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**REVISED REPORT ON  
1,4-DIOXANE AND PFAS GROUNDWATER SAMPLING  
SUMMARY  
PHILIPS LIGHTING COMPANY BATH FACILITY  
BATH, NEW YORK**

by Haley & Aldrich of New York  
Rochester, New York

for New York State Department of Environmental Conservation  
Avon, New York

File No. 127981-028  
January 2023





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16 January 2023  
File No. 127981-028

New York State Department of Environmental Conservation  
Region 8 Division of Remediation  
6274 East Avon-Lima Road  
Avon, New York 14414

Attention: Timothy A. Schneider, P.E.

Subject: Revised 1,4-dioxane and PFAS Groundwater Sampling Summary  
Philips Lighting Company Bath Facility  
7265 State Route 54  
Bath, New York  
BCP Site #C851044

Dear Mr. Schneider:

On behalf of the current site owner, Yort, Inc. and the former site owner (Philips North America LLC, formerly Philips Electronics North America Corporation; collectively “Philips”), Haley & Aldrich of New York (Haley & Aldrich) has prepared the following letter report which describes the results of a focused groundwater sampling event completed at the Philips Lighting Company site (Site) in Bath, New York, (BCP Site #C851044) in November 2018, supplemental groundwater sampling completed in new monitoring wells installed at the site in 2021, and surface water sampling completed in the wetlands on the east side of Route 54 in 2022.

The Site location is provided on Figure 1. In a letter dated 31 July 2018, the New York State Department of Environmental Conservation (NYSDEC or Department) requested that Philips, as part of a statewide initiative being completed at all regulated sites, prepare a work plan for the collection and analysis of groundwater samples for compounds that the Department had identified as “emerging contaminants,” including 1,4-dioxane and/or per- and polyfluoroalkyl substances (PFAS). Based on this request, a work plan for Emerging Contaminant Groundwater Sampling (Work Plan) was submitted to NYSDEC on 9 November 2018 and was approved on 14 November 2018.

In addition, new off-site monitoring wells were installed in areas east and south of the Site under NYSDEC-approved Supplemental Remedial Investigation Work Plans (RIWPs). After construction of the new wells, the wells were sampled for the expanded list of contaminants, including the emerging contaminants 1,4-dioxane and PFAS compounds. Finally, as part of the ongoing investigation of AOC-32 (State Pollutant Discharge Elimination System [SPDES] Outfall and Wetlands), surface water samples were collected from the wetland area east of the Site and analyzed for the expanded list of contaminants, including the emerging contaminants. The following letter report describes the methods used to collect and analyze the samples and provides a discussion of the results.

## Groundwater and Surface Water Sampling Summary

Groundwater sampling for analysis of 1,4-dioxane and PFAS compounds was completed at the Philips Lighting Company Bath Site in accordance with pertinent NYSDEC guidance<sup>1</sup> and the NYSDEC-approved Supplemental RIWP on 1,4-dioxane and PFAS Sampling, dated November 2018. Groundwater sampling of six (6) monitoring wells was completed on 15 and 16 November 2018. Additional sampling for emerging contaminants was completed in five (5) new monitoring wells in October 2021 and April 2022, that were installed in accordance with the NYSDEC-approved Supplemental RIWPs dated December 2020 and March 2022. Finally, three (3) surface water samples were collected from the wetland and a small surface water stream that enters the wetland in April 2022. The surface water samples were submitted for analysis of emerging contaminants as part of the ongoing AOC-32/Wetland investigation and in accordance with the NYSDEC-approved Supplemental RIWP dated September 2021. The sampling results are summarized on Table 1 and locations shown on Figure 2.

Consistent with the NYSDEC-approved work plans, surface water samples were collected as grab samples, and the monitoring wells were sampled with specialized sampling equipment. Two-inch-diameter GeoInsight high-density polyethylene (HDPE) Hydrasleeve™ samplers (Hydrasleeves™) were deployed in each well prior to the sampling events in November 2018, October 2021, and April 2022. Empty Hydrasleeves™ were attached to a suspension line tether and slowly lowered into each well to a depth that coincided with the approximate midpoint of the well screen. Hydrasleeve™ samplers remained in each well overnight to ensure the water column equalized prior to retrieving the samplers. As described in the NYSDEC-approved Work Plan, the Hydrasleeves™ were lifted through the water column once filled with groundwater for sample collection.

After the sampling device had equilibrated for at least 24-hours, the Hydrasleeves™ were retrieved from each well, and the groundwater was containerized for laboratory analysis of PFAS compounds using modified (low level) U.S. Environmental Protection Agency (EPA) Method 537, and 1,4-dioxane using EPA Method 8270C in selective ion monitoring (SIM) mode. Additionally, the following quality assurance/quality control samples were collected and analyzed:

- One field/sampler blank was collected by pouring demonstrated PFAS-free water supplied by the laboratory into laboratory containers and analyzing the blank for PFAS compounds;
- Field duplicate samples for 1,4-dioxane were aliquoted from the samples collected from MW-6B (November 2018), and field duplicate samples for PFAS were collected from MW-21B (October 2021), and MW-26B (April 2022); and
- A matrix spike/matrix spike duplicate sample collected from MW-3B for analysis of PFAS compounds.

The laboratory analytical reports for these samples are included in Appendix A.

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<sup>1</sup> "Collection of Groundwater Samples for Perfluorooctanoic Acid (PFOA) and Perfluorinated Compounds (PFCs) from Monitor Wells Sampling Protocol, Revision 1.2," dated 29 June 2016

## SAMPLING RESULTS

The results of the focused sampling event for 1,4-dioxane and PFAS compound are summarized on Table 1 and shown graphically on Figure 2.

### 1,4-Dioxane

1,4-dioxane was not detected in ten (10) of the eleven (11) groundwater samples or the three (3) surface water samples at concentrations above the laboratory reporting limits. The laboratory reporting limits for 1,4-dioxane ranged between 0.139 and 0.153 micrograms per liter ( $\mu\text{g}/\text{L}$ ), and only the sample collected from MW-25B during the April 2022 sampling event detected an estimated concentration of 1,4-dioxane below the laboratory reporting limit (at an estimated concentration of 0.0836  $\mu\text{g}/\text{L}$ ). The low-level laboratory reporting limits for each of the sampling events were below the NYSDEC-required detection limit of 0.28  $\mu\text{g}/\text{L}$ , and the one estimated concentration of 1,4-dioxane detected in the sample collected from MW-25B was less than the current NYSDEC guidance<sup>2</sup> for 1,4-dioxane of 1  $\mu\text{g}/\text{L}$ .

### PFAS Compounds

Groundwater samples were collected from eleven (11) monitoring wells and three (3) surface water sampling locations, and the samples were submitted for laboratory analysis of PFAS. Samples were collected from one (1) monitoring well located upgradient (off Site), five (5) wells located across the Site, and five (5) monitoring wells located downgradient of former manufacturing areas. The three (3) surface water samples were collected from the water course and standing water in the wetlands east of the Site, where the former SPDES Outfall (AOC-32) had previously discharged.

As summarized in Table 1 and shown on Figure 2, PFAS compounds were not detected at concentrations above the laboratory reporting limit of 2 nanograms per liter (ng/L) in the four (4) samples collected from MW-3B, MW-19B, MW-23A, and MW-26B. Low levels of perfluoroalkyl sulfonates and perfluoroalkyl carboxylates, generally reported as estimated values of 3 ng/L or less, were reported to be present in samples collected from on-site monitoring wells, including MW-1B, MW-2A, and MW-6B, off-site wells MW-21A, MW-21B, and MW-25B, and the three surface water samples. Total combined perfluorooctanoic acid/perfluorooctanesulfonic acid (PFOA/PFOS) concentrations in the samples from these wells ranged between 0.249 and 4.1 ng/L, and the concentrations of PFOS were less than 1 ng/L (ranging between 0.22 and 0.347 ng/L) in the three surface water samples. The concentrations of total combined PFOA/PFOS in ten (10) of the eleven (11) well samples and all three of the surface water samples were below the current NYSDEC draft guidance of 10 ng/L for PFOA and PFOS.

Higher concentrations of PFAS compounds were detected in only the one sample collected from MW-17B, located in the southeast corner of the site, on the west side of Route 54. The total combined PFOA/PFOS concentration of 40.7 ng/L was detected in the sample collected from MW-17B; other compounds that were detected at concentrations between approximately 2 and 18 ng/L include

<sup>2</sup> Draft addendum to Technical and Operational Guidance Series (TOGs) 1.1.1 Ambient Water Quality, New York State Department of Environmental Conservation, dated October 2021.

perfluoroalkyl sulfonates and perfluoroalkyl carboxylate. At the time of the November 2018 sampling, the concentration of total combined PFOA/PFOS in the sample collected from MW-17B was less than the EPA's established health advisory criteria of 70 ng/L and NYSDEC interim guidance; however, the concentration of total combined PFOA/PFOS in the sample collected from MW-17B in November 2018 is now considered above the current draft NYSDEC guidance of 10 ng/L.

MW-17B is located adjacent and directly across the street from the Steuben County Civil Defense Training and Fire Training Center (Steuben County Center), which is located at 7220 State Route 54 and identified by NYSDEC as FTR0071. In 2016, the NYSDEC undertook a survey of fire training centers to evaluate whether these facilities used or stored materials containing PFOS which was used in fire-fighting foams. Based on survey responses of the Steuben County Center to NYSDEC, Class B fire suppression foam (which may contain PFOS and PFAS) may have been stored or used for training purposes.

#### **GROUNDWATER ELEVATION AND FLOW CONDITIONS**

Depth groundwater has been measured in the monitoring network since 2012, and as the well network has continued to expand, additional water level measurements have been recorded, with the most recent site-wide round of water level measurements recorded in October 2022. A summary of the groundwater elevations at the Site are presented on Table 2.

The overall groundwater flow in the regional aquifer system at the Site is believed to be toward the south-southeast; however, the groundwater gradients are extremely small (between 0.0001 ft/ft and 0.0002 ft/ft), and the water table elevation is flat across much of the Site, and generally varies less than 0.10 ft between individual wells. Due to the relatively flat groundwater surface, and weak horizontal groundwater gradients, there is the potential for some transient seasonal changes in the predicted groundwater flow due to different recharge rates. Groundwater elevations measured in the monitoring wells in October and December 2022 suggest that the wetland area across Route 54 may represent a preferential recharge zone, and during periods of higher recharge, there may be some transient northerly groundwater movement in the regional aquifer system.

This condition of higher water level conditions was noted in the groundwater elevations from the newly installed off-site wells, the MW-21 cluster and MW-22B, which were slightly higher than on-site wells (generally higher by 0.05 to 0.11 ft), making MW-17B potentially downgradient of the Steuben County Center. The relatively flat water table surface and extremely small horizontal groundwater gradients, combined with some transient changes in groundwater elevations likely due to differential recharge patterns, may account for the detection of PFAS compounds in the sample collected from MW-17B.

#### **SUMMARY**

Focused groundwater sampling for emerging contaminants (1,4-dioxane and PFAS compounds) from selected monitoring wells was conducted at the Philips Lighting Company site in Bath, New York in accordance with the NYSDEC-approved Work Plan in November 2018. Additional sampling of wells and surface water for emerging contaminants was completed in October 2021 and April 2022 in accordance

with the Supplemental RIWPs. The sampling was completed to quantify the concentrations of 1,4-dioxane and PFAS compounds in the groundwater due to changes within the NYSDEC guidance related to emerging contaminants.

Based on the sampling results, 1,4-dioxane was not detected in any of the samples collected at concentrations that exceed the NYSDEC-required laboratory reporting level of 0.28 µg/L. An estimated detection of 1,4-dioxane in the sample collected from MW-25B at 0.0836 µg/L was below the laboratory reporting limits and also below the current NYSDEC TOGs guidance criterion of 1 µg/L. Based on the sampling conducted to date, 1,4-dioxane is not considered a contaminant of concern at the Philips Lighting Company Bath Site.

PFAS compounds were also not detected at concentrations that exceeded the laboratory reporting limit of 2 ng/L in many of the samples, including the two wells located upgradient of the Site (north of the manufacturing facility at MW-3B and MW-19B), or in two of the wells located downgradient of the Site (MW-23A and MW-26B). Low concentrations of total combined PFOA/PFOS, ranging between an estimated concentration of 0.249 and 4.11 ng/L, were detected in six (6) of the groundwater samples collected from wells proximate and downgradient of the plant. Concentrations of combined total PFOA/PFAS in the three surface water samples collected in the stream/wetland associated with AOC-32 were also low, and ranged between 0.22 and 0.347 ng/L. The concentrations of total combined PFOA/PFAS in ten (10) of the eleven (11) well samples and all of the surface water samples were below the current NYSDEC draft guidance of 10 ng/L for PFOA and PFOS.

Monitoring well MW-17B, which is located near Route 54 and immediately across from the Steuben County Center, contained a total combined PFOA/PFOS concentration 40.7 ng/L. The concentration of PFOS/PFAS observed in wells sampled was less than the EPA-established health advisory for these compounds, which is 70 ng/L, but currently greater than the NYSDEC draft TOGs 1.1.1 guidance criterion of 10 ng/L.

Of the five on-site monitoring wells originally sampled in November 2018, only the sample collected from MW-17B, located in the southeast corner of the Site, contained concentrations of PFAS compounds currently above draft NYSDEC guidance criteria. Six additional monitoring wells have been installed and sampled for emerging contaminants, including one (1) upgradient and five (5) downgradient wells, and none of these samples contained concentrations of PFAS compounds at levels above either the EPA health advisory criterion of 70 ng/L or the draft NYSDEC TOGs 1.1.1 criterion of 10 ng/L. Given that MW-17B is located immediately adjacent to a potential source of PFAS at the Steuben County Center, the relatively flat groundwater conditions across the area, including some transient groundwater flow that may be to the north-northeast, and the lack of historical manufacturing operations at the Site that could have used PFAS materials, we do not believe that the Site is the source of PFAS compounds detected in the sample from MW-17B.

16 January 2023

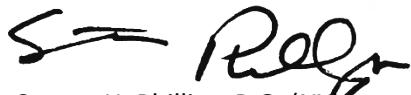
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## Closing

If you have any questions with this Supplemental Work Plan or wish to discuss the project further, please do not hesitate to contact either Mr. Emil Filc of Signify/Yort or Haley & Aldrich.

Sincerely yours,

**HALEY & ALDRICH OF NEW YORK**



Steven H. Phillips, P.G. (NY)  
Senior Project Manager



W. Thomas West, P.G. (NY)  
Senior Associate

Enclosures:

- Table 1 – Summary of Analytical Results – Emerging Contaminants
- Table 2 – Summary of Groundwater Elevation Data (2012-2022)
- Figure 1 – Project Locus
- Figure 2 – Emerging Contaminant Sampling Locations and Results
- Figure 3 – Groundwater Elevation and Contour Map – October 2022
- Appendix A – Laboratory Analytical Reports

c: Signify; Attn: M. Manning and E. Filc  
NYSDEC; Attn: D. Loew and D. Pratt  
NYSDOH; Attn: J. Robinson and J. Deming

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## **TABLES**

**TABLE 1**  
**SUMMARY OF ANALYTICAL RESULTS**  
**EMERGING CONTAMINANTS**  
**PHILIPS LIGHTING**  
**BATH , NY**

## Notes:

1. Results in **bold** are detected.
  2. U: Not detected above the indicated reporting limit.

J: Estimated

J+: Estimated, biased high

U.I.: Not detected, reporting

33. Not detected, reporting limit is estimated.

**TABLE 1**  
**SUMMARY OF ANALYTICAL RESULTS**  
**EMERGING CONTAMINANTS**  
**PHILIPS LIGHTING**  
**BATH , NY**

Location	Groundwater	Groundwater	Groundwater	Groundwater	Surface Water	Surface Water	Surface Water	Surface Water	
	<b>MW-23A</b>	<b>MW-25B</b>	<b>MW-26B</b>	<b>MW-26B</b>	<b>SW-BGKD-01</b>	<b>SW-BGKD-02</b>	<b>SW-POND</b>	<b>SW-POND</b>	
Sample Date	04/25/2022	04/25/2022	04/25/2022	04/25/2022	04/19/2022	04/19/2022	04/20/2022	04/20/2022	
Sample Type	Primary	Primary	Primary	Duplicate	Primary	Primary	Primary	Duplicate	
Sample Name	MW23A-042522-1515	MW25B-042522-1300	MW26B-042522-1015	4125-042522-0001	SW-BGKD-01-0.75	SW-BGKD-02-0.5	SW-POND-01-1.5	4125-042022-0001	
4125-042522-0002									
<b>PFAS (ug/L)</b>									
6:2 Fluorotelomer sulfonic acid (6:2 FTS)	0.00194	U	0.00184	U	0.00188	U	0.00183	U	
8:2 Fluorotelomer sulfonic acid (8:2 FTS)	0.00194	U	0.00184	U	0.00188	U	0.00183	U	
N-Ethyl Perfluoroctanesulfonamidoacetic Acid (NEtFOSAA)	0.00194	U	0.00184	U	0.00188	U	0.00183	U	
N-Methyl Perfluoroctanesulfonamidoacetic Acid (MeFOSAA)	0.00194	U	0.00184	U	0.00188	U	0.00183	U	
Perfluorobutanesulfonic acid (PFBS)	0.00194	U	<b>0.000347</b>	J	0.00188	U	0.00183	U	
Perfluorobutanoic acid (PFBA)	0.00194	U	<b>0.00297</b>	-	0.00188	U	0.00183	U	
Perfluorodecanesulfonic acid (PFDS)	0.00194	U	0.00184	U	0.00188	U	0.00183	U	
Perfluorodecanoic acid (PFDA)	0.00194	U	0.00184	U	0.00188	U	0.00183	U	
Perfluorododecanoic acid (PFDoDA)	0.00194	U	0.00184	U	0.00188	U	0.00183	U	
Perfluoroheptanesulfonic acid (PFHps)	0.00194	U	0.00184	U	0.00188	U	0.00183	U	
Perfluoroheptanoic acid (PFHpA)	0.00194	U	<b>0.000354</b>	J	0.00188	U	0.00183	U	
Perfluorohexanesulfonic acid (PFHxS)	0.00194	U	0.00184	U	0.00188	U	0.00183	U	
Perfluorohexanoic acid (PFHxA)	0.00194	U	<b>0.0014</b>	J	0.00188	U	0.00183	U	
Perfluorononanoic acid (PFNA)	0.00194	U	0.00184	U	0.00188	U	0.00183	U	
Perfluoroctane sulfonamide (PFOSA)	0.00194	UJ	0.00184	UJ	0.00188	UJ	0.00183	UJ	
Perfluoroctanesulfonic acid (PFOS)	0.00194	U	0.00184	U	0.00188	U	0.00183	U	
Perfluorooctanoic acid (PFOA)	0.00194	U	<b>0.000258</b>	J	0.00188	U	0.00183	U	
Perfluoropentanoic acid (PPPeA)	0.00194	U	<b>0.00119</b>	J	0.00188	U	0.00183	U	
Perfluorotetradecanoic acid (PFTeDA)	0.00194	U	0.00184	U	0.00188	U	0.00183	U	
Perfluorotridecanoic acid (PFTrDA)	0.00194	U	0.00184	U	0.00188	U	0.00183	U	
Perfluoroundecanoic acid (PFUnDA)	0.00194	U	0.00184	U	0.00188	U	0.00183	U	
US EPA PFAS (PFOS + PFOA)	0.00194	U	<b>0.000258</b>	J	0.00188	U	0.00183	U	
<b>Semi-Volatile Organic Compounds (SIM) (ug/L)</b>									
1,4-Dioxane	0.144	<b>0.0836</b>	J	0.144	U	0.144	U	0.139	U
						0.139	U	0.139	U
						0.139	U	0.139	U

**Notes:**

1. Results in **bold** are detected.
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J: Estimated

J+: Estimated, biased high

UJ: Not detected, reporting limit is estimated.

TABLE 2  
 SUMMARY OF GROUNDWATER ELEVATION DATA 2012 - 2022  
 PHILIPS LIGHTING COMPANY - BATH FACILITY  
 BATH, NY  
 BCP SITE #C851044

Monitoring Well ID	MW Type	Top of Screen (bgs)	Top of Screen Elevation	Bottom of Screen (bgs)	Bottom of Screen Elevation	N Side PVC Riser Elevation (fmsl) July 2020	Date	Depth to Water Measurement (ft btor)	Groundwater Elevation (fmsl)
MW-1B	WATER TABLE MW	44.8	1089.59	59.833	1074.557	1137.0	10/26/2012	53.59	1083.41
							10/31/2012	53.62	1083.38
							3/13/2015	54.34	1082.66
							5/11/2015	52.06	1084.94
							11/6/2015	52.52	1084.48
							1/9/2018	52.50	1084.50
							8/1/2018	49.50	1087.50
							11/15/2018	48.73	1088.27
							6/11/2020	48.38	1088.62
							7/2/2020	49.24	1087.76
							10/14/2021	49.54	1087.46
							10/28/2021	48.59	1088.41
							9/20/2022	51.95	1085.05
							10/12/2022	52.41	1084.59
MW-2A	PERCHED MW	20	1114.86	30	1104.86	1134.35	10/26/2012	22.97	1111.38
							10/31/2012	22.18	1112.17
							3/13/2015	24	1110.35
							5/11/2015	22.42	1111.93
							11/6/2015	22.38	1111.97
							1/9/2018	23.56	1110.79
							8/1/2018	22.14	1112.21
							11/15/2018	22.79	1111.56
							6/11/2020	22.32	1112.03
							7/2/2020	22.89	1111.46
							10/14/2021	21.75	1112.6
							6/22/2022	22.55	1111.8
							7/8/2022	23	1111.35
							7/21/2022	22.95	1111.4
							7/29/2022	22.93	1111.42
							8/5/2022	22.93	1111.42
							8/12/2022	23.2	1111.15
							8/19/2022	23.18	1111.17
							8/26/2022	23.2	1111.15
							9/2/2022	23.16	1111.19
							9/19/2022	23.18	1111.17
							9/16/2022	23.18	1111.17
							9/20/2022	22.04	1112.31
							10/12/2022	22.74	1111.61
							10/18/2022	22.92	1111.43
							11/18/2022	22.89	1111.46
							12/19/2022	23.07	1111.28
MW-2B	WATER TABLE MW	45	1089.65	60	1074.65	1134.31	10/26/2012	50.97	1083.34
							10/31/2012	50.98	1083.33
							3/13/2015	51.7	1082.61
							5/11/2015	49.42	1084.89
							11/6/2015	49.91	1084.4
							1/9/2018	49.88	1084.43
							8/1/2018	47.26	1087.05
							11/15/2018	46.19	1088.12
							6/11/2020	45.81	1088.5
							7/2/2020	46.64	1087.67
							10/14/2021	46.92	1087.39
							9/20/2022	49.33	1084.95
							10/12/2022	49.96	1084.35
							10/18/2022	49.96	1084.35
							11/18/2022	50.69	1083.62
							12/19/2022	51.12	1083.19
MW-2C	LACUSTRINE MW	87.5	1047.4	97.5	1037.4	1134.25	3/13/2015	51.49	1082.76
							5/11/2015	49.24	1085.01
							11/6/2015	49.68	1084.57
							1/9/2018	49.63	1084.62
							8/1/2018	47.26	1086.99
							11/15/2018	46.05	1088.20
							6/11/2020	45.74	1088.51
							7/2/2020	46.52	1087.73
							10/14/2021	46.8	1087.45
							9/20/2022	49.2	1085.05
							10/12/2022	49.65	1084.6

TABLE 2  
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PHILIPS LIGHTING COMPANY - BATH FACILITY  
BATH, NY  
BCP SITE #C851044

Monitoring Well ID	MW Type	Top of Screen (bgs)	Top of Screen Elevation	Bottom of Screen (bgs)	Bottom of Screen Elevation	N Side PVC Riser Elevation (fmsl) July 2020	Date	Depth to Water Measurement (ft btor)	Groundwater Elevation (fmsl)
MW-3B	WATER TABLE MW	50	1088.7	65	1073.7	1141.42	10/26/2012	58.04	1083.38
							10/31/2012	58.07	1083.35
							3/13/2015	58.8	1082.62
							5/11/2015	56.50	1084.92
							11/6/2015	56.91	1084.51
							1/9/2018	56.92	1084.50
							8/1/2018	54.36	1087.06
							11/15/2018	53.10	1088.32
							6/11/2020	52.8	1088.62
							7/2/2020	53.58	1087.84
							10/14/2021	53.94	1087.48
							10/28/2021	53.03	1088.39
							9/20/2022	56.33	1085.09
							10/12/2022	56.80	1084.62
							3/13/2015	59.36	1082.55
							5/11/2015	57.07	1084.84
							11/6/2015	57.51	1084.4
							1/9/2018	57.39	1084.52
							8/1/2018	54.91	1087
							11/15/2018	53.73	1088.18
							6/11/2020	53.41	1088.5
							7/2/2020	53.19	1088.72
							10/14/2021	54.52	1087.39
							10/28/2021	53.98	1087.93
							9/20/2022	56.93	1084.98
							10/12/2022	57.42	1084.49
MW-4A	PERCHED MW	14	1116.19	24	1106.19	1129.77	10/26/2012	19.09	1110.68
							10/31/2012	18.33	1111.44
							3/13/2015	19.1	1110.67
							5/11/2015	18.54	1111.23
							11/6/2015	18.63	1111.14
							1/9/2018	19.33	1110.44
							8/1/2018	19.51	1110.26
							11/15/2018	18.22	1111.55
							6/11/2020	18.85	1110.92
							7/2/2020	18.80	1110.97
							10/14/2021	18.22	1111.55
							10/28/2021	17.58	1112.19
							6/22/2022	18.78	1110.99
							7/8/2022	19.05	1110.72
							7/21/2022	19.13	1110.64
							7/29/2022	19.06	1110.71
							8/5/2022	19.07	1110.70
							8/12/2022	19.28	1110.49
							8/19/2022	19.32	1110.45
							8/26/2022	19.34	1110.43
							9/2/2022	19.18	1110.59
							9/9/2022	19.18	1110.59
							9/16/2022	19.27	1110.50
							9/20/2022	18.42	1111.35
							10/12/2022	18.98	1110.79
							10/18/2022	19.10	1110.67
							11/18/2022	19.26	1110.51
							12/19/2022	19.27	1110.50
MW-4B	WATER TABLE MW	40	1090.18	55	1075.18	1129.79	10/26/2012	46.42	1083.37
							10/31/2012	46.45	1083.34
							3/13/2015	47.18	1082.61
							5/11/2015	44.89	1084.90
							11/6/2015	45.33	1084.46
							1/9/2018	45.33	1084.46
							8/1/2018	42.79	1087
							11/15/2018	41.59	1088.20
							6/11/2020	41.24	1088.55
							7/2/2020	42.03	1087.76
							10/14/2021	42.37	1087.42
							10/28/2021	41.44	1088.35
							9/20/2022	44.74	1085.05
							10/12/2022	45.27	1084.52
							10/18/2022	45.43	1084.36
							11/18/2022	46.15	1083.64
							12/19/2022	46.56	1083.23

TABLE 2  
SUMMARY OF GROUNDWATER ELEVATION DATA 2012 - 2022  
PHILIPS LIGHTING COMPANY - BATH FACILITY  
BATH, NY  
BCP SITE #C851044

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Monitoring Well ID	MW Type	Top of Screen (bgs)	Top of Screen Elevation	Bottom of Screen (bgs)	Bottom of Screen Elevation	N Side PVC Riser Elevation (fmsl) July 2020	Date	Depth to Water Measurement (ft btor)	Groundwater Elevation (fmsl)
MW-4C	LACUSTRINE MW	100	1030.3	110	1020.3	1129.78	3/13/2015	60.4	1069.38
							5/11/2015	45.47	1084.31
							11/6/2015	45.41	1084.37
							1/9/2018	45.30	1084.48
							8/1/2018	43.1	1086.68
							11/15/2018	42.26	1087.52
							6/1/2020	41.62	1088.16
							7/2/2020	42.32	1087.46
							10/14/2021	43.08	1086.7
							9/20/2022	45.23	1084.55
							10/12/2022	45.61	1084.17
MW-5B	WATER TABLE MW	35	1094.74	50	1079.74	1132.31	10/26/2012	48.8	1083.51
							10/31/2012	48.90	1083.41
							3/13/2015	49.68	1082.63
							5/11/2015	46.90	1085.41
							11/6/2015	47.62	1084.69
							1/9/2018	47.47	1084.84
							8/1/2018	44.75	1087.56
							11/15/2018	42.85	1089.46
							6/1/2020	42.92	1089.39
							7/2/2020	43.94	1088.37
							10/14/2021	43.57	1088.74
							9/20/2022	46.81	1085.5
							10/12/2022	47.52	1084.79
MW-6B	WATER TABLE MW	45	1087.37	60	1072.37	1135.0	10/26/2012	51.59	1083.41
							10/31/2012	51.59	1083.41
							3/13/2015	53.34	1081.66
							5/11/2015	50.05	1084.95
							11/6/2015	50.49	1084.51
							1/9/2018	50.39	1084.61
							8/1/2018	47.97	1087.03
							11/15/2018	46.75	1088.25
							6/1/2020	46.45	1088.55
							7/2/2020	47.23	1087.77
							10/14/2021	47.53	1087.47
							10/28/2021	46.54	1088.46
							9/20/2022	49.93	1085.07
							10/12/2022	50.42	1084.58
MW-6B2	OUTWASH MW	62.7	1069.7	72.7	1059.7	1134.77	1/9/2018	50.26	1084.51
							8/1/2018	47.81	1086.96
							11/15/2018	46.59	1088.18
							6/1/2020	46.27	1088.50
							7/2/2020	47.07	1087.7
							10/14/2021	47.38	1087.39
							10/28/2021	46.38	1088.39
							9/20/2022	49.76	1085.01
							10/12/2022	50.27	1084.5
MW-6C	LACUSTRINE MW	90	1042.2	100	1032.2	1134.87	3/13/2015	52.13	1082.74
							5/11/2015	49.82	1085.05
							11/6/2015	50.30	1084.57
							1/9/2018	50.21	1084.66
							8/1/2018	47.81	1087.06
							11/15/2018	46.55	1088.28
							6/1/2020	46.29	1088.58
							7/2/2020	47.06	1087.81
							10/14/2021	47.36	1087.51
							10/28/2021	46.34	1088.53
							9/20/2022	49.73	1085.14
							10/12/2022	50.21	1084.66

TABLE 2  
 SUMMARY OF GROUNDWATER ELEVATION DATA 2012 - 2022  
 PHILIPS LIGHTING COMPANY - BATH FACILITY  
 BATH, NY  
 BCP SITE #C851044

Monitoring Well ID	MW Type	Top of Screen (bgs)	Top of Screen Elevation	Bottom of Screen (bgs)	Bottom of Screen Elevation	N Side PVC Riser Elevation (fmsl) July 2020	Date	Depth to Water Measurement (ft btor)	Groundwater Elevation (fmsl)
MW-7B	WATER TABLE MW	45	1090.18	60	1075.18	1134.77	10/26/2012	51.30	1083.47
							10/31/2012	51.31	1083.46
							3/13/2015	52.04	1082.73
							5/11/2015	49.75	1085.02
							11/6/2015	50.19	1084.58
							1/9/2018	50.25	1084.52
							8/1/2018	47.69	1087.08
							11/15/2018	46.48	1088.29
							6/11/2020	46.16	1088.61
							7/2/2020	46.92	1087.85
							10/14/2021	47.26	1087.51
							10/28/2021	46.27	1088.5
							9/20/2022	49.6	1085.17
							10/12/2022	50.1	1084.67
							10/18/2022	50.31	1084.46
							11/18/2022	51	1083.77
							12/19/2022	51.54	1083.23
MW-7C	OUTWASH MW	89.6	1045.6	99.6	1035.6	1134.72	3/13/2015	52.02	1082.70
							5/11/2015	49.72	1085
							11/6/2015	50.18	1084.54
							1/9/2018	50.09	1084.63
							8/1/2018	47.67	1087.05
							11/15/2018	46.5	1088.22
							6/11/2020	46.14	1088.58
							7/2/2020	46.93	1087.79
							10/14/2021	47.24	1087.48
							10/28/2021	46.25	1088.47
							9/20/2022	49.62	1085.1
							10/12/2022	50.09	1084.63
MW-8A	PERCHED MW	16	1118.22	26	1108.22	1136.75	10/26/2012	25.04	1111.71
							10/31/2012	24.31	1112.44
							3/13/2015	25.75	1111.00
							5/11/2015	24.4	1112.35
							11/6/2015	24.40	1112.35
							1/9/2018	25.45	1111.3
							8/1/2018	23.90	1112.85
							11/15/2018	23.53	1113.22
							6/11/2020	24.35	1112.40
							7/2/2020	24.9	1111.85
							10/14/2021	23.71	1113.04
							9/20/2022	23.53	1113.22
							10/12/2022	24.67	1112.08
							3/13/2015	53.50	1082.63
							5/11/2015	51.21	1084.92
							11/6/2015	51.70	1084.43
							1/9/2018	51.1	1085.03
							8/1/2018	49.10	1087.03
MW-9B	WATER TABLE MW	45	1089	60	1074	1136.13	11/15/2018	47.9	1088.23
							6/11/2020	47.52	1088.61
							7/2/2020	47.13	1089
							10/14/2021	48.71	1087.42
							9/20/2022	51.04	1085.09
							10/12/2022	51.98	1084.15
							3/13/2015	54.13	1082.30
							5/11/2015	51.8	1084.63
							11/6/2015	52.22	1084.21
							1/9/2018	52.05	1084.38
MW-9C	LACUSTRINE MW	88	1046	98	1036	1136.43	8/1/2018	49.60	1086.83
							11/15/2018	48.55	1087.88
							6/11/2020	48.04	1088.39
							7/2/2020	48.82	1087.61
							10/14/2021	49.23	1087.20
							9/20/2022	51.56	1084.87
							10/12/2022	52.05	1084.38

TABLE 2  
SUMMARY OF GROUNDWATER ELEVATION DATA 2012 - 2022  
PHILIPS LIGHTING COMPANY - BATH FACILITY  
BATH, NY  
BCP SITE #C851044

Monitoring Well ID	MW Type	Top of Screen (bgs)	Top of Screen Elevation	Bottom of Screen (bgs)	Bottom of Screen Elevation	N Side PVC Riser Elevation (fmsl) July 2020	Date	Depth to Water Measurement (ft btor)	Groundwater Elevation (fmsl)
MW-10B	WATER TABLE MW	41.75	1090.65	56.75	1075.65	1135.2	3/13/2015	52.56	1082.64
							5/11/2015	50.24	1084.96
							11/6/2015	50.71	1084.49
							1/9/2018	50.68	1084.52
							8/1/2018	48.14	1087.06
							11/15/2018	46.98	1088.22
							6/11/2020	46.60	1088.60
							7/2/2020	47.4	1087.8
							10/14/2021	47.78	1087.42
							10/28/2021	46.92	1088.28
							9/20/2022	50.17	1085.03
							10/12/2022	50.56	1084.64
							10/18/2022	50.8	1084.40
							11/18/2022	51.55	1083.65
							12/19/2022	51.95	1083.25
MW-11B	WATER TABLE MW	45	1090.3	60	1075.3	1138.27	3/13/2015	55.77	1082.50
							5/11/2015	53.46	1084.81
							11/6/2015	53.89	1084.38
							1/9/2018	53.9	1084.37
							8/1/2018	51.25	1087.02
							11/15/2018	50.07	1088.2
							6/11/2020	49.68	1088.50
							7/2/2020	50.45	1087.82
							10/14/2021	50.87	1087.40
							10/28/2021	50.05	1088.22
							9/19/2022	53.25	1085.02
							10/12/2022	53.77	1084.5
							10/18/2022	53.95	1084.32
							11/18/2022	54.7	1083.57
							12/19/2022	55.14	1083.13
MW-11C	LACUSTRINE MW	114.7	1022	124.7	1012	1139.26	1/9/2018	55.95	1083.31
							8/1/2018	53.4	1085.86
							11/15/2018	52.94	1086.32
							6/11/2020	52.06	1087.2
							7/2/2020	52.59	1086.67
							10/14/2021	53.52	1085.74
							10/28/2021	52.98	1086.28
							9/20/2022	55.27	1083.99
							10/12/2022	55.87	1083.39
							3/13/2015	46.05	1082.76
							5/11/2015	43.85	1084.96
							11/6/2015	44.28	1084.53
MW-12B	WATER TABLE MW	42	1087.2	57	1072.2	1128.81	1/9/2018	44.29	1084.52
							8/1/2018	41.75	1087.06
							11/15/2018	40.57	1088.24
							6/11/2020	40.21	1088.6
							7/2/2020	41.01	1087.80
							10/14/2021	41.33	1087.48
							10/28/2021	40.38	1088.43
							9/20/2022	43.74	1085.07
							10/12/2022	44.19	1084.62
							10/18/2022	44.38	1084.43
							11/18/2022	45.12	1083.69
							12/19/2022	45.52	1083.29
							3/13/2015	56.14	1082.73
							5/11/2015	53.86	1085.01
							11/6/2015	54.28	1084.59
MW-13B	WATER TABLE MW	44.5	1091.8	59.5	1076.8	1138.87	1/9/2018	54.32	1084.55
							8/1/2018	51.8	1087.07
							11/15/2018	50.60	1088.27
							6/11/2020	50.26	1088.61
							7/2/2020	51.05	1087.82
							10/14/2021	51.38	1087.49
							9/19/2022	53.67	1085.2
							9/23/2022	53.65	1085.22
							10/12/2022	54.22	1084.66
							10/18/2022	54.42	1084.47
							11/18/2022	55.14	1083.73
							12/19/2022	55.52	1083.35

TABLE 2  
SUMMARY OF GROUNDWATER ELEVATION DATA 2012 - 2022  
PHILIPS LIGHTING COMPANY - BATH FACILITY  
BATH, NY  
BCP SITE #C851044

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Monitoring Well ID	MW Type	Top of Screen (bgs)	Top of Screen Elevation	Bottom of Screen (bgs)	Bottom of Screen Elevation	N Side PVC Riser Elevation (fmsl) July 2020	Date	Depth to Water Measurement (ft btor)	Groundwater Elevation (fmsl)
MW-13C	LACUSTRINE MW	98	1038.1	108	1028.1	1138.73	3/13/2015	55.8	1082.93
							5/11/2015	53.60	1085.13
							11/6/2015	54.02	1084.71
							1/9/2018	54.09	1084.64
							8/1/2018	51.64	1087.09
							11/15/2018	50.52	1088.21
							6/1/2020	50.17	1088.56
							7/2/2020	50.94	1087.79
							10/14/2021	51.21	1087.52
							9/19/2022	53.46	1085.27
							10/12/2022	53.98	1084.75
							3/13/2015	64.9	1082.71
							5/11/2015	62.60	1085.01
							11/6/2015	63.06	1084.55
MW-14B	WATER TABLE MW	55	1090	70	1075	1147.61	1/9/2018	63.05	1084.56
							8/1/2018	60.53	1087.08
							11/15/2018	59.34	1088.27
							6/11/2020	58.99	1088.62
							7/2/2020	59.76	1087.85
							10/14/2021	60.11	1087.5
							9/19/2022	62.41	1085.2
							10/12/2022	62.97	1084.64
MW-15B	WATER TABLE MW	54.75	1087.45	69.75	1072.45	1144.89	3/13/2015	62.25	1082.64
							5/11/2015	59.94	1084.95
							11/6/2015	60.4	1084.49
							1/9/2018	60.38	1084.51
							8/1/2018	57.82	1087.07
							11/15/2018	56.63	1088.26
							6/11/2020	56.31	1088.58
							7/2/2020	57.06	1087.83
							10/14/2021	57.42	1087.47
							9/19/2022	59.75	1085.14
							10/12/2022	60.31	1084.58
MW-16B	WATER TABLE MW	45	1085.7	60	1070.7	1133.44	3/13/2015	50.74	1082.7
							5/11/2015	48.45	1084.99
							11/6/2015	48.89	1084.55
							1/9/2018	48.79	1084.65
							8/1/2018	46.36	1087.08
							11/15/2018	45.15	1088.29
							6/11/2020	44.8	1088.64
							7/2/2020	45.60	1087.84
							10/14/2021	45.9	1087.54
							10/28/2021	44.90	1088.54
							9/19/2022	48.28	1085.16
							10/12/2022	48.82	1084.62
MW-17B	WATER TABLE MW	45	1088.7	60	1073.7	1136.29	3/13/2015	53.54	1082.75
							5/11/2015	51.26	1085.03
							11/6/2015	51.68	1084.61
							1/9/2018	51.70	1084.59
							8/1/2018	49.17	1087.12
							11/15/2018	47.95	1088.33
							6/11/2020	47.69	1088.6
							7/2/2020	48.45	1087.84
							10/14/2021	48.75	1087.54
							10/28/2021	47.71	1088.58
							9/20/2022	51.12	1085.17
							10/12/2022	51.59	1084.70
							10/18/2022	51.80	1084.49
							11/18/2022	52.49	1083.80
							12/19/2022	52.90	1083.39
MW-18B	WATER TABLE MW	44.7	1093.7	59.7	1078.7	1141.06	1/9/2018	56.57	1084.49
							8/1/2018	54.01	1087.05
							11/15/2018	52.84	1088.22
							6/11/2020	52.47	1088.59
							7/2/2020	53.21	1087.85
							10/14/2021	53.62	1087.44
							9/19/2022	55.91	1085.15
							10/12/2022	56.45	1084.61

TABLE 2  
SUMMARY OF GROUNDWATER ELEVATION DATA 2012 - 2022  
PHILIPS LIGHTING COMPANY - BATH FACILITY  
BATH, NY  
BCP SITE #C851044

Monitoring Well ID	MW Type	Top of Screen (bgs)	Top of Screen Elevation	Bottom of Screen (bgs)	Bottom of Screen Elevation	N Side PVC Riser Elevation (fmsl) July 2020	Date	Depth to Water Measurement (ft btor)	Groundwater Elevation (fmsl)
MW-19B	WATER TABLE MW	43.8	1093.3	58.8	1078.3	1139.98	1/9/2018 8/1/2018 11/15/2018 6/11/2020 7/2/2020	55.58 51.56 51.76 49.08 49.79	1084.40 1088.42 1088.22 1090.9 1090.19
									Decommissioned in October 2020
MW-20B	WATER TABLE MW	48.8	1092.7	63.8	1077.7	1144.09	1/9/2018 8/1/2018 11/15/2018 6/11/2020 7/2/2020 10/14/2021 9/19/2022 10/12/2022	56.48 53.80 52.77 51.85 52.81 53.2 55.95 56.44	1087.61 1090.29 1091.32 1092.24 1091.28 1090.89 1088.14 1087.65
MW-21A	WATER TABLE MW	17.8	1097.6	32.8	1082.6	1117.93	10/14/2021 4/22/2022 9/20/2022 10/12/2022 10/18/2022 11/18/2022 12/19/2022	30.40 27.07 32.74 33.22 33.40 34.09 34.48	1087.53 1090.86 1085.19 1084.71 1084.53 1083.84 1083.45
MW-21B	OUTWASH MW	62.3	1053	69.3	1046	1117.89	10/14/2021 4/22/2022 9/20/2022 10/12/2022	30.39 27.15 32.73 33.21	1087.50 1090.74 1085.16 1084.68
MW-22B	WATER TABLE MW	26.8	1087.1	41.8	1072.1	1116.31	10/14/2021 4/22/2022 9/20/2022 10/12/2022	28.80 25.56 31.14 31.64	1087.51 1090.75 1085.17 1084.67
MW-23A	PERCHED MW	24.9	1115.2	29.9	1110.2	1142.58	4/22/2022 6/22/2022 7/8/2022 7/21/2022 7/29/2022 8/5/2022 8/12/2022 8/19/2022 8/26/2022 9/2/2022 9/9/2022 9/16/2022 9/19/2022 9/23/2022 10/12/2022	30.66 31.64 31.60 DRY DRY DRY DRY DRY DRY DRY DRY DRY DRY DRY DRY DRY DRY	1111.92 1110.94 1110.98 DRY DRY DRY DRY DRY DRY DRY DRY DRY DRY DRY DRY DRY DRY
MW-24A	PERCHED MW	23.9	1115.1	29	1110.1	1141.67	4/22/2022 6/22/2022 7/8/2022 7/21/2022 7/29/2022 8/5/2022 8/12/2022 8/19/2022 8/26/2022 9/2/2022 9/9/2022 9/16/2022 9/19/2022 9/23/2022 10/12/2022	31.28 31.29 31.29 31.33 31.40 31.34 31.35 31.75 31.64 31.61 31.45 31.40 31.73 31.49 31.41	1110.39 1110.38 1110.34 1110.34 1110.27 1110.33 1110.32 1109.92 1110.03 1110.06 1110.22 1110.22 1110.27 1109.94 1110.18 1110.26
MW-25A	PERCHED MW	27.9	1113.2	37.9	1103.2	1144.03	4/22/2022 6/22/2022 7/8/2022 7/21/2022 7/29/2022 8/5/2022 8/12/2022 8/19/2022 8/26/2022 9/2/2022 9/9/2022 9/16/2022 9/19/2022 9/23/2022 10/12/2022	DRY DRY DRY DRY DRY DRY DRY DRY DRY DRY DRY DRY DRY DRY DRY DRY	DRY DRY DRY DRY DRY DRY DRY DRY DRY DRY DRY DRY DRY DRY DRY DRY

TABLE 2  
 SUMMARY OF GROUNDWATER ELEVATION DATA 2012 - 2022  
 PHILIPS LIGHTING COMPANY - BATH FACILITY  
 BATH, NY  
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Monitoring Well ID	MW Type	Top of Screen (bgs)	Top of Screen Elevation	Bottom of Screen (bgs)	Bottom of Screen Elevation	N Side PVC Riser Elevation (fmsl) July 2020	Date	Depth to Water Measurement (ft btor)	Groundwater Elevation (fmsl)
MW-25B	WATER TABLE MW	44.9	1096.4	59.9	1081.4	1144.01	4/22/2022	53.23	1090.78
							6/22/2022	NM	NM
							7/8/2022	NM	NM
							7/21/2022	NM	NM
							7/29/2022	NM	NM
							8/5/2022	NM	NM
							8/12/2022	NM	NM
							8/19/2022	NM	NM
							9/19/2022	58.84	1085.17
							10/12/2022	59.35	1084.66
MW-26B	WATER TABLE MW	29.9	1093.7	44.9	1078.7	1126.18	4/22/2022	35.39	1090.79
							9/20/2022	41.08	1085.10
							10/12/2022	41.56	1084.62
MW-27A	PERCHED MW	17.8	1117.02	27.8	1107.02	1134.82	6/22/2022	26.81	1108.01
							7/8/2022	26.83	1108.29
							7/21/2022	26.80	1108.32
							7/29/2022	26.88	1108.24
							8/5/2022	28.88	1106.24
							8/12/2022	26.90	1108.22
							8/19/2022	26.82	1108.30
							8/26/2022	26.88	1108.24
							9/2/2022	26.85	1108.27
							9/9/2022	26.84	1108.28
							9/16/2022	26.89	1108.23
							9/20/2022	26.81	1108.31
							9/23/2022	26.83	1108.29
							10/12/2022	26.94	1108.18
MW-28A	PERCHED MW	13.75	1119.57	23.75	1109.57	1133.32	6/22/2022	DRY	DRY
							7/8/2022	DRY	DRY
							7/21/2022	DRY	DRY
							7/29/2022	DRY	DRY
							8/5/2022	DRY	DRY
							8/12/2022	DRY	DRY
							8/19/2022	DRY	DRY
							8/26/2022	DRY	DRY
							9/2/2022	DRY	DRY
							9/9/2022	DRY	DRY
							9/16/2022	DRY	DRY
							9/20/2022	DRY	DRY
							9/23/2022	DRY	DRY
							10/12/2022	DRY	DRY
MW-29A	PERCHED MW	15.75	1117.65	25.75	1107.65	1133.4	6/22/2022	DRY	DRY
							7/8/2022	DRY	DRY
							7/21/2022	DRY	DRY
							7/29/2022	DRY	DRY
							8/5/2022	DRY	DRY
							8/12/2022	DRY	DRY
							8/19/2022	DRY	DRY
							8/26/2022	DRY	DRY
							9/2/2022	DRY	DRY
							9/9/2022	DRY	DRY
							9/16/2022	DRY	DRY
							9/20/2022	DRY	DRY
							9/23/2022	DRY	DRY
							10/12/2022	DRY	DRY
MW-30A	PERCHED MW	16.8	1116.16	21.8	1111.16	1132.96	6/22/2022	DRY	DRY
							7/8/2022	DRY	DRY
							7/21/2022	DRY	DRY
							7/29/2022	DRY	DRY
							8/5/2022	DRY	DRY
							8/12/2022	DRY	DRY
							8/19/2022	DRY	DRY
							8/26/2022	DRY	DRY
							9/2/2022	DRY	DRY
							9/9/2022	DRY	DRY
							9/16/2022	DRY	DRY
							9/20/2022	DRY	DRY
							9/23/2022	DRY	DRY
							10/12/2022	DRY	DRY

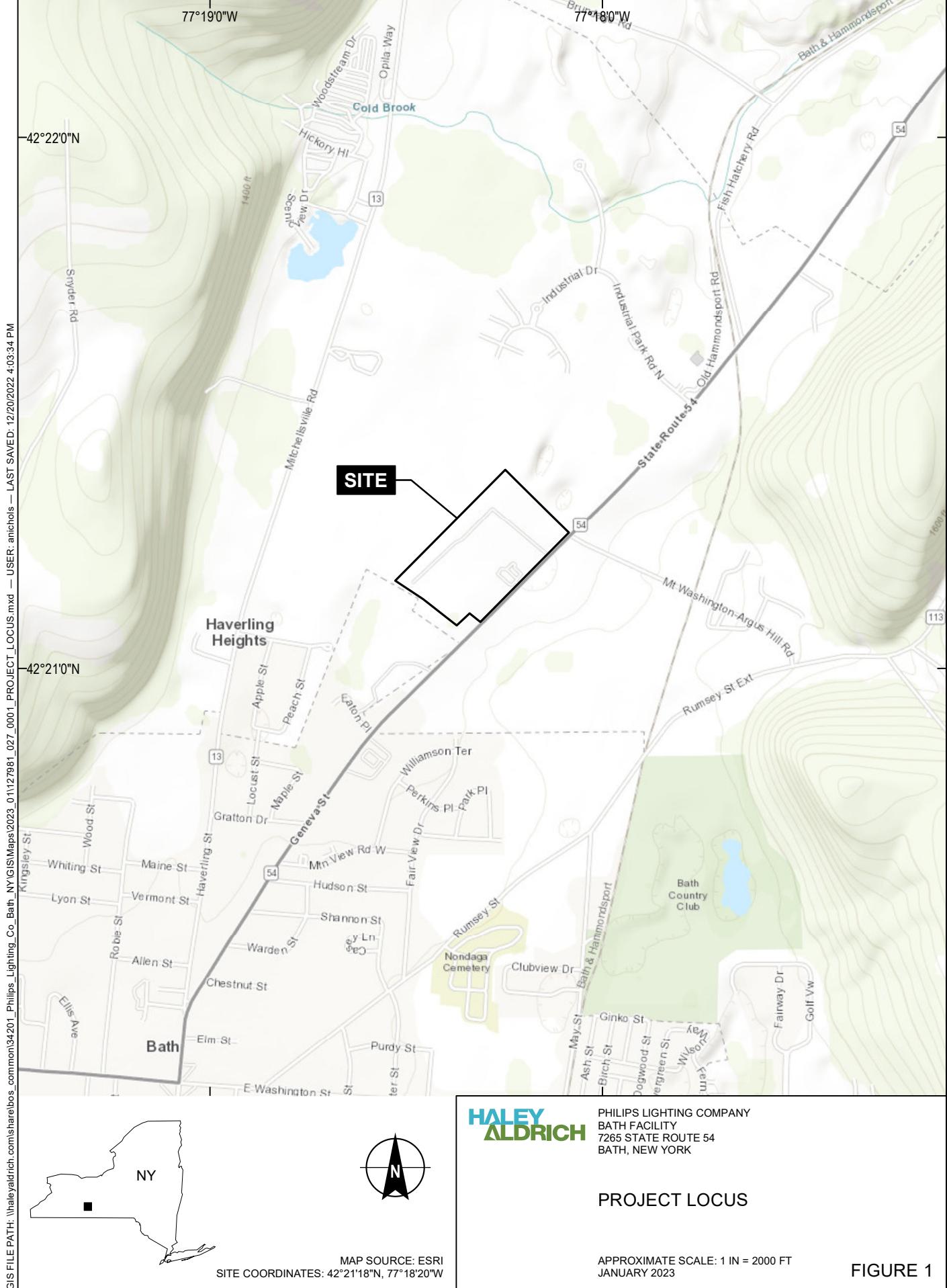
**TABLE 2**  
**SUMMARY OF GROUNDWATER ELEVATION DATA 2012 - 2022**  
**PHILIPS LIGHTING COMPANY - BATH FACILITY**  
**BATH, NY**  
**BCP SITE #C851044**

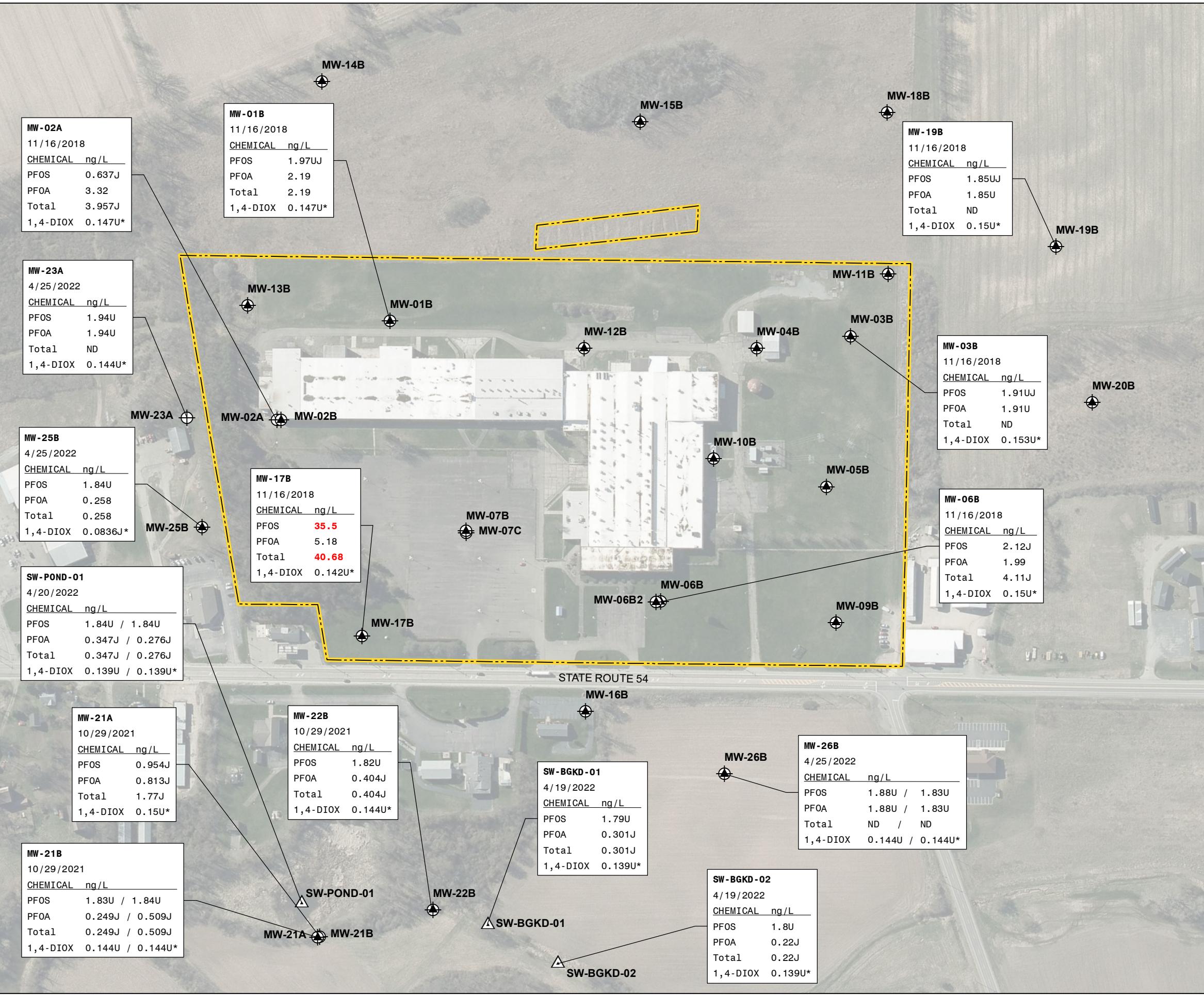
Monitoring Well ID	MW Type	Top of Screen (bgs)	Top of Screen Elevation	Bottom of Screen (bgs)	Bottom of Screen Elevation	N Side PVC Riser Elevation (fmsl) July 2020	Date	Depth to Water Measurement (ft btor)	Groundwater Elevation (fmsl)
MW-31A	PERCHED MW	13.75	1120.88	23.75	1110.88	1134.63	6/22/2022	21.70	1112.93
							7/8/2022	21.82	1112.81
							7/21/2022	21.82	1112.81
							7/29/2022	21.85	1112.78
							8/5/2022	21.85	1112.78
							8/12/2022	21.84	1112.79
							8/19/2022	21.85	1112.78
							8/26/2022	21.86	1112.77
							9/2/2022	21.86	1112.77
							9/9/2022	21.86	1112.77
							9/16/2022	21.84	1112.79
							9/20/2022	21.79	1112.84
							9/23/2022	21.68	1112.95
							10/12/2022	21.83	1112.80
							10/18/2022	21.81	1112.82
							11/18/2022	21.92	1112.71
							12/19/2022	21.83	1112.80
MW-32A	PERCHED MW	15.75	1113.85	25.75	1103.85	1129.6	6/22/2022	25.54	1104.06
							7/8/2022	25.64	1103.96
							7/21/2022	25.57	1104.03
							7/29/2022	25.56	1104.04
							8/5/2022	25.57	1104.03
							8/12/2022	25.70	1103.90
							8/19/2022	25.64	1103.96
							8/26/2022	25.61	1103.99
							9/2/2022	25.63	1103.97
							9/9/2022	25.63	1103.97
							9/16/2022	25.69	1103.91
							9/20/2022	25.58	1104.02
							9/23/2022	25.61	1103.99
							10/12/2022	25.53	1104.07
MW-33A	PERCHED MW	14.8	1120.58	29.8	1105.58	1135.38	6/22/2022	29.60	1105.78
							7/8/2022	DRY	DRY
							7/21/2022	DRY	DRY
							7/29/2022	DRY	DRY
							8/5/2022	DRY	DRY
							8/12/2022	DRY	DRY
							8/19/2022	DRY	DRY
							8/26/2022	DRY	DRY
							9/2/2022	DRY	DRY
							9/9/2016	DRY	DRY
							9/16/2022	DRY	DRY
							9/20/2022	DRY	DRY
							9/23/2022	DRY	DRY
							10/12/2022	DRY	DRY
MW-34A	PERCHED MW	14.8	1113.78	19.8	1108.78	1128.58	6/22/2022	18.89	1109.69
							7/8/2022	17.42	1111.16
							7/21/2022	17.45	1111.13
							7/29/2022	17.42	1111.16
							8/5/2022	17.43	1111.15
							8/12/2022	17.60	1110.98
							8/19/2022	17.67	1110.91
							8/26/2022	17.65	1110.93
							9/2/2022	17.59	1110.99
							9/9/2022	17.58	1111.00
							9/16/2022	17.51	1111.07
							9/20/2022	16.88	1111.70
							9/23/2022	16.90	1111.68
							10/12/2022	17.28	1111.32
							10/18/2022	17.41	1111.17
							11/18/2022	17.60	1110.98
							12/29/2022	17.61	1110.97

**Notes and Abbreviations:**

- NA: Elevation not surveyed  
 1. fmsl- Feet mean sea level  
 2. ft btor- Feet below top of riser.

## **FIGURES**



**LEGEND**

- WATER TABLE OR OUTWASH MONITORING WELL
- PERCHED GROUNDWATER MONITORING WELL
- △ SURFACE WATER SAMPLE
- BCP SITE BOUNDARY

**NOTES**

- ALL LOCATIONS AND DIMENSIONS ARE APPROXIMATE.
- MONITORING WELLS WITH DATA BOXES REPRESENT WELLS WHERE GROUNDWATER SAMPLES WERE COLLECTED AND SUBMITTED FOR ANALYSIS OF 1,4-DIOXANE AND PERFLUORINATED ALKYL ACIDS. VALUE SHOWN IN THE DATA BOX REPRESENT CONCENTRATIONS OF PERFLUOROOCTANESULFONIC ACID (PFOS), PERFLUOROOCTANOIC ACID (PFOA), AND TOTAL PFOA/PFOS DETECTED IN NANOGRAMS PER LITER (ng/L). ASTERISK (\*) INDICATES 1,4-DIOXANE (1,4-DIO) CONCENTRATIONS ARE PRESENTED IN MICROGRAMS PER LITER ( $\mu$ g/L).
- NEW YORK STATE DEPARTMENT OF HEALTH (NYSDOH) ADOPTED MAXIMUM CONTAMINANT LEVELS (MCLs) FOR PFOA AND PFOS IN FINISHED DRINKING WATER ARE 10 ng/L. THE MCL FOR 1,4-DIOXANE IS 1  $\mu$ g/L. CONCENTRATIONS DETECTED ABOVE THESE LIMITS ARE NOTED IN RED.
- MW-19B WAS DECOMMISSIONED IN OCTOBER 2020.
- ONLY WATER TABLE AND OUTWASH MONITORING WELLS PRESENTED ON MAP, WITH THE EXCEPTION OF WELLS MW-02A AND MW-23A, WHICH ARE PERCHED WATER WELLS.
- BOUNDARY SOURCE: DIGITIZED FROM "NYSDEC BROWNFIELD CLEANUP PROGRAM APPLICATION PLAN," PREPARED BY HOFFMAN LAND SURVEYING AND GEOMATICS, DATED 28 MARCH 2013
- AERIAL IMAGERY SOURCE: NEW YORK STATE, 2020



0 250 500  
SCALE IN FEET

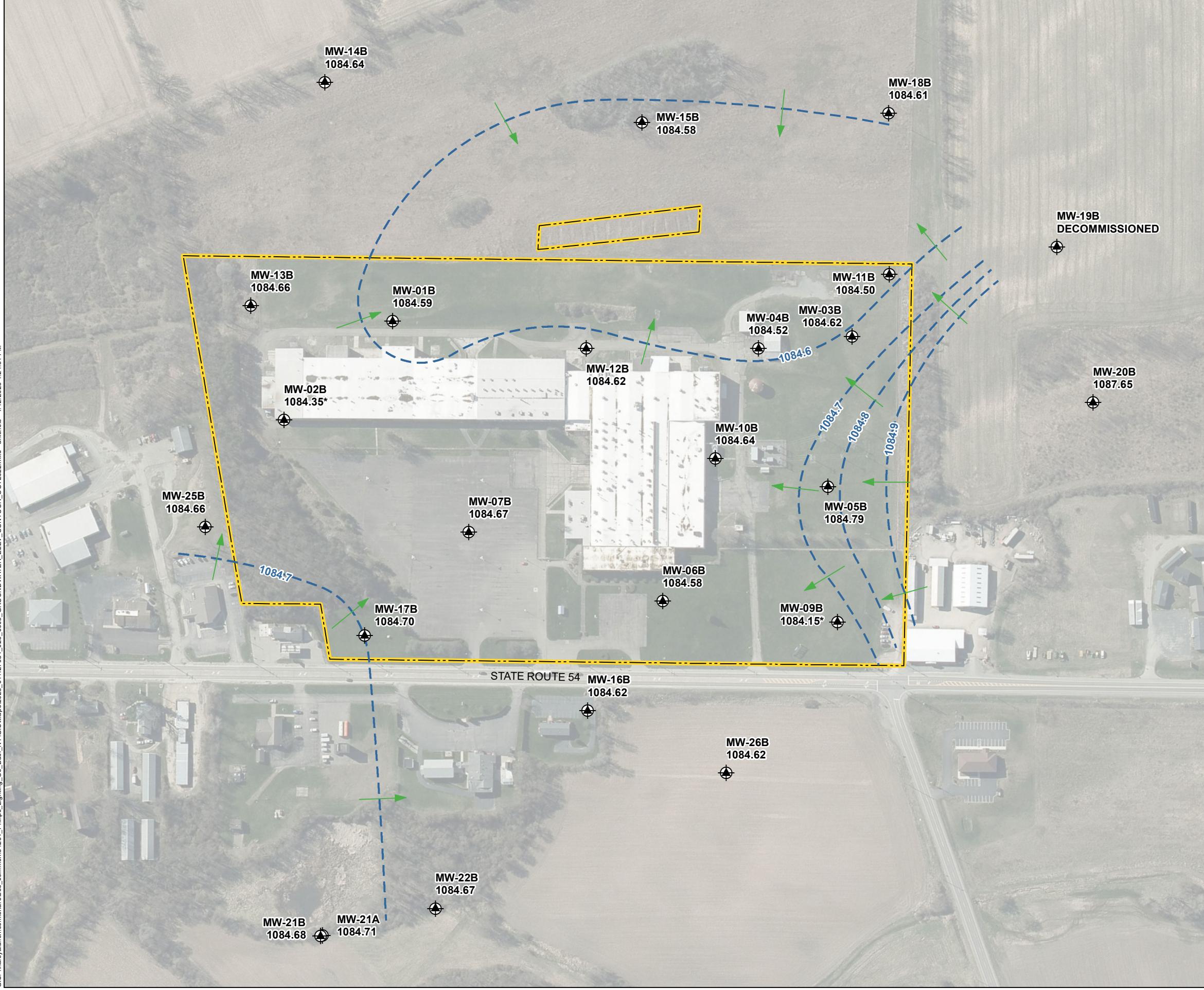
**HALEY ALDRICH**

PHILIPS LIGHTING COMPANY  
BATH FACILITY  
7265 STATE ROUTE 54  
BATH, NEW YORK

EMERGING CONTAMINANT  
SAMPLING LOCATIONS  
AND RESULTS

JANUARY 2023

FIGURE 2



#### LEGEND

- WATER TABLE OR OUTWASH MONITORING WELL, WITH GROUNDWATER ELEVATION IN FEET
- GROUNDWATER ELEVATION CONTOUR, IN FEET
- APPROXIMATE GROUNDWATER FLOW DIRECTION
- BCP SITE BOUNDARY

#### NOTES

1. ALL LOCATIONS AND DIMENSIONS ARE APPROXIMATE.
2. ONLY WATER TABLE AND OUTWASH MONITORING WELLS PRESENTED ON MAP.
3. GROUNDWATER LEVELS WERE MEASURED ON 12 OCTOBER 2022. ASTERISK (\*) INDICATES ELEVATION WAS NOT INCLUDED IN CONTOURING. THE ELEVATION FOR MW-09B IS CONSIDERED ANOMALOUS, AND THE ELEVATION FOR MW-02B IS NOT CONSIDERED REPRESENTATIVE OF THE WATER TABLE CONDITIONS.
4. MW-19B WAS DECOMMISSIONED IN OCTOBER 2020.
5. BOUNDARY SOURCE: DIGITIZED FROM "NYSDEC BROWNFIELD CLEANUP PROGRAM APPLICATION PLAN," PREPARED BY HOFFMAN LAND SURVEYING AND GEOMATICS, DATED 28 MARCH 2013
6. AERIAL IMAGERY SOURCE: NEW YORK STATE, 2020



0 250 500  
SCALE IN FEET

**HALEY  
ALDRICH**

PHILIPS LIGHTING COMPANY  
BATH FACILITY  
7265 STATE ROUTE 54  
BATH, NEW YORK

GROUNDWATER ELEVATION  
AND CONTOUR MAP  
OCTOBER 2022

JANUARY 2023

FIGURE 3

**APPENDIX A**

**Laboratory Analytical Reports**



## ANALYTICAL REPORT

Lab Number:	L1847309
Client:	Haley & Aldrich 200 Town Centre Drive Suite 2 Rochester, NY 14623-4264
ATTN:	Titania Ng
Phone:	(617) 886-7400
Project Name:	SUPP RI SAMPING PROGRAMS
Project Number:	127981-012 SID 1.1
Report Date:	12/04/18

The original project report/data package is held by Alpha Analytical. This report/data package is paginated and should be reproduced only in its entirety. Alpha Analytical holds no responsibility for results and/or data that are not consistent with the original.

Certifications & Approvals: MA (M-MA086), NH NELAP (2064), CT (PH-0574), IL (200077), ME (MA00086), MD (348), NJ (MA935), NY (11148), NC (25700/666), PA (68-03671), RI (LAO00065), TX (T104704476), VT (VT-0935), VA (460195), USDA (Permit #P330-17-00196).

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320 Forbes Boulevard, Mansfield, MA 02048-1806  
508-822-9300 (Fax) 508-822-3288 800-624-9220 - [www.alphalab.com](http://www.alphalab.com)



**Project Name:** SUPP RI SAMPING PROGRAMS  
**Project Number:** 127981-012 SID 1.1

**Lab Number:** L1847309  
**Report Date:** 12/04/18

<b>Alpha Sample ID</b>	<b>Client ID</b>	<b>Matrix</b>	<b>Sample Location</b>	<b>Collection Date/Time</b>	<b>Receive Date</b>
L1847309-01	MW01B-111618-1300	WATER	BATH, NEW YORK	11/16/18 13:00	11/16/18
L1847309-02	MW02A-111618-1330	WATER	BATH, NEW YORK	11/16/18 13:30	11/16/18
L1847309-03	MW03B-111618-1230	WATER	BATH, NEW YORK	11/16/18 12:30	11/16/18
L1847309-04	MW06B-111618-1400	WATER	BATH, NEW YORK	11/16/18 14:00	11/16/18
L1847309-05	MW17B-111618-1430	WATER	BATH, NEW YORK	11/16/18 14:30	11/16/18
L1847309-06	MW19B-111618-1200	WATER	BATH, NEW YORK	11/16/18 12:00	11/16/18
L1847309-07	4248-111618-0001	WATER	BATH, NEW YORK	11/16/18 00:00	11/16/18
L1847309-08	4248-111618-0002	WATER	BATH, NEW YORK	11/16/18 00:00	11/16/18

**Project Name:** SUPP RI SAMPING PROGRAMS  
**Project Number:** 127981-012 SID 1.1

**Lab Number:** L1847309  
**Report Date:** 12/04/18

### Case Narrative

The samples were received in accordance with the Chain of Custody and no significant deviations were encountered during the preparation or analysis unless otherwise noted. Sample Receipt, Container Information, and the Chain of Custody are located at the back of the report.

Results contained within this report relate only to the samples submitted under this Alpha Lab Number and meet NELAP requirements for all NELAP accredited parameters unless otherwise noted in the following narrative. The data presented in this report is organized by parameter (i.e. VOC, SVOC, etc.). Sample specific Quality Control data (i.e. Surrogate Spike Recovery) is reported at the end of the target analyte list for each individual sample, followed by the Laboratory Batch Quality Control at the end of each parameter. Tentatively Identified Compounds (TICs), if requested, are reported for compounds identified to be present and are not part of the method/program Target Compound List, even if only a subset of the TCL are being reported. If a sample was re-analyzed or re-extracted due to a required quality control corrective action and if both sets of data are reported, the Laboratory ID of the re-analysis or re-extraction is designated with an "R" or "RE", respectively. When multiple Batch Quality Control elements are reported (e.g. more than one LCS), the associated samples for each element are noted in the grey shaded header line of each data table. Any Laboratory Batch, Sample Specific % recovery or RPD value that is outside the listed Acceptance Criteria is bolded in the report. All specific QC information is also incorporated in the Data Usability format of our Data Merger tool where it can be reviewed along with any associated usability implications. Soil/sediments, solids and tissues are reported on a dry weight basis unless otherwise noted. Definitions of all data qualifiers and acronyms used in this report are provided in the Glossary located at the back of the report.

In reference to questions H (CAM) or 4 (RCP) when "NO" is checked, the performance criteria for CAM and RCP methods allow for some quality control failures to occur and still be within method compliance. In these instances the specific failure is not narrated but noted in the associated QC table. The information is also incorporated in the Data Usability format of our Data Merger tool where it can be reviewed along with any associated usability implications.

Please see the associated ADEX data file for a comparison of laboratory reporting limits that were achieved with the regulatory Numerical Standards requested on the Chain of Custody.

#### HOLD POLICY

For samples submitted on hold, Alpha's policy is to hold samples (with the exception of Air canisters) free of charge for 21 calendar days from the date the project is completed. After 21 calendar days, we will dispose of all samples submitted including those put on hold unless you have contacted your Client Service Representative and made arrangements for Alpha to continue to hold the samples. Air canisters will be disposed after 3 business days from the date the project is completed.

Please contact Client Services at 800-624-9220 with any questions.

**Project Name:** SUPP RI SAMPING PROGRAMS  
**Project Number:** 127981-012 SID 1.1

**Lab Number:** L1847309  
**Report Date:** 12/04/18

### Case Narrative (continued)

#### Report Submission

All non-detect (ND) or estimated concentrations (J-qualified) have been quantitated to the limit noted in the MDL column.

#### Perfluorinated Alkyl Acids by Isotope Dilution

L1847309-01, -02, -03, -04, -05, and -08: Extracted Internal Standard recoveries were outside the acceptance criteria for individual analytes. Please refer to the surrogate section of the report for details.

WG1181341-6/-7 MS/MSD: Extracted Internal Standard recoveries were outside the acceptance criteria for individual analytes. Please refer to the surrogate section of the report for details.

WG1182507-6: The continuing calibration standard, associated with L1847309 as well as the associated QC, had the response for the extracted internal standard Perfluoro[13C5]Pentanoic Acid (M5PFPEA) (154%) outside the acceptance criteria for the method. The associated target analytes were within acceptance criteria, therefore no further action was taken.

WG1182507-7: The continuing calibration standard, associated with L1847309 as well as the associated QC, had the response for the extracted internal standard Perfluoro[13C5]Pentanoic Acid (M5PFPEA) (156.8%) outside the acceptance criteria for the method. The associated target analytes were within acceptance criteria, therefore no further action was taken.

WG1182507-5: The continuing calibration standard, associated with L1847309 as well as the associated QC, had the response for Perfluorooctanesulfonic Acid-Branched (br-PFOS) (37%) outside the acceptance criteria for the method. The response for Perfluorooctanesulfonic Acid-Total (PFOS) (90.4%, therefore no further action was taken.

WG1182507-5: The continuing calibration standard, associated with L1847309 as well as the associated QC, had the response for the extracted internal standard Perfluoro[13C5]Pentanoic Acid (M5PFPEA) (154.3%) outside the acceptance criteria for the method. The associated target analytes were within acceptance criteria, therefore no further action was taken.

I, the undersigned, attest under the pains and penalties of perjury that, to the best of my knowledge and belief and based upon my personal inquiry of those responsible for providing the information contained in this analytical report, such information is accurate and complete. This certificate of analysis is not complete unless this page accompanies any and all pages of this report.

Authorized Signature:

*Gale Porta* Elizabeth Porta

Title: Technical Director/Representative

Date: 12/04/18

# ORGANICS

# **SEMIVOLATILES**



Project Name: SUPP RI SAMPING PROGRAMS

Lab Number: L1847309

Project Number: 127981-012 SID 1.1

Report Date: 12/04/18

**SAMPLE RESULTS**

Lab ID:	L1847309-01	Date Collected:	11/16/18 13:00
Client ID:	MW01B-111618-1300	Date Received:	11/16/18
Sample Location:	BATH, NEW YORK	Field Prep:	Not Specified

Sample Depth:

Matrix:	Water	Extraction Method:	EPA 3510C
Analytical Method:	1,8270D-SIM	Extraction Date:	11/21/18 16:00
Analytical Date:	11/29/18 17:34		
Analyst:	MA		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>1,4 Dioxane by 8270D-SIM - Mansfield Lab</b>						
1,4-Dioxane	ND		ng/l	147	73.5	1
<hr/>						
Surrogate		% Recovery	Qualifier	<b>Acceptance Criteria</b>		
1,4-Dioxane-d8		30		15-110		

Project Name: SUPP RI SAMPING PROGRAMS

Lab Number: L1847309

Project Number: 127981-012 SID 1.1

Report Date: 12/04/18

**SAMPLE RESULTS**

Lab ID: L1847309-01  
 Client ID: MW01B-111618-1300  
 Sample Location: BATH, NEW YORK

Date Collected: 11/16/18 13:00  
 Date Received: 11/16/18  
 Field Prep: Not Specified

Sample Depth:

Matrix: Water  
 Analytical Method: 122,537(M)  
 Analytical Date: 11/27/18 01:26  
 Analyst: AJ

Extraction Method: EPA 537  
 Extraction Date: 11/20/18 09:30

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Perfluorinated Alkyl Acids by Isotope Dilution - Mansfield Lab</b>						
Perfluorobutanoic Acid (PFBA)	2.19		ng/l	1.97	0.367	1
Perfluoropentanoic Acid (PFPeA)	1.32	J	ng/l	1.97	0.457	1
Perfluorobutanesulfonic Acid (PFBS)	0.579	J	ng/l	1.97	0.374	1
Perfluorohexanoic Acid (PFHxA)	1.20	J	ng/l	1.97	0.484	1
Perfluoroheptanoic Acid (PFHpA)	0.740	J	ng/l	1.97	0.366	1
Perfluorohexanesulfonic Acid (PFHxS)	0.579	J	ng/l	1.97	0.429	1
Perfluoroctanoic Acid (PFOA)	2.19		ng/l	1.97	0.453	1
1H,1H,2H,2H-Perfluorooctanesulfonic Acid (6:2FTS)	ND		ng/l	1.97	0.191	1
Perfluoroheptanesulfonic Acid (PFHpS)	ND		ng/l	1.97	0.512	1
Perfluorononanoic Acid (PFNA)	ND		ng/l	1.97	0.429	1
Perfluorooctanesulfonic Acid (PFOS)	ND		ng/l	1.97	0.551	1
Perfluorodecanoic Acid (PFDA)	ND		ng/l	1.97	0.610	1
1H,1H,2H,2H-Perfluorodecanesulfonic Acid (8:2FTS)	ND		ng/l	1.97	0.286	1
N-Methyl Perfluorooctanesulfonamidoacetic Acid (NMeFOSAA)	ND		ng/l	1.97	0.246	1
Perfluoroundecanoic Acid (PFUnA)	ND		ng/l	1.97	0.417	1
Perfluorodecanesulfonic Acid (PFDS)	ND		ng/l	1.97	0.380	1
Perfluorooctanesulfonamide (FOSA)	ND		ng/l	1.97	0.547	1
N-Ethyl Perfluorooctanesulfonamidoacetic Acid (NEtFOSAA)	ND		ng/l	1.97	0.367	1
Perfluorododecanoic Acid (PFDoA)	ND		ng/l	1.97	0.583	1
Perfluorotridecanoic Acid (PFTrDA)	ND		ng/l	1.97	0.309	1
Perfluorotetradecanoic Acid (PFTA)	ND		ng/l	1.97	0.972	1

Project Name: SUPP RI SAMPING PROGRAMS

Lab Number: L1847309

Project Number: 127981-012 SID 1.1

Report Date: 12/04/18

**SAMPLE RESULTS**

Lab ID:	L1847309-01	Date Collected:	11/16/18 13:00
Client ID:	MW01B-111618-1300	Date Received:	11/16/18
Sample Location:	BATH, NEW YORK	Field Prep:	Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Perfluorinated Alkyl Acids by Isotope Dilution - Mansfield Lab						
Surrogate			% Recovery	Qualifier	Acceptance Criteria	
Perfluoro[13C4]Butanoic Acid (MPFBA)			114		2-156	
Perfluoro[13C5]Pentanoic Acid (M5PFPEA)	233	Q			16-173	
Perfluoro[2,3,4-13C3]Butanesulfonic Acid (M3PFBS)	116				31-159	
Perfluoro[1,2,3,4,6-13C5]Hexanoic Acid (M5PFHxA)	101				21-145	
Perfluoro[1,2,3,4-13C4]Heptanoic Acid (M4PFHxA)	106				30-139	
Perfluoro[1,2,3-13C3]Hexanesulfonic Acid (M3PFHxS)	110				47-153	
Perfluoro[13C8]Octanoic Acid (M8PFOA)	117				36-149	
1H,1H,2H,2H-Perfluoro[1,2-13C2]Octanesulfonic Acid (M2-6:2FTS)	149				1-244	
Perfluoro[13C9]Nonanoic Acid (M9PFNA)	132				34-146	
Perfluoro[13C8]Octanesulfonic Acid (M8PFOS)	124				42-146	
Perfluoro[1,2,3,4,5,6-13C6]Decanoic Acid (M6PFDA)	110				38-144	
1H,1H,2H,2H-Perfluoro[1,2-13C2]Decanesulfonic Acid (M2-8:2FTS)	156				7-170	
N-Deuteriomethylperfluoro-1-octanesulfonamidoacetic Acid (d3-NMeFOSAA)	90				1-181	
Perfluoro[1,2,3,4,5,6,7-13C7]Undecanoic Acid (M7-PFUDA)	124				40-144	
Perfluoro[13C8]Octanesulfonamide (M8FOSA)	50				1-87	
N-Deuteroethylperfluoro-1-octanesulfonamidoacetic Acid (d5-NEtFOSAA)	76				23-146	
Perfluoro[1,2-13C2]Dodecanoic Acid (MPFDCA)	89				24-161	
Perfluoro[1,2-13C2]Tetradecanoic Acid (M2PFTEDA)	69				33-143	

Project Name: SUPP RI SAMPING PROGRAMS

Lab Number: L1847309

Project Number: 127981-012 SID 1.1

Report Date: 12/04/18

**SAMPLE RESULTS**

Lab ID:	L1847309-02	Date Collected:	11/16/18 13:30
Client ID:	MW02A-111618-1330	Date Received:	11/16/18
Sample Location:	BATH, NEW YORK	Field Prep:	Not Specified

Sample Depth:

Matrix:	Water	Extraction Method:	EPA 3510C
Analytical Method:	1,8270D-SIM	Extraction Date:	11/21/18 16:00
Analytical Date:	11/29/18 17:58		
Analyst:	MA		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
1,4 Dioxane by 8270D-SIM - Mansfield Lab						
1,4-Dioxane	ND		ng/l	147	73.5	1
Surrogate		% Recovery	Qualifier	Acceptance Criteria		
1,4-Dioxane-d8		30		15-110		

Project Name: SUPP RI SAMPING PROGRAMS

Lab Number: L1847309

Project Number: 127981-012 SID 1.1

Report Date: 12/04/18

**SAMPLE RESULTS**

Lab ID: L1847309-02  
 Client ID: MW02A-111618-1330  
 Sample Location: BATH, NEW YORK

Date Collected: 11/16/18 13:30  
 Date Received: 11/16/18  
 Field Prep: Not Specified

Sample Depth:

Matrix: Water  
 Analytical Method: 122,537(M)  
 Analytical Date: 11/27/18 01:42  
 Analyst: AJ

Extraction Method: EPA 537  
 Extraction Date: 11/20/18 09:30

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Perfluorinated Alkyl Acids by Isotope Dilution - Mansfield Lab</b>						
Perfluorobutanoic Acid (PFBA)	3.40		ng/l	2.24	0.418	1
Perfluoropentanoic Acid (PFPeA)	1.71	J	ng/l	2.24	0.520	1
Perfluorobutanesulfonic Acid (PFBS)	ND		ng/l	2.24	0.426	1
Perfluorohexanoic Acid (PFHxA)	1.71	J	ng/l	2.24	0.552	1
Perfluoroheptanoic Acid (PFHpA)	1.49	J	ng/l	2.24	0.417	1
Perfluorohexanesulfonic Acid (PFHxS)	ND		ng/l	2.24	0.489	1
Perfluoroctanoic Acid (PFOA)	3.32		ng/l	2.24	0.516	1
1H,1H,2H,2H-Perfluorooctanesulfonic Acid (6:2FTS)	ND		ng/l	2.24	0.217	1
Perfluoroheptanesulfonic Acid (PFHpS)	ND		ng/l	2.24	0.583	1
Perfluorononanoic Acid (PFNA)	0.520	J	ng/l	2.24	0.489	1
Perfluorooctanesulfonic Acid (PFOS)	0.637	J	ng/l	2.24	0.628	1
Perfluorodecanoic Acid (PFDA)	ND		ng/l	2.24	0.695	1
1H,1H,2H,2H-Perfluorodecanesulfonic Acid (8:2FTS)	ND		ng/l	2.24	0.326	1
N-Methyl Perfluorooctanesulfonamidoacetic Acid (NMeFOSAA)	ND		ng/l	2.24	0.281	1
Perfluoroundecanoic Acid (PFUnA)	ND		ng/l	2.24	0.475	1
Perfluorodecanesulfonic Acid (PFDS)	ND		ng/l	2.24	0.433	1
Perfluorooctanesulfonamide (FOSA)	ND		ng/l	2.24	0.623	1
N-Ethyl Perfluorooctanesulfonamidoacetic Acid (NEtFOSAA)	ND		ng/l	2.24	0.418	1
Perfluorododecanoic Acid (PFDoA)	ND		ng/l	2.24	0.664	1
Perfluorotridecanoic Acid (PFTrDA)	ND		ng/l	2.24	0.352	1
Perfluorotetradecanoic Acid (PFTA)	ND		ng/l	2.24	1.11	1

Project Name: SUPP RI SAMPING PROGRAMS

Lab Number: L1847309

Project Number: 127981-012 SID 1.1

Report Date: 12/04/18

**SAMPLE RESULTS**

Lab ID:	L1847309-02	Date Collected:	11/16/18 13:30
Client ID:	MW02A-111618-1330	Date Received:	11/16/18
Sample Location:	BATH, NEW YORK	Field Prep:	Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Perfluorinated Alkyl Acids by Isotope Dilution - Mansfield Lab						
Surrogate			% Recovery	Qualifier	Acceptance Criteria	
Perfluoro[13C4]Butanoic Acid (MPFBA)			124		2-156	
Perfluoro[13C5]Pentanoic Acid (M5PFPEA)	231	Q			16-173	
Perfluoro[2,3,4-13C3]Butanesulfonic Acid (M3PFBS)	121				31-159	
Perfluoro[1,2,3,4,6-13C5]Hexanoic Acid (M5PFHxA)	112				21-145	
Perfluoro[1,2,3,4-13C4]Heptanoic Acid (M4PFHxA)	118				30-139	
Perfluoro[1,2,3-13C3]Hexanesulfonic Acid (M3PFHxS)	131				47-153	
Perfluoro[13C8]Octanoic Acid (M8PFOA)	122				36-149	
1H,1H,2H,2H-Perfluoro[1,2-13C2]Octanesulfonic Acid (M2-6:2FTS)	156				1-244	
Perfluoro[13C9]Nonanoic Acid (M9PFNA)	120				34-146	
Perfluoro[13C8]Octanesulfonic Acid (M8PFOS)	112				42-146	
Perfluoro[1,2,3,4,5,6-13C6]Decanoic Acid (M6PFDA)	102				38-144	
1H,1H,2H,2H-Perfluoro[1,2-13C2]Decanesulfonic Acid (M2-8:2FTS)	117				7-170	
N-Deuteriomethylperfluoro-1-octanesulfonamidoacetic Acid (d3-NMeFOSAA)	53				1-181	
Perfluoro[1,2,3,4,5,6,7-13C7]Undecanoic Acid (M7-PFUDA)	88				40-144	
Perfluoro[13C8]Octanesulfonamide (M8FOSA)	27				1-87	
N-Deuteroethylperfluoro-1-octanesulfonamidoacetic Acid (d5-NEtFOSAA)	49				23-146	
Perfluoro[1,2-13C2]Dodecanoic Acid (MPFDCA)	65				24-161	
Perfluoro[1,2-13C2]Tetradecanoic Acid (M2PFTEDA)	56				33-143	

Project Name: SUPP RI SAMPING PROGRAMS

Lab Number: L1847309

Project Number: 127981-012 SID 1.1

Report Date: 12/04/18

**SAMPLE RESULTS**

Lab ID:	L1847309-03	Date Collected:	11/16/18 12:30
Client ID:	MW03B-111618-1230	Date Received:	11/16/18
Sample Location:	BATH, NEW YORK	Field Prep:	Not Specified

Sample Depth:

Matrix:	Water	Extraction Method:	EPA 3510C
Analytical Method:	1,8270D-SIM	Extraction Date:	11/21/18 16:00
Analytical Date:	11/29/18 18:22		
Analyst:	MA		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
1,4 Dioxane by 8270D-SIM - Mansfield Lab						
1,4-Dioxane	ND		ng/l	153	76.5	1
Surrogate		% Recovery	Qualifier	Acceptance Criteria		
1,4-Dioxane-d8		31		15-110		

Project Name: SUPP RI SAMPING PROGRAMS

Lab Number: L1847309

Project Number: 127981-012 SID 1.1

Report Date: 12/04/18

**SAMPLE RESULTS**

Lab ID: L1847309-03  
 Client ID: MW03B-111618-1230  
 Sample Location: BATH, NEW YORK

Date Collected: 11/16/18 12:30  
 Date Received: 11/16/18  
 Field Prep: Not Specified

Sample Depth:

Matrix: Water  
 Analytical Method: 122,537(M)  
 Analytical Date: 11/27/18 01:59  
 Analyst: AJ

Extraction Method: EPA 537  
 Extraction Date: 11/20/18 09:30

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Perfluorinated Alkyl Acids by Isotope Dilution - Mansfield Lab</b>						
Perfluorobutanoic Acid (PFBA)	0.813	J	ng/l	1.91	0.356	1
Perfluoropentanoic Acid (PFPeA)	ND		ng/l	1.91	0.443	1
Perfluorobutanesulfonic Acid (PFBS)	ND		ng/l	1.91	0.362	1
Perfluorohexanoic Acid (PFHxA)	ND		ng/l	1.91	0.469	1
Perfluoroheptanoic Acid (PFHpA)	ND		ng/l	1.91	0.355	1
Perfluorohexanesulfonic Acid (PFHxS)	ND		ng/l	1.91	0.416	1
Perfluoroctanoic Acid (PFOA)	ND		ng/l	1.91	0.439	1
1H,1H,2H,2H-Perfluorooctanesulfonic Acid (6:2FTS)	ND		ng/l	1.91	0.185	1
Perfluoroheptanesulfonic Acid (PFHpS)	ND		ng/l	1.91	0.496	1
Perfluorononanoic Acid (PFNA)	ND		ng/l	1.91	0.416	1
Perfluorooctanesulfonic Acid (PFOS)	ND		ng/l	1.91	0.534	1
Perfluorodecanoic Acid (PFDA)	ND		ng/l	1.91	0.592	1
1H,1H,2H,2H-Perfluorodecanesulfonic Acid (8:2FTS)	ND		ng/l	1.91	0.277	1
N-Methyl Perfluorooctanesulfonamidoacetic Acid (NMeFOSAA)	ND		ng/l	1.91	0.239	1
Perfluoroundecanoic Acid (PFUnA)	ND		ng/l	1.91	0.404	1
Perfluorodecanesulfonic Acid (PFDS)	ND		ng/l	1.91	0.368	1
Perfluorooctanesulfonamide (FOSA)	ND		ng/l	1.91	0.530	1
N-Ethyl Perfluorooctanesulfonamidoacetic Acid (NEtFOSAA)	ND		ng/l	1.91	0.356	1
Perfluorododecanoic Acid (PFDoA)	ND		ng/l	1.91	0.565	1
Perfluorotridecanoic Acid (PFTrDA)	ND		ng/l	1.91	0.300	1
Perfluorotetradecanoic Acid (PFTA)	ND		ng/l	1.91	0.943	1

Project Name: SUPP RI SAMPING PROGRAMS

Lab Number: L1847309

Project Number: 127981-012 SID 1.1

Report Date: 12/04/18

**SAMPLE RESULTS**

Lab ID:	L1847309-03	Date Collected:	11/16/18 12:30
Client ID:	MW03B-111618-1230	Date Received:	11/16/18
Sample Location:	BATH, NEW YORK	Field Prep:	Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Perfluorinated Alkyl Acids by Isotope Dilution - Mansfield Lab						
Surrogate			% Recovery	Qualifier	Acceptance Criteria	
Perfluoro[13C4]Butanoic Acid (MPFBA)			112		2-156	
Perfluoro[13C5]Pentanoic Acid (M5PFPEA)	178	Q			16-173	
Perfluoro[2,3,4-13C3]Butanesulfonic Acid (M3PFBS)	102				31-159	
Perfluoro[1,2,3,4,6-13C5]Hexanoic Acid (M5PFHxA)	98				21-145	
Perfluoro[1,2,3,4-13C4]Heptanoic Acid (M4PFHxA)	101				30-139	
Perfluoro[1,2,3-13C3]Hexanesulfonic Acid (M3PFHxS)	107				47-153	
Perfluoro[13C8]Octanoic Acid (M8PFOA)	110				36-149	
1H,1H,2H,2H-Perfluoro[1,2-13C2]Octanesulfonic Acid (M2-6:2FTS)	110				1-244	
Perfluoro[13C9]Nonanoic Acid (M9PFNA)	105				34-146	
Perfluoro[13C8]Octanesulfonic Acid (M8PFOS)	103				42-146	
Perfluoro[1,2,3,4,5,6-13C6]Decanoic Acid (M6PFDA)	103				38-144	
1H,1H,2H,2H-Perfluoro[1,2-13C2]Decanesulfonic Acid (M2-8:2FTS)	96				7-170	
N-Deuteriomethylperfluoro-1-octanesulfonamidoacetic Acid (d3-NMeFOSAA)	83				1-181	
Perfluoro[1,2,3,4,5,6,7-13C7]Undecanoic Acid (M7-PFUDA)	101				40-144	
Perfluoro[13C8]Octanesulfonamide (M8FOSA)	49				1-87	
N-Deuteroethylperfluoro-1-octanesulfonamidoacetic Acid (d5-NEtFOSAA)	72				23-146	
Perfluoro[1,2-13C2]Dodecanoic Acid (MPFDCA)	92				24-161	
Perfluoro[1,2-13C2]Tetradecanoic Acid (M2PFTEDA)	72				33-143	

Project Name: SUPP RI SAMPING PROGRAMS

Lab Number: L1847309

Project Number: 127981-012 SID 1.1

Report Date: 12/04/18

**SAMPLE RESULTS**

Lab ID:	L1847309-04	Date Collected:	11/16/18 14:00
Client ID:	MW06B-111618-1400	Date Received:	11/16/18
Sample Location:	BATH, NEW YORK	Field Prep:	Not Specified

Sample Depth:

Matrix:	Water	Extraction Method:	EPA 3510C
Analytical Method:	1,8270D-SIM	Extraction Date:	11/21/18 16:00
Analytical Date:	11/29/18 18:46		
Analyst:	MA		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
1,4 Dioxane by 8270D-SIM - Mansfield Lab						
1,4-Dioxane	ND		ng/l	150	75.0	1
Surrogate		% Recovery	Qualifier	Acceptance Criteria		
1,4-Dioxane-d8		31		15-110		

Project Name: SUPP RI SAMPING PROGRAMS

Lab Number: L1847309

Project Number: 127981-012 SID 1.1

Report Date: 12/04/18

**SAMPLE RESULTS**

Lab ID: L1847309-04  
 Client ID: MW06B-111618-1400  
 Sample Location: BATH, NEW YORK

Date Collected: 11/16/18 14:00  
 Date Received: 11/16/18  
 Field Prep: Not Specified

Sample Depth:

Matrix: Water  
 Analytical Method: 122,537(M)  
 Analytical Date: 11/27/18 03:05  
 Analyst: AJ

Extraction Method: EPA 537  
 Extraction Date: 11/20/18 09:30

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Perfluorinated Alkyl Acids by Isotope Dilution - Mansfield Lab</b>						
Perfluorobutanoic Acid (PFBA)	2.62		ng/l	1.94	0.363	1
Perfluoropentanoic Acid (PFPeA)	2.45		ng/l	1.94	0.451	1
Perfluorobutanesulfonic Acid (PFBS)	0.899	J	ng/l	1.94	0.370	1
Perfluorohexanoic Acid (PFHxA)	2.98		ng/l	1.94	0.478	1
Perfluoroheptanoic Acid (PFHpA)	1.45	J	ng/l	1.94	0.362	1
Perfluorohexanesulfonic Acid (PFHxS)	9.68		ng/l	1.94	0.424	1
Perfluoroctanoic Acid (PFOA)	1.99		ng/l	1.94	0.447	1
1H,1H,2H,2H-Perfluorooctanesulfonic Acid (6:2FTS)	ND		ng/l	1.94	0.189	1
Perfluoroheptanesulfonic Acid (PFHpS)	ND		ng/l	1.94	0.506	1
Perfluorononanoic Acid (PFNA)	0.486	J	ng/l	1.94	0.424	1
Perfluorooctanesulfonic Acid (PFOS)	2.12		ng/l	1.94	0.545	1
Perfluorodecanoic Acid (PFDA)	ND		ng/l	1.94	0.603	1
1H,1H,2H,2H-Perfluorodecanesulfonic Acid (8:2FTS)	ND		ng/l	1.94	0.283	1
N-Methyl Perfluorooctanesulfonamidoacetic Acid (NMeFOSAA)	ND		ng/l	1.94	0.244	1
Perfluoroundecanoic Acid (PFUnA)	ND		ng/l	1.94	0.412	1
Perfluorodecanesulfonic Acid (PFDS)	ND		ng/l	1.94	0.375	1
Perfluorooctanesulfonamide (FOSA)	ND		ng/l	1.94	0.541	1
N-Ethyl Perfluorooctanesulfonamidoacetic Acid (NEtFOSAA)	0.836	J	ng/l	1.94	0.363	1
Perfluorododecanoic Acid (PFDoA)	ND		ng/l	1.94	0.576	1
Perfluorotridecanoic Acid (PFTrDA)	ND		ng/l	1.94	0.305	1
Perfluorotetradecanoic Acid (PFTA)	ND		ng/l	1.94	0.961	1

Project Name: SUPP RI SAMPING PROGRAMS

Lab Number: L1847309

Project Number: 127981-012 SID 1.1

Report Date: 12/04/18

**SAMPLE RESULTS**

Lab ID:	L1847309-04	Date Collected:	11/16/18 14:00
Client ID:	MW06B-111618-1400	Date Received:	11/16/18
Sample Location:	BATH, NEW YORK	Field Prep:	Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Perfluorinated Alkyl Acids by Isotope Dilution - Mansfield Lab						
Surrogate			% Recovery	Qualifier	Acceptance Criteria	
Perfluoro[13C4]Butanoic Acid (MPFBA)			117		2-156	
Perfluoro[13C5]Pentanoic Acid (M5PFPEA)	<b>221</b>	Q			16-173	
Perfluoro[2,3,4-13C3]Butanesulfonic Acid (M3PFBS)	120				31-159	
Perfluoro[1,2,3,4,6-13C5]Hexanoic Acid (M5PFHxA)	104				21-145	
Perfluoro[1,2,3,4-13C4]Heptanoic Acid (M4PFHxA)	105				30-139	
Perfluoro[1,2,3-13C3]Hexanesulfonic Acid (M3PFHxS)	132				47-153	
Perfluoro[13C8]Octanoic Acid (M8PFOA)	117				36-149	
1H,1H,2H-Perfluoro[1,2-13C2]Octanesulfonic Acid (M2-6:2FTS)	137				1-244	
Perfluoro[13C9]Nonanoic Acid (M9PFNA)	123				34-146	
Perfluoro[13C8]Octanesulfonic Acid (M8PFOS)	128				42-146	
Perfluoro[1,2,3,4,5,6-13C6]Decanoic Acid (M6PFDA)	117				38-144	
1H,1H,2H-Perfluoro[1,2-13C2]Decanesulfonic Acid (M2-8:2FTS)	138				7-170	
N-Deuteriomethylperfluoro-1-octanesulfonamidoacetic Acid (d3-NMeFOSAA)	90				1-181	
Perfluoro[1,2,3,4,5,6,7-13C7]Undecanoic Acid (M7-PFUDA)	125				40-144	
Perfluoro[13C8]Octanesulfonamide (M8FOSA)	40				1-87	
N-Deuteroethylperfluoro-1-octanesulfonamidoacetic Acid (d5-NEtFOSAA)	79				23-146	
Perfluoro[1,2-13C2]Dodecanoic Acid (MPFDCA)	103				24-161	
Perfluoro[1,2-13C2]Tetradecanoic Acid (M2PFTEDA)	76				33-143	

Project Name: SUPP RI SAMPING PROGRAMS

Lab Number: L1847309

Project Number: 127981-012 SID 1.1

Report Date: 12/04/18

**SAMPLE RESULTS**

Lab ID:	L1847309-05	Date Collected:	11/16/18 14:30
Client ID:	MW17B-111618-1430	Date Received:	11/16/18
Sample Location:	BATH, NEW YORK	Field Prep:	Not Specified

Sample Depth:

Matrix:	Water	Extraction Method:	EPA 3510C
Analytical Method:	1,8270D-SIM	Extraction Date:	11/21/18 16:00
Analytical Date:	11/29/18 19:09		
Analyst:	MA		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
1,4 Dioxane by 8270D-SIM - Mansfield Lab						
1,4-Dioxane	ND		ng/l	142	70.8	1
Surrogate		% Recovery	Qualifier	Acceptance Criteria		
1,4-Dioxane-d8		30		15-110		

Project Name: SUPP RI SAMPING PROGRAMS

Lab Number: L1847309

Project Number: 127981-012 SID 1.1

Report Date: 12/04/18

**SAMPLE RESULTS**

Lab ID: L1847309-05  
 Client ID: MW17B-111618-1430  
 Sample Location: BATH, NEW YORK

Date Collected: 11/16/18 14:30  
 Date Received: 11/16/18  
 Field Prep: Not Specified

Sample Depth:

Matrix: Water  
 Analytical Method: 122,537(M)  
 Analytical Date: 11/27/18 03:22  
 Analyst: AJ

Extraction Method: EPA 537  
 Extraction Date: 11/20/18 09:30

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Perfluorinated Alkyl Acids by Isotope Dilution - Mansfield Lab</b>						
Perfluorobutanoic Acid (PFBA)	2.20		ng/l	2.10	0.392	1
Perfluoropentanoic Acid (PFPeA)	4.77		ng/l	2.10	0.487	1
Perfluorobutanesulfonic Acid (PFBS)	1.41	J	ng/l	2.10	0.399	1
Perfluorohexanoic Acid (PFHxA)	5.01		ng/l	2.10	0.517	1
Perfluoroheptanoic Acid (PFHpA)	3.83		ng/l	2.10	0.391	1
Perfluorohexanesulfonic Acid (PFHxS)	18.0		ng/l	2.10	0.458	1
Perfluoroctanoic Acid (PFOA)	5.18		ng/l	2.10	0.483	1
1H,1H,2H,2H-Perfluorooctanesulfonic Acid (6:2FTS)	ND		ng/l	2.10	0.204	1
Perfluoroheptanesulfonic Acid (PFHpS)	0.975	J	ng/l	2.10	0.546	1
Perfluorononanoic Acid (PFNA)	3.00		ng/l	2.10	0.458	1
Perfluorooctanesulfonic Acid (PFOS)	35.5		ng/l	2.10	0.588	1
Perfluorodecanoic Acid (PFDA)	ND		ng/l	2.10	0.651	1
1H,1H,2H,2H-Perfluorodecanesulfonic Acid (8:2FTS)	ND		ng/l	2.10	0.305	1
N-Methyl Perfluorooctanesulfonamidoacetic Acid (NMeFOSAA)	ND		ng/l	2.10	0.263	1
Perfluoroundecanoic Acid (PFUnA)	ND		ng/l	2.10	0.445	1
Perfluorodecanesulfonic Acid (PFDS)	ND		ng/l	2.10	0.405	1
Perfluorooctanesulfonamide (FOSA)	ND		ng/l	2.10	0.584	1
N-Ethyl Perfluorooctanesulfonamidoacetic Acid (NEtFOSAA)	ND		ng/l	2.10	0.392	1
Perfluorododecanoic Acid (PFDoA)	ND		ng/l	2.10	0.622	1
Perfluorotridecanoic Acid (PFTrDA)	ND		ng/l	2.10	0.330	1
Perfluorotetradecanoic Acid (PFTA)	ND		ng/l	2.10	1.04	1

Project Name: SUPP RI SAMPING PROGRAMS

Lab Number: L1847309

Project Number: 127981-012 SID 1.1

Report Date: 12/04/18

**SAMPLE RESULTS**

Lab ID:	L1847309-05	Date Collected:	11/16/18 14:30
Client ID:	MW17B-111618-1430	Date Received:	11/16/18
Sample Location:	BATH, NEW YORK	Field Prep:	Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Perfluorinated Alkyl Acids by Isotope Dilution - Mansfield Lab						
Surrogate			% Recovery	Qualifier	Acceptance Criteria	
Perfluoro[13C4]Butanoic Acid (MPFBA)			118		2-156	
Perfluoro[13C5]Pentanoic Acid (M5PFPEA)	217	Q			16-173	
Perfluoro[2,3,4-13C3]Butanesulfonic Acid (M3PFBS)	119				31-159	
Perfluoro[1,2,3,4,6-13C5]Hexanoic Acid (M5PFHxA)	102				21-145	
Perfluoro[1,2,3,4-13C4]Heptanoic Acid (M4PFHxA)	109				30-139	
Perfluoro[1,2,3-13C3]Hexanesulfonic Acid (M3PFHxS)	125				47-153	
Perfluoro[13C8]Octanoic Acid (M8PFOA)	118				36-149	
1H,1H,2H-Perfluoro[1,2-13C2]Octanesulfonic Acid (M2-6:2FTS)	141				1-244	
Perfluoro[13C9]Nonanoic Acid (M9PFNA)	113				34-146	
Perfluoro[13C8]Octanesulfonic Acid (M8PFOS)	104				42-146	
Perfluoro[1,2,3,4,5,6-13C6]Decanoic Acid (M6PFDA)	91				38-144	
1H,1H,2H-Perfluoro[1,2-13C2]Decanesulfonic Acid (M2-8:2FTS)	121				7-170	
N-Deuteriomethylperfluoro-1-octanesulfonamidoacetic Acid (d3-NMeFOSAA)	35				1-181	
Perfluoro[1,2,3,4,5,6,7-13C7]Undecanoic Acid (M7-PFUDA)	67				40-144	
Perfluoro[13C8]Octanesulfonamide (M8FOSA)	9				1-87	
N-Deuteroethylperfluoro-1-octanesulfonamidoacetic Acid (d5-NEtFOSAA)	29				23-146	
Perfluoro[1,2-13C2]Dodecanoic Acid (MPFDCA)	43				24-161	
Perfluoro[1,2-13C2]Tetradecanoic Acid (M2PFTEDA)	37				33-143	

Project Name: SUPP RI SAMPING PROGRAMS

Lab Number: L1847309

Project Number: 127981-012 SID 1.1

Report Date: 12/04/18

**SAMPLE RESULTS**

Lab ID:	L1847309-06	Date Collected:	11/16/18 12:00
Client ID:	MW19B-111618-1200	Date Received:	11/16/18
Sample Location:	BATH, NEW YORK	Field Prep:	Not Specified

Sample Depth:

Matrix:	Water	Extraction Method:	EPA 3510C
Analytical Method:	1,8270D-SIM	Extraction Date:	11/21/18 16:00
Analytical Date:	11/29/18 20:32		
Analyst:	MA		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
1,4 Dioxane by 8270D-SIM - Mansfield Lab						
1,4-Dioxane	ND		ng/l	150	75.0	1
Surrogate		% Recovery	Qualifier	Acceptance Criteria		
1,4-Dioxane-d8		31		15-110		

Project Name: SUPP RI SAMPING PROGRAMS

Lab Number: L1847309

Project Number: 127981-012 SID 1.1

Report Date: 12/04/18

**SAMPLE RESULTS**

Lab ID: L1847309-06  
 Client ID: MW19B-111618-1200  
 Sample Location: BATH, NEW YORK

Date Collected: 11/16/18 12:00  
 Date Received: 11/16/18  
 Field Prep: Not Specified

Sample Depth:

Matrix: Water  
 Analytical Method: 122,537(M)  
 Analytical Date: 11/27/18 03:38  
 Analyst: AJ

Extraction Method: EPA 537  
 Extraction Date: 11/20/18 09:30

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Perfluorinated Alkyl Acids by Isotope Dilution - Mansfield Lab</b>						
Perfluorobutanoic Acid (PFBA)	ND	ng/l	1.85	0.346	1	
Perfluoropentanoic Acid (PFPeA)	ND	ng/l	1.85	0.430	1	
Perfluorobutanesulfonic Acid (PFBS)	ND	ng/l	1.85	0.352	1	
Perfluorohexanoic Acid (PFHxA)	ND	ng/l	1.85	0.456	1	
Perfluoroheptanoic Acid (PFHpA)	ND	ng/l	1.85	0.344	1	
Perfluorohexanesulfonic Acid (PFHxS)	ND	ng/l	1.85	0.404	1	
Perfluoroctanoic Acid (PFOA)	ND	ng/l	1.85	0.426	1	
1H,1H,2H,2H-Perfluorooctanesulfonic Acid (6:2FTS)	ND	ng/l	1.85	0.180	1	
Perfluoroheptanesulfonic Acid (PFHpS)	ND	ng/l	1.85	0.481	1	
Perfluorononanoic Acid (PFNA)	ND	ng/l	1.85	0.404	1	
Perfluorooctanesulfonic Acid (PFOS)	ND	ng/l	1.85	0.518	1	
Perfluorodecanoic Acid (PFDA)	ND	ng/l	1.85	0.574	1	
1H,1H,2H,2H-Perfluorodecanesulfonic Acid (8:2FTS)	ND	ng/l	1.85	0.269	1	
N-Methyl Perfluorooctanesulfonamidoacetic Acid (NMeFOSAA)	ND	ng/l	1.85	0.232	1	
Perfluoroundecanoic Acid (PFUnA)	ND	ng/l	1.85	0.392	1	
Perfluorodecanesulfonic Acid (PFDS)	ND	ng/l	1.85	0.357	1	
Perfluorooctanesulfonamide (FOSA)	ND	ng/l	1.85	0.515	1	
N-Ethyl Perfluorooctanesulfonamidoacetic Acid (NEtFOSAA)	ND	ng/l	1.85	0.345	1	
Perfluorododecanoic Acid (PFDoA)	ND	ng/l	1.85	0.548	1	
Perfluorotridecanoic Acid (PFTrDA)	ND	ng/l	1.85	0.291	1	
Perfluorotetradecanoic Acid (PFTA)	ND	ng/l	1.85	0.915	1	

Project Name: SUPP RI SAMPING PROGRAMS

Lab Number: L1847309

Project Number: 127981-012 SID 1.1

Report Date: 12/04/18

**SAMPLE RESULTS**

Lab ID:	L1847309-06	Date Collected:	11/16/18 12:00
Client ID:	MW19B-111618-1200	Date Received:	11/16/18
Sample Location:	BATH, NEW YORK	Field Prep:	Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Perfluorinated Alkyl Acids by Isotope Dilution - Mansfield Lab						
Surrogate			% Recovery	Qualifier	Acceptance Criteria	
Perfluoro[13C4]Butanoic Acid (MPFBA)			104		2-156	
Perfluoro[13C5]Pentanoic Acid (M5PFPEA)			166		16-173	
Perfluoro[2,3,4-13C3]Butanesulfonic Acid (M3PFBS)			108		31-159	
Perfluoro[1,2,3,4,6-13C5]Hexanoic Acid (M5PFHxA)			94		21-145	
Perfluoro[1,2,3,4-13C4]Heptanoic Acid (M4PFHxA)			100		30-139	
Perfluoro[1,2,3-13C3]Hexanesulfonic Acid (M3PFHxS)			117		47-153	
Perfluoro[13C8]Octanoic Acid (M8PFOA)			108		36-149	
1H,1H,2H,2H-Perfluoro[1,2-13C2]Octanesulfonic Acid (M2-6:2FTS)			123		1-244	
Perfluoro[13C9]Nonanoic Acid (M9PFNA)			108		34-146	
Perfluoro[13C8]Octanesulfonic Acid (M8PFOS)			123		42-146	
Perfluoro[1,2,3,4,5,6-13C6]Decanoic Acid (M6PFDA)			111		38-144	
1H,1H,2H,2H-Perfluoro[1,2-13C2]Decanesulfonic Acid (M2-8:2FTS)			109		7-170	
N-Deuteriomethylperfluoro-1-octanesulfonamidoacetic Acid (d3-NMeFOSAA)			78		1-181	
Perfluoro[1,2,3,4,5,6,7-13C7]Undecanoic Acid (M7-PFUDA)			114		40-144	
Perfluoro[13C8]Octanesulfonamide (M8FOSA)			23		1-87	
N-Deuteroethylperfluoro-1-octanesulfonamidoacetic Acid (d5-NEtFOSAA)			76		23-146	
Perfluoro[1,2-13C2]Dodecanoic Acid (MPFDCA)			101		24-161	
Perfluoro[1,2-13C2]Tetradecanoic Acid (M2PFTEDA)			78		33-143	

Project Name: SUPP RI SAMPING PROGRAMS

Lab Number: L1847309

Project Number: 127981-012 SID 1.1

Report Date: 12/04/18

**SAMPLE RESULTS**

Lab ID: L1847309-07  
 Client ID: 4248-111618-0001  
 Sample Location: BATH, NEW YORK

Date Collected: 11/16/18 00:00  
 Date Received: 11/16/18  
 Field Prep: Not Specified

Sample Depth:

Matrix: Water  
 Analytical Method: 1,8270D-SIM  
 Analytical Date: 11/29/18 20:56  
 Analyst: MA

Extraction Method: EPA 3510C  
 Extraction Date: 11/21/18 16:00

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>1,4 Dioxane by 8270D-SIM - Mansfield Lab</b>						
1,4-Dioxane	ND		ng/l	147	73.5	1
Surrogate		% Recovery	Qualifier	Acceptance Criteria		
1,4-Dioxane-d8		33		15-110		

Project Name: SUPP RI SAMPING PROGRAMS

Lab Number: L1847309

Project Number: 127981-012 SID 1.1

Report Date: 12/04/18

**SAMPLE RESULTS**

Lab ID: L1847309-08  
 Client ID: 4248-111618-0002  
 Sample Location: BATH, NEW YORK

Date Collected: 11/16/18 00:00  
 Date Received: 11/16/18  
 Field Prep: Not Specified

Sample Depth:

Matrix: Water  
 Analytical Method: 122,537(M)  
 Analytical Date: 11/27/18 03:55  
 Analyst: AJ

Extraction Method: EPA 537  
 Extraction Date: 11/20/18 09:30

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Perfluorinated Alkyl Acids by Isotope Dilution - Mansfield Lab</b>						
Perfluorobutanoic Acid (PFBA)	ND	ng/l	1.85	0.346	1	
Perfluoropentanoic Acid (PFPeA)	ND	ng/l	1.85	0.430	1	
Perfluorobutanesulfonic Acid (PFBS)	ND	ng/l	1.85	0.352	1	
Perfluorohexanoic Acid (PFHxA)	ND	ng/l	1.85	0.456	1	
Perfluoroheptanoic Acid (PFHpA)	ND	ng/l	1.85	0.344	1	
Perfluorohexanesulfonic Acid (PFHxS)	ND	ng/l	1.85	0.404	1	
Perfluoroctanoic Acid (PFOA)	ND	ng/l	1.85	0.426	1	
1H,1H,2H,2H-Perfluorooctanesulfonic Acid (6:2FTS)	ND	ng/l	1.85	0.180	1	
Perfluoroheptanesulfonic Acid (PFHpS)	ND	ng/l	1.85	0.481	1	
Perfluorononanoic Acid (PFNA)	ND	ng/l	1.85	0.404	1	
Perfluorooctanesulfonic Acid (PFOS)	ND	ng/l	1.85	0.518	1	
Perfluorodecanoic Acid (PFDA)	ND	ng/l	1.85	0.574	1	
1H,1H,2H,2H-Perfluorodecanesulfonic Acid (8:2FTS)	ND	ng/l	1.85	0.269	1	
N-Methyl Perfluorooctanesulfonamidoacetic Acid (NMeFOSAA)	ND	ng/l	1.85	0.232	1	
Perfluoroundecanoic Acid (PFUnA)	ND	ng/l	1.85	0.392	1	
Perfluorodecanesulfonic Acid (PFDS)	ND	ng/l	1.85	0.357	1	
Perfluorooctanesulfonamide (FOSA)	ND	ng/l	1.85	0.515	1	
N-Ethyl Perfluorooctanesulfonamidoacetic Acid (NEtFOSAA)	ND	ng/l	1.85	0.345	1	
Perfluorododecanoic Acid (PFDoA)	ND	ng/l	1.85	0.548	1	
Perfluorotridecanoic Acid (PFTrDA)	ND	ng/l	1.85	0.291	1	
Perfluorotetradecanoic Acid (PFTA)	ND	ng/l	1.85	0.915	1	

Project Name: SUPP RI SAMPING PROGRAMS

Lab Number: L1847309

Project Number: 127981-012 SID 1.1

Report Date: 12/04/18

**SAMPLE RESULTS**

Lab ID: L1847309-08  
 Client ID: 4248-111618-0002  
 Sample Location: BATH, NEW YORK

Date Collected: 11/16/18 00:00  
 Date Received: 11/16/18  
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Perfluorinated Alkyl Acids by Isotope Dilution - Mansfield Lab						
Surrogate			% Recovery	Qualifier	Acceptance Criteria	
Perfluoro[13C4]Butanoic Acid (MPFBA)			122		2-156	
Perfluoro[13C5]Pentanoic Acid (M5PFPEA)	196	Q			16-173	
Perfluoro[2,3,4-13C3]Butanesulfonic Acid (M3PFBS)	103				31-159	
Perfluoro[1,2,3,4,6-13C5]Hexanoic Acid (M5PFHxA)	99				21-145	
Perfluoro[1,2,3,4-13C4]Heptanoic Acid (M4PFHxA)	106				30-139	
Perfluoro[1,2,3-13C3]Hexanesulfonic Acid (M3PFHxS)	118				47-153	
Perfluoro[13C8]Octanoic Acid (M8PFOA)	117				36-149	
1H,1H,2H,2H-Perfluoro[1,2-13C2]Octanesulfonic Acid (M2-6:2FTS)	142				1-244	
Perfluoro[13C9]Nonanoic Acid (M9PFNA)	120				34-146	
Perfluoro[13C8]Octanesulfonic Acid (M8PFOS)	123				42-146	
Perfluoro[1,2,3,4,5,6-13C6]Decanoic Acid (M6PFDA)	117				38-144	
1H,1H,2H,2H-Perfluoro[1,2-13C2]Decanesulfonic Acid (M2-8:2FTS)	120				7-170	
N-Deuteriomethylperfluoro-1-octanesulfonamidoacetic Acid (d3-NMeFOSAA)	90				1-181	
Perfluoro[1,2,3,4,5,6,7-13C7]Undecanoic Acid (M7-PFUDA)	117				40-144	
Perfluoro[13C8]Octanesulfonamide (M8FOSA)	38				1-87	
N-Deuteroethylperfluoro-1-octanesulfonamidoacetic Acid (d5-NEtFOSAA)	76				23-146	
Perfluoro[1,2-13C2]Dodecanoic Acid (MPFDCA)	107				24-161	
Perfluoro[1,2-13C2]Tetradecanoic Acid (M2PFTEDA)	79				33-143	

**Project Name:** SUPP RI SAMPING PROGRAMS  
**Project Number:** 127981-012 SID 1.1

**Lab Number:** L1847309  
**Report Date:** 12/04/18

### Method Blank Analysis Batch Quality Control

Analytical Method: 122,537(M)  
Analytical Date: 11/26/18 22:24  
Analyst: AJ

Extraction Method: EPA 537  
Extraction Date: 11/20/18 09:30

Parameter	Result	Qualifier	Units	RL	MDL
Perfluorinated Alkyl Acids by Isotope Dilution - Mansfield Lab for sample(s): 01-06,08 Batch: WG1181341-1					
Perfluorobutanoic Acid (PFBA)	ND		ng/l	2.00	0.373
Perfluoropentanoic Acid (PFPeA)	ND		ng/l	2.00	0.464
Perfluorobutanesulfonic Acid (PFBS)	ND		ng/l	2.00	0.380
Perfluorohexanoic Acid (PFHxA)	ND		ng/l	2.00	0.492
Perfluoroheptanoic Acid (PFHpA)	ND		ng/l	2.00	0.372
Perfluorohexanesulfonic Acid (PFHxS)	ND		ng/l	2.00	0.436
Perfluoroctanoic Acid (PFOA)	ND		ng/l	2.00	0.460
1H,1H,2H,2H-Perfluorooctanesulfonic Acid (6:2FTS)	ND		ng/l	2.00	0.194
Perfluoroheptanesulfonic Acid (PFHpS)	ND		ng/l	2.00	0.520
Perfluorononanoic Acid (PFNA)	ND		ng/l	2.00	0.436
Perfluorooctanesulfonic Acid (PFOS)	ND		ng/l	2.00	0.560
Perfluorodecanoic Acid (PFDA)	ND		ng/l	2.00	0.620
1H,1H,2H,2H-Perfluorodecanesulfonic Acid (8:2FTS)	ND		ng/l	2.00	0.291
N-Methyl Perfluorooctanesulfonamidoacetic Acid (NMeFOSAA)	ND		ng/l	2.00	0.250
Perfluoroundecanoic Acid (PFUnA)	ND		ng/l	2.00	0.424
Perfluorodecanesulfonic Acid (PFDS)	ND		ng/l	2.00	0.386
Perfluoroctanesulfonamide (FOSA)	ND		ng/l	2.00	0.556
N-Ethyl Perfluorooctanesulfonamidoacetic Acid (NEtFOSAA)	ND		ng/l	2.00	0.373
Perfluorododecanoic Acid (PFDoA)	ND		ng/l	2.00	0.592
Perfluorotridecanoic Acid (PFTrDA)	ND		ng/l	2.00	0.314
Perfluorotetradecanoic Acid (PFTA)	ND		ng/l	2.00	0.988



**Project Name:** SUPP RI SAMPING PROGRAMS  
**Project Number:** 127981-012 SID 1.1

**Lab Number:** L1847309  
**Report Date:** 12/04/18

### Method Blank Analysis Batch Quality Control

Analytical Method: 122,537(M)  
Analytical Date: 11/26/18 22:24  
Analyst: AJ

Extraction Method: EPA 537  
Extraction Date: 11/20/18 09:30

Parameter	Result	Qualifier	Units	RL	MDL
Perfluorinated Alkyl Acids by Isotope Dilution - Mansfield Lab for sample(s): 01-06,08 Batch: WG1181341-1					

Surrogate	%Recovery	Qualifier	Acceptance Criteria
Perfluoro[13C4]Butanoic Acid (MPFBA)	115		2-156
Perfluoro[13C5]Pentanoic Acid (M5PFPEA)	155		16-173
Perfluoro[2,3,4-13C3]Butanesulfonic Acid (M3PFBS)	112		31-159
Perfluoro[1,2,3,4,6-13C5]Hexanoic Acid (M5PFHxA)	110		21-145
Perfluoro[1,2,3,4-13C4]Heptanoic Acid (M4PFHpA)	106		30-139
Perfluoro[1,2,3-13C3]Hexanesulfonic Acid (M3PFHxS)	119		47-153
Perfluoro[13C8]Octanoic Acid (M8PFOA)	110		36-149
1H,1H,2H,2H-Perfluoro[1,2-13C2]Octanesulfonic Acid (M2-6:2FTS)	96		1-244
Perfluoro[13C9]Nonanoic Acid (M9PFNA)	104		34-146
Perfluoro[13C8]Octanesulfonic Acid (M8PFOS)	103		42-146
Perfluoro[1,2,3,4,5,6-13C6]Decanoic Acid (M6PFDA)	99		38-144
1H,1H,2H,2H-Perfluoro[1,2-13C2]Decanesulfonic Acid (M2-8:2FTS)	108		7-170
N-Deuteriomethylperfluoro-1-octanesulfonamidoacetic Acid (d3-NMeFOSAA)	85		1-181
Perfluoro[1,2,3,4,5,6,7-13C7]Undecanoic Acid (M7-PFUDA)	98		40-144
Perfluoro[13C8]Octanesulfonamide (M8FOSA)	56		1-87
N-Deuteroethylperfluoro-1-octanesulfonamidoacetic Acid (d5-NEtFOSAA)	89		23-146
Perfluoro[1,2-13C2]Dodecanoic Acid (MPFDOA)	88		24-161
Perfluoro[1,2-13C2]Tetradecanoic Acid (M2PFTEDA)	73		33-143

**Project Name:** SUPP RI SAMPING PROGRAMS  
**Project Number:** 127981-012 SID 1.1

**Lab Number:** L1847309  
**Report Date:** 12/04/18

**Method Blank Analysis**  
**Batch Quality Control**

Analytical Method: 1,8270D-SIM  
Analytical Date: 11/29/18 14:12  
Analyst: MA

Extraction Method: EPA 3510C  
Extraction Date: 11/21/18 16:00

Parameter	Result	Qualifier	Units	RL	MDL
1,4 Dioxane by 8270D-SIM - Mansfield Lab for sample(s):	01-07	Batch:	WG1181979-1		
1,4-Dioxane	ND		ng/l	150	75.0

Surrogate	%Recovery	Qualifier	Acceptance
			Criteria
1,4-Dioxane-d8	24		15-110

# Lab Control Sample Analysis

## Batch Quality Control

**Project Name:** SUPP RI SAMPING PROGRAMS  
**Project Number:** 127981-012 SID 1.1

**Lab Number:** L1847309  
**Report Date:** 12/04/18

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Perfluorinated Alkyl Acids by Isotope Dilution - Mansfield Lab Associated sample(s): 01-06,08 Batch: WG1181341-2 WG1181341-3								
Perfluorobutanoic Acid (PFBA)	108		102		67-148	6		30
Perfluoropentanoic Acid (PFPeA)	110		103		63-161	7		30
Perfluorobutanesulfonic Acid (PFBS)	114		108		65-157	5		30
Perfluorohexanoic Acid (PFHxA)	113		107		69-168	5		30
Perfluoroheptanoic Acid (PFHpA)	102		96		58-159	6		30
Perfluorooctanesulfonic Acid (PFHxS)	111		97		69-177	13		30
Perfluorooctanoic Acid (PFOA)	102		98		63-159	4		30
1H,1H,2H,2H-Perfluorooctanesulfonic Acid (6:2FTS)	117		100		49-187	16		30
Perfluoroheptanesulfonic Acid (PFHpS)	116		116		61-179	0		30
Perfluorononanoic Acid (PFNA)	107		100		68-171	7		30
Perfluorooctanesulfonic Acid (PFOS)	90		88		52-151	2		30
Perfluorodecanoic Acid (PFDA)	111		104		63-171	7		30
1H,1H,2H,2H-Perfluorodecanesulfonic Acid (8:2FTS)	128		112		56-173	13		30
N-Methyl Perfluorooctanesulfonamidoacetic Acid (NMeFOSAA)	104		100		60-166	4		30
Perfluoroundecanoic Acid (PFUnA)	104		101		60-153	3		30
Perfluorodecanesulfonic Acid (PFDS)	88		88		38-156	0		30
Perfluorooctanesulfonamide (FOSA)	96		92		46-170	4		30
N-Ethyl Perfluorooctanesulfonamidoacetic Acid (NEtFOSAA)	102		98		45-170	4		30
Perfluorododecanoic Acid (PFDoA)	106		103		67-153	3		30
Perfluorotridecanoic Acid (PFTrDA)	98		94		48-158	4		30
Perfluorotetradecanoic Acid (PFTA)	114		104		59-182	9		30

# Lab Control Sample Analysis

## Batch Quality Control

**Project Name:** SUPP RI SAMPING PROGRAMS  
**Project Number:** 127981-012 SID 1.1

**Lab Number:** L1847309  
**Report Date:** 12/04/18

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
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Perfluorinated Alkyl Acids by Isotope Dilution - Mansfield Lab Associated sample(s): 01-06,08 Batch: WG1181341-2 WG1181341-3

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
Perfluoro[13C4]Butanoic Acid (MPFBA)	114		118		2-156
Perfluoro[13C5]Pentanoic Acid (M5PFPEA)	149		151		16-173
Perfluoro[2,3,4-13C3]Butanesulfonic Acid (M3PFBS)	116		123		31-159
Perfluoro[1,2,3,4,6-13C5]Hexanoic Acid (M5PFHxA)	109		114		21-145
Perfluoro[1,2,3,4-13C4]Heptanoic Acid (M4PFHpA)	105		107		30-139
Perfluoro[1,2,3-13C3]Hexanesulfonic Acid (M3PFHxS)	120		125		47-153
Perfluoro[13C8]Octanoic Acid (M8PFOA)	111		110		36-149
1H,1H,2H-Perfluoro[1,2-13C2]Octanesulfonic Acid (M2-6:2FTS)	119		138		1-244
Perfluoro[13C9]Nonanoic Acid (M9PFNA)	109		108		34-146
Perfluoro[13C8]Octanesulfonic Acid (M8PFOS)	112		111		42-146
Perfluoro[1,2,3,4,5,6-13C6]Decanoic Acid (M6PFDA)	109		105		38-144
1H,1H,2H-Perfluoro[1,2-13C2]Decanesulfonic Acid (M2-8:2FTS)	115		125		7-170
N-Deuteriomethylperfluoro-1-octanesulfonamidoacetic Acid (d3-NMeFOSAA)	95		93		1-181
Perfluoro[1,2,3,4,5,6,7-13C7]Undecanoic Acid (M7-PFDA)	108		105		40-144
Perfluoro[13C8]Octanesulfonamide (M8FOSA)	57		60		1-87
N-Deuterioethylperfluoro-1-octanesulfonamidoacetic Acid (d5-NEtFOSAA)	96		99		23-146
Perfluoro[1,2-13C2]Dodecanoic Acid (MPFDOA)	99		99		24-161
Perfluoro[1,2-13C2]Tetradecanoic Acid (M2PFTEDA)	75		79		33-143

# Lab Control Sample Analysis

## Batch Quality Control

**Project Name:** SUPP RI SAMPING PROGRAMS  
**Project Number:** 127981-012 SID 1.1

**Lab Number:** L1847309  
**Report Date:** 12/04/18

<b>Parameter</b>	<i>LCS</i> %Recovery	<i>Qual</i>	<i>LCSD</i> %Recovery	<i>Qual</i>	<i>%Recovery</i> <i>Limits</i>	<i>RPD</i>	<i>Qual</i>	<i>RPD</i> <i>Limits</i>
1,4 Dioxane by 8270D-SIM - Mansfield Lab Associated sample(s): 01-07 Batch: WG1181979-2 WG1181979-3								
1,4-Dioxane	117		117		40-140	0		30

<b>Surrogate</b>	<i>LCS</i> %Recovery	<i>Qual</i>	<i>LCSD</i> %Recovery	<i>Qual</i>	<b>Acceptance Criteria</b>
1,4-Dioxane-d8					
	25		26		15-110

# Matrix Spike Analysis

## Batch Quality Control

**Project Name:** SUPP RI SAMPING PROGRAMS  
**Project Number:** 127981-012 SID 1.1

**Lab Number:** L1847309  
**Report Date:** 12/04/18

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Recovery Qual	Limits	RPD	RPD Qual	RPD Limits
Perfluorinated Alkyl Acids by Isotope Dilution - Mansfield Lab Associated sample(s): 01-06,08 QC Batch ID: WG1181341-6 WG1181341-7 QC Sample: L1847309-03 Client ID: MW03B-111618-1230												
Perfluorobutanoic Acid (PFBA)	0.813J	38.2	40.9	107		41.7	108		67-148	2		30
Perfluoropentanoic Acid (PFPeA)	ND	38.2	40.3	106		41.6	108		63-161	3		30
Perfluorobutanesulfonic Acid (PFBS)	ND	38.2	42.5	111		42.7	111		65-157	0		30
Perfluorohexanoic Acid (PFHxA)	ND	38.2	41.9	110		43.5	113		69-168	4		30
Perfluoroheptanoic Acid (PFHpA)	ND	38.2	38.4	101		39.3	102		58-159	2		30
Perfluorohexanesulfonic Acid (PFHxS)	ND	38.2	40.6	106		41.7	108		69-177	3		30
Perfluorooctanoic Acid (PFOA)	ND	38.2	40.1	105		40.0	104		63-159	0		30
1H,1H,2H,2H-Perfluorooctanesulfonic Acid (6:2FTS)	ND	38.2	44.4	116		40.5	105		49-187	9		30
Perfluoroheptanesulfonic Acid (PFHxS)	ND	38.2	45.0	118		43.4	113		61-179	4		30
Perfluorononanoic Acid (PFNA)	ND	38.2	41.1	108		42.2	110		68-171	3		30
Perfluorooctanesulfonic Acid (PFOS)	ND	38.2	38.0	100		37.1	96		52-151	2		30
Perfluorodecanoic Acid (PFDA)	ND	38.2	40.0	105		44.1	115		63-171	10		30
1H,1H,2H,2H-Perfluorodecanesulfonic Acid (8:2FTS)	ND	38.2	42.3	111		43.5	113		56-173	3		30
N-Methyl Perfluorooctanesulfonamidoacetic Acid (NMeFOSAA)	ND	38.2	39.2	103		38.7	101		60-166	1		30
Perfluoroundecanoic Acid (PFUnA)	ND	38.2	37.7	99		40.0	104		60-153	6		30
Perfluorodecanesulfonic Acid (PFDS)	ND	38.2	29.7	78		32.4	84		38-156	9		30
Perfluorooctanesulfonamide (FOSA)	ND	38.2	33.3	87		38.7	101		46-170	15		30
N-Ethyl Perfluorooctanesulfonamidoacetic Acid (NEtFOSAA)	ND	38.2	40.6	106		35.9	93		45-170	12		30
Perfluorododecanoic Acid (PFDoA)	ND	38.2	39.1	102		41.5	108		67-153	6		30
Perfluorotridecanoic Acid (PFTrDA)	ND	38.2	36.9	97		39.9	104		48-158	8		30
Perfluorotetradecanoic Acid (PFTA)	ND	38.2	42.7	112		42.5	111		59-182	0		30

**Matrix Spike Analysis**  
*Batch Quality Control*

**Project Name:** SUPP RI SAMPING PROGRAMS  
**Project Number:** 127981-012 SID 1.1

**Lab Number:** L1847309  
**Report Date:** 12/04/18

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	MSD Qual	Recovery Limits	RPD RPD	RPD Qual	RPD Limits
Surrogate			MS % Recovery	Qualifier		MSD % Recovery	Qualifier		Acceptance Criteria			
Perfluorinated Alkyl Acids by Isotope Dilution - Mansfield Lab Associated sample(s): 01-06,08 QC Batch ID: WG1181341-6 WG1181341-7 QC Sample: L1847309-03 Client ID: MW03B-111618-1230												
1H,1H,2H,2H-Perfluoro[1,2-13C2]Decanesulfonic Acid (M2-8:2FTS)			121			109			7-170			
1H,1H,2H,2H-Perfluoro[1,2-13C2]Octanesulfonic Acid (M2-6:2FTS)			114			127			1-244			
N-Deuterioethylperfluoro-1-octanesulfonamidoacetic Acid (d5-NEtFOSAA)			82			84			23-146			
N-Deuteriomethylperfluoro-1-octanesulfonamidoacetic Acid (d3-NMeFOSAA)			88			90			1-181			
Perfluoro[1,2,3,4,5,6,7-13C7]Undecanoic Acid (M7-PFUDA)			109			109			40-144			
Perfluoro[1,2,3,4,5,6-13C6]Decanoic Acid (M6PFDA)			110			108			38-144			
Perfluoro[1,2,3,4,6-13C5]Hexanoic Acid (M5PFHxA)			104			103			21-145			
Perfluoro[1,2,3,4-13C4]Heptanoic Acid (M4PFHpA)			105			105			30-139			
Perfluoro[1,2,3-13C3]Hexanesulfonic Acid (M3PFHxS)			117			116			47-153			
Perfluoro[1,2-13C2]Dodecanoic Acid (MPFDA)			101			97			24-161			
Perfluoro[1,2-13C2]Tetradecanoic Acid (M2PFTEDA)			79			79			33-143			
Perfluoro[13C4]Butanoic Acid (MPFBA)			115			113			2-156			
Perfluoro[13C5]Pentanoic Acid (M5PFPEA)		<b>187</b>		Q		<b>181</b>		Q	16-173			
Perfluoro[13C8]Octanesulfonamide (M8FOSA)			46			39			1-87			
Perfluoro[13C8]Octanesulfonic Acid (M8PFOS)			108			116			42-146			
Perfluoro[13C8]Octanoic Acid (M8PFOA)			111			113			36-149			
Perfluoro[13C9]Nonanoic Acid (M9PFNA)			109			110			34-146			
Perfluoro[2,3,4-13C3]Butanesulfonic Acid (M3PFBS)			108			105			31-159			

### **Sample Receipt and Container Information**

Were project specific reporting limits specified? YES

#### **Cooler Information**

<b>Cooler</b>	<b>Custody Seal</b>
A	Absent
B	Absent

#### **Container Information**

<b>Container ID</b>	<b>Container Type</b>	<b>Cooler</b>	<b>Initial pH</b>	<b>Final pH</b>	<b>Temp deg C</b>	<b>Pres</b>	<b>Seal</b>	<b>Frozen Date/Time</b>	<b>Analysis(*)</b>
L1847309-01A	Amber 500ml unpreserved	A	7	7	3.9	Y	Absent		A2-1,4-DIOXANE-SIM(7)
L1847309-01B	Amber 500ml unpreserved	A	7	7	3.9	Y	Absent		A2-1,4-DIOXANE-SIM(7)
L1847309-01C	2 Plastic/1 Plastic/1 H2O Plastic	B	NA		2.5	Y	Absent		A2-NY-537-ISOTOPE(14)
L1847309-01D	2 Plastic/1 Plastic/1 H2O Plastic	B	NA		2.5	Y	Absent		A2-NY-537-ISOTOPE(14)
L1847309-02A	Amber 500ml unpreserved	A	7	7	3.9	Y	Absent		A2-1,4-DIOXANE-SIM(7)
L1847309-02B	Amber 500ml unpreserved	A	7	7	3.9	Y	Absent		A2-1,4-DIOXANE-SIM(7)
L1847309-02C	2 Plastic/1 Plastic/1 H2O Plastic	B	NA		2.5	Y	Absent		A2-NY-537-ISOTOPE(14)
L1847309-02D	2 Plastic/1 Plastic/1 H2O Plastic	B	NA		2.5	Y	Absent		A2-NY-537-ISOTOPE(14)
L1847309-03A	Amber 500ml unpreserved	A	7	7	3.9	Y	Absent		A2-1,4-DIOXANE-SIM(7)
L1847309-03B	Amber 500ml unpreserved	A	7	7	3.9	Y	Absent		A2-1,4-DIOXANE-SIM(7)
L1847309-03C	2 Plastic/1 Plastic/1 H2O Plastic	B	NA		2.5	Y	Absent		A2-NY-537-ISOTOPE(14)
L1847309-03D	2 Plastic/1 Plastic/1 H2O Plastic	B	NA		2.5	Y	Absent		A2-NY-537-ISOTOPE(14)
L1847309-03E	2 Plastic/1 Plastic/1 H2O Plastic	B	NA		2.5	Y	Absent		A2-NY-537-ISOTOPE(14)
L1847309-03F	2 Plastic/1 Plastic/1 H2O Plastic	B	NA		2.5	Y	Absent		A2-NY-537-ISOTOPE(14)
L1847309-03G	2 Plastic/1 Plastic/1 H2O Plastic	B	NA		2.5	Y	Absent		A2-NY-537-ISOTOPE(14)
L1847309-03H	2 Plastic/1 Plastic/1 H2O Plastic	B	NA		2.5	Y	Absent		A2-NY-537-ISOTOPE(14)
L1847309-04A	Amber 500ml unpreserved	A	7	7	3.9	Y	Absent		A2-1,4-DIOXANE-SIM(7)
L1847309-04B	Amber 500ml unpreserved	A	7	7	3.9	Y	Absent		A2-1,4-DIOXANE-SIM(7)
L1847309-04C	2 Plastic/1 Plastic/1 H2O Plastic	B	NA		2.5	Y	Absent		A2-NY-537-ISOTOPE(14)
L1847309-04D	2 Plastic/1 Plastic/1 H2O Plastic	B	NA		2.5	Y	Absent		A2-NY-537-ISOTOPE(14)
L1847309-05A	Amber 500ml unpreserved	A	7	7	3.9	Y	Absent		A2-1,4-DIOXANE-SIM(7)
L1847309-05B	Amber 500ml unpreserved	A	7	7	3.9	Y	Absent		A2-1,4-DIOXANE-SIM(7)

\*Values in parentheses indicate holding time in days

**Container Information**

<b>Container ID</b>	<b>Container Type</b>	<b>Cooler</b>	<b>Initial pH</b>	<b>Final pH</b>	<b>Temp deg C</b>	<b>Pres</b>	<b>Seal</b>	<b>Frozen Date/Time</b>	<b>Analysis(*)</b>
L1847309-05C	2 Plastic/1 Plastic/1 H2O Plastic	B	NA		2.5	Y	Absent		A2-NY-537-ISOTOPE(14)
L1847309-05D	2 Plastic/1 Plastic/1 H2O Plastic	B	NA		2.5	Y	Absent		A2-NY-537-ISOTOPE(14)
L1847309-06A	Amber 500ml unpreserved	A	7	7	3.9	Y	Absent		A2-1,4-DIOXANE-SIM(7)
L1847309-06B	Amber 500ml unpreserved	A	7	7	3.9	Y	Absent		A2-1,4-DIOXANE-SIM(7)
L1847309-06C	2 Plastic/1 Plastic/1 H2O Plastic	B	NA		2.5	Y	Absent		A2-NY-537-ISOTOPE(14)
L1847309-06D	2 Plastic/1 Plastic/1 H2O Plastic	B	NA		2.5	Y	Absent		A2-NY-537-ISOTOPE(14)
L1847309-07A	Amber 500ml unpreserved	A	7	7	3.9	Y	Absent		A2-1,4-DIOXANE-SIM(7)
L1847309-07B	Amber 500ml unpreserved	A	7	7	3.9	Y	Absent		A2-1,4-DIOXANE-SIM(7)
L1847309-08A	2 Plastic/1 Plastic/1 H2O Plastic	A	NA		3.9	Y	Absent		A2-NY-537-ISOTOPE(14)

\*Values in parentheses indicate holding time in days

**Project Name:** SUPP RI SAMPING PROGRAMS  
**Project Number:** 127981-012 SID 1.1

**Lab Number:** L1847309  
**Report Date:** 12/04/18

## GLOSSARY

### **Acronyms**

EDL	- Estimated Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The EDL includes any adjustments from dilutions, concentrations or moisture content, where applicable. The use of EDLs is specific to the analysis of PAHs using Solid-Phase Microextraction (SPME).
EMPC	- Estimated Maximum Possible Concentration: The concentration that results from the signal present at the retention time of an analyte when the ions meet all of the identification criteria except the ion abundance ratio criteria. An EMPC is a worst-case estimate of the concentration.
EPA	- Environmental Protection Agency.
LCS	- Laboratory Control Sample: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
LCSD	- Laboratory Control Sample Duplicate: Refer to LCS.
LFB	- Laboratory Fortified Blank: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
MDL	- Method Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The MDL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
MS	- Matrix Spike Sample: A sample prepared by adding a known mass of target analyte to a specified amount of matrix sample for which an independent estimate of target analyte concentration is available.
MSD	- Matrix Spike Sample Duplicate: Refer to MS.
NA	- Not Applicable.
NC	- Not Calculated: Term is utilized when one or more of the results utilized in the calculation are non-detect at the parameter's reporting unit.
NDPA/DPA	- N-Nitrosodiphenylamine/Diphenylamine.
NI	- Not Ignitable.
NP	- Non-Plastic: Term is utilized for the analysis of Atterberg Limits in soil.
RL	- Reporting Limit: The value at which an instrument can accurately measure an analyte at a specific concentration. The RL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
RPD	- Relative Percent Difference: The results from matrix and/or matrix spike duplicates are primarily designed to assess the precision of analytical results in a given matrix and are expressed as relative percent difference (RPD). Values which are less than five times the reporting limit for any individual parameter are evaluated by utilizing the absolute difference between the values; although the RPD value will be provided in the report.
SRM	- Standard Reference Material: A reference sample of a known or certified value that is of the same or similar matrix as the associated field samples.
STLP	- Semi-dynamic Tank Leaching Procedure per EPA Method 1315.
TEF	- Toxic Equivalency Factors: The values assigned to each dioxin and furan to evaluate their toxicity relative to 2,3,7,8-TCDD.
TEQ	- Toxic Equivalent: The measure of a sample's toxicity derived by multiplying each dioxin and furan by its corresponding TEF and then summing the resulting values.
TIC	- Tentatively Identified Compound: A compound that has been identified to be present and is not part of the target compound list (TCL) for the method and/or program. All TICs are qualitatively identified and reported as estimated concentrations.

### **Footnotes**

- 1 - The reference for this analyte should be considered modified since this analyte is absent from the target analyte list of the original method.

### **Terms**

- Analytical Method: Both the document from which the method originates and the analytical reference method. (Example: EPA 8260B is shown as 1,8260B.) The codes for the reference method documents are provided in the References section of the Addendum.
- Final pH: As it pertains to Sample Receipt & Container Information section of the report, Final pH reflects pH of container determined after adjustment at the laboratory, if applicable. If no adjustment required, value reflects Initial pH.
- Frozen Date/Time: With respect to Volatile Organics in soil, Frozen Date/Time reflects the date/time at which associated Reagent Water-preserved vials were initially frozen. Note: If frozen date/time is beyond 48 hours from sample collection, value will be reflected in 'bold'.
- Initial pH: As it pertains to Sample Receipt & Container Information section of the report, Initial pH reflects pH of container determined upon receipt, if applicable.
- Total: With respect to Organic analyses, a 'Total' result is defined as the summation of results for individual isomers or Aroclors. If a 'Total' result is requested, the results of its individual components will also be reported. This is applicable to 'Total' results for methods 8260, 8081 and 8082.

**Report Format:** DU Report with 'J' Qualifiers



**Project Name:** SUPP RI SAMPING PROGRAMS  
**Project Number:** 127981-012 SID 1.1

**Lab Number:** L1847309  
**Report Date:** 12/04/18

**Data Qualifiers**

- A** - Spectra identified as "Aldol Condensation Product".
- B** - The analyte was detected above the reporting limit in the associated method blank. Flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For MCP-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For DOD-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank AND the analyte was detected above one-half the reporting limit (or above the reporting limit for common lab contaminants) in the associated method blank. For NJ-Air-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte above the reporting limit. For NJ-related projects (excluding Air), flag only applies to associated field samples that have detectable concentrations of the analyte, which was detected above the reporting limit in the associated method blank or above five times the reporting limit for common lab contaminants (Phthalates, Acetone, Methylene Chloride, 2-Butanone).
- C** - Co-elution: The target analyte co-elutes with a known lab standard (i.e. surrogate, internal standards, etc.) for co-extracted analyses.
- D** - Concentration of analyte was quantified from diluted analysis. Flag only applies to field samples that have detectable concentrations of the analyte.
- E** - Concentration of analyte exceeds the range of the calibration curve and/or linear range of the instrument.
- G** - The concentration may be biased high due to matrix interferences (i.e. co-elution) with non-target compound(s). The result should be considered estimated.
- H** - The analysis of pH was performed beyond the regulatory-required holding time of 15 minutes from the time of sample collection.
- I** - The lower value for the two columns has been reported due to obvious interference.
- M** - Reporting Limit (RL) exceeds the MCP CAM Reporting Limit for this analyte.
- NJ** - Presumptive evidence of compound. This represents an estimated concentration for Tentatively Identified Compounds (TICs), where the identification is based on a mass spectral library search.
- P** - The RPD between the results for the two columns exceeds the method-specified criteria.
- Q** - The quality control sample exceeds the associated acceptance criteria. For DOD-related projects, LCS and/or Continuing Calibration Standard exceedances are also qualified on all associated sample results. Note: This flag is not applicable for matrix spike recoveries when the sample concentration is greater than 4x the spike added or for batch duplicate RPD when the sample concentrations are less than 5x the RL. (Metals only.)
- R** - Analytical results are from sample re-analysis.
- RE** - Analytical results are from sample re-extraction.
- S** - Analytical results are from modified screening analysis.
- J** - Estimated value. The Target analyte concentration is below the quantitation limit (RL), but above the Method Detection Limit (MDL) or Estimated Detection Limit (EDL) for SPME-related analyses. This represents an estimated concentration for Tentatively Identified Compounds (TICs).
- ND** - Not detected at the method detection limit (MDL) for the sample, or estimated detection limit (EDL) for SPME-related analyses.

*Report Format:* DU Report with 'J' Qualifiers



**Project Name:** SUPP RI SAMPING PROGRAMS  
**Project Number:** 127981-012 SID 1.1

**Lab Number:** L1847309  
**Report Date:** 12/04/18

## REFERENCES

- 1 Test Methods for Evaluating Solid Waste: Physical/Chemical Methods. EPA SW-846. Third Edition. Updates I - IV, 2007.
- 122 Determination of Selected Perfluorinated Alkyl Acids in Drinking Water by Solid Phase Extraction and Liquid Chromatography/Tandem Mass Spectrometry (LC/MS/MS). EPA Method 537, EPA/600/R-08/092. Version 1.1, September 2009.

## LIMITATION OF LIABILITIES

Alpha Analytical performs services with reasonable care and diligence normal to the analytical testing laboratory industry. In the event of an error, the sole and exclusive responsibility of Alpha Analytical shall be to re-perform the work at its own expense. In no event shall Alpha Analytical be held liable for any incidental, consequential or special damages, including but not limited to, damages in any way connected with the use of, interpretation of, information or analysis provided by Alpha Analytical.

We strongly urge our clients to comply with EPA protocol regarding sample volume, preservation, cooling, containers, sampling procedures, holding time and splitting of samples in the field.



## Certification Information

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**The following analytes are not included in our Primary NELAP Scope of Accreditation:**

**Westborough Facility**

**EPA 624/624.1:** m/p-xylene, o-xylene

**EPA 8260C:** NPW: 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene, Azobenzene; **SCM:** Iodomethane (methyl iodide), Methyl methacrylate, 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene.

**EPA 8270D:** NPW: Dimethylnaphthalene,1,4-Diphenylhydrazine; **SCM:** Dimethylnaphthalene,1,4-Diphenylhydrazine.

**EPA 6860:** SCM: Perchlorate

**SM4500:** NPW: Amenable Cyanide; **SCM:** Total Phosphorus, TKN, NO<sub>2</sub>, NO<sub>3</sub>.

**Mansfield Facility**

**SM 2540D:** TSS

**EPA 8082A:** NPW: PCB: 1, 5, 31, 87,101, 110, 141, 151, 153, 180, 183, 187.

**EPA TO-15:** Halothane, 2,4,4-Trimethyl-2-pentene, 2,4,4-Trimethyl-1-pentene, Thiophene, 2-Methylthiophene, 3-Methylthiophene, 2-Ethylthiophene, 1,2,3-Trimethylbenzene, Indan, Indene, 1,2,4,5-Tetramethylbenzene, Benzothiophene, 1-Methylnaphthalene.

**Biological Tissue Matrix:** EPA 3050B

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**The following analytes are included in our Massachusetts DEP Scope of Accreditation**

**Westborough Facility:**

**Drinking Water**

**EPA 300.0:** Chloride, Nitrate-N, Fluoride, Sulfate; **EPA 353.2:** Nitrate-N, Nitrite-N; **SM4500NO3-F:** Nitrate-N, Nitrite-N; **SM4500F-C, SM4500CN-CE,** **EPA 180.1, SM2130B, SM4500CI-D, SM2320B, SM2540C, SM4500H-B**

**EPA 332:** Perchlorate; **EPA 524.2:** THMs and VOCs; **EPA 504.1:** EDB, DBCP.

**Microbiology:** **SM9215B; SM9223-P/A, SM9223B-Colilert-QT, SM9222D.**

**Non-Potable Water**

**SM4500H,B, EPA 120.1, SM2510B, SM2540C, SM2320B, SM4500CL-E, SM4500F-BC, SM4500NH3-BH:** Ammonia-N and Kjeldahl-N, **EPA 350.1:** Ammonia-N, LACHAT 10-107-06-1-B: Ammonia-N, **EPA 351.1, SM4500NO3-F, EPA 353.2:** Nitrate-N, **SM4500P-E, SM4500P-B, E, SM4500SO4-E, SM5220D, EPA 410.4, SM5210B, SM5310C, SM4500CL-D, EPA 1664, EPA 420.1, SM4500-CN-CE, SM2540D, EPA 300:** Chloride, Sulfate, Nitrate.

**EPA 624.1:** Volatile Halocarbons & Aromatics,

**EPA 608.3:** Chlordane, Toxaphene, Aldrin, alpha-BHC, beta-BHC, gamma-BHC, delta-BHC, Dieldrin, DDD, DDE, DDT, Endosulfan I, Endosulfan II, Endosulfan sulfate, Endrin, Endrin Aldehyde, Heptachlor, Heptachlor Epoxide, PCBs

**EPA 625.1:** SVOC (Acid/Base/Neutral Extractables), **EPA 600/4-81-045:** PCB-Oil.

**Microbiology:** **SM9223B-Colilert-QT; Enterolert-QT, SM9221E, EPA 1600, EPA 1603.**

**Mansfield Facility:**

**Drinking Water**

**EPA 200.7:** Al, Ba, Cd, Cr, Cu, Fe, Mn, Ni, Na, Ag, Ca, Zn. **EPA 200.8:** Al, Sb, As, Ba, Be, Cd, Cr, Cu, Pb, Mn, Ni, Se, Ag, TL, Zn. **EPA 245.1 Hg.**  
**EPA 522.**

**Non-Potable Water**

**EPA 200.7:** Al, Sb, As, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Mo, Ni, K, Se, Ag, Na, Sr, TL, Ti, V, Zn.

**EPA 200.8:** Al, Sb, As, Be, Cd, Cr, Cu, Fe, Pb, Mn, Ni, K, Se, Ag, Na, TL, Zn.

**EPA 245.1 Hg.**

**SM2340B**

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For a complete listing of analytes and methods, please contact your Alpha Project Manager.

 <p><b>NEW YORK</b> <b>CHAIN OF</b> <b>CUSTODY</b></p> <p>Westborough, MA 01581 8 Walkup Dr. TEL: 508-898-9220 FAX: 508-898-9193 Form No: 01-25 (rev. 30-Sept-2013)</p> <p>Mansfield, MA 02048 326 Forbes Blvd TEL: 508-822-9300 FAX: 508-822-3288</p>		<b>Service Centers</b> Mahwah, NJ 07430: 35 Whitney Rd, Ste 5 Albany, NY 12205: 14 Walker Way Tonawanda, NY 14150: 275 Cooper Ave, Ste 105		Page 1 of 1		<b>Date Rec'd in Lab</b> <i>11/17/18</i>		<b>ALPHA Job #</b> <i>L18417309</i>					
<b>Project Information</b>													
Project Name: Supplemental RI Sampling Programs													
Client Information													
Client: Haley & Aldrich, Inc.		Project Location: Bath, New York		<b>Deliverables</b>		<b>Billing Information</b>							
Address: 200 Town Centre Drive, Ste 2 Rochester, NY		Project #: 127981-012 SID 1.1		<input type="checkbox"/> ASP-A <input checked="" type="checkbox"/> ASP-B <input type="checkbox"/> EQuIS (1 File) <input checked="" type="checkbox"/> EQuIS (4 File) <input type="checkbox"/> Other <input checked="" type="checkbox"/> H&A Format		<input checked="" type="checkbox"/> Same as Client Info PO #							
Phone: 617.886.7405		Project Manager: Karyn Raymond		<b>Regulatory Requirement</b>		<b>Disposal Site Information</b>							
Fax: 617.886.7705		ALPHAQuote #: 2014230R1		<input type="checkbox"/> NY TOGS <input checked="" type="checkbox"/> NY Part 375 <input type="checkbox"/> AWQ Standards <input type="checkbox"/> NY CP-51 <input type="checkbox"/> NY Restricted Use <input type="checkbox"/> Other <input type="checkbox"/> NY Unrestricted Use <input type="checkbox"/> NYC Sewer Discharge		Please identify below location of applicable disposal facilities.							
Email: TNg@haleyaldrich.com		Turn-Around Time		Standard <input checked="" type="checkbox"/> Rush <input type="checkbox"/> # of Days:		Disposal Facility: <input type="checkbox"/> NJ <input checked="" type="checkbox"/> NY <input type="checkbox"/> Other							
Preservative Code: A = None      P = Plastic B = HCl      A = Amber Glass C = HNO <sub>3</sub> V = Vial D = H <sub>2</sub> SO <sub>4</sub> G = Glass E = NaOH      B = Bacteria Cup F = MeOH      C = Cube G = NaHSO <sub>4</sub> O = Other H = Na <sub>2</sub> S <sub>2</sub> O <sub>3</sub> E = Encore K/E = Zn Ac/NaOH      D = BOD Bottle O = Other		<b>Relinquished By:</b> <i>Jay S. Hargrave</i> <i>S. Hargrave 11/16/18 17:00</i> <i>11/17/18 17:00</i> <i>Jay S. Hargrave 11/17/18 05:55</i>		<b>Date/Time</b> <i>11/16/18 17:00</i> <i>11/17/18 05:55</i>		<b>Received By:</b> <i>S. Hargrave 11/16/18 17:00</i> <i>11/17/18 05:55</i>		<b>Date/Time</b> <i>11/16/18 17:00</i> <i>11/17/18 05:55</i>					
Westboro: Certification No: MA935 Mansfield: Certification No: MA015										Please print clearly, legibly and completely. Samples can not be logged in and turnaround time clock will not start until any ambiguities are resolved. BY EXECUTING THIS COC, THE CLIENT HAS READ AND AGREES TO BE BOUND BY ALPHA'S TERMS & CONDITIONS.			
These samples have been previously analyzed by Alpha <input type="checkbox"/>										<b>ANALYSIS</b>			
Other project specific requirements/comments: Part 375-6.8(b)										<b>Container Type</b>			
Please specify Metals or TAL.										P      A O      A			
<b>ALPHA Lab ID (Lab Use Only)</b> <i>7309-01</i>		<b>Sample ID</b> <i>MW01B-111618-1300</i>		<b>Collection</b> Date      Time		<b>Sample Matrix</b> <i>GW</i>	<b>Sampler's Initials</b> <i>JMS</i>	<b>PFAS-EPA 537</b> <i>8270C-SIM -1,4-DIOXAN</i>				<b>Sample Filtration</b> <input type="checkbox"/> Done <input type="checkbox"/> Lab to do <input checked="" type="checkbox"/> Preservation <input type="checkbox"/> Lab to do	
<i>-02</i>		<i>MW02A-111618-1330</i>		<i>11/16/2018</i> <i>13:00</i>		<i>GW</i>	<i>JMS</i>	<input checked="" type="checkbox"/> X <input checked="" type="checkbox"/> X				<b>(Please Specify below)</b>	
<i>-03</i>		<i>MW03B-111618-1230</i>		<i>11/16/2018</i> <i>12:30</i>		<i>GW</i>	<i>JMS</i>	<input checked="" type="checkbox"/> X <input checked="" type="checkbox"/> X					
<i>-04</i>		<i>MW06B-111618-1400</i>		<i>11/16/2018</i> <i>14:00</i>		<i>GW</i>	<i>JMS</i>	<input checked="" type="checkbox"/> X <input checked="" type="checkbox"/> X					
<i>-05</i>		<i>MW17B-111618-1430</i>		<i>11/16/2018</i> <i>14:30</i>		<i>GW</i>	<i>JMS</i>	<input checked="" type="checkbox"/> X <input checked="" type="checkbox"/> X					
<i>-06</i>		<i>MW19B-111618-1200</i>		<i>11/16/2018</i> <i>12:00</i>		<i>GW</i>	<i>JMS</i>	<input checked="" type="checkbox"/> X <input checked="" type="checkbox"/> X					
<i>-07</i>		<i>4248-111618-0001</i>		<i>11/16/2018</i> <i>—</i>		<i>GW</i>	<i>JMS</i>	<input checked="" type="checkbox"/> X					
<i>-08</i>		<i>4248-111618-0002</i>		<i>11/16/2018</i> <i>—</i>		<i>AQ</i>	<i></i>	<input checked="" type="checkbox"/> X				Field Duplicate- 1,4,dioxane FIELD BLANK -PFAS	



## ANALYTICAL REPORT

Lab Number:	L2159730
Client:	Haley & Aldrich 200 Town Centre Drive Suite 2 Rochester, NY 14623-4264
ATTN:	Santa McKenna
Phone:	(585) 321-4238
Project Name:	SUPPLEMENTAL RI SAMPLING PRGM.
Project Number:	0127981-023
Report Date:	11/08/21

The original project report/data package is held by Alpha Analytical. This report/data package is paginated and should be reproduced only in its entirety. Alpha Analytical holds no responsibility for results and/or data that are not consistent with the original.

Certifications & Approvals: MA (M-MA086), NH NELAP (2064), CT (PH-0574), IL (200077), ME (MA00086), MD (348), NJ (MA935), NY (11148), NC (25700/666), PA (68-03671), RI (LAO00065), TX (T104704476), VT (VT-0935), VA (460195), USDA (Permit #P330-17-00196).

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Eight Walkup Drive, Westborough, MA 01581-1019  
508-898-9220 (Fax) 508-898-9193 800-624-9220 - [www.alphalab.com](http://www.alphalab.com)



**Project Name:** SUPPLEMENTAL RI SAMPLING PRGM.  
**Project Number:** 0127981-023

**Lab Number:** L2159730  
**Report Date:** 11/08/21

Alpha Sample ID	Client ID	Matrix	Sample Location	Collection Date/Time	Receive Date
L2159730-01	MW22B-102921-1105	WATER	BATH, NY	10/29/21 11:05	10/29/21
L2159730-02	MW21B-102921-1135	WATER	BATH, NY	10/29/21 11:35	10/29/21
L2159730-03	MW21A-102921-1200	WATER	BATH, NY	10/29/21 12:00	10/29/21
L2159730-04	MW21B-102921-1340	WATER	BATH, NY	10/29/21 13:40	10/29/21
L2159730-05	MW21A-102921-1515	WATER	BATH, NY	10/29/21 15:15	10/29/21
L2159730-06	MW22B-102921-	WATER	BATH, NY	10/29/21 16:20	10/29/21
L2159730-07	4125-102921-0001	WATER	BATH, NY	10/29/21 00:00	10/29/21
L2159730-08	4125-102921-0002	WATER	BATH, NY	10/29/21 00:00	10/29/21
L2159730-09	4125-102921-0003	WATER	BATH, NY	10/29/21 00:00	10/29/21
L2159730-10	4125-102921-0004	WATER	BATH, NY	10/29/21 00:00	10/29/21
L2159730-11	FIELD BLANK	WATER	BATH, NY	10/29/21 00:00	10/31/21

**Project Name:** SUPPLEMENTAL RI SAMPLING PRGM.  
**Project Number:** 0127981-023

**Lab Number:** L2159730  
**Report Date:** 11/08/21

### Case Narrative

The samples were received in accordance with the Chain of Custody and no significant deviations were encountered during the preparation or analysis unless otherwise noted. Sample Receipt, Container Information, and the Chain of Custody are located at the back of the report.

Results contained within this report relate only to the samples submitted under this Alpha Lab Number and meet NELAP requirements for all NELAP accredited parameters unless otherwise noted in the following narrative. The data presented in this report is organized by parameter (i.e. VOC, SVOC, etc.). Sample specific Quality Control data (i.e. Surrogate Spike Recovery) is reported at the end of the target analyte list for each individual sample, followed by the Laboratory Batch Quality Control at the end of each parameter. Tentatively Identified Compounds (TICs), if requested, are reported for compounds identified to be present and are not part of the method/program Target Compound List, even if only a subset of the TCL are being reported. If a sample was re-analyzed or re-extracted due to a required quality control corrective action and if both sets of data are reported, the Laboratory ID of the re-analysis or re-extraction is designated with an "R" or "RE", respectively.

When multiple Batch Quality Control elements are reported (e.g. more than one LCS), the associated samples for each element are noted in the grey shaded header line of each data table. Any Laboratory Batch, Sample Specific % recovery or RPD value that is outside the listed Acceptance Criteria is bolded in the report. In reference to questions H (CAM) or 4 (RCP) when "NO" is checked, the performance criteria for CAM and RCP methods allow for some quality control failures to occur and still be within method compliance. In these instances, the specific failure is not narrated but noted in the associated QC Outlier Summary Report, located directly after the Case Narrative. QC information is also incorporated in the Data Usability Assessment table (Format 11) of our Data Merger tool, where it can be reviewed in conjunction with the sample result, associated regulatory criteria and any associated data usability implications.

Soil/sediments, solids and tissues are reported on a dry weight basis unless otherwise noted. Definitions of all data qualifiers and acronyms used in this report are provided in the Glossary located at the back of the report.

**HOLD POLICY** - For samples submitted on hold, Alpha's policy is to hold samples (with the exception of Air canisters) free of charge for 21 calendar days from the date the project is completed. After 21 calendar days, we will dispose of all samples submitted including those put on hold unless you have contacted your Alpha Project Manager and made arrangements for Alpha to continue to hold the samples. Air canisters will be disposed after 3 business days from the date the project is completed.

Please contact Project Management at 800-624-9220 with any questions.

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**Project Name:** SUPPLEMENTAL RI SAMPLING PRGM.  
**Project Number:** 0127981-023

**Lab Number:** L2159730  
**Report Date:** 11/08/21

### Case Narrative (continued)

#### Report Submission

November 08, 2021: This final report includes the results of all requested analyses.

November 04, 2021: This is a preliminary report.

All non-detect (ND) or estimated concentrations (J-qualified) have been quantitated to the limit noted in the MDL column.

#### Sample Receipt

L2159730-11: A sample identified as "FIELD BLANK" was received, but not listed on the Chain of Custody. At the client's request, this sample was analyzed.

#### Volatile Organics

The WG1566693-3/-4 LCS/LCSD recoveries, associated with L2159730-04, -05, -06, -08, -09, and -10, are above the individual acceptance criteria for 1,4-dioxane (164%/172%), but within the overall method allowances.

The WG1566693-3/-4 LCS/LCSD RPD, associated with L2159730-04, -05, -06, -08, -09, and -10, is above the acceptance criteria for acetone (26%).

The WG1566693-6/-7 MS/MSD recoveries, performed on L2159730-06, are above the acceptance criteria for chloroethane (MSD 140%) and 1,4-dioxane (MSD 174%); however, the associated LCS/LCSD recoveries are within overall method allowances.

The WG1566693-6/-7 MS/MSD RPD, performed on L2159730-06, is outside the acceptance criteria for 1,4-dioxane (22%).

#### Semivolatile Organics

L2159730-06: The surrogate recovery is outside the individual acceptance criteria for 2,4,6-tribromophenol (129%), but within the overall method allowances. The results of the original analysis are reported.

The WG1565393-2/-3 LCS/LCSD recoveries, associated with L2159730-04, -05, -06, -08, and -10, are

**Project Name:** SUPPLEMENTAL RI SAMPLING PRGM.  
**Project Number:** 0127981-023

**Lab Number:** L2159730  
**Report Date:** 11/08/21

### Case Narrative (continued)

below the individual acceptance criteria for 4-chloroaniline (32%/30%), carbazole (54%/51%), but within the overall method allowances. The results of the associated samples are reported.

The WG1565393-6/-7 MS/MSD recoveries, performed on L2159730-06, are outside the acceptance criteria for 4-chloroaniline (39%/19%) and 4-nitrophenol (94%/100%).

The WG1565393-6/-7 MS/MSD RPD, performed on L2159730-06, is outside the acceptance criteria for 4-chloroaniline (69%).

WG1565393-6/-7: The surrogate recoveries is outside the individual acceptance criteria for 2,4,6-tribromophenol (126%/131%), but within the overall method allowances. The results of the original analysis are reported.

#### Perfluorinated Alkyl Acids by Isotope Dilution

L2159730-03: The sample was centrifuged and decanted prior to extraction due to sample matrix.

#### Dissolved Metals

The WG1566220-2 LCS recovery, associated with L2159730-04, -05, -06, -08, and -10, is above the acceptance criteria for arsenic (121%); however, the associated samples are non-detect to the RL for this target analyte. The results of the original analysis are reported.

I, the undersigned, attest under the pains and penalties of perjury that, to the best of my knowledge and belief and based upon my personal inquiry of those responsible for providing the information contained in this analytical report, such information is accurate and complete. This certificate of analysis is not complete unless this page accompanies any and all pages of this report.

Authorized Signature:

*Tiffani Morrissey* - Tiffani Morrissey

Title: Technical Director/Representative

Date: 11/08/21

# ORGANICS



# VOLATILES



**Project Name:** SUPPLEMENTAL RI SAMPLING PRGM.  
**Project Number:** 0127981-023

**Lab Number:** L2159730  
**Report Date:** 11/08/21

**SAMPLE RESULTS**

Lab ID:	L2159730-04	Date Collected:	10/29/21 13:40
Client ID:	MW21B-102921-1340	Date Received:	10/29/21
Sample Location:	BATH, NY	Field Prep:	Not Specified

Sample Depth:

Matrix: Water  
Analytical Method: 1,8260C  
Analytical Date: 11/03/21 10:15  
Analyst: NLK

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Volatile Organics by GC/MS - Westborough Lab</b>						
Methylene chloride	ND	ug/l	2.5	0.70	1	
1,1-Dichloroethane	ND	ug/l	2.5	0.70	1	
Chloroform	ND	ug/l	2.5	0.70	1	
Carbon tetrachloride	ND	ug/l	0.50	0.13	1	
1,2-Dichloropropane	ND	ug/l	1.0	0.14	1	
Dibromochloromethane	ND	ug/l	0.50	0.15	1	
1,1,2-Trichloroethane	ND	ug/l	1.5	0.50	1	
Tetrachloroethene	ND	ug/l	0.50	0.18	1	
Chlorobenzene	ND	ug/l	2.5	0.70	1	
Trichlorofluoromethane	ND	ug/l	2.5	0.70	1	
1,2-Dichloroethane	ND	ug/l	0.50	0.13	1	
1,1,1-Trichloroethane	ND	ug/l	2.5	0.70	1	
Bromodichloromethane	ND	ug/l	0.50	0.19	1	
trans-1,3-Dichloropropene	ND	ug/l	0.50	0.16	1	
cis-1,3-Dichloropropene	ND	ug/l	0.50	0.14	1	
Bromoform	ND	ug/l	2.0	0.65	1	
1,1,2,2-Tetrachloroethane	ND	ug/l	0.50	0.17	1	
Benzene	ND	ug/l	0.50	0.16	1	
Toluene	ND	ug/l	2.5	0.70	1	
Ethylbenzene	ND	ug/l	2.5	0.70	1	
Chloromethane	ND	ug/l	2.5	0.70	1	
Bromomethane	ND	ug/l	2.5	0.70	1	
Vinyl chloride	ND	ug/l	1.0	0.07	1	
Chloroethane	ND	ug/l	2.5	0.70	1	
1,1-Dichloroethene	ND	ug/l	0.50	0.17	1	
trans-1,2-Dichloroethene	ND	ug/l	2.5	0.70	1	
Trichloroethene	ND	ug/l	0.50	0.18	1	
1,2-Dichlorobenzene	ND	ug/l	2.5	0.70	1	



**Project Name:** SUPPLEMENTAL RI SAMPLING PRGM.  
**Project Number:** 0127981-023

**Lab Number:** L2159730  
**Report Date:** 11/08/21

**SAMPLE RESULTS**

Lab ID:	L2159730-04	Date Collected:	10/29/21 13:40
Client ID:	MW21B-102921-1340	Date Received:	10/29/21
Sample Location:	BATH, NY	Field Prep:	Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Volatile Organics by GC/MS - Westborough Lab</b>						
1,3-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,4-Dichlorobenzene	ND		ug/l	2.5	0.70	1
Methyl tert butyl ether	ND		ug/l	2.5	0.70	1
p/m-Xylene	ND		ug/l	2.5	0.70	1
o-Xylene	ND		ug/l	2.5	0.70	1
cis-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1
Styrene	ND		ug/l	2.5	0.70	1
Dichlorodifluoromethane	ND		ug/l	5.0	1.0	1
Acetone	ND		ug/l	5.0	1.5	1
Carbon disulfide	ND		ug/l	5.0	1.0	1
2-Butanone	ND		ug/l	5.0	1.9	1
4-Methyl-2-pentanone	ND		ug/l	5.0	1.0	1
2-Hexanone	ND		ug/l	5.0	1.0	1
Bromochloromethane	ND		ug/l	2.5	0.70	1
1,2-Dibromoethane	ND		ug/l	2.0	0.65	1
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	0.70	1
Isopropylbenzene	ND		ug/l	2.5	0.70	1
1,2,3-Trichlorobenzene	ND		ug/l	2.5	0.70	1
1,2,4-Trichlorobenzene	ND		ug/l	2.5	0.70	1
Methyl Acetate	ND		ug/l	2.0	0.23	1
Cyclohexane	ND		ug/l	10	0.27	1
1,4-Dioxane	ND		ug/l	250	61.	1
Freon-113	ND		ug/l	2.5	0.70	1
Methyl cyclohexane	ND		ug/l	10	0.40	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	104		70-130
Toluene-d8	92		70-130
4-Bromofluorobenzene	94		70-130
Dibromofluoromethane	108		70-130

**Project Name:** SUPPLEMENTAL RI SAMPLING PRGM.  
**Project Number:** 0127981-023

**Lab Number:** L2159730  
**Report Date:** 11/08/21

**SAMPLE RESULTS**

Lab ID:	L2159730-05	Date Collected:	10/29/21 15:15
Client ID:	MW21A-102921-1515	Date Received:	10/29/21
Sample Location:	BATH, NY	Field Prep:	Not Specified

Sample Depth:

Matrix: Water  
Analytical Method: 1,8260C  
Analytical Date: 11/03/21 10:41  
Analyst: NLK

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Volatile Organics by GC/MS - Westborough Lab</b>						
Methylene chloride	ND		ug/l	2.5	0.70	1
1,1-Dichloroethane	ND		ug/l	2.5	0.70	1
Chloroform	ND		ug/l	2.5	0.70	1
Carbon tetrachloride	ND		ug/l	0.50	0.13	1
1,2-Dichloropropane	ND		ug/l	1.0	0.14	1
Dibromochloromethane	ND		ug/l	0.50	0.15	1
1,1,2-Trichloroethane	ND		ug/l	1.5	0.50	1
Tetrachloroethene	ND		ug/l	0.50	0.18	1
Chlorobenzene	ND		ug/l	2.5	0.70	1
Trichlorofluoromethane	ND		ug/l	2.5	0.70	1
1,2-Dichloroethane	ND		ug/l	0.50	0.13	1
1,1,1-Trichloroethane	ND		ug/l	2.5	0.70	1
Bromodichloromethane	ND		ug/l	0.50	0.19	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	0.16	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	0.14	1
Bromoform	ND		ug/l	2.0	0.65	1
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	0.17	1
Benzene	ND		ug/l	0.50	0.16	1
Toluene	ND		ug/l	2.5	0.70	1
Ethylbenzene	ND		ug/l	2.5	0.70	1
Chloromethane	ND		ug/l	2.5	0.70	1
Bromomethane	ND		ug/l	2.5	0.70	1
Vinyl chloride	ND		ug/l	1.0	0.07	1
Chloroethane	ND		ug/l	2.5	0.70	1
1,1-Dichloroethene	ND		ug/l	0.50	0.17	1
trans-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1
Trichloroethene	0.29	J	ug/l	0.50	0.18	1
1,2-Dichlorobenzene	ND		ug/l	2.5	0.70	1



**Project Name:** SUPPLEMENTAL RI SAMPLING PRGM.  
**Project Number:** 0127981-023

**Lab Number:** L2159730  
**Report Date:** 11/08/21

**SAMPLE RESULTS**

Lab ID:	L2159730-05	Date Collected:	10/29/21 15:15
Client ID:	MW21A-102921-1515	Date Received:	10/29/21
Sample Location:	BATH, NY	Field Prep:	Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Volatile Organics by GC/MS - Westborough Lab</b>						
1,3-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,4-Dichlorobenzene	ND		ug/l	2.5	0.70	1
Methyl tert butyl ether	ND		ug/l	2.5	0.70	1
p/m-Xylene	ND		ug/l	2.5	0.70	1
o-Xylene	ND		ug/l	2.5	0.70	1
cis-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1
Styrene	ND		ug/l	2.5	0.70	1
Dichlorodifluoromethane	ND		ug/l	5.0	1.0	1
Acetone	ND		ug/l	5.0	1.5	1
Carbon disulfide	ND		ug/l	5.0	1.0	1
2-Butanone	ND		ug/l	5.0	1.9	1
4-Methyl-2-pentanone	ND		ug/l	5.0	1.0	1
2-Hexanone	ND		ug/l	5.0	1.0	1
Bromochloromethane	ND		ug/l	2.5	0.70	1
1,2-Dibromoethane	ND		ug/l	2.0	0.65	1
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	0.70	1
Isopropylbenzene	ND		ug/l	2.5	0.70	1
1,2,3-Trichlorobenzene	ND		ug/l	2.5	0.70	1
1,2,4-Trichlorobenzene	ND		ug/l	2.5	0.70	1
Methyl Acetate	ND		ug/l	2.0	0.23	1
Cyclohexane	ND		ug/l	10	0.27	1
1,4-Dioxane	ND		ug/l	250	61.	1
Freon-113	ND		ug/l	2.5	0.70	1
Methyl cyclohexane	ND		ug/l	10	0.40	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	107		70-130
Toluene-d8	94		70-130
4-Bromofluorobenzene	95		70-130
Dibromofluoromethane	115		70-130

**Project Name:** SUPPLEMENTAL RI SAMPLING PRGM.  
**Project Number:** 0127981-023

**Lab Number:** L2159730  
**Report Date:** 11/08/21

**SAMPLE RESULTS**

Lab ID:	L2159730-06	Date Collected:	10/29/21 16:20
Client ID:	MW22B-102921-	Date Received:	10/29/21
Sample Location:	BATH, NY	Field Prep:	Not Specified

Sample Depth:

Matrix: Water  
Analytical Method: 1,8260C  
Analytical Date: 11/03/21 11:08  
Analyst: NLK

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Volatile Organics by GC/MS - Westborough Lab</b>						
Methylene chloride	ND	ug/l	2.5	0.70	1	
1,1-Dichloroethane	ND	ug/l	2.5	0.70	1	
Chloroform	ND	ug/l	2.5	0.70	1	
Carbon tetrachloride	ND	ug/l	0.50	0.13	1	
1,2-Dichloropropane	ND	ug/l	1.0	0.14	1	
Dibromochloromethane	ND	ug/l	0.50	0.15	1	
1,1,2-Trichloroethane	ND	ug/l	1.5	0.50	1	
Tetrachloroethene	ND	ug/l	0.50	0.18	1	
Chlorobenzene	ND	ug/l	2.5	0.70	1	
Trichlorofluoromethane	ND	ug/l	2.5	0.70	1	
1,2-Dichloroethane	ND	ug/l	0.50	0.13	1	
1,1,1-Trichloroethane	ND	ug/l	2.5	0.70	1	
Bromodichloromethane	ND	ug/l	0.50	0.19	1	
trans-1,3-Dichloropropene	ND	ug/l	0.50	0.16	1	
cis-1,3-Dichloropropene	ND	ug/l	0.50	0.14	1	
Bromoform	ND	ug/l	2.0	0.65	1	
1,1,2,2-Tetrachloroethane	ND	ug/l	0.50	0.17	1	
Benzene	ND	ug/l	0.50	0.16	1	
Toluene	ND	ug/l	2.5	0.70	1	
Ethylbenzene	ND	ug/l	2.5	0.70	1	
Chloromethane	ND	ug/l	2.5	0.70	1	
Bromomethane	ND	ug/l	2.5	0.70	1	
Vinyl chloride	ND	ug/l	1.0	0.07	1	
Chloroethane	ND	ug/l	2.5	0.70	1	
1,1-Dichloroethene	ND	ug/l	0.50	0.17	1	
trans-1,2-Dichloroethene	ND	ug/l	2.5	0.70	1	
Trichloroethene	ND	ug/l	0.50	0.18	1	
1,2-Dichlorobenzene	ND	ug/l	2.5	0.70	1	



**Project Name:** SUPPLEMENTAL RI SAMPLING PRGM.  
**Project Number:** 0127981-023

**Lab Number:** L2159730  
**Report Date:** 11/08/21

**SAMPLE RESULTS**

Lab ID:	L2159730-06	Date Collected:	10/29/21 16:20
Client ID:	MW22B-102921-	Date Received:	10/29/21
Sample Location:	BATH, NY	Field Prep:	Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Volatile Organics by GC/MS - Westborough Lab</b>						
1,3-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,4-Dichlorobenzene	ND		ug/l	2.5	0.70	1
Methyl tert butyl ether	ND		ug/l	2.5	0.70	1
p/m-Xylene	ND		ug/l	2.5	0.70	1
o-Xylene	ND		ug/l	2.5	0.70	1
cis-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1
Styrene	ND		ug/l	2.5	0.70	1
Dichlorodifluoromethane	ND		ug/l	5.0	1.0	1
Acetone	ND		ug/l	5.0	1.5	1
Carbon disulfide	ND		ug/l	5.0	1.0	1
2-Butanone	ND		ug/l	5.0	1.9	1
4-Methyl-2-pentanone	ND		ug/l	5.0	1.0	1
2-Hexanone	ND		ug/l	5.0	1.0	1
Bromochloromethane	ND		ug/l	2.5	0.70	1
1,2-Dibromoethane	ND		ug/l	2.0	0.65	1
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	0.70	1
Isopropylbenzene	ND		ug/l	2.5	0.70	1
1,2,3-Trichlorobenzene	ND		ug/l	2.5	0.70	1
1,2,4-Trichlorobenzene	ND		ug/l	2.5	0.70	1
Methyl Acetate	ND		ug/l	2.0	0.23	1
Cyclohexane	ND		ug/l	10	0.27	1
1,4-Dioxane	ND		ug/l	250	61.	1
Freon-113	ND		ug/l	2.5	0.70	1
Methyl cyclohexane	ND		ug/l	10	0.40	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	110		70-130
Toluene-d8	94		70-130
4-Bromofluorobenzene	94		70-130
Dibromofluoromethane	115		70-130

**Project Name:** SUPPLEMENTAL RI SAMPLING PRGM.  
**Project Number:** 0127981-023

**Lab Number:** L2159730  
**Report Date:** 11/08/21

**SAMPLE RESULTS**

Lab ID:	L2159730-08	Date Collected:	10/29/21 00:00
Client ID:	4125-102921-0002	Date Received:	10/29/21
Sample Location:	BATH, NY	Field Prep:	Not Specified

Sample Depth:

Matrix: Water  
Analytical Method: 1,8260C  
Analytical Date: 11/03/21 11:34  
Analyst: NLK

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Volatile Organics by GC/MS - Westborough Lab</b>						
Methylene chloride	ND	ug/l	2.5	0.70	1	
1,1-Dichloroethane	ND	ug/l	2.5	0.70	1	
Chloroform	ND	ug/l	2.5	0.70	1	
Carbon tetrachloride	ND	ug/l	0.50	0.13	1	
1,2-Dichloropropane	ND	ug/l	1.0	0.14	1	
Dibromochloromethane	ND	ug/l	0.50	0.15	1	
1,1,2-Trichloroethane	ND	ug/l	1.5	0.50	1	
Tetrachloroethene	ND	ug/l	0.50	0.18	1	
Chlorobenzene	ND	ug/l	2.5	0.70	1	
Trichlorofluoromethane	ND	ug/l	2.5	0.70	1	
1,2-Dichloroethane	ND	ug/l	0.50	0.13	1	
1,1,1-Trichloroethane	ND	ug/l	2.5	0.70	1	
Bromodichloromethane	ND	ug/l	0.50	0.19	1	
trans-1,3-Dichloropropene	ND	ug/l	0.50	0.16	1	
cis-1,3-Dichloropropene	ND	ug/l	0.50	0.14	1	
Bromoform	ND	ug/l	2.0	0.65	1	
1,1,2,2-Tetrachloroethane	ND	ug/l	0.50	0.17	1	
Benzene	ND	ug/l	0.50	0.16	1	
Toluene	ND	ug/l	2.5	0.70	1	
Ethylbenzene	ND	ug/l	2.5	0.70	1	
Chloromethane	ND	ug/l	2.5	0.70	1	
Bromomethane	ND	ug/l	2.5	0.70	1	
Vinyl chloride	ND	ug/l	1.0	0.07	1	
Chloroethane	ND	ug/l	2.5	0.70	1	
1,1-Dichloroethene	ND	ug/l	0.50	0.17	1	
trans-1,2-Dichloroethene	ND	ug/l	2.5	0.70	1	
Trichloroethene	ND	ug/l	0.50	0.18	1	
1,2-Dichlorobenzene	ND	ug/l	2.5	0.70	1	



**Project Name:** SUPPLEMENTAL RI SAMPLING PRGM.  
**Project Number:** 0127981-023

**Lab Number:** L2159730  
**Report Date:** 11/08/21

**SAMPLE RESULTS**

Lab ID:	L2159730-08	Date Collected:	10/29/21 00:00
Client ID:	4125-102921-0002	Date Received:	10/29/21
Sample Location:	BATH, NY	Field Prep:	Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Volatile Organics by GC/MS - Westborough Lab</b>						
1,3-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,4-Dichlorobenzene	ND		ug/l	2.5	0.70	1
Methyl tert butyl ether	ND		ug/l	2.5	0.70	1
p/m-Xylene	ND		ug/l	2.5	0.70	1
o-Xylene	ND		ug/l	2.5	0.70	1
cis-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1
Styrene	ND		ug/l	2.5	0.70	1
Dichlorodifluoromethane	ND		ug/l	5.0	1.0	1
Acetone	ND		ug/l	5.0	1.5	1
Carbon disulfide	ND		ug/l	5.0	1.0	1
2-Butanone	ND		ug/l	5.0	1.9	1
4-Methyl-2-pentanone	ND		ug/l	5.0	1.0	1
2-Hexanone	ND		ug/l	5.0	1.0	1
Bromochloromethane	ND		ug/l	2.5	0.70	1
1,2-Dibromoethane	ND		ug/l	2.0	0.65	1
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	0.70	1
Isopropylbenzene	ND		ug/l	2.5	0.70	1
1,2,3-Trichlorobenzene	ND		ug/l	2.5	0.70	1
1,2,4-Trichlorobenzene	ND		ug/l	2.5	0.70	1
Methyl Acetate	ND		ug/l	2.0	0.23	1
Cyclohexane	ND		ug/l	10	0.27	1
1,4-Dioxane	ND		ug/l	250	61.	1
Freon-113	ND		ug/l	2.5	0.70	1
Methyl cyclohexane	ND		ug/l	10	0.40	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	109		70-130
Toluene-d8	93		70-130
4-Bromofluorobenzene	93		70-130
Dibromofluoromethane	114		70-130

**Project Name:** SUPPLEMENTAL RI SAMPLING PRGM.  
**Project Number:** 0127981-023

**Lab Number:** L2159730  
**Report Date:** 11/08/21

**SAMPLE RESULTS**

Lab ID:	L2159730-09	Date Collected:	10/29/21 00:00
Client ID:	4125-102921-0003	Date Received:	10/29/21
Sample Location:	BATH, NY	Field Prep:	Not Specified

Sample Depth:

Matrix: Water  
Analytical Method: 1,8260C  
Analytical Date: 11/03/21 12:01  
Analyst: NLK

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Volatile Organics by GC/MS - Westborough Lab</b>						
Methylene chloride	ND	ug/l	2.5	0.70	1	
1,1-Dichloroethane	ND	ug/l	2.5	0.70	1	
Chloroform	ND	ug/l	2.5	0.70	1	
Carbon tetrachloride	ND	ug/l	0.50	0.13	1	
1,2-Dichloropropane	ND	ug/l	1.0	0.14	1	
Dibromochloromethane	ND	ug/l	0.50	0.15	1	
1,1,2-Trichloroethane	ND	ug/l	1.5	0.50	1	
Tetrachloroethene	ND	ug/l	0.50	0.18	1	
Chlorobenzene	ND	ug/l	2.5	0.70	1	
Trichlorofluoromethane	ND	ug/l	2.5	0.70	1	
1,2-Dichloroethane	ND	ug/l	0.50	0.13	1	
1,1,1-Trichloroethane	ND	ug/l	2.5	0.70	1	
Bromodichloromethane	ND	ug/l	0.50	0.19	1	
trans-1,3-Dichloropropene	ND	ug/l	0.50	0.16	1	
cis-1,3-Dichloropropene	ND	ug/l	0.50	0.14	1	
Bromoform	ND	ug/l	2.0	0.65	1	
1,1,2,2-Tetrachloroethane	ND	ug/l	0.50	0.17	1	
Benzene	ND	ug/l	0.50	0.16	1	
Toluene	ND	ug/l	2.5	0.70	1	
Ethylbenzene	ND	ug/l	2.5	0.70	1	
Chloromethane	ND	ug/l	2.5	0.70	1	
Bromomethane	ND	ug/l	2.5	0.70	1	
Vinyl chloride	ND	ug/l	1.0	0.07	1	
Chloroethane	ND	ug/l	2.5	0.70	1	
1,1-Dichloroethene	ND	ug/l	0.50	0.17	1	
trans-1,2-Dichloroethene	ND	ug/l	2.5	0.70	1	
Trichloroethene	ND	ug/l	0.50	0.18	1	
1,2-Dichlorobenzene	ND	ug/l	2.5	0.70	1	



**Project Name:** SUPPLEMENTAL RI SAMPLING PRGM.  
**Project Number:** 0127981-023

**Lab Number:** L2159730  
**Report Date:** 11/08/21

**SAMPLE RESULTS**

Lab ID:	L2159730-09	Date Collected:	10/29/21 00:00
Client ID:	4125-102921-0003	Date Received:	10/29/21
Sample Location:	BATH, NY	Field Prep:	Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Volatile Organics by GC/MS - Westborough Lab</b>						
1,3-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,4-Dichlorobenzene	ND		ug/l	2.5	0.70	1
Methyl tert butyl ether	ND		ug/l	2.5	0.70	1
p/m-Xylene	ND		ug/l	2.5	0.70	1
o-Xylene	ND		ug/l	2.5	0.70	1
cis-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1
Styrene	ND		ug/l	2.5	0.70	1
Dichlorodifluoromethane	ND		ug/l	5.0	1.0	1
Acetone	ND		ug/l	5.0	1.5	1
Carbon disulfide	ND		ug/l	5.0	1.0	1
2-Butanone	ND		ug/l	5.0	1.9	1
4-Methyl-2-pentanone	ND		ug/l	5.0	1.0	1
2-Hexanone	ND		ug/l	5.0	1.0	1
Bromochloromethane	ND		ug/l	2.5	0.70	1
1,2-Dibromoethane	ND		ug/l	2.0	0.65	1
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	0.70	1
Isopropylbenzene	ND		ug/l	2.5	0.70	1
1,2,3-Trichlorobenzene	ND		ug/l	2.5	0.70	1
1,2,4-Trichlorobenzene	ND		ug/l	2.5	0.70	1
Methyl Acetate	ND		ug/l	2.0	0.23	1
Cyclohexane	ND		ug/l	10	0.27	1
1,4-Dioxane	ND		ug/l	250	61.	1
Freon-113	ND		ug/l	2.5	0.70	1
Methyl cyclohexane	ND		ug/l	10	0.40	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	114		70-130
Toluene-d8	94		70-130
4-Bromofluorobenzene	96		70-130
Dibromofluoromethane	120		70-130

**Project Name:** SUPPLEMENTAL RI SAMPLING PRGM.  
**Project Number:** 0127981-023

**Lab Number:** L2159730  
**Report Date:** 11/08/21

**SAMPLE RESULTS**

Lab ID:	L2159730-10	Date Collected:	10/29/21 00:00
Client ID:	4125-102921-0004	Date Received:	10/29/21
Sample Location:	BATH, NY	Field Prep:	Not Specified

Sample Depth:

Matrix: Water  
Analytical Method: 1,8260C  
Analytical Date: 11/03/21 12:28  
Analyst: NLK

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Volatile Organics by GC/MS - Westborough Lab</b>						
Methylene chloride	ND	ug/l	2.5	0.70	1	
1,1-Dichloroethane	ND	ug/l	2.5	0.70	1	
Chloroform	ND	ug/l	2.5	0.70	1	
Carbon tetrachloride	ND	ug/l	0.50	0.13	1	
1,2-Dichloropropane	ND	ug/l	1.0	0.14	1	
Dibromochloromethane	ND	ug/l	0.50	0.15	1	
1,1,2-Trichloroethane	ND	ug/l	1.5	0.50	1	
Tetrachloroethene	ND	ug/l	0.50	0.18	1	
Chlorobenzene	ND	ug/l	2.5	0.70	1	
Trichlorofluoromethane	ND	ug/l	2.5	0.70	1	
1,2-Dichloroethane	ND	ug/l	0.50	0.13	1	
1,1,1-Trichloroethane	ND	ug/l	2.5	0.70	1	
Bromodichloromethane	ND	ug/l	0.50	0.19	1	
trans-1,3-Dichloropropene	ND	ug/l	0.50	0.16	1	
cis-1,3-Dichloropropene	ND	ug/l	0.50	0.14	1	
Bromoform	ND	ug/l	2.0	0.65	1	
1,1,2,2-Tetrachloroethane	ND	ug/l	0.50	0.17	1	
Benzene	ND	ug/l	0.50	0.16	1	
Toluene	ND	ug/l	2.5	0.70	1	
Ethylbenzene	ND	ug/l	2.5	0.70	1	
Chloromethane	ND	ug/l	2.5	0.70	1	
Bromomethane	ND	ug/l	2.5	0.70	1	
Vinyl chloride	ND	ug/l	1.0	0.07	1	
Chloroethane	ND	ug/l	2.5	0.70	1	
1,1-Dichloroethene	ND	ug/l	0.50	0.17	1	
trans-1,2-Dichloroethene	ND	ug/l	2.5	0.70	1	
Trichloroethene	ND	ug/l	0.50	0.18	1	
1,2-Dichlorobenzene	ND	ug/l	2.5	0.70	1	



**Project Name:** SUPPLEMENTAL RI SAMPLING PRGM.  
**Project Number:** 0127981-023

**Lab Number:** L2159730  
**Report Date:** 11/08/21

**SAMPLE RESULTS**

Lab ID:	L2159730-10	Date Collected:	10/29/21 00:00
Client ID:	4125-102921-0004	Date Received:	10/29/21
Sample Location:	BATH, NY	Field Prep:	Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Volatile Organics by GC/MS - Westborough Lab</b>						
1,3-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,4-Dichlorobenzene	ND		ug/l	2.5	0.70	1
Methyl tert butyl ether	ND		ug/l	2.5	0.70	1
p/m-Xylene	ND		ug/l	2.5	0.70	1
o-Xylene	ND		ug/l	2.5	0.70	1
cis-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1
Styrene	ND		ug/l	2.5	0.70	1
Dichlorodifluoromethane	ND		ug/l	5.0	1.0	1
Acetone	3.3	J	ug/l	5.0	1.5	1
Carbon disulfide	ND		ug/l	5.0	1.0	1
2-Butanone	ND		ug/l	5.0	1.9	1
4-Methyl-2-pentanone	ND		ug/l	5.0	1.0	1
2-Hexanone	ND		ug/l	5.0	1.0	1
Bromochloromethane	ND		ug/l	2.5	0.70	1
1,2-Dibromoethane	ND		ug/l	2.0	0.65	1
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	0.70	1
Isopropylbenzene	ND		ug/l	2.5	0.70	1
1,2,3-Trichlorobenzene	ND		ug/l	2.5	0.70	1
1,2,4-Trichlorobenzene	ND		ug/l	2.5	0.70	1
Methyl Acetate	ND		ug/l	2.0	0.23	1
Cyclohexane	ND		ug/l	10	0.27	1
1,4-Dioxane	ND		ug/l	250	61.	1
Freon-113	ND		ug/l	2.5	0.70	1
Methyl cyclohexane	ND		ug/l	10	0.40	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	111		70-130
Toluene-d8	93		70-130
4-Bromofluorobenzene	93		70-130
Dibromofluoromethane	115		70-130

**Project Name:** SUPPLEMENTAL RI SAMPLING PRGM.  
**Project Number:** 0127981-023

**Lab Number:** L2159730  
**Report Date:** 11/08/21

**Method Blank Analysis**  
**Batch Quality Control**

Analytical Method: 1,8260C  
Analytical Date: 11/03/21 09:48  
Analyst: PD

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s):	04-06,08-10			Batch:	WG1566693-5
Methylene chloride	ND	ug/l	2.5	0.70	
1,1-Dichloroethane	ND	ug/l	2.5	0.70	
Chloroform	ND	ug/l	2.5	0.70	
Carbon tetrachloride	ND	ug/l	0.50	0.13	
1,2-Dichloropropane	ND	ug/l	1.0	0.14	
Dibromochloromethane	ND	ug/l	0.50	0.15	
1,1,2-Trichloroethane	ND	ug/l	1.5	0.50	
Tetrachloroethene	ND	ug/l	0.50	0.18	
Chlorobenzene	ND	ug/l	2.5	0.70	
Trichlorofluoromethane	ND	ug/l	2.5	0.70	
1,2-Dichloroethane	ND	ug/l	0.50	0.13	
1,1,1-Trichloroethane	ND	ug/l	2.5	0.70	
Bromodichloromethane	ND	ug/l	0.50	0.19	
trans-1,3-Dichloropropene	ND	ug/l	0.50	0.16	
cis-1,3-Dichloropropene	ND	ug/l	0.50	0.14	
Bromoform	ND	ug/l	2.0	0.65	
1,1,2,2-Tetrachloroethane	ND	ug/l	0.50	0.17	
Benzene	ND	ug/l	0.50	0.16	
Toluene	ND	ug/l	2.5	0.70	
Ethylbenzene	ND	ug/l	2.5	0.70	
Chloromethane	ND	ug/l	2.5	0.70	
Bromomethane	ND	ug/l	2.5	0.70	
Vinyl chloride	ND	ug/l	1.0	0.07	
Chloroethane	ND	ug/l	2.5	0.70	
1,1-Dichloroethene	ND	ug/l	0.50	0.17	
trans-1,2-Dichloroethene	ND	ug/l	2.5	0.70	
Trichloroethene	ND	ug/l	0.50	0.18	
1,2-Dichlorobenzene	ND	ug/l	2.5	0.70	
1,3-Dichlorobenzene	ND	ug/l	2.5	0.70	

**Project Name:** SUPPLEMENTAL RI SAMPLING PRGM.  
**Project Number:** 0127981-023

**Lab Number:** L2159730  
**Report Date:** 11/08/21

**Method Blank Analysis**  
**Batch Quality Control**

Analytical Method: 1,8260C  
Analytical Date: 11/03/21 09:48  
Analyst: PD

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s):	04-06,08-10			Batch:	WG1566693-5
1,4-Dichlorobenzene	ND	ug/l	2.5	0.70	
Methyl tert butyl ether	ND	ug/l	2.5	0.70	
p/m-Xylene	ND	ug/l	2.5	0.70	
o-Xylene	ND	ug/l	2.5	0.70	
cis-1,2-Dichloroethene	ND	ug/l	2.5	0.70	
Styrene	ND	ug/l	2.5	0.70	
Dichlorodifluoromethane	ND	ug/l	5.0	1.0	
Acetone	ND	ug/l	5.0	1.5	
Carbon disulfide	ND	ug/l	5.0	1.0	
2-Butanone	ND	ug/l	5.0	1.9	
4-Methyl-2-pentanone	ND	ug/l	5.0	1.0	
2-Hexanone	ND	ug/l	5.0	1.0	
Bromochloromethane	ND	ug/l	2.5	0.70	
1,2-Dibromoethane	ND	ug/l	2.0	0.65	
1,2-Dibromo-3-chloropropane	ND	ug/l	2.5	0.70	
Isopropylbenzene	ND	ug/l	2.5	0.70	
1,2,3-Trichlorobenzene	ND	ug/l	2.5	0.70	
1,2,4-Trichlorobenzene	ND	ug/l	2.5	0.70	
Methyl Acetate	ND	ug/l	2.0	0.23	
Cyclohexane	ND	ug/l	10	0.27	
1,4-Dioxane	ND	ug/l	250	61.	
Freon-113	ND	ug/l	2.5	0.70	
Methyl cyclohexane	ND	ug/l	10	0.40	

**Project Name:** SUPPLEMENTAL RI SAMPLING PRGM.  
**Project Number:** 0127981-023

**Lab Number:** L2159730  
**Report Date:** 11/08/21

**Method Blank Analysis**  
**Batch Quality Control**

Analytical Method: 1,8260C  
Analytical Date: 11/03/21 09:48  
Analyst: PD

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s):	04-06,08-10	Batch:	WG1566693-5		

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	108		70-130
Toluene-d8	94		70-130
4-Bromofluorobenzene	95		70-130
Dibromofluoromethane	116		70-130

# Lab Control Sample Analysis

## Batch Quality Control

**Project Name:** SUPPLEMENTAL RI SAMPLING PRGM.  
**Project Number:** 0127981-023

**Lab Number:** L2159730  
**Report Date:** 11/08/21

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 04-06,08-10 Batch: WG1566693-3 WG1566693-4								
Methylene chloride	100		100		70-130	0		20
1,1-Dichloroethane	100		110		70-130	10		20
Chloroform	99		100		70-130	1		20
Carbon tetrachloride	100		100		63-132	0		20
1,2-Dichloropropane	96		99		70-130	3		20
Dibromochloromethane	91		100		63-130	9		20
1,1,2-Trichloroethane	77		85		70-130	10		20
Tetrachloroethene	91		93		70-130	2		20
Chlorobenzene	92		97		75-130	5		20
Trichlorofluoromethane	100		100		62-150	0		20
1,2-Dichloroethane	100		110		70-130	10		20
1,1,1-Trichloroethane	98		100		67-130	2		20
Bromodichloromethane	98		100		67-130	2		20
trans-1,3-Dichloropropene	76		84		70-130	10		20
cis-1,3-Dichloropropene	84		90		70-130	7		20
Bromoform	94		99		54-136	5		20
1,1,2,2-Tetrachloroethane	91		95		67-130	4		20
Benzene	89		93		70-130	4		20
Toluene	90		94		70-130	4		20
Ethylbenzene	87		95		70-130	9		20
Chloromethane	100		100		64-130	0		20
Bromomethane	98		94		39-139	4		20
Vinyl chloride	100		100		55-140	0		20

# Lab Control Sample Analysis

## Batch Quality Control

**Project Name:** SUPPLEMENTAL RI SAMPLING PRGM.  
**Project Number:** 0127981-023

**Lab Number:** L2159730  
**Report Date:** 11/08/21

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 04-06,08-10 Batch: WG1566693-3 WG1566693-4								
Chloroethane	120		130		55-138	8		20
1,1-Dichloroethene	100		100		61-145	0		20
trans-1,2-Dichloroethene	98		99		70-130	1		20
Trichloroethene	90		100		70-130	11		20
1,2-Dichlorobenzene	93		96		70-130	3		20
1,3-Dichlorobenzene	91		97		70-130	6		20
1,4-Dichlorobenzene	94		95		70-130	1		20
Methyl tert butyl ether	87		94		63-130	8		20
p/m-Xylene	90		95		70-130	5		20
o-Xylene	90		95		70-130	5		20
cis-1,2-Dichloroethene	97		100		70-130	3		20
Styrene	85		90		70-130	6		20
Dichlorodifluoromethane	96		94		36-147	2		20
Acetone	130		100		58-148	26	Q	20
Carbon disulfide	110		110		51-130	0		20
2-Butanone	91		100		63-138	9		20
4-Methyl-2-pentanone	85		90		59-130	6		20
2-Hexanone	84		84		57-130	0		20
Bromochloromethane	110		110		70-130	0		20
1,2-Dibromoethane	81		88		70-130	8		20
1,2-Dibromo-3-chloropropane	94		100		41-144	6		20
Isopropylbenzene	85		90		70-130	6		20
1,2,3-Trichlorobenzene	79		84		70-130	6		20

# Lab Control Sample Analysis

## Batch Quality Control

**Project Name:** SUPPLEMENTAL RI SAMPLING PRGM.  
**Project Number:** 0127981-023

**Lab Number:** L2159730  
**Report Date:** 11/08/21

<b>Parameter</b>	<b>LCS</b>		<b>LCSD</b>		<b>%Recovery</b>		<b>RPD</b>	<b>Qual</b>	<b>RPD</b> <b>Limits</b>
	<b>%Recovery</b>	<b>Qual</b>	<b>%Recovery</b>	<b>Qual</b>	<b>Limits</b>				
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 04-06,08-10 Batch: WG1566693-3 WG1566693-4									
1,2,4-Trichlorobenzene	86		93		70-130		8		20
Methyl Acetate	91		95		70-130		4		20
Cyclohexane	99		100		70-130		1		20
1,4-Dioxane	164	Q	172	Q	56-162		5		20
Freon-113	100		100		70-130		0		20
Methyl cyclohexane	90		92		70-130		2		20

<b>Surrogate</b>	<b>LCS</b>		<b>LCSD</b>		<b>Acceptance Criteria</b>
	<b>%Recovery</b>	<b>Qual</b>	<b>%Recovery</b>	<b>Qual</b>	
1,2-Dichloroethane-d4	96		102		70-130
Toluene-d8	94		98		70-130
4-Bromofluorobenzene	90		88		70-130
Dibromofluoromethane	104		105		70-130

# Matrix Spike Analysis

## Batch Quality Control

**Project Name:** SUPPLEMENTAL RI SAMPLING PRGM.  
**Project Number:** 0127981-023

**Lab Number:** L2159730  
**Report Date:** 11/08/21

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Recovery Qual	Limits	RPD	RPD Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab ID: MW22B-102921-				Associated sample(s): 04-06,08-10		QC Batch ID: WG1566693-6	WG1566693-7		QC Sample: L2159730-06		Client	
Methylene chloride	ND	10	10	100		11	110		70-130	10		20
1,1-Dichloroethane	ND	10	10	100		11	110		70-130	10		20
Chloroform	ND	10	10	100		11	110		70-130	10		20
Carbon tetrachloride	ND	10	10	100		11	110		63-132	10		20
1,2-Dichloropropane	ND	10	9.9	99		11	110		70-130	11		20
Dibromochloromethane	ND	10	9.8	98		10	100		63-130	2		20
1,1,2-Trichloroethane	ND	10	8.1	81		8.8	88		70-130	8		20
Tetrachloroethene	ND	10	9.3	93		9.9	99		70-130	6		20
Chlorobenzene	ND	10	9.8	98		10	100		75-130	2		20
Trichlorofluoromethane	ND	10	10	100		11	110		62-150	10		20
1,2-Dichloroethane	ND	10	10	100		11	110		70-130	10		20
1,1,1-Trichloroethane	ND	10	10	100		11	110		67-130	10		20
Bromodichloromethane	ND	10	10	100		11	110		67-130	10		20
trans-1,3-Dichloropropene	ND	10	8.0	80		8.7	87		70-130	8		20
cis-1,3-Dichloropropene	ND	10	8.4	84		9.6	96		70-130	13		20
Bromoform	ND	10	9.1	91		10	100		54-136	9		20
1,1,2,2-Tetrachloroethane	ND	10	8.9	89		10	100		67-130	12		20
Benzene	ND	10	9.5	95		10	100		70-130	5		20
Toluene	ND	10	9.6	96		9.9	99		70-130	3		20
Ethylbenzene	ND	10	9.4	94		9.9	99		70-130	5		20
Chloromethane	ND	10	11	110		11	110		64-130	0		20
Bromomethane	ND	10	8.4	84		8.7	87		39-139	4		20
Vinyl chloride	ND	10	11	110		11	110		55-140	0		20

**Matrix Spike Analysis**  
*Batch Quality Control*

**Project Name:** SUPPLEMENTAL RI SAMPLING PRGM.  
**Project Number:** 0127981-023

**Lab Number:** L2159730  
**Report Date:** 11/08/21

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Recovery Qual	Limits	RPD	RPD Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab ID: MW22B-102921-				Associated sample(s): 04-06,08-10		QC Batch ID: WG1566693-6	WG1566693-7		QC Sample: L2159730-06		Client	
Chloroethane	ND	10	13	130		14	140	Q	55-138	7		20
1,1-Dichloroethene	ND	10	10	100		11	110		61-145	10		20
trans-1,2-Dichloroethene	ND	10	10	100		11	110		70-130	10		20
Trichloroethene	ND	10	10	100		11	110		70-130	10		20
1,2-Dichlorobenzene	ND	10	9.4	94		10	100		70-130	6		20
1,3-Dichlorobenzene	ND	10	9.7	97		10	100		70-130	3		20
1,4-Dichlorobenzene	ND	10	9.6	96		10	100		70-130	4		20
Methyl tert butyl ether	ND	10	8.8	88		10	100		63-130	13		20
p/m-Xylene	ND	20	18	90		19	95		70-130	5		20
o-Xylene	ND	20	19	95		20	100		70-130	5		20
cis-1,2-Dichloroethene	ND	10	10	100		10	100		70-130	0		20
Styrene	ND	20	18	90		19	95		70-130	5		20
Dichlorodifluoromethane	ND	10	9.4	94		9.8	98		36-147	4		20
Acetone	ND	10	11	110		13	130		58-148	17		20
Carbon disulfide	ND	10	11	110		12	120		51-130	9		20
2-Butanone	ND	10	10	100		11	110		63-138	10		20
4-Methyl-2-pentanone	ND	10	8.3	83		9.0	90		59-130	8		20
2-Hexanone	ND	10	8.6	86		9.4	94		57-130	9		20
Bromochloromethane	ND	10	11	110		11	110		70-130	0		20
1,2-Dibromoethane	ND	10	8.3	83		8.9	89		70-130	7		20
1,2-Dibromo-3-chloropropane	ND	10	9.0	90		9.5	95		41-144	5		20
Isopropylbenzene	ND	10	8.9	89		9.7	97		70-130	9		20
1,2,3-Trichlorobenzene	ND	10	7.4	74		9.0	90		70-130	20		20

**Matrix Spike Analysis**  
*Batch Quality Control*

**Project Name:** SUPPLEMENTAL RI SAMPLING PRGM.  
**Project Number:** 0127981-023

**Lab Number:** L2159730  
**Report Date:** 11/08/21

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Recovery Qual	RPD	RPD Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab ID: MW22B-102921-			Associated sample(s): 04-06,08-10	QC Batch ID: WG1566693-6	WG1566693-7	QC Sample: L2159730-06	Client				
1,2,4-Trichlorobenzene	ND	10	8.6	86		9.6	96	70-130	11		20
Methyl Acetate	ND	10	9.2	92		11	110	70-130	18		20
Cyclohexane	ND	10	10	100		11	110	70-130	10		20
1,4-Dioxane	ND	500	700	140		870	174	Q	56-162	22	Q
Freon-113	ND	10	11	110		11	110	70-130	0		20
Methyl cyclohexane	ND	10	9.2J	92		10	100	70-130	8		20

Surrogate	MS		MSD		Acceptance Criteria
	% Recovery	Qualifier	% Recovery	Qualifier	
1,2-Dichloroethane-d4	100		107		70-130
4-Bromofluorobenzene	88		91		70-130
Dibromofluoromethane	104		103		70-130
Toluene-d8	95		95		70-130

# **SEMIVOLATILES**



**Project Name:** SUPPLEMENTAL RI SAMPLING PRGM.  
**Project Number:** 0127981-023

**Lab Number:** L2159730  
**Report Date:** 11/08/21

**SAMPLE RESULTS**

Lab ID: L2159730-01  
Client ID: MW22B-102921-1105  
Sample Location: BATH, NY

Date Collected: 10/29/21 11:05  
Date Received: 10/29/21  
Field Prep: Not Specified

Sample Depth:

Matrix: Water  
Analytical Method: 1,8270D-SIM  
Analytical Date: 11/07/21 10:09  
Analyst: DB

Extraction Method: EPA 3510C  
Extraction Date: 11/04/21 12:04

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
1,4 Dioxane by 8270D-SIM - Mansfield Lab						
1,4-Dioxane	ND		ng/l	144	32.6	1
Surrogate		% Recovery	Qualifier	Acceptance Criteria		
1,4-Dioxane-d8		28		15-110		

**Project Name:** SUPPLEMENTAL RI SAMPLING PRGM.  
**Project Number:** 0127981-023

**Lab Number:** L2159730  
**Report Date:** 11/08/21

**SAMPLE RESULTS**

Lab ID:	L2159730-01	Date Collected:	10/29/21 11:05
Client ID:	MW22B-102921-1105	Date Received:	10/29/21
Sample Location:	BATH, NY	Field Prep:	Not Specified
Sample Depth:			
Matrix:	Water	Extraction Method: ALPHA 23528	
Analytical Method:	134,LCMSMS-ID	Extraction Date: 11/01/21 09:31	
Analytical Date:	11/02/21 04:46		
Analyst:	HT		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Perfluorinated Alkyl Acids by Isotope Dilution - Mansfield Lab</b>						
Perfluorobutanoic Acid (PFBA)	0.578	J	ng/l	1.82	0.371	1
Perfluoropentanoic Acid (PFPeA)	0.644	J	ng/l	1.82	0.360	1
Perfluorobutanesulfonic Acid (PFBS)	0.269	J	ng/l	1.82	0.216	1
Perfluorohexanoic Acid (PFHxA)	ND		ng/l	1.82	0.298	1
Perfluoroheptanoic Acid (PFHpA)	ND		ng/l	1.82	0.205	1
Perfluorohexanesulfonic Acid (PFHxS)	ND		ng/l	1.82	0.342	1
Perfluoroctanoic Acid (PFOA)	0.404	J	ng/l	1.82	0.214	1
1H,1H,2H,2H-Perfluorooctanesulfonic Acid (6:2FTS)	ND		ng/l	1.82	1.21	1
Perfluoroheptanesulfonic Acid (PFHpS)	ND		ng/l	1.82	0.625	1
Perfluorononanoic Acid (PFNA)	ND		ng/l	1.82	0.284	1
Perfluorooctanesulfonic Acid (PFOS)	ND		ng/l	1.82	0.458	1
Perfluorodecanoic Acid (PFDA)	ND		ng/l	1.82	0.276	1
1H,1H,2H,2H-Perfluorodecanesulfonic Acid (8:2FTS)	ND		ng/l	1.82	1.10	1
N-Methyl Perfluorooctanesulfonamidoacetic Acid (NMeFOSAA)	ND		ng/l	1.82	0.589	1
Perfluoroundecanoic Acid (PFUnA)	ND		ng/l	1.82	0.236	1
Perfluorodecanesulfonic Acid (PFDS)	ND		ng/l	1.82	0.891	1
Perfluorooctanesulfonamide (FOSA)	ND		ng/l	1.82	0.527	1
N-Ethyl Perfluorooctanesulfonamidoacetic Acid (NEtFOSAA)	ND		ng/l	1.82	0.731	1
Perfluorododecanoic Acid (PFDoA)	ND		ng/l	1.82	0.338	1
Perfluorotridecanoic Acid (PFTrDA)	ND		ng/l	1.82	0.297	1
Perfluorotetradecanoic Acid (PFTA)	ND		ng/l	1.82	0.225	1
PFOA/PFOS, Total	0.404	J	ng/l	1.82	0.214	1

Project Name: SUPPLEMENTAL RI SAMPLING PRGM.

Lab Number: L2159730

Project Number: 0127981-023

Report Date: 11/08/21

**SAMPLE RESULTS**

Lab ID: L2159730-01  
 Client ID: MW22B-102921-1105  
 Sample Location: BATH, NY

Date Collected: 10/29/21 11:05  
 Date Received: 10/29/21  
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Perfluorinated Alkyl Acids by Isotope Dilution - Mansfield Lab						
Surrogate (Extracted Internal Standard)			% Recovery	Qualifier	Acceptance Criteria	
Perfluoro[13C4]Butanoic Acid (MPFBA)			83		58-132	
Perfluoro[13C5]Pentanoic Acid (M5PFPEA)			89		62-163	
Perfluoro[2,3,4-13C3]Butanesulfonic Acid (M3PFBS)			109		70-131	
Perfluoro[1,2,3,4,6-13C5]Hexanoic Acid (M5PFHxA)			78		57-129	
Perfluoro[1,2,3,4-13C4]Heptanoic Acid (M4PFHxA)			83		60-129	
Perfluoro[1,2,3-13C3]Hexanesulfonic Acid (M3PFHxS)			116		71-134	
Perfluoro[13C8]Octanoic Acid (M8PFOA)			89		62-129	
1H,1H,2H,2H-Perfluoro[1,2-13C2]Octanesulfonic Acid (M2-6:2FTS)			127		14-147	
Perfluoro[13C9]Nonanoic Acid (M9PFNA)			96		59-139	
Perfluoro[13C8]Octanesulfonic Acid (M8PFOS)			104		69-131	
Perfluoro[1,2,3,4,5,6-13C6]Decanoic Acid (M6PFDA)			94		62-124	
1H,1H,2H,2H-Perfluoro[1,2-13C2]Decanesulfonic Acid (M2-8:2FTS)			113		10-162	
N-Deuteriomethylperfluoro-1-octanesulfonamidoacetic Acid (d3-NMeFOSAA)			63		24-116	
Perfluoro[1,2,3,4,5,6,7-13C7]Undecanoic Acid (M7-PFUDA)			92		55-137	
Perfluoro[13C8]Octanesulfonamide (M8FOSA)			35		10-112	
N-Deuteroethylperfluoro-1-octanesulfonamidoacetic Acid (d5-NEtFOSAA)			84		27-126	
Perfluoro[1,2-13C2]Dodecanoic Acid (MPFDOA)			83		48-131	
Perfluoro[1,2-13C2]Tetradecanoic Acid (M2PFTEDA)			79		22-136	

Project Name: SUPPLEMENTAL RI SAMPLING PRGM.

Lab Number: L2159730

Project Number: 0127981-023

Report Date: 11/08/21

**SAMPLE RESULTS**

Lab ID: L2159730-02  
 Client ID: MW21B-102921-1135  
 Sample Location: BATH, NY

Date Collected: 10/29/21 11:35  
 Date Received: 10/29/21  
 Field Prep: Not Specified

Sample Depth:

Matrix: Water  
 Analytical Method: 1,8270D-SIM  
 Analytical Date: 11/07/21 11:23  
 Analyst: DB

Extraction Method: EPA 3510C  
 Extraction Date: 11/04/21 12:04

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>1,4 Dioxane by 8270D-SIM - Mansfield Lab</b>						
1,4-Dioxane	ND		ng/l	144	32.6	1
Surrogate		% Recovery	Qualifier	Acceptance Criteria		
1,4-Dioxane-d8		26		15-110		

**Project Name:** SUPPLEMENTAL RI SAMPLING PRGM.  
**Project Number:** 0127981-023

**Lab Number:** L2159730  
**Report Date:** 11/08/21

**SAMPLE RESULTS**

Lab ID: L2159730-02  
Client ID: MW21B-102921-1135  
Sample Location: BATH, NY

Date Collected: 10/29/21 11:35  
Date Received: 10/29/21  
Field Prep: Not Specified

Sample Depth:

Matrix: Water  
Analytical Method: 134,LCMSMS-ID  
Analytical Date: 11/02/21 05:36  
Analyst: HT

Extraction Method: ALPHA 23528  
Extraction Date: 11/01/21 09:31

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Perfluorinated Alkyl Acids by Isotope Dilution - Mansfield Lab</b>						
Perfluorobutanoic Acid (PFBA)	0.604	J	ng/l	1.83	0.374	1
Perfluoropentanoic Acid (PFPeA)	0.593	J	ng/l	1.83	0.363	1
Perfluorobutanesulfonic Acid (PFBS)	ND		ng/l	1.83	0.218	1
Perfluorohexanoic Acid (PFHxA)	0.322	JF	ng/l	1.83	0.300	1
Perfluoroheptanoic Acid (PFHpA)	ND		ng/l	1.83	0.206	1
Perfluorohexanesulfonic Acid (PFHxS)	ND		ng/l	1.83	0.344	1
Perfluoroctanoic Acid (PFOA)	0.249	J	ng/l	1.83	0.216	1
1H,1H,2H,2H-Perfluorooctanesulfonic Acid (6:2FTS)	ND		ng/l	1.83	1.22	1
Perfluoroheptanesulfonic Acid (PFHpS)	ND		ng/l	1.83	0.630	1
Perfluorononanoic Acid (PFNA)	ND		ng/l	1.83	0.286	1
Perfluorooctanesulfonic Acid (PFOS)	ND		ng/l	1.83	0.462	1
Perfluorodecanoic Acid (PFDA)	ND		ng/l	1.83	0.278	1
1H,1H,2H,2H-Perfluorodecanesulfonic Acid (8:2FTS)	ND		ng/l	1.83	1.11	1
N-Methyl Perfluorooctanesulfonamidoacetic Acid (NMeFOSAA)	ND		ng/l	1.83	0.593	1
Perfluoroundecanoic Acid (PFUnA)	ND		ng/l	1.83	0.238	1
Perfluorodecanesulfonic Acid (PFDS)	ND		ng/l	1.83	0.897	1
Perfluorooctanesulfonamide (FOSA)	ND		ng/l	1.83	0.531	1
N-Ethyl Perfluorooctanesulfonamidoacetic Acid (NEtFOSAA)	ND		ng/l	1.83	0.736	1
Perfluorododecanoic Acid (PFDoA)	ND		ng/l	1.83	0.341	1
Perfluorotridecanoic Acid (PFTrDA)	ND		ng/l	1.83	0.300	1
Perfluorotetradecanoic Acid (PFTA)	ND		ng/l	1.83	0.227	1
PFOA/PFOS, Total	0.249	J	ng/l	1.83	0.216	1

Project Name: SUPPLEMENTAL RI SAMPLING PRGM.

Lab Number: L2159730

Project Number: 0127981-023

Report Date: 11/08/21

**SAMPLE RESULTS**

Lab ID:	L2159730-02	Date Collected:	10/29/21 11:35
Client ID:	MW21B-102921-1135	Date Received:	10/29/21
Sample Location:	BATH, NY	Field Prep:	Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Perfluorinated Alkyl Acids by Isotope Dilution - Mansfield Lab						
Surrogate (Extracted Internal Standard)			% Recovery	Qualifier	Acceptance Criteria	
Perfluoro[13C4]Butanoic Acid (MPFBA)			92		58-132	
Perfluoro[13C5]Pentanoic Acid (M5PFPEA)			106		62-163	
Perfluoro[2,3,4-13C3]Butanesulfonic Acid (M3PFBS)			110		70-131	
Perfluoro[1,2,3,4,6-13C5]Hexanoic Acid (M5PFHxA)			94		57-129	
Perfluoro[1,2,3,4-13C4]Heptanoic Acid (M4PFHxA)			95		60-129	
Perfluoro[1,2,3-13C3]Hexanesulfonic Acid (M3PFHxS)			118		71-134	
Perfluoro[13C8]Octanoic Acid (M8PFOA)			97		62-129	
1H,1H,2H,2H-Perfluoro[1,2-13C2]Octanesulfonic Acid (M2-6:2FTS)			99		14-147	
Perfluoro[13C9]Nonanoic Acid (M9PFNA)			103		59-139	
Perfluoro[13C8]Octanesulfonic Acid (M8PFOS)			99		69-131	
Perfluoro[1,2,3,4,5,6-13C6]Decanoic Acid (M6PFDA)			94		62-124	
1H,1H,2H,2H-Perfluoro[1,2-13C2]Decanesulfonic Acid (M2-8:2FTS)			90		10-162	
N-Deuteriomethylperfluoro-1-octanesulfonamidoacetic Acid (d3-NMeFOSAA)			81		24-116	
Perfluoro[1,2,3,4,5,6,7-13C7]Undecanoic Acid (M7-PFUDA)			95		55-137	
Perfluoro[13C8]Octanesulfonamide (M8FOSA)			14		10-112	
N-Deuteroethylperfluoro-1-octanesulfonamidoacetic Acid (d5-NEtFOSAA)			92		27-126	
Perfluoro[1,2-13C2]Dodecanoic Acid (MPFDCA)			93		48-131	
Perfluoro[1,2-13C2]Tetradecanoic Acid (M2PFTEDA)			83		22-136	

**Project Name:** SUPPLEMENTAL RI SAMPLING PRGM.  
**Project Number:** 0127981-023

**Lab Number:** L2159730  
**Report Date:** 11/08/21

**SAMPLE RESULTS**

Lab ID:	L2159730-03	Date Collected:	10/29/21 12:00
Client ID:	MW21A-102921-1200	Date Received:	10/29/21
Sample Location:	BATH, NY	Field Prep:	Not Specified

Sample Depth:

Matrix:	Water	Extraction Method:	EPA 3510C
Analytical Method:	1,8270D-SIM	Extraction Date:	11/04/21 12:04
Analytical Date:	11/07/21 11:45		
Analyst:	DB		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
1,4 Dioxane by 8270D-SIM - Mansfield Lab						
1,4-Dioxane	ND		ng/l	150	33.9	1
Surrogate		% Recovery	Qualifier	Acceptance Criteria		
1,4-Dioxane-d8		29		15-110		

**Project Name:** SUPPLEMENTAL RI SAMPLING PRGM.  
**Project Number:** 0127981-023

**Lab Number:** L2159730  
**Report Date:** 11/08/21

**SAMPLE RESULTS**

Lab ID: L2159730-03  
Client ID: MW21A-102921-1200  
Sample Location: BATH, NY

Date Collected: 10/29/21 12:00  
Date Received: 10/29/21  
Field Prep: Not Specified

Sample Depth:

Matrix: Water  
Analytical Method: 134,LCMSMS-ID  
Analytical Date: 11/02/21 05:52  
Analyst: HT

Extraction Method: ALPHA 23528  
Extraction Date: 11/01/21 09:31

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Perfluorinated Alkyl Acids by Isotope Dilution - Mansfield Lab</b>						
Perfluorobutanoic Acid (PFBA)	2.88		ng/l	1.91	0.389	1
Perfluoropentanoic Acid (PFPeA)	0.676	J	ng/l	1.91	0.378	1
Perfluorobutanesulfonic Acid (PFBS)	0.637	J	ng/l	1.91	0.227	1
Perfluorohexanoic Acid (PFHxA)	0.416	JF	ng/l	1.91	0.313	1
Perfluoroheptanoic Acid (PFHpA)	ND		ng/l	1.91	0.215	1
Perfluorohexanesulfonic Acid (PFHxS)	ND		ng/l	1.91	0.359	1
Perfluoroctanoic Acid (PFOA)	0.813	J	ng/l	1.91	0.225	1
1H,1H,2H,2H-Perfluorooctanesulfonic Acid (6:2FTS)	ND		ng/l	1.91	1.27	1
Perfluoroheptanesulfonic Acid (PFHpS)	ND		ng/l	1.91	0.656	1
Perfluorononanoic Acid (PFNA)	ND		ng/l	1.91	0.298	1
Perfluorooctanesulfonic Acid (PFOS)	0.954	J	ng/l	1.91	0.481	1
Perfluorodecanoic Acid (PFDA)	ND		ng/l	1.91	0.290	1
1H,1H,2H,2H-Perfluorodecanesulfonic Acid (8:2FTS)	ND		ng/l	1.91	1.16	1
N-Methyl Perfluorooctanesulfonamidoacetic Acid (NMeFOSAA)	ND		ng/l	1.91	0.618	1
Perfluoroundecanoic Acid (PFUnA)	ND		ng/l	1.91	0.248	1
Perfluorodecanesulfonic Acid (PFDS)	ND		ng/l	1.91	0.935	1
Perfluorooctanesulfonamide (FOSA)	ND		ng/l	1.91	0.553	1
N-Ethyl Perfluorooctanesulfonamidoacetic Acid (NEtFOSAA)	ND		ng/l	1.91	0.767	1
Perfluorododecanoic Acid (PFDoA)	ND		ng/l	1.91	0.355	1
Perfluorotridecanoic Acid (PFTrDA)	ND		ng/l	1.91	0.312	1
Perfluorotetradecanoic Acid (PFTA)	ND		ng/l	1.91	0.237	1
PFOA/PFOS, Total	1.77	J	ng/l	1.91	0.225	1

Project Name: SUPPLEMENTAL RI SAMPLING PRGM.

Lab Number: L2159730

Project Number: 0127981-023

Report Date: 11/08/21

**SAMPLE RESULTS**

Lab ID:	L2159730-03	Date Collected:	10/29/21 12:00
Client ID:	MW21A-102921-1200	Date Received:	10/29/21
Sample Location:	BATH, NY	Field Prep:	Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Perfluorinated Alkyl Acids by Isotope Dilution - Mansfield Lab						
Surrogate (Extracted Internal Standard)			% Recovery	Qualifier	Acceptance Criteria	
Perfluoro[13C4]Butanoic Acid (MPFBA)			86		58-132	
Perfluoro[13C5]Pentanoic Acid (M5PFPEA)			97		62-163	
Perfluoro[2,3,4-13C3]Butanesulfonic Acid (M3PFBS)			106		70-131	
Perfluoro[1,2,3,4,6-13C5]Hexanoic Acid (M5PFHxA)			79		57-129	
Perfluoro[1,2,3,4-13C4]Heptanoic Acid (M4PFHxA)			87		60-129	
Perfluoro[1,2,3-13C3]Hexanesulfonic Acid (M3PFHxS)			115		71-134	
Perfluoro[13C8]Octanoic Acid (M8PFOA)			92		62-129	
1H,1H,2H-Perfluoro[1,2-13C2]Octanesulfonic Acid (M2-6:2FTS)			123		14-147	
Perfluoro[13C9]Nonanoic Acid (M9PFNA)			103		59-139	
Perfluoro[13C8]Octanesulfonic Acid (M8PFOS)			101		69-131	
Perfluoro[1,2,3,4,5,6-13C6]Decanoic Acid (M6PFDA)			96		62-124	
1H,1H,2H-Perfluoro[1,2-13C2]Decanesulfonic Acid (M2-8:2FTS)			101		10-162	
N-Deuteriomethylperfluoro-1-octanesulfonamidoacetic Acid (d3-NMeFOSAA)			68		24-116	
Perfluoro[1,2,3,4,5,6,7-13C7]Undecanoic Acid (M7-PFUDA)			90		55-137	
Perfluoro[13C8]Octanesulfonamide (M8FOSA)			25		10-112	
N-Deuteroethylperfluoro-1-octanesulfonamidoacetic Acid (d5-NEtFOSAA)			65		27-126	
Perfluoro[1,2-13C2]Dodecanoic Acid (MPFDOA)			86		48-131	
Perfluoro[1,2-13C2]Tetradecanoic Acid (M2PFTEDA)			80		22-136	

**Project Name:** SUPPLEMENTAL RI SAMPLING PRGM.  
**Project Number:** 0127981-023

**Lab Number:** L2159730  
**Report Date:** 11/08/21

**SAMPLE RESULTS**

Lab ID:	L2159730-04	Date Collected:	10/29/21 13:40
Client ID:	MW21B-102921-1340	Date Received:	10/29/21
Sample Location:	BATH, NY	Field Prep:	Not Specified

Sample Depth:

Matrix:	Water	Extraction Method:	EPA 3510C
Analytical Method:	1,8270D	Extraction Date:	10/31/21 23:18
Analytical Date:	11/01/21 23:10		
Analyst:	JG		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Semivolatile Organics by GC/MS - Westborough Lab</b>						
Bis(2-chloroethyl)ether	ND		ug/l	2.0	0.50	1
3,3'-Dichlorobenzidine	ND		ug/l	5.0	1.6	1
2,4-Dinitrotoluene	ND		ug/l	5.0	1.2	1
2,6-Dinitrotoluene	ND		ug/l	5.0	0.93	1
4-Chlorophenyl phenyl ether	ND		ug/l	2.0	0.49	1
4-Bromophenyl phenyl ether	ND		ug/l	2.0	0.38	1
Bis(2-chloroisopropyl)ether	ND		ug/l	2.0	0.53	1
Bis(2-chloroethoxy)methane	ND		ug/l	5.0	0.50	1
Hexachlorocyclopentadiene	ND		ug/l	20	0.69	1
Isophorone	ND		ug/l	5.0	1.2	1
Nitrobenzene	ND		ug/l	2.0	0.77	1
NDPA/DPA	ND		ug/l	2.0	0.42	1
n-Nitrosodi-n-propylamine	ND		ug/l	5.0	0.64	1
Bis(2-ethylhexyl)phthalate	2.2	J	ug/l	3.0	1.5	1
Butyl benzyl phthalate	ND		ug/l	5.0	1.2	1
Di-n-butylphthalate	ND		ug/l	5.0	0.39	1
Di-n-octylphthalate	ND		ug/l	5.0	1.3	1
Diethyl phthalate	ND		ug/l	5.0	0.38	1
Dimethyl phthalate	ND		ug/l	5.0	1.8	1
Biphenyl	ND		ug/l	2.0	0.46	1
4-Chloroaniline	ND		ug/l	5.0	1.1	1
2-Nitroaniline	ND		ug/l	5.0	0.50	1
3-Nitroaniline	ND		ug/l	5.0	0.81	1
4-Nitroaniline	ND		ug/l	5.0	0.80	1
Dibenzofuran	ND		ug/l	2.0	0.50	1
1,2,4,5-Tetrachlorobenzene	ND		ug/l	10	0.44	1
Acetophenone	ND		ug/l	5.0	0.53	1
2,4,6-Trichlorophenol	ND		ug/l	5.0	0.61	1



**Project Name:** SUPPLEMENTAL RI SAMPLING PRGM.  
**Project Number:** 0127981-023

**Lab Number:** L2159730  
**Report Date:** 11/08/21

**SAMPLE RESULTS**

Lab ID:	L2159730-04	Date Collected:	10/29/21 13:40
Client ID:	MW21B-102921-1340	Date Received:	10/29/21
Sample Location:	BATH, NY	Field Prep:	Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Semivolatile Organics by GC/MS - Westborough Lab</b>						
p-Chloro-m-cresol	ND		ug/l	2.0	0.35	1
2-Chlorophenol	ND		ug/l	2.0	0.48	1
2,4-Dichlorophenol	ND		ug/l	5.0	0.41	1
2,4-Dimethylphenol	ND		ug/l	5.0	1.8	1
2-Nitrophenol	ND		ug/l	10	0.85	1
4-Nitrophenol	ND		ug/l	10	0.67	1
2,4-Dinitrophenol	ND		ug/l	20	6.6	1
4,6-Dinitro-o-cresol	ND		ug/l	10	1.8	1
Phenol	ND		ug/l	5.0	0.57	1
2-Methylphenol	ND		ug/l	5.0	0.49	1
3-Methylphenol/4-Methylphenol	ND		ug/l	5.0	0.48	1
2,4,5-Trichlorophenol	ND		ug/l	5.0	0.77	1
Carbazole	ND		ug/l	2.0	0.49	1
Atrazine	ND		ug/l	10	0.76	1
Benzaldehyde	ND		ug/l	5.0	0.53	1
Caprolactam	ND		ug/l	10	3.3	1
2,3,4,6-Tetrachlorophenol	ND		ug/l	5.0	0.84	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	82		21-120
Phenol-d6	66		10-120
Nitrobenzene-d5	102		23-120
2-Fluorobiphenyl	87		15-120
2,4,6-Tribromophenol	109		10-120
4-Terphenyl-d14	92		41-149

**Project Name:** SUPPLEMENTAL RI SAMPLING PRGM.  
**Project Number:** 0127981-023

**Lab Number:** L2159730  
**Report Date:** 11/08/21

**SAMPLE RESULTS**

Lab ID:	L2159730-04	Date Collected:	10/29/21 13:40
Client ID:	MW21B-102921-1340	Date Received:	10/29/21
Sample Location:	BATH, NY	Field Prep:	Not Specified
Sample Depth:			
Matrix:	Water	Extraction Method: EPA 3510C	
Analytical Method:	1,8270D-SIM	Extraction Date: 11/01/21 02:24	
Analytical Date:	11/02/21 14:11		
Analyst:	DV		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Semivolatile Organics by GC/MS-SIM - Westborough Lab</b>						
Acenaphthene	ND		ug/l	0.10	0.01	1
2-Chloronaphthalene	ND		ug/l	0.20	0.02	1
Fluoranthene	ND		ug/l	0.10	0.02	1
Hexachlorobutadiene	ND		ug/l	0.50	0.05	1
Naphthalene	ND		ug/l	0.10	0.05	1
Benzo(a)anthracene	ND		ug/l	0.10	0.02	1
Benzo(a)pyrene	ND		ug/l	0.10	0.02	1
Benzo(b)fluoranthene	ND		ug/l	0.10	0.01	1
Benzo(k)fluoranthene	ND		ug/l	0.10	0.01	1
Chrysene	ND		ug/l	0.10	0.01	1
Acenaphthylene	ND		ug/l	0.10	0.01	1
Anthracene	ND		ug/l	0.10	0.01	1
Benzo(ghi)perylene	ND		ug/l	0.10	0.01	1
Fluorene	ND		ug/l	0.10	0.01	1
Phenanthrene	ND		ug/l	0.10	0.02	1
Dibenzo(a,h)anthracene	ND		ug/l	0.10	0.01	1
Indeno(1,2,3-cd)pyrene	ND		ug/l	0.10	0.01	1
Pyrene	ND		ug/l	0.10	0.02	1
2-Methylnaphthalene	0.03	J	ug/l	0.10	0.02	1
Pentachlorophenol	ND		ug/l	0.80	0.01	1
Hexachlorobenzene	ND		ug/l	0.80	0.01	1
Hexachloroethane	ND		ug/l	0.80	0.06	1

Project Name: SUPPLEMENTAL RI SAMPLING PRGM.

Lab Number: L2159730

Project Number: 0127981-023

Report Date: 11/08/21

**SAMPLE RESULTS**

Lab ID: L2159730-04  
 Client ID: MW21B-102921-1340  
 Sample Location: BATH, NY

Date Collected: 10/29/21 13:40  
 Date Received: 10/29/21  
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS-SIM - Westborough Lab						

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	68		21-120
Phenol-d6	64		10-120
Nitrobenzene-d5	95		23-120
2-Fluorobiphenyl	93		15-120
2,4,6-Tribromophenol	88		10-120
4-Terphenyl-d14	96		41-149

**Project Name:** SUPPLEMENTAL RI SAMPLING PRGM.  
**Project Number:** 0127981-023

**Lab Number:** L2159730  
**Report Date:** 11/08/21

**SAMPLE RESULTS**

Lab ID:	L2159730-05	Date Collected:	10/29/21 15:15
Client ID:	MW21A-102921-1515	Date Received:	10/29/21
Sample Location:	BATH, NY	Field Prep:	Not Specified

Sample Depth:

Matrix:	Water	Extraction Method:	EPA 3510C
Analytical Method:	1,8270D	Extraction Date:	10/31/21 23:18
Analytical Date:	11/01/21 23:33		
Analyst:	JG		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Semivolatile Organics by GC/MS - Westborough Lab</b>						
Bis(2-chloroethyl)ether	ND	ug/l	2.0	0.50	1	
3,3'-Dichlorobenzidine	ND	ug/l	5.0	1.6	1	
2,4-Dinitrotoluene	ND	ug/l	5.0	1.2	1	
2,6-Dinitrotoluene	ND	ug/l	5.0	0.93	1	
4-Chlorophenyl phenyl ether	ND	ug/l	2.0	0.49	1	
4-Bromophenyl phenyl ether	ND	ug/l	2.0	0.38	1	
Bis(2-chloroisopropyl)ether	ND	ug/l	2.0	0.53	1	
Bis(2-chloroethoxy)methane	ND	ug/l	5.0	0.50	1	
Hexachlorocyclopentadiene	ND	ug/l	20	0.69	1	
Isophorone	ND	ug/l	5.0	1.2	1	
Nitrobenzene	ND	ug/l	2.0	0.77	1	
NDPA/DPA	ND	ug/l	2.0	0.42	1	
n-Nitrosodi-n-propylamine	ND	ug/l	5.0	0.64	1	
Bis(2-ethylhexyl)phthalate	ND	ug/l	3.0	1.5	1	
Butyl benzyl phthalate	ND	ug/l	5.0	1.2	1	
Di-n-butylphthalate	ND	ug/l	5.0	0.39	1	
Di-n-octylphthalate	ND	ug/l	5.0	1.3	1	
Diethyl phthalate	ND	ug/l	5.0	0.38	1	
Dimethyl phthalate	ND	ug/l	5.0	1.8	1	
Biphenyl	ND	ug/l	2.0	0.46	1	
4-Chloroaniline	ND	ug/l	5.0	1.1	1	
2-Nitroaniline	ND	ug/l	5.0	0.50	1	
3-Nitroaniline	ND	ug/l	5.0	0.81	1	
4-Nitroaniline	ND	ug/l	5.0	0.80	1	
Dibenzofuran	ND	ug/l	2.0	0.50	1	
1,2,4,5-Tetrachlorobenzene	ND	ug/l	10	0.44	1	
Acetophenone	ND	ug/l	5.0	0.53	1	
2,4,6-Trichlorophenol	ND	ug/l	5.0	0.61	1	



**Project Name:** SUPPLEMENTAL RI SAMPLING PRGM.  
**Project Number:** 0127981-023

**Lab Number:** L2159730  
**Report Date:** 11/08/21

**SAMPLE RESULTS**

Lab ID:	L2159730-05	Date Collected:	10/29/21 15:15
Client ID:	MW21A-102921-1515	Date Received:	10/29/21
Sample Location:	BATH, NY	Field Prep:	Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Semivolatile Organics by GC/MS - Westborough Lab</b>						
p-Chloro-m-cresol	ND		ug/l	2.0	0.35	1
2-Chlorophenol	ND		ug/l	2.0	0.48	1
2,4-Dichlorophenol	ND		ug/l	5.0	0.41	1
2,4-Dimethylphenol	ND		ug/l	5.0	1.8	1
2-Nitrophenol	ND		ug/l	10	0.85	1
4-Nitrophenol	ND		ug/l	10	0.67	1
2,4-Dinitrophenol	ND		ug/l	20	6.6	1
4,6-Dinitro-o-cresol	ND		ug/l	10	1.8	1
Phenol	ND		ug/l	5.0	0.57	1
2-Methylphenol	ND		ug/l	5.0	0.49	1
3-Methylphenol/4-Methylphenol	ND		ug/l	5.0	0.48	1
2,4,5-Trichlorophenol	ND		ug/l	5.0	0.77	1
Carbazole	ND		ug/l	2.0	0.49	1
Atrazine	ND		ug/l	10	0.76	1
Benzaldehyde	ND		ug/l	5.0	0.53	1
Caprolactam	ND		ug/l	10	3.3	1
2,3,4,6-Tetrachlorophenol	ND		ug/l	5.0	0.84	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	67		21-120
Phenol-d6	60		10-120
Nitrobenzene-d5	95		23-120
2-Fluorobiphenyl	79		15-120
2,4,6-Tribromophenol	94		10-120
4-Terphenyl-d14	93		41-149

**Project Name:** SUPPLEMENTAL RI SAMPLING PRGM.  
**Project Number:** 0127981-023

**Lab Number:** L2159730  
**Report Date:** 11/08/21

**SAMPLE RESULTS**

Lab ID:	L2159730-05	Date Collected:	10/29/21 15:15
Client ID:	MW21A-102921-1515	Date Received:	10/29/21
Sample Location:	BATH, NY	Field Prep:	Not Specified
Sample Depth:			
Matrix:	Water	Extraction Method: EPA 3510C	
Analytical Method:	1,8270D-SIM	Extraction Date: 11/01/21 02:24	
Analytical Date:	11/02/21 14:31		
Analyst:	DV		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Semivolatile Organics by GC/MS-SIM - Westborough Lab</b>						
Acenaphthene	ND	ug/l	0.10	0.01	1	
2-Chloronaphthalene	ND	ug/l	0.20	0.02	1	
Fluoranthene	ND	ug/l	0.10	0.02	1	
Hexachlorobutadiene	ND	ug/l	0.50	0.05	1	
Naphthalene	ND	ug/l	0.10	0.05	1	
Benzo(a)anthracene	ND	ug/l	0.10	0.02	1	
Benzo(a)pyrene	ND	ug/l	0.10	0.02	1	
Benzo(b)fluoranthene	ND	ug/l	0.10	0.01	1	
Benzo(k)fluoranthene	ND	ug/l	0.10	0.01	1	
Chrysene	ND	ug/l	0.10	0.01	1	
Acenaphthylene	ND	ug/l	0.10	0.01	1	
Anthracene	ND	ug/l	0.10	0.01	1	
Benzo(ghi)perylene	ND	ug/l	0.10	0.01	1	
Fluorene	ND	ug/l	0.10	0.01	1	
Phenanthrene	ND	ug/l	0.10	0.02	1	
Dibenzo(a,h)anthracene	ND	ug/l	0.10	0.01	1	
Indeno(1,2,3-cd)pyrene	ND	ug/l	0.10	0.01	1	
Pyrene	ND	ug/l	0.10	0.02	1	
2-Methylnaphthalene	ND	ug/l	0.10	0.02	1	
Pentachlorophenol	ND	ug/l	0.80	0.01	1	
Hexachlorobenzene	ND	ug/l	0.80	0.01	1	
Hexachloroethane	ND	ug/l	0.80	0.06	1	

Project Name: SUPPLEMENTAL RI SAMPLING PRGM.

Lab Number: L2159730

Project Number: 0127981-023

Report Date: 11/08/21

**SAMPLE RESULTS**

Lab ID: L2159730-05  
 Client ID: MW21A-102921-1515  
 Sample Location: BATH, NY

Date Collected: 10/29/21 15:15  
 Date Received: 10/29/21  
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS-SIM - Westborough Lab						

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	55		21-120
Phenol-d6	53		10-120
Nitrobenzene-d5	78		23-120
2-Fluorobiphenyl	78		15-120
2,4,6-Tribromophenol	70		10-120
4-Terphenyl-d14	83		41-149

**Project Name:** SUPPLEMENTAL RI SAMPLING PRGM.  
**Project Number:** 0127981-023

**Lab Number:** L2159730  
**Report Date:** 11/08/21

**SAMPLE RESULTS**

Lab ID: L2159730-06  
Client ID: MW22B-102921-  
Sample Location: BATH, NY

Date Collected: 10/29/21 16:20  
Date Received: 10/29/21  
Field Prep: Not Specified

Sample Depth:

Matrix: Water  
Analytical Method: 1,8270D  
Analytical Date: 11/01/21 21:39  
Analyst: JG

Extraction Method: EPA 3510C  
Extraction Date: 10/31/21 23:18

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Semivolatile Organics by GC/MS - Westborough Lab</b>						
Bis(2-chloroethyl)ether	ND	ug/l	2.0	0.50	1	
3,3'-Dichlorobenzidine	ND	ug/l	5.0	1.6	1	
2,4-Dinitrotoluene	ND	ug/l	5.0	1.2	1	
2,6-Dinitrotoluene	ND	ug/l	5.0	0.93	1	
4-Chlorophenyl phenyl ether	ND	ug/l	2.0	0.49	1	
4-Bromophenyl phenyl ether	ND	ug/l	2.0	0.38	1	
Bis(2-chloroisopropyl)ether	ND	ug/l	2.0	0.53	1	
Bis(2-chloroethoxy)methane	ND	ug/l	5.0	0.50	1	
Hexachlorocyclopentadiene	ND	ug/l	20	0.69	1	
Isophorone	ND	ug/l	5.0	1.2	1	
Nitrobenzene	ND	ug/l	2.0	0.77	1	
NDPA/DPA	ND	ug/l	2.0	0.42	1	
n-Nitrosodi-n-propylamine	ND	ug/l	5.0	0.64	1	
Bis(2-ethylhexyl)phthalate	4.2	ug/l	3.0	1.5	1	
Butyl benzyl phthalate	ND	ug/l	5.0	1.2	1	
Di-n-butylphthalate	ND	ug/l	5.0	0.39	1	
Di-n-octylphthalate	ND	ug/l	5.0	1.3	1	
Diethyl phthalate	ND	ug/l	5.0	0.38	1	
Dimethyl phthalate	ND	ug/l	5.0	1.8	1	
Biphenyl	ND	ug/l	2.0	0.46	1	
4-Chloroaniline	ND	ug/l	5.0	1.1	1	
2-Nitroaniline	ND	ug/l	5.0	0.50	1	
3-Nitroaniline	ND	ug/l	5.0	0.81	1	
4-Nitroaniline	ND	ug/l	5.0	0.80	1	
Dibenzofuran	ND	ug/l	2.0	0.50	1	
1,2,4,5-Tetrachlorobenzene	ND	ug/l	10	0.44	1	
Acetophenone	ND	ug/l	5.0	0.53	1	
2,4,6-Trichlorophenol	ND	ug/l	5.0	0.61	1	



**Project Name:** SUPPLEMENTAL RI SAMPLING PRGM.  
**Project Number:** 0127981-023

**Lab Number:** L2159730  
**Report Date:** 11/08/21

**SAMPLE RESULTS**

Lab ID:	L2159730-06	Date Collected:	10/29/21 16:20
Client ID:	MW22B-102921-	Date Received:	10/29/21
Sample Location:	BATH, NY	Field Prep:	Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Semivolatile Organics by GC/MS - Westborough Lab</b>						
p-Chloro-m-cresol	ND		ug/l	2.0	0.35	1
2-Chlorophenol	ND		ug/l	2.0	0.48	1
2,4-Dichlorophenol	ND		ug/l	5.0	0.41	1
2,4-Dimethylphenol	ND		ug/l	5.0	1.8	1
2-Nitrophenol	ND		ug/l	10	0.85	1
4-Nitrophenol	ND		ug/l	10	0.67	1
2,4-Dinitrophenol	ND		ug/l	20	6.6	1
4,6-Dinitro-o-cresol	ND		ug/l	10	1.8	1
Phenol	ND		ug/l	5.0	0.57	1
2-Methylphenol	ND		ug/l	5.0	0.49	1
3-Methylphenol/4-Methylphenol	ND		ug/l	5.0	0.48	1
2,4,5-Trichlorophenol	ND		ug/l	5.0	0.77	1
Carbazole	ND		ug/l	2.0	0.49	1
Atrazine	ND		ug/l	10	0.76	1
Benzaldehyde	ND		ug/l	5.0	0.53	1
Caprolactam	ND		ug/l	10	3.3	1
2,3,4,6-Tetrachlorophenol	ND		ug/l	5.0	0.84	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	75		21-120
Phenol-d6	64		10-120
Nitrobenzene-d5	94		23-120
2-Fluorobiphenyl	83		15-120
2,4,6-Tribromophenol	129	Q	10-120
4-Terphenyl-d14	94		41-149

**Project Name:** SUPPLEMENTAL RI SAMPLING PRGM.  
**Project Number:** 0127981-023

**Lab Number:** L2159730  
**Report Date:** 11/08/21

**SAMPLE RESULTS**

Lab ID: L2159730-06  
Client ID: MW22B-102921-  
Sample Location: BATH, NY

Date Collected: 10/29/21 16:20  
Date Received: 10/29/21  
Field Prep: Not Specified

Sample Depth:

Matrix: Water  
Analytical Method: 1,8270D-SIM  
Analytical Date: 11/02/21 15:50  
Analyst: DV

Extraction Method: EPA 3510C  
Extraction Date: 11/01/21 02:24

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Semivolatile Organics by GC/MS-SIM - Westborough Lab</b>						
Acenaphthene	ND		ug/l	0.10	0.01	1
2-Chloronaphthalene	ND		ug/l	0.20	0.02	1
Fluoranthene	ND		ug/l	0.10	0.02	1
Hexachlorobutadiene	ND		ug/l	0.50	0.05	1
Naphthalene	ND		ug/l	0.10	0.05	1
Benzo(a)anthracene	ND		ug/l	0.10	0.02	1
Benzo(a)pyrene	ND		ug/l	0.10	0.02	1
Benzo(b)fluoranthene	ND		ug/l	0.10	0.01	1
Benzo(k)fluoranthene	ND		ug/l	0.10	0.01	1
Chrysene	ND		ug/l	0.10	0.01	1
Acenaphthylene	ND		ug/l	0.10	0.01	1
Anthracene	ND		ug/l	0.10	0.01	1
Benzo(ghi)perylene	ND		ug/l	0.10	0.01	1
Fluorene	ND		ug/l	0.10	0.01	1
Phenanthrene	0.03	J	ug/l	0.10	0.02	1
Dibenzo(a,h)anthracene	ND		ug/l	0.10	0.01	1
Indeno(1,2,3-cd)pyrene	ND		ug/l	0.10	0.01	1
Pyrene	ND		ug/l	0.10	0.02	1
2-Methylnaphthalene	0.04	J	ug/l	0.10	0.02	1
Pentachlorophenol	ND		ug/l	0.80	0.01	1
Hexachlorobenzene	ND		ug/l	0.80	0.01	1
Hexachloroethane	ND		ug/l	0.80	0.06	1

Project Name: SUPPLEMENTAL RI SAMPLING PRGM.

Lab Number: L2159730

Project Number: 0127981-023

Report Date: 11/08/21

**SAMPLE RESULTS**

Lab ID: L2159730-06  
 Client ID: MW22B-102921-  
 Sample Location: BATH, NY

Date Collected: 10/29/21 16:20  
 Date Received: 10/29/21  
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS-SIM - Westborough Lab						
Surrogate			% Recovery	Qualifier	Acceptance Criteria	
2-Fluorophenol			68		21-120	
Phenol-d6			63		10-120	
Nitrobenzene-d5			88		23-120	
2-Fluorobiphenyl			92		15-120	
2,4,6-Tribromophenol			96		10-120	
4-Terphenyl-d14			93		41-149	

**Project Name:** SUPPLEMENTAL RI SAMPLING PRGM.  
**Project Number:** 0127981-023

**Lab Number:** L2159730  
**Report Date:** 11/08/21

**SAMPLE RESULTS**

Lab ID: L2159730-07  
Client ID: 4125-102921-0001  
Sample Location: BATH, NY

Date Collected: 10/29/21 00:00  
Date Received: 10/29/21  
Field Prep: Not Specified

Sample Depth:

Matrix: Water  
Analytical Method: 1,8270D-SIM  
Analytical Date: 11/07/21 12:10  
Analyst: DB

Extraction Method: EPA 3510C  
Extraction Date: 11/04/21 12:04

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
1,4 Dioxane by 8270D-SIM - Mansfield Lab						
1,4-Dioxane	ND		ng/l	144	32.6	1
Surrogate		% Recovery	Qualifier	Acceptance Criteria		
1,4-Dioxane-d8		32		15-110		

**Project Name:** SUPPLEMENTAL RI SAMPLING PRGM.  
**Project Number:** 0127981-023

**Lab Number:** L2159730  
**Report Date:** 11/08/21

**SAMPLE RESULTS**

Lab ID: L2159730-07  
Client ID: 4125-102921-0001  
Sample Location: BATH, NY

Date Collected: 10/29/21 00:00  
Date Received: 10/29/21  
Field Prep: Not Specified

Sample Depth:

Matrix: Water  
Analytical Method: 134,LCMSMS-ID  
Analytical Date: 11/02/21 06:09  
Analyst: HT

Extraction Method: ALPHA 23528  
Extraction Date: 11/01/21 09:31

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Perfluorinated Alkyl Acids by Isotope Dilution - Mansfield Lab</b>						
Perfluorobutanoic Acid (PFBA)	1.33	J	ng/l	1.84	0.376	1
Perfluoropentanoic Acid (PFPeA)	0.845	J	ng/l	1.84	0.365	1
Perfluorobutanesulfonic Acid (PFBS)	ND		ng/l	1.84	0.220	1
Perfluorohexanoic Acid (PFHxA)	0.491	J	ng/l	1.84	0.302	1
Perfluoroheptanoic Acid (PFHpA)	ND		ng/l	1.84	0.208	1
Perfluorohexanesulfonic Acid (PFHxS)	ND		ng/l	1.84	0.347	1
Perfluoroctanoic Acid (PFOA)	0.509	JF	ng/l	1.84	0.218	1
1H,1H,2H,2H-Perfluorooctanesulfonic Acid (6:2FTS)	ND		ng/l	1.84	1.23	1
Perfluoroheptanesulfonic Acid (PFHpS)	ND		ng/l	1.84	0.635	1
Perfluorononanoic Acid (PFNA)	ND		ng/l	1.84	0.288	1
Perfluorooctanesulfonic Acid (PFOS)	ND		ng/l	1.84	0.465	1
Perfluorodecanoic Acid (PFDA)	ND		ng/l	1.84	0.280	1
1H,1H,2H,2H-Perfluorodecanesulfonic Acid (8:2FTS)	ND		ng/l	1.84	1.12	1
N-Methyl Perfluorooctanesulfonamidoacetic Acid (NMeFOSAA)	ND		ng/l	1.84	0.598	1
Perfluoroundecanoic Acid (PFUnA)	ND		ng/l	1.84	0.240	1
Perfluorodecanesulfonic Acid (PFDS)	ND		ng/l	1.84	0.904	1
Perfluorooctanesulfonamide (FOSA)	ND		ng/l	1.84	0.535	1
N-Ethyl Perfluorooctanesulfonamidoacetic Acid (NEtFOSAA)	ND		ng/l	1.84	0.742	1
Perfluorododecanoic Acid (PFDoA)	ND		ng/l	1.84	0.343	1
Perfluorotridecanoic Acid (PFTrDA)	ND		ng/l	1.84	0.302	1
Perfluorotetradecanoic Acid (PFTA)	ND		ng/l	1.84	0.229	1
PFOA/PFOS, Total	0.509	J	ng/l	1.84	0.218	1

Project Name: SUPPLEMENTAL RI SAMPLING PRGM.

Lab Number: L2159730

Project Number: 0127981-023

Report Date: 11/08/21

**SAMPLE RESULTS**

Lab ID: L2159730-07  
 Client ID: 4125-102921-0001  
 Sample Location: BATH, NY

Date Collected: 10/29/21 00:00  
 Date Received: 10/29/21  
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Perfluorinated Alkyl Acids by Isotope Dilution - Mansfield Lab						
Surrogate (Extracted Internal Standard)			% Recovery	Qualifier	Acceptance Criteria	
Perfluoro[13C4]Butanoic Acid (MPFBA)			91		58-132	
Perfluoro[13C5]Pentanoic Acid (M5PFPEA)			107		62-163	
Perfluoro[2,3,4-13C3]Butanesulfonic Acid (M3PFBS)			117		70-131	
Perfluoro[1,2,3,4,6-13C5]Hexanoic Acid (M5PFHxA)			96		57-129	
Perfluoro[1,2,3,4-13C4]Heptanoic Acid (M4PFHxA)			96		60-129	
Perfluoro[1,2,3-13C3]Hexanesulfonic Acid (M3PFHxS)			119		71-134	
Perfluoro[13C8]Octanoic Acid (M8PFOA)			100		62-129	
1H,1H,2H,2H-Perfluoro[1,2-13C2]Octanesulfonic Acid (M2-6:2FTS)			104		14-147	
Perfluoro[13C9]Nonanoic Acid (M9PFNA)			106		59-139	
Perfluoro[13C8]Octanesulfonic Acid (M8PFOS)			103		69-131	
Perfluoro[1,2,3,4,5,6-13C6]Decanoic Acid (M6PFDA)			99		62-124	
1H,1H,2H,2H-Perfluoro[1,2-13C2]Decanesulfonic Acid (M2-8:2FTS)			98		10-162	
N-Deuteriomethylperfluoro-1-octanesulfonamidoacetic Acid (d3-NMeFOSAA)			80		24-116	
Perfluoro[1,2,3,4,5,6,7-13C7]Undecanoic Acid (M7-PFUDA)			97		55-137	
Perfluoro[13C8]Octanesulfonamide (M8FOSA)			46		10-112	
N-Deuteroethylperfluoro-1-octanesulfonamidoacetic Acid (d5-NEtFOSAA)			96		27-126	
Perfluoro[1,2-13C2]Dodecanoic Acid (MPFDOA)			93		48-131	
Perfluoro[1,2-13C2]Tetradecanoic Acid (M2PFTEDA)			83		22-136	

**Project Name:** SUPPLEMENTAL RI SAMPLING PRGM.  
**Project Number:** 0127981-023

**Lab Number:** L2159730  
**Report Date:** 11/08/21

**SAMPLE RESULTS**

Lab ID: L2159730-08  
Client ID: 4125-102921-0002  
Sample Location: BATH, NY

Date Collected: 10/29/21 00:00  
Date Received: 10/29/21  
Field Prep: Not Specified

Sample Depth:

Matrix: Water  
Analytical Method: 1,8270D  
Analytical Date: 11/01/21 23:55  
Analyst: JG

Extraction Method: EPA 3510C  
Extraction Date: 10/31/21 23:18

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Semivolatile Organics by GC/MS - Westborough Lab</b>						
Bis(2-chloroethyl)ether	ND		ug/l	2.0	0.50	1
3,3'-Dichlorobenzidine	ND		ug/l	5.0	1.6	1
2,4-Dinitrotoluene	ND		ug/l	5.0	1.2	1
2,6-Dinitrotoluene	ND		ug/l	5.0	0.93	1
4-Chlorophenyl phenyl ether	ND		ug/l	2.0	0.49	1
4-Bromophenyl phenyl ether	ND		ug/l	2.0	0.38	1
Bis(2-chloroisopropyl)ether	ND		ug/l	2.0	0.53	1
Bis(2-chloroethoxy)methane	ND		ug/l	5.0	0.50	1
Hexachlorocyclopentadiene	ND		ug/l	20	0.69	1
Isophorone	ND		ug/l	5.0	1.2	1
Nitrobenzene	ND		ug/l	2.0	0.77	1
NDPA/DPA	ND		ug/l	2.0	0.42	1
n-Nitrosodi-n-propylamine	ND		ug/l	5.0	0.64	1
Bis(2-ethylhexyl)phthalate	2.4	J	ug/l	3.0	1.5	1
Butyl benzyl phthalate	ND		ug/l	5.0	1.2	1
Di-n-butylphthalate	ND		ug/l	5.0	0.39	1
Di-n-octylphthalate	ND		ug/l	5.0	1.3	1
Diethyl phthalate	ND		ug/l	5.0	0.38	1
Dimethyl phthalate	ND		ug/l	5.0	1.8	1
Biphenyl	ND		ug/l	2.0	0.46	1
4-Chloroaniline	ND		ug/l	5.0	1.1	1
2-Nitroaniline	ND		ug/l	5.0	0.50	1
3-Nitroaniline	ND		ug/l	5.0	0.81	1
4-Nitroaniline	ND		ug/l	5.0	0.80	1
Dibenzofuran	ND		ug/l	2.0	0.50	1
1,2,4,5-Tetrachlorobenzene	ND		ug/l	10	0.44	1
Acetophenone	ND		ug/l	5.0	0.53	1
2,4,6-Trichlorophenol	ND		ug/l	5.0	0.61	1



**Project Name:** SUPPLEMENTAL RI SAMPLING PRGM.  
**Project Number:** 0127981-023

**Lab Number:** L2159730  
**Report Date:** 11/08/21

**SAMPLE RESULTS**

Lab ID:	L2159730-08	Date Collected:	10/29/21 00:00
Client ID:	4125-102921-0002	Date Received:	10/29/21
Sample Location:	BATH, NY	Field Prep:	Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Semivolatile Organics by GC/MS - Westborough Lab</b>						
p-Chloro-m-cresol	ND		ug/l	2.0	0.35	1
2-Chlorophenol	ND		ug/l	2.0	0.48	1
2,4-Dichlorophenol	ND		ug/l	5.0	0.41	1
2,4-Dimethylphenol	ND		ug/l	5.0	1.8	1
2-Nitrophenol	ND		ug/l	10	0.85	1
4-Nitrophenol	ND		ug/l	10	0.67	1
2,4-Dinitrophenol	ND		ug/l	20	6.6	1
4,6-Dinitro-o-cresol	ND		ug/l	10	1.8	1
Phenol	ND		ug/l	5.0	0.57	1
2-Methylphenol	ND		ug/l	5.0	0.49	1
3-Methylphenol/4-Methylphenol	ND		ug/l	5.0	0.48	1
2,4,5-Trichlorophenol	ND		ug/l	5.0	0.77	1
Carbazole	ND		ug/l	2.0	0.49	1
Atrazine	ND		ug/l	10	0.76	1
Benzaldehyde	ND		ug/l	5.0	0.53	1
Caprolactam	ND		ug/l	10	3.3	1
2,3,4,6-Tetrachlorophenol	ND		ug/l	5.0	0.84	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	68		21-120
Phenol-d6	59		10-120
Nitrobenzene-d5	82		23-120
2-Fluorobiphenyl	73		15-120
2,4,6-Tribromophenol	100		10-120
4-Terphenyl-d14	87		41-149

**Project Name:** SUPPLEMENTAL RI SAMPLING PRGM.  
**Project Number:** 0127981-023

**Lab Number:** L2159730  
**Report Date:** 11/08/21

**SAMPLE RESULTS**

Lab ID: L2159730-08  
Client ID: 4125-102921-0002  
Sample Location: BATH, NY

Date Collected: 10/29/21 00:00  
Date Received: 10/29/21  
Field Prep: Not Specified

Sample Depth:

Matrix: Water  
Analytical Method: 1,8270D-SIM  
Analytical Date: 11/02/21 15:11  
Analyst: DV

Extraction Method: EPA 3510C  
Extraction Date: 11/01/21 02:24

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Semivolatile Organics by GC/MS-SIM - Westborough Lab</b>						
Acenaphthene	ND	ug/l	0.10	0.01	1	
2-Chloronaphthalene	ND	ug/l	0.20	0.02	1	
Fluoranthene	ND	ug/l	0.10	0.02	1	
Hexachlorobutadiene	ND	ug/l	0.50	0.05	1	
Naphthalene	ND	ug/l	0.10	0.05	1	
Benzo(a)anthracene	ND	ug/l	0.10	0.02	1	
Benzo(a)pyrene	ND	ug/l	0.10	0.02	1	
Benzo(b)fluoranthene	ND	ug/l	0.10	0.01	1	
Benzo(k)fluoranthene	ND	ug/l	0.10	0.01	1	
Chrysene	ND	ug/l	0.10	0.01	1	
Acenaphthylene	ND	ug/l	0.10	0.01	1	
Anthracene	ND	ug/l	0.10	0.01	1	
Benzo(ghi)perylene	ND	ug/l	0.10	0.01	1	
Fluorene	ND	ug/l	0.10	0.01	1	
Phenanthrene	ND	ug/l	0.10	0.02	1	
Dibeno(a,h)anthracene	ND	ug/l	0.10	0.01	1	
Indeno(1,2,3-cd)pyrene	ND	ug/l	0.10	0.01	1	
Pyrene	ND	ug/l	0.10	0.02	1	
2-Methylnaphthalene	ND	ug/l	0.10	0.02	1	
Pentachlorophenol	ND	ug/l	0.80	0.01	1	
Hexachlorobenzene	ND	ug/l	0.80	0.01	1	
Hexachloroethane	ND	ug/l	0.80	0.06	1	

Project Name: SUPPLEMENTAL RI SAMPLING PRGM.

Lab Number: L2159730

Project Number: 0127981-023

Report Date: 11/08/21

**SAMPLE RESULTS**

Lab ID: L2159730-08  
 Client ID: 4125-102921-0002  
 Sample Location: BATH, NY

Date Collected: 10/29/21 00:00  
 Date Received: 10/29/21  
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS-SIM - Westborough Lab						

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	66		21-120
Phenol-d6	63		10-120
Nitrobenzene-d5	87		23-120
2-Fluorobiphenyl	92		15-120
2,4,6-Tribromophenol	91		10-120
4-Terphenyl-d14	98		41-149

**Project Name:** SUPPLEMENTAL RI SAMPLING PRGM.  
**Project Number:** 0127981-023

**Lab Number:** L2159730  
**Report Date:** 11/08/21

**SAMPLE RESULTS**

Lab ID:	L2159730-10	Date Collected:	10/29/21 00:00
Client ID:	4125-102921-0004	Date Received:	10/29/21
Sample Location:	BATH, NY	Field Prep:	Not Specified

Sample Depth:

Matrix:	Water	Extraction Method:	EPA 3510C
Analytical Method:	1,8270D	Extraction Date:	10/31/21 23:18
Analytical Date:	11/02/21 00:18		
Analyst:	JG		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Semivolatile Organics by GC/MS - Westborough Lab</b>						
Bis(2-chloroethyl)ether	ND	ug/l	2.0	0.50	1	
3,3'-Dichlorobenzidine	ND	ug/l	5.0	1.6	1	
2,4-Dinitrotoluene	ND	ug/l	5.0	1.2	1	
2,6-Dinitrotoluene	ND	ug/l	5.0	0.93	1	
4-Chlorophenyl phenyl ether	ND	ug/l	2.0	0.49	1	
4-Bromophenyl phenyl ether	ND	ug/l	2.0	0.38	1	
Bis(2-chloroisopropyl)ether	ND	ug/l	2.0	0.53	1	
Bis(2-chloroethoxy)methane	ND	ug/l	5.0	0.50	1	
Hexachlorocyclopentadiene	ND	ug/l	20	0.69	1	
Isophorone	ND	ug/l	5.0	1.2	1	
Nitrobenzene	ND	ug/l	2.0	0.77	1	
NDPA/DPA	ND	ug/l	2.0	0.42	1	
n-Nitrosodi-n-propylamine	ND	ug/l	5.0	0.64	1	
Bis(2-ethylhexyl)phthalate	ND	ug/l	3.0	1.5	1	
Butyl benzyl phthalate	ND	ug/l	5.0	1.2	1	
Di-n-butylphthalate	ND	ug/l	5.0	0.39	1	
Di-n-octylphthalate	ND	ug/l	5.0	1.3	1	
Diethyl phthalate	ND	ug/l	5.0	0.38	1	
Dimethyl phthalate	ND	ug/l	5.0	1.8	1	
Biphenyl	ND	ug/l	2.0	0.46	1	
4-Chloroaniline	ND	ug/l	5.0	1.1	1	
2-Nitroaniline	ND	ug/l	5.0	0.50	1	
3-Nitroaniline	ND	ug/l	5.0	0.81	1	
4-Nitroaniline	ND	ug/l	5.0	0.80	1	
Dibenzofuran	ND	ug/l	2.0	0.50	1	
1,2,4,5-Tetrachlorobenzene	ND	ug/l	10	0.44	1	
Acetophenone	ND	ug/l	5.0	0.53	1	
2,4,6-Trichlorophenol	ND	ug/l	5.0	0.61	1	



**Project Name:** SUPPLEMENTAL RI SAMPLING PRGM.  
**Project Number:** 0127981-023

**Lab Number:** L2159730  
**Report Date:** 11/08/21

**SAMPLE RESULTS**

Lab ID:	L2159730-10	Date Collected:	10/29/21 00:00
Client ID:	4125-102921-0004	Date Received:	10/29/21
Sample Location:	BATH, NY	Field Prep:	Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Semivolatile Organics by GC/MS - Westborough Lab</b>						
p-Chloro-m-cresol	ND		ug/l	2.0	0.35	1
2-Chlorophenol	ND		ug/l	2.0	0.48	1
2,4-Dichlorophenol	ND		ug/l	5.0	0.41	1
2,4-Dimethylphenol	ND		ug/l	5.0	1.8	1
2-Nitrophenol	ND		ug/l	10	0.85	1
4-Nitrophenol	ND		ug/l	10	0.67	1
2,4-Dinitrophenol	ND		ug/l	20	6.6	1
4,6-Dinitro-o-cresol	ND		ug/l	10	1.8	1
Phenol	ND		ug/l	5.0	0.57	1
2-Methylphenol	ND		ug/l	5.0	0.49	1
3-Methylphenol/4-Methylphenol	ND		ug/l	5.0	0.48	1
2,4,5-Trichlorophenol	ND		ug/l	5.0	0.77	1
Carbazole	ND		ug/l	2.0	0.49	1
Atrazine	ND		ug/l	10	0.76	1
Benzaldehyde	ND		ug/l	5.0	0.53	1
Caprolactam	ND		ug/l	10	3.3	1
2,3,4,6-Tetrachlorophenol	ND		ug/l	5.0	0.84	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	72		21-120
Phenol-d6	63		10-120
Nitrobenzene-d5	94		23-120
2-Fluorobiphenyl	83		15-120
2,4,6-Tribromophenol	104		10-120
4-Terphenyl-d14	96		41-149

**Project Name:** SUPPLEMENTAL RI SAMPLING PRGM.  
**Project Number:** 0127981-023

**Lab Number:** L2159730  
**Report Date:** 11/08/21

**SAMPLE RESULTS**

Lab ID:	L2159730-10	Date Collected:	10/29/21 00:00
Client ID:	4125-102921-0004	Date Received:	10/29/21
Sample Location:	BATH, NY	Field Prep:	Not Specified

Sample Depth:

Matrix:	Water	Extraction Method:	EPA 3510C
Analytical Method:	1,8270D-SIM	Extraction Date:	11/01/21 02:24
Analytical Date:	11/02/21 15:30		
Analyst:	DV		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Semivolatile Organics by GC/MS-SIM - Westborough Lab</b>						
Acenaphthene	ND	ug/l	0.10	0.01	1	
2-Chloronaphthalene	ND	ug/l	0.20	0.02	1	
Fluoranthene	ND	ug/l	0.10	0.02	1	
Hexachlorobutadiene	ND	ug/l	0.50	0.05	1	
Naphthalene	ND	ug/l	0.10	0.05	1	
Benzo(a)anthracene	ND	ug/l	0.10	0.02	1	
Benzo(a)pyrene	ND	ug/l	0.10	0.02	1	
Benzo(b)fluoranthene	ND	ug/l	0.10	0.01	1	
Benzo(k)fluoranthene	ND	ug/l	0.10	0.01	1	
Chrysene	ND	ug/l	0.10	0.01	1	
Acenaphthylene	ND	ug/l	0.10	0.01	1	
Anthracene	ND	ug/l	0.10	0.01	1	
Benzo(ghi)perylene	ND	ug/l	0.10	0.01	1	
Fluorene	ND	ug/l	0.10	0.01	1	
Phenanthrene	ND	ug/l	0.10	0.02	1	
Dibeno(a,h)anthracene	ND	ug/l	0.10	0.01	1	
Indeno(1,2,3-cd)pyrene	ND	ug/l	0.10	0.01	1	
Pyrene	ND	ug/l	0.10	0.02	1	
2-Methylnaphthalene	ND	ug/l	0.10	0.02	1	
Pentachlorophenol	ND	ug/l	0.80	0.01	1	
Hexachlorobenzene	ND	ug/l	0.80	0.01	1	
Hexachloroethane	ND	ug/l	0.80	0.06	1	

Project Name: SUPPLEMENTAL RI SAMPLING PRGM.

Lab Number: L2159730

Project Number: 0127981-023

Report Date: 11/08/21

**SAMPLE RESULTS**

Lab ID: L2159730-10  
 Client ID: 4125-102921-0004  
 Sample Location: BATH, NY

Date Collected: 10/29/21 00:00  
 Date Received: 10/29/21  
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS-SIM - Westborough Lab						
Surrogate			% Recovery	Qualifier	Acceptance Criteria	
2-Fluorophenol			73		21-120	
Phenol-d6			67		10-120	
Nitrobenzene-d5			91		23-120	
2-Fluorobiphenyl			97		15-120	
2,4,6-Tribromophenol			101		10-120	
4-Terphenyl-d14			110		41-149	

**Project Name:** SUPPLEMENTAL RI SAMPLING PRGM.  
**Project Number:** 0127981-023

**Lab Number:** L2159730  
**Report Date:** 11/08/21

**SAMPLE RESULTS**

Lab ID: L2159730-11  
Client ID: FIELD BLANK  
Sample Location: BATH, NY

Date Collected: 10/29/21 00:00  
Date Received: 10/31/21  
Field Prep: Not Specified

Sample Depth:

Matrix: Water  
Analytical Method: 134,LCMSMS-ID  
Analytical Date: 11/02/21 06:26  
Analyst: HT

Extraction Method: ALPHA 23528  
Extraction Date: 11/01/21 09:31

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Perfluorinated Alkyl Acids by Isotope Dilution - Mansfield Lab</b>						
Perfluorobutanoic Acid (PFBA)	ND		ng/l	1.89	0.385	1
Perfluoropentanoic Acid (PFPeA)	0.385	J	ng/l	1.89	0.374	1
Perfluorobutanesulfonic Acid (PFBS)	ND		ng/l	1.89	0.224	1
Perfluorohexanoic Acid (PFHxA)	ND		ng/l	1.89	0.309	1
Perfluoroheptanoic Acid (PFHpA)	ND		ng/l	1.89	0.212	1
Perfluorohexanesulfonic Acid (PFHxS)	ND		ng/l	1.89	0.355	1
Perfluoroctanoic Acid (PFOA)	ND		ng/l	1.89	0.223	1
1H,1H,2H,2H-Perfluorooctanesulfonic Acid (6:2FTS)	ND		ng/l	1.89	1.26	1
Perfluoroheptanesulfonic Acid (PFHsP)	ND		ng/l	1.89	0.649	1
Perfluorononanoic Acid (PFNA)	ND		ng/l	1.89	0.294	1
Perfluorooctanesulfonic Acid (PFOS)	ND		ng/l	1.89	0.475	1
Perfluorodecanoic Acid (PFDA)	ND		ng/l	1.89	0.287	1
1H,1H,2H,2H-Perfluorodecanesulfonic Acid (8:2FTS)	ND		ng/l	1.89	1.14	1
N-Methyl Perfluorooctanesulfonamidoacetic Acid (NMeFOSAA)	ND		ng/l	1.89	0.611	1
Perfluoroundecanoic Acid (PFUnA)	ND		ng/l	1.89	0.245	1
Perfluorodecanesulfonic Acid (PFDS)	ND		ng/l	1.89	0.924	1
Perfluorooctanesulfonamide (FOSA)	ND		ng/l	1.89	0.547	1
N-Ethyl Perfluorooctanesulfonamidoacetic Acid (NEtFOSAA)	ND		ng/l	1.89	0.758	1
Perfluorododecanoic Acid (PFDoA)	ND		ng/l	1.89	0.351	1
Perfluorotridecanoic Acid (PFTrDA)	ND		ng/l	1.89	0.309	1
Perfluorotetradecanoic Acid (PFTA)	ND		ng/l	1.89	0.234	1
PFOA/PFOS, Total	ND		ng/l	1.89	0.223	1



Project Name: SUPPLEMENTAL RI SAMPLING PRGM.

Lab Number: L2159730

Project Number: 0127981-023

Report Date: 11/08/21

**SAMPLE RESULTS**

Lab ID: L2159730-11  
 Client ID: FIELD BLANK  
 Sample Location: BATH, NY

Date Collected: 10/29/21 00:00  
 Date Received: 10/31/21  
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Perfluorinated Alkyl Acids by Isotope Dilution - Mansfield Lab						
Surrogate (Extracted Internal Standard)			% Recovery	Qualifier	Acceptance Criteria	
Perfluoro[13C4]Butanoic Acid (MPFBA)			95		58-132	
Perfluoro[13C5]Pentanoic Acid (M5PFPEA)			111		62-163	
Perfluoro[2,3,4-13C3]Butanesulfonic Acid (M3PFBS)			114		70-131	
Perfluoro[1,2,3,4,6-13C5]Hexanoic Acid (M5PFHxA)			96		57-129	
Perfluoro[1,2,3,4-13C4]Heptanoic Acid (M4PFHxA)			96		60-129	
Perfluoro[1,2,3-13C3]Hexanesulfonic Acid (M3PFHxS)			112		71-134	
Perfluoro[13C8]Octanoic Acid (M8PFOA)			100		62-129	
1H,1H,2H,2H-Perfluoro[1,2-13C2]Octanesulfonic Acid (M2-6:2FTS)			93		14-147	
Perfluoro[13C9]Nonanoic Acid (M9PFNA)			109		59-139	
Perfluoro[13C8]Octanesulfonic Acid (M8PFOS)			105		69-131	
Perfluoro[1,2,3,4,5,6-13C6]Decanoic Acid (M6PFDA)			100		62-124	
1H,1H,2H,2H-Perfluoro[1,2-13C2]Decanesulfonic Acid (M2-8:2FTS)			100		10-162	
N-Deuteriomethylperfluoro-1-octanesulfonamidoacetic Acid (d3-NMeFOSAA)			78		24-116	
Perfluoro[1,2,3,4,5,6,7-13C7]Undecanoic Acid (M7-PFUDA)			100		55-137	
Perfluoro[13C8]Octanesulfonamide (M8FOSA)			59		10-112	
N-Deuteroethylperfluoro-1-octanesulfonamidoacetic Acid (d5-NEtFOSAA)			104		27-126	
Perfluoro[1,2-13C2]Dodecanoic Acid (MPFDCA)			94		48-131	
Perfluoro[1,2-13C2]Tetradecanoic Acid (M2PFTEDA)			84		22-136	

**Project Name:** SUPPLEMENTAL RI SAMPLING PRGM.  
**Project Number:** 0127981-023

**Lab Number:** L2159730  
**Report Date:** 11/08/21

**Method Blank Analysis**  
**Batch Quality Control**

Analytical Method: 1,8270D  
Analytical Date: 11/01/21 17:52  
Analyst: JG

Extraction Method: EPA 3510C  
Extraction Date: 10/31/21 15:52

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s):	04-06,08,10			Batch:	WG1565393-1
Bis(2-chloroethyl)ether	ND	ug/l	2.0	0.50	
3,3'-Dichlorobenzidine	ND	ug/l	5.0	1.6	
2,4-Dinitrotoluene	ND	ug/l	5.0	1.2	
2,6-Dinitrotoluene	ND	ug/l	5.0	0.93	
4-Chlorophenyl phenyl ether	ND	ug/l	2.0	0.49	
4-Bromophenyl phenyl ether	ND	ug/l	2.0	0.38	
Bis(2-chloroisopropyl)ether	ND	ug/l	2.0	0.53	
Bis(2-chloroethoxy)methane	ND	ug/l	5.0	0.50	
Hexachlorocyclopentadiene	ND	ug/l	20	0.69	
Isophorone	ND	ug/l	5.0	1.2	
Nitrobenzene	ND	ug/l	2.0	0.77	
NDPA/DPA	ND	ug/l	2.0	0.42	
n-Nitrosodi-n-propylamine	ND	ug/l	5.0	0.64	
Bis(2-ethylhexyl)phthalate	ND	ug/l	3.0	1.5	
Butyl benzyl phthalate	ND	ug/l	5.0	1.2	
Di-n-butylphthalate	ND	ug/l	5.0	0.39	
Di-n-octylphthalate	ND	ug/l	5.0	1.3	
Diethyl phthalate	ND	ug/l	5.0	0.38	
Dimethyl phthalate	ND	ug/l	5.0	1.8	
Biphenyl	ND	ug/l	2.0	0.46	
4-Chloroaniline	ND	ug/l	5.0	1.1	
2-Nitroaniline	ND	ug/l	5.0	0.50	
3-Nitroaniline	ND	ug/l	5.0	0.81	
4-Nitroaniline	ND	ug/l	5.0	0.80	
Dibenzofuran	ND	ug/l	2.0	0.50	
1,2,4,5-Tetrachlorobenzene	ND	ug/l	10	0.44	
Acetophenone	ND	ug/l	5.0	0.53	
2,4,6-Trichlorophenol	ND	ug/l	5.0	0.61	
p-Chloro-m-cresol	ND	ug/l	2.0	0.35	

**Project Name:** SUPPLEMENTAL RI SAMPLING PRGM.  
**Project Number:** 0127981-023

**Lab Number:** L2159730  
**Report Date:** 11/08/21

### **Method Blank Analysis Batch Quality Control**

Analytical Method: 1,8270D  
Analytical Date: 11/01/21 17:52  
Analyst: JG

Extraction Method: EPA 3510C  
Extraction Date: 10/31/21 15:52

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 04-06,08,10 Batch: WG1565393-1					
2-Chlorophenol	ND		ug/l	2.0	0.48
2,4-Dichlorophenol	ND		ug/l	5.0	0.41
2,4-Dimethylphenol	ND		ug/l	5.0	1.8
2-Nitrophenol	ND		ug/l	10	0.85
4-Nitrophenol	ND		ug/l	10	0.67
2,4-Dinitrophenol	ND		ug/l	20	6.6
4,6-Dinitro-o-cresol	ND		ug/l	10	1.8
Phenol	ND		ug/l	5.0	0.57
2-Methylphenol	ND		ug/l	5.0	0.49
3-Methylphenol/4-Methylphenol	ND		ug/l	5.0	0.48
2,4,5-Trichlorophenol	ND		ug/l	5.0	0.77
Carbazole	ND		ug/l	2.0	0.49
Atrazine	ND		ug/l	10	0.76
Benzaldehyde	ND		ug/l	5.0	0.53
Caprolactam	ND		ug/l	10	3.3
2,3,4,6-Tetrachlorophenol	ND		ug/l	5.0	0.84

Surrogate	%Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	47		21-120
Phenol-d6	37		10-120
Nitrobenzene-d5	64		23-120
2-Fluorobiphenyl	60		15-120
2,4,6-Tribromophenol	70		10-120
4-Terphenyl-d14	62		41-149



**Project Name:** SUPPLEMENTAL RI SAMPLING PRGM.  
**Project Number:** 0127981-023

**Lab Number:** L2159730  
**Report Date:** 11/08/21

### Method Blank Analysis Batch Quality Control

Analytical Method: 1,8270D-SIM  
Analytical Date: 11/02/21 13:51  
Analyst: DV

Extraction Method: EPA 3510C  
Extraction Date: 10/31/21 15:53

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS-SIM - Westborough Lab for sample(s): 04-06,08,10 Batch: WG1565394-1					
Acenaphthene	ND	ug/l	0.10	0.01	
2-Chloronaphthalene	ND	ug/l	0.20	0.02	
Fluoranthene	ND	ug/l	0.10	0.02	
Hexachlorobutadiene	ND	ug/l	0.50	0.05	
Naphthalene	ND	ug/l	0.10	0.05	
Benzo(a)anthracene	ND	ug/l	0.10	0.02	
Benzo(a)pyrene	ND	ug/l	0.10	0.02	
Benzo(b)fluoranthene	ND	ug/l	0.10	0.01	
Benzo(k)fluoranthene	ND	ug/l	0.10	0.01	
Chrysene	ND	ug/l	0.10	0.01	
Acenaphthylene	ND	ug/l	0.10	0.01	
Anthracene	ND	ug/l	0.10	0.01	
Benzo(ghi)perylene	ND	ug/l	0.10	0.01	
Fluorene	ND	ug/l	0.10	0.01	
Phenanthrene	ND	ug/l	0.10	0.02	
Dibenzo(a,h)anthracene	ND	ug/l	0.10	0.01	
Indeno(1,2,3-cd)pyrene	ND	ug/l	0.10	0.01	
Pyrene	ND	ug/l	0.10	0.02	
2-Methylnaphthalene	ND	ug/l	0.10	0.02	
Pentachlorophenol	ND	ug/l	0.80	0.01	
Hexachlorobenzene	ND	ug/l	0.80	0.01	
Hexachloroethane	ND	ug/l	0.80	0.06	

**Project Name:** SUPPLEMENTAL RI SAMPLING PRGM.  
**Project Number:** 0127981-023

**Lab Number:** L2159730  
**Report Date:** 11/08/21

### **Method Blank Analysis**

#### **Batch Quality Control**

Analytical Method: 1,8270D-SIM  
Analytical Date: 11/02/21 13:51  
Analyst: DV

Extraction Method: EPA 3510C  
Extraction Date: 10/31/21 15:53

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS-SIM - Westborough Lab for sample(s): 04-06,08,10 Batch: WG1565394-1					

Surrogate	%Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	50		21-120
Phenol-d6	42		10-120
Nitrobenzene-d5	71		23-120
2-Fluorobiphenyl	69		15-120
2,4,6-Tribromophenol	69		10-120
4-Terphenyl-d14	69		41-149

**Project Name:** SUPPLEMENTAL RI SAMPLING PRGM.  
**Project Number:** 0127981-023

**Lab Number:** L2159730  
**Report Date:** 11/08/21

### Method Blank Analysis Batch Quality Control

Analytical Method: 134,LCMSMS-ID  
Analytical Date: 11/02/21 02:50  
Analyst: HT

Extraction Method: ALPHA 23528  
Extraction Date: 11/01/21 09:31

Parameter	Result	Qualifier	Units	RL	MDL
Perfluorinated Alkyl Acids by Isotope Dilution - Mansfield Lab for sample(s): 01-03,07,11					Batch:
WG1565499-1					
Perfluorobutanoic Acid (PFBA)	ND		ng/l	2.00	0.408
Perfluoropentanoic Acid (PFPeA)	ND		ng/l	2.00	0.396
Perfluorobutanesulfonic Acid (PFBS)	ND		ng/l	2.00	0.238
Perfluorohexanoic Acid (PFHxA)	0.348	J	ng/l	2.00	0.328
Perfluoroheptanoic Acid (PFHpA)	ND		ng/l	2.00	0.225
Perfluorohexamersulfonic Acid (PFHxS)	ND		ng/l	2.00	0.376
Perfluorooctanoic Acid (PFOA)	ND		ng/l	2.00	0.236
1H,1H,2H,2H-Perfluorooctanesulfonic Acid (6:2FTS)	ND		ng/l	2.00	1.33
Perfluoroheptanesulfonic Acid (PFHpS)	ND		ng/l	2.00	0.688
Perfluorononanoic Acid (PFNA)	ND		ng/l	2.00	0.312
Perfluorooctanesulfonic Acid (PFOS)	ND		ng/l	2.00	0.504
Perfluorodecanoic Acid (PFDA)	ND		ng/l	2.00	0.304
1H,1H,2H,2H-Perfluorodecanesulfonic Acid (8:2FTS)	ND		ng/l	2.00	1.21
N-Methyl Perfluorooctanesulfonamidoacetic Acid (NMeFOSAA)	ND		ng/l	2.00	0.648
Perfluoroundecanoic Acid (PFUnA)	ND		ng/l	2.00	0.260
Perfluorodecanesulfonic Acid (PFDS)	ND		ng/l	2.00	0.980
Perfluorooctanesulfonamide (FOSA)	ND		ng/l	2.00	0.580
N-Ethyl Perfluorooctanesulfonamidoacetic Acid (NEtFOSAA)	ND		ng/l	2.00	0.804
Perfluorododecanoic Acid (PFDa)	ND		ng/l	2.00	0.372
Perfluorotridecanoic Acid (PFTrDA)	ND		ng/l	2.00	0.327
Perfluorotetradecanoic Acid (PFTA)	ND		ng/l	2.00	0.248
PFOA/PFOS, Total	ND		ng/l	2.00	0.236

**Project Name:** SUPPLEMENTAL RI SAMPLING PRGM.  
**Project Number:** 0127981-023

**Lab Number:** L2159730  
**Report Date:** 11/08/21

### Method Blank Analysis Batch Quality Control

Analytical Method: 134,LCMSMS-ID  
Analytical Date: 11/02/21 02:50  
Analyst: HT

Extraction Method: ALPHA 23528  
Extraction Date: 11/01/21 09:31

Parameter	Result	Qualifier	Units	RL	MDL
Perfluorinated Alkyl Acids by Isotope Dilution - Mansfield Lab for sample(s): 01-03,07,11 Batch: WG1565499-1					

Surrogate (Extracted Internal Standard)	%Recovery	Qualifier	Acceptance Criteria
Perfluoro[13C4]Butanoic Acid (MPFBA)	98		58-132
Perfluoro[13C5]Pentanoic Acid (M5PFPEA)	116		62-163
Perfluoro[2,3,4-13C3]Butanesulfonic Acid (M3PFBS)	116		70-131
Perfluoro[1,2,3,4,6-13C5]Hexanoic Acid (M5PFHxA)	100		57-129
Perfluoro[1,2,3,4-13C4]Heptanoic Acid (M4PFHpA)	99		60-129
Perfluoro[1,2,3-13C3]Hexanesulfonic Acid (M3PFHxS)	114		71-134
Perfluoro[13C8]Octanoic Acid (M8PFOA)	102		62-129
1H,1H,2H,2H-Perfluoro[1,2-13C2]Octanesulfonic Acid (M2-6:2FTS)	101		14-147
Perfluoro[13C9]Nonanoic Acid (M9PFNA)	110		59-139
Perfluoro[13C8]Octanesulfonic Acid (M8PFOS)	106		69-131
Perfluoro[1,2,3,4,5,6-13C6]Decanoic Acid (M6PFDA)	105		62-124
1H,1H,2H,2H-Perfluoro[1,2-13C2]Decanesulfonic Acid (M2-8:2FTS)	111		10-162
N-Deuteriomethylperfluoro-1-octanesulfonamidoacetic Acid (d3-NMeFOSAA)	80		24-116
Perfluoro[1,2,3,4,5,6,7-13C7]Undecanoic Acid (M7-PFDA)	107		55-137
Perfluoro[13C8]Octanesulfonamide (M8FOSA)	60		10-112
N-Deuteroethylperfluoro-1-octanesulfonamidoacetic Acid (d5-NEtFOSAA)	101		27-126
Perfluoro[1,2-13C2]Dodecanoic Acid (MPFDOA)	103		48-131
Perfluoro[1,2-13C2]Tetradecanoic Acid (M2PFTEDA)	76		22-136

**Project Name:** SUPPLEMENTAL RI SAMPLING PRGM.  
**Project Number:** 0127981-023

**Lab Number:** L2159730  
**Report Date:** 11/08/21

### **Method Blank Analysis Batch Quality Control**

Analytical Method: 1,8270D-SIM  
Analytical Date: 11/07/21 02:44  
Analyst: DB

Extraction Method: EPA 3510C  
Extraction Date: 11/04/21 12:04

Parameter	Result	Qualifier	Units	RL	MDL
1,4 Dioxane by 8270D-SIM - Mansfield Lab for sample(s):	01-03,07		Batch:	WG1567099-1	
1,4-Dioxane	ND		ng/l	150	33.9

Surrogate	%Recovery	Qualifier	Acceptance
			Criteria
1,4-Dioxane-d8	31		15-110

# Lab Control Sample Analysis

## Batch Quality Control

**Project Name:** SUPPLEMENTAL RI SAMPLING PRGM.  
**Project Number:** 0127981-023

**Lab Number:** L2159730  
**Report Date:** 11/08/21

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 04-06,08,10 Batch: WG1565393-2 WG1565393-3								
Bis(2-chloroethyl)ether	57		59		40-140	3		30
3,3'-Dichlorobenzidine	45		44		40-140	2		30
2,4-Dinitrotoluene	67		61		48-143	9		30
2,6-Dinitrotoluene	80		76		40-140	5		30
4-Chlorophenyl phenyl ether	60		56		40-140	7		30
4-Bromophenyl phenyl ether	68		64		40-140	6		30
Bis(2-chloroisopropyl)ether	56		55		40-140	2		30
Bis(2-chloroethoxy)methane	60		56		40-140	7		30
Hexachlorocyclopentadiene	53		53		40-140	0		30
Isophorone	58		56		40-140	4		30
Nitrobenzene	65		65		40-140	0		30
NDPA/DPA	62		58		40-140	7		30
n-Nitrosodi-n-propylamine	62		60		29-132	3		30
Bis(2-ethylhexyl)phthalate	60		57		40-140	5		30
Butyl benzyl phthalate	70		64		40-140	9		30
Di-n-butylphthalate	57		54		40-140	5		30
Di-n-octylphthalate	64		62		40-140	3		30
Diethyl phthalate	64		58		40-140	10		30
Dimethyl phthalate	68		62		40-140	9		30
Biphenyl	62		60		40-140	3		30
4-Chloroaniline	32	Q	30	Q	40-140	6		30
2-Nitroaniline	76		72		52-143	5		30
3-Nitroaniline	58		55		25-145	5		30

# Lab Control Sample Analysis

## Batch Quality Control

**Project Name:** SUPPLEMENTAL RI SAMPLING PRGM.  
**Project Number:** 0127981-023

**Lab Number:** L2159730  
**Report Date:** 11/08/21

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 04-06,08,10 Batch: WG1565393-2 WG1565393-3								
4-Nitroaniline	63		57		51-143	10		30
Dibenzofuran	57		54		40-140	5		30
1,2,4,5-Tetrachlorobenzene	64		62		2-134	3		30
Acetophenone	59		58		39-129	2		30
2,4,6-Trichlorophenol	69		67		30-130	3		30
p-Chloro-m-cresol	62		59		23-97	5		30
2-Chlorophenol	63		61		27-123	3		30
2,4-Dichlorophenol	68		64		30-130	6		30
2,4-Dimethylphenol	54		52		30-130	4		30
2-Nitrophenol	75		74		30-130	1		30
4-Nitrophenol	59		53		10-80	11		30
2,4-Dinitrophenol	78		78		20-130	0		30
4,6-Dinitro-o-cresol	78		73		20-164	7		30
Phenol	45		44		12-110	2		30
2-Methylphenol	55		54		30-130	2		30
3-Methylphenol/4-Methylphenol	59		57		30-130	3		30
2,4,5-Trichlorophenol	71		65		30-130	9		30
Carbazole	54	Q	51	Q	55-144	6		30
Atrazine	82		72		40-140	13		30
Benzaldehyde	56		55		40-140	2		30
Caprolactam	29		28		10-130	4		30
2,3,4,6-Tetrachlorophenol	67		63		40-140	6		30

# Lab Control Sample Analysis

## Batch Quality Control

**Project Name:** SUPPLEMENTAL RI SAMPLING PRGM.  
**Project Number:** 0127981-023

**Lab Number:** L2159730  
**Report Date:** 11/08/21

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
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Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 04-06,08,10 Batch: WG1565393-2 WG1565393-3

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
2-Fluorophenol	50		48		21-120
Phenol-d6	46		44		10-120
Nitrobenzene-d5	68		65		23-120
2-Fluorobiphenyl	58		55		15-120
2,4,6-Tribromophenol	88		78		10-120
4-Terphenyl-d14	59		52		41-149

# Lab Control Sample Analysis

## Batch Quality Control

**Project Name:** SUPPLEMENTAL RI SAMPLING PRGM.  
**Project Number:** 0127981-023

**Lab Number:** L2159730  
**Report Date:** 11/08/21

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS-SIM - Westborough Lab Associated sample(s): 04-06,08,10 Batch: WG1565394-2 WG1565394-3								
Acenaphthene	54		57		40-140	5		40
2-Chloronaphthalene	57		60		40-140	5		40
Fluoranthene	56		61		40-140	9		40
Hexachlorobutadiene	48		50		40-140	4		40
Naphthalene	54		57		40-140	5		40
Benzo(a)anthracene	55		57		40-140	4		40
Benzo(a)pyrene	56		60		40-140	7		40
Benzo(b)fluoranthene	62		65		40-140	5		40
Benzo(k)fluoranthene	56		59		40-140	5		40
Chrysene	54		57		40-140	5		40
Acenaphthylene	58		61		40-140	5		40
Anthracene	54		59		40-140	9		40
Benzo(ghi)perylene	61		62		40-140	2		40
Fluorene	55		58		40-140	5		40
Phenanthrene	56		59		40-140	5		40
Dibenzo(a,h)anthracene	60		63		40-140	5		40
Indeno(1,2,3-cd)pyrene	65		68		40-140	5		40
Pyrene	54		59		40-140	9		40
2-Methylnaphthalene	60		63		40-140	5		40
Pentachlorophenol	78		84		40-140	7		40
Hexachlorobenzene	51		54		40-140	6		40
Hexachloroethane	49		52		40-140	6		40

# Lab Control Sample Analysis

## Batch Quality Control

**Project Name:** SUPPLEMENTAL RI SAMPLING PRGM.  
**Project Number:** 0127981-023

**Lab Number:** L2159730  
**Report Date:** 11/08/21

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
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Semivolatile Organics by GC/MS-SIM - Westborough Lab Associated sample(s): 04-06,08,10 Batch: WG1565394-2 WG1565394-3

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
2-Fluorophenol	43		45		21-120
Phenol-d6	37		40		10-120
Nitrobenzene-d5	58		62		23-120
2-Fluorobiphenyl	57		60		15-120
2,4,6-Tribromophenol	59		61		10-120
4-Terphenyl-d14	54		60		41-149

# Lab Control Sample Analysis

## Batch Quality Control

**Project Name:** SUPPLEMENTAL RI SAMPLING PRGM.  
**Project Number:** 0127981-023

**Lab Number:** L2159730  
**Report Date:** 11/08/21

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Perfluorinated Alkyl Acids by Isotope Dilution - Mansfield Lab Associated sample(s): 01-03,07,11 Batch: WG1565499-2								
Perfluorobutanoic Acid (PFBA)	98		-		67-148	-		30
Perfluoropentanoic Acid (PFPeA)	97		-		63-161	-		30
Perfluorobutanesulfonic Acid (PFBS)	94		-		65-157	-		30
Perfluorohexanoic Acid (PFHxA)	95		-		69-168	-		30
Perfluoroheptanoic Acid (PFHpA)	91		-		58-159	-		30
Perfluorooctanesulfonic Acid (PFHxS)	89		-		69-177	-		30
Perfluorooctanoic Acid (PFOA)	93		-		63-159	-		30
1H,1H,2H,2H-Perfluorooctanesulfonic Acid (6:2FTS)	95		-		49-187	-		30
Perfluoroheptanesulfonic Acid (PFHpS)	108		-		61-179	-		30
Perfluorononanoic Acid (PFNA)	88		-		68-171	-		30
Perfluorooctanesulfonic Acid (PFOS)	85		-		52-151	-		30
Perfluorodecanoic Acid (PFDA)	91		-		63-171	-		30
1H,1H,2H,2H-Perfluorodecanesulfonic Acid (8:2FTS)	89		-		56-173	-		30
N-Methyl Perfluorooctanesulfonamidoacetic Acid (NMeFOSAA)	82		-		60-166	-		30
Perfluoroundecanoic Acid (PFUnA)	91		-		60-153	-		30
Perfluorodecanesulfonic Acid (PFDS)	106		-		38-156	-		30
Perfluorooctanesulfonamide (FOSA)	94		-		46-170	-		30
N-Ethyl Perfluorooctanesulfonamidoacetic Acid (NEtFOSAA)	77		-		45-170	-		30
Perfluorododecanoic Acid (PFDoA)	103		-		67-153	-		30
Perfluorotridecanoic Acid (PFTrDA)	96		-		48-158	-		30
Perfluorotetradecanoic Acid (PFTA)	95		-		59-182	-		30

# Lab Control Sample Analysis

## Batch Quality Control

**Project Name:** SUPPLEMENTAL RI SAMPLING PRGM.  
**Project Number:** 0127981-023

**Lab Number:** L2159730  
**Report Date:** 11/08/21

<b>Parameter</b>	<i>LCS</i> %Recovery	Qual	<i>LCSD</i> %Recovery	Qual	%Recovery Limits	RPD	Qual	<i>RPD</i> Limits
Perfluorinated Alkyl Acids by Isotope Dilution - Mansfield Lab Associated sample(s): 01-03,07,11 Batch: WG1565499-2								
<i>Surrogate (Extracted Internal Standard)</i>	<i>LCS</i> %Recovery	Qual	<i>LCSD</i> %Recovery	Qual	<i>Acceptance Criteria</i>			
Perfluoro[13C4]Butanoic Acid (MPFBA)	99				58-132			
Perfluoro[13C5]Pentanoic Acid (M5PFPEA)	114				62-163			
Perfluoro[2,3,4-13C3]Butanesulfonic Acid (M3PFBS)	118				70-131			
Perfluoro[1,2,3,4,6-13C5]Hexanoic Acid (M5PFHxA)	101				57-129			
Perfluoro[1,2,3,4-13C4]Heptanoic Acid (M4PFHpA)	98				60-129			
Perfluoro[1,2,3-13C3]Hexanesulfonic Acid (M3PFHxS)	119				71-134			
Perfluoro[13C8]Octanoic Acid (M8PFOA)	102				62-129			
1H,1H,2H-Perfluoro[1,2-13C2]Octanesulfonic Acid (M2-6:2FTS)	107				14-147			
Perfluoro[13C9]Nonanoic Acid (M9PFNA)	113				59-139			
Perfluoro[13C8]Octanesulfonic Acid (M8PFOS)	109				69-131			
Perfluoro[1,2,3,4,5,6-13C6]Decanoic Acid (M6PFDA)	108				62-124			
1H,1H,2H-Perfluoro[1,2-13C2]Decanesulfonic Acid (M2-8:2FTS)	113				10-162			
N-Deuteriomethylperfluoro-1-octanesulfonamidoacetic Acid (d3-NMeFOSAA)	90				24-116			
Perfluoro[1,2,3,4,5,6,7-13C7]Undecanoic Acid (M7-PFUDA)	110				55-137			
Perfluoro[13C8]Octanesulfonamide (M8FOSA)	66				10-112			
N-Deuterioethylperfluoro-1-octanesulfonamidoacetic Acid (d5-NEtFOSAA)	104				27-126			
Perfluoro[1,2-13C2]Dodecanoic Acid (MPFDOA)	102				48-131			
Perfluoro[1,2-13C2]Tetradecanoic Acid (M2PFTEDA)	91				22-136			

# Lab Control Sample Analysis

## Batch Quality Control

**Project Name:** SUPPLEMENTAL RI SAMPLING PRGM.  
**Project Number:** 0127981-023

**Lab Number:** L2159730  
**Report Date:** 11/08/21

<b>Parameter</b>	<i>LCS</i> %Recovery	<i>Qual</i>	<i>LCSD</i> %Recovery	<i>Qual</i>	<i>%Recovery</i> <i>Limits</i>	<i>RPD</i>	<i>Qual</i>	<i>RPD</i> <i>Limits</i>
1,4 Dioxane by 8270D-SIM - Mansfield Lab Associated sample(s): 01-03,07 Batch: WG1567099-2 WG1567099-3								
1,4-Dioxane	115		117		40-140	2		30

<b>Surrogate</b>	<i>LCS</i> %Recovery	<i>Qual</i>	<i>LCSD</i> %Recovery	<i>Qual</i>	<b>Acceptance Criteria</b>
1,4-Dioxane-d8					
	21		30		15-110

# Matrix Spike Analysis

## Batch Quality Control

**Project Name:** SUPPLEMENTAL RI SAMPLING PRGM.  
**Project Number:** 0127981-023

**Lab Number:** L2159730  
**Report Date:** 11/08/21

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Recovery Qual	Limits	RPD	RPD Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 04-06,08,10 QC Batch ID: WG1565393-6 WG1565393-7 QC Sample: L2159730-06 Client ID: MW22B-102921-												
Bis(2-chloroethyl)ether	ND	18.2	14	77		14	77		40-140	0		30
3,3'-Dichlorobenzidine	ND	18.2	11	61		11	61		40-140	0		30
2,4-Dinitrotoluene	ND	18.2	16	88		17	94		48-143	6		30
2,6-Dinitrotoluene	ND	18.2	20	110		22	120		40-140	10		30
4-Chlorophenyl phenyl ether	ND	18.2	15	83		15	83		40-140	0		30
4-Bromophenyl phenyl ether	ND	18.2	17	94		18	99		40-140	6		30
Bis(2-chloroisopropyl)ether	ND	18.2	13	72		14	77		40-140	7		30
Bis(2-chloroethoxy)methane	ND	18.2	14	77		15	83		40-140	7		30
Hexachlorocyclopentadiene	ND	18.2	16.J	88		16.J	88		40-140	0		30
Isophorone	ND	18.2	14	77		15	83		40-140	7		30
Nitrobenzene	ND	18.2	15	83		16	88		40-140	6		30
NDPA/DPA	ND	18.2	14	77		14	77		40-140	0		30
n-Nitrosodi-n-propylamine	ND	18.2	15	83		16	88		29-132	6		30
Bis(2-ethylhexyl)phthalate	4.2	18.2	15	59		17	70		40-140	13		30
Butyl benzyl phthalate	ND	18.2	18	99		21	120		40-140	15		30
Di-n-butylphthalate	ND	18.2	16	88		17	94		40-140	6		30
Di-n-octylphthalate	ND	18.2	16	88		17	94		40-140	6		30
Diethyl phthalate	ND	18.2	17	94		18	99		40-140	6		30
Dimethyl phthalate	ND	18.2	16	88		18	99		40-140	12		30
Biphenyl	ND	18.2	15	83		16	88		40-140	6		30
4-Chloroaniline	ND	18.2	7.0	39	Q	3.4J	19	Q	40-140	69	Q	30
2-Nitroaniline	ND	18.2	18	99		20	110		52-143	11		30
3-Nitroaniline	ND	18.2	13	72		12	66		25-145	8		30

# Matrix Spike Analysis

*Batch Quality Control*

**Project Name:** SUPPLEMENTAL RI SAMPLING PRGM.  
**Project Number:** 0127981-023

**Lab Number:** L2159730  
**Report Date:** 11/08/21

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Recovery Qual	Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 04-06,08,10 QC Batch ID: WG1565393-6 WG1565393-7 QC Sample: L2159730-06 Client ID: MW22B-102921-												
4-Nitroaniline	ND	18.2	17	94		18	99		51-143	6		30
Dibenzofuran	ND	18.2	15	83		15	83		40-140	0		30
1,2,4,5-Tetrachlorobenzene	ND	18.2	15	83		16	88		2-134	6		30
Acetophenone	ND	18.2	14	77		14	77		39-129	0		30
2,4,6-Trichlorophenol	ND	18.2	17	94		18	99		30-130	6		30
p-Chloro-m-cresol	ND	18.2	16	88		17	94		23-97	6		30
2-Chlorophenol	ND	18.2	15	83		15	83		27-123	0		30
2,4-Dichlorophenol	ND	18.2	16	88		18	99		30-130	12		30
2,4-Dimethylphenol	ND	18.2	14	77		14	77		30-130	0		30
2-Nitrophenol	ND	18.2	18	99		19	100		30-130	5		30
4-Nitrophenol	ND	18.2	17	94	Q	19	100	Q	10-80	11		30
2,4-Dinitrophenol	ND	18.2	18.J	99		21	120		20-130	15		30
4,6-Dinitro-o-cresol	ND	18.2	22	120		22	120		20-164	0		30
Phenol	ND	18.2	12	66		13	72		12-110	8		30
2-Methylphenol	ND	18.2	14	77		14	77		30-130	0		30
3-Methylphenol/4-Methylphenol	ND	18.2	15	83		15	83		30-130	0		30
2,4,5-Trichlorophenol	ND	18.2	17	94		20	110		30-130	16		30
Carbazole	ND	18.2	14	77		15	83		55-144	7		30
Atrazine	ND	18.2	21	120		23	130		40-140	9		30
Benzaldehyde	ND	18.2	14	77		14	77		40-140	0		30
Caprolactam	ND	18.2	7.5J	41		9.9J	54		10-130	28		30
2,3,4,6-Tetrachlorophenol	ND	18.2	18	99		18	99		40-140	0		30

**Matrix Spike Analysis**  
*Batch Quality Control*

**Project Name:** SUPPLEMENTAL RI SAMPLING PRGM.  
**Project Number:** 0127981-023

**Lab Number:** L2159730  
**Report Date:** 11/08/21

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	MSD Qual	Recovery Limits	RPD RPD	RPD Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 04-06,08,10 QC Batch ID: WG1565393-6 WG1565393-7 QC Sample: L2159730-06												
Client ID: MW22B-102921-												
<b>Surrogate</b>												
2,4,6-Tribromophenol				126		Q		131		Q		10-120
2-Fluorobiphenyl				78				80				15-120
2-Fluorophenol				70				71				21-120
4-Terphenyl-d14				79				86				41-149
Nitrobenzene-d5				92				92				23-120
Phenol-d6				63				71				10-120

# Matrix Spike Analysis

## Batch Quality Control

**Project Name:** SUPPLEMENTAL RI SAMPLING PRGM.  
**Project Number:** 0127981-023

**Lab Number:** L2159730  
**Report Date:** 11/08/21

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Recovery Qual	Limits	RPD	RPD Qual	RPD Limits
Semivolatile Organics by GC/MS-SIM - Westborough Lab Associated sample(s): 04-06,08,10 QC Batch ID: WG1565394-6 WG1565394-7 QC Sample: L2159730-06 Client ID: MW22B-102921-												
Acenaphthene	ND	18.2	13	72		17	94		40-140	27		40
2-Chloronaphthalene	ND	18.2	14	77		18	99		40-140	25		40
Fluoranthene	ND	18.2	14	77		19	100		40-140	30		40
Hexachlorobutadiene	ND	18.2	11	61		15	83		40-140	31		40
Naphthalene	ND	18.2	13	72		17	94		40-140	27		40
Benzo(a)anthracene	ND	18.2	14	77		18	99		40-140	25		40
Benzo(a)pyrene	ND	18.2	13	72		18	99		40-140	32		40
Benzo(b)fluoranthene	ND	18.2	15	83		20	110		40-140	29		40
Benzo(k)fluoranthene	ND	18.2	14	77		19	100		40-140	30		40
Chrysene	ND	18.2	14	77		18	99		40-140	25		40
Acenaphthylene	ND	18.2	14	77		18	99		40-140	25		40
Anthracene	ND	18.2	14	77		18	99		40-140	25		40
Benzo(ghi)perylene	ND	18.2	14	77		19	100		40-140	30		40
Fluorene	ND	18.2	13	72		18	99		40-140	32		40
Phenanthrene	0.03J	18.2	14	77		19	100		40-140	30		40
Dibenzo(a,h)anthracene	ND	18.2	14	77		19	100		40-140	30		40
Indeno(1,2,3-cd)pyrene	ND	18.2	15	83		21	120		40-140	33		40
Pyrene	ND	18.2	14	77		18	99		40-140	25		40
2-Methylnaphthalene	0.04J	18.2	14	77		18	99		40-140	25		40
Pentachlorophenol	ND	18.2	18	99		22	120		40-140	20		40
Hexachlorobenzene	ND	18.2	14	77		18	99		40-140	25		40
Hexachloroethane	ND	18.2	12	66		15	83		40-140	22		40

**Matrix Spike Analysis**  
*Batch Quality Control*

**Project Name:** SUPPLEMENTAL RI SAMPLING PRGM.  
**Project Number:** 0127981-023

**Lab Number:** L2159730  
**Report Date:** 11/08/21

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	MSD Qual	Recovery Limits	RPD RPD	RPD Qual	RPD Limits
Semivolatile Organics by GC/MS-SIM - Westborough Lab Associated sample(s): 04-06,08,10 QC Batch ID: WG1565394-6 WG1565394-7 QC Sample: L2159730-06 Client ID: MW22B-102921-												
<b>Surrogate</b>												
2,4,6-Tribromophenol				80			103			10-120		
2-Fluorobiphenyl				75			100			15-120		
2-Fluorophenol				57			77			21-120		
4-Terphenyl-d14				75			95			41-149		
Nitrobenzene-d5				73			97			23-120		
Phenol-d6				56			76			10-120		

# Matrix Spike Analysis

## Batch Quality Control

**Project Name:** SUPPLEMENTAL RI SAMPLING PRGM.  
**Project Number:** 0127981-023

**Lab Number:** L2159730  
**Report Date:** 11/08/21

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Recovery Qual	Limits	RPD	RPD Qual	RPD Limits
<b>Perfluorinated Alkyl Acids by Isotope Dilution - Mansfield Lab</b> Associated sample(s): 01-03,07,11 QC Batch ID: WG1565499-3 WG1565499-4 QC Sample: L2159730-01 Client ID: MW22B-102921-1105												
Perfluorobutanoic Acid (PFBA)	0.578J	37	37.0	98		36.5	95		67-148	1		30
Perfluoropentanoic Acid (PFPeA)	0.644J	37	36.7	97		35.6	93		63-161	3		30
Perfluorobutanesulfonic Acid (PFBS)	0.269J	32.9	31.3	94		30.8	91		65-157	2		30
Perfluorohexanoic Acid (PFHxA)	ND	37	35.4	96		35.2	93		69-168	1		30
Perfluoroheptanoic Acid (PFHpA)	ND	37	34.8	94		33.8	90		58-159	3		30
Perfluorohexanesulfonic Acid (PFHxS)	ND	33.8	30.4	90		28.3	82		69-177	7		30
Perfluorooctanoic Acid (PFOA)	0.404J	37	35.1	94		34.6	91		63-159	1		30
1H,1H,2H,2H-Perfluorooctanesulfonic Acid (6:2FTS)	ND	35.2	34.1	97		34.8	97		49-187	2		30
Perfluoroheptanesulfonic Acid (PFHxS)	ND	35.2	37.6	107		38.5	107		61-179	2		30
Perfluorononanoic Acid (PFNA)	ND	37	33.5	90		32.6	86		68-171	3		30
Perfluorooctanesulfonic Acid (PFOS)	ND	34.4	29.2	85		28.6	82		52-151	2		30
Perfluorodecanoic Acid (PFDA)	ND	37	33.3	90		32.3	86		63-171	3		30
1H,1H,2H,2H-Perfluorodecanesulfonic Acid (8:2FTS)	ND	35.6	33.5	94		30.1	83		56-173	11		30
N-Methyl Perfluorooctanesulfonamidoacetic Acid (NMeFOSAA)	ND	37	30.0	81		29.8	79		60-166	1		30
Perfluoroundecanoic Acid (PFUnA)	ND	37	33.3	90		31.9	84		60-153	4		30
Perfluorodecanesulfonic Acid (PFDS)	ND	35.7	37.4	105		33.0	91		38-156	13		30
Perfluorooctanesulfonamide (FOSA)	ND	37	33.6	91		31.7	84		46-170	6		30
N-Ethyl Perfluorooctanesulfonamidoacetic Acid (NEtFOSAA)	ND	37	27.1	73		22.5	60		45-170	19		30
Perfluorododecanoic Acid (PFDoA)	ND	37	37.9	102		34.0	90		67-153	11		30
Perfluorotridecanoic Acid (PFTrDA)	ND	37	36.9	100		34.1	90		48-158	8		30
Perfluorotetradecanoic Acid (PFTA)	ND	37	35.7	96		33.4	88		59-182	7		30

**Matrix Spike Analysis**  
*Batch Quality Control*

**Project Name:** SUPPLEMENTAL RI SAMPLING PRGM.  
**Project Number:** 0127981-023

**Lab Number:** L2159730  
**Report Date:** 11/08/21

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	MSD Qual	Recovery Limits	RPD RPD	RPD Qual	RPD Limits
Perfluorinated Alkyl Acids by Isotope Dilution - Mansfield Lab Associated sample(s): 01-03,07,11 QC Batch ID: WG1565499-3 WG1565499-4 QC Sample: L2159730-01 Client ID: MW22B-102921-1105												
<b>Surrogate (Extracted Internal Standard)</b>												

**Matrix Spike Analysis**  
*Batch Quality Control*

**Project Name:** SUPPLEMENTAL RI SAMPLING PRGM.  
**Project Number:** 0127981-023

**Lab Number:** L2159730  
**Report Date:** 11/08/21

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	MSD Qual	Recovery Limits	RPD RPD	RPD Qual	RPD Limits
1,4 Dioxane by 8270D-SIM - Mansfield Lab	Associated sample(s): 01-03,07	QC Batch ID: WG1567099-4	WG1567099-5	QC Sample: L2159730-01	Client ID: MW22B-102921-1105							
1,4-Dioxane	ND	5000	5780	116		5680	114		40-140	2		30

Surrogate	MS			MSD			Acceptance Criteria
	% Recovery	Qualifier	% Recovery	Qualifier	% Recovery	Qualifier	
1,4-Dioxane-d8	29		28		15-110		

## METALS



**Project Name:** SUPPLEMENTAL RI SAMPLING PRGM.  
**Project Number:** 0127981-023

**Lab Number:** L2159730  
**Report Date:** 11/08/21

**SAMPLE RESULTS**

Lab ID: L2159730-04  
Client ID: MW21B-102921-1340  
Sample Location: BATH, NY

Date Collected: 10/29/21 13:40  
Date Received: 10/29/21  
Field Prep: Not Specified

Sample Depth:

Matrix: Water

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
<b>Total Metals - Mansfield Lab</b>											
Aluminum, Total	1.37		mg/l	0.100	0.032	1	11/03/21 10:41	11/04/21 00:38	EPA 3005A	1,6010D	DL
Antimony, Total	ND		mg/l	0.050	0.007	1	11/03/21 10:41	11/03/21 20:34	EPA 3005A	1,6010D	SV
Arsenic, Total	ND		mg/l	0.005	0.002	1	11/03/21 10:41	11/03/21 20:34	EPA 3005A	1,6010D	SV
Barium, Total	0.081		mg/l	0.010	0.002	1	11/03/21 10:41	11/03/21 20:34	EPA 3005A	1,6010D	SV
Beryllium, Total	ND		mg/l	0.005	0.001	1	11/03/21 10:41	11/03/21 20:34	EPA 3005A	1,6010D	SV
Cadmium, Total	ND		mg/l	0.005	0.001	1	11/03/21 10:41	11/03/21 20:34	EPA 3005A	1,6010D	SV
Calcium, Total	43.3		mg/l	0.100	0.035	1	11/03/21 10:41	11/03/21 20:34	EPA 3005A	1,6010D	SV
Chromium, Total	0.003	J	mg/l	0.010	0.002	1	11/03/21 10:41	11/03/21 20:34	EPA 3005A	1,6010D	SV
Cobalt, Total	ND		mg/l	0.020	0.002	1	11/03/21 10:41	11/03/21 20:34	EPA 3005A	1,6010D	SV
Copper, Total	0.006	J	mg/l	0.010	0.002	1	11/03/21 10:41	11/03/21 20:34	EPA 3005A	1,6010D	SV
Iron, Total	2.89		mg/l	0.050	0.009	1	11/03/21 10:41	11/03/21 20:34	EPA 3005A	1,6010D	SV
Lead, Total	ND		mg/l	0.010	0.003	1	11/03/21 10:41	11/03/21 20:34	EPA 3005A	1,6010D	SV
Magnesium, Total	13.4		mg/l	0.100	0.015	1	11/03/21 10:41	11/03/21 20:34	EPA 3005A	1,6010D	SV
Manganese, Total	0.415		mg/l	0.010	0.002	1	11/03/21 10:41	11/03/21 20:34	EPA 3005A	1,6010D	SV
Mercury, Total	ND		mg/l	0.00020	0.00009	1	11/03/21 10:43	11/03/21 13:46	EPA 7470A	1,7470A	AC
Nickel, Total	0.003	J	mg/l	0.025	0.002	1	11/03/21 10:41	11/03/21 20:34	EPA 3005A	1,6010D	SV
Potassium, Total	4.05		mg/l	2.50	0.237	1	11/03/21 10:41	11/03/21 20:34	EPA 3005A	1,6010D	SV
Selenium, Total	ND		mg/l	0.010	0.004	1	11/03/21 10:41	11/03/21 20:34	EPA 3005A	1,6010D	SV
Silver, Total	ND		mg/l	0.007	0.003	1	11/03/21 10:41	11/03/21 20:34	EPA 3005A	1,6010D	SV
Sodium, Total	58.0		mg/l	2.00	0.120	1	11/03/21 10:41	11/03/21 20:34	EPA 3005A	1,6010D	SV
Thallium, Total	ND		mg/l	0.020	0.003	1	11/03/21 10:41	11/03/21 20:34	EPA 3005A	1,6010D	SV
Vanadium, Total	0.005	J	mg/l	0.010	0.002	1	11/03/21 10:41	11/03/21 20:34	EPA 3005A	1,6010D	SV
Zinc, Total	0.021	J	mg/l	0.050	0.002	1	11/03/21 10:41	11/03/21 20:34	EPA 3005A	1,6010D	SV
<b>Dissolved Metals - Mansfield Lab</b>											
Aluminum, Dissolved	ND		mg/l	0.100	0.032	1	11/03/21 16:58	11/04/21 10:27	EPA 3005A	1,6010D	SV
Antimony, Dissolved	ND		mg/l	0.050	0.007	1	11/03/21 16:58	11/04/21 10:27	EPA 3005A	1,6010D	SV
Arsenic, Dissolved	ND		mg/l	0.005	0.002	1	11/03/21 16:58	11/04/21 10:27	EPA 3005A	1,6010D	SV
Barium, Dissolved	0.074		mg/l	0.010	0.002	1	11/03/21 16:58	11/04/21 10:27	EPA 3005A	1,6010D	SV
Beryllium, Dissolved	ND		mg/l	0.005	0.001	1	11/03/21 16:58	11/04/21 10:27	EPA 3005A	1,6010D	SV



**Project Name:** SUPPLEMENTAL RI SAMPLING PRGM.  
**Project Number:** 0127981-023

**Lab Number:** L2159730  
**Report Date:** 11/08/21

**SAMPLE RESULTS**

Lab ID: L2159730-04  
Client ID: MW21B-102921-1340  
Sample Location: BATH, NY

Date Collected: 10/29/21 13:40  
Date Received: 10/29/21  
Field Prep: Not Specified

Sample Depth:

Matrix: Water

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Cadmium, Dissolved	ND		mg/l	0.005	0.001	1	11/03/21 16:58	11/04/21 10:27	EPA 3005A	1,6010D	SV
Calcium, Dissolved	43.7		mg/l	0.100	0.035	1	11/03/21 16:58	11/04/21 10:27	EPA 3005A	1,6010D	SV
Chromium, Dissolved	ND		mg/l	0.010	0.002	1	11/03/21 16:58	11/04/21 10:27	EPA 3005A	1,6010D	SV
Cobalt, Dissolved	ND		mg/l	0.020	0.002	1	11/03/21 16:58	11/04/21 10:27	EPA 3005A	1,6010D	SV
Copper, Dissolved	ND		mg/l	0.010	0.002	1	11/03/21 16:58	11/04/21 10:27	EPA 3005A	1,6010D	SV
Iron, Dissolved	ND		mg/l	0.050	0.009	1	11/03/21 16:58	11/04/21 10:27	EPA 3005A	1,6010D	SV
Lead, Dissolved	ND		mg/l	0.010	0.003	1	11/03/21 16:58	11/04/21 10:27	EPA 3005A	1,6010D	SV
Magnesium, Dissolved	12.3		mg/l	0.100	0.015	1	11/03/21 16:58	11/04/21 10:27	EPA 3005A	1,6010D	SV
Manganese, Dissolved	0.389		mg/l	0.010	0.002	1	11/03/21 16:58	11/04/21 10:27	EPA 3005A	1,6010D	SV
Mercury, Dissolved	ND		mg/l	0.00020	0.00009	1	11/03/21 20:45	11/04/21 05:49	EPA 7470A	1,7470A	AC
Nickel, Dissolved	ND		mg/l	0.025	0.002	1	11/03/21 16:58	11/04/21 10:27	EPA 3005A	1,6010D	SV
Potassium, Dissolved	3.72		mg/l	2.50	0.237	1	11/03/21 16:58	11/04/21 10:27	EPA 3005A	1,6010D	SV
Selenium, Dissolved	ND		mg/l	0.010	0.004	1	11/03/21 16:58	11/04/21 10:27	EPA 3005A	1,6010D	SV
Silver, Dissolved	ND		mg/l	0.007	0.003	1	11/03/21 16:58	11/04/21 10:27	EPA 3005A	1,6010D	SV
Sodium, Dissolved	58.6		mg/l	2.00	0.120	1	11/03/21 16:58	11/04/21 10:27	EPA 3005A	1,6010D	SV
Thallium, Dissolved	0.003	J	mg/l	0.020	0.003	1	11/03/21 16:58	11/04/21 10:27	EPA 3005A	1,6010D	SV
Vanadium, Dissolved	ND		mg/l	0.010	0.002	1	11/03/21 16:58	11/04/21 10:27	EPA 3005A	1,6010D	SV
Zinc, Dissolved	ND		mg/l	0.050	0.002	1	11/03/21 16:58	11/04/21 10:27	EPA 3005A	1,6010D	SV



**Project Name:** SUPPLEMENTAL RI SAMPLING PRGM.  
**Project Number:** 0127981-023

**Lab Number:** L2159730  
**Report Date:** 11/08/21

**SAMPLE RESULTS**

Lab ID:	L2159730-05	Date Collected:	10/29/21 15:15
Client ID:	MW21A-102921-1515	Date Received:	10/29/21
Sample Location:	BATH, NY	Field Prep:	Not Specified

Sample Depth:

Matrix: Water

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
<b>Total Metals - Mansfield Lab</b>											
Aluminum, Total	0.383		mg/l	0.100	0.032	1	11/03/21 10:41	11/04/21 00:42	EPA 3005A	1,6010D	DL
Antimony, Total	ND		mg/l	0.050	0.007	1	11/03/21 10:41	11/03/21 20:30	EPA 3005A	1,6010D	SV
Arsenic, Total	ND		mg/l	0.005	0.002	1	11/03/21 10:41	11/03/21 20:30	EPA 3005A	1,6010D	SV
Barium, Total	0.050		mg/l	0.010	0.002	1	11/03/21 10:41	11/03/21 20:30	EPA 3005A	1,6010D	SV
Beryllium, Total	ND		mg/l	0.005	0.001	1	11/03/21 10:41	11/03/21 20:30	EPA 3005A	1,6010D	SV
Cadmium, Total	ND		mg/l	0.005	0.001	1	11/03/21 10:41	11/03/21 20:30	EPA 3005A	1,6010D	SV
Calcium, Total	31.4		mg/l	0.100	0.035	1	11/03/21 10:41	11/03/21 20:30	EPA 3005A	1,6010D	SV
Chromium, Total	ND		mg/l	0.010	0.002	1	11/03/21 10:41	11/03/21 20:30	EPA 3005A	1,6010D	SV
Cobalt, Total	ND		mg/l	0.020	0.002	1	11/03/21 10:41	11/03/21 20:30	EPA 3005A	1,6010D	SV
Copper, Total	0.003	J	mg/l	0.010	0.002	1	11/03/21 10:41	11/03/21 20:30	EPA 3005A	1,6010D	SV
Iron, Total	0.704		mg/l	0.050	0.009	1	11/03/21 10:41	11/03/21 20:30	EPA 3005A	1,6010D	SV
Lead, Total	ND		mg/l	0.010	0.003	1	11/03/21 10:41	11/03/21 20:30	EPA 3005A	1,6010D	SV
Magnesium, Total	6.44		mg/l	0.100	0.015	1	11/03/21 10:41	11/03/21 20:30	EPA 3005A	1,6010D	SV
Manganese, Total	0.020		mg/l	0.010	0.002	1	11/03/21 10:41	11/03/21 20:30	EPA 3005A	1,6010D	SV
Mercury, Total	ND		mg/l	0.00020	0.00009	1	11/03/21 10:43	11/03/21 13:36	EPA 7470A	1,7470A	AC
Nickel, Total	0.003	J	mg/l	0.025	0.002	1	11/03/21 10:41	11/03/21 20:30	EPA 3005A	1,6010D	SV
Potassium, Total	2.14	J	mg/l	2.50	0.237	1	11/03/21 10:41	11/03/21 20:30	EPA 3005A	1,6010D	SV
Selenium, Total	ND		mg/l	0.010	0.004	1	11/03/21 10:41	11/03/21 20:30	EPA 3005A	1,6010D	SV
Silver, Total	ND		mg/l	0.007	0.003	1	11/03/21 10:41	11/03/21 20:30	EPA 3005A	1,6010D	SV
Sodium, Total	42.0		mg/l	2.00	0.120	1	11/03/21 10:41	11/03/21 20:30	EPA 3005A	1,6010D	SV
Thallium, Total	ND		mg/l	0.020	0.003	1	11/03/21 10:41	11/03/21 20:30	EPA 3005A	1,6010D	SV
Vanadium, Total	ND		mg/l	0.010	0.002	1	11/03/21 10:41	11/03/21 20:30	EPA 3005A	1,6010D	SV
Zinc, Total	0.014	J	mg/l	0.050	0.002	1	11/03/21 10:41	11/03/21 20:30	EPA 3005A	1,6010D	SV
<b>Dissolved Metals - Mansfield Lab</b>											
Aluminum, Dissolved	ND		mg/l	0.100	0.032	1	11/03/21 16:58	11/04/21 10:33	EPA 3005A	1,6010D	SV
Antimony, Dissolved	ND		mg/l	0.050	0.007	1	11/03/21 16:58	11/04/21 10:33	EPA 3005A	1,6010D	SV
Arsenic, Dissolved	ND		mg/l	0.005	0.002	1	11/03/21 16:58	11/04/21 10:33	EPA 3005A	1,6010D	SV
Barium, Dissolved	0.049		mg/l	0.010	0.002	1	11/03/21 16:58	11/04/21 10:33	EPA 3005A	1,6010D	SV
Beryllium, Dissolved	ND		mg/l	0.005	0.001	1	11/03/21 16:58	11/04/21 10:33	EPA 3005A	1,6010D	SV



**Project Name:** SUPPLEMENTAL RI SAMPLING PRGM.  
**Project Number:** 0127981-023

**Lab Number:** L2159730  
**Report Date:** 11/08/21

**SAMPLE RESULTS**

Lab ID: L2159730-05  
Client ID: MW21A-102921-1515  
Sample Location: BATH, NY

Date Collected: 10/29/21 15:15  
Date Received: 10/29/21  
Field Prep: Not Specified

Sample Depth:

Matrix: Water

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Cadmium, Dissolved	ND		mg/l	0.005	0.001	1	11/03/21 16:58	11/04/21 10:33	EPA 3005A	1,6010D	SV
Calcium, Dissolved	33.5		mg/l	0.100	0.035	1	11/03/21 16:58	11/04/21 10:33	EPA 3005A	1,6010D	SV
Chromium, Dissolved	ND		mg/l	0.010	0.002	1	11/03/21 16:58	11/04/21 10:33	EPA 3005A	1,6010D	SV
Cobalt, Dissolved	ND		mg/l	0.020	0.002	1	11/03/21 16:58	11/04/21 10:33	EPA 3005A	1,6010D	SV
Copper, Dissolved	ND		mg/l	0.010	0.002	1	11/03/21 16:58	11/04/21 10:33	EPA 3005A	1,6010D	SV
Iron, Dissolved	ND		mg/l	0.050	0.009	1	11/03/21 16:58	11/04/21 10:33	EPA 3005A	1,6010D	SV
Lead, Dissolved	ND		mg/l	0.010	0.003	1	11/03/21 16:58	11/04/21 10:33	EPA 3005A	1,6010D	SV
Magnesium, Dissolved	6.30		mg/l	0.100	0.015	1	11/03/21 16:58	11/04/21 10:33	EPA 3005A	1,6010D	SV
Manganese, Dissolved	ND		mg/l	0.010	0.002	1	11/03/21 16:58	11/04/21 10:33	EPA 3005A	1,6010D	SV
Mercury, Dissolved	ND		mg/l	0.00020	0.00009	1	11/03/21 20:45	11/04/21 05:52	EPA 7470A	1,7470A	AC
Nickel, Dissolved	ND		mg/l	0.025	0.002	1	11/03/21 16:58	11/04/21 10:33	EPA 3005A	1,6010D	SV
Potassium, Dissolved	2.00	J	mg/l	2.50	0.237	1	11/03/21 16:58	11/04/21 10:33	EPA 3005A	1,6010D	SV
Selenium, Dissolved	ND		mg/l	0.010	0.004	1	11/03/21 16:58	11/04/21 10:33	EPA 3005A	1,6010D	SV
Silver, Dissolved	ND		mg/l	0.007	0.003	1	11/03/21 16:58	11/04/21 10:33	EPA 3005A	1,6010D	SV
Sodium, Dissolved	43.5		mg/l	2.00	0.120	1	11/03/21 16:58	11/04/21 10:33	EPA 3005A	1,6010D	SV
Thallium, Dissolved	ND		mg/l	0.020	0.003	1	11/03/21 16:58	11/04/21 10:33	EPA 3005A	1,6010D	SV
Vanadium, Dissolved	ND		mg/l	0.010	0.002	1	11/03/21 16:58	11/04/21 10:33	EPA 3005A	1,6010D	SV
Zinc, Dissolved	ND		mg/l	0.050	0.002	1	11/03/21 16:58	11/04/21 10:33	EPA 3005A	1,6010D	SV



**Project Name:** SUPPLEMENTAL RI SAMPLING PRGM.  
**Project Number:** 0127981-023

**Lab Number:** L2159730  
**Report Date:** 11/08/21

**SAMPLE RESULTS**

Lab ID:	L2159730-06	Date Collected:	10/29/21 16:20
Client ID:	MW22B-102921-	Date Received:	10/29/21
Sample Location:	BATH, NY	Field Prep:	Not Specified

Sample Depth:

Matrix: Water

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
<b>Total Metals - Mansfield Lab</b>											
Aluminum, Total	1.32		mg/l	0.100	0.032	1	11/03/21 10:41	11/04/21 01:15	EPA 3005A	1,6010D	DL
Antimony, Total	ND		mg/l	0.050	0.007	1	11/03/21 10:41	11/03/21 20:38	EPA 3005A	1,6010D	SV
Arsenic, Total	ND		mg/l	0.005	0.002	1	11/03/21 10:41	11/03/21 20:38	EPA 3005A	1,6010D	SV
Barium, Total	0.032		mg/l	0.010	0.002	1	11/03/21 10:41	11/03/21 20:38	EPA 3005A	1,6010D	SV
Beryllium, Total	ND		mg/l	0.005	0.001	1	11/03/21 10:41	11/03/21 20:38	EPA 3005A	1,6010D	SV
Cadmium, Total	ND		mg/l	0.005	0.001	1	11/03/21 10:41	11/03/21 20:38	EPA 3005A	1,6010D	SV
Calcium, Total	37.0		mg/l	0.100	0.035	1	11/03/21 10:41	11/03/21 20:38	EPA 3005A	1,6010D	SV
Chromium, Total	0.004	J	mg/l	0.010	0.002	1	11/03/21 10:41	11/03/21 20:38	EPA 3005A	1,6010D	SV
Cobalt, Total	ND		mg/l	0.020	0.002	1	11/03/21 10:41	11/03/21 20:38	EPA 3005A	1,6010D	SV
Copper, Total	0.006	J	mg/l	0.010	0.002	1	11/03/21 10:41	11/03/21 20:38	EPA 3005A	1,6010D	SV
Iron, Total	2.52		mg/l	0.050	0.009	1	11/03/21 10:41	11/03/21 20:38	EPA 3005A	1,6010D	SV
Lead, Total	ND		mg/l	0.010	0.003	1	11/03/21 10:41	11/03/21 20:38	EPA 3005A	1,6010D	SV
Magnesium, Total	7.09		mg/l	0.100	0.015	1	11/03/21 10:41	11/03/21 20:38	EPA 3005A	1,6010D	SV
Manganese, Total	0.129		mg/l	0.010	0.002	1	11/03/21 10:41	11/03/21 20:38	EPA 3005A	1,6010D	SV
Mercury, Total	ND		mg/l	0.00020	0.00009	1	11/03/21 10:43	11/03/21 13:50	EPA 7470A	1,7470A	AC
Nickel, Total	0.003	J	mg/l	0.025	0.002	1	11/03/21 10:41	11/03/21 20:38	EPA 3005A	1,6010D	SV
Potassium, Total	2.84		mg/l	2.50	0.237	1	11/03/21 10:41	11/03/21 20:38	EPA 3005A	1,6010D	SV
Selenium, Total	ND		mg/l	0.010	0.004	1	11/03/21 10:41	11/03/21 20:38	EPA 3005A	1,6010D	SV
Silver, Total	ND		mg/l	0.007	0.003	1	11/03/21 10:41	11/03/21 20:38	EPA 3005A	1,6010D	SV
Sodium, Total	35.3		mg/l	2.00	0.120	1	11/03/21 10:41	11/03/21 20:38	EPA 3005A	1,6010D	SV
Thallium, Total	ND		mg/l	0.020	0.003	1	11/03/21 10:41	11/03/21 20:38	EPA 3005A	1,6010D	SV
Vanadium, Total	0.007	J	mg/l	0.010	0.002	1	11/03/21 10:41	11/03/21 20:38	EPA 3005A	1,6010D	SV
Zinc, Total	0.039	J	mg/l	0.050	0.002	1	11/03/21 10:41	11/03/21 20:38	EPA 3005A	1,6010D	SV
<b>Dissolved Metals - Mansfield Lab</b>											
Aluminum, Dissolved	0.108		mg/l	0.100	0.032	1	11/03/21 16:58	11/04/21 10:43	EPA 3005A	1,6010D	SV
Antimony, Dissolved	ND		mg/l	0.050	0.007	1	11/03/21 16:58	11/04/21 10:43	EPA 3005A	1,6010D	SV
Arsenic, Dissolved	ND		mg/l	0.005	0.002	1	11/03/21 16:58	11/04/21 10:43	EPA 3005A	1,6010D	SV
Barium, Dissolved	0.016		mg/l	0.010	0.002	1	11/03/21 16:58	11/04/21 10:43	EPA 3005A	1,6010D	SV
Beryllium, Dissolved	ND		mg/l	0.005	0.001	1	11/03/21 16:58	11/04/21 10:43	EPA 3005A	1,6010D	SV



**Project Name:** SUPPLEMENTAL RI SAMPLING PRGM.  
**Project Number:** 0127981-023

**Lab Number:** L2159730  
**Report Date:** 11/08/21

**SAMPLE RESULTS**

Lab ID: L2159730-06  
Client ID: MW22B-102921-  
Sample Location: BATH, NY

Date Collected: 10/29/21 16:20  
Date Received: 10/29/21  
Field Prep: Not Specified

Sample Depth:

Matrix: Water

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Cadmium, Dissolved	ND		mg/l	0.005	0.001	1	11/03/21 16:58	11/04/21 10:43	EPA 3005A	1,6010D	SV
Calcium, Dissolved	32.2		mg/l	0.100	0.035	1	11/03/21 16:58	11/04/21 10:43	EPA 3005A	1,6010D	SV
Chromium, Dissolved	ND		mg/l	0.010	0.002	1	11/03/21 16:58	11/04/21 10:43	EPA 3005A	1,6010D	SV
Cobalt, Dissolved	ND		mg/l	0.020	0.002	1	11/03/21 16:58	11/04/21 10:43	EPA 3005A	1,6010D	SV
Copper, Dissolved	ND		mg/l	0.010	0.002	1	11/03/21 16:58	11/04/21 10:43	EPA 3005A	1,6010D	SV
Iron, Dissolved	ND		mg/l	0.050	0.009	1	11/03/21 16:58	11/04/21 10:43	EPA 3005A	1,6010D	SV
Lead, Dissolved	ND		mg/l	0.010	0.003	1	11/03/21 16:58	11/04/21 10:43	EPA 3005A	1,6010D	SV
Magnesium, Dissolved	5.49		mg/l	0.100	0.015	1	11/03/21 16:58	11/04/21 10:43	EPA 3005A	1,6010D	SV
Manganese, Dissolved	0.004	J	mg/l	0.010	0.002	1	11/03/21 16:58	11/04/21 10:43	EPA 3005A	1,6010D	SV
Mercury, Dissolved	ND		mg/l	0.00020	0.00009	1	11/03/21 20:45	11/04/21 05:39	EPA 7470A	1,7470A	AC
Nickel, Dissolved	ND		mg/l	0.025	0.002	1	11/03/21 16:58	11/04/21 10:43	EPA 3005A	1,6010D	SV
Potassium, Dissolved	2.55		mg/l	2.50	0.237	1	11/03/21 16:58	11/04/21 10:43	EPA 3005A	1,6010D	SV
Selenium, Dissolved	ND		mg/l	0.010	0.004	1	11/03/21 16:58	11/04/21 10:43	EPA 3005A	1,6010D	SV
Silver, Dissolved	ND		mg/l	0.007	0.003	1	11/03/21 16:58	11/04/21 10:43	EPA 3005A	1,6010D	SV
Sodium, Dissolved	35.6		mg/l	2.00	0.120	1	11/03/21 16:58	11/04/21 10:43	EPA 3005A	1,6010D	SV
Thallium, Dissolved	ND		mg/l	0.020	0.003	1	11/03/21 16:58	11/04/21 10:43	EPA 3005A	1,6010D	SV
Vanadium, Dissolved	0.003	J	mg/l	0.010	0.002	1	11/03/21 16:58	11/04/21 10:43	EPA 3005A	1,6010D	SV
Zinc, Dissolved	ND		mg/l	0.050	0.002	1	11/03/21 16:58	11/04/21 10:43	EPA 3005A	1,6010D	SV



**Project Name:** SUPPLEMENTAL RI SAMPLING PRGM.  
**Project Number:** 0127981-023

**Lab Number:** L2159730  
**Report Date:** 11/08/21

**SAMPLE RESULTS**

Lab ID:	L2159730-08	Date Collected:	10/29/21 00:00
Client ID:	4125-102921-0002	Date Received:	10/29/21
Sample Location:	BATH, NY	Field Prep:	Not Specified

Sample Depth:

Matrix: Water

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
<b>Total Metals - Mansfield Lab</b>											
Aluminum, Total	1.49		mg/l	0.100	0.032	1	11/03/21 10:41	11/04/21 01:05	EPA 3005A	1,6010D	DL
Antimony, Total	0.009	J	mg/l	0.050	0.007	1	11/03/21 10:41	11/03/21 21:15	EPA 3005A	1,6010D	SV
Arsenic, Total	0.002	J	mg/l	0.005	0.002	1	11/03/21 10:41	11/03/21 21:15	EPA 3005A	1,6010D	SV
Barium, Total	0.084		mg/l	0.010	0.002	1	11/03/21 10:41	11/03/21 21:15	EPA 3005A	1,6010D	SV
Beryllium, Total	ND		mg/l	0.005	0.001	1	11/03/21 10:41	11/03/21 21:15	EPA 3005A	1,6010D	SV
Cadmium, Total	ND		mg/l	0.005	0.001	1	11/03/21 10:41	11/03/21 21:15	EPA 3005A	1,6010D	SV
Calcium, Total	43.7		mg/l	0.100	0.035	1	11/03/21 10:41	11/03/21 21:15	EPA 3005A	1,6010D	SV
Chromium, Total	0.003	J	mg/l	0.010	0.002	1	11/03/21 10:41	11/03/21 21:15	EPA 3005A	1,6010D	SV
Cobalt, Total	ND		mg/l	0.020	0.002	1	11/03/21 10:41	11/03/21 21:15	EPA 3005A	1,6010D	SV
Copper, Total	0.007	J	mg/l	0.010	0.002	1	11/03/21 10:41	11/03/21 21:15	EPA 3005A	1,6010D	SV
Iron, Total	3.13		mg/l	0.050	0.009	1	11/03/21 10:41	11/03/21 21:15	EPA 3005A	1,6010D	SV
Lead, Total	ND		mg/l	0.010	0.003	1	11/03/21 10:41	11/03/21 21:15	EPA 3005A	1,6010D	SV
Magnesium, Total	13.5		mg/l	0.100	0.015	1	11/03/21 10:41	11/03/21 21:15	EPA 3005A	1,6010D	SV
Manganese, Total	0.430		mg/l	0.010	0.002	1	11/03/21 10:41	11/03/21 21:15	EPA 3005A	1,6010D	SV
Mercury, Total	ND		mg/l	0.00020	0.00009	1	11/03/21 10:43	11/03/21 13:53	EPA 7470A	1,7470A	AC
Nickel, Total	0.004	J	mg/l	0.025	0.002	1	11/03/21 10:41	11/03/21 21:15	EPA 3005A	1,6010D	SV
Potassium, Total	4.08		mg/l	2.50	0.237	1	11/03/21 10:41	11/03/21 21:15	EPA 3005A	1,6010D	SV
Selenium, Total	ND		mg/l	0.010	0.004	1	11/03/21 10:41	11/03/21 21:15	EPA 3005A	1,6010D	SV
Silver, Total	ND		mg/l	0.007	0.003	1	11/03/21 10:41	11/03/21 21:15	EPA 3005A	1,6010D	SV
Sodium, Total	58.8		mg/l	2.00	0.120	1	11/03/21 10:41	11/03/21 21:15	EPA 3005A	1,6010D	SV
Thallium, Total	ND		mg/l	0.020	0.003	1	11/03/21 10:41	11/03/21 21:15	EPA 3005A	1,6010D	SV
Vanadium, Total	0.004	J	mg/l	0.010	0.002	1	11/03/21 10:41	11/03/21 21:15	EPA 3005A	1,6010D	SV
Zinc, Total	0.024	J	mg/l	0.050	0.002	1	11/03/21 10:41	11/03/21 21:15	EPA 3005A	1,6010D	SV
<b>Dissolved Metals - Mansfield Lab</b>											
Aluminum, Dissolved	ND		mg/l	0.100	0.032	1	11/03/21 16:58	11/04/21 10:38	EPA 3005A	1,6010D	SV
Antimony, Dissolved	ND		mg/l	0.050	0.007	1	11/03/21 16:58	11/04/21 10:38	EPA 3005A	1,6010D	SV
Arsenic, Dissolved	ND		mg/l	0.005	0.002	1	11/03/21 16:58	11/04/21 10:38	EPA 3005A	1,6010D	SV
Barium, Dissolved	0.073		mg/l	0.010	0.002	1	11/03/21 16:58	11/04/21 10:38	EPA 3005A	1,6010D	SV
Beryllium, Dissolved	ND		mg/l	0.005	0.001	1	11/03/21 16:58	11/04/21 10:38	EPA 3005A	1,6010D	SV



**Project Name:** SUPPLEMENTAL RI SAMPLING PRGM.  
**Project Number:** 0127981-023

**Lab Number:** L2159730  
**Report Date:** 11/08/21

**SAMPLE RESULTS**

Lab ID: L2159730-08  
Client ID: 4125-102921-0002  
Sample Location: BATH, NY

Date Collected: 10/29/21 00:00  
Date Received: 10/29/21  
Field Prep: Not Specified

Sample Depth:

Matrix: Water

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Cadmium, Dissolved	ND		mg/l	0.005	0.001	1	11/03/21 16:58	11/04/21 10:38	EPA 3005A	1,6010D	SV
Calcium, Dissolved	43.7		mg/l	0.100	0.035	1	11/03/21 16:58	11/04/21 10:38	EPA 3005A	1,6010D	SV
Chromium, Dissolved	ND		mg/l	0.010	0.002	1	11/03/21 16:58	11/04/21 10:38	EPA 3005A	1,6010D	SV
Cobalt, Dissolved	ND		mg/l	0.020	0.002	1	11/03/21 16:58	11/04/21 10:38	EPA 3005A	1,6010D	SV
Copper, Dissolved	ND		mg/l	0.010	0.002	1	11/03/21 16:58	11/04/21 10:38	EPA 3005A	1,6010D	SV
Iron, Dissolved	ND		mg/l	0.050	0.009	1	11/03/21 16:58	11/04/21 10:38	EPA 3005A	1,6010D	SV
Lead, Dissolved	ND		mg/l	0.010	0.003	1	11/03/21 16:58	11/04/21 10:38	EPA 3005A	1,6010D	SV
Magnesium, Dissolved	12.3		mg/l	0.100	0.015	1	11/03/21 16:58	11/04/21 10:38	EPA 3005A	1,6010D	SV
Manganese, Dissolved	0.388		mg/l	0.010	0.002	1	11/03/21 16:58	11/04/21 10:38	EPA 3005A	1,6010D	SV
Mercury, Dissolved	ND		mg/l	0.00020	0.00009	1	11/03/21 20:45	11/04/21 05:56	EPA 7470A	1,7470A	AC
Nickel, Dissolved	ND		mg/l	0.025	0.002	1	11/03/21 16:58	11/04/21 10:38	EPA 3005A	1,6010D	SV
Potassium, Dissolved	3.73		mg/l	2.50	0.237	1	11/03/21 16:58	11/04/21 10:38	EPA 3005A	1,6010D	SV
Selenium, Dissolved	ND		mg/l	0.010	0.004	1	11/03/21 16:58	11/04/21 10:38	EPA 3005A	1,6010D	SV
Silver, Dissolved	ND		mg/l	0.007	0.003	1	11/03/21 16:58	11/04/21 10:38	EPA 3005A	1,6010D	SV
Sodium, Dissolved	58.5		mg/l	2.00	0.120	1	11/03/21 16:58	11/04/21 10:38	EPA 3005A	1,6010D	SV
Thallium, Dissolved	0.002	J	mg/l	0.020	0.003	1	11/03/21 16:58	11/04/21 10:38	EPA 3005A	1,6010D	SV
Vanadium, Dissolved	ND		mg/l	0.010	0.002	1	11/03/21 16:58	11/04/21 10:38	EPA 3005A	1,6010D	SV
Zinc, Dissolved	ND		mg/l	0.050	0.002	1	11/03/21 16:58	11/04/21 10:38	EPA 3005A	1,6010D	SV



**Project Name:** SUPPLEMENTAL RI SAMPLING PRGM.  
**Project Number:** 0127981-023

**Lab Number:** L2159730  
**Report Date:** 11/08/21

**SAMPLE RESULTS**

Lab ID:	L2159730-10	Date Collected:	10/29/21 00:00
Client ID:	4125-102921-0004	Date Received:	10/29/21
Sample Location:	BATH, NY	Field Prep:	Not Specified

Sample Depth:

Matrix: Water

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
<b>Total Metals - Mansfield Lab</b>											
Aluminum, Total	ND		mg/l	0.100	0.032	1	11/03/21 10:41	11/04/21 01:10	EPA 3005A	1,6010D	DL
Antimony, Total	ND		mg/l	0.050	0.007	1	11/03/21 10:41	11/03/21 21:20	EPA 3005A	1,6010D	SV
Arsenic, Total	ND		mg/l	0.005	0.002	1	11/03/21 10:41	11/03/21 21:20	EPA 3005A	1,6010D	SV
Barium, Total	ND		mg/l	0.010	0.002	1	11/03/21 10:41	11/03/21 21:20	EPA 3005A	1,6010D	SV
Beryllium, Total	ND		mg/l	0.005	0.001	1	11/03/21 10:41	11/03/21 21:20	EPA 3005A	1,6010D	SV
Cadmium, Total	ND		mg/l	0.005	0.001	1	11/03/21 10:41	11/03/21 21:20	EPA 3005A	1,6010D	SV
Calcium, Total	ND		mg/l	0.100	0.035	1	11/03/21 10:41	11/03/21 21:20	EPA 3005A	1,6010D	SV
Chromium, Total	ND		mg/l	0.010	0.002	1	11/03/21 10:41	11/03/21 21:20	EPA 3005A	1,6010D	SV
Cobalt, Total	ND		mg/l	0.020	0.002	1	11/03/21 10:41	11/03/21 21:20	EPA 3005A	1,6010D	SV
Copper, Total	ND		mg/l	0.010	0.002	1	11/03/21 10:41	11/03/21 21:20	EPA 3005A	1,6010D	SV
Iron, Total	ND		mg/l	0.050	0.009	1	11/03/21 10:41	11/03/21 21:20	EPA 3005A	1,6010D	SV
Lead, Total	ND		mg/l	0.010	0.003	1	11/03/21 10:41	11/03/21 21:20	EPA 3005A	1,6010D	SV
Magnesium, Total	ND		mg/l	0.100	0.015	1	11/03/21 10:41	11/03/21 21:20	EPA 3005A	1,6010D	SV
Manganese, Total	ND		mg/l	0.010	0.002	1	11/03/21 10:41	11/03/21 21:20	EPA 3005A	1,6010D	SV
Mercury, Total	ND		mg/l	0.00020	0.00009	1	11/03/21 10:43	11/03/21 13:56	EPA 7470A	1,7470A	AC
Nickel, Total	ND		mg/l	0.025	0.002	1	11/03/21 10:41	11/03/21 21:20	EPA 3005A	1,6010D	SV
Potassium, Total	ND		mg/l	2.50	0.237	1	11/03/21 10:41	11/03/21 21:20	EPA 3005A	1,6010D	SV
Selenium, Total	ND		mg/l	0.010	0.004	1	11/03/21 10:41	11/03/21 21:20	EPA 3005A	1,6010D	SV
Silver, Total	ND		mg/l	0.007	0.003	1	11/03/21 10:41	11/03/21 21:20	EPA 3005A	1,6010D	SV
Sodium, Total	0.187	J	mg/l	2.00	0.120	1	11/03/21 10:41	11/03/21 21:20	EPA 3005A	1,6010D	SV
Thallium, Total	ND		mg/l	0.020	0.003	1	11/03/21 10:41	11/03/21 21:20	EPA 3005A	1,6010D	SV
Vanadium, Total	ND		mg/l	0.010	0.002	1	11/03/21 10:41	11/03/21 21:20	EPA 3005A	1,6010D	SV
Zinc, Total	0.011	J	mg/l	0.050	0.002	1	11/03/21 10:41	11/03/21 21:20	EPA 3005A	1,6010D	SV
<b>Dissolved Metals - Mansfield Lab</b>											
Aluminum, Dissolved	ND		mg/l	0.100	0.032	1	11/03/21 16:58	11/04/21 11:31	EPA 3005A	1,6010D	SV
Antimony, Dissolved	ND		mg/l	0.050	0.007	1	11/03/21 16:58	11/04/21 11:31	EPA 3005A	1,6010D	SV
Arsenic, Dissolved	ND		mg/l	0.005	0.002	1	11/03/21 16:58	11/04/21 11:31	EPA 3005A	1,6010D	SV
Barium, Dissolved	ND		mg/l	0.010	0.002	1	11/03/21 16:58	11/04/21 11:31	EPA 3005A	1,6010D	SV
Beryllium, Dissolved	ND		mg/l	0.005	0.001	1	11/03/21 16:58	11/04/21 11:31	EPA 3005A	1,6010D	SV



**Project Name:** SUPPLEMENTAL RI SAMPLING PRGM.  
**Project Number:** 0127981-023

**Lab Number:** L2159730  
**Report Date:** 11/08/21

**SAMPLE RESULTS**

Lab ID:	L2159730-10	Date Collected:	10/29/21 00:00
Client ID:	4125-102921-0004	Date Received:	10/29/21
Sample Location:	BATH, NY	Field Prep:	Not Specified

Sample Depth:

Matrix: Water

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Cadmium, Dissolved	ND		mg/l	0.005	0.001	1	11/03/21 16:58	11/04/21 11:31	EPA 3005A	1,6010D	SV
Calcium, Dissolved	ND		mg/l	0.100	0.035	1	11/03/21 16:58	11/04/21 11:31	EPA 3005A	1,6010D	SV
Chromium, Dissolved	ND		mg/l	0.010	0.002	1	11/03/21 16:58	11/04/21 11:31	EPA 3005A	1,6010D	SV
Cobalt, Dissolved	ND		mg/l	0.020	0.002	1	11/03/21 16:58	11/04/21 11:31	EPA 3005A	1,6010D	SV
Copper, Dissolved	ND		mg/l	0.010	0.002	1	11/03/21 16:58	11/04/21 11:31	EPA 3005A	1,6010D	SV
Iron, Dissolved	0.031	J	mg/l	0.050	0.009	1	11/03/21 16:58	11/04/21 11:31	EPA 3005A	1,6010D	SV
Lead, Dissolved	ND		mg/l	0.010	0.003	1	11/03/21 16:58	11/04/21 11:31	EPA 3005A	1,6010D	SV
Magnesium, Dissolved	ND		mg/l	0.100	0.015	1	11/03/21 16:58	11/04/21 11:31	EPA 3005A	1,6010D	SV
Manganese, Dissolved	ND		mg/l	0.010	0.002	1	11/03/21 16:58	11/04/21 11:31	EPA 3005A	1,6010D	SV
Mercury, Dissolved	ND		mg/l	0.00020	0.00009	1	11/03/21 20:45	11/04/21 06:07	EPA 7470A	1,7470A	AC
Nickel, Dissolved	ND		mg/l	0.025	0.002	1	11/03/21 16:58	11/04/21 11:31	EPA 3005A	1,6010D	SV
Potassium, Dissolved	ND		mg/l	2.50	0.237	1	11/03/21 16:58	11/04/21 11:31	EPA 3005A	1,6010D	SV
Selenium, Dissolved	ND		mg/l	0.010	0.004	1	11/03/21 16:58	11/04/21 11:31	EPA 3005A	1,6010D	SV
Silver, Dissolved	ND		mg/l	0.007	0.003	1	11/03/21 16:58	11/04/21 11:31	EPA 3005A	1,6010D	SV
Sodium, Dissolved	0.171	J	mg/l	2.00	0.120	1	11/03/21 16:58	11/04/21 11:31	EPA 3005A	1,6010D	SV
Thallium, Dissolved	ND		mg/l	0.020	0.003	1	11/03/21 16:58	11/04/21 11:31	EPA 3005A	1,6010D	SV
Vanadium, Dissolved	ND		mg/l	0.010	0.002	1	11/03/21 16:58	11/04/21 11:31	EPA 3005A	1,6010D	SV
Zinc, Dissolved	0.003	J	mg/l	0.050	0.002	1	11/03/21 16:58	11/04/21 11:31	EPA 3005A	1,6010D	SV



**Project Name:** SUPPLEMENTAL RI SAMPLING PRGM.  
**Project Number:** 0127981-023

**Lab Number:** L2159730  
**Report Date:** 11/08/21

## Method Blank Analysis Batch Quality Control

Parameter	Result Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst	
Total Metals - Mansfield Lab for sample(s): 04-06,08,10 Batch: WG1566218-1										
Aluminum, Total	ND	mg/l	0.100	0.032	1	11/03/21 10:41	11/04/21 00:56	1,6010D	DL	
Antimony, Total	ND	mg/l	0.050	0.007	1	11/03/21 10:41	11/03/21 21:07	1,6010D	SV	
Arsenic, Total	ND	mg/l	0.005	0.002	1	11/03/21 10:41	11/03/21 21:07	1,6010D	SV	
Barium, Total	ND	mg/l	0.010	0.002	1	11/03/21 10:41	11/03/21 21:07	1,6010D	SV	
Beryllium, Total	ND	mg/l	0.005	0.001	1	11/03/21 10:41	11/03/21 21:07	1,6010D	SV	
Cadmium, Total	ND	mg/l	0.005	0.001	1	11/03/21 10:41	11/03/21 21:07	1,6010D	SV	
Calcium, Total	ND	mg/l	0.100	0.035	1	11/03/21 10:41	11/03/21 21:07	1,6010D	SV	
Chromium, Total	ND	mg/l	0.010	0.002	1	11/03/21 10:41	11/03/21 21:07	1,6010D	SV	
Cobalt, Total	ND	mg/l	0.020	0.002	1	11/03/21 10:41	11/03/21 21:07	1,6010D	SV	
Copper, Total	ND	mg/l	0.010	0.002	1	11/03/21 10:41	11/03/21 21:07	1,6010D	SV	
Iron, Total	ND	mg/l	0.050	0.009	1	11/03/21 10:41	11/03/21 21:07	1,6010D	SV	
Lead, Total	ND	mg/l	0.010	0.003	1	11/03/21 10:41	11/03/21 21:07	1,6010D	SV	
Magnesium, Total	ND	mg/l	0.100	0.015	1	11/03/21 10:41	11/03/21 21:07	1,6010D	SV	
Manganese, Total	ND	mg/l	0.010	0.002	1	11/03/21 10:41	11/03/21 21:07	1,6010D	SV	
Nickel, Total	ND	mg/l	0.025	0.002	1	11/03/21 10:41	11/03/21 21:07	1,6010D	SV	
Potassium, Total	ND	mg/l	2.50	0.237	1	11/03/21 10:41	11/03/21 21:07	1,6010D	SV	
Selenium, Total	ND	mg/l	0.010	0.004	1	11/03/21 10:41	11/03/21 21:07	1,6010D	SV	
Silver, Total	ND	mg/l	0.007	0.003	1	11/03/21 10:41	11/03/21 21:07	1,6010D	SV	
Sodium, Total	0.210	J	mg/l	2.00	0.120	1	11/03/21 10:41	11/03/21 21:07	1,6010D	SV
Thallium, Total	ND	mg/l	0.020	0.003	1	11/03/21 10:41	11/03/21 21:07	1,6010D	SV	
Vanadium, Total	0.002	J	mg/l	0.010	0.002	1	11/03/21 10:41	11/03/21 21:07	1,6010D	SV
Zinc, Total	ND	mg/l	0.050	0.002	1	11/03/21 10:41	11/03/21 21:07	1,6010D	SV	

### Prep Information

Digestion Method: EPA 3005A

Parameter	Result Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Metals - Mansfield Lab for sample(s): 04-06,08,10 Batch: WG1566219-1									
Mercury, Total	ND	mg/l	0.00020	0.00009	1	11/03/21 10:43	11/03/21 13:30	1,7470A	AC



**Project Name:** SUPPLEMENTAL RI SAMPLING PRGM.  
**Project Number:** 0127981-023

**Lab Number:** L2159730  
**Report Date:** 11/08/21

## Method Blank Analysis Batch Quality Control

### Prep Information

Digestion Method: EPA 7470A

Parameter	Result Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst	
<b>Dissolved Metals - Mansfield Lab for sample(s): 04-06,08,10 Batch: WG1566220-1</b>										
Aluminum, Dissolved	ND	mg/l	0.100	0.032	1	11/03/21 16:58	11/04/21 10:17	1,6010D	SV	
Antimony, Dissolved	ND	mg/l	0.050	0.007	1	11/03/21 16:58	11/04/21 10:17	1,6010D	SV	
Arsenic, Dissolved	ND	mg/l	0.005	0.002	1	11/03/21 16:58	11/04/21 10:17	1,6010D	SV	
Barium, Dissolved	ND	mg/l	0.010	0.002	1	11/03/21 16:58	11/04/21 10:17	1,6010D	SV	
Beryllium, Dissolved	ND	mg/l	0.005	0.001	1	11/03/21 16:58	11/04/21 10:17	1,6010D	SV	
Cadmium, Dissolved	ND	mg/l	0.005	0.001	1	11/03/21 16:58	11/04/21 10:17	1,6010D	SV	
Calcium, Dissolved	ND	mg/l	0.100	0.035	1	11/03/21 16:58	11/04/21 10:17	1,6010D	SV	
Chromium, Dissolved	ND	mg/l	0.010	0.002	1	11/03/21 16:58	11/04/21 10:17	1,6010D	SV	
Cobalt, Dissolved	ND	mg/l	0.020	0.002	1	11/03/21 16:58	11/04/21 10:17	1,6010D	SV	
Copper, Dissolved	ND	mg/l	0.010	0.002	1	11/03/21 16:58	11/04/21 10:17	1,6010D	SV	
Iron, Dissolved	ND	mg/l	0.050	0.009	1	11/03/21 16:58	11/04/21 10:17	1,6010D	SV	
Lead, Dissolved	ND	mg/l	0.010	0.003	1	11/03/21 16:58	11/04/21 10:17	1,6010D	SV	
Magnesium, Dissolved	ND	mg/l	0.100	0.015	1	11/03/21 16:58	11/04/21 10:17	1,6010D	SV	
Manganese, Dissolved	ND	mg/l	0.010	0.002	1	11/03/21 16:58	11/04/21 10:17	1,6010D	SV	
Nickel, Dissolved	ND	mg/l	0.025	0.002	1	11/03/21 16:58	11/04/21 10:17	1,6010D	SV	
Potassium, Dissolved	ND	mg/l	2.50	0.237	1	11/03/21 16:58	11/04/21 10:17	1,6010D	SV	
Selenium, Dissolved	ND	mg/l	0.010	0.004	1	11/03/21 16:58	11/04/21 10:17	1,6010D	SV	
Silver, Dissolved	ND	mg/l	0.007	0.003	1	11/03/21 16:58	11/04/21 10:17	1,6010D	SV	
Sodium, Dissolved	0.199	J	mg/l	2.00	0.120	1	11/03/21 16:58	11/04/21 10:17	1,6010D	SV
Thallium, Dissolved	ND	mg/l	0.020	0.003	1	11/03/21 16:58	11/04/21 10:17	1,6010D	SV	
Vanadium, Dissolved	ND	mg/l	0.010	0.002	1	11/03/21 16:58	11/04/21 10:17	1,6010D	SV	
Zinc, Dissolved	0.012	J	mg/l	0.050	0.002	1	11/03/21 16:58	11/04/21 10:17	1,6010D	SV

### Prep Information

Digestion Method: EPA 3005A



**Project Name:** SUPPLEMENTAL RI SAMPLING PRGM.  
**Project Number:** 0127981-023

**Lab Number:** L2159730  
**Report Date:** 11/08/21

## Method Blank Analysis Batch Quality Control

Parameter	Result Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Dissolved Metals - Mansfield Lab for sample(s): 04-06,08,10 Batch: WG1566222-1									
Mercury, Dissolved	ND	mg/l	0.00020	0.00009	1	11/03/21 20:45	11/04/21 05:33	1,7470A	AC

### Prep Information

Digestion Method: EPA 7470A



# Lab Control Sample Analysis

## Batch Quality Control

**Project Name:** SUPPLEMENTAL RI SAMPLING PRGM.  
**Project Number:** 0127981-023

**Lab Number:** L2159730  
**Report Date:** 11/08/21

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 04-06,08,10 Batch: WG1566218-2								
Aluminum, Total	103	-	-	-	80-120	-	-	-
Antimony, Total	98	-	-	-	80-120	-	-	-
Arsenic, Total	108	-	-	-	80-120	-	-	-
Barium, Total	106	-	-	-	80-120	-	-	-
Beryllium, Total	112	-	-	-	80-120	-	-	-
Cadmium, Total	102	-	-	-	80-120	-	-	-
Calcium, Total	101	-	-	-	80-120	-	-	-
Chromium, Total	96	-	-	-	80-120	-	-	-
Cobalt, Total	96	-	-	-	80-120	-	-	-
Copper, Total	99	-	-	-	80-120	-	-	-
Iron, Total	103	-	-	-	80-120	-	-	-
Lead, Total	100	-	-	-	80-120	-	-	-
Magnesium, Total	110	-	-	-	80-120	-	-	-
Manganese, Total	100	-	-	-	80-120	-	-	-
Nickel, Total	98	-	-	-	80-120	-	-	-
Potassium, Total	113	-	-	-	80-120	-	-	-
Selenium, Total	106	-	-	-	80-120	-	-	-
Silver, Total	96	-	-	-	80-120	-	-	-
Sodium, Total	109	-	-	-	80-120	-	-	-
Thallium, Total	102	-	-	-	80-120	-	-	-
Vanadium, Total	97	-	-	-	80-120	-	-	-

# Lab Control Sample Analysis

## Batch Quality Control

**Project Name:** SUPPLEMENTAL RI SAMPLING PRGM.  
**Project Number:** 0127981-023

**Lab Number:** L2159730  
**Report Date:** 11/08/21

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 04-06,08,10 Batch: WG1566218-2					
Zinc, Total	99	-	80-120	-	
Total Metals - Mansfield Lab Associated sample(s): 04-06,08,10 Batch: WG1566219-2					
Mercury, Total	93	-	80-120	-	

# Lab Control Sample Analysis

## Batch Quality Control

**Project Name:** SUPPLEMENTAL RI SAMPLING PRGM.  
**Project Number:** 0127981-023

**Lab Number:** L2159730  
**Report Date:** 11/08/21

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
Dissolved Metals - Mansfield Lab Associated sample(s): 04-06,08,10 Batch: WG1566220-2					
Aluminum, Dissolved	113	-	80-120	-	
Antimony, Dissolved	109	-	80-120	-	
Arsenic, Dissolved	121	Q	80-120	-	
Barium, Dissolved	112	-	80-120	-	
Beryllium, Dissolved	114	-	80-120	-	
Cadmium, Dissolved	114	-	80-120	-	
Calcium, Dissolved	110	-	80-120	-	
Chromium, Dissolved	108	-	80-120	-	
Cobalt, Dissolved	107	-	80-120	-	
Copper, Dissolved	110	-	80-120	-	
Iron, Dissolved	113	-	80-120	-	
Lead, Dissolved	113	-	80-120	-	
Magnesium, Dissolved	110	-	80-120	-	
Manganese, Dissolved	109	-	80-120	-	
Nickel, Dissolved	109	-	80-120	-	
Potassium, Dissolved	115	-	80-120	-	
Selenium, Dissolved	120	-	80-120	-	
Silver, Dissolved	113	-	80-120	-	
Sodium, Dissolved	117	-	80-120	-	
Thallium, Dissolved	118	-	80-120	-	
Vanadium, Dissolved	109	-	80-120	-	

# Lab Control Sample Analysis

## Batch Quality Control

**Project Name:** SUPPLEMENTAL RI SAMPLING PRGM.  
**Project Number:** 0127981-023

**Lab Number:** L2159730  
**Report Date:** 11/08/21

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
Dissolved Metals - Mansfield Lab Associated sample(s): 04-06,08,10 Batch: WG1566220-2					
Zinc, Dissolved	113	-	80-120	-	
Dissolved Metals - Mansfield Lab Associated sample(s): 04-06,08,10 Batch: WG1566222-2					
Mercury, Dissolved	99	-	80-120	-	

**Matrix Spike Analysis**  
**Batch Quality Control**

**Project Name:** SUPPLEMENTAL RI SAMPLING PRGM.  
**Project Number:** 0127981-023

**Lab Number:** L2159730  
**Report Date:** 11/08/21

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	MSD Qual	MSD Found	MSD %Recovery	MSD Qual	Recovery Limits	RPD	RPD Qual	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 04-06,08,10 QC Batch ID: WG1566218-3 WG1566218-4 QC Sample: L2159730-06 Client ID: MW22B-102921-												
Aluminum, Total	1.32	2	3.46	107		3.43	106		75-125	1		20
Antimony, Total	ND	0.5	0.446	89		0.461	92		75-125	3		20
Arsenic, Total	ND	0.12	0.133	111		0.132	110		75-125	1		20
Barium, Total	0.032	2	2.12	104		2.16	106		75-125	2		20
Beryllium, Total	ND	0.05	0.056	112		0.057	113		75-125	1		20
Cadmium, Total	ND	0.053	0.054	102		0.054	102		75-125	0		20
Calcium, Total	37.0	10	46.8	98		47.0	100		75-125	0		20
Chromium, Total	0.004J	0.2	0.200	100		0.199	100		75-125	1		20
Cobalt, Total	ND	0.5	0.474	95		0.474	95		75-125	0		20
Copper, Total	0.006J	0.25	0.257	103		0.259	104		75-125	1		20
Iron, Total	2.52	1	3.29	77		3.28	76		75-125	0		20
Lead, Total	ND	0.53	0.523	99		0.520	98		75-125	1		20
Magnesium, Total	7.09	10	17.8	107		18.0	109		75-125	1		20
Manganese, Total	0.129	0.5	0.621	98		0.630	100		75-125	1		20
Nickel, Total	0.003J	0.5	0.488	98		0.487	97		75-125	0		20
Potassium, Total	2.84	10	14.0	112		14.1	113		75-125	1		20
Selenium, Total	ND	0.12	0.128	107		0.125	104		75-125	2		20
Silver, Total	ND	0.05	0.049	97		0.050	101		75-125	3		20
Sodium, Total	35.3	10	46.0	107		45.9	106		75-125	0		20
Thallium, Total	ND	0.12	0.120	100		0.119	99		75-125	1		20
Vanadium, Total	0.007J	0.5	0.491	98		0.483	97		75-125	2		20

**Matrix Spike Analysis**  
**Batch Quality Control**

**Project Name:** SUPPLEMENTAL RI SAMPLING PRGM.  
**Project Number:** 0127981-023

**Lab Number:** L2159730  
**Report Date:** 11/08/21

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	MSD Found	MSD %Recovery	Recovery Limits	RPD	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 04-06,08,10 QC Batch ID: WG1566218-3 WG1566218-4 QC Sample: L2159730-06 Client ID: MW22B-102921-									
Zinc, Total	0.039J	0.5	0.536	107	0.534	107	75-125	0	20
Total Metals - Mansfield Lab Associated sample(s): 04-06,08,10 QC Batch ID: WG1566219-3 WG1566219-4 QC Sample: L2159730-06 Client ID: MW22B-102921-									
Mercury, Total	ND	0.005	0.00463	93	0.00452	90	75-125	2	20

**Matrix Spike Analysis**  
**Batch Quality Control**

**Project Name:** SUPPLEMENTAL RI SAMPLING PRGM.  
**Project Number:** 0127981-023

**Lab Number:** L2159730  
**Report Date:** 11/08/21

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	MSD Found	MSD %Recovery	Recovery Limits	RPD	RPD Limits
Dissolved Metals - Mansfield Lab Associated sample(s): 04-06,08,10 QC Batch ID: WG1566220-3 WG1566220-4 QC Sample: L2159730-06 Client ID: MW22B-102921-									
Aluminum, Dissolved	0.108	2	2.26	108	2.27	108	75-125	0	20
Antimony, Dissolved	ND	0.5	0.548	110	0.554	111	75-125	1	20
Arsenic, Dissolved	ND	0.12	0.147	122	0.148	123	75-125	1	20
Barium, Dissolved	0.016	2	2.21	110	2.22	110	75-125	0	20
Beryllium, Dissolved	ND	0.05	0.057	113	0.057	114	75-125	1	20
Cadmium, Dissolved	ND	0.053	0.060	113	0.060	113	75-125	0	20
Calcium, Dissolved	32.2	10	42.9	107	42.6	104	75-125	1	20
Chromium, Dissolved	ND	0.2	0.218	109	0.218	109	75-125	0	20
Cobalt, Dissolved	ND	0.5	0.525	105	0.524	105	75-125	0	20
Copper, Dissolved	ND	0.25	0.277	111	0.276	110	75-125	0	20
Iron, Dissolved	ND	1	1.11	111	1.13	113	75-125	2	20
Lead, Dissolved	ND	0.53	0.582	110	0.580	109	75-125	0	20
Magnesium, Dissolved	5.49	10	16.0	105	15.9	104	75-125	1	20
Manganese, Dissolved	0.004J	0.5	0.535	107	0.538	108	75-125	1	20
Nickel, Dissolved	ND	0.5	0.537	107	0.536	107	75-125	0	20
Potassium, Dissolved	2.55	10	13.8	112	13.8	112	75-125	0	20
Selenium, Dissolved	ND	0.12	0.143	119	0.146	122	75-125	2	20
Silver, Dissolved	ND	0.05	0.056	113	0.057	113	75-125	0	20
Sodium, Dissolved	35.6	10	46.9	113	46.8	112	75-125	0	20
Thallium, Dissolved	ND	0.12	0.138	115	0.136	113	75-125	1	20
Vanadium, Dissolved	0.003J	0.5	0.549	110	0.547	109	75-125	0	20

**Matrix Spike Analysis**  
**Batch Quality Control**

**Project Name:** SUPPLEMENTAL RI SAMPLING PRGM.  
**Project Number:** 0127981-023

**Lab Number:** L2159730  
**Report Date:** 11/08/21

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	MSD Found	MSD %Recovery	Recovery Limits	RPD	RPD Limits
Dissolved Metals - Mansfield Lab Associated sample(s): 04-06,08,10 QC Batch ID: WG1566220-3 WG1566220-4 QC Sample: L2159730-06 Client ID: MW22B-102921-									
Zinc, Dissolved	ND	0.5	0.558	112	0.558	112	75-125	0	20
Dissolved Metals - Mansfield Lab Associated sample(s): 04-06,08,10 QC Batch ID: WG1566222-3 WG1566222-4 QC Sample: L2159730-06 Client ID: MW22B-102921-									
Mercury, Dissolved	ND	0.005	0.00468	94	0.00473	95	75-125	1	20

**Project Name:** SUPPLEMENTAL RI SAMPLING PRGM.  
**Project Number:** 0127981-023

**Lab Serial Dilution  
Analysis  
Batch Quality Control**

**Lab Number:** L2159730  
**Report Date:** 11/08/21

Parameter	Native Sample	Serial Dilution	Units	% D	Qual	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 04-06,08,10 QC Batch ID: WG1566218-6 QC Sample: L2159730-06 Client ID: MW22B-102921-						
Calcium, Total	37.0	36.8	mg/l	1		20
Iron, Total	2.52	2.48	mg/l	2		20
Magnesium, Total	7.09	7.31	mg/l	3		20
Dissolved Metals - Mansfield Lab Associated sample(s): 04-06,08,10 QC Batch ID: WG1566220-6 QC Sample: L2159730-06 Client ID: MW22B-102921-						
Calcium, Dissolved	32.2	30.5	mg/l	5		20
Magnesium, Dissolved	5.49	6.01	mg/l	9		20

**Project Name:** SUPPLEMENTAL RI SAMPLING PRGM.  
**Project Number:** 0127981-023

Serial\_No:11082119:37  
**Lab Number:** L2159730  
**Report Date:** 11/08/21

### Sample Receipt and Container Information

Were project specific reporting limits specified? YES

#### Cooler Information

<b>Cooler</b>	<b>Custody Seal</b>
A	Absent
B	Absent

#### Container Information

<b>Container ID</b>	<b>Container Type</b>	<b>Cooler</b>	<b>Initial pH</b>	<b>Final pH</b>	<b>Temp deg C</b>	<b>Pres</b>	<b>Seal</b>	<b>Frozen Date/Time</b>	<b>Analysis(*)</b>
L2159730-01A1	Plastic 250ml unpreserved	A	NA		3.9	Y	Absent		A2-NY-537-ISOTOPE(14)
L2159730-01B	Plastic 250ml unpreserved	A	NA		3.9	Y	Absent		A2-NY-537-ISOTOPE(14)
L2159730-01B1	Plastic 250ml unpreserved	A	NA		3.9	Y	Absent		A2-NY-537-ISOTOPE(14)
L2159730-01C	Plastic 250ml unpreserved	A	NA		3.9	Y	Absent		A2-NY-537-ISOTOPE(14)
L2159730-01D	Amber 250ml unpreserved	B	7	7	3.1	Y	Absent		A2-1,4-DIOXANE-SIM(7)
L2159730-01E	Amber 250ml unpreserved	B	7	7	3.1	Y	Absent		A2-1,4-DIOXANE-SIM(7)
L2159730-01F	Plastic 250ml unpreserved	B	7	7	3.1	Y	Absent		A2-1,4-DIOXANE-SIM(7)
L2159730-02A	Plastic 250ml unpreserved	A	NA		3.9	Y	Absent		A2-NY-537-ISOTOPE(14)
L2159730-02B	Plastic 250ml unpreserved	A	NA		3.9	Y	Absent		A2-NY-537-ISOTOPE(14)
L2159730-02C	Amber 250ml unpreserved	B	7	7	3.1	Y	Absent		A2-1,4-DIOXANE-SIM(7)
L2159730-02D	Amber 250ml unpreserved	B	7	7	3.1	Y	Absent		A2-1,4-DIOXANE-SIM(7)
L2159730-03A	Plastic 250ml unpreserved	A	NA		3.9	Y	Absent		A2-NY-537-ISOTOPE(14)
L2159730-03C	Amber 250ml unpreserved	B	7	7	3.1	Y	Absent		A2-1,4-DIOXANE-SIM(7)
L2159730-04A	Vial HCl preserved	B	NA		3.1	Y	Absent		NYTCL-8260-R2(14)
L2159730-04B	Vial HCl preserved	B	NA		3.1	Y	Absent		NYTCL-8260-R2(14)
L2159730-04C	Vial HCl preserved	B	NA		3.1	Y	Absent		NYTCL-8260-R2(14)
L2159730-04D	Amber 250ml unpreserved	B	7	7	3.1	Y	Absent		NYTCL-8270-SIM-LVI(7),NYTCL-8270-LVI(7)
L2159730-04E	Amber 250ml unpreserved	B	7	7	3.1	Y	Absent		NYTCL-8270-SIM-LVI(7),NYTCL-8270-LVI(7)
L2159730-04F	Plastic 250ml unpreserved	B	7	7	3.1	Y	Absent		-

\*Values in parentheses indicate holding time in days

**Container Information**

<b>Container ID</b>	<b>Container Type</b>	<b>Cooler</b>	<b>Initial pH</b>	<b>Final pH</b>	<b>Temp deg C</b>	<b>Pres</b>	<b>Seal</b>	<b>Frozen Date/Time</b>	<b>Analysis(*)</b>
L2159730-04G	Plastic 250ml HNO3 preserved	B	<2	<2	3.1	Y	Absent		BE-TI(180),BA-TI(180),AS-TI(180),AG-TI(180),AL-TI(180),CR-TI(180),NI-TI(180),TL-TI(180),PB-TI(180),SE-TI(180),CU-TI(180),SB-TI(180),ZN-TI(180),CO-TI(180),V-TI(180),HG-T(28),MN-TI(180),FE-TI(180),MG-TI(180),NA-TI(180),CD-TI(180),CA-TI(180),K-TI(180)
L2159730-04X	Plastic 120ml HNO3 preserved Filtrates	B	NA		3.1	Y	Absent		PB-SI(180),TL-SI(180),FE-SI(180),BA-SI(180),AS-SI(180),NI-SI(180),AG-SI(180),MN-SI(180),NA-SI(180),CU-SI(180),BE-SI(180),CD-SI(180),CO-SI(180),AL-SI(180),K-SI(180),MG-SI(180),SB-SI(180),CR-SI(180),CA-SI(180),V-SI(180),HG-S(28),SE-SI(180),ZN-SI(180)
L2159730-05A	Vial HCl preserved	B	NA		3.1	Y	Absent		NYTCL-8260-R2(14)
L2159730-05B	Vial HCl preserved	B	NA		3.1	Y	Absent		NYTCL-8260-R2(14)
L2159730-05C	Vial HCl preserved	B	NA		3.1	Y	Absent		NYTCL-8260-R2(14)
L2159730-05D	Amber 250ml unpreserved	B	7	7	3.1	Y	Absent		NYTCL-8270-SIM-LVI(7),NYTCL-8270-LVI(7)
L2159730-05E	Amber 250ml unpreserved	B	7	7	3.1	Y	Absent		NYTCL-8270-SIM-LVI(7),NYTCL-8270-LVI(7)
L2159730-05F	Plastic 250ml unpreserved	B	7	7	3.1	Y	Absent		-
L2159730-05G	Plastic 250ml HNO3 preserved	B	<2	<2	3.1	Y	Absent		BE-TI(180),AS-TI(180),BA-TI(180),AG-TI(180),AL-TI(180),TL-TI(180),NI-TI(180),CR-TI(180),PB-TI(180),ZN-TI(180),SB-TI(180),CU-TI(180),SE-TI(180),V-TI(180),CO-TI(180),MG-TI(180),MN-TI(180),FE-TI(180),HG-T(28),CA-TI(180),K-TI(180),NA-TI(180),CD-TI(180)
L2159730-05X	Plastic 120ml HNO3 preserved Filtrates	B	NA		3.1	Y	Absent		PB-SI(180),TL-SI(180),FE-SI(180),BA-SI(180),CU-SI(180),NI-SI(180),MN-SI(180),AG-SI(180),AS-SI(180),NA-SI(180),BE-SI(180),CO-SI(180),CD-SI(180),AL-SI(180),SB-SI(180),CR-SI(180),K-SI(180),MG-SI(180),CA-SI(180),SE-SI(180),V-SI(180),ZN-SI(180),HG-S(28)
L2159730-06A	Vial HCl preserved	B	NA		3.1	Y	Absent		NYTCL-8260-R2(14)
L2159730-06A1	Vial HCl preserved	B	NA		3.1	Y	Absent		NYTCL-8260-R2(14)
L2159730-06A2	Vial HCl preserved	B	NA		3.1	Y	Absent		NYTCL-8260-R2(14)
L2159730-06B	Vial HCl preserved	B	NA		3.1	Y	Absent		NYTCL-8260-R2(14)
L2159730-06B1	Vial HCl preserved	B	NA		3.1	Y	Absent		NYTCL-8260-R2(14)
L2159730-06B2	Vial HCl preserved	B	NA		3.1	Y	Absent		NYTCL-8260-R2(14)
L2159730-06C	Vial HCl preserved	B	NA		3.1	Y	Absent		NYTCL-8260-R2(14)
L2159730-06C1	Vial HCl preserved	B	NA		3.1	Y	Absent		NYTCL-8260-R2(14)
L2159730-06C2	Vial HCl preserved	B	NA		3.1	Y	Absent		NYTCL-8260-R2(14)

\*Values in parentheses indicate holding time in days

**Container Information**

<b>Container ID</b>	<b>Container Type</b>	<b>Cooler</b>	<b>Initial pH</b>	<b>Final pH</b>	<b>Temp deg C</b>	<b>Pres</b>	<b>Seal</b>	<b>Frozen Date/Time</b>	<b>Analysis(*)</b>
L2159730-06D	Amber 250ml unpreserved	B	7	7	3.1	Y	Absent		NYTCL-8270-SIM-LVI(7)
L2159730-06D1	Amber 250ml unpreserved	B	7	7	3.1	Y	Absent		NYTCL-8270-SIM-LVI(7),NYTCL-8270-LVI(7)
L2159730-06D2	Amber 250ml unpreserved	B	7	7	3.1	Y	Absent		NYTCL-8270-SIM-LVI(7),NYTCL-8270-LVI(7)
L2159730-06E	Amber 250ml unpreserved	B	7	7	3.1	Y	Absent		NYTCL-8270-SIM-LVI(7),NYTCL-8270-LVI(7)
L2159730-06E1	Amber 250ml unpreserved	B	7	7	3.1	Y	Absent		NYTCL-8270-SIM-LVI(7),NYTCL-8270-LVI(7)
L2159730-06E2	Amber 250ml unpreserved	B	7	7	3.1	Y	Absent		NYTCL-8270-SIM-LVI(7),NYTCL-8270-LVI(7)
L2159730-06F	Plastic 250ml HNO3 preserved	B	<2	<2	3.1	Y	Absent		BE-TI(180),AS-TI(180),BA-TI(180),AG-TI(180),NI-TI(180),CR-TI(180),TL-TI(180),AL-TI(180),PB-TI(180),ZN-TI(180),CU-TI(180),SE-TI(180),SB-TI(180),CO-TI(180),V-TI(180),FE-TI(180),MG-TI(180),MN-TI(180),HG-T(28),NA-TI(180),CD-TI(180),K-TI(180),CA-TI(180)
L2159730-06F1	Plastic 250ml HNO3 preserved	B	<2	<2	3.1	Y	Absent		BE-TI(180),AS-TI(180),BA-TI(180),AG-TI(180),NI-TI(180),CR-TI(180),TL-TI(180),AL-TI(180),PB-TI(180),ZN-TI(180),CU-TI(180),SE-TI(180),SB-TI(180),CO-TI(180),V-TI(180),FE-TI(180),MG-TI(180),MN-TI(180),HG-T(28),NA-TI(180),CD-TI(180),K-TI(180),CA-TI(180)
L2159730-06F2	Plastic 250ml HNO3 preserved	B	<2	<2	3.1	Y	Absent		BE-TI(180),AS-TI(180),BA-TI(180),AG-TI(180),NI-TI(180),CR-TI(180),TL-TI(180),AL-TI(180),PB-TI(180),ZN-TI(180),CU-TI(180),SE-TI(180),SB-TI(180),CO-TI(180),V-TI(180),FE-TI(180),MG-TI(180),MN-TI(180),HG-T(28),NA-TI(180),CD-TI(180),K-TI(180),CA-TI(180)
L2159730-06H	Plastic 250ml unpreserved	A	7	7	3.9	Y	Absent		-
L2159730-06H1	Plastic 250ml unpreserved	A	7	7	3.9	Y	Absent		-
L2159730-06H2	Plastic 250ml unpreserved	A	7	7	3.9	Y	Absent		-
L2159730-06X	Plastic 120ml HNO3 preserved Filtrates	B	NA		3.1	Y	Absent		PB-SI(180),FE-SI(180),TL-SI(180),BA-SI(180),AS-SI(180),CU-SI(180),AG-SI(180),NA-SI(180),NI-SI(180),MN-SI(180),BE-SI(180),CD-SI(180),AL-SI(180),CO-SI(180),SB-SI(180),CR-SI(180),K-SI(180),MG-SI(180),HG-S(28),CA-SI(180),SE-SI(180),V-SI(180),ZN-SI(180)
L2159730-06X1	Plastic 120ml HNO3 preserved Filtrates	B	NA		3.1	Y	Absent		PB-SI(180),FE-SI(180),TL-SI(180),BA-SI(180),AS-SI(180),CU-SI(180),AG-SI(180),NA-SI(180),NI-SI(180),MN-SI(180),BE-SI(180),CD-SI(180),AL-SI(180),CO-SI(180),SB-SI(180),CR-SI(180),K-SI(180),MG-SI(180),HG-S(28),CA-SI(180),SE-SI(180),V-SI(180),ZN-SI(180)

\*Values in parentheses indicate holding time in days

**Project Name:** SUPPLEMENTAL RI SAMPLING PRGM.  
**Project Number:** 0127981-023

Serial\_No:11082119:37

**Lab Number:** L2159730  
**Report Date:** 11/08/21

**Container Information**

<b>Container ID</b>	<b>Container Type</b>	<b>Cooler</b>	<b>Initial pH</b>	<b>Final pH</b>	<b>Temp deg C</b>	<b>Pres</b>	<b>Seal</b>	<b>Frozen Date/Time</b>	<b>Analysis(*)</b>
L2159730-06X2	Plastic 120ml HNO3 preserved Filtrates	B	NA		3.1	Y	Absent		PB-SI(180),FE-SI(180),TL-SI(180),BA-SI(180),AS-SI(180),CU-SI(180),AG-SI(180),NA-SI(180),NI-SI(180),MN-SI(180),BE-SI(180),CD-SI(180),AL-SI(180),CO-SI(180),SB-SI(180),CR-SI(180),K-SI(180),MG-SI(180),HG-S(28),CA-SI(180),SE-SI(180),V-SI(180),ZN-SI(180)
L2159730-07A	Plastic 250ml unpreserved	A	NA		3.9	Y	Absent		A2-NY-537-ISOTOPE(14)
L2159730-07C	Amber 250ml unpreserved	B	7	7	3.1	Y	Absent		A2-1,4-DIOXANE-SIM(7)
L2159730-08A	Vial HCl preserved	B	NA		3.1	Y	Absent		NYTCL-8260-R2(14)
L2159730-08B	Vial HCl preserved	B	NA		3.1	Y	Absent		NYTCL-8260-R2(14)
L2159730-08C	Vial HCl preserved	B	NA		3.1	Y	Absent		NYTCL-8260-R2(14)
L2159730-08D	Amber 250ml unpreserved	B	7	7	3.1	Y	Absent		NYTCL-8270-SIM-LVI(7),NYTCL-8270-LVI(7)
L2159730-08E	Amber 250ml unpreserved	B	7	7	3.1	Y	Absent		NYTCL-8270-SIM-LVI(7),NYTCL-8270-LVI(7)
L2159730-08F	Plastic 250ml unpreserved	B	7	7	3.1	Y	Absent		-
L2159730-08G	Plastic 250ml HNO3 preserved	B	<2	<2	3.1	Y	Absent		BE-TI(180),BA-TI(180),AS-TI(180),AG-TI(180),CR-TI(180),NI-TI(180),AL-TI(180),TL-TI(180),PB-TI(180),ZN-TI(180),SE-TI(180),SB-TI(180),CU-TI(180),V-TI(180),CO-TI(180),FE-TI(180),HG-T(28),MG-TI(180),MN-TI(180),KTI(180),NA-TI(180),CD-TI(180),CA-TI(180)
L2159730-08X	Plastic 120ml HNO3 preserved Filtrates	B	NA		3.1	Y	Absent		PB-SI(180),TL-SI(180),FE-SI(180),BA-SI(180),AG-SI(180),MN-SI(180),NI-SI(180),CU-SI(180),NA-SI(180),AS-SI(180),CD-SI(180),CO-SI(180),AL-SI(180),BE-SI(180),CR-SI(180),MG-SI(180),SB-SI(180),K-SI(180),CA-SI(180),ZN-SI(180),HG-S(28),SE-SI(180),V-SI(180)
L2159730-09A	Vial HCl preserved	B	NA		3.1	Y	Absent		NYTCL-8260-R2(14)
L2159730-09B	Vial HCl preserved	B	NA		3.1	Y	Absent		NYTCL-8260-R2(14)
L2159730-10A	Vial HCl preserved	B	NA		3.1	Y	Absent		NYTCL-8260-R2(14)
L2159730-10B	Vial HCl preserved	B	NA		3.1	Y	Absent		NYTCL-8260-R2(14)
L2159730-10C	Vial HCl preserved	B	NA		3.1	Y	Absent		NYTCL-8260-R2(14)
L2159730-10D	Amber 250ml unpreserved	B	7	7	3.1	Y	Absent		NYTCL-8270-SIM-LVI(7),NYTCL-8270-LVI(7)
L2159730-10E	Amber 250ml unpreserved	B	7	7	3.1	Y	Absent		NYTCL-8270-SIM-LVI(7),NYTCL-8270-LVI(7)
L2159730-10F	Plastic 250ml unpreserved	B	7	7	3.1	Y	Absent		-

\*Values in parentheses indicate holding time in days

**Project Name:** SUPPLEMENTAL RI SAMPLING PRGM.  
**Project Number:** 0127981-023

Serial\_No:11082119:37  
**Lab Number:** L2159730  
**Report Date:** 11/08/21

### Container Information

<b>Container ID</b>	<b>Container Type</b>	<b>Cooler</b>	<b>Initial pH</b>	<b>Final pH</b>	<b>Temp deg C</b>	<b>Pres</b>	<b>Seal</b>	<b>Frozen Date/Time</b>	<b>Analysis(*)</b>
L2159730-10G	Plastic 250ml HNO3 preserved	B	<2	<2	3.1	Y	Absent		BE-TI(180),AS-TI(180),BA-TI(180),AG-TI(180),CR-TI(180),NI-TI(180),AL-TI(180),TL-TI(180),SB-TI(180),CU-TI(180),PB-TI(180),SE-TI(180),ZN-TI(180),CO-TI(180),V-TI(180),FE-TI(180),MG-TI(180),HG-T(28),MN-TI(180),NA-TI(180),CD-TI(180),CA-TI(180),K-TI(180)
L2159730-10X	Plastic 120ml HNO3 preserved Filtrates	B	NA		3.1	Y	Absent		PB-SI(180),FE-SI(180),TL-SI(180),BA-SI(180),AS-SI(180),NA-SI(180),AG-SI(180),MN-SI(180),NI-SI(180),CU-SI(180),CO-SI(180),BE-SI(180),AL-SI(180),CD-SI(180),MG-SI(180),SB-SI(180),K-SI(180),CR-SI(180),V-SI(180),CA-SI(180),HG-S(28),ZN-SI(180),SE-SI(180)
L2159730-11A	Plastic 250ml unpreserved	B	NA		3.1	Y	Absent		A2-NY-537-ISOTOPE(14)

### Container Comments

L2159730-04D received with broken cap

\*Values in parentheses indicate holding time in days

### PFAS PARAMETER SUMMARY

Parameter	Acronym	CAS Number
<b>PERFLUOROALKYL CARBOXYLIC ACIDS (PFCAs)</b>		
Perfluorooctadecanoic Acid	PFODA	16517-11-6
Perfluorohexadecanoic Acid	PFHxDA	67905-19-5
Perfluorotetradecanoic Acid	PFTA	376-06-7
Perfluorotridecanoic Acid	PFTrDA	72629-94-8
Perfluorododecanoic Acid	PFDoA	307-55-1
Perfluoroundecanoic Acid	PFUnA	2058-94-8
Perfluorodecanoic Acid	PFDA	335-76-2
Perfluorononanoic Acid	PFNA	375-95-1
Perfluoroctanoic Acid	PFOA	335-67-1
Perfluoroheptanoic Acid	PFHpA	375-85-9
Perfluorohexanoic Acid	PFHxA	307-24-4
Perfluoropentanoic Acid	PPPeA	2706-90-3
Perfluorobutanoic Acid	PFBA	375-22-4
<b>PERFLUOROALKYL SULFONIC ACIDS (PFSAs)</b>		
Perfluorododecanesulfonic Acid	PFDoDS	79780-39-5
Perfluorodecanesulfonic Acid	PFDS	335-77-3
Perfluorononanesulfonic Acid	PFNS	68259-12-1
Perfluoroctanesulfonic Acid	PFOS	1763-23-1
Perfluoroheptanesulfonic Acid	PFHpS	375-92-8
Perfluorohexanesulfonic Acid	PFHxS	355-46-4
Perfluoropentanesulfonic Acid	PPPeS	2706-91-4
Perfluorobutanesulfonic Acid	PFBS	375-73-5
<b>FLUOROTELOMERS</b>		
1H,1H,2H,2H-Perfluorododecanesulfonic Acid	10:2FTS	120226-60-0
1H,1H,2H,2H-Perfluorodecanesulfonic Acid	8:2FTS	39108-34-4
1H,1H,2H,2H-Perfluoroctanesulfonic Acid	6:2FTS	27619-97-2
1H,1H,2H,2H-Perfluorohexanesulfonic Acid	4:2FTS	757124-72-4
<b>PERFLUOROALKANE SULFONAMIDES (FASAs)</b>		
Perfluoroctanesulfonamide	FOSA	754-91-6
N-Ethyl Perfluoroctane Sulfonamide	NEtFOSA	4151-50-2
N-Methyl Perfluoroctane Sulfonamide	NMeFOSA	31506-32-8
<b>PERFLUOROALKANE SULFONYL SUBSTANCES</b>		
N-Ethyl Perfluoroctanesulfonamido Ethanol	NEtFOSE	1691-99-2
N-Methyl Perfluoroctanesulfonamido Ethanol	NMeFOSE	24448-09-7
N-Ethyl Perfluoroctanesulfonamidoacetic Acid	NEtFOSAA	2991-50-6
N-Methyl Perfluoroctanesulfonamidoacetic Acid	NMeFOSAA	2355-31-9
<b>PER- and POLYFLUOROALKYL ETHER CARBOXYLIC ACIDS</b>		
2,3,3,3-Tetrafluoro-2-[1,1,2,2,3,3,3-Heptafluoropropoxy]-Propanoic Acid	HFPO-DA	13252-13-6
4,8-Dioxa-3h-Perfluorononanoic Acid	ADONA	919005-14-4
<b>CHLORO-PERFLUOROALKYL SULFONIC ACIDS</b>		
11-Chloroeicosfluoro-3-Oxaundecane-1-Sulfonic Acid	11CI-PF3OUdS	763051-92-9
9-Chlorohexadecafluoro-3-Oxanone-1-Sulfonic Acid	9CI-PF3ONS	756426-58-1
<b>PERFLUORETHER SULFONIC ACIDS (PFESAs)</b>		
Perfluoro(2-Ethoxyethane)Sulfonic Acid	PFEESA	113507-82-7
<b>PERFLUORETHER/POLYETHER CARBOXYLIC ACIDS (PFPCAs)</b>		
Perfluoro-3-Methoxypropanoic Acid	PFMPA	377-73-1
Perfluoro-4-Methoxybutanoic Acid	PFMBA	863090-89-5
Nonafuoro-3,6-Dioxaheptanoic Acid	NFDHA	151772-58-6

**Project Name:** SUPPLEMENTAL RI SAMPLING PRGM.  
**Project Number:** 0127981-023

**Lab Number:** L2159730  
**Report Date:** 11/08/21

## GLOSSARY

### Acronyms

DL	- Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the limit of quantitation (LOQ). The DL includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
EDL	- Estimated Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The EDL includes any adjustments from dilutions, concentrations or moisture content, where applicable. The use of EDLs is specific to the analysis of PAHs using Solid-Phase Microextraction (SPME).
EMPC	- Estimated Maximum Possible Concentration: The concentration that results from the signal present at the retention time of an analyte when the ions meet all of the identification criteria except the ion abundance ratio criteria. An EMPC is a worst-case estimate of the concentration.
EPA	- Environmental Protection Agency.
LCS	- Laboratory Control Sample: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
LCSD	- Laboratory Control Sample Duplicate: Refer to LCS.
LFB	- Laboratory Fortified Blank: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
LOD	- Limit of Detection: This value represents the level to which a target analyte can reliably be detected for a specific analyte in a specific matrix by a specific method. The LOD includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
LOQ	- Limit of Quantitation: The value at which an instrument can accurately measure an analyte at a specific concentration. The LOQ includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
	Limit of Quantitation: The value at which an instrument can accurately measure an analyte at a specific concentration. The LOQ includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
MDL	- Method Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The MDL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
MS	- Matrix Spike Sample: A sample prepared by adding a known mass of target analyte to a specified amount of matrix sample for which an independent estimate of target analyte concentration is available. For Method 332.0, the spike recovery is calculated using the native concentration, including estimated values.
MSD	- Matrix Spike Sample Duplicate: Refer to MS.
NA	- Not Applicable.
NC	- Not Calculated: Term is utilized when one or more of the results utilized in the calculation are non-detect at the parameter's reporting unit.
NDPA/DPA	- N-Nitrosodiphenylamine/Diphenylamine.
NI	- Not Ignitable.
NP	- Non-Plastic: Term is utilized for the analysis of Atterberg Limits in soil.
NR	- No Results: Term is utilized when 'No Target Compounds Requested' is reported for the analysis of Volatile or Semivolatile Organic TIC only requests.
RL	- Reporting Limit: The value at which an instrument can accurately measure an analyte at a specific concentration. The RL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
RPD	- Relative Percent Difference: The results from matrix and/or matrix spike duplicates are primarily designed to assess the precision of analytical results in a given matrix and are expressed as relative percent difference (RPD). Values which are less than five times the reporting limit for any individual parameter are evaluated by utilizing the absolute difference between the values; although the RPD value will be provided in the report.
SRM	- Standard Reference Material: A reference sample of a known or certified value that is of the same or similar matrix as the associated field samples.
STLP	- Semi-dynamic Tank Leaching Procedure per EPA Method 1315.
TEF	- Toxic Equivalency Factors: The values assigned to each dioxin and furan to evaluate their toxicity relative to 2,3,7,8-TCDD.
TEQ	- Toxic Equivalent: The measure of a sample's toxicity derived by multiplying each dioxin and furan by its corresponding TEF and then summing the resulting values.
TIC	- Tentatively Identified Compound: A compound that has been identified to be present and is not part of the target compound list (TCL) for the method and/or program. All TICs are qualitatively identified and reported as estimated concentrations.

*Report Format: DU Report with 'J' Qualifiers*



**Project Name:** SUPPLEMENTAL RI SAMPLING PRGM.  
**Project Number:** 0127981-023

**Lab Number:** L2159730  
**Report Date:** 11/08/21

#### Footnotes

- 1 - The reference for this analyte should be considered modified since this analyte is absent from the target analyte list of the original method.

#### Terms

**Analytical Method:** Both the document from which the method originates and the analytical reference method. (Example: EPA 8260B is shown as 1,8260B.) The codes for the reference method documents are provided in the References section of the Addendum.

**Difference:** With respect to Total Oxidizable Precursor (TOP) Assay analysis, the difference is defined as the Post-Treatment value minus the Pre-Treatment value.

**Final pH:** As it pertains to Sample Receipt & Container Information section of the report, Final pH reflects pH of container determined after adjustment at the laboratory, if applicable. If no adjustment required, value reflects Initial pH.

**Frozen Date/Time:** With respect to Volatile Organics in soil, Frozen Date/Time reflects the date/time at which associated Reagent Water-preserved vials were initially frozen. Note: If frozen date/time is beyond 48 hours from sample collection, value will be reflected in 'bold'.

**Initial pH:** As it pertains to Sample Receipt & Container Information section of the report, Initial pH reflects pH of container determined upon receipt, if applicable.

**PAH Total:** With respect to Alkylated PAH analyses, the 'PAHs, Total' result is defined as the summation of results for all or a subset of the following compounds: Naphthalene, C1-C4 Naphthalenes, 2-Methylnaphthalene, 1-Methylnaphthalene, Biphenyl, Acenaphthylene, Acenaphthene, Fluorene, C1-C3 Fluorenes, Phenanthrene, C1-C4 Phenanthrenes/Anthracenes, Anthracene, Fluoranthene, Pyrene, C1-C4 Fluoranthrenes/Pyrenes, Benz(a)anthracene, Chrysene, C1-C4 Chrysenes, Benzo(b)fluoranthene, Benzo(j)+(k)fluoranthene, Benzo(e)pyrene, Benzo(a)pyrene, Perylene, Indeno(1,2,3-cd)pyrene, Dibenz(ah)+(ac)anthracene, Benzo(g,h,i)perylene. If a 'Total' result is requested, the results of its individual components will also be reported.

**PFAS Total:** With respect to PFAS analyses, the 'PFAS, Total (5)' result is defined as the summation of results for: PFHpA, PFHxS, PFOA, PFNA and PFOS. In addition, the 'PFAS, Total (6)' result is defined as the summation of results for: PFHpA, PFHxS, PFOA, PFNA, PFDA and PFOS. For MassDEP DW compliance analysis only, the 'PFAS, Total (6)' result is defined as the summation of results at or above the RL. Note: If a 'Total' result is requested, the results of its individual components will also be reported.

The target compound Chlordane (CAS No. 57-74-9) is reported for GC ECD analyses. Per EPA, this compound "refers to a mixture of chlordane isomers, other chlorinated hydrocarbons and numerous other components." (Reference: USEPA Toxicological Review of Chlordane, In Support of Summary Information on the Integrated Risk Information System (IRIS), December 1997.)

**Total:** With respect to Organic analyses, a 'Total' result is defined as the summation of results for individual isomers or Aroclors. If a 'Total' result is requested, the results of its individual components will also be reported. This is applicable to 'Total' results for methods 8260, 8081 and 8082.

#### Data Qualifiers

- A** - Spectra identified as "Aldol Condensates" are byproducts of the extraction/concentration procedures when acetone is introduced in the process.
- B** - The analyte was detected above the reporting limit in the associated method blank. Flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For MCP-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For DOD-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank AND the analyte was detected above one-half the reporting limit (or above the reporting limit for common lab contaminants) in the associated method blank. For NJ-Air-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte above the reporting limit. For NJ-related projects (excluding Air), flag only applies to associated field samples that have detectable concentrations of the analyte, which was detected above the reporting limit in the associated method blank or above five times the reporting limit for common lab contaminants (Phthalates, Acetone, Methylene Chloride, 2-Butanone).
- C** - Co-elution: The target analyte co-elutes with a known lab standard (i.e. surrogate, internal standards, etc.) for co-extracted analyses.
- D** - Concentration of analyte was quantified from diluted analysis. Flag only applies to field samples that have detectable concentrations of the analyte.
- E** - Concentration of analyte exceeds the range of the calibration curve and/or linear range of the instrument.
- F** - The ratio of quantifier ion response to qualifier ion response falls outside of the laboratory criteria. Results are considered to be an estimated maximum concentration.
- G** - The concentration may be biased high due to matrix interferences (i.e., co-elution) with non-target compound(s). The result should be considered estimated.
- H** - The analysis of pH was performed beyond the regulatory-required holding time of 15 minutes from the time of sample collection.
- I** - The lower value for the two columns has been reported due to obvious interference.
- J** - Estimated value. The Target analyte concentration is below the quantitation limit (RL), but above the Method Detection Limit (MDL) or Estimated Detection Limit (EDL) for SPME-related analyses. This represents an estimated concentration for Tentatively Identified Compounds (TICs).
- M** - Reporting Limit (RL) exceeds the MCP CAM Reporting Limit for this analyte.
- ND** - Not detected at the method detection limit (MDL) for the sample, or estimated detection limit (EDL) for SPME-related analyses.

**Report Format:** DU Report with 'J' Qualifiers



**Project Name:** SUPPLEMENTAL RI SAMPLING PRGM.  
**Project Number:** 0127981-023

**Lab Number:** L2159730  
**Report Date:** 11/08/21

**Data Qualifiers**

- NJ** - Presumptive evidence of compound. This represents an estimated concentration for Tentatively Identified Compounds (TICs), where the identification is based on a mass spectral library search.
- P** - The RPD between the results for the two columns exceeds the method-specified criteria.
- Q** - The quality control sample exceeds the associated acceptance criteria. For DOD-related projects, LCS and/or Continuing Calibration Standard exceedences are also qualified on all associated sample results. Note: This flag is not applicable for matrix spike recoveries when the sample concentration is greater than 4x the spike added or for batch duplicate RPD when the sample concentrations are less than 5x the RL. (Metals only.)
- R** - Analytical results are from sample re-analysis.
- RE** - Analytical results are from sample re-extraction.
- S** - Analytical results are from modified screening analysis.
- V** - The surrogate associated with this target analyte has a recovery outside the QC acceptance limits. (Applicable to MassDEP DW Compliance samples only.)
- Z** - The batch matrix spike and/or duplicate associated with this target analyte has a recovery/RPD outside the QC acceptance limits. (Applicable to MassDEP DW Compliance samples only.)

*Report Format: DU Report with 'J' Qualifiers*



**Project Name:** SUPPLEMENTAL RI SAMPLING PRGM.  
**Project Number:** 0127981-023

**Lab Number:** L2159730  
**Report Date:** 11/08/21

## REFERENCES

- 1 Test Methods for Evaluating Solid Waste: Physical/Chemical Methods. EPA SW-846. Third Edition. Updates I - VI, 2018.
- 134 Determination of Selected Perfluorinated Alkyl Acids in Drinking Water by Solid Phase Extraction and Liquid Chromatography/Tandem Mass Spectrometry (LC/MS/MS) using Isotope Dilution. Alpha SOP 23528.

## LIMITATION OF LIABILITIES

Alpha Analytical performs services with reasonable care and diligence normal to the analytical testing laboratory industry. In the event of an error, the sole and exclusive responsibility of Alpha Analytical shall be to re-perform the work at its own expense. In no event shall Alpha Analytical be held liable for any incidental, consequential or special damages, including but not limited to, damages in any way connected with the use of, interpretation of, information or analysis provided by Alpha Analytical.

We strongly urge our clients to comply with EPA protocol regarding sample volume, preservation, cooling, containers, sampling procedures, holding time and splitting of samples in the field.



## Certification Information

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**The following analytes are not included in our Primary NELAP Scope of Accreditation:**

**Westborough Facility**

EPA 624/624.1: m/p-xylene, o-xylene, Naphthalene

EPA 625/625.1: alpha-Terpineol

EPA 8260C/8260D: NPW: 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene, Azobenzene; SCM: Iodomethane (methyl iodide), 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene.

EPA 8270D/8270E: NPW: Dimethylnaphthalene,1,4-Diphenylhydrazine, alpha-Terpineol; SCM: Dimethylnaphthalene,1,4-Diphenylhydrazine. SM4500: NPW: Amenable Cyanide; SCM: Total Phosphorus, TKN, NO<sub>2</sub>, NO<sub>3</sub>.

**Mansfield Facility**

**SM 2540D**: TSS

EPA 8082A: NPW: PCB: 1, 5, 31, 87,101, 110, 141, 151, 153, 180, 183, 187.

EPA TO-15: Halothane, 2,4,4-Trimethyl-2-pentene, 2,4,4-Trimethyl-1-pentene, Thiophene, 2-Methylthiophene, 3-Methylthiophene, 2-Ethylthiophene, 1,2,3-Trimethylbenzene, Indan, Indene, 1,2,4,5-Tetramethylbenzene, Benzothiophene, 1-Methylnaphthalene.

**Biological Tissue Matrix**: EPA 3050B

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**The following analytes are included in our Massachusetts DEP Scope of Accreditation**

**Westborough Facility:**

**Drinking Water**

EPA 300.0: Chloride, Nitrate-N, Fluoride, Sulfate; EPA 353.2: Nitrate-N, Nitrite-N; **SM4500NO3-F**: Nitrate-N, Nitrite-N; **SM4500F-C**, **SM4500CN-CE**, **EPA 180.1**, **SM2130B**, **SM4500CI-D**, **SM2320B**, **SM2540C**, **SM4500H-B**, **SM4500NO2-B**

EPA 332: Perchlorate; **EPA 524.2**: THMs and VOCs; **EPA 504.1**: EDB, DBCP.

**Microbiology**: **SM9215B**; **SM9223-P/A**, **SM9223B-Colilert-QT**, **SM9222D**.

**Non-Potable Water**

**SM4500H,B**, **EPA 120.1**, **SM2510B**, **SM2540C**, **SM2320B**, **SM4500CL-E**, **SM4500F-BC**, **SM4500NH3-BH**: Ammonia-N and Kjeldahl-N, **EPA 350.1**: Ammonia-N, LACHAT 10-107-06-1-B: Ammonia-N, **EPA 351.1**, **SM4500NO3-F**, **EPA 353.2**: Nitrate-N, **SM4500P-E**, **SM4500P-B**, **E**, **SM4500SO4-E**, **SM5220D**, **EPA 410.4**, **SM5210B**, **SM5310C**, **SM4500CL-D**, **EPA 1664**, **EPA 420.1**, **SM4500-CN-CE**, **SM2540D**, **EPA 300**: Chloride, Sulfate, Nitrate.

**EPA 624.1**: Volatile Halocarbons & Aromatics,

**EPA 608.3**: Chlordane, Toxaphene, Aldrin, alpha-BHC, beta-BHC, gamma-BHC, delta-BHC, Dieldrin, DDD, DDE, DDT, Endosulfan I, Endosulfan II, Endosulfan sulfate, Endrin, Endrin Aldehyde, Heptachlor, Heptachlor Epoxide, PCBs

**EPA 625.1**: SVOC (Acid/Base/Neutral Extractables), **EPA 600/4-81-045**: PCB-Oil.

**Microbiology**: **SM9223B-Colilert-QT**; **Enterolert-QT**, **SM9221E**, **EPA 1600**, **EPA 1603**, **SM9222D**.

**Mansfield Facility:**

**Drinking Water**

EPA 200.7: Al, Ba, Cd, Cr, Cu, Fe, Mn, Ni, Na, Ag, Ca, Zn. **EPA 200.8**: Al, Sb, As, Ba, Be, Cd, Cr, Cu, Pb, Mn, Ni, Se, Ag, TL, Zn. **EPA 245.1** Hg. **EPA 522**, **EPA 537.1**.

**Non-Potable Water**

EPA 200.7: Al, Sb, As, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Mo, Ni, K, Se, Ag, Na, Sr, Ti, V, Zn.

EPA 200.8: Al, Sb, As, Be, Cd, Cr, Cu, Fe, Pb, Mn, Ni, K, Se, Ag, Na, TL, Zn.

**EPA 245.1** Hg.

**SM2340B**

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For a complete listing of analytes and methods, please contact your Alpha Project Manager.


**CHAIN OF  
CUSTODY**

Westborough, MA 01581  
8 Walkup Dr.  
TEL: 508-898-9220  
FAX: 508-898-9193

Mansfield, MA 02048  
320 Forbes Blvd  
TEL: 508-822-9300  
FAX: 508-822-3288

**H&A Information:**H&A Client: *Haley & Aldrich Inc.*H&A Address: *200 Town centre*

Drive, Ste 2, Rochester, NY

H&A Phone: *585 - 321 - 4234*H&A Fax: *0*H&A Email: *Smckenna@haleyaldrich.com*These samples have been previously analyzed by Alpha 

Other project specific requirements/comments:

Please specify Metals or TAL.

ALPHA Lab ID  
(Lab Use Only)

Sample ID

## Collection

Date

Time

Sample Matrix

Sampler's Initials

- |           |                   |          |       |    |     |   |   |                                   |    |
|-----------|-------------------|----------|-------|----|-----|---|---|-----------------------------------|----|
| 59730- 01 | MW22B-102921-1105 | 10/29/21 | 11:05 | WG | ELL | X | X | MS/MSD                            | 12 |
| 02        | MW21B-102921-1135 | 10/29/21 | 11:35 | WG | ELL | X | X | *minimum amount provided for PFAS | 4  |
| 03        | MW21A-102921-1200 | 10/29/21 | 12:00 | WG | ELL | X | X |                                   | 4  |
| 64        | MW21B-102921-1340 | 10/29/21 | 13:40 | WG | ELL | X | X | # 1,4 dioxane analyses            | 7  |
| 05        | MW21A-102921-1515 | 10/29/21 | 15:15 | WG | ELL | X | X |                                   | 7  |
| 66        | MW22B-102921-     | 10/29/21 | 16:20 | WG | ELL | X | X | MS/MSD                            | 21 |
| 67        | 4125-102921-0001  | 10/29/21 |       | WG | ELL | X | X |                                   | 4  |
| 08        | 4125-102921-0002  | 10/29/21 |       | WG | ELL | X | X |                                   | 7  |
| 09        | 4125-102921-0003  | 10/29/21 |       | WG | ELL | X |   |                                   | 2  |
| 10        | 4125-102921-0004  | 10/29/21 |       | WG | ELL | X | X |                                   | 7  |

Preservative Code:

- A = None
- B = HCl
- C = HNO<sub>3</sub>
- D = H<sub>2</sub>SO<sub>4</sub>
- E = NaOH
- F = MeOH
- G = NaHSO<sub>4</sub>
- H = Na<sub>2</sub>S<sub>2</sub>O<sub>3</sub>
- K/E = Zn Ac/NaOH
- O = Other
- P = Plastic
- A = Amber Glass
- V = Vial
- G = Glass
- B = Bacteria Cup
- C = Cube
- O = Other
- E = Encore
- D = BOD Bottle

Service Centers  
Brewer, ME 04412 Portsmouth, NH 03801 Mahwah, NJ 07430  
Albany, NY 12205 Tonawanda, NY 14150 Holmes, PA 19043

Page 1  
of 1

Date Rec'd  
in Lab

10/30/21

ALPHA Job #  
L2159730

**Project Information**Project Name: *Supplemental RI Sampling Program-Annual GIN*Project Location: *Bath, NY*Project # *0127981-023***Deliverables**

- Email       Fax  
 EQuIS (1 File)       EQuIS (4 File)  
 Other: *ASP-B H&A Format*

**Billing Information**

- Same as Client Info  
PO #

**Regulatory Requirements (Program/Criteria)****Disposal Site Information**

Please identify below location of applicable disposal facilities.

**Disposal Facility:**

- NJ       NY  
 Other

Note: Select State from menu &amp; identify criteria.

**ANALYSIS**

NYTUL-0260  
NYTCL-SV065-  
GIA 8270D (LV1)  
PFAS via  
LCMSMS-1580  
14 PLEXAINE  
OPA 8270D SIM  
Total Metals  
Geo IDP  
DISSOLVED METALS  
(ZAB FLISE)

**Sample Filtration**

- Done  
 Lab to do  
**Preservation**  
 Lab to do

(Please Specify below)

**Sample Specific Comments**

MS/MSD  
\*minimum amount provided for PFAS  
# 1,4 dioxane analyses  
MS/MSD

Please print clearly, legibly and completely. Samples can not be logged in and turnaround time clock will not start until any ambiguities are resolved. Alpha Analytical's services under this Chain of Custody shall be performed in accordance with terms and conditions within Blanket Service Agreement# 2015-18-Alpha Analytical by and between Haley & Aldrich, Inc., its subsidiaries and affiliates and Alpha Analytical.

## Relinquished By:

*James Hawksbury*  
*Relinquished 10/29/21*

Date/Time

10/29/21 18:15  
10/29/21 18:15

Received By:

*R. Cummings*  
*Received 10/30/21*

Date/Time

10/29/21 18:15  
10/30/21 02:45



## ANALYTICAL REPORT

Lab Number:	L2220562
Client:	Haley & Aldrich 200 Town Centre Drive Suite 2 Rochester, NY 14623-4264
ATTN:	Titania Ng
Phone:	(617) 886-7400
Project Name:	AOC-32 SURFACE WATER SAMPLING
Project Number:	0127981-025
Report Date:	05/26/22

The original project report/data package is held by Alpha Analytical. This report/data package is paginated and should be reproduced only in its entirety. Alpha Analytical holds no responsibility for results and/or data that are not consistent with the original.

Certifications & Approvals: MA (M-MA086), NH NELAP (2064), CT (PH-0574), IL (200077), ME (MA00086), MD (348), NJ (MA935), NY (11148), NC (25700/666), PA (68-03671), RI (LAO00065), TX (T104704476), VT (VT-0935), VA (460195), USDA (Permit #P330-17-00196).

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Eight Walkup Drive, Westborough, MA 01581-1019  
508-898-9220 (Fax) 508-898-9193 800-624-9220 - [www.alphalab.com](http://www.alphalab.com)



**Project Name:** AOC-32 SURFACE WATER SAMPLING  
**Project Number:** 0127981-025

**Lab Number:** L2220562  
**Report Date:** 05/26/22

<b>Alpha Sample ID</b>	<b>Client ID</b>	<b>Matrix</b>	<b>Sample Location</b>	<b>Collection Date/Time</b>	<b>Receive Date</b>
L2220562-01	SW-BGKD-02-0.5	WATER	BATH, NY	04/19/22 12:30	04/20/22
L2220562-02	SW-BGKD-01-0.75	WATER	BATH, NY	04/19/22 13:00	04/20/22
L2220562-03	SW-POND-01-1.5	WATER	BATH, NY	04/20/22 11:30	04/20/22
L2220562-04	4125-041922-0001	WATER	BATH, NY	04/19/22 00:00	04/20/22
L2220562-05	4125-042022-0002	WATER	BATH, NY	04/20/22 11:35	04/20/22
L2220562-06	4125-042022-0001	WATER	BATH, NY	04/20/22 00:00	04/20/22

**Project Name:** AOC-32 SURFACE WATER SAMPLING  
**Project Number:** 0127981-025

**Lab Number:** L2220562  
**Report Date:** 05/26/22

### Case Narrative

The samples were received in accordance with the Chain of Custody and no significant deviations were encountered during the preparation or analysis unless otherwise noted. Sample Receipt, Container Information, and the Chain of Custody are located at the back of the report.

Results contained within this report relate only to the samples submitted under this Alpha Lab Number and meet NELAP requirements for all NELAP accredited parameters unless otherwise noted in the following narrative. The data presented in this report is organized by parameter (i.e. VOC, SVOC, etc.). Sample specific Quality Control data (i.e. Surrogate Spike Recovery) is reported at the end of the target analyte list for each individual sample, followed by the Laboratory Batch Quality Control at the end of each parameter. Tentatively Identified Compounds (TICs), if requested, are reported for compounds identified to be present and are not part of the method/program Target Compound List, even if only a subset of the TCL are being reported. If a sample was re-analyzed or re-extracted due to a required quality control corrective action and if both sets of data are reported, the Laboratory ID of the re-analysis or re-extraction is designated with an "R" or "RE", respectively.

When multiple Batch Quality Control elements are reported (e.g. more than one LCS), the associated samples for each element are noted in the grey shaded header line of each data table. Any Laboratory Batch, Sample Specific % recovery or RPD value that is outside the listed Acceptance Criteria is bolded in the report. In reference to questions H (CAM) or 4 (RCP) when "NO" is checked, the performance criteria for CAM and RCP methods allow for some quality control failures to occur and still be within method compliance. In these instances, the specific failure is not narrated but noted in the associated QC Outlier Summary Report, located directly after the Case Narrative. QC information is also incorporated in the Data Usability Assessment table (Format 11) of our Data Merger tool, where it can be reviewed in conjunction with the sample result, associated regulatory criteria and any associated data usability implications.

Soil/sediments, solids and tissues are reported on a dry weight basis unless otherwise noted. Definitions of all data qualifiers and acronyms used in this report are provided in the Glossary located at the back of the report.

**HOLD POLICY** - For samples submitted on hold, Alpha's policy is to hold samples (with the exception of Air canisters) free of charge for 21 calendar days from the date the project is completed. After 21 calendar days, we will dispose of all samples submitted including those put on hold unless you have contacted your Alpha Project Manager and made arrangements for Alpha to continue to hold the samples. Air canisters will be disposed after 3 business days from the date the project is completed.

Please contact Project Management at 800-624-9220 with any questions.

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**Project Name:** AOC-32 SURFACE WATER SAMPLING  
**Project Number:** 0127981-025

**Lab Number:** L2220562  
**Report Date:** 05/26/22

### Case Narrative (continued)

#### Report Revision

May 26, 2022: The collection date for L2220562-03 has been amended.

#### Report Submission

April 29, 2022: This final report includes the results of all requested analyses.

April 27, 2022: This is a preliminary report.

All non-detect (ND) or estimated concentrations (J-qualified) have been quantitated to the limit noted in the MDL column.

#### Sample Receipt

L2220562-05: The sample collection time was obtained from the container labels.

#### Perfluorinated Alkyl Acids by Isotope Dilution

L2220562-01 through -06, WG1630826-1, and WG1630826-2: Extracted Internal Standard recoveries were outside the acceptance criteria for individual analytes. Please refer to the surrogate section of the report for details.

#### Total Metals

The WG1630149-3 MS recovery, performed on L2220562-01, is outside the acceptance criteria for antimony (72%). A post digestion spike was performed and was within acceptance criteria.

The WG1630149-3 MS recovery for sodium (52%), performed on L2220562-01, does not apply because the sample concentration is greater than four times the spike amount added.

#### Dissolved Metals

The WG1630052-3 MS recovery for sodium (65%), performed on L2220562-06, does not apply because the sample concentration is greater than four times the spike amount added.

I, the undersigned, attest under the pains and penalties of perjury that, to the best of my knowledge and belief and based upon my personal inquiry of those responsible for providing the information contained in this analytical report, such information is accurate and complete. This certificate of analysis is not complete unless this page accompanies any and all pages of this report.

Authorized Signature:

Title: Technical Director/Representative

Date: 05/26/22

# ORGANICS



# VOLATILES



Project Name: AOC-32 SURFACE WATER SAMPLING

Lab Number: L2220562

Project Number: 0127981-025

Report Date: 05/26/22

**SAMPLE RESULTS**

Lab ID:	L2220562-01	Date Collected:	04/19/22 12:30
Client ID:	SW-BGKD-02-0.5	Date Received:	04/20/22
Sample Location:	BATH, NY	Field Prep:	Not Specified

Sample Depth:

Matrix: Water  
 Analytical Method: 1,8260C  
 Analytical Date: 04/22/22 14:41  
 Analyst: LAC

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Volatile Organics by GC/MS - Westborough Lab</b>						
Methylene chloride	ND	ug/l	2.5	0.70	1	
1,1-Dichloroethane	ND	ug/l	2.5	0.70	1	
Chloroform	ND	ug/l	2.5	0.70	1	
Carbon tetrachloride	ND	ug/l	0.50	0.13	1	
1,2-Dichloropropane	ND	ug/l	1.0	0.14	1	
Dibromochloromethane	ND	ug/l	0.50	0.15	1	
1,1,2-Trichloroethane	ND	ug/l	1.5	0.50	1	
Tetrachloroethene	ND	ug/l	0.50	0.18	1	
Chlorobenzene	ND	ug/l	2.5	0.70	1	
Trichlorofluoromethane	ND	ug/l	2.5	0.70	1	
1,2-Dichloroethane	ND	ug/l	0.50	0.13	1	
1,1,1-Trichloroethane	ND	ug/l	2.5	0.70	1	
Bromodichloromethane	ND	ug/l	0.50	0.19	1	
trans-1,3-Dichloropropene	ND	ug/l	0.50	0.16	1	
cis-1,3-Dichloropropene	ND	ug/l	0.50	0.14	1	
Bromoform	ND	ug/l	2.0	0.65	1	
1,1,2,2-Tetrachloroethane	ND	ug/l	0.50	0.17	1	
Benzene	ND	ug/l	0.50	0.16	1	
Toluene	ND	ug/l	2.5	0.70	1	
Ethylbenzene	ND	ug/l	2.5	0.70	1	
Chloromethane	ND	ug/l	2.5	0.70	1	
Bromomethane	ND	ug/l	2.5	0.70	1	
Vinyl chloride	ND	ug/l	1.0	0.07	1	
Chloroethane	ND	ug/l	2.5	0.70	1	
1,1-Dichloroethene	ND	ug/l	0.50	0.17	1	
trans-1,2-Dichloroethene	ND	ug/l	2.5	0.70	1	
Trichloroethene	ND	ug/l	0.50	0.18	1	
1,2-Dichlorobenzene	ND	ug/l	2.5	0.70	1	



Project Name: AOC-32 SURFACE WATER SAMPLING

Lab Number: L2220562

Project Number: 0127981-025

Report Date: 05/26/22

**SAMPLE RESULTS**

Lab ID:	L2220562-01	Date Collected:	04/19/22 12:30
Client ID:	SW-BGKD-02-0.5	Date Received:	04/20/22
Sample Location:	BATH, NY	Field Prep:	Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Volatile Organics by GC/MS - Westborough Lab</b>						
1,3-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,4-Dichlorobenzene	ND		ug/l	2.5	0.70	1
Methyl tert butyl ether	ND		ug/l	2.5	0.70	1
p/m-Xylene	ND		ug/l	2.5	0.70	1
o-Xylene	ND		ug/l	2.5	0.70	1
cis-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1
Styrene	ND		ug/l	2.5	0.70	1
Dichlorodifluoromethane	ND		ug/l	5.0	1.0	1
Acetone	ND		ug/l	5.0	1.5	1
Carbon disulfide	ND		ug/l	5.0	1.0	1
2-Butanone	ND		ug/l	5.0	1.9	1
4-Methyl-2-pentanone	ND		ug/l	5.0	1.0	1
2-Hexanone	ND		ug/l	5.0	1.0	1
Bromochloromethane	ND		ug/l	2.5	0.70	1
1,2-Dibromoethane	ND		ug/l	2.0	0.65	1
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	0.70	1
Isopropylbenzene	ND		ug/l	2.5	0.70	1
1,2,3-Trichlorobenzene	ND		ug/l	2.5	0.70	1
1,2,4-Trichlorobenzene	ND		ug/l	2.5	0.70	1
Methyl Acetate	ND		ug/l	2.0	0.23	1
Cyclohexane	ND		ug/l	10	0.27	1
1,4-Dioxane	ND		ug/l	250	61.	1
Freon-113	ND		ug/l	2.5	0.70	1
Methyl cyclohexane	ND		ug/l	10	0.40	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	113		70-130
Toluene-d8	98		70-130
4-Bromofluorobenzene	102		70-130
Dibromofluoromethane	116		70-130

Project Name: AOC-32 SURFACE WATER SAMPLING

Lab Number: L2220562

Project Number: 0127981-025

Report Date: 05/26/22

**SAMPLE RESULTS**

Lab ID: L2220562-02  
 Client ID: SW-BGKD-01-0.75  
 Sample Location: BATH, NY

Date Collected: 04/19/22 13:00  
 Date Received: 04/20/22  
 Field Prep: Not Specified

Sample Depth:

Matrix: Water  
 Analytical Method: 1,8260C  
 Analytical Date: 04/22/22 15:06  
 Analyst: LAC

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Volatile Organics by GC/MS - Westborough Lab</b>						
Methylene chloride	ND		ug/l	2.5	0.70	1
1,1-Dichloroethane	ND		ug/l	2.5	0.70	1
Chloroform	ND		ug/l	2.5	0.70	1
Carbon tetrachloride	ND		ug/l	0.50	0.13	1
1,2-Dichloropropane	ND		ug/l	1.0	0.14	1
Dibromochloromethane	ND		ug/l	0.50	0.15	1
1,1,2-Trichloroethane	ND		ug/l	1.5	0.50	1
Tetrachloroethene	ND		ug/l	0.50	0.18	1
Chlorobenzene	ND		ug/l	2.5	0.70	1
Trichlorofluoromethane	ND		ug/l	2.5	0.70	1
1,2-Dichloroethane	ND		ug/l	0.50	0.13	1
1,1,1-Trichloroethane	ND		ug/l	2.5	0.70	1
Bromodichloromethane	ND		ug/l	0.50	0.19	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	0.16	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	0.14	1
Bromoform	ND		ug/l	2.0	0.65	1
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	0.17	1
Benzene	ND		ug/l	0.50	0.16	1
Toluene	ND		ug/l	2.5	0.70	1
Ethylbenzene	ND		ug/l	2.5	0.70	1
Chloromethane	ND		ug/l	2.5	0.70	1
Bromomethane	ND		ug/l	2.5	0.70	1
Vinyl chloride	ND		ug/l	1.0	0.07	1
Chloroethane	ND		ug/l	2.5	0.70	1
1,1-Dichloroethene	ND		ug/l	0.50	0.17	1
trans-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1
Trichloroethene	ND		ug/l	0.50	0.18	1
1,2-Dichlorobenzene	ND		ug/l	2.5	0.70	1



Project Name: AOC-32 SURFACE WATER SAMPLING

Lab Number: L2220562

Project Number: 0127981-025

Report Date: 05/26/22

**SAMPLE RESULTS**

Lab ID:	L2220562-02	Date Collected:	04/19/22 13:00
Client ID:	SW-BGKD-01-0.75	Date Received:	04/20/22
Sample Location:	BATH, NY	Field Prep:	Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Volatile Organics by GC/MS - Westborough Lab</b>						
1,3-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,4-Dichlorobenzene	ND		ug/l	2.5	0.70	1
Methyl tert butyl ether	ND		ug/l	2.5	0.70	1
p/m-Xylene	ND		ug/l	2.5	0.70	1
o-Xylene	ND		ug/l	2.5	0.70	1
cis-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1
Styrene	ND		ug/l	2.5	0.70	1
Dichlorodifluoromethane	ND		ug/l	5.0	1.0	1
Acetone	ND		ug/l	5.0	1.5	1
Carbon disulfide	ND		ug/l	5.0	1.0	1
2-Butanone	ND		ug/l	5.0	1.9	1
4-Methyl-2-pentanone	ND		ug/l	5.0	1.0	1
2-Hexanone	ND		ug/l	5.0	1.0	1
Bromochloromethane	ND		ug/l	2.5	0.70	1
1,2-Dibromoethane	ND		ug/l	2.0	0.65	1
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	0.70	1
Isopropylbenzene	ND		ug/l	2.5	0.70	1
1,2,3-Trichlorobenzene	ND		ug/l	2.5	0.70	1
1,2,4-Trichlorobenzene	ND		ug/l	2.5	0.70	1
Methyl Acetate	ND		ug/l	2.0	0.23	1
Cyclohexane	ND		ug/l	10	0.27	1
1,4-Dioxane	ND		ug/l	250	61.	1
Freon-113	ND		ug/l	2.5	0.70	1
Methyl cyclohexane	ND		ug/l	10	0.40	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	116		70-130
Toluene-d8	98		70-130
4-Bromofluorobenzene	105		70-130
Dibromofluoromethane	119		70-130

Project Name: AOC-32 SURFACE WATER SAMPLING

Lab Number: L2220562

Project Number: 0127981-025

Report Date: 05/26/22

**SAMPLE RESULTS**

Lab ID:	L2220562-03	Date Collected:	04/20/22 11:30
Client ID:	SW-POND-01-1.5	Date Received:	04/20/22
Sample Location:	BATH, NY	Field Prep:	Not Specified

Sample Depth:

Matrix: Water  
 Analytical Method: 1,8260C  
 Analytical Date: 04/22/22 15:31  
 Analyst: LAC

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Volatile Organics by GC/MS - Westborough Lab</b>						
Methylene chloride	ND	ug/l	2.5	0.70	1	
1,1-Dichloroethane	ND	ug/l	2.5	0.70	1	
Chloroform	ND	ug/l	2.5	0.70	1	
Carbon tetrachloride	ND	ug/l	0.50	0.13	1	
1,2-Dichloropropane	ND	ug/l	1.0	0.14	1	
Dibromochloromethane	ND	ug/l	0.50	0.15	1	
1,1,2-Trichloroethane	ND	ug/l	1.5	0.50	1	
Tetrachloroethene	ND	ug/l	0.50	0.18	1	
Chlorobenzene	ND	ug/l	2.5	0.70	1	
Trichlorofluoromethane	ND	ug/l	2.5	0.70	1	
1,2-Dichloroethane	ND	ug/l	0.50	0.13	1	
1,1,1-Trichloroethane	ND	ug/l	2.5	0.70	1	
Bromodichloromethane	ND	ug/l	0.50	0.19	1	
trans-1,3-Dichloropropene	ND	ug/l	0.50	0.16	1	
cis-1,3-Dichloropropene	ND	ug/l	0.50	0.14	1	
Bromoform	ND	ug/l	2.0	0.65	1	
1,1,2,2-Tetrachloroethane	ND	ug/l	0.50	0.17	1	
Benzene	ND	ug/l	0.50	0.16	1	
Toluene	ND	ug/l	2.5	0.70	1	
Ethylbenzene	ND	ug/l	2.5	0.70	1	
Chloromethane	ND	ug/l	2.5	0.70	1	
Bromomethane	ND	ug/l	2.5	0.70	1	
Vinyl chloride	ND	ug/l	1.0	0.07	1	
Chloroethane	ND	ug/l	2.5	0.70	1	
1,1-Dichloroethene	ND	ug/l	0.50	0.17	1	
trans-1,2-Dichloroethene	ND	ug/l	2.5	0.70	1	
Trichloroethene	ND	ug/l	0.50	0.18	1	
1,2-Dichlorobenzene	ND	ug/l	2.5	0.70	1	



Project Name: AOC-32 SURFACE WATER SAMPLING

Lab Number: L2220562

Project Number: 0127981-025

Report Date: 05/26/22

**SAMPLE RESULTS**

Lab ID:	L2220562-03	Date Collected:	04/20/22 11:30
Client ID:	SW-POND-01-1.5	Date Received:	04/20/22
Sample Location:	BATH, NY	Field Prep:	Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Volatile Organics by GC/MS - Westborough Lab</b>						
1,3-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,4-Dichlorobenzene	ND		ug/l	2.5	0.70	1
Methyl tert butyl ether	ND		ug/l	2.5	0.70	1
p/m-Xylene	ND		ug/l	2.5	0.70	1
o-Xylene	ND		ug/l	2.5	0.70	1
cis-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1
Styrene	ND		ug/l	2.5	0.70	1
Dichlorodifluoromethane	ND		ug/l	5.0	1.0	1
Acetone	ND		ug/l	5.0	1.5	1
Carbon disulfide	ND		ug/l	5.0	1.0	1
2-Butanone	ND		ug/l	5.0	1.9	1
4-Methyl-2-pentanone	ND		ug/l	5.0	1.0	1
2-Hexanone	ND		ug/l	5.0	1.0	1
Bromochloromethane	ND		ug/l	2.5	0.70	1
1,2-Dibromoethane	ND		ug/l	2.0	0.65	1
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	0.70	1
Isopropylbenzene	ND		ug/l	2.5	0.70	1
1,2,3-Trichlorobenzene	ND		ug/l	2.5	0.70	1
1,2,4-Trichlorobenzene	ND		ug/l	2.5	0.70	1
Methyl Acetate	ND		ug/l	2.0	0.23	1
Cyclohexane	ND		ug/l	10	0.27	1
1,4-Dioxane	ND		ug/l	250	61.	1
Freon-113	ND		ug/l	2.5	0.70	1
Methyl cyclohexane	ND		ug/l	10	0.40	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	117		70-130
Toluene-d8	98		70-130
4-Bromofluorobenzene	104		70-130
Dibromofluoromethane	119		70-130

Project Name: AOC-32 SURFACE WATER SAMPLING

Lab Number: L2220562

Project Number: 0127981-025

Report Date: 05/26/22

**SAMPLE RESULTS**

Lab ID: L2220562-04  
 Client ID: 4125-041922-0001  
 Sample Location: BATH, NY

Date Collected: 04/19/22 00:00  
 Date Received: 04/20/22  
 Field Prep: Not Specified

Sample Depth:

Matrix: Water  
 Analytical Method: 1,8260C  
 Analytical Date: 04/22/22 11:21  
 Analyst: LAC

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Volatile Organics by GC/MS - Westborough Lab</b>						
Methylene chloride	ND		ug/l	2.5	0.70	1
1,1-Dichloroethane	ND		ug/l	2.5	0.70	1
Chloroform	ND		ug/l	2.5	0.70	1
Carbon tetrachloride	ND		ug/l	0.50	0.13	1
1,2-Dichloropropane	ND		ug/l	1.0	0.14	1
Dibromochloromethane	ND		ug/l	0.50	0.15	1
1,1,2-Trichloroethane	ND		ug/l	1.5	0.50	1
Tetrachloroethene	ND		ug/l	0.50	0.18	1
Chlorobenzene	ND		ug/l	2.5	0.70	1
Trichlorofluoromethane	ND		ug/l	2.5	0.70	1
1,2-Dichloroethane	ND		ug/l	0.50	0.13	1
1,1,1-Trichloroethane	ND		ug/l	2.5	0.70	1
Bromodichloromethane	ND		ug/l	0.50	0.19	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	0.16	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	0.14	1
Bromoform	ND		ug/l	2.0	0.65	1
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	0.17	1
Benzene	ND		ug/l	0.50	0.16	1
Toluene	ND		ug/l	2.5	0.70	1
Ethylbenzene	ND		ug/l	2.5	0.70	1
Chloromethane	ND		ug/l	2.5	0.70	1
Bromomethane	ND		ug/l	2.5	0.70	1
Vinyl chloride	ND		ug/l	1.0	0.07	1
Chloroethane	ND		ug/l	2.5	0.70	1
1,1-Dichloroethene	ND		ug/l	0.50	0.17	1
trans-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1
Trichloroethene	ND		ug/l	0.50	0.18	1
1,2-Dichlorobenzene	ND		ug/l	2.5	0.70	1



Project Name: AOC-32 SURFACE WATER SAMPLING

Lab Number: L2220562

Project Number: 0127981-025

Report Date: 05/26/22

**SAMPLE RESULTS**

Lab ID:	L2220562-04	Date Collected:	04/19/22 00:00
Client ID:	4125-041922-0001	Date Received:	04/20/22
Sample Location:	BATH, NY	Field Prep:	Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Volatile Organics by GC/MS - Westborough Lab</b>						
1,3-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,4-Dichlorobenzene	ND		ug/l	2.5	0.70	1
Methyl tert butyl ether	ND		ug/l	2.5	0.70	1
p/m-Xylene	ND		ug/l	2.5	0.70	1
o-Xylene	ND		ug/l	2.5	0.70	1
cis-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1
Styrene	ND		ug/l	2.5	0.70	1
Dichlorodifluoromethane	ND		ug/l	5.0	1.0	1
Acetone	ND		ug/l	5.0	1.5	1
Carbon disulfide	ND		ug/l	5.0	1.0	1
2-Butanone	ND		ug/l	5.0	1.9	1
4-Methyl-2-pentanone	ND		ug/l	5.0	1.0	1
2-Hexanone	ND		ug/l	5.0	1.0	1
Bromochloromethane	ND		ug/l	2.5	0.70	1
1,2-Dibromoethane	ND		ug/l	2.0	0.65	1
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	0.70	1
Isopropylbenzene	ND		ug/l	2.5	0.70	1
1,2,3-Trichlorobenzene	ND		ug/l	2.5	0.70	1
1,2,4-Trichlorobenzene	ND		ug/l	2.5	0.70	1
Methyl Acetate	ND		ug/l	2.0	0.23	1
Cyclohexane	ND		ug/l	10	0.27	1
1,4-Dioxane	ND		ug/l	250	61.	1
Freon-113	ND		ug/l	2.5	0.70	1
Methyl cyclohexane	ND		ug/l	10	0.40	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	114		70-130
Toluene-d8	98		70-130
4-Bromofluorobenzene	103		70-130
Dibromofluoromethane	117		70-130

Project Name: AOC-32 SURFACE WATER SAMPLING

Lab Number: L2220562

Project Number: 0127981-025

Report Date: 05/26/22

**SAMPLE RESULTS**

Lab ID: L2220562-06  
 Client ID: 4125-042022-0001  
 Sample Location: BATH, NY

Date Collected: 04/20/22 00:00  
 Date Received: 04/20/22  
 Field Prep: Not Specified

Sample Depth:

Matrix: Water  
 Analytical Method: 1,8260C  
 Analytical Date: 04/22/22 15:56  
 Analyst: LAC

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Volatile Organics by GC/MS - Westborough Lab</b>						
Methylene chloride	ND		ug/l	2.5	0.70	1
1,1-Dichloroethane	ND		ug/l	2.5	0.70	1
Chloroform	ND		ug/l	2.5	0.70	1
Carbon tetrachloride	ND		ug/l	0.50	0.13	1
1,2-Dichloropropane	ND		ug/l	1.0	0.14	1
Dibromochloromethane	ND		ug/l	0.50	0.15	1
1,1,2-Trichloroethane	ND		ug/l	1.5	0.50	1
Tetrachloroethene	ND		ug/l	0.50	0.18	1
Chlorobenzene	ND		ug/l	2.5	0.70	1
Trichlorofluoromethane	ND		ug/l	2.5	0.70	1
1,2-Dichloroethane	ND		ug/l	0.50	0.13	1
1,1,1-Trichloroethane	ND		ug/l	2.5	0.70	1
Bromodichloromethane	ND		ug/l	0.50	0.19	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	0.16	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	0.14	1
Bromoform	ND		ug/l	2.0	0.65	1
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	0.17	1
Benzene	ND		ug/l	0.50	0.16	1
Toluene	ND		ug/l	2.5	0.70	1
Ethylbenzene	ND		ug/l	2.5	0.70	1
Chloromethane	ND		ug/l	2.5	0.70	1
Bromomethane	ND		ug/l	2.5	0.70	1
Vinyl chloride	ND		ug/l	1.0	0.07	1
Chloroethane	ND		ug/l	2.5	0.70	1
1,1-Dichloroethene	ND		ug/l	0.50	0.17	1
trans-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1
Trichloroethene	ND		ug/l	0.50	0.18	1
1,2-Dichlorobenzene	ND		ug/l	2.5	0.70	1



Project Name: AOC-32 SURFACE WATER SAMPLING

Lab Number: L2220562

Project Number: 0127981-025

Report Date: 05/26/22

**SAMPLE RESULTS**

Lab ID: L2220562-06  
 Client ID: 4125-042022-0001  
 Sample Location: BATH, NY

Date Collected: 04/20/22 00:00  
 Date Received: 04/20/22  
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Volatile Organics by GC/MS - Westborough Lab</b>						
1,3-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,4-Dichlorobenzene	ND		ug/l	2.5	0.70	1
Methyl tert butyl ether	ND		ug/l	2.5	0.70	1
p/m-Xylene	ND		ug/l	2.5	0.70	1
o-Xylene	ND		ug/l	2.5	0.70	1
cis-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1
Styrene	ND		ug/l	2.5	0.70	1
Dichlorodifluoromethane	ND		ug/l	5.0	1.0	1
Acetone	ND		ug/l	5.0	1.5	1
Carbon disulfide	ND		ug/l	5.0	1.0	1
2-Butanone	ND		ug/l	5.0	1.9	1
4-Methyl-2-pentanone	ND		ug/l	5.0	1.0	1
2-Hexanone	ND		ug/l	5.0	1.0	1
Bromochloromethane	ND		ug/l	2.5	0.70	1
1,2-Dibromoethane	ND		ug/l	2.0	0.65	1
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	0.70	1
Isopropylbenzene	ND		ug/l	2.5	0.70	1
1,2,3-Trichlorobenzene	ND		ug/l	2.5	0.70	1
1,2,4-Trichlorobenzene	ND		ug/l	2.5	0.70	1
Methyl Acetate	ND		ug/l	2.0	0.23	1
Cyclohexane	ND		ug/l	10	0.27	1
1,4-Dioxane	ND		ug/l	250	61.	1
Freon-113	ND		ug/l	2.5	0.70	1
Methyl cyclohexane	ND		ug/l	10	0.40	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	118		70-130
Toluene-d8	97		70-130
4-Bromofluorobenzene	103		70-130
Dibromofluoromethane	118		70-130

**Project Name:** AOC-32 SURFACE WATER SAMPLING  
**Project Number:** 0127981-025

**Lab Number:** L2220562  
**Report Date:** 05/26/22

**Method Blank Analysis**  
**Batch Quality Control**

Analytical Method: 1,8260C  
Analytical Date: 04/22/22 08:51  
Analyst: PD

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s):	01-04,06		Batch:	WG1630666-5	
Methylene chloride	ND		ug/l	2.5	0.70
1,1-Dichloroethane	ND		ug/l	2.5	0.70
Chloroform	ND		ug/l	2.5	0.70
Carbon tetrachloride	ND		ug/l	0.50	0.13
1,2-Dichloropropane	ND		ug/l	1.0	0.14
Dibromochloromethane	ND		ug/l	0.50	0.15
1,1,2-Trichloroethane	ND		ug/l	1.5	0.50
Tetrachloroethene	ND		ug/l	0.50	0.18
Chlorobenzene	ND		ug/l	2.5	0.70
Trichlorofluoromethane	ND		ug/l	2.5	0.70
1,2-Dichloroethane	ND		ug/l	0.50	0.13
1,1,1-Trichloroethane	ND		ug/l	2.5	0.70
Bromodichloromethane	ND		ug/l	0.50	0.19
trans-1,3-Dichloropropene	ND		ug/l	0.50	0.16
cis-1,3-Dichloropropene	ND		ug/l	0.50	0.14
Bromoform	ND		ug/l	2.0	0.65
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	0.17
Benzene	ND		ug/l	0.50	0.16
Toluene	ND		ug/l	2.5	0.70
Ethylbenzene	ND		ug/l	2.5	0.70
Chloromethane	ND		ug/l	2.5	0.70
Bromomethane	ND		ug/l	2.5	0.70
Vinyl chloride	ND		ug/l	1.0	0.07
Chloroethane	ND		ug/l	2.5	0.70
1,1-Dichloroethene	ND		ug/l	0.50	0.17
trans-1,2-Dichloroethene	ND		ug/l	2.5	0.70
Trichloroethene	ND		ug/l	0.50	0.18
1,2-Dichlorobenzene	ND		ug/l	2.5	0.70
1,3-Dichlorobenzene	ND		ug/l	2.5	0.70

**Project Name:** AOC-32 SURFACE WATER SAMPLING  
**Project Number:** 0127981-025

**Lab Number:** L2220562  
**Report Date:** 05/26/22

**Method Blank Analysis**  
**Batch Quality Control**

Analytical Method: 1,8260C  
Analytical Date: 04/22/22 08:51  
Analyst: PD

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s):	01-04,06		Batch:	WG1630666-5	
1,4-Dichlorobenzene	ND		ug/l	2.5	0.70
Methyl tert butyl ether	ND		ug/l	2.5	0.70
p/m-Xylene	ND		ug/l	2.5	0.70
o-Xylene	ND		ug/l	2.5	0.70
cis-1,2-Dichloroethene	ND		ug/l	2.5	0.70
Styrene	ND		ug/l	2.5	0.70
Dichlorodifluoromethane	ND		ug/l	5.0	1.0
Acetone	ND		ug/l	5.0	1.5
Carbon disulfide	ND		ug/l	5.0	1.0
2-Butanone	ND		ug/l	5.0	1.9
4-Methyl-2-pentanone	ND		ug/l	5.0	1.0
2-Hexanone	ND		ug/l	5.0	1.0
Bromochloromethane	ND		ug/l	2.5	0.70
1,2-Dibromoethane	ND		ug/l	2.0	0.65
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	0.70
Isopropylbenzene	ND		ug/l	2.5	0.70
1,2,3-Trichlorobenzene	ND		ug/l	2.5	0.70
1,2,4-Trichlorobenzene	ND		ug/l	2.5	0.70
Methyl Acetate	ND		ug/l	2.0	0.23
Cyclohexane	ND		ug/l	10	0.27
1,4-Dioxane	ND		ug/l	250	61.
Freon-113	ND		ug/l	2.5	0.70
Methyl cyclohexane	ND		ug/l	10	0.40

**Project Name:** AOC-32 SURFACE WATER SAMPLING  
**Project Number:** 0127981-025

**Lab Number:** L2220562  
**Report Date:** 05/26/22

**Method Blank Analysis**  
**Batch Quality Control**

Analytical Method: 1,8260C  
Analytical Date: 04/22/22 08:51  
Analyst: PD

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 01-04,06				Batch: WG1630666-5	

Surrogate	%Recovery	Acceptance Criteria	
		Qualifier	
1,2-Dichloroethane-d4	104		70-130
Toluene-d8	100		70-130
4-Bromofluorobenzene	103		70-130
Dibromofluoromethane	112		70-130

# Lab Control Sample Analysis

## Batch Quality Control

**Project Name:** AOC-32 SURFACE WATER SAMPLING  
**Project Number:** 0127981-025

**Lab Number:** L2220562  
**Report Date:** 05/26/22

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-04,06 Batch: WG1630666-3 WG1630666-4								
Methylene chloride	100		100		70-130	0		20
1,1-Dichloroethane	100		110		70-130	10		20
Chloroform	100		100		70-130	0		20
Carbon tetrachloride	110		110		63-132	0		20
1,2-Dichloropropane	96		99		70-130	3		20
Dibromochloromethane	94		92		63-130	2		20
1,1,2-Trichloroethane	81		80		70-130	1		20
Tetrachloroethene	100		100		70-130	0		20
Chlorobenzene	98		98		75-130	0		20
Trichlorofluoromethane	110		120		62-150	9		20
1,2-Dichloroethane	97		100		70-130	3		20
1,1,1-Trichloroethane	110		110		67-130	0		20
Bromodichloromethane	94		98		67-130	4		20
trans-1,3-Dichloropropene	78		79		70-130	1		20
cis-1,3-Dichloropropene	81		82		70-130	1		20
Bromoform	82		83		54-136	1		20
1,1,2,2-Tetrachloroethane	89		92		67-130	3		20
Benzene	100		100		70-130	0		20
Toluene	97		97		70-130	0		20
Ethylbenzene	100		100		70-130	0		20
Chloromethane	95		97		64-130	2		20
Bromomethane	69		72		39-139	4		20
Vinyl chloride	88		90		55-140	2		20

# Lab Control Sample Analysis

## Batch Quality Control

**Project Name:** AOC-32 SURFACE WATER SAMPLING  
**Project Number:** 0127981-025

**Lab Number:** L2220562  
**Report Date:** 05/26/22

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-04,06 Batch: WG1630666-3 WG1630666-4								
Chloroethane	87		90		55-138	3		20
1,1-Dichloroethene	110		110		61-145	0		20
trans-1,2-Dichloroethene	100		110		70-130	10		20
Trichloroethene	99		100		70-130	1		20
1,2-Dichlorobenzene	96		98		70-130	2		20
1,3-Dichlorobenzene	97		96		70-130	1		20
1,4-Dichlorobenzene	96		97		70-130	1		20
Methyl tert butyl ether	87		90		63-130	3		20
p/m-Xylene	100		100		70-130	0		20
o-Xylene	100		100		70-130	0		20
cis-1,2-Dichloroethene	100		100		70-130	0		20
Styrene	90		90		70-130	0		20
Dichlorodifluoromethane	90		90		36-147	0		20
Acetone	88		90		58-148	2		20
Carbon disulfide	110		110		51-130	0		20
2-Butanone	82		96		63-138	16		20
4-Methyl-2-pentanone	81		84		59-130	4		20
2-Hexanone	80		86		57-130	7		20
Bromochloromethane	97		97		70-130	0		20
1,2-Dibromoethane	91		91		70-130	0		20
1,2-Dibromo-3-chloropropane	79		86		41-144	8		20
Isopropylbenzene	110		110		70-130	0		20
1,2,3-Trichlorobenzene	91		95		70-130	4		20

# Lab Control Sample Analysis

## Batch Quality Control

**Project Name:** AOC-32 SURFACE WATER SAMPLING  
**Project Number:** 0127981-025

**Lab Number:** L2220562  
**Report Date:** 05/26/22

<b>Parameter</b>	<i>LCS</i> %Recovery	<i>Qual</i>	<i>LCSD</i> %Recovery	<i>Qual</i>	<i>%Recovery</i> <i>Limits</i>	<i>RPD</i>	<i>Qual</i>	<i>RPD</i> <i>Limits</i>
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-04,06 Batch: WG1630666-3 WG1630666-4								
1,2,4-Trichlorobenzene	92		97		70-130	5		20
Methyl Acetate	94		90		70-130	4		20
Cyclohexane	110		110		70-130	0		20
1,4-Dioxane	84		92		56-162	9		20
Freon-113	120		120		70-130	0		20
Methyl cyclohexane	92		95		70-130	3		20

<b>Surrogate</b>	<i>LCS</i> %Recovery	<i>Qual</i>	<i>LCSD</i> %Recovery	<i>Qual</i>	<b>Acceptance Criteria</b>
1,2-Dichloroethane-d4	98		98		70-130
Toluene-d8	101		101		70-130
4-Bromofluorobenzene	107		106		70-130
Dibromofluoromethane	98		100		70-130

# **SEMIVOLATILES**



Project Name: AOC-32 SURFACE WATER SAMPLING

Lab Number: L2220562

Project Number: 0127981-025

Report Date: 05/26/22

**SAMPLE RESULTS**

Lab ID: L2220562-01  
 Client ID: SW-BGKD-02-0.5  
 Sample Location: BATH, NY

Date Collected: 04/19/22 12:30  
 Date Received: 04/20/22  
 Field Prep: Not Specified

Sample Depth:

Matrix: Water  
 Analytical Method: 1,8270D-SIM  
 Analytical Date: 04/25/22 23:00  
 Analyst: DB

Extraction Method: EPA 3510C  
 Extraction Date: 04/22/22 13:42

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
1,4 Dioxane by 8270D-SIM - Mansfield Lab						
1,4-Dioxane	ND		ng/l	139	31.4	1
Surrogate		% Recovery	Qualifier	Acceptance Criteria		
1,4-Dioxane-d8		29		15-110		

Project Name: AOC-32 SURFACE WATER SAMPLING

Lab Number: L2220562

Project Number: 0127981-025

Report Date: 05/26/22

**SAMPLE RESULTS**

Lab ID: L2220562-01  
 Client ID: SW-BGKD-02-0.5  
 Sample Location: BATH, NY

Date Collected: 04/19/22 12:30  
 Date Received: 04/20/22  
 Field Prep: Not Specified

Sample Depth:

Matrix: Water  
 Analytical Method: 134,LCMSMS-ID  
 Analytical Date: 04/27/22 00:31  
 Analyst: RS

Extraction Method: ALPHA 23528  
 Extraction Date: 04/25/22 17:37

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Perfluorinated Alkyl Acids by Isotope Dilution - Mansfield Lab</b>						
Perfluorobutanoic Acid (PFBA)	0.505	J	ng/l	1.80	0.368	1
Perfluoropentanoic Acid (PFPeA)	ND		ng/l	1.80	0.357	1
Perfluorobutanesulfonic Acid (PFBS)	ND		ng/l	1.80	0.215	1
Perfluorohexanoic Acid (PFHxA)	ND		ng/l	1.80	0.296	1
Perfluoroheptanoic Acid (PFHpA)	ND		ng/l	1.80	0.203	1
Perfluorohexanesulfonic Acid (PFHxS)	ND		ng/l	1.80	0.339	1
Perfluoroctanoic Acid (PFOA)	0.220	JF	ng/l	1.80	0.213	1
1H,1H,2H,2H-Perfluorooctanesulfonic Acid (6:2FTS)	2.20		ng/l	1.80	1.20	1
Perfluoroheptanesulfonic Acid (PFHpS)	ND		ng/l	1.80	0.620	1
Perfluorononanoic Acid (PFNA)	ND		ng/l	1.80	0.281	1
Perfluorooctanesulfonic Acid (PFOS)	ND		ng/l	1.80	0.454	1
Perfluorodecanoic Acid (PFDA)	ND		ng/l	1.80	0.274	1
1H,1H,2H,2H-Perfluorodecanesulfonic Acid (8:2FTS)	ND		ng/l	1.80	1.09	1
N-Methyl Perfluorooctanesulfonamidoacetic Acid (NMeFOSAA)	ND		ng/l	1.80	0.584	1
Perfluoroundecanoic Acid (PFUnA)	ND		ng/l	1.80	0.234	1
Perfluorodecanesulfonic Acid (PFDS)	ND		ng/l	1.80	0.884	1
Perfluorooctanesulfonamide (FOSA)	ND		ng/l	1.80	0.523	1
N-Ethyl Perfluorooctanesulfonamidoacetic Acid (NEtFOSAA)	ND		ng/l	1.80	0.725	1
Perfluorododecanoic Acid (PFDoA)	ND		ng/l	1.80	0.335	1
Perfluorotridecanoic Acid (PFTrDA)	ND		ng/l	1.80	0.295	1
Perfluorotetradecanoic Acid (PFTA)	ND		ng/l	1.80	0.224	1
PFOA/PFOS, Total	0.220	J	ng/l	1.80	0.213	1

Project Name: AOC-32 SURFACE WATER SAMPLING

Lab Number: L2220562

Project Number: 0127981-025

Report Date: 05/26/22

**SAMPLE RESULTS**

Lab ID:	L2220562-01	Date Collected:	04/19/22 12:30
Client ID:	SW-BGKD-02-0.5	Date Received:	04/20/22
Sample Location:	BATH, NY	Field Prep:	Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Perfluorinated Alkyl Acids by Isotope Dilution - Mansfield Lab						
Surrogate (Extracted Internal Standard)			% Recovery	Qualifier	Acceptance Criteria	
Perfluoro[13C4]Butanoic Acid (MPFBA)			88		58-132	
Perfluoro[13C5]Pentanoic Acid (M5PFPEA)			139		62-163	
Perfluoro[2,3,4-13C3]Butanesulfonic Acid (M3PFBS)			92		70-131	
Perfluoro[1,2,3,4,6-13C5]Hexanoic Acid (M5PFHxA)			85		57-129	
Perfluoro[1,2,3,4-13C4]Heptanoic Acid (M4PFHxA)			69		60-129	
Perfluoro[1,2,3-13C3]Hexanesulfonic Acid (M3PFHxS)			97		71-134	
Perfluoro[13C8]Octanoic Acid (M8PFOA)			94		62-129	
1H,1H,2H,2H-Perfluoro[1,2-13C2]Octanesulfonic Acid (M2-6:2FTS)			107		14-147	
Perfluoro[13C9]Nonanoic Acid (M9PFNA)			94		59-139	
Perfluoro[13C8]Octanesulfonic Acid (M8PFOS)			95		69-131	
Perfluoro[1,2,3,4,5,6-13C6]Decanoic Acid (M6PFDA)			90		62-124	
1H,1H,2H,2H-Perfluoro[1,2-13C2]Decanesulfonic Acid (M2-8:2FTS)			98		10-162	
N-Deuteriomethylperfluoro-1-octanesulfonamidoacetic Acid (d3-NMeFOSAA)	119	Q			24-116	
Perfluoro[1,2,3,4,5,6,7-13C7]Undecanoic Acid (M7-PFUDA)			104		55-137	
Perfluoro[13C8]Octanesulfonamide (M8FOSA)			22		10-112	
N-Deuteroethylperfluoro-1-octanesulfonamidoacetic Acid (d5-NEtFOSAA)			97		27-126	
Perfluoro[1,2-13C2]Dodecanoic Acid (MPFDOA)			115		48-131	
Perfluoro[1,2-13C2]Tetradecanoic Acid (M2PFTEDA)			79		22-136	

Project Name: AOC-32 SURFACE WATER SAMPLING

Lab Number: L2220562

Project Number: 0127981-025

Report Date: 05/26/22

**SAMPLE RESULTS**

Lab ID: L2220562-02  
 Client ID: SW-BGKD-01-0.75  
 Sample Location: BATH, NY

Date Collected: 04/19/22 13:00  
 Date Received: 04/20/22  
 Field Prep: Not Specified

Sample Depth:

Matrix: Water  
 Analytical Method: 1,8270D-SIM  
 Analytical Date: 04/25/22 23:23  
 Analyst: DB

Extraction Method: EPA 3510C  
 Extraction Date: 04/22/22 13:42

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>1,4 Dioxane by 8270D-SIM - Mansfield Lab</b>						
1,4-Dioxane	ND		ng/l	139	31.4	1
Surrogate		% Recovery	Qualifier	Acceptance Criteria		
1,4-Dioxane-d8		32		15-110		

Project Name: AOC-32 SURFACE WATER SAMPLING

Lab Number: L2220562

Project Number: 0127981-025

Report Date: 05/26/22

**SAMPLE RESULTS**

Lab ID: L2220562-02  
 Client ID: SW-BGKD-01-0.75  
 Sample Location: BATH, NY

Date Collected: 04/19/22 13:00  
 Date Received: 04/20/22  
 Field Prep: Not Specified

Sample Depth:

Matrix: Water  
 Analytical Method: 134,LCMSMS-ID  
 Analytical Date: 04/27/22 01:05  
 Analyst: RS

Extraction Method: ALPHA 23528  
 Extraction Date: 04/25/22 17:37

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Perfluorinated Alkyl Acids by Isotope Dilution - Mansfield Lab</b>						
Perfluorobutanoic Acid (PFBA)	0.491	J	ng/l	1.79	0.366	1
Perfluoropentanoic Acid (PFPeA)	ND		ng/l	1.79	0.355	1
Perfluorobutanesulfonic Acid (PFBS)	0.219	J	ng/l	1.79	0.213	1
Perfluorohexanoic Acid (PFHxA)	0.301	JF	ng/l	1.79	0.294	1
Perfluoroheptanoic Acid (PFHpA)	ND		ng/l	1.79	0.202	1
Perfluorohexanesulfonic Acid (PFHxS)	ND		ng/l	1.79	0.337	1
Perfluoroctanoic Acid (PFOA)	0.301	J	ng/l	1.79	0.212	1
1H,1H,2H,2H-Perfluorooctanesulfonic Acid (6:2FTS)	2.01		ng/l	1.79	1.19	1
Perfluoroheptanesulfonic Acid (PFHpS)	ND		ng/l	1.79	0.617	1
Perfluorononanoic Acid (PFNA)	ND		ng/l	1.79	0.280	1
Perfluorooctanesulfonic Acid (PFOS)	ND		ng/l	1.79	0.452	1
Perfluorodecanoic Acid (PFDA)	ND		ng/l	1.79	0.272	1
1H,1H,2H,2H-Perfluorodecanesulfonic Acid (8:2FTS)	ND		ng/l	1.79	1.09	1
N-Methyl Perfluorooctanesulfonamidoacetic Acid (NMeFOSAA)	ND		ng/l	1.79	0.581	1
Perfluoroundecanoic Acid (PFUnA)	ND		ng/l	1.79	0.233	1
Perfluorodecanesulfonic Acid (PFDS)	ND		ng/l	1.79	0.878	1
Perfluorooctanesulfonamide (FOSA)	ND		ng/l	1.79	0.520	1
N-Ethyl Perfluorooctanesulfonamidoacetic Acid (NEtFOSAA)	ND		ng/l	1.79	0.721	1
Perfluorododecanoic Acid (PFDoA)	ND		ng/l	1.79	0.333	1
Perfluorotridecanoic Acid (PFTrDA)	ND		ng/l	1.79	0.293	1
Perfluorotetradecanoic Acid (PFTA)	ND		ng/l	1.79	0.222	1
PFOA/PFOS, Total	0.301	J	ng/l	1.79	0.212	1

Project Name: AOC-32 SURFACE WATER SAMPLING

Lab Number: L2220562

Project Number: 0127981-025

Report Date: 05/26/22

**SAMPLE RESULTS**

Lab ID:	L2220562-02	Date Collected:	04/19/22 13:00
Client ID:	SW-BGKD-01-0.75	Date Received:	04/20/22
Sample Location:	BATH, NY	Field Prep:	Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Perfluorinated Alkyl Acids by Isotope Dilution - Mansfield Lab						
Surrogate (Extracted Internal Standard)			% Recovery	Qualifier	Acceptance Criteria	
Perfluoro[13C4]Butanoic Acid (MPFBA)			97		58-132	
Perfluoro[13C5]Pentanoic Acid (M5PFPEA)			153		62-163	
Perfluoro[2,3,4-13C3]Butanesulfonic Acid (M3PFBS)			97		70-131	
Perfluoro[1,2,3,4,6-13C5]Hexanoic Acid (M5PFHxA)			93		57-129	
Perfluoro[1,2,3,4-13C4]Heptanoic Acid (M4PFHxA)			90		60-129	
Perfluoro[1,2,3-13C3]Hexanesulfonic Acid (M3PFHxS)			105		71-134	
Perfluoro[13C8]Octanoic Acid (M8PFOA)			101		62-129	
1H,1H,2H,2H-Perfluoro[1,2-13C2]Octanesulfonic Acid (M2-6:2FTS)			112		14-147	
Perfluoro[13C9]Nonanoic Acid (M9PFNA)			100		59-139	
Perfluoro[13C8]Octanesulfonic Acid (M8PFOS)			99		69-131	
Perfluoro[1,2,3,4,5,6-13C6]Decanoic Acid (M6PFDA)			97		62-124	
1H,1H,2H,2H-Perfluoro[1,2-13C2]Decanesulfonic Acid (M2-8:2FTS)			108		10-162	
N-Deuteriomethylperfluoro-1-octanesulfonamidoacetic Acid (d3-NMeFOSAA)	<b>149</b>	Q			24-116	
Perfluoro[1,2,3,4,5,6,7-13C7]Undecanoic Acid (M7-PFUDA)			109		55-137	
Perfluoro[13C8]Octanesulfonamide (M8FOSA)			29		10-112	
N-Deuteroethylperfluoro-1-octanesulfonamidoacetic Acid (d5-NEtFOSAA)	<b>127</b>	Q			27-126	
Perfluoro[1,2-13C2]Dodecanoic Acid (MPFDCA)			112		48-131	
Perfluoro[1,2-13C2]Tetradecanoic Acid (M2PFTEDA)			78		22-136	

Project Name: AOC-32 SURFACE WATER SAMPLING

Lab Number: L2220562

Project Number: 0127981-025

Report Date: 05/26/22

**SAMPLE RESULTS**

Lab ID: L2220562-03  
 Client ID: SW-POND-01-1.5  
 Sample Location: BATH, NY

Date Collected: 04/20/22 11:30  
 Date Received: 04/20/22  
 Field Prep: Not Specified

Sample Depth:

Matrix: Water  
 Analytical Method: 1,8270D-SIM  
 Analytical Date: 04/25/22 23:46  
 Analyst: DB

Extraction Method: EPA 3510C  
 Extraction Date: 04/22/22 13:42

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>1,4 Dioxane by 8270D-SIM - Mansfield Lab</b>						
1,4-Dioxane	ND		ng/l	139	31.4	1
Surrogate		% Recovery	Qualifier	Acceptance Criteria		
1,4-Dioxane-d8		31		15-110		

Project Name: AOC-32 SURFACE WATER SAMPLING

Lab Number: L2220562

Project Number: 0127981-025

Report Date: 05/26/22

**SAMPLE RESULTS**

Lab ID: L2220562-03  
 Client ID: SW-POND-01-1.5  
 Sample Location: BATH, NY

Date Collected: 04/20/22 11:30  
 Date Received: 04/20/22  
 Field Prep: Not Specified

Sample Depth:

Matrix: Water  
 Analytical Method: 134,LCMSMS-ID  
 Analytical Date: 04/27/22 01:21  
 Analyst: RS

Extraction Method: ALPHA 23528  
 Extraction Date: 04/25/22 17:37

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Perfluorinated Alkyl Acids by Isotope Dilution - Mansfield Lab</b>						
Perfluorobutanoic Acid (PFBA)	0.704	J	ng/l	1.84	0.376	1
Perfluoropentanoic Acid (PFPeA)	ND		ng/l	1.84	0.365	1
Perfluorobutanesulfonic Acid (PFBS)	0.254	J	ng/l	1.84	0.219	1
Perfluorohexanoic Acid (PFHxA)	ND		ng/l	1.84	0.302	1
Perfluoroheptanoic Acid (PFHpA)	ND		ng/l	1.84	0.208	1
Perfluorohexanesulfonic Acid (PFHxS)	ND		ng/l	1.84	0.347	1
Perfluoroctanoic Acid (PFOA)	0.347	J	ng/l	1.84	0.218	1
1H,1H,2H,2H-Perfluorooctanesulfonic Acid (6:2FTS)	2.88		ng/l	1.84	1.23	1
Perfluoroheptanesulfonic Acid (PFHpS)	ND		ng/l	1.84	0.634	1
Perfluorononanoic Acid (PFNA)	ND		ng/l	1.84	0.288	1
Perfluorooctanesulfonic Acid (PFOS)	ND		ng/l	1.84	0.465	1
Perfluorodecanoic Acid (PFDA)	ND		ng/l	1.84	0.280	1
1H,1H,2H,2H-Perfluorodecanesulfonic Acid (8:2FTS)	ND		ng/l	1.84	1.12	1
N-Methyl Perfluorooctanesulfonamidoacetic Acid (NMeFOSAA)	ND		ng/l	1.84	0.597	1
Perfluoroundecanoic Acid (PFUnA)	ND		ng/l	1.84	0.240	1
Perfluorodecanesulfonic Acid (PFDS)	ND		ng/l	1.84	0.903	1
Perfluorooctanesulfonamide (FOSA)	ND		ng/l	1.84	0.535	1
N-Ethyl Perfluorooctanesulfonamidoacetic Acid (NEtFOSAA)	ND		ng/l	1.84	0.741	1
Perfluorododecanoic Acid (PFDoA)	ND		ng/l	1.84	0.343	1
Perfluorotridecanoic Acid (PFTrDA)	ND		ng/l	1.84	0.302	1
Perfluorotetradecanoic Acid (PFTA)	ND		ng/l	1.84	0.229	1
PFOA/PFOS, Total	0.347	J	ng/l	1.84	0.218	1

Project Name: AOC-32 SURFACE WATER SAMPLING

Lab Number: L2220562

Project Number: 0127981-025

Report Date: 05/26/22

**SAMPLE RESULTS**

Lab ID:	L2220562-03	Date Collected:	04/20/22 11:30
Client ID:	SW-POND-01-1.5	Date Received:	04/20/22
Sample Location:	BATH, NY	Field Prep:	Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Perfluorinated Alkyl Acids by Isotope Dilution - Mansfield Lab						
Surrogate (Extracted Internal Standard)			% Recovery	Qualifier	Acceptance Criteria	
Perfluoro[13C4]Butanoic Acid (MPFBA)			97		58-132	
Perfluoro[13C5]Pentanoic Acid (M5PFPEA)			155		62-163	
Perfluoro[2,3,4-13C3]Butanesulfonic Acid (M3PFBS)			97		70-131	
Perfluoro[1,2,3,4,6-13C5]Hexanoic Acid (M5PFHxA)			94		57-129	
Perfluoro[1,2,3,4-13C4]Heptanoic Acid (M4PFHxA)			81		60-129	
Perfluoro[1,2,3-13C3]Hexanesulfonic Acid (M3PFHxS)			107		71-134	
Perfluoro[13C8]Octanoic Acid (M8PFOA)			103		62-129	
1H,1H,2H,2H-Perfluoro[1,2-13C2]Octanesulfonic Acid (M2-6:2FTS)			129		14-147	
Perfluoro[13C9]Nonanoic Acid (M9PFNA)			104		59-139	
Perfluoro[13C8]Octanesulfonic Acid (M8PFOS)			101		69-131	
Perfluoro[1,2,3,4,5,6-13C6]Decanoic Acid (M6PFDA)			97		62-124	
1H,1H,2H,2H-Perfluoro[1,2-13C2]Decanesulfonic Acid (M2-8:2FTS)			111		10-162	
N-Deuteriomethylperfluoro-1-octanesulfonamidoacetic Acid (d3-NMeFOSAA)	<b>148</b>	Q			24-116	
Perfluoro[1,2,3,4,5,6,7-13C7]Undecanoic Acid (M7-PFUDA)			109		55-137	
Perfluoro[13C8]Octanesulfonamide (M8FOSA)			32		10-112	
N-Deuteroethylperfluoro-1-octanesulfonamidoacetic Acid (d5-NEtFOSAA)			97		27-126	
Perfluoro[1,2-13C2]Dodecanoic Acid (MPFDCA)			119		48-131	
Perfluoro[1,2-13C2]Tetradecanoic Acid (M2PFTEDA)			78		22-136	

Project Name: AOC-32 SURFACE WATER SAMPLING

Lab Number: L2220562

Project Number: 0127981-025

Report Date: 05/26/22

**SAMPLE RESULTS**

Lab ID: L2220562-04  
 Client ID: 4125-041922-0001  
 Sample Location: BATH, NY

Date Collected: 04/19/22 00:00  
 Date Received: 04/20/22  
 Field Prep: Not Specified

Sample Depth:

Matrix: Water  
 Analytical Method: 134,LCMSMS-ID  
 Analytical Date: 04/27/22 01:38  
 Analyst: RS

Extraction Method: ALPHA 23528  
 Extraction Date: 04/25/22 17:37

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Perfluorinated Alkyl Acids by Isotope Dilution - Mansfield Lab</b>						
Perfluorobutanoic Acid (PFBA)	ND		ng/l	1.83	0.373	1
Perfluoropentanoic Acid (PFPeA)	ND		ng/l	1.83	0.362	1
Perfluorobutanesulfonic Acid (PFBS)	ND		ng/l	1.83	0.218	1
Perfluorohexanoic Acid (PFHxA)	ND		ng/l	1.83	0.300	1
Perfluoroheptanoic Acid (PFHpA)	ND		ng/l	1.83	0.206	1
Perfluorohexanesulfonic Acid (PFHxS)	ND		ng/l	1.83	0.344	1
Perfluoroctanoic Acid (PFOA)	ND		ng/l	1.83	0.216	1
1H,1H,2H,2H-Perfluorooctanesulfonic Acid (6:2FTS)	2.37		ng/l	1.83	1.22	1
Perfluoroheptanesulfonic Acid (PFHpS)	ND		ng/l	1.83	0.629	1
Perfluorononanoic Acid (PFNA)	ND		ng/l	1.83	0.285	1
Perfluorooctanesulfonic Acid (PFOS)	ND		ng/l	1.83	0.461	1
Perfluorodecanoic Acid (PFDA)	ND		ng/l	1.83	0.278	1
1H,1H,2H,2H-Perfluorodecanesulfonic Acid (8:2FTS)	ND		ng/l	1.83	1.11	1
N-Methyl Perfluorooctanesulfonamidoacetic Acid (NMeFOSAA)	ND		ng/l	1.83	0.592	1
Perfluoroundecanoic Acid (PFUnA)	ND		ng/l	1.83	0.238	1
Perfluorodecanesulfonic Acid (PFDS)	ND		ng/l	1.83	0.896	1
Perfluorooctanesulfonamide (FOSA)	ND		ng/l	1.83	0.530	1
N-Ethyl Perfluorooctanesulfonamidoacetic Acid (NEtFOSAA)	ND		ng/l	1.83	0.735	1
Perfluorododecanoic Acid (PFDoA)	ND		ng/l	1.83	0.340	1
Perfluorotridecanoic Acid (PFTrDA)	ND		ng/l	1.83	0.299	1
Perfluorotetradecanoic Acid (PFTA)	ND		ng/l	1.83	0.227	1
PFOA/PFOS, Total	ND		ng/l	1.83	0.216	1

Project Name: AOC-32 SURFACE WATER SAMPLING

Lab Number: L2220562

Project Number: 0127981-025

Report Date: 05/26/22

**SAMPLE RESULTS**

Lab ID: L2220562-04  
 Client ID: 4125-041922-0001  
 Sample Location: BATH, NY

Date Collected: 04/19/22 00:00  
 Date Received: 04/20/22  
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Perfluorinated Alkyl Acids by Isotope Dilution - Mansfield Lab						
Surrogate (Extracted Internal Standard)			% Recovery	Qualifier	Acceptance Criteria	
Perfluoro[13C4]Butanoic Acid (MPFBA)			106		58-132	
Perfluoro[13C5]Pentanoic Acid (M5PFPEA)			133		62-163	
Perfluoro[2,3,4-13C3]Butanesulfonic Acid (M3PFBS)			105		70-131	
Perfluoro[1,2,3,4,6-13C5]Hexanoic Acid (M5PFHxA)			106		57-129	
Perfluoro[1,2,3,4-13C4]Heptanoic Acid (M4PFHpa)			105		60-129	
Perfluoro[1,2,3-13C3]Hexanesulfonic Acid (M3PFHxS)			107		71-134	
Perfluoro[13C8]Octanoic Acid (M8PFOA)			109		62-129	
1H,1H,2H,2H-Perfluoro[1,2-13C2]Octanesulfonic Acid (M2-6:2FTS)			93		14-147	
Perfluoro[13C9]Nonanoic Acid (M9PFNA)			95		59-139	
Perfluoro[13C8]Octanesulfonic Acid (M8PFOS)			92		69-131	
Perfluoro[1,2,3,4,5,6-13C6]Decanoic Acid (M6PFDA)			89		62-124	
1H,1H,2H,2H-Perfluoro[1,2-13C2]Decanesulfonic Acid (M2-8:2FTS)			98		10-162	
N-Deuteriomethylperfluoro-1-octanesulfonamidoacetic Acid (d3-NMeFOSAA)	145	Q			24-116	
Perfluoro[1,2,3,4,5,6,7-13C7]Undecanoic Acid (M7-PFUDA)			99		55-137	
Perfluoro[13C8]Octanesulfonamide (M8FOSA)			50		10-112	
N-Deuteroethylperfluoro-1-octanesulfonamidoacetic Acid (d5-NEtFOSAA)			118		27-126	
Perfluoro[1,2-13C2]Dodecanoic Acid (MPFDOA)			108		48-131	
Perfluoro[1,2-13C2]Tetradecanoic Acid (M2PFTEDA)			81		22-136	

Project Name: AOC-32 SURFACE WATER SAMPLING

Lab Number: L2220562

Project Number: 0127981-025

Report Date: 05/26/22

**SAMPLE RESULTS**

Lab ID: L2220562-05  
 Client ID: 4125-042022-0002  
 Sample Location: BATH, NY

Date Collected: 04/20/22 11:35  
 Date Received: 04/20/22  
 Field Prep: Not Specified

Sample Depth:

Matrix: Water  
 Analytical Method: 134,LCMSMS-ID  
 Analytical Date: 04/27/22 01:54  
 Analyst: RS

Extraction Method: ALPHA 23528  
 Extraction Date: 04/25/22 17:37

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Perfluorinated Alkyl Acids by Isotope Dilution - Mansfield Lab</b>						
Perfluorobutanoic Acid (PFBA)	ND		ng/l	1.84	0.376	1
Perfluoropentanoic Acid (PFPeA)	ND		ng/l	1.84	0.365	1
Perfluorobutanesulfonic Acid (PFBS)	ND		ng/l	1.84	0.219	1
Perfluorohexanoic Acid (PFHxA)	ND		ng/l	1.84	0.302	1
Perfluoroheptanoic Acid (PFHpA)	ND		ng/l	1.84	0.208	1
Perfluorohexanesulfonic Acid (PFHxS)	ND		ng/l	1.84	0.347	1
Perfluoroctanoic Acid (PFOA)	ND		ng/l	1.84	0.218	1
1H,1H,2H,2H-Perfluorooctanesulfonic Acid (6:2FTS)	1.99		ng/l	1.84	1.23	1
Perfluoroheptanesulfonic Acid (PFHpS)	ND		ng/l	1.84	0.634	1
Perfluorononanoic Acid (PFNA)	ND		ng/l	1.84	0.288	1
Perfluorooctanesulfonic Acid (PFOS)	ND		ng/l	1.84	0.465	1
Perfluorodecanoic Acid (PFDA)	ND		ng/l	1.84	0.280	1
1H,1H,2H,2H-Perfluorodecanesulfonic Acid (8:2FTS)	ND		ng/l	1.84	1.12	1
N-Methyl Perfluorooctanesulfonamidoacetic Acid (NMeFOSAA)	ND		ng/l	1.84	0.597	1
Perfluoroundecanoic Acid (PFUnA)	ND		ng/l	1.84	0.240	1
Perfluorodecanesulfonic Acid (PFDS)	ND		ng/l	1.84	0.904	1
Perfluorooctanesulfonamide (FOSA)	ND		ng/l	1.84	0.535	1
N-Ethyl Perfluorooctanesulfonamidoacetic Acid (NEtFOSAA)	ND		ng/l	1.84	0.741	1
Perfluorododecanoic Acid (PFDoA)	ND		ng/l	1.84	0.343	1
Perfluorotridecanoic Acid (PFTrDA)	ND		ng/l	1.84	0.302	1
Perfluorotetradecanoic Acid (PFTA)	ND		ng/l	1.84	0.229	1
PFOA/PFOS, Total	ND		ng/l	1.84	0.218	1

Project Name: AOC-32 SURFACE WATER SAMPLING

Lab Number: L2220562

Project Number: 0127981-025

Report Date: 05/26/22

**SAMPLE RESULTS**

Lab ID: L2220562-05  
 Client ID: 4125-042022-0002  
 Sample Location: BATH, NY

Date Collected: 04/20/22 11:35  
 Date Received: 04/20/22  
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Perfluorinated Alkyl Acids by Isotope Dilution - Mansfield Lab						
Surrogate (Extracted Internal Standard)			% Recovery	Qualifier	Acceptance Criteria	
Perfluoro[13C4]Butanoic Acid (MPFBA)			94		58-132	
Perfluoro[13C5]Pentanoic Acid (M5PFPEA)	167	Q			62-163	
Perfluoro[2,3,4-13C3]Butanesulfonic Acid (M3PFBS)	97				70-131	
Perfluoro[1,2,3,4,6-13C5]Hexanoic Acid (M5PFHxA)	103				57-129	
Perfluoro[1,2,3,4-13C4]Heptanoic Acid (M4PFHxA)	99				60-129	
Perfluoro[1,2,3-13C3]Hexanesulfonic Acid (M3PFHxS)	99				71-134	
Perfluoro[13C8]Octanoic Acid (M8PFOA)	103				62-129	
1H,1H,2H,2H-Perfluoro[1,2-13C2]Octanesulfonic Acid (M2-6:2FTS)	108				14-147	
Perfluoro[13C9]Nonanoic Acid (M9PFNA)	105				59-139	
Perfluoro[13C8]Octanesulfonic Acid (M8PFOS)	97				69-131	
Perfluoro[1,2,3,4,5,6-13C6]Decanoic Acid (M6PFDA)	95				62-124	
1H,1H,2H,2H-Perfluoro[1,2-13C2]Decanesulfonic Acid (M2-8:2FTS)	111				10-162	
N-Deuteriomethylperfluoro-1-octanesulfonamidoacetic Acid (d3-NMeFOSAA)	152	Q			24-116	
Perfluoro[1,2,3,4,5,6,7-13C7]Undecanoic Acid (M7-PFUDA)	102				55-137	
Perfluoro[13C8]Octanesulfonamide (M8FOSA)	18				10-112	
N-Deuteroethylperfluoro-1-octanesulfonamidoacetic Acid (d5-NEtFOSAA)	136	Q			27-126	
Perfluoro[1,2-13C2]Dodecanoic Acid (MPFDCA)	114				48-131	
Perfluoro[1,2-13C2]Tetradecanoic Acid (M2PFTEDA)	80				22-136	

Project Name: AOC-32 SURFACE WATER SAMPLING

Lab Number: L2220562

Project Number: 0127981-025

Report Date: 05/26/22

**SAMPLE RESULTS**

Lab ID: L2220562-06  
 Client ID: 4125-042022-0001  
 Sample Location: BATH, NY

Date Collected: 04/20/22 00:00  
 Date Received: 04/20/22  
 Field Prep: Not Specified

Sample Depth:

Matrix: Water  
 Analytical Method: 1,8270D-SIM  
 Analytical Date: 04/26/22 00:09  
 Analyst: DB

Extraction Method: EPA 3510C  
 Extraction Date: 04/22/22 13:42

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>1,4 Dioxane by 8270D-SIM - Mansfield Lab</b>						
1,4-Dioxane	ND		ng/l	139	31.4	1
Surrogate		% Recovery	Qualifier	Acceptance Criteria		
1,4-Dioxane-d8		27		15-110		

Project Name: AOC-32 SURFACE WATER SAMPLING

Lab Number: L2220562

Project Number: 0127981-025

Report Date: 05/26/22

**SAMPLE RESULTS**

Lab ID: L2220562-06  
 Client ID: 4125-042022-0001  
 Sample Location: BATH, NY

Date Collected: 04/20/22 00:00  
 Date Received: 04/20/22  
 Field Prep: Not Specified

Sample Depth:

Matrix: Water  
 Analytical Method: 134,LCMSMS-ID  
 Analytical Date: 04/27/22 02:11  
 Analyst: RS

Extraction Method: ALPHA 23528  
 Extraction Date: 04/25/22 17:37

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Perfluorinated Alkyl Acids by Isotope Dilution - Mansfield Lab</b>						
Perfluorobutanoic Acid (PFBA)	0.732	J	ng/l	1.84	0.375	1
Perfluoropentanoic Acid (PFPeA)	0.416	J	ng/l	1.84	0.364	1
Perfluorobutanesulfonic Acid (PFBS)	ND		ng/l	1.84	0.219	1
Perfluorohexanoic Acid (PFHxA)	ND		ng/l	1.84	0.302	1
Perfluoroheptanoic Acid (PFHpA)	ND		ng/l	1.84	0.207	1
Perfluorohexanesulfonic Acid (PFHxS)	ND		ng/l	1.84	0.346	1
Perfluoroctanoic Acid (PFOA)	0.276	J	ng/l	1.84	0.217	1
1H,1H,2H,2H-Perfluorooctanesulfonic Acid (6:2FTS)	1.47	J	ng/l	1.84	1.22	1
Perfluoroheptanesulfonic Acid (PFHpS)	ND		ng/l	1.84	0.633	1
Perfluorononanoic Acid (PFNA)	ND		ng/l	1.84	0.287	1
Perfluorooctanesulfonic Acid (PFOS)	ND		ng/l	1.84	0.463	1
Perfluorodecanoic Acid (PFDA)	ND		ng/l	1.84	0.280	1
1H,1H,2H,2H-Perfluorodecanesulfonic Acid (8:2FTS)	ND		ng/l	1.84	1.11	1
N-Methyl Perfluorooctanesulfonamidoacetic Acid (NMeFOSAA)	ND		ng/l	1.84	0.596	1
Perfluoroundecanoic Acid (PFUnA)	ND		ng/l	1.84	0.239	1
Perfluorodecanesulfonic Acid (PFDS)	ND		ng/l	1.84	0.901	1
Perfluorooctanesulfonamide (FOSA)	ND		ng/l	1.84	0.533	1
N-Ethyl Perfluorooctanesulfonamidoacetic Acid (NEtFOSAA)	ND		ng/l	1.84	0.739	1
Perfluorododecanoic Acid (PFDoA)	ND		ng/l	1.84	0.342	1
Perfluorotridecanoic Acid (PFTrDA)	ND		ng/l	1.84	0.301	1
Perfluorotetradecanoic Acid (PFTA)	ND		ng/l	1.84	0.228	1
PFOA/PFOS, Total	0.276	J	ng/l	1.84	0.217	1

Project Name: AOC-32 SURFACE WATER SAMPLING

Lab Number: L2220562

Project Number: 0127981-025

Report Date: 05/26/22

**SAMPLE RESULTS**

Lab ID: L2220562-06  
 Client ID: 4125-042022-0001  
 Sample Location: BATH, NY

Date Collected: 04/20/22 00:00  
 Date Received: 04/20/22  
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Perfluorinated Alkyl Acids by Isotope Dilution - Mansfield Lab						
Surrogate (Extracted Internal Standard)			% Recovery	Qualifier	Acceptance Criteria	
Perfluoro[13C4]Butanoic Acid (MPFBA)			93		58-132	
Perfluoro[13C5]Pentanoic Acid (M5PFPEA)			149		62-163	
Perfluoro[2,3,4-13C3]Butanesulfonic Acid (M3PFBS)			94		70-131	
Perfluoro[1,2,3,4,6-13C5]Hexanoic Acid (M5PFHxA)			85		57-129	
Perfluoro[1,2,3,4-13C4]Heptanoic Acid (M4PFHxA)			74		60-129	
Perfluoro[1,2,3-13C3]Hexanesulfonic Acid (M3PFHxS)			102		71-134	
Perfluoro[13C8]Octanoic Acid (M8PFOA)			95		62-129	
1H,1H,2H,2H-Perfluoro[1,2-13C2]Octanesulfonic Acid (M2-6:2FTS)			135		14-147	
Perfluoro[13C9]Nonanoic Acid (M9PFNA)			99		59-139	
Perfluoro[13C8]Octanesulfonic Acid (M8PFOS)			99		69-131	
Perfluoro[1,2,3,4,5,6-13C6]Decanoic Acid (M6PFDA)			94		62-124	
1H,1H,2H,2H-Perfluoro[1,2-13C2]Decanesulfonic Acid (M2-8:2FTS)			129		10-162	
N-Deuteriomethylperfluoro-1-octanesulfonamidoacetic Acid (d3-NMeFOSAA)	<b>146</b>	Q			24-116	
Perfluoro[1,2,3,4,5,6,7-13C7]Undecanoic Acid (M7-PFUDA)			109		55-137	
Perfluoro[13C8]Octanesulfonamide (M8FOSA)			25		10-112	
N-Deuteroethylperfluoro-1-octanesulfonamidoacetic Acid (d5-NEtFOSAA)			109		27-126	
Perfluoro[1,2-13C2]Dodecanoic Acid (MPFDCA)			111		48-131	
Perfluoro[1,2-13C2]Tetradecanoic Acid (M2PFTEDA)			82		22-136	

**Project Name:** AOC-32 SURFACE WATER SAMPLING  
**Project Number:** 0127981-025

**Lab Number:** L2220562  
**Report Date:** 05/26/22

### **Method Blank Analysis Batch Quality Control**

Analytical Method: 1,8270D-SIM  
Analytical Date: 04/25/22 14:51  
Analyst: DB

Extraction Method: EPA 3510C  
Extraction Date: 04/22/22 13:42

Parameter	Result	Qualifier	Units	RL	MDL
1,4 Dioxane by 8270D-SIM - Mansfield Lab for sample(s):	01-03,06	Batch:	WG1629980-1		
1,4-Dioxane	ND		ng/l	150	33.9

Surrogate	%Recovery	Qualifier	Acceptance
			Criteria
1,4-Dioxane-d8	41		15-110

**Project Name:** AOC-32 SURFACE WATER SAMPLING  
**Project Number:** 0127981-025

**Lab Number:** L2220562  
**Report Date:** 05/26/22

### Method Blank Analysis Batch Quality Control

Analytical Method: 134,LCMSMS-ID  
Analytical Date: 04/26/22 20:56  
Analyst: RS

Extraction Method: ALPHA 23528  
Extraction Date: 04/25/22 17:37

Parameter	Result	Qualifier	Units	RL	MDL
Perfluorinated Alkyl Acids by Isotope Dilution - Mansfield Lab for sample(s):	01-06			Batch:	WG1630826-1
Perfluorobutanoic Acid (PFBA)	ND		ng/l	2.00	0.408
Perfluoropentanoic Acid (PFPeA)	ND		ng/l	2.00	0.396
Perfluorobutanesulfonic Acid (PFBS)	ND		ng/l	2.00	0.238
Perfluorohexanoic Acid (PFHxA)	ND		ng/l	2.00	0.328
Perfluoroheptanoic Acid (PFHpA)	ND		ng/l	2.00	0.225
Perfluorohexamersulfonic Acid (PFHxS)	ND		ng/l	2.00	0.376
Perfluorooctanoic Acid (PFOA)	ND		ng/l	2.00	0.236
1H,1H,2H,2H-Perfluorooctanesulfonic Acid (6:2FTS)	1.82	J	ng/l	2.00	1.33
Perfluoroheptanesulfonic Acid (PFHpS)	ND		ng/l	2.00	0.688
Perfluorononanoic Acid (PFNA)	ND		ng/l	2.00	0.312
Perfluorooctanesulfonic Acid (PFOS)	ND		ng/l	2.00	0.504
Perfluorodecanoic Acid (PFDA)	ND		ng/l	2.00	0.304
1H,1H,2H,2H-Perfluorodecanesulfonic Acid (8:2FTS)	ND		ng/l	2.00	1.21
N-Methyl Perfluorooctanesulfonamidoacetic Acid (NMeFOSAA)	ND		ng/l	2.00	0.648
Perfluoroundecanoic Acid (PFUnA)	ND		ng/l	2.00	0.260
Perfluorodecanesulfonic Acid (PFDS)	ND		ng/l	2.00	0.980
Perfluorooctanesulfonamide (FOSA)	ND		ng/l	2.00	0.580
N-Ethyl Perfluorooctanesulfonamidoacetic Acid (NEtFOSAA)	ND		ng/l	2.00	0.804
Perfluorododecanoic Acid (PFDoA)	ND		ng/l	2.00	0.372
Perfluorotridecanoic Acid (PFTrDA)	ND		ng/l	2.00	0.327
Perfluorotetradecanoic Acid (PFTA)	ND		ng/l	2.00	0.248
PFOA/PFOS, Total	ND		ng/l	2.00	0.236

**Project Name:** AOC-32 SURFACE WATER SAMPLING  
**Project Number:** 0127981-025

**Lab Number:** L2220562  
**Report Date:** 05/26/22

### **Method Blank Analysis Batch Quality Control**

Analytical Method: 134,LCMSMS-ID  
Analytical Date: 04/26/22 20:56  
Analyst: RS

Extraction Method: ALPHA 23528  
Extraction Date: 04/25/22 17:37

Parameter	Result	Qualifier	Units	RL	MDL
Perfluorinated Alkyl Acids by Isotope Dilution - Mansfield Lab for sample(s): 01-06				Batch: WG1630826-1	

Surrogate (Extracted Internal Standard)	%Recovery	Qualifier	Acceptance Criteria
Perfluoro[13C4]Butanoic Acid (MPFBA)	108		58-132
Perfluoro[13C5]Pentanoic Acid (M5PFPEA)	142		62-163
Perfluoro[2,3,4-13C3]Butanesulfonic Acid (M3PFBS)	103		70-131
Perfluoro[1,2,3,4,6-13C5]Hexanoic Acid (M5PFHxA)	102		57-129
Perfluoro[1,2,3,4-13C4]Heptanoic Acid (M4PFHpA)	104		60-129
Perfluoro[1,2,3-13C3]Hexanesulfonic Acid (M3PFHxS)	112		71-134
Perfluoro[13C8]Octanoic Acid (M8PFOA)	110		62-129
1H,1H,2H,2H-Perfluoro[1,2-13C2]Octanesulfonic Acid (M2-6:2FTS)	111		14-147
Perfluoro[13C9]Nonanoic Acid (M9PFNA)	99		59-139
Perfluoro[13C8]Octanesulfonic Acid (M8PFOS)	106		69-131
Perfluoro[1,2,3,4,5,6-13C6]Decanoic Acid (M6PFDA)	102		62-124
1H,1H,2H,2H-Perfluoro[1,2-13C2]Decanesulfonic Acid (M2-8:2FTS)	122		10-162
N-Deuteriomethylperfluoro-1-octanesulfonamidoacetic Acid (d3-NMeFOSAA)	175	Q	24-116
Perfluoro[1,2,3,4,5,6,7-13C7]Undecanoic Acid (M7-PFUDA)	119		55-137
Perfluoro[13C8]Octanesulfonamide (M8FOSA)	44		10-112
N-Deuterioethylperfluoro-1-octanesulfonamidoacetic Acid (d5-NEtFOSAA)	164	Q	27-126
Perfluoro[1,2-13C2]Dodecanoic Acid (MPFDOA)	123		48-131
Perfluoro[1,2-13C2]Tetradecanoic Acid (M2PFTEDA)	95		22-136

# Lab Control Sample Analysis

## Batch Quality Control

**Project Name:** AOC-32 SURFACE WATER SAMPLING  
**Project Number:** 0127981-025

**Lab Number:** L2220562  
**Report Date:** 05/26/22

<b>Parameter</b>	<i>LCS</i> %Recovery	<i>Qual</i>	<i>LCSD</i> %Recovery	<i>Qual</i>	<i>%Recovery</i> <i>Limits</i>	<i>RPD</i>	<i>Qual</i>	<i>RPD</i> <i>Limits</i>
1,4 Dioxane by 8270D-SIM - Mansfield Lab Associated sample(s): 01-03,06 Batch: WG1629980-2 WG1629980-3								
1,4-Dioxane	124		125		40-140	1		30

<b>Surrogate</b>	<i>LCS</i> %Recovery	<i>Qual</i>	<i>LCSD</i> %Recovery	<i>Qual</i>	<b>Acceptance Criteria</b>
1,4-Dioxane-d8					15-110
	43		46		

# Lab Control Sample Analysis

## Batch Quality Control

**Project Name:** AOC-32 SURFACE WATER SAMPLING  
**Project Number:** 0127981-025

**Lab Number:** L2220562  
**Report Date:** 05/26/22

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Perfluorinated Alkyl Acids by Isotope Dilution - Mansfield Lab Associated sample(s): 01-06 Batch: WG1630826-2								
Perfluorobutanoic Acid (PFBA)	99		-		67-148	-		30
Perfluoropentanoic Acid (PFPeA)	96		-		63-161	-		30
Perfluorobutanesulfonic Acid (PFBS)	103		-		65-157	-		30
Perfluorohexanoic Acid (PFHxA)	98		-		69-168	-		30
Perfluoroheptanoic Acid (PFHpA)	101		-		58-159	-		30
Perfluorooctanesulfonic Acid (PFHxS)	110		-		69-177	-		30
Perfluorooctanoic Acid (PFOA)	98		-		63-159	-		30
1H,1H,2H,2H-Perfluorooctanesulfonic Acid (6:2FTS)	105		-		49-187	-		30
Perfluoroheptanesulfonic Acid (PFHpS)	115		-		61-179	-		30
Perfluorononanoic Acid (PFNA)	108		-		68-171	-		30
Perfluorooctanesulfonic Acid (PFOS)	114		-		52-151	-		30
Perfluorodecanoic Acid (PFDA)	109		-		63-171	-		30
1H,1H,2H,2H-Perfluorodecanesulfonic Acid (8:2FTS)	90		-		56-173	-		30
N-Methyl Perfluorooctanesulfonamidoacetic Acid (NMeFOSAA)	92		-		60-166	-		30
Perfluoroundecanoic Acid (PFUnA)	90		-		60-153	-		30
Perfluorodecanesulfonic Acid (PFDS)	126		-		38-156	-		30
Perfluorooctanesulfonamide (FOSA)	109		-		46-170	-		30
N-Ethyl Perfluorooctanesulfonamidoacetic Acid (NEtFOSAA)	110		-		45-170	-		30
Perfluorododecanoic Acid (PFDoA)	100		-		67-153	-		30
Perfluorotridecanoic Acid (PFTrDA)	126		-		48-158	-		30
Perfluorotetradecanoic Acid (PFTA)	122		-		59-182	-		30

# Lab Control Sample Analysis

## Batch Quality Control

**Project Name:** AOC-32 SURFACE WATER SAMPLING  
**Project Number:** 0127981-025

**Lab Number:** L2220562  
**Report Date:** 05/26/22

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Perfluorinated Alkyl Acids by Isotope Dilution - Mansfield Lab Associated sample(s): 01-06 Batch: WG1630826-2								
Surrogate (Extracted Internal Standard)	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria			
Perfluoro[13C4]Butanoic Acid (MPFBA)	110				58-132			
Perfluoro[13C5]Pentanoic Acid (M5PFPEA)	138				62-163			
Perfluoro[2,3,4-13C3]Butanesulfonic Acid (M3PFBS)	101				70-131			
Perfluoro[1,2,3,4,6-13C5]Hexanoic Acid (M5PFHxA)	106				57-129			
Perfluoro[1,2,3,4-13C4]Heptanoic Acid (M4PFHpA)	104				60-129			
Perfluoro[1,2,3-13C3]Hexanesulfonic Acid (M3PFHxS)	108				71-134			
Perfluoro[13C8]Octanoic Acid (M8PFOA)	111				62-129			
1H,1H,2H-Perfluoro[1,2-13C2]Octanesulfonic Acid (M2-6:2FTS)	119				14-147			
Perfluoro[13C9]Nonanoic Acid (M9PFNA)	102				59-139			
Perfluoro[13C8]Octanesulfonic Acid (M8PFOS)	102				69-131			
Perfluoro[1,2,3,4,5,6-13C6]Decanoic Acid (M6PFDA)	106				62-124			
1H,1H,2H-Perfluoro[1,2-13C2]Decanesulfonic Acid (M2-8:2FTS)	114				10-162			
N-Deuteriomethylperfluoro-1-octanesulfonamidoacetic Acid (d3-NMeFOSAA)	171	Q			24-116			
Perfluoro[1,2,3,4,5,6,7-13C7]Undecanoic Acid (M7-PFDA)	122				55-137			
Perfluoro[13C8]Octanesulfonamide (M8FOSA)	56				10-112			
N-Deuterioethylperfluoro-1-octanesulfonamidoacetic Acid (d5-NEtFOSAA)	161	Q			27-126			
Perfluoro[1,2-13C2]Dodecanoic Acid (MPFDOA)	134	Q			48-131			
Perfluoro[1,2-13C2]Tetradecanoic Acid (M2PFTEDA)	97				22-136			

# Matrix Spike Analysis

## Batch Quality Control

**Project Name:** AOC-32 SURFACE WATER SAMPLING  
**Project Number:** 0127981-025

**Lab Number:** L2220562  
**Report Date:** 05/26/22

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Recovery Qual	Limits	RPD	RPD Qual	RPD Limits
Perfluorinated Alkyl Acids by Isotope Dilution - Mansfield Lab Associated sample(s): 01-06 QC Batch ID: WG1630826-3 WG1630826-4 QC Sample: L2220330-06												
Client ID: MS Sample												
Perfluorobutanoic Acid (PFBA)	9.24	38.7	47.0	98		45.4	97		67-148	3		30
Perfluoropentanoic Acid (PFPeA)	25.8	38.7	61.3	92		60.7	94		63-161	1		30
Perfluorobutanesulfonic Acid (PFBS)	8.48	34.3	44.0	103		41.3	99		65-157	6		30
1H,1H,2H,2H-Perfluorohexanesulfonic Acid (4:2FTS)	ND	36.3	37.2	103		37.7	108		37-219	1		30
Perfluorohexanoic Acid (PFHxA)	22.9	38.7	60.6	98		60.1	100		69-168	1		30
Perfluoropentanesulfonic Acid (PFPeS)	0.638J	36.4	35.0	94		33.6	94		52-156	4		30
Perfluoroheptanoic Acid (PFHpA)	11.2	38.7	50.3	101		48.0	99		58-159	5		30
Perfluorohexanesulfonic Acid (PFHxS)	6.67	35.4	44.9	108		43.1	107		69-177	4		30
Perfluorooctanoic Acid (PFOA)	54.0	38.7	92.0	98		90.6	98		63-159	2		30
1H,1H,2H,2H-Perfluorooctanesulfonic Acid (6:2FTS)	1.82	36.8	41.5	108		37.4	100		49-187	10		30
Perfluoroheptanesulfonic Acid (PFHps)	1.74J	36.9	45.1	118		43.4	117		61-179	4		30
Perfluorononanoic Acid (PFNA)	9.98	38.7	51.1	106		49.6	106		68-171	3		30
Perfluorooctanesulfonic Acid (PFOS)	59.6F	35.9	98.6F	109		102F	122		52-151	3		30
Perfluorodecanoic Acid (PFDA)	ND	38.7	42.0	109		40.2	108		63-171	4		30
1H,1H,2H,2H-Perfluorodecanesulfonic Acid (8:2FTS)	ND	37.1	30.8	83		29.4	82		56-173	5		30
Perfluorononanesulfonic Acid (PFNS)	ND	37.2	43.8	118		42.9	119		48-150	2		30
N-Methyl Perfluorooctanesulfonamidoacetic Acid (NMeFOSAA)	ND	38.7	32.5	84		31.6	85		60-166	3		30
Perfluoroundecanoic Acid (PFUnA)	ND	38.7	34.0	88		32.2	86		60-153	5		30
Perfluorodecanesulfonic Acid (PFDS)	ND	37.4	41.2	110		43.6	121		38-156	6		30
Perfluorooctanesulfonamide (FOSA)	ND	38.7	42.4F	110		37.4F	100		46-170	13		30
N-Ethyl Perfluorooctanesulfonamidoacetic Acid (NEtFOSAA)	ND	38.7	40.2	104		39.8	107		45-170	1		30
Perfluorododecanoic Acid (PFDoA)	ND	38.7	39.2	101		36.9	99		67-153	6		30

# Matrix Spike Analysis

*Batch Quality Control*

**Project Name:** AOC-32 SURFACE WATER SAMPLING  
**Project Number:** 0127981-025

**Lab Number:** L2220562  
**Report Date:** 05/26/22

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	RPD Qual	RPD Limits
Perfluorinated Alkyl Acids by Isotope Dilution - Mansfield Lab Associated sample(s): 01-06 QC Batch ID: WG1630826-3 WG1630826-4 QC Sample: L2220330-06 Client ID: MS Sample												
Perfluorotridecanoic Acid (PFTrDA)	ND	38.7	48.6	126		42.3	113		48-158	14		30
Perfluorotetradecanoic Acid (PFTA)	ND	38.7	46.5	120		42.1	113		59-182	10		30

Surrogate (Extracted Internal Standard)	MS % Recovery	MS Qualifier	MSD % Recovery	MSD Qualifier	Acceptance Criteria
1H,1H,2H,2H-Perfluoro[1,2-13C2]Decanesulfonic Acid (M2-8:2FTS)	94		86		10-162
1H,1H,2H,2H-Perfluoro[1,2-13C2]Hexanesulfonic Acid (M2-4:2FTS)	113		104		12-142
1H,1H,2H,2H-Perfluoro[1,2-13C2]Octanesulfonic Acid (M2-6:2FTS)	96		94		14-147
N-Deuteroethylperfluoro-1-octanesulfonamidoacetic Acid (d5-NEtFOSAA)	84		94		27-126
N-Deuteriomethylperfluoro-1-octanesulfonamidoacetic Acid (d3-NMeFOSAA)	104		115		24-116
Perfluoro[1,2,3,4,5,6,7-13C7]Undecanoic Acid (M7-PFUDA)	90		101		55-137
Perfluoro[1,2,3,4,5,6-13C6]Decanoic Acid (M6PFDA)	79		89		62-124
Perfluoro[1,2,3,4,6-13C5]Hexanoic Acid (M5PFHxA)	83		82		57-129
Perfluoro[1,2,3,4-13C4]Heptanoic Acid (M4PFHxA)	83		85		60-129
Perfluoro[1,2,3-13C3]Hexanesulfonic Acid (M3PFHxS)	114		112		71-134
Perfluoro[1,2-13C2]Dodecanoic Acid (MPFDOA)	101		115		48-131
Perfluoro[1,2-13C2]Tetradecanoic Acid (M2PFTEDA)	79		85		22-136
Perfluoro[13C4]Butanoic Acid (MPFBA)	94		94		58-132
Perfluoro[13C5]Pentanoic Acid (M5PFPEA)	124		124		62-163
Perfluoro[13C8]Octanesulfonamide (M8FOSA)	24		26		10-112
Perfluoro[13C8]Octanesulfonic Acid (M8PFOS)	100		97		69-131
Perfluoro[13C8]Octanoic Acid (M8PFOA)	85		87		62-129
Perfluoro[13C9]Nonanoic Acid (M9PFNA)	78		82		59-139
Perfluoro[2,3,4-13C3]Butanesulfonic Acid (M3PFBS)	103		101		70-131

## METALS



Project Name: AOC-32 SURFACE WATER SAMPLING

Project Number: 0127981-025

Lab Number: L2220562

Report Date: 05/26/22

**SAMPLE RESULTS**

Lab ID: L2220562-01  
 Client ID: SW-BGKD-02-0.5  
 Sample Location: BATH, NY

Date Collected: 04/19/22 12:30  
 Date Received: 04/20/22  
 Field Prep: Not Specified

Sample Depth:

Matrix: Water

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
<b>Total Metals - Mansfield Lab</b>											
Aluminum, Total	0.645		mg/l	0.0100	0.00327	1	04/25/22 14:51	04/25/22 20:01	EPA 3005A	1,6020B	WP
Antimony, Total	0.00084	J	mg/l	0.00400	0.00042	1	04/25/22 14:51	04/25/22 20:01	EPA 3005A	1,6020B	WP
Arsenic, Total	0.00064		mg/l	0.00050	0.00016	1	04/25/22 14:51	04/25/22 20:01	EPA 3005A	1,6020B	WP
Barium, Total	0.05336		mg/l	0.00050	0.00017	1	04/25/22 14:51	04/25/22 20:01	EPA 3005A	1,6020B	WP
Beryllium, Total	ND		mg/l	0.00050	0.00010	1	04/25/22 14:51	04/25/22 20:01	EPA 3005A	1,6020B	WP
Cadmium, Total	ND		mg/l	0.00020	0.00005	1	04/25/22 14:51	04/25/22 20:01	EPA 3005A	1,6020B	WP
Calcium, Total	29.9		mg/l	0.100	0.0394	1	04/25/22 14:51	04/25/22 20:01	EPA 3005A	1,6020B	WP
Chromium, Total	0.00100		mg/l	0.00100	0.00017	1	04/25/22 14:51	04/25/22 20:01	EPA 3005A	1,6020B	WP
Cobalt, Total	0.00064		mg/l	0.00050	0.00016	1	04/25/22 14:51	04/25/22 20:01	EPA 3005A	1,6020B	WP
Copper, Total	0.00181		mg/l	0.00100	0.00038	1	04/25/22 14:51	04/25/22 20:01	EPA 3005A	1,6020B	WP
Iron, Total	1.16		mg/l	0.0500	0.0191	1	04/25/22 14:51	04/25/22 20:01	EPA 3005A	1,6020B	WP
Lead, Total	0.00119		mg/l	0.00100	0.00034	1	04/25/22 14:51	04/25/22 20:01	EPA 3005A	1,6020B	WP
Magnesium, Total	5.96		mg/l	0.0700	0.0242	1	04/25/22 14:51	04/25/22 20:01	EPA 3005A	1,6020B	WP
Manganese, Total	0.05122		mg/l	0.00100	0.00044	1	04/25/22 14:51	04/25/22 20:01	EPA 3005A	1,6020B	WP
Mercury, Total	ND		mg/l	0.00020	0.00009	1	04/26/22 15:25	04/27/22 10:41	EPA 7470A	1,7470A	DMB
Nickel, Total	0.00159	J	mg/l	0.00200	0.00055	1	04/25/22 14:51	04/25/22 20:01	EPA 3005A	1,6020B	WP
Potassium, Total	1.29		mg/l	0.100	0.0309	1	04/25/22 14:51	04/25/22 20:01	EPA 3005A	1,6020B	WP
Selenium, Total	ND		mg/l	0.00500	0.00173	1	04/25/22 14:51	04/25/22 20:01	EPA 3005A	1,6020B	WP
Silver, Total	ND		mg/l	0.00040	0.00016	1	04/25/22 14:51	04/25/22 20:01	EPA 3005A	1,6020B	WP
Sodium, Total	40.7		mg/l	0.100	0.0293	1	04/25/22 14:51	04/25/22 20:01	EPA 3005A	1,6020B	WP
Thallium, Total	ND		mg/l	0.00100	0.00014	1	04/25/22 14:51	04/25/22 20:01	EPA 3005A	1,6020B	WP
Vanadium, Total	ND		mg/l	0.00500	0.00157	1	04/25/22 14:51	04/25/22 20:01	EPA 3005A	1,6020B	WP
Zinc, Total	0.01706		mg/l	0.01000	0.00341	1	04/25/22 14:51	04/25/22 20:01	EPA 3005A	1,6020B	WP
<b>Dissolved Metals - Mansfield Lab</b>											
Aluminum, Dissolved	0.0198		mg/l	0.0100	0.00327	1	04/25/22 09:54	04/25/22 15:44	EPA 3005A	1,6020B	WP
Antimony, Dissolved	0.00049	J	mg/l	0.00400	0.00042	1	04/25/22 09:54	04/25/22 15:44	EPA 3005A	1,6020B	WP
Arsenic, Dissolved	0.00040	J	mg/l	0.00050	0.00016	1	04/25/22 09:54	04/25/22 15:44	EPA 3005A	1,6020B	WP
Barium, Dissolved	0.04205		mg/l	0.00050	0.00017	1	04/25/22 09:54	04/25/22 15:44	EPA 3005A	1,6020B	WP
Beryllium, Dissolved	ND		mg/l	0.00050	0.00010	1	04/25/22 09:54	04/25/22 15:44	EPA 3005A	1,6020B	WP



**Project Name:** AOC-32 SURFACE WATER SAMPLING  
**Project Number:** 0127981-025

**Lab Number:** L2220562  
**Report Date:** 05/26/22

**SAMPLE RESULTS**

Lab ID: L2220562-01  
Client ID: SW-BGKD-02-0.5  
Sample Location: BATH, NY

Date Collected: 04/19/22 12:30  
Date Received: 04/20/22  
Field Prep: Not Specified

Sample Depth:

Matrix: Water

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Cadmium, Dissolved	ND		mg/l	0.00020	0.00005	1	04/25/22 09:54	04/25/22 15:44	EPA 3005A	1,6020B	WP
Calcium, Dissolved	29.6		mg/l	0.100	0.0394	1	04/25/22 09:54	04/25/22 15:44	EPA 3005A	1,6020B	WP
Chromium, Dissolved	ND		mg/l	0.00100	0.00017	1	04/25/22 09:54	04/25/22 15:44	EPA 3005A	1,6020B	WP
Cobalt, Dissolved	ND		mg/l	0.00050	0.00016	1	04/25/22 09:54	04/25/22 15:44	EPA 3005A	1,6020B	WP
Copper, Dissolved	0.00079	J	mg/l	0.00100	0.00038	1	04/25/22 09:54	04/25/22 15:44	EPA 3005A	1,6020B	WP
Iron, Dissolved	0.0298	J	mg/l	0.0500	0.0191	1	04/25/22 09:54	04/25/22 15:44	EPA 3005A	1,6020B	WP
Lead, Dissolved	ND		mg/l	0.00100	0.00034	1	04/25/22 09:54	04/25/22 15:44	EPA 3005A	1,6020B	WP
Magnesium, Dissolved	5.79		mg/l	0.0700	0.0242	1	04/25/22 09:54	04/25/22 15:44	EPA 3005A	1,6020B	WP
Manganese, Dissolved	0.00273		mg/l	0.00100	0.00044	1	04/25/22 09:54	04/25/22 15:44	EPA 3005A	1,6020B	WP
Mercury, Dissolved	ND		mg/l	0.00020	0.00009	1	04/25/22 10:50	04/26/22 10:15	EPA 7470A	1,7470A	DMB
Nickel, Dissolved	ND		mg/l	0.00200	0.00055	1	04/25/22 09:54	04/25/22 15:44	EPA 3005A	1,6020B	WP
Potassium, Dissolved	1.27		mg/l	0.100	0.0309	1	04/25/22 09:54	04/25/22 15:44	EPA 3005A	1,6020B	WP
Selenium, Dissolved	ND		mg/l	0.00500	0.00173	1	04/25/22 09:54	04/25/22 15:44	EPA 3005A	1,6020B	WP
Silver, Dissolved	ND		mg/l	0.00040	0.00016	1	04/25/22 09:54	04/25/22 15:44	EPA 3005A	1,6020B	WP
Sodium, Dissolved	41.4		mg/l	0.100	0.0293	1	04/25/22 09:54	04/25/22 15:44	EPA 3005A	1,6020B	WP
Thallium, Dissolved	ND		mg/l	0.00100	0.00014	1	04/25/22 09:54	04/25/22 15:44	EPA 3005A	1,6020B	WP
Vanadium, Dissolved	ND		mg/l	0.00500	0.00157	1	04/25/22 09:54	04/25/22 15:44	EPA 3005A	1,6020B	WP
Zinc, Dissolved	ND		mg/l	0.01000	0.00341	1	04/25/22 09:54	04/25/22 15:44	EPA 3005A	1,6020B	WP



**Project Name:** AOC-32 SURFACE WATER SAMPLING**Project Number:** 0127981-025**Lab Number:** L2220562**Report Date:** 05/26/22**SAMPLE RESULTS**

Lab ID: L2220562-02  
 Client ID: SW-BGKD-01-0.75  
 Sample Location: BATH, NY

Date Collected: 04/19/22 13:00  
 Date Received: 04/20/22  
 Field Prep: Not Specified

Sample Depth:

Matrix: Water

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
<b>Total Metals - Mansfield Lab</b>											
Aluminum, Total	0.295		mg/l	0.0100	0.00327	1	04/25/22 14:51	04/25/22 20:06	EPA 3005A	1,6020B	WP
Antimony, Total	0.00052	J	mg/l	0.00400	0.00042	1	04/25/22 14:51	04/25/22 20:06	EPA 3005A	1,6020B	WP
Arsenic, Total	0.00050		mg/l	0.00050	0.00016	1	04/25/22 14:51	04/25/22 20:06	EPA 3005A	1,6020B	WP
Barium, Total	0.04540		mg/l	0.00050	0.00017	1	04/25/22 14:51	04/25/22 20:06	EPA 3005A	1,6020B	WP
Beryllium, Total	ND		mg/l	0.00050	0.00010	1	04/25/22 14:51	04/25/22 20:06	EPA 3005A	1,6020B	WP
Cadmium, Total	ND		mg/l	0.00020	0.00005	1	04/25/22 14:51	04/25/22 20:06	EPA 3005A	1,6020B	WP
Calcium, Total	28.4		mg/l	0.100	0.0394	1	04/25/22 14:51	04/25/22 20:06	EPA 3005A	1,6020B	WP
Chromium, Total	0.00056	J	mg/l	0.00100	0.00017	1	04/25/22 14:51	04/25/22 20:06	EPA 3005A	1,6020B	WP
Cobalt, Total	0.00025	J	mg/l	0.00050	0.00016	1	04/25/22 14:51	04/25/22 20:06	EPA 3005A	1,6020B	WP
Copper, Total	0.00107		mg/l	0.00100	0.00038	1	04/25/22 14:51	04/25/22 20:06	EPA 3005A	1,6020B	WP
Iron, Total	0.491		mg/l	0.0500	0.0191	1	04/25/22 14:51	04/25/22 20:06	EPA 3005A	1,6020B	WP
Lead, Total	0.00140		mg/l	0.00100	0.00034	1	04/25/22 14:51	04/25/22 20:06	EPA 3005A	1,6020B	WP
Magnesium, Total	5.47		mg/l	0.0700	0.0242	1	04/25/22 14:51	04/25/22 20:06	EPA 3005A	1,6020B	WP
Manganese, Total	0.01204		mg/l	0.00100	0.00044	1	04/25/22 14:51	04/25/22 20:06	EPA 3005A	1,6020B	WP
Mercury, Total	ND		mg/l	0.00020	0.00009	1	04/26/22 15:25	04/27/22 10:31	EPA 7470A	1,7470A	DMB
Nickel, Total	0.00077	J	mg/l	0.00200	0.00055	1	04/25/22 14:51	04/25/22 20:06	EPA 3005A	1,6020B	WP
Potassium, Total	1.24		mg/l	0.100	0.0309	1	04/25/22 14:51	04/25/22 20:06	EPA 3005A	1,6020B	WP
Selenium, Total	ND		mg/l	0.00500	0.00173	1	04/25/22 14:51	04/25/22 20:06	EPA 3005A	1,6020B	WP
Silver, Total	ND		mg/l	0.00040	0.00016	1	04/25/22 14:51	04/25/22 20:06	EPA 3005A	1,6020B	WP
Sodium, Total	40.4		mg/l	0.100	0.0293	1	04/25/22 14:51	04/25/22 20:06	EPA 3005A	1,6020B	WP
Thallium, Total	ND		mg/l	0.00100	0.00014	1	04/25/22 14:51	04/25/22 20:06	EPA 3005A	1,6020B	WP
Vanadium, Total	ND		mg/l	0.00500	0.00157	1	04/25/22 14:51	04/25/22 20:06	EPA 3005A	1,6020B	WP
Zinc, Total	0.01542		mg/l	0.01000	0.00341	1	04/25/22 14:51	04/25/22 20:06	EPA 3005A	1,6020B	WP
<b>Dissolved Metals - Mansfield Lab</b>											
Aluminum, Dissolved	0.0216		mg/l	0.0100	0.00327	1	04/25/22 09:54	04/25/22 15:49	EPA 3005A	1,6020B	WP
Antimony, Dissolved	ND		mg/l	0.00400	0.00042	1	04/25/22 09:54	04/25/22 15:49	EPA 3005A	1,6020B	WP
Arsenic, Dissolved	0.00037	J	mg/l	0.00050	0.00016	1	04/25/22 09:54	04/25/22 15:49	EPA 3005A	1,6020B	WP
Barium, Dissolved	0.04241		mg/l	0.00050	0.00017	1	04/25/22 09:54	04/25/22 15:49	EPA 3005A	1,6020B	WP
Beryllium, Dissolved	ND		mg/l	0.00050	0.00010	1	04/25/22 09:54	04/25/22 15:49	EPA 3005A	1,6020B	WP



**Project Name:** AOC-32 SURFACE WATER SAMPLING  
**Project Number:** 0127981-025

**Lab Number:** L2220562  
**Report Date:** 05/26/22

**SAMPLE RESULTS**

Lab ID:	L2220562-02	Date Collected:	04/19/22 13:00
Client ID:	SW-BGKD-01-0.75	Date Received:	04/20/22
Sample Location:	BATH, NY	Field Prep:	Not Specified

Sample Depth:

Matrix: Water

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Cadmium, Dissolved	ND		mg/l	0.00020	0.00005	1	04/25/22 09:54	04/25/22 15:49	EPA 3005A	1,6020B	WP
Calcium, Dissolved	30.3		mg/l	0.100	0.0394	1	04/25/22 09:54	04/25/22 15:49	EPA 3005A	1,6020B	WP
Chromium, Dissolved	ND		mg/l	0.00100	0.00017	1	04/25/22 09:54	04/25/22 15:49	EPA 3005A	1,6020B	WP
Cobalt, Dissolved	ND		mg/l	0.00050	0.00016	1	04/25/22 09:54	04/25/22 15:49	EPA 3005A	1,6020B	WP
Copper, Dissolved	0.00176		mg/l	0.00100	0.00038	1	04/25/22 09:54	04/25/22 15:49	EPA 3005A	1,6020B	WP
Iron, Dissolved	0.0247	J	mg/l	0.0500	0.0191	1	04/25/22 09:54	04/25/22 15:49	EPA 3005A	1,6020B	WP
Lead, Dissolved	ND		mg/l	0.00100	0.00034	1	04/25/22 09:54	04/25/22 15:49	EPA 3005A	1,6020B	WP
Magnesium, Dissolved	5.72		mg/l	0.0700	0.0242	1	04/25/22 09:54	04/25/22 15:49	EPA 3005A	1,6020B	WP
Manganese, Dissolved	0.00284		mg/l	0.00100	0.00044	1	04/25/22 09:54	04/25/22 15:49	EPA 3005A	1,6020B	WP
Mercury, Dissolved	ND		mg/l	0.00020	0.00009	1	04/25/22 10:50	04/26/22 10:05	EPA 7470A	1,7470A	DMB
Nickel, Dissolved	ND		mg/l	0.00200	0.00055	1	04/25/22 09:54	04/25/22 15:49	EPA 3005A	1,6020B	WP
Potassium, Dissolved	1.25		mg/l	0.100	0.0309	1	04/25/22 09:54	04/25/22 15:49	EPA 3005A	1,6020B	WP
Selenium, Dissolved	ND		mg/l	0.00500	0.00173	1	04/25/22 09:54	04/25/22 15:49	EPA 3005A	1,6020B	WP
Silver, Dissolved	ND		mg/l	0.00040	0.00016	1	04/25/22 09:54	04/25/22 15:49	EPA 3005A	1,6020B	WP
Sodium, Dissolved	42.9		mg/l	0.100	0.0293	1	04/25/22 09:54	04/25/22 15:49	EPA 3005A	1,6020B	WP
Thallium, Dissolved	ND		mg/l	0.00100	0.00014	1	04/25/22 09:54	04/25/22 15:49	EPA 3005A	1,6020B	WP
Vanadium, Dissolved	ND		mg/l	0.00500	0.00157	1	04/25/22 09:54	04/25/22 15:49	EPA 3005A	1,6020B	WP
Zinc, Dissolved	ND		mg/l	0.01000	0.00341	1	04/25/22 09:54	04/25/22 15:49	EPA 3005A	1,6020B	WP



Project Name: AOC-32 SURFACE WATER SAMPLING

Project Number: 0127981-025

Lab Number: L2220562

Report Date: 05/26/22

**SAMPLE RESULTS**

Lab ID: L2220562-03  
 Client ID: SW-POND-01-1.5  
 Sample Location: BATH, NY

Date Collected: 04/20/22 11:30  
 Date Received: 04/20/22  
 Field Prep: Not Specified

Sample Depth:

Matrix: Water

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
<b>Total Metals - Mansfield Lab</b>											
Aluminum, Total	0.121		mg/l	0.0100	0.00327	1	04/25/22 14:51	04/25/22 20:11	EPA 3005A	1,6020B	WP
Antimony, Total	ND		mg/l	0.00400	0.00042	1	04/25/22 14:51	04/25/22 20:11	EPA 3005A	1,6020B	WP
Arsenic, Total	0.00040	J	mg/l	0.00050	0.00016	1	04/25/22 14:51	04/25/22 20:11	EPA 3005A	1,6020B	WP
Barium, Total	0.04342		mg/l	0.00050	0.00017	1	04/25/22 14:51	04/25/22 20:11	EPA 3005A	1,6020B	WP
Beryllium, Total	ND		mg/l	0.00050	0.00010	1	04/25/22 14:51	04/25/22 20:11	EPA 3005A	1,6020B	WP
Cadmium, Total	ND		mg/l	0.00020	0.00005	1	04/25/22 14:51	04/25/22 20:11	EPA 3005A	1,6020B	WP
Calcium, Total	28.2		mg/l	0.100	0.0394	1	04/25/22 14:51	04/25/22 20:11	EPA 3005A	1,6020B	WP
Chromium, Total	0.00031	J	mg/l	0.00100	0.00017	1	04/25/22 14:51	04/25/22 20:11	EPA 3005A	1,6020B	WP
Cobalt, Total	ND		mg/l	0.00050	0.00016	1	04/25/22 14:51	04/25/22 20:11	EPA 3005A	1,6020B	WP
Copper, Total	0.00126		mg/l	0.00100	0.00038	1	04/25/22 14:51	04/25/22 20:11	EPA 3005A	1,6020B	WP
Iron, Total	0.126		mg/l	0.0500	0.0191	1	04/25/22 14:51	04/25/22 20:11	EPA 3005A	1,6020B	WP
Lead, Total	ND		mg/l	0.00100	0.00034	1	04/25/22 14:51	04/25/22 20:11	EPA 3005A	1,6020B	WP
Magnesium, Total	5.48		mg/l	0.0700	0.0242	1	04/25/22 14:51	04/25/22 20:11	EPA 3005A	1,6020B	WP
Manganese, Total	0.00880		mg/l	0.00100	0.00044	1	04/25/22 14:51	04/25/22 20:11	EPA 3005A	1,6020B	WP
Mercury, Total	ND		mg/l	0.00020	0.00009	1	04/26/22 15:25	04/27/22 10:44	EPA 7470A	1,7470A	DMB
Nickel, Total	ND		mg/l	0.00200	0.00055	1	04/25/22 14:51	04/25/22 20:11	EPA 3005A	1,6020B	WP
Potassium, Total	1.33		mg/l	0.100	0.0309	1	04/25/22 14:51	04/25/22 20:11	EPA 3005A	1,6020B	WP
Selenium, Total	ND		mg/l	0.00500	0.00173	1	04/25/22 14:51	04/25/22 20:11	EPA 3005A	1,6020B	WP
Silver, Total	ND		mg/l	0.00040	0.00016	1	04/25/22 14:51	04/25/22 20:11	EPA 3005A	1,6020B	WP
Sodium, Total	39.8		mg/l	0.100	0.0293	1	04/25/22 14:51	04/25/22 20:11	EPA 3005A	1,6020B	WP
Thallium, Total	ND		mg/l	0.00100	0.00014	1	04/25/22 14:51	04/25/22 20:11	EPA 3005A	1,6020B	WP
Vanadium, Total	ND		mg/l	0.00500	0.00157	1	04/25/22 14:51	04/25/22 20:11	EPA 3005A	1,6020B	WP
Zinc, Total	0.01054		mg/l	0.01000	0.00341	1	04/25/22 14:51	04/25/22 20:11	EPA 3005A	1,6020B	WP
<b>Dissolved Metals - Mansfield Lab</b>											
Aluminum, Dissolved	0.0261		mg/l	0.0100	0.00327	1	04/25/22 09:54	04/25/22 15:54	EPA 3005A	1,6020B	WP
Antimony, Dissolved	ND		mg/l	0.00400	0.00042	1	04/25/22 09:54	04/25/22 15:54	EPA 3005A	1,6020B	WP
Arsenic, Dissolved	0.00041	J	mg/l	0.00050	0.00016	1	04/25/22 09:54	04/25/22 15:54	EPA 3005A	1,6020B	WP
Barium, Dissolved	0.04382		mg/l	0.00050	0.00017	1	04/25/22 09:54	04/25/22 15:54	EPA 3005A	1,6020B	WP
Beryllium, Dissolved	ND		mg/l	0.00050	0.00010	1	04/25/22 09:54	04/25/22 15:54	EPA 3005A	1,6020B	WP



**Project Name:** AOC-32 SURFACE WATER SAMPLING  
**Project Number:** 0127981-025

**Lab Number:** L2220562  
**Report Date:** 05/26/22

**SAMPLE RESULTS**

Lab ID: L2220562-03  
Client ID: SW-POND-01-1.5  
Sample Location: BATH, NY

Date Collected: 04/20/22 11:30  
Date Received: 04/20/22  
Field Prep: Not Specified

Sample Depth:

Matrix: Water

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Cadmium, Dissolved	ND		mg/l	0.00020	0.00005	1	04/25/22 09:54	04/25/22 15:54	EPA 3005A	1,6020B	WP
Calcium, Dissolved	30.0		mg/l	0.100	0.0394	1	04/25/22 09:54	04/25/22 15:54	EPA 3005A	1,6020B	WP
Chromium, Dissolved	ND		mg/l	0.00100	0.00017	1	04/25/22 09:54	04/25/22 15:54	EPA 3005A	1,6020B	WP
Cobalt, Dissolved	ND		mg/l	0.00050	0.00016	1	04/25/22 09:54	04/25/22 15:54	EPA 3005A	1,6020B	WP
Copper, Dissolved	0.00113		mg/l	0.00100	0.00038	1	04/25/22 09:54	04/25/22 15:54	EPA 3005A	1,6020B	WP
Iron, Dissolved	0.0358	J	mg/l	0.0500	0.0191	1	04/25/22 09:54	04/25/22 15:54	EPA 3005A	1,6020B	WP
Lead, Dissolved	ND		mg/l	0.00100	0.00034	1	04/25/22 09:54	04/25/22 15:54	EPA 3005A	1,6020B	WP
Magnesium, Dissolved	5.80		mg/l	0.0700	0.0242	1	04/25/22 09:54	04/25/22 15:54	EPA 3005A	1,6020B	WP
Manganese, Dissolved	0.00717		mg/l	0.00100	0.00044	1	04/25/22 09:54	04/25/22 15:54	EPA 3005A	1,6020B	WP
Mercury, Dissolved	ND		mg/l	0.00020	0.00009	1	04/25/22 10:50	04/26/22 10:18	EPA 7470A	1,7470A	DMB
Nickel, Dissolved	ND		mg/l	0.00200	0.00055	1	04/25/22 09:54	04/25/22 15:54	EPA 3005A	1,6020B	WP
Potassium, Dissolved	1.38		mg/l	0.100	0.0309	1	04/25/22 09:54	04/25/22 15:54	EPA 3005A	1,6020B	WP
Selenium, Dissolved	ND		mg/l	0.00500	0.00173	1	04/25/22 09:54	04/25/22 15:54	EPA 3005A	1,6020B	WP
Silver, Dissolved	ND		mg/l	0.00040	0.00016	1	04/25/22 09:54	04/25/22 15:54	EPA 3005A	1,6020B	WP
Sodium, Dissolved	42.6		mg/l	0.100	0.0293	1	04/25/22 09:54	04/25/22 15:54	EPA 3005A	1,6020B	WP
Thallium, Dissolved	ND		mg/l	0.00100	0.00014	1	04/25/22 09:54	04/25/22 15:54	EPA 3005A	1,6020B	WP
Vanadium, Dissolved	ND		mg/l	0.00500	0.00157	1	04/25/22 09:54	04/25/22 15:54	EPA 3005A	1,6020B	WP
Zinc, Dissolved	ND		mg/l	0.01000	0.00341	1	04/25/22 09:54	04/25/22 15:54	EPA 3005A	1,6020B	WP



**Project Name:** AOC-32 SURFACE WATER SAMPLING  
**Project Number:** 0127981-025

**Lab Number:** L2220562  
**Report Date:** 05/26/22

**SAMPLE RESULTS**

Lab ID: L2220562-06  
Client ID: 4125-042022-0001  
Sample Location: BATH, NY

Date Collected: 04/20/22 00:00  
Date Received: 04/20/22  
Field Prep: Not Specified

Sample Depth:

Matrix: Water

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
<b>Total Metals - Mansfield Lab</b>											
Aluminum, Total	0.126		mg/l	0.0100	0.00327	1	04/25/22 14:51	04/25/22 20:16	EPA 3005A	1,6020B	WP
Antimony, Total	ND		mg/l	0.00400	0.00042	1	04/25/22 14:51	04/25/22 20:16	EPA 3005A	1,6020B	WP
Arsenic, Total	0.00045	J	mg/l	0.00050	0.00016	1	04/25/22 14:51	04/25/22 20:16	EPA 3005A	1,6020B	WP
Barium, Total	0.04426		mg/l	0.00050	0.00017	1	04/25/22 14:51	04/25/22 20:16	EPA 3005A	1,6020B	WP
Beryllium, Total	ND		mg/l	0.00050	0.00010	1	04/25/22 14:51	04/25/22 20:16	EPA 3005A	1,6020B	WP
Cadmium, Total	ND		mg/l	0.00020	0.00005	1	04/25/22 14:51	04/25/22 20:16	EPA 3005A	1,6020B	WP
Calcium, Total	29.5		mg/l	0.100	0.0394	1	04/25/22 14:51	04/25/22 20:16	EPA 3005A	1,6020B	WP
Chromium, Total	0.00032	J	mg/l	0.00100	0.00017	1	04/25/22 14:51	04/25/22 20:16	EPA 3005A	1,6020B	WP
Cobalt, Total	ND		mg/l	0.00050	0.00016	1	04/25/22 14:51	04/25/22 20:16	EPA 3005A	1,6020B	WP
Copper, Total	0.00134		mg/l	0.00100	0.00038	1	04/25/22 14:51	04/25/22 20:16	EPA 3005A	1,6020B	WP
Iron, Total	0.133		mg/l	0.0500	0.0191	1	04/25/22 14:51	04/25/22 20:16	EPA 3005A	1,6020B	WP
Lead, Total	ND		mg/l	0.00100	0.00034	1	04/25/22 14:51	04/25/22 20:16	EPA 3005A	1,6020B	WP
Magnesium, Total	5.54		mg/l	0.0700	0.0242	1	04/25/22 14:51	04/25/22 20:16	EPA 3005A	1,6020B	WP
Manganese, Total	0.00924		mg/l	0.00100	0.00044	1	04/25/22 14:51	04/25/22 20:16	EPA 3005A	1,6020B	WP
Mercury, Total	ND		mg/l	0.00020	0.00009	1	04/26/22 15:25	04/27/22 10:47	EPA 7470A	1,7470A	DMB
Nickel, Total	ND		mg/l	0.00200	0.00055	1	04/25/22 14:51	04/25/22 20:16	EPA 3005A	1,6020B	WP
Potassium, Total	1.42		mg/l	0.100	0.0309	1	04/25/22 14:51	04/25/22 20:16	EPA 3005A	1,6020B	WP
Selenium, Total	ND		mg/l	0.00500	0.00173	1	04/25/22 14:51	04/25/22 20:16	EPA 3005A	1,6020B	WP
Silver, Total	ND		mg/l	0.00040	0.00016	1	04/25/22 14:51	04/25/22 20:16	EPA 3005A	1,6020B	WP
Sodium, Total	40.2		mg/l	0.100	0.0293	1	04/25/22 14:51	04/25/22 20:16	EPA 3005A	1,6020B	WP
Thallium, Total	ND		mg/l	0.00100	0.00014	1	04/25/22 14:51	04/25/22 20:16	EPA 3005A	1,6020B	WP
Vanadium, Total	ND		mg/l	0.00500	0.00157	1	04/25/22 14:51	04/25/22 20:16	EPA 3005A	1,6020B	WP
Zinc, Total	0.00973	J	mg/l	0.01000	0.00341	1	04/25/22 14:51	04/25/22 20:16	EPA 3005A	1,6020B	WP
<b>Dissolved Metals - Mansfield Lab</b>											
Aluminum, Dissolved	0.0240		mg/l	0.0100	0.00327	1	04/25/22 09:54	04/25/22 15:39	EPA 3005A	1,6020B	WP
Antimony, Dissolved	0.00069	J	mg/l	0.00400	0.00042	1	04/25/22 09:54	04/25/22 15:39	EPA 3005A	1,6020B	WP
Arsenic, Dissolved	0.00051		mg/l	0.00050	0.00016	1	04/25/22 09:54	04/25/22 15:39	EPA 3005A	1,6020B	WP
Barium, Dissolved	0.04297		mg/l	0.00050	0.00017	1	04/25/22 09:54	04/25/22 15:39	EPA 3005A	1,6020B	WP
Beryllium, Dissolved	ND		mg/l	0.00050	0.00010	1	04/25/22 09:54	04/25/22 15:39	EPA 3005A	1,6020B	WP



**Project Name:** AOC-32 SURFACE WATER SAMPLING  
**Project Number:** 0127981-025

**Lab Number:** L2220562  
**Report Date:** 05/26/22

**SAMPLE RESULTS**

Lab ID: L2220562-06  
Client ID: 4125-042022-0001  
Sample Location: BATH, NY

Date Collected: 04/20/22 00:00  
Date Received: 04/20/22  
Field Prep: Not Specified

Sample Depth:

Matrix: Water

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Cadmium, Dissolved	ND		mg/l	0.00020	0.00005	1	04/25/22 09:54	04/25/22 15:39	EPA 3005A	1,6020B	WP
Calcium, Dissolved	29.4		mg/l	0.100	0.0394	1	04/25/22 09:54	04/25/22 15:39	EPA 3005A	1,6020B	WP
Chromium, Dissolved	ND		mg/l	0.00100	0.00017	1	04/25/22 09:54	04/25/22 15:39	EPA 3005A	1,6020B	WP
Cobalt, Dissolved	ND		mg/l	0.00050	0.00016	1	04/25/22 09:54	04/25/22 15:39	EPA 3005A	1,6020B	WP
Copper, Dissolved	0.00126		mg/l	0.00100	0.00038	1	04/25/22 09:54	04/25/22 15:39	EPA 3005A	1,6020B	WP
Iron, Dissolved	0.0420	J	mg/l	0.0500	0.0191	1	04/25/22 09:54	04/25/22 15:39	EPA 3005A	1,6020B	WP
Lead, Dissolved	ND		mg/l	0.00100	0.00034	1	04/25/22 09:54	04/25/22 15:39	EPA 3005A	1,6020B	WP
Magnesium, Dissolved	5.49		mg/l	0.0700	0.0242	1	04/25/22 09:54	04/25/22 15:39	EPA 3005A	1,6020B	WP
Manganese, Dissolved	0.00762		mg/l	0.00100	0.00044	1	04/25/22 09:54	04/25/22 15:39	EPA 3005A	1,6020B	WP
Mercury, Dissolved	ND		mg/l	0.00020	0.00009	1	04/25/22 10:50	04/26/22 10:22	EPA 7470A	1,7470A	DMB
Nickel, Dissolved	ND		mg/l	0.00200	0.00055	1	04/25/22 09:54	04/25/22 15:39	EPA 3005A	1,6020B	WP
Potassium, Dissolved	1.35		mg/l	0.100	0.0309	1	04/25/22 09:54	04/25/22 15:39	EPA 3005A	1,6020B	WP
Selenium, Dissolved	ND		mg/l	0.00500	0.00173	1	04/25/22 09:54	04/25/22 15:39	EPA 3005A	1,6020B	WP
Silver, Dissolved	ND		mg/l	0.00040	0.00016	1	04/25/22 09:54	04/25/22 15:39	EPA 3005A	1,6020B	WP
Sodium, Dissolved	40.3		mg/l	0.100	0.0293	1	04/25/22 09:54	04/25/22 15:39	EPA 3005A	1,6020B	WP
Thallium, Dissolved	ND		mg/l	0.00100	0.00014	1	04/25/22 09:54	04/25/22 15:39	EPA 3005A	1,6020B	WP
Vanadium, Dissolved	ND		mg/l	0.00500	0.00157	1	04/25/22 09:54	04/25/22 15:39	EPA 3005A	1,6020B	WP
Zinc, Dissolved	ND		mg/l	0.01000	0.00341	1	04/25/22 09:54	04/25/22 15:39	EPA 3005A	1,6020B	WP



**Project Name:** AOC-32 SURFACE WATER SAMPLING  
**Project Number:** 0127981-025

**Lab Number:** L2220562  
**Report Date:** 05/26/22

## Method Blank Analysis Batch Quality Control

Parameter	Result Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst	
<b>Dissolved Metals - Mansfield Lab for sample(s): 01-03,06 Batch: WG1630052-1</b>										
Aluminum, Dissolved	ND	mg/l	0.0100	0.00327	1	04/25/22 09:54	04/25/22 15:10	1,6020B	WP	
Antimony, Dissolved	0.00049	J	mg/l	0.00400	0.00042	1	04/25/22 09:54	04/25/22 15:10	1,6020B	WP
Arsenic, Dissolved	ND	mg/l	0.00050	0.00016	1	04/25/22 09:54	04/25/22 15:10	1,6020B	WP	
Barium, Dissolved	ND	mg/l	0.00050	0.00017	1	04/25/22 09:54	04/25/22 15:10	1,6020B	WP	
Beryllium, Dissolved	ND	mg/l	0.00050	0.00010	1	04/25/22 09:54	04/25/22 15:10	1,6020B	WP	
Cadmium, Dissolved	ND	mg/l	0.00020	0.00005	1	04/25/22 09:54	04/25/22 15:10	1,6020B	WP	
Calcium, Dissolved	ND	mg/l	0.100	0.0394	1	04/25/22 09:54	04/25/22 15:10	1,6020B	WP	
Chromium, Dissolved	ND	mg/l	0.00100	0.00017	1	04/25/22 09:54	04/25/22 15:10	1,6020B	WP	
Cobalt, Dissolved	ND	mg/l	0.00050	0.00016	1	04/25/22 09:54	04/25/22 15:10	1,6020B	WP	
Copper, Dissolved	ND	mg/l	0.00100	0.00038	1	04/25/22 09:54	04/25/22 15:10	1,6020B	WP	
Iron, Dissolved	ND	mg/l	0.0500	0.0191	1	04/25/22 09:54	04/25/22 15:10	1,6020B	WP	
Lead, Dissolved	ND	mg/l	0.00100	0.00034	1	04/25/22 09:54	04/25/22 15:10	1,6020B	WP	
Magnesium, Dissolved	ND	mg/l	0.0700	0.0242	1	04/25/22 09:54	04/25/22 15:10	1,6020B	WP	
Manganese, Dissolved	ND	mg/l	0.00100	0.00044	1	04/25/22 09:54	04/25/22 15:10	1,6020B	WP	
Nickel, Dissolved	ND	mg/l	0.00200	0.00055	1	04/25/22 09:54	04/25/22 15:10	1,6020B	WP	
Potassium, Dissolved	ND	mg/l	0.100	0.0309	1	04/25/22 09:54	04/25/22 15:10	1,6020B	WP	
Selenium, Dissolved	ND	mg/l	0.00500	0.00173	1	04/25/22 09:54	04/25/22 15:10	1,6020B	WP	
Silver, Dissolved	ND	mg/l	0.00040	0.00016	1	04/25/22 09:54	04/25/22 15:10	1,6020B	WP	
Sodium, Dissolved	0.0635	J	mg/l	0.100	0.0293	1	04/25/22 09:54	04/25/22 15:10	1,6020B	WP
Thallium, Dissolved	0.00015	J	mg/l	0.00100	0.00014	1	04/25/22 09:54	04/25/22 15:10	1,6020B	WP
Vanadium, Dissolved	ND	mg/l	0.00500	0.00157	1	04/25/22 09:54	04/25/22 15:10	1,6020B	WP	
Zinc, Dissolved	ND	mg/l	0.01000	0.00341	1	04/25/22 09:54	04/25/22 15:10	1,6020B	WP	

### Prep Information

Digestion Method: EPA 3005A

Parameter	Result Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
<b>Dissolved Metals - Mansfield Lab for sample(s): 01-03,06 Batch: WG1630054-1</b>									
Mercury, Dissolved	ND	mg/l	0.00020	0.00009	1	04/25/22 10:50	04/26/22 09:58	1,7470A	DMB



**Project Name:** AOC-32 SURFACE WATER SAMPLING  
**Project Number:** 0127981-025

**Lab Number:** L2220562  
**Report Date:** 05/26/22

## Method Blank Analysis Batch Quality Control

### Prep Information

Digestion Method: EPA 7470A

Parameter	Result Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
<b>Total Metals - Mansfield Lab for sample(s): 01-03,06 Batch: WG1630149-1</b>									
Aluminum, Total	ND	mg/l	0.0100	0.00327	1	04/25/22 14:51	04/25/22 19:23	1,6020B	WP
Antimony, Total	ND	mg/l	0.00400	0.00042	1	04/25/22 14:51	04/25/22 19:23	1,6020B	WP
Arsenic, Total	ND	mg/l	0.00050	0.00016	1	04/25/22 14:51	04/25/22 19:23	1,6020B	WP
Barium, Total	ND	mg/l	0.00050	0.00017	1	04/25/22 14:51	04/25/22 19:23	1,6020B	WP
Beryllium, Total	ND	mg/l	0.00050	0.00010	1	04/25/22 14:51	04/25/22 19:23	1,6020B	WP
Cadmium, Total	ND	mg/l	0.00020	0.00005	1	04/25/22 14:51	04/25/22 19:23	1,6020B	WP
Calcium, Total	ND	mg/l	0.100	0.0394	1	04/25/22 14:51	04/25/22 19:23	1,6020B	WP
Chromium, Total	ND	mg/l	0.00100	0.00017	1	04/25/22 14:51	04/25/22 19:23	1,6020B	WP
Cobalt, Total	ND	mg/l	0.00050	0.00016	1	04/25/22 14:51	04/25/22 19:23	1,6020B	WP
Copper, Total	ND	mg/l	0.00100	0.00038	1	04/25/22 14:51	04/25/22 19:23	1,6020B	WP
Iron, Total	ND	mg/l	0.0500	0.0191	1	04/25/22 14:51	04/25/22 19:23	1,6020B	WP
Lead, Total	ND	mg/l	0.00100	0.00034	1	04/25/22 14:51	04/25/22 19:23	1,6020B	WP
Magnesium, Total	ND	mg/l	0.0700	0.0242	1	04/25/22 14:51	04/25/22 19:23	1,6020B	WP
Manganese, Total	ND	mg/l	0.00100	0.00044	1	04/25/22 14:51	04/25/22 19:23	1,6020B	WP
Nickel, Total	ND	mg/l	0.00200	0.00055	1	04/25/22 14:51	04/25/22 19:23	1,6020B	WP
Potassium, Total	ND	mg/l	0.100	0.0309	1	04/25/22 14:51	04/25/22 19:23	1,6020B	WP
Selenium, Total	ND	mg/l	0.00500	0.00173	1	04/25/22 14:51	04/25/22 19:23	1,6020B	WP
Silver, Total	ND	mg/l	0.00040	0.00016	1	04/25/22 14:51	04/25/22 19:23	1,6020B	WP
Sodium, Total	ND	mg/l	0.100	0.0293	1	04/25/22 14:51	04/25/22 19:23	1,6020B	WP
Thallium, Total	ND	mg/l	0.00100	0.00014	1	04/25/22 14:51	04/25/22 19:23	1,6020B	WP
Vanadium, Total	ND	mg/l	0.00500	0.00157	1	04/25/22 14:51	04/25/22 19:23	1,6020B	WP
Zinc, Total	ND	mg/l	0.01000	0.00341	1	04/25/22 14:51	04/25/22 19:23	1,6020B	WP

### Prep Information

Digestion Method: EPA 3005A



**Project Name:** AOC-32 SURFACE WATER SAMPLING  
**Project Number:** 0127981-025

**Lab Number:** L2220562  
**Report Date:** 05/26/22

## Method Blank Analysis Batch Quality Control

Parameter	Result Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Metals - Mansfield Lab for sample(s): 01-03,06 Batch: WG1631219-1									
Mercury, Total	ND	mg/l	0.00020	0.00009	1	04/26/22 15:25	04/27/22 10:17	1,7470A	DMB

### Prep Information

Digestion Method: EPA 7470A



# Lab Control Sample Analysis

## Batch Quality Control

**Project Name:** AOC-32 SURFACE WATER SAMPLING  
**Project Number:** 0127981-025

**Lab Number:** L2220562  
**Report Date:** 05/26/22

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Dissolved Metals - Mansfield Lab Associated sample(s): 01-03,06 Batch: WG1630052-2								
Aluminum, Dissolved	97	-	-	-	80-120	-	-	-
Antimony, Dissolved	82	-	-	-	80-120	-	-	-
Arsenic, Dissolved	98	-	-	-	80-120	-	-	-
Barium, Dissolved	98	-	-	-	80-120	-	-	-
Beryllium, Dissolved	105	-	-	-	80-120	-	-	-
Cadmium, Dissolved	101	-	-	-	80-120	-	-	-
Calcium, Dissolved	96	-	-	-	80-120	-	-	-
Chromium, Dissolved	98	-	-	-	80-120	-	-	-
Cobalt, Dissolved	93	-	-	-	80-120	-	-	-
Copper, Dissolved	90	-	-	-	80-120	-	-	-
Iron, Dissolved	103	-	-	-	80-120	-	-	-
Lead, Dissolved	103	-	-	-	80-120	-	-	-
Magnesium, Dissolved	106	-	-	-	80-120	-	-	-
Manganese, Dissolved	101	-	-	-	80-120	-	-	-
Nickel, Dissolved	95	-	-	-	80-120	-	-	-
Potassium, Dissolved	105	-	-	-	80-120	-	-	-
Selenium, Dissolved	108	-	-	-	80-120	-	-	-
Silver, Dissolved	102	-	-	-	80-120	-	-	-
Sodium, Dissolved	100	-	-	-	80-120	-	-	-
Thallium, Dissolved	105	-	-	-	80-120	-	-	-
Vanadium, Dissolved	99	-	-	-	80-120	-	-	-

# Lab Control Sample Analysis

## Batch Quality Control

**Project Name:** AOC-32 SURFACE WATER SAMPLING  
**Project Number:** 0127981-025

**Lab Number:** L2220562  
**Report Date:** 05/26/22

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
Dissolved Metals - Mansfield Lab Associated sample(s): 01-03,06 Batch: WG1630052-2					
Zinc, Dissolved	89	-	80-120	-	
Dissolved Metals - Mansfield Lab Associated sample(s): 01-03,06 Batch: WG1630054-2					
Mercury, Dissolved	98	-	80-120	-	

# Lab Control Sample Analysis

## Batch Quality Control

**Project Name:** AOC-32 SURFACE WATER SAMPLING  
**Project Number:** 0127981-025

**Lab Number:** L2220562  
**Report Date:** 05/26/22

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 01-03,06 Batch: WG1630149-2					
Aluminum, Total	94	-	80-120	-	
Antimony, Total	81	-	80-120	-	
Arsenic, Total	98	-	80-120	-	
Barium, Total	100	-	80-120	-	
Beryllium, Total	99	-	80-120	-	
Cadmium, Total	102	-	80-120	-	
Calcium, Total	94	-	80-120	-	
Chromium, Total	98	-	80-120	-	
Cobalt, Total	94	-	80-120	-	
Copper, Total	90	-	80-120	-	
Iron, Total	100	-	80-120	-	
Lead, Total	102	-	80-120	-	
Magnesium, Total	106	-	80-120	-	
Manganese, Total	100	-	80-120	-	
Nickel, Total	94	-	80-120	-	
Potassium, Total	100	-	80-120	-	
Selenium, Total	103	-	80-120	-	
Silver, Total	101	-	80-120	-	
Sodium, Total	100	-	80-120	-	
Thallium, Total	105	-	80-120	-	
Vanadium, Total	98	-	80-120	-	

# Lab Control Sample Analysis

## Batch Quality Control

**Project Name:** AOC-32 SURFACE WATER SAMPLING  
**Project Number:** 0127981-025

**Lab Number:** L2220562  
**Report Date:** 05/26/22

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 01-03,06 Batch: WG1630149-2					
Zinc, Total	87	-	80-120	-	
Total Metals - Mansfield Lab Associated sample(s): 01-03,06 Batch: WG1631219-2					
Mercury, Total	85	-	80-120	-	

**Matrix Spike Analysis**  
**Batch Quality Control**

**Project Name:** AOC-32 SURFACE WATER SAMPLING  
**Project Number:** 0127981-025

**Lab Number:** L2220562  
**Report Date:** 05/26/22

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	MSD Qual	MSD Found	MSD %Recovery	MSD Qual	Recovery Limits	RPD Qual	RPD Limits
Dissolved Metals - Mansfield Lab Associated sample(s): 01-03,06 QC Batch ID: WG1630052-3 QC Sample: L2220562-06 Client ID: 4125-042022-0001											
Aluminum, Dissolved	0.0240	2	1.86	92	-	-	-	-	75-125	-	20
Antimony, Dissolved	0.00069J	0.5	0.4019	80	-	-	-	-	75-125	-	20
Arsenic, Dissolved	0.00051	0.12	0.1148	95	-	-	-	-	75-125	-	20
Barium, Dissolved	0.04297	2	2.021	99	-	-	-	-	75-125	-	20
Beryllium, Dissolved	ND	0.05	0.05149	103	-	-	-	-	75-125	-	20
Cadmium, Dissolved	ND	0.053	0.05314	100	-	-	-	-	75-125	-	20
Calcium, Dissolved	29.4	10	38.6	92	-	-	-	-	75-125	-	20
Chromium, Dissolved	ND	0.2	0.1922	96	-	-	-	-	75-125	-	20
Cobalt, Dissolved	ND	0.5	0.4638	93	-	-	-	-	75-125	-	20
Copper, Dissolved	0.00126	0.25	0.2214	88	-	-	-	-	75-125	-	20
Iron, Dissolved	0.0420J	1	1.03	103	-	-	-	-	75-125	-	20
Lead, Dissolved	ND	0.53	0.5326	100	-	-	-	-	75-125	-	20
Magnesium, Dissolved	5.49	10	15.6	101	-	-	-	-	75-125	-	20
Manganese, Dissolved	0.00762	0.5	0.5083	100	-	-	-	-	75-125	-	20
Nickel, Dissolved	ND	0.5	0.4674	93	-	-	-	-	75-125	-	20
Potassium, Dissolved	1.35	10	11.7	104	-	-	-	-	75-125	-	20
Selenium, Dissolved	ND	0.12	0.122	102	-	-	-	-	75-125	-	20
Silver, Dissolved	ND	0.05	0.05068	101	-	-	-	-	75-125	-	20
Sodium, Dissolved	40.3	10	46.8	65	Q	-	-	-	75-125	-	20
Thallium, Dissolved	ND	0.12	0.1243	104	-	-	-	-	75-125	-	20
Vanadium, Dissolved	ND	0.5	0.4752	95	-	-	-	-	75-125	-	20

**Matrix Spike Analysis**  
**Batch Quality Control**

**Project Name:** AOC-32 SURFACE WATER SAMPLING  
**Project Number:** 0127981-025

**Lab Number:** L2220562  
**Report Date:** 05/26/22

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	MSD Found	MSD %Recovery	Recovery Limits	RPD	RPD Limits
Dissolved Metals - Mansfield Lab Associated sample(s): 01-03,06 QC Batch ID: WG1630052-3 QC Sample: L2220562-06 Client ID: 4125-042022-0001									
Zinc, Dissolved	ND	0.5	0.4409	88	-	-	75-125	-	20
Dissolved Metals - Mansfield Lab Associated sample(s): 01-03,06 QC Batch ID: WG1630054-3 QC Sample: L2220562-02 Client ID: SW-BGKD-01-0.75									
Mercury, Dissolved	ND	0.005	0.00501	100	-	-	75-125	-	20

**Matrix Spike Analysis**  
**Batch Quality Control**

**Project Name:** AOC-32 SURFACE WATER SAMPLING  
**Project Number:** 0127981-025

**Lab Number:** L2220562  
**Report Date:** 05/26/22

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	MSD Found	MSD %Recovery	Recovery Limits	RPD	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 01-03,06 QC Batch ID: WG1630149-3 QC Sample: L2220562-01 Client ID: SW-BGKD-02-0.5									
Aluminum, Total	0.645	2	2.44	90	-	-	75-125	-	20
Antimony, Total	0.00084J	0.5	0.3578	72	Q	-	75-125	-	20
Arsenic, Total	0.00064	0.12	0.09910	82	-	-	75-125	-	20
Barium, Total	0.05336	2	1.978	96	-	-	75-125	-	20
Beryllium, Total	ND	0.05	0.05047	101	-	-	75-125	-	20
Cadmium, Total	ND	0.053	0.05121	97	-	-	75-125	-	20
Calcium, Total	29.9	10	37.6	77	-	-	75-125	-	20
Chromium, Total	0.00100	0.2	0.1830	91	-	-	75-125	-	20
Cobalt, Total	0.00064	0.5	0.4543	91	-	-	75-125	-	20
Copper, Total	0.00181	0.25	0.2189	87	-	-	75-125	-	20
Iron, Total	1.16	1	2.12	96	-	-	75-125	-	20
Lead, Total	0.00119	0.53	0.5185	98	-	-	75-125	-	20
Magnesium, Total	5.96	10	15.4	94	-	-	75-125	-	20
Manganese, Total	0.05122	0.5	0.5334	96	-	-	75-125	-	20
Nickel, Total	0.00159J	0.5	0.4607	92	-	-	75-125	-	20
Potassium, Total	1.29	10	10.7	94	-	-	75-125	-	20
Selenium, Total	ND	0.12	0.120	100	-	-	75-125	-	20
Silver, Total	ND	0.05	0.04847	97	-	-	75-125	-	20
Sodium, Total	40.7	10	45.9	52	Q	-	75-125	-	20
Thallium, Total	ND	0.12	0.1187	99	-	-	75-125	-	20
Vanadium, Total	ND	0.5	0.4691	94	-	-	75-125	-	20

**Matrix Spike Analysis**  
**Batch Quality Control**

**Project Name:** AOC-32 SURFACE WATER SAMPLING  
**Project Number:** 0127981-025

**Lab Number:** L2220562  
**Report Date:** 05/26/22

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	MSD Found	MSD %Recovery	Recovery Limits	RPD	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 01-03,06 QC Batch ID: WG1630149-3 QC Sample: L2220562-01 Client ID: SW-BGKD-02-0.5									
Zinc, Total	0.01706	0.5	0.4392	84	-	-	75-125	-	20
Total Metals - Mansfield Lab Associated sample(s): 01-03,06 QC Batch ID: WG1631219-3 QC Sample: L2220562-02 Client ID: SW-BGKD-01-0.75									
Mercury, Total	ND	0.005	0.00465	93	-	-	75-125	-	20

**Lab Duplicate Analysis**  
*Batch Quality Control*

**Project Name:** AOC-32 SURFACE WATER SAMPLING  
**Project Number:** 0127981-025

**Lab Number:** L2220562  
**Report Date:** 05/26/22

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
Dissolved Metals - Mansfield Lab Associated sample(s): 01-03,06 QC Batch ID: WG1630052-4 QC Sample: L2220562-06 Client ID: 4125-042022-0001						
Aluminum, Dissolved	0.0240	0.0264	mg/l	10		20
Antimony, Dissolved	0.00069J	0.00126J	mg/l	NC		20
Arsenic, Dissolved	0.00051	0.00045J	mg/l	NC		20
Barium, Dissolved	0.04297	0.04243	mg/l	1		20
Beryllium, Dissolved	ND	ND	mg/l	NC		20
Cadmium, Dissolved	ND	ND	mg/l	NC		20
Calcium, Dissolved	29.4	29.4	mg/l	0		20
Chromium, Dissolved	ND	ND	mg/l	NC		20
Cobalt, Dissolved	ND	ND	mg/l	NC		20
Copper, Dissolved	0.00126	0.00132	mg/l	5		20
Iron, Dissolved	0.0420J	0.0508	mg/l	NC		20
Lead, Dissolved	ND	ND	mg/l	NC		20
Magnesium, Dissolved	5.49	5.69	mg/l	4		20
Manganese, Dissolved	0.00762	0.00769	mg/l	1		20
Nickel, Dissolved	ND	ND	mg/l	NC		20
Potassium, Dissolved	1.35	1.36	mg/l	1		20
Selenium, Dissolved	ND	ND	mg/l	NC		20
Silver, Dissolved	ND	ND	mg/l	NC		20
Sodium, Dissolved	40.3	41.0	mg/l	2		20

**Project Name:** AOC-32 SURFACE WATER SAMPLING  
**Project Number:** 0127981-025

**Lab Duplicate Analysis**  
*Batch Quality Control*

**Lab Number:** L2220562  
**Report Date:** 05/26/22

Parameter	Native Sample	Duplicate Sample	Units	RPD	RPD Limits
Dissolved Metals - Mansfield Lab Associated sample(s): 01-03,06 QC Batch ID: WG1630052-4 QC Sample: L2220562-06 Client ID: 4125-042022-0001					
Thallium, Dissolved	ND	0.00043J	mg/l	NC	20
Vanadium, Dissolved	ND	ND	mg/l	NC	20
Zinc, Dissolved	ND	ND	mg/l	NC	20
Dissolved Metals - Mansfield Lab Associated sample(s): 01-03,06 QC Batch ID: WG1630054-4 QC Sample: L2220562-02 Client ID: SW-BGKD-01-0.75					
Mercury, Dissolved	ND	ND	mg/l	NC	20

**Lab Duplicate Analysis**  
*Batch Quality Control*

**Project Name:** AOC-32 SURFACE WATER SAMPLING  
**Project Number:** 0127981-025

**Lab Number:** L2220562  
**Report Date:** 05/26/22

Parameter	Native Sample	Duplicate Sample	Units	RPD	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 01-03,06 QC Batch ID: WG1630149-4 QC Sample: L2220562-01 Client ID: SW-BGKD-02-0.5					
Aluminum, Total	0.645	0.619	mg/l	4	20
Antimony, Total	0.00084J	0.00145J	mg/l	NC	20
Arsenic, Total	0.00064	0.00070	mg/l	9	20
Barium, Total	0.05336	0.05203	mg/l	3	20
Beryllium, Total	ND	ND	mg/l	NC	20
Cadmium, Total	ND	ND	mg/l	NC	20
Calcium, Total	29.9	28.7	mg/l	4	20
Chromium, Total	0.00100	0.00106	mg/l	6	20
Cobalt, Total	0.00064	0.00063	mg/l	1	20
Copper, Total	0.00181	0.00161	mg/l	11	20
Iron, Total	1.16	1.13	mg/l	3	20
Lead, Total	0.00119	0.00118	mg/l	1	20
Magnesium, Total	5.96	5.61	mg/l	6	20
Manganese, Total	0.05122	0.05072	mg/l	1	20
Nickel, Total	0.00159J	0.00147J	mg/l	NC	20
Potassium, Total	1.29	1.24	mg/l	4	20
Selenium, Total	ND	ND	mg/l	NC	20
Silver, Total	ND	ND	mg/l	NC	20
Sodium, Total	40.7	39.2	mg/l	4	20

**Project Name:** AOC-32 SURFACE WATER SAMPLING  
**Project Number:** 0127981-025

**Lab Duplicate Analysis**  
*Batch Quality Control*

**Lab Number:** L2220562  
**Report Date:** 05/26/22

Parameter	Native Sample	Duplicate Sample	Units	RPD	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 01-03,06 QC Batch ID: WG1630149-4 QC Sample: L2220562-01 Client ID: SW-BGKD-02-0.5					
Thallium, Total	ND	0.00040J	mg/l	NC	20
Vanadium, Total	ND	ND	mg/l	NC	20
Zinc, Total	0.01706	0.01578	mg/l	8	20
Total Metals - Mansfield Lab Associated sample(s): 01-03,06 QC Batch ID: WG1631219-4 QC Sample: L2220562-02 Client ID: SW-BGKD-01-0.75					
Mercury, Total	ND	ND	mg/l	NC	20

**Project Name:** AOC-32 SURFACE WATER SAMPLING  
**Project Number:** 0127981-025

**Lab Serial Dilution  
Analysis  
Batch Quality Control**

**Lab Number:** L2220562  
**Report Date:** 05/26/22

Parameter	Native Sample	Serial Dilution	Units	% D	Qual	RPD Limits
<b>Dissolved Metals - Mansfield Lab</b> Associated sample(s): 01-03,06 QC Batch ID: WG1630052-6 QC Sample: L2220562-06 Client ID: 4125-042022-0001						
Barium, Dissolved	0.04297	0.04493	mg/l	5		20
Calcium, Dissolved	29.4	30.3	mg/l	3		20
Magnesium, Dissolved	5.49	5.81	mg/l	6		20
Sodium, Dissolved	40.3	40.1	mg/l	0		20
<b>Total Metals - Mansfield Lab</b> Associated sample(s): 01-03,06 QC Batch ID: WG1630149-6 QC Sample: L2220562-01 Client ID: SW-BGKD-02-0.5						
Aluminum, Total	0.645	0.657	mg/l	2		20
Barium, Total	0.05336	0.05354	mg/l	0		20
Calcium, Total	29.9	30.8	mg/l	3		20
Magnesium, Total	5.96	6.06	mg/l	2		20
Manganese, Total	0.05122	0.05266	mg/l	3		20
Sodium, Total	40.7	38.8	mg/l	5		20

**Project Name:** AOC-32 SURFACE WATER SAMPLING  
**Project Number:** 0127981-025

Serial\_No:05262215:31  
**Lab Number:** L2220562  
**Report Date:** 05/26/22

### **Sample Receipt and Container Information**

Were project specific reporting limits specified? YES

#### **Cooler Information**

<b>Cooler</b>	<b>Custody Seal</b>
A	Absent

#### **Container Information**

<b>Container ID</b>	<b>Container Type</b>	<b>Cooler</b>	<b>Initial pH</b>	<b>Final pH</b>	<b>Temp deg C</b>	<b>Pres</b>	<b>Seal</b>	<b>Frozen Date/Time</b>	<b>Analysis(*)</b>
L2220562-01A	Vial HCl preserved	A	NA		4.0	Y	Absent		NYTCL-8260(14)
L2220562-01B	Vial HCl preserved	A	NA		4.0	Y	Absent		NYTCL-8260(14)
L2220562-01C	Vial HCl preserved	A	NA		4.0	Y	Absent		NYTCL-8260(14)
L2220562-01D	Plastic 250ml Trizma preserved	A	NA		4.0	Y	Absent		A2-NY-537-ISOTOPE(14)
L2220562-01E	Plastic 250ml Trizma preserved	A	NA		4.0	Y	Absent		A2-NY-537-ISOTOPE(14)
L2220562-01F	Plastic 250ml unpreserved	A	7	7	4.0	Y	Absent		-
L2220562-01G	Plastic 250ml HNO3 preserved	A	<2	<2	4.0	Y	Absent		FE-6020T(180),SE-6020T(180),TL-6020T(180),BA-6020T(180),CA-6020T(180),K-6020T(180),CR-6020T(180),NI-6020T(180),CU-6020T(180),NA-6020T(180),ZN-6020T(180),PB-6020T(180),BE-6020T(180),MN-6020T(180),AS-6020T(180),SB-6020T(180),V-6020T(180),AG-6020T(180),HG-T(28),AL-6020T(180),CD-6020T(180),MG-6020T(180),CO-6020T(180)
L2220562-01H	Amber 250ml unpreserved	A	7	7	4.0	Y	Absent		A2-1,4-DIOXANE-SIM(7)
L2220562-01I	Amber 250ml unpreserved	A	7	7	4.0	Y	Absent		A2-1,4-DIOXANE-SIM(7)
L2220562-01X	Plastic 120ml HNO3 preserved Filtrates	A	NA		4.0	Y	Absent		CU-6020S(180),V-6020S(180),SE-6020S(180),K-6020S(180),MN-6020S(180),BE-6020S(180),MG-6020S(180),ZN-6020S(180),CO-6020S(180),CA-6020S(180),CR-6020S(180),FE-6020S(180),PB-6020S(180),TL-6020S(180),BA-6020S(180),NI-6020S(180),NA-6020S(180),SB-6020S(180),AG-6020S(180),AS-6020S(180),HG-S(28),AL-6020S(180),CD-6020S(180)
L2220562-02A	Vial HCl preserved	A	NA		4.0	Y	Absent		NYTCL-8260(14)
L2220562-02B	Vial HCl preserved	A	NA		4.0	Y	Absent		NYTCL-8260(14)
L2220562-02C	Vial HCl preserved	A	NA		4.0	Y	Absent		NYTCL-8260(14)
L2220562-02D	Plastic 250ml Trizma preserved	A	NA		4.0	Y	Absent		A2-NY-537-ISOTOPE(14)

\*Values in parentheses indicate holding time in days

**Container Information**

<b>Container ID</b>	<b>Container Type</b>	<b>Cooler</b>	<b>Initial pH</b>	<b>Final pH</b>	<b>Temp deg C</b>	<b>Pres</b>	<b>Seal</b>	<b>Frozen Date/Time</b>	<b>Analysis(*)</b>
L2220562-02E	Plastic 250ml Trizma preserved	A	NA		4.0	Y	Absent		A2-NY-537-ISOTOPE(14)
L2220562-02F	Plastic 250ml unpreserved	A	7	7	4.0	Y	Absent		-
L2220562-02G	Plastic 250ml HNO3 preserved	A	<2	<2	4.0	Y	Absent		BA-6020T(180),TL-6020T(180),FE-6020T(180),SE-6020T(180),NI-6020T(180),CR-6020T(180),K-6020T(180),CA-6020T(180),NA-6020T(180),CU-6020T(180),ZN-6020T(180),PB-6020T(180),BE-6020T(180),MN-6020T(180),AS-6020T(180),V-6020T(180),SB-6020T(180),AG-6020T(180),CD-6020T(180),HG-T(28),MG-6020T(180),AL-6020T(180),CO-6020T(180)
L2220562-02H	Amber 250ml unpreserved	A	7	7	4.0	Y	Absent		A2-1,4-DIOXANE-SIM(7)
L2220562-02I	Amber 250ml unpreserved	A	7	7	4.0	Y	Absent		A2-1,4-DIOXANE-SIM(7)
L2220562-02X	Plastic 120ml HNO3 preserved Filtrates	A	NA		4.0	Y	Absent		V-6020S(180),CU-6020S(180),SE-6020S(180),K-6020S(180),MN-6020S(180),ZN-6020S(180),BE-6020S(180),CO-6020S(180),MG-6020S(180),FE-6020S(180),CR-6020S(180),CA-6020S(180),NA-6020S(180),PB-6020S(180),TL-6020S(180),NI-6020S(180),BA-6020S(180),SB-6020S(180),AS-6020S(180),AG-6020S(180),CD-6020S(180),AL-6020S(180),HG-S(28)
L2220562-03A	Vial HCl preserved	A	NA		4.0	Y	Absent		NYTCL-8260(14)
L2220562-03B	Vial HCl preserved	A	NA		4.0	Y	Absent		NYTCL-8260(14)
L2220562-03C	Vial HCl preserved	A	NA		4.0	Y	Absent		NYTCL-8260(14)
L2220562-03D	Plastic 250ml Trizma preserved	A	NA		4.0	Y	Absent		A2-NY-537-ISOTOPE(14)
L2220562-03E	Plastic 250ml Trizma preserved	A	NA		4.0	Y	Absent		A2-NY-537-ISOTOPE(14)
L2220562-03F	Plastic 250ml unpreserved	A	7	7	4.0	Y	Absent		-
L2220562-03G	Plastic 250ml HNO3 preserved	A	<2	<2	4.0	Y	Absent		FE-6020T(180),SE-6020T(180),TL-6020T(180),BA-6020T(180),CA-6020T(180),CR-6020T(180),NI-6020T(180),K-6020T(180),ZN-6020T(180),NA-6020T(180),CU-6020T(180),PB-6020T(180),MN-6020T(180),BE-6020T(180),AS-6020T(180),V-6020T(180),SB-6020T(180),CD-6020T(180),MG-6020T(180),AG-6020T(180),AL-6020T(180),HG-T(28),CO-6020T(180)
L2220562-03H	Amber 250ml unpreserved	A	7	7	4.0	Y	Absent		A2-1,4-DIOXANE-SIM(7)
L2220562-03I	Amber 250ml unpreserved	A	7	7	4.0	Y	Absent		A2-1,4-DIOXANE-SIM(7)

\*Values in parentheses indicate holding time in days

**Container Information**

<b>Container ID</b>	<b>Container Type</b>	<b>Cooler</b>	<b>Initial pH</b>	<b>Final pH</b>	<b>Temp deg C</b>	<b>Pres</b>	<b>Seal</b>	<b>Frozen Date/Time</b>	<b>Analysis(*)</b>
L2220562-03X	Plastic 120ml HNO3 preserved Filtrates	A	NA		4.0	Y	Absent		K-6020S(180),SE-6020S(180),V-6020S(180),CU-6020S(180),MN-6020S(180),MG-6020S(180),ZN-6020S(180),BE-6020S(180),CO-6020S(180),CR-6020S(180),CA-6020S(180),FE-6020S(180),NI-6020S(180),PB-6020S(180),NA-6020S(180),TL-6020S(180),BA-6020S(180),SB-6020S(180),AS-6020S(180),AG-6020S(180),HG-S(28),AL-6020S(180),CD-6020S(180)
L2220562-04A	Vial HCl preserved	A	NA		4.0	Y	Absent		NYTCL-8260(14)
L2220562-04B	Vial HCl preserved	A	NA		4.0	Y	Absent		NYTCL-8260(14)
L2220562-04C	Plastic 250ml unpreserved	A	NA		4.0	Y	Absent		A2-NY-537-ISOTOPE(14)
L2220562-05A	Plastic 250ml Trizma preserved	A	NA		4.0	Y	Absent		A2-NY-537-ISOTOPE(14)
L2220562-05B	Plastic 250ml Trizma preserved	A	NA		4.0	Y	Absent		A2-NY-537-ISOTOPE(14)
L2220562-06A	Vial HCl preserved	A	NA		4.0	Y	Absent		NYTCL-8260(14)
L2220562-06B	Vial HCl preserved	A	NA		4.0	Y	Absent		NYTCL-8260(14)
L2220562-06C	Vial HCl preserved	A	NA		4.0	Y	Absent		NYTCL-8260(14)
L2220562-06D	Plastic 250ml Trizma preserved	A	NA		4.0	Y	Absent		A2-NY-537-ISOTOPE(14)
L2220562-06E	Plastic 250ml Trizma preserved	A	NA		4.0	Y	Absent		A2-NY-537-ISOTOPE(14)
L2220562-06F	Plastic 250ml unpreserved	A	7	7	4.0	Y	Absent		-
L2220562-06G	Plastic 250ml HNO3 preserved	A	<2	<2	4.0	Y	Absent		TL-6020T(180),BA-6020T(180),SE-6020T(180),FE-6020T(180),K-6020T(180),NI-6020T(180),CA-6020T(180),CR-6020T(180),ZN-6020T(180),NA-6020T(180),CU-6020T(180),PB-6020T(180),BE-6020T(180),MN-6020T(180),V-6020T(180),AS-6020T(180),SB-6020T(180),AG-6020T(180),HG-T(28),CD-6020T(180),MG-6020T(180),AL-6020T(180),CO-6020T(180)
L2220562-06H	Amber 250ml unpreserved	A	7	7	4.0	Y	Absent		A2-1,4-DIOXANE-SIM(7)
L2220562-06I	Amber 250ml unpreserved	A	7	7	4.0	Y	Absent		A2-1,4-DIOXANE-SIM(7)

\*Values in parentheses indicate holding time in days

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**Container Information**

<b>Container ID</b>	<b>Container Type</b>	<b>Cooler</b>	<b>Initial pH</b>	<b>Final pH</b>	<b>Temp deg C</b>	<b>Pres</b>	<b>Seal</b>	<b>Frozen Date/Time</b>	<b>Analysis(*)</b>
L2220562-06X	Plastic 120ml HNO3 preserved Filtrates	A	NA		4.0	Y	Absent		SE-6020S(180),CU-6020S(180),V-6020S(180),K-6020S(180),MN-6020S(180),BE-6020S(180),CO-6020S(180),MG-6020S(180),ZN-6020S(180),CA-6020S(180),FE-6020S(180),CR-6020S(180),NA-6020S(180),NI-6020S(180),BA-6020S(180),TL-6020S(180),PB-6020S(180),AG-6020S(180),AS-6020S(180),SB-6020S(180),HG-S(28),AL-6020S(180),CD-6020S(180)

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### PFAS PARAMETER SUMMARY

Parameter	Acronym	CAS Number
<b>PERFLUOROALKYL CARBOXYLIC ACIDS (PFCAs)</b>		
Perfluorooctadecanoic Acid	PFODA	16517-11-6
Perfluorohexadecanoic Acid	PFHxDA	67905-19-5
Perfluorotetradecanoic Acid	PFTA	376-06-7
Perfluorotridecanoic Acid	PFTrDA	72629-94-8
Perfluorododecanoic Acid	PFDoA	307-55-1
Perfluoroundecanoic Acid	PFUnA	2058-94-8
Perfluorodecanoic Acid	PFDA	335-76-2
Perfluorononanoic Acid	PFNA	375-95-1
Perfluoroctanoic Acid	PFOA	335-67-1
Perfluoroheptanoic Acid	PFHpA	375-85-9
Perfluorohexanoic Acid	PFHxA	307-24-4
Perfluoropentanoic Acid	PPPeA	2706-90-3
Perfluorobutanoic Acid	PFBA	375-22-4
<b>PERFLUOROALKYL SULFONIC ACIDS (PFSAs)</b>		
Perfluorododecanesulfonic Acid	PFDoDS	79780-39-5
Perfluorodecanesulfonic Acid	PFDS	335-77-3
Perfluorononanesulfonic Acid	PFNS	68259-12-1
Perfluoroctanesulfonic Acid	PFOS	1763-23-1
Perfluoroheptanesulfonic Acid	PFHpS	375-92-8
Perfluorohexanesulfonic Acid	PFHxS	355-46-4
Perfluoropentanesulfonic Acid	PPPeS	2706-91-4
Perfluorobutanesulfonic Acid	PFBS	375-73-5
<b>FLUOROTELOMERS</b>		
1H,1H,2H,2H-Perfluorododecanesulfonic Acid	10:2FTS	120226-60-0
1H,1H,2H,2H-Perfluorodecanesulfonic Acid	8:2FTS	39108-34-4
1H,1H,2H,2H-Perfluoroctanesulfonic Acid	6:2FTS	27619-97-2
1H,1H,2H,2H-Perfluorohexanesulfonic Acid	4:2FTS	757124-72-4
<b>PERFLUOROALKANE SULFONAMIDES (FASAs)</b>		
Perfluoroctanesulfonamide	FOSA	754-91-6
N-Ethyl Perfluoroctane Sulfonamide	NEtFOSA	4151-50-2
N-Methyl Perfluoroctane Sulfonamide	NMeFOSA	31506-32-8
<b>PERFLUOROALKANE SULFONYL SUBSTANCES</b>		
N-Ethyl Perfluoroctanesulfonamido Ethanol	NEtFOSE	1691-99-2
N-Methyl Perfluoroctanesulfonamido Ethanol	NMeFOSE	24448-09-7
N-Ethyl Perfluoroctanesulfonamidoacetic Acid	NEtFOSAA	2991-50-6
N-Methyl Perfluoroctanesulfonamidoacetic Acid	NMeFOSAA	2355-31-9
<b>PER- and POLYFLUOROALKYL ETHER CARBOXYLIC ACIDS</b>		
2,3,3,3-Tetrafluoro-2-[1,1,2,2,3,3,3-Heptafluoropropoxy]-Propanoic Acid	HFPO-DA	13252-13-6
4,8-Dioxa-3h-Perfluorononanoic Acid	ADONA	919005-14-4
<b>CHLORO-PERFLUOROALKYL SULFONIC ACIDS</b>		
11-Chloroeicosfluoro-3-Oxaundecane-1-Sulfonic Acid	11CI-PF3OUdS	763051-92-9
9-Chlorohexadecafluoro-3-Oxanone-1-Sulfonic Acid	9CI-PF3ONS	756426-58-1
<b>PERFLUORETHER SULFONIC ACIDS (PFESAs)</b>		
Perfluoro(2-Ethoxyethane)Sulfonic Acid	PFEESA	113507-82-7
<b>PERFLUORETHER/POLYETHER CARBOXYLIC ACIDS (PFPCAs)</b>		
Perfluoro-3-Methoxypropanoic Acid	PFMPA	377-73-1
Perfluoro-4-Methoxybutanoic Acid	PFMBA	863090-89-5
Nonafuoro-3,6-Dioxaheptanoic Acid	NFDHA	151772-58-6

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## GLOSSARY

### **Acronyms**

DL	- Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the limit of quantitation (LOQ). The DL includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
EDL	- Estimated Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The EDL includes any adjustments from dilutions, concentrations or moisture content, where applicable. The use of EDLs is specific to the analysis of PAHs using Solid-Phase Microextraction (SPME).
EMPC	- Estimated Maximum Possible Concentration: The concentration that results from the signal present at the retention time of an analyte when the ions meet all of the identification criteria except the ion abundance ratio criteria. An EMPC is a worst-case estimate of the concentration.
EPA	- Environmental Protection Agency.
LCS	- Laboratory Control Sample: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
LCSD	- Laboratory Control Sample Duplicate: Refer to LCS.
LFB	- Laboratory Fortified Blank: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
LOD	- Limit of Detection: This value represents the level to which a target analyte can reliably be detected for a specific analyte in a specific matrix by a specific method. The LOD includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
LOQ	- Limit of Quantitation: The value at which an instrument can accurately measure an analyte at a specific concentration. The LOQ includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
	Limit of Quantitation: The value at which an instrument can accurately measure an analyte at a specific concentration. The LOQ includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
MDL	- Method Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The MDL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
MS	- Matrix Spike Sample: A sample prepared by adding a known mass of target analyte to a specified amount of matrix sample for which an independent estimate of target analyte concentration is available. For Method 332.0, the spike recovery is calculated using the native concentration, including estimated values.
MSD	- Matrix Spike Sample Duplicate: Refer to MS.
NA	- Not Applicable.
NC	- Not Calculated: Term is utilized when one or more of the results utilized in the calculation are non-detect at the parameter's reporting unit.
NDPA/DPA	- N-Nitrosodiphenylamine/Diphenylamine.
NI	- Not Ignitable.
NP	- Non-Plastic: Term is utilized for the analysis of Atterberg Limits in soil.
NR	- No Results: Term is utilized when 'No Target Compounds Requested' is reported for the analysis of Volatile or Semivolatile Organic TIC only requests.
RL	- Reporting Limit: The value at which an instrument can accurately measure an analyte at a specific concentration. The RL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
RPD	- Relative Percent Difference: The results from matrix and/or matrix spike duplicates are primarily designed to assess the precision of analytical results in a given matrix and are expressed as relative percent difference (RPD). Values which are less than five times the reporting limit for any individual parameter are evaluated by utilizing the absolute difference between the values; although the RPD value will be provided in the report.
SRM	- Standard Reference Material: A reference sample of a known or certified value that is of the same or similar matrix as the associated field samples.
STLP	- Semi-dynamic Tank Leaching Procedure per EPA Method 1315.
TEF	- Toxic Equivalency Factors: The values assigned to each dioxin and furan to evaluate their toxicity relative to 2,3,7,8-TCDD.
TEQ	- Toxic Equivalent: The measure of a sample's toxicity derived by multiplying each dioxin and furan by its corresponding TEF and then summing the resulting values.
TIC	- Tentatively Identified Compound: A compound that has been identified to be present and is not part of the target compound list (TCL) for the method and/or program. All TICs are qualitatively identified and reported as estimated concentrations.

*Report Format: DU Report with 'J' Qualifiers*



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#### Footnotes

- 1 - The reference for this analyte should be considered modified since this analyte is absent from the target analyte list of the original method.

#### Terms

**Analytical Method:** Both the document from which the method originates and the analytical reference method. (Example: EPA 8260B is shown as 1,8260B.) The codes for the reference method documents are provided in the References section of the Addendum.

**Difference:** With respect to Total Oxidizable Precursor (TOP) Assay analysis, the difference is defined as the Post-Treatment value minus the Pre-Treatment value.

**Final pH:** As it pertains to Sample Receipt & Container Information section of the report, Final pH reflects pH of container determined after adjustment at the laboratory, if applicable. If no adjustment required, value reflects Initial pH.

**Frozen Date/Time:** With respect to Volatile Organics in soil, Frozen Date/Time reflects the date/time at which associated Reagent Water-preserved vials were initially frozen. Note: If frozen date/time is beyond 48 hours from sample collection, value will be reflected in 'bold'.

**Initial pH:** As it pertains to Sample Receipt & Container Information section of the report, Initial pH reflects pH of container determined upon receipt, if applicable.

**PAH Total:** With respect to Alkylated PAH analyses, the 'PAHs, Total' result is defined as the summation of results for all or a subset of the following compounds: Naphthalene, C1-C4 Naphthalenes, 2-Methylnaphthalene, 1-Methylnaphthalene, Biphenyl, Acenaphthylene, Acenaphthene, Fluorene, C1-C3 Fluorenes, Phenanthrene, C1-C4 Phenanthrenes/Anthracenes, Anthracene, Fluoranthene, Pyrene, C1-C4 Fluoranthrenes/Pyrenes, Benz(a)anthracene, Chrysene, C1-C4 Chrysenes, Benzo(b)fluoranthene, Benzo(j)+(k)fluoranthene, Benzo(e)pyrene, Benzo(a)pyrene, Perylene, Indeno(1,2,3-cd)pyrene, Dibenz(ah)+(ac)anthracene, Benzo(g,h,i)perylene. If a 'Total' result is requested, the results of its individual components will also be reported.

**PFAS Total:** With respect to PFAS analyses, the 'PFAS, Total (5)' result is defined as the summation of results for: PFHpA, PFHxS, PFOA, PFNA and PFOS. In addition, the 'PFAS, Total (6)' result is defined as the summation of results for: PFHpA, PFHxS, PFOA, PFNA, PFDA and PFOS. For MassDEP DW compliance analysis only, the 'PFAS, Total (6)' result is defined as the summation of results at or above the RL. Note: If a 'Total' result is requested, the results of its individual components will also be reported.

The target compound Chlordane (CAS No. 57-74-9) is reported for GC ECD analyses. Per EPA, this compound "refers to a mixture of chlordane isomers, other chlorinated hydrocarbons and numerous other components." (Reference: USEPA Toxicological Review of Chlordane, In Support of Summary Information on the Integrated Risk Information System (IRIS), December 1997.)

**Total:** With respect to Organic analyses, a 'Total' result is defined as the summation of results for individual isomers or Aroclors. If a 'Total' result is requested, the results of its individual components will also be reported. This is applicable to 'Total' results for methods 8260, 8081 and 8082.

#### Data Qualifiers

- A** - Spectra identified as "Aldol Condensates" are byproducts of the extraction/concentration procedures when acetone is introduced in the process.
- B** - The analyte was detected above the reporting limit in the associated method blank. Flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For MCP-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For DOD-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank AND the analyte was detected above one-half the reporting limit (or above the reporting limit for common lab contaminants) in the associated method blank. For NJ-Air-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte above the reporting limit. For NJ-related projects (excluding Air), flag only applies to associated field samples that have detectable concentrations of the analyte, which was detected above the reporting limit in the associated method blank or above five times the reporting limit for common lab contaminants (Phthalates, Acetone, Methylene Chloride, 2-Butanone).
- C** - Co-elution: The target analyte co-elutes with a known lab standard (i.e. surrogate, internal standards, etc.) for co-extracted analyses.
- D** - Concentration of analyte was quantified from diluted analysis. Flag only applies to field samples that have detectable concentrations of the analyte.
- E** - Concentration of analyte exceeds the range of the calibration curve and/or linear range of the instrument.
- F** - The ratio of quantifier ion response to qualifier ion response falls outside of the laboratory criteria. Results are considered to be an estimated maximum concentration.
- G** - The concentration may be biased high due to matrix interferences (i.e., co-elution) with non-target compound(s). The result should be considered estimated.
- H** - The analysis of pH was performed beyond the regulatory-required holding time of 15 minutes from the time of sample collection.
- I** - The lower value for the two columns has been reported due to obvious interference.
- J** - Estimated value. The Target analyte concentration is below the quantitation limit (RL), but above the Method Detection Limit (MDL) or Estimated Detection Limit (EDL) for SPME-related analyses. This represents an estimated concentration for Tentatively Identified Compounds (TICs).
- M** - Reporting Limit (RL) exceeds the MCP CAM Reporting Limit for this analyte.
- ND** - Not detected at the method detection limit (MDL) for the sample, or estimated detection limit (EDL) for SPME-related analyses.

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**Data Qualifiers**

- NJ** - Presumptive evidence of compound. This represents an estimated concentration for Tentatively Identified Compounds (TICs), where the identification is based on a mass spectral library search.
- P** - The RPD between the results for the two columns exceeds the method-specified criteria.
- Q** - The quality control sample exceeds the associated acceptance criteria. For DOD-related projects, LCS and/or Continuing Calibration Standard exceedences are also qualified on all associated sample results. Note: This flag is not applicable for matrix spike recoveries when the sample concentration is greater than 4x the spike added or for batch duplicate RPD when the sample concentrations are less than 5x the RL. (Metals only.)
- R** - Analytical results are from sample re-analysis.
- RE** - Analytical results are from sample re-extraction.
- S** - Analytical results are from modified screening analysis.
- V** - The surrogate associated with this target analyte has a recovery outside the QC acceptance limits. (Applicable to MassDEP DW Compliance samples only.)
- Z** - The batch matrix spike and/or duplicate associated with this target analyte has a recovery/RPD outside the QC acceptance limits. (Applicable to MassDEP DW Compliance samples only.)

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**Lab Number:** L2220562  
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## REFERENCES

- 1 Test Methods for Evaluating Solid Waste: Physical/Chemical Methods. EPA SW-846. Third Edition. Updates I - VI, 2018.
- 134 Determination of Selected Perfluorinated Alkyl Acids in Drinking Water by Solid Phase Extraction and Liquid Chromatography/Tandem Mass Spectrometry (LC/MS/MS) using Isotope Dilution. Alpha SOP 23528.

## LIMITATION OF LIABILITIES

Alpha Analytical performs services with reasonable care and diligence normal to the analytical testing laboratory industry. In the event of an error, the sole and exclusive responsibility of Alpha Analytical shall be to re-perform the work at its own expense. In no event shall Alpha Analytical be held liable for any incidental, consequential or special damages, including but not limited to, damages in any way connected with the use of, interpretation of, information or analysis provided by Alpha Analytical.

We strongly urge our clients to comply with EPA protocol regarding sample volume, preservation, cooling, containers, sampling procedures, holding time and splitting of samples in the field.



## Certification Information

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**The following analytes are not included in our Primary NELAP Scope of Accreditation:**

**Westborough Facility**

EPA 624/624.1: m/p-xylene, o-xylene, Naphthalene

EPA 625/625.1: alpha-Terpineol

EPA 8260C/8260D: NPW: 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene, Azobenzene; SCM: Iodomethane (methyl iodide), 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene.

EPA 8270D/8270E: NPW: Dimethylnaphthalene,1,4-Diphenylhydrazine, alpha-Terpineol; SCM: Dimethylnaphthalene,1,4-Diphenylhydrazine. SM4500: NPW: Amenable Cyanide; SCM: Total Phosphorus, TKN, NO<sub>2</sub>, NO<sub>3</sub>.

**Mansfield Facility**

**SM 2540D**: TSS

EPA 8082A: NPW: PCB: 1, 5, 31, 87,101, 110, 141, 151, 153, 180, 183, 187.

EPA TO-15: Halothane, 2,4,4-Trimethyl-2-pentene, 2,4,4-Trimethyl-1-pentene, Thiophene, 2-Methylthiophene, 3-Methylthiophene, 2-Ethylthiophene, 1,2,3-Trimethylbenzene, Indan, Indene, 1,2,4,5-Tetramethylbenzene, Benzothiophene, 1-Methylnaphthalene.

**Biological Tissue Matrix**: EPA 3050B

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**The following analytes are included in our Massachusetts DEP Scope of Accreditation**

**Westborough Facility:**

**Drinking Water**

EPA 300.0: Chloride, Nitrate-N, Fluoride, Sulfate; EPA 353.2: Nitrate-N, Nitrite-N; **SM4500NO3-F**: Nitrate-N, Nitrite-N; **SM4500F-C**, **SM4500CN-CE**, **EPA 180.1**, **SM2130B**, **SM4500CI-D**, **SM2320B**, **SM2540C**, **SM4500H-B**, **SM4500NO2-B**

EPA 332: Perchlorate; **EPA 524.2**: THMs and VOCs; **EPA 504.1**: EDB, DBCP.

**Microbiology**: **SM9215B**; **SM9223-P/A**, **SM9223B-Colilert-QT**, **SM9222D**.

**Non-Potable Water**

**SM4500H,B**, **EPA 120.1**, **SM2510B**, **SM2540C**, **SM2320B**, **SM4500CL-E**, **SM4500F-BC**, **SM4500NH3-BH**: Ammonia-N and Kjeldahl-N, **EPA 350.1**: Ammonia-N, LACHAT 10-107-06-1-B: Ammonia-N, **EPA 351.1**, **SM4500NO3-F**, **EPA 353.2**: Nitrate-N, **SM4500P-E**, **SM4500P-B**, **E**, **SM4500SO4-E**, **SM5220D**, **EPA 410.4**, **SM5210B**, **SM5310C**, **SM4500CL-D**, **EPA 1664**, **EPA 420.1**, **SM4500-CN-CE**, **SM2540D**, **EPA 300**: Chloride, Sulfate, Nitrate.

**EPA 624.1**: Volatile Halocarbons & Aromatics,

**EPA 608.3**: Chlordane, Toxaphene, Aldrin, alpha-BHC, beta-BHC, gamma-BHC, delta-BHC, Dieldrin, DDD, DDE, DDT, Endosulfan I, Endosulfan II, Endosulfan sulfate, Endrin, Endrin Aldehyde, Heptachlor, Heptachlor Epoxide, PCBs

**EPA 625.1**: SVOC (Acid/Base/Neutral Extractables), **EPA 600/4-81-045**: PCB-Oil.

**Microbiology**: **SM9223B-Colilert-QT**; **Enterolert-QT**, **SM9221E**, **EPA 1600**, **EPA 1603**, **SM9222D**.

**Mansfield Facility:**

**Drinking Water**

EPA 200.7: Al, Ba, Cd, Cr, Cu, Fe, Mn, Ni, Na, Ag, Ca, Zn. **EPA 200.8**: Al, Sb, As, Ba, Be, Cd, Cr, Cu, Pb, Mn, Ni, Se, Ag, TL, Zn. **EPA 245.1** Hg. **EPA 522**, **EPA 537.1**.

**Non-Potable Water**

EPA 200.7: Al, Sb, As, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Mo, Ni, K, Se, Ag, Na, Sr, Ti, V, Zn.

EPA 200.8: Al, Sb, As, Be, Cd, Cr, Cu, Fe, Pb, Mn, Ni, K, Se, Ag, Na, TL, Zn.

EPA 245.1 Hg.

**SM2340B**

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For a complete listing of analytes and methods, please contact your Alpha Project Manager.



 <b>NEW YORK CHAIN OF CUSTODY</b> Westborough, MA 01581 8 Walkup Dr. TEL: 508-898-9220 FAX: 508-898-9193		<b>Service Centers</b> Mahwah, NJ 07430: 35 Whitney Rd, Suite 5 Albany, NY 12205: 14 Walker Way Tonawanda, NY 14210: 275 Cooper Ave, Suite 105		Page 1 of 1  Date Rec'd in Lab 4/21/22		<b>ALPHA Job #</b> <u>12220562</u>																																																																																																																																																																																																																																					
<b>Client Information</b> Client: <u>Haley &amp; Aldrich</u> Address: <u>200 Town Centre Dr.</u> <u>Rochester, NY 14602-23</u> Phone: <u>(585) 442-7088</u> Fax: _____ Email: <u>TNg@haleyaldrich.com</u>		<b>Project Information</b> Project Name: <u>AOC-32 Surface Water Sampling</u> Project Location: <u>Bath, NY</u> Project # <u>0127981-025</u> (Use Project name as Project #) <input type="checkbox"/>		<b>Deliverables</b> <input checked="" type="checkbox"/> ASP-A Level II <input type="checkbox"/> ASP-B <input type="checkbox"/> EQuIS (1 File) <input type="checkbox"/> EQuIS (4 File) <input type="checkbox"/> Other		<b>Billing Information</b> <input type="checkbox"/> Same as Client Info PO # _____																																																																																																																																																																																																																																					
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## ANALYTICAL REPORT

Lab Number:	L2221593
Client:	Haley & Aldrich 200 Town Centre Drive Suite 2 Rochester, NY 14623-4264
ATTN:	Titania Ng
Phone:	(617) 886-7400
Project Name:	BATH SIGNIFY OFFSITE GW SAMPLI
Project Number:	0127981-025
Report Date:	05/26/22

The original project report/data package is held by Alpha Analytical. This report/data package is paginated and should be reproduced only in its entirety. Alpha Analytical holds no responsibility for results and/or data that are not consistent with the original.

Certifications & Approvals: MA (M-MA086), NH NELAP (2064), CT (PH-0574), IL (200077), ME (MA00086), MD (348), NJ (MA935), NY (11148), NC (25700/666), PA (68-03671), RI (LAO00065), TX (T104704476), VT (VT-0935), VA (460195), USDA (Permit #P330-17-00196).

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Eight Walkup Drive, Westborough, MA 01581-1019  
508-898-9220 (Fax) 508-898-9193 800-624-9220 - [www.alphalab.com](http://www.alphalab.com)



**Project Name:** BATH SIGNIFY OFFSITE GW SAMPLI  
**Project Number:** 0127981-025

**Lab Number:** L2221593  
**Report Date:** 05/26/22

<b>Alpha Sample ID</b>	<b>Client ID</b>	<b>Matrix</b>	<b>Sample Location</b>	<b>Collection Date/Time</b>	<b>Receive Date</b>
L2221593-01	4125-042222-0001	WATER	Not Specified	04/22/22 00:00	04/26/22
L2221593-02	MW22B-042222-1505	WATER	Not Specified	04/22/22 15:05	04/26/22
L2221593-03	MW21A-042522-0835	WATER	Not Specified	04/25/22 08:35	04/26/22
L2221593-04	MW21B-042522-0940	WATER	Not Specified	04/25/22 09:40	04/26/22
L2221593-05	MW26B-042522-1015	WATER	Not Specified	04/25/22 10:15	04/26/22
L2221593-06	MW26B-042522-1115	WATER	Not Specified	04/25/22 11:15	04/26/22
L2221593-07	MW25B-042522-1300	WATER	Not Specified	04/25/22 13:00	04/26/22
L2221593-08	MW25B-042522-1440	WATER	Not Specified	04/25/22 14:40	04/26/22
L2221593-09	MW23A-042522-1515	WATER	Not Specified	04/25/22 15:15	04/26/22
L2221593-10	4125-042522-0001	WATER	Not Specified	04/25/22 00:00	04/26/22
L2221593-11	4125-042522-0002	WATER	Not Specified	04/25/22 00:00	04/26/22
L2221593-12	4125-042522-0003	WATER	Not Specified	04/25/22 00:00	04/26/22
L2221593-13	4125-042522-0004	WATER	Not Specified	04/25/22 00:00	04/26/22

**Project Name:** BATH SIGNIFY OFFSITE GW SAMPLI  
**Project Number:** 0127981-025

**Lab Number:** L2221593  
**Report Date:** 05/26/22

### Case Narrative

The samples were received in accordance with the Chain of Custody and no significant deviations were encountered during the preparation or analysis unless otherwise noted. Sample Receipt, Container Information, and the Chain of Custody are located at the back of the report.

Results contained within this report relate only to the samples submitted under this Alpha Lab Number and meet NELAP requirements for all NELAP accredited parameters unless otherwise noted in the following narrative. The data presented in this report is organized by parameter (i.e. VOC, SVOC, etc.). Sample specific Quality Control data (i.e. Surrogate Spike Recovery) is reported at the end of the target analyte list for each individual sample, followed by the Laboratory Batch Quality Control at the end of each parameter. Tentatively Identified Compounds (TICs), if requested, are reported for compounds identified to be present and are not part of the method/program Target Compound List, even if only a subset of the TCL are being reported. If a sample was re-analyzed or re-extracted due to a required quality control corrective action and if both sets of data are reported, the Laboratory ID of the re-analysis or re-extraction is designated with an "R" or "RE", respectively.

When multiple Batch Quality Control elements are reported (e.g. more than one LCS), the associated samples for each element are noted in the grey shaded header line of each data table. Any Laboratory Batch, Sample Specific % recovery or RPD value that is outside the listed Acceptance Criteria is bolded in the report. In reference to questions H (CAM) or 4 (RCP) when "NO" is checked, the performance criteria for CAM and RCP methods allow for some quality control failures to occur and still be within method compliance. In these instances, the specific failure is not narrated but noted in the associated QC Outlier Summary Report, located directly after the Case Narrative. QC information is also incorporated in the Data Usability Assessment table (Format 11) of our Data Merger tool, where it can be reviewed in conjunction with the sample result, associated regulatory criteria and any associated data usability implications.

Soil/sediments, solids and tissues are reported on a dry weight basis unless otherwise noted. Definitions of all data qualifiers and acronyms used in this report are provided in the Glossary located at the back of the report.

**HOLD POLICY** - For samples submitted on hold, Alpha's policy is to hold samples (with the exception of Air canisters) free of charge for 21 calendar days from the date the project is completed. After 21 calendar days, we will dispose of all samples submitted including those put on hold unless you have contacted your Alpha Project Manager and made arrangements for Alpha to continue to hold the samples. Air canisters will be disposed after 3 business days from the date the project is completed.

Please contact Project Management at 800-624-9220 with any questions.

---

**Project Name:** BATH SIGNIFY OFFSITE GW SAMPLI  
**Project Number:** 0127981-025

**Lab Number:** L2221593  
**Report Date:** 05/26/22

### Case Narrative (continued)

#### Report Revision

May 26, 2022: The Client ID was amended on L2221593-01.

#### Report Submission

All non-detect (ND) or estimated concentrations (J-qualified) have been quantitated to the limit noted in the MDL column.

#### Semivolatile Organics

The WG1632450-2 LCS recovery, associated with L2221593-06, -11, and -12, is above the individual acceptance criteria for 4-nitrophenol (82%), but within the overall method allowances. The results of the associated samples are reported.

The WG1632450-2/-3 LCS/LCSD RPDs, associated with L2221593-06, -11, and -12, are above the acceptance criteria for 2,4-dinitrophenol (39%) and 4,6-dinitro-o-cresol (36%).

The WG1632944-3 LCSD recovery, associated with L2221593-08 and -09, is above the individual acceptance criteria for 4-nitrophenol, but within the overall method allowances. The results of the associated samples are reported.

The WG1632944-2/-3 LCS/LCSD RPDs, associated with L2221593-08 and -09, are above the acceptance criteria for 3,3'-dichlorobenzidine (32%), di-n-octylphthalate (33%), 4-nitrophenol (33%), and atrazine (31%).

#### Semivolatile Organics by SIM

The WG1632451-3 LCSD recovery, associated with L2221593-06, -11, and -12, is below the individual acceptance criteria for pentachlorophenol (38%), but within the overall method allowances. The results of the associated samples are reported.

The surrogate recovery for the WG1632945-2 LCS, associated with L2221593-08 and -09, is outside the acceptance criteria for 2,4,6-tribromophenol (121%). The LCS spike compounds are within overall method allowances; therefore, no further action was taken.

**Project Name:** BATH SIGNIFY OFFSITE GW SAMPLI  
**Project Number:** 0127981-025

**Lab Number:** L2221593  
**Report Date:** 05/26/22

**Case Narrative (continued)**

Perfluorinated Alkyl Acids by Isotope Dilution

L2221593-05, -07, and -10: The sample was centrifuged and decanted prior to extraction due to sample matrix.

I, the undersigned, attest under the pains and penalties of perjury that, to the best of my knowledge and belief and based upon my personal inquiry of those responsible for providing the information contained in this analytical report, such information is accurate and complete. This certificate of analysis is not complete unless this page accompanies any and all pages of this report.

Authorized Signature:

*Caitlin Walukevich* Caitlin Walukevich

Title: Technical Director/Representative

Date: 05/26/22

# ORGANICS



# VOLATILES



**Project Name:** BATH SIGNIFY OFFSITE GW SAMPLI  
**Project Number:** 0127981-025

**Lab Number:** L2221593  
**Report Date:** 05/26/22

**SAMPLE RESULTS**

Lab ID:	L2221593-01	Date Collected:	04/22/22 00:00
Client ID:	4125-042222-0001	Date Received:	04/26/22
Sample Location:	Not Specified	Field Prep:	Not Specified

Sample Depth:

Matrix: Water  
Analytical Method: 1,8260C  
Analytical Date: 05/02/22 12:52  
Analyst: MV

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Volatile Organics by GC/MS - Westborough Lab</b>						
Methylene chloride	ND	ug/l	2.5	0.70	1	
1,1-Dichloroethane	ND	ug/l	2.5	0.70	1	
Chloroform	ND	ug/l	2.5	0.70	1	
Carbon tetrachloride	ND	ug/l	0.50	0.13	1	
1,2-Dichloropropane	ND	ug/l	1.0	0.14	1	
Dibromochloromethane	ND	ug/l	0.50	0.15	1	
1,1,2-Trichloroethane	ND	ug/l	1.5	0.50	1	
Tetrachloroethene	ND	ug/l	0.50	0.18	1	
Chlorobenzene	ND	ug/l	2.5	0.70	1	
Trichlorofluoromethane	ND	ug/l	2.5	0.70	1	
1,2-Dichloroethane	ND	ug/l	0.50	0.13	1	
1,1,1-Trichloroethane	ND	ug/l	2.5	0.70	1	
Bromodichloromethane	ND	ug/l	0.50	0.19	1	
trans-1,3-Dichloropropene	ND	ug/l	0.50	0.16	1	
cis-1,3-Dichloropropene	ND	ug/l	0.50	0.14	1	
Bromoform	ND	ug/l	2.0	0.65	1	
1,1,2,2-Tetrachloroethane	ND	ug/l	0.50	0.17	1	
Benzene	ND	ug/l	0.50	0.16	1	
Toluene	ND	ug/l	2.5	0.70	1	
Ethylbenzene	ND	ug/l	2.5	0.70	1	
Chloromethane	ND	ug/l	2.5	0.70	1	
Bromomethane	ND	ug/l	2.5	0.70	1	
Vinyl chloride	ND	ug/l	1.0	0.07	1	
Chloroethane	ND	ug/l	2.5	0.70	1	
1,1-Dichloroethene	ND	ug/l	0.50	0.17	1	
trans-1,2-Dichloroethene	ND	ug/l	2.5	0.70	1	
Trichloroethene	ND	ug/l	0.50	0.18	1	
1,2-Dichlorobenzene	ND	ug/l	2.5	0.70	1	



Project Name: BATH SIGNIFY OFFSITE GW SAMPLI

Lab Number: L2221593

Project Number: 0127981-025

Report Date: 05/26/22

**SAMPLE RESULTS**

Lab ID:	L2221593-01	Date Collected:	04/22/22 00:00
Client ID:	4125-042222-0001	Date Received:	04/26/22
Sample Location:	Not Specified	Field Prep:	Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Volatile Organics by GC/MS - Westborough Lab</b>						
1,3-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,4-Dichlorobenzene	ND		ug/l	2.5	0.70	1
Methyl tert butyl ether	ND		ug/l	2.5	0.70	1
p/m-Xylene	ND		ug/l	2.5	0.70	1
o-Xylene	ND		ug/l	2.5	0.70	1
cis-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1
Styrene	ND		ug/l	2.5	0.70	1
Dichlorodifluoromethane	ND		ug/l	5.0	1.0	1
Acetone	ND		ug/l	5.0	1.5	1
Carbon disulfide	ND		ug/l	5.0	1.0	1
2-Butanone	ND		ug/l	5.0	1.9	1
4-Methyl-2-pentanone	ND		ug/l	5.0	1.0	1
2-Hexanone	ND		ug/l	5.0	1.0	1
Bromochloromethane	ND		ug/l	2.5	0.70	1
1,2-Dibromoethane	ND		ug/l	2.0	0.65	1
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	0.70	1
Isopropylbenzene	ND		ug/l	2.5	0.70	1
1,2,3-Trichlorobenzene	ND		ug/l	2.5	0.70	1
1,2,4-Trichlorobenzene	ND		ug/l	2.5	0.70	1
Methyl Acetate	ND		ug/l	2.0	0.23	1
Cyclohexane	ND		ug/l	10	0.27	1
1,4-Dioxane	ND		ug/l	250	61.	1
Freon-113	ND		ug/l	2.5	0.70	1
Methyl cyclohexane	ND		ug/l	10	0.40	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	115		70-130
Toluene-d8	95		70-130
4-Bromofluorobenzene	98		70-130
Dibromofluoromethane	108		70-130

Project Name: BATH SIGNIFY OFFSITE GW SAMPLI

Lab Number: L2221593

Project Number: 0127981-025

Report Date: 05/26/22

**SAMPLE RESULTS**

Lab ID:	L2221593-02	Date Collected:	04/22/22 15:05
Client ID:	MW22B-042222-1505	Date Received:	04/26/22
Sample Location:	Not Specified	Field Prep:	Not Specified

Sample Depth:

Matrix: Water

Analytical Method: 1,8260C

Analytical Date: 05/02/22 13:15

Analyst: MV

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Volatile Organics by GC/MS - Westborough Lab</b>						
Methylene chloride	ND	ug/l	2.5	0.70	1	
1,1-Dichloroethane	ND	ug/l	2.5	0.70	1	
Chloroform	ND	ug/l	2.5	0.70	1	
Carbon tetrachloride	ND	ug/l	0.50	0.13	1	
1,2-Dichloropropane	ND	ug/l	1.0	0.14	1	
Dibromochloromethane	ND	ug/l	0.50	0.15	1	
1,1,2-Trichloroethane	ND	ug/l	1.5	0.50	1	
Tetrachloroethene	ND	ug/l	0.50	0.18	1	
Chlorobenzene	ND	ug/l	2.5	0.70	1	
Trichlorofluoromethane	ND	ug/l	2.5	0.70	1	
1,2-Dichloroethane	ND	ug/l	0.50	0.13	1	
1,1,1-Trichloroethane	ND	ug/l	2.5	0.70	1	
Bromodichloromethane	ND	ug/l	0.50	0.19	1	
trans-1,3-Dichloropropene	ND	ug/l	0.50	0.16	1	
cis-1,3-Dichloropropene	ND	ug/l	0.50	0.14	1	
Bromoform	ND	ug/l	2.0	0.65	1	
1,1,2,2-Tetrachloroethane	ND	ug/l	0.50	0.17	1	
Benzene	ND	ug/l	0.50	0.16	1	
Toluene	ND	ug/l	2.5	0.70	1	
Ethylbenzene	ND	ug/l	2.5	0.70	1	
Chloromethane	ND	ug/l	2.5	0.70	1	
Bromomethane	ND	ug/l	2.5	0.70	1	
Vinyl chloride	ND	ug/l	1.0	0.07	1	
Chloroethane	ND	ug/l	2.5	0.70	1	
1,1-Dichloroethene	ND	ug/l	0.50	0.17	1	
trans-1,2-Dichloroethene	ND	ug/l	2.5	0.70	1	
Trichloroethene	ND	ug/l	0.50	0.18	1	
1,2-Dichlorobenzene	ND	ug/l	2.5	0.70	1	



Project Name: BATH SIGNIFY OFFSITE GW SAMPLI

Lab Number: L2221593

Project Number: 0127981-025

Report Date: 05/26/22

**SAMPLE RESULTS**

Lab ID:	L2221593-02	Date Collected:	04/22/22 15:05
Client ID:	MW22B-042222-1505	Date Received:	04/26/22
Sample Location:	Not Specified	Field Prep:	Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Volatile Organics by GC/MS - Westborough Lab</b>						
1,3-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,4-Dichlorobenzene	ND		ug/l	2.5	0.70	1
Methyl tert butyl ether	ND		ug/l	2.5	0.70	1
p/m-Xylene	ND		ug/l	2.5	0.70	1
o-Xylene	ND		ug/l	2.5	0.70	1
cis-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1
Styrene	ND		ug/l	2.5	0.70	1
Dichlorodifluoromethane	ND		ug/l	5.0	1.0	1
Acetone	ND		ug/l	5.0	1.5	1
Carbon disulfide	ND		ug/l	5.0	1.0	1
2-Butanone	ND		ug/l	5.0	1.9	1
4-Methyl-2-pentanone	ND		ug/l	5.0	1.0	1
2-Hexanone	ND		ug/l	5.0	1.0	1
Bromochloromethane	ND		ug/l	2.5	0.70	1
1,2-Dibromoethane	ND		ug/l	2.0	0.65	1
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	0.70	1
Isopropylbenzene	ND		ug/l	2.5	0.70	1
1,2,3-Trichlorobenzene	ND		ug/l	2.5	0.70	1
1,2,4-Trichlorobenzene	ND		ug/l	2.5	0.70	1
Methyl Acetate	ND		ug/l	2.0	0.23	1
Cyclohexane	ND		ug/l	10	0.27	1
1,4-Dioxane	ND		ug/l	250	61.	1
Freon-113	ND		ug/l	2.5	0.70	1
Methyl cyclohexane	ND		ug/l	10	0.40	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	114		70-130
Toluene-d8	94		70-130
4-Bromofluorobenzene	100		70-130
Dibromofluoromethane	110		70-130

Project Name: BATH SIGNIFY OFFSITE GW SAMPLI

Lab Number: L2221593

Project Number: 0127981-025

Report Date: 05/26/22

**SAMPLE RESULTS**

Lab ID:	L2221593-03	Date Collected:	04/25/22 08:35
Client ID:	MW21A-042522-0835	Date Received:	04/26/22
Sample Location:	Not Specified	Field Prep:	Not Specified

Sample Depth:

Matrix: Water  
 Analytical Method: 1,8260C  
 Analytical Date: 05/02/22 13:38  
 Analyst: MV

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Volatile Organics by GC/MS - Westborough Lab</b>						
Methylene chloride	ND	ug/l	2.5	0.70	1	
1,1-Dichloroethane	ND	ug/l	2.5	0.70	1	
Chloroform	ND	ug/l	2.5	0.70	1	
Carbon tetrachloride	ND	ug/l	0.50	0.13	1	
1,2-Dichloropropane	ND	ug/l	1.0	0.14	1	
Dibromochloromethane	ND	ug/l	0.50	0.15	1	
1,1,2-Trichloroethane	ND	ug/l	1.5	0.50	1	
Tetrachloroethene	ND	ug/l	0.50	0.18	1	
Chlorobenzene	ND	ug/l	2.5	0.70	1	
Trichlorofluoromethane	ND	ug/l	2.5	0.70	1	
1,2-Dichloroethane	ND	ug/l	0.50	0.13	1	
1,1,1-Trichloroethane	ND	ug/l	2.5	0.70	1	
Bromodichloromethane	ND	ug/l	0.50	0.19	1	
trans-1,3-Dichloropropene	ND	ug/l	0.50	0.16	1	
cis-1,3-Dichloropropene	ND	ug/l	0.50	0.14	1	
Bromoform	ND	ug/l	2.0	0.65	1	
1,1,2,2-Tetrachloroethane	ND	ug/l	0.50	0.17	1	
Benzene	ND	ug/l	0.50	0.16	1	
Toluene	ND	ug/l	2.5	0.70	1	
Ethylbenzene	ND	ug/l	2.5	0.70	1	
Chloromethane	ND	ug/l	2.5	0.70	1	
Bromomethane	ND	ug/l	2.5	0.70	1	
Vinyl chloride	ND	ug/l	1.0	0.07	1	
Chloroethane	ND	ug/l	2.5	0.70	1	
1,1-Dichloroethene	ND	ug/l	0.50	0.17	1	
trans-1,2-Dichloroethene	ND	ug/l	2.5	0.70	1	
Trichloroethene	ND	ug/l	0.50	0.18	1	
1,2-Dichlorobenzene	ND	ug/l	2.5	0.70	1	



Project Name: BATH SIGNIFY OFFSITE GW SAMPLI

Lab Number: L2221593

Project Number: 0127981-025

Report Date: 05/26/22

**SAMPLE RESULTS**

Lab ID:	L2221593-03	Date Collected:	04/25/22 08:35
Client ID:	MW21A-042522-0835	Date Received:	04/26/22
Sample Location:	Not Specified	Field Prep:	Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Volatile Organics by GC/MS - Westborough Lab</b>						
1,3-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,4-Dichlorobenzene	ND		ug/l	2.5	0.70	1
Methyl tert butyl ether	ND		ug/l	2.5	0.70	1
p/m-Xylene	ND		ug/l	2.5	0.70	1
o-Xylene	ND		ug/l	2.5	0.70	1
cis-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1
Styrene	ND		ug/l	2.5	0.70	1
Dichlorodifluoromethane	ND		ug/l	5.0	1.0	1
Acetone	ND		ug/l	5.0	1.5	1
Carbon disulfide	ND		ug/l	5.0	1.0	1
2-Butanone	ND		ug/l	5.0	1.9	1
4-Methyl-2-pentanone	ND		ug/l	5.0	1.0	1
2-Hexanone	ND		ug/l	5.0	1.0	1
Bromochloromethane	ND		ug/l	2.5	0.70	1
1,2-Dibromoethane	ND		ug/l	2.0	0.65	1
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	0.70	1
Isopropylbenzene	ND		ug/l	2.5	0.70	1
1,2,3-Trichlorobenzene	ND		ug/l	2.5	0.70	1
1,2,4-Trichlorobenzene	ND		ug/l	2.5	0.70	1
Methyl Acetate	ND		ug/l	2.0	0.23	1
Cyclohexane	ND		ug/l	10	0.27	1
1,4-Dioxane	ND		ug/l	250	61.	1
Freon-113	ND		ug/l	2.5	0.70	1
Methyl cyclohexane	ND		ug/l	10	0.40	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	114		70-130
Toluene-d8	95		70-130
4-Bromofluorobenzene	97		70-130
Dibromofluoromethane	111		70-130

Project Name: BATH SIGNIFY OFFSITE GW SAMPLI

Lab Number: L2221593

Project Number: 0127981-025

Report Date: 05/26/22

**SAMPLE RESULTS**

Lab ID:	L2221593-04	Date Collected:	04/25/22 09:40
Client ID:	MW21B-042522-0940	Date Received:	04/26/22
Sample Location:	Not Specified	Field Prep:	Not Specified

Sample Depth:

Matrix: Water

Analytical Method: 1,8260C

Analytical Date: 05/02/22 14:02

Analyst: MV

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Volatile Organics by GC/MS - Westborough Lab</b>						
Methylene chloride	ND		ug/l	2.5	0.70	1
1,1-Dichloroethane	ND		ug/l	2.5	0.70	1
Chloroform	ND		ug/l	2.5	0.70	1
Carbon tetrachloride	ND		ug/l	0.50	0.13	1
1,2-Dichloropropane	ND		ug/l	1.0	0.14	1
Dibromochloromethane	ND		ug/l	0.50	0.15	1
1,1,2-Trichloroethane	ND		ug/l	1.5	0.50	1
Tetrachloroethene	ND		ug/l	0.50	0.18	1
Chlorobenzene	ND		ug/l	2.5	0.70	1
Trichlorofluoromethane	ND		ug/l	2.5	0.70	1
1,2-Dichloroethane	ND		ug/l	0.50	0.13	1
1,1,1-Trichloroethane	ND		ug/l	2.5	0.70	1
Bromodichloromethane	ND		ug/l	0.50	0.19	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	0.16	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	0.14	1
Bromoform	ND		ug/l	2.0	0.65	1
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	0.17	1
Benzene	ND		ug/l	0.50	0.16	1
Toluene	ND		ug/l	2.5	0.70	1
Ethylbenzene	ND		ug/l	2.5	0.70	1
Chloromethane	ND		ug/l	2.5	0.70	1
Bromomethane	ND		ug/l	2.5	0.70	1
Vinyl chloride	ND		ug/l	1.0	0.07	1
Chloroethane	ND		ug/l	2.5	0.70	1
1,1-Dichloroethene	ND		ug/l	0.50	0.17	1
trans-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1
Trichloroethene	0.27	J	ug/l	0.50	0.18	1
1,2-Dichlorobenzene	ND		ug/l	2.5	0.70	1



Project Name: BATH SIGNIFY OFFSITE GW SAMPLI

Lab Number: L2221593

Project Number: 0127981-025

Report Date: 05/26/22

**SAMPLE RESULTS**

Lab ID:	L2221593-04	Date Collected:	04/25/22 09:40
Client ID:	MW21B-042522-0940	Date Received:	04/26/22
Sample Location:	Not Specified	Field Prep:	Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Volatile Organics by GC/MS - Westborough Lab</b>						
1,3-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,4-Dichlorobenzene	ND		ug/l	2.5	0.70	1
Methyl tert butyl ether	ND		ug/l	2.5	0.70	1
p/m-Xylene	ND		ug/l	2.5	0.70	1
o-Xylene	ND		ug/l	2.5	0.70	1
cis-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1
Styrene	ND		ug/l	2.5	0.70	1
Dichlorodifluoromethane	ND		ug/l	5.0	1.0	1
Acetone	6.3		ug/l	5.0	1.5	1
Carbon disulfide	ND		ug/l	5.0	1.0	1
2-Butanone	ND		ug/l	5.0	1.9	1
4-Methyl-2-pentanone	ND		ug/l	5.0	1.0	1
2-Hexanone	ND		ug/l	5.0	1.0	1
Bromochloromethane	ND		ug/l	2.5	0.70	1
1,2-Dibromoethane	ND		ug/l	2.0	0.65	1
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	0.70	1
Isopropylbenzene	ND		ug/l	2.5	0.70	1
1,2,3-Trichlorobenzene	ND		ug/l	2.5	0.70	1
1,2,4-Trichlorobenzene	ND		ug/l	2.5	0.70	1
Methyl Acetate	ND		ug/l	2.0	0.23	1
Cyclohexane	ND		ug/l	10	0.27	1
1,4-Dioxane	ND		ug/l	250	61.	1
Freon-113	ND		ug/l	2.5	0.70	1
Methyl cyclohexane	ND		ug/l	10	0.40	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	115		70-130
Toluene-d8	94		70-130
4-Bromofluorobenzene	98		70-130
Dibromofluoromethane	110		70-130

**Project Name:** BATH SIGNIFY OFFSITE GW SAMPLI  
**Project Number:** 0127981-025

**Lab Number:** L2221593  
**Report Date:** 05/26/22

**SAMPLE RESULTS**

Lab ID:	L2221593-06	Date Collected:	04/25/22 11:15
Client ID:	MW26B-042522-1115	Date Received:	04/26/22
Sample Location:	Not Specified	Field Prep:	Not Specified

Sample Depth:

Matrix: Water  
Analytical Method: 1,8260C  
Analytical Date: 05/02/22 14:25  
Analyst: MV

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Volatile Organics by GC/MS - Westborough Lab</b>						
Methylene chloride	ND	ug/l	2.5	0.70	1	
1,1-Dichloroethane	ND	ug/l	2.5	0.70	1	
Chloroform	ND	ug/l	2.5	0.70	1	
Carbon tetrachloride	ND	ug/l	0.50	0.13	1	
1,2-Dichloropropane	ND	ug/l	1.0	0.14	1	
Dibromochloromethane	ND	ug/l	0.50	0.15	1	
1,1,2-Trichloroethane	ND	ug/l	1.5	0.50	1	
Tetrachloroethene	ND	ug/l	0.50	0.18	1	
Chlorobenzene	ND	ug/l	2.5	0.70	1	
Trichlorofluoromethane	ND	ug/l	2.5	0.70	1	
1,2-Dichloroethane	ND	ug/l	0.50	0.13	1	
1,1,1-Trichloroethane	ND	ug/l	2.5	0.70	1	
Bromodichloromethane	ND	ug/l	0.50	0.19	1	
trans-1,3-Dichloropropene	ND	ug/l	0.50	0.16	1	
cis-1,3-Dichloropropene	ND	ug/l	0.50	0.14	1	
Bromoform	ND	ug/l	2.0	0.65	1	
1,1,2,2-Tetrachloroethane	ND	ug/l	0.50	0.17	1	
Benzene	ND	ug/l	0.50	0.16	1	
Toluene	ND	ug/l	2.5	0.70	1	
Ethylbenzene	ND	ug/l	2.5	0.70	1	
Chloromethane	ND	ug/l	2.5	0.70	1	
Bromomethane	ND	ug/l	2.5	0.70	1	
Vinyl chloride	ND	ug/l	1.0	0.07	1	
Chloroethane	ND	ug/l	2.5	0.70	1	
1,1-Dichloroethene	ND	ug/l	0.50	0.17	1	
trans-1,2-Dichloroethene	ND	ug/l	2.5	0.70	1	
Trichloroethene	1.1	ug/l	0.50	0.18	1	
1,2-Dichlorobenzene	ND	ug/l	2.5	0.70	1	



Project Name: BATH SIGNIFY OFFSITE GW SAMPLI

Lab Number: L2221593

Project Number: 0127981-025

Report Date: 05/26/22

**SAMPLE RESULTS**

Lab ID:	L2221593-06	Date Collected:	04/25/22 11:15
Client ID:	MW26B-042522-1115	Date Received:	04/26/22
Sample Location:	Not Specified	Field Prep:	Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Volatile Organics by GC/MS - Westborough Lab</b>						
1,3-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,4-Dichlorobenzene	ND		ug/l	2.5	0.70	1
Methyl tert butyl ether	ND		ug/l	2.5	0.70	1
p/m-Xylene	ND		ug/l	2.5	0.70	1
o-Xylene	ND		ug/l	2.5	0.70	1
cis-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1
Styrene	ND		ug/l	2.5	0.70	1
Dichlorodifluoromethane	ND		ug/l	5.0	1.0	1
Acetone	ND		ug/l	5.0	1.5	1
Carbon disulfide	ND		ug/l	5.0	1.0	1
2-Butanone	ND		ug/l	5.0	1.9	1
4-Methyl-2-pentanone	ND		ug/l	5.0	1.0	1
2-Hexanone	ND		ug/l	5.0	1.0	1
Bromochloromethane	ND		ug/l	2.5	0.70	1
1,2-Dibromoethane	ND		ug/l	2.0	0.65	1
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	0.70	1
Isopropylbenzene	ND		ug/l	2.5	0.70	1
1,2,3-Trichlorobenzene	ND		ug/l	2.5	0.70	1
1,2,4-Trichlorobenzene	ND		ug/l	2.5	0.70	1
Methyl Acetate	ND		ug/l	2.0	0.23	1
Cyclohexane	ND		ug/l	10	0.27	1
1,4-Dioxane	ND		ug/l	250	61.	1
Freon-113	ND		ug/l	2.5	0.70	1
Methyl cyclohexane	ND		ug/l	10	0.40	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	116		70-130
Toluene-d8	95		70-130
4-Bromofluorobenzene	98		70-130
Dibromofluoromethane	111		70-130

Project Name: BATH SIGNIFY OFFSITE GW SAMPLI

Lab Number: L2221593

Project Number: 0127981-025

Report Date: 05/26/22

**SAMPLE RESULTS**

Lab ID:	L2221593-08	Date Collected:	04/25/22 14:40
Client ID:	MW25B-042522-1440	Date Received:	04/26/22
Sample Location:	Not Specified	Field Prep:	Not Specified

Sample Depth:

Matrix: Water

Analytical Method: 1,8260C

Analytical Date: 05/02/22 14:49

Analyst: MV

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Volatile Organics by GC/MS - Westborough Lab</b>						
Methylene chloride	ND		ug/l	2.5	0.70	1
1,1-Dichloroethane	ND		ug/l	2.5	0.70	1
Chloroform	ND		ug/l	2.5	0.70	1
Carbon tetrachloride	ND		ug/l	0.50	0.13	1
1,2-Dichloropropane	ND		ug/l	1.0	0.14	1
Dibromochloromethane	ND		ug/l	0.50	0.15	1
1,1,2-Trichloroethane	ND		ug/l	1.5	0.50	1
Tetrachloroethene	ND		ug/l	0.50	0.18	1
Chlorobenzene	ND		ug/l	2.5	0.70	1
Trichlorofluoromethane	ND		ug/l	2.5	0.70	1
1,2-Dichloroethane	ND		ug/l	0.50	0.13	1
1,1,1-Trichloroethane	ND		ug/l	2.5	0.70	1
Bromodichloromethane	ND		ug/l	0.50	0.19	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	0.16	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	0.14	1
Bromoform	ND		ug/l	2.0	0.65	1
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	0.17	1
Benzene	0.21	J	ug/l	0.50	0.16	1
Toluene	ND		ug/l	2.5	0.70	1
Ethylbenzene	ND		ug/l	2.5	0.70	1
Chloromethane	ND		ug/l	2.5	0.70	1
Bromomethane	ND		ug/l	2.5	0.70	1
Vinyl chloride	ND		ug/l	1.0	0.07	1
Chloroethane	ND		ug/l	2.5	0.70	1
1,1-Dichloroethene	ND		ug/l	0.50	0.17	1
trans-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1
Trichloroethene	0.39	J	ug/l	0.50	0.18	1
1,2-Dichlorobenzene	ND		ug/l	2.5	0.70	1



Project Name: BATH SIGNIFY OFFSITE GW SAMPLI

Lab Number: L2221593

Project Number: 0127981-025

Report Date: 05/26/22

**SAMPLE RESULTS**

Lab ID:	L2221593-08	Date Collected:	04/25/22 14:40
Client ID:	MW25B-042522-1440	Date Received:	04/26/22
Sample Location:	Not Specified	Field Prep:	Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Volatile Organics by GC/MS - Westborough Lab</b>						
1,3-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,4-Dichlorobenzene	ND		ug/l	2.5	0.70	1
Methyl tert butyl ether	ND		ug/l	2.5	0.70	1
p/m-Xylene	ND		ug/l	2.5	0.70	1
o-Xylene	ND		ug/l	2.5	0.70	1
cis-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1
Styrene	ND		ug/l	2.5	0.70	1
Dichlorodifluoromethane	ND		ug/l	5.0	1.0	1
Acetone	15		ug/l	5.0	1.5	1
Carbon disulfide	ND		ug/l	5.0	1.0	1
2-Butanone	ND		ug/l	5.0	1.9	1
4-Methyl-2-pentanone	ND		ug/l	5.0	1.0	1
2-Hexanone	ND		ug/l	5.0	1.0	1
Bromochloromethane	ND		ug/l	2.5	0.70	1
1,2-Dibromoethane	ND		ug/l	2.0	0.65	1
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	0.70	1
Isopropylbenzene	ND		ug/l	2.5	0.70	1
1,2,3-Trichlorobenzene	ND		ug/l	2.5	0.70	1
1,2,4-Trichlorobenzene	ND		ug/l	2.5	0.70	1
Methyl Acetate	ND		ug/l	2.0	0.23	1
Cyclohexane	0.34	J	ug/l	10	0.27	1
1,4-Dioxane	ND		ug/l	250	61.	1
Freon-113	ND		ug/l	2.5	0.70	1
Methyl cyclohexane	0.43	J	ug/l	10	0.40	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	118		70-130
Toluene-d8	95		70-130
4-Bromofluorobenzene	97		70-130
Dibromofluoromethane	111		70-130

**Project Name:** BATH SIGNIFY OFFSITE GW SAMPLI  
**Project Number:** 0127981-025

**Lab Number:** L2221593  
**Report Date:** 05/26/22

**SAMPLE RESULTS**

Lab ID:	L2221593-09	Date Collected:	04/25/22 15:15
Client ID:	MW23A-042522-1515	Date Received:	04/26/22
Sample Location:	Not Specified	Field Prep:	Not Specified

Sample Depth:

Matrix: Water  
Analytical Method: 1,8260C  
Analytical Date: 05/02/22 15:12  
Analyst: MV

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Volatile Organics by GC/MS - Westborough Lab</b>						
Methylene chloride	ND		ug/l	2.5	0.70	1
1,1-Dichloroethane	ND		ug/l	2.5	0.70	1
Chloroform	ND		ug/l	2.5	0.70	1
Carbon tetrachloride	ND		ug/l	0.50	0.13	1
1,2-Dichloropropane	ND		ug/l	1.0	0.14	1
Dibromochloromethane	ND		ug/l	0.50	0.15	1
1,1,2-Trichloroethane	ND		ug/l	1.5	0.50	1
Tetrachloroethene	ND		ug/l	0.50	0.18	1
Chlorobenzene	ND		ug/l	2.5	0.70	1
Trichlorofluoromethane	ND		ug/l	2.5	0.70	1
1,2-Dichloroethane	ND		ug/l	0.50	0.13	1
1,1,1-Trichloroethane	1.4	J	ug/l	2.5	0.70	1
Bromodichloromethane	ND		ug/l	0.50	0.19	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	0.16	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	0.14	1
Bromoform	ND		ug/l	2.0	0.65	1
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	0.17	1
Benzene	ND		ug/l	0.50	0.16	1
Toluene	ND		ug/l	2.5	0.70	1
Ethylbenzene	ND		ug/l	2.5	0.70	1
Chloromethane	ND		ug/l	2.5	0.70	1
Bromomethane	ND		ug/l	2.5	0.70	1
Vinyl chloride	ND		ug/l	1.0	0.07	1
Chloroethane	ND		ug/l	2.5	0.70	1
1,1-Dichloroethene	ND		ug/l	0.50	0.17	1
trans-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1
Trichloroethene	1.3		ug/l	0.50	0.18	1
1,2-Dichlorobenzene	ND		ug/l	2.5	0.70	1



Project Name: BATH SIGNIFY OFFSITE GW SAMPLI

Lab Number: L2221593

Project Number: 0127981-025

Report Date: 05/26/22

**SAMPLE RESULTS**

Lab ID:	L2221593-09	Date Collected:	04/25/22 15:15
Client ID:	MW23A-042522-1515	Date Received:	04/26/22
Sample Location:	Not Specified	Field Prep:	Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Volatile Organics by GC/MS - Westborough Lab</b>						
1,3-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,4-Dichlorobenzene	ND		ug/l	2.5	0.70	1
Methyl tert butyl ether	ND		ug/l	2.5	0.70	1
p/m-Xylene	ND		ug/l	2.5	0.70	1
o-Xylene	ND		ug/l	2.5	0.70	1
cis-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1
Styrene	ND		ug/l	2.5	0.70	1
Dichlorodifluoromethane	ND		ug/l	5.0	1.0	1
Acetone	ND		ug/l	5.0	1.5	1
Carbon disulfide	ND		ug/l	5.0	1.0	1
2-Butanone	ND		ug/l	5.0	1.9	1
4-Methyl-2-pentanone	ND		ug/l	5.0	1.0	1
2-Hexanone	ND		ug/l	5.0	1.0	1
Bromochloromethane	ND		ug/l	2.5	0.70	1
1,2-Dibromoethane	ND		ug/l	2.0	0.65	1
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	0.70	1
Isopropylbenzene	ND		ug/l	2.5	0.70	1
1,2,3-Trichlorobenzene	ND		ug/l	2.5	0.70	1
1,2,4-Trichlorobenzene	ND		ug/l	2.5	0.70	1
Methyl Acetate	ND		ug/l	2.0	0.23	1
Cyclohexane	ND		ug/l	10	0.27	1
1,4-Dioxane	ND		ug/l	250	61.	1
Freon-113	ND		ug/l	2.5	0.70	1
Methyl cyclohexane	ND		ug/l	10	0.40	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	118		70-130
Toluene-d8	94		70-130
4-Bromofluorobenzene	99		70-130
Dibromofluoromethane	109		70-130

**Project Name:** BATH SIGNIFY OFFSITE GW SAMPLI  
**Project Number:** 0127981-025

**Lab Number:** L2221593  
**Report Date:** 05/26/22

**SAMPLE RESULTS**

Lab ID:	L2221593-11	Date Collected:	04/25/22 00:00
Client ID:	4125-042522-0002	Date Received:	04/26/22
Sample Location:	Not Specified	Field Prep:	Not Specified

Sample Depth:

Matrix: Water  
Analytical Method: 1,8260C  
Analytical Date: 05/02/22 15:35  
Analyst: MV

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Volatile Organics by GC/MS - Westborough Lab</b>						
Methylene chloride	ND	ug/l	2.5	0.70	1	
1,1-Dichloroethane	ND	ug/l	2.5	0.70	1	
Chloroform	ND	ug/l	2.5	0.70	1	
Carbon tetrachloride	ND	ug/l	0.50	0.13	1	
1,2-Dichloropropane	ND	ug/l	1.0	0.14	1	
Dibromochloromethane	ND	ug/l	0.50	0.15	1	
1,1,2-Trichloroethane	ND	ug/l	1.5	0.50	1	
Tetrachloroethene	ND	ug/l	0.50	0.18	1	
Chlorobenzene	ND	ug/l	2.5	0.70	1	
Trichlorofluoromethane	ND	ug/l	2.5	0.70	1	
1,2-Dichloroethane	ND	ug/l	0.50	0.13	1	
1,1,1-Trichloroethane	ND	ug/l	2.5	0.70	1	
Bromodichloromethane	ND	ug/l	0.50	0.19	1	
trans-1,3-Dichloropropene	ND	ug/l	0.50	0.16	1	
cis-1,3-Dichloropropene	ND	ug/l	0.50	0.14	1	
Bromoform	ND	ug/l	2.0	0.65	1	
1,1,2,2-Tetrachloroethane	ND	ug/l	0.50	0.17	1	
Benzene	ND	ug/l	0.50	0.16	1	
Toluene	ND	ug/l	2.5	0.70	1	
Ethylbenzene	ND	ug/l	2.5	0.70	1	
Chloromethane	ND	ug/l	2.5	0.70	1	
Bromomethane	ND	ug/l	2.5	0.70	1	
Vinyl chloride	ND	ug/l	1.0	0.07	1	
Chloroethane	ND	ug/l	2.5	0.70	1	
1,1-Dichloroethene	ND	ug/l	0.50	0.17	1	
trans-1,2-Dichloroethene	ND	ug/l	2.5	0.70	1	
Trichloroethene	1.3	ug/l	0.50	0.18	1	
1,2-Dichlorobenzene	ND	ug/l	2.5	0.70	1	



Project Name: BATH SIGNIFY OFFSITE GW SAMPLI

Lab Number: L2221593

Project Number: 0127981-025

Report Date: 05/26/22

**SAMPLE RESULTS**

Lab ID:	L2221593-11	Date Collected:	04/25/22 00:00
Client ID:	4125-042522-0002	Date Received:	04/26/22
Sample Location:	Not Specified	Field Prep:	Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Volatile Organics by GC/MS - Westborough Lab</b>						
1,3-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,4-Dichlorobenzene	ND		ug/l	2.5	0.70	1
Methyl tert butyl ether	ND		ug/l	2.5	0.70	1
p/m-Xylene	ND		ug/l	2.5	0.70	1
o-Xylene	ND		ug/l	2.5	0.70	1
cis-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1
Styrene	ND		ug/l	2.5	0.70	1
Dichlorodifluoromethane	ND		ug/l	5.0	1.0	1
Acetone	ND		ug/l	5.0	1.5	1
Carbon disulfide	ND		ug/l	5.0	1.0	1
2-Butanone	ND		ug/l	5.0	1.9	1
4-Methyl-2-pentanone	ND		ug/l	5.0	1.0	1
2-Hexanone	ND		ug/l	5.0	1.0	1
Bromochloromethane	ND		ug/l	2.5	0.70	1
1,2-Dibromoethane	ND		ug/l	2.0	0.65	1
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	0.70	1
Isopropylbenzene	ND		ug/l	2.5	0.70	1
1,2,3-Trichlorobenzene	ND		ug/l	2.5	0.70	1
1,2,4-Trichlorobenzene	ND		ug/l	2.5	0.70	1
Methyl Acetate	ND		ug/l	2.0	0.23	1
Cyclohexane	ND		ug/l	10	0.27	1
1,4-Dioxane	ND		ug/l	250	61.	1
Freon-113	ND		ug/l	2.5	0.70	1
Methyl cyclohexane	ND		ug/l	10	0.40	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	120		70-130
Toluene-d8	95		70-130
4-Bromofluorobenzene	97		70-130
Dibromofluoromethane	113		70-130

Project Name: BATH SIGNIFY OFFSITE GW SAMPLI

Lab Number: L2221593

Project Number: 0127981-025

Report Date: 05/26/22

**SAMPLE RESULTS**

Lab ID: L2221593-12  
 Client ID: 4125-042522-0003  
 Sample Location: Not Specified

Date Collected: 04/25/22 00:00  
 Date Received: 04/26/22  
 Field Prep: Not Specified

Sample Depth:

Matrix: Water  
 Analytical Method: 1,8260C  
 Analytical Date: 05/02/22 15:59  
 Analyst: MV

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Volatile Organics by GC/MS - Westborough Lab</b>						
Methylene chloride	ND	ug/l	2.5	0.70	1	
1,1-Dichloroethane	ND	ug/l	2.5	0.70	1	
Chloroform	ND	ug/l	2.5	0.70	1	
Carbon tetrachloride	ND	ug/l	0.50	0.13	1	
1,2-Dichloropropane	ND	ug/l	1.0	0.14	1	
Dibromochloromethane	ND	ug/l	0.50	0.15	1	
1,1,2-Trichloroethane	ND	ug/l	1.5	0.50	1	
Tetrachloroethene	ND	ug/l	0.50	0.18	1	
Chlorobenzene	ND	ug/l	2.5	0.70	1	
Trichlorofluoromethane	ND	ug/l	2.5	0.70	1	
1,2-Dichloroethane	ND	ug/l	0.50	0.13	1	
1,1,1-Trichloroethane	ND	ug/l	2.5	0.70	1	
Bromodichloromethane	ND	ug/l	0.50	0.19	1	
trans-1,3-Dichloropropene	ND	ug/l	0.50	0.16	1	
cis-1,3-Dichloropropene	ND	ug/l	0.50	0.14	1	
Bromoform	ND	ug/l	2.0	0.65	1	
1,1,2,2-Tetrachloroethane	ND	ug/l	0.50	0.17	1	
Benzene	ND	ug/l	0.50	0.16	1	
Toluene	ND	ug/l	2.5	0.70	1	
Ethylbenzene	ND	ug/l	2.5	0.70	1	
Chloromethane	ND	ug/l	2.5	0.70	1	
Bromomethane	ND	ug/l	2.5	0.70	1	
Vinyl chloride	ND	ug/l	1.0	0.07	1	
Chloroethane	ND	ug/l	2.5	0.70	1	
1,1-Dichloroethene	ND	ug/l	0.50	0.17	1	
trans-1,2-Dichloroethene	ND	ug/l	2.5	0.70	1	
Trichloroethene	ND	ug/l	0.50	0.18	1	
1,2-Dichlorobenzene	ND	ug/l	2.5	0.70	1	



Project Name: BATH SIGNIFY OFFSITE GW SAMPLI

Lab Number: L2221593

Project Number: 0127981-025

Report Date: 05/26/22

**SAMPLE RESULTS**

Lab ID: L2221593-12  
 Client ID: 4125-042522-0003  
 Sample Location: Not Specified

Date Collected: 04/25/22 00:00  
 Date Received: 04/26/22  
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Volatile Organics by GC/MS - Westborough Lab</b>						
1,3-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,4-Dichlorobenzene	ND		ug/l	2.5	0.70	1
Methyl tert butyl ether	ND		ug/l	2.5	0.70	1
p/m-Xylene	ND		ug/l	2.5	0.70	1
o-Xylene	ND		ug/l	2.5	0.70	1
cis-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1
Styrene	ND		ug/l	2.5	0.70	1
Dichlorodifluoromethane	ND		ug/l	5.0	1.0	1
Acetone	ND		ug/l	5.0	1.5	1
Carbon disulfide	ND		ug/l	5.0	1.0	1
2-Butanone	ND		ug/l	5.0	1.9	1
4-Methyl-2-pentanone	ND		ug/l	5.0	1.0	1
2-Hexanone	ND		ug/l	5.0	1.0	1
Bromochloromethane	ND		ug/l	2.5	0.70	1
1,2-Dibromoethane	ND		ug/l	2.0	0.65	1
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	0.70	1
Isopropylbenzene	ND		ug/l	2.5	0.70	1
1,2,3-Trichlorobenzene	ND		ug/l	2.5	0.70	1
1,2,4-Trichlorobenzene	ND		ug/l	2.5	0.70	1
Methyl Acetate	ND		ug/l	2.0	0.23	1
Cyclohexane	ND		ug/l	10	0.27	1
1,4-Dioxane	ND		ug/l	250	61.	1
Freon-113	ND		ug/l	2.5	0.70	1
Methyl cyclohexane	ND		ug/l	10	0.40	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	117		70-130
Toluene-d8	95		70-130
4-Bromofluorobenzene	96		70-130
Dibromofluoromethane	110		70-130

**Project Name:** BATH SIGNIFY OFFSITE GW SAMPLI  
**Project Number:** 0127981-025

**Lab Number:** L2221593  
**Report Date:** 05/26/22

**Method Blank Analysis**  
**Batch Quality Control**

Analytical Method: 1,8260C  
Analytical Date: 05/02/22 08:36  
Analyst: PD

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 01-04,06,08-09,11-12 Batch: WG1633727-5					
Methylene chloride	ND	ug/l	2.5	0.70	
1,1-Dichloroethane	ND	ug/l	2.5	0.70	
Chloroform	ND	ug/l	2.5	0.70	
Carbon tetrachloride	ND	ug/l	0.50	0.13	
1,2-Dichloropropane	ND	ug/l	1.0	0.14	
Dibromochloromethane	ND	ug/l	0.50	0.15	
1,1,2-Trichloroethane	ND	ug/l	1.5	0.50	
Tetrachloroethene	ND	ug/l	0.50	0.18	
Chlorobenzene	ND	ug/l	2.5	0.70	
Trichlorofluoromethane	ND	ug/l	2.5	0.70	
1,2-Dichloroethane	ND	ug/l	0.50	0.13	
1,1,1-Trichloroethane	ND	ug/l	2.5	0.70	
Bromodichloromethane	ND	ug/l	0.50	0.19	
trans-1,3-Dichloropropene	ND	ug/l	0.50	0.16	
cis-1,3-Dichloropropene	ND	ug/l	0.50	0.14	
Bromoform	ND	ug/l	2.0	0.65	
1,1,2,2-Tetrachloroethane	ND	ug/l	0.50	0.17	
Benzene	ND	ug/l	0.50	0.16	
Toluene	ND	ug/l	2.5	0.70	
Ethylbenzene	ND	ug/l	2.5	0.70	
Chloromethane	ND	ug/l	2.5	0.70	
Bromomethane	ND	ug/l	2.5	0.70	
Vinyl chloride	ND	ug/l	1.0	0.07	
Chloroethane	ND	ug/l	2.5	0.70	
1,1-Dichloroethene	ND	ug/l	0.50	0.17	
trans-1,2-Dichloroethene	ND	ug/l	2.5	0.70	
Trichloroethene	ND	ug/l	0.50	0.18	
1,2-Dichlorobenzene	ND	ug/l	2.5	0.70	
1,3-Dichlorobenzene	ND	ug/l	2.5	0.70	



**Project Name:** BATH SIGNIFY OFFSITE GW SAMPLI  
**Project Number:** 0127981-025

**Lab Number:** L2221593  
**Report Date:** 05/26/22

**Method Blank Analysis**  
**Batch Quality Control**

Analytical Method: 1,8260C  
Analytical Date: 05/02/22 08:36  
Analyst: PD

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 01-04,06,08-09,11-12 Batch: WG1633727-5					
1,4-Dichlorobenzene	ND	ug/l	2.5	0.70	
Methyl tert butyl ether	ND	ug/l	2.5	0.70	
p/m-Xylene	ND	ug/l	2.5	0.70	
o-Xylene	ND	ug/l	2.5	0.70	
cis-1,2-Dichloroethene	ND	ug/l	2.5	0.70	
Styrene	ND	ug/l	2.5	0.70	
Dichlorodifluoromethane	ND	ug/l	5.0	1.0	
Acetone	ND	ug/l	5.0	1.5	
Carbon disulfide	ND	ug/l	5.0	1.0	
2-Butanone	ND	ug/l	5.0	1.9	
4-Methyl-2-pentanone	ND	ug/l	5.0	1.0	
2-Hexanone	ND	ug/l	5.0	1.0	
Bromochloromethane	ND	ug/l	2.5	0.70	
1,2-Dibromoethane	ND	ug/l	2.0	0.65	
1,2-Dibromo-3-chloropropane	ND	ug/l	2.5	0.70	
Isopropylbenzene	ND	ug/l	2.5	0.70	
1,2,3-Trichlorobenzene	ND	ug/l	2.5	0.70	
1,2,4-Trichlorobenzene	ND	ug/l	2.5	0.70	
Methyl Acetate	ND	ug/l	2.0	0.23	
Cyclohexane	ND	ug/l	10	0.27	
1,4-Dioxane	ND	ug/l	250	61.	
Freon-113	ND	ug/l	2.5	0.70	
Methyl cyclohexane	ND	ug/l	10	0.40	



**Project Name:** BATH SIGNIFY OFFSITE GW SAMPLI  
**Project Number:** 0127981-025

**Lab Number:** L2221593  
**Report Date:** 05/26/22

### **Method Blank Analysis Batch Quality Control**

Analytical Method: 1,8260C  
Analytical Date: 05/02/22 08:36  
Analyst: PD

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 01-04,06,08-09,11-12 Batch: WG1633727-5					

Surrogate	%Recovery	Acceptance Criteria	
		Qualifier	Criteria
1,2-Dichloroethane-d4	110		70-130
Toluene-d8	95		70-130
4-Bromofluorobenzene	99		70-130
Dibromofluoromethane	109		70-130

# Lab Control Sample Analysis

## Batch Quality Control

**Project Name:** BATH SIGNIFY OFFSITE GW SAMPLI  
**Project Number:** 0127981-025

**Lab Number:** L2221593  
**Report Date:** 05/26/22

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-04,06,08-09,11-12 Batch: WG1633727-3 WG1633727-4								
Methylene chloride	100		98		70-130	2		20
1,1-Dichloroethane	100		100		70-130	0		20
Chloroform	110		110		70-130	0		20
Carbon tetrachloride	120		120		63-132	0		20
1,2-Dichloropropane	94		95		70-130	1		20
Dibromochloromethane	100		110		63-130	10		20
1,1,2-Trichloroethane	96		97		70-130	1		20
Tetrachloroethene	110		110		70-130	0		20
Chlorobenzene	100		99		75-130	1		20
Trichlorofluoromethane	120		130		62-150	8		20
1,2-Dichloroethane	110		110		70-130	0		20
1,1,1-Trichloroethane	120		120		67-130	0		20
Bromodichloromethane	110		110		67-130	0		20
trans-1,3-Dichloropropene	110		110		70-130	0		20
cis-1,3-Dichloropropene	96		95		70-130	1		20
Bromoform	100		100		54-136	0		20
1,1,2,2-Tetrachloroethane	88		94		67-130	7		20
Benzene	100		100		70-130	0		20
Toluene	100		100		70-130	0		20
Ethylbenzene	100		100		70-130	0		20
Chloromethane	90		87		64-130	3		20
Bromomethane	65		66		39-139	2		20
Vinyl chloride	100		97		55-140	3		20

# Lab Control Sample Analysis

## Batch Quality Control

**Project Name:** BATH SIGNIFY OFFSITE GW SAMPLI  
**Project Number:** 0127981-025

**Lab Number:** L2221593  
**Report Date:** 05/26/22

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-04,06,08-09,11-12 Batch: WG1633727-3 WG1633727-4								
Chloroethane	100		97		55-138	3		20
1,1-Dichloroethene	110		110		61-145	0		20
trans-1,2-Dichloroethene	100		100		70-130	0		20
Trichloroethene	93		93		70-130	0		20
1,2-Dichlorobenzene	100		100		70-130	0		20
1,3-Dichlorobenzene	100		100		70-130	0		20
1,4-Dichlorobenzene	100		100		70-130	0		20
Methyl tert butyl ether	100		110		63-130	10		20
p/m-Xylene	105		105		70-130	0		20
o-Xylene	105		105		70-130	0		20
cis-1,2-Dichloroethene	100		98		70-130	2		20
Styrene	105		105		70-130	0		20
Dichlorodifluoromethane	92		89		36-147	3		20
Acetone	92		94		58-148	2		20
Carbon disulfide	100		100		51-130	0		20
2-Butanone	94		86		63-138	9		20
4-Methyl-2-pentanone	88		94		59-130	7		20
2-Hexanone	92		99		57-130	7		20
Bromochloromethane	100		100		70-130	0		20
1,2-Dibromoethane	94		96		70-130	2		20
1,2-Dibromo-3-chloropropane	87		90		41-144	3		20
Isopropylbenzene	100		100		70-130	0		20
1,2,3-Trichlorobenzene	96		99		70-130	3		20

# Lab Control Sample Analysis

## Batch Quality Control

**Project Name:** BATH SIGNIFY OFFSITE GW SAMPLI  
**Project Number:** 0127981-025

**Lab Number:** L2221593  
**Report Date:** 05/26/22

<b>Parameter</b>	<i>LCS</i> %Recovery	<i>Qual</i>	<i>LCSD</i> %Recovery	<i>Qual</i>	<i>%Recovery</i> <i>Limits</i>	<i>RPD</i>	<i>Qual</i>	<i>RPD</i> <i>Limits</i>
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-04,06,08-09,11-12 Batch: WG1633727-3 WG1633727-4								
1,2,4-Trichlorobenzene	100		100		70-130	0		20
Methyl Acetate	86		95		70-130	10		20
Cyclohexane	100		100		70-130	0		20
1,4-Dioxane	126		116		56-162	8		20
Freon-113	110		110		70-130	0		20
Methyl cyclohexane	100		100		70-130	0		20

<b>Surrogate</b>	<i>LCS</i> %Recovery	<i>Qual</i>	<i>LCSD</i> %Recovery	<i>Qual</i>	<b>Acceptance Criteria</b>
1,2-Dichloroethane-d4	111		112		70-130
Toluene-d8	98		98		70-130
4-Bromofluorobenzene	98		100		70-130
Dibromofluoromethane	106		106		70-130

# **SEMIVOLATILES**



Project Name: BATH SIGNIFY OFFSITE GW SAMPLI

Lab Number: L2221593

Project Number: 0127981-025

Report Date: 05/26/22

**SAMPLE RESULTS**

Lab ID: L2221593-05  
 Client ID: MW26B-042522-1015  
 Sample Location: Not Specified

Date Collected: 04/25/22 10:15  
 Date Received: 04/26/22  
 Field Prep: Not Specified

Sample Depth:

Matrix: Water  
 Analytical Method: 134,LCMSMS-ID  
 Analytical Date: 05/06/22 17:56  
 Analyst: RS

Extraction Method: ALPHA 23528  
 Extraction Date: 05/06/22 03:28

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Perfluorinated Alkyl Acids by Isotope Dilution - Mansfield Lab</b>						
Perfluorobutanoic Acid (PFBA)	ND	ng/l	1.88	0.385	1	
Perfluoropentanoic Acid (PFPeA)	ND	ng/l	1.88	0.373	1	
Perfluorobutanesulfonic Acid (PFBS)	ND	ng/l	1.88	0.224	1	
Perfluorohexanoic Acid (PFHxA)	ND	ng/l	1.88	0.309	1	
Perfluoroheptanoic Acid (PFHpA)	ND	ng/l	1.88	0.212	1	
Perfluorohexanesulfonic Acid (PFHxS)	ND	ng/l	1.88	0.354	1	
Perfluoroctanoic Acid (PFOA)	ND	ng/l	1.88	0.222	1	
1H,1H,2H,2H-Perfluorooctanesulfonic Acid (6:2FTS)	ND	ng/l	1.88	1.26	1	
Perfluoroheptanesulfonic Acid (PFHpS)	ND	ng/l	1.88	0.649	1	
Perfluorononanoic Acid (PFNA)	ND	ng/l	1.88	0.294	1	
Perfluorooctanesulfonic Acid (PFOS)	ND	ng/l	1.88	0.475	1	
Perfluorodecanoic Acid (PFDA)	ND	ng/l	1.88	0.287	1	
1H,1H,2H,2H-Perfluorodecanesulfonic Acid (8:2FTS)	ND	ng/l	1.88	1.14	1	
N-Methyl Perfluorooctanesulfonamidoacetic Acid (NMeFOSAA)	ND	ng/l	1.88	0.611	1	
Perfluoroundecanoic Acid (PFUnA)	ND	ng/l	1.88	0.245	1	
Perfluorodecanesulfonic Acid (PFDS)	ND	ng/l	1.88	0.924	1	
Perfluorooctanesulfonamide (FOSA)	ND	ng/l	1.88	0.547	1	
N-Ethyl Perfluorooctanesulfonamidoacetic Acid (NEtFOSAA)	ND	ng/l	1.88	0.758	1	
Perfluorododecanoic Acid (PFDoA)	ND	ng/l	1.88	0.351	1	
Perfluorotridecanoic Acid (PFTrDA)	ND	ng/l	1.88	0.308	1	
Perfluorotetradecanoic Acid (PFTA)	ND	ng/l	1.88	0.234	1	
PFOA/PFOS, Total	ND	ng/l	1.88	0.222	1	

Project Name: BATH SIGNIFY OFFSITE GW SAMPLI

Lab Number: L2221593

Project Number: 0127981-025

Report Date: 05/26/22

**SAMPLE RESULTS**

Lab ID: L2221593-05  
 Client ID: MW26B-042522-1015  
 Sample Location: Not Specified

Date Collected: 04/25/22 10:15  
 Date Received: 04/26/22  
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Perfluorinated Alkyl Acids by Isotope Dilution - Mansfield Lab						
Surrogate (Extracted Internal Standard)			% Recovery	Qualifier	Acceptance Criteria	
Perfluoro[13C4]Butanoic Acid (MPFBA)			75		58-132	
Perfluoro[13C5]Pentanoic Acid (M5PFPEA)			96		62-163	
Perfluoro[2,3,4-13C3]Butanesulfonic Acid (M3PFBS)			86		70-131	
Perfluoro[1,2,3,4,6-13C5]Hexanoic Acid (M5PFHxA)			71		57-129	
Perfluoro[1,2,3,4-13C4]Heptanoic Acid (M4PFHxA)			73		60-129	
Perfluoro[1,2,3-13C3]Hexanesulfonic Acid (M3PFHxS)			88		71-134	
Perfluoro[13C8]Octanoic Acid (M8PFOA)			73		62-129	
1H,1H,2H,2H-Perfluoro[1,2-13C2]Octanesulfonic Acid (M2-6:2FTS)			68		14-147	
Perfluoro[13C9]Nonanoic Acid (M9PFNA)			77		59-139	
Perfluoro[13C8]Octanesulfonic Acid (M8PFOS)			85		69-131	
Perfluoro[1,2,3,4,5,6-13C6]Decanoic Acid (M6PFDA)			75		62-124	
1H,1H,2H,2H-Perfluoro[1,2-13C2]Decanesulfonic Acid (M2-8:2FTS)			85		10-162	
N-Deuteriomethylperfluoro-1-octanesulfonamidoacetic Acid (d3-NMeFOSAA)			60		24-116	
Perfluoro[1,2,3,4,5,6,7-13C7]Undecanoic Acid (M7-PFUDA)			85		55-137	
Perfluoro[13C8]Octanesulfonamide (M8FOSA)			13		10-112	
N-Deuteroethylperfluoro-1-octanesulfonamidoacetic Acid (d5-NEtFOSAA)			61		27-126	
Perfluoro[1,2-13C2]Dodecanoic Acid (MPFDCA)			84		48-131	
Perfluoro[1,2-13C2]Tetradecanoic Acid (M2PFTEDA)			77		22-136	

Project Name: BATH SIGNIFY OFFSITE GW SAMPLI

Lab Number: L2221593

Project Number: 0127981-025

Report Date: 05/26/22

**SAMPLE RESULTS**

Lab ID: L2221593-06  
 Client ID: MW26B-042522-1115  
 Sample Location: Not Specified

Date Collected: 04/25/22 11:15  
 Date Received: 04/26/22  
 Field Prep: Not Specified

Sample Depth:

Matrix: Water  
 Analytical Method: 1,8270D  
 Analytical Date: 04/29/22 19:14  
 Analyst: SZ

Extraction Method: EPA 3510C  
 Extraction Date: 04/29/22 08:18

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Semivolatile Organics by GC/MS - Westborough Lab</b>						
Bis(2-chloroethyl)ether	ND	ug/l	2.0	0.50	1	
3,3'-Dichlorobenzidine	ND	ug/l	5.0	1.6	1	
2,4-Dinitrotoluene	ND	ug/l	5.0	1.2	1	
2,6-Dinitrotoluene	ND	ug/l	5.0	0.93	1	
4-Chlorophenyl phenyl ether	ND	ug/l	2.0	0.49	1	
4-Bromophenyl phenyl ether	ND	ug/l	2.0	0.38	1	
Bis(2-chloroisopropyl)ether	ND	ug/l	2.0	0.53	1	
Bis(2-chloroethoxy)methane	ND	ug/l	5.0	0.50	1	
Hexachlorocyclopentadiene	ND	ug/l	20	0.69	1	
Isophorone	ND	ug/l	5.0	1.2	1	
Nitrobenzene	ND	ug/l	2.0	0.77	1	
NDPA/DPA	ND	ug/l	2.0	0.42	1	
n-Nitrosodi-n-propylamine	ND	ug/l	5.0	0.64	1	
Bis(2-ethylhexyl)phthalate	ND	ug/l	3.0	1.5	1	
Butyl benzyl phthalate	ND	ug/l	5.0	1.2	1	
Di-n-butylphthalate	ND	ug/l	5.0	0.39	1	
Di-n-octylphthalate	ND	ug/l	5.0	1.3	1	
Diethyl phthalate	ND	ug/l	5.0	0.38	1	
Dimethyl phthalate	ND	ug/l	5.0	1.8	1	
Biphenyl	ND	ug/l	2.0	0.46	1	
4-Chloroaniline	ND	ug/l	5.0	1.1	1	
2-Nitroaniline	ND	ug/l	5.0	0.50	1	
3-Nitroaniline	ND	ug/l	5.0	0.81	1	
4-Nitroaniline	ND	ug/l	5.0	0.80	1	
Dibenzofuran	ND	ug/l	2.0	0.50	1	
1,2,4,5-Tetrachlorobenzene	ND	ug/l	10	0.44	1	
Acetophenone	ND	ug/l	5.0	0.53	1	
2,4,6-Trichlorophenol	ND	ug/l	5.0	0.61	1	



Project Name: BATH SIGNIFY OFFSITE GW SAMPLI

Lab Number: L2221593

Project Number: 0127981-025

Report Date: 05/26/22

**SAMPLE RESULTS**

Lab ID:	L2221593-06	Date Collected:	04/25/22 11:15
Client ID:	MW26B-042522-1115	Date Received:	04/26/22
Sample Location:	Not Specified	Field Prep:	Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Semivolatile Organics by GC/MS - Westborough Lab</b>						
p-Chloro-m-cresol	ND		ug/l	2.0	0.35	1
2-Chlorophenol	ND		ug/l	2.0	0.48	1
2,4-Dichlorophenol	ND		ug/l	5.0	0.41	1
2,4-Dimethylphenol	ND		ug/l	5.0	1.8	1
2-Nitrophenol	ND		ug/l	10	0.85	1
4-Nitrophenol	ND		ug/l	10	0.67	1
2,4-Dinitrophenol	ND		ug/l	20	6.6	1
4,6-Dinitro-o-cresol	ND		ug/l	10	1.8	1
Phenol	ND		ug/l	5.0	0.57	1
2-Methylphenol	ND		ug/l	5.0	0.49	1
3-Methylphenol/4-Methylphenol	ND		ug/l	5.0	0.48	1
2,4,5-Trichlorophenol	ND		ug/l	5.0	0.77	1
Carbazole	ND		ug/l	2.0	0.49	1
Atrazine	ND		ug/l	10	0.76	1
Benzaldehyde	ND		ug/l	5.0	0.53	1
Caprolactam	ND		ug/l	10	3.3	1
2,3,4,6-Tetrachlorophenol	ND		ug/l	5.0	0.84	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	60		21-120
Phenol-d6	50		10-120
Nitrobenzene-d5	75		23-120
2-Fluorobiphenyl	61		15-120
2,4,6-Tribromophenol	62		10-120
4-Terphenyl-d14	60		41-149

Project Name: BATH SIGNIFY OFFSITE GW SAMPLI

Lab Number: L2221593

Project Number: 0127981-025

Report Date: 05/26/22

**SAMPLE RESULTS**

Lab ID:	L2221593-06	Date Collected:	04/25/22 11:15
Client ID:	MW26B-042522-1115	Date Received:	04/26/22
Sample Location:	Not Specified	Field Prep:	Not Specified

Sample Depth:

Matrix:	Water	Extraction Method:	EPA 3510C
Analytical Method:	1,8270D-SIM	Extraction Date:	04/28/22 18:00
Analytical Date:	04/29/22 20:50		
Analyst:	DB		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
1,4 Dioxane by 8270D-SIM - Mansfield Lab						
1,4-Dioxane	ND		ng/l	144	32.6	1
Surrogate		% Recovery	Qualifier	Acceptance Criteria		
1,4-Dioxane-d8		26		15-110		

**Project Name:** BATH SIGNIFY OFFSITE GW SAMPLI  
**Project Number:** 0127981-025

**Lab Number:** L2221593  
**Report Date:** 05/26/22

**SAMPLE RESULTS**

Lab ID:	L2221593-06	Date Collected:	04/25/22 11:15
Client ID:	MW26B-042522-1115	Date Received:	04/26/22
Sample Location:	Not Specified	Field Prep:	Not Specified

Sample Depth:

Matrix:	Water	Extraction Method:	EPA 3510C
Analytical Method:	1,8270D-SIM	Extraction Date:	04/29/22 08:19
Analytical Date:	05/01/22 08:07		
Analyst:	JJW		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Semivolatile Organics by GC/MS-SIM - Westborough Lab</b>						
Acenaphthene	ND		ug/l	0.10	0.01	1
2-Chloronaphthalene	ND		ug/l	0.20	0.02	1
Fluoranthene	ND		ug/l	0.10	0.02	1
Hexachlorobutadiene	ND		ug/l	0.50	0.05	1
Naphthalene	0.28		ug/l	0.10	0.05	1
Benzo(a)anthracene	0.03	J	ug/l	0.10	0.02	1
Benzo(a)pyrene	ND		ug/l	0.10	0.02	1
Benzo(b)fluoranthene	ND		ug/l	0.10	0.01	1
Benzo(k)fluoranthene	ND		ug/l	0.10	0.01	1
Chrysene	ND		ug/l	0.10	0.01	1
Acenaphthylene	0.07	J	ug/l	0.10	0.01	1
Anthracene	0.03	J	ug/l	0.10	0.01	1
Benzo(ghi)perylene	ND		ug/l	0.10	0.01	1
Fluorene	0.04	J	ug/l	0.10	0.01	1
Phenanthrene	0.13		ug/l	0.10	0.02	1
Dibenzo(a,h)anthracene	ND		ug/l	0.10	0.01	1
Indeno(1,2,3-cd)pyrene	ND		ug/l	0.10	0.01	1
Pyrene	ND		ug/l	0.10	0.02	1
2-Methylnaphthalene	0.15		ug/l	0.10	0.02	1
Pentachlorophenol	ND		ug/l	0.80	0.01	1
Hexachlorobenzene	ND		ug/l	0.80	0.01	1
Hexachloroethane	ND		ug/l	0.80	0.06	1

Project Name: BATH SIGNIFY OFFSITE GW SAMPLI

Lab Number: L2221593

Project Number: 0127981-025

Report Date: 05/26/22

**SAMPLE RESULTS**

Lab ID:	L2221593-06	Date Collected:	04/25/22 11:15
Client ID:	MW26B-042522-1115	Date Received:	04/26/22
Sample Location:	Not Specified	Field Prep:	Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS-SIM - Westborough Lab						
Surrogate			% Recovery	Qualifier	Acceptance Criteria	
2-Fluorophenol			61		21-120	
Phenol-d6			52		10-120	
Nitrobenzene-d5			71		23-120	
2-Fluorobiphenyl			67		15-120	
2,4,6-Tribromophenol			81		10-120	
4-Terphenyl-d14			67		41-149	

**Project Name:** BATH SIGNIFY OFFSITE GW SAMPLI  
**Project Number:** 0127981-025

**Lab Number:** L2221593  
**Report Date:** 05/26/22

**SAMPLE RESULTS**

Lab ID: L2221593-07  
Client ID: MW25B-042522-1300  
Sample Location: Not Specified

Date Collected: 04/25/22 13:00  
Date Received: 04/26/22  
Field Prep: Not Specified

Sample Depth:

Matrix: Water  
Analytical Method: 134,LCMSMS-ID  
Analytical Date: 05/06/22 18:12  
Analyst: RS

Extraction Method: ALPHA 23528  
Extraction Date: 05/06/22 03:28

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Perfluorinated Alkyl Acids by Isotope Dilution - Mansfield Lab</b>						
Perfluorobutanoic Acid (PFBA)	2.97		ng/l	1.84	0.376	1
Perfluoropentanoic Acid (PFPeA)	1.19	J	ng/l	1.84	0.365	1
Perfluorobutanesulfonic Acid (PFBS)	0.347	J	ng/l	1.84	0.219	1
Perfluorohexanoic Acid (PFHxA)	1.40	J	ng/l	1.84	0.302	1
Perfluoroheptanoic Acid (PFHpA)	0.354	J	ng/l	1.84	0.208	1
Perfluorohexanesulfonic Acid (PFHxS)	ND		ng/l	1.84	0.347	1
Perfluoroctanoic Acid (PFOA)	0.258	J	ng/l	1.84	0.218	1
1H,1H,2H,2H-Perfluorooctanesulfonic Acid (6:2FTS)	ND		ng/l	1.84	1.23	1
Perfluoroheptanesulfonic Acid (PFHpS)	ND		ng/l	1.84	0.634	1
Perfluorononanoic Acid (PFNA)	ND		ng/l	1.84	0.288	1
Perfluorooctanesulfonic Acid (PFOS)	ND		ng/l	1.84	0.465	1
Perfluorodecanoic Acid (PFDA)	ND		ng/l	1.84	0.280	1
1H,1H,2H,2H-Perfluorodecanesulfonic Acid (8:2FTS)	ND		ng/l	1.84	1.12	1
N-Methyl Perfluorooctanesulfonamidoacetic Acid (NMeFOSAA)	ND		ng/l	1.84	0.597	1
Perfluoroundecanoic Acid (PFUnA)	ND		ng/l	1.84	0.240	1
Perfluorodecanesulfonic Acid (PFDS)	ND		ng/l	1.84	0.904	1
Perfluorooctanesulfonamide (FOSA)	ND		ng/l	1.84	0.535	1
N-Ethyl Perfluorooctanesulfonamidoacetic Acid (NEtFOSAA)	ND		ng/l	1.84	0.741	1
Perfluorododecanoic Acid (PFDoA)	ND		ng/l	1.84	0.343	1
Perfluorotridecanoic Acid (PFTrDA)	ND		ng/l	1.84	0.302	1
Perfluorotetradecanoic Acid (PFTA)	ND		ng/l	1.84	0.229	1
PFOA/PFOS, Total	0.258	J	ng/l	1.84	0.218	1

Project Name: BATH SIGNIFY OFFSITE GW SAMPLI

Lab Number: L2221593

Project Number: 0127981-025

Report Date: 05/26/22

**SAMPLE RESULTS**

Lab ID: L2221593-07  
 Client ID: MW25B-042522-1300  
 Sample Location: Not Specified

Date Collected: 04/25/22 13:00  
 Date Received: 04/26/22  
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Perfluorinated Alkyl Acids by Isotope Dilution - Mansfield Lab						
Surrogate (Extracted Internal Standard)			% Recovery	Qualifier	Acceptance Criteria	
Perfluoro[13C4]Butanoic Acid (MPFBA)			76		58-132	
Perfluoro[13C5]Pentanoic Acid (M5PFPEA)			84		62-163	
Perfluoro[2,3,4-13C3]Butanesulfonic Acid (M3PFBS)			76		70-131	
Perfluoro[1,2,3,4,6-13C5]Hexanoic Acid (M5PFHxA)			69		57-129	
Perfluoro[1,2,3,4-13C4]Heptanoic Acid (M4PFHxA)			78		60-129	
Perfluoro[1,2,3-13C3]Hexanesulfonic Acid (M3PFHxS)			77		71-134	
Perfluoro[13C8]Octanoic Acid (M8PFOA)			74		62-129	
1H,1H,2H,2H-Perfluoro[1,2-13C2]Octanesulfonic Acid (M2-6:2FTS)			112		14-147	
Perfluoro[13C9]Nonanoic Acid (M9PFNA)			74		59-139	
Perfluoro[13C8]Octanesulfonic Acid (M8PFOS)			75		69-131	
Perfluoro[1,2,3,4,5,6-13C6]Decanoic Acid (M6PFDA)			78		62-124	
1H,1H,2H,2H-Perfluoro[1,2-13C2]Decanesulfonic Acid (M2-8:2FTS)			106		10-162	
N-Deuteriomethylperfluoro-1-octanesulfonamidoacetic Acid (d3-NMeFOSAA)			61		24-116	
Perfluoro[1,2,3,4,5,6,7-13C7]Undecanoic Acid (M7-PFUDA)			81		55-137	
Perfluoro[13C8]Octanesulfonamide (M8FOSA)			15		10-112	
N-Deuteroethylperfluoro-1-octanesulfonamidoacetic Acid (d5-NEtFOSAA)			65		27-126	
Perfluoro[1,2-13C2]Dodecanoic Acid (MPFDCA)			70		48-131	
Perfluoro[1,2-13C2]Tetradecanoic Acid (M2PFTEDA)			68		22-136	

Project Name: BATH SIGNIFY OFFSITE GW SAMPLI

Lab Number: L2221593

Project Number: 0127981-025

Report Date: 05/26/22

**SAMPLE RESULTS**

Lab ID: L2221593-08  
 Client ID: MW25B-042522-1440  
 Sample Location: Not Specified

Date Collected: 04/25/22 14:40  
 Date Received: 04/26/22  
 Field Prep: Not Specified

Sample Depth:

Matrix: Water  
 Analytical Method: 1,8270D  
 Analytical Date: 05/02/22 19:10  
 Analyst: SZ

Extraction Method: EPA 3510C  
 Extraction Date: 05/01/22 09:22

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Semivolatile Organics by GC/MS - Westborough Lab</b>						
Bis(2-chloroethyl)ether	ND		ug/l	2.0	0.50	1
3,3'-Dichlorobenzidine	ND		ug/l	5.0	1.6	1
2,4-Dinitrotoluene	ND		ug/l	5.0	1.2	1
2,6-Dinitrotoluene	ND		ug/l	5.0	0.93	1
4-Chlorophenyl phenyl ether	ND		ug/l	2.0	0.49	1
4-Bromophenyl phenyl ether	ND		ug/l	2.0	0.38	1
Bis(2-chloroisopropyl)ether	ND		ug/l	2.0	0.53	1
Bis(2-chloroethoxy)methane	ND		ug/l	5.0	0.50	1
Hexachlorocyclopentadiene	ND		ug/l	20	0.69	1
Isophorone	ND		ug/l	5.0	1.2	1
Nitrobenzene	ND		ug/l	2.0	0.77	1
NDPA/DPA	ND		ug/l	2.0	0.42	1
n-Nitrosodi-n-propylamine	ND		ug/l	5.0	0.64	1
Bis(2-ethylhexyl)phthalate	2.6	J	ug/l	3.0	1.5	1
Butyl benzyl phthalate	ND		ug/l	5.0	1.2	1
Di-n-butylphthalate	ND		ug/l	5.0	0.39	1
Di-n-octylphthalate	ND		ug/l	5.0	1.3	1
Diethyl phthalate	ND		ug/l	5.0	0.38	1
Dimethyl phthalate	ND		ug/l	5.0	1.8	1
Biphenyl	ND		ug/l	2.0	0.46	1
4-Chloroaniline	ND		ug/l	5.0	1.1	1
2-Nitroaniline	ND		ug/l	5.0	0.50	1
3-Nitroaniline	ND		ug/l	5.0	0.81	1
4-Nitroaniline	ND		ug/l	5.0	0.80	1
Dibenzofuran	ND		ug/l	2.0	0.50	1
1,2,4,5-Tetrachlorobenzene	ND		ug/l	10	0.44	1
Acetophenone	ND		ug/l	5.0	0.53	1
2,4,6-Trichlorophenol	ND		ug/l	5.0	0.61	1



Project Name: BATH SIGNIFY OFFSITE GW SAMPLI

Lab Number: L2221593

Project Number: 0127981-025

Report Date: 05/26/22

**SAMPLE RESULTS**

Lab ID:	L2221593-08	Date Collected:	04/25/22 14:40
Client ID:	MW25B-042522-1440	Date Received:	04/26/22
Sample Location:	Not Specified	Field Prep:	Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Semivolatile Organics by GC/MS - Westborough Lab</b>						
p-Chloro-m-cresol	ND		ug/l	2.0	0.35	1
2-Chlorophenol	ND		ug/l	2.0	0.48	1
2,4-Dichlorophenol	ND		ug/l	5.0	0.41	1
2,4-Dimethylphenol	ND		ug/l	5.0	1.8	1
2-Nitrophenol	ND		ug/l	10	0.85	1
4-Nitrophenol	ND		ug/l	10	0.67	1
2,4-Dinitrophenol	ND		ug/l	20	6.6	1
4,6-Dinitro-o-cresol	ND		ug/l	10	1.8	1
Phenol	5.2		ug/l	5.0	0.57	1
2-Methylphenol	ND		ug/l	5.0	0.49	1
3-Methylphenol/4-Methylphenol	ND		ug/l	5.0	0.48	1
2,4,5-Trichlorophenol	ND		ug/l	5.0	0.77	1
Carbazole	ND		ug/l	2.0	0.49	1
Atrazine	ND		ug/l	10	0.76	1
Benzaldehyde	ND		ug/l	5.0	0.53	1
Caprolactam	49.		ug/l	10	3.3	1
2,3,4,6-Tetrachlorophenol	ND		ug/l	5.0	0.84	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	69		21-120
Phenol-d6	52		10-120
Nitrobenzene-d5	74		23-120
2-Fluorobiphenyl	74		15-120
2,4,6-Tribromophenol	78		10-120
4-Terphenyl-d14	79		41-149

Project Name: BATH SIGNIFY OFFSITE GW SAMPLI

Lab Number: L2221593

Project Number: 0127981-025

Report Date: 05/26/22

**SAMPLE RESULTS**

Lab ID:	L2221593-08	Date Collected:	04/25/22 14:40
Client ID:	MW25B-042522-1440	Date Received:	04/26/22
Sample Location:	Not Specified	Field Prep:	Not Specified

Sample Depth:

Matrix:	Water	Extraction Method:	EPA 3510C
Analytical Method:	1,8270D-SIM	Extraction Date:	04/28/22 18:00
Analytical Date:	04/29/22 21:13		
Analyst:	DB		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
1,4 Dioxane by 8270D-SIM - Mansfield Lab						
1,4-Dioxane	83.6	J	ng/l	144	32.6	1
<hr/>						
Surrogate		% Recovery	Qualifier	Acceptance Criteria		
1,4-Dioxane-d8		28		15-110		

Project Name: BATH SIGNIFY OFFSITE GW SAMPLI

Lab Number: L2221593

Project Number: 0127981-025

Report Date: 05/26/22

**SAMPLE RESULTS**

Lab ID:	L2221593-08	Date Collected:	04/25/22 14:40
Client ID:	MW25B-042522-1440	Date Received:	04/26/22
Sample Location:	Not Specified	Field Prep:	Not Specified

Sample Depth:

Matrix:	Water	Extraction Method:	EPA 3510C
Analytical Method:	1,8270D-SIM	Extraction Date:	05/01/22 09:25
Analytical Date:	05/02/22 12:09		

Analyst: JJW

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Semivolatile Organics by GC/MS-SIM - Westborough Lab</b>						
Acenaphthene	0.09	J	ug/l	0.10	0.01	1
2-Chloronaphthalene	ND		ug/l	0.20	0.02	1
Fluoranthene	0.10		ug/l	0.10	0.02	1
Hexachlorobutadiene	ND		ug/l	0.50	0.05	1
Naphthalene	0.29		ug/l	0.10	0.05	1
Benzo(a)anthracene	0.08	J	ug/l	0.10	0.02	1
Benzo(a)pyrene	0.02	J	ug/l	0.10	0.02	1
Benzo(b)fluoranthene	0.04	J	ug/l	0.10	0.01	1
Benzo(k)fluoranthene	0.03	J	ug/l	0.10	0.01	1
Chrysene	0.07	J	ug/l	0.10	0.01	1
Acenaphthylene	0.05	J	ug/l	0.10	0.01	1
Anthracene	0.14		ug/l	0.10	0.01	1
Benzo(ghi)perylene	ND		ug/l	0.10	0.01	1
Fluorene	0.14		ug/l	0.10	0.01	1
Phenanthrene	0.23		ug/l	0.10	0.02	1
Dibenzo(a,h)anthracene	ND		ug/l	0.10	0.01	1
Indeno(1,2,3-cd)pyrene	ND		ug/l	0.10	0.01	1
Pyrene	0.08	J	ug/l	0.10	0.02	1
2-Methylnaphthalene	0.13		ug/l	0.10	0.02	1
Pentachlorophenol	0.08	J	ug/l	0.80	0.01	1
Hexachlorobenzene	ND		ug/l	0.80	0.01	1
Hexachloroethane	ND		ug/l	0.80	0.06	1

Project Name: BATH SIGNIFY OFFSITE GW SAMPLI

Lab Number: L2221593

Project Number: 0127981-025

Report Date: 05/26/22

**SAMPLE RESULTS**

Lab ID: L2221593-08  
 Client ID: MW25B-042522-1440  
 Sample Location: Not Specified

Date Collected: 04/25/22 14:40  
 Date Received: 04/26/22  
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS-SIM - Westborough Lab						

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	65		21-120
Phenol-d6	55		10-120
Nitrobenzene-d5	82		23-120
2-Fluorobiphenyl	78		15-120
2,4,6-Tribromophenol	100		10-120
4-Terphenyl-d14	80		41-149

Project Name: BATH SIGNIFY OFFSITE GW SAMPLI

Lab Number: L2221593

Project Number: 0127981-025

Report Date: 05/26/22

**SAMPLE RESULTS**

Lab ID: L2221593-09  
 Client ID: MW23A-042522-1515  
 Sample Location: Not Specified

Date Collected: 04/25/22 15:15  
 Date Received: 04/26/22  
 Field Prep: Not Specified

Sample Depth:

Matrix: Water  
 Analytical Method: 1,8270D  
 Analytical Date: 05/02/22 19:33  
 Analyst: SZ

Extraction Method: EPA 3510C  
 Extraction Date: 05/01/22 09:22

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Semivolatile Organics by GC/MS - Westborough Lab</b>						
Bis(2-chloroethyl)ether	ND	ug/l	2.0	0.50	1	
3,3'-Dichlorobenzidine	ND	ug/l	5.0	1.6	1	
2,4-Dinitrotoluene	ND	ug/l	5.0	1.2	1	
2,6-Dinitrotoluene	ND	ug/l	5.0	0.93	1	
4-Chlorophenyl phenyl ether	ND	ug/l	2.0	0.49	1	
4-Bromophenyl phenyl ether	ND	ug/l	2.0	0.38	1	
Bis(2-chloroisopropyl)ether	ND	ug/l	2.0	0.53	1	
Bis(2-chloroethoxy)methane	ND	ug/l	5.0	0.50	1	
Hexachlorocyclopentadiene	ND	ug/l	20	0.69	1	
Isophorone	ND	ug/l	5.0	1.2	1	
Nitrobenzene	ND	ug/l	2.0	0.77	1	
NDPA/DPA	ND	ug/l	2.0	0.42	1	
n-Nitrosodi-n-propylamine	ND	ug/l	5.0	0.64	1	
Bis(2-ethylhexyl)phthalate	ND	ug/l	3.0	1.5	1	
Butyl benzyl phthalate	ND	ug/l	5.0	1.2	1	
Di-n-butylphthalate	ND	ug/l	5.0	0.39	1	
Di-n-octylphthalate	ND	ug/l	5.0	1.3	1	
Diethyl phthalate	ND	ug/l	5.0	0.38	1	
Dimethyl phthalate	ND	ug/l	5.0	1.8	1	
Biphenyl	ND	ug/l	2.0	0.46	1	
4-Chloroaniline	ND	ug/l	5.0	1.1	1	
2-Nitroaniline	ND	ug/l	5.0	0.50	1	
3-Nitroaniline	ND	ug/l	5.0	0.81	1	
4-Nitroaniline	ND	ug/l	5.0	0.80	1	
Dibenzofuran	ND	ug/l	2.0	0.50	1	
1,2,4,5-Tetrachlorobenzene	ND	ug/l	10	0.44	1	
Acetophenone	ND	ug/l	5.0	0.53	1	
2,4,6-Trichlorophenol	ND	ug/l	5.0	0.61	1	



Project Name: BATH SIGNIFY OFFSITE GW SAMPLI

Lab Number: L2221593

Project Number: 0127981-025

Report Date: 05/26/22

**SAMPLE RESULTS**

Lab ID:	L2221593-09	Date Collected:	04/25/22 15:15
Client ID:	MW23A-042522-1515	Date Received:	04/26/22
Sample Location:	Not Specified	Field Prep:	Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Semivolatile Organics by GC/MS - Westborough Lab</b>						
p-Chloro-m-cresol	ND		ug/l	2.0	0.35	1
2-Chlorophenol	ND		ug/l	2.0	0.48	1
2,4-Dichlorophenol	ND		ug/l	5.0	0.41	1
2,4-Dimethylphenol	ND		ug/l	5.0	1.8	1
2-Nitrophenol	ND		ug/l	10	0.85	1
4-Nitrophenol	ND		ug/l	10	0.67	1
2,4-Dinitrophenol	ND		ug/l	20	6.6	1
4,6-Dinitro-o-cresol	ND		ug/l	10	1.8	1
Phenol	ND		ug/l	5.0	0.57	1
2-Methylphenol	ND		ug/l	5.0	0.49	1
3-Methylphenol/4-Methylphenol	ND		ug/l	5.0	0.48	1
2,4,5-Trichlorophenol	ND		ug/l	5.0	0.77	1
Carbazole	ND		ug/l	2.0	0.49	1
Atrazine	ND		ug/l	10	0.76	1
Benzaldehyde	ND		ug/l	5.0	0.53	1
Caprolactam	ND		ug/l	10	3.3	1
2,3,4,6-Tetrachlorophenol	ND		ug/l	5.0	0.84	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	54		21-120
Phenol-d6	41		10-120
Nitrobenzene-d5	61		23-120
2-Fluorobiphenyl	60		15-120
2,4,6-Tribromophenol	59		10-120
4-Terphenyl-d14	66		41-149

Project Name: BATH SIGNIFY OFFSITE GW SAMPLI

Lab Number: L2221593

Project Number: 0127981-025

Report Date: 05/26/22

**SAMPLE RESULTS**

Lab ID:	L2221593-09	Date Collected:	04/25/22 15:15
Client ID:	MW23A-042522-1515	Date Received:	04/26/22
Sample Location:	Not Specified	Field Prep:	Not Specified

Sample Depth:

Matrix:	Water	Extraction Method:	EPA 3510C
Analytical Method:	1,8270D-SIM	Extraction Date:	04/28/22 18:00
Analytical Date:	04/29/22 21:36		
Analyst:	DB		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
1,4 Dioxane by 8270D-SIM - Mansfield Lab						
1,4-Dioxane	ND		ng/l	144	32.6	1
Surrogate		% Recovery	Qualifier	Acceptance Criteria		
1,4-Dioxane-d8		29		15-110		

Project Name: BATH SIGNIFY OFFSITE GW SAMPLI

Lab Number: L2221593

Project Number: 0127981-025

Report Date: 05/26/22

**SAMPLE RESULTS**

Lab ID:	L2221593-09	Date Collected:	04/25/22 15:15
Client ID:	MW23A-042522-1515	Date Received:	04/26/22
Sample Location:	Not Specified	Field Prep:	Not Specified

Sample Depth:

Matrix:	Water	Extraction Method:	EPA 3510C
Analytical Method:	1,8270D-SIM	Extraction Date:	05/01/22 09:25
Analytical Date:	05/02/22 12:26		
Analyst:	JJW		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Semivolatile Organics by GC/MS-SIM - Westborough Lab</b>						
Acenaphthene	ND		ug/l	0.10	0.01	1
2-Chloronaphthalene	ND		ug/l	0.20	0.02	1
Fluoranthene	ND		ug/l	0.10	0.02	1
Hexachlorobutadiene	ND		ug/l	0.50	0.05	1
Naphthalene	ND		ug/l	0.10	0.05	1
Benzo(a)anthracene	ND		ug/l	0.10	0.02	1
Benzo(a)pyrene	ND		ug/l	0.10	0.02	1
Benzo(b)fluoranthene	0.02	J	ug/l	0.10	0.01	1
Benzo(k)fluoranthene	ND		ug/l	0.10	0.01	1
Chrysene	ND		ug/l	0.10	0.01	1
Acenaphthylene	ND		ug/l	0.10	0.01	1
Anthracene	ND		ug/l	0.10	0.01	1
Benzo(ghi)perylene	ND		ug/l	0.10	0.01	1
Fluorene	ND		ug/l	0.10	0.01	1
Phenanthrene	ND		ug/l	0.10	0.02	1
Dibenzo(a,h)anthracene	ND		ug/l	0.10	0.01	1
Indeno(1,2,3-cd)pyrene	ND		ug/l	0.10	0.01	1
Pyrene	ND		ug/l	0.10	0.02	1
2-Methylnaphthalene	ND		ug/l	0.10	0.02	1
Pentachlorophenol	ND		ug/l	0.80	0.01	1
Hexachlorobenzene	ND		ug/l	0.80	0.01	1
Hexachloroethane	ND		ug/l	0.80	0.06	1

Project Name: BATH SIGNIFY OFFSITE GW SAMPLI

Lab Number: L2221593

Project Number: 0127981-025

Report Date: 05/26/22

**SAMPLE RESULTS**

Lab ID:	L2221593-09	Date Collected:	04/25/22 15:15
Client ID:	MW23A-042522-1515	Date Received:	04/26/22
Sample Location:	Not Specified	Field Prep:	Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS-SIM - Westborough Lab						
Surrogate			% Recovery	Qualifier	Acceptance Criteria	
2-Fluorophenol			51		21-120	
Phenol-d6			43		10-120	
Nitrobenzene-d5			68		23-120	
2-Fluorobiphenyl			64		15-120	
2,4,6-Tribromophenol			79		10-120	
4-Terphenyl-d14			68		41-149	

**Project Name:** BATH SIGNIFY OFFSITE GW SAMPLI  
**Project Number:** 0127981-025

**Lab Number:** L2221593  
**Report Date:** 05/26/22

**SAMPLE RESULTS**

Lab ID: L2221593-09  
Client ID: MW23A-042522-1515  
Sample Location: Not Specified

Date Collected: 04/25/22 15:15  
Date Received: 04/26/22  
Field Prep: Not Specified

Sample Depth:

Matrix: Water  
Analytical Method: 134,LCMSMS-ID  
Analytical Date: 05/06/22 18:29  
Analyst: RS

Extraction Method: ALPHA 23528  
Extraction Date: 05/06/22 03:28

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Perfluorinated Alkyl Acids by Isotope Dilution - Mansfield Lab</b>						
Perfluorobutanoic Acid (PFBA)	ND	ng/l	1.94	0.395	1	
Perfluoropentanoic Acid (PFPeA)	ND	ng/l	1.94	0.383	1	
Perfluorobutanesulfonic Acid (PFBS)	ND	ng/l	1.94	0.230	1	
Perfluorohexanoic Acid (PFHxA)	ND	ng/l	1.94	0.318	1	
Perfluoroheptanoic Acid (PFHpA)	ND	ng/l	1.94	0.218	1	
Perfluorohexanesulfonic Acid (PFHxS)	ND	ng/l	1.94	0.364	1	
Perfluoroctanoic Acid (PFOA)	ND	ng/l	1.94	0.228	1	
1H,1H,2H,2H-Perfluorooctanesulfonic Acid (6:2FTS)	ND	ng/l	1.94	1.29	1	
Perfluoroheptanesulfonic Acid (PFHpS)	ND	ng/l	1.94	0.666	1	
Perfluorononanoic Acid (PFNA)	ND	ng/l	1.94	0.302	1	
Perfluorooctanesulfonic Acid (PFOS)	ND	ng/l	1.94	0.488	1	
Perfluorodecanoic Acid (PFDA)	ND	ng/l	1.94	0.294	1	
1H,1H,2H,2H-Perfluorodecanesulfonic Acid (8:2FTS)	ND	ng/l	1.94	1.17	1	
N-Methyl Perfluorooctanesulfonamidoacetic Acid (NMeFOSAA)	ND	ng/l	1.94	0.627	1	
Perfluoroundecanoic Acid (PFUnA)	ND	ng/l	1.94	0.252	1	
Perfluorodecanesulfonic Acid (PFDS)	ND	ng/l	1.94	0.949	1	
Perfluorooctanesulfonamide (FOSA)	ND	ng/l	1.94	0.562	1	
N-Ethyl Perfluorooctanesulfonamidoacetic Acid (NEtFOSAA)	ND	ng/l	1.94	0.778	1	
Perfluorododecanoic Acid (PFDoA)	ND	ng/l	1.94	0.360	1	
Perfluorotridecanoic Acid (PFTrDA)	ND	ng/l	1.94	0.317	1	
Perfluorotetradecanoic Acid (PFTA)	ND	ng/l	1.94	0.240	1	
PFOA/PFOS, Total	ND	ng/l	1.94	0.228	1	

Project Name: BATH SIGNIFY OFFSITE GW SAMPLI

Lab Number: L2221593

Project Number: 0127981-025

Report Date: 05/26/22

**SAMPLE RESULTS**

Lab ID:	L2221593-09	Date Collected:	04/25/22 15:15
Client ID:	MW23A-042522-1515	Date Received:	04/26/22
Sample Location:	Not Specified	Field Prep:	Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Perfluorinated Alkyl Acids by Isotope Dilution - Mansfield Lab						
Surrogate (Extracted Internal Standard)			% Recovery	Qualifier	Acceptance Criteria	
Perfluoro[13C4]Butanoic Acid (MPFBA)			72		58-132	
Perfluoro[13C5]Pentanoic Acid (M5PFPEA)			79		62-163	
Perfluoro[2,3,4-13C3]Butanesulfonic Acid (M3PFBS)			90		70-131	
Perfluoro[1,2,3,4,6-13C5]Hexanoic Acid (M5PFHxA)			75		57-129	
Perfluoro[1,2,3,4-13C4]Heptanoic Acid (M4PFHxA)			76		60-129	
Perfluoro[1,2,3-13C3]Hexanesulfonic Acid (M3PFHxS)			91		71-134	
Perfluoro[13C8]Octanoic Acid (M8PFOA)			76		62-129	
1H,1H,2H-Perfluoro[1,2-13C2]Octanesulfonic Acid (M2-6:2FTS)			77		14-147	
Perfluoro[13C9]Nonanoic Acid (M9PFNA)			73		59-139	
Perfluoro[13C8]Octanesulfonic Acid (M8PFOS)			76		69-131	
Perfluoro[1,2,3,4,5,6-13C6]Decanoic Acid (M6PFDA)			67		62-124	
1H,1H,2H-Perfluoro[1,2-13C2]Decanesulfonic Acid (M2-8:2FTS)			73		10-162	
N-Deuteriomethylperfluoro-1-octanesulfonamidoacetic Acid (d3-NMeFOSAA)			53		24-116	
Perfluoro[1,2,3,4,5,6,7-13C7]Undecanoic Acid (M7-PFUDA)			64		55-137	
Perfluoro[13C8]Octanesulfonamide (M8FOSA)			16		10-112	
N-Deuteroethylperfluoro-1-octanesulfonamidoacetic Acid (d5-NEtFOSAA)			50		27-126	
Perfluoro[1,2-13C2]Dodecanoic Acid (MPFDCA)			67		48-131	
Perfluoro[1,2-13C2]Tetradecanoic Acid (M2PFTEDA)			66		22-136	

**Project Name:** BATH SIGNIFY OFFSITE GW SAMPLI  
**Project Number:** 0127981-025

**Lab Number:** L2221593  
**Report Date:** 05/26/22

**SAMPLE RESULTS**

Lab ID: L2221593-10  
Client ID: 4125-042522-0001  
Sample Location: Not Specified

Date Collected: 04/25/22 00:00  
Date Received: 04/26/22  
Field Prep: Not Specified

Sample Depth:

Matrix: Water  
Analytical Method: 134,LCMSMS-ID  
Analytical Date: 05/06/22 18:45  
Analyst: RS

Extraction Method: ALPHA 23528  
Extraction Date: 05/06/22 03:28

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Perfluorinated Alkyl Acids by Isotope Dilution - Mansfield Lab</b>						
Perfluorobutanoic Acid (PFBA)	ND	ng/l	1.83	0.373	1	
Perfluoropentanoic Acid (PFPeA)	ND	ng/l	1.83	0.362	1	
Perfluorobutanesulfonic Acid (PFBS)	ND	ng/l	1.83	0.218	1	
Perfluorohexanoic Acid (PFHxA)	ND	ng/l	1.83	0.300	1	
Perfluoroheptanoic Acid (PFHpA)	ND	ng/l	1.83	0.206	1	
Perfluorohexanesulfonic Acid (PFHxS)	ND	ng/l	1.83	0.344	1	
Perfluoroctanoic Acid (PFOA)	ND	ng/l	1.83	0.216	1	
1H,1H,2H,2H-Perfluorooctanesulfonic Acid (6:2FTS)	ND	ng/l	1.83	1.22	1	
Perfluoroheptanesulfonic Acid (PFHpS)	ND	ng/l	1.83	0.630	1	
Perfluorononanoic Acid (PFNA)	ND	ng/l	1.83	0.286	1	
Perfluorooctanesulfonic Acid (PFOS)	ND	ng/l	1.83	0.461	1	
Perfluorodecanoic Acid (PFDA)	ND	ng/l	1.83	0.278	1	
1H,1H,2H,2H-Perfluorodecanesulfonic Acid (8:2FTS)	ND	ng/l	1.83	1.11	1	
N-Methyl Perfluorooctanesulfonamidoacetic Acid (NMeFOSAA)	ND	ng/l	1.83	0.593	1	
Perfluoroundecanoic Acid (PFUnA)	ND	ng/l	1.83	0.238	1	
Perfluorodecanesulfonic Acid (PFDS)	ND	ng/l	1.83	0.897	1	
Perfluorooctanesulfonamide (FOSA)	ND	ng/l	1.83	0.531	1	
N-Ethyl Perfluorooctanesulfonamidoacetic Acid (NEtFOSAA)	ND	ng/l	1.83	0.736	1	
Perfluorododecanoic Acid (PFDoA)	ND	ng/l	1.83	0.340	1	
Perfluorotridecanoic Acid (PFTrDA)	ND	ng/l	1.83	0.299	1	
Perfluorotetradecanoic Acid (PFTA)	ND	ng/l	1.83	0.227	1	
PFOA/PFOS, Total	ND	ng/l	1.83	0.216	1	

Project Name: BATH SIGNIFY OFFSITE GW SAMPLI

Lab Number: L2221593

Project Number: 0127981-025

Report Date: 05/26/22

**SAMPLE RESULTS**

Lab ID: L2221593-10  
 Client ID: 4125-042522-0001  
 Sample Location: Not Specified

Date Collected: 04/25/22 00:00  
 Date Received: 04/26/22  
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Perfluorinated Alkyl Acids by Isotope Dilution - Mansfield Lab						
Surrogate (Extracted Internal Standard)			% Recovery	Qualifier	Acceptance Criteria	
Perfluoro[13C4]Butanoic Acid (MPFBA)			78		58-132	
Perfluoro[13C5]Pentanoic Acid (M5PFPEA)			102		62-163	
Perfluoro[2,3,4-13C3]Butanesulfonic Acid (M3PFBS)			85		70-131	
Perfluoro[1,2,3,4,6-13C5]Hexanoic Acid (M5PFHxA)			78		57-129	
Perfluoro[1,2,3,4-13C4]Heptanoic Acid (M4PFHxA)			77		60-129	
Perfluoro[1,2,3-13C3]Hexanesulfonic Acid (M3PFHxS)			89		71-134	
Perfluoro[13C8]Octanoic Acid (M8PFOA)			78		62-129	
1H,1H,2H,2H-Perfluoro[1,2-13C2]Octanesulfonic Acid (M2-6:2FTS)			64		14-147	
Perfluoro[13C9]Nonanoic Acid (M9PFNA)			77		59-139	
Perfluoro[13C8]Octanesulfonic Acid (M8PFOS)			83		69-131	
Perfluoro[1,2,3,4,5,6-13C6]Decanoic Acid (M6PFDA)			80		62-124	
1H,1H,2H,2H-Perfluoro[1,2-13C2]Decanesulfonic Acid (M2-8:2FTS)			76		10-162	
N-Deuteriomethylperfluoro-1-octanesulfonamidoacetic Acid (d3-NMeFOSAA)			61		24-116	
Perfluoro[1,2,3,4,5,6,7-13C7]Undecanoic Acid (M7-PFUDA)			90		55-137	
Perfluoro[13C8]Octanesulfonamide (M8FOSA)			14		10-112	
N-Deuteroethylperfluoro-1-octanesulfonamidoacetic Acid (d5-NEtFOSAA)			65		27-126	
Perfluoro[1,2-13C2]Dodecanoic Acid (MPFDCA)			85		48-131	
Perfluoro[1,2-13C2]Tetradecanoic Acid (M2PFTEDA)			83		22-136	

Project Name: BATH SIGNIFY OFFSITE GW SAMPLI

Lab Number: L2221593

Project Number: 0127981-025

Report Date: 05/26/22

**SAMPLE RESULTS**

Lab ID: L2221593-11  
 Client ID: 4125-042522-0002  
 Sample Location: Not Specified

Date Collected: 04/25/22 00:00  
 Date Received: 04/26/22  
 Field Prep: Not Specified

Sample Depth:

Matrix: Water  
 Analytical Method: 1,8270D  
 Analytical Date: 04/29/22 19:38  
 Analyst: SZ

Extraction Method: EPA 3510C  
 Extraction Date: 04/29/22 08:18

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Semivolatile Organics by GC/MS - Westborough Lab</b>						
Bis(2-chloroethyl)ether	ND	ug/l	2.0	0.50	1	
3,3'-Dichlorobenzidine	ND	ug/l	5.0	1.6	1	
2,4-Dinitrotoluene	ND	ug/l	5.0	1.2	1	
2,6-Dinitrotoluene	ND	ug/l	5.0	0.93	1	
4-Chlorophenyl phenyl ether	ND	ug/l	2.0	0.49	1	
4-Bromophenyl phenyl ether	ND	ug/l	2.0	0.38	1	
Bis(2-chloroisopropyl)ether	ND	ug/l	2.0	0.53	1	
Bis(2-chloroethoxy)methane	ND	ug/l	5.0	0.50	1	
Hexachlorocyclopentadiene	ND	ug/l	20	0.69	1	
Isophorone	ND	ug/l	5.0	1.2	1	
Nitrobenzene	ND	ug/l	2.0	0.77	1	
NDPA/DPA	ND	ug/l	2.0	0.42	1	
n-Nitrosodi-n-propylamine	ND	ug/l	5.0	0.64	1	
Bis(2-ethylhexyl)phthalate	ND	ug/l	3.0	1.5	1	
Butyl benzyl phthalate	ND	ug/l	5.0	1.2	1	
Di-n-butylphthalate	ND	ug/l	5.0	0.39	1	
Di-n-octylphthalate	ND	ug/l	5.0	1.3	1	
Diethyl phthalate	ND	ug/l	5.0	0.38	1	
Dimethyl phthalate	ND	ug/l	5.0	1.8	1	
Biphenyl	ND	ug/l	2.0	0.46	1	
4-Chloroaniline	ND	ug/l	5.0	1.1	1	
2-Nitroaniline	ND	ug/l	5.0	0.50	1	
3-Nitroaniline	ND	ug/l	5.0	0.81	1	
4-Nitroaniline	ND	ug/l	5.0	0.80	1	
Dibenzofuran	ND	ug/l	2.0	0.50	1	
1,2,4,5-Tetrachlorobenzene	ND	ug/l	10	0.44	1	
Acetophenone	ND	ug/l	5.0	0.53	1	
2,4,6-Trichlorophenol	ND	ug/l	5.0	0.61	1	



Project Name: BATH SIGNIFY OFFSITE GW SAMPLI

Lab Number: L2221593

Project Number: 0127981-025

Report Date: 05/26/22

**SAMPLE RESULTS**

Lab ID:	L2221593-11	Date Collected:	04/25/22 00:00
Client ID:	4125-042522-0002	Date Received:	04/26/22
Sample Location:	Not Specified	Field Prep:	Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
p-Chloro-m-cresol	ND		ug/l	2.0	0.35	1
2-Chlorophenol	ND		ug/l	2.0	0.48	1
2,4-Dichlorophenol	ND		ug/l	5.0	0.41	1
2,4-Dimethylphenol	ND		ug/l	5.0	1.8	1
2-Nitrophenol	ND		ug/l	10	0.85	1
4-Nitrophenol	ND		ug/l	10	0.67	1
2,4-Dinitrophenol	ND		ug/l	20	6.6	1
4,6-Dinitro-o-cresol	ND		ug/l	10	1.8	1
Phenol	ND		ug/l	5.0	0.57	1
2-Methylphenol	ND		ug/l	5.0	0.49	1
3-Methylphenol/4-Methylphenol	ND		ug/l	5.0	0.48	1
2,4,5-Trichlorophenol	ND		ug/l	5.0	0.77	1
Carbazole	ND		ug/l	2.0	0.49	1
Atrazine	ND		ug/l	10	0.76	1
Benzaldehyde	ND		ug/l	5.0	0.53	1
Caprolactam	ND		ug/l	10	3.3	1
2,3,4,6-Tetrachlorophenol	ND		ug/l	5.0	0.84	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	63		21-120
Phenol-d6	53		10-120
Nitrobenzene-d5	80		23-120
2-Fluorobiphenyl	67		15-120
2,4,6-Tribromophenol	68		10-120
4-Terphenyl-d14	64		41-149

Project Name: BATH SIGNIFY OFFSITE GW SAMPLI

Lab Number: L2221593

Project Number: 0127981-025

Report Date: 05/26/22

**SAMPLE RESULTS**

Lab ID: L2221593-11  
 Client ID: 4125-042522-0002  
 Sample Location: Not Specified

Date Collected: 04/25/22 00:00  
 Date Received: 04/26/22  
 Field Prep: Not Specified

Sample Depth:

Matrix: Water  
 Analytical Method: 1,8270D-SIM  
 Analytical Date: 04/29/22 21:59  
 Analyst: DB

Extraction Method: EPA 3510C  
 Extraction Date: 04/28/22 18:00

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>1,4 Dioxane by 8270D-SIM - Mansfield Lab</b>						
1,4-Dioxane	ND		ng/l	144	32.6	1
Surrogate		% Recovery	Qualifier	Acceptance Criteria		
1,4-Dioxane-d8		26		15-110		

**Project Name:** BATH SIGNIFY OFFSITE GW SAMPLI  
**Project Number:** 0127981-025

**Lab Number:** L2221593  
**Report Date:** 05/26/22

**SAMPLE RESULTS**

Lab ID:	L2221593-11	Date Collected:	04/25/22 00:00
Client ID:	4125-042522-0002	Date Received:	04/26/22
Sample Location:	Not Specified	Field Prep:	Not Specified

Sample Depth:

Matrix:	Water	Extraction Method:	EPA 3510C
Analytical Method:	1,8270D-SIM	Extraction Date:	04/29/22 08:19
Analytical Date:	05/01/22 08:24		
Analyst:	JJW		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Semivolatile Organics by GC/MS-SIM - Westborough Lab</b>						
Acenaphthene	ND		ug/l	0.10	0.01	1
2-Chloronaphthalene	ND		ug/l	0.20	0.02	1
Fluoranthene	ND		ug/l	0.10	0.02	1
Hexachlorobutadiene	ND		ug/l	0.50	0.05	1
Naphthalene	ND		ug/l	0.10	0.05	1
Benzo(a)anthracene	0.03	J	ug/l	0.10	0.02	1
Benzo(a)pyrene	ND		ug/l	0.10	0.02	1
Benzo(b)fluoranthene	ND		ug/l	0.10	0.01	1
Benzo(k)fluoranthene	ND		ug/l	0.10	0.01	1
Chrysene	ND		ug/l	0.10	0.01	1
Acenaphthylene	ND		ug/l	0.10	0.01	1
Anthracene	ND		ug/l	0.10	0.01	1
Benzo(ghi)perylene	ND		ug/l	0.10	0.01	1
Fluorene	ND		ug/l	0.10	0.01	1
Phenanthrene	ND		ug/l	0.10	0.02	1
Dibenzo(a,h)anthracene	ND		ug/l	0.10	0.01	1
Indeno(1,2,3-cd)pyrene	ND		ug/l	0.10	0.01	1
Pyrene	ND		ug/l	0.10	0.02	1
2-Methylnaphthalene	ND		ug/l	0.10	0.02	1
Pentachlorophenol	ND		ug/l	0.80	0.01	1
Hexachlorobenzene	ND		ug/l	0.80	0.01	1
Hexachloroethane	ND		ug/l	0.80	0.06	1

Project Name: BATH SIGNIFY OFFSITE GW SAMPLI

Lab Number: L2221593

Project Number: 0127981-025

Report Date: 05/26/22

**SAMPLE RESULTS**

Lab ID: L2221593-11  
 Client ID: 4125-042522-0002  
 Sample Location: Not Specified

Date Collected: 04/25/22 00:00  
 Date Received: 04/26/22  
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS-SIM - Westborough Lab						

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	60		21-120
Phenol-d6	50		10-120
Nitrobenzene-d5	70		23-120
2-Fluorobiphenyl	64		15-120
2,4,6-Tribromophenol	80		10-120
4-Terphenyl-d14	64		41-149

Project Name: BATH SIGNIFY OFFSITE GW SAMPLI

Lab Number: L2221593

Project Number: 0127981-025

Report Date: 05/26/22

**SAMPLE RESULTS**

Lab ID: L2221593-12  
 Client ID: 4125-042522-0003  
 Sample Location: Not Specified

Date Collected: 04/25/22 00:00  
 Date Received: 04/26/22  
 Field Prep: Not Specified

Sample Depth:

Matrix: Water  
 Analytical Method: 1,8270D  
 Analytical Date: 05/03/22 18:55  
 Analyst: CMM

Extraction Method: EPA 3510C  
 Extraction Date: 04/29/22 08:18

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Semivolatile Organics by GC/MS - Westborough Lab</b>						
Bis(2-chloroethyl)ether	ND	ug/l	2.0	0.50	1	
3,3'-Dichlorobenzidine	ND	ug/l	5.0	1.6	1	
2,4-Dinitrotoluene	ND	ug/l	5.0	1.2	1	
2,6-Dinitrotoluene	ND	ug/l	5.0	0.93	1	
4-Chlorophenyl phenyl ether	ND	ug/l	2.0	0.49	1	
4-Bromophenyl phenyl ether	ND	ug/l	2.0	0.38	1	
Bis(2-chloroisopropyl)ether	ND	ug/l	2.0	0.53	1	
Bis(2-chloroethoxy)methane	ND	ug/l	5.0	0.50	1	
Hexachlorocyclopentadiene	ND	ug/l	20	0.69	1	
Isophorone	ND	ug/l	5.0	1.2	1	
Nitrobenzene	ND	ug/l	2.0	0.77	1	
NDPA/DPA	ND	ug/l	2.0	0.42	1	
n-Nitrosodi-n-propylamine	ND	ug/l	5.0	0.64	1	
Bis(2-ethylhexyl)phthalate	ND	ug/l	3.0	1.5	1	
Butyl benzyl phthalate	ND	ug/l	5.0	1.2	1	
Di-n-butylphthalate	ND	ug/l	5.0	0.39	1	
Di-n-octylphthalate	ND	ug/l	5.0	1.3	1	
Diethyl phthalate	ND	ug/l	5.0	0.38	1	
Dimethyl phthalate	ND	ug/l	5.0	1.8	1	
Biphenyl	ND	ug/l	2.0	0.46	1	
4-Chloroaniline	ND	ug/l	5.0	1.1	1	
2-Nitroaniline	ND	ug/l	5.0	0.50	1	
3-Nitroaniline	ND	ug/l	5.0	0.81	1	
4-Nitroaniline	ND	ug/l	5.0	0.80	1	
Dibenzofuran	ND	ug/l	2.0	0.50	1	
1,2,4,5-Tetrachlorobenzene	ND	ug/l	10	0.44	1	
Acetophenone	ND	ug/l	5.0	0.53	1	
2,4,6-Trichlorophenol	ND	ug/l	5.0	0.61	1	



Project Name: BATH SIGNIFY OFFSITE GW SAMPLI

Lab Number: L2221593

Project Number: 0127981-025

Report Date: 05/26/22

**SAMPLE RESULTS**

Lab ID:	L2221593-12	Date Collected:	04/25/22 00:00
Client ID:	4125-042522-0003	Date Received:	04/26/22
Sample Location:	Not Specified	Field Prep:	Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Semivolatile Organics by GC/MS - Westborough Lab</b>						
p-Chloro-m-cresol	ND		ug/l	2.0	0.35	1
2-Chlorophenol	ND		ug/l	2.0	0.48	1
2,4-Dichlorophenol	ND		ug/l	5.0	0.41	1
2,4-Dimethylphenol	ND		ug/l	5.0	1.8	1
2-Nitrophenol	ND		ug/l	10	0.85	1
4-Nitrophenol	ND		ug/l	10	0.67	1
2,4-Dinitrophenol	ND		ug/l	20	6.6	1
4,6-Dinitro-o-cresol	ND		ug/l	10	1.8	1
Phenol	ND		ug/l	5.0	0.57	1
2-Methylphenol	ND		ug/l	5.0	0.49	1
3-Methylphenol/4-Methylphenol	ND		ug/l	5.0	0.48	1
2,4,5-Trichlorophenol	ND		ug/l	5.0	0.77	1
Carbazole	ND		ug/l	2.0	0.49	1
Atrazine	ND		ug/l	10	0.76	1
Benzaldehyde	ND		ug/l	5.0	0.53	1
Caprolactam	ND		ug/l	10	3.3	1
2,3,4,6-Tetrachlorophenol	ND		ug/l	5.0	0.84	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	65		21-120
Phenol-d6	53		10-120
Nitrobenzene-d5	86		23-120
2-Fluorobiphenyl	72		15-120
2,4,6-Tribromophenol	59		10-120
4-Terphenyl-d14	66		41-149

Project Name: BATH SIGNIFY OFFSITE GW SAMPLI

Lab Number: L2221593

Project Number: 0127981-025

Report Date: 05/26/22

**SAMPLE RESULTS**

Lab ID: L2221593-12  
 Client ID: 4125-042522-0003  
 Sample Location: Not Specified

Date Collected: 04/25/22 00:00  
 Date Received: 04/26/22  
 Field Prep: Not Specified

Sample Depth:

Matrix: Water  
 Analytical Method: 1,8270D-SIM  
 Analytical Date: 04/29/22 22:22  
 Analyst: DB

Extraction Method: EPA 3510C  
 Extraction Date: 04/28/22 18:00

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>1,4 Dioxane by 8270D-SIM - Mansfield Lab</b>						
1,4-Dioxane	ND		ng/l	144	32.6	1
Surrogate		% Recovery	Qualifier	Acceptance Criteria		
1,4-Dioxane-d8		26		15-110		



Project Name: BATH SIGNIFY OFFSITE GW SAMPLI

Lab Number: L2221593

Project Number: 0127981-025

Report Date: 05/26/22

**SAMPLE RESULTS**

Lab ID: L2221593-12  
 Client ID: 4125-042522-0003  
 Sample Location: Not Specified

Date Collected: 04/25/22 00:00  
 Date Received: 04/26/22  
 Field Prep: Not Specified

Sample Depth:

Matrix: Water  
 Analytical Method: 1,8270D-SIM  
 Analytical Date: 05/01/22 08:40  
 Analyst: JJW

Extraction Method: EPA 3510C  
 Extraction Date: 04/29/22 08:19

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Semivolatile Organics by GC/MS-SIM - Westborough Lab</b>						
Acenaphthene	ND		ug/l	0.10	0.01	1
2-Chloronaphthalene	ND		ug/l	0.20	0.02	1
Fluoranthene	ND		ug/l	0.10	0.02	1
Hexachlorobutadiene	ND		ug/l	0.50	0.05	1
Naphthalene	0.35		ug/l	0.10	0.05	1
Benzo(a)anthracene	0.02	J	ug/l	0.10	0.02	1
Benzo(a)pyrene	ND		ug/l	0.10	0.02	1
Benzo(b)fluoranthene	ND		ug/l	0.10	0.01	1
Benzo(k)fluoranthene	ND		ug/l	0.10	0.01	1
Chrysene	ND		ug/l	0.10	0.01	1
Acenaphthylene	ND		ug/l	0.10	0.01	1
Anthracene	ND		ug/l	0.10	0.01	1
Benzo(ghi)perylene	ND		ug/l	0.10	0.01	1
Fluorene	ND		ug/l	0.10	0.01	1
Phenanthrene	ND		ug/l	0.10	0.02	1
Dibeno(a,h)anthracene	ND		ug/l	0.10	0.01	1
Indeno(1,2,3-cd)pyrene	0.02	J	ug/l	0.10	0.01	1
Pyrene	ND		ug/l	0.10	0.02	1
2-Methylnaphthalene	0.06	J	ug/l	0.10	0.02	1
Pentachlorophenol	ND		ug/l	0.80	0.01	1
Hexachlorobenzene	ND		ug/l	0.80	0.01	1
Hexachloroethane	ND		ug/l	0.80	0.06	1

Project Name: BATH SIGNIFY OFFSITE GW SAMPLI

Lab Number: L2221593

Project Number: 0127981-025

Report Date: 05/26/22

**SAMPLE RESULTS**

Lab ID: L2221593-12  
 Client ID: 4125-042522-0003  
 Sample Location: Not Specified

Date Collected: 04/25/22 00:00  
 Date Received: 04/26/22  
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS-SIM - Westborough Lab						
Surrogate			% Recovery	Qualifier	Acceptance Criteria	
2-Fluorophenol			65		21-120	
Phenol-d6			54		10-120	
Nitrobenzene-d5			76		23-120	
2-Fluorobiphenyl			70		15-120	
2,4,6-Tribromophenol			85		10-120	
4-Terphenyl-d14			71		41-149	

Project Name: BATH SIGNIFY OFFSITE GW SAMPLI

Lab Number: L2221593

Project Number: 0127981-025

Report Date: 05/26/22

**SAMPLE RESULTS**

Lab ID: L2221593-12  
 Client ID: 4125-042522-0003  
 Sample Location: Not Specified

Date Collected: 04/25/22 00:00  
 Date Received: 04/26/22  
 Field Prep: Not Specified

Sample Depth:

Matrix: Water  
 Analytical Method: 134,LCMSMS-ID  
 Analytical Date: 05/06/22 19:02  
 Analyst: RS

Extraction Method: ALPHA 23528  
 Extraction Date: 05/06/22 03:28

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Perfluorinated Alkyl Acids by Isotope Dilution - Mansfield Lab</b>						
Perfluorobutanoic Acid (PFBA)	ND	ng/l	1.86	0.380	1	
Perfluoropentanoic Acid (PFPeA)	ND	ng/l	1.86	0.369	1	
Perfluorobutanesulfonic Acid (PFBS)	ND	ng/l	1.86	0.222	1	
Perfluorohexanoic Acid (PFHxA)	ND	ng/l	1.86	0.306	1	
Perfluoroheptanoic Acid (PFHpA)	ND	ng/l	1.86	0.210	1	
Perfluorohexanesulfonic Acid (PFHxS)	ND	ng/l	1.86	0.351	1	
Perfluoroctanoic Acid (PFOA)	ND	ng/l	1.86	0.220	1	
1H,1H,2H,2H-Perfluorooctanesulfonic Acid (6:2FTS)	ND	ng/l	1.86	1.24	1	
Perfluoroheptanesulfonic Acid (PFHpS)	ND	ng/l	1.86	0.642	1	
Perfluorononanoic Acid (PFNA)	ND	ng/l	1.86	0.291	1	
Perfluorooctanesulfonic Acid (PFOS)	ND	ng/l	1.86	0.470	1	
Perfluorodecanoic Acid (PFDA)	ND	ng/l	1.86	0.283	1	
1H,1H,2H,2H-Perfluorodecanesulfonic Acid (8:2FTS)	ND	ng/l	1.86	1.13	1	
N-Methyl Perfluorooctanesulfonamidoacetic Acid (NMeFOSAA)	ND	ng/l	1.86	0.604	1	
Perfluoroundecanoic Acid (PFUnA)	ND	ng/l	1.86	0.242	1	
Perfluorodecanesulfonic Acid (PFDS)	ND	ng/l	1.86	0.914	1	
Perfluorooctanesulfonamide (FOSA)	ND	ng/l	1.86	0.541	1	
N-Ethyl Perfluorooctanesulfonamidoacetic Acid (NEtFOSAA)	ND	ng/l	1.86	0.750	1	
Perfluorododecanoic Acid (PFDoA)	ND	ng/l	1.86	0.347	1	
Perfluorotridecanoic Acid (PFTrDA)	ND	ng/l	1.86	0.305	1	
Perfluorotetradecanoic Acid (PFTA)	ND	ng/l	1.86	0.231	1	
PFOA/PFOS, Total	ND	ng/l	1.86	0.220	1	

Project Name: BATH SIGNIFY OFFSITE GW SAMPLI

Lab Number: L2221593

Project Number: 0127981-025

Report Date: 05/26/22

**SAMPLE RESULTS**

Lab ID: L2221593-12  
 Client ID: 4125-042522-0003  
 Sample Location: Not Specified

Date Collected: 04/25/22 00:00  
 Date Received: 04/26/22  
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Perfluorinated Alkyl Acids by Isotope Dilution - Mansfield Lab						
Surrogate (Extracted Internal Standard)			% Recovery	Qualifier	Acceptance Criteria	
Perfluoro[13C4]Butanoic Acid (MPFBA)			87		58-132	
Perfluoro[13C5]Pentanoic Acid (M5PFPEA)			104		62-163	
Perfluoro[2,3,4-13C3]Butanesulfonic Acid (M3PFBS)			85		70-131	
Perfluoro[1,2,3,4,6-13C5]Hexanoic Acid (M5PFHxA)			84		57-129	
Perfluoro[1,2,3,4-13C4]Heptanoic Acid (M4PFHxA)			84		60-129	
Perfluoro[1,2,3-13C3]Hexanesulfonic Acid (M3PFHxS)			86		71-134	
Perfluoro[13C8]Octanoic Acid (M8PFOA)			84		62-129	
1H,1H,2H,2H-Perfluoro[1,2-13C2]Octanesulfonic Acid (M2-6:2FTS)			69		14-147	
Perfluoro[13C9]Nonanoic Acid (M9PFNA)			84		59-139	
Perfluoro[13C8]Octanesulfonic Acid (M8PFOS)			85		69-131	
Perfluoro[1,2,3,4,5,6-13C6]Decanoic Acid (M6PFDA)			85		62-124	
1H,1H,2H,2H-Perfluoro[1,2-13C2]Decanesulfonic Acid (M2-8:2FTS)			74		10-162	
N-Deuteriomethylperfluoro-1-octanesulfonamidoacetic Acid (d3-NMeFOSAA)			70		24-116	
Perfluoro[1,2,3,4,5,6,7-13C7]Undecanoic Acid (M7-PFUDA)			93		55-137	
Perfluoro[13C8]Octanesulfonamide (M8FOSA)			46		10-112	
N-Deuteroethylperfluoro-1-octanesulfonamidoacetic Acid (d5-NEtFOSAA)			78		27-126	
Perfluoro[1,2-13C2]Dodecanoic Acid (MPFDCA)			85		48-131	
Perfluoro[1,2-13C2]Tetradecanoic Acid (M2PFTEDA)			81		22-136	

Project Name: BATH SIGNIFY OFFSITE GW SAMPLI

Lab Number: L2221593

Project Number: 0127981-025

Report Date: 05/26/22

**SAMPLE RESULTS**

Lab ID: L2221593-13  
 Client ID: 4125-042522-0004  
 Sample Location: Not Specified

Date Collected: 04/25/22 00:00  
 Date Received: 04/26/22  
 Field Prep: Not Specified

Sample Depth:

Matrix: Water  
 Analytical Method: 134,LCMSMS-ID  
 Analytical Date: 05/06/22 19:19  
 Analyst: RS

Extraction Method: ALPHA 23528  
 Extraction Date: 05/06/22 03:28

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Perfluorinated Alkyl Acids by Isotope Dilution - Mansfield Lab</b>						
Perfluorobutanoic Acid (PFBA)	ND		ng/l	1.87	0.382	1
Perfluoropentanoic Acid (PFPeA)	ND		ng/l	1.87	0.371	1
Perfluorobutanesulfonic Acid (PFBS)	ND		ng/l	1.87	0.223	1
Perfluorohexanoic Acid (PFHxA)	ND		ng/l	1.87	0.307	1
Perfluoroheptanoic Acid (PFHpA)	ND		ng/l	1.87	0.211	1
Perfluorohexanesulfonic Acid (PFHxS)	ND		ng/l	1.87	0.352	1
Perfluoroctanoic Acid (PFOA)	ND		ng/l	1.87	0.221	1
1H,1H,2H,2H-Perfluorooctanesulfonic Acid (6:2FTS)	ND		ng/l	1.87	1.25	1
Perfluoroheptanesulfonic Acid (PFHpS)	ND		ng/l	1.87	0.645	1
Perfluorononanoic Acid (PFNA)	ND		ng/l	1.87	0.292	1
Perfluorooctanesulfonic Acid (PFOS)	ND		ng/l	1.87	0.472	1
Perfluorodecanoic Acid (PFDA)	ND		ng/l	1.87	0.285	1
1H,1H,2H,2H-Perfluorodecanesulfonic Acid (8:2FTS)	ND		ng/l	1.87	1.14	1
N-Methyl Perfluorooctanesulfonamidoacetic Acid (NMeFOSAA)	ND		ng/l	1.87	0.607	1
Perfluoroundecanoic Acid (PFUnA)	ND		ng/l	1.87	0.244	1
Perfluorodecanesulfonic Acid (PFDS)	ND		ng/l	1.87	0.919	1
Perfluorooctanesulfonamide (FOSA)	ND		ng/l	1.87	0.544	1
N-Ethyl Perfluorooctanesulfonamidoacetic Acid (NEtFOSAA)	ND		ng/l	1.87	0.754	1
Perfluorododecanoic Acid (PFDoA)	ND		ng/l	1.87	0.349	1
Perfluorotridecanoic Acid (PFTrDA)	ND		ng/l	1.87	0.307	1
Perfluorotetradecanoic Acid (PFTA)	ND		ng/l	1.87	0.232	1
PFOA/PFOS, Total	ND		ng/l	1.87	0.221	1

Project Name: BATH SIGNIFY OFFSITE GW SAMPLI

Lab Number: L2221593

Project Number: 0127981-025

Report Date: 05/26/22

**SAMPLE RESULTS**

Lab ID: L2221593-13  
 Client ID: 4125-042522-0004  
 Sample Location: Not Specified

Date Collected: 04/25/22 00:00  
 Date Received: 04/26/22  
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Perfluorinated Alkyl Acids by Isotope Dilution - Mansfield Lab						
Surrogate (Extracted Internal Standard)			% Recovery	Qualifier	Acceptance Criteria	
Perfluoro[13C4]Butanoic Acid (MPFBA)			89		58-132	
Perfluoro[13C5]Pentanoic Acid (M5PFPEA)			103		62-163	
Perfluoro[2,3,4-13C3]Butanesulfonic Acid (M3PFBS)			86		70-131	
Perfluoro[1,2,3,4,6-13C5]Hexanoic Acid (M5PFHxA)			85		57-129	
Perfluoro[1,2,3,4-13C4]Heptanoic Acid (M4PFHxA)			84		60-129	
Perfluoro[1,2,3-13C3]Hexanesulfonic Acid (M3PFHxS)			89		71-134	
Perfluoro[13C8]Octanoic Acid (M8PFOA)			83		62-129	
1H,1H,2H,2H-Perfluoro[1,2-13C2]Octanesulfonic Acid (M2-6:2FTS)			72		14-147	
Perfluoro[13C9]Nonanoic Acid (M9PFNA)			80		59-139	
Perfluoro[13C8]Octanesulfonic Acid (M8PFOS)			81		69-131	
Perfluoro[1,2,3,4,5,6-13C6]Decanoic Acid (M6PFDA)			85		62-124	
1H,1H,2H,2H-Perfluoro[1,2-13C2]Decanesulfonic Acid (M2-8:2FTS)			71		10-162	
N-Deuteriomethylperfluoro-1-octanesulfonamidoacetic Acid (d3-NMeFOSAA)			70		24-116	
Perfluoro[1,2,3,4,5,6,7-13C7]Undecanoic Acid (M7-PFUDA)			83		55-137	
Perfluoro[13C8]Octanesulfonamide (M8FOSA)			39		10-112	
N-Deuteroethylperfluoro-1-octanesulfonamidoacetic Acid (d5-NEtFOSAA)			71		27-126	
Perfluoro[1,2-13C2]Dodecanoic Acid (MPFDCA)			84		48-131	
Perfluoro[1,2-13C2]Tetradecanoic Acid (M2PFTEDA)			79		22-136	

**Project Name:** BATH SIGNIFY OFFSITE GW SAMPLI  
**Project Number:** 0127981-025

**Lab Number:** L2221593  
**Report Date:** 05/26/22

**Method Blank Analysis**  
**Batch Quality Control**

Analytical Method: 1,8270D-SIM  
Analytical Date: 04/29/22 16:55  
Analyst: DB

Extraction Method: EPA 3510C  
Extraction Date: 04/28/22 18:00

Parameter	Result	Qualifier	Units	RL	MDL
1,4 Dioxane by 8270D-SIM - Mansfield Lab for sample(s): 06,08-09,11-12			Batch:	WG1632199-1	
1,4-Dioxane	ND		ng/l	150	33.9

Surrogate	%Recovery	Qualifier	Acceptance
			Criteria
1,4-Dioxane-d8	34		15-110

**Project Name:** BATH SIGNIFY OFFSITE GW SAMPLI  
**Project Number:** 0127981-025

**Lab Number:** L2221593  
**Report Date:** 05/26/22

**Method Blank Analysis**  
**Batch Quality Control**

Analytical Method: 1,8270D  
Analytical Date: 04/29/22 18:04  
Analyst: SZ

Extraction Method: EPA 3510C  
Extraction Date: 04/29/22 08:18

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 06,11-12 Batch: WG1632450-1					
Bis(2-chloroethyl)ether	ND	ug/l	2.0	0.50	
3,3'-Dichlorobenzidine	ND	ug/l	5.0	1.6	
2,4-Dinitrotoluene	ND	ug/l	5.0	1.2	
2,6-Dinitrotoluene	ND	ug/l	5.0	0.93	
4-Chlorophenyl phenyl ether	ND	ug/l	2.0	0.49	
4-Bromophenyl phenyl ether	ND	ug/l	2.0	0.38	
Bis(2-chloroisopropyl)ether	ND	ug/l	2.0	0.53	
Bis(2-chloroethoxy)methane	ND	ug/l	5.0	0.50	
Hexachlorocyclopentadiene	ND	ug/l	20	0.69	
Isophorone	ND	ug/l	5.0	1.2	
Nitrobenzene	ND	ug/l	2.0	0.77	
NDPA/DPA	ND	ug/l	2.0	0.42	
n-Nitrosodi-n-propylamine	ND	ug/l	5.0	0.64	
Bis(2-ethylhexyl)phthalate	ND	ug/l	3.0	1.5	
Butyl benzyl phthalate	ND	ug/l	5.0	1.2	
Di-n-butylphthalate	ND	ug/l	5.0	0.39	
Di-n-octylphthalate	ND	ug/l	5.0	1.3	
Diethyl phthalate	ND	ug/l	5.0	0.38	
Dimethyl phthalate	ND	ug/l	5.0	1.8	
Biphenyl	ND	ug/l	2.0	0.46	
4-Chloroaniline	ND	ug/l	5.0	1.1	
2-Nitroaniline	ND	ug/l	5.0	0.50	
3-Nitroaniline	ND	ug/l	5.0	0.81	
4-Nitroaniline	ND	ug/l	5.0	0.80	
Dibenzofuran	ND	ug/l	2.0	0.50	
1,2,4,5-Tetrachlorobenzene	ND	ug/l	10	0.44	
Acetophenone	ND	ug/l	5.0	0.53	
2,4,6-Trichlorophenol	ND	ug/l	5.0	0.61	
p-Chloro-m-cresol	ND	ug/l	2.0	0.35	

**Project Name:** BATH SIGNIFY OFFSITE GW SAMPLI  
**Project Number:** 0127981-025

**Lab Number:** L2221593  
**Report Date:** 05/26/22

**Method Blank Analysis**  
**Batch Quality Control**

Analytical Method: 1,8270D  
Analytical Date: 04/29/22 18:04  
Analyst: SZ

Extraction Method: EPA 3510C  
Extraction Date: 04/29/22 08:18

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 06,11-12 Batch: WG1632450-1					
2-Chlorophenol	ND		ug/l	2.0	0.48
2,4-Dichlorophenol	ND		ug/l	5.0	0.41
2,4-Dimethylphenol	ND		ug/l	5.0	1.8
2-Nitrophenol	ND		ug/l	10	0.85
4-Nitrophenol	ND		ug/l	10	0.67
2,4-Dinitrophenol	ND		ug/l	20	6.6
4,6-Dinitro-o-cresol	ND		ug/l	10	1.8
Phenol	ND		ug/l	5.0	0.57
2-Methylphenol	ND		ug/l	5.0	0.49
3-Methylphenol/4-Methylphenol	ND		ug/l	5.0	0.48
2,4,5-Trichlorophenol	ND		ug/l	5.0	0.77
Carbazole	ND		ug/l	2.0	0.49
Atrazine	ND		ug/l	10	0.76
Benzaldehyde	ND		ug/l	5.0	0.53
Caprolactam	ND		ug/l	10	3.3
2,3,4,6-Tetrachlorophenol	ND		ug/l	5.0	0.84

Surrogate	%Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	56		21-120
Phenol-d6	46		10-120
Nitrobenzene-d5	75		23-120
2-Fluorobiphenyl	62		15-120
2,4,6-Tribromophenol	57		10-120
4-Terphenyl-d14	51		41-149



**Project Name:** BATH SIGNIFY OFFSITE GW SAMPLI  
**Project Number:** 0127981-025

**Lab Number:** L2221593  
**Report Date:** 05/26/22

**Method Blank Analysis**  
**Batch Quality Control**

Analytical Method: 1,8270D-SIM  
Analytical Date: 04/30/22 13:24  
Analyst: AH

Extraction Method: EPA 3510C  
Extraction Date: 04/29/22 08:19

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS-SIM - Westborough Lab for sample(s):	06,11-12			Batch:	WG1632451-1
Acenaphthene	ND		ug/l	0.10	0.01
2-Chloronaphthalene	ND		ug/l	0.20	0.02
Fluoranthene	ND		ug/l	0.10	0.02
Hexachlorobutadiene	ND		ug/l	0.50	0.05
Naphthalene	ND		ug/l	0.10	0.05
Benzo(a)anthracene	0.02	J	ug/l	0.10	0.02
Benzo(a)pyrene	ND		ug/l	0.10	0.02
Benzo(b)fluoranthene	ND		ug/l	0.10	0.01
Benzo(k)fluoranthene	ND		ug/l	0.10	0.01
Chrysene	ND		ug/l	0.10	0.01
Acenaphthylene	ND		ug/l	0.10	0.01
Anthracene	ND		ug/l	0.10	0.01
Benzo(ghi)perylene	ND		ug/l	0.10	0.01
Fluorene	ND		ug/l	0.10	0.01
Phenanthrene	ND		ug/l	0.10	0.02
Dibenzo(a,h)anthracene	ND		ug/l	0.10	0.01
Indeno(1,2,3-cd)pyrene	ND		ug/l	0.10	0.01
Pyrene	ND		ug/l	0.10	0.02
2-Methylnaphthalene	ND		ug/l	0.10	0.02
Pentachlorophenol	ND		ug/l	0.80	0.01
Hexachlorobenzene	ND		ug/l	0.80	0.01
Hexachloroethane	ND		ug/l	0.80	0.06

**Project Name:** BATH SIGNIFY OFFSITE GW SAMPLI  
**Project Number:** 0127981-025

**Lab Number:** L2221593  
**Report Date:** 05/26/22

### **Method Blank Analysis Batch Quality Control**

Analytical Method: 1,8270D-SIM  
Analytical Date: 04/30/22 13:24  
Analyst: AH

Extraction Method: EPA 3510C  
Extraction Date: 04/29/22 08:19

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS-SIM - Westborough Lab for sample(s):	06,11-12		Batch:	WG1632451-1	

Surrogate	%Recovery	Acceptance Criteria	
		Qualifier	
2-Fluorophenol	62		21-120
Phenol-d6	52		10-120
Nitrobenzene-d5	75		23-120
2-Fluorobiphenyl	71		15-120
2,4,6-Tribromophenol	84		10-120
4-Terphenyl-d14	70		41-149

**Project Name:** BATH SIGNIFY OFFSITE GW SAMPLI  
**Project Number:** 0127981-025

**Lab Number:** L2221593  
**Report Date:** 05/26/22

**Method Blank Analysis**  
**Batch Quality Control**

Analytical Method: 1,8270D  
Analytical Date: 05/02/22 14:19  
Analyst: SZ

Extraction Method: EPA 3510C  
Extraction Date: 05/01/22 09:22

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s):	08-09		Batch:	WG1632944-1	
Bis(2-chloroethyl)ether	ND	ug/l	2.0	0.50	
3,3'-Dichlorobenzidine	ND	ug/l	5.0	1.6	
2,4-Dinitrotoluene	ND	ug/l	5.0	1.2	
2,6-Dinitrotoluene	ND	ug/l	5.0	0.93	
4-Chlorophenyl phenyl ether	ND	ug/l	2.0	0.49	
4-Bromophenyl phenyl ether	ND	ug/l	2.0	0.38	
Bis(2-chloroisopropyl)ether	ND	ug/l	2.0	0.53	
Bis(2-chloroethoxy)methane	ND	ug/l	5.0	0.50	
Hexachlorocyclopentadiene	ND	ug/l	20	0.69	
Isophorone	ND	ug/l	5.0	1.2	
Nitrobenzene	ND	ug/l	2.0	0.77	
NDPA/DPA	ND	ug/l	2.0	0.42	
n-Nitrosodi-n-propylamine	ND	ug/l	5.0	0.64	
Bis(2-ethylhexyl)phthalate	ND	ug/l	3.0	1.5	
Butyl benzyl phthalate	ND	ug/l	5.0	1.2	
Di-n-butylphthalate	ND	ug/l	5.0	0.39	
Di-n-octylphthalate	ND	ug/l	5.0	1.3	
Diethyl phthalate	ND	ug/l	5.0	0.38	
Dimethyl phthalate	ND	ug/l	5.0	1.8	
Biphenyl	ND	ug/l	2.0	0.46	
4-Chloroaniline	ND	ug/l	5.0	1.1	
2-Nitroaniline	ND	ug/l	5.0	0.50	
3-Nitroaniline	ND	ug/l	5.0	0.81	
4-Nitroaniline	ND	ug/l	5.0	0.80	
Dibenzofuran	ND	ug/l	2.0	0.50	
1,2,4,5-Tetrachlorobenzene	ND	ug/l	10	0.44	
Acetophenone	ND	ug/l	5.0	0.53	
2,4,6-Trichlorophenol	ND	ug/l	5.0	0.61	
p-Chloro-m-cresol	ND	ug/l	2.0	0.35	



**Project Name:** BATH SIGNIFY OFFSITE GW SAMPLI  
**Project Number:** 0127981-025

**Lab Number:** L2221593  
**Report Date:** 05/26/22

**Method Blank Analysis**  
**Batch Quality Control**

Analytical Method: 1,8270D  
Analytical Date: 05/02/22 14:19  
Analyst: SZ

Extraction Method: EPA 3510C  
Extraction Date: 05/01/22 09:22

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s):	08-09		Batch:	WG1632944-1	
2-Chlorophenol	ND		ug/l	2.0	0.48
2,4-Dichlorophenol	ND		ug/l	5.0	0.41
2,4-Dimethylphenol	ND		ug/l	5.0	1.8
2-Nitrophenol	ND		ug/l	10	0.85
4-Nitrophenol	ND		ug/l	10	0.67
2,4-Dinitrophenol	ND		ug/l	20	6.6
4,6-Dinitro-o-cresol	ND		ug/l	10	1.8
Phenol	ND		ug/l	5.0	0.57
2-Methylphenol	ND		ug/l	5.0	0.49
3-Methylphenol/4-Methylphenol	ND		ug/l	5.0	0.48
2,4,5-Trichlorophenol	ND		ug/l	5.0	0.77
Carbazole	ND		ug/l	2.0	0.49
Atrazine	ND		ug/l	10	0.76
Benzaldehyde	ND		ug/l	5.0	0.53
Caprolactam	ND		ug/l	10	3.3
2,3,4,6-Tetrachlorophenol	ND		ug/l	5.0	0.84

Surrogate	%Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	64		21-120
Phenol-d6	45		10-120
Nitrobenzene-d5	78		23-120
2-Fluorobiphenyl	72		15-120
2,4,6-Tribromophenol	79		10-120
4-Terphenyl-d14	88		41-149



**Project Name:** BATH SIGNIFY OFFSITE GW SAMPLI  
**Project Number:** 0127981-025

**Lab Number:** L2221593  
**Report Date:** 05/26/22

**Method Blank Analysis**  
**Batch Quality Control**

Analytical Method: 1,8270D-SIM  
Analytical Date: 05/02/22 11:52  
Analyst: JJW

Extraction Method: EPA 3510C  
Extraction Date: 05/01/22 09:25

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS-SIM - Westborough Lab for sample(s):	08-09			Batch:	WG1632945-1
Acenaphthene	ND	ug/l	0.10	0.01	
2-Chloronaphthalene	ND	ug/l	0.20	0.02	
Fluoranthene	ND	ug/l	0.10	0.02	
Hexachlorobutadiene	ND	ug/l	0.50	0.05	
Naphthalene	ND	ug/l	0.10	0.05	
Benzo(a)anthracene	ND	ug/l	0.10	0.02	
Benzo(a)pyrene	ND	ug/l	0.10	0.02	
Benzo(b)fluoranthene	ND	ug/l	0.10	0.01	
Benzo(k)fluoranthene	ND	ug/l	0.10	0.01	
Chrysene	ND	ug/l	0.10	0.01	
Acenaphthylene	ND	ug/l	0.10	0.01	
Anthracene	ND	ug/l	0.10	0.01	
Benzo(ghi)perylene	ND	ug/l	0.10	0.01	
Fluorene	ND	ug/l	0.10	0.01	
Phenanthrene	ND	ug/l	0.10	0.02	
Dibenzo(a,h)anthracene	ND	ug/l	0.10	0.01	
Indeno(1,2,3-cd)pyrene	ND	ug/l	0.10	0.01	
Pyrene	ND	ug/l	0.10	0.02	
2-Methylnaphthalene	ND	ug/l	0.10	0.02	
Pentachlorophenol	ND	ug/l	0.80	0.01	
Hexachlorobenzene	ND	ug/l	0.80	0.01	
Hexachloroethane	ND	ug/l	0.80	0.06	

**Project Name:** BATH SIGNIFY OFFSITE GW SAMPLI  
**Project Number:** 0127981-025

**Lab Number:** L2221593  
**Report Date:** 05/26/22

### **Method Blank Analysis Batch Quality Control**

Analytical Method: 1,8270D-SIM  
Analytical Date: 05/02/22 11:52  
Analyst: JJW

Extraction Method: EPA 3510C  
Extraction Date: 05/01/22 09:25

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS-SIM - Westborough Lab for sample(s):	08-09		Batch:	WG1632945-1	

Surrogate	%Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	62		21-120
Phenol-d6	51		10-120
Nitrobenzene-d5	89		23-120
2-Fluorobiphenyl	79		15-120
2,4,6-Tribromophenol	109		10-120
4-Terphenyl-d14	96		41-149

**Project Name:** BATH SIGNIFY OFFSITE GW SAMPLI  
**Project Number:** 0127981-025

**Lab Number:** L2221593  
**Report Date:** 05/26/22

**Method Blank Analysis**  
**Batch Quality Control**

Analytical Method: 134,LCMSMS-ID  
Analytical Date: 05/06/22 17:23  
Analyst: RS

Extraction Method: ALPHA 23528  
Extraction Date: 05/06/22 03:28

Parameter	Result	Qualifier	Units	RL	MDL
Perfluorinated Alkyl Acids by Isotope Dilution - Mansfield Lab for sample(s): 05,07,09-10,12-13 Batch: WG1635192-1					
Perfluorobutanoic Acid (PFBA)	ND	ng/l	2.00	0.408	
Perfluoropentanoic Acid (PFPeA)	ND	ng/l	2.00	0.396	
Perfluorobutanesulfonic Acid (PFBS)	ND	ng/l	2.00	0.238	
Perfluorohexanoic Acid (PFHxA)	ND	ng/l	2.00	0.328	
Perfluoroheptanoic Acid (PFHpA)	ND	ng/l	2.00	0.225	
Perfluorohexanesulfonic Acid (PFHxS)	ND	ng/l	2.00	0.376	
Perfluoroctanoic Acid (PFOA)	ND	ng/l	2.00	0.236	
1H,1H,2H,2H-Perfluorooctanesulfonic Acid (6:2FTS)	ND	ng/l	2.00	1.33	
Perfluoroheptanesulfonic Acid (PFHpS)	ND	ng/l	2.00	0.688	
Perfluorononanoic Acid (PFNA)	ND	ng/l	2.00	0.312	
Perfluorooctanesulfonic Acid (PFOS)	ND	ng/l	2.00	0.504	
Perfluorodecanoic Acid (PFDA)	ND	ng/l	2.00	0.304	
1H,1H,2H,2H-Perfluorodecanesulfonic Acid (8:2FTS)	ND	ng/l	2.00	1.21	
N-Methyl Perfluorooctanesulfonamidoacetic Acid (NMeFOSAA)	ND	ng/l	2.00	0.648	
Perfluoroundecanoic Acid (PFUnA)	ND	ng/l	2.00	0.260	
Perfluorodecanesulfonic Acid (PFDS)	ND	ng/l	2.00	0.980	
Perfluorooctanesulfonamide (FOSA)	ND	ng/l	2.00	0.580	
N-Ethyl Perfluorooctanesulfonamidoacetic Acid (NEtFOSAA)	ND	ng/l	2.00	0.804	
Perfluorododecanoic Acid (PFDoA)	ND	ng/l	2.00	0.372	
Perfluorotridecanoic Acid (PFTrDA)	ND	ng/l	2.00	0.327	
Perfluorotetradecanoic Acid (PFTA)	ND	ng/l	2.00	0.248	
PFOA/PFOS, Total	ND	ng/l	2.00	0.236	



**Project Name:** BATH SIGNIFY OFFSITE GW SAMPLI  
**Project Number:** 0127981-025

**Lab Number:** L2221593  
**Report Date:** 05/26/22

### Method Blank Analysis Batch Quality Control

Analytical Method: 134,LCMSMS-ID  
Analytical Date: 05/06/22 17:23  
Analyst: RS

Extraction Method: ALPHA 23528  
Extraction Date: 05/06/22 03:28

Parameter	Result	Qualifier	Units	RL	MDL
Perfluorinated Alkyl Acids by Isotope Dilution - Mansfield Lab for sample(s): 05,07,09-10,12-13 Batch: WG1635192-1					

Surrogate (Extracted Internal Standard)	%Recovery	Qualifier	Acceptance Criteria
Perfluoro[13C4]Butanoic Acid (MPFBA)	93		58-132
Perfluoro[13C5]Pentanoic Acid (M5PFPEA)	106		62-163
Perfluoro[2,3,4-13C3]Butanesulfonic Acid (M3PFBS)	86		70-131
Perfluoro[1,2,3,4,6-13C5]Hexanoic Acid (M5PFHxA)	95		57-129
Perfluoro[1,2,3,4-13C4]Heptanoic Acid (M4PFHpA)	94		60-129
Perfluoro[1,2,3-13C3]Hexanesulfonic Acid (M3PFHxS)	87		71-134
Perfluoro[13C8]Octanoic Acid (M8PFOA)	94		62-129
1H,1H,2H,2H-Perfluoro[1,2-13C2]Octanesulfonic Acid (M2-6:2FTS)	90		14-147
Perfluoro[13C9]Nonanoic Acid (M9PFNA)	92		59-139
Perfluoro[13C8]Octanesulfonic Acid (M8PFOS)	88		69-131
Perfluoro[1,2,3,4,5,6-13C6]Decanoic Acid (M6PFDA)	94		62-124
1H,1H,2H,2H-Perfluoro[1,2-13C2]Decanesulfonic Acid (M2-8:2FTS)	104		10-162
N-Deuteriomethylperfluoro-1-octanesulfonamidoacetic Acid (d3-NMeFOSAA)	80		24-116
Perfluoro[1,2,3,4,5,6,7-13C7]Undecanoic Acid (M7-PFDA)	103		55-137
Perfluoro[13C8]Octanesulfonamide (M8FOSA)	46		10-112
N-Deuterioethylperfluoro-1-octanesulfonamidoacetic Acid (d5-NEtFOSAA)	76		27-126
Perfluoro[1,2-13C2]Dodecanoic Acid (MPFDOA)	96		48-131
Perfluoro[1,2-13C2]Tetradecanoic Acid (M2PFTEDA)	95		22-136

**Project Name:** BATH SIGNIFY OFFSITE GW SAMPLI  
**Project Number:** 0127981-025

**Lab Number:** L2221593  
**Report Date:** 05/26/22

**Method Blank Analysis**  
**Batch Quality Control**

Analytical Method: 134,LCMSMS-ID  
Analytical Date: 05/15/22 19:34  
Analyst: SG

Extraction Method: ALPHA 23528  
Extraction Date: 05/06/22 03:28

<b>Parameter</b>	<b>Result</b>	<b>Qualifier</b>	<b>Units</b>	<b>RL</b>	<b>MDL</b>
Perfluorinated Alkyl Acids by Isotope Dilution - Mansfield Lab for sample(s): 05,07,09-10,12-13 Batch: WG1635192-1					
Perfluorooctanesulfonamide (FOSA)	ND		ng/l	2.00	0.580

<b>Surrogate (Extracted Internal Standard)</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Acceptance Criteria</b>
			10-112
Perfluoro[13C8]Octanesulfonamide (M8FOSA)	75		

# Lab Control Sample Analysis

## Batch Quality Control

**Project Name:** BATH SIGNIFY OFFSITE GW SAMPLI  
**Project Number:** 0127981-025

**Lab Number:** L2221593  
**Report Date:** 05/26/22

<b>Parameter</b>	<i>LCS</i> <i>%Recovery</i>	<i>Qual</i>	<i>LCSD</i> <i>%Recovery</i>	<i>Qual</i>	<i>%Recovery</i> <i>Limits</i>	<i>RPD</i>	<i>Qual</i>	<i>RPD</i> <i>Limits</i>
1,4 Dioxane by 8270D-SIM - Mansfield Lab Associated sample(s): 06,08-09,11-12 Batch: WG1632199-2 WG1632199-3								
1,4-Dioxane	129		131		40-140	2		30

<b>Surrogate</b>	<i>LCS</i> <i>%Recovery</i>	<i>Qual</i>	<i>LCSD</i> <i>%Recovery</i>	<i>Qual</i>	<b>Acceptance Criteria</b>
1,4-Dioxane-d8					
	23		31		15-110

# Lab Control Sample Analysis

## Batch Quality Control

**Project Name:** BATH SIGNIFY OFFSITE GW SAMPLI  
**Project Number:** 0127981-025

**Lab Number:** L2221593  
**Report Date:** 05/26/22

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 06,11-12 Batch: WG1632450-2 WG1632450-3								
Bis(2-chloroethyl)ether	71		62		40-140	14		30
3,3'-Dichlorobenzidine	60		51		40-140	16		30
2,4-Dinitrotoluene	90		74		48-143	20		30
2,6-Dinitrotoluene	88		70		40-140	23		30
4-Chlorophenyl phenyl ether	66		55		40-140	18		30
4-Bromophenyl phenyl ether	68		56		40-140	19		30
Bis(2-chloroisopropyl)ether	100		89		40-140	12		30
Bis(2-chloroethoxy)methane	76		66		40-140	14		30
Hexachlorocyclopentadiene	68		57		40-140	18		30
Isophorone	70		60		40-140	15		30
Nitrobenzene	77		68		40-140	12		30
NDPA/DPA	70		59		40-140	17		30
n-Nitrosodi-n-propylamine	71		61		29-132	15		30
Bis(2-ethylhexyl)phthalate	82		66		40-140	22		30
Butyl benzyl phthalate	83		67		40-140	21		30
Di-n-butylphthalate	70		57		40-140	20		30
Di-n-octylphthalate	80		66		40-140	19		30
Diethyl phthalate	72		61		40-140	17		30
Dimethyl phthalate	74		60		40-140	21		30
Biphenyl	72		58		40-140	22		30
4-Chloroaniline	57		49		40-140	15		30
2-Nitroaniline	95		80		52-143	17		30
3-Nitroaniline	84		70		25-145	18		30

# Lab Control Sample Analysis

## Batch Quality Control

**Project Name:** BATH SIGNIFY OFFSITE GW SAMPLI  
**Project Number:** 0127981-025

**Lab Number:** L2221593  
**Report Date:** 05/26/22

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 06,11-12 Batch: WG1632450-2 WG1632450-3								
4-Nitroaniline	89		75		51-143	17		30
Dibenzofuran	67		55		40-140	20		30
1,2,4,5-Tetrachlorobenzene	61		53		2-134	14		30
Acetophenone	67		57		39-129	16		30
2,4,6-Trichlorophenol	68		56		30-130	19		30
p-Chloro-m-cresol	71		59		23-97	18		30
2-Chlorophenol	72		63		27-123	13		30
2,4-Dichlorophenol	76		64		30-130	17		30
2,4-Dimethylphenol	72		59		30-130	20		30
2-Nitrophenol	91		79		30-130	14		30
4-Nitrophenol	82	Q	67		10-80	20		30
2,4-Dinitrophenol	52		35		20-130	39	Q	30
4,6-Dinitro-o-cresol	89		62		20-164	36	Q	30
Phenol	57		49		12-110	15		30
2-Methylphenol	70		59		30-130	17		30
3-Methylphenol/4-Methylphenol	80		65		30-130	21		30
2,4,5-Trichlorophenol	66		56		30-130	16		30
Carbazole	68		56		55-144	19		30
Atrazine	66		53		40-140	22		30
Benzaldehyde	66		58		40-140	13		30
Caprolactam	47		40		10-130	16		30
2,3,4,6-Tetrachlorophenol	61		45		40-140	30		30

# Lab Control Sample Analysis

## Batch Quality Control

**Project Name:** BATH SIGNIFY OFFSITE GW SAMPLI  
**Project Number:** 0127981-025

**Lab Number:** L2221593  
**Report Date:** 05/26/22

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
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Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 06,11-12 Batch: WG1632450-2 WG1632450-3

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
2-Fluorophenol	64		56		21-120
Phenol-d6	55		47		10-120
Nitrobenzene-d5	79		69		23-120
2-Fluorobiphenyl	68		57		15-120
2,4,6-Tribromophenol	70		58		10-120
4-Terphenyl-d14	64		51		41-149

# Lab Control Sample Analysis

## Batch Quality Control

**Project Name:** BATH SIGNIFY OFFSITE GW SAMPLI  
**Project Number:** 0127981-025

**Lab Number:** L2221593  
**Report Date:** 05/26/22

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS-SIM - Westborough Lab Associated sample(s): 06,11-12 Batch: WG1632451-2 WG1632451-3								
Acenaphthene	70		72		40-140	3		40
2-Chloronaphthalene	70		72		40-140	3		40
Fluoranthene	68		68		40-140	0		40
Hexachlorobutadiene	68		72		40-140	6		40
Naphthalene	69		71		40-140	3		40
Benzo(a)anthracene	67		68		40-140	1		40
Benzo(a)pyrene	61		62		40-140	2		40
Benzo(b)fluoranthene	68		73		40-140	7		40
Benzo(k)fluoranthene	74		70		40-140	6		40
Chrysene	69		68		40-140	1		40
Acenaphthylene	65		66		40-140	2		40
Anthracene	67		68		40-140	1		40
Benzo(ghi)perylene	70		68		40-140	3		40
Fluorene	71		72		40-140	1		40
Phenanthrene	69		70		40-140	1		40
Dibenzo(a,h)anthracene	72		72		40-140	0		40
Indeno(1,2,3-cd)pyrene	72		72		40-140	0		40
Pyrene	69		68		40-140	1		40
2-Methylnaphthalene	69		72		40-140	4		40
Pentachlorophenol	57		38	Q	40-140	40		40
Hexachlorobenzene	76		78		40-140	3		40
Hexachloroethane	75		82		40-140	9		40

# Lab Control Sample Analysis

## Batch Quality Control

**Project Name:** BATH SIGNIFY OFFSITE GW SAMPLI  
**Project Number:** 0127981-025

**Lab Number:** L2221593  
**Report Date:** 05/26/22

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
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Semivolatile Organics by GC/MS-SIM - Westborough Lab Associated sample(s): 06,11-12 Batch: WG1632451-2 WG1632451-3

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
2-Fluorophenol	60		65		21-120
Phenol-d6	53		55		10-120
Nitrobenzene-d5	70		73		23-120
2-Fluorobiphenyl	65		67		15-120
2,4,6-Tribromophenol	83		84		10-120
4-Terphenyl-d14	65		64		41-149

# Lab Control Sample Analysis

## Batch Quality Control

**Project Name:** BATH SIGNIFY OFFSITE GW SAMPLI  
**Project Number:** 0127981-025

**Lab Number:** L2221593  
**Report Date:** 05/26/22

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 08-09 Batch: WG1632944-2 WG1632944-3								
Bis(2-chloroethyl)ether	65		76		40-140	16		30
3,3'-Dichlorobenzidine	61		44		40-140	32	Q	30
2,4-Dinitrotoluene	68		84		48-143	21		30
2,6-Dinitrotoluene	63		79		40-140	23		30
4-Chlorophenyl phenyl ether	66		80		40-140	19		30
4-Bromophenyl phenyl ether	64		79		40-140	21		30
Bis(2-chloroisopropyl)ether	67		72		40-140	7		30
Bis(2-chloroethoxy)methane	67		74		40-140	10		30
Hexachlorocyclopentadiene	44		56		40-140	24		30
Isophorone	61		69		40-140	12		30
Nitrobenzene	65		76		40-140	16		30
NDPA/DPA	69		66		40-140	4		30
n-Nitrosodi-n-propylamine	65		76		29-132	16		30
Bis(2-ethylhexyl)phthalate	72		92		40-140	24		30
Butyl benzyl phthalate	65		85		40-140	27		30
Di-n-butylphthalate	67		83		40-140	21		30
Di-n-octylphthalate	67		93		40-140	33	Q	30
Diethyl phthalate	68		82		40-140	19		30
Dimethyl phthalate	64		76		40-140	17		30
Biphenyl	64		76		40-140	17		30
4-Chloroaniline	56		59		40-140	5		30
2-Nitroaniline	66		81		52-143	20		30
3-Nitroaniline	66		79		25-145	18		30

# Lab Control Sample Analysis

## Batch Quality Control

**Project Name:** BATH SIGNIFY OFFSITE GW SAMPLI  
**Project Number:** 0127981-025

**Lab Number:** L2221593  
**Report Date:** 05/26/22

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 08-09 Batch: WG1632944-2 WG1632944-3								
4-Nitroaniline	67		85		51-143	24		30
Dibenzofuran	70		84		40-140	18		30
1,2,4,5-Tetrachlorobenzene	56		67		2-134	18		30
Acetophenone	65		77		39-129	17		30
2,4,6-Trichlorophenol	64		76		30-130	17		30
p-Chloro-m-cresol	67		82		23-97	20		30
2-Chlorophenol	65		71		27-123	9		30
2,4-Dichlorophenol	66		74		30-130	11		30
2,4-Dimethylphenol	64		58		30-130	10		30
2-Nitrophenol	67		78		30-130	15		30
4-Nitrophenol	60		84	Q	10-80	33	Q	30
2,4-Dinitrophenol	69		79		20-130	14		30
4,6-Dinitro-o-cresol	71		93		20-164	27		30
Phenol	48		47		12-110	2		30
2-Methylphenol	64		62		30-130	3		30
3-Methylphenol/4-Methylphenol	62		65		30-130	5		30
2,4,5-Trichlorophenol	64		79		30-130	21		30
Carbazole	73		91		55-144	22		30
Atrazine	57		78		40-140	31	Q	30
Benzaldehyde	67		75		40-140	11		30
Caprolactam	33		43		10-130	26		30
2,3,4,6-Tetrachlorophenol	62		82		40-140	28		30

# Lab Control Sample Analysis

## Batch Quality Control

**Project Name:** BATH SIGNIFY OFFSITE GW SAMPLI  
**Project Number:** 0127981-025

**Lab Number:** L2221593  
**Report Date:** 05/26/22

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
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Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 08-09 Batch: WG1632944-2 WG1632944-3

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
2-Fluorophenol	61		58		21-120
Phenol-d6	47		45		10-120
Nitrobenzene-d5	66		74		23-120
2-Fluorobiphenyl	62		71		15-120
2,4,6-Tribromophenol	67		83		10-120
4-Terphenyl-d14	69		84		41-149

# Lab Control Sample Analysis

## Batch Quality Control

**Project Name:** BATH SIGNIFY OFFSITE GW SAMPLI  
**Project Number:** 0127981-025

**Lab Number:** L2221593  
**Report Date:** 05/26/22

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS-SIM - Westborough Lab Associated sample(s): 08-09 Batch: WG1632945-2 WG1632945-3								
Acenaphthene	100		77		40-140	26		40
2-Chloronaphthalene	94		77		40-140	20		40
Fluoranthene	104		80		40-140	26		40
Hexachlorobutadiene	79		67		40-140	16		40
Naphthalene	124		88		40-140	34		40
Benzo(a)anthracene	104		79		40-140	27		40
Benzo(a)pyrene	97		74		40-140	27		40
Benzo(b)fluoranthene	116		92		40-140	23		40
Benzo(k)fluoranthene	114		85		40-140	29		40
Chrysene	106		83		40-140	24		40
Acenaphthylene	91		71		40-140	25		40
Anthracene	103		80		40-140	25		40
Benzo(ghi)perylene	97		75		40-140	26		40
Fluorene	104		81		40-140	25		40
Phenanthrene	105		81		40-140	26		40
Dibenzo(a,h)anthracene	106		81		40-140	27		40
Indeno(1,2,3-cd)pyrene	105		80		40-140	27		40
Pyrene	104		80		40-140	26		40
2-Methylnaphthalene	103		79		40-140	26		40
Pentachlorophenol	80		63		40-140	24		40
Hexachlorobenzene	106		85		40-140	22		40
Hexachloroethane	83		74		40-140	11		40

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**Project Number:** 0127981-025

**Lab Number:** L2221593  
**Report Date:** 05/26/22

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
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Semivolatile Organics by GC/MS-SIM - Westborough Lab Associated sample(s): 08-09 Batch: WG1632945-2 WG1632945-3

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
2-Fluorophenol	75		58		21-120
Phenol-d6	62		48		10-120
Nitrobenzene-d5	94		75		23-120
2-Fluorobiphenyl	84		69		15-120
2,4,6-Tribromophenol	121	Q	95		10-120
4-Terphenyl-d14	97		79		41-149

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**Project Name:** BATH SIGNIFY OFFSITE GW SAMPLI  
**Project Number:** 0127981-025

**Lab Number:** L2221593  
**Report Date:** 05/26/22

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Perfluorinated Alkyl Acids by Isotope Dilution - Mansfield Lab Associated sample(s): 05,07,09-10,12-13 Batch: WG1635192-2								
Perfluorobutanoic Acid (PFBA)	93		-		67-148	-		30
Perfluoropentanoic Acid (PFPeA)	92		-		63-161	-		30
Perfluorobutanesulfonic Acid (PFBS)	91		-		65-157	-		30
Perfluorohexanoic Acid (PFHxA)	93		-		69-168	-		30
Perfluoroheptanoic Acid (PFHpA)	90		-		58-159	-		30
Perfluorohexanesulfonic Acid (PFHxS)	103		-		69-177	-		30
Perfluorooctanoic Acid (PFOA)	95		-		63-159	-		30
1H,1H,2H,2H-Perfluorooctanesulfonic Acid (6:2FTS)	97		-		49-187	-		30
Perfluoroheptanesulfonic Acid (PFHpS)	96		-		61-179	-		30
Perfluorononanoic Acid (PFNA)	92		-		68-171	-		30
Perfluorooctanesulfonic Acid (PFOS)	96		-		52-151	-		30
Perfluorodecanoic Acid (PFDA)	91		-		63-171	-		30
1H,1H,2H,2H-Perfluorodecanesulfonic Acid (8:2FTS)	104		-		56-173	-		30
N-Methyl Perfluorooctanesulfonamidoacetic Acid (NMeFOSAA)	89		-		60-166	-		30
Perfluoroundecanoic Acid (PFUnA)	96		-		60-153	-		30
Perfluorodecanesulfonic Acid (PFDS)	93		-		38-156	-		30
Perfluorooctanesulfonamide (FOSA)	93		-		46-170	-		30
N-Ethyl Perfluorooctanesulfonamidoacetic Acid (NEtFOSAA)	103		-		45-170	-		30
Perfluorododecanoic Acid (PFDoA)	94		-		67-153	-		30
Perfluorotridecanoic Acid (PFTrDA)	101		-		48-158	-		30
Perfluorotetradecanoic Acid (PFTA)	99		-		59-182	-		30

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## Batch Quality Control

**Project Name:** BATH SIGNIFY OFFSITE GW SAMPLI  
**Project Number:** 0127981-025

**Lab Number:** L2221593  
**Report Date:** 05/26/22

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
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Perfluorinated Alkyl Acids by Isotope Dilution - Mansfield Lab Associated sample(s): 05,07,09-10,12-13 Batch: WG1635192-2

Surrogate (Extracted Internal Standard)	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
Perfluoro[13C4]Butanoic Acid (MPFBA)	91				58-132
Perfluoro[13C5]Pentanoic Acid (M5PFPEA)	103				62-163
Perfluoro[2,3,4-13C3]Butanesulfonic Acid (M3PFBS)	88				70-131
Perfluoro[1,2,3,4,6-13C5]Hexanoic Acid (M5PFHxA)	90				57-129
Perfluoro[1,2,3,4-13C4]Heptanoic Acid (M4PFHpA)	92				60-129
Perfluoro[1,2,3-13C3]Hexanesulfonic Acid (M3PFHxS)	87				71-134
Perfluoro[13C8]Octanoic Acid (M8PFOA)	89				62-129
1H,1H,2H-Perfluoro[1,2-13C2]Octanesulfonic Acid (M2-6:2FTS)	95				14-147
Perfluoro[13C9]Nonanoic Acid (M9PFNA)	94				59-139
Perfluoro[13C8]Octanesulfonic Acid (M8PFOS)	89				69-131
Perfluoro[1,2,3,4,5,6-13C6]Decanoic Acid (M6PFDA)	92				62-124
1H,1H,2H-Perfluoro[1,2-13C2]Decanesulfonic Acid (M2-8:2FTS)	103				10-162
N-Deuteriomethylperfluoro-1-octanesulfonamidoacetic Acid (d3-NMeFOSAA)	86				24-116
Perfluoro[1,2,3,4,5,6,7-13C7]Undecanoic Acid (M7-PFDA)	97				55-137
Perfluoro[13C8]Octanesulfonamide (M8FOSA)	48				10-112
N-Deuterioethylperfluoro-1-octanesulfonamidoacetic Acid (d5-NEtFOSAA)	74				27-126
Perfluoro[1,2-13C2]Dodecanoic Acid (MPFDOA)	93				48-131
Perfluoro[1,2-13C2]Tetradecanoic Acid (M2PFTEDA)	86				22-136

# Lab Control Sample Analysis

## Batch Quality Control

**Project Name:** BATH SIGNIFY OFFSITE GW SAMPLI  
**Project Number:** 0127981-025

**Lab Number:** L2221593  
**Report Date:** 05/26/22

<b>Parameter</b>	<i>LCS</i> <i>%Recovery</i>	<i>Qual</i>	<i>LCSD</i> <i>%Recovery</i>	<i>Qual</i>	<i>%Recovery</i> <i>Limits</i>	<i>RPD</i>	<i>Qual</i>	<i>RPD</i> <i>Limits</i>
Perfluorinated Alkyl Acids by Isotope Dilution - Mansfield Lab Associated sample(s): 05,07,09-10,12-13 Batch: WG1635192-2								
Perfluorooctanesulfonamide (FOSA)	112	-	-	-	46-170	-	-	30

<i>Surrogate (Extracted Internal Standard)</i>	<i>LCS</i> <i>%Recovery</i>	<i>Qual</i>	<i>LCSD</i> <i>%Recovery</i>	<i>Qual</i>	<i>Acceptance Criteria</i>
Perfluoro[13C8]Octanesulfonamide (M8FOSA)	71	-	-	-	10-112

# Matrix Spike Analysis

## Batch Quality Control

**Project Name:** BATH SIGNIFY OFFSITE GW SAMPLI  
**Project Number:** 0127981-025

**Lab Number:** L2221593  
**Report Date:** 05/26/22

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Recovery Qual	Limits	RPD	Qual	RPD Limits
Perfluorinated Alkyl Acids by Isotope Dilution - Mansfield Lab Associated sample(s): 05,07,09-10,12-13 QC Batch ID: WG1635192-3 WG1635192-4 QC Sample: L222134-14 Client ID: MS Sample												
Perfluorobutanoic Acid (PFBA)	2.29	36.7	36.2	92		36.5	93		67-148	1		30
Perfluoropentanoic Acid (PFPeA)	4.02	36.7	37.9	92		38.6	94		63-161	2		30
Perfluorobutanesulfonic Acid (PFBS)	6.38	32.6	35.6	90		37.8	96		65-157	6		30
1H,1H,2H,2H-Perfluorohexanesulfonic Acid (4:2FTS)	ND	34.4	35.2	102		34.7	101		37-219	1		30
Perfluorohexanoic Acid (PFHxA)	3.58	36.7	36.7	90		37.7	93		69-168	3		30
Perfluoropentanesulfonic Acid (PFPeS)	ND	34.6	33.9	98		33.0	95		52-156	3		30
Perfluoroheptanoic Acid (PFHpA)	3.14	36.7	38.1	95		37.9	94		58-159	1		30
Perfluorohexanesulfonic Acid (PFHxS)	0.849JF	33.6	36.9	107		36.5	106		69-177	1		30
Perfluorooctanoic Acid (PFOA)	7.22	36.7	44.2	101		40.5	90		63-159	9		30
1H,1H,2H,2H-Perfluorooctanesulfonic Acid (6:2FTS)	ND	34.9	33.4	96		34.3	98		49-187	3		30
Perfluoroheptanesulfonic Acid (PFHps)	ND	35	35.8	102		35.4	101		61-179	1		30
Perfluorononanoic Acid (PFNA)	1.32J	36.7	37.9	100		36.3	95		68-171	4		30
Perfluorooctanesulfonic Acid (PFOS)	8.62	34.1	43.3	102		43.0	101		52-151	1		30
Perfluorodecanoic Acid (PFDA)	0.387JF	36.7	35.7	96		33.7	90		63-171	6		30
1H,1H,2H,2H-Perfluorodecanesulfonic Acid (8:2FTS)	ND	35.2	36.1	102		39.4	112		56-173	9		30
Perfluorononanesulfonic Acid (PFNS)	ND	35.3	36.6	104		36.1	102		48-150	1		30
N-Methyl Perfluorooctanesulfonamidoacetic Acid (NMeFOSAA)	ND	36.7	43.0	117		37.2	101		60-166	14		30
Perfluoroundecanoic Acid (PFUnA)	ND	36.7	37.6	102		37.2	101		60-153	1		30
Perfluorodecanesulfonic Acid (PFDS)	ND	35.4	31.1	88		29.4	83		38-156	6		30
Perfluorooctanesulfonamide (FOSA)	ND	36.7	35.7	97		37.0F	101		46-170	4		30
N-Ethyl Perfluorooctanesulfonamidoacetic Acid (NEtFOSAA)	ND	36.7	40.4	110		36.1	98		45-170	11		30
Perfluorododecanoic Acid (PFDoA)	ND	36.7	36.6	100		32.2	88		67-153	13		30

# Matrix Spike Analysis

*Batch Quality Control*

**Project Name:** BATH SIGNIFY OFFSITE GW SAMPLI  
**Project Number:** 0127981-025

**Lab Number:** L2221593  
**Report Date:** 05/26/22

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Recovery Qual	Limits	RPD RPD	Qual	RPD Limits
Perfluorinated Alkyl Acids by Isotope Dilution - Mansfield Lab Associated sample(s): 05,07,09-10,12-13 QC Batch ID: WG1635192-3 WG1635192-4 QC Sample: L222134-14 Client ID: MS Sample												
Perfluorotridecanoic Acid (PFTrDA)	ND	36.7	35.2	96		32.4	88		48-158	8		30
Perfluorotetradecanoic Acid (PFTA)	ND	36.7	36.9	101		36.5	99		59-182	1		30

Surrogate (Extracted Internal Standard)	MS % Recovery	Qualifier	MSD % Recovery	Qualifier	Acceptance Criteria
1H,1H,2H,2H-Perfluoro[1,2-13C2]Decanesulfonic Acid (M2-8:2FTS)	105		95		10-162
1H,1H,2H,2H-Perfluoro[1,2-13C2]Hexanesulfonic Acid (M2-4:2FTS)	161	Q	157	Q	12-142
1H,1H,2H,2H-Perfluoro[1,2-13C2]Octanesulfonic Acid (M2-6:2FTS)	168	Q	159	Q	14-147
N-Deuteroethylperfluoro-1-octanesulfonamidoacetic Acid (d5-NEtFOSAA)	52		60		27-126
N-Deuteriomethylperfluoro-1-octanesulfonamidoacetic Acid (d3-NMeFOSAA)	51		61		24-116
Perfluoro[1,2,3,4,5,6,7-13C7]Undecanoic Acid (M7-PFUDA)	78		79		55-137
Perfluoro[1,2,3,4,5,6-13C6]Decanoic Acid (M6PFDA)	78		79		62-124
Perfluoro[1,2,3,4,6-13C5]Hexanoic Acid (M5PFHxA)	65		65		57-129
Perfluoro[1,2,3,4-13C4]Heptanoic Acid (M4PFHxA)	63		65		60-129
Perfluoro[1,2,3-13C3]Hexanesulfonic Acid (M3PFHxS)	85		83		71-134
Perfluoro[1,2-13C2]Dodecanoic Acid (MPFDOA)	69		77		48-131
Perfluoro[1,2-13C2]Tetradecanoic Acid (M2PFTEDA)	66		70		22-136
Perfluoro[13C4]Butanoic Acid (MPFBA)	81		81		58-132
Perfluoro[13C5]Pentanoic Acid (M5PFPEA)	98		98		62-163
Perfluoro[13C8]Octanesulfonamide (M8FOSA)	12		8	Q	10-112
Perfluoro[13C8]Octanesulfonic Acid (M8PFOS)	86		83		69-131
Perfluoro[13C8]Octanoic Acid (M8PFOA)	76		82		62-129
Perfluoro[13C9]Nonanoic Acid (M9PFNA)	80		80		59-139
Perfluoro[2,3,4-13C3]Butanesulfonic Acid (M3PFBS)	86		79		70-131

## METALS



**Project Name:** BATH SIGNIFY OFFSITE GW SAMPLI  
**Project Number:** 0127981-025

**Lab Number:** L2221593  
**Report Date:** 05/26/22

**SAMPLE RESULTS**

Lab ID: L2221593-06  
Client ID: MW26B-042522-1115  
Sample Location: Not Specified

Date Collected: 04/25/22 11:15  
Date Received: 04/26/22  
Field Prep: Not Specified

Sample Depth:

Matrix: Water

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
<b>Total Metals - Mansfield Lab</b>											
Aluminum, Total	3.76		mg/l	0.0100	0.00327	1	05/10/22 19:16 05/11/22 09:39	EPA 3005A	1,6020B	SV	
Antimony, Total	ND		mg/l	0.00400	0.00042	1	05/10/22 19:16 05/11/22 09:39	EPA 3005A	1,6020B	SV	
Arsenic, Total	0.00299		mg/l	0.00050	0.00016	1	05/10/22 19:16 05/11/22 09:39	EPA 3005A	1,6020B	SV	
Barium, Total	0.06636		mg/l	0.00050	0.00017	1	05/10/22 19:16 05/11/22 09:39	EPA 3005A	1,6020B	SV	
Beryllium, Total	0.00017	J	mg/l	0.00050	0.00010	1	05/10/22 19:16 05/11/22 09:39	EPA 3005A	1,6020B	SV	
Cadmium, Total	0.00011	J	mg/l	0.00020	0.00005	1	05/10/22 19:16 05/11/22 09:39	EPA 3005A	1,6020B	SV	
Calcium, Total	94.5		mg/l	0.100	0.0394	1	05/10/22 19:16 05/11/22 09:39	EPA 3005A	1,6020B	SV	
Chromium, Total	0.00644		mg/l	0.00100	0.00017	1	05/10/22 19:16 05/11/22 09:39	EPA 3005A	1,6020B	SV	
Cobalt, Total	0.00457		mg/l	0.00050	0.00016	1	05/10/22 19:16 05/11/22 09:39	EPA 3005A	1,6020B	SV	
Copper, Total	0.01349		mg/l	0.00100	0.00038	1	05/10/22 19:16 05/11/22 09:39	EPA 3005A	1,6020B	SV	
Iron, Total	8.71		mg/l	0.0500	0.0191	1	05/10/22 19:16 05/11/22 09:39	EPA 3005A	1,6020B	SV	
Lead, Total	0.00571		mg/l	0.00100	0.00034	1	05/10/22 19:16 05/11/22 09:39	EPA 3005A	1,6020B	SV	
Magnesium, Total	28.8		mg/l	0.0700	0.0242	1	05/10/22 19:16 05/11/22 09:39	EPA 3005A	1,6020B	SV	
Manganese, Total	0.3044		mg/l	0.00100	0.00044	1	05/10/22 19:16 05/11/22 09:39	EPA 3005A	1,6020B	SV	
Mercury, Total	ND		mg/l	0.00020	0.00009	1	05/10/22 22:22 05/11/22 08:28	EPA 7470A	1,7470A	DMB	
Nickel, Total	0.01050		mg/l	0.00200	0.00055	1	05/10/22 19:16 05/11/22 09:39	EPA 3005A	1,6020B	SV	
Potassium, Total	1.70		mg/l	0.100	0.0309	1	05/10/22 19:16 05/11/22 09:39	EPA 3005A	1,6020B	SV	
Selenium, Total	ND		mg/l	0.00500	0.00173	1	05/10/22 19:16 05/11/22 09:39	EPA 3005A	1,6020B	SV	
Silver, Total	ND		mg/l	0.00040	0.00016	1	05/10/22 19:16 05/11/22 09:39	EPA 3005A	1,6020B	SV	
Sodium, Total	6.05		mg/l	0.100	0.0293	1	05/10/22 19:16 05/11/22 09:39	EPA 3005A	1,6020B	SV	
Thallium, Total	0.00016	J	mg/l	0.00100	0.00014	1	05/10/22 19:16 05/11/22 09:39	EPA 3005A	1,6020B	SV	
Vanadium, Total	0.00575		mg/l	0.00500	0.00157	1	05/10/22 19:16 05/11/22 09:39	EPA 3005A	1,6020B	SV	
Zinc, Total	0.04546		mg/l	0.01000	0.00341	1	05/10/22 19:16 05/11/22 09:39	EPA 3005A	1,6020B	SV	



**Project Name:** BATH SIGNIFY OFFSITE GW SAMPLI  
**Project Number:** 0127981-025

**Lab Number:** L2221593  
**Report Date:** 05/26/22

**SAMPLE RESULTS**

Lab ID: L2221593-08  
Client ID: MW25B-042522-1440  
Sample Location: Not Specified

Date Collected: 04/25/22 14:40  
Date Received: 04/26/22  
Field Prep: Not Specified

Sample Depth:

Matrix: Water

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
<b>Total Metals - Mansfield Lab</b>											
Aluminum, Total	17.2		mg/l	0.0100	0.00327	1	05/10/22 19:16 05/11/22 09:43	EPA 3005A	1,6020B	SV	
Antimony, Total	ND		mg/l	0.00400	0.00042	1	05/10/22 19:16 05/11/22 09:43	EPA 3005A	1,6020B	SV	
Arsenic, Total	0.01366		mg/l	0.00050	0.00016	1	05/10/22 19:16 05/11/22 09:43	EPA 3005A	1,6020B	SV	
Barium, Total	0.2001		mg/l	0.00050	0.00017	1	05/10/22 19:16 05/11/22 09:43	EPA 3005A	1,6020B	SV	
Beryllium, Total	0.00058		mg/l	0.00050	0.00010	1	05/10/22 19:16 05/11/22 09:43	EPA 3005A	1,6020B	SV	
Cadmium, Total	0.00034		mg/l	0.00020	0.00005	1	05/10/22 19:16 05/11/22 09:43	EPA 3005A	1,6020B	SV	
Calcium, Total	74.1		mg/l	0.100	0.0394	1	05/10/22 19:16 05/11/22 09:43	EPA 3005A	1,6020B	SV	
Chromium, Total	0.03500		mg/l	0.00100	0.00017	1	05/10/22 19:16 05/11/22 09:43	EPA 3005A	1,6020B	SV	
Cobalt, Total	0.01696		mg/l	0.00050	0.00016	1	05/10/22 19:16 05/11/22 09:43	EPA 3005A	1,6020B	SV	
Copper, Total	0.06363		mg/l	0.00100	0.00038	1	05/10/22 19:16 05/11/22 09:43	EPA 3005A	1,6020B	SV	
Iron, Total	34.4		mg/l	0.0500	0.0191	1	05/10/22 19:16 05/11/22 09:43	EPA 3005A	1,6020B	SV	
Lead, Total	0.01846		mg/l	0.00100	0.00034	1	05/10/22 19:16 05/11/22 09:43	EPA 3005A	1,6020B	SV	
Magnesium, Total	28.1		mg/l	0.0700	0.0242	1	05/10/22 19:16 05/11/22 09:43	EPA 3005A	1,6020B	SV	
Manganese, Total	0.9666		mg/l	0.00100	0.00044	1	05/10/22 19:16 05/11/22 09:43	EPA 3005A	1,6020B	SV	
Mercury, Total	0.00011	J	mg/l	0.00020	0.00009	1	05/10/22 22:22 05/11/22 08:18	EPA 7470A	1,7470A	DMB	
Nickel, Total	0.03589		mg/l	0.00200	0.00055	1	05/10/22 19:16 05/11/22 09:43	EPA 3005A	1,6020B	SV	
Potassium, Total	138.		mg/l	0.100	0.0309	1	05/10/22 19:16 05/11/22 09:43	EPA 3005A	1,6020B	SV	
Selenium, Total	0.00256	J	mg/l	0.00500	0.00173	1	05/10/22 19:16 05/11/22 09:43	EPA 3005A	1,6020B	SV	
Silver, Total	0.00022	J	mg/l	0.00040	0.00016	1	05/10/22 19:16 05/11/22 09:43	EPA 3005A	1,6020B	SV	
Sodium, Total	77.1		mg/l	0.100	0.0293	1	05/10/22 19:16 05/11/22 09:43	EPA 3005A	1,6020B	SV	
Thallium, Total	0.00025	J	mg/l	0.00100	0.00014	1	05/10/22 19:16 05/11/22 09:43	EPA 3005A	1,6020B	SV	
Vanadium, Total	0.03236		mg/l	0.00500	0.00157	1	05/10/22 19:16 05/11/22 09:43	EPA 3005A	1,6020B	SV	
Zinc, Total	0.2076		mg/l	0.01000	0.00341	1	05/10/22 19:16 05/11/22 09:43	EPA 3005A	1,6020B	SV	



**Project Name:** BATH SIGNIFY OFFSITE GW SAMPLI  
**Project Number:** 0127981-025

**Lab Number:** L2221593  
**Report Date:** 05/26/22

**SAMPLE RESULTS**

Lab ID: L2221593-09  
Client ID: MW23A-042522-1515  
Sample Location: Not Specified

Date Collected: 04/25/22 15:15  
Date Received: 04/26/22  
Field Prep: Not Specified

Sample Depth:

Matrix: Water

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
<b>Total Metals - Mansfield Lab</b>											
Aluminum, Total	0.860		mg/l	0.0100	0.00327	1	05/10/22 19:16 05/11/22 09:48	EPA 3005A	1,6020B	SV	
Antimony, Total	0.00044	J	mg/l	0.00400	0.00042	1	05/10/22 19:16 05/11/22 09:48	EPA 3005A	1,6020B	SV	
Arsenic, Total	0.00096		mg/l	0.00050	0.00016	1	05/10/22 19:16 05/11/22 09:48	EPA 3005A	1,6020B	SV	
Barium, Total	0.1186		mg/l	0.00050	0.00017	1	05/10/22 19:16 05/11/22 09:48	EPA 3005A	1,6020B	SV	
Beryllium, Total	ND		mg/l	0.00050	0.00010	1	05/10/22 19:16 05/11/22 09:48	EPA 3005A	1,6020B	SV	
Cadmium, Total	ND		mg/l	0.00020	0.00005	1	05/10/22 19:16 05/11/22 09:48	EPA 3005A	1,6020B	SV	
Calcium, Total	111.		mg/l	0.100	0.0394	1	05/10/22 19:16 05/11/22 09:48	EPA 3005A	1,6020B	SV	
Chromium, Total	0.00347		mg/l	0.00100	0.00017	1	05/10/22 19:16 05/11/22 09:48	EPA 3005A	1,6020B	SV	
Cobalt, Total	0.00062		mg/l	0.00050	0.00016	1	05/10/22 19:16 05/11/22 09:48	EPA 3005A	1,6020B	SV	
Copper, Total	0.00184		mg/l	0.00100	0.00038	1	05/10/22 19:16 05/11/22 09:48	EPA 3005A	1,6020B	SV	
Iron, Total	1.36		mg/l	0.0500	0.0191	1	05/10/22 19:16 05/11/22 09:48	EPA 3005A	1,6020B	SV	
Lead, Total	0.00115		mg/l	0.00100	0.00034	1	05/10/22 19:16 05/11/22 09:48	EPA 3005A	1,6020B	SV	
Magnesium, Total	31.9		mg/l	0.0700	0.0242	1	05/10/22 19:16 05/11/22 09:48	EPA 3005A	1,6020B	SV	
Manganese, Total	0.2149		mg/l	0.00100	0.00044	1	05/10/22 19:16 05/11/22 09:48	EPA 3005A	1,6020B	SV	
Mercury, Total	0.00010	J	mg/l	0.00020	0.00009	1	05/10/22 22:22 05/11/22 08:31	EPA 7470A	1,7470A	DMB	
Nickel, Total	0.00244		mg/l	0.00200	0.00055	1	05/10/22 19:16 05/11/22 09:48	EPA 3005A	1,6020B	SV	
Potassium, Total	4.14		mg/l	0.100	0.0309	1	05/10/22 19:16 05/11/22 09:48	EPA 3005A	1,6020B	SV	
Selenium, Total	ND		mg/l	0.00500	0.00173	1	05/10/22 19:16 05/11/22 09:48	EPA 3005A	1,6020B	SV	
Silver, Total	ND		mg/l	0.00040	0.00016	1	05/10/22 19:16 05/11/22 09:48	EPA 3005A	1,6020B	SV	
Sodium, Total	10.8		mg/l	0.100	0.0293	1	05/10/22 19:16 05/11/22 09:48	EPA 3005A	1,6020B	SV	
Thallium, Total	ND		mg/l	0.00100	0.00014	1	05/10/22 19:16 05/11/22 09:48	EPA 3005A	1,6020B	SV	
Vanadium, Total	0.00173	J	mg/l	0.00500	0.00157	1	05/10/22 19:16 05/11/22 09:48	EPA 3005A	1,6020B	SV	
Zinc, Total	0.01148		mg/l	0.01000	0.00341	1	05/10/22 19:16 05/11/22 09:48	EPA 3005A	1,6020B	SV	



**Project Name:** BATH SIGNIFY OFFSITE GW SAMPLI  
**Project Number:** 0127981-025

**Lab Number:** L2221593  
**Report Date:** 05/26/22

**SAMPLE RESULTS**

Lab ID:	L2221593-11	Date Collected:	04/25/22 00:00
Client ID:	4125-042522-0002	Date Received:	04/26/22
Sample Location:	Not Specified	Field Prep:	Not Specified

Sample Depth:

Matrix: Water

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
<b>Total Metals - Mansfield Lab</b>											
Aluminum, Total	3.62		mg/l	0.0100	0.00327	1	05/10/22 19:16 05/11/22 09:53	EPA 3005A	1,6020B	SV	
Antimony, Total	ND		mg/l	0.00400	0.00042	1	05/10/22 19:16 05/11/22 09:53	EPA 3005A	1,6020B	SV	
Arsenic, Total	0.00256		mg/l	0.00050	0.00016	1	05/10/22 19:16 05/11/22 09:53	EPA 3005A	1,6020B	SV	
Barium, Total	0.06716		mg/l	0.00050	0.00017	1	05/10/22 19:16 05/11/22 09:53	EPA 3005A	1,6020B	SV	
Beryllium, Total	0.00016	J	mg/l	0.00050	0.00010	1	05/10/22 19:16 05/11/22 09:53	EPA 3005A	1,6020B	SV	
Cadmium, Total	0.00009	J	mg/l	0.00020	0.00005	1	05/10/22 19:16 05/11/22 09:53	EPA 3005A	1,6020B	SV	
Calcium, Total	94.1		mg/l	0.100	0.0394	1	05/10/22 19:16 05/11/22 09:53	EPA 3005A	1,6020B	SV	
Chromium, Total	0.00613		mg/l	0.00100	0.00017	1	05/10/22 19:16 05/11/22 09:53	EPA 3005A	1,6020B	SV	
Cobalt, Total	0.00415		mg/l	0.00050	0.00016	1	05/10/22 19:16 05/11/22 09:53	EPA 3005A	1,6020B	SV	
Copper, Total	0.01236		mg/l	0.00100	0.00038	1	05/10/22 19:16 05/11/22 09:53	EPA 3005A	1,6020B	SV	
Iron, Total	7.77		mg/l	0.0500	0.0191	1	05/10/22 19:16 05/11/22 09:53	EPA 3005A	1,6020B	SV	
Lead, Total	0.00532		mg/l	0.00100	0.00034	1	05/10/22 19:16 05/11/22 09:53	EPA 3005A	1,6020B	SV	
Magnesium, Total	28.1		mg/l	0.0700	0.0242	1	05/10/22 19:16 05/11/22 09:53	EPA 3005A	1,6020B	SV	
Manganese, Total	0.2769		mg/l	0.00100	0.00044	1	05/10/22 19:16 05/11/22 09:53	EPA 3005A	1,6020B	SV	
Mercury, Total	0.00012	J	mg/l	0.00020	0.00009	1	05/10/22 22:22 05/11/22 08:34	EPA 7470A	1,7470A	DMB	
Nickel, Total	0.00975		mg/l	0.00200	0.00055	1	05/10/22 19:16 05/11/22 09:53	EPA 3005A	1,6020B	SV	
Potassium, Total	1.66		mg/l	0.100	0.0309	1	05/10/22 19:16 05/11/22 09:53	EPA 3005A	1,6020B	SV	
Selenium, Total	ND		mg/l	0.00500	0.00173	1	05/10/22 19:16 05/11/22 09:53	EPA 3005A	1,6020B	SV	
Silver, Total	ND		mg/l	0.00040	0.00016	1	05/10/22 19:16 05/11/22 09:53	EPA 3005A	1,6020B	SV	
Sodium, Total	6.10		mg/l	0.100	0.0293	1	05/10/22 19:16 05/11/22 09:53	EPA 3005A	1,6020B	SV	
Thallium, Total	ND		mg/l	0.00100	0.00014	1	05/10/22 19:16 05/11/22 09:53	EPA 3005A	1,6020B	SV	
Vanadium, Total	0.00573		mg/l	0.00500	0.00157	1	05/10/22 19:16 05/11/22 09:53	EPA 3005A	1,6020B	SV	
Zinc, Total	0.04200		mg/l	0.01000	0.00341	1	05/10/22 19:16 05/11/22 09:53	EPA 3005A	1,6020B	SV	



**Project Name:** BATH SIGNIFY OFFSITE GW SAMPLI  
**Project Number:** 0127981-025

**Lab Number:** L2221593  
**Report Date:** 05/26/22

**SAMPLE RESULTS**

Lab ID:	L2221593-12	Date Collected:	04/25/22 00:00
Client ID:	4125-042522-0003	Date Received:	04/26/22
Sample Location:	Not Specified	Field Prep:	Not Specified

Sample Depth:

Matrix: Water

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
<b>Total Metals - Mansfield Lab</b>											
Aluminum, Total	0.00348	J	mg/l	0.0100	0.00327	1	05/10/22 19:16 05/11/22 09:58	EPA 3005A	1,6020B	SV	
Antimony, Total	ND		mg/l	0.00400	0.00042	1	05/10/22 19:16 05/11/22 09:58	EPA 3005A	1,6020B	SV	
Arsenic, Total	ND		mg/l	0.00050	0.00016	1	05/10/22 19:16 05/11/22 09:58	EPA 3005A	1,6020B	SV	
Barium, Total	ND		mg/l	0.00050	0.00017	1	05/10/22 19:16 05/11/22 09:58	EPA 3005A	1,6020B	SV	
Beryllium, Total	ND		mg/l	0.00050	0.00010	1	05/10/22 19:16 05/11/22 09:58	EPA 3005A	1,6020B	SV	
Cadmium, Total	ND		mg/l	0.00020	0.00005	1	05/10/22 19:16 05/11/22 09:58	EPA 3005A	1,6020B	SV	
Calcium, Total	ND		mg/l	0.100	0.0394	1	05/10/22 19:16 05/11/22 09:58	EPA 3005A	1,6020B	SV	
Chromium, Total	ND		mg/l	0.00100	0.00017	1	05/10/22 19:16 05/11/22 09:58	EPA 3005A	1,6020B	SV	
Cobalt, Total	ND		mg/l	0.00050	0.00016	1	05/10/22 19:16 05/11/22 09:58	EPA 3005A	1,6020B	SV	
Copper, Total	ND		mg/l	0.00100	0.00038	1	05/10/22 19:16 05/11/22 09:58	EPA 3005A	1,6020B	SV	
Iron, Total	0.0326	J	mg/l	0.0500	0.0191	1	05/10/22 19:16 05/11/22 09:58	EPA 3005A	1,6020B	SV	
Lead, Total	ND		mg/l	0.00100	0.00034	1	05/10/22 19:16 05/11/22 09:58	EPA 3005A	1,6020B	SV	
Magnesium, Total	ND		mg/l	0.0700	0.0242	1	05/10/22 19:16 05/11/22 09:58	EPA 3005A	1,6020B	SV	
Manganese, Total	ND		mg/l	0.00100	0.00044	1	05/10/22 19:16 05/11/22 09:58	EPA 3005A	1,6020B	SV	
Mercury, Total	0.00016	J	mg/l	0.00020	0.00009	1	05/10/22 22:22 05/11/22 08:45	EPA 7470A	1,7470A	DMB	
Nickel, Total	ND		mg/l	0.00200	0.00055	1	05/10/22 19:16 05/11/22 09:58	EPA 3005A	1,6020B	SV	
Potassium, Total	ND		mg/l	0.100	0.0309	1	05/10/22 19:16 05/11/22 09:58	EPA 3005A	1,6020B	SV	
Selenium, Total	ND		mg/l	0.00500	0.00173	1	05/10/22 19:16 05/11/22 09:58	EPA 3005A	1,6020B	SV	
Silver, Total	ND		mg/l	0.00040	0.00016	1	05/10/22 19:16 05/11/22 09:58	EPA 3005A	1,6020B	SV	
Sodium, Total	ND		mg/l	0.100	0.0293	1	05/10/22 19:16 05/11/22 09:58	EPA 3005A	1,6020B	SV	
Thallium, Total	ND		mg/l	0.00100	0.00014	1	05/10/22 19:16 05/11/22 09:58	EPA 3005A	1,6020B	SV	
Vanadium, Total	ND		mg/l	0.00500	0.00157	1	05/10/22 19:16 05/11/22 09:58	EPA 3005A	1,6020B	SV	
Zinc, Total	ND		mg/l	0.01000	0.00341	1	05/10/22 19:16 05/11/22 09:58	EPA 3005A	1,6020B	SV	



**Project Name:** BATH SIGNIFY OFFSITE GW SAMPLI  
**Project Number:** 0127981-025

**Lab Number:** L2221593  
**Report Date:** 05/26/22

## Method Blank Analysis Batch Quality Control

Parameter	Result Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
<b>Total Metals - Mansfield Lab for sample(s): 06,08-09,11-12 Batch: WG1636741-1</b>									
Mercury, Total	0.00009	J	mg/l	0.00020	0.00009	1	05/10/22 22:22	05/11/22 08:11	1,7470A DMB

### Prep Information

Digestion Method: EPA 7470A

Parameter	Result Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst	
<b>Total Metals - Mansfield Lab for sample(s): 06,08-09,11-12 Batch: WG1636764-1</b>										
Aluminum, Total	ND	mg/l	0.0100	0.00327	1	05/10/22 19:16	05/11/22 08:19	1,6020B	SV	
Antimony, Total	ND	mg/l	0.00400	0.00042	1	05/10/22 19:16	05/11/22 08:19	1,6020B	SV	
Arsenic, Total	ND	mg/l	0.00050	0.00016	1	05/10/22 19:16	05/11/22 08:19	1,6020B	SV	
Barium, Total	ND	mg/l	0.00050	0.00017	1	05/10/22 19:16	05/11/22 08:19	1,6020B	SV	
Beryllium, Total	ND	mg/l	0.00050	0.00010	1	05/10/22 19:16	05/11/22 08:19	1,6020B	SV	
Cadmium, Total	ND	mg/l	0.00020	0.00005	1	05/10/22 19:16	05/11/22 08:19	1,6020B	SV	
Calcium, Total	ND	mg/l	0.100	0.0394	1	05/10/22 19:16	05/11/22 08:19	1,6020B	SV	
Chromium, Total	ND	mg/l	0.00100	0.00017	1	05/10/22 19:16	05/11/22 08:19	1,6020B	SV	
Cobalt, Total	ND	mg/l	0.00050	0.00016	1	05/10/22 19:16	05/11/22 08:19	1,6020B	SV	
Copper, Total	ND	mg/l	0.00100	0.00038	1	05/10/22 19:16	05/11/22 08:19	1,6020B	SV	
Iron, Total	ND	mg/l	0.0500	0.0191	1	05/10/22 19:16	05/11/22 08:19	1,6020B	SV	
Lead, Total	ND	mg/l	0.00100	0.00034	1	05/10/22 19:16	05/11/22 08:19	1,6020B	SV	
Magnesium, Total	ND	mg/l	0.0700	0.0242	1	05/10/22 19:16	05/11/22 08:19	1,6020B	SV	
Manganese, Total	ND	mg/l	0.00100	0.00044	1	05/10/22 19:16	05/11/22 08:19	1,6020B	SV	
Nickel, Total	ND	mg/l	0.00200	0.00055	1	05/10/22 19:16	05/11/22 08:19	1,6020B	SV	
Potassium, Total	ND	mg/l	0.100	0.0309	1	05/10/22 19:16	05/11/22 08:19	1,6020B	SV	
Selenium, Total	ND	mg/l	0.00500	0.00173	1	05/10/22 19:16	05/11/22 08:19	1,6020B	SV	
Silver, Total	ND	mg/l	0.00040	0.00016	1	05/10/22 19:16	05/11/22 08:19	1,6020B	SV	
Sodium, Total	ND	mg/l	0.100	0.0293	1	05/10/22 19:16	05/11/22 08:19	1,6020B	SV	
Thallium, Total	0.00019	J	mg/l	0.00100	0.00014	1	05/10/22 19:16	05/11/22 08:19	1,6020B	SV
Vanadium, Total	ND	mg/l	0.00500	0.00157	1	05/10/22 19:16	05/11/22 08:19	1,6020B	SV	
Zinc, Total	ND	mg/l	0.01000	0.00341	1	05/10/22 19:16	05/11/22 08:19	1,6020B	SV	



**Project Name:** BATH SIGNIFY OFFSITE GW SAMPLI  
**Project Number:** 0127981-025

**Lab Number:** L2221593  
**Report Date:** 05/26/22

## Method Blank Analysis Batch Quality Control

### Prep Information

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Digestion Method: EPA 3005A



**Lab Control Sample Analysis**  
**Batch Quality Control**

**Project Name:** BATH SIGNIFY OFFSITE GW SAMPLI  
**Project Number:** 0127981-025

**Lab Number:** L2221593  
**Report Date:** 05/26/22

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 06,08-09,11-12 Batch: WG1636741-2								
Mercury, Total	96	-	-	-	80-120	-	-	-

# Lab Control Sample Analysis

## Batch Quality Control

**Project Name:** BATH SIGNIFY OFFSITE GW SAMPLI  
**Project Number:** 0127981-025

**Lab Number:** L2221593  
**Report Date:** 05/26/22

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 06,08-09,11-12 Batch: WG1636764-2					
Aluminum, Total	103	-	80-120	-	
Antimony, Total	93	-	80-120	-	
Arsenic, Total	104	-	80-120	-	
Barium, Total	101	-	80-120	-	
Beryllium, Total	111	-	80-120	-	
Cadmium, Total	102	-	80-120	-	
Calcium, Total	94	-	80-120	-	
Chromium, Total	98	-	80-120	-	
Cobalt, Total	94	-	80-120	-	
Copper, Total	94	-	80-120	-	
Iron, Total	108	-	80-120	-	
Lead, Total	105	-	80-120	-	
Magnesium, Total	105	-	80-120	-	
Manganese, Total	101	-	80-120	-	
Nickel, Total	96	-	80-120	-	
Potassium, Total	103	-	80-120	-	
Selenium, Total	108	-	80-120	-	
Silver, Total	93	-	80-120	-	
Sodium, Total	99	-	80-120	-	
Thallium, Total	101	-	80-120	-	
Vanadium, Total	100	-	80-120	-	

**Lab Control Sample Analysis**  
**Batch Quality Control**

**Project Name:** BATH SIGNIFY OFFSITE GW SAMPLI  
**Project Number:** 0127981-025

**Lab Number:** L2221593  
**Report Date:** 05/26/22

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 06,08-09,11-12 Batch: WG1636764-2					
Zinc, Total	98	-	80-120	-	-

**Matrix Spike Analysis**  
**Batch Quality Control**

**Project Name:** BATH SIGNIFY OFFSITE GW SAMPLI  
**Project Number:** 0127981-025

**Lab Number:** L2221593  
**Report Date:** 05/26/22

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	MSD Qual	MSD Found	MSD %Recovery	Recovery Qual Limits	RPD Qual	RPD Qual Limits
Total Metals - Mansfield Lab Associated sample(s): 06,08-09,11-12 QC Batch ID: WG1636741-3 QC Sample: L2221593-08 Client ID: MW25B-042522-1440										
Mercury, Total	0.00011J	0.005	0.00436	87	-	-	-	75-125	-	20

**Matrix Spike Analysis**  
**Batch Quality Control**

**Project Name:** BATH SIGNIFY OFFSITE GW SAMPLI  
**Project Number:** 0127981-025

**Lab Number:** L2221593  
**Report Date:** 05/26/22

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	MSD Found	MSD %Recovery	Recovery Limits	RPD	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 06,08-09,11-12 QC Batch ID: WG1636764-3 QC Sample: L2221886-01 Client ID: MS Sample									
Aluminum, Total	0.060	2	2.18	106	-	-	75-125	-	20
Antimony, Total	0.0010J	0.5	0.4502	90	-	-	75-125	-	20
Arsenic, Total	0.00184	0.12	0.1177	96	-	-	75-125	-	20
Barium, Total	0.0041	2	2.011	100	-	-	75-125	-	20
Beryllium, Total	ND	0.05	0.05321	106	-	-	75-125	-	20
Cadmium, Total	ND	0.053	0.05385	102	-	-	75-125	-	20
Calcium, Total	10.1	10	20.0	99	-	-	75-125	-	20
Chromium, Total	0.0007J	0.2	0.1989	99	-	-	75-125	-	20
Cobalt, Total	ND	0.5	0.4795	96	-	-	75-125	-	20
Copper, Total	0.0020	0.25	0.2419	96	-	-	75-125	-	20
Iron, Total	0.399	1	1.48	108	-	-	75-125	-	20
Lead, Total	0.0004J	0.53	0.5540	104	-	-	75-125	-	20
Magnesium, Total	0.990	10	11.8	108	-	-	75-125	-	20
Manganese, Total	0.0542	0.5	0.5658	102	-	-	75-125	-	20
Nickel, Total	ND	0.5	0.4831	97	-	-	75-125	-	20
Potassium, Total	1.53	10	12.2	107	-	-	75-125	-	20
Selenium, Total	ND	0.12	0.136	113	-	-	75-125	-	20
Silver, Total	ND	0.05	0.04632	93	-	-	75-125	-	20
Sodium, Total	15.0	10	24.0	90	-	-	75-125	-	20
Thallium, Total	0.0003J	0.12	0.1222	102	-	-	75-125	-	20
Vanadium, Total	ND	0.5	0.5052	101	-	-	75-125	-	20

**Matrix Spike Analysis**  
**Batch Quality Control**

**Project Name:** BATH SIGNIFY OFFSITE GW SAMPLI  
**Project Number:** 0127981-025

**Lab Number:** L2221593  
**Report Date:** 05/26/22

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	MSD Found	MSD %Recovery	Recovery Limits	RPD	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 06,08-09,11-12 QC Batch ID: WG1636764-3 QC Sample: L2221886-01 Client ID: MS Sample									
Zinc, Total	0.02707	0.5	0.5356	102	-	-	75-125	-	20

**Lab Duplicate Analysis**  
*Batch Quality Control*

**Project Name:** BATH SIGNIFY OFFSITE GW SAMPLI  
**Project Number:** 0127981-025

**Lab Number:** L2221593  
**Report Date:** 05/26/22

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 06,08-09,11-12 QC Batch ID: WG1636741-4 QC Sample: L2221593-08 Client ID: MW25B-042522-1440						
Mercury, Total	0.00011J	0.00010J	mg/l	NC		20
Total Metals - Mansfield Lab Associated sample(s): 06,08-09,11-12 QC Batch ID: WG1636764-4 QC Sample: L2221886-01 Client ID: DUP Sample						
Arsenic, Total	0.00184	0.00175	mg/l	5		20
Zinc, Total	0.02707	0.02763	mg/l	2		20

**Project Name:** BATH SIGNIFY OFFSITE GW SAMPLI  
**Project Number:** 0127981-025

Serial\_No:05262215:27  
**Lab Number:** L2221593  
**Report Date:** 05/26/22

### **Sample Receipt and Container Information**

Were project specific reporting limits specified? YES

#### **Cooler Information**

<b>Cooler</b>	<b>Custody Seal</b>
A	Absent

#### **Container Information**

<b>Container ID</b>	<b>Container Type</b>	<b>Cooler</b>	<b>Initial pH</b>	<b>Final pH</b>	<b>Temp deg C</b>	<b>Pres</b>	<b>Seal</b>	<b>Frozen Date/Time</b>	<b>Analysis(*)</b>
L2221593-01A	Vial HCl preserved	A	NA		3.5	Y	Absent		NYTCL-8260-R2(14)
L2221593-01B	Vial HCl preserved	A	NA		3.5	Y	Absent		NYTCL-8260-R2(14)
L2221593-02A	Vial HCl preserved	A	NA		3.5	Y	Absent		NYTCL-8260-R2(14)
L2221593-02B	Vial HCl preserved	A	NA		3.5	Y	Absent		NYTCL-8260-R2(14)
L2221593-02C	Vial HCl preserved	A	NA		3.5	Y	Absent		NYTCL-8260-R2(14)
L2221593-03A	Vial HCl preserved	A	NA		3.5	Y	Absent		NYTCL-8260-R2(14)
L2221593-03B	Vial HCl preserved	A	NA		3.5	Y	Absent		NYTCL-8260-R2(14)
L2221593-03C	Vial HCl preserved	A	NA		3.5	Y	Absent		NYTCL-8260-R2(14)
L2221593-04A	Vial HCl preserved	A	NA		3.5	Y	Absent		NYTCL-8260-R2(14)
L2221593-04B	Vial HCl preserved	A	NA		3.5	Y	Absent		NYTCL-8260-R2(14)
L2221593-04C	Vial HCl preserved	A	NA		3.5	Y	Absent		NYTCL-8260-R2(14)
L2221593-05A	Plastic 250ml unpreserved	A	NA		3.5	Y	Absent		A2-NY-537-ISOTOPE(14)
L2221593-05B	Plastic 250ml unpreserved	A	NA		3.5	Y	Absent		A2-NY-537-ISOTOPE(14)
L2221593-06A	Vial HCl preserved	A	NA		3.5	Y	Absent		NYTCL-8260-R2(14)
L2221593-06B	Vial HCl preserved	A	NA		3.5	Y	Absent		NYTCL-8260-R2(14)
L2221593-06C	Vial HCl preserved	A	NA		3.5	Y	Absent		NYTCL-8260-R2(14)
L2221593-06D	Plastic 250ml HNO3 preserved	A	<2	<2	3.5	Y	Absent		FE-6020T(180),TL-6020T(180),SE-6020T(180),BA-6020T(180),CA-6020T(180),K-6020T(180),NI-6020T(180),CR-6020T(180),NA-6020T(180),ZN-6020T(180),CU-6020T(180),PB-6020T(180),MN-6020T(180),BE-6020T(180),V-6020T(180),AS-6020T(180),SB-6020T(180),MG-6020T(180),AL-6020T(180),CD-6020T(180),AG-6020T(180),HG-T(28),CO-6020T(180)
L2221593-06E	Amber 250ml unpreserved	A	7	7	3.5	Y	Absent		NYTCL-8270-SIM-LVI(7),NYTCL-8270-LVI(7)
L2221593-06F	Amber 250ml unpreserved	A	7	7	3.5	Y	Absent		NYTCL-8270-SIM-LVI(7),NYTCL-8270-LVI(7)

\*Values in parentheses indicate holding time in days

**Container Information**

<b>Container ID</b>	<b>Container Type</b>	<b>Cooler</b>	<b>Initial pH</b>	<b>Final pH</b>	<b>Temp deg C</b>	<b>Pres</b>	<b>Seal</b>	<b>Frozen Date/Time</b>	<b>Analysis(*)</b>
L2221593-06G	Amber 250ml unpreserved	A	7	7	3.5	Y	Absent		A2-1,4-DIOXANE-SIM(7)
L2221593-06H	Amber 250ml unpreserved	A	7	7	3.5	Y	Absent		A2-1,4-DIOXANE-SIM(7)
L2221593-07A	Plastic 250ml unpreserved	A	NA		3.5	Y	Absent		A2-NY-537-ISOTOPE(14)
L2221593-07B	Plastic 250ml unpreserved	A	NA		3.5	Y	Absent		A2-NY-537-ISOTOPE(14)
L2221593-08A	Vial HCl preserved	A	NA		3.5	Y	Absent		NYTCL-8260-R2(14)
L2221593-08B	Vial HCl preserved	A	NA		3.5	Y	Absent		NYTCL-8260-R2(14)
L2221593-08C	Vial HCl preserved	A	NA		3.5	Y	Absent		NYTCL-8260-R2(14)
L2221593-08D	Plastic 250ml HNO3 preserved	A	<2	<2	3.5	Y	Absent		TL-6020T(180),BA-6020T(180),SE-6020T(180),FE-6020T(180),CA-6020T(180),K-6020T(180),NI-6020T(180),CR-6020T(180),ZN-6020T(180),NA-6020T(180),CU-6020T(180),PB-6020T(180),BE-6020T(180),MN-6020T(180),AS-6020T(180),V-6020T(180),SB-6020T(180),MG-6020T(180),AL-6020T(180),CD-6020T(180),HG-T(28),AG-6020T(180),CO-6020T(180)
L2221593-08E	Amber 250ml unpreserved	A	10	10	3.5	Y	Absent		NYTCL-8270-SIM-LVI(7),NYTCL-8270-LVI(7)
L2221593-08F	Amber 250ml unpreserved	A	10	10	3.5	Y	Absent		NYTCL-8270-SIM-LVI(7),NYTCL-8270-LVI(7)
L2221593-08G	Amber 250ml unpreserved	A	10	10	3.5	Y	Absent		A2-1,4-DIOXANE-SIM(7)
L2221593-08H	Amber 250ml unpreserved	A	10	10	3.5	Y	Absent		A2-1,4-DIOXANE-SIM(7)
L2221593-09A	Vial HCl preserved	A	NA		3.5	Y	Absent		NYTCL-8260-R2(14)
L2221593-09B	Vial HCl preserved	A	NA		3.5	Y	Absent		NYTCL-8260-R2(14)
L2221593-09C	Vial HCl preserved	A	NA		3.5	Y	Absent		NYTCL-8260-R2(14)
L2221593-09D	Plastic 250ml HNO3 preserved	A	<2	<2	3.5	Y	Absent		SE-6020T(180),FE-6020T(180),BA-6020T(180),TL-6020T(180),K-6020T(180),NI-6020T(180),CR-6020T(180),CA-6020T(180),NA-6020T(180),ZN-6020T(180),CU-6020T(180),PB-6020T(180),MN-6020T(180),BE-6020T(180),AS-6020T(180),SB-6020T(180),V-6020T(180),HG-T(28),MG-6020T(180),AG-6020T(180),AL-6020T(180),CD-6020T(180),CO-6020T(180)
L2221593-09E	Plastic 250ml unpreserved	A	NA		3.5	Y	Absent		A2-NY-537-ISOTOPE(14)
L2221593-09F	Plastic 250ml unpreserved	A	NA		3.5	Y	Absent		A2-NY-537-ISOTOPE(14)
L2221593-09G	Amber 250ml unpreserved	A	7	7	3.5	Y	Absent		NYTCL-8270-SIM-LVI(7),NYTCL-8270-LVI(7)

\*Values in parentheses indicate holding time in days

**Container Information**

<b>Container ID</b>	<b>Container Type</b>	<b>Cooler</b>	<b>Initial pH</b>	<b>Final pH</b>	<b>Temp deg C</b>	<b>Pres</b>	<b>Seal</b>	<b>Frozen Date/Time</b>	<b>Analysis(*)</b>
L2221593-09H	Amber 250ml unpreserved	A	7	7	3.5	Y	Absent		NYTCL-8270-SIM-LVI(7),NYTCL-8270-LVI(7)
L2221593-09I	Amber 250ml unpreserved	A	7	7	3.5	Y	Absent		A2-1,4-DIOXANE-SIM(7)
L2221593-09J	Amber 250ml unpreserved	A	7	7	3.5	Y	Absent		A2-1,4-DIOXANE-SIM(7)
L2221593-10A	Plastic 250ml unpreserved	A	NA		3.5	Y	Absent		A2-NY-537-ISOTOPE(14)
L2221593-10B	Plastic 250ml unpreserved	A	NA		3.5	Y	Absent		A2-NY-537-ISOTOPE(14)
L2221593-11A	Vial HCl preserved	A	NA		3.5	Y	Absent		NYTCL-8260-R2(14)
L2221593-11B	Vial HCl preserved	A	NA		3.5	Y	Absent		NYTCL-8260-R2(14)
L2221593-11C	Vial HCl preserved	A	NA		3.5	Y	Absent		NYTCL-8260-R2(14)
L2221593-11D	Plastic 250ml HNO3 preserved	A	<2	<2	3.5	Y	Absent		BA-6020T(180),TL-6020T(180),SE-6020T(180),FE-6020T(180),K-6020T(180),NI-6020T(180),CA-6020T(180),CR-6020T(180),ZN-6020T(180),CU-6020T(180),NA-6020T(180),PB-6020T(180),BE-6020T(180),MN-6020T(180),SB-6020T(180),AS-6020T(180),V-6020T(180),CD-6020T(180),AL-6020T(180),MG-6020T(180),AG-6020T(180),HG-T(28),CO-6020T(180)
L2221593-11E	Amber 250ml unpreserved	A	7	7	3.5	Y	Absent		NYTCL-8270-SIM-LVI(7),NYTCL-8270-LVI(7)
L2221593-11F	Amber 250ml unpreserved	A	7	7	3.5	Y	Absent		NYTCL-8270-SIM-LVI(7),NYTCL-8270-LVI(7)
L2221593-11G	Amber 250ml unpreserved	A	7	7	3.5	Y	Absent		A2-1,4-DIOXANE-SIM(7)
L2221593-11H	Amber 250ml unpreserved	A	7	7	3.5	Y	Absent		A2-1,4-DIOXANE-SIM(7)
L2221593-12A	Vial HCl preserved	A	NA		3.5	Y	Absent		NYTCL-8260-R2(14)
L2221593-12B	Vial HCl preserved	A	NA		3.5	Y	Absent		NYTCL-8260-R2(14)
L2221593-12C	Vial HCl preserved	A	NA		3.5	Y	Absent		NYTCL-8260-R2(14)
L2221593-12D	Plastic 250ml HNO3 preserved	A	<2	<2	3.5	Y	Absent		FE-6020T(180),SE-6020T(180),TL-6020T(180),BA-6020T(180),CR-6020T(180),NI-6020T(180),CA-6020T(180),K-6020T(180),ZN-6020T(180),NA-6020T(180),CU-6020T(180),PB-6020T(180),BE-6020T(180),MN-6020T(180),SB-6020T(180),V-6020T(180),AS-6020T(180),CD-6020T(180),MG-6020T(180),HG-T(28),AG-6020T(180),AL-6020T(180),CO-6020T(180)
L2221593-12E	Plastic 250ml unpreserved	A	NA		3.5	Y	Absent		A2-NY-537-ISOTOPE(14)
L2221593-12F	Plastic 250ml unpreserved	A	NA		3.5	Y	Absent		A2-NY-537-ISOTOPE(14)
L2221593-12G	Amber 250ml unpreserved	A	7	7	3.5	Y	Absent		NYTCL-8270-SIM-LVI(7),NYTCL-8270-LVI(7)

\*Values in parentheses indicate holding time in days

**Project Name:** BATH SIGNIFY OFFSITE GW SAMPLI  
**Project Number:** 0127981-025

Serial\_No:05262215:27  
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**Container Information**

<b>Container ID</b>	<b>Container Type</b>	<b>Cooler</b>	<b>Initial pH</b>	<b>Final pH</b>	<b>Temp deg C</b>	<b>Pres</b>	<b>Seal</b>	<b>Frozen Date/Time</b>	<b>Analysis(*)</b>
L2221593-12H	Amber 250ml unpreserved	A	7	7	3.5	Y	Absent		NYTCL-8270-SIM-LVI(7),NYTCL-8270-LVI(7)
L2221593-12I	Amber 250ml unpreserved	A	7	7	3.5	Y	Absent		A2-1,4-DIOXANE-SIM(7)
L2221593-12J	Amber 250ml unpreserved	A	7	7	3.5	Y	Absent		A2-1,4-DIOXANE-SIM(7)
L2221593-13A	Plastic 250ml unpreserved	A	NA		3.5	Y	Absent		A2-NY-537-ISOTOPE(14)
L2221593-13B	Plastic 250ml unpreserved	A	NA		3.5	Y	Absent		A2-NY-537-ISOTOPE(14)

### PFAS PARAMETER SUMMARY

Parameter	Acronym	CAS Number
<b>PERFLUOROALKYL CARBOXYLIC ACIDS (PFCAs)</b>		
Perfluorooctadecanoic Acid	PFODA	16517-11-6
Perfluorohexadecanoic Acid	PFHxDA	67905-19-5
Perfluorotetradecanoic Acid	PFTA	376-06-7
Perfluorotridecanoic Acid	PFTrDA	72629-94-8
Perfluorododecanoic Acid	PFDoA	307-55-1
Perfluoroundecanoic Acid	PFUnA	2058-94-8
Perfluorodecanoic Acid	PFDA	335-76-2
Perfluorononanoic Acid	PFNA	375-95-1
Perfluoroctanoic Acid	PFOA	335-67-1
Perfluoroheptanoic Acid	PFHpA	375-85-9
Perfluorohexanoic Acid	PFHxA	307-24-4
Perfluoropentanoic Acid	PPPeA	2706-90-3
Perfluorobutanoic Acid	PFBA	375-22-4
<b>PERFLUOROALKYL SULFONIC ACIDS (PFSAs)</b>		
Perfluorododecanesulfonic Acid	PFDoDS	79780-39-5
Perfluorodecanesulfonic Acid	PFDS	335-77-3
Perfluorononanesulfonic Acid	PFNS	68259-12-1
Perfluoroctanesulfonic Acid	PFOS	1763-23-1
Perfluoroheptanesulfonic Acid	PFHpS	375-92-8
Perfluorohexanesulfonic Acid	PFHxS	355-46-4
Perfluoropentanesulfonic Acid	PPPeS	2706-91-4
Perfluorobutanesulfonic Acid	PFBS	375-73-5
<b>FLUOROTELOMERS</b>		
1H,1H,2H,2H-Perfluorododecanesulfonic Acid	10:2FTS	120226-60-0
1H,1H,2H,2H-Perfluorodecanesulfonic Acid	8:2FTS	39108-34-4
1H,1H,2H,2H-Perfluoroctanesulfonic Acid	6:2FTS	27619-97-2
1H,1H,2H,2H-Perfluorohexanesulfonic Acid	4:2FTS	757124-72-4
<b>PERFLUOROALKANE SULFONAMIDES (FASAs)</b>		
Perfluoroctanesulfonamide	FOSA	754-91-6
N-Ethyl Perfluoroctane Sulfonamide	NEtFOSA	4151-50-2
N-Methyl Perfluoroctane Sulfonamide	NMeFOSA	31506-32-8
<b>PERFLUOROALKANE SULFONYL SUBSTANCES</b>		
N-Ethyl Perfluoroctanesulfonamido Ethanol	NEtFOSE	1691-99-2
N-Methyl Perfluoroctanesulfonamido Ethanol	NMeFOSE	24448-09-7
N-Ethyl Perfluoroctanesulfonamidoacetic Acid	NEtFOSAA	2991-50-6
N-Methyl Perfluoroctanesulfonamidoacetic Acid	NMeFOSAA	2355-31-9
<b>PER- and POLYFLUOROALKYL ETHER CARBOXYLIC ACIDS</b>		
2,3,3,3-Tetrafluoro-2-[1,1,2,2,3,3,3-Heptafluoropropoxy]-Propanoic Acid	HFPO-DA	13252-13-6
4,8-Dioxa-3h-Perfluorononanoic Acid	ADONA	919005-14-4
<b>CHLORO-PERFLUOROALKYL SULFONIC ACIDS</b>		
11-Chloroeicosfluoro-3-Oxaundecane-1-Sulfonic Acid	11CI-PF3OUdS	763051-92-9
9-Chlorohexadecafluoro-3-Oxanone-1-Sulfonic Acid	9CI-PF3ONS	756426-58-1
<b>PERFLUORETHER SULFONIC ACIDS (PFESAs)</b>		
Perfluoro(2-Ethoxyethane)Sulfonic Acid	PFEESA	113507-82-7
<b>PERFLUORETHER/POLYETHER CARBOXYLIC ACIDS (PFPCAs)</b>		
Perfluoro-3-Methoxypropanoic Acid	PFMPA	377-73-1
Perfluoro-4-Methoxybutanoic Acid	PFMBA	863090-89-5
Nonafuoro-3,6-Dioxaheptanoic Acid	NFDHA	151772-58-6

**Project Name:** BATH SIGNIFY OFFSITE GW SAMPLI  
**Project Number:** 0127981-025

**Lab Number:** L2221593  
**Report Date:** 05/26/22

## GLOSSARY

### Acronyms

DL	- Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the limit of quantitation (LOQ). The DL includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
EDL	- Estimated Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The EDL includes any adjustments from dilutions, concentrations or moisture content, where applicable. The use of EDLs is specific to the analysis of PAHs using Solid-Phase Microextraction (SPME).
EMPC	- Estimated Maximum Possible Concentration: The concentration that results from the signal present at the retention time of an analyte when the ions meet all of the identification criteria except the ion abundance ratio criteria. An EMPC is a worst-case estimate of the concentration.
EPA	- Environmental Protection Agency.
LCS	- Laboratory Control Sample: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
LCSD	- Laboratory Control Sample Duplicate: Refer to LCS.
LFB	- Laboratory Fortified Blank: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
LOD	- Limit of Detection: This value represents the level to which a target analyte can reliably be detected for a specific analyte in a specific matrix by a specific method. The LOD includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
LOQ	- Limit of Quantitation: The value at which an instrument can accurately measure an analyte at a specific concentration. The LOQ includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
	Limit of Quantitation: The value at which an instrument can accurately measure an analyte at a specific concentration. The LOQ includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
MDL	- Method Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The MDL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
MS	- Matrix Spike Sample: A sample prepared by adding a known mass of target analyte to a specified amount of matrix sample for which an independent estimate of target analyte concentration is available. For Method 332.0, the spike recovery is calculated using the native concentration, including estimated values.
MSD	- Matrix Spike Sample Duplicate: Refer to MS.
NA	- Not Applicable.
NC	- Not Calculated: Term is utilized when one or more of the results utilized in the calculation are non-detect at the parameter's reporting unit.
NDPA/DPA	- N-Nitrosodiphenylamine/Diphenylamine.
NI	- Not Ignitable.
NP	- Non-Plastic: Term is utilized for the analysis of Atterberg Limits in soil.
NR	- No Results: Term is utilized when 'No Target Compounds Requested' is reported for the analysis of Volatile or Semivolatile Organic TIC only requests.
RL	- Reporting Limit: The value at which an instrument can accurately measure an analyte at a specific concentration. The RL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
RPD	- Relative Percent Difference: The results from matrix and/or matrix spike duplicates are primarily designed to assess the precision of analytical results in a given matrix and are expressed as relative percent difference (RPD). Values which are less than five times the reporting limit for any individual parameter are evaluated by utilizing the absolute difference between the values; although the RPD value will be provided in the report.
SRM	- Standard Reference Material: A reference sample of a known or certified value that is of the same or similar matrix as the associated field samples.
STLP	- Semi-dynamic Tank Leaching Procedure per EPA Method 1315.
TEF	- Toxic Equivalency Factors: The values assigned to each dioxin and furan to evaluate their toxicity relative to 2,3,7,8-TCDD.
TEQ	- Toxic Equivalent: The measure of a sample's toxicity derived by multiplying each dioxin and furan by its corresponding TEF and then summing the resulting values.
TIC	- Tentatively Identified Compound: A compound that has been identified to be present and is not part of the target compound list (TCL) for the method and/or program. All TICs are qualitatively identified and reported as estimated concentrations.

*Report Format: DU Report with 'J' Qualifiers*



**Project Name:** BATH SIGNIFY OFFSITE GW SAMPLI  
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#### Footnotes

- 1 - The reference for this analyte should be considered modified since this analyte is absent from the target analyte list of the original method.

#### Terms

**Analytical Method:** Both the document from which the method originates and the analytical reference method. (Example: EPA 8260B is shown as 1,8260B.) The codes for the reference method documents are provided in the References section of the Addendum.

**Difference:** With respect to Total Oxidizable Precursor (TOP) Assay analysis, the difference is defined as the Post-Treatment value minus the Pre-Treatment value.

**Final pH:** As it pertains to Sample Receipt & Container Information section of the report, Final pH reflects pH of container determined after adjustment at the laboratory, if applicable. If no adjustment required, value reflects Initial pH.

**Frozen Date/Time:** With respect to Volatile Organics in soil, Frozen Date/Time reflects the date/time at which associated Reagent Water-preserved vials were initially frozen. Note: If frozen date/time is beyond 48 hours from sample collection, value will be reflected in 'bold'.

**Initial pH:** As it pertains to Sample Receipt & Container Information section of the report, Initial pH reflects pH of container determined upon receipt, if applicable.

**PAH Total:** With respect to Alkylated PAH analyses, the 'PAHs, Total' result is defined as the summation of results for all or a subset of the following compounds: Naphthalene, C1-C4 Naphthalenes, 2-Methylnaphthalene, 1-Methylnaphthalene, Biphenyl, Acenaphthylene, Acenaphthene, Fluorene, C1-C3 Fluorenes, Phenanthrene, C1-C4 Phenanthrenes/Anthracenes, Anthracene, Fluoranthene, Pyrene, C1-C4 Fluoranthrenes/Pyrenes, Benz(a)anthracene, Chrysene, C1-C4 Chrysenes, Benzo(b)fluoranthene, Benzo(j)+(k)fluoranthene, Benzo(e)pyrene, Benzo(a)pyrene, Perylene, Indeno(1,2,3-cd)pyrene, Dibenz(ah)+(ac)anthracene, Benzo(g,h,i)perylene. If a 'Total' result is requested, the results of its individual components will also be reported.

**PFAS Total:** With respect to PFAS analyses, the 'PFAS, Total (5)' result is defined as the summation of results for: PFHpA, PFHxS, PFOA, PFNA and PFOS. In addition, the 'PFAS, Total (6)' result is defined as the summation of results for: PFHpA, PFHxS, PFOA, PFNA, PFDA and PFOS. For MassDEP DW compliance analysis only, the 'PFAS, Total (6)' result is defined as the summation of results at or above the RL. Note: If a 'Total' result is requested, the results of its individual components will also be reported.

The target compound Chlordane (CAS No. 57-74-9) is reported for GC ECD analyses. Per EPA, this compound "refers to a mixture of chlordane isomers, other chlorinated hydrocarbons and numerous other components." (Reference: USEPA Toxicological Review of Chlordane, In Support of Summary Information on the Integrated Risk Information System (IRIS), December 1997.)

**Total:** With respect to Organic analyses, a 'Total' result is defined as the summation of results for individual isomers or Aroclors. If a 'Total' result is requested, the results of its individual components will also be reported. This is applicable to 'Total' results for methods 8260, 8081 and 8082.

#### Data Qualifiers

- A** - Spectra identified as "Aldol Condensates" are byproducts of the extraction/concentration procedures when acetone is introduced in the process.
- B** - The analyte was detected above the reporting limit in the associated method blank. Flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For MCP-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For DOD-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank AND the analyte was detected above one-half the reporting limit (or above the reporting limit for common lab contaminants) in the associated method blank. For NJ-Air-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte above the reporting limit. For NJ-related projects (excluding Air), flag only applies to associated field samples that have detectable concentrations of the analyte, which was detected above the reporting limit in the associated method blank or above five times the reporting limit for common lab contaminants (Phthalates, Acetone, Methylene Chloride, 2-Butanone).
- C** - Co-elution: The target analyte co-elutes with a known lab standard (i.e. surrogate, internal standards, etc.) for co-extracted analyses.
- D** - Concentration of analyte was quantified from diluted analysis. Flag only applies to field samples that have detectable concentrations of the analyte.
- E** - Concentration of analyte exceeds the range of the calibration curve and/or linear range of the instrument.
- F** - The ratio of quantifier ion response to qualifier ion response falls outside of the laboratory criteria. Results are considered to be an estimated maximum concentration.
- G** - The concentration may be biased high due to matrix interferences (i.e., co-elution) with non-target compound(s). The result should be considered estimated.
- H** - The analysis of pH was performed beyond the regulatory-required holding time of 15 minutes from the time of sample collection.
- I** - The lower value for the two columns has been reported due to obvious interference.
- J** - Estimated value. The Target analyte concentration is below the quantitation limit (RL), but above the Method Detection Limit (MDL) or Estimated Detection Limit (EDL) for SPME-related analyses. This represents an estimated concentration for Tentatively Identified Compounds (TICs).
- M** - Reporting Limit (RL) exceeds the MCP CAM Reporting Limit for this analyte.
- ND** - Not detected at the method detection limit (MDL) for the sample, or estimated detection limit (EDL) for SPME-related analyses.

**Report Format:** DU Report with 'J' Qualifiers



**Project Name:** BATH SIGNIFY OFFSITE GW SAMPLI  
**Project Number:** 0127981-025

**Lab Number:** L2221593  
**Report Date:** 05/26/22

**Data Qualifiers**

- NJ** - Presumptive evidence of compound. This represents an estimated concentration for Tentatively Identified Compounds (TICs), where the identification is based on a mass spectral library search.
- P** - The RPD between the results for the two columns exceeds the method-specified criteria.
- Q** - The quality control sample exceeds the associated acceptance criteria. For DOD-related projects, LCS and/or Continuing Calibration Standard exceedences are also qualified on all associated sample results. Note: This flag is not applicable for matrix spike recoveries when the sample concentration is greater than 4x the spike added or for batch duplicate RPD when the sample concentrations are less than 5x the RL. (Metals only.)
- R** - Analytical results are from sample re-analysis.
- RE** - Analytical results are from sample re-extraction.
- S** - Analytical results are from modified screening analysis.
- V** - The surrogate associated with this target analyte has a recovery outside the QC acceptance limits. (Applicable to MassDEP DW Compliance samples only.)
- Z** - The batch matrix spike and/or duplicate associated with this target analyte has a recovery/RPD outside the QC acceptance limits. (Applicable to MassDEP DW Compliance samples only.)

*Report Format: DU Report with 'J' Qualifiers*



**Project Name:** BATH SIGNIFY OFFSITE GW SAMPLI  
**Project Number:** 0127981-025

**Lab Number:** L2221593  
**Report Date:** 05/26/22

## REFERENCES

- 1 Test Methods for Evaluating Solid Waste: Physical/Chemical Methods. EPA SW-846. Third Edition. Updates I - VI, 2018.
- 134 Determination of Selected Perfluorinated Alkyl Acids in Drinking Water by Solid Phase Extraction and Liquid Chromatography/Tandem Mass Spectrometry (LC/MS/MS) using Isotope Dilution. Alpha SOP 23528.

## LIMITATION OF LIABILITIES

Alpha Analytical performs services with reasonable care and diligence normal to the analytical testing laboratory industry. In the event of an error, the sole and exclusive responsibility of Alpha Analytical shall be to re-perform the work at its own expense. In no event shall Alpha Analytical be held liable for any incidental, consequential or special damages, including but not limited to, damages in any way connected with the use of, interpretation of, information or analysis provided by Alpha Analytical.

We strongly urge our clients to comply with EPA protocol regarding sample volume, preservation, cooling, containers, sampling procedures, holding time and splitting of samples in the field.



## Certification Information

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**The following analytes are not included in our Primary NELAP Scope of Accreditation:**

**Westborough Facility**

EPA 624/624.1: m/p-xylene, o-xylene, Naphthalene

EPA 625/625.1: alpha-Terpineol

EPA 8260C/8260D: NPW: 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene, Azobenzene; SCM: Iodomethane (methyl iodide), 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene.

EPA 8270D/8270E: NPW: Dimethylnaphthalene,1,4-Diphenylhydrazine, alpha-Terpineol; SCM: Dimethylnaphthalene,1,4-Diphenylhydrazine. SM4500: NPW: Amenable Cyanide; SCM: Total Phosphorus, TKN, NO<sub>2</sub>, NO<sub>3</sub>.

**Mansfield Facility**

**SM 2540D**: TSS

EPA 8082A: NPW: PCB: 1, 5, 31, 87,101, 110, 141, 151, 153, 180, 183, 187.

EPA TO-15: Halothane, 2,4,4-Trimethyl-2-pentene, 2,4,4-Trimethyl-1-pentene, Thiophene, 2-Methylthiophene, 3-Methylthiophene, 2-Ethylthiophene, 1,2,3-Trimethylbenzene, Indan, Indene, 1,2,4,5-Tetramethylbenzene, Benzothiophene, 1-Methylnaphthalene.

**Biological Tissue Matrix**: EPA 3050B

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**The following analytes are included in our Massachusetts DEP Scope of Accreditation**

**Westborough Facility:**

**Drinking Water**

EPA 300.0: Chloride, Nitrate-N, Fluoride, Sulfate; EPA 353.2: Nitrate-N, Nitrite-N; **SM4500NO3-F**: Nitrate-N, Nitrite-N; **SM4500F-C**, **SM4500CN-CE**, **EPA 180.1**, **SM2130B**, **SM4500CI-D**, **SM2320B**, **SM2540C**, **SM4500H-B**, **SM4500NO2-B**

EPA 332: Perchlorate; **EPA 524.2**: THMs and VOCs; **EPA 504.1**: EDB, DBCP.

**Microbiology**: **SM9215B**; **SM9223-P/A**, **SM9223B-Colilert-QT**, **SM9222D**.

**Non-Potable Water**

**SM4500H,B**, **EPA 120.1**, **SM2510B**, **SM2540C**, **SM2320B**, **SM4500CL-E**, **SM4500F-BC**, **SM4500NH3-BH**: Ammonia-N and Kjeldahl-N, **EPA 350.1**: Ammonia-N, **LACHAT 10-107-06-1-B**: Ammonia-N, **EPA 351.1**, **SM4500NO3-F**, **EPA 353.2**: Nitrate-N, **SM4500P-E**, **SM4500P-B**, **E**, **SM4500SO4-E**, **SM5220D**, **EPA 410.4**, **SM5210B**, **SM5310C**, **SM4500CL-D**, **EPA 1664**, **EPA 420.1**, **SM4500-CN-CE**, **SM2540D**, **EPA 300**: Chloride, Sulfate, Nitrate.

**EPA 624.1**: Volatile Halocarbons & Aromatics,

**EPA 608.3**: Chlordane, Toxaphene, Aldrin, alpha-BHC, beta-BHC, gamma-BHC, delta-BHC, Dieldrin, DDD, DDE, DDT, Endosulfan I, Endosulfan II, Endosulfan sulfate, Endrin, Endrin Aldehyde, Heptachlor, Heptachlor Epoxide, PCBs

**EPA 625.1**: SVOC (Acid/Base/Neutral Extractables), **EPA 600/4-81-045**: PCB-Oil.

**Microbiology**: **SM9223B-Colilert-QT**; **Enterolert-QT**, **SM9221E**, **EPA 1600**, **EPA 1603**, **SM9222D**.

**Mansfield Facility:**

**Drinking Water**

EPA 200.7: Al, Ba, Cd, Cr, Cu, Fe, Mn, Ni, Na, Ag, Ca, Zn. **EPA 200.8**: Al, Sb, As, Ba, Be, Cd, Cr, Cu, Pb, Mn, Ni, Se, Ag, TL, Zn. **EPA 245.1** Hg. **EPA 522**, **EPA 537.1**.

**Non-Potable Water**

EPA 200.7: Al, Sb, As, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Mo, Ni, K, Se, Ag, Na, Sr, Ti, V, Zn.

EPA 200.8: Al, Sb, As, Be, Cd, Cr, Cu, Fe, Pb, Mn, Ni, K, Se, Ag, Na, TL, Zn.

**EPA 245.1** Hg.

**SM2340B**

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For a complete listing of analytes and methods, please contact your Alpha Project Manager.


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**Service Centers**

Brewer, ME 04412      Portsmouth, NH 03801 Mahwah, NJ 07430  
 Albany, NY 12205  
 Tonawanda, NY 14150 Holmes, PA 19043

Westborough, MA 01581  
 8 Walkup Dr.  
 TEL: 508-898-9220  
 FAX: 508-898-9193

Mansfield, MA 02048  
 320 Forbes Blvd  
 TEL: 508-822-9300  
 FAX: 508-822-3288

**Page**

1 of 2

**Date Rec'd**

in Lab

4/27/22

**ALPHA Job #**

L2221593

H&A Information

H&amp;A Client: Haley &amp; Aldrich

H&A Address: 200 Town Centre Dr.  
Rochester, NY 14623

H&amp;A Phone: (614) 564-7088

H&amp;A Fax:

H&A Email: [TNg@haleyaldrich.com](mailto:TNg@haleyaldrich.com)**Project Information**

Project Name: Bath Signify Offsite GW Sampling

## Project Location:

Project # 0127981-025

(Use Project name as Project #) 

Project Manager: Titania Ng, Santa McKenna

ALPHAQuote #:

## Turn-Around Time

Standard 

Due Date:

Rush (only if pre approved) 

# of Days:

These samples have been previously analyzed by Alpha 

## Other project specific requirements/comments:

CC: Smckenna@haleyaldrich.com

## Please specify Metals or TAL.

**Deliverables** Email  Fax EQuIS (1 File)  EQuIS (4 File) Other: A SP-A Level II**Billing Information** Same as Client Info

PO #

Please identify below location of applicable disposal facilities.

## Disposal Facility:

 NJ  NY Other:

## Regulatory Requirements (Program/Criteria)

Note: Select State from menu &amp; identify criteria.

**ANALYSIS**

VOCs -  
TCLV  
EPA 8440C  
VOCs -  
TCLV  
EPA 8270D-SIM(LW)  
1,4 Dioxane via  
EPA 8270D-SIM  
Target Analyte List  
Metals - Total Lead  
NY PFAHS via  
LC/MS-Isotope Dilution

**Sample Filtration**

Done  
 Lab to do  
**Preservation**

 Lab to do

(Please Specify below)

## Sample Specific Comments

TRIP BLANK 2  
 3  
 3  
 3  
 3  
 2  
 8  
 2  
 8  
 10  
 Field Dup. 2

ALPHA Lab ID  
(Lab Use Only)

## Sample ID

## Collection

Date

Time

Sample Matrix

Sampler's Initials

X

X

X

X

X

X

X

X

X

X

X

X

X

2

3

3

3

3

2

8

2

8

2

10

2

## Preservative Code:

A = None

P = Plastic

B = HCl

C = HNO<sub>3</sub>D = H<sub>2</sub>SO<sub>4</sub>

E = NaOH

F = MeOH

G = NaHSO<sub>4</sub>H = Na<sub>2</sub>S<sub>2</sub>O<sub>3</sub>

K/E = Zn Ac/NaOH

O = Other

B = Bacteria Cup

C = Cube

O = Other

E = Encore

D = BOD Bottle

Westboro: Certification No: MA935

Mansfield: Certification No: MA015

## Container Type

V

A

A

P

P

## Preservative

B

A

A

C

A

Relinquished By:	Date/Time	Received By:	Date/Time
<i>Mr. J. J. Cunningham</i>	4/26/22 11:55	<i>SECURE STORAGE AAC</i>	4/26/22 11:55
<i>SECURE STORAGE AAC</i>	4/26/22 12:15	<i>R Cunningham AAC</i>	4/26/22 12:15
<i>R Cunningham AAC</i>	4/26/22 12:15	<i>J. J.</i>	4/27/22 00:00

Please print clearly, legibly and completely. Samples can not be logged in and turnaround time clock will not start until any ambiguities are resolved. Alpha Analytical's services under this Chain of Custody shall be performed in accordance with terms and conditions within Blanket Service Agreement# 2015-18-Alpha Analytical by and between Haley & Aldrich, Inc., its subsidiaries and affiliates and Alpha Analytical.


**CHAIN OF  
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**Service Centers**  
 Brewer, ME 04412 Portsmouth, NH 03801 Mahwah, NJ 07430  
 Albany, NY 12205 Tonawanda, NY 14150 Holmes, PA 19043

Westborough, MA 01581  
 8 Walkup Dr.  
 TEL: 508-898-9220  
 FAX: 508-898-9193

Mansfield, MA 02048  
 320 Forbes Blvd  
 TEL: 508-822-9300  
 FAX: 508-822-3288

Page  
 2 of 2

Date Rec'd  
 in Lab 4/27/22

ALPHA Job #  
 L2221593

**Project Information**

Project Name: Bath Signify Offsite C/W Sampling

Project Location:

Project # 012 7981-025

(Use Project name as Project #)

H&A Address: 200 Town Centre Dr.  
Rochester, NY 14623  
 Project Manager: Titania Ng, Santa McKenna

ALPHAQuote #:

**Turn-Around Time**

Standard

Due Date:

Rush (only if pre approved)

# of Days:

**H&A Information**

H&A Client: Haley & Aldrich

H&A Address: 200 Town Centre Dr.  
Rochester, NY 14623

H&A Phone: 614-504-7088

H&A Fax:

H&A Email: TNg@haleyaldrich.com

These samples have been previously analyzed by Alpha

Other project specific requirements/comments:

cc: smckenna@haleyaldrich.com

Please specify Metals or TAL.

ALPHA Lab ID  
 (Lab Use Only)

Sample ID

**Collection**

Date

Time

Sample Matrix

Sampler's Initials

**ANALYSIS**

TCL VOLs  
 EPA 8240 C  
 NY TCL VOLs via EPA  
 8240 D  
 8240 E  
 8240 F  
 8240 G  
 8240 H  
 8240 I  
 8240 J  
 8240 K  
 8240 L  
 8240 M  
 8240 N  
 8240 O  
 8240 P  
 8240 Q  
 8240 R  
 8240 S  
 8240 T  
 8240 U  
 8240 V  
 8240 W  
 8240 X  
 8240 Y  
 8240 Z  
 DIOXANE-EPA  
 SIM(LV)  
 SIM  
 Target analyte first  
 Method - Total Gold D  
 NY PFFats-L CMSMS  
 Isotope Dilution

**Sample Filtration**

Done  
 Lab to do  
 Preservation  
 Lab to do

(Please Specify below)

**Sample Specific Comments**

Field Dup. 8  
 Equipment Blank 10  
 Field Blank 2

21593

11 4125-042522-0002

4/25/22

—

WG

RSL

12 4125-042522-0003

4/25/22

—

WNQ

RSL

13 4125-042522-0004

4/25/22

—

WNQ

RSL

**Preservative Code:**

A = None  
 B = HCl  
 C = HNO<sub>3</sub>  
 D = H<sub>2</sub>SO<sub>4</sub>  
 E = NaOH  
 F = MeOH  
 G = NaHSO<sub>4</sub>  
 H = Na<sub>2</sub>S<sub>2</sub>O<sub>3</sub>  
 K/E = Zn Ac/NaOH  
 O = Other

**Container Code**

P = Plastic  
 A = Amber Glass  
 V = Vial  
 G = Glass  
 B = Bacteria Cup  
 C = Cube  
 O = Other  
 E = Encore  
 D = BOD Bottle

Westboro: Certification No: MA935

Mansfield: Certification No: MA015

**Container Type**

V A A P P

**Preservative**

B A A C A

**Relinquished By:**

Date/Time

**Received By:**

Date/Time

<u>Jeanne Lantz Aldrich</u>	4/26/22 11:55	<u>Secure Storage AAC</u>	4/26/22 11:55
<u>SECURE STORAGE AAC</u>	4/26/22 12:15	<u>JR Cunningham AAC</u>	4/26/22 12:15
<u>JR Cunningham AAC</u>	4/26/22 12:15	<u>JR</u>	4/27/22 00:00

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