VIA ELECTRONIC MAIL

February 24, 2023

John Hopkins
Remedial Project Manager
U.S. Environmental Protection Agency, Region III
4 Penn Center
Mail Code – 3LD10
Philadelphia, PA 19103

Subject: **Quarterly Progress Report No. 25**
Former Kop-Flex Facility Site, Hanover, Maryland
USEPA ID No. MDD043373935
Administrative Order on Consent, Docket No. RCRA-03-2016-0170 CA

Dear John:

On behalf of EMERSUB 16, LLC, a subsidiary of Emerson Electric Co., WSP USA, Inc. (WSP) is submitting this quarterly progress report describing the activities conducted in the fourth quarter of calendar year 2022 (October 1st through December 31st) as part of the corrective measures implementation at the former Kop-Flex, Inc. facility property located at 7555 Harmans Road (Site) in Hanover, Maryland. The Site is identical to the area described as the "Facility" in the Administrative Order on Consent, Docket No. RCRA-03-2016-0170 CA (Consent Order). The report also describes the activities planned for the first quarter of calendar year 2023 (January 1st through March 31st).

This progress report is being submitted to the U.S. Environmental Protection Agency (EPA) pursuant to Section VI.C.3 of the Consent Order. Please note that, in addition to performing the work conducted under the Consent Order, EMERSUB 16 continues to perform the remedial activities specified in the October 2015 Response Action Plan (RAP) approved by the Maryland Department of the Environment (MDE) Voluntary Cleanup Program, and that EMERSUB 16 copies USEPA on all submittals required under that program.

If you have any questions, please do not hesitate to contact us at 703-709-6500.

Kind regards,

Robert E. Johnson
Vice President – Earth & Environment

SLB:ESR:REJ
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Encl.

cc: Mr. Stephen Clarke, EMERSUB 16 LLC
Ms. Richelle Hanson, Maryland Department of the Environment

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CERTIFICATION

I certify that the information contained in or accompanying this quarterly progress report is true, accurate, and complete.

As to those portions of this quarterly progress report for which I cannot personally verify their accuracy, I certify under penalty of law that this quarterly report and all attachments were prepared in accordance with procedures designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, or the immediate supervisor of such person(s), the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fines and imprisonment for knowing violations.

Signature: 

Name: Stephen L. Clarke

Title: President of EMERSUB 16, LLC

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Site Name: Former Kop-Flex Facility
Site Address: 7555 Harmans Road
Hanover, Maryland 21077

Consultant: WSP USA Inc.
Address: 13530 Dulles Technology Drive, Suite 300
Herndon, Virginia 20171
Phone No.: (703) 709-6500

Project Coordinator: Eric Johnson
Alternate: Lisa Kelly

1.0 ACTIVITIES COMPLETED DURING OCTOBER 2022 – DECEMBER 2022 REPORTING PERIOD

1.1 HYDRAULIC CONTAINMENT SYSTEM OPERATION

– The hydraulic containment system (System) operated for 90 of the 92 days during the fourth quarter of 2022, which equates to a 98% run-time efficiency over this 3-month period. There was one planned, brief (2-day) shutdown during the quarter to complete the regeneration of both resin vessels (*i.e.*, resin regeneration "reset"). There were several short-term (1 to 2-day) disruptions in the extraction of groundwater from deep recovery well RW-1D due to malfunctioning of the variable frequency drive (VFD) for the submersible pump in this well, although this pump issue did not affect operation of the System.[1] In addition, there was no extraction of groundwater from shallow recovery well RW-3S during the 4th quarter of 2022 due to a problem with the water level transducer, which was first identified in early September 2022. (For each recovery well, the transducer needs to be functioning or the submersible pump will not operate.) Before initiating any repairs to the transducer, WSP plans to evaluate the hydraulic response due to pumping from wells RW-1S and RW-2S and the contaminant mass recovery from RW-3S to assess this well's impact on the overall performance of the shallow recovery well system.

  A total of approximately 8.38 million gallons of impacted groundwater were extracted and treated during the fourth quarter of 2022, with the combined average monthly withdrawal rate during full-scale operation ranging from 66 gallons per minute (GPM) to 73 GPM. Effluent samples were collected monthly for chemical analysis in accordance with the requirements specified in the National Pollutant Discharge Elimination System (NPDES) Permit for the System. The analytical results for all monitoring parameters complied with the effluent limitations specified in the NPDES Permit.

– To monitor and evaluate concentrations of volatile organic compounds (VOCs) and 1,4-dioxane in the untreated (*i.e.*, extracted) and treated water, samples of both the System influent and effluent were collected and analyzed during the reporting period. An influent water sample was collected for analysis in November, while monthly effluent samples were collected from October through December. The total concentration of chlorinated VOCs (CVOCs) and 1,4-dioxane in the influent sample was 436 micrograms per liter (µg/L). This CVOC + 1,4-dioxane concentration is higher than levels detected in recent influent samples collected when the System was under normal (*i.e.*, continuous) operation during the first and second quarters of 2022, but less than the concentration detected in the third quarter influent sample collected in September (480 µg/L). The increased contaminant levels in the September and November 2022 samples may reflect the diffusion of constituents from stagnant zones and low permeability layers to groundwater present in high permeability flow intervals when the System was shut down for over 3 months

[1] Inspection and servicing of the RW-1D VFD was completed in January 2023.

(April 29, 2022 through August 8, 2022). Groundwater in these high permeability zones serves as the primary source of water to the recovery wells during remedial pumping. As of the end of December 2022, an estimated total of 459 pounds of CVOCs and 192 pounds of 1,4-dioxane have been recovered from the affected portion of the Lower Patapsco aquifer.

Analyses of the effluent samples indicated non-detect concentrations of CVOCs. The 1,4-dioxane concentrations in the effluent samples ranged from 2.9 µg/L (October 2022) to 6.6 µg/L (December 2022). The analytical results for 1,4-dioxane were below the site-specific cleanup level of 15 µg/L.

1.2 GROUNDWATER LEVEL MONITORING

– Groundwater level monitoring is conducted semi-annually to gather data to evaluate the hydraulic head conditions in both the shallow and deep zones of the Lower Patapsco aquifer at the Site. Based on historical water level data collected under non-remedial pumping conditions, groundwater in the shallow zone of the Lower Patapsco aquifer flows to the north and west toward Stony Run, while flow paths are to the south-southeast in the deep (confined) zone of the aquifer.

  During the reporting period, water level measurements were collected from most of the shallow monitoring wells and recovery well piezometers early the week of November 7, 2022, and from all monitoring wells and recovery well piezometers the week of November 20, 2022, as part of the semi-annual groundwater monitoring event at the Site. The collection of data from the shallow zone of the Lower Patapsco aquifer in early November was to assess the water level response to remedial pumping with recovery well RW-3S off-line (see above). The water level data for this and previous measurement rounds is provided in Table 1.

– The contouring of the groundwater elevations determined from the early November data showed spatial variations in the water table and piezometric surface for the lower portion of the shallow zone that closely resemble those from previous measurement rounds when all shallow recovery wells were in operation. Based on the recent head contours for the lower portion of the shallow zone, the southern extent of the recovery well inflow, or capture, area continues to extend to the area of monitoring well MW-44, which is consistent with the evaluation of the groundwater levels during the pumping of RW-3S. The low groundwater withdrawal rate when RW-3S is on-line is believed to be a primary factor for the similarity in the hydraulic response under the different pumping conditions.

– Contour maps depicting the water table (Figure 1) and hydraulic head in the lower portion of the shallow zone of the Lower Patapsco aquifer (Figure 2) are based on the late November measurements. Evaluation of the groundwater elevations and gradients in the shallow zone are discussed separately below.

  The water table contour map (Figure 1) indicates the west-northwest flow of groundwater in the uppermost portion of the shallow zone of the Lower Patapsco aquifer across the Site, with the continued presence of a lowering in the groundwater surface around well MW-38R that is associated with pumping from recovery wells RW-1S and RW-2S. Historically, a slight mounding of the water table in the area around MW-09 has been interpreted to reflect the enhanced recharge to the groundwater system associated with the routing of surface water runoff to the small storm water management area (SWMA) located in the east-central portion of the Site. The enhanced infiltration of runoff in this SWMA, compared to the surrounding paved area, caused the observed localized increase in the water table elevation in the immediate area. After the re-siting and replacement of MW-04 with MW-04R, the mounding effect around MW-09 is not as pronounced as in previous monitoring events.

  The resumption of remedial pumping during the current reporting period resulted in the re-establishment of the drawdown cone centered around pumping well RW-2S. As with previous measurement rounds, the most pronounced head changes (i.e., drawdown) in the shallow zone of the Lower Patapsco aquifer occurred within the permeable sand deposits comprising the lower portion of this hydrogeologic unit, with a well-developed cone of depression in the piezometric surface centered around shallow recovery well RW-2S and extending to the north toward recovery well RW-1S and monitoring well MW-43 (Figure 2). Based on the head contours, groundwater in the eastern portion of the Site flows in a generally westward direction toward the recovery wells. The westward flow of groundwater in the shallow zone differs from the southerly direction of groundwater movement in the deep confined zone discussed below.

As discussed in the preceding bullet, the November 2022 contour map for the lower portion of the shallow zone (Figure 2) depicts a hydraulic response with pumping from wells RW-1S and RW-2S that is similar to instances when all three recovery wells are in operation. Comparison of the recent data (2 pumping wells) with the piezometric contours from May 2021 (3 pumping wells) indicates generally equivalent capture areas due to remedial pumping, with the capture zone width extending northward toward monitoring well MW-43 and underneath the north building and southward below the south building toward MW-44. The capture area also extends westward toward Stony Run and its bordering flood zone under both pumping scenarios. Based on the initial evaluation of the hydraulic heads, the extraction of groundwater from RW-1S and RW-2S appears to impart sufficient hydraulic influence to contain the migration of dissolved contaminants in the shallow zone of the Lower Patapsco aquifer. Additional evaluation regarding the effectiveness of the shallow portion of the hydraulic containment under different pumping scenarios will be conducted in the future.

- The potentiometric surface contour map for the deep, confined zone of the Lower Patapsco aquifer generated from the November 2022 water level data is provided in Figure 3. The hydraulic head distribution shows the recurrence of a slightly elongated depression, or lowering, in the potentiometric surface along the southern property boundary in response to groundwater withdrawals from the two deep recovery wells, RW-1D and RW-2D. Evaluation of the head distribution indicates drawdown of the potentiometric surface extending south onto the adjoining William Scotsman property. The decline in the head caused by the pumping at RW-1D and RW-2D results in the movement of groundwater toward these extraction wells.

1.3 GROUNDWATER QUALITY MONITORING

- In accordance with the Groundwater Monitoring Plan, groundwater quality samples were collected in late-November 2022 from the onsite monitoring wells identified for semi-annual sampling. Samples from the shallow and deep monitoring wells were collected using HydraSleeve™ passive samplers, which were deployed to the same depths as previous monitoring events. Groundwater samples were obtained by carefully removing the HydraSleeve™ sampler from the well and decanting a representative portion of the collected water into the laboratory-supplied containers. Samples of the groundwater discharge from each recovery well were collected via sampling ports located in the well head piping. A small amount of water was purged from each sampling port and collected in a 5-gallon bucket followed by the collection of the sample directly into the containers. All water samples were submitted to the Australian Laboratory Services (ALS) Global laboratory in Middletown, Pennsylvania, and analyzed for VOCs using EPA SW-846 Test Method 8260D and 1,4-dioxane using EPA Test Method 8270E with selected ion monitoring.

  Analytical results for the site-related CVOCs and 1,4-dioxane are summarized in Table 2 for the monitoring well samples. A copy of the certified laboratory analytical report for the samples is included in Enclosure A. Historical (December 2016 to present) data for the monitoring well samples are provided in Table 3. Analytical results for the site-related CVOCs and 1,4-dioxane in the recovery well discharge samples are summarized in Table 4. The certified analytical results for these samples are included in the laboratory report provided in Enclosure B.

- The distribution of CVOC and 1,4-dioxane concentrations in the November 2022 groundwater samples from the shallow zone monitoring wells is similar to levels detected in the June 2022 samples (Table 3; Figure 4). As with previous sampling events, the highest concentrations of site-related contaminants of concern (COCs) were detected in the samples collected from MW-16, which had a total CVOC + 1,4-dioxane concentration of 10,870 µg/l (Table 2). This total represents a significant increase in COC levels at MW-16 from June to November 2022, where concentrations of 1,1-dichloroethane (1,1-DCA), 1,1-dichlorothene (1,1-DCE), and 1,4-dioxane more than tripled and 1,1,1-trichlorothane (1,1,1-TCA) and trichloroethene doubled (Figure 4; Table 3). These changes may be a transient response to the cessation and resumption of pumping during the summer and early fall months. Lesser changes were observed in the sample collected from MW-20 during the reporting period with slight decreases in 1,1-DCA and 1,1-DCE concentrations and a slight increase in the 1,4-dioxane level. The concentration of 1,4-dioxane in this sample (560 µg/l) was higher than in the MW-16 sample (143 µg/l). The changes in the concentrations of these CVOCs appear to reflect inherent seasonal fluctuations in the water quality in the eastern portion of the Site; however, the historical data indicate a possible

increasing trend in the 1,1-DCA and 1,1-DCE concentrations over the entire sampling history of the well. No such trend is observable in the 1,4-dioxane results.

MW-04R was installed in September 2022, as a replacement for MW-04, which was abandoned to facilitate the construction of a multi-level parking garage. The results of the November 2022 sampling at the replacement well indicate lower concentrations of 1,1-DCA (37.4 µg/l), 1,1-DCE (76.0 µg/l), and 1,4-dioxane (57.3 µg/l) than the June 2022 sample collected from MW-04 (173 µg/l, 339 µg/l, and 86.8 µg/l, respectively; Table 3; Figure 4). All three compounds were at or near the historical low values observed at MW-04 during its sampling history, indicating that MW-04R may be in an area of slightly less-affected groundwater than MW-04. Additional data will need to be collected to evaluate the validity of this initial assessment of the groundwater conditions in this portion of the Site.

Lower concentrations were observed in the remainder of the wells screened in the shallow unconfined zone (Table 2, Figure 4). Concentrations of one or more site-related COCs exceeded the groundwater quality criteria in downgradient (i.e., western) wells MW-38R, MW-43, and MW-44, and in MW-09 located north of MW-16. Concentrations of 1,1-DCA (1.7 µg/l) and 1,1-DCE (20.3 µg/l), and 1,4-dioxane (9.6 µg/l) were at or near historical lows in the November 2022 samples collected from MW-43. These results are consistent with a trend of decreasing VOC concentrations in this well throughout its sampling history.

- For the deep monitoring well samples, the CVOC and 1,4-dioxane concentrations in the November 2022 results are generally similar to levels detected historically with some exceptions (Table 3; Figure 5). At MW-16D, which has the highest concentrations of site-related COCs, the latest results indicate historically low concentrations for 1,1-DCA (16.4 µg/l), 1,1-DCE (80.1 µg/l) and 1,4-dioxane (29.9 µg/l). These declines are consistent with the historical trend of decreasing concentrations of COCs at this location throughout its sampling history.

  Changes in COC concentrations in the upgradient portion of the plume (MW-23D) were observed in the latest data. At this location, the concentration of 1,4-dioxane increased between June and November 2022, from 27 µg/l to 60 µg/l; however, both concentrations are historically low for samples collected at this location and are perhaps indicative of a downward trend. In contrast, slight changes in 1,1-DCE and 1,4-dioxane concentrations at MW-21D and MW-22D locations are in line with historical variations.

- Overall, the concentrations of site-related COCs in groundwater from the shallow zone recovery wells decreased between June and December 2022, with the exception of 1,4-dioxane, which increased slightly in the RW-1S well discharge. Total concentrations of detectable CVOCs and 1,4-dioxane in the samples from recovery wells RW-1S and RW-2S were 914 µg/l and 880 µg/l, respectively (Figure 6; Table 4). As with the historical data, the total CVOC and 1,4-dioxane concentrations were lower in the sample collected from RW-3S (14.3 µg/l) as compared to the other two extraction wells, with concentrations of individual compounds all below the comparative groundwater quality criteria during the most recent sampling event.

  The COC concentrations in the deep recovery well samples are comparable to the previous (June 2022) data, with 1,1-DCA, 1,1-DCE, and 1,4-dioxane detected at concentrations above the comparative criteria (Table 4). As with previous sampling rounds, the sample results indicate higher levels of chlorinated CVOCs – primarily 1,1-DCA and 1,1-DCE – in the discharge from well RW-1D (367 µg/l) in the southwestern portion of the Site compared to RW-2D (188 µg/l) located near the southeastern corner. The 1,4-dioxane concentrations are similar in the discharge samples from both deep recovery wells (Table 4).

2.0 PLANNED ONSITE ACTIVITIES FOR THE FIRST QUARTER OF 2023

- Continue with the full-scale System operation, including an interim solution for managing the boiler blowdown discharge, and collection and assessment of System data to evaluate operational performance. Upon receipt of the new NPDES Permit, the blowdown water will be rerouted to enable combining it with the extracted groundwater in the flow equalization tank for treatment through the System.

- Complete an evaluation of the performance of the hydraulic containment system in the shallow zone of the Lower Patapsco aquifer with and without RW-3S in operation and provide recommendations regarding future repairs to this recovery well.

- Conduct the required effluent monitoring and monthly reporting pursuant to the State Discharge/NPDES Permit.
- Provide requested information on the System design and operation to MDE to facilitate the preparation of the new NPDES Permit for the System discharge.

3.0 KEY PERSONNEL/FACILITY CHANGES

There were no changes to the key personnel for the corrective action or onsite conditions related to the activities conducted by the facility owner/operator.

FIGURES

STONY RUN

POND

WILLIAMS SCOTSMAN, INC.

TREATMENT EQUIPMENT BUILDING

NORTH WAREHOUSE

SOUTH WAREHOUSE

MW-03

MW-43

MW-39

MW-38R

RW-1S

106.39

MW-42
107.42

RW-2S

MW-18

MW-5R
107.55

RW-3S

MW-44

MW-09
114.02

MW-04R
113.46

MW-20

MW-16

MW-45
113.18

MW-01
114.15

107

108

109

110

111

112

113

114

POND

N

LEGEND

- PROPERTY LINE
- STREAM/EDGE OF WATER
- FENCE LINE
- STORMWATER MANAGEMENT AREA
- SHALLOW MONITORING WELL
- SHALLOW EXTRACTION WELL
- 114.15 GROUNDWATER SURFACE ELEVATION (FEET MSL)
- GROUNDWATER SURFACE CONTOUR (DASHED WHERE INFERRED)
- GROUNDWATER FLOW PATH

NOTE:
THE NOVEMBER 2022 GROUNDWATER ELEVATIONS ARE REPRESENTATIVE OF PUMPING CONDITIONS.

0 140 280
SCALE IN FEET

THE ORIGINAL VERSION OF THIS DRAWING IS IN COLOR. BLACK & WHITE COPIES MAY NOT ACCURATELY DEPICT CERTAIN INFORMATION.

B

Drawn By: EGC
Checked: 2/9/2023
Approved:
DWG Name: 314V5608.010-019

FORMER KOP-FLEX FACILITY SITE
HANOVER, MARYLAND
PREPARED FOR
EMERSUB 16 LLC
ST. LOUIS, MISSOURI

FIGURE 1

WATER TABLE CONTOUR MAP,
PUMPING CONDITIONS
(NOVEMBER 2022)

WSP USA Inc.
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STONY RUN

POND

WILLIAMS SCOTSMAN, INC.

NORTH WAREHOUSE

SOUTH WAREHOUSE

TREATMENT EQUIPMENT BUILDING

MW-03 107.31

MW-43 101.29

MW-39 101.11

MW-38R

RW-1S 102.49

RW-2S 94.68

MW-42

MW-18 101.71

MW-5R

RW-3S 108.46

MW-44 111.25

MW-09

MW-04R

MW-20 113.67

MW-16 112.25

MW-01

106 104 106 108 110 112 98 100 102 104

POND

N

LEGEND

- PROPERTY LINE
- STREAM/EDGE OF WATER
- FENCE LINE
- STORMWATER MANAGEMENT AREA
- SHALLOW MONITORING WELL
- SHALLOW EXTRACTION WELL
- 112.25 PIEZOMETRIC SURFACE ELEVATION (FEET MSL)
- PIEZOMETRIC SURFACE CONTOUR (DASHED WHERE INFERRED)
- GROUNDWATER FLOW PATH

NOTE:
THE NOVEMBER 2022 GROUNDWATER ELEVATIONS ARE REPRESENTATIVE OF PUMPING CONDITIONS.

0 140 280
SCALE IN FEET

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B NOTICE: THIS DRAWING HAS BEEN PREPARED UNDER THE DIRECTION OF A PROFESSIONAL. DO NOT ALTER THIS DOCUMENT IN ANY WAY WITHOUT THE WRITTEN CONSENT OF WSP USA INC.

Drawn By: EGC
Checked: 1/18/2023
Approved: PGD
DWG Name: 314V5608.010-020

FORMER KOP-FLEX FACILITY SITE
HANOVER, MARYLAND
PREPARED FOR
EMERSUB 16 LLC
ST. LOUIS, MISSOURI

FIGURE 2

PIEZOMETRIC SURFACE CONTOUR MAP FOR THE LOWER PORTION OF THE SHALLOW ZONE OF THE LOWER PATASPCO AQUIFER (NOVEMBER 2022)

WSP USA Inc.
13530 DULLES TECHNOLOGY DR
SUITE 300
HERNDON, VA 20171
TEL: +1 703.709.6500

STONY RUN

MW-27D
86.02

MW-46D
86.39

86

POND

N

MW-23D
85.35

CATALENT BUILDING 1

84

WILLIAMS
SCOTSMAN, INC.

TREATMENT
EQUIPMENT
BUILDING

MW-16D
NM

MW-40D
82.52

CATALENT BUILDING 2

MW-22D
81.95

MW-41D

MW-01D
69.38

MW-21D
74.35

RW-1D

RW-2D

72

82

80

74

MW-24D
75.99

78

76

POND

LEGEND

- PROPERTY LINE
- STREAM/EDGE OF WATER
- FENCE LINE
- STORMWATER MANAGEMENT AREA
- DEEP MONITORING WELL
- DEEP EXTRACTION WELL
- 84.20 POTENTIOMETRIC SURFACE ELEVATION (FEET MSL)
- POTENTIOMETRIC SURFACE CONTOUR (DASHED WHERE INFERRED)
- GROUNDWATER FLOW PATH

0 140 280
SCALE IN FEET

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Drawn By: EGC
Checked: 1/27/2023
Approved:
DWG Name: 314V5608.010-021

FORMER KOP-FLEX FACILITY SITE
HANOVER, MARYLAND

PREPARED FOR
EMERSUB 16 LLC
ST. LOUIS, MISSOURI

FIGURE 3

POTENTIOMETRIC SURFACE CONTOUR MAP FOR THE DEEP ZONE OF THE LOWER PATAPSCO AQUIFER, PUMPING CONDITIONS (NOVEMBER 2022)

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VERIZON

MW-46D

MW-27D

STONY RUN

POND

MW-23D

NORTH WAREHOUSE

TREATMENT EQUIPMENT BUILDING

MW-03

MW-43

MW-09

WILLIAMS SCOTSMAN, INC.

MW-39

MW-38R

MW-04R

MW-45

MW-20

MW-04

RW-1S

MW-16

MW-16D

MW-42

RW-2S

MW-18

MW-5R

SOUTH WAREHOUSE

MW-40D

RW-3S

MW-22D

MW-44

MW-41D

MW-21D

RW-1D

RW-2D

MW-01D

MW-01

MW-24D

N

MW-43		
	6/26/22	11/20/22
1,1-DCA	2.5	1.7
1,2-DCA	ND	ND
1,1-DCE	***29.4***	***20.3***
1,4-Dioxane	7.0	9.6
1,1,1-TCA	ND	ND
TCE	ND	ND

MW-03		
	6/26/22	11/20/22
1,1-DCA	ND	ND
1,2-DCA	ND	ND
1,1-DCE	ND	ND
1,4-Dioxane	ND	ND
1,1,1-TCA	ND	ND
TCE	ND	ND

MW-39		
	6/26/22	11/20/22
1,1-DCA	ND	ND
1,2-DCA	ND	ND
1,1-DCE	ND	ND
1,4-Dioxane	0.22	ND
1,1,1-TCA	ND	ND
TCE	ND	ND

MW-38R		
	6/26/22	11/20/22
1,1-DCA	***7.6***	***7.1***
1,2-DCA	ND	ND
1,1-DCE	ND	ND
1,4-Dioxane	14.4	***20.1***
1,1,1-TCA	ND	ND
TCE	ND	ND

MW-42		
	7/15/22	11/20/22
1,1-DCA	ND	ND
1,2-DCA	ND	ND
1,1-DCE	ND	ND
1,4-Dioxane	5.6	5.4
1,1,1-TCA	ND	ND
TCE	ND	ND

MW-18		
	6/26/22	11/20/22
1,1-DCA	ND	ND
1,2-DCA	ND	ND
1,1-DCE	ND	ND
1,4-Dioxane	ND	ND
1,1,1-TCA	ND	ND
TCE	ND	ND

MW-5R		
	6/26/22	11/20/22
1,1-DCA	ND	ND
1,2-DCA	ND	ND
1,1-DCE	ND	ND
1,4-Dioxane	1.0	1.1
1,1,1-TCA	ND	ND
TCE	ND	ND

MW-44		
	6/26/22	11/20/22
1,1-DCA	2.3	2.4
1,2-DCA	ND	1.0
1,1-DCE	3.2	3.9
1,4-Dioxane	2.5	4.2
1,1,1-TCA	5.9	8.0
TCE	ND	ND

MW-09		
	6/26/22	11/20/22
1,1-DCA	***3.0***	1.9
1,2-DCA	ND	ND
1,1-DCE	***57.7***	***35.7***
1,4-Dioxane	4,5	7.5
1,1,1-TCA	ND	ND
TCE	ND	ND

MW-16		
	6/26/22	11/20/22
1,1-DCA	***1,030***	***3,290***
1,2-DCA	ND	ND
1,1-DCE	***1,210***	***4,290***
1,4-Dioxane	***26.4***	***143***
1,1,1-TCA	***1,610***	***2,960***
TCE	***13.8***	***28***

MW-04R	
	11/20/22
1,1-DCA	***37.4***
1,2-DCA	ND
1,1-DCE	***76***
1,4-Dioxane	***57.3***
1,1,1-TCA	1.1
TCE	ND

MW-20		
	6/26/22	11/20/22
1,1-DCA	***294***	***258***
1,2-DCA	***10.8***	***9.7***
1,1-DCE	***426***	***348***
1,4-Dioxane	***377***	***560***
1,1,1-TCA	2.7	2.4
TCE	2.7	2.7

MW-04	
	6/26/22
1,1-DCA	***173***
1,2-DCA	3.1
1,1-DCE	***339***
1,4-Dioxane	***86.8***
1,1,1-TCA	1.8
TCE	3

MW-01		
	6/26/22	11/20/22
1,1-DCA	ND	ND
1,2-DCA	ND	ND
1,1-DCE	ND	ND
1,4-Dioxane	0.23	ND
1,1,1-TCA	ND	ND
TCE	ND	ND

LEGEND

- PROPERTY LINE
- STREAM/EDGE OF WATER
- FENCE LINE
- STORMWATER MANAGEMENT AREA
- SHALLOW MONITORING WELL
- DEEP MONITORING WELL
- ABANDONED WELL
- SHALLOW EXTRACTION WELL
- DEEP EXTRACTION WELL

MW-20		
	6/26/22	11/20/22
1,1-DCA	***294***	***258***
1,2-DCA	***10.8***	***9.7***
1,1-DCE	***426***	***348***
1,4-Dioxane	***377***	***560***
1,1,1-TCA	2.7	2.4
TCE	2.7	2.7

- WELL ID
- DATE
- CONCENTRATION (ug/l) (BOLD ITALIC EXCEEDS CLEANUP LEVELS)
- CONSTITUENT

ND	NON DETECT
1,1-DCA	1,1-DICHLOROETHANE
1,2-DCA	1,2-DICHLOROETHANE
1,1-DCE	1,1-DICHLOROETHENE
1,1,1-TCA	1,1,1-TRICHLOROETHANE
TCE	TRICHLOROETHENE

Cleanup Levels	
	µg/l
1,1-DCA	2.8
1,2-DCA	5
1,1-DCE	7
1,4-Dioxane	15
1,1,1-TCA	200
TCE	5

NOTICE: THIS DRAWING HAS BEEN PREPARED UNDER THE DIRECTION OF A PROFESSIONAL. DO NOT ALTER THIS DOCUMENT IN ANY WAY WITHOUT THE WRITTEN CONSENT OF WSP USA INC.

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SCALE IN FEET

B

Drawn By: EGC
Checked: EJM 2/3/2023
Approved: KH
DWG Name: 314V5608.010-017

FORMER KOP-FLEX FACILITY SITE
HANOVER, MARYLAND
PREPARED FOR
EMERSUB 16 LLC
ST. LOUIS, MISSOURI

FIGURE 4

SAMPLING RESULTS FOR THE MONITORING WELLS SCREENED IN THE SHALLOW ZONE OF THE LOWER PATAPSCO AQUIFER (2022)

WSP USA Inc.
13530 DULLES TECHNOLOGY DR
SUITE 300
HERNDON, VA 20171
TEL: +1 703.709.6500

NOTICE: THIS DRAWING HAS BEEN PREPARED UNDER THE DIRECTION OF A PROFESSIONAL. DO NOT ALTER THIS DOCUMENT IN ANY WAY WITHOUT THE WRITTEN CONSENT OF WSP USA INC.

THE ORIGINAL VERSION OF THIS DRAWING IS IN COLOR. BLACK AND WHITE COPIES MAY NOT ACCURATELY DEPICT CERTAIN INFORMATION.

VERIZON

STONY RUN

POND

WILLIAMS SCOTSMAN, INC.

NORTH WAREHOUSE

SOUTH WAREHOUSE

TREATMENT EQUIPMENT BUILDING

MW-27D

MW-27D	6/26/22	11/20/22
1,1-DCA	ND	ND
1,2-DCA	ND	ND
1,1-DCE	ND	ND
1,4-Dioxane	0.13	ND
1,1,1-TCA	ND	ND
TCE	ND	ND

MW-23D

MW-23D	6/26/22	11/20/22
1,1-DCA	***34.6***	***33.6***
1,2-DCA	1.5	1.7
1,1-DCE	***138***	***140***
1,4-Dioxane	***27.0***	***59.6***
1,1,1-TCA	10.7	9.7
TCE	ND	ND

MW-40D

MW-40D	6/26/22	11/20/22
1,1-DCA	ND	ND
1,2-DCA	ND	ND
1,1-DCE	ND	ND
1,4-Dioxane	0.18	ND
1,1,1-TCA	ND	ND
TCE	ND	ND

MW-16D

MW-16D	7/15/22	11/20/22
1,1-DCA	***27.4***	***16.4***
1,2-DCA	1.7	ND
1,1-DCE	***136***	***80.1***
1,4-Dioxane	***39.2***	***29.9***
1,1,1-TCA	8.3	4.7
TCE	ND	ND

MW-22D

MW-22D	6/26/22	11/20/22
1,1-DCA	ND	ND
1,2-DCA	ND	ND
1,1-DCE	***9.0***	6.1
1,4-Dioxane	1.6	2.7
1,1,1-TCA	ND	ND
TCE	ND	ND

MW-21D

MW-21D	6/26/22	11/20/22
1,1-DCA	ND	ND
1,2-DCA	ND	ND
1,1-DCE	***24.5***	***17.6***
1,4-Dioxane	4.2	5.5
1,1,1-TCA	ND	ND
TCE	ND	ND

MW-41D

MW-41D	6/26/22	11/20/22
1,1-DCA	ND	ND
1,2-DCA	ND	ND
1,1-DCE	ND	ND
1,4-Dioxane	0.62	1.1
1,1,1-TCA	ND	ND
TCE	ND	ND

MW-1D

MW-1D	6/26/22	11/20/22
1,1-DCA	***3.1***	***3.0***
1,2-DCA	ND	ND
1,1-DCE	***19.1***	***16.8***
1,4-Dioxane	4.0	6.8
1,1,1-TCA	1.3	1.0
TCE	ND	ND

MW-1D — WELL ID
6/26/22 11/20/22 — DATE
CONCENTRATION (ug/l) (BOLD ITALIC EXCEEDS CLEANUP LEVELS)
CONSTITUENT

ND NON DETECT

1,1-DCA 1,1-DICHLOROETHANE
1,2-DCA 1,2-DICHLOROETHANE
1,1-DCE 1,1-DICHLOROETHENE
1,1,1-TCA 1,1,1-TRICHLOROETHANE
TCE TRICHLOROETHENE

Cleanup Levels	µg/l
1,1-DCA	2.8
1,2-DCA	5
1,1-DCE	7
1,4-Dioxane	15
1,1,1-TCA	200
TCE	5

LEGEND
- PROPERTY LINE
- STREAM/EDGE OF WATER
- FENCE LINE
- STORMWATER MANAGEMENT AREA
- SHALLOW MONITORING WELL
- DEEP MONITORING WELL
- ABANDONED WELL
- SHALLOW EXTRACTION WELL
- DEEP EXTRACTION WELL

MW-39 MW-38R MW-42 MW-18 MW-40D MW-5R MW-43 MW-03 MW-09 MW-04R MW-20 MW-04 MW-45 MW-16 MW-16D RW-1S RW-2S RW-3S MW-44 MW-41D MW-22D MW-01D MW-01 RW-2D MW-21D RW-1D MW-24D

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SCALE IN FEET

B

Drawn By: EGC
Checked: EJM 2/7/2023
Approved: KH
DWG Name: 314V5608.010-017

FORMER KOP-FLEX FACILITY SITE
HANOVER, MARYLAND
PREPARED FOR
EMERSUB 16 LLC
ST. LOUIS, MISSOURI

FIGURE 5

SAMPLING RESULTS FOR THE MONITORING WELLS SCREENED IN THE DEEP ZONE OF THE LOWER PATAPSCO AQUIFER (2022)

WSP USA Inc.
13530 DULLES TECHNOLOGY DR
SUITE 300
HERNDON, VA 20171
TEL: +1 703.709.6500

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VERIZON

MW-46D

MW-27D

STONY RUN

POND

MW-23D

WILLIAMS SCOTSMAN, INC.

NORTH WAREHOUSE

MW-03

TREATMENT EQUIPMENT BUILDING

MW-43

MW-09

MW-39

RW-1S

MW-38R

MW-04R

MW-20

MW-04

MW-45

MW-16

MW-16D

MW-42

MW-18

RW-2S

MW-5R

MW-40D

SOUTH WAREHOUSE

RW-3S

MW-22D

MW-44

MW-41D

MW-01D

MW-01

MW-21D

RW-1D

RW-2D

MW-24D

RW-1S	6/26/22	11/20/22
1,1-DCA	***144***	***150***
1,2-DCA	2.4	2.3
1,1-DCE	***537***	***523***
1,4-Dioxane	***136***	***158***
1,1,1-TCA	75.4	49
TCE	3.7	3.7

RW-2S	6/26/22	11/20/22
1,1-DCA	***133***	***71.2***
1,2-DCA	ND	ND
1,1-DCE	***726***	***393***
1,4-Dioxane	***276***	***172***
1,1,1-TCA	***800***	***238***
TCE	***9.8***	4.4

RW-3S	6/26/22	11/20/22
1,1-DCA	***3.1***	2.1
1,2-DCA	ND	ND
1,1-DCE	5.8	2.2
1,4-Dioxane	5.9	5.4
1,1,1-TCA	7.8	4.6
TCE	ND	ND

RW-1D	6/26/22	11/20/22
1,1-DCA	***59.9***	***68.6***
1,2-DCA	1.7	1.9
1,1-DCE	***242***	***237***
1,4-Dioxane	***36.2***	***40.2***
1,1,1-TCA	8.3	8.1
TCE	ND	ND

RW-2D	6/26/22	11/20/22
1,1-DCA	***27.1***	***20.4***
1,2-DCA	1.3	1.2
1,1-DCE	***125***	***123***
1,4-Dioxane	***39.2***	***40.0***
1,1,1-TCA	5.4	4.2
TCE	ND	ND

LEGEND

- PROPERTY LINE
- STREAM/EDGE OF WATER
- FENCE LINE
- STORMWATER MANAGEMENT AREA
- SHALLOW MONITORING WELL
- DEEP MONITORING WELL
- ABANDONED WELL
- SHALLOW EXTRACTION WELL
- DEEP EXTRACTION WELL

RW-1S	6/26/22	11/20/22
1,1-DCA	***144***	***150***
1,2-DCA	2.4	2.3
1,1-DCE	***537***	***523***
1,4-Dioxane	***136***	***158***
1,1,1-TCA	75.4	49
TCE	3.7	3.7

WELL ID
DATE
CONCENTRATION (ug/l) (BOLD ITALIC EXCEEDS CLEANUP LEVELS)
CONSTITUENT

ND	NON DETECT
1,1-DCA	1,1–DICHLOROETHANE
1,2-DCA	1,2–DICHLOROETHANE
1,1-DCE	1,1–DICHLOROETHENE
1,1,1-TCA	1,1,1–TRICHLOROETHANE
TCE	TRICHLOROETHENE

Cleanup Levels	µg/l
1,1-DCA	2.8
1,2-DCA	5
1,1-DCE	7
1,4-Dioxane	15
1,1,1-TCA	200
TCE	5

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SCALE IN FEET

B

Drawn By: EGC
Checked: EJM 2/3/2023
Approved: KM
DWG Name: 314V5608.010-018

FORMER KOP-FLEX FACILITY SITE
HANOVER, MARYLAND

PREPARED FOR
EMERSUB 16 LLC
ST. LOUIS, MISSOURI

FIGURE 6

GROUNDWATER RECOVERY WELL RESULTS (2022)

WSP USA Inc.
13530 DULLES TECHNOLOGY DR
SUITE 300
HERNDON, VA 20171
TEL: +1 703.709.6500

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TABLES

Table 1

Historical Water Level Measurements in
Onsite Monitoring Wells and Recovery Well Piezometers
Former Kop-Flex Facility Site
Hanover, Maryland
(December 2016 to November 2022) (a)

Well ID	Zone	TOC elevation	12/7/2016 (c)		2/1/2017 (c)		3/21/2017		4/7/2017		4/10/2017		4/13/2017	
			Depth to Water	*Groundwater Elevation*	*Depth to Water*	*Groundwater Elevation*	*Depth to Water*	*Groundwater Elevation*	*Depth to Water*	*Groundwater Elevation*	*Depth to Water*	*Groundwater Elevation*	*Depth to Water*	*Groundwater Elevation*
MW-01	Shallow	129.8	NM	-	15.98	113.82	16.16	113.64	15.93	113.87	15.95	113.85	15.94	113.86
MW-03	Shallow	113.6	6.78	106.82	6.83	106.77	6.79	106.81	6.41	107.19	6.76	106.84	6.91	106.69
MW-04	Shallow	124.4	12.28	112.12	11.14	113.26	11.17	113.23	11.05	113.35	11.09	113.31	11.06	113.34
MW-04R (b)	Shallow	127.5	NA	-	NA	-	NA	-	NA	-	NA	-	NA	-
MW-5R	Shallow	123.5	15.87	107.63	13.49	110.01	15.98	107.52	16.15	107.35	16.38	107.12	16.45	107.05
MW-09	Shallow	125.1	10.84	114.26	11.30	113.80	11.51	113.59	11.41	113.69	11.41	113.69	11.51	113.59
MW-16	Shallow	124.0	10.92	113.08	11.12	112.88	11.66	112.34	11.74	112.26	11.81	112.19	11.82	112.18
MW-18	Shallow	125.1	20.77	104.33	20.84	104.26	22.85	102.25	22.85	102.25	23.11	101.99	23.18	101.92
MW-20	Shallow	125.4	NM	-	12.24	113.16	12.5	112.90	12.33	113.07	12.31	113.09	12.3	113.10
MW-38R	Shallow	125.4	15.58	109.82	15.76	109.64	19.64	105.76	19.6	105.80	20.81	104.59	19.81	105.59
MW-39	Shallow	124.6	NM	-	20.96	103.64	22.64	101.96	22.55	102.05	21.86	102.74	23	101.60
MW-42	Shallow	125.9	16.18	109.72	16.26	109.64	19.28	106.62	19.33	106.57	19.52	106.38	19.49	106.41
MW-43	Shallow	122.8	19.25	103.55	19.31	103.49	20.68	102.12	20.31	102.49	20.61	102.19	21.81	100.99
MW-44	Shallow	127.1	14.93	112.17	15.25	111.85	17.7	109.40	17.08	110.02	17.18	109.92	17.35	109.75
MW-45	Shallow	126.7	NM	-	NM	-	14.1	112.62	13.85	112.87	13.85	112.87	13.85	112.87
RW-1S	Shallow	122.9	12.96	109.94	13.17	109.73	12.96	109.94	20.36	102.54	20.6	102.30	20.56	102.34
RW-2S	Shallow	123.5	14.12	109.38	14.02	109.48	28.55	94.95	28.88	94.62	29.81	93.69	29	94.50
RW-3S	Shallow	125.4	14.29	111.11	14.24	111.16	20.34	105.06	23.49	101.91	23.59	101.81	23.69	101.71
MW-1D	Deep	129.4	42.81	86.59	42.22	87.18	56.15	73.25	56.06	73.34	56.22	73.18	56.44	72.96
MW-16D	Deep	124.1	34.91	89.19	34.72	89.38	37.55	86.55	37.6	86.50	38.02	86.08	38.1	86.00
MW-21D	Deep	126.3	37.8	88.50	37.59	88.71	47.12	79.18	47.26	79.04	47.57	78.73	47.61	78.69
MW-22D	Deep	128.9	40.78	88.07	40.49	88.36	43.28	85.57	43.3	85.55	43.59	85.26	43.76	85.09
MW-23D	Deep	125.2	35.14	90.06	34.74	90.46	36.33	88.87	36.29	88.91	36.72	88.48	36.81	88.39
MW-24D	Deep	129.1	46.3	82.80	45.73	83.37	47.44	81.66	47.71	81.39	48	81.10	48.16	80.94
MW-27D	Deep	117.2	29.66	87.54	26.78	90.42	27.73	89.47	27.68	89.52	28.18	89.02	28.3	88.90
MW-40D	Deep	124.1	35.14	88.96	34.94	89.16	37.19	86.91	37.51	86.59	37.98	86.12	37.98	86.12
MW-41D	Deep	127.1	41.98	85.12	41.44	85.66	44.00	83.10	44.06	83.04	44.48	82.62	44.56	82.54
MW-46D	Deep	124.8	NM	-	NM	-	NM	-	NM	-	NM	-	NM	-
RW-1D	Deep	126.9	38.53	88.37	38.19	88.71	58.69	68.21	59.02	67.88	59.06	67.84	59.02	67.88
RW-2D	Deep	127.4	42.31	85.09	41.62	85.78	68.82	58.58	68.51	58.89	68.39	59.01	68.78	58.62

a/ Vertical datum is NAVD-88
NM = not measured
TOC = top of casing
NA = not available because the well had not been installed
Light gray shading denotes wells screened in the shallow (unconfined) zone; blue shading denotes wells screened in the deep (confined) zone.
Continuous pumping of the groundwater recovery well system started on March 29, 2017.
Water levels from both shallow and deep recovery wells were measured in piezometers co-located with the wells.
b/ MW-04 was replaced in September 2022 with MW-04R.
c/ Water level measurements representative of non-pumping conditions in the aquifer system.

Table 1

Historical Water Level Measurements in
Onsite Monitoring Wells and Recovery Well Piezometers
Former Kop-Flex Facility Site
Hanover, Maryland
(December 2016 to November 2022) (a)

Well ID	Zone	TOC elevation	4/17/2017		5/1/2017		5/8/2017		8/31/2017		10/25/2017		11/14/2017	
			Depth to Water	*Groundwater Elevation*	*Depth to Water*	*Groundwater Elevation*	*Depth to Water*	*Groundwater Elevation*	*Depth to Water*	*Groundwater Elevation*	*Depth to Water*	*Groundwater Elevation*	*Depth to Water*	*Groundwater Elevation*
MW-01	Shallow	129.8	15.90	113.90	15.92	113.88	15.81	113.99	15.49	114.31	NA	NA	14.17	115.63
MW-03	Shallow	113.6	6.90	106.70	6.96	106.64	6.87	106.73	7.59	106.01	NA	NA	7.27	106.33
MW-04	Shallow	124.4	11.13	113.27	10.95	113.45	10.91	113.49	10.66	113.74	NA	NA	10.97	113.43
MW-04R (b)	Shallow	127.5	NA	-	NA	-	NA	-	NA	-	NA	-	NA	-
MW-5R	Shallow	123.5	16.47	107.03	16.60	106.90	16.60	106.90	16.90	106.60	NA	NA	16.78	106.72
MW-09	Shallow	125.1	11.48	113.62	11.41	113.69	11.34	113.76	11.09	114.01	NA	NA	NA	NA
MW-16	Shallow	124.0	12.08	111.92	11.99	112.01	11.81	112.19	11.90	112.10	NA	NA	12.00	112.00
MW-18	Shallow	125.1	23.19	101.91	23.30	101.80	23.28	101.82	24.63	100.47	NA	NA	24.41	100.69
MW-20	Shallow	125.4	13.38	112.02	13.01	112.39	12.24	113.16	12.39	113.01	NA	NA	11.98	113.42
MW-38R	Shallow	125.4	19.84	105.56	19.94	105.46	19.96	105.44	20.16	105.24	NA	NA	19.93	105.47
MW-39	Shallow	124.6	23.01	101.59	23.05	101.55	23.00	101.60	24.51	100.09	NA	NA	23.93	100.67
MW-42	Shallow	125.9	19.55	106.35	19.68	106.22	19.67	106.23	19.95	105.95	NA	NA	19.82	106.08
MW-43	Shallow	122.8	20.92	101.88	21.11	101.69	20.90	101.90	21.73	101.07	NA	NA	21.66	101.14
MW-44	Shallow	127.1	17.23	109.87	17.31	109.79	17.27	109.83	17.18	109.92	NA	NA	17.00	110.10
MW-45	Shallow	126.7	13.75	112.97	13.67	113.05	13.60	113.12	13.20	113.52	NA	NA	13.80	112.92
RW-1S	Shallow	122.9	20.60	102.30	20.80	102.10	20.79	102.11	21.49	101.41	NA	NA	21.98	100.92
RW-2S	Shallow	123.5	29.14	94.36	29.61	93.89	29.74	93.76	32.10	91.40	NA	NA	30.76	92.74
RW-3S	Shallow	125.4	23.73	101.67	24.32	101.08	24.46	100.94	26.20	99.20	NA	NA	28.47	96.93
MW-1D	Deep	129.4	56.37	73.03	56.40	73.00	56.29	73.11	56.70	72.70	58.17	71.23	58.09	71.31
MW-16D	Deep	124.1	37.94	86.16	37.98	86.12	38.08	86.02	41.1	83.00	40.71	83.39	40.63	83.47
MW-21D	Deep	126.3	47.58	78.72	47.54	78.76	47.61	78.69	56.7	69.60	50.61	75.69	50.53	75.77
MW-22D	Deep	128.9	43.73	85.12	43.82	85.03	43.81	85.04	46.71	82.14	46.74	82.11	46.25	82.60
MW-23D	Deep	125.2	36.61	88.59	36.71	88.49	36.77	88.43	39.9	85.30	39.21	85.99	39.04	86.16
MW-24D	Deep	129.1	48.29	80.81	48.35	80.75	48.37	80.73	55.82	73.28	52.15	76.95	51.99	77.11
MW-27D	Deep	117.2	28.03	89.17	28.21	88.99	28.21	88.99	31.11	86.09	30.52	86.68	30.34	86.86
MW-40D	Deep	124.1	37.85	86.25	38.01	86.09	38.04	86.06	41.00	83.10	40.75	83.35	40.50	83.60
MW-41D	Deep	127.1	44.43	82.67	44.61	82.49	44.62	82.48	49.18	77.92	47.94	79.16	47.71	79.39
MW-46D	Deep	124.8	NM	-	NM	-	NM	-	NM	-	NM	-	NM	-
RW-1D	Deep	126.9	59.26	67.64	58.88	68.02	58.99	67.91	60.23	66.67	62.62	64.28	63.62	63.28
RW-2D	Deep	127.4	68.63	58.77	68.70	58.70	68.44	58.96	70.11	57.29	68.90	58.50	68.95	58.45

a/ Vertical datum is NAVD-88
NM = not measured
TOC = top of casing
NA = not available because the well had not been installed
Light gray shading denotes wells screened in the shallow (unconfined) zone; blue shading denotes wells screened in the deep (confined) zone.
Continuous pumping of the groundwater recovery well system started on March 29, 2017.
Water levels from both shallow and deep recovery wells were measured in piezometers co-located with the wells.
c/ MW-04 was replaced in September 2022 with MW-04R.
b/ Water level measurements representative of non-pumping conditions in the aquifer system.

Table 1

Historical Water Level Measurements in
Onsite Monitoring Wells and Recovery Well Piezometers
Former Kop-Flex Facility Site
Hanover, Maryland
(December 2016 to November 2022) (a)

Well ID	Zone	TOC elevation	5/30/2018		11/7/2018		5/21/2019		11/19/2019		5/12/2020	
			Depth to Water	*Groundwater Elevation*	*Depth to Water*	*Groundwater Elevation*	*Depth to Water*	*Groundwater Elevation*	*Depth to Water*	*Groundwater Elevation*	*Depth to Water*	*Groundwater Elevation*
MW-01	Shallow	129.8	15.52	114.28	13.99	115.81	13.98	115.82	16.47	113.33	15.67	114.13
MW-03	Shallow	113.6	7.17	106.43	6.43	107.17	7.08	106.52	7.02	106.58	6.09	107.51
MW-04	Shallow	124.4	10.19	114.21	9.16	115.24	8.80	115.60	11.07	113.33	11.00	113.40
MW-04R (b)	Shallow	127.5	NA	-	NA	-	NA	-	NA	-	NA	-
MW-5R	Shallow	123.5	15.89	107.61	15.51	107.99	15.74	107.76	16.61	106.89	16.55	106.95
MW-09	Shallow	125.1	10.78	114.32	9.16	115.94	9.61	115.49	12.00	113.10	11.57	113.53
MW-16	Shallow	124.0	11.76	112.24	10.96	113.04	9.37	114.63	12.43	111.57	11.66	112.34
MW-18	Shallow	125.1	23.80	101.30	23.13	101.97	22.97	102.13	21.12	103.98	23.10	102.00
MW-20	Shallow	125.4	12.15	113.25	11.74	113.66	10.64	114.76	12.98	112.42	12.57	112.83
MW-38R	Shallow	125.4	19.35	106.05	18.67	106.73	19.13	106.27	19.83	105.57	19.03	106.37
MW-39	Shallow	124.6	23.72	100.88	23.09	101.51	23.00	101.60	23.94	100.66	23.04	101.56
MW-42	Shallow	125.9	19.16	106.74	18.55	107.35	18.91	106.99	19.44	106.46	18.85	107.05
MW-43	Shallow	122.8	20.47	102.33	20.60	102.20	21.46	101.34	22.04	100.76	20.98	101.82
MW-44	Shallow	127.1	16.32	110.78	15.78	111.32	15.91	111.19	17.24	109.86	16.30	110.80
MW-45	Shallow	126.7	12.98	113.74	12.00	114.72	11.75	114.97	14.55	112.17	NM	-
RW-1S	Shallow	122.9	22.88	100.02	23.97	98.93	26.42	96.48	28.64	94.26	29.16	93.74
RW-2S	Shallow	123.5	28.37	95.13	27.48	96.02	31.16	92.34	31.70	91.80	33.33	90.17
RW-3S	Shallow	125.4	26.91	98.49	24.39	101.01	22.10	103.30	23.24	102.16	22.85	102.55
MW-1D	Deep	129.4	58.03	71.37	57.22	72.18	56.55	72.85	59.49	69.91	57.17	72.23
MW-16D	Deep	124.1	40.37	83.73	39.33	84.77	38.30	85.80	40.99	83.11	38.67	85.43
MW-21D	Deep	126.3	50.38	75.92	49.61	76.69	48.38	77.92	50.75	75.55	48.50	77.80
MW-22D	Deep	128.9	46.30	82.55	35.31	93.54	44.02	84.83	46.20	82.65	44.05	84.80
MW-23D	Deep	125.2	38.87	86.33	37.72	87.48	36.88	88.32	39.40	85.80	37.16	88.04
MW-24D	Deep	129.1	50.94	78.16	50.72	78.38	49.67	79.43	51.12	77.98	48.80	80.30
MW-27D	Deep	117.2	30.20	87.00	29.17	88.03	28.15	89.05	30.68	86.52	28.64	88.56
MW-40D	Deep	124.1	40.44	83.66	39.60	84.50	38.50	85.60	41.16	82.94	38.59	85.51
MW-41D	Deep	127.1	47.56	79.54	46.56	80.54	45.42	81.68	48.50	78.60	45.28	81.82
MW-46D	Deep	124.8	37.37	87.40	32.65	92.12	35.47	89.30	37.90	86.87	35.73	89.04
RW-1D	Deep	126.9	62.75	64.15	62.97	63.93	62.44	64.46	64.86	62.04	NM	-
RW-2D	Deep	127.4	69.21	58.19	68.34	59.06	68.19	59.21	71.36	56.04	69.35	58.05

a/ Vertical datum is NAVD-88
NM = not measured
TOC = top of casing
NA = not available because the well had not been installed
Light gray shading denotes wells screened in the shallow (unconfined) zone; blue shading denotes wells screened in the deep (confined) zone.
Continuous pumping of the groundwater recovery well system started on March 29, 2017.
Water levels from both shallow and deep recovery wells were measured in piezometers co-located with the wells.
c/ MW-04 was replaced in September 2022 with MW-04R.
b/ Water level measurements representative of non-pumping conditions in the aquifer system.

Table 1

Historical Water Level Measurements in
Onsite Monitoring Wells and Recovery Well Piezometers
Former Kop-Flex Facility Site
Hanover, Maryland
(December 2016 to November 2022) (a)

Well ID	Zone	TOC elevation	11/22/2020		5/9/2021		11/14/2021 (c)		6/26/2022 (c)		11/7/2022		11/20/2022	
			Depth to Water	*Groundwater Elevation*	*Depth to Water*	*Groundwater Elevation*	*Depth to Water*	*Groundwater Elevation*	*Depth to Water*	*Groundwater Elevation*	*Depth to Water*	*Groundwater Elevation*	*Depth to Water*	*Groundwater Elevation*
MW-01	Shallow	129.8	15.58	114.22	14.75	115.05	15.35	114.45	14.85	114.95	15.66	114.14	15.65	114.15
MW-03	Shallow	113.6	6.1	107.50	6.4	107.20	5.86	107.74	6.21	107.39	6.39	107.21	6.29	107.31
MW-04	Shallow	124.4	10.85	113.55	9.75	114.65	10.43	113.97	9.90	114.50	-	- (b)	-	- (b)
MW-04R (b)	Shallow	127.5	NA	-	NA	-	NA	-	NA	-	13.93	113.54	14.01	113.46
MW-5R	Shallow	123.5	15.84	107.66	NM	-	13.52	109.98	14.36	109.14	NM	-	15.95	107.55
MW-09	Shallow	125.1	11.23	113.87	10.35	114.75	10.85	114.25	10.50	114.60	10.81	114.29	11.08	114.02
MW-16	Shallow	124.0	11.68	112.32	11.15	112.85	11.05	112.95	11.22	112.78	11.84	112.16	11.75	112.25
MW-18	Shallow	125.1	23.80	101.30	26.71	98.39	21.42	103.68	22.05	103.05	23.37	101.73	23.39	101.71
MW-20	Shallow	125.4	12.11	113.29	11.22	114.18	11.34	114.06	14.41	110.99	11.35	114.05	11.73	113.67
MW-38R	Shallow	125.4	19.25	106.15	18.55	106.85	15.63	109.77	17.66	107.74	19.32	106.08	19.01	106.39
MW-39	Shallow	124.6	23.52	101.08	22.98	101.62	21.29	103.31	22.22	102.38	23.74	100.86	23.49	101.11
MW-42	Shallow	125.9	NM	-	17.98	107.92	15.64	110.26	NM	-	18.68	107.22	18.48	107.42
MW-43	Shallow	122.8	21.91	100.89	21.02	101.78	20.10	102.70	20.47	102.33	21.58	101.22	21.51	101.29
MW-44	Shallow	127.1	16.52	110.58	16.26	110.84	15.21	111.89	15.80	111.30	16.12	110.98	15.85	111.25
MW-45	Shallow	126.7	13.61	113.11	12.69	114.03	13.35	113.37	12.91	113.81	NM	-	13.54	113.18
RW-1S	Shallow	122.9	28.13	94.77	25.00	97.90	13.28	109.62	NM	-	20.77	102.13	20.41	102.49
RW-2S	Shallow	123.5	35.31	88.19	34.85	88.65	16.02	107.48	NM	-	29.30	94.20	28.82	94.68
RW-3S	Shallow	125.4	26.72	98.68	25.36	100.04	15.69	109.71	NM	-	NM	-	16.94	108.46
MW-1D	Deep	129.4	59.91	69.49	57.46	71.94	45.20	84.20	47.46	81.94	NM	-	60.02	69.38
MW-16D	Deep	124.1	39.97	84.13	38.81	85.29	37.06	87.04	NM	-	NM	-	NM	-
MW-21D	Deep	126.3	50.37	75.93	48.64	77.66	41.50	84.80	43.11	83.19	NM	-	51.95	74.35
MW-22D	Deep	128.9	46.55	82.30	44.72	84.13	43.36	85.49	44.90	83.95	NM	-	46.90	81.95
MW-23D	Deep	125.2	39.22	85.98	37.36	87.84	36.73	88.47	38.36	86.84	NM	-	39.85	85.35
MW-24D	Deep	129.1	53.02	76.08	50.01	79.09	49.40	79.70	51.06	78.04	NM	-	53.11	75.99
MW-27D	Deep	117.2	30.62	86.58	28.89	88.31	28.72	88.48	29.82	87.38	NM	-	31.18	86.02
MW-40D	Deep	124.1	40.97	83.13	39.00	85.10	37.48	86.62	40.04	84.06	NM	-	41.58	82.52
MW-41D	Deep	127.1	48.65	78.45	45.95	81.15	44.51	82.59	46.96	80.14	NM	-	48.78	78.32
MW-46D	Deep	124.8	37.72	87.05	35.95	88.82	35.62	89.15	37.13	87.64	NM	-	38.38	86.39
RW-1D	Deep	126.9	NM	-	NM	-	41.71	85.19	NM	-	NM	-	64.80	62.10
RW-2D	Deep	127.4	69.72	57.68	69.41	57.99	43.90	83.50	NM	-	NM	-	71.59	55.81

a/ Vertical datum is NAVD-88
NM = not measured
TOC = top of casing
NA = not available because the well had not been installed
Light gray shading denotes wells screened in the shallow (unconfined) zone; blue shading denotes wells screened in the deep (confined) zone.
Continuous pumping of the groundwater recovery well system started on March 29, 2017.
Water levels from both shallow and deep recovery wells were measured in piezometers co-located with the wells.
b/ MW-04 was replaced in September 2022 with MW-04R.
c/ Water level measurements representative of non-pumping conditions in the aquifer system.

Table 2

November 2022 Monitoring Well Sampling Results
Former Kop-Flex Facility Site
Hanover, Maryland (a)

Parameters	Groundwater Cleanup Standards (µg/L) (b)	Well ID:	Shallow Wells												
		Sampling Date:	MW-01 11/20/2022	MW-03 11/20/2022	MW-4R (d) 11/20/2022	MW-05R 11/20/2022	MW-09 11/20/2022	MW-16 11/20/2022	MW-18 11/20/2022	MW-20 11/20/2022	MW-38R 11/20/2022	MW-39 11/20/2022	MW-42 11/20/2022	MW-43 11/20/2022	MW-44 11/20/2022
Acetone	1,400		10.0 U	10.0 U	10.0 U	10.0 U	10.0 U	50.1	10.0 U	10.0 U	10.0 U	10.0 U	10.0 U	10.0 U	10.0 U
Methyl t-Butyl Ether	20		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.2	1.0 U
Chloroethane	-		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	136	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1-Dichloroethane	2.8		1.0 U	1.0 U	**37.4**	1.0 U	1.9	**3,290**	1.0 U	**258**	**7.1**	1.0 U	1.0 U	1.7	2.4
1,2-Dichloroethane	5		1.0 U	1.0 U	1.1	1.0 U	1.0 U	1.0 U	1.0 U	**9.7**	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1-Dichloroethene	7		1.0 U	1.0 U	**76.0**	1.0 U	**35.7**	**4,290**	1.0 U	**348**	1.0 U	1.0 U	1.0 U	**20.3**	3.9
cis-1,2-Dichloroethene	70		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.6	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,4-Dioxane	15	(c)	1.0 U	1.0 U	**57.3**	1.1	7.5	**143**	1.0 U	**560**	**20.1**	1.0 U	5.4	9.6	4.2
Ethylbenzene	700		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.2	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Tetrachloroethene	5		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	**9.4**	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Toluene	1,000		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.4	1.0 U	1.0 U	1.0 U	1.0 U	1.9	1.0 U	1.0 U
1,1,1-Trichloroethane	200		1.0 U	1.0 U	1.1	1.0	1.0 U	**2,960**	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	8.0
1,1,2-Trichloroethane	5		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.4	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Trichloroethene	5		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	**28.0**	1.0 U	2.7	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Vinyl Chloride	3		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	**13.2**	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
mp-Xylene	(see total)		2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	6.5	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
o-Xylene	(see total)		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	3.2	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Total Xylenes	10,000		3.0 U	3.0 U	3.0 U	3.0 U	3.0 U	9.7	3.0 U	3.0 U	3.0 U	3.0 U	3.0 U	3.0 U	3.0 U
		Total CVOCs & 1,4-Dioxane	**ND**	**ND**	**172.9**	**2.1**	**45.1**	**10,870**	**ND**	**1,183**	**27.2**	**ND**	**5.4**	**31.6**	**18.5**

Table 2

November 2022 Monitoring Well Sampling Results
Former Kop-Flex Facility Site
Hanover, Maryland (a)

Parameters	Groundwater Cleanup Standards (µg/L) (b)		Well ID:	MW-01	MW-01D	MW-16D	MW-21D	MW-22D	MW-23D	MW-27D	MW-40D	MW-41D
				Deep Wells								
			Sampling Date:	11/20/2022	11/20/2022	12/29/2022	11/20/2022	11/20/2022	11/20/2022	11/20/2022	11/20/2022	11/20/2022
Acetone	1,400			10.0 U	10.0 U	10.0 U	10.0 U	10.0 U	10.0 U	10.0 U	10.0 U	10.0 U
Methyl t-Butyl Ether	20			1.0 U	1.0 U	1.2	1.2	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chloroethane	-			1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1-Dichloroethane	2.8			1.0 U	**3.0**	**16.4**	1.0 U	1.0 U	**33.6**	1.0 U	1.0 U	1.0 U
1,2-Dichloroethane	5			1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.7	1.0 U	1.0 U	1.0 U
1,1-Dichloroethene	7			1.0 U	**16.8**	**80.1**	**17.6**	6.1	**140**	1.0 U	1.0 U	1.0 U
cis-1,2-Dichloroethene	70			1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,4-Dioxane	15	(c)		1.0 U	6.8	**29.9**	5.5	2.7	**59.6**	1.0 U	1.0 U	1.1
Ethylbenzene	700			1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Tetrachloroethene	5			1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Toluene	1,000			1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1,1-Trichloroethane	200			1.0 U	1.0	4.7	1.0 U	1.0 U	9.7	1.0 U	1.0 U	1.0 U
1,1,2-Trichloroethane	5			1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Trichloroethene	5			1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Vinyl Chloride	3			1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
mp-Xylene	(see total)			2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
o-Xylene	(see total)			1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Total Xylenes	10,000			3.0 U	3.0 U	3.0 U	3.0 U	3.0 U	3.0 U	3.0 U	3.0 U	3.0 U
			Total CVOCs & 1,4-Dioxane	**ND**	**27.6**	**131**	**23.1**	**8.8**	**244.6**	**ND**	**ND**	**1.1**

a/ U = not detected above the method detection limit; NS = not sampled; ID = identification
Bolded values indicate an exceedence of the Groundwater Quality Standards
All sample concentrations in micrograms per liter (µg/l)
Collected samples representative of non-pumping conditions in the aquifer system

b/ All cleanup standards, except for 1,4-dioxane, are equal to the Maryland Generic Numeric Cleanup Standards for Groundwater, Type I and II Aquifers, from the State of Maryland Interim Final Guidance (October 2018). Accessed May 27, 2020: https://mde.maryland.gov/programs/LAND/MarylandBrownfieldVCP/Docume

c/ Numeric cleanup standards from WSP's October 2, 2015, Response Action Plan, Revision 2.

d/ MW-04 was replaced in September 2022 with monitoring well MW-4R

Table 3

Historical Monitoring Well Sampling Results
Former Kop-Flex Facility Site
Hanover, Maryland
(December 2016 - November 2022) (a)

Well ID	Sample Date	Chloroethane	1,1-Dichloroethane	1,2-Dichloroethane	1,1-Dichloroethene	cis-1,2-Dichloroethene	1,4-Dioxane	Methylene Chloride	Tetrachloroethene	1,1,1-Trichloroethane	1,1,2-Trichloroethane	Trichloroethene	Vinyl chloride
Groundwater Cleanup Standards (b)		2,100	2.8	5	7	70	15 (c)	5	5	200	5	5	2
MW-01	5/14/2020	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
	5/9/2021	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
	11/14/2021	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
	6/26/2022	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.23	2.0 U	1.0	1.0 U	1.0 U	1.0 U	1.0 U
	11/20/2022	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
MW-03	12/8/2016	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	4.6	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
	5/1/2017	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
	5/30/2018	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
	5/21/2019	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
	5/12/2020	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
	5/9/2021	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
	11/14/2021	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
	6/26/2022	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
	11/20/2022	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
MW-04	12/7/2016	10.0 U	**259**	10.0 U	**1,020**	10.0 U	**576**	20.0 U	4.0 U	31.7	10.0 U	10.0 U	10.0 U
	5/2/2017	4.0 U	**103**	4.0 U	**459**	4.0 U	**252**	8.0 U	4.0 U	13.0	4.0 U	4.0 U	4.0 U
	11/15/2017	5.0 U	**29.2**	1.0 J	**151**	1.0 U	**121**	**10.5**	0.687 J	4.3	1.0 U	1.4	1.0 U
	5/30/2018	1.0 U	**33.3**	1.0 U	**153**	1.0 U	**92.7**	2.0 U	1.0 U	4.0	1.0 U	1.0 U	1.0 U
	11/7/2018	1.0 U	**23.3**	1.0 U	**89.9**	1.0 U	1.0 U	2.0 U	1.0 U	1.6	1.0 U	1.0 U	1.0 U
	5/21/2019	1.0 U	**57.7**	1.1	**142**	1.0 U	**111**	5.0 U	1.0 U	1.7	1.0 U	1.1	1.0 U
	11/19/2019	1.0 U	**45.1**	1.1	**126**	1.0 U	**94.2**	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
	5/13/2020	1.0 U	**58.6**	1.3	**149**	1.0 U	**84.6**	5.0 U	1.0 U	1.4	1.2	1.2	1.0 U
	11/22/2020	1.0 U	**62.0**	1.6	**141**	1.0 U	**151**	5.0 U	1.0 U	1.0 U	1.0 U	1.2	1.0 U
	5/9/2021	2.5 U	**130**	2.9	**361**	2.5 U	**303**	12.5 U	2.5 U	3.4	2.5 U	2.5 U	2.5 U
	11/14/2021	1.0 U	**82.7**	1.2	**175**	1.0 U	**134**	5.0 U	1.0 U	1.0 U	1.0 U	1.5	1.0 U
	6/26/2022	1.0 U	**173**	3.1	**339**	1.0 U	**86.8**	5.0 U	1.0 U	1.8	1.0 U	3.0	1.0 U
MW-04R	11/20/2022	1.0 U	**37.4**	1.1	**76.0**	1.0 U	**57.3**	1.0 U	1.0 U	1.1	1.0 U	1.0 U	1.0 U

Table 3

Historical Monitoring Well Sampling Results
Former Kop-Flex Facility Site
Hanover, Maryland
(December 2016 - November 2022) (a)

Well ID	Sample Date	Chloroethane	1,1-Dichloroethane	1,2-Dichloroethane	1,1-Dichloroethene	cis-1,2-Dichloroethene	1,4-Dioxane	Methylene Chloride	Tetrachloroethene	1,1,1-Trichloroethane	1,1,2-Trichloroethane	Trichloroethene	Vinyl chloride
Groundwater Cleanup Standards (b)		2,100	2.8	5	7	70	15 (c)	5	5	200	5	5	2
MW-5R	12/7/2016	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	**16.5**	2.0 U	1.0 U	1.4	1.0 U	1.0 U	1.0 U
	5/1/2017	1.0 U	1.4	1.0 U	1.4	1.0 U	**16.5**	2.0 U	1.0 U	2.7	1.0 U	1.0 U	1.0 U
	11/15/2017	5.0 U	1.6	1.0 U	2.5	1.0 U	11.0	**10.2**	1.0 U	1.7	1.0 U	1.0 U	1.0 U
	5/30/2018	1.0 U	1.8	1.0 U	2.7	1.0 U	11.5	2.0 U	1.0 U	1.4	1.0 U	1.0 U	1.0 U
	11/7/2018	1.0 U	1.0 U	1.0 U	1.3	1.0 U	2.0 U	2.0 U	1.0 U	1.5	1.0 U	1.0 U	1.0 U
	5/21/2019	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	7.6	5.0 U	1.0 U	1.9	1.0 U	1.0 U	1.0 U
	11/19/2019	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	6.8	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
	5/12/2020	1.0 U	1.8	1.0 U	1.7	1.0 U	13.4	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
	11/22/2020	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.2	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
	11/14/2021	1.0 U	1.6	1.0 U	1.4	1.0 U	12.0	5.0 U	1.0 U	2.4	1.0 U	1.0 U	1.0 U
	6/26/2022	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0	5.0 U	1.0 U	1.2	1.0 U	1.0 U	1.0 U
	11/20/2022	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.1	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
MW-09	12/8/2016	1.0 U	**4.5**	1.0 U	**104**	1.0 U	**95.5**	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
	5/2/2017	1.0 U	**2.9**	1.0 U	**63.8**	1.0 U	**20.8**	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
	11/15/2017	5.0 U	**3.1**	0.4 J	**60.2**	1.0 U	**32.4**	5.0 U	1.0 U	0.7 J	1.0 U	1.0 U	1.0 U
	5/30/2018	1.0 U	2.2	1.0 U	**49.2**	1.0 U	**23.4**	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
	11/7/2018	1.0 U	**4.5**	1.0 U	**75.9**	1.0 U	**37.4**	2.0 U	1.0 U	1.1	1.0 U	1.0 U	1.0 U
	5/21/2019	1.0 U	**3.6**	1.0 U	**70.8**	1.0 U	**32.8**	5.0 U	1.0 U	1.2	1.0 U	1.0 U	1.0 U
	11/19/2019	1.0 U	2.6	1.0 U	**48.7**	1.0 U	**24.4**	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
	5/13/2020	1.0 U	2.6	1.0 U	**50.5**	1.0 U	**18.7**	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
	11/22/2020	1.0 U	2.5	1.0 U	**56.4**	1.0 U	**25.7**	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
	5/9/2021	1.0 U	**3.0**	1.0 U	**56.3**	1.0 U	**23.6**	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
	11/14/2021	1.0 U	2.5	1.0 U	**53.3**	1.0 U	**22.6**	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
	6/26/2022	1.0 U	**3.0**	1.0 U	**57.7**	1.0 U	4.5	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
	11/20/2022	1.0 U	1.9	1.0 U	**35.7**	1.0 U	7.5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U

Table 3

Historical Monitoring Well Sampling Results
Former Kop-Flex Facility Site
Hanover, Maryland
(December 2016 - November 2022) (a)

Well ID	Sample Date	Chloroethane	1,1-Dichloroethane	1,2-Dichloroethane	1,1-Dichloroethene	cis-1,2-Dichloroethene	1,4-Dioxane	Methylene Chloride	Tetrachloroethene	1,1,1-Trichloroethane	1,1,2-Trichloroethane	Trichloroethene	Vinyl chloride
Groundwater Cleanup Standards (b)		2,100	2.8	5	7	70	15 (c)	5	5	200	5	5	2
MW-16	12/8/2016	200 U	**6,420**	200 U	**26,200**	200 U	**1,450**	400 U	100 U	**4,390**	200 U	200 U	200 U
	5/2/2017	225	**7,910**	100 U	**10,500**	100 U	**971**	200 U	100 U	**8,930**	100 U	100 U	100 U
	11/15/2017	732	**7,110**	**22**	**7,740**	46	**836**	**11**	**18.4**	**5,590**	1.0 U	**69**	**19**
	5/30/2018	249	**6,250**	50 U	**4,690**	50 U	**636**	100 U	50 U	**7,360**	50 U	50 U	50 U
	11/7/2018	275	**7,360**	50 U	**7,800**	50 U	**866**	100 U	50 U	**6,420**	50 U	**74.2**	50 U
	5/22/2019	10 U	**343**	10 U	**1,160**	10 U	**1,230**	50 U	10 U	**216**	10 U	**13.7**	10 U
	11/19/2019	23.4	**608**	10 U	**1,440**	10 U	**81.9**	50 U	10 U	**314**	10 U	**18.3**	10 U
	5/13/2020	10.9	**394**	5 U	**571**	5 U	**39.2**	5 U	5 U	**487**	5 U	**10.7**	5 U
	11/22/2020	20.0 U	**1,560**	20 U	**1,130**	20 U	**84.2**	100 U	20 U	**2,060**	5 U	20.0 U	20 U
	5/9/2021	4.2	**169**	2 U	**276**	2.1	**19.3**	10 U	2.2	123	2 U	**6.2**	2 U
	11/14/2021	12.5 U	**1,350**	12.5 U	**1,630**	12.5 U	**76.0**	62.5 U	12.5 U	**1,720**	12.5 U	12.5 U	12.5 U
	6/26/2022	42.6	**1,030**	1.0 U	**1,210**	1.0 U	**26.4**	1.4	**5.5**	**1,610**	1.0 U	**13.8**	**2.3**
	11/20/2022	136.0	**3,290**	1.0 U	**4,290**	1.0 U	**143.0**	2.2	**9.4**	**2,960**	1.0 U	**28.0**	**13.2**
MW-18	12/7/2016	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
	5/1/2017	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
	11/15/2017	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	**24.9**	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
	5/30/2018	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
	11/7/2018	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
	5/21/2019	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
	11/19/2019	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
	5/12/2020	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
	11/22/2020	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
	5/9/2021	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
	11/14/2021	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
	6/26/2022	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
	11/20/2022	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U

Table 3

Historical Monitoring Well Sampling Results
Former Kop-Flex Facility Site
Hanover, Maryland
(December 2016 - November 2022) (a)

Well ID	Sample Date	Chloroethane	1,1-Dichloroethane	1,2-Dichloroethane	1,1-Dichloroethene	cis-1,2-Dichloroethene	1,4-Dioxane	Methylene Chloride	Tetrachloroethene	1,1,1-Trichloroethane	1,1,2-Trichloroethane	Trichloroethene	Vinyl chloride
Groundwater Cleanup Standards (b)		2,100	2.8	5	7	70	15 (c)	5	5	200	5	5	2
MW-20	12/9/2016	2.0 U	**99.7**	**5.1**	**173**	2.0 U	**767**	4.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
	5/2/2017	2.0 U	**161**	**7.3**	**286**	2.0 U	**967**	4.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
	11/15/2017	5.0 U	**136**	**5.7**	**223**	1.4	**969**	5.0 U	1.0 U	1.0 U	1.9	1.0 U	1.0 U
	5/30/2018	2.0 U	**115**	**5.5**	**205**	2.0 U	**966**	4.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
	11/7/2018	2.5 U	**145**	**6.3**	**233**	2.5 U	**986**	5.0 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
	5/21/2019	2.0 U	**157**	**6.5**	**226**	2.0 U	**1,620**	10.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
	11/19/2019	2.0 U	**175**	**7.5**	**244**	2.0 U	**1,220**	10.0 U	2.0 U	2.0 U	2.1	2.0 U	2.0 U
	5/13/2020	2.0 U	**188**	**7.7**	**232**	2.0 U	**1,000**	10.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
	11/22/2020	2.0 U	**205**	**7.5**	**272**	2.0 U	**1,260**	4.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
	5/9/2021	2.0 U	**214**	**7.5**	**267**	2.2	**1,010**	4.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
	11/14/2021	2.0 U	**256**	**8.7**	**321**	2.0 U	**1,210**	4.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
	6/26/2022	1.0 U	**294**	**10.8**	**426**	2.9	**377**	5.0 U	1.0 U	1.0 U	2.7	2.7	1.0 U
	11/20/2022	1.0 U	**258**	**9.7**	**348**	2.6	**560**	1.0 U	1.0 U	1.0 U	2.4	2.7	1.0 U
MW-38R	12/9/2016	1.0 U	**3.8**	1.0 U	1.0 U	1.0 U	**18.3**	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
	5/1/2017	1.0 U	**6.0**	1.0 U	1.0 U	1.0 U	**42.6**	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
	11/15/2017	5.0 U	**8.3**	1.0 U	1.0 U	1.0 U	**62.5**	**8.1**	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
	5/30/2018	1.0 U	**4.3**	1.0 U	1.0 U	1.0 U	**40.7**	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
	11/7/2018	1.0 U	**6.9**	1.0 U	1.0 U	1.0 U	**39.4**	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
	5/21/2019	1.0 U	**4.7**	1.0 U	1.0 U	1.0 U	**43.2**	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
	11/19/2019	1.0 U	**7.7**	1.0 U	1.0 U	1.0 U	**51.5**	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
	5/12/2020	1.0 U	**6.2**	1.0 U	1.0 U	1.0 U	**40.8**	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
	11/22/2020	1.0 U	**6.5**	1.0 U	1.0 U	1.0 U	**40.9**	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
	5/9/2021	1.0 U	**5.5**	1.0 U	1.0 U	1.0 U	**47.0**	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
	11/19/2021	1.0 U	**6.7**	1.0 U	1.0 U	1.0 U	**46.2**	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
	6/26/2022	1.0 U	**7.6**	1.0 U	1.0 U	1.0 U	14.4	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
	11/20/2022	1.0 U	**7.1**	1.0 U	1.0 U	1.0 U	**20.1**	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U

Table 3

Historical Monitoring Well Sampling Results
Former Kop-Flex Facility Site
Hanover, Maryland
(December 2016 - November 2022) (a)

Well ID	Sample Date	Chloroethane	1,1-Dichloroethane	1,2-Dichloroethane	1,1-Dichloroethene	cis-1,2-Dichloroethene	1,4-Dioxane	Methylene Chloride	Tetrachloroethene	1,1,1-Trichloroethane	1,1,2-Trichloroethane	Trichloroethene	Vinyl chloride
Groundwater Cleanup Standards (b)		2,100	2.8	5	7	70	15 (c)	5	5	200	5	5	2
MW-39	12/7/2016	1.0 U	1.0 U	1.0 U	1.7	1.0 U	2.5	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
	5/1/2017	1.0 U	1.0 U	1.0 U	1.1	1.0 U	3.0	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
	11/15/2017	5.0 U	1.0 U	1.0 U	0.6 J	1.0 U	2.2	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
	5/30/2018	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
	11/7/2018	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
	5/21/2019	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
	11/19/2019	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
	5/12/2020	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
	11/22/2020	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
	5/9/2021	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
	11/14/2021	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
	6/26/2022	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.22	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
	11/20/2022	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
MW-42	12/7/2016	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	4.8	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
	5/1/2017	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	8.0	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
	11/15/2017	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	**19.3**	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
	5/30/2018	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	7.4	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
	11/7/2018	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	10.3	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
	5/21/2019	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	10.6	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
	11/19/2019	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	5.6	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
	5/12/2020	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	11.2	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
	1/6/2021	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	13.2	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
	5/9/2021	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	13.3	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
	11/14/2021	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	12.5	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
	7/15/2022	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	5.6	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
	11/20/2022	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	5.4	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U

Table 3

Historical Monitoring Well Sampling Results
Former Kop-Flex Facility Site
Hanover, Maryland
(December 2016 - November 2022) (a)

Well ID	Sample Date	Chloroethane	1,1-Dichloroethane	1,2-Dichloroethane	1,1-Dichloroethene	cis-1,2-Dichloroethene	1,4-Dioxane	Methylene Chloride	Tetrachloroethene	1,1,1-Trichloroethane	1,1,2-Trichloroethane	Trichloroethene	Vinyl chloride
Groundwater Cleanup Standards (b)		2,100	2.8	5	7	70	15 (c)	5	5	200	5	5	2
MW-43	12/7/2016	2.0 U	**15.9**	2.1	**171**	2.0 U	**237**	4.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
	5/1/2017	2.0 U	**21.3**	2.1	**177**	2.0 U	**206**	4.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
	11/15/2017	5.0 U	**15.9**	1.3	**159**	1.0 U	**165**	5.0 U	1.0 U	1.2	1.0 U	1.0 U	1.0 U
	5/30/2018	2.0 U	**5.9**	1.0 U	**68**	1.0 U	**57.6**	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
	11/7/2018	1.0 U	**13.8**	1.2	**118**	1.0 U	**107**	2.0 U	1.0 U	1.0 U	1.0 U	1.3	1.0 U
	5/21/2019	1.0 U	**5.2**	1.0 U	**53.9**	1.0 U	**52.0**	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
	11/19/2019	1.0 U	**4.3**	1.0 U	**48.5**	1.0 U	**55.2**	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
	5/12/2020	1.0 U	**3.8**	1.0 U	**46.3**	1.0 U	**49.0**	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
	11/22/2020	1.0 U	**2.9**	1.0 U	**31.8**	1.0 U	**42.7**	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
	5/9/2021	1.0 U	2.7	1.0 U	**31.7**	1.0 U	**34.1**	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
	11/14/2021	1.0 U	2.6	1.0 U	**31.3**	1.0 U	**34.3**	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
	6/26/2022	1.0 U	2.5	1.0 U	**29.4**	1.0 U	7.0	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
	11/20/2022	1.0 U	1.7	1.0 U	**20.3**	1.0 U	9.6	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
MW-44	12/7/2016	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
	5/1/2017	1.0 U	**6.6**	1.0 U	5.9	1.0 U	**49.1**	2.0 U	1.0 U	27.7	1.0 U	1.0 U	1.0 U
	5/30/2018	1.0 U	1.4	1.0 U	1.4	1.0 U	8.4	2.0 U	1.0 U	4.9	1.0 U	1.0 U	1.0 U
	5/21/2019	1.0 U	**14.9**	1.0 U	**22.4**	1.0 U	**64.4**	5.0 U	1.0 U	74.3	1.0 U	1.0 U	1.0 U
	5/13/2020	1.0 U	**3.0**	1.0 U	4.1	1.0 U	**17.7**	5.0 U	1.0 U	11.9	1.0 U	1.0 U	1.0 U
	5/9/2021	1.0 U	1.7	1.0 U	2.9	1.0 U	10.2	5.0 U	1.0 U	6.9	1.0 U	1.0 U	1.0 U
	11/14/2021	1.0 U	**3.8**	1.0 U	**7.2**	1.0 U	13.3	5.0 U	1.0 U	15.4	1.0 U	1.0 U	1.0 U
	6/26/2022	1.0 U	2.3	1.0 U	3.2	1.0 U	2.5	5.0 U	1.0 U	5.9	1.0 U	1.0 U	1.0 U
	11/20/2022	1.0 U	2.4	1.0 U	3.9	1.0 U	4.2	1.0 U	1.0 U	8.0	1.0 U	1.0 U	1.0 U
MW-1D	1/2/2017	2.0 U	**72**	4.7	**375**	2.0 U	**236**	4.0 U	2.5 U	37.5	2.0 U	2.0 U	2.0 U
	5/3/2017	2.5 U	**105**	**5.7**	**407**	2.5 U	**329**	5.0 U	2.5 U	37.1	2.5 U	2.5 U	2.5 U
	11/15/2017	5.0 U	**80**	3.8	**277**	0.6 J	**243**	5.0 U	0.519 J	29.8	0.8 J	1.7	1 U
	5/30/2018	1.0 U	**14.9**	1.0 U	**71.4**	1.0 U	**64.4**	2.0 U	1.0 U	5.3	1.0 U	1.0 U	1.0 U
	11/7/2018	1.0 U	**7.1**	1.0 U	**38.8**	1.0 U	2.0 U	2.0 U	1.0 U	3.3	1.0 U	1.0 U	1.0 U
	5/21/2019	1.0 U	2.1	1.0 U	**13.7**	1.0 U	12.8	5.0 U	1.0 U	1.1	1.0 U	1.0 U	1.0 U
	11/19/2019	1.0 U	**3.4**	1.0 U	**17.7**	1.0 U	**17.9**	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
	5/18/2020	1.0 U	2.6	1.0 U	**16.5**	1.0 U	12.8	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
	11/22/2020	1.0 U	**3.1**	1.0 U	**17.6**	1.0 U	**16.9**	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
	5/9/2021	1.0 U	1.8	1.0 U	**12.2**	1.0 U	9.0	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
	11/14/2021	1.0 U	**3.8**	1.0 U	**22.4**	1.0 U	**16.5**	5.0 U	1.0 U	1.5	1.0 U	1.0 U	1.0 U
	6/26/2022	1.0 U	**3.1**	1.0 U	**19.1**	1.0 U	4.0	5.0 U	1.0 U	1.3	1.0 U	1.0 U	1.0 U
	11/20/2022	1.0 U	**3.0**	1.0 U	**16.8**	1.0 U	6.8	1.0 U	1.0 U	1.0	1.0 U	1.0 U	1.0 U

Table 3

Historical Monitoring Well Sampling Results
Former Kop-Flex Facility Site
Hanover, Maryland
(December 2016 - November 2022) (a)

Well ID	Sample Date	Chloroethane	1,1-Dichloroethane	1,2-Dichloroethane	1,1-Dichloroethene	cis-1,2-Dichloroethene	1,4-Dioxane	Methylene Chloride	Tetrachloroethene	1,1,1-Trichloroethane	1,1,2-Trichloroethane	Trichloroethene	Vinyl chloride
Groundwater Cleanup Standards (b)		2,100	2.8	5	7	70	15 (c)	5	5	200	5	5	2
MW-16D	12/8/2016	2.0 U	**56.6**	2.9	**254**	2.0 U	**202**	4.0 U	2.0 U	21	2.0 U	2.0 U	2.0 U
	5/2/2017	2.0 U	**43.7**	2.9	**235**	2.0 U	**182**	4.0 U	2.0 U	16.4	2.0 U	2.0 U	2.0 U
	11/15/2017	5.0 U	**29.7**	1.9	**179**	0.3 J	**192**	**10.0**	1.0 U	15.1	0.5 J	0.9 J	1.0 U
	5/30/2018	1.0 U	**26.4**	1.6	**180**	1.0 U	**153**	2.0 U	1.0 U	10.3	1.0 U	1.0 U	1.0 U
	11/7/2018	1.0 U	**27.5**	1.8	**161**	1.0 U	**158**	2.0 U	1.0 U	12.5	1.0 U	1.0 U	1.0 U
	5/22/2019	1.0 U	**28.5**	2.1	**172**	1.0 U	**148**	5.0 U	1.0 U	14.5	1.0 U	1.0 U	1.0 U
	11/19/2019	1.0 U	**25.6**	1.7	**133**	1.0 U	**140**	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
	5/13/2020	1.0 U	**29.1**	1.9	**145**	1.0 U	**130**	5.0 U	1.0 U	11.7	1.0 U	1.0 U	1.0 U
	12/8/2020	1.0 U	**25.9**	1.6	**127**	1.0 U	**105**	5.0 U	1.0 U	10.1	1.0 U	1.0 U	1.0 U
	5/9/2021	1.0 U	**27.7**	1.7	**130**	1.0 U	**107**	5.0 U	1.0 U	9.5	1.0 U	1.0 U	1.0 U
	11/14/2021	1.0 U	**21.5**	1.1	**98.7**	1.0 U	**84.5**	5.0 U	1.0 U	6.9	1.0 U	1.0 U	1.0 U
	7/15/2022	1.0 U	**27.4**	1.7	**136.0**	1.0 U	**39.2**	1.0 U	1.0 U	8.3	1.0 U	1.0 U	1.0 U
	12/29/2022	1.0 U	**16.4**	1.0 U	**80.1**	1.0 U	**29.9**	5.0 U	1.0 U	4.7	1.0 U	1.0 U	1.0 U
MW-21D	12/16/2016	1.0 U	2.6	1.0 U	**23.4**	1.0 U	**18.6**	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
	5/1/2017	1.0 U	**6.9**	1.4	**111**	1.0 U	**57.5**	2.0 U	1.0 U	2.3	1.0 U	1.0 U	1.0 U
	11/15/2017	5.0 U	2.0	1.0 U	**14.4**	1.0 U	**18.5**	5.0 U	1.0 U	0.7 J	1.0 U	1.0 U	1.0 U
	5/30/2018	1.0 U	1.0	1.0 U	**38.8**	1.0 U	**32.2**	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
	11/7/2018	1.0 U	1.0 U	1.0 U	**30.0**	1.0 U	**18.0**	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
	5/21/2019	1.0 U	1.0 U	1.0 U	**9.9**	1.0 U	8.4	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
	11/19/2019	1.0 U	1.0 U	1.0 U	4.1	1.0 U	4.1	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
	5/18/2020	1.0 U	1.0 U	1.0 U	**13.6**	1.0 U	7.6	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
	11/22/2020	1.0 U	1.0 U	1.0 U	**7.8**	1.0 U	5.1	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
	5/9/2021	1.0 U	1.0 U	1.0 U	4.1	1.0 U	2.8	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
	11/14/2021	1.0 U	1.0 U	1.0 U	**18.7**	1.0 U	12.9	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
	6/26/2022	1.0 U	1.0 U	1.0 U	**24.5**	1.0 U	4.2	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
	11/20/2022	1.0 U	1.0 U	1.0 U	**17.6**	1.0 U	5.5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U

Table 3

Historical Monitoring Well Sampling Results
Former Kop-Flex Facility Site
Hanover, Maryland
(December 2016 - November 2022) (a)

Well ID	Sample Date	Chloroethane	1,1-Dichloroethane	1,2-Dichloroethane	1,1-Dichloroethene	cis-1,2-Dichloroethene	1,4-Dioxane	Methylene Chloride	Tetrachloroethene	1,1,1-Trichloroethane	1,1,2-Trichloroethane	Trichloroethene	Vinyl chloride
Groundwater Cleanup Standards (b)		2,100	2.8	5	7	70	15 (c)	5	5	200	5	5	2
MW-22D	12/7/2016	1.0 U	2.5	1.0 U	**31.5**	1.0 U	**24.5**	2.0 U	1.0 U	4.1	1.0 U	1.0 U	1.0 U
	5/2/2017	1.0 U	2.5	1.0 U	**36.9**	1.0 U	**24.6**	2.0 U	1.0 U	3.7	1.0 U	1.0 U	1.0 U
	11/15/2017	5.0 U	1.72	1.0 U	**24.4**	1.0 U	**19.6**	5.0 U	1.0 U	2.8	1.0 U	1.0 U	1.0 U
	5/30/2018	1.0 U	1.0 U	1.0 U	**13.1**	1.0 U	7.9	2.0 U	1.0 U	1.1	1.0 U	1.0 U	1.0 U
	11/7/2018	1.0 U	1.0 U	1.0 U	**9.7**	1.0 U	2.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
	5/21/2019	1.0 U	1.0 U	1.0 U	6.3	1.0 U	5.1	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
	11/19/2019	1.0 U	1.0 U	1.0 U	5.6	1.0 U	4.9	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
	5/18/2020	1.0 U	1.0 U	1.0 U	6.2	1.0 U	4.6	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
	11/22/2020	1.0 U	1.0 U	1.0 U	**7.1**	1.0 U	4.9	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
	5/9/2021	1.0 U	1.0 U	1.0 U	5.9	1.0 U	4.0	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
	11/14/2021	1.0 U	1.0 U	1.0 U	6.2	1.0 U	5.2	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
	6/26/2022	1.0 U	1.0 U	1.0 U	**9.0**	1.0 U	1.6	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
	11/20/2022	1.0 U	1.0 U	1.0 U	6.1	1.0 U	2.7	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
MW-23D	1/2/2017	2.0 U	**26.4**	2.0 U	**140**	2.0 U	**151**	**8.3**	1.0 U	17.0	2.0 U	2.0 U	2.0 U
	5/1/2017	2.0 U	**39.1**	2.4	**208**	2.0 U	**177**	4.0 U	2.0 U	19.9	2.0 U	2.0 U	2.0 U
	11/15/2017	5.0 U	**31.1**	1.9	**179**	0.3 J	**158**	5.0 U	0.417 J	19.3	0.4 J	0.9 J	1.0 U
	5/30/2018	1.0 U	**30.5**	1.6	**172**	1.0 U	**148**	2.0 U	1.0 U	14.8	1.0 U	1.0 U	1.0 U
	11/7/2018	1.0 U	**36.2**	1.9	**185**	1.0 U	**146**	2.0 U	1.0 U	17.0	1.0 U	1.0 U	1.0 U
	5/21/2019	1.0 U	**18.5**	1.2	**96.4**	1.0 U	**70.7**	5.0 U	1.0 U	8.6	1.0 U	1.0 U	1.0 U
	11/19/2019	1.0 U	**22.7**	1.4	**107**	1.0 U	**109**	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
	5/13/2020	1.0 U	**35.2**	1.8	**142**	1.0 U	**112**	5.0 U	1.0 U	13.6	1.0 U	1.0 U	1.0 U
	11/22/2020	1.0 U	**26.3**	1.2	**106**	1.0 U	**96.7**	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
	5/9/2021	1.0 U	**31.8**	1.5	**126**	1.0 U	**99.0**	5.0 U	1.0 U	11.7	1.0 U	1.0 U	1.0 U
	11/14/2021	1.0 U	**28.5**	1.1	**110**	1.0 U	**92.4**	5.0 U	1.0 U	9.2	1.0 U	1.0 U	1.0 U
	6/26/2022	1.0 U	**34.6**	1.5	**138**	1.0 U	**27.0**	5.0 U	1.0 U	10.7	1.0 U	1.0 U	1.0 U
	11/20/2022	1.0 U	**33.6**	1.7	**140**	1.0 U	**59.6**	1.0 U	1.0 U	9.7	1.0 U	1.0 U	1.0 U
MW-27D	12/7/2016	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
	5/1/2017	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	3.6	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
	5/30/2018	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
	5/21/2019	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
	5/13/2020	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
	5/9/2021	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
	11/14/2021	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
	6/26/2022	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.13	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
	11/20/2022	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U

Table 3

Historical Monitoring Well Sampling Results
Former Kop-Flex Facility Site
Hanover, Maryland
(December 2016 - November 2022) (a)

Well ID	Sample Date	Chloroethane	1,1-Dichloroethane	1,2-Dichloroethane	1,1-Dichloroethene	cis-1,2-Dichloroethene	1,4-Dioxane	Methylene Chloride	Tetrachloroethene	1,1,1-Trichloroethane	1,1,2-Trichloroethane	Trichloroethene	Vinyl chloride
Groundwater Cleanup Standards (b)		2,100	2.8	5	7	70	15 (c)	5	5	200	5	5	2
MW-40D	12/9/2016	1.0 U	**2.9**	1.0 U	**18.1**	1.0 U	9.4	2.0 U		1.0 U	1.0 U	1.0 U	1.0 U
	5/1/2017	1.0 U	**3.1**	1.0 U	**17.4**	1.0 U	8.5	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
	11/15/2017	5.0 U	0.9 J	1.0 U	5.2	1.0 U	5.2	**9.7**	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
	5/30/2018	1.0 U	1.0 U	1.0 U	2.9	1.0 U	2.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
	11/7/2018	1.0 U	1.0 U	1.0 U	4.4	1.0 U	2.7	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
	5/21/2019	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
	11/19/2019	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
	5/18/2020	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
	11/22/2020	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
	5/9/2021	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
	11/14/2021	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
	6/26/2022	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.18	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
	11/20/2022	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
MW-41D	12/16/2016	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.8	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
	5/17/2017	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.4	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
	5/30/2018	1.0 U	1.0 U	1.0 U	1.1	1.0 U	2.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
	5/21/2019	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.1	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
	5/18/2020	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
	5/9/2021	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
	11/14/2021	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
	6/26/2022	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.62	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
	11/20/2022	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.1	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U

a/ U = not detected above the method detection limit
Bolded values indicate an exceedence of the Groundwater Quality Standards
All sample concentrations in micrograms per liter (µg/l)
b/ All cleanup standards, except for 1,4-dioxane, are equal to the Maryland Generic Numeric Cleanup Standards for Groundwater, Type I and II Aquifers, from the State of Maryland Interim Final Guidance (October 2018). Accessed May 27, 2020: https://mde.maryland.gov/programs/LAND/MarylandBrownfieldVCP/Documents/www.mde.state.md.us/assets/document/M
c/ Numeric cleanup standards from WSP's October 2, 2015, Response Action Plan, Revision 2.

Table 4

November 2022 Recovery Well Sampling Results
Former Kop-Flex Facility
Hanover, Maryland (a)

Parameters	Groundwater Cleanup Standards (µg/L) (b)		Shallow Zone Wells			Deep Zone Wells	
		Well ID:	RW-1S	RW-2S	RW-3S	RW-1D	RW-2D
		Sampling Date:	11/20/2022	11/20/2022	11/20/2022	11/20/2022	11/20/2022
Acetone	1,400		10.0 U	10.0 U	10.3	10.0 U	10.0 U
Chloroethane	-		20.4	1.7	1.0 U	8.2	1.0 U
1,1-Dichloroethane	2.8		**150**	**71.2**	2.1	**68.6**	**20.4**
1,2-Dichloroethane	5		2.3	1.0 U	1.0 U	1.9	1.2
1,1-Dichloroethene	7		**523**	**393**	2.2	**237**	**123**
cis-1,2-Dichloroethene	70		2.9	1.0 U	1.0 U	2.8	1.0 U
1,4-Dioxane	15.0	(c)	**158**	**172**	5.4	**40.2**	**40.0**
Methylene Chloride	5		1.0 U	2.3	1.0 U	1.0 U	1.0 U
1,1,1-Trichloroethane	200		49.0	**238**	4.6	8.1	4.2
Trichloroethene	5		3.7	4.4	1.0 U	1.0	1.0 U
Vinyl Chloride	3		**5.0**	1.0 U	1.0 U	1.0 U	1.0 U
Total Detected CVOCs + 1,4-Dioxane			*914.3*	*880.3*	*14.3*	*367.8*	*188.8*

a/ U = not detected above the method detection limit
Bolded values indicate an exceedence of the Groundwater Quality Standards
All sample concentrations in micrograms per liter (µg/l)

b/ All cleanup standards, except for 1,4-dioxane, are equal to the Maryland Generic Numeric Cleanup Standards for Groundwater, Type I and II Aquifers, from the State of Maryland Interim Final Guidance (October 2018). Accessed May 27, 2020: https://mde.maryland.gov/programs/LAND/MarylandBrownfieldVCP/Documents/www.mde.state.md.us/assets/document/MDE%20Soil%2

c/ Numeric cleanup standards from WSP's October 2, 2015, Response Action Plan, Revision 2.

ENCLOSURE A – CERTIFIED LABORATORY ANALYTICAL REPORT FOR ONSITE MONITORING WELL SAMPLES (NOVEMBER 2022)

301 Fulling Mill Road | Middletown, PA 17057 | Phone: 717-944-5541 | Fax: 717-944-1430 | www.alsglobal.com

NELAP Certifications: NJ PA010 , NY 11759 , PA 22-293 DoD ELAP: PJLA 74618
State Certifications: FL E871113 , WA C999 , MD 128 , VA 460157 , WV DW 9961-C , WV 343

Analytical Results Report For **WSP USA Inc.**

Project 31405608.010
Workorder 3275168
Report ID 221698 on 1/30/2023

Certificate of Analysis

Enclosed are the analytical results for samples received by the laboratory on Nov 21, 2022.

The ALS Environmental laboratory in Middletown, Pennsylvania is a National Environmental Laboratory Accreditation Program (NELAP) accredited laboratory and as such, certifies that all applicable test results meet the requirements of NELAP.

If you have any questions regarding this certificate of analysis, please contact Susan Scherer (Project Coordinator) at (717) 944-5541.

Analyses were performed according to our laboratory's NELAP-approved quality assurance program and any applicable state requirements. The test results meet requirements of the current NELAP standards or state requirements, where applicable. For a specific list of accredited analytes, refer to the certifications section of the ALS website at www.alsglobal.com/en/Our-Services/Life-Sciences/Environmental/Downloads.

ALS Middletown: 301 Fulling Mill Road, Middletown, PA 17057 : 717-944-5541.

Recipient(s):
Elliott Martynkiewicz - WSP USA Inc.
Eric Johnson - WSP USA INC

This page is included as part of the Analytical Report and must be retained as a permanent record thereof.

Susan Scherer

Susan Scherer *(ALS Digital Signature)*
Project Coordinator

Sample Summary

Lab ID	Sample ID	Matrix	Date Collected	Date Received	Collector	Collection Company
3275168001	MW-03	Ground Water	11/20/2022 10:00	11/21/2022 17:40	CBC	Collected By Client
3275168002	MW-27D	Ground Water	11/20/2022 10:15	11/21/2022 17:40	CBC	Collected By Client
3275168003	MW-43	Ground Water	11/20/2022 10:30	11/21/2022 17:40	CBC	Collected By Client
3275168004	MW-39	Ground Water	11/20/2022 11:40	11/21/2022 17:40	CBC	Collected By Client
3275168005	MW-42	Ground Water	11/20/2022 11:55	11/21/2022 17:40	CBC	Collected By Client
3275168006	MW-18	Ground Water	11/20/2022 12:15	11/21/2022 17:40	CBC	Collected By Client
3275168007	MW-38R	Ground Water	11/20/2022 12:20	11/21/2022 17:40	CBC	Collected By Client
3275168008	MW-40D	Ground Water	11/20/2022 12:55	11/21/2022 17:40	CBC	Collected By Client
3275168009	MW-05R	Ground Water	11/20/2022 12:40	11/21/2022 17:40	CBC	Collected By Client
3275168010	MW-44	Ground Water	11/20/2022 14:10	11/21/2022 17:40	CBC	Collected By Client
3275168011	MW-21D	Ground Water	11/20/2022 14:30	11/21/2022 17:40	CBC	Collected By Client
3275168012	MW-41D	Ground Water	11/20/2022 14:45	11/21/2022 17:40	CBC	Collected By Client
3275168013	MW-09	Ground Water	11/20/2022 15:20	11/21/2022 17:40	CBC	Collected By Client
3275168014	MW-23D	Ground Water	11/20/2022 15:30	11/21/2022 17:40	CBC	Collected By Client
3275168015	MW-46D	Ground Water	11/20/2022 16:00	11/21/2022 17:40	CBC	Collected By Client
3275168016	MW-01	Ground Water	11/20/2022 16:10	11/21/2022 17:40	CBC	Collected By Client
3275168017	MW-01D	Ground Water	11/20/2022 16:20	11/21/2022 17:40	CBC	Collected By Client
3275168018	MW-22D	Ground Water	11/20/2022 16:30	11/21/2022 17:40	CBC	Collected By Client
3275168019	MW-20	Ground Water	11/20/2022 16:45	11/21/2022 17:40	CBC	Collected By Client
3275168020	MW-4R	Ground Water	11/20/2022 16:55	11/21/2022 17:40	CBC	Collected By Client
3275168021	MW-16	Ground Water	11/20/2022 17:05	11/21/2022 17:40	CBC	Collected By Client
3275168022	Trip Blank-A	Ground Water	11/20/2022 17:05	11/21/2022 17:40	CBC	Collected By Client
3275168023	Trip Blank-B	Ground Water	11/20/2022 17:05	11/21/2022 17:40	CBC	Collected By Client
3275168024	Trip Blank-E	Ground Water	11/20/2022 17:05	11/21/2022 17:40	CBC	Collected By Client

Reference

Notes

- Samples collected by ALS personnel are done so in accordance with the procedures set forth in the ALS Field Sampling Plan (20 - Field Services Sampling Plan).
- Except as qualified, Clean Water Act sample analyses are consistent with methodology requirements in 40 CFR Part 136.
- Except as qualified, Safe Drinking Water Act sample analyses are consistent with methodology requirements in 40 CFR Part 141.
- The Chain of Custody document is included as part of this report.
- All Library Search analytes should be regarded as tentative identifications based on the presumptive evidence of the mass spectra. Concentrations reported are estimated values.
- Parameters identified as "analyze immediately" require analysis within 15 minutes of collection. Any "analyze immediately" parameters not listed under the header "Field Parameters" are preformed in the laboratory and are therefore analyzed out of hold time.
- Method references listed on this report beginning with the prefix “S” followed by a method number (such as S2310B-97) refer to methods from “Standard Methods for the Examination of Water and Wastewater”.
- For microbiological analyses, the "Prepared" value is the date/time into the incubator and the "Analyzed" value is the date/time out the incubator.
- An Analysis-Prep Method Cross Reference Table is included after Analytical Results & Qualifiers section in this report.
- Unless otherwise noted, all quantitative results for soils are reported on a dry weight basis.

Standard Acronyms/Flags

J	Indicates an estimated value between the Method Detection Limit (MDL) and the Practical Quantitation Limit (PQL) for the analyte
U	Indicates that the analyte was Not Detected (ND) above the MDL
N	Indicates presumptive evidence of the presence of a compound
MDL	Method Detection Limit
PQL	Practical Quantitation Limit
RDL	Practical Quantitation Limit for this Project
ND	Not Detected - indicates that the analyte was Not Detected
Cntr	Analysis was performed using this container
RegLmt	Regulatory Limit
LCS	Laboratory Control Sample
MS	Matrix Spike
MSD	Matrix Spike Duplicate
DUP	Sample Duplicate
%Rec	Percent Recovery
RPD	Relative Percent Difference
LOD	DoD Limit of Detection
LOQ	DoD Limit of Quantitation
DL	DoD Detection Limit
I	Indicates reported value is greater than or equal to the Method Detection Limit (MDL) but less than the Report Detection Limit (RDL)
(S)	Surrogate Compound
NC	Not Calculated
*	Result outside of QC limits
#	Please reference the result in the Results Section for analyte-level flags.

Project Notations

P1 This workorder was modified to correct the reporting limits of 1,4-Dioxane from the 8270E SIM analysis based on Task Orders submitted to ALS. A reporting limit (RL) for 1,4-dioxane of 1 µg/L was requested. AJL 1/30/2023.

Sample Notations

Lab ID	Sample ID

Result Notations

Notation Ref.	
1	The QC sample type LCS for method SW846 8260D was outside the control limits for the analyte Bromomethane. The % Recovery was reported as 169 and the control limits were 45 to 148.
2	The QC sample type LCS for method SW846 8260D was outside the control limits for the analyte Hexachlorobutadiene. The % Recovery was reported as 153 and the control limits were 55 to 128.
3	The QC sample type MSD for method SW846 8260D was outside the control limits for the analyte Acetone. The RPD was reported as 56.4 and the upper control limit is 40.
4	The QC sample type MSD for method SW846 8260D was outside the control limits for the analyte Bromoform. The RPD was reported as 21.2 and the upper control limit is 16.
5	The QC sample type MS for method SW846 8260D was outside the control limits for the analyte Bromomethane. The % Recovery was reported as 233 and the control limits were 45 to 148.
6	The QC sample type MSD for method SW846 8260D was outside the control limits for the analyte Bromomethane. The % Recovery was reported as 197 and the control limits were 45 to 148.
7	The QC sample type MSD for method SW846 8260D was outside the control limits for the analyte 2-Butanone. The RPD was reported as 52.2 and the upper control limit is 16.
8	The QC sample type MSD for method SW846 8260D was outside the control limits for the analyte Carbon Tetrachloride. The % Recovery was reported as 140 and the control limits were 62 to 132.
9	The QC sample type MSD for method SW846 8260D was outside the control limits for the analyte Carbon Tetrachloride. The RPD was reported as 22.2 and the upper control limit is 17.
10	The QC sample type MSD for method SW846 8260D was outside the control limits for the analyte Chlorodibromomethane. The RPD was reported as 17.1 and the upper control limit is 15.
11	The QC sample type MSD for method SW846 8260D was outside the control limits for the analyte 1,2-Dibromo-3-chloropropane. The RPD was reported as 42.4 and the upper control limit is 26.
12	The QC sample type MSD for method SW846 8260D was outside the control limits for the analyte 1,2-Dibromoethane. The RPD was reported as 19.7 and the upper control limit is 19.
13	The QC sample type MSD for method SW846 8260D was outside the control limits for the analyte Dibromomethane. The RPD was reported as 17.1 and the upper control limit is 16.
14	The QC sample type MSD for method SW846 8260D was outside the control limits for the analyte 1,2-Dichlorobenzene. The RPD was reported as 17.1 and the upper control limit is 15.
15	The QC sample type MSD for method SW846 8260D was outside the control limits for the analyte 1,3-Dichloropropane. The RPD was reported as 16.7 and the upper control limit is 15.
16	The QC sample type MSD for method SW846 8260D was outside the control limits for the analyte trans-1,3-Dichloropropene. The RPD was reported as 19.2 and the upper control limit is 18.
17	The QC sample type MS for method SW846 8260D was outside the control limits for the analyte Hexachlorobutadiene. The % Recovery was reported as 142 and the control limits were 55 to 128.
18	The QC sample type MSD for method SW846 8260D was outside the control limits for the analyte Hexachlorobutadiene. The % Recovery was reported as 153 and the control limits were 55 to 128.
19	The QC sample type MS for method SW846 8260D was outside the control limits for the analyte 2-Hexanone. The % Recovery was reported as 63.2 and the control limits were 65 to 154.
20	The QC sample type MSD for method SW846 8260D was outside the control limits for the analyte 2-Hexanone. The RPD was reported as 46.3 and the upper control limit is 17.

21	The QC sample type MSD for method SW846 8260D was outside the control limits for the analyte p-Isopropyltoluene. The % Recovery was reported as 125 and the control limits were 72 to 123.
22	The QC sample type MSD for method SW846 8260D was outside the control limits for the analyte Methyl t-Butyl Ether. The RPD was reported as 23.2 and the upper control limit is 20.
23	The QC sample type MSD for method SW846 8260D was outside the control limits for the analyte 4-Methyl-2-Pentanone(MIBK). The RPD was reported as 39.3 and the upper control limit is 16.
24	The QC sample type MS for method SW846 8260D was outside the control limits for the analyte Naphthalene. The % Recovery was reported as 41.9 and the control limits were 56 to 134.
25	The QC sample type MSD for method SW846 8260D was outside the control limits for the analyte Naphthalene. The RPD was reported as 70.5 and the upper control limit is 40.
26	The QC sample type MSD for method SW846 8260D was outside the control limits for the analyte 1,1,2,2-Tetrachloroethane. The RPD was reported as 26.8 and the upper control limit is 16.
27	The QC sample type MS for method SW846 8260D was outside the control limits for the analyte 1,2,3-Trichlorobenzene. The % Recovery was reported as 48.2 and the control limits were 61 to 126.
28	The QC sample type MSD for method SW846 8260D was outside the control limits for the analyte 1,2,3-Trichlorobenzene. The RPD was reported as 66.2 and the upper control limit is 36.
29	The QC sample type MSD for method SW846 8260D was outside the control limits for the analyte 1,2,4-Trichlorobenzene. The RPD was reported as 36.9 and the upper control limit is 22.
30	The QC sample type MSD for method SW846 8260D was outside the control limits for the analyte 1,1,2-Trichloroethane. The RPD was reported as 17.6 and the upper control limit is 15.
31	The QC sample type MSD for method SW846 8260D was outside the control limits for the analyte 1,2,3-Trichloropropane. The RPD was reported as 28.2 and the upper control limit is 19.
32	The QC sample type MSD for method SW846 8260D was outside the control limits for the analyte Vinyl Acetate. The RPD was reported as 21.9 and the upper control limit is 17.
33	The QC sample type MS for method SW846 8270E SIM was outside the control limits for the analyte 1,4-Dioxane. The % Recovery was reported as 97.6 and the control limits were 22 to 75.
34	The QC sample type MS for method SW846 8270E SIM was outside the control limits for the analyte 1,4-Dioxane. The % Recovery was reported as 14.2 and the control limits were 22 to 75.

Detected Results Summary

Client Sample ID	MW-43	Collected	11/20/2022 10:30
Lab Sample ID	3275168003	Lab Receipt	11/21/2022 17:40

Compound	Result	Units	RDL	Method	Flag
SEMIVOLATILE SIM					
1,4-Dioxane	9.6	ug/L	1.0	SW846 8270E SIM	#
VOLATILE ORGANICS					
1,1-Dichloroethane	1.7	ug/L	1.0	SW846 8260D	#
1,1-Dichloroethene	20.3	ug/L	1.0	SW846 8260D	#
Methyl t-Butyl Ether	2.2	ug/L	1.0	SW846 8260D	#

Detected Results Summary

Client Sample ID	MW-42	Collected	11/20/2022 11:55
Lab Sample ID	3275168005	Lab Receipt	11/21/2022 17:40

Compound	Result	Units	RDL	Method	Flag
SEMIVOLATILE SIM					
1,4-Dioxane	5.4	ug/L	1.0	SW846 8270E SIM	#
VOLATILE ORGANICS					
Toluene	1.9	ug/L	1.0	SW846 8260D	#

Detected Results Summary

Client Sample ID	MW-38R	Collected	11/20/2022 12:20
Lab Sample ID	3275168007	Lab Receipt	11/21/2022 17:40

Compound	Result	Units	RDL	Method	Flag
SEMIVOLATILE SIM					
1,4-Dioxane	20.1	ug/L	2.5	SW846 8270E SIM	#
VOLATILE ORGANICS					
1,1-Dichloroethane	7.1	ug/L	1.0	SW846 8260D	#

Detected Results Summary

Client Sample ID	MW-05R	Collected	11/20/2022 12:40
Lab Sample ID	3275168009	Lab Receipt	11/21/2022 17:40

Compound	Result	Units	RDL	Method	Flag
SEMIVOLATILE SIM					
1,4-Dioxane	1.1	ug/L	1.0	SW846 8270E SIM	#
VOLATILE ORGANICS					
1,1,1-Trichloroethane	1.0	ug/L	1.0	SW846 8260D	#

Detected Results Summary

Client Sample ID	MW-44	Collected	11/20/2022 14:10
Lab Sample ID	3275168010	Lab Receipt	11/21/2022 17:40

Compound	Result	Units	RDL	Method	Flag
SEMIVOLATILE SIM					
1,4-Dioxane	4.2	ug/L	1.0	SW846 8270E SIM	#
VOLATILE ORGANICS					
1,1,1-Trichloroethane	8.0	ug/L	1.0	SW846 8260D	#
1,1-Dichloroethane	2.4	ug/L	1.0	SW846 8260D	#
1,1-Dichloroethene	3.9	ug/L	1.0	SW846 8260D	#

Detected Results Summary

Client Sample ID	MW-21D	Collected	11/20/2022 14:30
Lab Sample ID	3275168011	Lab Receipt	11/21/2022 17:40

Compound	Result	Units	RDL	Method	Flag
SEMIVOLATILE SIM					
1,4-Dioxane	5.5	ug/L	1.0	SW846 8270E SIM	#
VOLATILE ORGANICS					
1,1-Dichloroethene	17.6	ug/L	1.0	SW846 8260D	#
Methyl t-Butyl Ether	1.2	ug/L	1.0	SW846 8260D	#

Detected Results Summary

Client Sample ID	MW-41D	Collected	11/20/2022 14:45
Lab Sample ID	3275168012	Lab Receipt	11/21/2022 17:40

Compound	Result	Units	RDL	Method	Flag
SEMIVOLATILE SIM					
1,4-Dioxane	1.1	ug/L	1.0	SW846 8270E SIM	#

Detected Results Summary

Client Sample ID	MW-09	Collected	11/20/2022 15:20
Lab Sample ID	3275168013	Lab Receipt	11/21/2022 17:40

Compound	Result	Units	RDL	Method	Flag
SEMIVOLATILE SIM					
1,4-Dioxane	7.5	ug/L	1.0	SW846 8270E SIM	#
VOLATILE ORGANICS					
1,1-Dichloroethane	1.9	ug/L	1.0	SW846 8260D	#
1,1-Dichloroethene	35.7	ug/L	1.0	SW846 8260D	#

Detected Results Summary

Client Sample ID	MW-23D	Collected	11/20/2022 15:30
Lab Sample ID	3275168014	Lab Receipt	11/21/2022 17:40

Compound	Result	Units	RDL	Method	Flag
SEMIVOLATILE SIM					
1,4-Dioxane	59.6	ug/L	5.4	SW846 8270E SIM	#
VOLATILE ORGANICS					
1,1,1-Trichloroethane	9.7	ug/L	1.0	SW846 8260D	#
1,1-Dichloroethane	33.6	ug/L	1.0	SW846 8260D	#
1,1-Dichloroethene	140	ug/L	1.0	SW846 8260D	#
1,2-Dichloroethane	1.7	ug/L	1.0	SW846 8260D	#

Detected Results Summary

Client Sample ID	MW-46D	Collected	11/20/2022 16:00
Lab Sample ID	3275168015	Lab Receipt	11/21/2022 17:40

Compound	Result	Units	RDL	Method	Flag
SEMIVOLATILE SIM					
1,4-Dioxane	40.1	ug/L	6.3	SW846 8270E SIM	#
VOLATILE ORGANICS					
1,1,1-Trichloroethane	3.6	ug/L	1.0	SW846 8260D	#
1,1-Dichloroethane	15.7	ug/L	1.0	SW846 8260D	#
1,1-Dichloroethene	74.9	ug/L	1.0	SW846 8260D	#

Detected Results Summary

Client Sample ID	MW-01D	Collected	11/20/2022 16:20
Lab Sample ID	3275168017	Lab Receipt	11/21/2022 17:40

Compound	Result	Units	RDL	Method	Flag
SEMIVOLATILE SIM					
1,4-Dioxane	6.8	ug/L	1.0	SW846 8270E SIM	#
VOLATILE ORGANICS					
1,1,1-Trichloroethane	1.0	ug/L	1.0	SW846 8260D	#
1,1-Dichloroethane	3.0	ug/L	1.0	SW846 8260D	#
1,1-Dichloroethene	16.8	ug/L	1.0	SW846 8260D	#

Detected Results Summary

Client Sample ID	MW-22D	Collected	11/20/2022 16:30
Lab Sample ID	3275168018	Lab Receipt	11/21/2022 17:40

Compound	Result	Units	RDL	Method	Flag
SEMIVOLATILE SIM					
1,4-Dioxane	2.7	ug/L	1.0	SW846 8270E SIM	#
VOLATILE ORGANICS					
1,1-Dichloroethene	6.1	ug/L	1.0	SW846 8260D	#

Detected Results Summary

Client Sample ID	MW-20	Collected	11/20/2022 16:45
Lab Sample ID	3275168019	Lab Receipt	11/21/2022 17:40

Compound	Result	Units	RDL	Method	Flag
SEMIVOLATILE SIM					
1,4-Dioxane	560	ug/L	132	SW846 8270E SIM	#
VOLATILE ORGANICS					
1,1,2-Trichloroethane	2.4	ug/L	1.0	SW846 8260D	#
1,1-Dichloroethane	258	ug/L	10.0	SW846 8260D	#
1,1-Dichloroethene	348	ug/L	10.0	SW846 8260D	#
1,2-Dichloroethane	9.7	ug/L	1.0	SW846 8260D	#
cis-1,2-Dichloroethene	2.6	ug/L	1.0	SW846 8260D	#
Trichloroethene	2.7	ug/L	1.0	SW846 8260D	#

Detected Results Summary

Client Sample ID	MW-4R	Collected	11/20/2022 16:55
Lab Sample ID	3275168020	Lab Receipt	11/21/2022 17:40

Compound	Result	Units	RDL	Method	Flag
SEMIVOLATILE SIM					
1,4-Dioxane	57.3	ug/L	5.3	SW846 8270E SIM	#
VOLATILE ORGANICS					
1,1,1-Trichloroethane	1.1	ug/L	1.0	SW846 8260D	#
1,1-Dichloroethane	37.4	ug/L	1.0	SW846 8260D	#
1,1-Dichloroethene	76.0	ug/L	1.0	SW846 8260D	#
1,2-Dichloroethane	1.1	ug/L	1.0	SW846 8260D	#

Detected Results Summary

Client Sample ID	MW-16	Collected	11/20/2022 17:05
Lab Sample ID	3275168021	Lab Receipt	11/21/2022 17:40

Compound	Result	Units	RDL	Method	Flag
SEMIVOLATILE SIM					
1,4-Dioxane	143	ug/L	28.6	SW846 8270E SIM	#
VOLATILE ORGANICS					
1,1,1-Trichloroethane	2960	ug/L	100	SW846 8260D	#
1,1-Dichloroethane	3290	ug/L	100	SW846 8260D	#
1,1-Dichloroethene	4290	ug/L	100	SW846 8260D	#
Acetone	50.1	ug/L	10.0	SW846 8260D	#
Chloroethane	136	ug/L	1.0	SW846 8260D	#
Ethylbenzene	2.2	ug/L	1.0	SW846 8260D	#
mp-Xylene	6.5	ug/L	2.0	SW846 8260D	#
o-Xylene	3.2	ug/L	1.0	SW846 8260D	#
Tetrachloroethene	9.4	ug/L	1.0	SW846 8260D	#
Toluene	1.4	ug/L	1.0	SW846 8260D	#
Total Xylenes	9.7	ug/L	3.0	SW846 8260D	#
Trichloroethene	28.0	ug/L	1.0	SW846 8260D	#
Vinyl Chloride	13.2	ug/L	1.0	SW846 8260D	#

Detected Results Summary

Client Sample ID	Trip Blank-B	Collected	11/20/2022 17:05
Lab Sample ID	3275168023	Lab Receipt	11/21/2022 17:40

Compound	Result	Units	RDL	Method	Flag
VOLATILE ORGANICS					
Chloroform	1.1	ug/L	1.0	SW846 8260D	#

Detected Results Summary

Client Sample ID	Trip Blank-E	Collected	11/20/2022 17:05
Lab Sample ID	3275168024	Lab Receipt	11/21/2022 17:40

Compound	Result	Units	RDL	Method	Flag
VOLATILE ORGANICS					
Chloroform	1.1	ug/L	1.0	SW846 8260D	#

Results

Client Sample ID	MW-03	Collected	11/20/2022 10:00
Lab Sample ID	3275168001	Lab Receipt	11/21/2022 17:40

SEMIVOLATILE SIM

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
1,4-Dioxane	1.0 U	U,P1	ug/L	1.0	SW846 8270E SIM	1	11/24/2022 02:15	M1O	C

SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
2-Methylnapthalene-d10	7297-45-2	73.8%	29 – 112	11/24/2022 02:15	
Fluoranthene-d10	93951-69-0	92.2%	45 – 130	11/24/2022 02:15	

VOLATILE ORGANICS

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
1,1,1,2-Tetrachloroethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/01/2022 18:28	TMP	A
1,1,1-Trichloroethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/01/2022 18:28	TMP	A
1,1,2,2-Tetrachloroethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/01/2022 18:28	TMP	A
1,1,2-Trichloroethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/01/2022 18:28	TMP	A
1,1-Dichloroethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/01/2022 18:28	TMP	A
1,1-Dichloroethene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/01/2022 18:28	TMP	A
1,1-Dichloropropene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/01/2022 18:28	TMP	A
1,2,3-Trichlorobenzene	2.0 U	U,P1	ug/L	2.0	SW846 8260D	1	12/01/2022 18:28	TMP	A
1,2,3-Trichloropropane	2.0 U	U,P1	ug/L	2.0	SW846 8260D	1	12/01/2022 18:28	TMP	A
1,2,4-Trichlorobenzene	2.0 U	U,P1	ug/L	2.0	SW846 8260D	1	12/01/2022 18:28	TMP	A
1,2-Dibromo-3-chloropropane	7.0 U	U,P1	ug/L	7.0	SW846 8260D	1	12/01/2022 18:28	TMP	A
1,2-Dibromoethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/01/2022 18:28	TMP	A
1,2-Dichlorobenzene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/01/2022 18:28	TMP	A
1,2-Dichloroethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/01/2022 18:28	TMP	A
1,2-Dichloropropane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/01/2022 18:28	TMP	A
1,3-Dichlorobenzene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/01/2022 18:28	TMP	A
1,3-Dichloropropane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/01/2022 18:28	TMP	A
1,4-Dichlorobenzene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/01/2022 18:28	TMP	A
2,2-Dichloropropane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/01/2022 18:28	TMP	A
2-Butanone	10.0 U	U,P1	ug/L	10.0	SW846 8260D	1	12/01/2022 18:28	TMP	A
2-Hexanone	5.0 U	U,P1	ug/L	5.0	SW846 8260D	1	12/01/2022 18:28	TMP	A
4-Methyl-2-Pentanone(MIBK)	5.0 U	U,P1	ug/L	5.0	SW846 8260D	1	12/01/2022 18:28	TMP	A
Acetone	10.0 U	U,P1	ug/L	10.0	SW846 8260D	1	12/01/2022 18:28	TMP	A
Benzene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/01/2022 18:28	TMP	A
Bromobenzene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/01/2022 18:28	TMP	A
Bromochloromethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/01/2022 18:28	TMP	A
Bromodichloromethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/01/2022 18:28	TMP	A
Bromoform	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/01/2022 18:28	TMP	A
Bromomethane	1.0 U	U,1,P1	ug/L	1.0	SW846 8260D	1	12/01/2022 18:28	TMP	A
Carbon Tetrachloride	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/01/2022 18:28	TMP	A
Chlorobenzene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/01/2022 18:28	TMP	A
Chlorodibromomethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/01/2022 18:28	TMP	A
Chloroethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/01/2022 18:28	TMP	A
Chloroform	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/01/2022 18:28	TMP	A
Chloromethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/01/2022 18:28	TMP	A

Results

Client Sample ID	MW-03	Collected	11/20/2022 10:00
Lab Sample ID	3275168001	Lab Receipt	11/21/2022 17:40

VOLATILE ORGANICS (cont.)

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
cis-1,2-Dichloroethene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/01/2022 18:28	TMP	A
cis-1,3-Dichloropropene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/01/2022 18:28	TMP	A
Dibromomethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/01/2022 18:28	TMP	A
Dichlorodifluoromethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/01/2022 18:28	TMP	A
Diisopropyl ether	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/01/2022 18:28	TMP	A
Ethylbenzene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/01/2022 18:28	TMP	A
Hexachlorobutadiene	5.0 U	U,2,P1	ug/L	5.0	SW846 8260D	1	12/01/2022 18:28	TMP	A
Methyl t-Butyl Ether	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/01/2022 18:28	TMP	A
Methylene Chloride	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/01/2022 18:28	TMP	A
mp-Xylene	2.0 U	U,P1	ug/L	2.0	SW846 8260D	1	12/01/2022 18:28	TMP	A
Naphthalene	2.0 U	U,P1	ug/L	2.0	SW846 8260D	1	12/01/2022 18:28	TMP	A
o-Chlorotoluene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/01/2022 18:28	TMP	A
o-Xylene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/01/2022 18:28	TMP	A
p-Chlorotoluene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/01/2022 18:28	TMP	A
p-Isopropyltoluene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/01/2022 18:28	TMP	A
Styrene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/01/2022 18:28	TMP	A
Tetrachloroethene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/01/2022 18:28	TMP	A
Toluene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/01/2022 18:28	TMP	A
Total Xylenes	3.0 U	U,P1	ug/L	3.0	SW846 8260D	1	12/01/2022 18:28	TMP	A
trans-1,2-Dichloroethene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/01/2022 18:28	TMP	A
trans-1,3-Dichloropropene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/01/2022 18:28	TMP	A
Trichloroethene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/01/2022 18:28	TMP	A
Trichlorofluoromethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/01/2022 18:28	TMP	A
Vinyl Acetate	5.0 U	U,P1	ug/L	5.0	SW846 8260D	1	12/01/2022 18:28	TMP	A
Vinyl Chloride	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/01/2022 18:28	TMP	A

SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
1,2-Dichloroethane-d4	17060-07-0	93.3%	62 – 133	12/01/2022 18:28	
4-Bromofluorobenzene	460-00-4	110%	79 – 114	12/01/2022 18:28	
Dibromofluoromethane	1868-53-7	97.3%	78 – 116	12/01/2022 18:28	
Toluene-d8	2037-26-5	100%	76 – 127	12/01/2022 18:28	

Results

Client Sample ID	MW-27D	Collected	11/20/2022 10:15
Lab Sample ID	3275168002	Lab Receipt	11/21/2022 17:40

SEMIVOLATILE SIM

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
1,4-Dioxane	1.0 U	U,P1	ug/L	1.0	SW846 8270E SIM	1	11/24/2022 02:42	M1O	C

SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
2-Methylnapthalene-d10	7297-45-2	68.7%	29 – 112	11/24/2022 02:42	
Fluoranthene-d10	93951-69-0	88.7%	45 – 130	11/24/2022 02:42	

VOLATILE ORGANICS

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
1,1,1,2-Tetrachloroethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/01/2022 18:51	TMP	A
1,1,1-Trichloroethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/01/2022 18:51	TMP	A
1,1,2,2-Tetrachloroethane	1.0 U	U,26,P1	ug/L	1.0	SW846 8260D	1	12/01/2022 18:51	TMP	A
1,1,2-Trichloroethane	1.0 U	U,30,P1	ug/L	1.0	SW846 8260D	1	12/01/2022 18:51	TMP	A
1,1-Dichloroethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/01/2022 18:51	TMP	A
1,1-Dichloroethene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/01/2022 18:51	TMP	A
1,1-Dichloropropene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/01/2022 18:51	TMP	A
1,2,3-Trichlorobenzene	2.0 U	U,27,28,P1	ug/L	2.0	SW846 8260D	1	12/01/2022 18:51	TMP	A
1,2,3-Trichloropropane	2.0 U	U,31,P1	ug/L	2.0	SW846 8260D	1	12/01/2022 18:51	TMP	A
1,2,4-Trichlorobenzene	2.0 U	U,29,P1	ug/L	2.0	SW846 8260D	1	12/01/2022 18:51	TMP	A
1,2-Dibromo-3-chloropropane	7.0 U	U,11,P1	ug/L	7.0	SW846 8260D	1	12/01/2022 18:51	TMP	A
1,2-Dibromoethane	1.0 U	U,12,P1	ug/L	1.0	SW846 8260D	1	12/01/2022 18:51	TMP	A
1,2-Dichlorobenzene	1.0 U	U,14,P1	ug/L	1.0	SW846 8260D	1	12/01/2022 18:51	TMP	A
1,2-Dichloroethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/01/2022 18:51	TMP	A
1,2-Dichloropropane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/01/2022 18:51	TMP	A
1,3-Dichlorobenzene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/01/2022 18:51	TMP	A
1,3-Dichloropropane	1.0 U	U,15,P1	ug/L	1.0	SW846 8260D	1	12/01/2022 18:51	TMP	A
1,4-Dichlorobenzene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/01/2022 18:51	TMP	A
2,2-Dichloropropane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/01/2022 18:51	TMP	A
2-Butanone	10.0 U	U,7,P1	ug/L	10.0	SW846 8260D	1	12/01/2022 18:51	TMP	A
2-Hexanone	5.0 U	U,19,20,P1	ug/L	5.0	SW846 8260D	1	12/01/2022 18:51	TMP	A
4-Methyl-2-Pentanone(MIBK)	5.0 U	U,23,P1	ug/L	5.0	SW846 8260D	1	12/01/2022 18:51	TMP	A
Acetone	10.0 U	U,3,P1	ug/L	10.0	SW846 8260D	1	12/01/2022 18:51	TMP	A
Benzene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/01/2022 18:51	TMP	A
Bromobenzene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/01/2022 18:51	TMP	A
Bromochloromethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/01/2022 18:51	TMP	A
Bromodichloromethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/01/2022 18:51	TMP	A
Bromoform	1.0 U	U,4,P1	ug/L	1.0	SW846 8260D	1	12/01/2022 18:51	TMP	A
Bromomethane	1.0 U	U,1,5,6,P1	ug/L	1.0	SW846 8260D	1	12/01/2022 18:51	TMP	A
Carbon Tetrachloride	1.0 U	U,8,9,P1	ug/L	1.0	SW846 8260D	1	12/01/2022 18:51	TMP	A
Chlorobenzene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/01/2022 18:51	TMP	A
Chlorodibromomethane	1.0 U	U,10,P1	ug/L	1.0	SW846 8260D	1	12/01/2022 18:51	TMP	A
Chloroethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/01/2022 18:51	TMP	A
Chloroform	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/01/2022 18:51	TMP	A

Results

Client Sample ID	MW-27D	Collected	11/20/2022 10:15
Lab Sample ID	3275168002	Lab Receipt	11/21/2022 17:40

VOLATILE ORGANICS (cont.)

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
Chloromethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/01/2022 18:51	TMP	A
cis-1,2-Dichloroethene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/01/2022 18:51	TMP	A
cis-1,3-Dichloropropene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/01/2022 18:51	TMP	A
Dibromomethane	1.0 U	U,13,P1	ug/L	1.0	SW846 8260D	1	12/01/2022 18:51	TMP	A
Dichlorodifluoromethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/01/2022 18:51	TMP	A
Diisopropyl ether	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/01/2022 18:51	TMP	A
Ethylbenzene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/01/2022 18:51	TMP	A
Hexachlorobutadiene	5.0 U	U,2,17,18,P1	ug/L	5.0	SW846 8260D	1	12/01/2022 18:51	TMP	A
Methyl t-Butyl Ether	1.0 U	U,22,P1	ug/L	1.0	SW846 8260D	1	12/01/2022 18:51	TMP	A
Methylene Chloride	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/01/2022 18:51	TMP	A
mp-Xylene	2.0 U	U,P1	ug/L	2.0	SW846 8260D	1	12/01/2022 18:51	TMP	A
Naphthalene	2.0 U	U,24,25,P1	ug/L	2.0	SW846 8260D	1	12/01/2022 18:51	TMP	A
o-Chlorotoluene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/01/2022 18:51	TMP	A
o-Xylene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/01/2022 18:51	TMP	A
p-Chlorotoluene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/01/2022 18:51	TMP	A
p-Isopropyltoluene	1.0 U	U,21,P1	ug/L	1.0	SW846 8260D	1	12/01/2022 18:51	TMP	A
Styrene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/01/2022 18:51	TMP	A
Tetrachloroethene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/01/2022 18:51	TMP	A
Toluene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/01/2022 18:51	TMP	A
Total Xylenes	3.0 U	U,P1	ug/L	3.0	SW846 8260D	1	12/01/2022 18:51	TMP	A
trans-1,2-Dichloroethene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/01/2022 18:51	TMP	A
trans-1,3-Dichloropropene	1.0 U	U,16,P1	ug/L	1.0	SW846 8260D	1	12/01/2022 18:51	TMP	A
Trichloroethene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/01/2022 18:51	TMP	A
Trichlorofluoromethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/01/2022 18:51	TMP	A
Vinyl Acetate	5.0 U	U,32,P1	ug/L	5.0	SW846 8260D	1	12/01/2022 18:51	TMP	A
Vinyl Chloride	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/01/2022 18:51	TMP	A

SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
1,2-Dichloroethane-d4	17060-07-0	93.2%	62 – 133	12/01/2022 18:51	
4-Bromofluorobenzene	460-00-4	108%	79 – 114	12/01/2022 18:51	
Dibromofluoromethane	1868-53-7	95.4%	78 – 116	12/01/2022 18:51	
Toluene-d8	2037-26-5	100%	76 – 127	12/01/2022 18:51	

Results

Client Sample ID	MW-43	Collected	11/20/2022 10:30
Lab Sample ID	3275168003	Lab Receipt	11/21/2022 17:40

SEMIVOLATILE SIM

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
1,4-Dioxane	9.6	P1	ug/L	1.0	SW846 8270E SIM	1	11/24/2022 03:09	M1O	C

SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
2-Methylnapthalene-d10	7297-45-2	66.4%	29 – 112	11/24/2022 03:09	
Fluoranthene-d10	93951-69-0	83.4%	45 – 130	11/24/2022 03:09	

VOLATILE ORGANICS

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
1,1,1,2-Tetrachloroethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/01/2022 19:13	TMP	A
1,1,1-Trichloroethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/01/2022 19:13	TMP	A
1,1,2,2-Tetrachloroethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/01/2022 19:13	TMP	A
1,1,2-Trichloroethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/01/2022 19:13	TMP	A
1,1-Dichloroethane	1.7	P1	ug/L	1.0	SW846 8260D	1	12/01/2022 19:13	TMP	A
1,1-Dichloroethene	20.3	P1	ug/L	1.0	SW846 8260D	1	12/01/2022 19:13	TMP	A
1,1-Dichloropropene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/01/2022 19:13	TMP	A
1,2,3-Trichlorobenzene	2.0 U	U,P1	ug/L	2.0	SW846 8260D	1	12/01/2022 19:13	TMP	A
1,2,3-Trichloropropane	2.0 U	U,P1	ug/L	2.0	SW846 8260D	1	12/01/2022 19:13	TMP	A
1,2,4-Trichlorobenzene	2.0 U	U,P1	ug/L	2.0	SW846 8260D	1	12/01/2022 19:13	TMP	A
1,2-Dibromo-3-chloropropane	7.0 U	U,P1	ug/L	7.0	SW846 8260D	1	12/01/2022 19:13	TMP	A
1,2-Dibromoethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/01/2022 19:13	TMP	A
1,2-Dichlorobenzene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/01/2022 19:13	TMP	A
1,2-Dichloroethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/01/2022 19:13	TMP	A
1,2-Dichloropropane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/01/2022 19:13	TMP	A
1,3-Dichlorobenzene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/01/2022 19:13	TMP	A
1,3-Dichloropropane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/01/2022 19:13	TMP	A
1,4-Dichlorobenzene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/01/2022 19:13	TMP	A
2,2-Dichloropropane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/01/2022 19:13	TMP	A
2-Butanone	10.0 U	U,P1	ug/L	10.0	SW846 8260D	1	12/01/2022 19:13	TMP	A
2-Hexanone	5.0 U	U,P1	ug/L	5.0	SW846 8260D	1	12/01/2022 19:13	TMP	A
4-Methyl-2-Pentanone(MIBK)	5.0 U	U,P1	ug/L	5.0	SW846 8260D	1	12/01/2022 19:13	TMP	A
Acetone	10.0 U	U,P1	ug/L	10.0	SW846 8260D	1	12/01/2022 19:13	TMP	A
Benzene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/01/2022 19:13	TMP	A
Bromobenzene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/01/2022 19:13	TMP	A
Bromochloromethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/01/2022 19:13	TMP	A
Bromodichloromethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/01/2022 19:13	TMP	A
Bromoform	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/01/2022 19:13	TMP	A
Bromomethane	1.0 U	U,1,P1	ug/L	1.0	SW846 8260D	1	12/01/2022 19:13	TMP	A
Carbon Tetrachloride	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/01/2022 19:13	TMP	A
Chlorobenzene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/01/2022 19:13	TMP	A
Chlorodibromomethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/01/2022 19:13	TMP	A
Chloroethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/01/2022 19:13	TMP	A
Chloroform	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/01/2022 19:13	TMP	A
Chloromethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/01/2022 19:13	TMP	A

Results

Client Sample ID	MW-43	Collected	11/20/2022 10:30
Lab Sample ID	3275168003	Lab Receipt	11/21/2022 17:40

VOLATILE ORGANICS (cont.)

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
cis-1,2-Dichloroethene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/01/2022 19:13	TMP	A
cis-1,3-Dichloropropene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/01/2022 19:13	TMP	A
Dibromomethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/01/2022 19:13	TMP	A
Dichlorodifluoromethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/01/2022 19:13	TMP	A
Diisopropyl ether	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/01/2022 19:13	TMP	A
Ethylbenzene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/01/2022 19:13	TMP	A
Hexachlorobutadiene	5.0 U	U,2,P1	ug/L	5.0	SW846 8260D	1	12/01/2022 19:13	TMP	A
Methyl t-Butyl Ether	2.2	P1	ug/L	1.0	SW846 8260D	1	12/01/2022 19:13	TMP	A
Methylene Chloride	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/01/2022 19:13	TMP	A
mp-Xylene	2.0 U	U,P1	ug/L	2.0	SW846 8260D	1	12/01/2022 19:13	TMP	A
Naphthalene	2.0 U	U,P1	ug/L	2.0	SW846 8260D	1	12/01/2022 19:13	TMP	A
o-Chlorotoluene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/01/2022 19:13	TMP	A
o-Xylene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/01/2022 19:13	TMP	A
p-Chlorotoluene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/01/2022 19:13	TMP	A
p-Isopropyltoluene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/01/2022 19:13	TMP	A
Styrene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/01/2022 19:13	TMP	A
Tetrachloroethene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/01/2022 19:13	TMP	A
Toluene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/01/2022 19:13	TMP	A
Total Xylenes	3.0 U	U,P1	ug/L	3.0	SW846 8260D	1	12/01/2022 19:13	TMP	A
trans-1,2-Dichloroethene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/01/2022 19:13	TMP	A
trans-1,3-Dichloropropene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/01/2022 19:13	TMP	A
Trichloroethene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/01/2022 19:13	TMP	A
Trichlorofluoromethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/01/2022 19:13	TMP	A
Vinyl Acetate	5.0 U	U,P1	ug/L	5.0	SW846 8260D	1	12/01/2022 19:13	TMP	A
Vinyl Chloride	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/01/2022 19:13	TMP	A

SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
1,2-Dichloroethane-d4	17060-07-0	92.9%	62 – 133	12/01/2022 19:13	
4-Bromofluorobenzene	460-00-4	106%	79 – 114	12/01/2022 19:13	
Dibromofluoromethane	1868-53-7	96.1%	78 – 116	12/01/2022 19:13	
Toluene-d8	2037-26-5	99.6%	76 – 127	12/01/2022 19:13	

Results

Client Sample ID	MW-39	Collected	11/20/2022 11:40
Lab Sample ID	3275168004	Lab Receipt	11/21/2022 17:40

SEMIVOLATILE SIM

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
1,4-Dioxane	1.0 U	U,P1	ug/L	1.0	SW846 8270E SIM	1	11/24/2022 03:36	M1O	C

SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
2-Methylnapthalene-d10	7297-45-2	70.3%	29 – 112	11/24/2022 03:36	
Fluoranthene-d10	93951-69-0	94.4%	45 – 130	11/24/2022 03:36	

VOLATILE ORGANICS

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
1,1,1,2-Tetrachloroethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/01/2022 19:36	TMP	A
1,1,1-Trichloroethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/01/2022 19:36	TMP	A
1,1,2,2-Tetrachloroethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/01/2022 19:36	TMP	A
1,1,2-Trichloroethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/01/2022 19:36	TMP	A
1,1-Dichloroethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/01/2022 19:36	TMP	A
1,1-Dichloroethene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/01/2022 19:36	TMP	A
1,1-Dichloropropene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/01/2022 19:36	TMP	A
1,2,3-Trichlorobenzene	2.0 U	U,P1	ug/L	2.0	SW846 8260D	1	12/01/2022 19:36	TMP	A
1,2,3-Trichloropropane	2.0 U	U,P1	ug/L	2.0	SW846 8260D	1	12/01/2022 19:36	TMP	A
1,2,4-Trichlorobenzene	2.0 U	U,P1	ug/L	2.0	SW846 8260D	1	12/01/2022 19:36	TMP	A
1,2-Dibromo-3-chloropropane	7.0 U	U,P1	ug/L	7.0	SW846 8260D	1	12/01/2022 19:36	TMP	A
1,2-Dibromoethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/01/2022 19:36	TMP	A
1,2-Dichlorobenzene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/01/2022 19:36	TMP	A
1,2-Dichloroethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/01/2022 19:36	TMP	A
1,2-Dichloropropane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/01/2022 19:36	TMP	A
1,3-Dichlorobenzene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/01/2022 19:36	TMP	A
1,3-Dichloropropane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/01/2022 19:36	TMP	A
1,4-Dichlorobenzene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/01/2022 19:36	TMP	A
2,2-Dichloropropane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/01/2022 19:36	TMP	A
2-Butanone	10.0 U	U,P1	ug/L	10.0	SW846 8260D	1	12/01/2022 19:36	TMP	A
2-Hexanone	5.0 U	U,P1	ug/L	5.0	SW846 8260D	1	12/01/2022 19:36	TMP	A
4-Methyl-2-Pentanone(MIBK)	5.0 U	U,P1	ug/L	5.0	SW846 8260D	1	12/01/2022 19:36	TMP	A
Acetone	10.0 U	U,P1	ug/L	10.0	SW846 8260D	1	12/01/2022 19:36	TMP	A
Benzene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/01/2022 19:36	TMP	A
Bromobenzene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/01/2022 19:36	TMP	A
Bromochloromethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/01/2022 19:36	TMP	A
Bromodichloromethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/01/2022 19:36	TMP	A
Bromoform	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/01/2022 19:36	TMP	A
Bromomethane	1.0 U	U,1,P1	ug/L	1.0	SW846 8260D	1	12/01/2022 19:36	TMP	A
Carbon Tetrachloride	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/01/2022 19:36	TMP	A
Chlorobenzene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/01/2022 19:36	TMP	A
Chlorodibromomethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/01/2022 19:36	TMP	A
Chloroethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/01/2022 19:36	TMP	A
Chloroform	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/01/2022 19:36	TMP	A
Chloromethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/01/2022 19:36	TMP	A

Results

Client Sample ID	MW-39	Collected	11/20/2022 11:40
Lab Sample ID	3275168004	Lab Receipt	11/21/2022 17:40

VOLATILE ORGANICS (cont.)

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
cis-1,2-Dichloroethene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/01/2022 19:36	TMP	A
cis-1,3-Dichloropropene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/01/2022 19:36	TMP	A
Dibromomethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/01/2022 19:36	TMP	A
Dichlorodifluoromethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/01/2022 19:36	TMP	A
Diisopropyl ether	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/01/2022 19:36	TMP	A
Ethylbenzene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/01/2022 19:36	TMP	A
Hexachlorobutadiene	5.0 U	U,2,P1	ug/L	5.0	SW846 8260D	1	12/01/2022 19:36	TMP	A
Methyl t-Butyl Ether	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/01/2022 19:36	TMP	A
Methylene Chloride	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/01/2022 19:36	TMP	A
mp-Xylene	2.0 U	U,P1	ug/L	2.0	SW846 8260D	1	12/01/2022 19:36	TMP	A
Naphthalene	2.0 U	U,P1	ug/L	2.0	SW846 8260D	1	12/01/2022 19:36	TMP	A
o-Chlorotoluene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/01/2022 19:36	TMP	A
o-Xylene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/01/2022 19:36	TMP	A
p-Chlorotoluene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/01/2022 19:36	TMP	A
p-Isopropyltoluene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/01/2022 19:36	TMP	A
Styrene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/01/2022 19:36	TMP	A
Tetrachloroethene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/01/2022 19:36	TMP	A
Toluene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/01/2022 19:36	TMP	A
Total Xylenes	3.0 U	U,P1	ug/L	3.0	SW846 8260D	1	12/01/2022 19:36	TMP	A
trans-1,2-Dichloroethene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/01/2022 19:36	TMP	A
trans-1,3-Dichloropropene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/01/2022 19:36	TMP	A
Trichloroethene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/01/2022 19:36	TMP	A
Trichlorofluoromethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/01/2022 19:36	TMP	A
Vinyl Acetate	5.0 U	U,P1	ug/L	5.0	SW846 8260D	1	12/01/2022 19:36	TMP	A
Vinyl Chloride	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/01/2022 19:36	TMP	A

SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
1,2-Dichloroethane-d4	17060-07-0	94.3%	62 – 133	12/01/2022 19:36	
4-Bromofluorobenzene	460-00-4	108%	79 – 114	12/01/2022 19:36	
Dibromofluoromethane	1868-53-7	98.7%	78 – 116	12/01/2022 19:36	
Toluene-d8	2037-26-5	101%	76 – 127	12/01/2022 19:36	

Results

Client Sample ID	MW-42	Collected	11/20/2022 11:55
Lab Sample ID	3275168005	Lab Receipt	11/21/2022 17:40

SEMIVOLATILE SIM

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
1,4-Dioxane	5.4	P1	ug/L	1.0	SW846 8270E SIM	1	11/24/2022 04:02	M1O	C

SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
2-Methylnapthalene-d10	7297-45-2	66.4%	29 – 112	11/24/2022 04:02	
Fluoranthene-d10	93951-69-0	78.2%	45 – 130	11/24/2022 04:02	

VOLATILE ORGANICS

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
1,1,1,2-Tetrachloroethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/01/2022 19:59	TMP	A
1,1,1-Trichloroethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/01/2022 19:59	TMP	A
1,1,2,2-Tetrachloroethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/01/2022 19:59	TMP	A
1,1,2-Trichloroethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/01/2022 19:59	TMP	A
1,1-Dichloroethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/01/2022 19:59	TMP	A
1,1-Dichloroethene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/01/2022 19:59	TMP	A
1,1-Dichloropropene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/01/2022 19:59	TMP	A
1,2,3-Trichlorobenzene	2.0 U	U,P1	ug/L	2.0	SW846 8260D	1	12/01/2022 19:59	TMP	A
1,2,3-Trichloropropane	2.0 U	U,P1	ug/L	2.0	SW846 8260D	1	12/01/2022 19:59	TMP	A
1,2,4-Trichlorobenzene	2.0 U	U,P1	ug/L	2.0	SW846 8260D	1	12/01/2022 19:59	TMP	A
1,2-Dibromo-3-chloropropane	7.0 U	U,P1	ug/L	7.0	SW846 8260D	1	12/01/2022 19:59	TMP	A
1,2-Dibromoethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/01/2022 19:59	TMP	A
1,2-Dichlorobenzene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/01/2022 19:59	TMP	A
1,2-Dichloroethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/01/2022 19:59	TMP	A
1,2-Dichloropropane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/01/2022 19:59	TMP	A
1,3-Dichlorobenzene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/01/2022 19:59	TMP	A
1,3-Dichloropropane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/01/2022 19:59	TMP	A
1,4-Dichlorobenzene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/01/2022 19:59	TMP	A
2,2-Dichloropropane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/01/2022 19:59	TMP	A
2-Butanone	10.0 U	U,P1	ug/L	10.0	SW846 8260D	1	12/01/2022 19:59	TMP	A
2-Hexanone	5.0 U	U,P1	ug/L	5.0	SW846 8260D	1	12/01/2022 19:59	TMP	A
4-Methyl-2-Pentanone(MIBK)	5.0 U	U,P1	ug/L	5.0	SW846 8260D	1	12/01/2022 19:59	TMP	A
Acetone	10.0 U	U,P1	ug/L	10.0	SW846 8260D	1	12/01/2022 19:59	TMP	A
Benzene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/01/2022 19:59	TMP	A
Bromobenzene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/01/2022 19:59	TMP	A
Bromochloromethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/01/2022 19:59	TMP	A
Bromodichloromethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/01/2022 19:59	TMP	A
Bromoform	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/01/2022 19:59	TMP	A
Bromomethane	1.0 U	U,1,P1	ug/L	1.0	SW846 8260D	1	12/01/2022 19:59	TMP	A
Carbon Tetrachloride	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/01/2022 19:59	TMP	A
Chlorobenzene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/01/2022 19:59	TMP	A
Chlorodibromomethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/01/2022 19:59	TMP	A
Chloroethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/01/2022 19:59	TMP	A
Chloroform	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/01/2022 19:59	TMP	A
Chloromethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/01/2022 19:59	TMP	A

Results

Client Sample ID	MW-42	Collected	11/20/2022 11:55
Lab Sample ID	3275168005	Lab Receipt	11/21/2022 17:40

VOLATILE ORGANICS (cont.)

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
cis-1,2-Dichloroethene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/01/2022 19:59	TMP	A
cis-1,3-Dichloropropene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/01/2022 19:59	TMP	A
Dibromomethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/01/2022 19:59	TMP	A
Dichlorodifluoromethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/01/2022 19:59	TMP	A
Diisopropyl ether	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/01/2022 19:59	TMP	A
Ethylbenzene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/01/2022 19:59	TMP	A
Hexachlorobutadiene	5.0 U	U,2,P1	ug/L	5.0	SW846 8260D	1	12/01/2022 19:59	TMP	A
Methyl t-Butyl Ether	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/01/2022 19:59	TMP	A
Methylene Chloride	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/01/2022 19:59	TMP	A
mp-Xylene	2.0 U	U,P1	ug/L	2.0	SW846 8260D	1	12/01/2022 19:59	TMP	A
Naphthalene	2.0 U	U,P1	ug/L	2.0	SW846 8260D	1	12/01/2022 19:59	TMP	A
o-Chlorotoluene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/01/2022 19:59	TMP	A
o-Xylene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/01/2022 19:59	TMP	A
p-Chlorotoluene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/01/2022 19:59	TMP	A
p-Isopropyltoluene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/01/2022 19:59	TMP	A
Styrene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/01/2022 19:59	TMP	A
Tetrachloroethene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/01/2022 19:59	TMP	A
Toluene	1.9	P1	ug/L	1.0	SW846 8260D	1	12/01/2022 19:59	TMP	A
Total Xylenes	3.0 U	U,P1	ug/L	3.0	SW846 8260D	1	12/01/2022 19:59	TMP	A
trans-1,2-Dichloroethene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/01/2022 19:59	TMP	A
trans-1,3-Dichloropropene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/01/2022 19:59	TMP	A
Trichloroethene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/01/2022 19:59	TMP	A
Trichlorofluoromethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/01/2022 19:59	TMP	A
Vinyl Acetate	5.0 U	U,P1	ug/L	5.0	SW846 8260D	1	12/01/2022 19:59	TMP	A
Vinyl Chloride	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/01/2022 19:59	TMP	A

SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
1,2-Dichloroethane-d4	17060-07-0	92.9%	62 – 133	12/01/2022 19:59	
4-Bromofluorobenzene	460-00-4	107%	79 – 114	12/01/2022 19:59	
Dibromofluoromethane	1868-53-7	96.2%	78 – 116	12/01/2022 19:59	
Toluene-d8	2037-26-5	98.6%	76 – 127	12/01/2022 19:59	

Results

Client Sample ID	MW-18	Collected	11/20/2022 12:15
Lab Sample ID	3275168006	Lab Receipt	11/21/2022 17:40

SEMIVOLATILE SIM

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
1,4-Dioxane	1.0 U	U,P1	ug/L	1.0	SW846 8270E SIM	1	11/24/2022 04:29	M1O	C

SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
2-Methylnapthalene-d10	7297-45-2	65.1%	29 – 112	11/24/2022 04:29	
Fluoranthene-d10	93951-69-0	89%	45 – 130	11/24/2022 04:29	

VOLATILE ORGANICS

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
1,1,1,2-Tetrachloroethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 03:41	PDK	A
1,1,1-Trichloroethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 03:41	PDK	A
1,1,2,2-Tetrachloroethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 03:41	PDK	A
1,1,2-Trichloroethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 03:41	PDK	A
1,1-Dichloroethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 03:41	PDK	A
1,1-Dichloroethene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 03:41	PDK	A
1,1-Dichloropropene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 03:41	PDK	A
1,2,3-Trichlorobenzene	2.0 U	U,P1	ug/L	2.0	SW846 8260D	1	12/02/2022 03:41	PDK	A
1,2,3-Trichloropropane	2.0 U	U,P1	ug/L	2.0	SW846 8260D	1	12/02/2022 03:41	PDK	A
1,2,4-Trichlorobenzene	2.0 U	U,P1	ug/L	2.0	SW846 8260D	1	12/02/2022 03:41	PDK	A
1,2-Dibromo-3-chloropropane	7.0 U	U,P1	ug/L	7.0	SW846 8260D	1	12/02/2022 03:41	PDK	A
1,2-Dibromoethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 03:41	PDK	A
1,2-Dichlorobenzene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 03:41	PDK	A
1,2-Dichloroethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 03:41	PDK	A
1,2-Dichloropropane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 03:41	PDK	A
1,3-Dichlorobenzene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 03:41	PDK	A
1,3-Dichloropropane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 03:41	PDK	A
1,4-Dichlorobenzene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 03:41	PDK	A
2,2-Dichloropropane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 03:41	PDK	A
2-Butanone	10.0 U	U,P1	ug/L	10.0	SW846 8260D	1	12/02/2022 03:41	PDK	A
2-Hexanone	5.0 U	U,P1	ug/L	5.0	SW846 8260D	1	12/02/2022 03:41	PDK	A
4-Methyl-2-Pentanone(MIBK)	5.0 U	U,P1	ug/L	5.0	SW846 8260D	1	12/02/2022 03:41	PDK	A
Acetone	10.0 U	U,P1	ug/L	10.0	SW846 8260D	1	12/02/2022 03:41	PDK	A
Benzene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 03:41	PDK	A
Bromobenzene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 03:41	PDK	A
Bromochloromethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 03:41	PDK	A
Bromodichloromethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 03:41	PDK	A
Bromoform	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 03:41	PDK	A
Bromomethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 03:41	PDK	A
Carbon Tetrachloride	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 03:41	PDK	A
Chlorobenzene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 03:41	PDK	A
Chlorodibromomethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 03:41	PDK	A
Chloroethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 03:41	PDK	A
Chloroform	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 03:41	PDK	A
Chloromethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 03:41	PDK	A

Results

Client Sample ID	MW-18	Collected	11/20/2022 12:15
Lab Sample ID	3275168006	Lab Receipt	11/21/2022 17:40

VOLATILE ORGANICS (cont.)

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
cis-1,2-Dichloroethene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 03:41	PDK	A
cis-1,3-Dichloropropene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 03:41	PDK	A
Dibromomethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 03:41	PDK	A
Dichlorodifluoromethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 03:41	PDK	A
Diisopropyl ether	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 03:41	PDK	A
Ethylbenzene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 03:41	PDK	A
Hexachlorobutadiene	5.0 U	U,P1	ug/L	5.0	SW846 8260D	1	12/02/2022 03:41	PDK	A
Methyl t-Butyl Ether	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 03:41	PDK	A
Methylene Chloride	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 03:41	PDK	A
mp-Xylene	2.0 U	U,P1	ug/L	2.0	SW846 8260D	1	12/02/2022 03:41	PDK	A
Naphthalene	2.0 U	U,P1	ug/L	2.0	SW846 8260D	1	12/02/2022 03:41	PDK	A
o-Chlorotoluene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 03:41	PDK	A
o-Xylene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 03:41	PDK	A
p-Chlorotoluene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 03:41	PDK	A
p-Isopropyltoluene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 03:41	PDK	A
Styrene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 03:41	PDK	A
Tetrachloroethene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 03:41	PDK	A
Toluene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 03:41	PDK	A
Total Xylenes	3.0 U	U,P1	ug/L	3.0	SW846 8260D	1	12/02/2022 03:41	PDK	A
trans-1,2-Dichloroethene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 03:41	PDK	A
trans-1,3-Dichloropropene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 03:41	PDK	A
Trichloroethene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 03:41	PDK	A
Trichlorofluoromethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 03:41	PDK	A
Vinyl Acetate	5.0 U	U,P1	ug/L	5.0	SW846 8260D	1	12/02/2022 03:41	PDK	A
Vinyl Chloride	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 03:41	PDK	A

SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
1,2-Dichloroethane-d4	17060-07-0	93.7%	62 – 133	12/02/2022 03:41	
4-Bromofluorobenzene	460-00-4	103%	79 – 114	12/02/2022 03:41	
Dibromofluoromethane	1868-53-7	91.8%	78 – 116	12/02/2022 03:41	
Toluene-d8	2037-26-5	94.2%	76 – 127	12/02/2022 03:41	

Results

Client Sample ID	MW-38R	Collected	11/20/2022 12:20
Lab Sample ID	3275168007	Lab Receipt	11/21/2022 17:40

SEMIVOLATILE SIM

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
1,4-Dioxane	20.1	P1	ug/L	2.5	SW846 8270E SIM	1	11/24/2022 04:55	M1O	C

SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
2-Methylnapthalene-d10	7297-45-2	64.9%	29 – 112	11/24/2022 04:55	
Fluoranthene-d10	93951-69-0	83.7%	45 – 130	11/24/2022 04:55	

VOLATILE ORGANICS

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
1,1,1,2-Tetrachloroethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 04:04	PDK	A
1,1,1-Trichloroethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 04:04	PDK	A
1,1,2,2-Tetrachloroethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 04:04	PDK	A
1,1,2-Trichloroethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 04:04	PDK	A
1,1-Dichloroethane	7.1	P1	ug/L	1.0	SW846 8260D	1	12/02/2022 04:04	PDK	A
1,1-Dichloroethene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 04:04	PDK	A
1,1-Dichloropropene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 04:04	PDK	A
1,2,3-Trichlorobenzene	2.0 U	U,P1	ug/L	2.0	SW846 8260D	1	12/02/2022 04:04	PDK	A
1,2,3-Trichloropropane	2.0 U	U,P1	ug/L	2.0	SW846 8260D	1	12/02/2022 04:04	PDK	A
1,2,4-Trichlorobenzene	2.0 U	U,P1	ug/L	2.0	SW846 8260D	1	12/02/2022 04:04	PDK	A
1,2-Dibromo-3-chloropropane	7.0 U	U,P1	ug/L	7.0	SW846 8260D	1	12/02/2022 04:04	PDK	A
1,2-Dibromoethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 04:04	PDK	A
1,2-Dichlorobenzene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 04:04	PDK	A
1,2-Dichloroethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 04:04	PDK	A
1,2-Dichloropropane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 04:04	PDK	A
1,3-Dichlorobenzene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 04:04	PDK	A
1,3-Dichloropropane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 04:04	PDK	A
1,4-Dichlorobenzene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 04:04	PDK	A
2,2-Dichloropropane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 04:04	PDK	A
2-Butanone	10.0 U	U,P1	ug/L	10.0	SW846 8260D	1	12/02/2022 04:04	PDK	A
2-Hexanone	5.0 U	U,P1	ug/L	5.0	SW846 8260D	1	12/02/2022 04:04	PDK	A
4-Methyl-2-Pentanone(MIBK)	5.0 U	U,P1	ug/L	5.0	SW846 8260D	1	12/02/2022 04:04	PDK	A
Acetone	10.0 U	U,P1	ug/L	10.0	SW846 8260D	1	12/02/2022 04:04	PDK	A
Benzene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 04:04	PDK	A
Bromobenzene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 04:04	PDK	A
Bromochloromethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 04:04	PDK	A
Bromodichloromethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 04:04	PDK	A
Bromoform	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 04:04	PDK	A
Bromomethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 04:04	PDK	A
Carbon Tetrachloride	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 04:04	PDK	A
Chlorobenzene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 04:04	PDK	A
Chlorodibromomethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 04:04	PDK	A
Chloroethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 04:04	PDK	A
Chloroform	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 04:04	PDK	A
Chloromethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 04:04	PDK	A

Results

Client Sample ID	MW-38R	Collected	11/20/2022 12:20
Lab Sample ID	3275168007	Lab Receipt	11/21/2022 17:40

VOLATILE ORGANICS (cont.)

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
cis-1,2-Dichloroethene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 04:04	PDK	A
cis-1,3-Dichloropropene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 04:04	PDK	A
Dibromomethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 04:04	PDK	A
Dichlorodifluoromethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 04:04	PDK	A
Diisopropyl ether	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 04:04	PDK	A
Ethylbenzene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 04:04	PDK	A
Hexachlorobutadiene	5.0 U	U,P1	ug/L	5.0	SW846 8260D	1	12/02/2022 04:04	PDK	A
Methyl t-Butyl Ether	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 04:04	PDK	A
Methylene Chloride	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 04:04	PDK	A
mp-Xylene	2.0 U	U,P1	ug/L	2.0	SW846 8260D	1	12/02/2022 04:04	PDK	A
Naphthalene	2.0 U	U,P1	ug/L	2.0	SW846 8260D	1	12/02/2022 04:04	PDK	A
o-Chlorotoluene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 04:04	PDK	A
o-Xylene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 04:04	PDK	A
p-Chlorotoluene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 04:04	PDK	A
p-Isopropyltoluene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 04:04	PDK	A
Styrene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 04:04	PDK	A
Tetrachloroethene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 04:04	PDK	A
Toluene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 04:04	PDK	A
Total Xylenes	3.0 U	U,P1	ug/L	3.0	SW846 8260D	1	12/02/2022 04:04	PDK	A
trans-1,2-Dichloroethene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 04:04	PDK	A
trans-1,3-Dichloropropene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 04:04	PDK	A
Trichloroethene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 04:04	PDK	A
Trichlorofluoromethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 04:04	PDK	A
Vinyl Acetate	5.0 U	U,P1	ug/L	5.0	SW846 8260D	1	12/02/2022 04:04	PDK	A
Vinyl Chloride	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 04:04	PDK	A

SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
1,2-Dichloroethane-d4	17060-07-0	93.1%	62 – 133	12/02/2022 04:04	
4-Bromofluorobenzene	460-00-4	104%	79 – 114	12/02/2022 04:04	
Dibromofluoromethane	1868-53-7	93.9%	78 – 116	12/02/2022 04:04	
Toluene-d8	2037-26-5	94.4%	76 – 127	12/02/2022 04:04	

Results

Client Sample ID	MW-40D	Collected	11/20/2022 12:55
Lab Sample ID	3275168008	Lab Receipt	11/21/2022 17:40

SEMIVOLATILE SIM

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
1,4-Dioxane	1.0 U	U,P1	ug/L	1.0	SW846 8270E SIM	1	11/24/2022 05:22	M1O	C

SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
2-Methylnapthalene-d10	7297-45-2	76.5%	29 – 112	11/24/2022 05:22	
Fluoranthene-d10	93951-69-0	96.9%	45 – 130	11/24/2022 05:22	

VOLATILE ORGANICS

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
1,1,1,2-Tetrachloroethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 04:26	PDK	A
1,1,1-Trichloroethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 04:26	PDK	A
1,1,2,2-Tetrachloroethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 04:26	PDK	A
1,1,2-Trichloroethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 04:26	PDK	A
1,1-Dichloroethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 04:26	PDK	A
1,1-Dichloroethene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 04:26	PDK	A
1,1-Dichloropropene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 04:26	PDK	A
1,2,3-Trichlorobenzene	2.0 U	U,P1	ug/L	2.0	SW846 8260D	1	12/02/2022 04:26	PDK	A
1,2,3-Trichloropropane	2.0 U	U,P1	ug/L	2.0	SW846 8260D	1	12/02/2022 04:26	PDK	A
1,2,4-Trichlorobenzene	2.0 U	U,P1	ug/L	2.0	SW846 8260D	1	12/02/2022 04:26	PDK	A
1,2-Dibromo-3-chloropropane	7.0 U	U,P1	ug/L	7.0	SW846 8260D	1	12/02/2022 04:26	PDK	A
1,2-Dibromoethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 04:26	PDK	A
1,2-Dichlorobenzene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 04:26	PDK	A
1,2-Dichloroethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 04:26	PDK	A
1,2-Dichloropropane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 04:26	PDK	A
1,3-Dichlorobenzene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 04:26	PDK	A
1,3-Dichloropropane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 04:26	PDK	A
1,4-Dichlorobenzene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 04:26	PDK	A
2,2-Dichloropropane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 04:26	PDK	A
2-Butanone	10.0 U	U,P1	ug/L	10.0	SW846 8260D	1	12/02/2022 04:26	PDK	A
2-Hexanone	5.0 U	U,P1	ug/L	5.0	SW846 8260D	1	12/02/2022 04:26	PDK	A
4-Methyl-2-Pentanone(MIBK)	5.0 U	U,P1	ug/L	5.0	SW846 8260D	1	12/02/2022 04:26	PDK	A
Acetone	10.0 U	U,P1	ug/L	10.0	SW846 8260D	1	12/02/2022 04:26	PDK	A
Benzene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 04:26	PDK	A
Bromobenzene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 04:26	PDK	A
Bromochloromethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 04:26	PDK	A
Bromodichloromethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 04:26	PDK	A
Bromoform	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 04:26	PDK	A
Bromomethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 04:26	PDK	A
Carbon Tetrachloride	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 04:26	PDK	A
Chlorobenzene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 04:26	PDK	A
Chlorodibromomethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 04:26	PDK	A
Chloroethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 04:26	PDK	A
Chloroform	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 04:26	PDK	A
Chloromethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 04:26	PDK	A

Results

Client Sample ID	MW-40D	Collected	11/20/2022 12:55
Lab Sample ID	3275168008	Lab Receipt	11/21/2022 17:40

VOLATILE ORGANICS (cont.)

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
cis-1,2-Dichloroethene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 04:26	PDK	A
cis-1,3-Dichloropropene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 04:26	PDK	A
Dibromomethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 04:26	PDK	A
Dichlorodifluoromethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 04:26	PDK	A
Diisopropyl ether	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 04:26	PDK	A
Ethylbenzene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 04:26	PDK	A
Hexachlorobutadiene	5.0 U	U,P1	ug/L	5.0	SW846 8260D	1	12/02/2022 04:26	PDK	A
Methyl t-Butyl Ether	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 04:26	PDK	A
Methylene Chloride	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 04:26	PDK	A
mp-Xylene	2.0 U	U,P1	ug/L	2.0	SW846 8260D	1	12/02/2022 04:26	PDK	A
Naphthalene	2.0 U	U,P1	ug/L	2.0	SW846 8260D	1	12/02/2022 04:26	PDK	A
o-Chlorotoluene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 04:26	PDK	A
o-Xylene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 04:26	PDK	A
p-Chlorotoluene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 04:26	PDK	A
p-Isopropyltoluene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 04:26	PDK	A
Styrene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 04:26	PDK	A
Tetrachloroethene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 04:26	PDK	A
Toluene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 04:26	PDK	A
Total Xylenes	3.0 U	U,P1	ug/L	3.0	SW846 8260D	1	12/02/2022 04:26	PDK	A
trans-1,2-Dichloroethene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 04:26	PDK	A
trans-1,3-Dichloropropene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 04:26	PDK	A
Trichloroethene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 04:26	PDK	A
Trichlorofluoromethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 04:26	PDK	A
Vinyl Acetate	5.0 U	U,P1	ug/L	5.0	SW846 8260D	1	12/02/2022 04:26	PDK	A
Vinyl Chloride	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 04:26	PDK	A

SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
1,2-Dichloroethane-d4	17060-07-0	93.1%	62 – 133	12/02/2022 04:26	
4-Bromofluorobenzene	460-00-4	103%	79 – 114	12/02/2022 04:26	
Dibromofluoromethane	1868-53-7	91.4%	78 – 116	12/02/2022 04:26	
Toluene-d8	2037-26-5	93.2%	76 – 127	12/02/2022 04:26	

Results

Client Sample ID	MW-05R	Collected	11/20/2022 12:40
Lab Sample ID	3275168009	Lab Receipt	11/21/2022 17:40

SEMIVOLATILE SIM

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
1,4-Dioxane	1.1	P1	ug/L	1.0	SW846 8270E SIM	1	11/24/2022 05:49	M1O	C

SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
2-Methylnapthalene-d10	7297-45-2	56.5%	29 – 112	11/24/2022 05:49	
Fluoranthene-d10	93951-69-0	73.6%	45 – 130	11/24/2022 05:49	

VOLATILE ORGANICS

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
1,1,1,2-Tetrachloroethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 04:49	PDK	A
1,1,1-Trichloroethane	1.0	P1	ug/L	1.0	SW846 8260D	1	12/02/2022 04:49	PDK	A
1,1,2,2-Tetrachloroethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 04:49	PDK	A
1,1,2-Trichloroethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 04:49	PDK	A
1,1-Dichloroethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 04:49	PDK	A
1,1-Dichloroethene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 04:49	PDK	A
1,1-Dichloropropene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 04:49	PDK	A
1,2,3-Trichlorobenzene	2.0 U	U,P1	ug/L	2.0	SW846 8260D	1	12/02/2022 04:49	PDK	A
1,2,3-Trichloropropane	2.0 U	U,P1	ug/L	2.0	SW846 8260D	1	12/02/2022 04:49	PDK	A
1,2,4-Trichlorobenzene	2.0 U	U,P1	ug/L	2.0	SW846 8260D	1	12/02/2022 04:49	PDK	A
1,2-Dibromo-3-chloropropane	7.0 U	U,P1	ug/L	7.0	SW846 8260D	1	12/02/2022 04:49	PDK	A
1,2-Dibromoethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 04:49	PDK	A
1,2-Dichlorobenzene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 04:49	PDK	A
1,2-Dichloroethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 04:49	PDK	A
1,2-Dichloropropane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 04:49	PDK	A
1,3-Dichlorobenzene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 04:49	PDK	A
1,3-Dichloropropane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 04:49	PDK	A
1,4-Dichlorobenzene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 04:49	PDK	A
2,2-Dichloropropane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 04:49	PDK	A
2-Butanone	10.0 U	U,P1	ug/L	10.0	SW846 8260D	1	12/02/2022 04:49	PDK	A
2-Hexanone	5.0 U	U,P1	ug/L	5.0	SW846 8260D	1	12/02/2022 04:49	PDK	A
4-Methyl-2-Pentanone(MIBK)	5.0 U	U,P1	ug/L	5.0	SW846 8260D	1	12/02/2022 04:49	PDK	A
Acetone	10.0 U	U,P1	ug/L	10.0	SW846 8260D	1	12/02/2022 04:49	PDK	A
Benzene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 04:49	PDK	A
Bromobenzene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 04:49	PDK	A
Bromochloromethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 04:49	PDK	A
Bromodichloromethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 04:49	PDK	A
Bromoform	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 04:49	PDK	A
Bromomethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 04:49	PDK	A
Carbon Tetrachloride	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 04:49	PDK	A
Chlorobenzene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 04:49	PDK	A
Chlorodibromomethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 04:49	PDK	A
Chloroethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 04:49	PDK	A
Chloroform	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 04:49	PDK	A
Chloromethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 04:49	PDK	A

Results

Client Sample ID	MW-05R	Collected	11/20/2022 12:40
Lab Sample ID	3275168009	Lab Receipt	11/21/2022 17:40

VOLATILE ORGANICS (cont.)

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
cis-1,2-Dichloroethene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 04:49	PDK	A
cis-1,3-Dichloropropene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 04:49	PDK	A
Dibromomethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 04:49	PDK	A
Dichlorodifluoromethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 04:49	PDK	A
Diisopropyl ether	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 04:49	PDK	A
Ethylbenzene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 04:49	PDK	A
Hexachlorobutadiene	5.0 U	U,P1	ug/L	5.0	SW846 8260D	1	12/02/2022 04:49	PDK	A
Methyl t-Butyl Ether	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 04:49	PDK	A
Methylene Chloride	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 04:49	PDK	A
mp-Xylene	2.0 U	U,P1	ug/L	2.0	SW846 8260D	1	12/02/2022 04:49	PDK	A
Naphthalene	2.0 U	U,P1	ug/L	2.0	SW846 8260D	1	12/02/2022 04:49	PDK	A
o-Chlorotoluene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 04:49	PDK	A
o-Xylene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 04:49	PDK	A
p-Chlorotoluene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 04:49	PDK	A
p-Isopropyltoluene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 04:49	PDK	A
Styrene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 04:49	PDK	A
Tetrachloroethene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 04:49	PDK	A
Toluene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 04:49	PDK	A
Total Xylenes	3.0 U	U,P1	ug/L	3.0	SW846 8260D	1	12/02/2022 04:49	PDK	A
trans-1,2-Dichloroethene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 04:49	PDK	A
trans-1,3-Dichloropropene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 04:49	PDK	A
Trichloroethene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 04:49	PDK	A
Trichlorofluoromethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 04:49	PDK	A
Vinyl Acetate	5.0 U	U,P1	ug/L	5.0	SW846 8260D	1	12/02/2022 04:49	PDK	A
Vinyl Chloride	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 04:49	PDK	A

SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
1,2-Dichloroethane-d4	17060-07-0	94.3%	62 – 133	12/02/2022 04:49	
4-Bromofluorobenzene	460-00-4	103%	79 – 114	12/02/2022 04:49	
Dibromofluoromethane	1868-53-7	94.1%	78 – 116	12/02/2022 04:49	
Toluene-d8	2037-26-5	94.6%	76 – 127	12/02/2022 04:49	

Results

Client Sample ID	MW-44	Collected	11/20/2022 14:10
Lab Sample ID	3275168010	Lab Receipt	11/21/2022 17:40

SEMIVOLATILE SIM

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
1,4-Dioxane	4.2	33,P1	ug/L	1.0	SW846 8270E SIM	1	11/24/2022 06:15	M1O	C

SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
2-Methylnapthalene-d10	7297-45-2	67.6%	29 – 112	11/24/2022 06:15	
Fluoranthene-d10	93951-69-0	91.1%	45 – 130	11/24/2022 06:15	

VOLATILE ORGANICS

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
1,1,1,2-Tetrachloroethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 05:12	PDK	A
1,1,1-Trichloroethane	8.0	P1	ug/L	1.0	SW846 8260D	1	12/02/2022 05:12	PDK	A
1,1,2,2-Tetrachloroethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 05:12	PDK	A
1,1,2-Trichloroethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 05:12	PDK	A
1,1-Dichloroethane	2.4	P1	ug/L	1.0	SW846 8260D	1	12/02/2022 05:12	PDK	A
1,1-Dichloroethene	3.9	P1	ug/L	1.0	SW846 8260D	1	12/02/2022 05:12	PDK	A
1,1-Dichloropropene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 05:12	PDK	A
1,2,3-Trichlorobenzene	2.0 U	U,P1	ug/L	2.0	SW846 8260D	1	12/02/2022 05:12	PDK	A
1,2,3-Trichloropropane	2.0 U	U,P1	ug/L	2.0	SW846 8260D	1	12/02/2022 05:12	PDK	A
1,2,4-Trichlorobenzene	2.0 U	U,P1	ug/L	2.0	SW846 8260D	1	12/02/2022 05:12	PDK	A
1,2-Dibromo-3-chloropropane	7.0 U	U,P1	ug/L	7.0	SW846 8260D	1	12/02/2022 05:12	PDK	A
1,2-Dibromoethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 05:12	PDK	A
1,2-Dichlorobenzene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 05:12	PDK	A
1,2-Dichloroethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 05:12	PDK	A
1,2-Dichloropropane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 05:12	PDK	A
1,3-Dichlorobenzene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 05:12	PDK	A
1,3-Dichloropropane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 05:12	PDK	A
1,4-Dichlorobenzene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 05:12	PDK	A
2,2-Dichloropropane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 05:12	PDK	A
2-Butanone	10.0 U	U,P1	ug/L	10.0	SW846 8260D	1	12/02/2022 05:12	PDK	A
2-Hexanone	5.0 U	U,P1	ug/L	5.0	SW846 8260D	1	12/02/2022 05:12	PDK	A
4-Methyl-2-Pentanone(MIBK)	5.0 U	U,P1	ug/L	5.0	SW846 8260D	1	12/02/2022 05:12	PDK	A
Acetone	10.0 U	U,P1	ug/L	10.0	SW846 8260D	1	12/02/2022 05:12	PDK	A
Benzene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 05:12	PDK	A
Bromobenzene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 05:12	PDK	A
Bromochloromethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 05:12	PDK	A
Bromodichloromethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 05:12	PDK	A
Bromoform	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 05:12	PDK	A
Bromomethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 05:12	PDK	A
Carbon Tetrachloride	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 05:12	PDK	A
Chlorobenzene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 05:12	PDK	A
Chlorodibromomethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 05:12	PDK	A
Chloroethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 05:12	PDK	A
Chloroform	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 05:12	PDK	A
Chloromethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 05:12	PDK	A

Results

Client Sample ID	MW-44	Collected	11/20/2022 14:10
Lab Sample ID	3275168010	Lab Receipt	11/21/2022 17:40

VOLATILE ORGANICS (cont.)

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
cis-1,2-Dichloroethene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 05:12	PDK	A
cis-1,3-Dichloropropene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 05:12	PDK	A
Dibromomethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 05:12	PDK	A
Dichlorodifluoromethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 05:12	PDK	A
Diisopropyl ether	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 05:12	PDK	A
Ethylbenzene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 05:12	PDK	A
Hexachlorobutadiene	5.0 U	U,P1	ug/L	5.0	SW846 8260D	1	12/02/2022 05:12	PDK	A
Methyl t-Butyl Ether	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 05:12	PDK	A
Methylene Chloride	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 05:12	PDK	A
mp-Xylene	2.0 U	U,P1	ug/L	2.0	SW846 8260D	1	12/02/2022 05:12	PDK	A
Naphthalene	2.0 U	U,P1	ug/L	2.0	SW846 8260D	1	12/02/2022 05:12	PDK	A
o-Chlorotoluene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 05:12	PDK	A
o-Xylene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 05:12	PDK	A
p-Chlorotoluene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 05:12	PDK	A
p-Isopropyltoluene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 05:12	PDK	A
Styrene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 05:12	PDK	A
Tetrachloroethene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 05:12	PDK	A
Toluene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 05:12	PDK	A
Total Xylenes	3.0 U	U,P1	ug/L	3.0	SW846 8260D	1	12/02/2022 05:12	PDK	A
trans-1,2-Dichloroethene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 05:12	PDK	A
trans-1,3-Dichloropropene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 05:12	PDK	A
Trichloroethene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 05:12	PDK	A
Trichlorofluoromethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 05:12	PDK	A
Vinyl Acetate	5.0 U	U,P1	ug/L	5.0	SW846 8260D	1	12/02/2022 05:12	PDK	A
Vinyl Chloride	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 05:12	PDK	A

SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
1,2-Dichloroethane-d4	17060-07-0	94.4%	62 – 133	12/02/2022 05:12	
4-Bromofluorobenzene	460-00-4	103%	79 – 114	12/02/2022 05:12	
Dibromofluoromethane	1868-53-7	93.7%	78 – 116	12/02/2022 05:12	
Toluene-d8	2037-26-5	94.6%	76 – 127	12/02/2022 05:12	

Results

Client Sample ID	MW-21D	Collected	11/20/2022 14:30
Lab Sample ID	3275168011	Lab Receipt	11/21/2022 17:40

SEMIVOLATILE SIM

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
1,4-Dioxane	5.5	P1	ug/L	1.0	SW846 8270E SIM	1	11/28/2022 22:42	M1O	C

SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
2-Methylnapthalene-d10	7297-45-2	60.8%	29 – 112	11/28/2022 22:42	
Fluoranthene-d10	93951-69-0	81.7%	45 – 130	11/28/2022 22:42	

VOLATILE ORGANICS

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
1,1,1,2-Tetrachloroethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 05:35	PDK	A
1,1,1-Trichloroethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 05:35	PDK	A
1,1,2,2-Tetrachloroethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 05:35	PDK	A
1,1,2-Trichloroethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 05:35	PDK	A
1,1-Dichloroethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 05:35	PDK	A
1,1-Dichloroethene	17.6	P1	ug/L	1.0	SW846 8260D	1	12/02/2022 05:35	PDK	A
1,1-Dichloropropene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 05:35	PDK	A
1,2,3-Trichlorobenzene	2.0 U	U,P1	ug/L	2.0	SW846 8260D	1	12/02/2022 05:35	PDK	A
1,2,3-Trichloropropane	2.0 U	U,P1	ug/L	2.0	SW846 8260D	1	12/02/2022 05:35	PDK	A
1,2,4-Trichlorobenzene	2.0 U	U,P1	ug/L	2.0	SW846 8260D	1	12/02/2022 05:35	PDK	A
1,2-Dibromo-3-chloropropane	7.0 U	U,P1	ug/L	7.0	SW846 8260D	1	12/02/2022 05:35	PDK	A
1,2-Dibromoethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 05:35	PDK	A
1,2-Dichlorobenzene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 05:35	PDK	A
1,2-Dichloroethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 05:35	PDK	A
1,2-Dichloropropane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 05:35	PDK	A
1,3-Dichlorobenzene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 05:35	PDK	A
1,3-Dichloropropane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 05:35	PDK	A
1,4-Dichlorobenzene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 05:35	PDK	A
2,2-Dichloropropane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 05:35	PDK	A
2-Butanone	10.0 U	U,P1	ug/L	10.0	SW846 8260D	1	12/02/2022 05:35	PDK	A
2-Hexanone	5.0 U	U,P1	ug/L	5.0	SW846 8260D	1	12/02/2022 05:35	PDK	A
4-Methyl-2-Pentanone(MIBK)	5.0 U	U,P1	ug/L	5.0	SW846 8260D	1	12/02/2022 05:35	PDK	A
Acetone	10.0 U	U,P1	ug/L	10.0	SW846 8260D	1	12/02/2022 05:35	PDK	A
Benzene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 05:35	PDK	A
Bromobenzene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 05:35	PDK	A
Bromochloromethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 05:35	PDK	A
Bromodichloromethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 05:35	PDK	A
Bromoform	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 05:35	PDK	A
Bromomethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 05:35	PDK	A
Carbon Tetrachloride	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 05:35	PDK	A
Chlorobenzene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 05:35	PDK	A
Chlorodibromomethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 05:35	PDK	A
Chloroethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 05:35	PDK	A
Chloroform	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 05:35	PDK	A
Chloromethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 05:35	PDK	A

Results

Client Sample ID	MW-21D	Collected	11/20/2022 14:30
Lab Sample ID	3275168011	Lab Receipt	11/21/2022 17:40

VOLATILE ORGANICS (cont.)

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
cis-1,2-Dichloroethene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 05:35	PDK	A
cis-1,3-Dichloropropene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 05:35	PDK	A
Dibromomethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 05:35	PDK	A
Dichlorodifluoromethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 05:35	PDK	A
Diisopropyl ether	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 05:35	PDK	A
Ethylbenzene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 05:35	PDK	A
Hexachlorobutadiene	5.0 U	U,P1	ug/L	5.0	SW846 8260D	1	12/02/2022 05:35	PDK	A
Methyl t-Butyl Ether	1.2	P1	ug/L	1.0	SW846 8260D	1	12/02/2022 05:35	PDK	A
Methylene Chloride	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 05:35	PDK	A
mp-Xylene	2.0 U	U,P1	ug/L	2.0	SW846 8260D	1	12/02/2022 05:35	PDK	A
Naphthalene	2.0 U	U,P1	ug/L	2.0	SW846 8260D	1	12/02/2022 05:35	PDK	A
o-Chlorotoluene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 05:35	PDK	A
o-Xylene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 05:35	PDK	A
p-Chlorotoluene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 05:35	PDK	A
p-Isopropyltoluene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 05:35	PDK	A
Styrene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 05:35	PDK	A
Tetrachloroethene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 05:35	PDK	A
Toluene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 05:35	PDK	A
Total Xylenes	3.0 U	U,P1	ug/L	3.0	SW846 8260D	1	12/02/2022 05:35	PDK	A
trans-1,2-Dichloroethene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 05:35	PDK	A
trans-1,3-Dichloropropene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 05:35	PDK	A
Trichloroethene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 05:35	PDK	A
Trichlorofluoromethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 05:35	PDK	A
Vinyl Acetate	5.0 U	U,P1	ug/L	5.0	SW846 8260D	1	12/02/2022 05:35	PDK	A
Vinyl Chloride	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 05:35	PDK	A

SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
1,2-Dichloroethane-d4	17060-07-0	95%	62 – 133	12/02/2022 05:35	
4-Bromofluorobenzene	460-00-4	102%	79 – 114	12/02/2022 05:35	
Dibromofluoromethane	1868-53-7	93.5%	78 – 116	12/02/2022 05:35	
Toluene-d8	2037-26-5	94.3%	76 – 127	12/02/2022 05:35	

Results

Client Sample ID	MW-41D	Collected	11/20/2022 14:45
Lab Sample ID	3275168012	Lab Receipt	11/21/2022 17:40

SEMIVOLATILE SIM

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
1,4-Dioxane	1.1	34,P1	ug/L	1.0	SW846 8270E SIM	1	11/28/2022 23:09	M1O	C

SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
2-Methylnapthalene-d10	7297-45-2	65.1%	29 – 112	11/28/2022 23:09	
Fluoranthene-d10	93951-69-0	97.8%	45 – 130	11/28/2022 23:09	

VOLATILE ORGANICS

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
1,1,1,2-Tetrachloroethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 05:58	PDK	A
1,1,1-Trichloroethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 05:58	PDK	A
1,1,2,2-Tetrachloroethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 05:58	PDK	A
1,1,2-Trichloroethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 05:58	PDK	A
1,1-Dichloroethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 05:58	PDK	A
1,1-Dichloroethene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 05:58	PDK	A
1,1-Dichloropropene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 05:58	PDK	A
1,2,3-Trichlorobenzene	2.0 U	U,P1	ug/L	2.0	SW846 8260D	1	12/02/2022 05:58	PDK	A
1,2,3-Trichloropropane	2.0 U	U,P1	ug/L	2.0	SW846 8260D	1	12/02/2022 05:58	PDK	A
1,2,4-Trichlorobenzene	2.0 U	U,P1	ug/L	2.0	SW846 8260D	1	12/02/2022 05:58	PDK	A
1,2-Dibromo-3-chloropropane	7.0 U	U,P1	ug/L	7.0	SW846 8260D	1	12/02/2022 05:58	PDK	A
1,2-Dibromoethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 05:58	PDK	A
1,2-Dichlorobenzene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 05:58	PDK	A
1,2-Dichloroethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 05:58	PDK	A
1,2-Dichloropropane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 05:58	PDK	A
1,3-Dichlorobenzene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 05:58	PDK	A
1,3-Dichloropropane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 05:58	PDK	A
1,4-Dichlorobenzene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 05:58	PDK	A
2,2-Dichloropropane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 05:58	PDK	A
2-Butanone	10.0 U	U,P1	ug/L	10.0	SW846 8260D	1	12/02/2022 05:58	PDK	A
2-Hexanone	5.0 U	U,P1	ug/L	5.0	SW846 8260D	1	12/02/2022 05:58	PDK	A
4-Methyl-2-Pentanone(MIBK)	5.0 U	U,P1	ug/L	5.0	SW846 8260D	1	12/02/2022 05:58	PDK	A
Acetone	10.0 U	U,P1	ug/L	10.0	SW846 8260D	1	12/02/2022 05:58	PDK	A
Benzene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 05:58	PDK	A
Bromobenzene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 05:58	PDK	A
Bromochloromethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 05:58	PDK	A
Bromodichloromethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 05:58	PDK	A
Bromoform	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 05:58	PDK	A
Bromomethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 05:58	PDK	A
Carbon Tetrachloride	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 05:58	PDK	A
Chlorobenzene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 05:58	PDK	A
Chlorodibromomethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 05:58	PDK	A
Chloroethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 05:58	PDK	A
Chloroform	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 05:58	PDK	A
Chloromethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 05:58	PDK	A

Results

Client Sample ID	MW-41D	Collected	11/20/2022 14:45
Lab Sample ID	3275168012	Lab Receipt	11/21/2022 17:40

VOLATILE ORGANICS (cont.)

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
cis-1,2-Dichloroethene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 05:58	PDK	A
cis-1,3-Dichloropropene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 05:58	PDK	A
Dibromomethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 05:58	PDK	A
Dichlorodifluoromethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 05:58	PDK	A
Diisopropyl ether	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 05:58	PDK	A
Ethylbenzene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 05:58	PDK	A
Hexachlorobutadiene	5.0 U	U,P1	ug/L	5.0	SW846 8260D	1	12/02/2022 05:58	PDK	A
Methyl t-Butyl Ether	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 05:58	PDK	A
Methylene Chloride	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 05:58	PDK	A
mp-Xylene	2.0 U	U,P1	ug/L	2.0	SW846 8260D	1	12/02/2022 05:58	PDK	A
Naphthalene	2.0 U	U,P1	ug/L	2.0	SW846 8260D	1	12/02/2022 05:58	PDK	A
o-Chlorotoluene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 05:58	PDK	A
o-Xylene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 05:58	PDK	A
p-Chlorotoluene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 05:58	PDK	A
p-Isopropyltoluene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 05:58	PDK	A
Styrene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 05:58	PDK	A
Tetrachloroethene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 05:58	PDK	A
Toluene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 05:58	PDK	A
Total Xylenes	3.0 U	U,P1	ug/L	3.0	SW846 8260D	1	12/02/2022 05:58	PDK	A
trans-1,2-Dichloroethene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 05:58	PDK	A
trans-1,3-Dichloropropene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 05:58	PDK	A
Trichloroethene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 05:58	PDK	A
Trichlorofluoromethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 05:58	PDK	A
Vinyl Acetate	5.0 U	U,P1	ug/L	5.0	SW846 8260D	1	12/02/2022 05:58	PDK	A
Vinyl Chloride	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 05:58	PDK	A

SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
1,2-Dichloroethane-d4	17060-07-0	94.3%	62 – 133	12/02/2022 05:58	
4-Bromofluorobenzene	460-00-4	103%	79 – 114	12/02/2022 05:58	
Dibromofluoromethane	1868-53-7	93.3%	78 – 116	12/02/2022 05:58	
Toluene-d8	2037-26-5	94.8%	76 – 127	12/02/2022 05:58	

Results

Client Sample ID	MW-09	Collected	11/20/2022 15:20
Lab Sample ID	3275168013	Lab Receipt	11/21/2022 17:40

SEMIVOLATILE SIM

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
1,4-Dioxane	7.5	P1	ug/L	1.0	SW846 8270E SIM	1	11/29/2022 00:56	M1O	C

SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
2-Methylnapthalene-d10	7297-45-2	74.7%	29 – 112	11/29/2022 00:56	
Fluoranthene-d10	93951-69-0	104%	45 – 130	11/29/2022 00:56	

VOLATILE ORGANICS

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
1,1,1,2-Tetrachloroethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 06:20	PDK	A
1,1,1-Trichloroethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 06:20	PDK	A
1,1,2,2-Tetrachloroethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 06:20	PDK	A
1,1,2-Trichloroethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 06:20	PDK	A
1,1-Dichloroethane	1.9	P1	ug/L	1.0	SW846 8260D	1	12/02/2022 06:20	PDK	A
1,1-Dichloroethene	35.7	P1	ug/L	1.0	SW846 8260D	1	12/02/2022 06:20	PDK	A
1,1-Dichloropropene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 06:20	PDK	A
1,2,3-Trichlorobenzene	2.0 U	U,P1	ug/L	2.0	SW846 8260D	1	12/02/2022 06:20	PDK	A
1,2,3-Trichloropropane	2.0 U	U,P1	ug/L	2.0	SW846 8260D	1	12/02/2022 06:20	PDK	A
1,2,4-Trichlorobenzene	2.0 U	U,P1	ug/L	2.0	SW846 8260D	1	12/02/2022 06:20	PDK	A
1,2-Dibromo-3-chloropropane	7.0 U	U,P1	ug/L	7.0	SW846 8260D	1	12/02/2022 06:20	PDK	A
1,2-Dibromoethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 06:20	PDK	A
1,2-Dichlorobenzene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 06:20	PDK	A
1,2-Dichloroethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 06:20	PDK	A
1,2-Dichloropropane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 06:20	PDK	A
1,3-Dichlorobenzene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 06:20	PDK	A
1,3-Dichloropropane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 06:20	PDK	A
1,4-Dichlorobenzene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 06:20	PDK	A
2,2-Dichloropropane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 06:20	PDK	A
2-Butanone	10.0 U	U,P1	ug/L	10.0	SW846 8260D	1	12/02/2022 06:20	PDK	A
2-Hexanone	5.0 U	U,P1	ug/L	5.0	SW846 8260D	1	12/02/2022 06:20	PDK	A
4-Methyl-2-Pentanone(MIBK)	5.0 U	U,P1	ug/L	5.0	SW846 8260D	1	12/02/2022 06:20	PDK	A
Acetone	10.0 U	U,P1	ug/L	10.0	SW846 8260D	1	12/02/2022 06:20	PDK	A
Benzene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 06:20	PDK	A
Bromobenzene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 06:20	PDK	A
Bromochloromethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 06:20	PDK	A
Bromodichloromethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 06:20	PDK	A
Bromoform	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 06:20	PDK	A
Bromomethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 06:20	PDK	A
Carbon Tetrachloride	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 06:20	PDK	A
Chlorobenzene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 06:20	PDK	A
Chlorodibromomethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 06:20	PDK	A
Chloroethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 06:20	PDK	A
Chloroform	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 06:20	PDK	A
Chloromethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 06:20	PDK	A

Results

Client Sample ID	MW-09	Collected	11/20/2022 15:20
Lab Sample ID	3275168013	Lab Receipt	11/21/2022 17:40

VOLATILE ORGANICS (cont.)

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
cis-1,2-Dichloroethene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 06:20	PDK	A
cis-1,3-Dichloropropene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 06:20	PDK	A
Dibromomethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 06:20	PDK	A
Dichlorodifluoromethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 06:20	PDK	A
Diisopropyl ether	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 06:20	PDK	A
Ethylbenzene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 06:20	PDK	A
Hexachlorobutadiene	5.0 U	U,P1	ug/L	5.0	SW846 8260D	1	12/02/2022 06:20	PDK	A
Methyl t-Butyl Ether	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 06:20	PDK	A
Methylene Chloride	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 06:20	PDK	A
mp-Xylene	2.0 U	U,P1	ug/L	2.0	SW846 8260D	1	12/02/2022 06:20	PDK	A
Naphthalene	2.0 U	U,P1	ug/L	2.0	SW846 8260D	1	12/02/2022 06:20	PDK	A
o-Chlorotoluene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 06:20	PDK	A
o-Xylene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 06:20	PDK	A
p-Chlorotoluene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 06:20	PDK	A
p-Isopropyltoluene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 06:20	PDK	A
Styrene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 06:20	PDK	A
Tetrachloroethene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 06:20	PDK	A
Toluene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 06:20	PDK	A
Total Xylenes	3.0 U	U,P1	ug/L	3.0	SW846 8260D	1	12/02/2022 06:20	PDK	A
trans-1,2-Dichloroethene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 06:20	PDK	A
trans-1,3-Dichloropropene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 06:20	PDK	A
Trichloroethene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 06:20	PDK	A
Trichlorofluoromethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 06:20	PDK	A
Vinyl Acetate	5.0 U	U,P1	ug/L	5.0	SW846 8260D	1	12/02/2022 06:20	PDK	A
Vinyl Chloride	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 06:20	PDK	A

SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
1,2-Dichloroethane-d4	17060-07-0	96.4%	62 – 133	12/02/2022 06:20	
4-Bromofluorobenzene	460-00-4	105%	79 – 114	12/02/2022 06:20	
Dibromofluoromethane	1868-53-7	94.3%	78 – 116	12/02/2022 06:20	
Toluene-d8	2037-26-5	96.7%	76 – 127	12/02/2022 06:20	

Results

Client Sample ID	MW-23D	Collected	11/20/2022 15:30
Lab Sample ID	3275168014	Lab Receipt	11/21/2022 17:40

SEMIVOLATILE SIM

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
1,4-Dioxane	59.6	P1	ug/L	5.4	SW846 8270E SIM	4	11/29/2022 23:38	M1O	C

SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
2-Methylnapthalene-d10	7297-45-2	71.3%	29 – 112	11/29/2022 01:23	
2-Methylnapthalene-d10	7297-45-2	76.2%	29 – 112	11/29/2022 23:38	
Fluoranthene-d10	93951-69-0	89.3%	45 – 130	11/29/2022 01:23	
Fluoranthene-d10	93951-69-0	95.7%	45 – 130	11/29/2022 23:38	

VOLATILE ORGANICS

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
1,1,1,2-Tetrachloroethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 06:43	PDK	A
1,1,1-Trichloroethane	9.7	P1	ug/L	1.0	SW846 8260D	1	12/02/2022 06:43	PDK	A
1,1,2,2-Tetrachloroethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 06:43	PDK	A
1,1,2-Trichloroethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 06:43	PDK	A
1,1-Dichloroethane	33.6	P1	ug/L	1.0	SW846 8260D	1	12/02/2022 06:43	PDK	A
1,1-Dichloroethene	140	P1	ug/L	1.0	SW846 8260D	1	12/02/2022 06:43	PDK	A
1,1-Dichloropropene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 06:43	PDK	A
1,2,3-Trichlorobenzene	2.0 U	U,P1	ug/L	2.0	SW846 8260D	1	12/02/2022 06:43	PDK	A
1,2,3-Trichloropropane	2.0 U	U,P1	ug/L	2.0	SW846 8260D	1	12/02/2022 06:43	PDK	A
1,2,4-Trichlorobenzene	2.0 U	U,P1	ug/L	2.0	SW846 8260D	1	12/02/2022 06:43	PDK	A
1,2-Dibromo-3-chloropropane	7.0 U	U,P1	ug/L	7.0	SW846 8260D	1	12/02/2022 06:43	PDK	A
1,2-Dibromoethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 06:43	PDK	A
1,2-Dichlorobenzene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 06:43	PDK	A
1,2-Dichloroethane	1.7	P1	ug/L	1.0	SW846 8260D	1	12/02/2022 06:43	PDK	A
1,2-Dichloropropane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 06:43	PDK	A
1,3-Dichlorobenzene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 06:43	PDK	A
1,3-Dichloropropane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 06:43	PDK	A
1,4-Dichlorobenzene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 06:43	PDK	A
2,2-Dichloropropane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 06:43	PDK	A
2-Butanone	10.0 U	U,P1	ug/L	10.0	SW846 8260D	1	12/02/2022 06:43	PDK	A
2-Hexanone	5.0 U	U,P1	ug/L	5.0	SW846 8260D	1	12/02/2022 06:43	PDK	A
4-Methyl-2-Pentanone(MIBK)	5.0 U	U,P1	ug/L	5.0	SW846 8260D	1	12/02/2022 06:43	PDK	A
Acetone	10.0 U	U,P1	ug/L	10.0	SW846 8260D	1	12/02/2022 06:43	PDK	A
Benzene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 06:43	PDK	A
Bromobenzene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 06:43	PDK	A
Bromochloromethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 06:43	PDK	A
Bromodichloromethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 06:43	PDK	A
Bromoform	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 06:43	PDK	A
Bromomethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 06:43	PDK	A
Carbon Tetrachloride	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 06:43	PDK	A
Chlorobenzene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 06:43	PDK	A
Chlorodibromomethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 06:43	PDK	A
Chloroethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 06:43	PDK	A

Results

Client Sample ID	MW-23D	Collected	11/20/2022 15:30
Lab Sample ID	3275168014	Lab Receipt	11/21/2022 17:40

VOLATILE ORGANICS (cont.)

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
Chloroform	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 06:43	PDK	A
Chloromethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 06:43	PDK	A
cis-1,2-Dichloroethene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 06:43	PDK	A
cis-1,3-Dichloropropene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 06:43	PDK	A
Dibromomethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 06:43	PDK	A
Dichlorodifluoromethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 06:43	PDK	A
Diisopropyl ether	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 06:43	PDK	A
Ethylbenzene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 06:43	PDK	A
Hexachlorobutadiene	5.0 U	U,P1	ug/L	5.0	SW846 8260D	1	12/02/2022 06:43	PDK	A
Methyl t-Butyl Ether	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 06:43	PDK	A
Methylene Chloride	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 06:43	PDK	A
mp-Xylene	2.0 U	U,P1	ug/L	2.0	SW846 8260D	1	12/02/2022 06:43	PDK	A
Naphthalene	2.0 U	U,P1	ug/L	2.0	SW846 8260D	1	12/02/2022 06:43	PDK	A
o-Chlorotoluene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 06:43	PDK	A
o-Xylene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 06:43	PDK	A
p-Chlorotoluene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 06:43	PDK	A
p-Isopropyltoluene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 06:43	PDK	A
Styrene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 06:43	PDK	A
Tetrachloroethene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 06:43	PDK	A
Toluene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 06:43	PDK	A
Total Xylenes	3.0 U	U,P1	ug/L	3.0	SW846 8260D	1	12/02/2022 06:43	PDK	A
trans-1,2-Dichloroethene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 06:43	PDK	A
trans-1,3-Dichloropropene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 06:43	PDK	A
Trichloroethene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 06:43	PDK	A
Trichlorofluoromethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 06:43	PDK	A
Vinyl Acetate	5.0 U	U,P1	ug/L	5.0	SW846 8260D	1	12/02/2022 06:43	PDK	A
Vinyl Chloride	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 06:43	PDK	A

SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
1,2-Dichloroethane-d4	17060-07-0	92.8%	62 – 133	12/02/2022 06:43	
4-Bromofluorobenzene	460-00-4	104%	79 – 114	12/02/2022 06:43	
Dibromofluoromethane	1868-53-7	93.8%	78 – 116	12/02/2022 06:43	
Toluene-d8	2037-26-5	94.4%	76 – 127	12/02/2022 06:43	

Results

Client Sample ID	MW-46D	Collected	11/20/2022 16:00
Lab Sample ID	3275168015	Lab Receipt	11/21/2022 17:40

SEMIVOLATILE SIM

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
1,4-Dioxane	40.1	P1	ug/L	6.3	SW846 8270E SIM	4	11/30/2022 00:31	M1O	C

SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
2-Methylnapthalene-d10	7297-45-2	60.9%	29 – 112	11/29/2022 02:16	
2-Methylnapthalene-d10	7297-45-2	65.1%	29 – 112	11/30/2022 00:31	
Fluoranthene-d10	93951-69-0	71.1%	45 – 130	11/29/2022 02:16	
Fluoranthene-d10	93951-69-0	78.8%	45 – 130	11/30/2022 00:31	

VOLATILE ORGANICS

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
1,1,1,2-Tetrachloroethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 07:06	PDK	A
1,1,1-Trichloroethane	3.6	P1	ug/L	1.0	SW846 8260D	1	12/02/2022 07:06	PDK	A
1,1,2,2-Tetrachloroethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 07:06	PDK	A
1,1,2-Trichloroethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 07:06	PDK	A
1,1-Dichloroethane	15.7	P1	ug/L	1.0	SW846 8260D	1	12/02/2022 07:06	PDK	A
1,1-Dichloroethene	74.9	P1	ug/L	1.0	SW846 8260D	1	12/02/2022 07:06	PDK	A
1,1-Dichloropropene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 07:06	PDK	A
1,2,3-Trichlorobenzene	2.0 U	U,P1	ug/L	2.0	SW846 8260D	1	12/02/2022 07:06	PDK	A
1,2,3-Trichloropropane	2.0 U	U,P1	ug/L	2.0	SW846 8260D	1	12/02/2022 07:06	PDK	A
1,2,4-Trichlorobenzene	2.0 U	U,P1	ug/L	2.0	SW846 8260D	1	12/02/2022 07:06	PDK	A
1,2-Dibromo-3-chloropropane	7.0 U	U,P1	ug/L	7.0	SW846 8260D	1	12/02/2022 07:06	PDK	A
1,2-Dibromoethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 07:06	PDK	A
1,2-Dichlorobenzene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 07:06	PDK	A
1,2-Dichloroethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 07:06	PDK	A
1,2-Dichloropropane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 07:06	PDK	A
1,3-Dichlorobenzene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 07:06	PDK	A
1,3-Dichloropropane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 07:06	PDK	A
1,4-Dichlorobenzene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 07:06	PDK	A
2,2-Dichloropropane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 07:06	PDK	A
2-Butanone	10.0 U	U,P1	ug/L	10.0	SW846 8260D	1	12/02/2022 07:06	PDK	A
2-Hexanone	5.0 U	U,P1	ug/L	5.0	SW846 8260D	1	12/02/2022 07:06	PDK	A
4-Methyl-2-Pentanone(MIBK)	5.0 U	U,P1	ug/L	5.0	SW846 8260D	1	12/02/2022 07:06	PDK	A
Acetone	10.0 U	U,P1	ug/L	10.0	SW846 8260D	1	12/02/2022 07:06	PDK	A
Benzene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 07:06	PDK	A
Bromobenzene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 07:06	PDK	A
Bromochloromethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 07:06	PDK	A
Bromodichloromethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 07:06	PDK	A
Bromoform	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 07:06	PDK	A
Bromomethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 07:06	PDK	A
Carbon Tetrachloride	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 07:06	PDK	A
Chlorobenzene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 07:06	PDK	A
Chlorodibromomethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 07:06	PDK	A
Chloroethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 07:06	PDK	A

Results

Client Sample ID	MW-46D	Collected	11/20/2022 16:00
Lab Sample ID	3275168015	Lab Receipt	11/21/2022 17:40

VOLATILE ORGANICS (cont.)

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
Chloroform	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 07:06	PDK	A
Chloromethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 07:06	PDK	A
cis-1,2-Dichloroethene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 07:06	PDK	A
cis-1,3-Dichloropropene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 07:06	PDK	A
Dibromomethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 07:06	PDK	A
Dichlorodifluoromethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 07:06	PDK	A
Diisopropyl ether	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 07:06	PDK	A
Ethylbenzene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 07:06	PDK	A
Hexachlorobutadiene	5.0 U	U,P1	ug/L	5.0	SW846 8260D	1	12/02/2022 07:06	PDK	A
Methyl t-Butyl Ether	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 07:06	PDK	A
Methylene Chloride	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 07:06	PDK	A
mp-Xylene	2.0 U	U,P1	ug/L	2.0	SW846 8260D	1	12/02/2022 07:06	PDK	A
Naphthalene	2.0 U	U,P1	ug/L	2.0	SW846 8260D	1	12/02/2022 07:06	PDK	A
o-Chlorotoluene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 07:06	PDK	A
o-Xylene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 07:06	PDK	A
p-Chlorotoluene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 07:06	PDK	A
p-Isopropyltoluene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 07:06	PDK	A
Styrene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 07:06	PDK	A
Tetrachloroethene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 07:06	PDK	A
Toluene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 07:06	PDK	A
Total Xylenes	3.0 U	U,P1	ug/L	3.0	SW846 8260D	1	12/02/2022 07:06	PDK	A
trans-1,2-Dichloroethene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 07:06	PDK	A
trans-1,3-Dichloropropene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 07:06	PDK	A
Trichloroethene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 07:06	PDK	A
Trichlorofluoromethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 07:06	PDK	A
Vinyl Acetate	5.0 U	U,P1	ug/L	5.0	SW846 8260D	1	12/02/2022 07:06	PDK	A
Vinyl Chloride	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 07:06	PDK	A

SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
1,2-Dichloroethane-d4	17060-07-0	93.9%	62 – 133	12/02/2022 07:06	
4-Bromofluorobenzene	460-00-4	104%	79 – 114	12/02/2022 07:06	
Dibromofluoromethane	1868-53-7	94.7%	78 – 116	12/02/2022 07:06	
Toluene-d8	2037-26-5	94.4%	76 – 127	12/02/2022 07:06	

Results

Client Sample ID	MW-01	Collected	11/20/2022 16:10
Lab Sample ID	3275168016	Lab Receipt	11/21/2022 17:40

SEMIVOLATILE SIM

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
1,4-Dioxane	1.0 U	U,P1	ug/L	1.0	SW846 8270E SIM	1	11/29/2022 02:43	M1O	C

SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
2-Methylnapthalene-d10	7297-45-2	69.3%	29 – 112	11/29/2022 02:43	
Fluoranthene-d10	93951-69-0	89.1%	45 – 130	11/29/2022 02:43	

VOLATILE ORGANICS

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
1,1,1,2-Tetrachloroethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 17:52	TMP	A
1,1,1-Trichloroethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 17:52	TMP	A
1,1,2,2-Tetrachloroethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 17:52	TMP	A
1,1,2-Trichloroethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 17:52	TMP	A
1,1-Dichloroethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 17:52	TMP	A
1,1-Dichloroethene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 17:52	TMP	A
1,1-Dichloropropene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 17:52	TMP	A
1,2,3-Trichlorobenzene	2.0 U	U,P1	ug/L	2.0	SW846 8260D	1	12/02/2022 17:52	TMP	A
1,2,3-Trichloropropane	2.0 U	U,P1	ug/L	2.0	SW846 8260D	1	12/02/2022 17:52	TMP	A
1,2,4-Trichlorobenzene	2.0 U	U,P1	ug/L	2.0	SW846 8260D	1	12/02/2022 17:52	TMP	A
1,2-Dibromo-3-chloropropane	7.0 U	U,P1	ug/L	7.0	SW846 8260D	1	12/02/2022 17:52	TMP	A
1,2-Dibromoethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 17:52	TMP	A
1,2-Dichlorobenzene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 17:52	TMP	A
1,2-Dichloroethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 17:52	TMP	A
1,2-Dichloropropane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 17:52	TMP	A
1,3-Dichlorobenzene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 17:52	TMP	A
1,3-Dichloropropane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 17:52	TMP	A
1,4-Dichlorobenzene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 17:52	TMP	A
2,2-Dichloropropane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 17:52	TMP	A
2-Butanone	10.0 U	U,P1	ug/L	10.0	SW846 8260D	1	12/02/2022 17:52	TMP	A
2-Hexanone	5.0 U	U,P1	ug/L	5.0	SW846 8260D	1	12/02/2022 17:52	TMP	A
4-Methyl-2-Pentanone(MIBK)	5.0 U	U,P1	ug/L	5.0	SW846 8260D	1	12/02/2022 17:52	TMP	A
Acetone	10.0 U	U,P1	ug/L	10.0	SW846 8260D	1	12/02/2022 17:52	TMP	A
Benzene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 17:52	TMP	A
Bromobenzene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 17:52	TMP	A
Bromochloromethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 17:52	TMP	A
Bromodichloromethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 17:52	TMP	A
Bromoform	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 17:52	TMP	A
Bromomethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 17:52	TMP	A
Carbon Tetrachloride	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 17:52	TMP	A
Chlorobenzene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 17:52	TMP	A
Chlorodibromomethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 17:52	TMP	A
Chloroethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 17:52	TMP	A
Chloroform	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 17:52	TMP	A
Chloromethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 17:52	TMP	A

Results

Client Sample ID	MW-01	Collected	11/20/2022 16:10
Lab Sample ID	3275168016	Lab Receipt	11/21/2022 17:40

VOLATILE ORGANICS (cont.)

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
cis-1,2-Dichloroethene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 17:52	TMP	A
cis-1,3-Dichloropropene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 17:52	TMP	A
Dibromomethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 17:52	TMP	A
Dichlorodifluoromethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 17:52	TMP	A
Diisopropyl ether	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 17:52	TMP	A
Ethylbenzene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 17:52	TMP	A
Hexachlorobutadiene	5.0 U	U,P1	ug/L	5.0	SW846 8260D	1	12/02/2022 17:52	TMP	A
Methyl t-Butyl Ether	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 17:52	TMP	A
Methylene Chloride	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 17:52	TMP	A
mp-Xylene	2.0 U	U,P1	ug/L	2.0	SW846 8260D	1	12/02/2022 17:52	TMP	A
Naphthalene	2.0 U	U,P1	ug/L	2.0	SW846 8260D	1	12/02/2022 17:52	TMP	A
o-Chlorotoluene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 17:52	TMP	A
o-Xylene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 17:52	TMP	A
p-Chlorotoluene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 17:52	TMP	A
p-Isopropyltoluene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 17:52	TMP	A
Styrene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 17:52	TMP	A
Tetrachloroethene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 17:52	TMP	A
Toluene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 17:52	TMP	A
Total Xylenes	3.0 U	U,P1	ug/L	3.0	SW846 8260D	1	12/02/2022 17:52	TMP	A
trans-1,2-Dichloroethene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 17:52	TMP	A
trans-1,3-Dichloropropene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 17:52	TMP	A
Trichloroethene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 17:52	TMP	A
Trichlorofluoromethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 17:52	TMP	A
Vinyl Acetate	5.0 U	U,P1	ug/L	5.0	SW846 8260D	1	12/02/2022 17:52	TMP	A
Vinyl Chloride	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 17:52	TMP	A

SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
1,2-Dichloroethane-d4	17060-07-0	96.3%	62 – 133	12/02/2022 17:52	
4-Bromofluorobenzene	460-00-4	102%	79 – 114	12/02/2022 17:52	
Dibromofluoromethane	1868-53-7	96.8%	78 – 116	12/02/2022 17:52	
Toluene-d8	2037-26-5	95%	76 – 127	12/02/2022 17:52	

Results

Client Sample ID	MW-01D	Collected	11/20/2022 16:20
Lab Sample ID	3275168017	Lab Receipt	11/21/2022 17:40

SEMIVOLATILE SIM

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
1,4-Dioxane	6.8	P1	ug/L	1.0	SW846 8270E SIM	1	11/29/2022 03:10	M1O	C

SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
2-Methylnapthalene-d10	7297-45-2	74.5%	29 – 112	11/29/2022 03:10	
Fluoranthene-d10	93951-69-0	99.3%	45 – 130	11/29/2022 03:10	

VOLATILE ORGANICS

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
1,1,1,2-Tetrachloroethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 16:21	TMP	A
1,1,1-Trichloroethane	1.0	P1	ug/L	1.0	SW846 8260D	1	12/02/2022 16:21	TMP	A
1,1,2,2-Tetrachloroethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 16:21	TMP	A
1,1,2-Trichloroethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 16:21	TMP	A
1,1-Dichloroethane	3.0	P1	ug/L	1.0	SW846 8260D	1	12/02/2022 16:21	TMP	A
1,1-Dichloroethene	16.8	P1	ug/L	1.0	SW846 8260D	1	12/02/2022 16:21	TMP	A
1,1-Dichloropropene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 16:21	TMP	A
1,2,3-Trichlorobenzene	2.0 U	U,P1	ug/L	2.0	SW846 8260D	1	12/02/2022 16:21	TMP	A
1,2,3-Trichloropropane	2.0 U	U,P1	ug/L	2.0	SW846 8260D	1	12/02/2022 16:21	TMP	A
1,2,4-Trichlorobenzene	2.0 U	U,P1	ug/L	2.0	SW846 8260D	1	12/02/2022 16:21	TMP	A
1,2-Dibromo-3-chloropropane	7.0 U	U,P1	ug/L	7.0	SW846 8260D	1	12/02/2022 16:21	TMP	A
1,2-Dibromoethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 16:21	TMP	A
1,2-Dichlorobenzene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 16:21	TMP	A
1,2-Dichloroethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 16:21	TMP	A
1,2-Dichloropropane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 16:21	TMP	A
1,3-Dichlorobenzene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 16:21	TMP	A
1,3-Dichloropropane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 16:21	TMP	A
1,4-Dichlorobenzene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 16:21	TMP	A
2,2-Dichloropropane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 16:21	TMP	A
2-Butanone	10.0 U	U,P1	ug/L	10.0	SW846 8260D	1	12/02/2022 16:21	TMP	A
2-Hexanone	5.0 U	U,P1	ug/L	5.0	SW846 8260D	1	12/02/2022 16:21	TMP	A
4-Methyl-2-Pentanone(MIBK)	5.0 U	U,P1	ug/L	5.0	SW846 8260D	1	12/02/2022 16:21	TMP	A
Acetone	10.0 U	U,P1	ug/L	10.0	SW846 8260D	1	12/02/2022 16:21	TMP	A
Benzene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 16:21	TMP	A
Bromobenzene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 16:21	TMP	A
Bromochloromethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 16:21	TMP	A
Bromodichloromethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 16:21	TMP	A
Bromoform	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 16:21	TMP	A
Bromomethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 16:21	TMP	A
Carbon Tetrachloride	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 16:21	TMP	A
Chlorobenzene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 16:21	TMP	A
Chlorodibromomethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 16:21	TMP	A
Chloroethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 16:21	TMP	A
Chloroform	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 16:21	TMP	A
Chloromethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 16:21	TMP	A

Results

Client Sample ID	MW-01D	Collected	11/20/2022 16:20
Lab Sample ID	3275168017	Lab Receipt	11/21/2022 17:40

VOLATILE ORGANICS (cont.)

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
cis-1,2-Dichloroethene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 16:21	TMP	A
cis-1,3-Dichloropropene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 16:21	TMP	A
Dibromomethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 16:21	TMP	A
Dichlorodifluoromethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 16:21	TMP	A
Diisopropyl ether	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 16:21	TMP	A
Ethylbenzene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 16:21	TMP	A
Hexachlorobutadiene	5.0 U	U,P1	ug/L	5.0	SW846 8260D	1	12/02/2022 16:21	TMP	A
Methyl t-Butyl Ether	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 16:21	TMP	A
Methylene Chloride	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 16:21	TMP	A
mp-Xylene	2.0 U	U,P1	ug/L	2.0	SW846 8260D	1	12/02/2022 16:21	TMP	A
Naphthalene	2.0 U	U,P1	ug/L	2.0	SW846 8260D	1	12/02/2022 16:21	TMP	A
o-Chlorotoluene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 16:21	TMP	A
o-Xylene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 16:21	TMP	A
p-Chlorotoluene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 16:21	TMP	A
p-Isopropyltoluene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 16:21	TMP	A
Styrene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 16:21	TMP	A
Tetrachloroethene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 16:21	TMP	A
Toluene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 16:21	TMP	A
Total Xylenes	3.0 U	U,P1	ug/L	3.0	SW846 8260D	1	12/02/2022 16:21	TMP	A
trans-1,2-Dichloroethene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 16:21	TMP	A
trans-1,3-Dichloropropene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 16:21	TMP	A
Trichloroethene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 16:21	TMP	A
Trichlorofluoromethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 16:21	TMP	A
Vinyl Acetate	5.0 U	U,P1	ug/L	5.0	SW846 8260D	1	12/02/2022 16:21	TMP	A
Vinyl Chloride	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 16:21	TMP	A

SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
1,2-Dichloroethane-d4	17060-07-0	97.5%	62 – 133	12/02/2022 16:21	
4-Bromofluorobenzene	460-00-4	103%	79 – 114	12/02/2022 16:21	
Dibromofluoromethane	1868-53-7	98%	78 – 116	12/02/2022 16:21	
Toluene-d8	2037-26-5	95.5%	76 – 127	12/02/2022 16:21	

Results

Client Sample ID	MW-22D	Collected	11/20/2022 16:30
Lab Sample ID	3275168018	Lab Receipt	11/21/2022 17:40

SEMIVOLATILE SIM

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
1,4-Dioxane	2.7	P1	ug/L	1.0	SW846 8270E SIM	1	11/29/2022 03:36	M1O	C

SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
2-Methylnapthalene-d10	7297-45-2	75.3%	29 – 112	11/29/2022 03:36	
Fluoranthene-d10	93951-69-0	99.6%	45 – 130	11/29/2022 03:36	

VOLATILE ORGANICS

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
1,1,1,2-Tetrachloroethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 15:58	TMP	A
1,1,1-Trichloroethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 15:58	TMP	A
1,1,2,2-Tetrachloroethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 15:58	TMP	A
1,1,2-Trichloroethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 15:58	TMP	A
1,1-Dichloroethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 15:58	TMP	A
1,1-Dichloroethene	6.1	P1	ug/L	1.0	SW846 8260D	1	12/02/2022 15:58	TMP	A
1,1-Dichloropropene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 15:58	TMP	A
1,2,3-Trichlorobenzene	2.0 U	U,P1	ug/L	2.0	SW846 8260D	1	12/02/2022 15:58	TMP	A
1,2,3-Trichloropropane	2.0 U	U,P1	ug/L	2.0	SW846 8260D	1	12/02/2022 15:58	TMP	A
1,2,4-Trichlorobenzene	2.0 U	U,P1	ug/L	2.0	SW846 8260D	1	12/02/2022 15:58	TMP	A
1,2-Dibromo-3-chloropropane	7.0 U	U,P1	ug/L	7.0	SW846 8260D	1	12/02/2022 15:58	TMP	A
1,2-Dibromoethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 15:58	TMP	A
1,2-Dichlorobenzene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 15:58	TMP	A
1,2-Dichloroethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 15:58	TMP	A
1,2-Dichloropropane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 15:58	TMP	A
1,3-Dichlorobenzene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 15:58	TMP	A
1,3-Dichloropropane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 15:58	TMP	A
1,4-Dichlorobenzene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 15:58	TMP	A
2,2-Dichloropropane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 15:58	TMP	A
2-Butanone	10.0 U	U,P1	ug/L	10.0	SW846 8260D	1	12/02/2022 15:58	TMP	A
2-Hexanone	5.0 U	U,P1	ug/L	5.0	SW846 8260D	1	12/02/2022 15:58	TMP	A
4-Methyl-2-Pentanone(MIBK)	5.0 U	U,P1	ug/L	5.0	SW846 8260D	1	12/02/2022 15:58	TMP	A
Acetone	10.0 U	U,P1	ug/L	10.0	SW846 8260D	1	12/02/2022 15:58	TMP	A
Benzene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 15:58	TMP	A
Bromobenzene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 15:58	TMP	A
Bromochloromethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 15:58	TMP	A
Bromodichloromethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 15:58	TMP	A
Bromoform	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 15:58	TMP	A
Bromomethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 15:58	TMP	A
Carbon Tetrachloride	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 15:58	TMP	A
Chlorobenzene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 15:58	TMP	A
Chlorodibromomethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 15:58	TMP	A
Chloroethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 15:58	TMP	A
Chloroform	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 15:58	TMP	A
Chloromethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 15:58	TMP	A

Results

Client Sample ID	MW-22D	Collected	11/20/2022 16:30
Lab Sample ID	3275168018	Lab Receipt	11/21/2022 17:40

VOLATILE ORGANICS (cont.)

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
cis-1,2-Dichloroethene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 15:58	TMP	A
cis-1,3-Dichloropropene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 15:58	TMP	A
Dibromomethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 15:58	TMP	A
Dichlorodifluoromethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 15:58	TMP	A
Diisopropyl ether	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 15:58	TMP	A
Ethylbenzene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 15:58	TMP	A
Hexachlorobutadiene	5.0 U	U,P1	ug/L	5.0	SW846 8260D	1	12/02/2022 15:58	TMP	A
Methyl t-Butyl Ether	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 15:58	TMP	A
Methylene Chloride	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 15:58	TMP	A
mp-Xylene	2.0 U	U,P1	ug/L	2.0	SW846 8260D	1	12/02/2022 15:58	TMP	A
Naphthalene	2.0 U	U,P1	ug/L	2.0	SW846 8260D	1	12/02/2022 15:58	TMP	A
o-Chlorotoluene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 15:58	TMP	A
o-Xylene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 15:58	TMP	A
p-Chlorotoluene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 15:58	TMP	A
p-Isopropyltoluene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 15:58	TMP	A
Styrene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 15:58	TMP	A
Tetrachloroethene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 15:58	TMP	A
Toluene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 15:58	TMP	A
Total Xylenes	3.0 U	U,P1	ug/L	3.0	SW846 8260D	1	12/02/2022 15:58	TMP	A
trans-1,2-Dichloroethene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 15:58	TMP	A
trans-1,3-Dichloropropene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 15:58	TMP	A
Trichloroethene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 15:58	TMP	A
Trichlorofluoromethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 15:58	TMP	A
Vinyl Acetate	5.0 U	U,P1	ug/L	5.0	SW846 8260D	1	12/02/2022 15:58	TMP	A
Vinyl Chloride	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 15:58	TMP	A

SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
1,2-Dichloroethane-d4	17060-07-0	96.8%	62 – 133	12/02/2022 15:58	
4-Bromofluorobenzene	460-00-4	102%	79 – 114	12/02/2022 15:58	
Dibromofluoromethane	1868-53-7	97.7%	78 – 116	12/02/2022 15:58	
Toluene-d8	2037-26-5	94.3%	76 – 127	12/02/2022 15:58	

Results

Client Sample ID	MW-20	Collected	11/20/2022 16:45
Lab Sample ID	3275168019	Lab Receipt	11/21/2022 17:40

SEMIVOLATILE SIM

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
1,4-Dioxane	560	P1	ug/L	132	SW846 8270E SIM	100	12/01/2022 11:46	S7M	C

SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
2-Methylnapthalene-d10	7297-45-2	62.8%	29 – 112	11/29/2022 04:03	
2-Methylnapthalene-d10	7297-45-2	0*%	29 – 112	12/01/2022 11:46	
Fluoranthene-d10	93951-69-0	98.9%	45 – 130	11/29/2022 04:03	
Fluoranthene-d10	93951-69-0	0*%	45 – 130	12/01/2022 11:46	

VOLATILE ORGANICS

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
1,1,1,2-Tetrachloroethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 18:15	TMP	A
1,1,1-Trichloroethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 18:15	TMP	A
1,1,2,2-Tetrachloroethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 18:15	TMP	A
1,1,2-Trichloroethane	2.4	P1	ug/L	1.0	SW846 8260D	1	12/02/2022 18:15	TMP	A
1,1-Dichloroethane	258	P1	ug/L	10.0	SW846 8260D	10	12/05/2022 22:13	VLM	A
1,1-Dichloroethene	348	P1	ug/L	10.0	SW846 8260D	10	12/05/2022 22:13	VLM	A
1,1-Dichloropropene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 18:15	TMP	A
1,2,3-Trichlorobenzene	2.0 U	U,P1	ug/L	2.0	SW846 8260D	1	12/02/2022 18:15	TMP	A
1,2,3-Trichloropropane	2.0 U	U,P1	ug/L	2.0	SW846 8260D	1	12/02/2022 18:15	TMP	A
1,2,4-Trichlorobenzene	2.0 U	U,P1	ug/L	2.0	SW846 8260D	1	12/02/2022 18:15	TMP	A
1,2-Dibromo-3-chloropropane	7.0 U	U,P1	ug/L	7.0	SW846 8260D	1	12/02/2022 18:15	TMP	A
1,2-Dibromoethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 18:15	TMP	A
1,2-Dichlorobenzene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 18:15	TMP	A
1,2-Dichloroethane	9.7	P1	ug/L	1.0	SW846 8260D	1	12/02/2022 18:15	TMP	A
1,2-Dichloropropane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 18:15	TMP	A
1,3-Dichlorobenzene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 18:15	TMP	A
1,3-Dichloropropane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 18:15	TMP	A
1,4-Dichlorobenzene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 18:15	TMP	A
2,2-Dichloropropane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 18:15	TMP	A
2-Butanone	10.0 U	U,P1	ug/L	10.0	SW846 8260D	1	12/02/2022 18:15	TMP	A
2-Hexanone	5.0 U	U,P1	ug/L	5.0	SW846 8260D	1	12/02/2022 18:15	TMP	A
4-Methyl-2-Pentanone(MIBK)	5.0 U	U,P1	ug/L	5.0	SW846 8260D	1	12/02/2022 18:15	TMP	A
Acetone	10.0 U	U,P1	ug/L	10.0	SW846 8260D	1	12/02/2022 18:15	TMP	A
Benzene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 18:15	TMP	A
Bromobenzene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 18:15	TMP	A
Bromochloromethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 18:15	TMP	A
Bromodichloromethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 18:15	TMP	A
Bromoform	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 18:15	TMP	A
Bromomethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 18:15	TMP	A
Carbon Tetrachloride	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 18:15	TMP	A
Chlorobenzene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 18:15	TMP	A
Chlorodibromomethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 18:15	TMP	A
Chloroethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 18:15	TMP	A

Results

Client Sample ID	MW-20	Collected	11/20/2022 16:45
Lab Sample ID	3275168019	Lab Receipt	11/21/2022 17:40

VOLATILE ORGANICS (cont.)

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
Chloroform	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 18:15	TMP	A
Chloromethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 18:15	TMP	A
cis-1,2-Dichloroethene	2.6	P1	ug/L	1.0	SW846 8260D	1	12/02/2022 18:15	TMP	A
cis-1,3-Dichloropropene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 18:15	TMP	A
Dibromomethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 18:15	TMP	A
Dichlorodifluoromethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 18:15	TMP	A
Diisopropyl ether	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 18:15	TMP	A
Ethylbenzene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 18:15	TMP	A
Hexachlorobutadiene	5.0 U	U,P1	ug/L	5.0	SW846 8260D	1	12/02/2022 18:15	TMP	A
Methyl t-Butyl Ether	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 18:15	TMP	A
Methylene Chloride	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 18:15	TMP	A
mp-Xylene	2.0 U	U,P1	ug/L	2.0	SW846 8260D	1	12/02/2022 18:15	TMP	A
Naphthalene	2.0 U	U,P1	ug/L	2.0	SW846 8260D	1	12/02/2022 18:15	TMP	A
o-Chlorotoluene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 18:15	TMP	A
o-Xylene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 18:15	TMP	A
p-Chlorotoluene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 18:15	TMP	A
p-Isopropyltoluene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 18:15	TMP	A
Styrene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 18:15	TMP	A
Tetrachloroethene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 18:15	TMP	A
Toluene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 18:15	TMP	A
Total Xylenes	3.0 U	U,P1	ug/L	3.0	SW846 8260D	1	12/02/2022 18:15	TMP	A
trans-1,2-Dichloroethene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 18:15	TMP	A
trans-1,3-Dichloropropene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 18:15	TMP	A
Trichloroethene	2.7	P1	ug/L	1.0	SW846 8260D	1	12/02/2022 18:15	TMP	A
Trichlorofluoromethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 18:15	TMP	A
Vinyl Acetate	5.0 U	U,P1	ug/L	5.0	SW846 8260D	1	12/02/2022 18:15	TMP	A
Vinyl Chloride	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 18:15	TMP	A

SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
1,2-Dichloroethane-d4	17060-07-0	83.2%	62 – 133	12/05/2022 22:13	
1,2-Dichloroethane-d4	17060-07-0	100%	62 – 133	12/02/2022 18:15	
4-Bromofluorobenzene	460-00-4	101%	79 – 114	12/05/2022 22:13	
4-Bromofluorobenzene	460-00-4	103%	79 – 114	12/02/2022 18:15	
Dibromofluoromethane	1868-53-7	88.9%	78 – 116	12/05/2022 22:13	
Dibromofluoromethane	1868-53-7	98.8%	78 – 116	12/02/2022 18:15	
Toluene-d8	2037-26-5	88.7%	76 – 127	12/05/2022 22:13	
Toluene-d8	2037-26-5	96.3%	76 – 127	12/02/2022 18:15	

Results

Client Sample ID	MW-4R	Collected	11/20/2022 16:55
Lab Sample ID	3275168020	Lab Receipt	11/21/2022 17:40

SEMIVOLATILE SIM

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
1,4-Dioxane	57.3	P1	ug/L	5.3	SW846 8270E SIM	4	11/30/2022 01:25	M1O	C

SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
2-Methylnapthalene-d10	7297-45-2	72.4%	29 – 112	11/29/2022 04:30	
2-Methylnapthalene-d10	7297-45-2	79.7%	29 – 112	11/30/2022 01:25	
Fluoranthene-d10	93951-69-0	98.6%	45 – 130	11/29/2022 04:30	
Fluoranthene-d10	93951-69-0	99.4%	45 – 130	11/30/2022 01:25	

VOLATILE ORGANICS

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
1,1,1,2-Tetrachloroethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 18:38	TMP	A
1,1,1-Trichloroethane	1.1	P1	ug/L	1.0	SW846 8260D	1	12/02/2022 18:38	TMP	A
1,1,2,2-Tetrachloroethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 18:38	TMP	A
1,1,2-Trichloroethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 18:38	TMP	A
1,1-Dichloroethane	37.4	P1	ug/L	1.0	SW846 8260D	1	12/02/2022 18:38	TMP	A
1,1-Dichloroethene	76.0	P1	ug/L	1.0	SW846 8260D	1	12/02/2022 18:38	TMP	A
1,1-Dichloropropene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 18:38	TMP	A
1,2,3-Trichlorobenzene	2.0 U	U,P1	ug/L	2.0	SW846 8260D	1	12/02/2022 18:38	TMP	A
1,2,3-Trichloropropane	2.0 U	U,P1	ug/L	2.0	SW846 8260D	1	12/02/2022 18:38	TMP	A
1,2,4-Trichlorobenzene	2.0 U	U,P1	ug/L	2.0	SW846 8260D	1	12/02/2022 18:38	TMP	A
1,2-Dibromo-3-chloropropane	7.0 U	U,P1	ug/L	7.0	SW846 8260D	1	12/02/2022 18:38	TMP	A
1,2-Dibromoethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 18:38	TMP	A
1,2-Dichlorobenzene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 18:38	TMP	A
1,2-Dichloroethane	1.1	P1	ug/L	1.0	SW846 8260D	1	12/02/2022 18:38	TMP	A
1,2-Dichloropropane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 18:38	TMP	A
1,3-Dichlorobenzene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 18:38	TMP	A
1,3-Dichloropropane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 18:38	TMP	A
1,4-Dichlorobenzene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 18:38	TMP	A
2,2-Dichloropropane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 18:38	TMP	A
2-Butanone	10.0 U	U,P1	ug/L	10.0	SW846 8260D	1	12/02/2022 18:38	TMP	A
2-Hexanone	5.0 U	U,P1	ug/L	5.0	SW846 8260D	1	12/02/2022 18:38	TMP	A
4-Methyl-2-Pentanone(MIBK)	5.0 U	U,P1	ug/L	5.0	SW846 8260D	1	12/02/2022 18:38	TMP	A
Acetone	10.0 U	U,P1	ug/L	10.0	SW846 8260D	1	12/02/2022 18:38	TMP	A
Benzene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 18:38	TMP	A
Bromobenzene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 18:38	TMP	A
Bromochloromethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 18:38	TMP	A
Bromodichloromethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 18:38	TMP	A
Bromoform	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 18:38	TMP	A
Bromomethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 18:38	TMP	A
Carbon Tetrachloride	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 18:38	TMP	A
Chlorobenzene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 18:38	TMP	A
Chlorodibromomethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 18:38	TMP	A
Chloroethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 18:38	TMP	A

Results

Client Sample ID	MW-4R	Collected	11/20/2022 16:55
Lab Sample ID	3275168020	Lab Receipt	11/21/2022 17:40

VOLATILE ORGANICS (cont.)

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
Chloroform	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 18:38	TMP	A
Chloromethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 18:38	TMP	A
cis-1,2-Dichloroethene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 18:38	TMP	A
cis-1,3-Dichloropropene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 18:38	TMP	A
Dibromomethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 18:38	TMP	A
Dichlorodifluoromethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 18:38	TMP	A
Diisopropyl ether	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 18:38	TMP	A
Ethylbenzene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 18:38	TMP	A
Hexachlorobutadiene	5.0 U	U,P1	ug/L	5.0	SW846 8260D	1	12/02/2022 18:38	TMP	A
Methyl t-Butyl Ether	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 18:38	TMP	A
Methylene Chloride	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 18:38	TMP	A
mp-Xylene	2.0 U	U,P1	ug/L	2.0	SW846 8260D	1	12/02/2022 18:38	TMP	A
Naphthalene	2.0 U	U,P1	ug/L	2.0	SW846 8260D	1	12/02/2022 18:38	TMP	A
o-Chlorotoluene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 18:38	TMP	A
o-Xylene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 18:38	TMP	A
p-Chlorotoluene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 18:38	TMP	A
p-Isopropyltoluene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 18:38	TMP	A
Styrene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 18:38	TMP	A
Tetrachloroethene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 18:38	TMP	A
Toluene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 18:38	TMP	A
Total Xylenes	3.0 U	U,P1	ug/L	3.0	SW846 8260D	1	12/02/2022 18:38	TMP	A
trans-1,2-Dichloroethene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 18:38	TMP	A
trans-1,3-Dichloropropene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 18:38	TMP	A
Trichloroethene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 18:38	TMP	A
Trichlorofluoromethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 18:38	TMP	A
Vinyl Acetate	5.0 U	U,P1	ug/L	5.0	SW846 8260D	1	12/02/2022 18:38	TMP	A
Vinyl Chloride	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 18:38	TMP	A

SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
1,2-Dichloroethane-d4	17060-07-0	96.5%	62 – 133	12/02/2022 18:38	
4-Bromofluorobenzene	460-00-4	101%	79 – 114	12/02/2022 18:38	
Dibromofluoromethane	1868-53-7	96.5%	78 – 116	12/02/2022 18:38	
Toluene-d8	2037-26-5	93.1%	76 – 127	12/02/2022 18:38	

Results

Client Sample ID	MW-16	Collected	11/20/2022 17:05
Lab Sample ID	3275168021	Lab Receipt	11/21/2022 17:40

SEMIVOLATILE SIM

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
1,4-Dioxane	143	P1	ug/L	28.6	SW846 8270E SIM	20	12/01/2022 12:13	S7M	C

SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
2-Methylnapthalene-d10	7297-45-2	55.7%	29 – 112	11/29/2022 04:56	
2-Methylnapthalene-d10	7297-45-2	0*%	29 – 112	12/01/2022 12:13	
Fluoranthene-d10	93951-69-0	77%	45 – 130	11/29/2022 04:56	
Fluoranthene-d10	93951-69-0	0*%	45 – 130	12/01/2022 12:13	

VOLATILE ORGANICS

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
1,1,1,2-Tetrachloroethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 19:00	TMP	A
1,1,1-Trichloroethane	2960	P1	ug/L	100	SW846 8260D	100	12/05/2022 22:36	VLM	A
1,1,2,2-Tetrachloroethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 19:00	TMP	A
1,1,2-Trichloroethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 19:00	TMP	A
1,1-Dichloroethane	3290	P1	ug/L	100	SW846 8260D	100	12/05/2022 22:36	VLM	A
1,1-Dichloroethene	4290	P1	ug/L	100	SW846 8260D	100	12/05/2022 22:36	VLM	A
1,1-Dichloropropene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 19:00	TMP	A
1,2,3-Trichlorobenzene	2.0 U	U,P1	ug/L	2.0	SW846 8260D	1	12/02/2022 19:00	TMP	A
1,2,3-Trichloropropane	2.0 U	U,P1	ug/L	2.0	SW846 8260D	1	12/02/2022 19:00	TMP	A
1,2,4-Trichlorobenzene	2.0 U	U,P1	ug/L	2.0	SW846 8260D	1	12/02/2022 19:00	TMP	A
1,2-Dibromo-3-chloropropane	7.0 U	U,P1	ug/L	7.0	SW846 8260D	1	12/02/2022 19:00	TMP	A
1,2-Dibromoethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 19:00	TMP	A
1,2-Dichlorobenzene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 19:00	TMP	A
1,2-Dichloroethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 19:00	TMP	A
1,2-Dichloropropane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 19:00	TMP	A
1,3-Dichlorobenzene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 19:00	TMP	A
1,3-Dichloropropane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 19:00	TMP	A
1,4-Dichlorobenzene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 19:00	TMP	A
2,2-Dichloropropane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 19:00	TMP	A
2-Butanone	10.0 U	U,P1	ug/L	10.0	SW846 8260D	1	12/02/2022 19:00	TMP	A
2-Hexanone	5.0 U	U,P1	ug/L	5.0	SW846 8260D	1	12/02/2022 19:00	TMP	A
4-Methyl-2-Pentanone(MIBK)	5.0 U	U,P1	ug/L	5.0	SW846 8260D	1	12/02/2022 19:00	TMP	A
Acetone	50.1	P1	ug/L	10.0	SW846 8260D	1	12/02/2022 19:00	TMP	A
Benzene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 19:00	TMP	A
Bromobenzene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 19:00	TMP	A
Bromochloromethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 19:00	TMP	A
Bromodichloromethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 19:00	TMP	A
Bromoform	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 19:00	TMP	A
Bromomethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 19:00	TMP	A
Carbon Tetrachloride	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 19:00	TMP	A
Chlorobenzene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 19:00	TMP	A
Chlorodibromomethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 19:00	TMP	A
Chloroethane	136	P1	ug/L	1.0	SW846 8260D	1	12/02/2022 19:00	TMP	A

Results

Client Sample ID	MW-16	Collected	11/20/2022 17:05
Lab Sample ID	3275168021	Lab Receipt	11/21/2022 17:40

VOLATILE ORGANICS (cont.)

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
Chloroform	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 19:00	TMP	A
Chloromethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 19:00	TMP	A
cis-1,2-Dichloroethene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 19:00	TMP	A
cis-1,3-Dichloropropene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 19:00	TMP	A
Dibromomethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 19:00	TMP	A
Dichlorodifluoromethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 19:00	TMP	A
Diisopropyl ether	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 19:00	TMP	A
Ethylbenzene	2.2	P1	ug/L	1.0	SW846 8260D	1	12/02/2022 19:00	TMP	A
Hexachlorobutadiene	5.0 U	U,P1	ug/L	5.0	SW846 8260D	1	12/02/2022 19:00	TMP	A
Methyl t-Butyl Ether	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 19:00	TMP	A
Methylene Chloride	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 19:00	TMP	A
mp-Xylene	6.5	P1	ug/L	2.0	SW846 8260D	1	12/02/2022 19:00	TMP	A
Naphthalene	2.0 U	U,P1	ug/L	2.0	SW846 8260D	1	12/02/2022 19:00	TMP	A
o-Chlorotoluene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 19:00	TMP	A
o-Xylene	3.2	P1	ug/L	1.0	SW846 8260D	1	12/02/2022 19:00	TMP	A
p-Chlorotoluene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 19:00	TMP	A
p-Isopropyltoluene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 19:00	TMP	A
Styrene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 19:00	TMP	A
Tetrachloroethene	9.4	P1	ug/L	1.0	SW846 8260D	1	12/02/2022 19:00	TMP	A
Toluene	1.4	P1	ug/L	1.0	SW846 8260D	1	12/02/2022 19:00	TMP	A
Total Xylenes	9.7	P1	ug/L	3.0	SW846 8260D	1	12/02/2022 19:00	TMP	A
trans-1,2-Dichloroethene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 19:00	TMP	A
trans-1,3-Dichloropropene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 19:00	TMP	A
Trichloroethene	28.0	P1	ug/L	1.0	SW846 8260D	1	12/02/2022 19:00	TMP	A
Trichlorofluoromethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 19:00	TMP	A
Vinyl Acetate	5.0 U	U,P1	ug/L	5.0	SW846 8260D	1	12/02/2022 19:00	TMP	A
Vinyl Chloride	13.2	P1	ug/L	1.0	SW846 8260D	1	12/02/2022 19:00	TMP	A

SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
1,2-Dichloroethane-d4	17060-07-0	82.5%	62 – 133	12/05/2022 22:36	
1,2-Dichloroethane-d4	17060-07-0	98%	62 – 133	12/02/2022 19:00	
4-Bromofluorobenzene	460-00-4	103%	79 – 114	12/05/2022 22:36	
4-Bromofluorobenzene	460-00-4	102%	79 – 114	12/02/2022 19:00	
Dibromofluoromethane	1868-53-7	87.4%	78 – 116	12/05/2022 22:36	
Dibromofluoromethane	1868-53-7	95.6%	78 – 116	12/02/2022 19:00	
Toluene-d8	2037-26-5	88.2%	76 – 127	12/05/2022 22:36	
Toluene-d8	2037-26-5	93.7%	76 – 127	12/02/2022 19:00	

Results

Client Sample ID	Trip Blank-A	Collected	11/20/2022 17:05
Lab Sample ID	3275168022	Lab Receipt	11/21/2022 17:40

VOLATILE ORGANICS

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
1,1,1,2-Tetrachloroethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 12:55	TMP	A
1,1,1-Trichloroethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 12:55	TMP	A
1,1,2,2-Tetrachloroethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 12:55	TMP	A
1,1,2-Trichloroethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 12:55	TMP	A
1,1-Dichloroethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 12:55	TMP	A
1,1-Dichloroethene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 12:55	TMP	A
1,1-Dichloropropene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 12:55	TMP	A
1,2,3-Trichlorobenzene	2.0 U	U,P1	ug/L	2.0	SW846 8260D	1	12/02/2022 12:55	TMP	A
1,2,3-Trichloropropane	2.0 U	U,P1	ug/L	2.0	SW846 8260D	1	12/02/2022 12:55	TMP	A
1,2,4-Trichlorobenzene	2.0 U	U,P1	ug/L	2.0	SW846 8260D	1	12/02/2022 12:55	TMP	A
1,2-Dibromo-3-chloropropane	7.0 U	U,P1	ug/L	7.0	SW846 8260D	1	12/02/2022 12:55	TMP	A
1,2-Dibromoethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 12:55	TMP	A
1,2-Dichlorobenzene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 12:55	TMP	A
1,2-Dichloroethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 12:55	TMP	A
1,2-Dichloropropane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 12:55	TMP	A
1,3-Dichlorobenzene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 12:55	TMP	A
1,3-Dichloropropane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 12:55	TMP	A
1,4-Dichlorobenzene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 12:55	TMP	A
2,2-Dichloropropane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 12:55	TMP	A
2-Butanone	10.0 U	U,P1	ug/L	10.0	SW846 8260D	1	12/02/2022 12:55	TMP	A
2-Hexanone	5.0 U	U,P1	ug/L	5.0	SW846 8260D	1	12/02/2022 12:55	TMP	A
4-Methyl-2-Pentanone(MIBK)	5.0 U	U,P1	ug/L	5.0	SW846 8260D	1	12/02/2022 12:55	TMP	A
Acetone	10.0 U	U,P1	ug/L	10.0	SW846 8260D	1	12/02/2022 12:55	TMP	A
Benzene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 12:55	TMP	A
Bromobenzene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 12:55	TMP	A
Bromochloromethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 12:55	TMP	A
Bromodichloromethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 12:55	TMP	A
Bromoform	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 12:55	TMP	A
Bromomethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 12:55	TMP	A
Carbon Tetrachloride	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 12:55	TMP	A
Chlorobenzene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 12:55	TMP	A
Chlorodibromomethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 12:55	TMP	A
Chloroethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 12:55	TMP	A
Chloroform	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 12:55	TMP	A
Chloromethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 12:55	TMP	A
cis-1,2-Dichloroethene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 12:55	TMP	A
cis-1,3-Dichloropropene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 12:55	TMP	A
Dibromomethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 12:55	TMP	A
Dichlorodifluoromethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 12:55	TMP	A
Diisopropyl ether	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 12:55	TMP	A
Ethylbenzene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 12:55	TMP	A
Hexachlorobutadiene	5.0 U	U,P1	ug/L	5.0	SW846 8260D	1	12/02/2022 12:55	TMP	A
Methyl t-Butyl Ether	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 12:55	TMP	A
Methylene Chloride	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 12:55	TMP	A
mp-Xylene	2.0 U	U,P1	ug/L	2.0	SW846 8260D	1	12/02/2022 12:55	TMP	A
Naphthalene	2.0 U	U,P1	ug/L	2.0	SW846 8260D	1	12/02/2022 12:55	TMP	A
o-Chlorotoluene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 12:55	TMP	A

Results

Client Sample ID	Trip Blank-A	Collected	11/20/2022 17:05
Lab Sample ID	3275168022	Lab Receipt	11/21/2022 17:40

VOLATILE ORGANICS (cont.)

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
o-Xylene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 12:55	TMP	A
p-Chlorotoluene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 12:55	TMP	A
p-Isopropyltoluene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 12:55	TMP	A
Styrene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 12:55	TMP	A
Tetrachloroethene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 12:55	TMP	A
Toluene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 12:55	TMP	A
Total Xylenes	3.0 U	U,P1	ug/L	3.0	SW846 8260D	1	12/02/2022 12:55	TMP	A
trans-1,2-Dichloroethene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 12:55	TMP	A
trans-1,3-Dichloropropene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 12:55	TMP	A
Trichloroethene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 12:55	TMP	A
Trichlorofluoromethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 12:55	TMP	A
Vinyl Acetate	5.0 U	U,P1	ug/L	5.0	SW846 8260D	1	12/02/2022 12:55	TMP	A
Vinyl Chloride	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 12:55	TMP	A

SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
1,2-Dichloroethane-d4	17060-07-0	96%	62 – 133	12/02/2022 12:55	
4-Bromofluorobenzene	460-00-4	107%	79 – 114	12/02/2022 12:55	
Dibromofluoromethane	1868-53-7	95.4%	78 – 116	12/02/2022 12:55	
Toluene-d8	2037-26-5	95.4%	76 – 127	12/02/2022 12:55	

Results

Client Sample ID	Trip Blank-B	Collected	11/20/2022 17:05
Lab Sample ID	3275168023	Lab Receipt	11/21/2022 17:40

VOLATILE ORGANICS

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
1,1,1,2-Tetrachloroethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 13:18	TMP	A
1,1,1-Trichloroethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 13:18	TMP	A
1,1,2,2-Tetrachloroethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 13:18	TMP	A
1,1,2-Trichloroethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 13:18	TMP	A
1,1-Dichloroethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 13:18	TMP	A
1,1-Dichloroethene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 13:18	TMP	A
1,1-Dichloropropene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 13:18	TMP	A
1,2,3-Trichlorobenzene	2.0 U	U,P1	ug/L	2.0	SW846 8260D	1	12/02/2022 13:18	TMP	A
1,2,3-Trichloropropane	2.0 U	U,P1	ug/L	2.0	SW846 8260D	1	12/02/2022 13:18	TMP	A
1,2,4-Trichlorobenzene	2.0 U	U,P1	ug/L	2.0	SW846 8260D	1	12/02/2022 13:18	TMP	A
1,2-Dibromo-3-chloropropane	7.0 U	U,P1	ug/L	7.0	SW846 8260D	1	12/02/2022 13:18	TMP	A
1,2-Dibromoethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 13:18	TMP	A
1,2-Dichlorobenzene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 13:18	TMP	A
1,2-Dichloroethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 13:18	TMP	A
1,2-Dichloropropane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 13:18	TMP	A
1,3-Dichlorobenzene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 13:18	TMP	A
1,3-Dichloropropane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 13:18	TMP	A
1,4-Dichlorobenzene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 13:18	TMP	A
2,2-Dichloropropane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 13:18	TMP	A
2-Butanone	10.0 U	U,P1	ug/L	10.0	SW846 8260D	1	12/02/2022 13:18	TMP	A
2-Hexanone	5.0 U	U,P1	ug/L	5.0	SW846 8260D	1	12/02/2022 13:18	TMP	A
4-Methyl-2-Pentanone(MIBK)	5.0 U	U,P1	ug/L	5.0	SW846 8260D	1	12/02/2022 13:18	TMP	A
Acetone	10.0 U	U,P1	ug/L	10.0	SW846 8260D	1	12/02/2022 13:18	TMP	A
Benzene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 13:18	TMP	A
Bromobenzene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 13:18	TMP	A
Bromochloromethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 13:18	TMP	A
Bromodichloromethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 13:18	TMP	A
Bromoform	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 13:18	TMP	A
Bromomethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 13:18	TMP	A
Carbon Tetrachloride	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 13:18	TMP	A
Chlorobenzene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 13:18	TMP	A
Chlorodibromomethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 13:18	TMP	A
Chloroethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 13:18	TMP	A
Chloroform	1.1	P1	ug/L	1.0	SW846 8260D	1	12/02/2022 13:18	TMP	A
Chloromethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 13:18	TMP	A
cis-1,2-Dichloroethene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 13:18	TMP	A
cis-1,3-Dichloropropene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 13:18	TMP	A
Dibromomethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 13:18	TMP	A
Dichlorodifluoromethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 13:18	TMP	A
Diisopropyl ether	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 13:18	TMP	A
Ethylbenzene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 13:18	TMP	A
Hexachlorobutadiene	5.0 U	U,P1	ug/L	5.0	SW846 8260D	1	12/02/2022 13:18	TMP	A
Methyl t-Butyl Ether	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 13:18	TMP	A
Methylene Chloride	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 13:18	TMP	A
mp-Xylene	2.0 U	U,P1	ug/L	2.0	SW846 8260D	1	12/02/2022 13:18	TMP	A
Naphthalene	2.0 U	U,P1	ug/L	2.0	SW846 8260D	1	12/02/2022 13:18	TMP	A
o-Chlorotoluene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 13:18	TMP	A

Results

Client Sample ID	Trip Blank-B	Collected	11/20/2022 17:05
Lab Sample ID	3275168023	Lab Receipt	11/21/2022 17:40

VOLATILE ORGANICS (cont.)

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
o-Xylene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 13:18	TMP	A
p-Chlorotoluene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 13:18	TMP	A
p-Isopropyltoluene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 13:18	TMP	A
Styrene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 13:18	TMP	A
Tetrachloroethene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 13:18	TMP	A
Toluene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 13:18	TMP	A
Total Xylenes	3.0 U	U,P1	ug/L	3.0	SW846 8260D	1	12/02/2022 13:18	TMP	A
trans-1,2-Dichloroethene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 13:18	TMP	A
trans-1,3-Dichloropropene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 13:18	TMP	A
Trichloroethene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 13:18	TMP	A
Trichlorofluoromethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 13:18	TMP	A
Vinyl Acetate	5.0 U	U,P1	ug/L	5.0	SW846 8260D	1	12/02/2022 13:18	TMP	A
Vinyl Chloride	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 13:18	TMP	A

SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
1,2-Dichloroethane-d4	17060-07-0	94.6%	62 – 133	12/02/2022 13:18	
4-Bromofluorobenzene	460-00-4	104%	79 – 114	12/02/2022 13:18	
Dibromofluoromethane	1868-53-7	94.3%	78 – 116	12/02/2022 13:18	
Toluene-d8	2037-26-5	93.7%	76 – 127	12/02/2022 13:18	

Results

Client Sample ID	Trip Blank-E	Collected	11/20/2022 17:05
Lab Sample ID	3275168024	Lab Receipt	11/21/2022 17:40

VOLATILE ORGANICS

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
1,1,1,2-Tetrachloroethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 13:41	TMP	A
1,1,1-Trichloroethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 13:41	TMP	A
1,1,2,2-Tetrachloroethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 13:41	TMP	A
1,1,2-Trichloroethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 13:41	TMP	A
1,1-Dichloroethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 13:41	TMP	A
1,1-Dichloroethene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 13:41	TMP	A
1,1-Dichloropropene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 13:41	TMP	A
1,2,3-Trichlorobenzene	2.0 U	U,P1	ug/L	2.0	SW846 8260D	1	12/02/2022 13:41	TMP	A
1,2,3-Trichloropropane	2.0 U	U,P1	ug/L	2.0	SW846 8260D	1	12/02/2022 13:41	TMP	A
1,2,4-Trichlorobenzene	2.0 U	U,P1	ug/L	2.0	SW846 8260D	1	12/02/2022 13:41	TMP	A
1,2-Dibromo-3-chloropropane	7.0 U	U,P1	ug/L	7.0	SW846 8260D	1	12/02/2022 13:41	TMP	A
1,2-Dibromoethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 13:41	TMP	A
1,2-Dichlorobenzene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 13:41	TMP	A
1,2-Dichloroethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 13:41	TMP	A
1,2-Dichloropropane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 13:41	TMP	A
1,3-Dichlorobenzene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 13:41	TMP	A
1,3-Dichloropropane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 13:41	TMP	A
1,4-Dichlorobenzene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 13:41	TMP	A
2,2-Dichloropropane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 13:41	TMP	A
2-Butanone	10.0 U	U,P1	ug/L	10.0	SW846 8260D	1	12/02/2022 13:41	TMP	A
2-Hexanone	5.0 U	U,P1	ug/L	5.0	SW846 8260D	1	12/02/2022 13:41	TMP	A
4-Methyl-2-Pentanone(MIBK)	5.0 U	U,P1	ug/L	5.0	SW846 8260D	1	12/02/2022 13:41	TMP	A
Acetone	10.0 U	U,P1	ug/L	10.0	SW846 8260D	1	12/02/2022 13:41	TMP	A
Benzene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 13:41	TMP	A
Bromobenzene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 13:41	TMP	A
Bromochloromethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 13:41	TMP	A
Bromodichloromethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 13:41	TMP	A
Bromoform	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 13:41	TMP	A
Bromomethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 13:41	TMP	A
Carbon Tetrachloride	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 13:41	TMP	A
Chlorobenzene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 13:41	TMP	A
Chlorodibromomethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 13:41	TMP	A
Chloroethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 13:41	TMP	A
Chloroform	1.1	P1	ug/L	1.0	SW846 8260D	1	12/02/2022 13:41	TMP	A
Chloromethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 13:41	TMP	A
cis-1,2-Dichloroethene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 13:41	TMP	A
cis-1,3-Dichloropropene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 13:41	TMP	A
Dibromomethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 13:41	TMP	A
Dichlorodifluoromethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 13:41	TMP	A
Diisopropyl ether	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 13:41	TMP	A
Ethylbenzene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 13:41	TMP	A
Hexachlorobutadiene	5.0 U	U,P1	ug/L	5.0	SW846 8260D	1	12/02/2022 13:41	TMP	A
Methyl t-Butyl Ether	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 13:41	TMP	A
Methylene Chloride	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 13:41	TMP	A
mp-Xylene	2.0 U	U,P1	ug/L	2.0	SW846 8260D	1	12/02/2022 13:41	TMP	A
Naphthalene	2.0 U	U,P1	ug/L	2.0	SW846 8260D	1	12/02/2022 13:41	TMP	A
o-Chlorotoluene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 13:41	TMP	A

Results

Client Sample ID	Trip Blank-E	Collected	11/20/2022 17:05
Lab Sample ID	3275168024	Lab Receipt	11/21/2022 17:40

VOLATILE ORGANICS (cont.)

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
o-Xylene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 13:41	TMP	A
p-Chlorotoluene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 13:41	TMP	A
p-Isopropyltoluene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 13:41	TMP	A
Styrene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 13:41	TMP	A
Tetrachloroethene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 13:41	TMP	A
Toluene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 13:41	TMP	A
Total Xylenes	3.0 U	U,P1	ug/L	3.0	SW846 8260D	1	12/02/2022 13:41	TMP	A
trans-1,2-Dichloroethene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 13:41	TMP	A
trans-1,3-Dichloropropene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 13:41	TMP	A
Trichloroethene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 13:41	TMP	A
Trichlorofluoromethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 13:41	TMP	A
Vinyl Acetate	5.0 U	U,P1	ug/L	5.0	SW846 8260D	1	12/02/2022 13:41	TMP	A
Vinyl Chloride	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	12/02/2022 13:41	TMP	A

SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
1,2-Dichloroethane-d4	17060-07-0	96.5%	62 – 133	12/02/2022 13:41	
4-Bromofluorobenzene	460-00-4	102%	79 – 114	12/02/2022 13:41	
Dibromofluoromethane	1868-53-7	95.9%	78 – 116	12/02/2022 13:41	
Toluene-d8	2037-26-5	96.1%	76 – 127	12/02/2022 13:41	

Sample - Method Cross Reference Table

Lab ID	Sample ID	Analysis Method	Preparation Method	Leachate Method
3275168001	MW-03	SW846 8270E SIM	SW846 3510C	
		SW846 8260D	N/A	
3275168002	MW-27D	SW846 8270E SIM	SW846 3510C	
		SW846 8260D	N/A	
3275168003	MW-43	SW846 8270E SIM	SW846 3510C	
		SW846 8260D	N/A	
3275168004	MW-39	SW846 8270E SIM	SW846 3510C	
		SW846 8260D	N/A	
3275168005	MW-42	SW846 8270E SIM	SW846 3510C	
		SW846 8260D	N/A	
3275168006	MW-18	SW846 8270E SIM	SW846 3510C	
		SW846 8260D	N/A	
3275168007	MW-38R	SW846 8270E SIM	SW846 3510C	
		SW846 8260D	N/A	
3275168008	MW-40D	SW846 8270E SIM	SW846 3510C	
		SW846 8260D	N/A	
3275168009	MW-05R	SW846 8270E SIM	SW846 3510C	
		SW846 8260D	N/A	
3275168010	MW-44	SW846 8270E SIM	SW846 3510C	
		SW846 8260D	N/A	
3275168011	MW-21D	SW846 8270E SIM	SW846 3510C	
		SW846 8260D	N/A	
3275168012	MW-41D	SW846 8270E SIM	SW846 3510C	
		SW846 8260D	N/A	
3275168013	MW-09	SW846 8270E SIM	SW846 3510C	
		SW846 8260D	N/A	
3275168014	MW-23D	SW846 8270E SIM	SW846 3510C	
		SW846 8260D	N/A	
3275168015	MW-46D	SW846 8270E SIM	SW846 3510C	
		SW846 8260D	N/A	
3275168016	MW-01	SW846 8270E SIM	SW846 3510C	
		SW846 8260D	N/A	
3275168017	MW-01D	SW846 8270E SIM	SW846 3510C	
		SW846 8260D	N/A	
3275168018	MW-22D	SW846 8270E SIM	SW846 3510C	
		SW846 8260D	N/A	
3275168019	MW-20	SW846 8270E SIM	SW846 3510C	
		SW846 8260D	N/A	
		SW846 8260D	N/A	
3275168020	MW-4R	SW846 8270E SIM	SW846 3510C	
		SW846 8260D	N/A	
3275168021	MW-16	SW846 8270E SIM	SW846 3510C	
		SW846 8260D	N/A	
		SW846 8260D	N/A	
3275168022	Trip Blank-A	SW846 8260D	N/A	
3275168023	Trip Blank-B	SW846 8260D	N/A	
3275168024	Trip Blank-E	SW846 8260D	N/A	

QUALITY CONTROL SAMPLES

SEMIVOLATILE SIM

QC Batch

QC Batch	912104	Prep Method	SW846 3510C
Date	11/23/2022 13:25	Analysis Method	SW846 8270E SIM
Tech.	LDC		

Associated Samples

3275168001	3275168010	3275168002	3275168003
3275168004	3275168005	3275168006	3275168007
3275168008	3275168009		

Duplicate 3590700 (DUP) 3274995002 (non-Project Sample) For QC Batch 912104

****NOTE - The Original Result and Duplicate Result shown below are raw results and are only used for the purpose of calculating Sample Duplicate percent recoveries. This result is not a final value and cannot be used as such.

RESULTS

Compound	CAS No		Result (ug/L)	Orig. Result (ug/L)				Qualifiers
1,4-Dioxane	123-91-1	DUP	0	0	RPD	0	(Max-30)	U

SURROGATES

Compound	CAS No		Result (ug/L)	Expected (ug/L)	Rec. (%)	Limits (%)	Qualifiers
2-Methylnapthalene-d10	7297-45-2	DUP	0.68	1	68.3	29 - 112	
Fluoranthene-d10	93951-69-0	DUP	0.90	1	90.1	45 - 130	

Method Blank 3590698 (MB) Created on 11/22/2022 14:43 For QC Batch 912104

RESULTS

Compound	CAS No		Result	Units	RDL	Qualifiers
1,4-Dioxane	123-91-1	BLK	1.0 U	ug/L	1.0	U

SURROGATES

Compound	CAS No		Result (ug/L)	Expected (ug/L)	Rec. (%)	Limits (%)	Qualifiers
2-Methylnapthalene-d10	7297-45-2	BLK	0.69	1	68.9	29 - 112	
Fluoranthene-d10	93951-69-0	BLK	0.94	1	93.6	45 - 130	

Lab Control Standard 3590699 (LCS) Created on 11/22/2022 14:43 For QC Batch 912104

RESULTS

Compound	CAS No		Result (ug/L)	Orig. Result (ug/L)	Spk Added (ug/L)	Rec. (%)	Limits (%)	RPD Limit (%)	Qualifiers
1,4-Dioxane	123-91-1	LCS	0.45		1	45.2	22 - 75		U

QUALITY CONTROL SAMPLES

SEMIVOLATILE SIM (cont.)

SURROGATES

Compound	CAS No		Result (ug/L)	Expected (ug/L)	Rec. (%)	Limits (%)	Qualifiers
2-Methylnapthalene-d10	7297-45-2	LCS	0.70	1	70	29 - 112	
Fluoranthene-d10	93951-69-0	LCS	0.98	1	98.5	45 - 130	

Matrix Spike 3590701 (MS) 3275168010 For QC Batch 912104

****NOTE - The Original Result shown below is a raw result and is only used for the purpose of calculating Matrix Spike percent recoveries. This result is not a final value and cannot be used as such.

RESULTS

Compound	CAS No		Result (ug/L)	Orig. Result (ug/L)	Spk Added (ug/L)	Rec. (%)	Limits (%)	RPD Limit (%)	Qualifiers
1,4-Dioxane	123-91-1	MS	5.40	4.20	1.30	97.6*	22 - 75		

SURROGATES

Compound	CAS No		Result (ug/L)	Expected (ug/L)	Rec. (%)	Limits (%)	Qualifiers
2-Methylnapthalene-d10	7297-45-2	MS	1	1.30	78.5	29 - 112	
Fluoranthene-d10	93951-69-0	MS	1.20	1.30	90.3	45 - 130	

QC Batch

QC Batch	912308	Prep Method	SW846 3510C
Date	11/25/2022 06:25	Analysis Method	SW846 8270E SIM
Tech.	MXL		

Associated Samples

3275168016	3275168017	3275168018	3275168019
3275168020	3275168011	3275168012	3275168013
3275168014	3275168015	3275168021	

Method Blank 3591157 (MB) Created on 11/23/2022 08:33 For QC Batch 912308

RESULTS

Compound	CAS No		Result	Units	RDL	Qualifiers
1,4-Dioxane	123-91-1	BLK	1.0 U	ug/L	1.0	U

SURROGATES

Compound	CAS No		Result (ug/L)	Expected (ug/L)	Rec. (%)	Limits (%)	Qualifiers
2-Methylnapthalene-d10	7297-45-2	BLK	0.75	1	75.4	29 - 112	
Fluoranthene-d10	93951-69-0	BLK	1.10	1	108	45 - 130	

Lab Control Standard 3591158 (LCS) Created on 11/23/2022 08:33 For QC Batch 912308

QUALITY CONTROL SAMPLES

SEMIVOLATILE SIM (cont.)

RESULTS

Compound	CAS No		Result (ug/L)	Orig. Result (ug/L)	Spk Added (ug/L)	Rec. (%)	Limits (%)	RPD Limit (%)	Qualifiers
1,4-Dioxane	123-91-1	LCS	0.55		1	55.3	22 - 75		U

SURROGATES

Compound	CAS No		Result (ug/L)	Expected (ug/L)	Rec. (%)	Limits (%)	Qualifiers
2-Methylnapthalene-d10	7297-45-2	LCS	0.78	1	78.2	29 - 112	
Fluoranthene-d10	93951-69-0	LCS	0.99	1	99	45 - 130	

Matrix Spike 3591159 (MS) 3275168012 For QC Batch 912308

****NOTE - The Original Result shown below is a raw result and is only used for the purpose of calculating Matrix Spike percent recoveries. This result is not a final value and cannot be used as such.

RESULTS

Compound	CAS No		Result (ug/L)	Orig. Result (ug/L)	Spk Added (ug/L)	Rec. (%)	Limits (%)	RPD Limit (%)	Qualifiers
1,4-Dioxane	123-91-1	MS	1.30	1.10	1	14.2*	22 - 75		

SURROGATES

Compound	CAS No		Result (ug/L)	Expected (ug/L)	Rec. (%)	Limits (%)	Qualifiers
2-Methylnapthalene-d10	7297-45-2	MS	0.79	1	78.8	29 - 112	
Fluoranthene-d10	93951-69-0	MS	0.97	1	97.3	45 - 130	

Duplicate 3591160 (DUP) 3275168014 For QC Batch 912308

****NOTE - The Original Result and Duplicate Result shown below are raw results and are only used for the purpose of calculating Sample Duplicate percent recoveries. This result is not a final value and cannot be used as such.

RESULTS

Compound	CAS No		Result (ug/L)	Orig. Result (ug/L)		Qualifiers
1,4-Dioxane	123-91-1	DUP	62.8599	59.6334	RPD 5.27 (Max-30)	

SURROGATES

Compound	CAS No		Result (ug/L)	Expected (ug/L)	Rec. (%)	Limits (%)	Qualifiers
2-Methylnapthalene-d10	7297-45-2	DUP	0.72	1	71.7	29 - 112	
2-Methylnapthalene-d10	7297-45-2	DUP	0	1	0*	29 - 112	
Fluoranthene-d10	93951-69-0	DUP	0.87	1	86.8	45 - 130	
Fluoranthene-d10	93951-69-0	DUP	0	1	0*	45 - 130	

QUALITY CONTROL SAMPLES

VOLATILE ORGANICS

QC Batch

QC Batch	915266	Prep Method	N/A
Date	N/A	Analysis Method	SW846 8260D
Tech.			

Associated Samples

3275168001 3275168002 3275168003 3275168004 3275168005

Method Blank 3594113 (MB) Created on 12/01/2022 10:53 For QC Batch 915266

RESULTS

Compound	CAS No		Result	Units	RDL	Qualifiers
1,1,1,2-Tetrachloroethane	630-20-6	BLK	1.0 U	ug/L	1.0	U
1,1,1-Trichloroethane	71-55-6	BLK	1.0 U	ug/L	1.0	U
1,1,2,2-Tetrachloroethane	79-34-5	BLK	1.0 U	ug/L	1.0	U
1,1,2-Trichloroethane	79-00-5	BLK	1.0 U	ug/L	1.0	U
1,1-Dichloroethane	75-34-3	BLK	1.0 U	ug/L	1.0	U
1,1-Dichloroethene	75-35-4	BLK	1.0 U	ug/L	1.0	U
1,1-Dichloropropene	563-58-6	BLK	1.0 U	ug/L	1.0	U
1,2,3-Trichlorobenzene	87-61-6	BLK	2.0 U	ug/L	2.0	U
1,2,3-Trichloropropane	96-18-4	BLK	2.0 U	ug/L	2.0	U
1,2,4-Trichlorobenzene	120-82-1	BLK	2.0 U	ug/L	2.0	U
1,2-Dibromo-3-chloropropane	96-12-8	BLK	7.0 U	ug/L	7.0	U
1,2-Dibromoethane	106-93-4	BLK	1.0 U	ug/L	1.0	U
1,2-Dichlorobenzene	95-50-1	BLK	1.0 U	ug/L	1.0	U
1,2-Dichloroethane	107-06-2	BLK	1.0 U	ug/L	1.0	U
1,2-Dichloropropane	78-87-5	BLK	1.0 U	ug/L	1.0	U
1,3-Dichlorobenzene	541-73-1	BLK	1.0 U	ug/L	1.0	U
1,3-Dichloropropane	142-28-9	BLK	1.0 U	ug/L	1.0	U
1,4-Dichlorobenzene	106-46-7	BLK	1.0 U	ug/L	1.0	U
2,2-Dichloropropane	594-20-7	BLK	1.0 U	ug/L	1.0	U
2-Butanone	78-93-3	BLK	10.0 U	ug/L	10.0	U
2-Hexanone	591-78-6	BLK	5.0 U	ug/L	5.0	U
4-Methyl-2-Pentanone(MIBK)	108-10-1	BLK	5.0 U	ug/L	5.0	U
Acetone	67-64-1	BLK	10.0 U	ug/L	10.0	U
Benzene	71-43-2	BLK	1.0 U	ug/L	1.0	U
Bromobenzene	108-86-1	BLK	1.0 U	ug/L	1.0	U
Bromochloromethane	74-97-5	BLK	1.0 U	ug/L	1.0	U
Bromodichloromethane	75-27-4	BLK	1.0 U	ug/L	1.0	U
Bromoform	75-25-2	BLK	1.0 U	ug/L	1.0	U
Bromomethane	74-83-9	BLK	1.0 U	ug/L	1.0	U
Carbon Tetrachloride	56-23-5	BLK	1.0 U	ug/L	1.0	U
Chlorobenzene	108-90-7	BLK	1.0 U	ug/L	1.0	U
Chlorodibromomethane	124-48-1	BLK	1.0 U	ug/L	1.0	U
Chloroethane	75-00-3	BLK	1.0 U	ug/L	1.0	U
Chloroform	67-66-3	BLK	1.0 U	ug/L	1.0	U
Chloromethane	74-87-3	BLK	1.0 U	ug/L	1.0	U
cis-1,2-Dichloroethene	156-59-2	BLK	1.0 U	ug/L	1.0	U
cis-1,3-Dichloropropene	10061-01-5	BLK	1.0 U	ug/L	1.0	U
Dibromomethane	74-95-3	BLK	1.0 U	ug/L	1.0	U
Dichlorodifluoromethane	75-71-8	BLK	1.0 U	ug/L	1.0	U

QUALITY CONTROL SAMPLES

VOLATILE ORGANICS (cont.)

RESULTS

Compound	CAS No		Result	Units	RDL	Qualifiers
Diisopropyl ether	108-20-3	BLK	1.0 U	ug/L	1.0	U
Ethylbenzene	100-41-4	BLK	1.0 U	ug/L	1.0	U
Hexachlorobutadiene	87-68-3	BLK	5.0 U	ug/L	5.0	U
Methyl t-Butyl Ether	1634-04-4	BLK	1.0 U	ug/L	1.0	U
Methylene Chloride	75-09-2	BLK	1.0 U	ug/L	1.0	U
mp-Xylene	108383/106423	BLK	2.0 U	ug/L	2.0	U
Naphthalene	91-20-3	BLK	2.0 U	ug/L	2.0	U
o-Chlorotoluene	95-49-8	BLK	1.0 U	ug/L	1.0	U
o-Xylene	95-47-6	BLK	1.0 U	ug/L	1.0	U
p-Chlorotoluene	106-43-4	BLK	1.0 U	ug/L	1.0	U
p-Isopropyltoluene	99-87-6	BLK	1.0 U	ug/L	1.0	U
Styrene	100-42-5	BLK	1.0 U	ug/L	1.0	U
Tetrachloroethene	127-18-4	BLK	1.0 U	ug/L	1.0	U
Toluene	108-88-3	BLK	1.0 U	ug/L	1.0	U
Total Xylenes	1330-20-7	BLK	3.0 U	ug/L	3.0	U
trans-1,2-Dichloroethene	156-60-5	BLK	1.0 U	ug/L	1.0	U
trans-1,3-Dichloropropene	10061-02-6	BLK	1.0 U	ug/L	1.0	U
Trichloroethene	79-01-6	BLK	1.0 U	ug/L	1.0	U
Trichlorofluoromethane	75-69-4	BLK	1.0 U	ug/L	1.0	U
Vinyl Acetate	108-05-4	BLK	5.0 U	ug/L	5.0	U
Vinyl Chloride	75-01-4	BLK	1.0 U	ug/L	1.0	U

SURROGATES

Compound	CAS No		Result (ug/L)	Expected (ug/L)	Rec. (%)	Limits (%)	Qualifiers
1,2-Dichloroethane-d4	17060-07-0	BLK	27.90	30	93	62 - 133	
4-Bromofluorobenzene	460-00-4	BLK	31.40	30	105	79 - 114	
Dibromofluoromethane	1868-53-7	BLK	29	30	96.6	78 - 116	
Toluene-d8	2037-26-5	BLK	29.90	30	99.6	76 - 127	

Lab Control Standard 3594114 (LCS) Created on 12/01/2022 10:53 For QC Batch 915266

RESULTS

Compound	CAS No		Result (ug/L)	Orig. Result (ug/L)	Spk Added (ug/L)	Rec. (%)	Limits (%)	RPD Limit (%)	Qualifiers
1,1,1,2-Tetrachloroethane	630-20-6	LCS	21.10		20	105	78 - 121		
1,1,1-Trichloroethane	71-55-6	LCS	21.30		20	106	66 - 130		
1,1,2,2-Tetrachloroethane	79-34-5	LCS	20.50		20	103	74 - 135		
1,1,2-Trichloroethane	79-00-5	LCS	20.80		20	104	82 - 126		
1,1-Dichloroethane	75-34-3	LCS	21		20	105	78 - 124		
1,1-Dichloroethene	75-35-4	LCS	21.50		20	108	63 - 128		
1,1-Dichloropropene	563-58-6	LCS	21.60		20	108	76 - 126		
1,2,3-Trichlorobenzene	87-61-6	LCS	20.20		20	101	61 - 126		
1,2,3-Trichloropropane	96-18-4	LCS	20.80		20	104	75 - 132		
1,2,4-Trichlorobenzene	120-82-1	LCS	20.60		20	103	67 - 123		
1,2-Dibromo-3-chloropropane	96-12-8	LCS	17.30		20	86.3	59 - 133		

QUALITY CONTROL SAMPLES

VOLATILE ORGANICS (cont.)

RESULTS

Compound	CAS No		Result (ug/L)	Orig. Result (ug/L)	Spk Added (ug/L)	Rec. (%)	Limits (%)	RPD Limit (%)	Qualifiers
1,2-Dibromoethane	106-93-4	LCS	20.60		20	103	80 - 124		
1,2-Dichlorobenzene	95-50-1	LCS	20.80		20	104	82 - 118		
1,2-Dichloroethane	107-06-2	LCS	20.60		20	103	70 - 133		
1,2-Dichloropropane	78-87-5	LCS	21.20		20	106	81 - 127		
1,3-Dichlorobenzene	541-73-1	LCS	21.70		20	108	81 - 118		
1,3-Dichloropropane	142-28-9	LCS	20		20	99.9	82 - 126		
1,4-Dichlorobenzene	106-46-7	LCS	22		20	110	81 - 116		
2,2-Dichloropropane	594-20-7	LCS	21.60		20	108	64 - 129		
2-Butanone	78-93-3	LCS	75.90		100	75.9	50 - 152		
2-Hexanone	591-78-6	LCS	93		100	93	65 - 154		
4-Methyl-2-Pentanone(MIBK)	108-10-1	LCS	109		100	109	71 - 146		
Acetone	67-64-1	LCS	90.30		100	90.3	40 - 151		
Benzene	71-43-2	LCS	21.50		20	108	80 - 124		
Bromobenzene	108-86-1	LCS	22.10		20	110	81 - 119		
Bromochloromethane	74-97-5	LCS	22		20	110	73 - 117		
Bromodichloromethane	75-27-4	LCS	21.20		20	106	79 - 126		
Bromoform	75-25-2	LCS	20.70		20	104	70 - 123		
Bromomethane	74-83-9	LCS	33.80		20	169*	45 - 148		
Carbon Tetrachloride	56-23-5	LCS	24.70		20	124	62 - 132		
Chlorobenzene	108-90-7	LCS	20.80		20	104	85 - 117		
Chlorodibromomethane	124-48-1	LCS	20.70		20	104	77 - 122		
Chloroethane	75-00-3	LCS	21.30		20	106	51 - 142		
Chloroform	67-66-3	LCS	20.30		20	102	78 - 122		
Chloromethane	74-87-3	LCS	21.70		20	108	38 - 156		
cis-1,2-Dichloroethene	156-59-2	LCS	21.50		20	108	78 - 125		
cis-1,3-Dichloropropene	10061-01-5	LCS	20.30		20	101	81 - 121		
Dibromomethane	74-95-3	LCS	20.50		20	102	81 - 125		
Dichlorodifluoromethane	75-71-8	LCS	24.80		20	124	17 - 166		
Diisopropyl ether	108-20-3	LCS	21.70		20	108	74 - 131		
Ethylbenzene	100-41-4	LCS	21.50		20	107	80 - 124		
Hexachlorobutadiene	87-68-3	LCS	30.50		20	153*	55 - 128		
Methyl t-Butyl Ether	1634-04-4	LCS	21.20		20	106	69 - 115		
Methylene Chloride	75-09-2	LCS	20.70		20	104	76 - 121		
mp-Xylene	108383/106423	LCS	44.20		40	111	79 - 125		
Naphthalene	91-20-3	LCS	19.10		20	95.3	56 - 134		
o-Chlorotoluene	95-49-8	LCS	22.50		20	113	78 - 126		
o-Xylene	95-47-6	LCS	21		20	105	79 - 124		
p-Chlorotoluene	106-43-4	LCS	22.80		20	114	78 - 125		
p-Isopropyltoluene	99-87-6	LCS	23.70		20	118	72 - 123		
Styrene	100-42-5	LCS	22.10		20	110	79 - 123		
Tetrachloroethene	127-18-4	LCS	20.10		20	100	72 - 124		
Toluene	108-88-3	LCS	21.40		20	107	80 - 125		
Total Xylenes	1330-20-7	LCS	65.30		60	109	79 - 125		
trans-1,2-Dichloroethene	156-60-5	LCS	20.90		20	105	71 - 122		
trans-1,3-Dichloropropene	10061-02-6	LCS	21.10		20	106	78 - 126		
Trichloroethene	79-01-6	LCS	20.30		20	102	77 - 124		
Trichlorofluoromethane	75-69-4	LCS	22.40		20	112	38 - 123		

QUALITY CONTROL SAMPLES

VOLATILE ORGANICS (cont.)

RESULTS

Compound	CAS No		Result (ug/L)	Orig. Result (ug/L)	Spk Added (ug/L)	Rec. (%)	Limits (%)	RPD Limit (%)	Qualifiers
Vinyl Acetate	108-05-4	LCS	20.20		20	101	58 - 136		
Vinyl Chloride	75-01-4	LCS	22.70		20	114	27 - 138		

SURROGATES

Compound	CAS No		Result (ug/L)	Expected (ug/L)	Rec. (%)	Limits (%)	Qualifiers
1,2-Dichloroethane-d4	17060-07-0	LCS	27.90	30	92.9	62 - 133	
4-Bromofluorobenzene	460-00-4	LCS	31.30	30	104	79 - 114	
Dibromofluoromethane	1868-53-7	LCS	28.50	30	94.9	78 - 116	
Toluene-d8	2037-26-5	LCS	29.20	30	97.5	76 - 127	

Matrix Spike 3594359 (MS) 3275168002 For QC Batch 915266

****NOTE - The Original Result shown below is a raw result and is only used for the purpose of calculating Matrix Spike percent recoveries. This result is not a final value and cannot be used as such.

Matrix Spike Duplicate 3594360 (MSD) 3275168002 For QC Batch 915266

RESULTS

Compound	CAS No		Result (ug/L)	Orig. Result (ug/L)	Spk Added (ug/L)	Rec. (%)	Limits (%)	RPD Limit (%)	Qualifiers
1,1,1,2-Tetrachloroethane	630-20-6	MS	19.70	0	20	98.6	78 - 121		
1,1,1,2-Tetrachloroethane	630-20-6	MSD	22.30	0	20	112	78 - 121	RPD 12.50 (Max-16)	
1,1,1-Trichloroethane	71-55-6	MS	21.50	0	20	107	66 - 130		
1,1,1-Trichloroethane	71-55-6	MSD	23.70	0	20	119	66 - 130	RPD 9.96 (Max-20)	
1,1,2,2-Tetrachloroethane	79-34-5	MS	16.50	0	20	82.3	74 - 135		
1,1,2,2-Tetrachloroethane	79-34-5	MSD	21.50	0	20	108	74 - 135	RPD 26.80* (Max-16)	
1,1,2-Trichloroethane	79-00-5	MS	17.80	0	20	89.2	82 - 126		
1,1,2-Trichloroethane	79-00-5	MSD	21.30	0	20	106	82 - 126	RPD 17.60* (Max-15)	
1,1-Dichloroethane	75-34-3	MS	20.80	0	20	104	78 - 124		
1,1-Dichloroethane	75-34-3	MSD	22.80	0	20	114	78 - 124	RPD 9.09 (Max-15)	
1,1-Dichloroethene	75-35-4	MS	22.20	0	20	111	63 - 128		
1,1-Dichloroethene	75-35-4	MSD	24	0	20	120	63 - 128	RPD 7.75 (Max-21)	
1,1-Dichloropropene	563-58-6	MS	22.30	0	20	112	76 - 126		
1,1-Dichloropropene	563-58-6	MSD	24.40	0	20	122	76 - 126	RPD 8.71 (Max-16)	
1,2,3-Trichlorobenzene	87-61-6	MS	9.60	0	20	48.2*	61 - 126		
1,2,3-Trichlorobenzene	87-61-6	MSD	19.20	0	20	95.8	61 - 126	RPD 66.20* (Max-36)	
1,2,3-Trichloropropane	96-18-4	MS	16.50	0	20	82.5	75 - 132		
1,2,3-Trichloropropane	96-18-4	MSD	21.90	0	20	110	75 - 132	RPD 28.20* (Max-19)	
1,2,4-Trichlorobenzene	120-82-1	MS	13.50	0	20	67.4	67 - 123		
1,2,4-Trichlorobenzene	120-82-1	MSD	19.60	0	20	97.9	67 - 123	RPD 36.90* (Max-22)	
1,2-Dibromo-3-chloropropane	96-12-8	MS	12.20	0	20	61.2	59 - 133		
1,2-Dibromo-3-chloropropane	96-12-8	MSD	18.80	0	20	94.2	59 - 133	RPD 42.40* (Max-26)	
1,2-Dibromoethane	106-93-4	MS	17.40	0	20	87.2	80 - 124		
1,2-Dibromoethane	106-93-4	MSD	21.30	0	20	106	80 - 124	RPD 19.70* (Max-19)	
1,2-Dichlorobenzene	95-50-1	MS	17.90	0	20	89.7	82 - 118		
1,2-Dichlorobenzene	95-50-1	MSD	21.30	0	20	106	82 - 118	RPD 17.10* (Max-15)	

QUALITY CONTROL SAMPLES

VOLATILE ORGANICS (cont.)

RESULTS

Compound	CAS No		Result (ug/L)	Orig. Result (ug/L)	Spk Added (ug/L)	Rec. (%)	Limits (%)	RPD Limit (%)	Qualifiers
1,2-Dichloroethane	107-06-2	MS	18.80	0	20	94.2	70 - 133		
1,2-Dichloroethane	107-06-2	MSD	21.90	0	20	109	70 - 133	RPD 15 (Max-19)	
1,2-Dichloropropane	78-87-5	MS	20.10	0	20	100	81 - 127		
1,2-Dichloropropane	78-87-5	MSD	22.90	0	20	114	81 - 127	RPD 13.10 (Max-15)	
1,3-Dichlorobenzene	541-73-1	MS	19.50	0	20	97.3	81 - 118		
1,3-Dichlorobenzene	541-73-1	MSD	22.70	0	20	113	81 - 118	RPD 15.20 (Max-16)	
1,3-Dichloropropane	142-28-9	MS	17.50	0	20	87.4	82 - 126		
1,3-Dichloropropane	142-28-9	MSD	20.70	0	20	103	82 - 126	RPD 16.70* (Max-15)	
1,4-Dichlorobenzene	106-46-7	MS	19.90	0	20	99.7	81 - 116		
1,4-Dichlorobenzene	106-46-7	MSD	22.90	0	20	114	81 - 116	RPD 13.60 (Max-15)	
2,2-Dichloropropane	594-20-7	MS	22.70	0	20	114	64 - 129		
2,2-Dichloropropane	594-20-7	MSD	24.60	0	20	123	64 - 129	RPD 7.92 (Max-18)	
2-Butanone	78-93-3	MS	50.30	0	100	50.3	50 - 152		
2-Butanone	78-93-3	MSD	85.80	0	100	85.8	50 - 152	RPD 52.20* (Max-16)	
2-Hexanone	591-78-6	MS	63.20	0	100	63.2*	65 - 154		
2-Hexanone	591-78-6	MSD	101	0	100	101	65 - 154	RPD 46.30* (Max-17)	
4-Methyl-2-Pentanone(MIBK)	108-10-1	MS	75.80	0	100	75.8	71 - 146		
4-Methyl-2-Pentanone(MIBK)	108-10-1	MSD	113	0	100	113	71 - 146	RPD 39.30* (Max-16)	
Acetone	67-64-1	MS	54.50	0	100	54.5	40 - 151		
Acetone	67-64-1	MSD	97.30	0	100	97.3	40 - 151	RPD 56.40* (Max-40)	
Benzene	71-43-2	MS	21.20	0	20	106	80 - 124		
Benzene	71-43-2	MSD	23.20	0	20	116	80 - 124	RPD 9.20 (Max-26)	
Bromobenzene	108-86-1	MS	20.70	0	20	103	81 - 119		
Bromobenzene	108-86-1	MSD	23.10	0	20	116	81 - 119	RPD 11.20 (Max-17)	
Bromochloromethane	74-97-5	MS	20.60	0	20	103	73 - 117		
Bromochloromethane	74-97-5	MSD	23.40	0	20	117	73 - 117	RPD 12.40 (Max-19)	
Bromodichloromethane	75-27-4	MS	19.70	0	20	98.6	79 - 126		
Bromodichloromethane	75-27-4	MSD	22.80	0	20	114	79 - 126	RPD 14.60 (Max-16)	
Bromoform	75-25-2	MS	17.10	0	20	85.7	70 - 123		
Bromoform	75-25-2	MSD	21.20	0	20	106	70 - 123	RPD 21.20* (Max-16)	
Bromomethane	74-83-9	MS	47.20	0.62	20	233*	45 - 148		
Bromomethane	74-83-9	MSD	40.10	0.62	20	197*	45 - 148	RPD 16.20 (Max-26)	
Carbon Tetrachloride	56-23-5	MS	22.30	0	20	112	62 - 132		
Carbon Tetrachloride	56-23-5	MSD	27.90	0	20	140*	62 - 132	RPD 22.20* (Max-17)	
Chlorobenzene	108-90-7	MS	19.70	0	20	98.4	85 - 117		
Chlorobenzene	108-90-7	MSD	22.10	0	20	110	85 - 117	RPD 11.50 (Max-15)	
Chlorodibromomethane	124-48-1	MS	18	0	20	90.2	77 - 122		
Chlorodibromomethane	124-48-1	MSD	21.40	0	20	107	77 - 122	RPD 17.10* (Max-15)	
Chloroethane	75-00-3	MS	21.50	0	20	107	51 - 142		
Chloroethane	75-00-3	MSD	22	0	20	110	51 - 142	RPD 2.64 (Max-24)	
Chloroform	67-66-3	MS	19.70	0	20	98.7	78 - 122		
Chloroform	67-66-3	MSD	22.10	0	20	111	78 - 122	RPD 11.40 (Max-16)	
Chloromethane	74-87-3	MS	21.10	0	20	105	38 - 156		
Chloromethane	74-87-3	MSD	22.10	0	20	110	38 - 156	RPD 4.62 (Max-27)	
cis-1,2-Dichloroethene	156-59-2	MS	21.20	0	20	106	78 - 125		
cis-1,2-Dichloroethene	156-59-2	MSD	23.20	0	20	116	78 - 125	RPD 9.20 (Max-21)	
cis-1,3-Dichloropropene	10061-01-5	MS	18.60	0	20	93.1	81 - 121		
cis-1,3-Dichloropropene	10061-01-5	MSD	21.20	0	20	106	81 - 121	RPD 13.10 (Max-16)	
Dibromomethane	74-95-3	MS	18.40	0	20	91.9	81 - 125		

QUALITY CONTROL SAMPLES

VOLATILE ORGANICS (cont.)

RESULTS

Compound	CAS No		Result (ug/L)	Orig. Result (ug/L)	Spk Added (ug/L)	Rec. (%)	Limits (%)	RPD Limit (%)	Qualifiers
Dibromomethane	74-95-3	MSD	21.80	0	20	109	81 - 125	RPD 17.10* (Max-16)	
Dichlorodifluoromethane	75-71-8	MS	24.90	0	20	124	17 - 166		
Dichlorodifluoromethane	75-71-8	MSD	26.40	0	20	132	17 - 166	RPD 6 (Max-24)	
Diisopropyl ether	108-20-3	MS	19.60	0	20	98.2	74 - 131		
Diisopropyl ether	108-20-3	MSD	22.70	0	20	114	74 - 131	RPD 14.70 (Max-15)	
Ethylbenzene	100-41-4	MS	20.90	0	20	105	80 - 124		
Ethylbenzene	100-41-4	MSD	23.40	0	20	117	80 - 124	RPD 11 (Max-19)	
Hexachlorobutadiene	87-68-3	MS	28.50	0	20	142*	55 - 128		
Hexachlorobutadiene	87-68-3	MSD	30.60	0	20	153*	55 - 128	RPD 7.09 (Max-35)	
Methyl t-Butyl Ether	1634-04-4	MS	17.90	0.43	20	87.3	69 - 115		
Methyl t-Butyl Ether	1634-04-4	MSD	22.60	0.43	20	111	69 - 115	RPD 23.20* (Max-20)	
Methylene Chloride	75-09-2	MS	19.90	0	20	99.5	76 - 121		
Methylene Chloride	75-09-2	MSD	22.20	0	20	111	76 - 121	RPD 11 (Max-17)	
mp-Xylene	108383/106423	MS	42.60	0	40	106	79 - 125		
mp-Xylene	108383/106423	MSD	48	0	40	120	79 - 125	RPD 12 (Max-21)	
Naphthalene	91-20-3	MS	8.40	0	20	41.9*	56 - 134		
Naphthalene	91-20-3	MSD	17.50	0	20	87.6	56 - 134	RPD 70.50* (Max-40)	
o-Chlorotoluene	95-49-8	MS	21.50	0	20	108	78 - 126		
o-Chlorotoluene	95-49-8	MSD	24	0	20	120	78 - 126	RPD 11.10 (Max-17)	
o-Xylene	95-47-6	MS	19.70	0	20	98.4	79 - 124		
o-Xylene	95-47-6	MSD	22.30	0	20	111	79 - 124	RPD 12.50 (Max-19)	
p-Chlorotoluene	106-43-4	MS	21.70	0	20	109	78 - 125		
p-Chlorotoluene	106-43-4	MSD	24.50	0	20	122	78 - 125	RPD 12 (Max-16)	
p-Isopropyltoluene	99-87-6	MS	21.80	0	20	109	72 - 123		
p-Isopropyltoluene	99-87-6	MSD	25	0	20	125*	72 - 123	RPD 14 (Max-17)	
Styrene	100-42-5	MS	21.90	0	20	110	79 - 123		
Styrene	100-42-5	MSD	24.40	0	20	122	79 - 123	RPD 10.60 (Max-16)	
Tetrachloroethene	127-18-4	MS	19.50	0	20	97.4	72 - 124		
Tetrachloroethene	127-18-4	MSD	21.30	0	20	107	72 - 124	RPD 9.17 (Max-38)	
Toluene	108-88-3	MS	21.10	0	20	105	80 - 125		
Toluene	108-88-3	MSD	23	0	20	115	80 - 125	RPD 8.92 (Max-20)	
Total Xylenes	1330-20-7	MS	62.20	0	60	104	79 - 125		
Total Xylenes	1330-20-7	MSD	70.30	0	60	117	79 - 125	RPD 12.20 (Max-35)	
trans-1,2-Dichloroethene	156-60-5	MS	21.50	0	20	108	71 - 122		
trans-1,2-Dichloroethene	156-60-5	MSD	23.10	0	20	115	71 - 122	RPD 7.01 (Max-22)	
trans-1,3-Dichloropropene	10061-02-6	MS	18	0	20	90.1	78 - 126		
trans-1,3-Dichloropropene	10061-02-6	MSD	21.90	0	20	109	78 - 126	RPD 19.20* (Max-18)	
Trichloroethene	79-01-6	MS	20	0	20	100	77 - 124		
Trichloroethene	79-01-6	MSD	22.50	0	20	112	77 - 124	RPD 11.50 (Max-18)	
Trichlorofluoromethane	75-69-4	MS	21.80	0	20	109	38 - 123		
Trichlorofluoromethane	75-69-4	MSD	23.70	0	20	118	38 - 123	RPD 8.16 (Max-23)	
Vinyl Acetate	108-05-4	MS	16.50	0	20	82.4	58 - 136		
Vinyl Acetate	108-05-4	MSD	20.50	0	20	103	58 - 136	RPD 21.90* (Max-17)	
Vinyl Chloride	75-01-4	MS	23.30	0	20	117	27 - 138		
Vinyl Chloride	75-01-4	MSD	24	0	20	120	27 - 138	RPD 2.72 (Max-40)	

QUALITY CONTROL SAMPLES

VOLATILE ORGANICS (cont.)

SURROGATES

Compound	CAS No		Result (ug/L)	Expected (ug/L)	Rec. (%)	Limits (%)	Qualifiers
1,2-Dichloroethane-d4	17060-07-0	MS	27.30	30	91	62 - 133	
1,2-Dichloroethane-d4	17060-07-0	MSD	28.20	30	93.8	62 - 133	
4-Bromofluorobenzene	460-00-4	MS	32.40	30	108	79 - 114	
4-Bromofluorobenzene	460-00-4	MSD	31.10	30	104	79 - 114	
Dibromofluoromethane	1868-53-7	MS	29.20	30	97.3	78 - 116	
Dibromofluoromethane	1868-53-7	MSD	29	30	96.8	78 - 116	
Toluene-d8	2037-26-5	MS	29.30	30	97.7	76 - 127	
Toluene-d8	2037-26-5	MSD	28.80	30	96.1	76 - 127	

QC Batch

QC Batch	915795	Prep Method	N/A
Date	N/A	Analysis Method	SW846 8260D
Tech.			

Associated Samples

3275168009	3275168015	3275168010	3275168011
3275168006	3275168012	3275168007	3275168013
3275168008	3275168014		

Matrix Spike 3594440 (MS) 3275166015 (non-Project Sample) For QC Batch 915795

****NOTE - The Original Result shown below is a raw result and is only used for the purpose of calculating Matrix Spike percent recoveries. This result is not a final value and cannot be used as such.

Matrix Spike Duplicate 3594441 (MSD) 3275166015 (non-Project Sample) For QC Batch 915795

RESULTS

Compound	CAS No		Result (ug/L)	Orig. Result (ug/L)	Spk Added (ug/L)	Rec. (%)	Limits (%)	RPD Limit (%)	Qualifiers
1,1,1,2-Tetrachloroethane	630-20-6	MS	20.70	0	20	104	78 - 121		
1,1,1,2-Tetrachloroethane	630-20-6	MSD	20.80	0	20	104	78 - 121	RPD 0.43 (Max-16)	
1,1,1-Trichloroethane	71-55-6	MS	24.10	3.70	20	102	66 - 130		
1,1,1-Trichloroethane	71-55-6	MSD	23.60	3.70	20	99.7	66 - 130	RPD 1.84 (Max-20)	
1,1,2,2-Tetrachloroethane	79-34-5	MS	19.20	0	20	96.2	74 - 135		
1,1,2,2-Tetrachloroethane	79-34-5	MSD	19.30	0	20	96.5	74 - 135	RPD 0.30 (Max-16)	
1,1,2-Trichloroethane	79-00-5	MS	19.50	0	20	97.4	82 - 126		
1,1,2-Trichloroethane	79-00-5	MSD	19.80	0	20	98.9	82 - 126	RPD 1.51 (Max-15)	
1,1-Dichloroethane	75-34-3	MS	25.20	7.30	20	90	78 - 124		
1,1-Dichloroethane	75-34-3	MSD	25.40	7.30	20	90.5	78 - 124	RPD 0.43 (Max-15)	
1,1-Dichloroethene	75-35-4	MS	46.90	29.10	20	88.8	63 - 128		
1,1-Dichloroethene	75-35-4	MSD	44.90	29.10	20	79	63 - 128	RPD 4.27 (Max-21)	
1,1-Dichloropropene	563-58-6	MS	19.70	0	20	98.7	76 - 126		
1,1-Dichloropropene	563-58-6	MSD	19.70	0	20	98.7	76 - 126	RPD 0.0020 (Max-16)	
1,2,3-Trichlorobenzene	87-61-6	MS	17.90	0	20	89.5	61 - 126		
1,2,3-Trichlorobenzene	87-61-6	MSD	19.70	0	20	98.5	61 - 126	RPD 9.55 (Max-36)	
1,2,3-Trichloropropane	96-18-4	MS	19.10	0	20	95.5	75 - 132		
1,2,3-Trichloropropane	96-18-4	MSD	18.80	0	20	94	75 - 132	RPD 1.63 (Max-19)	
1,2,4-Trichlorobenzene	120-82-1	MS	17.60	0	20	87.8	67 - 123		
1,2,4-Trichlorobenzene	120-82-1	MSD	19	0	20	95	67 - 123	RPD 7.97 (Max-22)	
1,2-Dibromo-3-chloropropane	96-12-8	MS	16.80	0	20	84	59 - 133		

QUALITY CONTROL SAMPLES

VOLATILE ORGANICS (cont.)

RESULTS

Compound	CAS No		Result (ug/L)	Orig. Result (ug/L)	Spk Added (ug/L)	Rec. (%)	Limits (%)	RPD Limit (%)	Qualifiers
1,2-Dibromo-3-chloropropane	96-12-8	MSD	17.10	0	20	85.5	59 - 133	RPD 1.77 (Max-26)	
1,2-Dibromoethane	106-93-4	MS	19.70	0	20	98.4	80 - 124		
1,2-Dibromoethane	106-93-4	MSD	19.90	0	20	99.4	80 - 124	RPD 1 (Max-19)	
1,2-Dichlorobenzene	95-50-1	MS	19	0	20	94.8	82 - 118		
1,2-Dichlorobenzene	95-50-1	MSD	19.20	0	20	95.8	82 - 118	RPD 1.13 (Max-15)	
1,2-Dichloroethane	107-06-2	MS	19	0.39	20	93.2	70 - 133		
1,2-Dichloroethane	107-06-2	MSD	19.30	0.39	20	94.4	70 - 133	RPD 1.25 (Max-19)	
1,2-Dichloropropane	78-87-5	MS	18.40	0	20	91.9	81 - 127		
1,2-Dichloropropane	78-87-5	MSD	18.70	0	20	93.5	81 - 127	RPD 1.66 (Max-15)	
1,3-Dichlorobenzene	541-73-1	MS	19.40	0	20	97.1	81 - 118		
1,3-Dichlorobenzene	541-73-1	MSD	19.10	0	20	95.6	81 - 118	RPD 1.59 (Max-16)	
1,3-Dichloropropane	142-28-9	MS	19	0	20	94.9	82 - 126		
1,3-Dichloropropane	142-28-9	MSD	19.30	0	20	96.3	82 - 126	RPD 1.45 (Max-15)	
1,4-Dichlorobenzene	106-46-7	MS	19.40	0	20	96.9	81 - 116		
1,4-Dichlorobenzene	106-46-7	MSD	19.30	0	20	96.5	81 - 116	RPD 0.39 (Max-15)	
2,2-Dichloropropane	594-20-7	MS	20	0	20	100	64 - 129		
2,2-Dichloropropane	594-20-7	MSD	19.70	0	20	98.4	64 - 129	RPD 1.75 (Max-18)	
2-Butanone	78-93-3	MS	88.60	0	100	88.6	50 - 152		
2-Butanone	78-93-3	MSD	90.10	0	100	90.1	50 - 152	RPD 1.69 (Max-16)	
2-Hexanone	591-78-6	MS	95.60	0	100	95.6	65 - 154		
2-Hexanone	591-78-6	MSD	96.30	0	100	96.3	65 - 154	RPD 0.80 (Max-17)	
4-Methyl-2-Pentanone(MIBK)	108-10-1	MS	96.40	0	100	96.4	71 - 146		
4-Methyl-2-Pentanone(MIBK)	108-10-1	MSD	98	0	100	98	71 - 146	RPD 1.64 (Max-16)	
Acetone	67-64-1	MS	77.80	0	100	77.8	40 - 151		
Acetone	67-64-1	MSD	81.90	0	100	81.9	40 - 151	RPD 5.22 (Max-40)	
Benzene	71-43-2	MS	19.20	0	20	96	80 - 124		
Benzene	71-43-2	MSD	19	0	20	95.1	80 - 124	RPD 0.90 (Max-26)	
Bromobenzene	108-86-1	MS	20.10	0	20	100	81 - 119		
Bromobenzene	108-86-1	MSD	20.10	0	20	101	81 - 119	RPD 0.06 (Max-17)	
Bromochloromethane	74-97-5	MS	19.90	0	20	99.4	73 - 117		
Bromochloromethane	74-97-5	MSD	20.10	0	20	101	73 - 117	RPD 1.28 (Max-19)	
Bromodichloromethane	75-27-4	MS	19.50	0	20	97.3	79 - 126		
Bromodichloromethane	75-27-4	MSD	19.50	0	20	97.7	79 - 126	RPD 0.42 (Max-16)	
Bromoform	75-25-2	MS	19.10	0	20	95.6	70 - 123		
Bromoform	75-25-2	MSD	19.20	0	20	95.8	70 - 123	RPD 0.13 (Max-16)	
Bromomethane	74-83-9	MS	17.60	0	20	88	45 - 148		
Bromomethane	74-83-9	MSD	19.60	0	20	97.9	45 - 148	RPD 10.60 (Max-26)	
Carbon Tetrachloride	56-23-5	MS	20.90	0	20	104	62 - 132		
Carbon Tetrachloride	56-23-5	MSD	20.90	0	20	104	62 - 132	RPD 0.05 (Max-17)	
Chlorobenzene	108-90-7	MS	19.90	0	20	99.3	85 - 117		
Chlorobenzene	108-90-7	MSD	19.60	0	20	98.1	85 - 117	RPD 1.18 (Max-15)	
Chlorodibromomethane	124-48-1	MS	20.10	0	20	100	77 - 122		
Chlorodibromomethane	124-48-1	MSD	20.50	0	20	102	77 - 122	RPD 2.05 (Max-15)	
Chloroethane	75-00-3	MS	22	0	20	110	51 - 142		
Chloroethane	75-00-3	MSD	21.10	0	20	106	51 - 142	RPD 4.09 (Max-24)	
Chloroform	67-66-3	MS	19	0	20	94.8	78 - 122		
Chloroform	67-66-3	MSD	19.30	0	20	96.5	78 - 122	RPD 1.80 (Max-16)	
Chloromethane	74-87-3	MS	21.20	0	20	106	38 - 156		
Chloromethane	74-87-3	MSD	21.30	0	20	106	38 - 156	RPD 0.43 (Max-27)	

QUALITY CONTROL SAMPLES

VOLATILE ORGANICS (cont.)

RESULTS

Compound	CAS No		Result (ug/L)	Orig. Result (ug/L)	Spk Added (ug/L)	Rec. (%)	Limits (%)	RPD Limit (%)	Qualifiers
cis-1,2-Dichloroethene	156-59-2	MS	18.70	0	20	93.7	78 - 125		
cis-1,2-Dichloroethene	156-59-2	MSD	19	0	20	94.8	78 - 125	RPD 1.10 (Max-21)	
cis-1,3-Dichloropropene	10061-01-5	MS	18.80	0	20	94	81 - 121		
cis-1,3-Dichloropropene	10061-01-5	MSD	19.10	0	20	95.6	81 - 121	RPD 1.74 (Max-16)	
Dibromomethane	74-95-3	MS	19	0	20	94.8	81 - 125		
Dibromomethane	74-95-3	MSD	19.60	0	20	98.2	81 - 125	RPD 3.54 (Max-16)	
Dichlorodifluoromethane	75-71-8	MS	27.40	0	20	137	17 - 166		
Dichlorodifluoromethane	75-71-8	MSD	26.40	0	20	132	17 - 166	RPD 3.69 (Max-24)	
Diisopropyl ether	108-20-3	MS	17.90	0	20	89.7	74 - 131		
Diisopropyl ether	108-20-3	MSD	18.50	0	20	92.3	74 - 131	RPD 2.84 (Max-15)	
Ethylbenzene	100-41-4	MS	20.40	0	20	102	80 - 124		
Ethylbenzene	100-41-4	MSD	20.10	0	20	100	80 - 124	RPD 1.62 (Max-19)	
Hexachlorobutadiene	87-68-3	MS	19.10	0	20	95.4	55 - 128		
Hexachlorobutadiene	87-68-3	MSD	19.60	0	20	98.1	55 - 128	RPD 2.76 (Max-35)	
Methyl t-Butyl Ether	1634-04-4	MS	19.90	1.20	20	94	69 - 115		
Methyl t-Butyl Ether	1634-04-4	MSD	20.50	1.20	20	96.7	69 - 115	RPD 2.75 (Max-20)	
Methylene Chloride	75-09-2	MS	18.20	0	20	90.8	76 - 121		
Methylene Chloride	75-09-2	MSD	18.60	0	20	92.8	76 - 121	RPD 2.24 (Max-17)	
mp-Xylene	108383/106423	MS	41.20	0	40	103	79 - 125		
mp-Xylene	108383/106423	MSD	40.60	0	40	101	79 - 125	RPD 1.45 (Max-21)	
Naphthalene	91-20-3	MS	13.20	0	20	66.2	56 - 134		
Naphthalene	91-20-3	MSD	14	0	20	69.8	56 - 134	RPD 5.33 (Max-40)	
o-Chlorotoluene	95-49-8	MS	20.20	0	20	101	78 - 126		
o-Chlorotoluene	95-49-8	MSD	20.30	0	20	101	78 - 126	RPD 0.26 (Max-17)	
o-Xylene	95-47-6	MS	20.20	0	20	101	79 - 124		
o-Xylene	95-47-6	MSD	19.90	0	20	99.4	79 - 124	RPD 1.47 (Max-19)	
p-Chlorotoluene	106-43-4	MS	20	0	20	100	78 - 125		
p-Chlorotoluene	106-43-4	MSD	20	0	20	100	78 - 125	RPD 0.15 (Max-16)	
p-Isopropyltoluene	99-87-6	MS	21.30	0	20	106	72 - 123		
p-Isopropyltoluene	99-87-6	MSD	22.50	0	20	113	72 - 123	RPD 5.65 (Max-17)	
Styrene	100-42-5	MS	20.80	0	20	104	79 - 123		
Styrene	100-42-5	MSD	20.60	0	20	103	79 - 123	RPD 1.09 (Max-16)	
Tetrachloroethene	127-18-4	MS	19.40	0	20	97.2	72 - 124		
Tetrachloroethene	127-18-4	MSD	19.10	0	20	95.6	72 - 124	RPD 1.71 (Max-38)	
Toluene	108-88-3	MS	20	0	20	100	80 - 125		
Toluene	108-88-3	MSD	19.80	0	20	98.8	80 - 125	RPD 1.46 (Max-20)	
Total Xylenes	1330-20-7	MS	61.30	0	60	102	79 - 125		
Total Xylenes	1330-20-7	MSD	60.50	0	60	101	79 - 125	RPD 1.45 (Max-35)	
trans-1,2-Dichloroethene	156-60-5	MS	19	0	20	94.8	71 - 122		
trans-1,2-Dichloroethene	156-60-5	MSD	18.60	0	20	93	71 - 122	RPD 1.93 (Max-22)	
trans-1,3-Dichloropropene	10061-02-6	MS	19.90	0	20	99.5	78 - 126		
trans-1,3-Dichloropropene	10061-02-6	MSD	20.20	0	20	101	78 - 126	RPD 1.56 (Max-18)	
Trichloroethene	79-01-6	MS	19.50	0	20	97.4	77 - 124		
Trichloroethene	79-01-6	MSD	19.40	0	20	97	77 - 124	RPD 0.46 (Max-18)	
Trichlorofluoromethane	75-69-4	MS	22.40	0	20	112	38 - 123		
Trichlorofluoromethane	75-69-4	MSD	22.10	0	20	111	38 - 123	RPD 1.26 (Max-23)	
Vinyl Acetate	108-05-4	MS	16.50	0	20	82.7	58 - 136		
Vinyl Acetate	108-05-4	MSD	16.70	0	20	83.5	58 - 136	RPD 1.06 (Max-17)	

QUALITY CONTROL SAMPLES

VOLATILE ORGANICS (cont.)

RESULTS

Compound	CAS No		Result (ug/L)	Orig. Result (ug/L)	Spk Added (ug/L)	Rec. (%)	Limits (%)	RPD Limit (%)	Qualifiers
Vinyl Chloride	75-01-4	MS	22.80	0	20	114	27 - 138		
Vinyl Chloride	75-01-4	MSD	21.90	0	20	110	27 - 138	RPD 3.87 (Max-40)	

SURROGATES

Compound	CAS No		Result (ug/L)	Expected (ug/L)	Rec. (%)	Limits (%)	Qualifiers
1,2-Dichloroethane-d4	17060-07-0	MS	28.80	30	96	62 - 133	
1,2-Dichloroethane-d4	17060-07-0	MSD	28.90	30	96.3	62 - 133	
4-Bromofluorobenzene	460-00-4	MS	30.20	30	101	79 - 114	
4-Bromofluorobenzene	460-00-4	MSD	30.10	30	100	79 - 114	
Dibromofluoromethane	1868-53-7	MS	28.40	30	94.6	78 - 116	
Dibromofluoromethane	1868-53-7	MSD	28.90	30	96.4	78 - 116	
Toluene-d8	2037-26-5	MS	28.30	30	94.3	76 - 127	
Toluene-d8	2037-26-5	MSD	28.30	30	94.2	76 - 127	

Method Blank 3594420 (MB) Created on 12/01/2022 23:48 For QC Batch 915795

RESULTS

Compound	CAS No		Result	Units	RDL	Qualifiers
1,1,1,2-Tetrachloroethane	630-20-6	BLK	1.0 U	ug/L	1.0	U
1,1,1-Trichloroethane	71-55-6	BLK	1.0 U	ug/L	1.0	U
1,1,2,2-Tetrachloroethane	79-34-5	BLK	1.0 U	ug/L	1.0	U
1,1,2-Trichloroethane	79-00-5	BLK	1.0 U	ug/L	1.0	U
1,1-Dichloroethane	75-34-3	BLK	1.0 U	ug/L	1.0	U
1,1-Dichloroethene	75-35-4	BLK	1.0 U	ug/L	1.0	U
1,1-Dichloropropene	563-58-6	BLK	1.0 U	ug/L	1.0	U
1,2,3-Trichlorobenzene	87-61-6	BLK	2.0 U	ug/L	2.0	U
1,2,3-Trichloropropane	96-18-4	BLK	2.0 U	ug/L	2.0	U
1,2,4-Trichlorobenzene	120-82-1	BLK	2.0 U	ug/L	2.0	U
1,2-Dibromo-3-chloropropane	96-12-8	BLK	7.0 U	ug/L	7.0	U
1,2-Dibromoethane	106-93-4	BLK	1.0 U	ug/L	1.0	U
1,2-Dichlorobenzene	95-50-1	BLK	1.0 U	ug/L	1.0	U
1,2-Dichloroethane	107-06-2	BLK	1.0 U	ug/L	1.0	U
1,2-Dichloropropane	78-87-5	BLK	1.0 U	ug/L	1.0	U
1,3-Dichlorobenzene	541-73-1	BLK	1.0 U	ug/L	1.0	U
1,3-Dichloropropane	142-28-9	BLK	1.0 U	ug/L	1.0	U
1,4-Dichlorobenzene	106-46-7	BLK	1.0 U	ug/L	1.0	U
2,2-Dichloropropane	594-20-7	BLK	1.0 U	ug/L	1.0	U
2-Butanone	78-93-3	BLK	10.0 U	ug/L	10.0	U
2-Hexanone	591-78-6	BLK	5.0 U	ug/L	5.0	U
4-Methyl-2-Pentanone(MIBK)	108-10-1	BLK	5.0 U	ug/L	5.0	U
Acetone	67-64-1	BLK	10.0 U	ug/L	10.0	U
Benzene	71-43-2	BLK	1.0 U	ug/L	1.0	U
Bromobenzene	108-86-1	BLK	1.0 U	ug/L	1.0	U
Bromochloromethane	74-97-5	BLK	1.0 U	ug/L	1.0	U

QUALITY CONTROL SAMPLES

VOLATILE ORGANICS (cont.)

RESULTS

Compound	CAS No		Result	Units	RDL	Qualifiers
Bromodichloromethane	75-27-4	BLK	1.0 U	ug/L	1.0	U
Bromoform	75-25-2	BLK	1.0 U	ug/L	1.0	U
Bromomethane	74-83-9	BLK	1.0 U	ug/L	1.0	U
Carbon Tetrachloride	56-23-5	BLK	1.0 U	ug/L	1.0	U
Chlorobenzene	108-90-7	BLK	1.0 U	ug/L	1.0	U
Chlorodibromomethane	124-48-1	BLK	1.0 U	ug/L	1.0	U
Chloroethane	75-00-3	BLK	1.0 U	ug/L	1.0	U
Chloroform	67-66-3	BLK	1.0 U	ug/L	1.0	U
Chloromethane	74-87-3	BLK	1.0 U	ug/L	1.0	U
cis-1,2-Dichloroethene	156-59-2	BLK	1.0 U	ug/L	1.0	U
cis-1,3-Dichloropropene	10061-01-5	BLK	1.0 U	ug/L	1.0	U
Dibromomethane	74-95-3	BLK	1.0 U	ug/L	1.0	U
Dichlorodifluoromethane	75-71-8	BLK	1.0 U	ug/L	1.0	U
Diisopropyl ether	108-20-3	BLK	1.0 U	ug/L	1.0	U
Ethylbenzene	100-41-4	BLK	1.0 U	ug/L	1.0	U
Hexachlorobutadiene	87-68-3	BLK	5.0 U	ug/L	5.0	U
Methyl t-Butyl Ether	1634-04-4	BLK	1.0 U	ug/L	1.0	U
Methylene Chloride	75-09-2	BLK	1.0 U	ug/L	1.0	U
mp-Xylene	108383/106423	BLK	2.0 U	ug/L	2.0	U
Naphthalene	91-20-3	BLK	2.0 U	ug/L	2.0	U
o-Chlorotoluene	95-49-8	BLK	1.0 U	ug/L	1.0	U
o-Xylene	95-47-6	BLK	1.0 U	ug/L	1.0	U
p-Chlorotoluene	106-43-4	BLK	1.0 U	ug/L	1.0	U
p-Isopropyltoluene	99-87-6	BLK	1.0 U	ug/L	1.0	U
Styrene	100-42-5	BLK	1.0 U	ug/L	1.0	U
Tetrachloroethene	127-18-4	BLK	1.0 U	ug/L	1.0	U
Toluene	108-88-3	BLK	1.0 U	ug/L	1.0	U
Total Xylenes	1330-20-7	BLK	3.0 U	ug/L	3.0	U
trans-1,2-Dichloroethene	156-60-5	BLK	1.0 U	ug/L	1.0	U
trans-1,3-Dichloropropene	10061-02-6	BLK	1.0 U	ug/L	1.0	U
Trichloroethene	79-01-6	BLK	1.0 U	ug/L	1.0	U
Trichlorofluoromethane	75-69-4	BLK	1.0 U	ug/L	1.0	U
Vinyl Acetate	108-05-4	BLK	5.0 U	ug/L	5.0	U
Vinyl Chloride	75-01-4	BLK	1.0 U	ug/L	1.0	U

SURROGATES

Compound	CAS No		Result (ug/L)	Expected (ug/L)	Rec. (%)	Limits (%)	Qualifiers
1,2-Dichloroethane-d4	17060-07-0	BLK	27.90	30	92.9	62 - 133	
4-Bromofluorobenzene	460-00-4	BLK	30.40	30	101	79 - 114	
Dibromofluoromethane	1868-53-7	BLK	27.20	30	90.8	78 - 116	
Toluene-d8	2037-26-5	BLK	28.20	30	93.9	76 - 127	

QUALITY CONTROL SAMPLES

VOLATILE ORGANICS (cont.)

Lab Control Standard 3594421 (LCS) Created on 12/01/2022 23:48 For QC Batch 915795

RESULTS

Compound	CAS No		Result (ug/L)	Orig. Result (ug/L)	Spk Added (ug/L)	Rec. (%)	Limits (%)	RPD Limit (%)	Qualifiers
1,1,1,2-Tetrachloroethane	630-20-6	LCS	20.30		20	101	78 - 121		
1,1,1-Trichloroethane	71-55-6	LCS	20.20		20	101	66 - 130		
1,1,2,2-Tetrachloroethane	79-34-5	LCS	19.60		20	98.1	74 - 135		
1,1,2-Trichloroethane	79-00-5	LCS	19.80		20	98.9	82 - 126		
1,1-Dichloroethane	75-34-3	LCS	19.70		20	98.3	78 - 124		
1,1-Dichloroethene	75-35-4	LCS	20.70		20	103	63 - 128		
1,1-Dichloropropene	563-58-6	LCS	20.30		20	101	76 - 126		
1,2,3-Trichlorobenzene	87-61-6	LCS	20.10		20	101	61 - 126		
1,2,3-Trichloropropane	96-18-4	LCS	19.10		20	95.7	75 - 132		
1,2,4-Trichlorobenzene	120-82-1	LCS	21		20	105	67 - 123		
1,2-Dibromo-3-chloropropane	96-12-8	LCS	17.30		20	86.6	59 - 133		
1,2-Dibromoethane	106-93-4	LCS	19.40		20	97.1	80 - 124		
1,2-Dichlorobenzene	95-50-1	LCS	19.70		20	98.3	82 - 118		
1,2-Dichloroethane	107-06-2	LCS	18.70		20	93.7	70 - 133		
1,2-Dichloropropane	78-87-5	LCS	19.70		20	98.7	81 - 127		
1,3-Dichlorobenzene	541-73-1	LCS	20.10		20	100	81 - 118		
1,3-Dichloropropane	142-28-9	LCS	19.30		20	96.4	82 - 126		
1,4-Dichlorobenzene	106-46-7	LCS	20.20		20	101	81 - 116		
2,2-Dichloropropane	594-20-7	LCS	20.10		20	101	64 - 129		
2-Butanone	78-93-3	LCS	90.40		100	90.4	50 - 152		
2-Hexanone	591-78-6	LCS	96.80		100	96.8	65 - 154		
4-Methyl-2-Pentanone(MIBK)	108-10-1	LCS	99.40		100	99.4	71 - 146		
Acetone	67-64-1	LCS	86.60		100	86.6	40 - 151		
Benzene	71-43-2	LCS	20.20		20	101	80 - 124		
Bromobenzene	108-86-1	LCS	20.60		20	103	81 - 119		
Bromochloromethane	74-97-5	LCS	19.30		20	96.6	73 - 117		
Bromodichloromethane	75-27-4	LCS	19.60		20	98	79 - 126		
Bromoform	75-25-2	LCS	18.90		20	94.6	70 - 123		
Bromomethane	74-83-9	LCS	21.90		20	110	45 - 148		
Carbon Tetrachloride	56-23-5	LCS	20.70		20	104	62 - 132		
Chlorobenzene	108-90-7	LCS	19.90		20	99.5	85 - 117		
Chlorodibromomethane	124-48-1	LCS	19.60		20	98.2	77 - 122		
Chloroethane	75-00-3	LCS	22.70		20	113	51 - 142		
Chloroform	67-66-3	LCS	19.70		20	98.4	78 - 122		
Chloromethane	74-87-3	LCS	21.20		20	106	38 - 156		
cis-1,2-Dichloroethene	156-59-2	LCS	19.80		20	99	78 - 125		
cis-1,3-Dichloropropene	10061-01-5	LCS	19.60		20	98.1	81 - 121		
Dibromomethane	74-95-3	LCS	18.80		20	93.8	81 - 125		
Dichlorodifluoromethane	75-71-8	LCS	24.30		20	121	17 - 166		
Diisopropyl ether	108-20-3	LCS	20.20		20	101	74 - 131		
Ethylbenzene	100-41-4	LCS	20.70		20	103	80 - 124		
Hexachlorobutadiene	87-68-3	LCS	22.80		20	114	55 - 128		
Methyl t-Butyl Ether	1634-04-4	LCS	19.50		20	97.3	69 - 115		
Methylene Chloride	75-09-2	LCS	19		20	94.9	76 - 121		

QUALITY CONTROL SAMPLES

VOLATILE ORGANICS (cont.)

RESULTS

Compound	CAS No		Result (ug/L)	Orig. Result (ug/L)	Spk Added (ug/L)	Rec. (%)	Limits (%)	RPD Limit (%)	Qualifiers
mp-Xylene	108383/106423	LCS	41.60		40	104	79 - 125		
Naphthalene	91-20-3	LCS	16		20	80.2	56 - 134		
o-Chlorotoluene	95-49-8	LCS	21.50		20	107	78 - 126		
o-Xylene	95-47-6	LCS	20.40		20	102	79 - 124		
p-Chlorotoluene	106-43-4	LCS	21.40		20	107	78 - 125		
p-Isopropyltoluene	99-87-6	LCS	22.70		20	114	72 - 123		
Styrene	100-42-5	LCS	21.90		20	110	79 - 123		
Tetrachloroethene	127-18-4	LCS	20.30		20	101	72 - 124		
Toluene	108-88-3	LCS	20.40		20	102	80 - 125		
Total Xylenes	1330-20-7	LCS	62		60	103	79 - 125		
trans-1,2-Dichloroethene	156-60-5	LCS	20.30		20	102	71 - 122		
trans-1,3-Dichloropropene	10061-02-6	LCS	20.60		20	103	78 - 126		
Trichloroethene	79-01-6	LCS	20.20		20	101	77 - 124		
Trichlorofluoromethane	75-69-4	LCS	20.60		20	103	38 - 123		
Vinyl Acetate	108-05-4	LCS	15.80		20	79.2	58 - 136		
Vinyl Chloride	75-01-4	LCS	22.10		20	111	27 - 138		

SURROGATES

Compound	CAS No		Result (ug/L)	Expected (ug/L)	Rec. (%)	Limits (%)	Qualifiers
1,2-Dichloroethane-d4	17060-07-0	LCS	28.10	30	93.5	62 - 133	
4-Bromofluorobenzene	460-00-4	LCS	30.30	30	101	79 - 114	
Dibromofluoromethane	1868-53-7	LCS	27.70	30	92.3	78 - 116	
Toluene-d8	2037-26-5	LCS	28.40	30	94.7	76 - 127	

QC Batch

QC Batch	916108	Prep Method	N/A
Date	N/A	Analysis Method	SW846 8260D
Tech.			

Associated Samples

3275168020	3275168016	3275168017	3275168018
3275168019	3275168023	3275168024	3275168022
3275168021			

Matrix Spike 3594704 (MS) 3275171005 (non-Project Sample) For QC Batch 916108

****NOTE - The Original Result shown below is a raw result and is only used for the purpose of calculating Matrix Spike percent recoveries. This result is not a final value and cannot be used as such.

Matrix Spike Duplicate 3594705 (MSD) 3275171005 (non-Project Sample) For QC Batch 916108

RESULTS

Compound	CAS No		Result (ug/L)	Orig. Result (ug/L)	Spk Added (ug/L)	Rec. (%)	Limits (%)	RPD Limit (%)	Qualifiers
1,1,1,2-Tetrachloroethane	630-20-6	MS	22.40	0	20	112	78 - 121		
1,1,1,2-Tetrachloroethane	630-20-6	MSD	22.10	0	20	110	78 - 121	RPD 1.52 (Max-16)	
1,1,1-Trichloroethane	71-55-6	MS	24.30	0	20	121	66 - 130		
1,1,1-Trichloroethane	71-55-6	MSD	21.80	0	20	109	66 - 130	RPD 10.80 (Max-20)	

QUALITY CONTROL SAMPLES

VOLATILE ORGANICS (cont.)

RESULTS

Compound	CAS No		Result (ug/L)	Orig. Result (ug/L)	Spk Added (ug/L)	Rec. (%)	Limits (%)	RPD Limit (%)	Qualifiers
1,1,2,2-Tetrachloroethane	79-34-5	MS	19.80	0	20	98.9	74 - 135		
1,1,2,2-Tetrachloroethane	79-34-5	MSD	20.30	0	20	102	74 - 135	RPD 2.79 (Max-16)	
1,1,2-Trichloroethane	79-00-5	MS	20.70	0	20	104	82 - 126		
1,1,2-Trichloroethane	79-00-5	MSD	20.70	0	20	103	82 - 126	RPD 0.28 (Max-15)	
1,1-Dichloroethane	75-34-3	MS	21.90	0	20	109	78 - 124		
1,1-Dichloroethane	75-34-3	MSD	20.30	0	20	102	78 - 124	RPD 7.45 (Max-15)	
1,1-Dichloroethene	75-35-4	MS	24.40	0	20	122	63 - 128		
1,1-Dichloroethene	75-35-4	MSD	21.40	0	20	107	63 - 128	RPD 13.10 (Max-21)	
1,1-Dichloropropene	563-58-6	MS	22.60	0	20	113	76 - 126		
1,1-Dichloropropene	563-58-6	MSD	21.20	0	20	106	76 - 126	RPD 6.61 (Max-16)	
1,2,3-Trichlorobenzene	87-61-6	MS	19.50	0	20	97.4	61 - 126		
1,2,3-Trichlorobenzene	87-61-6	MSD	20.30	0	20	102	61 - 126	RPD 4.16 (Max-36)	
1,2,3-Trichloropropane	96-18-4	MS	19.50	0	20	97.4	75 - 132		
1,2,3-Trichloropropane	96-18-4	MSD	20.30	0	20	101	75 - 132	RPD 4.04 (Max-19)	
1,2,4-Trichlorobenzene	120-82-1	MS	19.60	0	20	98.2	67 - 123		
1,2,4-Trichlorobenzene	120-82-1	MSD	20	0	20	99.8	67 - 123	RPD 1.63 (Max-22)	
1,2-Dibromo-3-chloropropane	96-12-8	MS	17.20	0	20	86	59 - 133		
1,2-Dibromo-3-chloropropane	96-12-8	MSD	18.30	0	20	91.6	59 - 133	RPD 6.36 (Max-26)	
1,2-Dibromoethane	106-93-4	MS	20.90	0	20	105	80 - 124		
1,2-Dibromoethane	106-93-4	MSD	21.20	0	20	106	80 - 124	RPD 1.19 (Max-19)	
1,2-Dichlorobenzene	95-50-1	MS	20.20	0	20	101	82 - 118		
1,2-Dichlorobenzene	95-50-1	MSD	20.10	0	20	100	82 - 118	RPD 0.42 (Max-15)	
1,2-Dichloroethane	107-06-2	MS	21.10	0	20	106	70 - 133		
1,2-Dichloroethane	107-06-2	MSD	20.80	0	20	104	70 - 133	RPD 1.73 (Max-19)	
1,2-Dichloropropane	78-87-5	MS	20.60	0	20	103	81 - 127		
1,2-Dichloropropane	78-87-5	MSD	20	0	20	100	81 - 127	RPD 2.64 (Max-15)	
1,3-Dichlorobenzene	541-73-1	MS	20.80	0	20	104	81 - 118		
1,3-Dichlorobenzene	541-73-1	MSD	20.60	0	20	103	81 - 118	RPD 1.02 (Max-16)	
1,3-Dichloropropane	142-28-9	MS	20.20	0	20	101	82 - 126		
1,3-Dichloropropane	142-28-9	MSD	20.10	0	20	101	82 - 126	RPD 0.59 (Max-15)	
1,4-Dichlorobenzene	106-46-7	MS	20.70	0	20	104	81 - 116		
1,4-Dichlorobenzene	106-46-7	MSD	20.30	0	20	102	81 - 116	RPD 1.90 (Max-15)	
2,2-Dichloropropane	594-20-7	MS	22.60	0	20	113	64 - 129		
2,2-Dichloropropane	594-20-7	MSD	21.40	0	20	107	64 - 129	RPD 5.64 (Max-18)	
2-Butanone	78-93-3	MS	96.10	0	100	96.1	50 - 152		
2-Butanone	78-93-3	MSD	104	0	100	104	50 - 152	RPD 7.72 (Max-16)	
2-Hexanone	591-78-6	MS	98.10	0	100	98.1	65 - 154		
2-Hexanone	591-78-6	MSD	105	0	100	105	65 - 154	RPD 7.05 (Max-17)	
4-Methyl-2-Pentanone(MIBK)	108-10-1	MS	99.20	0	100	99.2	71 - 146		
4-Methyl-2-Pentanone(MIBK)	108-10-1	MSD	105	0	100	105	71 - 146	RPD 5.87 (Max-16)	
Acetone	67-64-1	MS	86.50	0	100	86.5	40 - 151		
Acetone	67-64-1	MSD	94.50	0	100	94.5	40 - 151	RPD 8.91 (Max-40)	
Benzene	71-43-2	MS	21.40	0	20	107	80 - 124		
Benzene	71-43-2	MSD	20.70	0	20	104	80 - 124	RPD 3.46 (Max-26)	
Bromobenzene	108-86-1	MS	21.70	0	20	109	81 - 119		
Bromobenzene	108-86-1	MSD	21.20	0	20	106	81 - 119	RPD 2.34 (Max-17)	
Bromochloromethane	74-97-5	MS	22.30	0	20	112	73 - 117		
Bromochloromethane	74-97-5	MSD	22	0	20	110	73 - 117	RPD 1.52 (Max-19)	
Bromodichloromethane	75-27-4	MS	21.60	0	20	108	79 - 126		

QUALITY CONTROL SAMPLES

VOLATILE ORGANICS (cont.)

RESULTS

Compound	CAS No		Result (ug/L)	Orig. Result (ug/L)	Spk Added (ug/L)	Rec. (%)	Limits (%)	RPD Limit (%)	Qualifiers
Bromodichloromethane	75-27-4	MSD	21.10	0	20	106	79 - 126	RPD 2.21 (Max-16)	
Bromoform	75-25-2	MS	20	0	20	100	70 - 123		
Bromoform	75-25-2	MSD	20.40	0	20	102	70 - 123	RPD 1.76 (Max-16)	
Bromomethane	74-83-9	MS	19.70	0	20	98.3	45 - 148		
Bromomethane	74-83-9	MSD	19.90	0	20	99.7	45 - 148	RPD 1.39 (Max-26)	
Carbon Tetrachloride	56-23-5	MS	24	0	20	120	62 - 132		
Carbon Tetrachloride	56-23-5	MSD	22.40	0	20	112	62 - 132	RPD 6.87 (Max-17)	
Chlorobenzene	108-90-7	MS	21.60	0	20	108	85 - 117		
Chlorobenzene	108-90-7	MSD	20.60	0	20	103	85 - 117	RPD 4.89 (Max-15)	
Chlorodibromomethane	124-48-1	MS	22	0	20	110	77 - 122		
Chlorodibromomethane	124-48-1	MSD	21.60	0	20	108	77 - 122	RPD 1.83 (Max-15)	
Chloroethane	75-00-3	MS	23.90	0	20	120	51 - 142		
Chloroethane	75-00-3	MSD	21.80	0	20	109	51 - 142	RPD 9.36 (Max-24)	
Chloroform	67-66-3	MS	21.10	0	20	106	78 - 122		
Chloroform	67-66-3	MSD	20.50	0	20	103	78 - 122	RPD 3.01 (Max-16)	
Chloromethane	74-87-3	MS	23.40	0	20	117	38 - 156		
Chloromethane	74-87-3	MSD	22.40	0	20	112	38 - 156	RPD 4.30 (Max-27)	
cis-1,2-Dichloroethene	156-59-2	MS	21.60	0.33	20	106	78 - 125		
cis-1,2-Dichloroethene	156-59-2	MSD	20.80	0.33	20	102	78 - 125	RPD 3.64 (Max-21)	
cis-1,3-Dichloropropene	10061-01-5	MS	20.40	0	20	102	81 - 121		
cis-1,3-Dichloropropene	10061-01-5	MSD	19.80	0	20	98.8	81 - 121	RPD 2.96 (Max-16)	
Dibromomethane	74-95-3	MS	21	0	20	105	81 - 125		
Dibromomethane	74-95-3	MSD	20.80	0	20	104	81 - 125	RPD 0.86 (Max-16)	
Dichlorodifluoromethane	75-71-8	MS	29.20	0	20	146	17 - 166		
Dichlorodifluoromethane	75-71-8	MSD	27.50	0	20	138	17 - 166	RPD 5.96 (Max-24)	
Diisopropyl ether	108-20-3	MS	20.10	0	20	100	74 - 131		
Diisopropyl ether	108-20-3	MSD	19.60	0	20	98.2	74 - 131	RPD 2.07 (Max-15)	
Ethylbenzene	100-41-4	MS	21.90	0	20	109	80 - 124		
Ethylbenzene	100-41-4	MSD	21.20	0	20	106	80 - 124	RPD 3 (Max-19)	
Hexachlorobutadiene	87-68-3	MS	20.50	0	20	102	55 - 128		
Hexachlorobutadiene	87-68-3	MSD	20.50	0	20	102	55 - 128	RPD 0.15 (Max-35)	
Methyl t-Butyl Ether	1634-04-4	MS	21.50	0	20	107	69 - 115		
Methyl t-Butyl Ether	1634-04-4	MSD	21.40	0	20	107	69 - 115	RPD 0.15 (Max-20)	
Methylene Chloride	75-09-2	MS	20.70	0	20	103	76 - 121		
Methylene Chloride	75-09-2	MSD	20.20	0	20	101	76 - 121	RPD 2.41 (Max-17)	
mp-Xylene	108383/106423	MS	44.90	0	40	112	79 - 125		
mp-Xylene	108383/106423	MSD	42.70	0	40	107	79 - 125	RPD 5.01 (Max-21)	
Naphthalene	91-20-3	MS	14.60	0	20	73.1	56 - 134		
Naphthalene	91-20-3	MSD	15.50	0	20	77.4	56 - 134	RPD 5.72 (Max-40)	
o-Chlorotoluene	95-49-8	MS	21.60	0	20	108	78 - 126		
o-Chlorotoluene	95-49-8	MSD	21	0	20	105	78 - 126	RPD 2.58 (Max-17)	
o-Xylene	95-47-6	MS	21.60	0	20	108	79 - 124		
o-Xylene	95-47-6	MSD	21	0	20	105	79 - 124	RPD 2.57 (Max-19)	
p-Chlorotoluene	106-43-4	MS	21.10	0	20	106	78 - 125		
p-Chlorotoluene	106-43-4	MSD	21	0	20	105	78 - 125	RPD 0.70 (Max-16)	
p-Isopropyltoluene	99-87-6	MS	22.90	0	20	115	72 - 123		
p-Isopropyltoluene	99-87-6	MSD	23.20	0	20	116	72 - 123	RPD 0.97 (Max-17)	
Styrene	100-42-5	MS	22.10	0	20	110	79 - 123		
Styrene	100-42-5	MSD	21.60	0	20	108	79 - 123	RPD 2.04 (Max-16)	

QUALITY CONTROL SAMPLES

VOLATILE ORGANICS (cont.)

RESULTS

Compound	CAS No		Result (ug/L)	Orig. Result (ug/L)	Spk Added (ug/L)	Rec. (%)	Limits (%)	RPD Limit (%)	Qualifiers
Tetrachloroethene	127-18-4	MS	20.90	0	20	104	72 - 124		
Tetrachloroethene	127-18-4	MSD	20.20	0	20	101	72 - 124	RPD 3.32 (Max-38)	
Toluene	108-88-3	MS	21.60	0	20	108	80 - 125		
Toluene	108-88-3	MSD	20.60	0	20	103	80 - 125	RPD 5.10 (Max-20)	
Total Xylenes	1330-20-7	MS	66.50	0	60	111	79 - 125		
Total Xylenes	1330-20-7	MSD	63.80	0	60	106	79 - 125	RPD 4.21 (Max-35)	
trans-1,2-Dichloroethene	156-60-5	MS	21.30	0	20	107	71 - 122		
trans-1,2-Dichloroethene	156-60-5	MSD	20.30	0	20	102	71 - 122	RPD 4.78 (Max-22)	
trans-1,3-Dichloropropene	10061-02-6	MS	21.70	0	20	108	78 - 126		
trans-1,3-Dichloropropene	10061-02-6	MSD	20.90	0	20	105	78 - 126	RPD 3.51 (Max-18)	
Trichloroethene	79-01-6	MS	24.90	2.60	20	112	77 - 124		
Trichloroethene	79-01-6	MSD	23.20	2.60	20	103	77 - 124	RPD 6.99 (Max-18)	
Trichlorofluoromethane	75-69-4	MS	25	0	20	125*	38 - 123		
Trichlorofluoromethane	75-69-4	MSD	23.20	0	20	116	38 - 123	RPD 7.74 (Max-23)	
Vinyl Acetate	108-05-4	MS	17.80	0	20	88.8	58 - 136		
Vinyl Acetate	108-05-4	MSD	18.20	0	20	91.2	58 - 136	RPD 2.63 (Max-17)	
Vinyl Chloride	75-01-4	MS	24.50	0	20	122	27 - 138		
Vinyl Chloride	75-01-4	MSD	23	0	20	115	27 - 138	RPD 5.94 (Max-40)	

SURROGATES

Compound	CAS No		Result (ug/L)	Expected (ug/L)	Rec. (%)	Limits (%)	Qualifiers
1,2-Dichloroethane-d4	17060-07-0	MS	29.70	30	98.9	62 - 133	
1,2-Dichloroethane-d4	17060-07-0	MSD	29.70	30	99	62 - 133	
4-Bromofluorobenzene	460-00-4	MS	30	30	100	79 - 114	
4-Bromofluorobenzene	460-00-4	MSD	30.40	30	101	79 - 114	
Dibromofluoromethane	1868-53-7	MS	29.10	30	96.9	78 - 116	
Dibromofluoromethane	1868-53-7	MSD	29.50	30	98.2	78 - 116	
Toluene-d8	2037-26-5	MS	27.90	30	92.9	76 - 127	
Toluene-d8	2037-26-5	MSD	28	30	93.3	76 - 127	

Method Blank 3594612 (MB) Created on 12/02/2022 10:36 For QC Batch 916108

RESULTS

Compound	CAS No		Result	Units	RDL	Qualifiers
1,1,1,2-Tetrachloroethane	630-20-6	BLK	1.0 U	ug/L	1.0	U
1,1,1-Trichloroethane	71-55-6	BLK	1.0 U	ug/L	1.0	U
1,1,2,2-Tetrachloroethane	79-34-5	BLK	1.0 U	ug/L	1.0	U
1,1,2-Trichloroethane	79-00-5	BLK	1.0 U	ug/L	1.0	U
1,1-Dichloroethane	75-34-3	BLK	1.0 U	ug/L	1.0	U
1,1-Dichloroethene	75-35-4	BLK	1.0 U	ug/L	1.0	U
1,1-Dichloropropene	563-58-6	BLK	1.0 U	ug/L	1.0	U
1,2,3-Trichlorobenzene	87-61-6	BLK	2.0 U	ug/L	2.0	U
1,2,3-Trichloropropane	96-18-4	BLK	2.0 U	ug/L	2.0	U
1,2,4-Trichlorobenzene	120-82-1	BLK	2.0 U	ug/L	2.0	U

QUALITY CONTROL SAMPLES

VOLATILE ORGANICS (cont.)

RESULTS

Compound	CAS No		Result	Units	RDL	Qualifiers
1,2-Dibromo-3-chloropropane	96-12-8	BLK	7.0 U	ug/L	7.0	U
1,2-Dibromoethane	106-93-4	BLK	1.0 U	ug/L	1.0	U
1,2-Dichlorobenzene	95-50-1	BLK	1.0 U	ug/L	1.0	U
1,2-Dichloroethane	107-06-2	BLK	1.0 U	ug/L	1.0	U
1,2-Dichloropropane	78-87-5	BLK	1.0 U	ug/L	1.0	U
1,3-Dichlorobenzene	541-73-1	BLK	1.0 U	ug/L	1.0	U
1,3-Dichloropropane	142-28-9	BLK	1.0 U	ug/L	1.0	U
1,4-Dichlorobenzene	106-46-7	BLK	1.0 U	ug/L	1.0	U
2,2-Dichloropropane	594-20-7	BLK	1.0 U	ug/L	1.0	U
2-Butanone	78-93-3	BLK	10.0 U	ug/L	10.0	U
2-Hexanone	591-78-6	BLK	5.0 U	ug/L	5.0	U
4-Methyl-2-Pentanone(MIBK)	108-10-1	BLK	5.0 U	ug/L	5.0	U
Acetone	67-64-1	BLK	10.0 U	ug/L	10.0	U
Benzene	71-43-2	BLK	1.0 U	ug/L	1.0	U
Bromobenzene	108-86-1	BLK	1.0 U	ug/L	1.0	U
Bromochloromethane	74-97-5	BLK	1.0 U	ug/L	1.0	U
Bromodichloromethane	75-27-4	BLK	1.0 U	ug/L	1.0	U
Bromoform	75-25-2	BLK	1.0 U	ug/L	1.0	U
Bromomethane	74-83-9	BLK	1.0 U	ug/L	1.0	U
Carbon Tetrachloride	56-23-5	BLK	1.0 U	ug/L	1.0	U
Chlorobenzene	108-90-7	BLK	1.0 U	ug/L	1.0	U
Chlorodibromomethane	124-48-1	BLK	1.0 U	ug/L	1.0	U
Chloroethane	75-00-3	BLK	1.0 U	ug/L	1.0	U
Chloroform	67-66-3	BLK	1.0 U	ug/L	1.0	U
Chloromethane	74-87-3	BLK	1.0 U	ug/L	1.0	U
cis-1,2-Dichloroethene	156-59-2	BLK	1.0 U	ug/L	1.0	U
cis-1,3-Dichloropropene	10061-01-5	BLK	1.0 U	ug/L	1.0	U
Dibromomethane	74-95-3	BLK	1.0 U	ug/L	1.0	U
Dichlorodifluoromethane	75-71-8	BLK	1.0 U	ug/L	1.0	U
Diisopropyl ether	108-20-3	BLK	1.0 U	ug/L	1.0	U
Ethylbenzene	100-41-4	BLK	1.0 U	ug/L	1.0	U
Hexachlorobutadiene	87-68-3	BLK	5.0 U	ug/L	5.0	U
Methyl t-Butyl Ether	1634-04-4	BLK	1.0 U	ug/L	1.0	U
Methylene Chloride	75-09-2	BLK	1.0 U	ug/L	1.0	U
mp-Xylene	108383/106423	BLK	2.0 U	ug/L	2.0	U
Naphthalene	91-20-3	BLK	2.0 U	ug/L	2.0	U
o-Chlorotoluene	95-49-8	BLK	1.0 U	ug/L	1.0	U
o-Xylene	95-47-6	BLK	1.0 U	ug/L	1.0	U
p-Chlorotoluene	106-43-4	BLK	1.0 U	ug/L	1.0	U
p-Isopropyltoluene	99-87-6	BLK	1.0 U	ug/L	1.0	U
Styrene	100-42-5	BLK	1.0 U	ug/L	1.0	U
Tetrachloroethene	127-18-4	BLK	1.0 U	ug/L	1.0	U
Toluene	108-88-3	BLK	1.0 U	ug/L	1.0	U
Total Xylenes	1330-20-7	BLK	3.0 U	ug/L	3.0	U
trans-1,2-Dichloroethene	156-60-5	BLK	1.0 U	ug/L	1.0	U
trans-1,3-Dichloropropene	10061-02-6	BLK	1.0 U	ug/L	1.0	U
Trichloroethene	79-01-6	BLK	1.0 U	ug/L	1.0	U
Trichlorofluoromethane	75-69-4	BLK	1.0 U	ug/L	1.0	U

QUALITY CONTROL SAMPLES

VOLATILE ORGANICS (cont.)

RESULTS

Compound	CAS No		Result	Units	RDL	Qualifiers
Vinyl Acetate	108-05-4	BLK	5.0 U	ug/L	5.0	U
Vinyl Chloride	75-01-4	BLK	1.0 U	ug/L	1.0	U

SURROGATES

Compound	CAS No		Result (ug/L)	Expected (ug/L)	Rec. (%)	Limits (%)	Qualifiers
1,2-Dichloroethane-d4	17060-07-0	BLK	28.40	30	94.7	62 - 133	
4-Bromofluorobenzene	460-00-4	BLK	31.10	30	104	79 - 114	
Dibromofluoromethane	1868-53-7	BLK	28.30	30	94.3	78 - 116	
Toluene-d8	2037-26-5	BLK	28.50	30	95.1	76 - 127	

Lab Control Standard 3594613 (LCS) Created on 12/02/2022 10:36 For QC Batch 916108

RESULTS

Compound	CAS No		Result (ug/L)	Orig. Result (ug/L)	Spk Added (ug/L)	Rec. (%)	Limits (%)	RPD Limit (%)	Qualifiers
1,1,1,2-Tetrachloroethane	630-20-6	LCS	21.80		20	109	78 - 121		
1,1,1-Trichloroethane	71-55-6	LCS	20.40		20	102	66 - 130		
1,1,2,2-Tetrachloroethane	79-34-5	LCS	20.70		20	103	74 - 135		
1,1,2-Trichloroethane	79-00-5	LCS	20.90		20	104	82 - 126		
1,1-Dichloroethane	75-34-3	LCS	19.70		20	98.4	78 - 124		
1,1-Dichloroethene	75-35-4	LCS	20.10		20	100	63 - 128		
1,1-Dichloropropene	563-58-6	LCS	20.40		20	102	76 - 126		
1,2,3-Trichlorobenzene	87-61-6	LCS	23.70		20	119	61 - 126		
1,2,3-Trichloropropane	96-18-4	LCS	20.40		20	102	75 - 132		
1,2,4-Trichlorobenzene	120-82-1	LCS	22.50		20	113	67 - 123		
1,2-Dibromo-3-chloropropane	96-12-8	LCS	20.20		20	101	59 - 133		
1,2-Dibromoethane	106-93-4	LCS	21.10		20	105	80 - 124		
1,2-Dichlorobenzene	95-50-1	LCS	20.90		20	104	82 - 118		
1,2-Dichloroethane	107-06-2	LCS	19.50		20	97.6	70 - 133		
1,2-Dichloropropane	78-87-5	LCS	19.70		20	98.6	81 - 127		
1,3-Dichlorobenzene	541-73-1	LCS	21		20	105	81 - 118		
1,3-Dichloropropane	142-28-9	LCS	20.20		20	101	82 - 126		
1,4-Dichlorobenzene	106-46-7	LCS	20.90		20	105	81 - 116		
2,2-Dichloropropane	594-20-7	LCS	18.40		20	92	64 - 129		
2-Butanone	78-93-3	LCS	104		100	104	50 - 152		
2-Hexanone	591-78-6	LCS	112		100	112	65 - 154		
4-Methyl-2-Pentanone(MIBK)	108-10-1	LCS	110		100	110	71 - 146		
Acetone	67-64-1	LCS	102		100	102	40 - 151		
Benzene	71-43-2	LCS	20		20	100	80 - 124		
Bromobenzene	108-86-1	LCS	21.30		20	107	81 - 119		
Bromochloromethane	74-97-5	LCS	21		20	105	73 - 117		
Bromodichloromethane	75-27-4	LCS	20.30		20	101	79 - 126		
Bromoform	75-25-2	LCS	20.50		20	102	70 - 123		
Bromomethane	74-83-9	LCS	21.10		20	105	45 - 148		
Carbon Tetrachloride	56-23-5	LCS	21		20	105	62 - 132		

QUALITY CONTROL SAMPLES

VOLATILE ORGANICS (cont.)

RESULTS

Compound	CAS No		Result (ug/L)	Orig. Result (ug/L)	Spk Added (ug/L)	Rec. (%)	Limits (%)	RPD Limit (%)	Qualifiers
Chlorobenzene	108-90-7	LCS	20.50		20	102	85 - 117		
Chlorodibromomethane	124-48-1	LCS	21.60		20	108	77 - 122		
Chloroethane	75-00-3	LCS	21.60		20	108	51 - 142		
Chloroform	67-66-3	LCS	20.50		20	103	78 - 122		
Chloromethane	74-87-3	LCS	21.10		20	105	38 - 156		
cis-1,2-Dichloroethene	156-59-2	LCS	20		20	99.9	78 - 125		
cis-1,3-Dichloropropene	10061-01-5	LCS	20.10		20	101	81 - 121		
Dibromomethane	74-95-3	LCS	20.10		20	101	81 - 125		
Dichlorodifluoromethane	75-71-8	LCS	24.40		20	122	17 - 166		
Diisopropyl ether	108-20-3	LCS	19.90		20	99.4	74 - 131		
Ethylbenzene	100-41-4	LCS	21		20	105	80 - 124		
Hexachlorobutadiene	87-68-3	LCS	24.30		20	121	55 - 128		
Methyl t-Butyl Ether	1634-04-4	LCS	20.60		20	103	69 - 115		
Methylene Chloride	75-09-2	LCS	19.30		20	96.7	76 - 121		
mp-Xylene	108383/106423	LCS	42.60		40	107	79 - 125		
Naphthalene	91-20-3	LCS	18.70		20	93.4	56 - 134		
o-Chlorotoluene	95-49-8	LCS	21.50		20	108	78 - 126		
o-Xylene	95-47-6	LCS	20.80		20	104	79 - 124		
p-Chlorotoluene	106-43-4	LCS	21.40		20	107	78 - 125		
p-Isopropyltoluene	99-87-6	LCS	22.80		20	114	72 - 123		
Styrene	100-42-5	LCS	22.10		20	110	79 - 123		
Tetrachloroethene	127-18-4	LCS	22.40		20	112	72 - 124		
Toluene	108-88-3	LCS	20.80		20	104	80 - 125		
Total Xylenes	1330-20-7	LCS	63.50		60	106	79 - 125		
trans-1,2-Dichloroethene	156-60-5	LCS	19.90		20	99.6	71 - 122		
trans-1,3-Dichloropropene	10061-02-6	LCS	21.20		20	106	78 - 126		
Trichloroethene	79-01-6	LCS	20.20		20	101	77 - 124		
Trichlorofluoromethane	75-69-4	LCS	21.60		20	108	38 - 123		
Vinyl Acetate	108-05-4	LCS	18		20	89.9	58 - 136		
Vinyl Chloride	75-01-4	LCS	21.70		20	109	27 - 138		

SURROGATES

Compound	CAS No		Result (ug/L)	Expected (ug/L)	Rec. (%)	Limits (%)	Qualifiers
1,2-Dichloroethane-d4	17060-07-0	LCS	29.20	30	97.4	62 - 133	
4-Bromofluorobenzene	460-00-4	LCS	31	30	103	79 - 114	
Dibromofluoromethane	1868-53-7	LCS	29.10	30	97	78 - 116	
Toluene-d8	2037-26-5	LCS	28.90	30	96.3	76 - 127	

QC Batch

QC Batch	917178	Prep Method	N/A
Date	N/A	Analysis Method	SW846 8260D
Tech.			

Associated Samples

3275168019 3275168021

QUALITY CONTROL SAMPLES

VOLATILE ORGANICS (cont.)

Method Blank 3595366 (MB) Created on 12/05/2022 11:28 For QC Batch 917178

RESULTS

Compound	CAS No		Result	Units	RDL	Qualifiers
1,1,1,2-Tetrachloroethane	630-20-6	BLK	1.0 U	ug/L	1.0	U
1,1,1-Trichloroethane	71-55-6	BLK	1.0 U	ug/L	1.0	U
1,1,2,2-Tetrachloroethane	79-34-5	BLK	1.0 U	ug/L	1.0	U
1,1,2-Trichloroethane	79-00-5	BLK	1.0 U	ug/L	1.0	U
1,1-Dichloroethane	75-34-3	BLK	1.0 U	ug/L	1.0	U
1,1-Dichloroethene	75-35-4	BLK	1.0 U	ug/L	1.0	U
1,1-Dichloropropene	563-58-6	BLK	1.0 U	ug/L	1.0	U
1,2,3-Trichlorobenzene	87-61-6	BLK	2.0 U	ug/L	2.0	U
1,2,3-Trichloropropane	96-18-4	BLK	2.0 U	ug/L	2.0	U
1,2,4-Trichlorobenzene	120-82-1	BLK	2.0 U	ug/L	2.0	U
1,2-Dibromo-3-chloropropane	96-12-8	BLK	7.0 U	ug/L	7.0	U
1,2-Dibromoethane	106-93-4	BLK	1.0 U	ug/L	1.0	U
1,2-Dichlorobenzene	95-50-1	BLK	1.0 U	ug/L	1.0	U
1,2-Dichloroethane	107-06-2	BLK	1.0 U	ug/L	1.0	U
1,2-Dichloropropane	78-87-5	BLK	1.0 U	ug/L	1.0	U
1,3-Dichlorobenzene	541-73-1	BLK	1.0 U	ug/L	1.0	U
1,3-Dichloropropane	142-28-9	BLK	1.0 U	ug/L	1.0	U
1,4-Dichlorobenzene	106-46-7	BLK	1.0 U	ug/L	1.0	U
2,2-Dichloropropane	594-20-7	BLK	1.0 U	ug/L	1.0	U
2-Butanone	78-93-3	BLK	10.0 U	ug/L	10.0	U
2-Hexanone	591-78-6	BLK	5.0 U	ug/L	5.0	U
4-Methyl-2-Pentanone(MIBK)	108-10-1	BLK	5.0 U	ug/L	5.0	U
Acetone	67-64-1	BLK	10.0 U	ug/L	10.0	U
Benzene	71-43-2	BLK	1.0 U	ug/L	1.0	U
Bromobenzene	108-86-1	BLK	1.0 U	ug/L	1.0	U
Bromochloromethane	74-97-5	BLK	1.0 U	ug/L	1.0	U
Bromodichloromethane	75-27-4	BLK	1.0 U	ug/L	1.0	U
Bromoform	75-25-2	BLK	1.0 U	ug/L	1.0	U
Bromomethane	74-83-9	BLK	1.0 U	ug/L	1.0	U
Carbon Tetrachloride	56-23-5	BLK	1.0 U	ug/L	1.0	U
Chlorobenzene	108-90-7	BLK	1.0 U	ug/L	1.0	U
Chlorodibromomethane	124-48-1	BLK	1.0 U	ug/L	1.0	U
Chloroethane	75-00-3	BLK	1.0 U	ug/L	1.0	U
Chloroform	67-66-3	BLK	1.0 U	ug/L	1.0	U
Chloromethane	74-87-3	BLK	1.0 U	ug/L	1.0	U
cis-1,2-Dichloroethene	156-59-2	BLK	1.0 U	ug/L	1.0	U
cis-1,3-Dichloropropene	10061-01-5	BLK	1.0 U	ug/L	1.0	U
Dibromomethane	74-95-3	BLK	1.0 U	ug/L	1.0	U
Dichlorodifluoromethane	75-71-8	BLK	1.0 U	ug/L	1.0	U
Diisopropyl ether	108-20-3	BLK	1.0 U	ug/L	1.0	U
Ethylbenzene	100-41-4	BLK	1.0 U	ug/L	1.0	U
Hexachlorobutadiene	87-68-3	BLK	5.0 U	ug/L	5.0	U
Methyl t-Butyl Ether	1634-04-4	BLK	1.0 U	ug/L	1.0	U
Methylene Chloride	75-09-2	BLK	1.0 U	ug/L	1.0	U
mp-Xylene	108383/106423	BLK	2.0 U	ug/L	2.0	U

QUALITY CONTROL SAMPLES

VOLATILE ORGANICS (cont.)

RESULTS

Compound	CAS No		Result	Units	RDL	Qualifiers
Naphthalene	91-20-3	BLK	2.0 U	ug/L	2.0	U
o-Chlorotoluene	95-49-8	BLK	1.0 U	ug/L	1.0	U
o-Xylene	95-47-6	BLK	1.0 U	ug/L	1.0	U
p-Chlorotoluene	106-43-4	BLK	1.0 U	ug/L	1.0	U
p-Isopropyltoluene	99-87-6	BLK	1.0 U	ug/L	1.0	U
Styrene	100-42-5	BLK	1.0 U	ug/L	1.0	U
Tetrachloroethene	127-18-4	BLK	1.0 U	ug/L	1.0	U
Toluene	108-88-3	BLK	1.0 U	ug/L	1.0	U
Total Xylenes	1330-20-7	BLK	3.0 U	ug/L	3.0	U
trans-1,2-Dichloroethene	156-60-5	BLK	1.0 U	ug/L	1.0	U
trans-1,3-Dichloropropene	10061-02-6	BLK	1.0 U	ug/L	1.0	U
Trichloroethene	79-01-6	BLK	1.0 U	ug/L	1.0	U
Trichlorofluoromethane	75-69-4	BLK	1.0 U	ug/L	1.0	U
Vinyl Acetate	108-05-4	BLK	5.0 U	ug/L	5.0	U
Vinyl Chloride	75-01-4	BLK	1.0 U	ug/L	1.0	U

SURROGATES

Compound	CAS No		Result (ug/L)	Expected (ug/L)	Rec. (%)	Limits (%)	Qualifiers
1,2-Dichloroethane-d4	17060-07-0	BLK	24.40	30	81.4	62 - 133	
4-Bromofluorobenzene	460-00-4	BLK	29.60	30	98.5	79 - 114	
Dibromofluoromethane	1868-53-7	BLK	25.90	30	86.4	78 - 116	
Toluene-d8	2037-26-5	BLK	26.60	30	88.6	76 - 127	

Lab Control Standard 3595367 (LCS) Created on 12/05/2022 11:28 For QC Batch 917178

RESULTS

Compound	CAS No		Result (ug/L)	Orig. Result (ug/L)	Spk Added (ug/L)	Rec. (%)	Limits (%)	RPD Limit (%)	Qualifiers
1,1,1,2-Tetrachloroethane	630-20-6	LCS	16.70		20	83.5	78 - 121		
1,1,1-Trichloroethane	71-55-6	LCS	18.20		20	91.1	66 - 130		
1,1,2,2-Tetrachloroethane	79-34-5	LCS	18.20		20	90.8	74 - 135		
1,1,2-Trichloroethane	79-00-5	LCS	16.70		20	83.3	82 - 126		
1,1-Dichloroethane	75-34-3	LCS	18.80		20	93.9	78 - 124		
1,1-Dichloroethene	75-35-4	LCS	20.10		20	100	63 - 128		
1,1-Dichloropropene	563-58-6	LCS	18.80		20	93.9	76 - 126		
1,2,3-Trichlorobenzene	87-61-6	LCS	14.20		20	71	61 - 126		
1,2,3-Trichloropropane	96-18-4	LCS	18.60		20	92.8	75 - 132		
1,2,4-Trichlorobenzene	120-82-1	LCS	14.60		20	72.9	67 - 123		
1,2-Dibromo-3-chloropropane	96-12-8	LCS	15.40		20	76.8	59 - 133		
1,2-Dibromoethane	106-93-4	LCS	16		20	80	80 - 124		
1,2-Dichlorobenzene	95-50-1	LCS	17.20		20	86.2	82 - 118		
1,2-Dichloroethane	107-06-2	LCS	18.80		20	93.9	70 - 133		
1,2-Dichloropropane	78-87-5	LCS	17.70		20	88.3	81 - 127		
1,3-Dichlorobenzene	541-73-1	LCS	17.10		20	85.5	81 - 118		
1,3-Dichloropropane	142-28-9	LCS	16.70		20	83.4	82 - 126		

QUALITY CONTROL SAMPLES

VOLATILE ORGANICS (cont.)

RESULTS

Compound	CAS No		Result (ug/L)	Orig. Result (ug/L)	Spk Added (ug/L)	Rec. (%)	Limits (%)	RPD Limit (%)	Qualifiers
1,4-Dichlorobenzene	106-46-7	LCS	17.60		20	88	81 - 116		
2,2-Dichloropropane	594-20-7	LCS	17.90		20	89.7	64 - 129		
2-Butanone	78-93-3	LCS	59.40		100	59.4	50 - 152		
2-Hexanone	591-78-6	LCS	76.40		100	76.4	65 - 154		
4-Methyl-2-Pentanone(MIBK)	108-10-1	LCS	86.10		100	86.1	71 - 146		
Acetone	67-64-1	LCS	78.50		100	78.5	40 - 151		
Benzene	71-43-2	LCS	20		20	100	80 - 124		
Bromobenzene	108-86-1	LCS	18		20	90.2	81 - 119		
Bromochloromethane	74-97-5	LCS	19.20		20	95.9	73 - 117		
Bromodichloromethane	75-27-4	LCS	17.20		20	86	79 - 126		
Bromoform	75-25-2	LCS	16.60		20	83.2	70 - 123		
Bromomethane	74-83-9	LCS	20.70		20	103	45 - 148		
Carbon Tetrachloride	56-23-5	LCS	20.70		20	104	62 - 132		
Chlorobenzene	108-90-7	LCS	18		20	89.9	85 - 117		
Chlorodibromomethane	124-48-1	LCS	15.50		20	77.7	77 - 122		
Chloroethane	75-00-3	LCS	19.20		20	96	51 - 142		
Chloroform	67-66-3	LCS	18.50		20	92.6	78 - 122		
Chloromethane	74-87-3	LCS	19.70		20	98.3	38 - 156		
cis-1,2-Dichloroethene	156-59-2	LCS	18.20		20	91.2	78 - 125		
cis-1,3-Dichloropropene	10061-01-5	LCS	16.50		20	82.5	81 - 121		
Dibromomethane	74-95-3	LCS	17.20		20	86.2	81 - 125		
Dichlorodifluoromethane	75-71-8	LCS	19		20	95.2	17 - 166		
Diisopropyl ether	108-20-3	LCS	18.80		20	93.9	74 - 131		
Ethylbenzene	100-41-4	LCS	17.70		20	88.3	80 - 124		
Hexachlorobutadiene	87-68-3	LCS	15.90		20	79.6	55 - 128		
Methyl t-Butyl Ether	1634-04-4	LCS	18.20		20	91	69 - 115		
Methylene Chloride	75-09-2	LCS	19		20	95.2	76 - 121		
mp-Xylene	108383/106423	LCS	36.90		40	92.3	79 - 125		
Naphthalene	91-20-3	LCS	13.30		20	66.4	56 - 134		
o-Chlorotoluene	95-49-8	LCS	18.50		20	92.7	78 - 126		
o-Xylene	95-47-6	LCS	16.90		20	84.5	79 - 124		
p-Chlorotoluene	106-43-4	LCS	18.20		20	91	78 - 125		
p-Isopropyltoluene	99-87-6	LCS	17		20	84.8	72 - 123		
Styrene	100-42-5	LCS	17.80		20	88.9	79 - 123		
Tetrachloroethene	127-18-4	LCS	17.90		20	89.3	72 - 124		
Toluene	108-88-3	LCS	17.90		20	89.6	80 - 125		
Total Xylenes	1330-20-7	LCS	53.80		60	89.7	79 - 125		
trans-1,2-Dichloroethene	156-60-5	LCS	18.90		20	94.4	71 - 122		
trans-1,3-Dichloropropene	10061-02-6	LCS	15.80		20	78.8	78 - 126		
Trichloroethene	79-01-6	LCS	19.20		20	96.1	77 - 124		
Trichlorofluoromethane	75-69-4	LCS	18.40		20	92.1	38 - 123		
Vinyl Acetate	108-05-4	LCS	12.20		20	61.2	58 - 136		
Vinyl Chloride	75-01-4	LCS	20.20		20	101	27 - 138		

QUALITY CONTROL SAMPLES

VOLATILE ORGANICS (cont.)

SURROGATES

Compound	CAS No		Result (ug/L)	Expected (ug/L)	Rec. (%)	Limits (%)	Qualifiers
1,2-Dichloroethane-d4	17060-07-0	LCS	25.30	30	84.2	62 - 133	
4-Bromofluorobenzene	460-00-4	LCS	29.70	30	99	79 - 114	
Dibromofluoromethane	1868-53-7	LCS	26.40	30	88	78 - 116	
Toluene-d8	2037-26-5	LCS	25.60	30	85.4	76 - 127	

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Lab ID	Sample ID	Preparation Method	Prep Batch	Prep Date/Time	By	Analysis Method	Anly Batch
3275168001	MW-03	SW846 3510C	912104	11/23/2022 13:25	LDC	SW846 8270E SIM	912698
		N/A	N/A	N/A		SW846 8260D	915266
3275168002	MW-27D	SW846 3510C	912104	11/23/2022 13:25	LDC	SW846 8270E SIM	912698
		N/A	N/A	N/A		SW846 8260D	915266
3275168003	MW-43	SW846 3510C	912104	11/23/2022 13:25	LDC	SW846 8270E SIM	912698
		N/A	N/A	N/A		SW846 8260D	915266
3275168004	MW-39	SW846 3510C	912104	11/23/2022 13:25	LDC	SW846 8270E SIM	912698
		N/A	N/A	N/A		SW846 8260D	915266
3275168005	MW-42	SW846 3510C	912104	11/23/2022 13:25	LDC	SW846 8270E SIM	912698
		N/A	N/A	N/A		SW846 8260D	915266
3275168006	MW-18	SW846 3510C	912104	11/23/2022 13:25	LDC	SW846 8270E SIM	912698
		N/A	N/A	N/A		SW846 8260D	915795
3275168007	MW-38R	SW846 3510C	912104	11/23/2022 13:25	LDC	SW846 8270E SIM	912698
		N/A	N/A	N/A		SW846 8260D	915795
3275168008	MW-40D	SW846 3510C	912104	11/23/2022 13:25	LDC	SW846 8270E SIM	912698
		N/A	N/A	N/A		SW846 8260D	915795
3275168009	MW-05R	SW846 3510C	912104	11/23/2022 13:25	LDC	SW846 8270E SIM	912698
		N/A	N/A	N/A		SW846 8260D	915795
3275168010	MW-44	SW846 3510C	912104	11/23/2022 13:25	LDC	SW846 8270E SIM	912698
		N/A	N/A	N/A		SW846 8260D	915795
3275168011	MW-21D	SW846 3510C	912308	11/25/2022 06:25	MXL	SW846 8270E SIM	914158
		N/A	N/A	N/A		SW846 8260D	915795
3275168012	MW-41D	SW846 3510C	912308	11/25/2022 06:25	MXL	SW846 8270E SIM	914158
		N/A	N/A	N/A		SW846 8260D	915795
3275168013	MW-09	SW846 3510C	912308	11/25/2022 06:25	MXL	SW846 8270E SIM	914158
		N/A	N/A	N/A		SW846 8260D	915795
3275168014	MW-23D	SW846 3510C	912308	11/25/2022 06:25	MXL	SW846 8270E SIM	914158
		SW846 3510C	912308	11/25/2022 06:25	MXL	SW846 8270E SIM	914227
		N/A	N/A	N/A		SW846 8260D	915795
3275168015	MW-46D	SW846 3510C	912308	11/25/2022 06:25	MXL	SW846 8270E SIM	914158
		SW846 3510C	912308	11/25/2022 06:25	MXL	SW846 8270E SIM	914227
		N/A	N/A	N/A		SW846 8260D	915795
3275168016	MW-01	SW846 3510C	912308	11/25/2022 06:25	MXL	SW846 8270E SIM	914158
		N/A	N/A	N/A		SW846 8260D	916108
3275168017	MW-01D	SW846 3510C	912308	11/25/2022 06:25	MXL	SW846 8270E SIM	914158
		N/A	N/A	N/A		SW846 8260D	916108
3275168018	MW-22D	SW846 3510C	912308	11/25/2022 06:25	MXL	SW846 8270E SIM	914158
		N/A	N/A	N/A		SW846 8260D	916108
3275168019	MW-20	SW846 3510C	912308	11/25/2022 06:25	MXL	SW846 8270E SIM	914158
		SW846 3510C	912308	11/25/2022 06:25	MXL	SW846 8270E SIM	915208
		N/A	N/A	N/A		SW846 8260D	916108
		N/A	N/A	N/A		SW846 8260D	917178
3275168020	MW-4R	SW846 3510C	912308	11/25/2022 06:25	MXL	SW846 8270E SIM	914158
		SW846 3510C	912308	11/25/2022 06:25	MXL	SW846 8270E SIM	914227
		N/A	N/A	N/A		SW846 8260D	916108
3275168021	MW-16	SW846 3510C	912308	11/25/2022 06:25	MXL	SW846 8270E SIM	914158
		SW846 3510C	912308	11/25/2022 06:25	MXL	SW846 8270E SIM	915208
		N/A	N/A	N/A		SW846 8260D	917178
		N/A	N/A	N/A		SW846 8260D	916108
3275168022	Trip Blank-A	N/A	N/A	N/A		SW846 8260D	916108
3275168023	Trip Blank-B	N/A	N/A	N/A		SW846 8260D	916108
3275168024	Trip Blank-E	N/A	N/A	N/A		SW846 8260D	916108

301 Fulling Mill Rd, Suite A
Middletown, PA 17057
P. 717-944-5541

CHAIN OF CUSTODY/ REQUEST FOR ANALYSIS

ALL SHADED AREAS MUST BE COMPLETED BY THE CLIENT / SAMPLER. INSTRUCTIONS ON THE BACK.

3275168
Logged By: CXW
PM: SJB

COC #: 1 of 3
ALS Quote #:

Client Name: WSP

Address:
13530 Dulles Technology Dr
Suite 300
Herndon VA 20171

Contact: Eric Johnson
Phone#: (703) 709-6500
Project Name/#: 31405608.010
Bill To:
Purchase Order #:

TAT [X] Normal-Standard TAT is 10-12 business days.
[ ] Rush-Subject to ALS approval and surcharges.
Date Required: Approved?
Email? [X]-Y eric.johnson@wsp.com

Receipt Information (completed by Receiving Lab)
Temp Taken By: MJE Therm ID: TH570 WO Temp (°C) 3°C
Receipt Info completed by:

Sample Description/Location (as it will appear on the lab report)	Date Collected mm/dd/yy	Time hh:mm	SDWA Sample Type (see key)	*G or C	**Matrix (See bottom of COC)	Container Type	Container Size	Preservative	VOCs	1,4-Dioxane						
						CG	AG									
						40mL	250mL									
						HCl	None									
						Unless otherwise Indicated, preservation indicates field filtration on applicable me			ANALYSES/METHOD REQUESTED							
						Enter Number of Containers Per Sample or Field Results										
1 MW-03	11/20/22	1000		G	GW	2	2									
2 MW-27D	11/20/22	1015		G	GW	2	2									
3 MW-43	11/20/22	1030		G	GW	2	2									
4 MW-39	11/20/22	1140		G	GW	2	2									
5 MW-42	11/20/22	1155		G	GW	2	1									
6 MW-18	11/20/22	1215		G	GW	2	2									
7 MW-38R	11/20/22	1220		G	GW	2	2									
8 MW-40D	11/20/22	1255		G	GW	2	2									
9 MW-05R	11/20/22	1240		G	GW	2	2									
10 MW-44	11/20/22	1410		G	GW	2	2									

Temp Taken By: MJE
WO Temp (°C) 3
Therm ID: 570
Receipt Info Completed By: DPB 11/22/22
Cooler Custody Seal Intact Y N NA
Sample Custody Seal Intact Y N NA
Received on Ice Y N NA
Cooler & Samples Intact Y N
Correct Containers Provided Y N
Sample Label/COC Agree Y N
Adequate Sample Volumes Y N
VOA Headspace Present Y N NA
Voa Trip Blank Y N NA
NJ≤ 4 Days? Y N
Rad Screen (uCi)
Courier/Tracking #:
SDWA Compliance Y N
PWSID
WV Containers 0-6°C Y N NA

WV Containers 0-6°C Y N NA
Y N NA
Y N NA
Y N NA
Y N
Y N
Y N
Y N NA
Y N NA
Y N
Y N
Deviations? NO YES
If YES, list below:
Client contact:
Date/Tech:
Rad Screen (uCi)
New Source? Y N
New Source Contact:
PWS Phone #:

SDWA Sample Type Key: D=Distribution E=Entry Point
R=Raw P=Plant C=Check S=Special A=Annual Startup

Sample/COC Remarks
No Collector
DPB
11/22/22

Contains Short Hold Testing YES NO
Internal Use: If less than 48 hours - notify lab upon receipt

Circle Sample Collector: ALS Tech / Client ID:
Comments:

Date:	Time		Relinquished By / Company Name		Received By / Company Name
11-21-22	1330	1		2 1330	ALS Evan P
11-21-22	1740	3	ALS Evan P.	4	
		5		6	
		7		8	
		9		10	

Data Deliverables: [ ] Standard Lvl 1 [ ] Standard Lvl 2 [ ] Standard Lvl 3 [ ] Standard Lvl 4 [ ] CLP-like [ ] DOD [ ] NJ RED [ ] NJ Full [ ] HSCA [ ] Landfill [ ] NJ GW [ ] _____

EDD: [ ] Excel Summary [ ] Equis [ ] Custom

Sample Disposal: Lab [ ] Special [ ]

EDDS: Format Type

State Samples Collected In: [ ] NY [ ] NJ [ ] PA [ ] WV [ ] FL [ ] other _____

* G=Grab; C=Composite **Matrix - A=Air; D=Drinking Water; GW=Groundwater; O=Oil; LW=Liquid Waste; S=Solid/Soil/Sludge; SW=Surface Water; WP=Wipe; WW=Wastewater

ALS SHIPPING ADDRESS: 301 Fulling Mill Road, Suite A, Middletown, PA 17057

301 Fulling Mill Rd, Suite A
Middletown, PA 17057
P. 717-944-5541

CHAIN OF CUSTODY/ REQUEST FOR ANALYSIS

ALL SHADED AREAS MUST BE COMPLETED BY THE CLIENT / SAMPLER. INSTRUCTIONS ON THE BACK.

COC #: 2 of 3 of
ALS Quote #:

Client Name: WSP

Address:
13530 Dulles Technology Dr
Suite 300
Herndon VA 20171

Contact: Eric Johnsen
Phone#: (703) 709-6500
Project Name/#: 31405608.010
Bill To:
Purchase Order #:
TAT [X] Normal-Standard TAT is 10-12 business days. [ ] Rush-Subject to ALS approval and surcharges.
Date Required: Approved?
Email? [X]-Y Eric.Johnsen@wsp.com

	Container Type	Container Size	Preservative
	GG	40	HCl
	AG	250	Non

Unless otherwise Indicated, preservation indicates field filtration on applicable methods

ANALYSES/METHOD REQUESTED

	Sample Description/Location (as it will appear on the lab report)	Date Collected mm/dd/yy	Time hh:mm	SDWA Sample Type (see key)	*G or C	**Matrix (See bottom of COC)	VOCs	1,4 Dioxane	Enter Number o
1	MW-21D	11/20/22	1430		G		2	2	
2	MW-41D	11/20/22	1445		G		2	2	
3	MW-09	11/20/22	1520		G		2	2	
4	MW-23D	11/20/22	1530		G		2	2	
5	MW-46D	11/20/22	1600		G		2	2	
6	MW-01	11/20/22	1610		G		2	2	
7	MW-01D	11/20/22	1620		G		2	2	
8	MW-22D	11/20/22	1630		G		2	2	
9	MW-20	11/20/22	1645		G		2	2	
10	MW-4R	11/20/22	1655		G		2	2	

Temp Taken By: MJE
WO Temp (°C): 5.0
Therm ID: 510
Receipt Info Completed By: DPB
Cooler Custody Seal Intact Y N NA
Sample Custody Seal Intact Y N NA
Received on Ice Y N
Cooler & Samples Intact Y N
Correct Containers Provided Y N
Sample Label/COC Agree Y N
Adequate Sample Volumes Y N
VOA Headspace Present Y N NA
Voa Trip Blank Y N NA
NJ≤ 4 Days? Y N
Rad Screen (uCi)
Courier/Tracking #:
SDWA Compliance Y N
PWSID
WV Containers 0-6°C Y N NA

Circle Sample Collector: ALS Tech / Client ID:

Comments:

Date:	Time		Relinquished By / Company Name		Received By / Company Name
11-21-22	1330	1	Elliott	2	1330 ALS Evan P
11-21-22	1740	3	ALS Evan P	4	
		5		6	
		7		8	
		9		10	

* G=Grab; C=Composite
**Matrix - A=Air; D=Drinking Water; GW=Groundwater; O=Oil; LW=Liquid Waste; S=Solid/Soil/Sludge; SW=Surface Water; WP=Wipe; WW=Wastewater

Receipt Information (completed by Receiving Lab)

Temp Taken By: Therm ID: WO Temp (°C)

Receipt Info completed by:_____ WV Containers 0-6°C Y N NA

Cooler Custody Seals Intact	Y	N	NA
Sample Custody Seal Intact	Y	N	NA
Received on Ice	Y	N	NA
Coolers & Samples Intact	Y	N	
Correct Containers Provided	Y	N	
Sample Label/COC Agree	Y	N	
Adequate Sample Volumes	Y	N	
VOA only: Headspace Present	Y	N	NA
VOA only: Trip Blank	Y	N	NA

Deviations? NO YES
If YES, list below:

NJ ≤ 4 days? Y N
Courier/Tracking #:_____
Client contact:
Date/Tech:

Sample(s) for Radiation testing? Y N Rad Screen (uCi)_____
Reportable SDWA Sample(s)? Y N New Source? Y N
SDWA State of Origin?_____ New Source Contact:
PWSID #_____
PWS Contact:_____ PWS Phone #:_____

SDWA Sample Type Key: D=Distribution E=Entry Point
R=Raw P=Plant C=Check S=Special A=Annual Startup

Sample/COC Remarks

No Collector
DPB
11/22/22

Contains Short Hold Testing YES NO

Internal Use: If less than 48 hours - notify lab upon receipt

Data Deliverables: [ ] Standard Lvl 1 [ ] CLP-like [ ] HSCA; [ ] Standard Lvl 2 [ ] DOD [ ] Landfill; [ ] Standard Lvl 3 [ ] NJ RED [ ] NJ GW; [ ] Standard Lvl 4 [ ] NJ Full [ ] _____

EDD: [ ] Excel Summary [ ] Equis [ ] Custom

Sample Disposal: [ ] Lab [ ] Special

EDDS: Format Type

State Samples Collected In: [ ] NY [ ] NJ [ ] PA [ ] WV [ ] FL [ ] other

301 Fulling Mill Rd, Suite A
Middletown, PA 17057
P. 717-944-5541

CHAIN OF CUSTODY/ REQUEST FOR ANALYSIS

ALL SHADED AREAS MUST BE COMPLETED BY THE CLIENT / SAMPLER. INSTRUCTIONS ON THE BACK.

COC #: 3 of 3
ALS Quote #:
of

Client Name: WSP

Address:
13530 Dulles Technology Dr
Suite 300
Herndon VA 20171

Contact: Eric Johnson
Phone#: (703) 709 6500
Project Name/#: 31401545.010
Bill To:
Purchase Order #:

TAT: [X] Normal-Standard TAT is 10-12 business days. [ ] Rush-Subject to ALS approval and surcharges.
Date Required: Approved?
Email? [X]-Y eric.johnson@wsp.com

	Container Type	Container Size	Preservative
	GG	40	HCl
	AG	250	None

Unless otherwise Indicated, preservation in

ANALYSES/METH

	Sample Description/Location (as it will appear on the lab report)	Date Collected mm/dd/yy	Time hh:mm	SDWA Sample Type (see key)	*G or C	**Matrix (See bottom of COC)	VOCs	1,4 - Dioxane	
					Enter Number of Conta				
1	MW-16	11/20/22	1705		G	GW	2	2	
2	Trip Blank-A	11/20/22	—		—	—	2	—	
3	Trip Blank-B	11/20/22	—		—	—	2	—	
4	Trip Blank-E	11/20/22	—		—	—	2	—	
5									
6									
7									
8									
9									
10									

Temp Taken By: IR/DF
WO Temp (°C)
Therm ID: 510
Receipt Info Completed By: DPB
Cooler Custody Seal Intact Y N NA
Sample Custody Seal Intact Y N NA
Received on Ice Y N NA
Cooler & Samples Intact Y N
Correct Containers Provided Y N
Sample Label/COC Agree Y N
Adequate Sample Volumes Y N
VOA Headspace Present Y N NA
Voa Trip Blank Y N NA
NJ≤ 4 Days? Y N
Rad Screen (uCi)
Courier/Tracking #:

SDWA Compliance Y N
PWSID
WV Containers 0-6°C Y N NA

Receipt Information (completed by Receiving Lab)

Temp Taken By: Therm ID: WO Temp (°C)
Receipt Info completed by: WV Containers 0-6°C Y N NA

Cooler Custody Seals Intact	Y	N	NA
Sample Custody Seal Intact	Y	N	NA
Received on Ice	Y	N	NA
Coolers & Samples Intact	Y	N	
Correct Containers Provided	Y	N	
Sample Label/COC Agree	Y	N	
Adequate Sample Volumes	Y	N	
VOA only: Headspace Present	Y	N	NA
VOA only: Trip Blank	Y	N	NA

Deviations? NO (YES)
If YES, list below:

NJ ≤ 4 days? Y N
Courier/Tracking #:
Client contact:
Date/Tech:

Sample(s) for Radiation testing? Y N
Rad Screen (uCi)
Reportable SDWA Sample(s)? Y N
New Source? Y N
SDWA State of Origin?
New Source Contact:
PWSID #
PWS Contact: PWS Phone #:

SDWA Sample Type Key: D=Distribution E=Entry Point
R=Raw P=Plant C=Check S=Special A=Annual Startup

Sample/COC Remarks
No Collector
DPB 11/22/22

Contains Short Hold Testing YES NO
Internal Use: If less than 48 hours - notify lab upon receipt

Circle Sample Collector: ALS Tech / Client ID:
Comments:

Date:	Time		Relinquished By / Company Name		Received By / Company Name
11-21-22	1330	1		2	1330 ALS Evon P
11-21-22	1740	3	ALS Evon P	4	
		5		6	
		7		8	
		9		10	

Data Deliverables: [ ] Standard Lvl 1 [ ] Standard Lvl 2 [ ] Standard Lvl 3 [ ] Standard Lvl 4 [ ] CLP-like [ ] DOD [ ] NJ RED [ ] NJ Full [ ] HSCA [ ] Landfill [ ] NJ GW [ ] _____

EDD: [ ] Excel Summary [ ] Equis [ ] Custom

Sample Disposal: [ ] Lab [ ] Special

EDDS: Format Type

State Samples Collected In: [ ] NY [ ] NJ [ ] PA [ ] WV [ ] FL [ ] other

* G=Grab; C=Composite **Matrix - A=Air; D=Drinking Water; GW=Groundwater; O=Oil; LW=Liquid Waste; S=Solid/Soil/Sludge; SW=Surface Water; WP=Wipe; WW=Wastewater

ALS SHIPPING ADDRESS: 301 Fulling Mill Road, Suite A

ENCLOSURE B – CERTIFIED LABORATORY ANALYTICAL REPORT FOR ONSITE RECOVERY WELL SAMPLES (NOVEMBER 2022)

301 Fulling Mill Road | Middletown, PA 17057 | Phone: 717-944-5541 | Fax: 717-944-1430 | www.alsglobal.com

NELAP Certifications: NJ PA010 , NY 11759 , PA 22-293 DoD ELAP: PJLA 74618
State Certifications: FL E871113 , WA C999 , MD 128 , VA 460157 , WV DW 9961-C , WV 343

Analytical Results Report For **WSP USA Inc.**

Project 31405608.010
Workorder 3275167
Report ID 211246 on 12/6/2022

Certificate of Analysis

Enclosed are the analytical results for samples received by the laboratory on Nov 21, 2022.

The ALS Environmental laboratory in Middletown, Pennsylvania is a National Environmental Laboratory Accreditation Program (NELAP) accredited laboratory and as such, certifies that all applicable test results meet the requirements of NELAP.

If you have any questions regarding this certificate of analysis, please contact Susan Scherer (Project Coordinator) at (717) 944-5541.

Analyses were performed according to our laboratory's NELAP-approved quality assurance program and any applicable state requirements. The test results meet requirements of the current NELAP standards or state requirements, where applicable. For a specific list of accredited analytes, refer to the certifications section of the ALS website at www.alsglobal.com/en/Our-Services/Life-Sciences/Environmental/Downloads.

ALS Middletown: 301 Fulling Mill Road, Middletown, PA 17057 : 717-944-5541.

Recipient(s):
Elliott Martynkiewicz - WSP USA Inc.
Eric Johnson - WSP USA INC

This page is included as part of the Analytical Report and must be retained as a permanent record thereof.

Susan Scherer

Susan Scherer *(ALS Digital Signature)*
Project Coordinator

Sample Summary

Lab ID	Sample ID	Matrix	Date Collected	Date Received	Collector	Collection Company
3275167001	RW-1S	Ground Water	11/20/2022 12:30	11/21/2022 17:40	CBC	Collected By Client
3275167002	RW-3S	Ground Water	11/20/2022 12:50	11/21/2022 17:40	CBC	Collected By Client
3275167003	RW-1D	Ground Water	11/20/2022 14:20	11/21/2022 17:40	CBC	Collected By Client
3275167004	RW-2D	Ground Water	11/20/2022 15:00	11/21/2022 17:40	CBC	Collected By Client
3275167005	RW-2S	Ground Water	11/20/2022 15:05	11/21/2022 17:40	CBC	Collected By Client

Reference

Notes

- Samples collected by ALS personnel are done so in accordance with the procedures set forth in the ALS Field Sampling Plan (20 - Field Services Sampling Plan).
- Except as qualified, Clean Water Act sample analyses are consistent with methodology requirements in 40 CFR Part 136.
- Except as qualified, Safe Drinking Water Act sample analyses are consistent with methodology requirements in 40 CFR Part 141.
- The Chain of Custody document is included as part of this report.
- All Library Search analytes should be regarded as tentative identifications based on the presumptive evidence of the mass spectra. Concentrations reported are estimated values.
- Parameters identified as "analyze immediately" require analysis within 15 minutes of collection. Any "analyze immediately" parameters not listed under the header "Field Parameters" are preformed in the laboratory and are therefore analyzed out of hold time.
- Method references listed on this report beginning with the prefix “S” followed by a method number (such as S2310B-97) refer to methods from “Standard Methods for the Examination of Water and Wastewater”.
- For microbiological analyses, the "Prepared" value is the date/time into the incubator and the "Analyzed" value is the date/time out the incubator.
- An Analysis-Prep Method Cross Reference Table is included after Analytical Results & Qualifiers section in this report.
- Unless otherwise noted, all quantitative results for soils are reported on a dry weight basis.

Standard Acronyms/Flags

J	Indicates an estimated value between the Method Detection Limit (MDL) and the Practical Quantitation Limit (PQL) for the analyte
U	Indicates that the analyte was Not Detected (ND) above the MDL
N	Indicates presumptive evidence of the presence of a compound
MDL	Method Detection Limit
PQL	Practical Quantitation Limit
RDL	Practical Quantitation Limit for this Project
ND	Not Detected - indicates that the analyte was Not Detected
Cntr	Analysis was performed using this container
RegLmt	Regulatory Limit
LCS	Laboratory Control Sample
MS	Matrix Spike
MSD	Matrix Spike Duplicate
DUP	Sample Duplicate
%Rec	Percent Recovery
RPD	Relative Percent Difference
LOD	DoD Limit of Detection
LOQ	DoD Limit of Quantitation
DL	DoD Detection Limit
I	Indicates reported value is greater than or equal to the Method Detection Limit (MDL) but less than the Report Detection Limit (RDL)
(S)	Surrogate Compound
NC	Not Calculated
*	Result outside of QC limits
#	Please reference the result in the Results Section for analyte-level flags.

Project Notations

Sample Notations

Lab ID	Sample ID

Result Notations

Notation Ref.	
1	The QC sample type LCS for method SW846 8260D was outside the control limits for the analyte Bromomethane. The % Recovery was reported as 169 and the control limits were 45 to 148.
2	The QC sample type LCS for method SW846 8260D was outside the control limits for the analyte Hexachlorobutadiene. The % Recovery was reported as 153 and the control limits were 55 to 128.

Detected Results Summary

Client Sample ID	RW-1S	Collected	11/20/2022 12:30
Lab Sample ID	3275167001	Lab Receipt	11/21/2022 17:40

Compound	Result	Units	RDL	Method	Flag
SEMIVOLATILE SIM					
1,4-Dioxane	158	ug/L	5.0	SW846 8270E SIM	#
VOLATILE ORGANICS					
1,1,1-Trichloroethane	49.0	ug/L	1.0	SW846 8260D	#
1,1-Dichloroethane	150	ug/L	1.0	SW846 8260D	#
1,1-Dichloroethene	523	ug/L	10.0	SW846 8260D	#
1,2-Dichloroethane	2.3	ug/L	1.0	SW846 8260D	#
Chloroethane	20.4	ug/L	1.0	SW846 8260D	#
cis-1,2-Dichloroethene	2.9	ug/L	1.0	SW846 8260D	#
Trichloroethene	3.7	ug/L	1.0	SW846 8260D	#
Vinyl Chloride	5.0	ug/L	1.0	SW846 8260D	#

Detected Results Summary

Client Sample ID	RW-3S	Collected	11/20/2022 12:50
Lab Sample ID	3275167002	Lab Receipt	11/21/2022 17:40

Compound	Result	Units	RDL	Method	Flag
SEMIVOLATILE SIM					
1,4-Dioxane	5.4	ug/L	0.10	SW846 8270E SIM	#
VOLATILE ORGANICS					
1,1,1-Trichloroethane	4.6	ug/L	1.0	SW846 8260D	#
1,1-Dichloroethane	2.1	ug/L	1.0	SW846 8260D	#
1,1-Dichloroethene	2.2	ug/L	1.0	SW846 8260D	#
Acetone	10.3	ug/L	10.0	SW846 8260D	#

Detected Results Summary

Client Sample ID	RW-1D	Collected	11/20/2022 14:20
Lab Sample ID	3275167003	Lab Receipt	11/21/2022 17:40

Compound	Result	Units	RDL	Method	Flag
SEMIVOLATILE SIM					
1,4-Dioxane	40.2	ug/L	0.40	SW846 8270E SIM	#
VOLATILE ORGANICS					
1,1,1-Trichloroethane	8.1	ug/L	1.0	SW846 8260D	#
1,1-Dichloroethane	68.6	ug/L	1.0	SW846 8260D	#
1,1-Dichloroethene	237	ug/L	10.0	SW846 8260D	#
1,2-Dichloroethane	1.9	ug/L	1.0	SW846 8260D	#
Chloroethane	8.2	ug/L	1.0	SW846 8260D	#
cis-1,2-Dichloroethene	2.8	ug/L	1.0	SW846 8260D	#
Trichloroethene	1.0	ug/L	1.0	SW846 8260D	#

Detected Results Summary

Client Sample ID	RW-2D	Collected	11/20/2022 15:00
Lab Sample ID	3275167004	Lab Receipt	11/21/2022 17:40

Compound	Result	Units	RDL	Method	Flag
SEMIVOLATILE SIM					
1,4-Dioxane	40.0	ug/L	0.10	SW846 8270E SIM	#
VOLATILE ORGANICS					
1,1,1-Trichloroethane	4.2	ug/L	1.0	SW846 8260D	#
1,1-Dichloroethane	20.4	ug/L	1.0	SW846 8260D	#
1,1-Dichloroethene	123	ug/L	1.0	SW846 8260D	#
1,2-Dichloroethane	1.2	ug/L	1.0	SW846 8260D	#

Detected Results Summary

Client Sample ID	RW-2S	Collected	11/20/2022 15:05
Lab Sample ID	3275167005	Lab Receipt	11/21/2022 17:40

Compound	Result	Units	RDL	Method	Flag
SEMIVOLATILE SIM					
1,4-Dioxane	172	ug/L	2.0	SW846 8270E SIM	#
VOLATILE ORGANICS					
1,1,1-Trichloroethane	238	ug/L	10.0	SW846 8260D	#
1,1-Dichloroethane	71.2	ug/L	1.0	SW846 8260D	#
1,1-Dichloroethene	393	ug/L	10.0	SW846 8260D	#
Chloroethane	1.7	ug/L	1.0	SW846 8260D	#
Methylene Chloride	2.3	ug/L	1.0	SW846 8260D	#
Trichloroethene	4.4	ug/L	1.0	SW846 8260D	#

Results

Client Sample ID	RW-1S	Collected	11/20/2022 12:30
Lab Sample ID	3275167001	Lab Receipt	11/21/2022 17:40

SEMIVOLATILE SIM

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
1,4-Dioxane	158		ug/L	5.0	SW846 8270E SIM	50	12/01/2022 12:40	S7M	C

SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
2-Methylnapthalene-d10	7297-45-2	71.1%	29 – 112	11/24/2022 07:09	
2-Methylnapthalene-d10	7297-45-2	0*%	29 – 112	12/01/2022 12:40	
Fluoranthene-d10	93951-69-0	92.7%	45 – 130	11/24/2022 07:09	
Fluoranthene-d10	93951-69-0	0*%	45 – 130	12/01/2022 12:40	

VOLATILE ORGANICS

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
1,1,1,2-Tetrachloroethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/01/2022 16:35	TMP	A
1,1,1-Trichloroethane	49.0		ug/L	1.0	SW846 8260D	1	12/01/2022 16:35	TMP	A
1,1,2,2-Tetrachloroethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/01/2022 16:35	TMP	A
1,1,2-Trichloroethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/01/2022 16:35	TMP	A
1,1-Dichloroethane	150		ug/L	1.0	SW846 8260D	1	12/01/2022 16:35	TMP	A
1,1-Dichloroethene	523		ug/L	10.0	SW846 8260D	10	12/05/2022 00:51	PDK	B
1,1-Dichloropropene	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/01/2022 16:35	TMP	A
1,2,3-Trichlorobenzene	2.0 U	U	ug/L	2.0	SW846 8260D	1	12/01/2022 16:35	TMP	A
1,2,3-Trichloropropane	2.0 U	U	ug/L	2.0	SW846 8260D	1	12/01/2022 16:35	TMP	A
1,2,4-Trichlorobenzene	2.0 U	U	ug/L	2.0	SW846 8260D	1	12/01/2022 16:35	TMP	A
1,2-Dibromo-3-chloropropane	7.0 U	U	ug/L	7.0	SW846 8260D	1	12/01/2022 16:35	TMP	A
1,2-Dibromoethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/01/2022 16:35	TMP	A
1,2-Dichlorobenzene	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/01/2022 16:35	TMP	A
1,2-Dichloroethane	2.3		ug/L	1.0	SW846 8260D	1	12/01/2022 16:35	TMP	A
1,2-Dichloropropane	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/01/2022 16:35	TMP	A
1,3-Dichlorobenzene	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/01/2022 16:35	TMP	A
1,3-Dichloropropane	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/01/2022 16:35	TMP	A
1,4-Dichlorobenzene	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/01/2022 16:35	TMP	A
2,2-Dichloropropane	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/01/2022 16:35	TMP	A
2-Butanone	10.0 U	U	ug/L	10.0	SW846 8260D	1	12/01/2022 16:35	TMP	A
2-Hexanone	5.0 U	U	ug/L	5.0	SW846 8260D	1	12/01/2022 16:35	TMP	A
4-Methyl-2-Pentanone(MIBK)	5.0 U	U	ug/L	5.0	SW846 8260D	1	12/01/2022 16:35	TMP	A
Acetone	10.0 U	U	ug/L	10.0	SW846 8260D	1	12/01/2022 16:35	TMP	A
Benzene	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/01/2022 16:35	TMP	A
Bromobenzene	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/01/2022 16:35	TMP	A
Bromochloromethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/01/2022 16:35	TMP	A
Bromodichloromethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/01/2022 16:35	TMP	A
Bromoform	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/01/2022 16:35	TMP	A
Bromomethane	1.0 U	U,1	ug/L	1.0	SW846 8260D	1	12/01/2022 16:35	TMP	A
Carbon Tetrachloride	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/01/2022 16:35	TMP	A
Chlorobenzene	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/01/2022 16:35	TMP	A
Chlorodibromomethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/01/2022 16:35	TMP	A
Chloroethane	20.4		ug/L	1.0	SW846 8260D	1	12/01/2022 16:35	TMP	A

Results

Client Sample ID	RW-1S	Collected	11/20/2022 12:30
Lab Sample ID	3275167001	Lab Receipt	11/21/2022 17:40

VOLATILE ORGANICS (cont.)

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
Chloroform	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/01/2022 16:35	TMP	A
Chloromethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/01/2022 16:35	TMP	A
cis-1,2-Dichloroethene	2.9		ug/L	1.0	SW846 8260D	1	12/01/2022 16:35	TMP	A
cis-1,3-Dichloropropene	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/01/2022 16:35	TMP	A
Dibromomethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/01/2022 16:35	TMP	A
Dichlorodifluoromethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/01/2022 16:35	TMP	A
Diisopropyl ether	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/01/2022 16:35	TMP	A
Ethylbenzene	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/01/2022 16:35	TMP	A
Hexachlorobutadiene	5.0 U	U,2	ug/L	5.0	SW846 8260D	1	12/01/2022 16:35	TMP	A
Methyl t-Butyl Ether	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/01/2022 16:35	TMP	A
Methylene Chloride	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/01/2022 16:35	TMP	A
mp-Xylene	2.0 U	U	ug/L	2.0	SW846 8260D	1	12/01/2022 16:35	TMP	A
Naphthalene	2.0 U	U	ug/L	2.0	SW846 8260D	1	12/01/2022 16:35	TMP	A
o-Chlorotoluene	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/01/2022 16:35	TMP	A
o-Xylene	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/01/2022 16:35	TMP	A
p-Chlorotoluene	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/01/2022 16:35	TMP	A
p-Isopropyltoluene	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/01/2022 16:35	TMP	A
Styrene	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/01/2022 16:35	TMP	A
Tetrachloroethene	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/01/2022 16:35	TMP	A
Toluene	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/01/2022 16:35	TMP	A
Total Xylenes	3.0 U	U	ug/L	3.0	SW846 8260D	1	12/01/2022 16:35	TMP	A
trans-1,2-Dichloroethene	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/01/2022 16:35	TMP	A
trans-1,3-Dichloropropene	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/01/2022 16:35	TMP	A
Trichloroethene	3.7		ug/L	1.0	SW846 8260D	1	12/01/2022 16:35	TMP	A
Trichlorofluoromethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/01/2022 16:35	TMP	A
Vinyl Acetate	5.0 U	U	ug/L	5.0	SW846 8260D	1	12/01/2022 16:35	TMP	A
Vinyl Chloride	5.0		ug/L	1.0	SW846 8260D	1	12/01/2022 16:35	TMP	A

SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
1,2-Dichloroethane-d4	17060-07-0	95.4%	62 – 133	12/01/2022 16:35	
1,2-Dichloroethane-d4	17060-07-0	100%	62 – 133	12/05/2022 00:51	
4-Bromofluorobenzene	460-00-4	107%	79 – 114	12/01/2022 16:35	
4-Bromofluorobenzene	460-00-4	103%	79 – 114	12/05/2022 00:51	
Dibromofluoromethane	1868-53-7	98.1%	78 – 116	12/01/2022 16:35	
Dibromofluoromethane	1868-53-7	102%	78 – 116	12/05/2022 00:51	
Toluene-d8	2037-26-5	101%	76 – 127	12/01/2022 16:35	
Toluene-d8	2037-26-5	95.7%	76 – 127	12/05/2022 00:51	

Results

Client Sample ID	RW-3S	Collected	11/20/2022 12:50
Lab Sample ID	3275167002	Lab Receipt	11/21/2022 17:40

SEMIVOLATILE SIM

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
1,4-Dioxane	5.4		ug/L	0.10	SW846 8270E SIM	1	11/24/2022 07:35	M1O	C

SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
2-Methylnapthalene-d10	7297-45-2	80.9%	29 – 112	11/24/2022 07:35	
Fluoranthene-d10	93951-69-0	102%	45 – 130	11/24/2022 07:35	

VOLATILE ORGANICS

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
1,1,1,2-Tetrachloroethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/01/2022 16:58	TMP	A
1,1,1-Trichloroethane	4.6		ug/L	1.0	SW846 8260D	1	12/01/2022 16:58	TMP	A
1,1,2,2-Tetrachloroethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/01/2022 16:58	TMP	A
1,1,2-Trichloroethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/01/2022 16:58	TMP	A
1,1-Dichloroethane	2.1		ug/L	1.0	SW846 8260D	1	12/01/2022 16:58	TMP	A
1,1-Dichloroethene	2.2		ug/L	1.0	SW846 8260D	1	12/01/2022 16:58	TMP	A
1,1-Dichloropropene	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/01/2022 16:58	TMP	A
1,2,3-Trichlorobenzene	2.0 U	U	ug/L	2.0	SW846 8260D	1	12/01/2022 16:58	TMP	A
1,2,3-Trichloropropane	2.0 U	U	ug/L	2.0	SW846 8260D	1	12/01/2022 16:58	TMP	A
1,2,4-Trichlorobenzene	2.0 U	U	ug/L	2.0	SW846 8260D	1	12/01/2022 16:58	TMP	A
1,2-Dibromo-3-chloropropane	7.0 U	U	ug/L	7.0	SW846 8260D	1	12/01/2022 16:58	TMP	A
1,2-Dibromoethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/01/2022 16:58	TMP	A
1,2-Dichlorobenzene	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/01/2022 16:58	TMP	A
1,2-Dichloroethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/01/2022 16:58	TMP	A
1,2-Dichloropropane	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/01/2022 16:58	TMP	A
1,3-Dichlorobenzene	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/01/2022 16:58	TMP	A
1,3-Dichloropropane	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/01/2022 16:58	TMP	A
1,4-Dichlorobenzene	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/01/2022 16:58	TMP	A
2,2-Dichloropropane	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/01/2022 16:58	TMP	A
2-Butanone	10.0 U	U	ug/L	10.0	SW846 8260D	1	12/01/2022 16:58	TMP	A
2-Hexanone	5.0 U	U	ug/L	5.0	SW846 8260D	1	12/01/2022 16:58	TMP	A
4-Methyl-2-Pentanone(MIBK)	5.0 U	U	ug/L	5.0	SW846 8260D	1	12/01/2022 16:58	TMP	A
Acetone	10.3		ug/L	10.0	SW846 8260D	1	12/01/2022 16:58	TMP	A
Benzene	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/01/2022 16:58	TMP	A
Bromobenzene	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/01/2022 16:58	TMP	A
Bromochloromethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/01/2022 16:58	TMP	A
Bromodichloromethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/01/2022 16:58	TMP	A
Bromoform	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/01/2022 16:58	TMP	A
Bromomethane	1.0 U	U,1	ug/L	1.0	SW846 8260D	1	12/01/2022 16:58	TMP	A
Carbon Tetrachloride	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/01/2022 16:58	TMP	A
Chlorobenzene	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/01/2022 16:58	TMP	A
Chlorodibromomethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/01/2022 16:58	TMP	A
Chloroethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/01/2022 16:58	TMP	A
Chloroform	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/01/2022 16:58	TMP	A
Chloromethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/01/2022 16:58	TMP	A

Results

Client Sample ID	RW-3S	Collected	11/20/2022 12:50
Lab Sample ID	3275167002	Lab Receipt	11/21/2022 17:40

VOLATILE ORGANICS (cont.)

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
cis-1,2-Dichloroethene	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/01/2022 16:58	TMP	A
cis-1,3-Dichloropropene	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/01/2022 16:58	TMP	A
Dibromomethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/01/2022 16:58	TMP	A
Dichlorodifluoromethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/01/2022 16:58	TMP	A
Diisopropyl ether	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/01/2022 16:58	TMP	A
Ethylbenzene	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/01/2022 16:58	TMP	A
Hexachlorobutadiene	5.0 U	U,2	ug/L	5.0	SW846 8260D	1	12/01/2022 16:58	TMP	A
Methyl t-Butyl Ether	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/01/2022 16:58	TMP	A
Methylene Chloride	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/01/2022 16:58	TMP	A
mp-Xylene	2.0 U	U	ug/L	2.0	SW846 8260D	1	12/01/2022 16:58	TMP	A
Naphthalene	2.0 U	U	ug/L	2.0	SW846 8260D	1	12/01/2022 16:58	TMP	A
o-Chlorotoluene	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/01/2022 16:58	TMP	A
o-Xylene	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/01/2022 16:58	TMP	A
p-Chlorotoluene	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/01/2022 16:58	TMP	A
p-Isopropyltoluene	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/01/2022 16:58	TMP	A
Styrene	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/01/2022 16:58	TMP	A
Tetrachloroethene	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/01/2022 16:58	TMP	A
Toluene	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/01/2022 16:58	TMP	A
Total Xylenes	3.0 U	U	ug/L	3.0	SW846 8260D	1	12/01/2022 16:58	TMP	A
trans-1,2-Dichloroethene	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/01/2022 16:58	TMP	A
trans-1,3-Dichloropropene	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/01/2022 16:58	TMP	A
Trichloroethene	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/01/2022 16:58	TMP	A
Trichlorofluoromethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/01/2022 16:58	TMP	A
Vinyl Acetate	5.0 U	U	ug/L	5.0	SW846 8260D	1	12/01/2022 16:58	TMP	A
Vinyl Chloride	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/01/2022 16:58	TMP	A

SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
1,2-Dichloroethane-d4	17060-07-0	91.9%	62 – 133	12/01/2022 16:58	
4-Bromofluorobenzene	460-00-4	110%	79 – 114	12/01/2022 16:58	
Dibromofluoromethane	1868-53-7	95.4%	78 – 116	12/01/2022 16:58	
Toluene-d8	2037-26-5	101%	76 – 127	12/01/2022 16:58	

Results

Client Sample ID	RW-1D	Collected	11/20/2022 14:20
Lab Sample ID	3275167003	Lab Receipt	11/21/2022 17:40

SEMIVOLATILE SIM

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
1,4-Dioxane	40.2		ug/L	0.40	SW846 8270E SIM	4	11/30/2022 02:45	M1O	C

SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
2-Methylnapthalene-d10	7297-45-2	76.6%	29 – 112	11/24/2022 08:02	
2-Methylnapthalene-d10	7297-45-2	83.7%	29 – 112	11/30/2022 02:45	
Fluoranthene-d10	93951-69-0	97.7%	45 – 130	11/24/2022 08:02	
Fluoranthene-d10	93951-69-0	96.5%	45 – 130	11/30/2022 02:45	

VOLATILE ORGANICS

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
1,1,1,2-Tetrachloroethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/01/2022 17:20	TMP	A
1,1,1-Trichloroethane	8.1		ug/L	1.0	SW846 8260D	1	12/01/2022 17:20	TMP	A
1,1,2,2-Tetrachloroethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/01/2022 17:20	TMP	A
1,1,2-Trichloroethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/01/2022 17:20	TMP	A
1,1-Dichloroethane	68.6		ug/L	1.0	SW846 8260D	1	12/01/2022 17:20	TMP	A
1,1-Dichloroethene	237		ug/L	10.0	SW846 8260D	10	12/05/2022 01:37	PDK	B
1,1-Dichloropropene	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/01/2022 17:20	TMP	A
1,2,3-Trichlorobenzene	2.0 U	U	ug/L	2.0	SW846 8260D	1	12/01/2022 17:20	TMP	A
1,2,3-Trichloropropane	2.0 U	U	ug/L	2.0	SW846 8260D	1	12/01/2022 17:20	TMP	A
1,2,4-Trichlorobenzene	2.0 U	U	ug/L	2.0	SW846 8260D	1	12/01/2022 17:20	TMP	A
1,2-Dibromo-3-chloropropane	7.0 U	U	ug/L	7.0	SW846 8260D	1	12/01/2022 17:20	TMP	A
1,2-Dibromoethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/01/2022 17:20	TMP	A
1,2-Dichlorobenzene	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/01/2022 17:20	TMP	A
1,2-Dichloroethane	1.9		ug/L	1.0	SW846 8260D	1	12/01/2022 17:20	TMP	A
1,2-Dichloropropane	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/01/2022 17:20	TMP	A
1,3-Dichlorobenzene	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/01/2022 17:20	TMP	A
1,3-Dichloropropane	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/01/2022 17:20	TMP	A
1,4-Dichlorobenzene	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/01/2022 17:20	TMP	A
2,2-Dichloropropane	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/01/2022 17:20	TMP	A
2-Butanone	10.0 U	U	ug/L	10.0	SW846 8260D	1	12/01/2022 17:20	TMP	A
2-Hexanone	5.0 U	U	ug/L	5.0	SW846 8260D	1	12/01/2022 17:20	TMP	A
4-Methyl-2-Pentanone(MIBK)	5.0 U	U	ug/L	5.0	SW846 8260D	1	12/01/2022 17:20	TMP	A
Acetone	10.0 U	U	ug/L	10.0	SW846 8260D	1	12/01/2022 17:20	TMP	A
Benzene	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/01/2022 17:20	TMP	A
Bromobenzene	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/01/2022 17:20	TMP	A
Bromochloromethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/01/2022 17:20	TMP	A
Bromodichloromethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/01/2022 17:20	TMP	A
Bromoform	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/01/2022 17:20	TMP	A
Bromomethane	1.0 U	U,1	ug/L	1.0	SW846 8260D	1	12/01/2022 17:20	TMP	A
Carbon Tetrachloride	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/01/2022 17:20	TMP	A
Chlorobenzene	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/01/2022 17:20	TMP	A
Chlorodibromomethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/01/2022 17:20	TMP	A
Chloroethane	8.2		ug/L	1.0	SW846 8260D	1	12/01/2022 17:20	TMP	A

Results

Client Sample ID	RW-1D	Collected	11/20/2022 14:20
Lab Sample ID	3275167003	Lab Receipt	11/21/2022 17:40

VOLATILE ORGANICS (cont.)

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
Chloroform	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/01/2022 17:20	TMP	A
Chloromethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/01/2022 17:20	TMP	A
cis-1,2-Dichloroethene	2.8		ug/L	1.0	SW846 8260D	1	12/01/2022 17:20	TMP	A
cis-1,3-Dichloropropene	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/01/2022 17:20	TMP	A
Dibromomethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/01/2022 17:20	TMP	A
Dichlorodifluoromethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/01/2022 17:20	TMP	A
Diisopropyl ether	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/01/2022 17:20	TMP	A
Ethylbenzene	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/01/2022 17:20	TMP	A
Hexachlorobutadiene	5.0 U	U,2	ug/L	5.0	SW846 8260D	1	12/01/2022 17:20	TMP	A
Methyl t-Butyl Ether	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/01/2022 17:20	TMP	A
Methylene Chloride	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/01/2022 17:20	TMP	A
mp-Xylene	2.0 U	U	ug/L	2.0	SW846 8260D	1	12/01/2022 17:20	TMP	A
Naphthalene	2.0 U	U	ug/L	2.0	SW846 8260D	1	12/01/2022 17:20	TMP	A
o-Chlorotoluene	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/01/2022 17:20	TMP	A
o-Xylene	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/01/2022 17:20	TMP	A
p-Chlorotoluene	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/01/2022 17:20	TMP	A
p-Isopropyltoluene	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/01/2022 17:20	TMP	A
Styrene	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/01/2022 17:20	TMP	A
Tetrachloroethene	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/01/2022 17:20	TMP	A
Toluene	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/01/2022 17:20	TMP	A
Total Xylenes	3.0 U	U	ug/L	3.0	SW846 8260D	1	12/01/2022 17:20	TMP	A
trans-1,2-Dichloroethene	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/01/2022 17:20	TMP	A
trans-1,3-Dichloropropene	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/01/2022 17:20	TMP	A
Trichloroethene	1.0		ug/L	1.0	SW846 8260D	1	12/01/2022 17:20	TMP	A
Trichlorofluoromethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/01/2022 17:20	TMP	A
Vinyl Acetate	5.0 U	U	ug/L	5.0	SW846 8260D	1	12/01/2022 17:20	TMP	A
Vinyl Chloride	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/01/2022 17:20	TMP	A

SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
1,2-Dichloroethane-d4	17060-07-0	95.1%	62 – 133	12/01/2022 17:20	
1,2-Dichloroethane-d4	17060-07-0	97.9%	62 – 133	12/05/2022 01:37	
4-Bromofluorobenzene	460-00-4	107%	79 – 114	12/01/2022 17:20	
4-Bromofluorobenzene	460-00-4	104%	79 – 114	12/05/2022 01:37	
Dibromofluoromethane	1868-53-7	98.2%	78 – 116	12/01/2022 17:20	
Dibromofluoromethane	1868-53-7	101%	78 – 116	12/05/2022 01:37	
Toluene-d8	2037-26-5	100%	76 – 127	12/01/2022 17:20	
Toluene-d8	2037-26-5	95%	76 – 127	12/05/2022 01:37	

Results

Client Sample ID	RW-2D	Collected	11/20/2022 15:00
Lab Sample ID	3275167004	Lab Receipt	11/21/2022 17:40

SEMIVOLATILE SIM

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
1,4-Dioxane	40.0		ug/L	0.10	SW846 8270E SIM	1	11/29/2022 00:02	M1O	C

SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
2-Methylnapthalene-d10	7297-45-2	79%	29 – 112	11/29/2022 00:02	
Fluoranthene-d10	93951-69-0	104%	45 – 130	11/29/2022 00:02	

VOLATILE ORGANICS

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
1,1,1,2-Tetrachloroethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/01/2022 17:43	TMP	A
1,1,1-Trichloroethane	4.2		ug/L	1.0	SW846 8260D	1	12/01/2022 17:43	TMP	A
1,1,2,2-Tetrachloroethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/01/2022 17:43	TMP	A
1,1,2-Trichloroethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/01/2022 17:43	TMP	A
1,1-Dichloroethane	20.4		ug/L	1.0	SW846 8260D	1	12/01/2022 17:43	TMP	A
1,1-Dichloroethene	123		ug/L	1.0	SW846 8260D	1	12/01/2022 17:43	TMP	A
1,1-Dichloropropene	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/01/2022 17:43	TMP	A
1,2,3-Trichlorobenzene	2.0 U	U	ug/L	2.0	SW846 8260D	1	12/01/2022 17:43	TMP	A
1,2,3-Trichloropropane	2.0 U	U	ug/L	2.0	SW846 8260D	1	12/01/2022 17:43	TMP	A
1,2,4-Trichlorobenzene	2.0 U	U	ug/L	2.0	SW846 8260D	1	12/01/2022 17:43	TMP	A
1,2-Dibromo-3-chloropropane	7.0 U	U	ug/L	7.0	SW846 8260D	1	12/01/2022 17:43	TMP	A
1,2-Dibromoethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/01/2022 17:43	TMP	A
1,2-Dichlorobenzene	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/01/2022 17:43	TMP	A
1,2-Dichloroethane	1.2		ug/L	1.0	SW846 8260D	1	12/01/2022 17:43	TMP	A
1,2-Dichloropropane	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/01/2022 17:43	TMP	A
1,3-Dichlorobenzene	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/01/2022 17:43	TMP	A
1,3-Dichloropropane	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/01/2022 17:43	TMP	A
1,4-Dichlorobenzene	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/01/2022 17:43	TMP	A
2,2-Dichloropropane	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/01/2022 17:43	TMP	A
2-Butanone	10.0 U	U	ug/L	10.0	SW846 8260D	1	12/01/2022 17:43	TMP	A
2-Hexanone	5.0 U	U	ug/L	5.0	SW846 8260D	1	12/01/2022 17:43	TMP	A
4-Methyl-2-Pentanone(MIBK)	5.0 U	U	ug/L	5.0	SW846 8260D	1	12/01/2022 17:43	TMP	A
Acetone	10.0 U	U	ug/L	10.0	SW846 8260D	1	12/01/2022 17:43	TMP	A
Benzene	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/01/2022 17:43	TMP	A
Bromobenzene	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/01/2022 17:43	TMP	A
Bromochloromethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/01/2022 17:43	TMP	A
Bromodichloromethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/01/2022 17:43	TMP	A
Bromoform	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/01/2022 17:43	TMP	A
Bromomethane	1.0 U	U,1	ug/L	1.0	SW846 8260D	1	12/01/2022 17:43	TMP	A
Carbon Tetrachloride	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/01/2022 17:43	TMP	A
Chlorobenzene	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/01/2022 17:43	TMP	A
Chlorodibromomethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/01/2022 17:43	TMP	A
Chloroethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/01/2022 17:43	TMP	A
Chloroform	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/01/2022 17:43	TMP	A
Chloromethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/01/2022 17:43	TMP	A

Results

Client Sample ID	RW-2D	Collected	11/20/2022 15:00
Lab Sample ID	3275167004	Lab Receipt	11/21/2022 17:40

VOLATILE ORGANICS (cont.)

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
cis-1,2-Dichloroethene	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/01/2022 17:43	TMP	A
cis-1,3-Dichloropropene	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/01/2022 17:43	TMP	A
Dibromomethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/01/2022 17:43	TMP	A
Dichlorodifluoromethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/01/2022 17:43	TMP	A
Diisopropyl ether	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/01/2022 17:43	TMP	A
Ethylbenzene	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/01/2022 17:43	TMP	A
Hexachlorobutadiene	5.0 U	U,2	ug/L	5.0	SW846 8260D	1	12/01/2022 17:43	TMP	A
Methyl t-Butyl Ether	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/01/2022 17:43	TMP	A
Methylene Chloride	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/01/2022 17:43	TMP	A
mp-Xylene	2.0 U	U	ug/L	2.0	SW846 8260D	1	12/01/2022 17:43	TMP	A
Naphthalene	2.0 U	U	ug/L	2.0	SW846 8260D	1	12/01/2022 17:43	TMP	A
o-Chlorotoluene	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/01/2022 17:43	TMP	A
o-Xylene	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/01/2022 17:43	TMP	A
p-Chlorotoluene	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/01/2022 17:43	TMP	A
p-Isopropyltoluene	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/01/2022 17:43	TMP	A
Styrene	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/01/2022 17:43	TMP	A
Tetrachloroethene	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/01/2022 17:43	TMP	A
Toluene	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/01/2022 17:43	TMP	A
Total Xylenes	3.0 U	U	ug/L	3.0	SW846 8260D	1	12/01/2022 17:43	TMP	A
trans-1,2-Dichloroethene	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/01/2022 17:43	TMP	A
trans-1,3-Dichloropropene	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/01/2022 17:43	TMP	A
Trichloroethene	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/01/2022 17:43	TMP	A
Trichlorofluoromethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/01/2022 17:43	TMP	A
Vinyl Acetate	5.0 U	U	ug/L	5.0	SW846 8260D	1	12/01/2022 17:43	TMP	A
Vinyl Chloride	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/01/2022 17:43	TMP	A

SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
1,2-Dichloroethane-d4	17060-07-0	93.3%	62 – 133	12/01/2022 17:43	
4-Bromofluorobenzene	460-00-4	107%	79 – 114	12/01/2022 17:43	
Dibromofluoromethane	1868-53-7	98.4%	78 – 116	12/01/2022 17:43	
Toluene-d8	2037-26-5	102%	76 – 127	12/01/2022 17:43	

Results

Client Sample ID	RW-2S	Collected	11/20/2022 15:05
Lab Sample ID	3275167005	Lab Receipt	11/21/2022 17:40

SEMIVOLATILE SIM

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
1,4-Dioxane	172		ug/L	2.0	SW846 8270E SIM	20	12/01/2022 10:53	S7M	C

SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
2-Methylnapthalene-d10	7297-45-2	0*%	29 – 112	12/01/2022 10:53	
2-Methylnapthalene-d10	7297-45-2	75.6%	29 – 112	11/29/2022 00:29	
Fluoranthene-d10	93951-69-0	0*%	45 – 130	12/01/2022 10:53	
Fluoranthene-d10	93951-69-0	106%	45 – 130	11/29/2022 00:29	

VOLATILE ORGANICS

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
1,1,1,2-Tetrachloroethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/01/2022 18:06	TMP	A
1,1,1-Trichloroethane	238		ug/L	10.0	SW846 8260D	10	12/05/2022 01:14	PDK	B
1,1,2,2-Tetrachloroethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/01/2022 18:06	TMP	A
1,1,2-Trichloroethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/01/2022 18:06	TMP	A
1,1-Dichloroethane	71.2		ug/L	1.0	SW846 8260D	1	12/01/2022 18:06	TMP	A
1,1-Dichloroethene	393		ug/L	10.0	SW846 8260D	10	12/05/2022 01:14	PDK	B
1,1-Dichloropropene	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/01/2022 18:06	TMP	A
1,2,3-Trichlorobenzene	2.0 U	U	ug/L	2.0	SW846 8260D	1	12/01/2022 18:06	TMP	A
1,2,3-Trichloropropane	2.0 U	U	ug/L	2.0	SW846 8260D	1	12/01/2022 18:06	TMP	A
1,2,4-Trichlorobenzene	2.0 U	U	ug/L	2.0	SW846 8260D	1	12/01/2022 18:06	TMP	A
1,2-Dibromo-3-chloropropane	7.0 U	U	ug/L	7.0	SW846 8260D	1	12/01/2022 18:06	TMP	A
1,2-Dibromoethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/01/2022 18:06	TMP	A
1,2-Dichlorobenzene	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/01/2022 18:06	TMP	A
1,2-Dichloroethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/01/2022 18:06	TMP	A
1,2-Dichloropropane	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/01/2022 18:06	TMP	A
1,3-Dichlorobenzene	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/01/2022 18:06	TMP	A
1,3-Dichloropropane	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/01/2022 18:06	TMP	A
1,4-Dichlorobenzene	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/01/2022 18:06	TMP	A
2,2-Dichloropropane	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/01/2022 18:06	TMP	A
2-Butanone	10.0 U	U	ug/L	10.0	SW846 8260D	1	12/01/2022 18:06	TMP	A
2-Hexanone	5.0 U	U	ug/L	5.0	SW846 8260D	1	12/01/2022 18:06	TMP	A
4-Methyl-2-Pentanone(MIBK)	5.0 U	U	ug/L	5.0	SW846 8260D	1	12/01/2022 18:06	TMP	A
Acetone	10.0 U	U	ug/L	10.0	SW846 8260D	1	12/01/2022 18:06	TMP	A
Benzene	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/01/2022 18:06	TMP	A
Bromobenzene	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/01/2022 18:06	TMP	A
Bromochloromethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/01/2022 18:06	TMP	A
Bromodichloromethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/01/2022 18:06	TMP	A
Bromoform	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/01/2022 18:06	TMP	A
Bromomethane	1.0 U	U,1	ug/L	1.0	SW846 8260D	1	12/01/2022 18:06	TMP	A
Carbon Tetrachloride	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/01/2022 18:06	TMP	A
Chlorobenzene	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/01/2022 18:06	TMP	A
Chlorodibromomethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/01/2022 18:06	TMP	A
Chloroethane	1.7		ug/L	1.0	SW846 8260D	1	12/01/2022 18:06	TMP	A

Results

Client Sample ID	RW-2S	Collected	11/20/2022 15:05
Lab Sample ID	3275167005	Lab Receipt	11/21/2022 17:40

VOLATILE ORGANICS (cont.)

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
Chloroform	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/01/2022 18:06	TMP	A
Chloromethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/01/2022 18:06	TMP	A
cis-1,2-Dichloroethene	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/01/2022 18:06	TMP	A
cis-1,3-Dichloropropene	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/01/2022 18:06	TMP	A
Dibromomethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/01/2022 18:06	TMP	A
Dichlorodifluoromethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/01/2022 18:06	TMP	A
Diisopropyl ether	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/01/2022 18:06	TMP	A
Ethylbenzene	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/01/2022 18:06	TMP	A
Hexachlorobutadiene	5.0 U	U,2	ug/L	5.0	SW846 8260D	1	12/01/2022 18:06	TMP	A
Methyl t-Butyl Ether	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/01/2022 18:06	TMP	A
Methylene Chloride	2.3		ug/L	1.0	SW846 8260D	1	12/01/2022 18:06	TMP	A
mp-Xylene	2.0 U	U	ug/L	2.0	SW846 8260D	1	12/01/2022 18:06	TMP	A
Naphthalene	2.0 U	U	ug/L	2.0	SW846 8260D	1	12/01/2022 18:06	TMP	A
o-Chlorotoluene	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/01/2022 18:06	TMP	A
o-Xylene	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/01/2022 18:06	TMP	A
p-Chlorotoluene	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/01/2022 18:06	TMP	A
p-Isopropyltoluene	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/01/2022 18:06	TMP	A
Styrene	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/01/2022 18:06	TMP	A
Tetrachloroethene	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/01/2022 18:06	TMP	A
Toluene	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/01/2022 18:06	TMP	A
Total Xylenes	3.0 U	U	ug/L	3.0	SW846 8260D	1	12/01/2022 18:06	TMP	A
trans-1,2-Dichloroethene	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/01/2022 18:06	TMP	A
trans-1,3-Dichloropropene	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/01/2022 18:06	TMP	A
Trichloroethene	4.4		ug/L	1.0	SW846 8260D	1	12/01/2022 18:06	TMP	A
Trichlorofluoromethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/01/2022 18:06	TMP	A
Vinyl Acetate	5.0 U	U	ug/L	5.0	SW846 8260D	1	12/01/2022 18:06	TMP	A
Vinyl Chloride	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/01/2022 18:06	TMP	A

SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
1,2-Dichloroethane-d4	17060-07-0	94.3%	62 – 133	12/01/2022 18:06	
1,2-Dichloroethane-d4	17060-07-0	96.9%	62 – 133	12/05/2022 01:14	
4-Bromofluorobenzene	460-00-4	112%	79 – 114	12/01/2022 18:06	
4-Bromofluorobenzene	460-00-4	104%	79 – 114	12/05/2022 01:14	
Dibromofluoromethane	1868-53-7	98.7%	78 – 116	12/01/2022 18:06	
Dibromofluoromethane	1868-53-7	101%	78 – 116	12/05/2022 01:14	
Toluene-d8	2037-26-5	101%	76 – 127	12/01/2022 18:06	
Toluene-d8	2037-26-5	94.1%	76 – 127	12/05/2022 01:14	

Sample - Method Cross Reference Table

Lab ID	Sample ID	Analysis Method	Preparation Method	Leachate Method
3275167001	RW-1S	SW846 8270E SIM	SW846 3510C	
		SW846 8260D	N/A	
		SW846 8260D	N/A	
3275167002	RW-3S	SW846 8270E SIM	SW846 3510C	
		SW846 8260D	N/A	
3275167003	RW-1D	SW846 8270E SIM	SW846 3510C	
		SW846 8260D	N/A	
		SW846 8260D	N/A	
3275167004	RW-2D	SW846 8270E SIM	SW846 3510C	
		SW846 8260D	N/A	
3275167005	RW-2S	SW846 8270E SIM	SW846 3510C	
		SW846 8260D	N/A	
		SW846 8260D	N/A	

QUALITY CONTROL SAMPLES

SEMIVOLATILE SIM

QC Batch

QC Batch	912104	Prep Method	SW846 3510C
Date	11/23/2022 13:25	Analysis Method	SW846 8270E SIM
Tech.	LDC		

Associated Samples

3275167001 3275167002 3275167003

Duplicate

3590700 (DUP) 3274995002 (non-Project Sample) For QC Batch 912104

****NOTE - The Original Result and Duplicate Result shown below are raw results and are only used for the purpose of calculating Sample Duplicate percent recoveries. This result is not a final value and cannot be used as such.

RESULTS

Compound	CAS No		Result (ug/L)	Orig. Result (ug/L)			Qualifiers
1,4-Dioxane	123-91-1	DUP	0	0	RPD 0	(Max-30)	U

SURROGATES

Compound	CAS No		Result (ug/L)	Expected (ug/L)	Rec. (%)	Limits (%)	Qualifiers
2-Methylnapthalene-d10	7297-45-2	DUP	0.68	1	68.3	29 - 112	
Fluoranthene-d10	93951-69-0	DUP	0.90	1	90.1	45 - 130	

Matrix Spike

3590701 (MS) 3275168010 (non-Project Sample) For QC Batch 912104

****NOTE - The Original Result shown below is a raw result and is only used for the purpose of calculating Matrix Spike percent recoveries. This result is not a final value and cannot be used as such.

RESULTS

Compound	CAS No		Result (ug/L)	Orig. Result (ug/L)	Spk Added (ug/L)	Rec. (%)	Limits (%)	RPD Limit (%)	Qualifiers
1,4-Dioxane	123-91-1	MS	5.40	4.20	1.30	97.6*	22 - 75		

SURROGATES

Compound	CAS No		Result (ug/L)	Expected (ug/L)	Rec. (%)	Limits (%)	Qualifiers
2-Methylnapthalene-d10	7297-45-2	MS	1	1.30	78.5	29 - 112	
Fluoranthene-d10	93951-69-0	MS	1.20	1.30	90.3	45 - 130	

Method Blank

3590698 (MB) Created on 11/22/2022 14:43 For QC Batch 912104

RESULTS

Compound	CAS No		Result	Units	RDL	Qualifiers
1,4-Dioxane	123-91-1	BLK	0.10 U	ug/L	0.10	U

QUALITY CONTROL SAMPLES

SEMIVOLATILE SIM (cont.)

SURROGATES

Compound	CAS No		Result (ug/L)	Expected (ug/L)	Rec. (%)	Limits (%)	Qualifiers
2-Methylnapthalene-d10	7297-45-2	BLK	0.69	1	68.9	29 - 112	
Fluoranthene-d10	93951-69-0	BLK	0.94	1	93.6	45 - 130	

Lab Control Standard 3590699 (LCS) Created on 11/22/2022 14:43 For QC Batch 912104

RESULTS

Compound	CAS No		Result (ug/L)	Orig. Result (ug/L)	Spk Added (ug/L)	Rec. (%)	Limits (%)	RPD Limit (%)	Qualifiers
1,4-Dioxane	123-91-1	LCS	0.45		1	45.2	22 - 75		

SURROGATES

Compound	CAS No		Result (ug/L)	Expected (ug/L)	Rec. (%)	Limits (%)	Qualifiers
2-Methylnapthalene-d10	7297-45-2	LCS	0.70	1	70	29 - 112	
Fluoranthene-d10	93951-69-0	LCS	0.98	1	98.5	45 - 130	

QC Batch

QC Batch	912308	Prep Method	SW846 3510C
Date	11/25/2022 06:25	Analysis Method	SW846 8270E SIM
Tech.	MXL		

Associated Samples

3275167004 3275167005

Matrix Spike 3591159 (MS) 3275168012 (non-Project Sample) For QC Batch 912308

****NOTE - The Original Result shown below is a raw result and is only used for the purpose of calculating Matrix Spike percent recoveries. This result is not a final value and cannot be used as such.

RESULTS

Compound	CAS No		Result (ug/L)	Orig. Result (ug/L)	Spk Added (ug/L)	Rec. (%)	Limits (%)	RPD Limit (%)	Qualifiers
1,4-Dioxane	123-91-1	MS	1.30	1.10	1	14.2*	22 - 75		

SURROGATES

Compound	CAS No		Result (ug/L)	Expected (ug/L)	Rec. (%)	Limits (%)	Qualifiers
2-Methylnapthalene-d10	7297-45-2	MS	0.79	1	78.8	29 - 112	
Fluoranthene-d10	93951-69-0	MS	0.97	1	97.3	45 - 130	

Duplicate 3591160 (DUP) 3275168014 (non-Project Sample) For QC Batch 912308

****NOTE - The Original Result and Duplicate Result shown below are raw results and are only used for the purpose of calculating Sample Duplicate percent recoveries. This result is not a final value and cannot be used as such.

QUALITY CONTROL SAMPLES

SEMIVOLATILE SIM (cont.)

RESULTS

Compound	CAS No		Result (ug/L)	Orig. Result (ug/L)			Qualifiers
1,4-Dioxane	123-91-1	DUP	62.8599	59.6334	RPD	5.27 (Max-30)	

SURROGATES

Compound	CAS No		Result (ug/L)	Expected (ug/L)	Rec. (%)	Limits (%)	Qualifiers
2-Methylnapthalene-d10	7297-45-2	DUP	0.72	1	71.7	29 - 112	
2-Methylnapthalene-d10	7297-45-2	DUP	0	1	0*	29 - 112	
Fluoranthene-d10	93951-69-0	DUP	0.87	1	86.8	45 - 130	
Fluoranthene-d10	93951-69-0	DUP	0	1	0*	45 - 130	

Method Blank 3591157 (MB) Created on 11/23/2022 08:33 For QC Batch 912308

RESULTS

Compound	CAS No		Result	Units	RDL	Qualifiers
1,4-Dioxane	123-91-1	BLK	0.10 U	ug/L	0.10	U

SURROGATES

Compound	CAS No		Result (ug/L)	Expected (ug/L)	Rec. (%)	Limits (%)	Qualifiers
2-Methylnapthalene-d10	7297-45-2	BLK	0.75	1	75.4	29 - 112	
Fluoranthene-d10	93951-69-0	BLK	1.10	1	108	45 - 130	

Lab Control Standard 3591158 (LCS) Created on 11/23/2022 08:33 For QC Batch 912308

RESULTS

Compound	CAS No		Result (ug/L)	Orig. Result (ug/L)	Spk Added (ug/L)	Rec. (%)	Limits (%)	RPD Limit (%)	Qualifiers
1,4-Dioxane	123-91-1	LCS	0.55		1	55.3	22 - 75		

SURROGATES

Compound	CAS No		Result (ug/L)	Expected (ug/L)	Rec. (%)	Limits (%)	Qualifiers
2-Methylnapthalene-d10	7297-45-2	LCS	0.78	1	78.2	29 - 112	
Fluoranthene-d10	93951-69-0	LCS	0.99	1	99	45 - 130	

QUALITY CONTROL SAMPLES

VOLATILE ORGANICS

QC Batch

QC Batch	915266	Prep Method	N/A
Date	N/A	Analysis Method	SW846 8260D
Tech.			

Associated Samples

3275167001 3275167002 3275167004 3275167003 3275167005

Matrix Spike 3594359 (MS) 3275168002 (non-Project Sample) For QC Batch 915266

****NOTE - The Original Result shown below is a raw result and is only used for the purpose of calculating Matrix Spike percent recoveries. This result is not a final value and cannot be used as such.

Matrix Spike Duplicate 3594360 (MSD) 3275168002 (non-Project Sample) For QC Batch 915266

RESULTS

Compound	CAS No		Result (ug/L)	Orig. Result (ug/L)	Spk Added (ug/L)	Rec. (%)	Limits (%)	RPD Limit (%)	Qualifiers
1,1,1,2-Tetrachloroethane	630-20-6	MS	19.70	0	20	98.6	78 - 121		
1,1,1,2-Tetrachloroethane	630-20-6	MSD	22.30	0	20	112	78 - 121	RPD 12.50 (Max-16)	
1,1,1-Trichloroethane	71-55-6	MS	21.50	0	20	107	66 - 130		
1,1,1-Trichloroethane	71-55-6	MSD	23.70	0	20	119	66 - 130	RPD 9.96 (Max-20)	
1,1,2,2-Tetrachloroethane	79-34-5	MS	16.50	0	20	82.3	74 - 135		
1,1,2,2-Tetrachloroethane	79-34-5	MSD	21.50	0	20	108	74 - 135	RPD 26.80* (Max-16)	
1,1,2-Trichloroethane	79-00-5	MS	17.80	0	20	89.2	82 - 126		
1,1,2-Trichloroethane	79-00-5	MSD	21.30	0	20	106	82 - 126	RPD 17.60* (Max-15)	
1,1-Dichloroethane	75-34-3	MS	20.80	0	20	104	78 - 124		
1,1-Dichloroethane	75-34-3	MSD	22.80	0	20	114	78 - 124	RPD 9.09 (Max-15)	
1,1-Dichloroethene	75-35-4	MS	22.20	0	20	111	63 - 128		
1,1-Dichloroethene	75-35-4	MSD	24	0	20	120	63 - 128	RPD 7.75 (Max-21)	
1,1-Dichloropropene	563-58-6	MS	22.30	0	20	112	76 - 126		
1,1-Dichloropropene	563-58-6	MSD	24.40	0	20	122	76 - 126	RPD 8.71 (Max-16)	
1,2,3-Trichlorobenzene	87-61-6	MS	9.60	0	20	48.2*	61 - 126		
1,2,3-Trichlorobenzene	87-61-6	MSD	19.20	0	20	95.8	61 - 126	RPD 66.20* (Max-36)	
1,2,3-Trichloropropane	96-18-4	MS	16.50	0	20	82.5	75 - 132		
1,2,3-Trichloropropane	96-18-4	MSD	21.90	0	20	110	75 - 132	RPD 28.20* (Max-19)	
1,2,4-Trichlorobenzene	120-82-1	MS	13.50	0	20	67.4	67 - 123		
1,2,4-Trichlorobenzene	120-82-1	MSD	19.60	0	20	97.9	67 - 123	RPD 36.90* (Max-22)	
1,2-Dibromo-3-chloropropane	96-12-8	MS	12.20	0	20	61.2	59 - 133		
1,2-Dibromo-3-chloropropane	96-12-8	MSD	18.80	0	20	94.2	59 - 133	RPD 42.40* (Max-26)	
1,2-Dibromoethane	106-93-4	MS	17.40	0	20	87.2	80 - 124		
1,2-Dibromoethane	106-93-4	MSD	21.30	0	20	106	80 - 124	RPD 19.70* (Max-19)	
1,2-Dichlorobenzene	95-50-1	MS	17.90	0	20	89.7	82 - 118		
1,2-Dichlorobenzene	95-50-1	MSD	21.30	0	20	106	82 - 118	RPD 17.10* (Max-15)	
1,2-Dichloroethane	107-06-2	MS	18.80	0	20	94.2	70 - 133		
1,2-Dichloroethane	107-06-2	MSD	21.90	0	20	109	70 - 133	RPD 15 (Max-19)	
1,2-Dichloropropane	78-87-5	MS	20.10	0	20	100	81 - 127		
1,2-Dichloropropane	78-87-5	MSD	22.90	0	20	114	81 - 127	RPD 13.10 (Max-15)	
1,3-Dichlorobenzene	541-73-1	MS	19.50	0	20	97.3	81 - 118		
1,3-Dichlorobenzene	541-73-1	MSD	22.70	0	20	113	81 - 118	RPD 15.20 (Max-16)	
1,3-Dichloropropane	142-28-9	MS	17.50	0	20	87.4	82 - 126		
1,3-Dichloropropane	142-28-9	MSD	20.70	0	20	103	82 - 126	RPD 16.70* (Max-15)	
1,4-Dichlorobenzene	106-46-7	MS	19.90	0	20	99.7	81 - 116		

QUALITY CONTROL SAMPLES

VOLATILE ORGANICS (cont.)

RESULTS

Compound	CAS No		Result (ug/L)	Orig. Result (ug/L)	Spk Added (ug/L)	Rec. (%)	Limits (%)	RPD Limit (%)	Qualifiers
1,4-Dichlorobenzene	106-46-7	MSD	22.90	0	20	114	81 - 116	RPD 13.60 (Max-15)	
2,2-Dichloropropane	594-20-7	MS	22.70	0	20	114	64 - 129		
2,2-Dichloropropane	594-20-7	MSD	24.60	0	20	123	64 - 129	RPD 7.92 (Max-18)	
2-Butanone	78-93-3	MS	50.30	0	100	50.3	50 - 152		
2-Butanone	78-93-3	MSD	85.80	0	100	85.8	50 - 152	RPD 52.20* (Max-16)	
2-Hexanone	591-78-6	MS	63.20	0	100	63.2*	65 - 154		
2-Hexanone	591-78-6	MSD	101	0	100	101	65 - 154	RPD 46.30* (Max-17)	
4-Methyl-2-Pentanone(MIBK)	108-10-1	MS	75.80	0	100	75.8	71 - 146		
4-Methyl-2-Pentanone(MIBK)	108-10-1	MSD	113	0	100	113	71 - 146	RPD 39.30* (Max-16)	
Acetone	67-64-1	MS	54.50	0	100	54.5	40 - 151		
Acetone	67-64-1	MSD	97.30	0	100	97.3	40 - 151	RPD 56.40* (Max-40)	
Benzene	71-43-2	MS	21.20	0	20	106	80 - 124		
Benzene	71-43-2	MSD	23.20	0	20	116	80 - 124	RPD 9.20 (Max-26)	
Bromobenzene	108-86-1	MS	20.70	0	20	103	81 - 119		
Bromobenzene	108-86-1	MSD	23.10	0	20	116	81 - 119	RPD 11.20 (Max-17)	
Bromochloromethane	74-97-5	MS	20.60	0	20	103	73 - 117		
Bromochloromethane	74-97-5	MSD	23.40	0	20	117	73 - 117	RPD 12.40 (Max-19)	
Bromodichloromethane	75-27-4	MS	19.70	0	20	98.6	79 - 126		
Bromodichloromethane	75-27-4	MSD	22.80	0	20	114	79 - 126	RPD 14.60 (Max-16)	
Bromoform	75-25-2	MS	17.10	0	20	85.7	70 - 123		
Bromoform	75-25-2	MSD	21.20	0	20	106	70 - 123	RPD 21.20* (Max-16)	
Bromomethane	74-83-9	MS	47.20	0.62	20	233*	45 - 148		
Bromomethane	74-83-9	MSD	40.10	0.62	20	197*	45 - 148	RPD 16.20 (Max-26)	
Carbon Tetrachloride	56-23-5	MS	22.30	0	20	112	62 - 132		
Carbon Tetrachloride	56-23-5	MSD	27.90	0	20	140*	62 - 132	RPD 22.20* (Max-17)	
Chlorobenzene	108-90-7	MS	19.70	0	20	98.4	85 - 117		
Chlorobenzene	108-90-7	MSD	22.10	0	20	110	85 - 117	RPD 11.50 (Max-15)	
Chlorodibromomethane	124-48-1	MS	18	0	20	90.2	77 - 122		
Chlorodibromomethane	124-48-1	MSD	21.40	0	20	107	77 - 122	RPD 17.10* (Max-15)	
Chloroethane	75-00-3	MS	21.50	0	20	107	51 - 142		
Chloroethane	75-00-3	MSD	22	0	20	110	51 - 142	RPD 2.64 (Max-24)	
Chloroform	67-66-3	MS	19.70	0	20	98.7	78 - 122		
Chloroform	67-66-3	MSD	22.10	0	20	111	78 - 122	RPD 11.40 (Max-16)	
Chloromethane	74-87-3	MS	21.10	0	20	105	38 - 156		
Chloromethane	74-87-3	MSD	22.10	0	20	110	38 - 156	RPD 4.62 (Max-27)	
cis-1,2-Dichloroethene	156-59-2	MS	21.20	0	20	106	78 - 125		
cis-1,2-Dichloroethene	156-59-2	MSD	23.20	0	20	116	78 - 125	RPD 9.20 (Max-21)	
cis-1,3-Dichloropropene	10061-01-5	MS	18.60	0	20	93.1	81 - 121		
cis-1,3-Dichloropropene	10061-01-5	MSD	21.20	0	20	106	81 - 121	RPD 13.10 (Max-16)	
Dibromomethane	74-95-3	MS	18.40	0	20	91.9	81 - 125		
Dibromomethane	74-95-3	MSD	21.80	0	20	109	81 - 125	RPD 17.10* (Max-16)	
Dichlorodifluoromethane	75-71-8	MS	24.90	0	20	124	17 - 166		
Dichlorodifluoromethane	75-71-8	MSD	26.40	0	20	132	17 - 166	RPD 6 (Max-24)	
Diisopropyl ether	108-20-3	MS	19.60	0	20	98.2	74 - 131		
Diisopropyl ether	108-20-3	MSD	22.70	0	20	114	74 - 131	RPD 14.70 (Max-15)	
Ethylbenzene	100-41-4	MS	20.90	0	20	105	80 - 124		
Ethylbenzene	100-41-4	MSD	23.40	0	20	117	80 - 124	RPD 11 (Max-19)	
Hexachlorobutadiene	87-68-3	MS	28.50	0	20	142*	55 - 128		
Hexachlorobutadiene	87-68-3	MSD	30.60	0	20	153*	55 - 128	RPD 7.09 (Max-35)	

QUALITY CONTROL SAMPLES

VOLATILE ORGANICS (cont.)

RESULTS

Compound	CAS No		Result (ug/L)	Orig. Result (ug/L)	Spk Added (ug/L)	Rec. (%)	Limits (%)	RPD Limit (%)	Qualifiers
Methyl t-Butyl Ether	1634-04-4	MS	17.90	0.43	20	87.3	69 - 115		
Methyl t-Butyl Ether	1634-04-4	MSD	22.60	0.43	20	111	69 - 115	RPD 23.20* (Max-20)	
Methylene Chloride	75-09-2	MS	19.90	0	20	99.5	76 - 121		
Methylene Chloride	75-09-2	MSD	22.20	0	20	111	76 - 121	RPD 11 (Max-17)	
mp-Xylene	108383/106423	MS	42.60	0	40	106	79 - 125		
mp-Xylene	108383/106423	MSD	48	0	40	120	79 - 125	RPD 12 (Max-21)	
Naphthalene	91-20-3	MS	8.40	0	20	41.9*	56 - 134		
Naphthalene	91-20-3	MSD	17.50	0	20	87.6	56 - 134	RPD 70.50* (Max-40)	
o-Chlorotoluene	95-49-8	MS	21.50	0	20	108	78 - 126		
o-Chlorotoluene	95-49-8	MSD	24	0	20	120	78 - 126	RPD 11.10 (Max-17)	
o-Xylene	95-47-6	MS	19.70	0	20	98.4	79 - 124		
o-Xylene	95-47-6	MSD	22.30	0	20	111	79 - 124	RPD 12.50 (Max-19)	
p-Chlorotoluene	106-43-4	MS	21.70	0	20	109	78 - 125		
p-Chlorotoluene	106-43-4	MSD	24.50	0	20	122	78 - 125	RPD 12 (Max-16)	
p-Isopropyltoluene	99-87-6	MS	21.80	0	20	109	72 - 123		
p-Isopropyltoluene	99-87-6	MSD	25	0	20	125*	72 - 123	RPD 14 (Max-17)	
Styrene	100-42-5	MS	21.90	0	20	110	79 - 123		
Styrene	100-42-5	MSD	24.40	0	20	122	79 - 123	RPD 10.60 (Max-16)	
Tetrachloroethene	127-18-4	MS	19.50	0	20	97.4	72 - 124		
Tetrachloroethene	127-18-4	MSD	21.30	0	20	107	72 - 124	RPD 9.17 (Max-38)	
Toluene	108-88-3	MS	21.10	0	20	105	80 - 125		
Toluene	108-88-3	MSD	23	0	20	115	80 - 125	RPD 8.92 (Max-20)	
Total Xylenes	1330-20-7	MS	62.20	0	60	104	79 - 125		
Total Xylenes	1330-20-7	MSD	70.30	0	60	117	79 - 125	RPD 12.20 (Max-35)	
trans-1,2-Dichloroethene	156-60-5	MS	21.50	0	20	108	71 - 122		
trans-1,2-Dichloroethene	156-60-5	MSD	23.10	0	20	115	71 - 122	RPD 7.01 (Max-22)	
trans-1,3-Dichloropropene	10061-02-6	MS	18	0	20	90.1	78 - 126		
trans-1,3-Dichloropropene	10061-02-6	MSD	21.90	0	20	109	78 - 126	RPD 19.20* (Max-18)	
Trichloroethene	79-01-6	MS	20	0	20	100	77 - 124		
Trichloroethene	79-01-6	MSD	22.50	0	20	112	77 - 124	RPD 11.50 (Max-18)	
Trichlorofluoromethane	75-69-4	MS	21.80	0	20	109	38 - 123		
Trichlorofluoromethane	75-69-4	MSD	23.70	0	20	118	38 - 123	RPD 8.16 (Max-23)	
Vinyl Acetate	108-05-4	MS	16.50	0	20	82.4	58 - 136		
Vinyl Acetate	108-05-4	MSD	20.50	0	20	103	58 - 136	RPD 21.90* (Max-17)	
Vinyl Chloride	75-01-4	MS	23.30	0	20	117	27 - 138		
Vinyl Chloride	75-01-4	MSD	24	0	20	120	27 - 138	RPD 2.72 (Max-40)	

SURROGATES

Compound	CAS No		Result (ug/L)	Expected (ug/L)	Rec. (%)	Limits (%)	Qualifiers
1,2-Dichloroethane-d4	17060-07-0	MS	27.30	30	91	62 - 133	
1,2-Dichloroethane-d4	17060-07-0	MSD	28.20	30	93.8	62 - 133	
4-Bromofluorobenzene	460-00-4	MS	32.40	30	108	79 - 114	
4-Bromofluorobenzene	460-00-4	MSD	31.10	30	104	79 - 114	
Dibromofluoromethane	1868-53-7	MS	29.20	30	97.3	78 - 116	
Dibromofluoromethane	1868-53-7	MSD	29	30	96.8	78 - 116	
Toluene-d8	2037-26-5	MS	29.30	30	97.7	76 - 127	
Toluene-d8	2037-26-5	MSD	28.80	30	96.1	76 - 127	

QUALITY CONTROL SAMPLES

VOLATILE ORGANICS (cont.)

Method Blank 3594113 (MB) Created on 12/01/2022 10:53 For QC Batch 915266

RESULTS

Compound	CAS No		Result	Units	RDL	Qualifiers
1,1,1,2-Tetrachloroethane	630-20-6	BLK	1.0 U	ug/L	1.0	U
1,1,1-Trichloroethane	71-55-6	BLK	1.0 U	ug/L	1.0	U
1,1,2,2-Tetrachloroethane	79-34-5	BLK	1.0 U	ug/L	1.0	U
1,1,2-Trichloroethane	79-00-5	BLK	1.0 U	ug/L	1.0	U
1,1-Dichloroethane	75-34-3	BLK	1.0 U	ug/L	1.0	U
1,1-Dichloroethene	75-35-4	BLK	1.0 U	ug/L	1.0	U
1,1-Dichloropropene	563-58-6	BLK	1.0 U	ug/L	1.0	U
1,2,3-Trichlorobenzene	87-61-6	BLK	2.0 U	ug/L	2.0	U
1,2,3-Trichloropropane	96-18-4	BLK	2.0 U	ug/L	2.0	U
1,2,4-Trichlorobenzene	120-82-1	BLK	2.0 U	ug/L	2.0	U
1,2-Dibromo-3-chloropropane	96-12-8	BLK	7.0 U	ug/L	7.0	U
1,2-Dibromoethane	106-93-4	BLK	1.0 U	ug/L	1.0	U
1,2-Dichlorobenzene	95-50-1	BLK	1.0 U	ug/L	1.0	U
1,2-Dichloroethane	107-06-2	BLK	1.0 U	ug/L	1.0	U
1,2-Dichloropropane	78-87-5	BLK	1.0 U	ug/L	1.0	U
1,3-Dichlorobenzene	541-73-1	BLK	1.0 U	ug/L	1.0	U
1,3-Dichloropropane	142-28-9	BLK	1.0 U	ug/L	1.0	U
1,4-Dichlorobenzene	106-46-7	BLK	1.0 U	ug/L	1.0	U
2,2-Dichloropropane	594-20-7	BLK	1.0 U	ug/L	1.0	U
2-Butanone	78-93-3	BLK	10.0 U	ug/L	10.0	U
2-Hexanone	591-78-6	BLK	5.0 U	ug/L	5.0	U
4-Methyl-2-Pentanone(MIBK)	108-10-1	BLK	5.0 U	ug/L	5.0	U
Acetone	67-64-1	BLK	10.0 U	ug/L	10.0	U
Benzene	71-43-2	BLK	1.0 U	ug/L	1.0	U
Bromobenzene	108-86-1	BLK	1.0 U	ug/L	1.0	U
Bromochloromethane	74-97-5	BLK	1.0 U	ug/L	1.0	U
Bromodichloromethane	75-27-4	BLK	1.0 U	ug/L	1.0	U
Bromoform	75-25-2	BLK	1.0 U	ug/L	1.0	U
Bromomethane	74-83-9	BLK	1.0 U	ug/L	1.0	U
Carbon Tetrachloride	56-23-5	BLK	1.0 U	ug/L	1.0	U
Chlorobenzene	108-90-7	BLK	1.0 U	ug/L	1.0	U
Chlorodibromomethane	124-48-1	BLK	1.0 U	ug/L	1.0	U
Chloroethane	75-00-3	BLK	1.0 U	ug/L	1.0	U
Chloroform	67-66-3	BLK	1.0 U	ug/L	1.0	U
Chloromethane	74-87-3	BLK	1.0 U	ug/L	1.0	U
cis-1,2-Dichloroethene	156-59-2	BLK	1.0 U	ug/L	1.0	U
cis-1,3-Dichloropropene	10061-01-5	BLK	1.0 U	ug/L	1.0	U
Dibromomethane	74-95-3	BLK	1.0 U	ug/L	1.0	U
Dichlorodifluoromethane	75-71-8	BLK	1.0 U	ug/L	1.0	U
Diisopropyl ether	108-20-3	BLK	1.0 U	ug/L	1.0	U
Ethylbenzene	100-41-4	BLK	1.0 U	ug/L	1.0	U
Hexachlorobutadiene	87-68-3	BLK	5.0 U	ug/L	5.0	U
Methyl t-Butyl Ether	1634-04-4	BLK	1.0 U	ug/L	1.0	U
Methylene Chloride	75-09-2	BLK	1.0 U	ug/L	1.0	U
mp-Xylene	108383/106423	BLK	2.0 U	ug/L	2.0	U

QUALITY CONTROL SAMPLES

VOLATILE ORGANICS (cont.)

RESULTS

Compound	CAS No		Result	Units	RDL	Qualifiers
Naphthalene	91-20-3	BLK	2.0 U	ug/L	2.0	U
o-Chlorotoluene	95-49-8	BLK	1.0 U	ug/L	1.0	U
o-Xylene	95-47-6	BLK	1.0 U	ug/L	1.0	U
p-Chlorotoluene	106-43-4	BLK	1.0 U	ug/L	1.0	U
p-Isopropyltoluene	99-87-6	BLK	1.0 U	ug/L	1.0	U
Styrene	100-42-5	BLK	1.0 U	ug/L	1.0	U
Tetrachloroethene	127-18-4	BLK	1.0 U	ug/L	1.0	U
Toluene	108-88-3	BLK	1.0 U	ug/L	1.0	U
Total Xylenes	1330-20-7	BLK	3.0 U	ug/L	3.0	U
trans-1,2-Dichloroethene	156-60-5	BLK	1.0 U	ug/L	1.0	U
trans-1,3-Dichloropropene	10061-02-6	BLK	1.0 U	ug/L	1.0	U
Trichloroethene	79-01-6	BLK	1.0 U	ug/L	1.0	U
Trichlorofluoromethane	75-69-4	BLK	1.0 U	ug/L	1.0	U
Vinyl Acetate	108-05-4	BLK	5.0 U	ug/L	5.0	U
Vinyl Chloride	75-01-4	BLK	1.0 U	ug/L	1.0	U

SURROGATES

Compound	CAS No		Result (ug/L)	Expected (ug/L)	Rec. (%)	Limits (%)	Qualifiers
1,2-Dichloroethane-d4	17060-07-0	BLK	27.90	30	93	62 - 133	
4-Bromofluorobenzene	460-00-4	BLK	31.40	30	105	79 - 114	
Dibromofluoromethane	1868-53-7	BLK	29	30	96.6	78 - 116	
Toluene-d8	2037-26-5	BLK	29.90	30	99.6	76 - 127	

Lab Control Standard 3594114 (LCS) Created on 12/01/2022 10:53 For QC Batch 915266

RESULTS

Compound	CAS No		Result (ug/L)	Orig. Result (ug/L)	Spk Added (ug/L)	Rec. (%)	Limits (%)	RPD Limit (%)	Qualifiers
1,1,1,2-Tetrachloroethane	630-20-6	LCS	21.10		20	105	78 - 121		
1,1,1-Trichloroethane	71-55-6	LCS	21.30		20	106	66 - 130		
1,1,2,2-Tetrachloroethane	79-34-5	LCS	20.50		20	103	74 - 135		
1,1,2-Trichloroethane	79-00-5	LCS	20.80		20	104	82 - 126		
1,1-Dichloroethane	75-34-3	LCS	21		20	105	78 - 124		
1,1-Dichloroethene	75-35-4	LCS	21.50		20	108	63 - 128		
1,1-Dichloropropene	563-58-6	LCS	21.60		20	108	76 - 126		
1,2,3-Trichlorobenzene	87-61-6	LCS	20.20		20	101	61 - 126		
1,2,3-Trichloropropane	96-18-4	LCS	20.80		20	104	75 - 132		
1,2,4-Trichlorobenzene	120-82-1	LCS	20.60		20	103	67 - 123		
1,2-Dibromo-3-chloropropane	96-12-8	LCS	17.30		20	86.3	59 - 133		
1,2-Dibromoethane	106-93-4	LCS	20.60		20	103	80 - 124		
1,2-Dichlorobenzene	95-50-1	LCS	20.80		20	104	82 - 118		
1,2-Dichloroethane	107-06-2	LCS	20.60		20	103	70 - 133		
1,2-Dichloropropane	78-87-5	LCS	21.20		20	106	81 - 127		
1,3-Dichlorobenzene	541-73-1	LCS	21.70		20	108	81 - 118		
1,3-Dichloropropane	142-28-9	LCS	20		20	99.9	82 - 126		

QUALITY CONTROL SAMPLES

VOLATILE ORGANICS (cont.)

RESULTS

Compound	CAS No		Result (ug/L)	Orig. Result (ug/L)	Spk Added (ug/L)	Rec. (%)	Limits (%)	RPD Limit (%)	Qualifiers
1,4-Dichlorobenzene	106-46-7	LCS	22		20	110	81 - 116		
2,2-Dichloropropane	594-20-7	LCS	21.60		20	108	64 - 129		
2-Butanone	78-93-3	LCS	75.90		100	75.9	50 - 152		
2-Hexanone	591-78-6	LCS	93		100	93	65 - 154		
4-Methyl-2-Pentanone(MIBK)	108-10-1	LCS	109		100	109	71 - 146		
Acetone	67-64-1	LCS	90.30		100	90.3	40 - 151		
Benzene	71-43-2	LCS	21.50		20	108	80 - 124		
Bromobenzene	108-86-1	LCS	22.10		20	110	81 - 119		
Bromochloromethane	74-97-5	LCS	22		20	110	73 - 117		
Bromodichloromethane	75-27-4	LCS	21.20		20	106	79 - 126		
Bromoform	75-25-2	LCS	20.70		20	104	70 - 123		
Bromomethane	74-83-9	LCS	33.80		20	169*	45 - 148		
Carbon Tetrachloride	56-23-5	LCS	24.70		20	124	62 - 132		
Chlorobenzene	108-90-7	LCS	20.80		20	104	85 - 117		
Chlorodibromomethane	124-48-1	LCS	20.70		20	104	77 - 122		
Chloroethane	75-00-3	LCS	21.30		20	106	51 - 142		
Chloroform	67-66-3	LCS	20.30		20	102	78 - 122		
Chloromethane	74-87-3	LCS	21.70		20	108	38 - 156		
cis-1,2-Dichloroethene	156-59-2	LCS	21.50		20	108	78 - 125		
cis-1,3-Dichloropropene	10061-01-5	LCS	20.30		20	101	81 - 121		
Dibromomethane	74-95-3	LCS	20.50		20	102	81 - 125		
Dichlorodifluoromethane	75-71-8	LCS	24.80		20	124	17 - 166		
Diisopropyl ether	108-20-3	LCS	21.70		20	108	74 - 131		
Ethylbenzene	100-41-4	LCS	21.50		20	107	80 - 124		
Hexachlorobutadiene	87-68-3	LCS	30.50		20	153*	55 - 128		
Methyl t-Butyl Ether	1634-04-4	LCS	21.20		20	106	69 - 115		
Methylene Chloride	75-09-2	LCS	20.70		20	104	76 - 121		
mp-Xylene	108383/106423	LCS	44.20		40	111	79 - 125		
Naphthalene	91-20-3	LCS	19.10		20	95.3	56 - 134		
o-Chlorotoluene	95-49-8	LCS	22.50		20	113	78 - 126		
o-Xylene	95-47-6	LCS	21		20	105	79 - 124		
p-Chlorotoluene	106-43-4	LCS	22.80		20	114	78 - 125		
p-Isopropyltoluene	99-87-6	LCS	23.70		20	118	72 - 123		
Styrene	100-42-5	LCS	22.10		20	110	79 - 123		
Tetrachloroethene	127-18-4	LCS	20.10		20	100	72 - 124		
Toluene	108-88-3	LCS	21.40		20	107	80 - 125		
Total Xylenes	1330-20-7	LCS	65.30		60	109	79 - 125		
trans-1,2-Dichloroethene	156-60-5	LCS	20.90		20	105	71 - 122		
trans-1,3-Dichloropropene	10061-02-6	LCS	21.10		20	106	78 - 126		
Trichloroethene	79-01-6	LCS	20.30		20	102	77 - 124		
Trichlorofluoromethane	75-69-4	LCS	22.40		20	112	38 - 123		
Vinyl Acetate	108-05-4	LCS	20.20		20	101	58 - 136		
Vinyl Chloride	75-01-4	LCS	22.70		20	114	27 - 138		

QUALITY CONTROL SAMPLES

VOLATILE ORGANICS (cont.)

SURROGATES

Compound	CAS No		Result (ug/L)	Expected (ug/L)	Rec. (%)	Limits (%)	Qualifiers
1,2-Dichloroethane-d4	17060-07-0	LCS	27.90	30	92.9	62 - 133	
4-Bromofluorobenzene	460-00-4	LCS	31.30	30	104	79 - 114	
Dibromofluoromethane	1868-53-7	LCS	28.50	30	94.9	78 - 116	
Toluene-d8	2037-26-5	LCS	29.20	30	97.5	76 - 127	

QC Batch

QC Batch	916914	Prep Method	N/A
Date	N/A	Analysis Method	SW846 8260D
Tech.			

Associated Samples

3275167001 3275167003 3275167005

Matrix Spike 3595075 (MS) 3276423001 (non-Project Sample) For QC Batch 916914

****NOTE - The Original Result shown below is a raw result and is only used for the purpose of calculating Matrix Spike percent recoveries. This result is not a final value and cannot be used as such.

Matrix Spike Duplicate 3595076 (MSD) 3276423001 (non-Project Sample) For QC Batch 916914

RESULTS

Compound	CAS No		Result (ug/L)	Orig. Result (ug/L)	Spk Added (ug/L)	Rec. (%)	Limits (%)	RPD Limit (%)	Qualifiers
1,1,1,2-Tetrachloroethane	630-20-6	MS	22.80	0	20	114	78 - 121		
1,1,1,2-Tetrachloroethane	630-20-6	MSD	22	0	20	110	78 - 121	RPD 3.57 (Max-16)	
1,1,1-Trichloroethane	71-55-6	MS	23.60	0	20	118	66 - 130		
1,1,1-Trichloroethane	71-55-6	MSD	22.50	0	20	113	66 - 130	RPD 4.74 (Max-20)	
1,1,2,2-Tetrachloroethane	79-34-5	MS	18.30	0	20	91.7	74 - 135		
1,1,2,2-Tetrachloroethane	79-34-5	MSD	18.20	0	20	90.8	74 - 135	RPD 1.05 (Max-16)	
1,1,2-Trichloroethane	79-00-5	MS	20.50	0	20	102	82 - 126		
1,1,2-Trichloroethane	79-00-5	MSD	20.40	0	20	102	82 - 126	RPD 0.48 (Max-15)	
1,1-Dichloroethane	75-34-3	MS	20.90	0	20	104	78 - 124		
1,1-Dichloroethane	75-34-3	MSD	19.80	0	20	99.1	78 - 124	RPD 5.17 (Max-15)	
1,1-Dichloroethene	75-35-4	MS	21	0	20	105	63 - 128		
1,1-Dichloroethene	75-35-4	MSD	18.90	0	20	94.3	63 - 128	RPD 10.70 (Max-21)	
1,1-Dichloropropene	563-58-6	MS	22.70	0	20	113	76 - 126		
1,1-Dichloropropene	563-58-6	MSD	21.30	0	20	107	76 - 126	RPD 5.97 (Max-16)	
1,2,3-Trichlorobenzene	87-61-6	MS	18.70	0	20	93.3	61 - 126		
1,2,3-Trichlorobenzene	87-61-6	MSD	19.60	0	20	98.2	61 - 126	RPD 5.21 (Max-36)	
1,2,3-Trichloropropane	96-18-4	MS	19.40	0	20	96.8	75 - 132		
1,2,3-Trichloropropane	96-18-4	MSD	18.70	0	20	93.7	75 - 132	RPD 3.31 (Max-19)	
1,2,4-Trichlorobenzene	120-82-1	MS	18.90	0	20	94.3	67 - 123		
1,2,4-Trichlorobenzene	120-82-1	MSD	18.60	0	20	93	67 - 123	RPD 1.44 (Max-22)	
1,2-Dibromo-3-chloropropane	96-12-8	MS	15.60	0	20	78	59 - 133		
1,2-Dibromo-3-chloropropane	96-12-8	MSD	16.20	0	20	80.9	59 - 133	RPD 3.58 (Max-26)	
1,2-Dibromoethane	106-93-4	MS	20.60	0	20	103	80 - 124		
1,2-Dibromoethane	106-93-4	MSD	21.10	0	20	105	80 - 124	RPD 2.37 (Max-19)	
1,2-Dichlorobenzene	95-50-1	MS	19.70	0	20	98.3	82 - 118		

QUALITY CONTROL SAMPLES

VOLATILE ORGANICS (cont.)

RESULTS

Compound	CAS No		Result (ug/L)	Orig. Result (ug/L)	Spk Added (ug/L)	Rec. (%)	Limits (%)	RPD Limit (%)	Qualifiers
1,2-Dichlorobenzene	95-50-1	MSD	19.40	0	20	96.8	82 - 118	RPD 1.62 (Max-15)	
1,2-Dichloroethane	107-06-2	MS	21.30	0	20	107	70 - 133		
1,2-Dichloroethane	107-06-2	MSD	21.10	0	20	106	70 - 133	RPD 0.96 (Max-19)	
1,2-Dichloropropane	78-87-5	MS	20	0	20	99.8	81 - 127		
1,2-Dichloropropane	78-87-5	MSD	19.60	0	20	98.1	81 - 127	RPD 1.68 (Max-15)	
1,3-Dichlorobenzene	541-73-1	MS	20.10	0	20	100	81 - 118		
1,3-Dichlorobenzene	541-73-1	MSD	19.80	0	20	99.1	81 - 118	RPD 1.34 (Max-16)	
1,3-Dichloropropane	142-28-9	MS	19.50	0	20	97.6	82 - 126		
1,3-Dichloropropane	142-28-9	MSD	19.60	0	20	98.2	82 - 126	RPD 0.60 (Max-15)	
1,4-Dichlorobenzene	106-46-7	MS	20.20	0	20	101	81 - 116		
1,4-Dichlorobenzene	106-46-7	MSD	19.40	0	20	97.1	81 - 116	RPD 3.92 (Max-15)	
2,2-Dichloropropane	594-20-7	MS	23.30	0	20	116	64 - 129		
2,2-Dichloropropane	594-20-7	MSD	21.70	0	20	108	64 - 129	RPD 7.27 (Max-18)	
2-Butanone	78-93-3	MS	95.40	0	100	95.4	50 - 152		
2-Butanone	78-93-3	MSD	96.10	0	100	96.1	50 - 152	RPD 0.78 (Max-16)	
2-Hexanone	591-78-6	MS	87.70	0	100	87.7	65 - 154		
2-Hexanone	591-78-6	MSD	86	0	100	86	65 - 154	RPD 2.02 (Max-17)	
4-Methyl-2-Pentanone(MIBK)	108-10-1	MS	89.60	0	100	89.6	71 - 146		
4-Methyl-2-Pentanone(MIBK)	108-10-1	MSD	91.90	0	100	91.9	71 - 146	RPD 2.57 (Max-16)	
Acetone	67-64-1	MS	83.80	0	100	83.8	40 - 151		
Acetone	67-64-1	MSD	78.40	0	100	78.4	40 - 151	RPD 6.58 (Max-40)	
Benzene	71-43-2	MS	21.80	0	20	109	80 - 124		
Benzene	71-43-2	MSD	20.80	0	20	104	80 - 124	RPD 4.45 (Max-26)	
Bromobenzene	108-86-1	MS	21.60	0	20	108	81 - 119		
Bromobenzene	108-86-1	MSD	20.70	0	20	103	81 - 119	RPD 4.72 (Max-17)	
Bromochloromethane	74-97-5	MS	23.50	0	20	118*	73 - 117		
Bromochloromethane	74-97-5	MSD	23.10	0	20	115	73 - 117	RPD 2.06 (Max-19)	
Bromodichloromethane	75-27-4	MS	22	0	20	110	79 - 126		
Bromodichloromethane	75-27-4	MSD	21.80	0	20	109	79 - 126	RPD 0.65 (Max-16)	
Bromoform	75-25-2	MS	19.30	0	20	96.5	70 - 123		
Bromoform	75-25-2	MSD	19.80	0	20	99.1	70 - 123	RPD 2.59 (Max-16)	
Bromomethane	74-83-9	MS	19.80	0	20	99	45 - 148		
Bromomethane	74-83-9	MSD	20.50	0	20	102	45 - 148	RPD 3.42 (Max-26)	
Carbon Tetrachloride	56-23-5	MS	24.70	0	20	124	62 - 132		
Carbon Tetrachloride	56-23-5	MSD	23	0	20	115	62 - 132	RPD 7.15 (Max-17)	
Chlorobenzene	108-90-7	MS	21.50	0	20	107	85 - 117		
Chlorobenzene	108-90-7	MSD	20.30	0	20	102	85 - 117	RPD 5.43 (Max-15)	
Chlorodibromomethane	124-48-1	MS	22.10	0	20	110	77 - 122		
Chlorodibromomethane	124-48-1	MSD	21.80	0	20	109	77 - 122	RPD 1.23 (Max-15)	
Chloroethane	75-00-3	MS	21.40	0	20	107	51 - 142		
Chloroethane	75-00-3	MSD	19.90	0	20	99.7	51 - 142	RPD 6.98 (Max-24)	
Chloroform	67-66-3	MS	21.90	0	20	109	78 - 122		
Chloroform	67-66-3	MSD	21.10	0	20	106	78 - 122	RPD 3.64 (Max-16)	
Chloromethane	74-87-3	MS	20	0	20	100	38 - 156		
Chloromethane	74-87-3	MSD	19	0	20	95.2	38 - 156	RPD 5.16 (Max-27)	
cis-1,2-Dichloroethene	156-59-2	MS	21.20	0	20	106	78 - 125		
cis-1,2-Dichloroethene	156-59-2	MSD	20.40	0	20	102	78 - 125	RPD 3.74 (Max-21)	
cis-1,3-Dichloropropene	10061-01-5	MS	19.70	0	20	98.4	81 - 121		
cis-1,3-Dichloropropene	10061-01-5	MSD	19.10	0	20	95.6	81 - 121	RPD 2.84 (Max-16)	

QUALITY CONTROL SAMPLES

VOLATILE ORGANICS (cont.)

RESULTS

Compound	CAS No		Result (ug/L)	Orig. Result (ug/L)	Spk Added (ug/L)	Rec. (%)	Limits (%)	RPD Limit (%)	Qualifiers
Dibromomethane	74-95-3	MS	21.70	0	20	109	81 - 125		
Dibromomethane	74-95-3	MSD	21.30	0	20	106	81 - 125	RPD 1.95 (Max-16)	
Dichlorodifluoromethane	75-71-8	MS	28.20	0	20	141	17 - 166		
Dichlorodifluoromethane	75-71-8	MSD	26.20	0	20	131	17 - 166	RPD 7.28 (Max-24)	
Diisopropyl ether	108-20-3	MS	19.20	0	20	95.8	74 - 131		
Diisopropyl ether	108-20-3	MSD	18.50	0	20	92.5	74 - 131	RPD 3.48 (Max-15)	
Ethylbenzene	100-41-4	MS	22.10	0	20	110	80 - 124		
Ethylbenzene	100-41-4	MSD	20.70	0	20	104	80 - 124	RPD 6.26 (Max-19)	
Hexachlorobutadiene	87-68-3	MS	21	0	20	105	55 - 128		
Hexachlorobutadiene	87-68-3	MSD	20	0	20	100	55 - 128	RPD 4.74 (Max-35)	
Methyl t-Butyl Ether	1634-04-4	MS	21.20	0	20	106	69 - 115		
Methyl t-Butyl Ether	1634-04-4	MSD	20.70	0	20	104	69 - 115	RPD 2.35 (Max-20)	
Methylene Chloride	75-09-2	MS	21	0	20	105	76 - 121		
Methylene Chloride	75-09-2	MSD	19.50	0	20	97.3	76 - 121	RPD 7.88 (Max-17)	
mp-Xylene	108383/106423	MS	44.70	0	40	112	79 - 125		
mp-Xylene	108383/106423	MSD	42.10	0	40	105	79 - 125	RPD 5.96 (Max-21)	
Naphthalene	91-20-3	MS	12.90	0	20	64.7	56 - 134		
Naphthalene	91-20-3	MSD	13.30	0	20	66.5	56 - 134	RPD 2.77 (Max-40)	
o-Chlorotoluene	95-49-8	MS	20.60	0	20	103	78 - 126		
o-Chlorotoluene	95-49-8	MSD	19.80	0	20	99.2	78 - 126	RPD 3.66 (Max-17)	
o-Xylene	95-47-6	MS	20.70	0	20	103	79 - 124		
o-Xylene	95-47-6	MSD	20.90	0	20	105	79 - 124	RPD 1.32 (Max-19)	
p-Chlorotoluene	106-43-4	MS	20.40	0	20	102	78 - 125		
p-Chlorotoluene	106-43-4	MSD	19.30	0	20	96.6	78 - 125	RPD 5.52 (Max-16)	
p-Isopropyltoluene	99-87-6	MS	22.40	0	20	112	72 - 123		
p-Isopropyltoluene	99-87-6	MSD	22.30	0	20	111	72 - 123	RPD 0.68 (Max-17)	
Styrene	100-42-5	MS	20	0	20	99.8	79 - 123		
Styrene	100-42-5	MSD	20.20	0	20	101	79 - 123	RPD 1.02 (Max-16)	
Tetrachloroethene	127-18-4	MS	22	0	20	110	72 - 124		
Tetrachloroethene	127-18-4	MSD	20.90	0	20	105	72 - 124	RPD 4.85 (Max-38)	
Toluene	108-88-3	MS	21.10	0	20	106	80 - 125		
Toluene	108-88-3	MSD	20.50	0	20	103	80 - 125	RPD 2.85 (Max-20)	
Total Xylenes	1330-20-7	MS	65.30	0	60	109	79 - 125		
Total Xylenes	1330-20-7	MSD	63	0	60	105	79 - 125	RPD 3.60 (Max-35)	
trans-1,2-Dichloroethene	156-60-5	MS	21.50	0	20	107	71 - 122		
trans-1,2-Dichloroethene	156-60-5	MSD	19.20	0	20	96	71 - 122	RPD 11.20 (Max-22)	
trans-1,3-Dichloropropene	10061-02-6	MS	20.70	0	20	103	78 - 126		
trans-1,3-Dichloropropene	10061-02-6	MSD	20.80	0	20	104	78 - 126	RPD 0.44 (Max-18)	
Trichloroethene	79-01-6	MS	22.70	0.72	20	110	77 - 124		
Trichloroethene	79-01-6	MSD	21.60	0.72	20	104	77 - 124	RPD 5.37 (Max-18)	
Trichlorofluoromethane	75-69-4	MS	24.70	0	20	123	38 - 123		
Trichlorofluoromethane	75-69-4	MSD	22.90	0	20	115	38 - 123	RPD 7.46 (Max-23)	
Vinyl Acetate	108-05-4	MS	17.40	0	20	87.2	58 - 136		
Vinyl Acetate	108-05-4	MSD	18.50	0	20	92.5	58 - 136	RPD 5.91 (Max-17)	
Vinyl Chloride	75-01-4	MS	21.20	0	20	106	27 - 138		
Vinyl Chloride	75-01-4	MSD	19.60	0	20	98	27 - 138	RPD 8.01 (Max-40)	

QUALITY CONTROL SAMPLES

VOLATILE ORGANICS (cont.)

SURROGATES

Compound	CAS No		Result (ug/L)	Expected (ug/L)	Rec. (%)	Limits (%)	Qualifiers
1,2-Dichloroethane-d4	17060-07-0	MS	30.30	30	101	62 - 133	
1,2-Dichloroethane-d4	17060-07-0	MSD	31.30	30	104	62 - 133	
4-Bromofluorobenzene	460-00-4	MS	30.10	30	100	79 - 114	
4-Bromofluorobenzene	460-00-4	MSD	30.80	30	103	79 - 114	
Dibromofluoromethane	1868-53-7	MS	30.90	30	103	78 - 116	
Dibromofluoromethane	1868-53-7	MSD	31.90	30	106	78 - 116	
Toluene-d8	2037-26-5	MS	28	30	93.4	76 - 127	
Toluene-d8	2037-26-5	MSD	29.10	30	97	76 - 127	

Method Blank 3595069 (MB) Created on 12/04/2022 22:58 For QC Batch 916914

RESULTS

Compound	CAS No		Result	Units	RDL	Qualifiers
1,1,1,2-Tetrachloroethane	630-20-6	BLK	1.0 U	ug/L	1.0	U
1,1,1-Trichloroethane	71-55-6	BLK	1.0 U	ug/L	1.0	U
1,1,2,2-Tetrachloroethane	79-34-5	BLK	1.0 U	ug/L	1.0	U
1,1,2-Trichloroethane	79-00-5	BLK	1.0 U	ug/L	1.0	U
1,1-Dichloroethane	75-34-3	BLK	1.0 U	ug/L	1.0	U
1,1-Dichloroethene	75-35-4	BLK	1.0 U	ug/L	1.0	U
1,1-Dichloropropene	563-58-6	BLK	1.0 U	ug/L	1.0	U
1,2,3-Trichlorobenzene	87-61-6	BLK	2.0 U	ug/L	2.0	U
1,2,3-Trichloropropane	96-18-4	BLK	2.0 U	ug/L	2.0	U
1,2,4-Trichlorobenzene	120-82-1	BLK	2.0 U	ug/L	2.0	U
1,2-Dibromo-3-chloropropane	96-12-8	BLK	7.0 U	ug/L	7.0	U
1,2-Dibromoethane	106-93-4	BLK	1.0 U	ug/L	1.0	U
1,2-Dichlorobenzene	95-50-1	BLK	1.0 U	ug/L	1.0	U
1,2-Dichloroethane	107-06-2	BLK	1.0 U	ug/L	1.0	U
1,2-Dichloropropane	78-87-5	BLK	1.0 U	ug/L	1.0	U
1,3-Dichlorobenzene	541-73-1	BLK	1.0 U	ug/L	1.0	U
1,3-Dichloropropane	142-28-9	BLK	1.0 U	ug/L	1.0	U
1,4-Dichlorobenzene	106-46-7	BLK	1.0 U	ug/L	1.0	U
2,2-Dichloropropane	594-20-7	BLK	1.0 U	ug/L	1.0	U
2-Butanone	78-93-3	BLK	10.0 U	ug/L	10.0	U
2-Hexanone	591-78-6	BLK	5.0 U	ug/L	5.0	U
4-Methyl-2-Pentanone(MIBK)	108-10-1	BLK	5.0 U	ug/L	5.0	U
Acetone	67-64-1	BLK	10.0 U	ug/L	10.0	U
Benzene	71-43-2	BLK	1.0 U	ug/L	1.0	U
Bromobenzene	108-86-1	BLK	1.0 U	ug/L	1.0	U
Bromochloromethane	74-97-5	BLK	1.0 U	ug/L	1.0	U
Bromodichloromethane	75-27-4	BLK	1.0 U	ug/L	1.0	U
Bromoform	75-25-2	BLK	1.0 U	ug/L	1.0	U
Bromomethane	74-83-9	BLK	1.0 U	ug/L	1.0	U
Carbon Tetrachloride	56-23-5	BLK	1.0 U	ug/L	1.0	U
Chlorobenzene	108-90-7	BLK	1.0 U	ug/L	1.0	U
Chlorodibromomethane	124-48-1	BLK	1.0 U	ug/L	1.0	U

QUALITY CONTROL SAMPLES

VOLATILE ORGANICS (cont.)

RESULTS

Compound	CAS No		Result	Units	RDL	Qualifiers
Chloroethane	75-00-3	BLK	1.0 U	ug/L	1.0	U
Chloroform	67-66-3	BLK	1.0 U	ug/L	1.0	U
Chloromethane	74-87-3	BLK	1.0 U	ug/L	1.0	U
cis-1,2-Dichloroethene	156-59-2	BLK	1.0 U	ug/L	1.0	U
cis-1,3-Dichloropropene	10061-01-5	BLK	1.0 U	ug/L	1.0	U
Dibromomethane	74-95-3	BLK	1.0 U	ug/L	1.0	U
Dichlorodifluoromethane	75-71-8	BLK	1.0 U	ug/L	1.0	U
Diisopropyl ether	108-20-3	BLK	1.0 U	ug/L	1.0	U
Ethylbenzene	100-41-4	BLK	1.0 U	ug/L	1.0	U
Hexachlorobutadiene	87-68-3	BLK	5.0 U	ug/L	5.0	U
Methyl t-Butyl Ether	1634-04-4	BLK	1.0 U	ug/L	1.0	U
Methylene Chloride	75-09-2	BLK	1.0 U	ug/L	1.0	U
mp-Xylene	108383/106423	BLK	2.0 U	ug/L	2.0	U
Naphthalene	91-20-3	BLK	2.0 U	ug/L	2.0	U
o-Chlorotoluene	95-49-8	BLK	1.0 U	ug/L	1.0	U
o-Xylene	95-47-6	BLK	1.0 U	ug/L	1.0	U
p-Chlorotoluene	106-43-4	BLK	1.0 U	ug/L	1.0	U
p-Isopropyltoluene	99-87-6	BLK	1.0 U	ug/L	1.0	U
Styrene	100-42-5	BLK	1.0 U	ug/L	1.0	U
Tetrachloroethene	127-18-4	BLK	1.0 U	ug/L	1.0	U
Toluene	108-88-3	BLK	1.0 U	ug/L	1.0	U
Total Xylenes	1330-20-7	BLK	3.0 U	ug/L	3.0	U
trans-1,2-Dichloroethene	156-60-5	BLK	1.0 U	ug/L	1.0	U
trans-1,3-Dichloropropene	10061-02-6	BLK	1.0 U	ug/L	1.0	U
Trichloroethene	79-01-6	BLK	1.0 U	ug/L	1.0	U
Trichlorofluoromethane	75-69-4	BLK	1.0 U	ug/L	1.0	U
Vinyl Acetate	108-05-4	BLK	5.0 U	ug/L	5.0	U
Vinyl Chloride	75-01-4	BLK	1.0 U	ug/L	1.0	U

SURROGATES

Compound	CAS No		Result (ug/L)	Expected (ug/L)	Rec. (%)	Limits (%)	Qualifiers
1,2-Dichloroethane-d4	17060-07-0	BLK	29.40	30	98.1	62 - 133	
4-Bromofluorobenzene	460-00-4	BLK	30.50	30	102	79 - 114	
Dibromofluoromethane	1868-53-7	BLK	30.50	30	102	78 - 116	
Toluene-d8	2037-26-5	BLK	28.70	30	95.5	76 - 127	

Lab Control Standard 3595070 (LCS) Created on 12/04/2022 22:58 For QC Batch 916914

RESULTS

Compound	CAS No		Result (ug/L)	Orig. Result (ug/L)	Spk Added (ug/L)	Rec. (%)	Limits (%)	RPD Limit (%)	Qualifiers
1,1,1,2-Tetrachloroethane	630-20-6	LCS	22.60		20	113	78 - 121		
1,1,1-Trichloroethane	71-55-6	LCS	22.70		20	114	66 - 130		
1,1,2,2-Tetrachloroethane	79-34-5	LCS	18.40		20	92.1	74 - 135		
1,1,2-Trichloroethane	79-00-5	LCS	20.10		20	101	82 - 126		

QUALITY CONTROL SAMPLES

VOLATILE ORGANICS (cont.)

RESULTS

Compound	CAS No		Result (ug/L)	Orig. Result (ug/L)	Spk Added (ug/L)	Rec. (%)	Limits (%)	RPD Limit (%)	Qualifiers
1,1-Dichloroethane	75-34-3	LCS	20.20		20	101	78 - 124		
1,1-Dichloroethene	75-35-4	LCS	21.30		20	107	63 - 128		
1,1-Dichloropropene	563-58-6	LCS	22		20	110	76 - 126		
1,2,3-Trichlorobenzene	87-61-6	LCS	20.30		20	101	61 - 126		
1,2,3-Trichloropropane	96-18-4	LCS	18.20		20	90.8	75 - 132		
1,2,4-Trichlorobenzene	120-82-1	LCS	21.40		20	107	67 - 123		
1,2-Dibromo-3-chloropropane	96-12-8	LCS	16.40		20	81.8	59 - 133		
1,2-Dibromoethane	106-93-4	LCS	20.50		20	102	80 - 124		
1,2-Dichlorobenzene	95-50-1	LCS	20.40		20	102	82 - 118		
1,2-Dichloroethane	107-06-2	LCS	20.40		20	102	70 - 133		
1,2-Dichloropropane	78-87-5	LCS	19.70		20	98.7	81 - 127		
1,3-Dichlorobenzene	541-73-1	LCS	21.20		20	106	81 - 118		
1,3-Dichloropropane	142-28-9	LCS	19.60		20	98.2	82 - 126		
1,4-Dichlorobenzene	106-46-7	LCS	21		20	105	81 - 116		
2,2-Dichloropropane	594-20-7	LCS	25.60		20	128	64 - 129		
2-Butanone	78-93-3	LCS	92.20		100	92.2	50 - 152		
2-Hexanone	591-78-6	LCS	85.80		100	85.8	65 - 154		
4-Methyl-2-Pentanone(MIBK)	108-10-1	LCS	88.10		100	88.1	71 - 146		
Acetone	67-64-1	LCS	89.50		100	89.5	40 - 151		
Benzene	71-43-2	LCS	20.90		20	105	80 - 124		
Bromobenzene	108-86-1	LCS	21.50		20	108	81 - 119		
Bromochloromethane	74-97-5	LCS	22.30		20	112	73 - 117		
Bromodichloromethane	75-27-4	LCS	21.80		20	109	79 - 126		
Bromoform	75-25-2	LCS	20.80		20	104	70 - 123		
Bromomethane	74-83-9	LCS	24.30		20	122	45 - 148		
Carbon Tetrachloride	56-23-5	LCS	23.10		20	116	62 - 132		
Chlorobenzene	108-90-7	LCS	21.20		20	106	85 - 117		
Chlorodibromomethane	124-48-1	LCS	22.20		20	111	77 - 122		
Chloroethane	75-00-3	LCS	23.40		20	117	51 - 142		
Chloroform	67-66-3	LCS	21.70		20	108	78 - 122		
Chloromethane	74-87-3	LCS	21.40		20	107	38 - 156		
cis-1,2-Dichloroethene	156-59-2	LCS	20.80		20	104	78 - 125		
cis-1,3-Dichloropropene	10061-01-5	LCS	20.60		20	103	81 - 121		
Dibromomethane	74-95-3	LCS	20.70		20	103	81 - 125		
Dichlorodifluoromethane	75-71-8	LCS	25.90		20	130	17 - 166		
Diisopropyl ether	108-20-3	LCS	19.50		20	97.4	74 - 131		
Ethylbenzene	100-41-4	LCS	21.50		20	107	80 - 124		
Hexachlorobutadiene	87-68-3	LCS	24.80		20	124	55 - 128		
Methyl t-Butyl Ether	1634-04-4	LCS	20.80		20	104	69 - 115		
Methylene Chloride	75-09-2	LCS	20.10		20	101	76 - 121		
mp-Xylene	108383/106423	LCS	44.20		40	111	79 - 125		
Naphthalene	91-20-3	LCS	14.60		20	73.2	56 - 134		
o-Chlorotoluene	95-49-8	LCS	21		20	105	78 - 126		
o-Xylene	95-47-6	LCS	21.40		20	107	79 - 124		
p-Chlorotoluene	106-43-4	LCS	21.10		20	105	78 - 125		
p-Isopropyltoluene	99-87-6	LCS	23.50		20	117	72 - 123		
Styrene	100-42-5	LCS	21.70		20	109	79 - 123		

QUALITY CONTROL SAMPLES

VOLATILE ORGANICS (cont.)

RESULTS

Compound	CAS No		Result (ug/L)	Orig. Result (ug/L)	Spk Added (ug/L)	Rec. (%)	Limits (%)	RPD Limit (%)	Qualifiers
Tetrachloroethene	127-18-4	LCS	21.40		20	107	72 - 124		
Toluene	108-88-3	LCS	21.10		20	106	80 - 125		
Total Xylenes	1330-20-7	LCS	65.60		60	109	79 - 125		
trans-1,2-Dichloroethene	156-60-5	LCS	20.70		20	104	71 - 122		
trans-1,3-Dichloropropene	10061-02-6	LCS	21.70		20	109	78 - 126		
Trichloroethene	79-01-6	LCS	21.50		20	107	77 - 124		
Trichlorofluoromethane	75-69-4	LCS	24.60		20	123	38 - 123		
Vinyl Acetate	108-05-4	LCS	18.90		20	94.5	58 - 136		
Vinyl Chloride	75-01-4	LCS	23		20	115	27 - 138		

SURROGATES

Compound	CAS No		Result (ug/L)	Expected (ug/L)	Rec. (%)	Limits (%)	Qualifiers
1,2-Dichloroethane-d4	17060-07-0	LCS	28.40	30	94.6	62 - 133	
4-Bromofluorobenzene	460-00-4	LCS	30.70	30	102	79 - 114	
Dibromofluoromethane	1868-53-7	LCS	30.60	30	102	78 - 116	
Toluene-d8	2037-26-5	LCS	28.60	30	95.4	76 - 127	

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Lab ID	Sample ID	Preparation Method	Prep Batch	Prep Date/Time	By	Analysis Method	Anly Batch
3275167001	RW-1S	SW846 3510C	912104	11/23/2022 13:25	LDC	SW846 8270E SIM	912698
		SW846 3510C	912104	11/23/2022 13:25	LDC	SW846 8270E SIM	915208
		N/A	N/A	N/A		SW846 8260D	915266
		N/A	N/A	N/A		SW846 8260D	916914
3275167002	RW-3S	SW846 3510C	912104	11/23/2022 13:25	LDC	SW846 8270E SIM	912698
		N/A	N/A	N/A		SW846 8260D	915266
3275167003	RW-1D	SW846 3510C	912104	11/23/2022 13:25	LDC	SW846 8270E SIM	912698
		SW846 3510C	912104	11/23/2022 13:25	LDC	SW846 8270E SIM	914227
		N/A	N/A	N/A		SW846 8260D	916914
		N/A	N/A	N/A		SW846 8260D	915266
3275167004	RW-2D	SW846 3510C	912308	11/25/2022 06:25	MXL	SW846 8270E SIM	914158
		N/A	N/A	N/A		SW846 8260D	915266
3275167005	RW-2S	SW846 3510C	912308	11/25/2022 06:25	MXL	SW846 8270E SIM	915208
		SW846 3510C	912308	11/25/2022 06:25	MXL	SW846 8270E SIM	914158
		N/A	N/A	N/A		SW846 8260D	916914
		N/A	N/A	N/A		SW846 8260D	915266

301 Fulling Mill Rd, Suite A
Middletown, PA 17057
P. 717-944-5541

CHAIN OF CUSTODY/ REQUEST FOR ANALYSIS

ALL SHADED AREAS MUST BE COMPLETED BY THE CLIENT / SAMPLER. INSTRUCTIONS ON THE BACK.

COC #: 1 of 1
ALS Quote #:

3275167
Logged By: CXW
PM: SJB

Client Name: WSP

Address:
13530 Dulles Technology Dr
Suite 300
Herndon VA 20171

Contact: Eric Johnson
Phone#: (703) 709-6500
Project Name/#: 3140154-5608.010
Bill To:
Purchase Order #:

TAT: [ ] Normal-Standard TAT is 10-12 business days. [ ] Rush-Subject to ALS approval and surcharges.
Date Required: Approved?
Email? [X]-Y eric.johnson@wsp.com

	Container Type	AG	AG							
	Container Size	40	250							
	Preservative	HCl	None							

Unless otherwise Indicated, preservation indicates field filtration on applicable methods

ANALYSES/METHOD REQUESTED

	Sample Description/Location (as it will appear on the lab report)	Date Collected mm/dd/yy	Time hh:mm	SDWA Sample Type (see key)	*G or C	**Matrix (See bottom of COC)	VOCs	1,4 - Dioxane								
							Enter Number of Containers Per Sample or Field Results Below.									
1	RW-1S	11/20/22	1230		G	GW	2	2								
2	RW-3S	11/20/22	1250		G	GW	2	2								
3	RW-1D	11/20/22	1420		G	GW	2	2								
4	RW-2D	11/20/22	1500		G	GW	2	2								
5	RW-2S	11/20/22	1505		G	GW	2	2								
6	~~Trip Blank-E~~															
7																
8																
9																
10																

Circle Sample Collector: ALS Tech / Client ID:

Comments:

Date:	Time		Relinquished By / Company Name		Received By / Company Name
11/21/22	1530	1		2	1330 ALS Evan P
11-21-22	1740	3	ALS Evan P.	4	
		5		6	
		7		8	
		9		10	

* G=Grab; C=Composite

**Matrix - A=Air; D=Drinking Water; GW=Groundwater; O=Oil; LW=Liquid Waste; S=Solid/Soil/Sludge; SW=Surface Water; WP=Wipe; WW=Wastewater

Receipt Inform...
Temp Taken By: MJE Therm ID: TH570 WO Temp (°C) 3°C
Receipt Info completed by: _____ WV Containers 0-6°C Y N NA
Cooler Custody Seals Intact Y N NA
S ... NA
F ... IA
Deviations? NO YES
If YES, llist below:

Temp Taken By: MJE
WO Temp (°C) 3.0
Therm ID: 570
Receipt Info Completed By: DPB
Cooler Custody Seal Intact Y N NA
Sample Custody Seal Intact Y N NA
Received on Ice Y N NA
Cooler & Samples Intact Y N NA
Correct Containers Provided Y N NA
Sample Label/COC Agree Y N
Adequate Sample Volumes Y N
VOA Headspace Present Y N NA
Voa Trip Blank Y N NA
NJ≤ 4 Days? Y N
Rad Screen (uCi)
Courier/Tracking #:

SDWA Compliance Y N
PWSID
WV Containers 0-6°C Y N NA

Client contact:
Date/Tech:

Rad Screen (uCi)_____
New Source? Y N
New Source Contact:

e #:_____

...ion E=Entry Point
R=Raw P=Plant C=Check S=Special A=Annual Startup

Sample/COC Remarks
No Collector
11/22/22

Contains Short Hold Testing YES NO
Internal Use: If less than 48 hours - notify lab upon receipt

Data Deliverables: [ ] Standard Lvl 1 [ ] Standard Lvl 2 [ ] Standard Lvl 3 [ ] Standard Lvl 4 [ ] CLP-like [ ] DOD [ ] NJ RED [ ] NJ Full [ ] HSCA [ ] Landfill [ ] NJ GW [ ] _____

EDD: [ ] Excel Summary [ ] Equis [ ] Custom

Sample Disposal: Lab [ ] Special [ ]

EDDS: Format Type

State Samples Collected In: [ ] NY [ ] NJ [ ] PA [ ] WV [ ] FL [ ] other _____