VIA ELECTRONIC MAIL

August 16, 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. 27**
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 second quarter of calendar year 2023 (April 1st through June 30th) 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 third quarter of calendar year 2023 (July 1st through September 30th).

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

REJ
k:\emerson\kop-flex_reports_progress reports\epa progress reports\cm progress report 25 q4 2022\

Encl.

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

WSP USA
Suite 300
13530 Dulles Technology Drive
Herndon, VA 20171

Tel.: +1 703 709-6500
wsp.com

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

WSP USA
Suite 300
13530 Dulles Technology Drive
Herndon, VA 20171

Tel.: +1 703 709-6500
Fax: +1 703 709-8505
wsp.com

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 APRIL 2023 – JUNE 2023 REPORTING PERIOD

1.1 HYDRAULIC CONTAINMENT SYSTEM OPERATION

- The hydraulic containment system (System) did not operate during the second quarter of 2023 due to issues with some vital equipment components. The System was shut down on March 31, 2023, when WSP's operation and maintenance (O&M) subcontractor noted a potential problem with the boiler used to produce steam for the onsite regeneration of the treatment resin. A subsequent inspection by the boiler O&M subcontractor determined that one of the fire tubes for the boiler had failed and needed replacement. The necessary repairs to the boiler were conducted in mid-April 2023. Around the time the boiler maintenance activities were being completed, it was discovered the internet router provided by WSP's internet services provider (ISP) – Verizon – was not functioning. Since the internet router allows for remote access to the System programming and operation, WSP, in consultation with EMERSUB 16, decided the System would remain shut down until a new internet router could be installed. Attempts to contact Verizon regarding procurement of a replacement internet router have been unsuccessful. Therefore, WSP has been working with Emerging Compound Treatment Technologies, Inc. (ECT2), the environmental engineering firm that designed the resin treatment process being used at the Site, to obtain a suitable replacement router that can be set-up, installed and programmed to re-establish the remote monitoring capabilities for the System.
- Since the System was not operational, there was no discharge of treated water to Outfall 001 during the quarterly period. The Discharge Monitoring Reports (DMRs) submitted to MDE indicated no discharge for each monthly reporting period.

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 all monitoring wells and recovery well piezometers the week of May 21, 2023, as part of the semi-annual groundwater monitoring event at the Site. The water level data for this and previous measurement rounds is provided in Table 1. Groundwater elevations determined from the May 2023 gauging event are representative of non-remedial pumping conditions at the Site.

- Contour maps depicting the water table (Figure 1) and hydraulic head conditions in the lower portion of the shallow zone of the Lower Patapsco aquifer (Figure 2) were generated from the May water level data. Evaluation of the groundwater elevations and gradients in the shallow zone are discussed separately below.

- The water table contour map (Figure 1) indicates a primarily westward flow of groundwater in the uppermost portion of the shallow zone of the Lower Patapsco aquifer in the eastern half of the site. The flow direction shifts northwesterly towards the western half of the site, particularly around MW-38R, which is centered in a depression in the groundwater surface. This depression has previously been interpreted to be the result of drawdown related to remedial pumping in the underlying deep zone of the Lower Patapsco aquifer. However, this latest data, representing a non-pumping condition, indicates that MW-38R may be positioned within a hydraulically distinct layer that exhibits a delayed water level response to the cessation of pumping. In the eastern portion of the Site, a slight mounding, or rise, in the water table continues to exist in the vicinity of well MW-09. The water table mounding reflects 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, causes the localized increase in the water table elevation beneath and immediately downgradient of this stormwater management feature.

- Based on the head contours, groundwater flows in a generally northwestward direction toward Stony Run in the lower portion of the shallow zone of the Lower Patapsco aquifer. The flow of groundwater to the north and west in the shallow zone differs from the southerly direction of groundwater movement in the deep confined zone. The cessation of remedial pumping resulted in the disappearance of the pronounced head changes, or cone of depression, centered around the recovery wells RW-1 and RW-2, which are screened within a thick sequence of permeable sand deposits comprising the lower portion of the shallow zone in the western portion of the Site (Figure 2). However, the water levels in MW-39 and MW-43 remained relatively low compared other wells in the area after system shutdown. Similar to the shallow zone discussed above, water levels may have been slow to recover within the screened intervals of these wells. MW-39 and MW-43 are both screened across a thin sand layer bounded above and below by clay units. The bounding clayey units may limit the movement of water to this sand layer, thus delaying the water level recovery in these wells.

- Figure 3 depicts the potentiometric surface for the deep zone of the Lower Patapsco aquifer based on the May 2023 water level measurements at the onsite deep wells and offsite wells MW-24D on the William-Scotsman property to the south and MW-46D on the Verizon property to the north. As with the shallow zone, the data reflect the recovery of the hydraulic heads to a non-pumping condition following shutdown of the System at the end of March 2023. The hydraulic head contours generated from the data demonstrate south to southeast flow pathways for groundwater in the deep zone. The southward groundwater flow direction is consistent with other potentiometric surface contour maps developed from water level data collected under non-remedial pumping conditions.

1.3 GROUNDWATER QUALITY MONITORING

- In accordance with the Groundwater Monitoring Plan, groundwater quality samples were collected in late May 2023 from the onsite monitoring wells identified for semi-annual sampling. The samples collected from the monitoring wells are representative of the groundwater quality a short (7-week) period after the cessation of remedial pumping in the aquifer system. 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. 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. 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.

- The distribution of CVOC and 1,4-dioxane concentrations in the May 2023 groundwater samples from the shallow zone monitoring wells is similar to levels detected in the November 2022 samples (Table 3). As with previous sampling events, the highest concentrations of site-related contaminants of concern (COCs) were detected in the sample from MW-16, which had a total CVOC + 1,4-dioxane concentration of 7,188 µg/l in the recent sample (Table 2). This total represents a significant decrease in COC levels at MW-16 from November 2022 to May 2023, where concentrations of 1,1-dichloroethane (1,1-DCA) and 1,1-dichlorothene (1,1-DCE) decreased approximately 32 percent and 42 percent, respectively, 1,4-dioxane decreased by 37 percent, and 1,1,1-trichlorothane (1,1,1-TCA) and trichloroethene decreased by 25 percent and 32 percent, respectively (Figure 4; Table 3). The changes in COC concentrations at MW-16 appear to reflect inherent seasonal fluctuations in the water quality in the predominately fine-grained deposits in the eastern portion of the Site (i.e., lower concentrations during the Spring sampling event and higher concentrations during the Fall sampling event). Lesser changes were observed in the sample collected from MW-20, with slight decreases in 1,1-DCE (approximately 12 percent decline between November 2022 and May 2023) and 1,4-dioxane concentrations (27 percent decrease).

  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 May 2023 sample from MW-04R indicate slightly lower concentrations of 1,1-DCA (33.2 µg/l), 1,1-DCE (65.5 µg/l), and 1,4-dioxane (30.8 µg/l) compared to the previous (November 2022) sample (Table 3). All three compounds were at or near the historical low values detected in the MW-04 samples, indicating that MW-04R may be in an area of slightly less-affected groundwater. Additional data will need to be collected to further evaluate this assessment of the groundwater conditions in this portion of the Site.

  Lower COC concentrations were observed in the remainder of the wells screened in the shallow zone (Table 2, Figure 4). Concentrations of site-related COCs exceeded the groundwater quality criteria in the sample from MW-09 in the eastern portion of the Site and downgradient wells MW-38R and MW-43 at the western end of the loading dock area between the buildings, which corresponds to the north end of the line of shallow recovery wells. Similar to the November 2022 data, concentrations of 1,1-DCA (1.6 µg/l),1,1-DCE (21.2 µg/l), and 1,4-dioxane (9.0 µg/l) were at or near historical lows in the May 2023 sample collected from MW-43. These results are consistent with a trend of decreasing COC concentrations in this well following initiation of remedial pumping.

- For the deep monitoring well samples, the CVOC and 1,4-dioxane concentrations in the May 2023 results are generally similar to levels detected historically with some exceptions (Table 3; Figure 5). At MW-16D, which typically has high concentrations of site-related COCs, the May 2023 sample results indicate a slight increase compared to the concentrations detected in the December 2022.[1] 1,1-DCA (24.8 µg/l), 1,1-DCE (111 µg/l) and 1,4-dioxane (36.1 µg/l) concentrations remained consistent with the historical trend of decreasing concentrations of COCs in this portion of the deep zone. Since 1,1-DCE concentrations tend to fluctuate seasonally in this well, with lower concentrations in the Fall-Winter and higher concentrations in the Spring, the recent increase may reflect natural temporal variation within the aquifer. The concentrations of 1,4-dioxane and 1,1-DCA also appear to exhibit minor seasonal fluctuations, although recent results indicate that the concentration trends for these compounds may be asymptotic. Additional data is necessary to further assess the trends for these COCs.

  Changes in COC concentrations in the upgradient portion of the plume (MW-23D) were also observed in the latest data. At this location, the concentration of 1,4-dioxane decreased from November 2022 (60 µg/l) to the May 2023 (27 µg/l) sampling events. Both concentrations are historically low for samples collected at this location and are perhaps indicative of a decreasing trend for this COC. 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.

[1] In Fall-Winter 2022, MW-16D was sampled a month later than the other wells due to inaccessibility during the primary sampling event.

2.0 PLANNED ONSITE ACTIVITIES FOR THE THIRD QUARTER OF 2023

- Install the new internet router allowing for remote access to the System controls and resume the full-scale operation of the System, along with the collection and evaluation of operational data.
- Recommence the effluent monitoring pursuant to the State Discharge/ National Pollutant Discharge Elimination System (NPDES) Permit and submittal of monthly DMRs.
- Review drafts of the new NPDES permit and supporting Fact Sheet and, if deemed necessary, provide comments to MDE for their consideration when finalizing the new permit.

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

CATALENT BUILDING 1

CATALENT BUILDING 2

MW-03

MW-43

MW-09
114.20

MW-39
109

MW-38R
108.64

RW-1S

MW-42
110.01

RW-2S

MW-18

MW-5R
109.97

RW-3S

MW-16

MW-04R
113.87

MW-20

MW-44

MW-01
114.58

109

110

111

112

113

114

N

LEGEND

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

NOTE:
THE MAY 2023 GROUNDWATER ELEVATIONS ARE REPRESENTATIVE OF NON-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: 7/24/2023
Approved: 8/2/2023
DWG Name: 314V5608.010-046

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

FIGURE 1

WATER TABLE CONTOUR MAP
NON-PUMPING CONDITIONS
(MAY 2023)

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

STONY RUN

POND

WILLIAMS SCOTSMAN, INC.

CATALENT BUILDING 1

CATALENT BUILDING 2

TREATMENT EQUIPMENT BUILDING

MW-03 106.97

MW-43 102.70

MW-39 102.88

MW-38R

RW-1S 109.68

RW-2S 108.80

MW-42

MW-18 103.64

MW-5R

RW-3S 109.58

MW-44 111.80

MW-09

MW-04R

MW-20 113.60

MW-16 112.21

MW-01

104

106

108

110

112

POND

N

LEGEND

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

NOTE:
THE MAY 2023 GROUNDWATER ELEVATIONS ARE REPRESENTATIVE OF NON-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: 7/24/2023
Approved: 8/2/2023
DWG Name: 314V5608.010-047

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 (MAY 2023)

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

MW-46D
88.51

MW-27D
87.96

MW-23D
87.89

MW-16D
86.54

MW-40D
86.30

MW-22D
85.33

MW-41D

MW-21D
85.44

RW-1D

RW-2D

MW-01D
83.79

MW-24D
79.68

CATALENT BUILDING 1

CATALENT BUILDING 2

TREATMENT EQUIPMENT BUILDING

STONY RUN

POND

WILLIAMS SCOTSMAN, INC.

POND

88

86

84

82

80

N

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

NOTE:
THE MAY 2023 GROUNDWATER ELEVATIONS ARE REPRESENTATIVE OF NON-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: 8/9/2023
Approved:
DWG Name: 314V5608.010-048

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 (MAY 2023)

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

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

VERIZON

MW-46D

MW-27D

POND

STONY RUN

MW-23D

CATALENT BUILDING 1

CATALENT BUILDING 2

TREATMENT EQUIPMENT BUILDING

MW-03

MW-43

MW-09

WILLIAMS SCOTSMAN, INC.

MW-39

MW-38R

MW-42

MW-18

MW-05R

MW-44

MW-04R

MW-20

MW-45

MW-04

MW-16

MW-16D

RW-1S

RW-2S

MW-5R

RW-3S

MW-40D

MW-41D

MW-22D

MW-21D

RW-1D

RW-2D

MW-01D

MW-01

MW-24D

MW-43	5/21/23
1,1-DCA	1.6
1,2-DCA	ND
1,1-DCE	***21.2***
1,4-Dioxane	9
1,1,1-TCA	ND
TCE	ND

MW-09	5/21/23
1,1-DCA	1.9
1,2-DCA	ND
1,1-DCE	***36***
1,4-Dioxane	4.5
1,1,1-TCA	ND
TCE	ND

MW-16	5/21/23
1,1-DCA	***2,230***
1,2-DCA	ND
1,1-DCE	***2,510***
1,4-Dioxane	***89.5***
1,1,1-TCA	***2,230***
TCE	***19.1***

MW-39	5/21/23
1,1-DCA	ND
1,2-DCA	ND
1,1-DCE	ND
1,4-Dioxane	ND
1,1,1-TCA	ND
TCE	ND

MW-04R	5/21/23
1,1-DCA	***33.2***
1,2-DCA	ND
1,1-DCE	***65.5***
1,4-Dioxane	***30.8***
1,1,1-TCA	ND
TCE	ND

MW-38R	5/21/23
1,1-DCA	***6.8***
1,2-DCA	ND
1,1-DCE	ND
1,4-Dioxane	11.4
1,1,1-TCA	ND
TCE	ND

MW-20	5/21/23
1,1-DCA	***252***
1,2-DCA	***8.9***
1,1-DCE	***307***
1,4-Dioxane	***407***
1,1,1-TCA	ND
TCE	ND

MW-42	5/21/23
1,1-DCA	ND
1,2-DCA	ND
1,1-DCE	ND
1,4-Dioxane	5.8
1,1,1-TCA	ND
TCE	ND

MW-18	5/21/23
1,1-DCA	ND
1,2-DCA	ND
1,1-DCE	ND
1,4-Dioxane	ND
1,1,1-TCA	ND
TCE	ND

MW-05R	5/21/23
1,1-DCA	1.2
1,2-DCA	ND
1,1-DCE	ND
1,4-Dioxane	3.3
1,1,1-TCA	1.6
TCE	ND

MW-44	5/21/23
1,1-DCA	1.2
1,2-DCA	ND
1,1-DCE	1.9
1,4-Dioxane	1.9
1,1,1-TCA	2.6
TCE	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-09	5/21/23
1,1-DCA	1.9
1,2-DCA	ND
1,1-DCE	***36***
1,4-Dioxane	4.5
1,1,1-TCA	ND
TCE	ND

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.

0 140 280
SCALE IN FEET

B

R:\ACAD\CADD_CLIENT\Emerson\MD_Hanover\314056608.010\CAD\314V5608.010-044.dwg 8/1/2023 5:07 PM USEC01012

Drawn By: EGC
Checked: TK 7/14/2023
Approved: RM
DWG Name: 314V5608.010-044

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 (MAY 2023)

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.

CATALENT BUILDING 1

CATALENT BUILDING 2

TREATMENT EQUIPMENT BUILDING

MW-46D

MW-27D

MW-23D

MW-03

MW-43

MW-09

MW-39

MW-38R

RW-1S

MW-42

MW-18

RW-2S

MW-5R

RW-3S

MW-40D

MW-16

MW-16D

MW-04R

MW-20

MW-04

MW-45

MW-44

MW-41D

MW-22D

MW-01D

MW-01

MW-21D

RW-1D

RW-2D

MW-24D

MW-23D	
	5/21/23
1,1-DCA	***32.4***
1,2-DCA	1.4
1,1-DCE	***116***
1,4-Dioxane	***27***
1,1,1-TCA	8.3
TCE	ND

MW-40D	
	5/21/23
1,1-DCA	ND
1,2-DCA	ND
1,1-DCE	ND
1,4-Dioxane	ND
1,1,1-TCA	ND
TCE	ND

MW-16D	
	5/21/23
1,1-DCA	***24.8***
1,2-DCA	1.4
1,1-DCE	***111***
1,4-Dioxane	***36.1***
1,1,1-TCA	6.5
TCE	ND

MW-22D	
	5/21/23
1,1-DCA	ND
1,2-DCA	ND
1,1-DCE	***8.4***
1,4-Dioxane	3
1,1,1-TCA	ND
TCE	ND

MW-01D	
	5/21/23
1,1-DCA	1.8
1,2-DCA	ND
1,1-DCE	***11.1***
1,4-Dioxane	4
1,1,1-TCA	ND
TCE	ND

MW-21D	
	5/21/23
1,1-DCA	ND
1,2-DCA	ND
1,1-DCE	***26.1***
1,4-Dioxane	7.1
1,1,1-TCA	ND
TCE	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-23D	WELL ID
5/21/23	DATE
1,1-DCA ***32.4***	CONCENTRATION (ug/l) (BOLD
1,2-DCA 1.4	ITALIC EXCEEDS CLEANUP LEVELS)
1,1-DCE ***116***	
1,4-Dioxane ***27***	
1,1,1-TCA 8.3	
TCE ND	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

0 140 280
SCALE IN FEET

B

Drawn By: EGC
Checked: TK 7/14/2023
Approved: RM
DWG Name: 314V5608.010-044

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 (MAY 2023)

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

R:\ACAD\CADD_CLIENT\Emerson\MD_Hanover\314056608.010\CAD\314V5608.010-044.dwg 8/1/2023 5:04 PM USEC01012

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 May 2023) (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 May 2023) (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 May 2023) (a)

Well ID	Zone	TOC elevation	5/30/2018		11/7/2018		5/21/2019		11/19/2019		5/12/2020		11/22/2020	
			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*	*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	15.58	114.22
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	6.1	107.50
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	10.85	113.55
MW-04R (b)	Shallow	127.5	NA	-	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	15.84	107.66
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	11.23	113.87
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	11.68	112.32
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	23.80	101.30
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	12.11	113.29
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	19.25	106.15
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	23.52	101.08
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	NM	-
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	21.91	100.89
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	16.52	110.58
MW-45	Shallow	126.7	12.98	113.74	12.00	114.72	11.75	114.97	14.55	112.17	NM	-	13.61	113.11
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	28.13	94.77
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	35.31	88.19
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	26.72	98.68
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	59.91	69.49
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	39.97	84.13
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	50.37	75.93
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	46.55	82.30
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	39.22	85.98
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	53.02	76.08
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	30.62	86.58
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	40.97	83.13
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	48.65	78.45
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	37.72	87.05
RW-1D	Deep	126.9	62.75	64.15	62.97	63.93	62.44	64.46	64.86	62.04	NM	-	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	69.72	57.68

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.

a/ Vertical datum is NAVD-88
NM = not measured
TOC = top of casing
NA = not available beca
Light gray shading denotes w
screened in the deep (confi
Continuous pumping of the g
Water levels from both shallo
b/ MW-04 was replaced in Sep
c/ Water level measurements re

Table 1

Historical Water Level Measurements in
Onsite Monitoring Wells and Recovery Well Piezometers
Former Kop-Flex Facility Site
Hanover, Maryland
(December 2016 to May 2023) (a)

Well ID	Zone	TOC elevation	5/9/2021		11/14/2021 (c)		6/26/2022 (c)		11/7/2022		11/20/2022		5/21/2023	
			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	14.75	115.05	15.35	114.45	14.85	114.95	15.66	114.14	15.65	114.15	15.22	114.58
MW-03	Shallow	113.6	6.4	107.20	5.86	107.74	6.21	107.39	6.39	107.21	6.29	107.31	6.63	106.97
MW-04	Shallow	124.4	9.75	114.65	10.43	113.97	9.90	114.50	-	- (b)	-	- (b)	-	- (b)
MW-04R (b)	Shallow	127.5	NA	-	NA	-	NA	-	13.93	113.54	14.01	113.46	13.60	113.87
MW-5R	Shallow	123.5	NM	-	13.52	109.98	14.36	109.14	NM	-	15.95	107.55	13.53	109.97
MW-09	Shallow	125.1	10.35	114.75	10.85	114.25	10.50	114.60	10.81	114.29	11.08	114.02	10.90	114.20
MW-16	Shallow	124.0	11.15	112.85	11.05	112.95	11.22	112.78	11.84	112.16	11.75	112.25	11.79	112.21
MW-18	Shallow	125.1	26.71	98.39	21.42	103.68	22.05	103.05	23.37	101.73	23.39	101.71	21.46	103.64
MW-20	Shallow	125.4	11.22	114.18	11.34	114.06	14.41	110.99	11.35	114.05	11.73	113.67	11.80	113.60
MW-38R	Shallow	125.4	18.55	106.85	15.63	109.77	17.66	107.74	19.32	106.08	19.01	106.39	16.76	108.64
MW-39	Shallow	124.6	22.98	101.62	21.29	103.31	22.22	102.38	23.74	100.86	23.49	101.11	21.72	102.88
MW-42	Shallow	125.9	17.98	107.92	15.64	110.26	NM	-	18.68	107.22	18.48	107.42	15.89	110.01
MW-43	Shallow	122.8	21.02	101.78	20.10	102.70	20.47	102.33	21.58	101.22	21.51	101.29	20.10	102.70
MW-44	Shallow	127.1	16.26	110.84	15.21	111.89	15.80	111.30	16.12	110.98	15.85	111.25	15.30	111.80
MW-45	Shallow	126.7	12.69	114.03	13.35	113.37	12.91	113.81	NM	-	13.54	113.18	13.08	113.64
RW-1S	Shallow	122.9	25.00	97.90	13.28	109.62	NM	-	20.77	102.13	20.41	102.49	13.22	109.68
RW-2S	Shallow	123.5	34.85	88.65	16.02	107.48	NM	-	29.30	94.20	28.82	94.68	14.70	108.80
RW-3S	Shallow	125.4	25.36	100.04	15.69	109.71	NM	-	NM	-	16.94	108.46	15.82	109.58
MW-1D	Deep	129.4	57.46	71.94	45.20	84.20	47.46	81.94	NM	-	60.02	69.38	45.61	83.79
MW-16D	Deep	124.1	38.81	85.29	37.06	87.04	NM	-	NM	-	NM	-	37.56	86.54
MW-21D	Deep	126.3	48.64	77.66	41.50	84.80	43.11	83.19	NM	-	51.95	74.35	40.86	85.44
MW-22D	Deep	128.9	44.72	84.13	43.36	85.49	44.90	83.95	NM	-	46.90	81.95	43.52	85.33
MW-23D	Deep	125.2	37.36	87.84	36.73	88.47	38.36	86.84	NM	-	39.85	85.35	37.31	87.89
MW-24D	Deep	129.1	50.01	79.09	49.40	79.70	51.06	78.04	NM	-	53.11	75.99	49.42	79.68
MW-27D	Deep	117.2	28.89	88.31	28.72	88.48	29.82	87.38	NM	-	31.18	86.02	29.24	87.96
MW-40D	Deep	124.1	39.00	85.10	37.48	86.62	40.04	84.06	NM	-	41.58	82.52	37.80	86.30
MW-41D	Deep	127.1	45.95	81.15	44.51	82.59	46.96	80.14	NM	-	48.78	78.32	44.84	82.26
MW-46D	Deep	124.8	35.95	88.82	35.62	89.15	37.13	87.64	NM	-	38.38	86.39	36.26	88.51
RW-1D	Deep	126.9	NM	-	41.71	85.19	NM	-	NM	-	64.80	62.10	42.00	84.90
RW-2D	Deep	127.4	69.41	57.99	43.90	83.50	NM	-	NM	-	71.59	55.81	45.25	82.15

ıse the well had not been installed
ells screened in the shallow (unconfined) zone; blue shading denotes wells
ned) zone.
oundwater recovery well system started on March 29, 2017.
w and deep recovery wells were measured in piezometers co-located with the wells.
ember 2022 with MW-04R.
resentative of non-pumping conditions in the aquifer system.

Table 2

May 2023 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-4R (d) 5/21/2023	MW-05R 5/21/2023	MW-09 5/21/2023	MW-16 5/21/2023	MW-18 5/21/2023	MW-20 5/21/2023	MW-38R 5/21/2023	MW-39 5/21/2023	MW-42 5/21/2023	MW-43 5/21/2023	MW-44 5/21/2023
Acetone	1,400			10.0 U	10.0 U	10.0 U	12.3	10.0 U	10.0 U	10.0 U	10.0 U	10.0 U	10.0 U	10.0 U
Chloroethane	2,100			1.0 U	1.0 U	1.0 U	96.1	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			**33.2**	1.2	1.9	**2,230**	1.0 U	**252**	**6.8**	1.0 U	1.0 U	1.6	1.2
1,2-Dichloroethane	5			1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	**8.9**	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1-Dichloroethene	7			**65.5**	1.0 U	**36.0**	**2,510**	1.0 U	**307**	1.0 U	1.0 U	1.0 U	**21.2**	1.9
1,4-Dioxane	15	(c)		**30.8**	3.3	4.5	**89.5**	1.0 U	**407**	11.4	1.0 U	5.8	9.0	1.9
Ethylbenzene	700			1.0 U	1.0 U	1.0 U	1.3	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 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	1.1	1.0 U	2.3	1.0 U
Methylene Chloride	5			1.0 U	1.0 U	1.0 U	3.7	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	**6.3**	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	1.6	1.0 U	**2,230**	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.6
Trichloroethene	5			1.0 U	1.0 U	1.0 U	**19.1**	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	**6.7**	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	3.7	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	1.9	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	5.7	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			**129.5**	**6.1**	**42.4**	**7,191**	**ND**	**975**	**18.2**	**ND**	**5.8**	**31.8**	**7.6**

Table 2

May 2023 Monitoring Well Sampling Results
Former Kop-Flex Facility Site
Hanover, Maryland (a)

Parameters	Groundwater Cleanup Standards (µg/L) (b)		Well ID:	Deep Wells MW-01D	MW-16D	MW-16D (e)	MW-21D	MW-22D	MW-23D	MW-40D
			Sampling Date:	5/21/2023	5/21/2023	5/21/2023	5/21/2023	5/21/2023	5/21/2023	5/21/2023
Acetone	1,400			10.0 U	10.0 U	10.0 U	10.0 U	10.0 U	10.0 U	10.0 U
Chloroethane	2,100			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			1.8	**24.8**	**24.9**	1.0 U	1.0 U	**32.4**	1.0 U
1,2-Dichloroethane	5			1.0 U	1.4	1.4	1.0 U	1.0 U	1.4	1.0 U
1,1-Dichloroethene	7			**11.1**	**111**	**110**	**26.1**	**8.4**	**116**	1.0 U
1,4-Dioxane	15	(c)		4.0	**36.1**	**21.3**	7.1	3.0	**27.0**	1.0 U
Ethylbenzene	700			1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Methyl t-Butyl Ether	20			1.0 U	1.0 U	1.0 U	1.2	1.0 U	1.0 U	1.0 U
Methylene Chloride	5			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
1,1,1-Trichloroethane	200			1.0 U	6.5	6.7	1.0 U	1.0 U	8.3	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
Vinyl Chloride	3			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
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
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
		Total CVOCs & 1,4-Dioxane		**16.9**	**179.8**	**164.3**	**33.2**	**11.4**	**185.1**	**ND**

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/Documents/www.mde.state.md.us/assets/document/MDE%20Soil%20and%20Groundwater%20Cleanup%20Standards%2010-2018%20Interim%20Final%20Update%203-2.pdf
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
e/ This sample was duplicate of MW-16D

Table 3

Historical Monitoring Well Sampling Results
Former Kop-Flex Facility Site
Hanover, Maryland
(December 2016 - May 2023) (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
	5/21/2023	1.0 U	**33.2**	1.0 U	**65.5**	1.0 U	**30.8**	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 - May 2023) (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
	5/21/2023	1.0 U	1.2	1.0 U	1.0 U	1.0 U	3.3	1.0 U	1.0 U	1.6	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
	5/21/2023	1.0 U	1.9	1.0 U	**36.0**	1.0 U	4.5	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 - May 2023) (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**
	5/21/2023	96.1	**2,230**	1.0 U	**2,510**	1.0 U	**89.5**	3.7	**6.3**	**2,230**	1.0 U	**19.1**	**6.7**
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
	5/21/2023	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 - May 2023) (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
	5/21/2023	1.0 U	**252**	**8.9**	**307**	1.0 U	**407**	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	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
	5/21/2023	1.0 U	**6.8**	1.0 U	1.0 U	1.0 U	11.4	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 - May 2023) (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
	5/21/2023	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
	5/21/2023	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	5.8	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 - May 2023) (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
	5/21/2023	1.0 U	1.6	1.0 U	**21.2**	1.0 U	9.0	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
	5/21/2023	1.0 U	1.2	1.0 U	1.9	1.0 U	1.9	1.0 U	1.0 U	2.6	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

Table 3

Historical Monitoring Well Sampling Results
Former Kop-Flex Facility Site
Hanover, Maryland
(December 2016 - May 2023) (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-1D	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
	5/21/2023	1.0 U	**1.8**	1.0 U	**11.1**	1.0 U	4.0	1.0 U	1.0 U	1.0	1.0 U	1.0 U	1.0 U
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
	5/21/2023	1.0 U	**24.8**	1.4	**111.0**	1.0 U	**36.1**	1.0 U	1.0 U	6.5	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
	5/21/2023	1.0 U	1.0 U	1.0 U	**26.1**	1.0 U	7.1	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 - May 2023) (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
	5/21/2023	1.0 U	1.0 U	1.0 U	8.4	1.0 U	3.0	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
	5/21/2023	1.0 U	**32.4**	1.4	**116**	1.0 U	**27.0**	1.0 U	1.0 U	8.3	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

Table 3

Historical Monitoring Well Sampling Results
Former Kop-Flex Facility Site
Hanover, Maryland
(December 2016 - May 2023) (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-27D	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
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
	5/21/2023	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.

ENCLOSURE A – CERTIFIED LABORATORY ANALYTICAL REPORT FOR ONSITE MONITORING WELL SAMPLES (MAY 2023

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 Former KOP-Flex Facility Onsit
Workorder 3304367
Report ID 250632 on 6/13/2023

Certificate of Analysis

Enclosed are the analytical results for samples received by the laboratory on May 22, 2023.

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.

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
3304367001	MW-01D	Ground Water	05/21/2023 15:00	05/22/2023 18:15	CBC	Collected By Client
3304367002	MW-22D	Ground Water	05/21/2023 15:15	05/22/2023 18:15	CBC	Collected By Client
3304367003	MW-04R	Ground Water	05/21/2023 15:25	05/22/2023 18:15	CBC	Collected By Client
3304367004	MW-20	Ground Water	05/21/2023 15:35	05/22/2023 18:15	CBC	Collected By Client
3304367005	MW-09	Ground Water	05/21/2023 15:55	05/22/2023 18:15	CBC	Collected By Client
3304367006	MW-23D	Ground Water	05/21/2023 16:10	05/22/2023 18:15	CBC	Collected By Client
3304367007	MW-46D	Ground Water	05/21/2023 16:25	05/22/2023 18:15	CBC	Collected By Client
3304367008	MW-16	Ground Water	05/21/2023 16:50	05/22/2023 18:15	CBC	Collected By Client
3304367009	MW-16D	Ground Water	05/21/2023 17:05	05/22/2023 18:15	CBC	Collected By Client
3304367010	DUP-052123	Ground Water	05/21/2023 13:00	05/22/2023 18:15	CBC	Collected By Client
3304367011	MW-43	Ground Water	05/21/2023 11:25	05/22/2023 18:15	CBC	Collected By Client
3304367012	MW-39	Ground Water	05/21/2023 11:35	05/22/2023 18:15	CBC	Collected By Client
3304367013	MW-42	Ground Water	05/21/2023 11:45	05/22/2023 18:15	CBC	Collected By Client
3304367014	MW-18	Ground Water	05/21/2023 12:00	05/22/2023 18:15	CBC	Collected By Client
3304367015	MW-40D	Ground Water	05/21/2023 12:10	05/22/2023 18:15	CBC	Collected By Client
3304367016	MW-38R	Ground Water	05/21/2023 13:35	05/22/2023 18:15	CBC	Collected By Client
3304367017	MW-05R	Ground Water	05/21/2023 13:55	05/22/2023 18:15	CBC	Collected By Client
3304367018	MW-44	Ground Water	05/21/2023 14:05	05/22/2023 18:15	CBC	Collected By Client
3304367019	MW-21D	Ground Water	05/21/2023 14:20	05/22/2023 18:15	CBC	Collected By Client
3304367020	Trip Blank A	Ground Water	05/21/2023 00:00	05/22/2023 18:15	CBC	Collected By Client
3304367021	Trip Blank B	Ground Water	05/21/2023 00:00	05/22/2023 18:15	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 initial calibration verification for method SW846 8260D was outside the control limits for the analyte chloroethane. The % Recovery was reported as 68% and the control limits were 70 to 130%.
2	This compound was recovered below the 20 percent 8260D criteria in the continuing calibration verification associated with this sample.
3	The surrogate 2-Methylnapthalene-d10 for method SW846 8270E SIM was outside of control limits. The % Recovery was reported as 0 and the control limits were 29 to 112. This result was reported at a dilution of 100.
4	The surrogate Fluoranthene-d10 for method SW846 8270E SIM was outside of control limits. The % Recovery was reported as 0 and the control limits were 45 to 130. This result was reported at a dilution of 100.
5	1,1,1,2-Tetrachloroethane was recovered below the 20 percent 8260D criteria in the continuing calibration verification associated with this sample.
6	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 101 and the control limits were 22 to 75.
7	A dilution of the GCMS volatiles analysis was performed outside of the 14 day 8260D method holding time because 1,1-Dichloroethane exceeded the calibration range in the initial analysis.
8	A dilution of the GCMS volatiles analysis was performed outside of the 14 day 8260D method holding time because 1,1-Dichloroethene exceeded the calibration range in the initial analysis.
9	A dilution of the GCMS volatiles analysis was performed outside of the 14 day 8260D method holding time because 1,1,1-Trichloroethane exceeded the calibration range in the initial analysis.
11	The surrogate Fluoranthene-d10 for method SW846 8270E SIM was outside of control limits. The % Recovery was reported as 40.6 and the control limits were 45 to 130. This result was reported at a dilution of 10.

Detected Results Summary

Client Sample ID	MW-01D	Collected	05/21/2023 15:00
Lab Sample ID	3304367001	Lab Receipt	05/22/2023 18:15

Compound	Result	Units	RDL	Method	Flag
SEMIVOLATILE SIM					
1,4-Dioxane	4.0	ug/L	1.0	SW846 8270E SIM	#
VOLATILE ORGANICS					
1,1-Dichloroethane	1.8	ug/L	1.0	SW846 8260D	#
1,1-Dichloroethene	11.1	ug/L	1.0	SW846 8260D	#

Detected Results Summary

Client Sample ID	MW-22D	Collected	05/21/2023 15:15
Lab Sample ID	3304367002	Lab Receipt	05/22/2023 18:15

Compound	Result	Units	RDL	Method	Flag
SEMIVOLATILE SIM					
1,4-Dioxane	3.0	ug/L	1.0	SW846 8270E SIM	#
VOLATILE ORGANICS					
1,1-Dichloroethene	8.4	ug/L	1.0	SW846 8260D	#

Detected Results Summary

Client Sample ID	MW-04R	Collected	05/21/2023 15:25
Lab Sample ID	3304367003	Lab Receipt	05/22/2023 18:15

Compound	Result	Units	RDL	Method	Flag
SEMIVOLATILE SIM					
1,4-Dioxane	30.8	ug/L	15.6	SW846 8270E SIM	#
VOLATILE ORGANICS					
1,1-Dichloroethane	33.2	ug/L	5.0	SW846 8260D	#
1,1-Dichloroethene	65.5	ug/L	5.0	SW846 8260D	#

Detected Results Summary

Client Sample ID	MW-20	Collected	05/21/2023 15:35
Lab Sample ID	3304367004	Lab Receipt	05/22/2023 18:15

Compound	Result	Units	RDL	Method	Flag
SEMIVOLATILE SIM					
1,4-Dioxane	407	ug/L	100	SW846 8270E SIM	#
VOLATILE ORGANICS					
1,1-Dichloroethane	252	ug/L	5.0	SW846 8260D	#
1,1-Dichloroethene	307	ug/L	5.0	SW846 8260D	#
1,2-Dichloroethane	8.9	ug/L	5.0	SW846 8260D	#

Detected Results Summary

Client Sample ID	MW-09	Collected	05/21/2023 15:55
Lab Sample ID	3304367005	Lab Receipt	05/22/2023 18:15

Compound	Result	Units	RDL	Method	Flag
SEMIVOLATILE SIM					
1,4-Dioxane	4.5	ug/L	1.4	SW846 8270E SIM	#
VOLATILE ORGANICS					
1,1-Dichloroethane	1.9	ug/L	1.0	SW846 8260D	#
1,1-Dichloroethene	36.0	ug/L	1.0	SW846 8260D	#

Detected Results Summary

Client Sample ID	MW-23D	Collected	05/21/2023 16:10
Lab Sample ID	3304367006	Lab Receipt	05/22/2023 18:15

Compound	Result	Units	RDL	Method	Flag
SEMIVOLATILE SIM					
1,4-Dioxane	27.0	ug/L	16.0	SW846 8270E SIM	#
VOLATILE ORGANICS					
1,1,1-Trichloroethane	8.3	ug/L	1.0	SW846 8260D	#
1,1-Dichloroethane	32.4	ug/L	1.0	SW846 8260D	#
1,1-Dichloroethene	116	ug/L	1.0	SW846 8260D	#
1,2-Dichloroethane	1.4	ug/L	1.0	SW846 8260D	#

Detected Results Summary

Client Sample ID	MW-46D	Collected	05/21/2023 16:25
Lab Sample ID	3304367007	Lab Receipt	05/22/2023 18:15

Compound	Result	Units	RDL	Method	Flag
VOLATILE ORGANICS					
1,1-Dichloroethane	1.2	ug/L	1.0	SW846 8260D	#
1,1-Dichloroethene	19.2	ug/L	1.0	SW846 8260D	#

Detected Results Summary

Client Sample ID	MW-16	Collected	05/21/2023 16:50
Lab Sample ID	3304367008	Lab Receipt	05/22/2023 18:15

Compound	Result	Units	RDL	Method	Flag
SEMIVOLATILE SIM					
1,4-Dioxane	89.5	ug/L	10.0	SW846 8270E SIM	#
VOLATILE ORGANICS					
1,1,1-Trichloroethane	2230	ug/L	50.0	SW846 8260D	#
1,1-Dichloroethane	2230	ug/L	50.0	SW846 8260D	#
1,1-Dichloroethene	2510	ug/L	50.0	SW846 8260D	#
Acetone	12.3	ug/L	10.0	SW846 8260D	#
Chloroethane	96.1	ug/L	1.0	SW846 8260D	#
Ethylbenzene	1.3	ug/L	1.0	SW846 8260D	#
Methylene Chloride	3.7	ug/L	1.0	SW846 8260D	#
mp-Xylene	3.7	ug/L	2.0	SW846 8260D	#
o-Xylene	1.9	ug/L	1.0	SW846 8260D	#
Tetrachloroethene	6.3	ug/L	1.0	SW846 8260D	#
Total Xylenes	5.7	ug/L	3.0	SW846 8260D	#
Trichloroethene	19.1	ug/L	1.0	SW846 8260D	#
Vinyl Chloride	6.7	ug/L	1.0	SW846 8260D	#

Detected Results Summary

Client Sample ID	MW-16D	Collected	05/21/2023 17:05
Lab Sample ID	3304367009	Lab Receipt	05/22/2023 18:15

Compound	Result	Units	RDL	Method	Flag
SEMIVOLATILE SIM					
1,4-Dioxane	36.1	ug/L	10.0	SW846 8270E SIM	#
VOLATILE ORGANICS					
1,1,1-Trichloroethane	6.5	ug/L	1.0	SW846 8260D	#
1,1-Dichloroethane	24.8	ug/L	1.0	SW846 8260D	#
1,1-Dichloroethene	111	ug/L	1.0	SW846 8260D	#
1,2-Dichloroethane	1.4	ug/L	1.0	SW846 8260D	#

Detected Results Summary

Client Sample ID	DUP-052123	Collected	05/21/2023 13:00
Lab Sample ID	3304367010	Lab Receipt	05/22/2023 18:15

Compound	Result	Units	RDL	Method	Flag
SEMIVOLATILE SIM					
1,4-Dioxane	21.3	ug/L	10.0	SW846 8270E SIM	#
VOLATILE ORGANICS					
1,1,1-Trichloroethane	6.7	ug/L	1.0	SW846 8260D	#
1,1-Dichloroethane	24.9	ug/L	1.0	SW846 8260D	#
1,1-Dichloroethene	110	ug/L	1.0	SW846 8260D	#
1,2-Dichloroethane	1.4	ug/L	1.0	SW846 8260D	#

Detected Results Summary

Client Sample ID	MW-43	Collected	05/21/2023 11:25
Lab Sample ID	3304367011	Lab Receipt	05/22/2023 18:15

Compound	Result	Units	RDL	Method	Flag
SEMIVOLATILE SIM					
1,4-Dioxane	9.0	ug/L	1.4	SW846 8270E SIM	#
VOLATILE ORGANICS					
1,1-Dichloroethane	1.6	ug/L	1.0	SW846 8260D	#
1,1-Dichloroethene	21.2	ug/L	1.0	SW846 8260D	#
Methyl t-Butyl Ether	2.3	ug/L	1.0	SW846 8260D	#

Detected Results Summary

Client Sample ID	MW-39	Collected	05/21/2023 11:35
Lab Sample ID	3304367012	Lab Receipt	05/22/2023 18:15

Compound	Result	Units	RDL	Method	Flag
VOLATILE ORGANICS					
Methyl t-Butyl Ether	1.1	ug/L	1.0	SW846 8260D	#

Detected Results Summary

Client Sample ID	MW-42	Collected	05/21/2023 11:45
Lab Sample ID	3304367013	Lab Receipt	05/22/2023 18:15

Compound	Result	Units	RDL	Method	Flag
SEMIVOLATILE SIM					
1,4-Dioxane	5.8	ug/L	1.5	SW846 8270E SIM	#

Detected Results Summary

Client Sample ID	MW-38R	Collected	05/21/2023 13:35
Lab Sample ID	3304367016	Lab Receipt	05/22/2023 18:15

Compound	Result	Units	RDL	Method	Flag
SEMIVOLATILE SIM					
1,4-Dioxane	11.4	ug/L	10.0	SW846 8270E SIM	#
VOLATILE ORGANICS					
1,1-Dichloroethane	6.8	ug/L	1.0	SW846 8260D	#

Detected Results Summary

Client Sample ID	MW-05R	Collected	05/21/2023 13:55
Lab Sample ID	3304367017	Lab Receipt	05/22/2023 18:15

Compound	Result	Units	RDL	Method	Flag
SEMIVOLATILE SIM					
1,4-Dioxane	3.3	ug/L	1.0	SW846 8270E SIM	#
VOLATILE ORGANICS					
1,1,1-Trichloroethane	1.6	ug/L	1.0	SW846 8260D	#
1,1-Dichloroethane	1.2	ug/L	1.0	SW846 8260D	#

Detected Results Summary

Client Sample ID	MW-44	Collected	05/21/2023 14:05
Lab Sample ID	3304367018	Lab Receipt	05/22/2023 18:15

Compound	Result	Units	RDL	Method	Flag
SEMIVOLATILE SIM					
1,4-Dioxane	1.9	ug/L	1.6	SW846 8270E SIM	#
VOLATILE ORGANICS					
1,1,1-Trichloroethane	2.6	ug/L	1.0	SW846 8260D	#
1,1-Dichloroethane	1.2	ug/L	1.0	SW846 8260D	#
1,1-Dichloroethene	1.9	ug/L	1.0	SW846 8260D	#

Detected Results Summary

Client Sample ID	MW-21D	Collected	05/21/2023 14:20
Lab Sample ID	3304367019	Lab Receipt	05/22/2023 18:15

Compound	Result	Units	RDL	Method	Flag
SEMIVOLATILE SIM					
1,4-Dioxane	7.1	ug/L	1.0	SW846 8270E SIM	#
VOLATILE ORGANICS					
1,1-Dichloroethene	26.1	ug/L	1.0	SW846 8260D	#
Methyl t-Butyl Ether	1.2	ug/L	1.0	SW846 8260D	#

Results

Client Sample ID	MW-01D	Collected	05/21/2023 15:00
Lab Sample ID	3304367001	Lab Receipt	05/22/2023 18:15

SEMIVOLATILE SIM

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
1,4-Dioxane	4.0		ug/L	1.0	SW846 8270E SIM	1	05/26/2023 07:11	M1O	C

SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
2-Methylnapthalene-d10	7297-45-2	70.3%	29 – 112	05/26/2023 07:11	
Fluoranthene-d10	93951-69-0	75.7%	45 – 130	05/26/2023 07:11	

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	06/01/2023 17:50	TMP	A
1,1,1-Trichloroethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/01/2023 17:50	TMP	A
1,1,2,2-Tetrachloroethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/01/2023 17:50	TMP	A
1,1,2-Trichloroethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/01/2023 17:50	TMP	A
1,1-Dichloroethane	1.8		ug/L	1.0	SW846 8260D	1	06/01/2023 17:50	TMP	A
1,1-Dichloroethene	11.1		ug/L	1.0	SW846 8260D	1	06/01/2023 17:50	TMP	A
1,1-Dichloropropene	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/01/2023 17:50	TMP	A
1,2,3-Trichlorobenzene	2.0 U	U	ug/L	2.0	SW846 8260D	1	06/01/2023 17:50	TMP	A
1,2,3-Trichloropropane	2.0 U	U	ug/L	2.0	SW846 8260D	1	06/01/2023 17:50	TMP	A
1,2,4-Trichlorobenzene	2.0 U	U	ug/L	2.0	SW846 8260D	1	06/01/2023 17:50	TMP	A
1,2-Dibromo-3-chloropropane	7.0 U	U	ug/L	7.0	SW846 8260D	1	06/01/2023 17:50	TMP	A
1,2-Dibromoethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/01/2023 17:50	TMP	A
1,2-Dichlorobenzene	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/01/2023 17:50	TMP	A
1,2-Dichloroethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/01/2023 17:50	TMP	A
1,2-Dichloropropane	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/01/2023 17:50	TMP	A
1,3-Dichlorobenzene	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/01/2023 17:50	TMP	A
1,3-Dichloropropane	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/01/2023 17:50	TMP	A
1,4-Dichlorobenzene	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/01/2023 17:50	TMP	A
2,2-Dichloropropane	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/01/2023 17:50	TMP	A
2-Butanone	10.0 U	U	ug/L	10.0	SW846 8260D	1	06/01/2023 17:50	TMP	A
2-Hexanone	5.0 U	U	ug/L	5.0	SW846 8260D	1	06/01/2023 17:50	TMP	A
4-Methyl-2-Pentanone(MIBK)	5.0 U	U	ug/L	5.0	SW846 8260D	1	06/01/2023 17:50	TMP	A
Acetone	10.0 U	U	ug/L	10.0	SW846 8260D	1	06/01/2023 17:50	TMP	A
Benzene	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/01/2023 17:50	TMP	A
Bromobenzene	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/01/2023 17:50	TMP	A
Bromochloromethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/01/2023 17:50	TMP	A
Bromodichloromethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/01/2023 17:50	TMP	A
Bromoform	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/01/2023 17:50	TMP	A
Bromomethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/01/2023 17:50	TMP	A
Carbon Tetrachloride	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/01/2023 17:50	TMP	A
Chlorobenzene	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/01/2023 17:50	TMP	A
Chlorodibromomethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/01/2023 17:50	TMP	A
Chloroethane	1.0 U	U,1	ug/L	1.0	SW846 8260D	1	06/01/2023 17:50	TMP	A
Chloroform	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/01/2023 17:50	TMP	A
Chloromethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/01/2023 17:50	TMP	A

Results

Client Sample ID	MW-01D	Collected	05/21/2023 15:00
Lab Sample ID	3304367001	Lab Receipt	05/22/2023 18:15

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	06/01/2023 17:50	TMP	A
cis-1,3-Dichloropropene	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/01/2023 17:50	TMP	A
Dibromomethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/01/2023 17:50	TMP	A
Dichlorodifluoromethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/01/2023 17:50	TMP	A
Diisopropyl ether	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/01/2023 17:50	TMP	A
Ethylbenzene	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/01/2023 17:50	TMP	A
Hexachlorobutadiene	5.0 U	U	ug/L	5.0	SW846 8260D	1	06/01/2023 17:50	TMP	A
Methyl t-Butyl Ether	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/01/2023 17:50	TMP	A
Methylene Chloride	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/01/2023 17:50	TMP	A
mp-Xylene	2.0 U	U	ug/L	2.0	SW846 8260D	1	06/01/2023 17:50	TMP	A
Naphthalene	2.0 U	U	ug/L	2.0	SW846 8260D	1	06/01/2023 17:50	TMP	A
o-Chlorotoluene	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/01/2023 17:50	TMP	A
o-Xylene	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/01/2023 17:50	TMP	A
p-Chlorotoluene	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/01/2023 17:50	TMP	A
p-Isopropyltoluene	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/01/2023 17:50	TMP	A
Styrene	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/01/2023 17:50	TMP	A
Tetrachloroethene	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/01/2023 17:50	TMP	A
Toluene	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/01/2023 17:50	TMP	A
Total Xylenes	3.0 U	U	ug/L	3.0	SW846 8260D	1	06/01/2023 17:50	TMP	A
trans-1,2-Dichloroethene	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/01/2023 17:50	TMP	A
trans-1,3-Dichloropropene	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/01/2023 17:50	TMP	A
Trichloroethene	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/01/2023 17:50	TMP	A
Trichlorofluoromethane	1.0 U	U,2	ug/L	1.0	SW846 8260D	1	06/01/2023 17:50	TMP	A
Vinyl Acetate	5.0 U	U	ug/L	5.0	SW846 8260D	1	06/01/2023 17:50	TMP	A
Vinyl Chloride	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/01/2023 17:50	TMP	A

SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
1,2-Dichloroethane-d4	17060-07-0	101%	62 – 133	06/01/2023 17:50	
4-Bromofluorobenzene	460-00-4	97.7%	79 – 114	06/01/2023 17:50	
Dibromofluoromethane	1868-53-7	95.2%	78 – 116	06/01/2023 17:50	
Toluene-d8	2037-26-5	97.1%	76 – 127	06/01/2023 17:50	

Results

Client Sample ID	MW-22D	Collected	05/21/2023 15:15
Lab Sample ID	3304367002	Lab Receipt	05/22/2023 18:15

SEMIVOLATILE SIM

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
1,4-Dioxane	3.0		ug/L	1.0	SW846 8270E SIM	1	05/26/2023 07:38	M1O	C

SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
2-Methylnapthalene-d10	7297-45-2	70.4%	29 – 112	05/26/2023 07:38	
Fluoranthene-d10	93951-69-0	84.7%	45 – 130	05/26/2023 07:38	

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	06/01/2023 18:13	TMP	A
1,1,1-Trichloroethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/01/2023 18:13	TMP	A
1,1,2,2-Tetrachloroethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/01/2023 18:13	TMP	A
1,1,2-Trichloroethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/01/2023 18:13	TMP	A
1,1-Dichloroethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/01/2023 18:13	TMP	A
1,1-Dichloroethene	8.4		ug/L	1.0	SW846 8260D	1	06/01/2023 18:13	TMP	A
1,1-Dichloropropene	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/01/2023 18:13	TMP	A
1,2,3-Trichlorobenzene	2.0 U	U	ug/L	2.0	SW846 8260D	1	06/01/2023 18:13	TMP	A
1,2,3-Trichloropropane	2.0 U	U	ug/L	2.0	SW846 8260D	1	06/01/2023 18:13	TMP	A
1,2,4-Trichlorobenzene	2.0 U	U	ug/L	2.0	SW846 8260D	1	06/01/2023 18:13	TMP	A
1,2-Dibromo-3-chloropropane	7.0 U	U	ug/L	7.0	SW846 8260D	1	06/01/2023 18:13	TMP	A
1,2-Dibromoethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/01/2023 18:13	TMP	A
1,2-Dichlorobenzene	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/01/2023 18:13	TMP	A
1,2-Dichloroethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/01/2023 18:13	TMP	A
1,2-Dichloropropane	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/01/2023 18:13	TMP	A
1,3-Dichlorobenzene	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/01/2023 18:13	TMP	A
1,3-Dichloropropane	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/01/2023 18:13	TMP	A
1,4-Dichlorobenzene	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/01/2023 18:13	TMP	A
2,2-Dichloropropane	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/01/2023 18:13	TMP	A
2-Butanone	10.0 U	U	ug/L	10.0	SW846 8260D	1	06/01/2023 18:13	TMP	A
2-Hexanone	5.0 U	U	ug/L	5.0	SW846 8260D	1	06/01/2023 18:13	TMP	A
4-Methyl-2-Pentanone(MIBK)	5.0 U	U	ug/L	5.0	SW846 8260D	1	06/01/2023 18:13	TMP	A
Acetone	10.0 U	U	ug/L	10.0	SW846 8260D	1	06/01/2023 18:13	TMP	A
Benzene	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/01/2023 18:13	TMP	A
Bromobenzene	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/01/2023 18:13	TMP	A
Bromochloromethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/01/2023 18:13	TMP	A
Bromodichloromethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/01/2023 18:13	TMP	A
Bromoform	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/01/2023 18:13	TMP	A
Bromomethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/01/2023 18:13	TMP	A
Carbon Tetrachloride	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/01/2023 18:13	TMP	A
Chlorobenzene	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/01/2023 18:13	TMP	A
Chlorodibromomethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/01/2023 18:13	TMP	A
Chloroethane	1.0 U	U,1	ug/L	1.0	SW846 8260D	1	06/01/2023 18:13	TMP	A
Chloroform	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/01/2023 18:13	TMP	A
Chloromethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/01/2023 18:13	TMP	A

Results

Client Sample ID	MW-22D	Collected	05/21/2023 15:15
Lab Sample ID	3304367002	Lab Receipt	05/22/2023 18:15

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	06/01/2023 18:13	TMP	A
cis-1,3-Dichloropropene	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/01/2023 18:13	TMP	A
Dibromomethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/01/2023 18:13	TMP	A
Dichlorodifluoromethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/01/2023 18:13	TMP	A
Diisopropyl ether	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/01/2023 18:13	TMP	A
Ethylbenzene	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/01/2023 18:13	TMP	A
Hexachlorobutadiene	5.0 U	U	ug/L	5.0	SW846 8260D	1	06/01/2023 18:13	TMP	A
Methyl t-Butyl Ether	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/01/2023 18:13	TMP	A
Methylene Chloride	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/01/2023 18:13	TMP	A
mp-Xylene	2.0 U	U	ug/L	2.0	SW846 8260D	1	06/01/2023 18:13	TMP	A
Naphthalene	2.0 U	U	ug/L	2.0	SW846 8260D	1	06/01/2023 18:13	TMP	A
o-Chlorotoluene	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/01/2023 18:13	TMP	A
o-Xylene	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/01/2023 18:13	TMP	A
p-Chlorotoluene	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/01/2023 18:13	TMP	A
p-Isopropyltoluene	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/01/2023 18:13	TMP	A
Styrene	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/01/2023 18:13	TMP	A
Tetrachloroethene	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/01/2023 18:13	TMP	A
Toluene	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/01/2023 18:13	TMP	A
Total Xylenes	3.0 U	U	ug/L	3.0	SW846 8260D	1	06/01/2023 18:13	TMP	A
trans-1,2-Dichloroethene	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/01/2023 18:13	TMP	A
trans-1,3-Dichloropropene	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/01/2023 18:13	TMP	A
Trichloroethene	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/01/2023 18:13	TMP	A
Trichlorofluoromethane	1.0 U	U,2	ug/L	1.0	SW846 8260D	1	06/01/2023 18:13	TMP	A
Vinyl Acetate	5.0 U	U	ug/L	5.0	SW846 8260D	1	06/01/2023 18:13	TMP	A
Vinyl Chloride	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/01/2023 18:13	TMP	A

SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
1,2-Dichloroethane-d4	17060-07-0	101%	62 – 133	06/01/2023 18:13	
4-Bromofluorobenzene	460-00-4	99.7%	79 – 114	06/01/2023 18:13	
Dibromofluoromethane	1868-53-7	94.9%	78 – 116	06/01/2023 18:13	
Toluene-d8	2037-26-5	98.8%	76 – 127	06/01/2023 18:13	

Results

Client Sample ID	MW-04R	Collected	05/21/2023 15:25
Lab Sample ID	3304367003	Lab Receipt	05/22/2023 18:15

SEMIVOLATILE SIM

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
1,4-Dioxane	30.8		ug/L	15.6	SW846 8270E SIM	10	05/27/2023 01:02	M1O	C

SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
2-Methylnapthalene-d10	7297-45-2	69.6%	29 – 112	05/26/2023 08:05	
2-Methylnapthalene-d10	7297-45-2	66.3%	29 – 112	05/27/2023 01:02	
Fluoranthene-d10	93951-69-0	77%	45 – 130	05/26/2023 08:05	
Fluoranthene-d10	93951-69-0	61.9%	45 – 130	05/27/2023 01:02	

VOLATILE ORGANICS

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
1,1,1,2-Tetrachloroethane	5.0 U	U	ug/L	5.0	SW846 8260D	5	06/01/2023 18:36	TMP	A
1,1,1-Trichloroethane	5.0 U	U	ug/L	5.0	SW846 8260D	5	06/01/2023 18:36	TMP	A
1,1,2,2-Tetrachloroethane	5.0 U	U	ug/L	5.0	SW846 8260D	5	06/01/2023 18:36	TMP	A
1,1,2-Trichloroethane	5.0 U	U	ug/L	5.0	SW846 8260D	5	06/01/2023 18:36	TMP	A
1,1-Dichloroethane	33.2		ug/L	5.0	SW846 8260D	5	06/01/2023 18:36	TMP	A
1,1-Dichloroethene	65.5		ug/L	5.0	SW846 8260D	5	06/01/2023 18:36	TMP	A
1,1-Dichloropropene	5.0 U	U	ug/L	5.0	SW846 8260D	5	06/01/2023 18:36	TMP	A
1,2,3-Trichlorobenzene	10.0 U	U	ug/L	10.0	SW846 8260D	5	06/01/2023 18:36	TMP	A
1,2,3-Trichloropropane	10.0 U	U	ug/L	10.0	SW846 8260D	5	06/01/2023 18:36	TMP	A
1,2,4-Trichlorobenzene	10.0 U	U	ug/L	10.0	SW846 8260D	5	06/01/2023 18:36	TMP	A
1,2-Dibromo-3-chloropropane	35.0 U	U	ug/L	35.0	SW846 8260D	5	06/01/2023 18:36	TMP	A
1,2-Dibromoethane	5.0 U	U	ug/L	5.0	SW846 8260D	5	06/01/2023 18:36	TMP	A
1,2-Dichlorobenzene	5.0 U	U	ug/L	5.0	SW846 8260D	5	06/01/2023 18:36	TMP	A
1,2-Dichloroethane	5.0 U	U	ug/L	5.0	SW846 8260D	5	06/01/2023 18:36	TMP	A
1,2-Dichloropropane	5.0 U	U	ug/L	5.0	SW846 8260D	5	06/01/2023 18:36	TMP	A
1,3-Dichlorobenzene	5.0 U	U	ug/L	5.0	SW846 8260D	5	06/01/2023 18:36	TMP	A
1,3-Dichloropropane	5.0 U	U	ug/L	5.0	SW846 8260D	5	06/01/2023 18:36	TMP	A
1,4-Dichlorobenzene	5.0 U	U	ug/L	5.0	SW846 8260D	5	06/01/2023 18:36	TMP	A
2,2-Dichloropropane	5.0 U	U	ug/L	5.0	SW846 8260D	5	06/01/2023 18:36	TMP	A
2-Butanone	50.0 U	U	ug/L	50.0	SW846 8260D	5	06/01/2023 18:36	TMP	A
2-Hexanone	25.0 U	U	ug/L	25.0	SW846 8260D	5	06/01/2023 18:36	TMP	A
4-Methyl-2-Pentanone(MIBK)	25.0 U	U	ug/L	25.0	SW846 8260D	5	06/01/2023 18:36	TMP	A
Acetone	50.0 U	U	ug/L	50.0	SW846 8260D	5	06/01/2023 18:36	TMP	A
Benzene	5.0 U	U	ug/L	5.0	SW846 8260D	5	06/01/2023 18:36	TMP	A
Bromobenzene	5.0 U	U	ug/L	5.0	SW846 8260D	5	06/01/2023 18:36	TMP	A
Bromochloromethane	5.0 U	U	ug/L	5.0	SW846 8260D	5	06/01/2023 18:36	TMP	A
Bromodichloromethane	5.0 U	U	ug/L	5.0	SW846 8260D	5	06/01/2023 18:36	TMP	A
Bromoform	5.0 U	U	ug/L	5.0	SW846 8260D	5	06/01/2023 18:36	TMP	A
Bromomethane	5.0 U	U	ug/L	5.0	SW846 8260D	5	06/01/2023 18:36	TMP	A
Carbon Tetrachloride	5.0 U	U	ug/L	5.0	SW846 8260D	5	06/01/2023 18:36	TMP	A
Chlorobenzene	5.0 U	U	ug/L	5.0	SW846 8260D	5	06/01/2023 18:36	TMP	A
Chlorodibromomethane	5.0 U	U	ug/L	5.0	SW846 8260D	5	06/01/2023 18:36	TMP	A
Chloroethane	5.0 U	U,1	ug/L	5.0	SW846 8260D	5	06/01/2023 18:36	TMP	A

Results

Client Sample ID	MW-04R	Collected	05/21/2023 15:25
Lab Sample ID	3304367003	Lab Receipt	05/22/2023 18:15

VOLATILE ORGANICS (cont.)

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
Chloroform	5.0 U	U	ug/L	5.0	SW846 8260D	5	06/01/2023 18:36	TMP	A
Chloromethane	5.0 U	U	ug/L	5.0	SW846 8260D	5	06/01/2023 18:36	TMP	A
cis-1,2-Dichloroethene	5.0 U	U	ug/L	5.0	SW846 8260D	5	06/01/2023 18:36	TMP	A
cis-1,3-Dichloropropene	5.0 U	U	ug/L	5.0	SW846 8260D	5	06/01/2023 18:36	TMP	A
Dibromomethane	5.0 U	U	ug/L	5.0	SW846 8260D	5	06/01/2023 18:36	TMP	A
Dichlorodifluoromethane	5.0 U	U	ug/L	5.0	SW846 8260D	5	06/01/2023 18:36	TMP	A
Diisopropyl ether	5.0 U	U	ug/L	5.0	SW846 8260D	5	06/01/2023 18:36	TMP	A
Ethylbenzene	5.0 U	U	ug/L	5.0	SW846 8260D	5	06/01/2023 18:36	TMP	A
Hexachlorobutadiene	25.0 U	U	ug/L	25.0	SW846 8260D	5	06/01/2023 18:36	TMP	A
Methyl t-Butyl Ether	5.0 U	U	ug/L	5.0	SW846 8260D	5	06/01/2023 18:36	TMP	A
Methylene Chloride	5.0 U	U	ug/L	5.0	SW846 8260D	5	06/01/2023 18:36	TMP	A
mp-Xylene	10.0 U	U	ug/L	10.0	SW846 8260D	5	06/01/2023 18:36	TMP	A
Naphthalene	10.0 U	U	ug/L	10.0	SW846 8260D	5	06/01/2023 18:36	TMP	A
o-Chlorotoluene	5.0 U	U	ug/L	5.0	SW846 8260D	5	06/01/2023 18:36	TMP	A
o-Xylene	5.0 U	U	ug/L	5.0	SW846 8260D	5	06/01/2023 18:36	TMP	A
p-Chlorotoluene	5.0 U	U	ug/L	5.0	SW846 8260D	5	06/01/2023 18:36	TMP	A
p-Isopropyltoluene	5.0 U	U	ug/L	5.0	SW846 8260D	5	06/01/2023 18:36	TMP	A
Styrene	5.0 U	U	ug/L	5.0	SW846 8260D	5	06/01/2023 18:36	TMP	A
Tetrachloroethene	5.0 U	U	ug/L	5.0	SW846 8260D	5	06/01/2023 18:36	TMP	A
Toluene	5.0 U	U	ug/L	5.0	SW846 8260D	5	06/01/2023 18:36	TMP	A
Total Xylenes	15.0 U	U	ug/L	15.0	SW846 8260D	5	06/01/2023 18:36	TMP	A
trans-1,2-Dichloroethene	5.0 U	U	ug/L	5.0	SW846 8260D	5	06/01/2023 18:36	TMP	A
trans-1,3-Dichloropropene	5.0 U	U	ug/L	5.0	SW846 8260D	5	06/01/2023 18:36	TMP	A
Trichloroethene	5.0 U	U	ug/L	5.0	SW846 8260D	5	06/01/2023 18:36	TMP	A
Trichlorofluoromethane	5.0 U	U,2	ug/L	5.0	SW846 8260D	5	06/01/2023 18:36	TMP	A
Vinyl Acetate	25.0 U	U	ug/L	25.0	SW846 8260D	5	06/01/2023 18:36	TMP	A
Vinyl Chloride	5.0 U	U	ug/L	5.0	SW846 8260D	5	06/01/2023 18:36	TMP	A

SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
1,2-Dichloroethane-d4	17060-07-0	102%	62 – 133	06/01/2023 18:36	
4-Bromofluorobenzene	460-00-4	97%	79 – 114	06/01/2023 18:36	
Dibromofluoromethane	1868-53-7	96%	78 – 116	06/01/2023 18:36	
Toluene-d8	2037-26-5	97.9%	76 – 127	06/01/2023 18:36	

Results

Client Sample ID	MW-20	Collected	05/21/2023 15:35
Lab Sample ID	3304367004	Lab Receipt	05/22/2023 18:15

SEMIVOLATILE SIM

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
1,4-Dioxane	407		ug/L	100	SW846 8270E SIM	100	05/27/2023 02:24	M1O	C

SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
2-Methylnapthalene-d10	7297-45-2	74%	29 – 112	05/26/2023 08:33	
2-Methylnapthalene-d10	7297-45-2	0*%	29 – 112	05/27/2023 02:24	3
Fluoranthene-d10	93951-69-0	85.4%	45 – 130	05/26/2023 08:33	
Fluoranthene-d10	93951-69-0	0*%	45 – 130	05/27/2023 02:24	4

VOLATILE ORGANICS

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
1,1,1,2-Tetrachloroethane	5.0 U	U	ug/L	5.0	SW846 8260D	5	06/01/2023 18:59	TMP	A
1,1,1-Trichloroethane	5.0 U	U	ug/L	5.0	SW846 8260D	5	06/01/2023 18:59	TMP	A
1,1,2,2-Tetrachloroethane	5.0 U	U	ug/L	5.0	SW846 8260D	5	06/01/2023 18:59	TMP	A
1,1,2-Trichloroethane	5.0 U	U	ug/L	5.0	SW846 8260D	5	06/01/2023 18:59	TMP	A
1,1-Dichloroethane	252		ug/L	5.0	SW846 8260D	5	06/01/2023 18:59	TMP	A
1,1-Dichloroethene	307		ug/L	5.0	SW846 8260D	5	06/01/2023 18:59	TMP	A
1,1-Dichloropropene	5.0 U	U	ug/L	5.0	SW846 8260D	5	06/01/2023 18:59	TMP	A
1,2,3-Trichlorobenzene	10.0 U	U	ug/L	10.0	SW846 8260D	5	06/01/2023 18:59	TMP	A
1,2,3-Trichloropropane	10.0 U	U	ug/L	10.0	SW846 8260D	5	06/01/2023 18:59	TMP	A
1,2,4-Trichlorobenzene	10.0 U	U	ug/L	10.0	SW846 8260D	5	06/01/2023 18:59	TMP	A
1,2-Dibromo-3-chloropropane	35.0 U	U	ug/L	35.0	SW846 8260D	5	06/01/2023 18:59	TMP	A
1,2-Dibromoethane	5.0 U	U	ug/L	5.0	SW846 8260D	5	06/01/2023 18:59	TMP	A
1,2-Dichlorobenzene	5.0 U	U	ug/L	5.0	SW846 8260D	5	06/01/2023 18:59	TMP	A
1,2-Dichloroethane	8.9		ug/L	5.0	SW846 8260D	5	06/01/2023 18:59	TMP	A
1,2-Dichloropropane	5.0 U	U	ug/L	5.0	SW846 8260D	5	06/01/2023 18:59	TMP	A
1,3-Dichlorobenzene	5.0 U	U	ug/L	5.0	SW846 8260D	5	06/01/2023 18:59	TMP	A
1,3-Dichloropropane	5.0 U	U	ug/L	5.0	SW846 8260D	5	06/01/2023 18:59	TMP	A
1,4-Dichlorobenzene	5.0 U	U	ug/L	5.0	SW846 8260D	5	06/01/2023 18:59	TMP	A
2,2-Dichloropropane	5.0 U	U	ug/L	5.0	SW846 8260D	5	06/01/2023 18:59	TMP	A
2-Butanone	50.0 U	U	ug/L	50.0	SW846 8260D	5	06/01/2023 18:59	TMP	A
2-Hexanone	25.0 U	U	ug/L	25.0	SW846 8260D	5	06/01/2023 18:59	TMP	A
4-Methyl-2-Pentanone(MIBK)	25.0 U	U	ug/L	25.0	SW846 8260D	5	06/01/2023 18:59	TMP	A
Acetone	50.0 U	U	ug/L	50.0	SW846 8260D	5	06/01/2023 18:59	TMP	A
Benzene	5.0 U	U	ug/L	5.0	SW846 8260D	5	06/01/2023 18:59	TMP	A
Bromobenzene	5.0 U	U	ug/L	5.0	SW846 8260D	5	06/01/2023 18:59	TMP	A
Bromochloromethane	5.0 U	U	ug/L	5.0	SW846 8260D	5	06/01/2023 18:59	TMP	A
Bromodichloromethane	5.0 U	U	ug/L	5.0	SW846 8260D	5	06/01/2023 18:59	TMP	A
Bromoform	5.0 U	U	ug/L	5.0	SW846 8260D	5	06/01/2023 18:59	TMP	A
Bromomethane	5.0 U	U	ug/L	5.0	SW846 8260D	5	06/01/2023 18:59	TMP	A
Carbon Tetrachloride	5.0 U	U	ug/L	5.0	SW846 8260D	5	06/01/2023 18:59	TMP	A
Chlorobenzene	5.0 U	U	ug/L	5.0	SW846 8260D	5	06/01/2023 18:59	TMP	A
Chlorodibromomethane	5.0 U	U	ug/L	5.0	SW846 8260D	5	06/01/2023 18:59	TMP	A
Chloroethane	5.0 U	U,1	ug/L	5.0	SW846 8260D	5	06/01/2023 18:59	TMP	A

Results

Client Sample ID	MW-20	Collected	05/21/2023 15:35
Lab Sample ID	3304367004	Lab Receipt	05/22/2023 18:15

VOLATILE ORGANICS (cont.)

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
Chloroform	5.0 U	U	ug/L	5.0	SW846 8260D	5	06/01/2023 18:59	TMP	A
Chloromethane	5.0 U	U	ug/L	5.0	SW846 8260D	5	06/01/2023 18:59	TMP	A
cis-1,2-Dichloroethene	5.0 U	U	ug/L	5.0	SW846 8260D	5	06/01/2023 18:59	TMP	A
cis-1,3-Dichloropropene	5.0 U	U	ug/L	5.0	SW846 8260D	5	06/01/2023 18:59	TMP	A
Dibromomethane	5.0 U	U	ug/L	5.0	SW846 8260D	5	06/01/2023 18:59	TMP	A
Dichlorodifluoromethane	5.0 U	U	ug/L	5.0	SW846 8260D	5	06/01/2023 18:59	TMP	A
Diisopropyl ether	5.0 U	U	ug/L	5.0	SW846 8260D	5	06/01/2023 18:59	TMP	A
Ethylbenzene	5.0 U	U	ug/L	5.0	SW846 8260D	5	06/01/2023 18:59	TMP	A
Hexachlorobutadiene	25.0 U	U	ug/L	25.0	SW846 8260D	5	06/01/2023 18:59	TMP	A
Methyl t-Butyl Ether	5.0 U	U	ug/L	5.0	SW846 8260D	5	06/01/2023 18:59	TMP	A
Methylene Chloride	5.0 U	U	ug/L	5.0	SW846 8260D	5	06/01/2023 18:59	TMP	A
mp-Xylene	10.0 U	U	ug/L	10.0	SW846 8260D	5	06/01/2023 18:59	TMP	A
Naphthalene	10.0 U	U	ug/L	10.0	SW846 8260D	5	06/01/2023 18:59	TMP	A
o-Chlorotoluene	5.0 U	U	ug/L	5.0	SW846 8260D	5	06/01/2023 18:59	TMP	A
o-Xylene	5.0 U	U	ug/L	5.0	SW846 8260D	5	06/01/2023 18:59	TMP	A
p-Chlorotoluene	5.0 U	U	ug/L	5.0	SW846 8260D	5	06/01/2023 18:59	TMP	A
p-Isopropyltoluene	5.0 U	U	ug/L	5.0	SW846 8260D	5	06/01/2023 18:59	TMP	A
Styrene	5.0 U	U	ug/L	5.0	SW846 8260D	5	06/01/2023 18:59	TMP	A
Tetrachloroethene	5.0 U	U	ug/L	5.0	SW846 8260D	5	06/01/2023 18:59	TMP	A
Toluene	5.0 U	U	ug/L	5.0	SW846 8260D	5	06/01/2023 18:59	TMP	A
Total Xylenes	15.0 U	U	ug/L	15.0	SW846 8260D	5	06/01/2023 18:59	TMP	A
trans-1,2-Dichloroethene	5.0 U	U	ug/L	5.0	SW846 8260D	5	06/01/2023 18:59	TMP	A
trans-1,3-Dichloropropene	5.0 U	U	ug/L	5.0	SW846 8260D	5	06/01/2023 18:59	TMP	A
Trichloroethene	5.0 U	U	ug/L	5.0	SW846 8260D	5	06/01/2023 18:59	TMP	A
Trichlorofluoromethane	5.0 U	U,2	ug/L	5.0	SW846 8260D	5	06/01/2023 18:59	TMP	A
Vinyl Acetate	25.0 U	U	ug/L	25.0	SW846 8260D	5	06/01/2023 18:59	TMP	A
Vinyl Chloride	5.0 U	U	ug/L	5.0	SW846 8260D	5	06/01/2023 18:59	TMP	A

SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
1,2-Dichloroethane-d4	17060-07-0	101%	62 – 133	06/01/2023 18:59	
4-Bromofluorobenzene	460-00-4	97.4%	79 – 114	06/01/2023 18:59	
Dibromofluoromethane	1868-53-7	95.6%	78 – 116	06/01/2023 18:59	
Toluene-d8	2037-26-5	98.9%	76 – 127	06/01/2023 18:59	

Results

Client Sample ID	MW-09	Collected	05/21/2023 15:55
Lab Sample ID	3304367005	Lab Receipt	05/22/2023 18:15

SEMIVOLATILE SIM

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
1,4-Dioxane	4.5	6	ug/L	1.4	SW846 8270E SIM	1	05/26/2023 09:00	M1O	C

SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
2-Methylnapthalene-d10	7297-45-2	70.1%	29 – 112	05/26/2023 09:00	
Fluoranthene-d10	93951-69-0	77.7%	45 – 130	05/26/2023 09:00	

VOLATILE ORGANICS

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
1,1,1,2-Tetrachloroethane	1.0 U	U,5	ug/L	1.0	SW846 8260D	1	06/02/2023 13:33	TMP	A
1,1,1-Trichloroethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 13:33	TMP	A
1,1,2,2-Tetrachloroethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 13:33	TMP	A
1,1,2-Trichloroethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 13:33	TMP	A
1,1-Dichloroethane	1.9		ug/L	1.0	SW846 8260D	1	06/02/2023 13:33	TMP	A
1,1-Dichloroethene	36.0		ug/L	1.0	SW846 8260D	1	06/02/2023 13:33	TMP	A
1,1-Dichloropropene	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 13:33	TMP	A
1,2,3-Trichlorobenzene	2.0 U	U	ug/L	2.0	SW846 8260D	1	06/02/2023 13:33	TMP	A
1,2,3-Trichloropropane	2.0 U	U	ug/L	2.0	SW846 8260D	1	06/02/2023 13:33	TMP	A
1,2,4-Trichlorobenzene	2.0 U	U	ug/L	2.0	SW846 8260D	1	06/02/2023 13:33	TMP	A
1,2-Dibromo-3-chloropropane	7.0 U	U	ug/L	7.0	SW846 8260D	1	06/02/2023 13:33	TMP	A
1,2-Dibromoethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 13:33	TMP	A
1,2-Dichlorobenzene	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 13:33	TMP	A
1,2-Dichloroethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 13:33	TMP	A
1,2-Dichloropropane	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 13:33	TMP	A
1,3-Dichlorobenzene	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 13:33	TMP	A
1,3-Dichloropropane	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 13:33	TMP	A
1,4-Dichlorobenzene	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 13:33	TMP	A
2,2-Dichloropropane	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 13:33	TMP	A
2-Butanone	10.0 U	U	ug/L	10.0	SW846 8260D	1	06/02/2023 13:33	TMP	A
2-Hexanone	5.0 U	U	ug/L	5.0	SW846 8260D	1	06/02/2023 13:33	TMP	A
4-Methyl-2-Pentanone(MIBK)	5.0 U	U	ug/L	5.0	SW846 8260D	1	06/02/2023 13:33	TMP	A
Acetone	10.0 U	U	ug/L	10.0	SW846 8260D	1	06/02/2023 13:33	TMP	A
Benzene	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 13:33	TMP	A
Bromobenzene	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 13:33	TMP	A
Bromochloromethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 13:33	TMP	A
Bromodichloromethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 13:33	TMP	A
Bromoform	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 13:33	TMP	A
Bromomethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 13:33	TMP	A
Carbon Tetrachloride	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 13:33	TMP	A
Chlorobenzene	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 13:33	TMP	A
Chlorodibromomethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 13:33	TMP	A
Chloroethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 13:33	TMP	A
Chloroform	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 13:33	TMP	A
Chloromethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 13:33	TMP	A

Results

Client Sample ID	MW-09	Collected	05/21/2023 15:55
Lab Sample ID	3304367005	Lab Receipt	05/22/2023 18:15

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	06/02/2023 13:33	TMP	A
cis-1,3-Dichloropropene	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 13:33	TMP	A
Dibromomethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 13:33	TMP	A
Dichlorodifluoromethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 13:33	TMP	A
Diisopropyl ether	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 13:33	TMP	A
Ethylbenzene	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 13:33	TMP	A
Hexachlorobutadiene	5.0 U	U	ug/L	5.0	SW846 8260D	1	06/02/2023 13:33	TMP	A
Methyl t-Butyl Ether	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 13:33	TMP	A
Methylene Chloride	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 13:33	TMP	A
mp-Xylene	2.0 U	U	ug/L	2.0	SW846 8260D	1	06/02/2023 13:33	TMP	A
Naphthalene	2.0 U	U	ug/L	2.0	SW846 8260D	1	06/02/2023 13:33	TMP	A
o-Chlorotoluene	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 13:33	TMP	A
o-Xylene	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 13:33	TMP	A
p-Chlorotoluene	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 13:33	TMP	A
p-Isopropyltoluene	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 13:33	TMP	A
Styrene	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 13:33	TMP	A
Tetrachloroethene	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 13:33	TMP	A
Toluene	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 13:33	TMP	A
Total Xylenes	3.0 U	U	ug/L	3.0	SW846 8260D	1	06/02/2023 13:33	TMP	A
trans-1,2-Dichloroethene	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 13:33	TMP	A
trans-1,3-Dichloropropene	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 13:33	TMP	A
Trichloroethene	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 13:33	TMP	A
Trichlorofluoromethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 13:33	TMP	A
Vinyl Acetate	5.0 U	U	ug/L	5.0	SW846 8260D	1	06/02/2023 13:33	TMP	A
Vinyl Chloride	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 13:33	TMP	A

SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
1,2-Dichloroethane-d4	17060-07-0	102%	62 – 133	06/02/2023 13:33	
4-Bromofluorobenzene	460-00-4	99.5%	79 – 114	06/02/2023 13:33	
Dibromofluoromethane	1868-53-7	93.2%	78 – 116	06/02/2023 13:33	
Toluene-d8	2037-26-5	98.4%	76 – 127	06/02/2023 13:33	

Results

Client Sample ID	MW-23D	Collected	05/21/2023 16:10
Lab Sample ID	3304367006	Lab Receipt	05/22/2023 18:15

SEMIVOLATILE SIM

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
1,4-Dioxane	27.0		ug/L	16.0	SW846 8270E SIM	10	05/27/2023 03:18	M1O	C

SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
2-Methylnapthalene-d10	7297-45-2	61.2%	29 – 112	05/26/2023 09:55	
2-Methylnapthalene-d10	7297-45-2	48.9%	29 – 112	05/27/2023 03:18	
Fluoranthene-d10	93951-69-0	63.3%	45 – 130	05/26/2023 09:55	
Fluoranthene-d10	93951-69-0	49.1%	45 – 130	05/27/2023 03:18	

VOLATILE ORGANICS

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
1,1,1,2-Tetrachloroethane	1.0 U	U,5	ug/L	1.0	SW846 8260D	1	06/02/2023 13:56	TMP	A
1,1,1-Trichloroethane	8.3		ug/L	1.0	SW846 8260D	1	06/02/2023 13:56	TMP	A
1,1,2,2-Tetrachloroethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 13:56	TMP	A
1,1,2-Trichloroethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 13:56	TMP	A
1,1-Dichloroethane	32.4		ug/L	1.0	SW846 8260D	1	06/02/2023 13:56	TMP	A
1,1-Dichloroethene	116		ug/L	1.0	SW846 8260D	1	06/02/2023 13:56	TMP	A
1,1-Dichloropropene	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 13:56	TMP	A
1,2,3-Trichlorobenzene	2.0 U	U	ug/L	2.0	SW846 8260D	1	06/02/2023 13:56	TMP	A
1,2,3-Trichloropropane	2.0 U	U	ug/L	2.0	SW846 8260D	1	06/02/2023 13:56	TMP	A
1,2,4-Trichlorobenzene	2.0 U	U	ug/L	2.0	SW846 8260D	1	06/02/2023 13:56	TMP	A
1,2-Dibromo-3-chloropropane	7.0 U	U	ug/L	7.0	SW846 8260D	1	06/02/2023 13:56	TMP	A
1,2-Dibromoethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 13:56	TMP	A
1,2-Dichlorobenzene	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 13:56	TMP	A
1,2-Dichloroethane	1.4		ug/L	1.0	SW846 8260D	1	06/02/2023 13:56	TMP	A
1,2-Dichloropropane	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 13:56	TMP	A
1,3-Dichlorobenzene	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 13:56	TMP	A
1,3-Dichloropropane	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 13:56	TMP	A
1,4-Dichlorobenzene	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 13:56	TMP	A
2,2-Dichloropropane	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 13:56	TMP	A
2-Butanone	10.0 U	U	ug/L	10.0	SW846 8260D	1	06/02/2023 13:56	TMP	A
2-Hexanone	5.0 U	U	ug/L	5.0	SW846 8260D	1	06/02/2023 13:56	TMP	A
4-Methyl-2-Pentanone(MIBK)	5.0 U	U	ug/L	5.0	SW846 8260D	1	06/02/2023 13:56	TMP	A
Acetone	10.0 U	U	ug/L	10.0	SW846 8260D	1	06/02/2023 13:56	TMP	A
Benzene	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 13:56	TMP	A
Bromobenzene	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 13:56	TMP	A
Bromochloromethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 13:56	TMP	A
Bromodichloromethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 13:56	TMP	A
Bromoform	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 13:56	TMP	A
Bromomethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 13:56	TMP	A
Carbon Tetrachloride	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 13:56	TMP	A
Chlorobenzene	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 13:56	TMP	A
Chlorodibromomethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 13:56	TMP	A
Chloroethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 13:56	TMP	A

Results

Client Sample ID	MW-23D	Collected	05/21/2023 16:10
Lab Sample ID	3304367006	Lab Receipt	05/22/2023 18:15

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	06/02/2023 13:56	TMP	A
Chloromethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 13:56	TMP	A
cis-1,2-Dichloroethene	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 13:56	TMP	A
cis-1,3-Dichloropropene	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 13:56	TMP	A
Dibromomethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 13:56	TMP	A
Dichlorodifluoromethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 13:56	TMP	A
Diisopropyl ether	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 13:56	TMP	A
Ethylbenzene	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 13:56	TMP	A
Hexachlorobutadiene	5.0 U	U	ug/L	5.0	SW846 8260D	1	06/02/2023 13:56	TMP	A
Methyl t-Butyl Ether	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 13:56	TMP	A
Methylene Chloride	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 13:56	TMP	A
mp-Xylene	2.0 U	U	ug/L	2.0	SW846 8260D	1	06/02/2023 13:56	TMP	A
Naphthalene	2.0 U	U	ug/L	2.0	SW846 8260D	1	06/02/2023 13:56	TMP	A
o-Chlorotoluene	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 13:56	TMP	A
o-Xylene	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 13:56	TMP	A
p-Chlorotoluene	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 13:56	TMP	A
p-Isopropyltoluene	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 13:56	TMP	A
Styrene	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 13:56	TMP	A
Tetrachloroethene	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 13:56	TMP	A
Toluene	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 13:56	TMP	A
Total Xylenes	3.0 U	U	ug/L	3.0	SW846 8260D	1	06/02/2023 13:56	TMP	A
trans-1,2-Dichloroethene	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 13:56	TMP	A
trans-1,3-Dichloropropene	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 13:56	TMP	A
Trichloroethene	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 13:56	TMP	A
Trichlorofluoromethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 13:56	TMP	A
Vinyl Acetate	5.0 U	U	ug/L	5.0	SW846 8260D	1	06/02/2023 13:56	TMP	A
Vinyl Chloride	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 13:56	TMP	A

SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
1,2-Dichloroethane-d4	17060-07-0	102%	62 – 133	06/02/2023 13:56	
4-Bromofluorobenzene	460-00-4	98.3%	79 – 114	06/02/2023 13:56	
Dibromofluoromethane	1868-53-7	97.5%	78 – 116	06/02/2023 13:56	
Toluene-d8	2037-26-5	97.2%	76 – 127	06/02/2023 13:56	

Results

Client Sample ID	MW-46D	Collected	05/21/2023 16:25
Lab Sample ID	3304367007	Lab Receipt	05/22/2023 18:15

SEMIVOLATILE SIM

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
1,4-Dioxane	1.0 U	U	ug/L	1.0	SW846 8270E SIM	1	05/26/2023 10:49	M1O	C

SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
2-Methylnapthalene-d10	7297-45-2	59.2%	29 – 112	05/26/2023 10:49	
Fluoranthene-d10	93951-69-0	82.4%	45 – 130	05/26/2023 10:49	

VOLATILE ORGANICS

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
1,1,1,2-Tetrachloroethane	1.0 U	U,5	ug/L	1.0	SW846 8260D	1	06/02/2023 14:19	TMP	A
1,1,1-Trichloroethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 14:19	TMP	A
1,1,2,2-Tetrachloroethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 14:19	TMP	A
1,1,2-Trichloroethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 14:19	TMP	A
1,1-Dichloroethane	1.2		ug/L	1.0	SW846 8260D	1	06/02/2023 14:19	TMP	A
1,1-Dichloroethene	19.2		ug/L	1.0	SW846 8260D	1	06/02/2023 14:19	TMP	A
1,1-Dichloropropene	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 14:19	TMP	A
1,2,3-Trichlorobenzene	2.0 U	U	ug/L	2.0	SW846 8260D	1	06/02/2023 14:19	TMP	A
1,2,3-Trichloropropane	2.0 U	U	ug/L	2.0	SW846 8260D	1	06/02/2023 14:19	TMP	A
1,2,4-Trichlorobenzene	2.0 U	U	ug/L	2.0	SW846 8260D	1	06/02/2023 14:19	TMP	A
1,2-Dibromo-3-chloropropane	7.0 U	U	ug/L	7.0	SW846 8260D	1	06/02/2023 14:19	TMP	A
1,2-Dibromoethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 14:19	TMP	A
1,2-Dichlorobenzene	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 14:19	TMP	A
1,2-Dichloroethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 14:19	TMP	A
1,2-Dichloropropane	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 14:19	TMP	A
1,3-Dichlorobenzene	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 14:19	TMP	A
1,3-Dichloropropane	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 14:19	TMP	A
1,4-Dichlorobenzene	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 14:19	TMP	A
2,2-Dichloropropane	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 14:19	TMP	A
2-Butanone	10.0 U	U	ug/L	10.0	SW846 8260D	1	06/02/2023 14:19	TMP	A
2-Hexanone	5.0 U	U	ug/L	5.0	SW846 8260D	1	06/02/2023 14:19	TMP	A
4-Methyl-2-Pentanone(MIBK)	5.0 U	U	ug/L	5.0	SW846 8260D	1	06/02/2023 14:19	TMP	A
Acetone	10.0 U	U	ug/L	10.0	SW846 8260D	1	06/02/2023 14:19	TMP	A
Benzene	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 14:19	TMP	A
Bromobenzene	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 14:19	TMP	A
Bromochloromethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 14:19	TMP	A
Bromodichloromethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 14:19	TMP	A
Bromoform	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 14:19	TMP	A
Bromomethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 14:19	TMP	A
Carbon Tetrachloride	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 14:19	TMP	A
Chlorobenzene	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 14:19	TMP	A
Chlorodibromomethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 14:19	TMP	A
Chloroethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 14:19	TMP	A
Chloroform	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 14:19	TMP	A
Chloromethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 14:19	TMP	A

Results

Client Sample ID	MW-46D	Collected	05/21/2023 16:25
Lab Sample ID	3304367007	Lab Receipt	05/22/2023 18:15

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	06/02/2023 14:19	TMP	A
cis-1,3-Dichloropropene	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 14:19	TMP	A
Dibromomethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 14:19	TMP	A
Dichlorodifluoromethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 14:19	TMP	A
Diisopropyl ether	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 14:19	TMP	A
Ethylbenzene	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 14:19	TMP	A
Hexachlorobutadiene	5.0 U	U	ug/L	5.0	SW846 8260D	1	06/02/2023 14:19	TMP	A
Methyl t-Butyl Ether	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 14:19	TMP	A
Methylene Chloride	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 14:19	TMP	A
mp-Xylene	2.0 U	U	ug/L	2.0	SW846 8260D	1	06/02/2023 14:19	TMP	A
Naphthalene	2.0 U	U	ug/L	2.0	SW846 8260D	1	06/02/2023 14:19	TMP	A
o-Chlorotoluene	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 14:19	TMP	A
o-Xylene	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 14:19	TMP	A
p-Chlorotoluene	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 14:19	TMP	A
p-Isopropyltoluene	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 14:19	TMP	A
Styrene	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 14:19	TMP	A
Tetrachloroethene	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 14:19	TMP	A
Toluene	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 14:19	TMP	A
Total Xylenes	3.0 U	U	ug/L	3.0	SW846 8260D	1	06/02/2023 14:19	TMP	A
trans-1,2-Dichloroethene	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 14:19	TMP	A
trans-1,3-Dichloropropene	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 14:19	TMP	A
Trichloroethene	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 14:19	TMP	A
Trichlorofluoromethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 14:19	TMP	A
Vinyl Acetate	5.0 U	U	ug/L	5.0	SW846 8260D	1	06/02/2023 14:19	TMP	A
Vinyl Chloride	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 14:19	TMP	A

SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
1,2-Dichloroethane-d4	17060-07-0	102%	62 – 133	06/02/2023 14:19	
4-Bromofluorobenzene	460-00-4	98.9%	79 – 114	06/02/2023 14:19	
Dibromofluoromethane	1868-53-7	96.2%	78 – 116	06/02/2023 14:19	
Toluene-d8	2037-26-5	98%	76 – 127	06/02/2023 14:19	

Results

Client Sample ID	MW-16	Collected	05/21/2023 16:50
Lab Sample ID	3304367008	Lab Receipt	05/22/2023 18:15

SEMIVOLATILE SIM

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
1,4-Dioxane	89.5		ug/L	10.0	SW846 8270E SIM	10	05/27/2023 05:05	M1O	C

SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
2-Methylnapthalene-d10	7297-45-2	61.8%	29 – 112	05/26/2023 11:16	
2-Methylnapthalene-d10	7297-45-2	50.2%	29 – 112	05/27/2023 05:05	
Fluoranthene-d10	93951-69-0	70.7%	45 – 130	05/26/2023 11:16	
Fluoranthene-d10	93951-69-0	52.8%	45 – 130	05/27/2023 05:05	

VOLATILE ORGANICS

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
1,1,1,2-Tetrachloroethane	1.0 U	U,5	ug/L	1.0	SW846 8260D	1	06/02/2023 19:18	TMP	A
1,1,1-Trichloroethane	2230	9	ug/L	50.0	SW846 8260D	50	06/07/2023 01:59	PDK	B
1,1,2,2-Tetrachloroethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 19:18	TMP	A
1,1,2-Trichloroethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 19:18	TMP	A
1,1-Dichloroethane	2230	7	ug/L	50.0	SW846 8260D	50	06/07/2023 01:59	PDK	B
1,1-Dichloroethene	2510	8	ug/L	50.0	SW846 8260D	50	06/07/2023 01:59	PDK	B
1,1-Dichloropropene	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 19:18	TMP	A
1,2,3-Trichlorobenzene	2.0 U	U	ug/L	2.0	SW846 8260D	1	06/02/2023 19:18	TMP	A
1,2,3-Trichloropropane	2.0 U	U	ug/L	2.0	SW846 8260D	1	06/02/2023 19:18	TMP	A
1,2,4-Trichlorobenzene	2.0 U	U	ug/L	2.0	SW846 8260D	1	06/02/2023 19:18	TMP	A
1,2-Dibromo-3-chloropropane	7.0 U	U	ug/L	7.0	SW846 8260D	1	06/02/2023 19:18	TMP	A
1,2-Dibromoethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 19:18	TMP	A
1,2-Dichlorobenzene	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 19:18	TMP	A
1,2-Dichloroethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 19:18	TMP	A
1,2-Dichloropropane	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 19:18	TMP	A
1,3-Dichlorobenzene	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 19:18	TMP	A
1,3-Dichloropropane	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 19:18	TMP	A
1,4-Dichlorobenzene	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 19:18	TMP	A
2,2-Dichloropropane	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 19:18	TMP	A
2-Butanone	10.0 U	U	ug/L	10.0	SW846 8260D	1	06/02/2023 19:18	TMP	A
2-Hexanone	5.0 U	U	ug/L	5.0	SW846 8260D	1	06/02/2023 19:18	TMP	A
4-Methyl-2-Pentanone(MIBK)	5.0 U	U	ug/L	5.0	SW846 8260D	1	06/02/2023 19:18	TMP	A
Acetone	12.3		ug/L	10.0	SW846 8260D	1	06/02/2023 19:18	TMP	A
Benzene	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 19:18	TMP	A
Bromobenzene	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 19:18	TMP	A
Bromochloromethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 19:18	TMP	A
Bromodichloromethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 19:18	TMP	A
Bromoform	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 19:18	TMP	A
Bromomethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 19:18	TMP	A
Carbon Tetrachloride	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 19:18	TMP	A
Chlorobenzene	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 19:18	TMP	A
Chlorodibromomethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 19:18	TMP	A
Chloroethane	96.1		ug/L	1.0	SW846 8260D	1	06/02/2023 19:18	TMP	A

Results

Client Sample ID	MW-16	Collected	05/21/2023 16:50
Lab Sample ID	3304367008	Lab Receipt	05/22/2023 18:15

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	06/02/2023 19:18	TMP	A
Chloromethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 19:18	TMP	A
cis-1,2-Dichloroethene	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 19:18	TMP	A
cis-1,3-Dichloropropene	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 19:18	TMP	A
Dibromomethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 19:18	TMP	A
Dichlorodifluoromethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 19:18	TMP	A
Diisopropyl ether	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 19:18	TMP	A
Ethylbenzene	1.3		ug/L	1.0	SW846 8260D	1	06/02/2023 19:18	TMP	A
Hexachlorobutadiene	5.0 U	U	ug/L	5.0	SW846 8260D	1	06/02/2023 19:18	TMP	A
Methyl t-Butyl Ether	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 19:18	TMP	A
Methylene Chloride	3.7		ug/L	1.0	SW846 8260D	1	06/02/2023 19:18	TMP	A
mp-Xylene	3.7		ug/L	2.0	SW846 8260D	1	06/02/2023 19:18	TMP	A
Naphthalene	2.0 U	U	ug/L	2.0	SW846 8260D	1	06/02/2023 19:18	TMP	A
o-Chlorotoluene	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 19:18	TMP	A
o-Xylene	1.9		ug/L	1.0	SW846 8260D	1	06/02/2023 19:18	TMP	A
p-Chlorotoluene	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 19:18	TMP	A
p-Isopropyltoluene	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 19:18	TMP	A
Styrene	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 19:18	TMP	A
Tetrachloroethene	6.3		ug/L	1.0	SW846 8260D	1	06/02/2023 19:18	TMP	A
Toluene	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 19:18	TMP	A
Total Xylenes	5.7		ug/L	3.0	SW846 8260D	1	06/02/2023 19:18	TMP	A
trans-1,2-Dichloroethene	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 19:18	TMP	A
trans-1,3-Dichloropropene	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 19:18	TMP	A
Trichloroethene	19.1		ug/L	1.0	SW846 8260D	1	06/02/2023 19:18	TMP	A
Trichlorofluoromethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 19:18	TMP	A
Vinyl Acetate	5.0 U	U	ug/L	5.0	SW846 8260D	1	06/02/2023 19:18	TMP	A
Vinyl Chloride	6.7		ug/L	1.0	SW846 8260D	1	06/02/2023 19:18	TMP	A

SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
1,2-Dichloroethane-d4	17060-07-0	111%	62 – 133	06/02/2023 19:18	
1,2-Dichloroethane-d4	17060-07-0	96.6%	62 – 133	06/07/2023 01:59	
4-Bromofluorobenzene	460-00-4	97.8%	79 – 114	06/02/2023 19:18	
4-Bromofluorobenzene	460-00-4	104%	79 – 114	06/07/2023 01:59	
Dibromofluoromethane	1868-53-7	116%	78 – 116	06/02/2023 19:18	
Dibromofluoromethane	1868-53-7	104%	78 – 116	06/07/2023 01:59	
Toluene-d8	2037-26-5	97.8%	76 – 127	06/02/2023 19:18	
Toluene-d8	2037-26-5	100%	76 – 127	06/07/2023 01:59	

Results

Client Sample ID	MW-16D	Collected	05/21/2023 17:05
Lab Sample ID	3304367009	Lab Receipt	05/22/2023 18:15

SEMIVOLATILE SIM

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
1,4-Dioxane	36.1		ug/L	10.0	SW846 8270E SIM	10	05/27/2023 05:58	M1O	C

SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
2-Methylnapthalene-d10	7297-45-2	69.9%	29 – 112	05/26/2023 11:43	
2-Methylnapthalene-d10	7297-45-2	58.2%	29 – 112	05/27/2023 05:58	
Fluoranthene-d10	93951-69-0	65.2%	45 – 130	05/26/2023 11:43	
Fluoranthene-d10	93951-69-0	54.2%	45 – 130	05/27/2023 05:58	

VOLATILE ORGANICS

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
1,1,1,2-Tetrachloroethane	1.0 U	U,5	ug/L	1.0	SW846 8260D	1	06/02/2023 14:42	TMP	A
1,1,1-Trichloroethane	6.5		ug/L	1.0	SW846 8260D	1	06/02/2023 14:42	TMP	A
1,1,2,2-Tetrachloroethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 14:42	TMP	A
1,1,2-Trichloroethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 14:42	TMP	A
1,1-Dichloroethane	24.8		ug/L	1.0	SW846 8260D	1	06/02/2023 14:42	TMP	A
1,1-Dichloroethene	111		ug/L	1.0	SW846 8260D	1	06/02/2023 14:42	TMP	A
1,1-Dichloropropene	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 14:42	TMP	A
1,2,3-Trichlorobenzene	2.0 U	U	ug/L	2.0	SW846 8260D	1	06/02/2023 14:42	TMP	A
1,2,3-Trichloropropane	2.0 U	U	ug/L	2.0	SW846 8260D	1	06/02/2023 14:42	TMP	A
1,2,4-Trichlorobenzene	2.0 U	U	ug/L	2.0	SW846 8260D	1	06/02/2023 14:42	TMP	A
1,2-Dibromo-3-chloropropane	7.0 U	U	ug/L	7.0	SW846 8260D	1	06/02/2023 14:42	TMP	A
1,2-Dibromoethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 14:42	TMP	A
1,2-Dichlorobenzene	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 14:42	TMP	A
1,2-Dichloroethane	1.4		ug/L	1.0	SW846 8260D	1	06/02/2023 14:42	TMP	A
1,2-Dichloropropane	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 14:42	TMP	A
1,3-Dichlorobenzene	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 14:42	TMP	A
1,3-Dichloropropane	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 14:42	TMP	A
1,4-Dichlorobenzene	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 14:42	TMP	A
2,2-Dichloropropane	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 14:42	TMP	A
2-Butanone	10.0 U	U	ug/L	10.0	SW846 8260D	1	06/02/2023 14:42	TMP	A
2-Hexanone	5.0 U	U	ug/L	5.0	SW846 8260D	1	06/02/2023 14:42	TMP	A
4-Methyl-2-Pentanone(MIBK)	5.0 U	U	ug/L	5.0	SW846 8260D	1	06/02/2023 14:42	TMP	A
Acetone	10.0 U	U	ug/L	10.0	SW846 8260D	1	06/02/2023 14:42	TMP	A
Benzene	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 14:42	TMP	A
Bromobenzene	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 14:42	TMP	A
Bromochloromethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 14:42	TMP	A
Bromodichloromethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 14:42	TMP	A
Bromoform	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 14:42	TMP	A
Bromomethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 14:42	TMP	A
Carbon Tetrachloride	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 14:42	TMP	A
Chlorobenzene	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 14:42	TMP	A
Chlorodibromomethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 14:42	TMP	A
Chloroethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 14:42	TMP	A

Results

Client Sample ID	MW-16D	Collected	05/21/2023 17:05
Lab Sample ID	3304367009	Lab Receipt	05/22/2023 18:15

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	06/02/2023 14:42	TMP	A
Chloromethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 14:42	TMP	A
cis-1,2-Dichloroethene	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 14:42	TMP	A
cis-1,3-Dichloropropene	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 14:42	TMP	A
Dibromomethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 14:42	TMP	A
Dichlorodifluoromethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 14:42	TMP	A
Diisopropyl ether	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 14:42	TMP	A
Ethylbenzene	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 14:42	TMP	A
Hexachlorobutadiene	5.0 U	U	ug/L	5.0	SW846 8260D	1	06/02/2023 14:42	TMP	A
Methyl t-Butyl Ether	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 14:42	TMP	A
Methylene Chloride	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 14:42	TMP	A
mp-Xylene	2.0 U	U	ug/L	2.0	SW846 8260D	1	06/02/2023 14:42	TMP	A
Naphthalene	2.0 U	U	ug/L	2.0	SW846 8260D	1	06/02/2023 14:42	TMP	A
o-Chlorotoluene	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 14:42	TMP	A
o-Xylene	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 14:42	TMP	A
p-Chlorotoluene	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 14:42	TMP	A
p-Isopropyltoluene	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 14:42	TMP	A
Styrene	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 14:42	TMP	A
Tetrachloroethene	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 14:42	TMP	A
Toluene	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 14:42	TMP	A
Total Xylenes	3.0 U	U	ug/L	3.0	SW846 8260D	1	06/02/2023 14:42	TMP	A
trans-1,2-Dichloroethene	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 14:42	TMP	A
trans-1,3-Dichloropropene	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 14:42	TMP	A
Trichloroethene	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 14:42	TMP	A
Trichlorofluoromethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 14:42	TMP	A
Vinyl Acetate	5.0 U	U	ug/L	5.0	SW846 8260D	1	06/02/2023 14:42	TMP	A
Vinyl Chloride	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 14:42	TMP	A

SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
1,2-Dichloroethane-d4	17060-07-0	103%	62 – 133	06/02/2023 14:42	
4-Bromofluorobenzene	460-00-4	98.4%	79 – 114	06/02/2023 14:42	
Dibromofluoromethane	1868-53-7	96.9%	78 – 116	06/02/2023 14:42	
Toluene-d8	2037-26-5	97.2%	76 – 127	06/02/2023 14:42	

Results

Client Sample ID	DUP-052123	Collected	05/21/2023 13:00
Lab Sample ID	3304367010	Lab Receipt	05/22/2023 18:15

SEMIVOLATILE SIM

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
1,4-Dioxane	21.3		ug/L	10.0	SW846 8270E SIM	10	05/27/2023 06:52	M1O	C

SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
2-Methylnapthalene-d10	7297-45-2	57%	29 – 112	05/26/2023 12:11	
2-Methylnapthalene-d10	7297-45-2	41.6%	29 – 112	05/27/2023 06:52	
Fluoranthene-d10	93951-69-0	56.9%	45 – 130	05/26/2023 12:11	
Fluoranthene-d10	93951-69-0	40.6*%	45 – 130	05/27/2023 06:52	11

VOLATILE ORGANICS

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
1,1,1,2-Tetrachloroethane	1.0 U	U,5	ug/L	1.0	SW846 8260D	1	06/02/2023 15:05	TMP	A
1,1,1-Trichloroethane	6.7		ug/L	1.0	SW846 8260D	1	06/02/2023 15:05	TMP	A
1,1,2,2-Tetrachloroethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 15:05	TMP	A
1,1,2-Trichloroethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 15:05	TMP	A
1,1-Dichloroethane	24.9		ug/L	1.0	SW846 8260D	1	06/02/2023 15:05	TMP	A
1,1-Dichloroethene	110		ug/L	1.0	SW846 8260D	1	06/02/2023 15:05	TMP	A
1,1-Dichloropropene	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 15:05	TMP	A
1,2,3-Trichlorobenzene	2.0 U	U	ug/L	2.0	SW846 8260D	1	06/02/2023 15:05	TMP	A
1,2,3-Trichloropropane	2.0 U	U	ug/L	2.0	SW846 8260D	1	06/02/2023 15:05	TMP	A
1,2,4-Trichlorobenzene	2.0 U	U	ug/L	2.0	SW846 8260D	1	06/02/2023 15:05	TMP	A
1,2-Dibromo-3-chloropropane	7.0 U	U	ug/L	7.0	SW846 8260D	1	06/02/2023 15:05	TMP	A
1,2-Dibromoethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 15:05	TMP	A
1,2-Dichlorobenzene	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 15:05	TMP	A
1,2-Dichloroethane	1.4		ug/L	1.0	SW846 8260D	1	06/02/2023 15:05	TMP	A
1,2-Dichloropropane	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 15:05	TMP	A
1,3-Dichlorobenzene	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 15:05	TMP	A
1,3-Dichloropropane	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 15:05	TMP	A
1,4-Dichlorobenzene	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 15:05	TMP	A
2,2-Dichloropropane	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 15:05	TMP	A
2-Butanone	10.0 U	U	ug/L	10.0	SW846 8260D	1	06/02/2023 15:05	TMP	A
2-Hexanone	5.0 U	U	ug/L	5.0	SW846 8260D	1	06/02/2023 15:05	TMP	A
4-Methyl-2-Pentanone(MIBK)	5.0 U	U	ug/L	5.0	SW846 8260D	1	06/02/2023 15:05	TMP	A
Acetone	10.0 U	U	ug/L	10.0	SW846 8260D	1	06/02/2023 15:05	TMP	A
Benzene	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 15:05	TMP	A
Bromobenzene	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 15:05	TMP	A
Bromochloromethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 15:05	TMP	A
Bromodichloromethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 15:05	TMP	A
Bromoform	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 15:05	TMP	A
Bromomethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 15:05	TMP	A
Carbon Tetrachloride	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 15:05	TMP	A
Chlorobenzene	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 15:05	TMP	A
Chlorodibromomethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 15:05	TMP	A
Chloroethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 15:05	TMP	A

Results

Client Sample ID	DUP-052123	Collected	05/21/2023 13:00
Lab Sample ID	3304367010	Lab Receipt	05/22/2023 18:15

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	06/02/2023 15:05	TMP	A
Chloromethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 15:05	TMP	A
cis-1,2-Dichloroethene	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 15:05	TMP	A
cis-1,3-Dichloropropene	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 15:05	TMP	A
Dibromomethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 15:05	TMP	A
Dichlorodifluoromethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 15:05	TMP	A
Diisopropyl ether	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 15:05	TMP	A
Ethylbenzene	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 15:05	TMP	A
Hexachlorobutadiene	5.0 U	U	ug/L	5.0	SW846 8260D	1	06/02/2023 15:05	TMP	A
Methyl t-Butyl Ether	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 15:05	TMP	A
Methylene Chloride	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 15:05	TMP	A
mp-Xylene	2.0 U	U	ug/L	2.0	SW846 8260D	1	06/02/2023 15:05	TMP	A
Naphthalene	2.0 U	U	ug/L	2.0	SW846 8260D	1	06/02/2023 15:05	TMP	A
o-Chlorotoluene	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 15:05	TMP	A
o-Xylene	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 15:05	TMP	A
p-Chlorotoluene	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 15:05	TMP	A
p-Isopropyltoluene	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 15:05	TMP	A
Styrene	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 15:05	TMP	A
Tetrachloroethene	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 15:05	TMP	A
Toluene	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 15:05	TMP	A
Total Xylenes	3.0 U	U	ug/L	3.0	SW846 8260D	1	06/02/2023 15:05	TMP	A
trans-1,2-Dichloroethene	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 15:05	TMP	A
trans-1,3-Dichloropropene	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 15:05	TMP	A
Trichloroethene	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 15:05	TMP	A
Trichlorofluoromethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 15:05	TMP	A
Vinyl Acetate	5.0 U	U	ug/L	5.0	SW846 8260D	1	06/02/2023 15:05	TMP	A
Vinyl Chloride	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 15:05	TMP	A

SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
1,2-Dichloroethane-d4	17060-07-0	103%	62 – 133	06/02/2023 15:05	
4-Bromofluorobenzene	460-00-4	98.3%	79 – 114	06/02/2023 15:05	
Dibromofluoromethane	1868-53-7	96.6%	78 – 116	06/02/2023 15:05	
Toluene-d8	2037-26-5	97.7%	76 – 127	06/02/2023 15:05	

Results

Client Sample ID	MW-43	Collected	05/21/2023 11:25
Lab Sample ID	3304367011	Lab Receipt	05/22/2023 18:15

SEMIVOLATILE SIM

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
1,4-Dioxane	9.0		ug/L	1.4	SW846 8270E SIM	1	05/26/2023 12:38	M1O	C

SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
2-Methylnapthalene-d10	7297-45-2	73.7%	29 – 112	05/26/2023 12:38	
Fluoranthene-d10	93951-69-0	80.6%	45 – 130	05/26/2023 12:38	

VOLATILE ORGANICS

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
1,1,1,2-Tetrachloroethane	1.0 U	U,5	ug/L	1.0	SW846 8260D	1	06/02/2023 15:28	TMP	A
1,1,1-Trichloroethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 15:28	TMP	A
1,1,2,2-Tetrachloroethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 15:28	TMP	A
1,1,2-Trichloroethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 15:28	TMP	A
1,1-Dichloroethane	1.6		ug/L	1.0	SW846 8260D	1	06/02/2023 15:28	TMP	A
1,1-Dichloroethene	21.2		ug/L	1.0	SW846 8260D	1	06/02/2023 15:28	TMP	A
1,1-Dichloropropene	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 15:28	TMP	A
1,2,3-Trichlorobenzene	2.0 U	U	ug/L	2.0	SW846 8260D	1	06/02/2023 15:28	TMP	A
1,2,3-Trichloropropane	2.0 U	U	ug/L	2.0	SW846 8260D	1	06/02/2023 15:28	TMP	A
1,2,4-Trichlorobenzene	2.0 U	U	ug/L	2.0	SW846 8260D	1	06/02/2023 15:28	TMP	A
1,2-Dibromo-3-chloropropane	7.0 U	U	ug/L	7.0	SW846 8260D	1	06/02/2023 15:28	TMP	A
1,2-Dibromoethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 15:28	TMP	A
1,2-Dichlorobenzene	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 15:28	TMP	A
1,2-Dichloroethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 15:28	TMP	A
1,2-Dichloropropane	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 15:28	TMP	A
1,3-Dichlorobenzene	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 15:28	TMP	A
1,3-Dichloropropane	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 15:28	TMP	A
1,4-Dichlorobenzene	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 15:28	TMP	A
2,2-Dichloropropane	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 15:28	TMP	A
2-Butanone	10.0 U	U	ug/L	10.0	SW846 8260D	1	06/02/2023 15:28	TMP	A
2-Hexanone	5.0 U	U	ug/L	5.0	SW846 8260D	1	06/02/2023 15:28	TMP	A
4-Methyl-2-Pentanone(MIBK)	5.0 U	U	ug/L	5.0	SW846 8260D	1	06/02/2023 15:28	TMP	A
Acetone	10.0 U	U	ug/L	10.0	SW846 8260D	1	06/02/2023 15:28	TMP	A
Benzene	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 15:28	TMP	A
Bromobenzene	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 15:28	TMP	A
Bromochloromethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 15:28	TMP	A
Bromodichloromethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 15:28	TMP	A
Bromoform	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 15:28	TMP	A
Bromomethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 15:28	TMP	A
Carbon Tetrachloride	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 15:28	TMP	A
Chlorobenzene	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 15:28	TMP	A
Chlorodibromomethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 15:28	TMP	A
Chloroethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 15:28	TMP	A
Chloroform	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 15:28	TMP	A
Chloromethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 15:28	TMP	A

Results

Client Sample ID	MW-43	Collected	05/21/2023 11:25
Lab Sample ID	3304367011	Lab Receipt	05/22/2023 18:15

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	06/02/2023 15:28	TMP	A
cis-1,3-Dichloropropene	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 15:28	TMP	A
Dibromomethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 15:28	TMP	A
Dichlorodifluoromethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 15:28	TMP	A
Diisopropyl ether	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 15:28	TMP	A
Ethylbenzene	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 15:28	TMP	A
Hexachlorobutadiene	5.0 U	U	ug/L	5.0	SW846 8260D	1	06/02/2023 15:28	TMP	A
Methyl t-Butyl Ether	2.3		ug/L	1.0	SW846 8260D	1	06/02/2023 15:28	TMP	A
Methylene Chloride	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 15:28	TMP	A
mp-Xylene	2.0 U	U	ug/L	2.0	SW846 8260D	1	06/02/2023 15:28	TMP	A
Naphthalene	2.0 U	U	ug/L	2.0	SW846 8260D	1	06/02/2023 15:28	TMP	A
o-Chlorotoluene	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 15:28	TMP	A
o-Xylene	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 15:28	TMP	A
p-Chlorotoluene	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 15:28	TMP	A
p-Isopropyltoluene	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 15:28	TMP	A
Styrene	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 15:28	TMP	A
Tetrachloroethene	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 15:28	TMP	A
Toluene	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 15:28	TMP	A
Total Xylenes	3.0 U	U	ug/L	3.0	SW846 8260D	1	06/02/2023 15:28	TMP	A
trans-1,2-Dichloroethene	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 15:28	TMP	A
trans-1,3-Dichloropropene	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 15:28	TMP	A
Trichloroethene	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 15:28	TMP	A
Trichlorofluoromethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 15:28	TMP	A
Vinyl Acetate	5.0 U	U	ug/L	5.0	SW846 8260D	1	06/02/2023 15:28	TMP	A
Vinyl Chloride	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 15:28	TMP	A

SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
1,2-Dichloroethane-d4	17060-07-0	104%	62 – 133	06/02/2023 15:28	
4-Bromofluorobenzene	460-00-4	100%	79 – 114	06/02/2023 15:28	
Dibromofluoromethane	1868-53-7	95.8%	78 – 116	06/02/2023 15:28	
Toluene-d8	2037-26-5	98%	76 – 127	06/02/2023 15:28	

Results

Client Sample ID	MW-39	Collected	05/21/2023 11:35
Lab Sample ID	3304367012	Lab Receipt	05/22/2023 18:15

SEMIVOLATILE SIM

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
1,4-Dioxane	1.0 U	U	ug/L	1.0	SW846 8270E SIM	1	05/26/2023 13:05	M1O	C

SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
2-Methylnapthalene-d10	7297-45-2	70.5%	29 – 112	05/26/2023 13:05	
Fluoranthene-d10	93951-69-0	87.7%	45 – 130	05/26/2023 13:05	

VOLATILE ORGANICS

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
1,1,1,2-Tetrachloroethane	1.0 U	U,5	ug/L	1.0	SW846 8260D	1	06/02/2023 15:51	TMP	A
1,1,1-Trichloroethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 15:51	TMP	A
1,1,2,2-Tetrachloroethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 15:51	TMP	A
1,1,2-Trichloroethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 15:51	TMP	A
1,1-Dichloroethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 15:51	TMP	A
1,1-Dichloroethene	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 15:51	TMP	A
1,1-Dichloropropene	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 15:51	TMP	A
1,2,3-Trichlorobenzene	2.0 U	U	ug/L	2.0	SW846 8260D	1	06/02/2023 15:51	TMP	A
1,2,3-Trichloropropane	2.0 U	U	ug/L	2.0	SW846 8260D	1	06/02/2023 15:51	TMP	A
1,2,4-Trichlorobenzene	2.0 U	U	ug/L	2.0	SW846 8260D	1	06/02/2023 15:51	TMP	A
1,2-Dibromo-3-chloropropane	7.0 U	U	ug/L	7.0	SW846 8260D	1	06/02/2023 15:51	TMP	A
1,2-Dibromoethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 15:51	TMP	A
1,2-Dichlorobenzene	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 15:51	TMP	A
1,2-Dichloroethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 15:51	TMP	A
1,2-Dichloropropane	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 15:51	TMP	A
1,3-Dichlorobenzene	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 15:51	TMP	A
1,3-Dichloropropane	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 15:51	TMP	A
1,4-Dichlorobenzene	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 15:51	TMP	A
2,2-Dichloropropane	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 15:51	TMP	A
2-Butanone	10.0 U	U	ug/L	10.0	SW846 8260D	1	06/02/2023 15:51	TMP	A
2-Hexanone	5.0 U	U	ug/L	5.0	SW846 8260D	1	06/02/2023 15:51	TMP	A
4-Methyl-2-Pentanone(MIBK)	5.0 U	U	ug/L	5.0	SW846 8260D	1	06/02/2023 15:51	TMP	A
Acetone	10.0 U	U	ug/L	10.0	SW846 8260D	1	06/02/2023 15:51	TMP	A
Benzene	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 15:51	TMP	A
Bromobenzene	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 15:51	TMP	A
Bromochloromethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 15:51	TMP	A
Bromodichloromethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 15:51	TMP	A
Bromoform	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 15:51	TMP	A
Bromomethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 15:51	TMP	A
Carbon Tetrachloride	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 15:51	TMP	A
Chlorobenzene	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 15:51	TMP	A
Chlorodibromomethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 15:51	TMP	A
Chloroethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 15:51	TMP	A
Chloroform	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 15:51	TMP	A
Chloromethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 15:51	TMP	A

Results

Client Sample ID	MW-39	Collected	05/21/2023 11:35
Lab Sample ID	3304367012	Lab Receipt	05/22/2023 18:15

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	06/02/2023 15:51	TMP	A
cis-1,3-Dichloropropene	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 15:51	TMP	A
Dibromomethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 15:51	TMP	A
Dichlorodifluoromethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 15:51	TMP	A
Diisopropyl ether	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 15:51	TMP	A
Ethylbenzene	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 15:51	TMP	A
Hexachlorobutadiene	5.0 U	U	ug/L	5.0	SW846 8260D	1	06/02/2023 15:51	TMP	A
Methyl t-Butyl Ether	1.1		ug/L	1.0	SW846 8260D	1	06/02/2023 15:51	TMP	A
Methylene Chloride	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 15:51	TMP	A
mp-Xylene	2.0 U	U	ug/L	2.0	SW846 8260D	1	06/02/2023 15:51	TMP	A
Naphthalene	2.0 U	U	ug/L	2.0	SW846 8260D	1	06/02/2023 15:51	TMP	A
o-Chlorotoluene	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 15:51	TMP	A
o-Xylene	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 15:51	TMP	A
p-Chlorotoluene	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 15:51	TMP	A
p-Isopropyltoluene	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 15:51	TMP	A
Styrene	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 15:51	TMP	A
Tetrachloroethene	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 15:51	TMP	A
Toluene	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 15:51	TMP	A
Total Xylenes	3.0 U	U	ug/L	3.0	SW846 8260D	1	06/02/2023 15:51	TMP	A
trans-1,2-Dichloroethene	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 15:51	TMP	A
trans-1,3-Dichloropropene	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 15:51	TMP	A
Trichloroethene	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 15:51	TMP	A
Trichlorofluoromethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 15:51	TMP	A
Vinyl Acetate	5.0 U	U	ug/L	5.0	SW846 8260D	1	06/02/2023 15:51	TMP	A
Vinyl Chloride	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 15:51	TMP	A

SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
1,2-Dichloroethane-d4	17060-07-0	104%	62 – 133	06/02/2023 15:51	
4-Bromofluorobenzene	460-00-4	99.7%	79 – 114	06/02/2023 15:51	
Dibromofluoromethane	1868-53-7	95.4%	78 – 116	06/02/2023 15:51	
Toluene-d8	2037-26-5	98%	76 – 127	06/02/2023 15:51	

Results

Client Sample ID	MW-42	Collected	05/21/2023 11:45
Lab Sample ID	3304367013	Lab Receipt	05/22/2023 18:15

SEMIVOLATILE SIM

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
1,4-Dioxane	5.8		ug/L	1.5	SW846 8270E SIM	1	05/26/2023 13:33	M1O	C

SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
2-Methylnapthalene-d10	7297-45-2	70.8%	29 – 112	05/26/2023 13:33	
Fluoranthene-d10	93951-69-0	81%	45 – 130	05/26/2023 13:33	

VOLATILE ORGANICS

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
1,1,1,2-Tetrachloroethane	1.0 U	U,5	ug/L	1.0	SW846 8260D	1	06/02/2023 16:14	TMP	A
1,1,1-Trichloroethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 16:14	TMP	A
1,1,2,2-Tetrachloroethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 16:14	TMP	A
1,1,2-Trichloroethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 16:14	TMP	A
1,1-Dichloroethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 16:14	TMP	A
1,1-Dichloroethene	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 16:14	TMP	A
1,1-Dichloropropene	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 16:14	TMP	A
1,2,3-Trichlorobenzene	2.0 U	U	ug/L	2.0	SW846 8260D	1	06/02/2023 16:14	TMP	A
1,2,3-Trichloropropane	2.0 U	U	ug/L	2.0	SW846 8260D	1	06/02/2023 16:14	TMP	A
1,2,4-Trichlorobenzene	2.0 U	U	ug/L	2.0	SW846 8260D	1	06/02/2023 16:14	TMP	A
1,2-Dibromo-3-chloropropane	7.0 U	U	ug/L	7.0	SW846 8260D	1	06/02/2023 16:14	TMP	A
1,2-Dibromoethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 16:14	TMP	A
1,2-Dichlorobenzene	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 16:14	TMP	A
1,2-Dichloroethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 16:14	TMP	A
1,2-Dichloropropane	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 16:14	TMP	A
1,3-Dichlorobenzene	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 16:14	TMP	A
1,3-Dichloropropane	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 16:14	TMP	A
1,4-Dichlorobenzene	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 16:14	TMP	A
2,2-Dichloropropane	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 16:14	TMP	A
2-Butanone	10.0 U	U	ug/L	10.0	SW846 8260D	1	06/02/2023 16:14	TMP	A
2-Hexanone	5.0 U	U	ug/L	5.0	SW846 8260D	1	06/02/2023 16:14	TMP	A
4-Methyl-2-Pentanone(MIBK)	5.0 U	U	ug/L	5.0	SW846 8260D	1	06/02/2023 16:14	TMP	A
Acetone	10.0 U	U	ug/L	10.0	SW846 8260D	1	06/02/2023 16:14	TMP	A
Benzene	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 16:14	TMP	A
Bromobenzene	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 16:14	TMP	A
Bromochloromethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 16:14	TMP	A
Bromodichloromethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 16:14	TMP	A
Bromoform	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 16:14	TMP	A
Bromomethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 16:14	TMP	A
Carbon Tetrachloride	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 16:14	TMP	A
Chlorobenzene	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 16:14	TMP	A
Chlorodibromomethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 16:14	TMP	A
Chloroethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 16:14	TMP	A
Chloroform	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 16:14	TMP	A
Chloromethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 16:14	TMP	A

Results

Client Sample ID	MW-42	Collected	05/21/2023 11:45
Lab Sample ID	3304367013	Lab Receipt	05/22/2023 18:15

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	06/02/2023 16:14	TMP	A
cis-1,3-Dichloropropene	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 16:14	TMP	A
Dibromomethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 16:14	TMP	A
Dichlorodifluoromethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 16:14	TMP	A
Diisopropyl ether	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 16:14	TMP	A
Ethylbenzene	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 16:14	TMP	A
Hexachlorobutadiene	5.0 U	U	ug/L	5.0	SW846 8260D	1	06/02/2023 16:14	TMP	A
Methyl t-Butyl Ether	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 16:14	TMP	A
Methylene Chloride	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 16:14	TMP	A
mp-Xylene	2.0 U	U	ug/L	2.0	SW846 8260D	1	06/02/2023 16:14	TMP	A
Naphthalene	2.0 U	U	ug/L	2.0	SW846 8260D	1	06/02/2023 16:14	TMP	A
o-Chlorotoluene	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 16:14	TMP	A
o-Xylene	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 16:14	TMP	A
p-Chlorotoluene	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 16:14	TMP	A
p-Isopropyltoluene	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 16:14	TMP	A
Styrene	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 16:14	TMP	A
Tetrachloroethene	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 16:14	TMP	A
Toluene	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 16:14	TMP	A
Total Xylenes	3.0 U	U	ug/L	3.0	SW846 8260D	1	06/02/2023 16:14	TMP	A
trans-1,2-Dichloroethene	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 16:14	TMP	A
trans-1,3-Dichloropropene	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 16:14	TMP	A
Trichloroethene	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 16:14	TMP	A
Trichlorofluoromethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 16:14	TMP	A
Vinyl Acetate	5.0 U	U	ug/L	5.0	SW846 8260D	1	06/02/2023 16:14	TMP	A
Vinyl Chloride	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 16:14	TMP	A

SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
1,2-Dichloroethane-d4	17060-07-0	103%	62 – 133	06/02/2023 16:14	
4-Bromofluorobenzene	460-00-4	99%	79 – 114	06/02/2023 16:14	
Dibromofluoromethane	1868-53-7	95.8%	78 – 116	06/02/2023 16:14	
Toluene-d8	2037-26-5	98%	76 – 127	06/02/2023 16:14	

Results

Client Sample ID	MW-18	Collected	05/21/2023 12:00
Lab Sample ID	3304367014	Lab Receipt	05/22/2023 18:15

SEMIVOLATILE SIM

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
1,4-Dioxane	1.0 U	U	ug/L	1.0	SW846 8270E SIM	1	05/26/2023 14:00	M1O	C

SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
2-Methylnapthalene-d10	7297-45-2	59.3%	29 – 112	05/26/2023 14:00	
Fluoranthene-d10	93951-69-0	77.7%	45 – 130	05/26/2023 14:00	

VOLATILE ORGANICS

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
1,1,1,2-Tetrachloroethane	1.0 U	U,5	ug/L	1.0	SW846 8260D	1	06/02/2023 16:37	TMP	A
1,1,1-Trichloroethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 16:37	TMP	A
1,1,2,2-Tetrachloroethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 16:37	TMP	A
1,1,2-Trichloroethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 16:37	TMP	A
1,1-Dichloroethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 16:37	TMP	A
1,1-Dichloroethene	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 16:37	TMP	A
1,1-Dichloropropene	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 16:37	TMP	A
1,2,3-Trichlorobenzene	2.0 U	U	ug/L	2.0	SW846 8260D	1	06/02/2023 16:37	TMP	A
1,2,3-Trichloropropane	2.0 U	U	ug/L	2.0	SW846 8260D	1	06/02/2023 16:37	TMP	A
1,2,4-Trichlorobenzene	2.0 U	U	ug/L	2.0	SW846 8260D	1	06/02/2023 16:37	TMP	A
1,2-Dibromo-3-chloropropane	7.0 U	U	ug/L	7.0	SW846 8260D	1	06/02/2023 16:37	TMP	A
1,2-Dibromoethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 16:37	TMP	A
1,2-Dichlorobenzene	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 16:37	TMP	A
1,2-Dichloroethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 16:37	TMP	A
1,2-Dichloropropane	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 16:37	TMP	A
1,3-Dichlorobenzene	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 16:37	TMP	A
1,3-Dichloropropane	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 16:37	TMP	A
1,4-Dichlorobenzene	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 16:37	TMP	A
2,2-Dichloropropane	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 16:37	TMP	A
2-Butanone	10.0 U	U	ug/L	10.0	SW846 8260D	1	06/02/2023 16:37	TMP	A
2-Hexanone	5.0 U	U	ug/L	5.0	SW846 8260D	1	06/02/2023 16:37	TMP	A
4-Methyl-2-Pentanone(MIBK)	5.0 U	U	ug/L	5.0	SW846 8260D	1	06/02/2023 16:37	TMP	A
Acetone	10.0 U	U	ug/L	10.0	SW846 8260D	1	06/02/2023 16:37	TMP	A
Benzene	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 16:37	TMP	A
Bromobenzene	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 16:37	TMP	A
Bromochloromethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 16:37	TMP	A
Bromodichloromethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 16:37	TMP	A
Bromoform	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 16:37	TMP	A
Bromomethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 16:37	TMP	A
Carbon Tetrachloride	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 16:37	TMP	A
Chlorobenzene	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 16:37	TMP	A
Chlorodibromomethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 16:37	TMP	A
Chloroethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 16:37	TMP	A
Chloroform	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 16:37	TMP	A
Chloromethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 16:37	TMP	A

Results

Client Sample ID	MW-18	Collected	05/21/2023 12:00
Lab Sample ID	3304367014	Lab Receipt	05/22/2023 18:15

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	06/02/2023 16:37	TMP	A
cis-1,3-Dichloropropene	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 16:37	TMP	A
Dibromomethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 16:37	TMP	A
Dichlorodifluoromethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 16:37	TMP	A
Diisopropyl ether	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 16:37	TMP	A
Ethylbenzene	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 16:37	TMP	A
Hexachlorobutadiene	5.0 U	U	ug/L	5.0	SW846 8260D	1	06/02/2023 16:37	TMP	A
Methyl t-Butyl Ether	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 16:37	TMP	A
Methylene Chloride	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 16:37	TMP	A
mp-Xylene	2.0 U	U	ug/L	2.0	SW846 8260D	1	06/02/2023 16:37	TMP	A
Naphthalene	2.0 U	U	ug/L	2.0	SW846 8260D	1	06/02/2023 16:37	TMP	A
o-Chlorotoluene	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 16:37	TMP	A
o-Xylene	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 16:37	TMP	A
p-Chlorotoluene	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 16:37	TMP	A
p-Isopropyltoluene	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 16:37	TMP	A
Styrene	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 16:37	TMP	A
Tetrachloroethene	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 16:37	TMP	A
Toluene	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 16:37	TMP	A
Total Xylenes	3.0 U	U	ug/L	3.0	SW846 8260D	1	06/02/2023 16:37	TMP	A
trans-1,2-Dichloroethene	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 16:37	TMP	A
trans-1,3-Dichloropropene	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 16:37	TMP	A
Trichloroethene	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 16:37	TMP	A
Trichlorofluoromethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 16:37	TMP	A
Vinyl Acetate	5.0 U	U	ug/L	5.0	SW846 8260D	1	06/02/2023 16:37	TMP	A
Vinyl Chloride	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 16:37	TMP	A

SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
1,2-Dichloroethane-d4	17060-07-0	100%	62 – 133	06/02/2023 16:37	
4-Bromofluorobenzene	460-00-4	98%	79 – 114	06/02/2023 16:37	
Dibromofluoromethane	1868-53-7	93.2%	78 – 116	06/02/2023 16:37	
Toluene-d8	2037-26-5	97.3%	76 – 127	06/02/2023 16:37	

Results

Client Sample ID	MW-40D	Collected	05/21/2023 12:10
Lab Sample ID	3304367015	Lab Receipt	05/22/2023 18:15

SEMIVOLATILE SIM

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
1,4-Dioxane	1.4 U	U	ug/L	1.4	SW846 8270E SIM	1	05/26/2023 14:27	M1O	C

SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
2-Methylnapthalene-d10	7297-45-2	70.9%	29 – 112	05/26/2023 14:27	
Fluoranthene-d10	93951-69-0	78.4%	45 – 130	05/26/2023 14:27	

VOLATILE ORGANICS

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
1,1,1,2-Tetrachloroethane	1.0 U	U,5	ug/L	1.0	SW846 8260D	1	06/02/2023 17:00	TMP	A
1,1,1-Trichloroethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 17:00	TMP	A
1,1,2,2-Tetrachloroethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 17:00	TMP	A
1,1,2-Trichloroethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 17:00	TMP	A
1,1-Dichloroethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 17:00	TMP	A
1,1-Dichloroethene	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 17:00	TMP	A
1,1-Dichloropropene	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 17:00	TMP	A
1,2,3-Trichlorobenzene	2.0 U	U	ug/L	2.0	SW846 8260D	1	06/02/2023 17:00	TMP	A
1,2,3-Trichloropropane	2.0 U	U	ug/L	2.0	SW846 8260D	1	06/02/2023 17:00	TMP	A
1,2,4-Trichlorobenzene	2.0 U	U	ug/L	2.0	SW846 8260D	1	06/02/2023 17:00	TMP	A
1,2-Dibromo-3-chloropropane	7.0 U	U	ug/L	7.0	SW846 8260D	1	06/02/2023 17:00	TMP	A
1,2-Dibromoethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 17:00	TMP	A
1,2-Dichlorobenzene	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 17:00	TMP	A
1,2-Dichloroethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 17:00	TMP	A
1,2-Dichloropropane	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 17:00	TMP	A
1,3-Dichlorobenzene	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 17:00	TMP	A
1,3-Dichloropropane	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 17:00	TMP	A
1,4-Dichlorobenzene	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 17:00	TMP	A
2,2-Dichloropropane	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 17:00	TMP	A
2-Butanone	10.0 U	U	ug/L	10.0	SW846 8260D	1	06/02/2023 17:00	TMP	A
2-Hexanone	5.0 U	U	ug/L	5.0	SW846 8260D	1	06/02/2023 17:00	TMP	A
4-Methyl-2-Pentanone(MIBK)	5.0 U	U	ug/L	5.0	SW846 8260D	1	06/02/2023 17:00	TMP	A
Acetone	10.0 U	U	ug/L	10.0	SW846 8260D	1	06/02/2023 17:00	TMP	A
Benzene	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 17:00	TMP	A
Bromobenzene	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 17:00	TMP	A
Bromochloromethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 17:00	TMP	A
Bromodichloromethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 17:00	TMP	A
Bromoform	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 17:00	TMP	A
Bromomethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 17:00	TMP	A
Carbon Tetrachloride	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 17:00	TMP	A
Chlorobenzene	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 17:00	TMP	A
Chlorodibromomethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 17:00	TMP	A
Chloroethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 17:00	TMP	A
Chloroform	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 17:00	TMP	A
Chloromethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 17:00	TMP	A

Results

Client Sample ID	MW-40D	Collected	05/21/2023 12:10
Lab Sample ID	3304367015	Lab Receipt	05/22/2023 18:15

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	06/02/2023 17:00	TMP	A
cis-1,3-Dichloropropene	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 17:00	TMP	A
Dibromomethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 17:00	TMP	A
Dichlorodifluoromethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 17:00	TMP	A
Diisopropyl ether	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 17:00	TMP	A
Ethylbenzene	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 17:00	TMP	A
Hexachlorobutadiene	5.0 U	U	ug/L	5.0	SW846 8260D	1	06/02/2023 17:00	TMP	A
Methyl t-Butyl Ether	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 17:00	TMP	A
Methylene Chloride	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 17:00	TMP	A
mp-Xylene	2.0 U	U	ug/L	2.0	SW846 8260D	1	06/02/2023 17:00	TMP	A
Naphthalene	2.0 U	U	ug/L	2.0	SW846 8260D	1	06/02/2023 17:00	TMP	A
o-Chlorotoluene	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 17:00	TMP	A
o-Xylene	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 17:00	TMP	A
p-Chlorotoluene	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 17:00	TMP	A
p-Isopropyltoluene	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 17:00	TMP	A
Styrene	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 17:00	TMP	A
Tetrachloroethene	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 17:00	TMP	A
Toluene	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 17:00	TMP	A
Total Xylenes	3.0 U	U	ug/L	3.0	SW846 8260D	1	06/02/2023 17:00	TMP	A
trans-1,2-Dichloroethene	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 17:00	TMP	A
trans-1,3-Dichloropropene	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 17:00	TMP	A
Trichloroethene	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 17:00	TMP	A
Trichlorofluoromethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 17:00	TMP	A
Vinyl Acetate	5.0 U	U	ug/L	5.0	SW846 8260D	1	06/02/2023 17:00	TMP	A
Vinyl Chloride	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 17:00	TMP	A

SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
1,2-Dichloroethane-d4	17060-07-0	104%	62 – 133	06/02/2023 17:00	
4-Bromofluorobenzene	460-00-4	98.7%	79 – 114	06/02/2023 17:00	
Dibromofluoromethane	1868-53-7	95.5%	78 – 116	06/02/2023 17:00	
Toluene-d8	2037-26-5	98.3%	76 – 127	06/02/2023 17:00	

Results

Client Sample ID	MW-38R	Collected	05/21/2023 13:35
Lab Sample ID	3304367016	Lab Receipt	05/22/2023 18:15

SEMIVOLATILE SIM

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
1,4-Dioxane	11.4		ug/L	10.0	SW846 8270E SIM	10	05/27/2023 07:19	M1O	C

SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
2-Methylnapthalene-d10	7297-45-2	59.3%	29 – 112	05/26/2023 14:54	
2-Methylnapthalene-d10	7297-45-2	47%	29 – 112	05/27/2023 07:19	
Fluoranthene-d10	93951-69-0	64.4%	45 – 130	05/26/2023 14:54	
Fluoranthene-d10	93951-69-0	50.1%	45 – 130	05/27/2023 07:19	

VOLATILE ORGANICS

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
1,1,1,2-Tetrachloroethane	1.0 U	U,5	ug/L	1.0	SW846 8260D	1	06/02/2023 17:24	TMP	A
1,1,1-Trichloroethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 17:24	TMP	A
1,1,2,2-Tetrachloroethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 17:24	TMP	A
1,1,2-Trichloroethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 17:24	TMP	A
1,1-Dichloroethane	6.8		ug/L	1.0	SW846 8260D	1	06/02/2023 17:24	TMP	A
1,1-Dichloroethene	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 17:24	TMP	A
1,1-Dichloropropene	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 17:24	TMP	A
1,2,3-Trichlorobenzene	2.0 U	U	ug/L	2.0	SW846 8260D	1	06/02/2023 17:24	TMP	A
1,2,3-Trichloropropane	2.0 U	U	ug/L	2.0	SW846 8260D	1	06/02/2023 17:24	TMP	A
1,2,4-Trichlorobenzene	2.0 U	U	ug/L	2.0	SW846 8260D	1	06/02/2023 17:24	TMP	A
1,2-Dibromo-3-chloropropane	7.0 U	U	ug/L	7.0	SW846 8260D	1	06/02/2023 17:24	TMP	A
1,2-Dibromoethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 17:24	TMP	A
1,2-Dichlorobenzene	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 17:24	TMP	A
1,2-Dichloroethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 17:24	TMP	A
1,2-Dichloropropane	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 17:24	TMP	A
1,3-Dichlorobenzene	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 17:24	TMP	A
1,3-Dichloropropane	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 17:24	TMP	A
1,4-Dichlorobenzene	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 17:24	TMP	A
2,2-Dichloropropane	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 17:24	TMP	A
2-Butanone	10.0 U	U	ug/L	10.0	SW846 8260D	1	06/02/2023 17:24	TMP	A
2-Hexanone	5.0 U	U	ug/L	5.0	SW846 8260D	1	06/02/2023 17:24	TMP	A
4-Methyl-2-Pentanone(MIBK)	5.0 U	U	ug/L	5.0	SW846 8260D	1	06/02/2023 17:24	TMP	A
Acetone	10.0 U	U	ug/L	10.0	SW846 8260D	1	06/02/2023 17:24	TMP	A
Benzene	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 17:24	TMP	A
Bromobenzene	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 17:24	TMP	A
Bromochloromethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 17:24	TMP	A
Bromodichloromethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 17:24	TMP	A
Bromoform	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 17:24	TMP	A
Bromomethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 17:24	TMP	A
Carbon Tetrachloride	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 17:24	TMP	A
Chlorobenzene	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 17:24	TMP	A
Chlorodibromomethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 17:24	TMP	A
Chloroethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 17:24	TMP	A

Results

Client Sample ID	MW-38R	Collected	05/21/2023 13:35
Lab Sample ID	3304367016	Lab Receipt	05/22/2023 18:15

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	06/02/2023 17:24	TMP	A
Chloromethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 17:24	TMP	A
cis-1,2-Dichloroethene	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 17:24	TMP	A
cis-1,3-Dichloropropene	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 17:24	TMP	A
Dibromomethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 17:24	TMP	A
Dichlorodifluoromethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 17:24	TMP	A
Diisopropyl ether	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 17:24	TMP	A
Ethylbenzene	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 17:24	TMP	A
Hexachlorobutadiene	5.0 U	U	ug/L	5.0	SW846 8260D	1	06/02/2023 17:24	TMP	A
Methyl t-Butyl Ether	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 17:24	TMP	A
Methylene Chloride	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 17:24	TMP	A
mp-Xylene	2.0 U	U	ug/L	2.0	SW846 8260D	1	06/02/2023 17:24	TMP	A
Naphthalene	2.0 U	U	ug/L	2.0	SW846 8260D	1	06/02/2023 17:24	TMP	A
o-Chlorotoluene	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 17:24	TMP	A
o-Xylene	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 17:24	TMP	A
p-Chlorotoluene	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 17:24	TMP	A
p-Isopropyltoluene	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 17:24	TMP	A
Styrene	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 17:24	TMP	A
Tetrachloroethene	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 17:24	TMP	A
Toluene	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 17:24	TMP	A
Total Xylenes	3.0 U	U	ug/L	3.0	SW846 8260D	1	06/02/2023 17:24	TMP	A
trans-1,2-Dichloroethene	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 17:24	TMP	A
trans-1,3-Dichloropropene	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 17:24	TMP	A
Trichloroethene	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 17:24	TMP	A
Trichlorofluoromethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 17:24	TMP	A
Vinyl Acetate	5.0 U	U	ug/L	5.0	SW846 8260D	1	06/02/2023 17:24	TMP	A
Vinyl Chloride	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 17:24	TMP	A

SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
1,2-Dichloroethane-d4	17060-07-0	101%	62 – 133	06/02/2023 17:24	
4-Bromofluorobenzene	460-00-4	97.4%	79 – 114	06/02/2023 17:24	
Dibromofluoromethane	1868-53-7	94.5%	78 – 116	06/02/2023 17:24	
Toluene-d8	2037-26-5	98.4%	76 – 127	06/02/2023 17:24	

Results

Client Sample ID	MW-05R	Collected	05/21/2023 13:55
Lab Sample ID	3304367017	Lab Receipt	05/22/2023 18:15

SEMIVOLATILE SIM

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
1,4-Dioxane	3.3		ug/L	1.0	SW846 8270E SIM	1	05/26/2023 15:21	M1O	C

SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
2-Methylnapthalene-d10	7297-45-2	67.9%	29 – 112	05/26/2023 15:21	
Fluoranthene-d10	93951-69-0	76.2%	45 – 130	05/26/2023 15:21	

VOLATILE ORGANICS

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
1,1,1,2-Tetrachloroethane	1.0 U	U,5	ug/L	1.0	SW846 8260D	1	06/02/2023 17:47	TMP	A
1,1,1-Trichloroethane	1.6		ug/L	1.0	SW846 8260D	1	06/02/2023 17:47	TMP	A
1,1,2,2-Tetrachloroethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 17:47	TMP	A
1,1,2-Trichloroethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 17:47	TMP	A
1,1-Dichloroethane	1.2		ug/L	1.0	SW846 8260D	1	06/02/2023 17:47	TMP	A
1,1-Dichloroethene	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 17:47	TMP	A
1,1-Dichloropropene	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 17:47	TMP	A
1,2,3-Trichlorobenzene	2.0 U	U	ug/L	2.0	SW846 8260D	1	06/02/2023 17:47	TMP	A
1,2,3-Trichloropropane	2.0 U	U	ug/L	2.0	SW846 8260D	1	06/02/2023 17:47	TMP	A
1,2,4-Trichlorobenzene	2.0 U	U	ug/L	2.0	SW846 8260D	1	06/02/2023 17:47	TMP	A
1,2-Dibromo-3-chloropropane	7.0 U	U	ug/L	7.0	SW846 8260D	1	06/02/2023 17:47	TMP	A
1,2-Dibromoethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 17:47	TMP	A
1,2-Dichlorobenzene	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 17:47	TMP	A
1,2-Dichloroethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 17:47	TMP	A
1,2-Dichloropropane	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 17:47	TMP	A
1,3-Dichlorobenzene	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 17:47	TMP	A
1,3-Dichloropropane	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 17:47	TMP	A
1,4-Dichlorobenzene	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 17:47	TMP	A
2,2-Dichloropropane	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 17:47	TMP	A
2-Butanone	10.0 U	U	ug/L	10.0	SW846 8260D	1	06/02/2023 17:47	TMP	A
2-Hexanone	5.0 U	U	ug/L	5.0	SW846 8260D	1	06/02/2023 17:47	TMP	A
4-Methyl-2-Pentanone(MIBK)	5.0 U	U	ug/L	5.0	SW846 8260D	1	06/02/2023 17:47	TMP	A
Acetone	10.0 U	U	ug/L	10.0	SW846 8260D	1	06/02/2023 17:47	TMP	A
Benzene	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 17:47	TMP	A
Bromobenzene	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 17:47	TMP	A
Bromochloromethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 17:47	TMP	A
Bromodichloromethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 17:47	TMP	A
Bromoform	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 17:47	TMP	A
Bromomethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 17:47	TMP	A
Carbon Tetrachloride	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 17:47	TMP	A
Chlorobenzene	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 17:47	TMP	A
Chlorodibromomethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 17:47	TMP	A
Chloroethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 17:47	TMP	A
Chloroform	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 17:47	TMP	A
Chloromethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 17:47	TMP	A

Results

Client Sample ID	MW-05R	Collected	05/21/2023 13:55
Lab Sample ID	3304367017	Lab Receipt	05/22/2023 18:15

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	06/02/2023 17:47	TMP	A
cis-1,3-Dichloropropene	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 17:47	TMP	A
Dibromomethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 17:47	TMP	A
Dichlorodifluoromethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 17:47	TMP	A
Diisopropyl ether	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 17:47	TMP	A
Ethylbenzene	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 17:47	TMP	A
Hexachlorobutadiene	5.0 U	U	ug/L	5.0	SW846 8260D	1	06/02/2023 17:47	TMP	A
Methyl t-Butyl Ether	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 17:47	TMP	A
Methylene Chloride	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 17:47	TMP	A
mp-Xylene	2.0 U	U	ug/L	2.0	SW846 8260D	1	06/02/2023 17:47	TMP	A
Naphthalene	2.0 U	U	ug/L	2.0	SW846 8260D	1	06/02/2023 17:47	TMP	A
o-Chlorotoluene	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 17:47	TMP	A
o-Xylene	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 17:47	TMP	A
p-Chlorotoluene	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 17:47	TMP	A
p-Isopropyltoluene	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 17:47	TMP	A
Styrene	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 17:47	TMP	A
Tetrachloroethene	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 17:47	TMP	A
Toluene	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 17:47	TMP	A
Total Xylenes	3.0 U	U	ug/L	3.0	SW846 8260D	1	06/02/2023 17:47	TMP	A
trans-1,2-Dichloroethene	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 17:47	TMP	A
trans-1,3-Dichloropropene	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 17:47	TMP	A
Trichloroethene	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 17:47	TMP	A
Trichlorofluoromethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 17:47	TMP	A
Vinyl Acetate	5.0 U	U	ug/L	5.0	SW846 8260D	1	06/02/2023 17:47	TMP	A
Vinyl Chloride	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 17:47	TMP	A

SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
1,2-Dichloroethane-d4	17060-07-0	104%	62 – 133	06/02/2023 17:47	
4-Bromofluorobenzene	460-00-4	99.6%	79 – 114	06/02/2023 17:47	
Dibromofluoromethane	1868-53-7	95.5%	78 – 116	06/02/2023 17:47	
Toluene-d8	2037-26-5	97.7%	76 – 127	06/02/2023 17:47	

Results

Client Sample ID	MW-44	Collected	05/21/2023 14:05
Lab Sample ID	3304367018	Lab Receipt	05/22/2023 18:15

SEMIVOLATILE SIM

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
1,4-Dioxane	1.9		ug/L	1.6	SW846 8270E SIM	1	05/26/2023 15:49	M1O	C

SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
2-Methylnapthalene-d10	7297-45-2	70.3%	29 – 112	05/26/2023 15:49	
Fluoranthene-d10	93951-69-0	82.5%	45 – 130	05/26/2023 15:49	

VOLATILE ORGANICS

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
1,1,1,2-Tetrachloroethane	1.0 U	U,5	ug/L	1.0	SW846 8260D	1	06/02/2023 18:10	TMP	A
1,1,1-Trichloroethane	2.6		ug/L	1.0	SW846 8260D	1	06/02/2023 18:10	TMP	A
1,1,2,2-Tetrachloroethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 18:10	TMP	A
1,1,2-Trichloroethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 18:10	TMP	A
1,1-Dichloroethane	1.2		ug/L	1.0	SW846 8260D	1	06/02/2023 18:10	TMP	A
1,1-Dichloroethene	1.9		ug/L	1.0	SW846 8260D	1	06/02/2023 18:10	TMP	A
1,1-Dichloropropene	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 18:10	TMP	A
1,2,3-Trichlorobenzene	2.0 U	U	ug/L	2.0	SW846 8260D	1	06/02/2023 18:10	TMP	A
1,2,3-Trichloropropane	2.0 U	U	ug/L	2.0	SW846 8260D	1	06/02/2023 18:10	TMP	A
1,2,4-Trichlorobenzene	2.0 U	U	ug/L	2.0	SW846 8260D	1	06/02/2023 18:10	TMP	A
1,2-Dibromo-3-chloropropane	7.0 U	U	ug/L	7.0	SW846 8260D	1	06/02/2023 18:10	TMP	A
1,2-Dibromoethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 18:10	TMP	A
1,2-Dichlorobenzene	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 18:10	TMP	A
1,2-Dichloroethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 18:10	TMP	A
1,2-Dichloropropane	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 18:10	TMP	A
1,3-Dichlorobenzene	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 18:10	TMP	A
1,3-Dichloropropane	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 18:10	TMP	A
1,4-Dichlorobenzene	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 18:10	TMP	A
2,2-Dichloropropane	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 18:10	TMP	A
2-Butanone	10.0 U	U	ug/L	10.0	SW846 8260D	1	06/02/2023 18:10	TMP	A
2-Hexanone	5.0 U	U	ug/L	5.0	SW846 8260D	1	06/02/2023 18:10	TMP	A
4-Methyl-2-Pentanone(MIBK)	5.0 U	U	ug/L	5.0	SW846 8260D	1	06/02/2023 18:10	TMP	A
Acetone	10.0 U	U	ug/L	10.0	SW846 8260D	1	06/02/2023 18:10	TMP	A
Benzene	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 18:10	TMP	A
Bromobenzene	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 18:10	TMP	A
Bromochloromethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 18:10	TMP	A
Bromodichloromethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 18:10	TMP	A
Bromoform	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 18:10	TMP	A
Bromomethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 18:10	TMP	A
Carbon Tetrachloride	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 18:10	TMP	A
Chlorobenzene	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 18:10	TMP	A
Chlorodibromomethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 18:10	TMP	A
Chloroethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 18:10	TMP	A
Chloroform	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 18:10	TMP	A
Chloromethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 18:10	TMP	A

Results

Client Sample ID	MW-44	Collected	05/21/2023 14:05
Lab Sample ID	3304367018	Lab Receipt	05/22/2023 18:15

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	06/02/2023 18:10	TMP	A
cis-1,3-Dichloropropene	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 18:10	TMP	A
Dibromomethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 18:10	TMP	A
Dichlorodifluoromethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 18:10	TMP	A
Diisopropyl ether	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 18:10	TMP	A
Ethylbenzene	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 18:10	TMP	A
Hexachlorobutadiene	5.0 U	U	ug/L	5.0	SW846 8260D	1	06/02/2023 18:10	TMP	A
Methyl t-Butyl Ether	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 18:10	TMP	A
Methylene Chloride	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 18:10	TMP	A
mp-Xylene	2.0 U	U	ug/L	2.0	SW846 8260D	1	06/02/2023 18:10	TMP	A
Naphthalene	2.0 U	U	ug/L	2.0	SW846 8260D	1	06/02/2023 18:10	TMP	A
o-Chlorotoluene	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 18:10	TMP	A
o-Xylene	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 18:10	TMP	A
p-Chlorotoluene	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 18:10	TMP	A
p-Isopropyltoluene	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 18:10	TMP	A
Styrene	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 18:10	TMP	A
Tetrachloroethene	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 18:10	TMP	A
Toluene	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 18:10	TMP	A
Total Xylenes	3.0 U	U	ug/L	3.0	SW846 8260D	1	06/02/2023 18:10	TMP	A
trans-1,2-Dichloroethene	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 18:10	TMP	A
trans-1,3-Dichloropropene	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 18:10	TMP	A
Trichloroethene	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 18:10	TMP	A
Trichlorofluoromethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 18:10	TMP	A
Vinyl Acetate	5.0 U	U	ug/L	5.0	SW846 8260D	1	06/02/2023 18:10	TMP	A
Vinyl Chloride	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 18:10	TMP	A

SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
1,2-Dichloroethane-d4	17060-07-0	101%	62 – 133	06/02/2023 18:10	
4-Bromofluorobenzene	460-00-4	99.6%	79 – 114	06/02/2023 18:10	
Dibromofluoromethane	1868-53-7	93.4%	78 – 116	06/02/2023 18:10	
Toluene-d8	2037-26-5	99%	76 – 127	06/02/2023 18:10	

Results

Client Sample ID	MW-21D	Collected	05/21/2023 14:20
Lab Sample ID	3304367019	Lab Receipt	05/22/2023 18:15

SEMIVOLATILE SIM

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
1,4-Dioxane	7.1		ug/L	1.0	SW846 8270E SIM	1	05/26/2023 16:16	M1O	C

SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
2-Methylnapthalene-d10	7297-45-2	68.9%	29 – 112	05/26/2023 16:16	
Fluoranthene-d10	93951-69-0	80.1%	45 – 130	05/26/2023 16:16	

VOLATILE ORGANICS

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
1,1,1,2-Tetrachloroethane	1.0 U	U,5	ug/L	1.0	SW846 8260D	1	06/02/2023 18:33	TMP	A
1,1,1-Trichloroethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 18:33	TMP	A
1,1,2,2-Tetrachloroethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 18:33	TMP	A
1,1,2-Trichloroethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 18:33	TMP	A
1,1-Dichloroethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 18:33	TMP	A
1,1-Dichloroethene	26.1		ug/L	1.0	SW846 8260D	1	06/02/2023 18:33	TMP	A
1,1-Dichloropropene	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 18:33	TMP	A
1,2,3-Trichlorobenzene	2.0 U	U	ug/L	2.0	SW846 8260D	1	06/02/2023 18:33	TMP	A
1,2,3-Trichloropropane	2.0 U	U	ug/L	2.0	SW846 8260D	1	06/02/2023 18:33	TMP	A
1,2,4-Trichlorobenzene	2.0 U	U	ug/L	2.0	SW846 8260D	1	06/02/2023 18:33	TMP	A
1,2-Dibromo-3-chloropropane	7.0 U	U	ug/L	7.0	SW846 8260D	1	06/02/2023 18:33	TMP	A
1,2-Dibromoethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 18:33	TMP	A
1,2-Dichlorobenzene	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 18:33	TMP	A
1,2-Dichloroethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 18:33	TMP	A
1,2-Dichloropropane	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 18:33	TMP	A
1,3-Dichlorobenzene	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 18:33	TMP	A
1,3-Dichloropropane	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 18:33	TMP	A
1,4-Dichlorobenzene	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 18:33	TMP	A
2,2-Dichloropropane	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 18:33	TMP	A
2-Butanone	10.0 U	U	ug/L	10.0	SW846 8260D	1	06/02/2023 18:33	TMP	A
2-Hexanone	5.0 U	U	ug/L	5.0	SW846 8260D	1	06/02/2023 18:33	TMP	A
4-Methyl-2-Pentanone(MIBK)	5.0 U	U	ug/L	5.0	SW846 8260D	1	06/02/2023 18:33	TMP	A
Acetone	10.0 U	U	ug/L	10.0	SW846 8260D	1	06/02/2023 18:33	TMP	A
Benzene	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 18:33	TMP	A
Bromobenzene	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 18:33	TMP	A
Bromochloromethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 18:33	TMP	A
Bromodichloromethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 18:33	TMP	A
Bromoform	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 18:33	TMP	A
Bromomethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 18:33	TMP	A
Carbon Tetrachloride	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 18:33	TMP	A
Chlorobenzene	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 18:33	TMP	A
Chlorodibromomethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 18:33	TMP	A
Chloroethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 18:33	TMP	A
Chloroform	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 18:33	TMP	A
Chloromethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 18:33	TMP	A

Results

Client Sample ID	MW-21D	Collected	05/21/2023 14:20
Lab Sample ID	3304367019	Lab Receipt	05/22/2023 18:15

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	06/02/2023 18:33	TMP	A
cis-1,3-Dichloropropene	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 18:33	TMP	A
Dibromomethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 18:33	TMP	A
Dichlorodifluoromethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 18:33	TMP	A
Diisopropyl ether	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 18:33	TMP	A
Ethylbenzene	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 18:33	TMP	A
Hexachlorobutadiene	5.0 U	U	ug/L	5.0	SW846 8260D	1	06/02/2023 18:33	TMP	A
Methyl t-Butyl Ether	1.2		ug/L	1.0	SW846 8260D	1	06/02/2023 18:33	TMP	A
Methylene Chloride	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 18:33	TMP	A
mp-Xylene	2.0 U	U	ug/L	2.0	SW846 8260D	1	06/02/2023 18:33	TMP	A
Naphthalene	2.0 U	U	ug/L	2.0	SW846 8260D	1	06/02/2023 18:33	TMP	A
o-Chlorotoluene	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 18:33	TMP	A
o-Xylene	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 18:33	TMP	A
p-Chlorotoluene	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 18:33	TMP	A
p-Isopropyltoluene	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 18:33	TMP	A
Styrene	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 18:33	TMP	A
Tetrachloroethene	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 18:33	TMP	A
Toluene	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 18:33	TMP	A
Total Xylenes	3.0 U	U	ug/L	3.0	SW846 8260D	1	06/02/2023 18:33	TMP	A
trans-1,2-Dichloroethene	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 18:33	TMP	A
trans-1,3-Dichloropropene	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 18:33	TMP	A
Trichloroethene	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 18:33	TMP	A
Trichlorofluoromethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 18:33	TMP	A
Vinyl Acetate	5.0 U	U	ug/L	5.0	SW846 8260D	1	06/02/2023 18:33	TMP	A
Vinyl Chloride	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 18:33	TMP	A

SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
1,2-Dichloroethane-d4	17060-07-0	103%	62 – 133	06/02/2023 18:33	
4-Bromofluorobenzene	460-00-4	99.8%	79 – 114	06/02/2023 18:33	
Dibromofluoromethane	1868-53-7	95%	78 – 116	06/02/2023 18:33	
Toluene-d8	2037-26-5	98.3%	76 – 127	06/02/2023 18:33	

Results

Client Sample ID	Trip Blank A	Collected	05/21/2023 00:00
Lab Sample ID	3304367020	Lab Receipt	05/22/2023 18:15

VOLATILE ORGANICS

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
1,1,1,2-Tetrachloroethane	1.0 U	U,5	ug/L	1.0	SW846 8260D	1	06/02/2023 12:01	TMP	A
1,1,1-Trichloroethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 12:01	TMP	A
1,1,2,2-Tetrachloroethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 12:01	TMP	A
1,1,2-Trichloroethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 12:01	TMP	A
1,1-Dichloroethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 12:01	TMP	A
1,1-Dichloroethene	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 12:01	TMP	A
1,1-Dichloropropene	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 12:01	TMP	A
1,2,3-Trichlorobenzene	2.0 U	U	ug/L	2.0	SW846 8260D	1	06/02/2023 12:01	TMP	A
1,2,3-Trichloropropane	2.0 U	U	ug/L	2.0	SW846 8260D	1	06/02/2023 12:01	TMP	A
1,2,4-Trichlorobenzene	2.0 U	U	ug/L	2.0	SW846 8260D	1	06/02/2023 12:01	TMP	A
1,2-Dibromo-3-chloropropane	7.0 U	U	ug/L	7.0	SW846 8260D	1	06/02/2023 12:01	TMP	A
1,2-Dibromoethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 12:01	TMP	A
1,2-Dichlorobenzene	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 12:01	TMP	A
1,2-Dichloroethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 12:01	TMP	A
1,2-Dichloropropane	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 12:01	TMP	A
1,3-Dichlorobenzene	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 12:01	TMP	A
1,3-Dichloropropane	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 12:01	TMP	A
1,4-Dichlorobenzene	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 12:01	TMP	A
2,2-Dichloropropane	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 12:01	TMP	A
2-Butanone	10.0 U	U	ug/L	10.0	SW846 8260D	1	06/02/2023 12:01	TMP	A
2-Hexanone	5.0 U	U	ug/L	5.0	SW846 8260D	1	06/02/2023 12:01	TMP	A
4-Methyl-2-Pentanone(MIBK)	5.0 U	U	ug/L	5.0	SW846 8260D	1	06/02/2023 12:01	TMP	A
Acetone	10.0 U	U	ug/L	10.0	SW846 8260D	1	06/02/2023 12:01	TMP	A
Benzene	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 12:01	TMP	A
Bromobenzene	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 12:01	TMP	A
Bromochloromethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 12:01	TMP	A
Bromodichloromethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 12:01	TMP	A
Bromoform	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 12:01	TMP	A
Bromomethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 12:01	TMP	A
Carbon Tetrachloride	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 12:01	TMP	A
Chlorobenzene	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 12:01	TMP	A
Chlorodibromomethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 12:01	TMP	A
Chloroethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 12:01	TMP	A
Chloroform	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 12:01	TMP	A
Chloromethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 12:01	TMP	A
cis-1,2-Dichloroethene	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 12:01	TMP	A
cis-1,3-Dichloropropene	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 12:01	TMP	A
Dibromomethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 12:01	TMP	A
Dichlorodifluoromethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 12:01	TMP	A
Diisopropyl ether	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 12:01	TMP	A
Ethylbenzene	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 12:01	TMP	A
Hexachlorobutadiene	5.0 U	U	ug/L	5.0	SW846 8260D	1	06/02/2023 12:01	TMP	A
Methyl t-Butyl Ether	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 12:01	TMP	A
Methylene Chloride	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 12:01	TMP	A
mp-Xylene	2.0 U	U	ug/L	2.0	SW846 8260D	1	06/02/2023 12:01	TMP	A
Naphthalene	2.0 U	U	ug/L	2.0	SW846 8260D	1	06/02/2023 12:01	TMP	A
o-Chlorotoluene	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 12:01	TMP	A

Results

Client Sample ID	Trip Blank A	Collected	05/21/2023 00:00
Lab Sample ID	3304367020	Lab Receipt	05/22/2023 18:15

VOLATILE ORGANICS (cont.)

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
o-Xylene	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 12:01	TMP	A
p-Chlorotoluene	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 12:01	TMP	A
p-Isopropyltoluene	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 12:01	TMP	A
Styrene	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 12:01	TMP	A
Tetrachloroethene	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 12:01	TMP	A
Toluene	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 12:01	TMP	A
Total Xylenes	3.0 U	U	ug/L	3.0	SW846 8260D	1	06/02/2023 12:01	TMP	A
trans-1,2-Dichloroethene	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 12:01	TMP	A
trans-1,3-Dichloropropene	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 12:01	TMP	A
Trichloroethene	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 12:01	TMP	A
Trichlorofluoromethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 12:01	TMP	A
Vinyl Acetate	5.0 U	U	ug/L	5.0	SW846 8260D	1	06/02/2023 12:01	TMP	A
Vinyl Chloride	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 12:01	TMP	A

SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
1,2-Dichloroethane-d4	17060-07-0	103%	62 – 133	06/02/2023 12:01	
4-Bromofluorobenzene	460-00-4	98%	79 – 114	06/02/2023 12:01	
Dibromofluoromethane	1868-53-7	96.7%	78 – 116	06/02/2023 12:01	
Toluene-d8	2037-26-5	97.5%	76 – 127	06/02/2023 12:01	

Results

Client Sample ID	Trip Blank B	Collected	05/21/2023 00:00
Lab Sample ID	3304367021	Lab Receipt	05/22/2023 18:15

VOLATILE ORGANICS

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
1,1,1,2-Tetrachloroethane	1.0 U	U,5	ug/L	1.0	SW846 8260D	1	06/02/2023 12:24	TMP	A
1,1,1-Trichloroethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 12:24	TMP	A
1,1,2,2-Tetrachloroethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 12:24	TMP	A
1,1,2-Trichloroethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 12:24	TMP	A
1,1-Dichloroethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 12:24	TMP	A
1,1-Dichloroethene	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 12:24	TMP	A
1,1-Dichloropropene	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 12:24	TMP	A
1,2,3-Trichlorobenzene	2.0 U	U	ug/L	2.0	SW846 8260D	1	06/02/2023 12:24	TMP	A
1,2,3-Trichloropropane	2.0 U	U	ug/L	2.0	SW846 8260D	1	06/02/2023 12:24	TMP	A
1,2,4-Trichlorobenzene	2.0 U	U	ug/L	2.0	SW846 8260D	1	06/02/2023 12:24	TMP	A
1,2-Dibromo-3-chloropropane	7.0 U	U	ug/L	7.0	SW846 8260D	1	06/02/2023 12:24	TMP	A
1,2-Dibromoethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 12:24	TMP	A
1,2-Dichlorobenzene	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 12:24	TMP	A
1,2-Dichloroethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 12:24	TMP	A
1,2-Dichloropropane	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 12:24	TMP	A
1,3-Dichlorobenzene	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 12:24	TMP	A
1,3-Dichloropropane	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 12:24	TMP	A
1,4-Dichlorobenzene	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 12:24	TMP	A
2,2-Dichloropropane	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 12:24	TMP	A
2-Butanone	10.0 U	U	ug/L	10.0	SW846 8260D	1	06/02/2023 12:24	TMP	A
2-Hexanone	5.0 U	U	ug/L	5.0	SW846 8260D	1	06/02/2023 12:24	TMP	A
4-Methyl-2-Pentanone(MIBK)	5.0 U	U	ug/L	5.0	SW846 8260D	1	06/02/2023 12:24	TMP	A
Acetone	10.0 U	U	ug/L	10.0	SW846 8260D	1	06/02/2023 12:24	TMP	A
Benzene	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 12:24	TMP	A
Bromobenzene	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 12:24	TMP	A
Bromochloromethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 12:24	TMP	A
Bromodichloromethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 12:24	TMP	A
Bromoform	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 12:24	TMP	A
Bromomethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 12:24	TMP	A
Carbon Tetrachloride	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 12:24	TMP	A
Chlorobenzene	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 12:24	TMP	A
Chlorodibromomethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 12:24	TMP	A
Chloroethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 12:24	TMP	A
Chloroform	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 12:24	TMP	A
Chloromethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 12:24	TMP	A
cis-1,2-Dichloroethene	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 12:24	TMP	A
cis-1,3-Dichloropropene	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 12:24	TMP	A
Dibromomethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 12:24	TMP	A
Dichlorodifluoromethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 12:24	TMP	A
Diisopropyl ether	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 12:24	TMP	A
Ethylbenzene	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 12:24	TMP	A
Hexachlorobutadiene	5.0 U	U	ug/L	5.0	SW846 8260D	1	06/02/2023 12:24	TMP	A
Methyl t-Butyl Ether	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 12:24	TMP	A
Methylene Chloride	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 12:24	TMP	A
mp-Xylene	2.0 U	U	ug/L	2.0	SW846 8260D	1	06/02/2023 12:24	TMP	A
Naphthalene	2.0 U	U	ug/L	2.0	SW846 8260D	1	06/02/2023 12:24	TMP	A
o-Chlorotoluene	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 12:24	TMP	A

Results

Client Sample ID	Trip Blank B	Collected	05/21/2023 00:00
Lab Sample ID	3304367021	Lab Receipt	05/22/2023 18:15

VOLATILE ORGANICS (cont.)

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
o-Xylene	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 12:24	TMP	A
p-Chlorotoluene	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 12:24	TMP	A
p-Isopropyltoluene	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 12:24	TMP	A
Styrene	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 12:24	TMP	A
Tetrachloroethene	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 12:24	TMP	A
Toluene	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 12:24	TMP	A
Total Xylenes	3.0 U	U	ug/L	3.0	SW846 8260D	1	06/02/2023 12:24	TMP	A
trans-1,2-Dichloroethene	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 12:24	TMP	A
trans-1,3-Dichloropropene	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 12:24	TMP	A
Trichloroethene	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 12:24	TMP	A
Trichlorofluoromethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 12:24	TMP	A
Vinyl Acetate	5.0 U	U	ug/L	5.0	SW846 8260D	1	06/02/2023 12:24	TMP	A
Vinyl Chloride	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/02/2023 12:24	TMP	A

SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
1,2-Dichloroethane-d4	17060-07-0	102%	62 – 133	06/02/2023 12:24	
4-Bromofluorobenzene	460-00-4	98.9%	79 – 114	06/02/2023 12:24	
Dibromofluoromethane	1868-53-7	95.3%	78 – 116	06/02/2023 12:24	
Toluene-d8	2037-26-5	97.7%	76 – 127	06/02/2023 12:24	

Sample - Method Cross Reference Table

Lab ID	Sample ID	Analysis Method	Preparation Method	Leachate Method
3304367001	MW-01D	SW846 8270E SIM	SW846 3510C	
		SW846 8260D	N/A	
3304367002	MW-22D	SW846 8270E SIM	SW846 3510C	
		SW846 8260D	N/A	
3304367003	MW-04R	SW846 8270E SIM	SW846 3510C	
		SW846 8260D	N/A	
3304367004	MW-20	SW846 8270E SIM	SW846 3510C	
		SW846 8260D	N/A	
3304367005	MW-09	SW846 8270E SIM	SW846 3510C	
		SW846 8260D	N/A	
3304367006	MW-23D	SW846 8270E SIM	SW846 3510C	
		SW846 8260D	N/A	
3304367007	MW-46D	SW846 8270E SIM	SW846 3510C	
		SW846 8260D	N/A	
3304367008	MW-16	SW846 8270E SIM	SW846 3510C	
		SW846 8260D	N/A	
		SW846 8260D	N/A	
3304367009	MW-16D	SW846 8270E SIM	SW846 3510C	
		SW846 8260D	N/A	
3304367010	DUP-052123	SW846 8270E SIM	SW846 3510C	
		SW846 8260D	N/A	
3304367011	MW-43	SW846 8270E SIM	SW846 3510C	
		SW846 8260D	N/A	
3304367012	MW-39	SW846 8270E SIM	SW846 3510C	
		SW846 8260D	N/A	
3304367013	MW-42	SW846 8270E SIM	SW846 3510C	
		SW846 8260D	N/A	
3304367014	MW-18	SW846 8270E SIM	SW846 3510C	
		SW846 8260D	N/A	
3304367015	MW-40D	SW846 8270E SIM	SW846 3510C	
		SW846 8260D	N/A	
3304367016	MW-38R	SW846 8270E SIM	SW846 3510C	
		SW846 8260D	N/A	
3304367017	MW-05R	SW846 8270E SIM	SW846 3510C	
		SW846 8260D	N/A	
3304367018	MW-44	SW846 8270E SIM	SW846 3510C	
		SW846 8260D	N/A	
3304367019	MW-21D	SW846 8270E SIM	SW846 3510C	
		SW846 8260D	N/A	
3304367020	Trip Blank A	SW846 8260D	N/A	
3304367021	Trip Blank B	SW846 8260D	N/A	

QUALITY CONTROL SAMPLES

SEMIVOLATILE SIM

QC Batch

QC Batch	1005881	Prep Method	SW846 3510C
Date	05/24/2023 10:10	Analysis Method	SW846 8270E SIM
Tech.	SRL		

Associated Samples

3304367001	3304367002	3304367003	3304367004
3304367005	3304367006	3304367007	3304367008
3304367009	3304367010	3304367011	3304367012
3304367013	3304367014	3304367015	3304367016
3304367017	3304367018	3304367019	

Method Blank 3673863 (MB) Created on 05/24/2023 08:09 For QC Batch 1005881

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	69.3	29 - 112	
Fluoranthene-d10	93951-69-0	BLK	0.81	1	81.2	45 - 130	

Lab Control Standard 3673864 (LCS) Created on 05/24/2023 08:09 For QC Batch 1005881

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	0.52		1	51.8	22 - 75		U

SURROGATES

Compound	CAS No		Result (ug/L)	Expected (ug/L)	Rec. (%)	Limits (%)	Qualifiers
2-Methylnapthalene-d10	7297-45-2	LCS	0.73	1	73.3	29 - 112	
Fluoranthene-d10	93951-69-0	LCS	0.85	1	84.6	45 - 130	

Matrix Spike 3673865 (MS) 3304367005 For QC Batch 1005881

****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	5.50	4.50	1	NC	22 - 75		

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	MS	0.75	1	74.7	29 - 112	
Fluoranthene-d10	93951-69-0	MS	0.85	1	85.3	45 - 130	

Duplicate 3673866 (DUP) 3304367006 For QC Batch 1005881

****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	29.6262	26.9576	RPD	9.43 (Max-30)	

SURROGATES

Compound	CAS No		Result (ug/L)	Expected (ug/L)	Rec. (%)	Limits (%)	Qualifiers
2-Methylnapthalene-d10	7297-45-2	DUP	0.51	1	50.5	29 - 112	
2-Methylnapthalene-d10	7297-45-2	DUP	0.64	1	63.8	29 - 112	
Fluoranthene-d10	93951-69-0	DUP	0.55	1	55.2	45 - 130	
Fluoranthene-d10	93951-69-0	DUP	0.72	1	71.9	45 - 130	

QUALITY CONTROL SAMPLES

VOLATILE ORGANICS

QC Batch

QC Batch	1008495	Prep Method	N/A
Date	N/A	Analysis Method	SW846 8260D
Tech.			

Associated Samples

3304367001 3304367002 3304367003 3304367004

Matrix Spike 3677151 (MS) 3304366014 (non-Project Sample) For QC Batch 1008495

****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 3677152 (MSD) 3304366014 (non-Project Sample) For QC Batch 1008495

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	16.80	0	20	84.1	78 - 121		
1,1,1,2-Tetrachloroethane	630-20-6	MSD	16.40	0	20	81.8	78 - 121	RPD 2.74 (Max-16)	
1,1,1-Trichloroethane	71-55-6	MS	26.90	3.60	20	117	66 - 130		
1,1,1-Trichloroethane	71-55-6	MSD	25.20	3.60	20	108	66 - 130	RPD 6.52 (Max-20)	
1,1,2,2-Tetrachloroethane	79-34-5	MS	21.50	0	20	108	74 - 135		
1,1,2,2-Tetrachloroethane	79-34-5	MSD	21.50	0	20	107	74 - 135	RPD 0.34 (Max-16)	
1,1,2-Trichloroethane	79-00-5	MS	20.80	0	20	104	82 - 126		
1,1,2-Trichloroethane	79-00-5	MSD	20.90	0	20	104	82 - 126	RPD 0.50 (Max-15)	
1,1-Dichloroethane	75-34-3	MS	29.40	7.10	20	111	78 - 124		
1,1-Dichloroethane	75-34-3	MSD	28	7.10	20	104	78 - 124	RPD 4.85 (Max-15)	
1,1-Dichloroethene	75-35-4	MS	53.20	30.10	20	115	63 - 128		
1,1-Dichloroethene	75-35-4	MSD	49.90	30.10	20	98.8	63 - 128	RPD 6.44 (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 6.15 (Max-16)	
1,2,3-Trichlorobenzene	87-61-6	MS	20.30	0	20	102	61 - 126		
1,2,3-Trichlorobenzene	87-61-6	MSD	20.80	0	20	104	61 - 126	RPD 2.24 (Max-36)	
1,2,3-Trichloropropane	96-18-4	MS	21.90	0	20	110	75 - 132		
1,2,3-Trichloropropane	96-18-4	MSD	21.80	0	20	109	75 - 132	RPD 0.55 (Max-19)	
1,2,4-Trichlorobenzene	120-82-1	MS	19.90	0	20	99.3	67 - 123		
1,2,4-Trichlorobenzene	120-82-1	MSD	20.20	0	20	101	67 - 123	RPD 1.43 (Max-22)	
1,2-Dibromo-3-chloropropane	96-12-8	MS	17.50	0	20	87.7	59 - 133		
1,2-Dibromo-3-chloropropane	96-12-8	MSD	17.10	0	20	85.7	59 - 133	RPD 2.34 (Max-26)	
1,2-Dibromoethane	106-93-4	MS	20.10	0	20	101	80 - 124		
1,2-Dibromoethane	106-93-4	MSD	20	0	20	100	80 - 124	RPD 0.47 (Max-19)	
1,2-Dichlorobenzene	95-50-1	MS	20.90	0	20	104	82 - 118		
1,2-Dichlorobenzene	95-50-1	MSD	20.70	0	20	104	82 - 118	RPD 0.65 (Max-15)	
1,2-Dichloroethane	107-06-2	MS	21.50	0	20	108	70 - 133		
1,2-Dichloroethane	107-06-2	MSD	20.90	0	20	104	70 - 133	RPD 3.08 (Max-19)	
1,2-Dichloropropane	78-87-5	MS	21	0	20	105	81 - 127		
1,2-Dichloropropane	78-87-5	MSD	20.40	0	20	102	81 - 127	RPD 2.93 (Max-15)	
1,3-Dichlorobenzene	541-73-1	MS	20.50	0	20	102	81 - 118		
1,3-Dichlorobenzene	541-73-1	MSD	20.10	0	20	101	81 - 118	RPD 1.68 (Max-16)	
1,3-Dichloropropane	142-28-9	MS	20.60	0	20	103	82 - 126		
1,3-Dichloropropane	142-28-9	MSD	20.10	0	20	101	82 - 126	RPD 2.30 (Max-15)	
1,4-Dichlorobenzene	106-46-7	MS	21.20	0	20	106	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	20.70	0	20	103	81 - 116	RPD 2.64 (Max-15)	
2,2-Dichloropropane	594-20-7	MS	19.40	0	20	97.1	64 - 129		
2,2-Dichloropropane	594-20-7	MSD	18.10	0	20	90.4	64 - 129	RPD 7.17 (Max-18)	
2-Butanone	78-93-3	MS	120	0	100	120	50 - 152		
2-Butanone	78-93-3	MSD	121	0	100	121	50 - 152	RPD 0.29 (Max-16)	
2-Hexanone	591-78-6	MS	111	0	100	111	65 - 154		
2-Hexanone	591-78-6	MSD	110	0	100	110	65 - 154	RPD 0.89 (Max-17)	
4-Methyl-2-Pentanone(MIBK)	108-10-1	MS	117	0	100	117	71 - 146		
4-Methyl-2-Pentanone(MIBK)	108-10-1	MSD	116	0	100	116	71 - 146	RPD 0.76 (Max-16)	
Acetone	67-64-1	MS	109	0	100	109	40 - 151		
Acetone	67-64-1	MSD	107	0	100	107	40 - 151	RPD 1.85 (Max-40)	
Benzene	71-43-2	MS	22.10	0	20	111	80 - 124		
Benzene	71-43-2	MSD	20.70	0	20	103	80 - 124	RPD 6.92 (Max-26)	
Bromobenzene	108-86-1	MS	21.40	0	20	107	81 - 119		
Bromobenzene	108-86-1	MSD	20.90	0	20	104	81 - 119	RPD 2.58 (Max-17)	
Bromochloromethane	74-97-5	MS	18	0	20	89.9	73 - 117		
Bromochloromethane	74-97-5	MSD	17.30	0	20	86.7	73 - 117	RPD 3.66 (Max-19)	
Bromodichloromethane	75-27-4	MS	21	0	20	105	79 - 126		
Bromodichloromethane	75-27-4	MSD	19.90	0	20	99.5	79 - 126	RPD 5.33 (Max-16)	
Bromoform	75-25-2	MS	17.60	0	20	88	70 - 123		
Bromoform	75-25-2	MSD	17.70	0	20	88.4	70 - 123	RPD 0.44 (Max-16)	
Bromomethane	74-83-9	MS	16.70	0	20	83.7	45 - 148		
Bromomethane	74-83-9	MSD	16.90	0	20	84.3	45 - 148	RPD 0.66 (Max-26)	
Carbon Tetrachloride	56-23-5	MS	22.60	0	20	113	62 - 132		
Carbon Tetrachloride	56-23-5	MSD	20.40	0	20	102	62 - 132	RPD 10.40 (Max-17)	
Chlorobenzene	108-90-7	MS	21	0	20	105	85 - 117		
Chlorobenzene	108-90-7	MSD	20.10	0	20	101	85 - 117	RPD 4.04 (Max-15)	
Chlorodibromomethane	124-48-1	MS	19.20	0	20	96.2	77 - 122		
Chlorodibromomethane	124-48-1	MSD	19	0	20	95.1	77 - 122	RPD 1.18 (Max-15)	
Chloroethane	75-00-3	MS	14	0	20	70.1	51 - 142		
Chloroethane	75-00-3	MSD	13.60	0	20	68.2	51 - 142	RPD 2.69 (Max-24)	
Chloroform	67-66-3	MS	22.50	0	20	112	78 - 122		
Chloroform	67-66-3	MSD	21.70	0	20	108	78 - 122	RPD 3.62 (Max-16)	
Chloromethane	74-87-3	MS	24.50	0	20	123	38 - 156		
Chloromethane	74-87-3	MSD	22.60	0	20	113	38 - 156	RPD 8.14 (Max-27)	
cis-1,2-Dichloroethene	156-59-2	MS	22.30	0	20	111	78 - 125		
cis-1,2-Dichloroethene	156-59-2	MSD	20.80	0	20	104	78 - 125	RPD 6.91 (Max-21)	
cis-1,3-Dichloropropene	10061-01-5	MS	19.80	0	20	98.8	81 - 121		
cis-1,3-Dichloropropene	10061-01-5	MSD	19	0	20	94.8	81 - 121	RPD 4.12 (Max-16)	
Dibromomethane	74-95-3	MS	21	0	20	105	81 - 125		
Dibromomethane	74-95-3	MSD	21	0	20	105	81 - 125	RPD 0.12 (Max-16)	
Dichlorodifluoromethane	75-71-8	MS	28.40	0	20	142	17 - 166		
Dichlorodifluoromethane	75-71-8	MSD	26.20	0	20	131	17 - 166	RPD 7.94 (Max-24)	
Diisopropyl ether	108-20-3	MS	23.20	0	20	116	74 - 131		
Diisopropyl ether	108-20-3	MSD	22.40	0	20	112	74 - 131	RPD 3.72 (Max-15)	
Ethylbenzene	100-41-4	MS	21.60	0	20	108	80 - 124		
Ethylbenzene	100-41-4	MSD	20.50	0	20	102	80 - 124	RPD 5.32 (Max-19)	
Hexachlorobutadiene	87-68-3	MS	22.80	0	20	114	55 - 128		
Hexachlorobutadiene	87-68-3	MSD	21.40	0	20	107	55 - 128	RPD 6.34 (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	23.80	1.40	20	112	69 - 115		
Methyl t-Butyl Ether	1634-04-4	MSD	23.70	1.40	20	112	69 - 115	RPD 0.52 (Max-20)	
Methylene Chloride	75-09-2	MS	22.40	0	20	112	76 - 121		
Methylene Chloride	75-09-2	MSD	21.80	0	20	109	76 - 121	RPD 2.66 (Max-17)	
mp-Xylene	108383/106423	MS	43.60	0	40	109	79 - 125		
mp-Xylene	108383/106423	MSD	41.60	0	40	104	79 - 125	RPD 4.63 (Max-21)	
Naphthalene	91-20-3	MS	19.50	0	20	97.6	56 - 134		
Naphthalene	91-20-3	MSD	20.20	0	20	101	56 - 134	RPD 3.54 (Max-40)	
o-Chlorotoluene	95-49-8	MS	21.80	0	20	109	78 - 126		
o-Chlorotoluene	95-49-8	MSD	21.40	0	20	107	78 - 126	RPD 1.92 (Max-17)	
o-Xylene	95-47-6	MS	21	0	20	105	79 - 124		
o-Xylene	95-47-6	MSD	20.30	0	20	101	79 - 124	RPD 3.59 (Max-19)	
p-Chlorotoluene	106-43-4	MS	21.30	0	20	107	78 - 125		
p-Chlorotoluene	106-43-4	MSD	20.80	0	20	104	78 - 125	RPD 2.46 (Max-16)	
p-Isopropyltoluene	99-87-6	MS	22.30	0	20	112	72 - 123		
p-Isopropyltoluene	99-87-6	MSD	22.60	0	20	113	72 - 123	RPD 1.10 (Max-17)	
Styrene	100-42-5	MS	21.40	0	20	107	79 - 123		
Styrene	100-42-5	MSD	20.80	0	20	104	79 - 123	RPD 2.77 (Max-16)	
Tetrachloroethene	127-18-4	MS	20.90	0	20	105	72 - 124		
Tetrachloroethene	127-18-4	MSD	19.90	0	20	99.3	72 - 124	RPD 5.32 (Max-38)	
Toluene	108-88-3	MS	21.70	0	20	108	80 - 125		
Toluene	108-88-3	MSD	20.50	0	20	103	80 - 125	RPD 5.46 (Max-20)	
Total Xylenes	1330-20-7	MS	64.70	0	60	108	79 - 125		
Total Xylenes	1330-20-7	MSD	61.90	0	60	103	79 - 125	RPD 4.29 (Max-35)	
trans-1,2-Dichloroethene	156-60-5	MS	22.80	0	20	114	71 - 122		
trans-1,2-Dichloroethene	156-60-5	MSD	20.90	0	20	105	71 - 122	RPD 8.73 (Max-22)	
trans-1,3-Dichloropropene	10061-02-6	MS	20.10	0	20	101	78 - 126		
trans-1,3-Dichloropropene	10061-02-6	MSD	19.90	0	20	99.5	78 - 126	RPD 0.98 (Max-18)	
Trichloroethene	79-01-6	MS	21.70	0	20	108	77 - 124		
Trichloroethene	79-01-6	MSD	20.30	0	20	102	77 - 124	RPD 6.42 (Max-18)	
Trichlorofluoromethane	75-69-4	MS	16.90	0	20	84.5	38 - 123		
Trichlorofluoromethane	75-69-4	MSD	15.80	0	20	79	38 - 123	RPD 6.67 (Max-23)	
Vinyl Acetate	108-05-4	MS	15.90	0	20	79.6	58 - 136		
Vinyl Acetate	108-05-4	MSD	16.20	0	20	80.8	58 - 136	RPD 1.45 (Max-17)	
Vinyl Chloride	75-01-4	MS	24.30	0	20	121	27 - 138		
Vinyl Chloride	75-01-4	MSD	22	0	20	110	27 - 138	RPD 9.79 (Max-40)	

SURROGATES

Compound	CAS No		Result (ug/L)	Expected (ug/L)	Rec. (%)	Limits (%)	Qualifiers
1,2-Dichloroethane-d4	17060-07-0	MS	30.40	30	101	62 - 133	
1,2-Dichloroethane-d4	17060-07-0	MSD	30.30	30	101	62 - 133	
4-Bromofluorobenzene	460-00-4	MS	29.90	30	99.6	79 - 114	
4-Bromofluorobenzene	460-00-4	MSD	29.80	30	99.5	79 - 114	
Dibromofluoromethane	1868-53-7	MS	30.20	30	101	78 - 116	
Dibromofluoromethane	1868-53-7	MSD	29.80	30	99.3	78 - 116	
Toluene-d8	2037-26-5	MS	29.50	30	98.4	76 - 127	
Toluene-d8	2037-26-5	MSD	29.60	30	98.6	76 - 127	

QUALITY CONTROL SAMPLES

VOLATILE ORGANICS (cont.)

Method Blank 3677099 (MB) Created on 06/01/2023 10:14 For QC Batch 1008495

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	29.80	30	99.4	62 - 133	
4-Bromofluorobenzene	460-00-4	BLK	28.60	30	95.4	79 - 114	
Dibromofluoromethane	1868-53-7	BLK	28.40	30	94.6	78 - 116	
Toluene-d8	2037-26-5	BLK	29.70	30	99.1	76 - 127	

Lab Control Standard 3677100 (LCS) Created on 06/01/2023 10:14 For QC Batch 1008495

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	16.50		20	82.7	78 - 121		
1,1,1-Trichloroethane	71-55-6	LCS	20.70		20	103	66 - 130		
1,1,2,2-Tetrachloroethane	79-34-5	LCS	20.60		20	103	74 - 135		
1,1,2-Trichloroethane	79-00-5	LCS	19.90		20	99.4	82 - 126		
1,1-Dichloroethane	75-34-3	LCS	19.70		20	98.4	78 - 124		
1,1-Dichloroethene	75-35-4	LCS	22.30		20	111	63 - 128		
1,1-Dichloropropene	563-58-6	LCS	20.60		20	103	76 - 126		
1,2,3-Trichlorobenzene	87-61-6	LCS	21.90		20	110	61 - 126		
1,2,3-Trichloropropane	96-18-4	LCS	20.70		20	104	75 - 132		
1,2,4-Trichlorobenzene	120-82-1	LCS	20.70		20	104	67 - 123		
1,2-Dibromo-3-chloropropane	96-12-8	LCS	17		20	85	59 - 133		
1,2-Dibromoethane	106-93-4	LCS	20.10		20	100	80 - 124		
1,2-Dichlorobenzene	95-50-1	LCS	20.40		20	102	82 - 118		
1,2-Dichloroethane	107-06-2	LCS	19.90		20	99.3	70 - 133		
1,2-Dichloropropane	78-87-5	LCS	19.50		20	97.4	81 - 127		
1,3-Dichlorobenzene	541-73-1	LCS	20		20	100	81 - 118		
1,3-Dichloropropane	142-28-9	LCS	19.80		20	98.9	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	20.70		20	103	81 - 116		
2,2-Dichloropropane	594-20-7	LCS	20.70		20	104	64 - 129		
2-Butanone	78-93-3	LCS	107		100	107	50 - 152		
2-Hexanone	591-78-6	LCS	104		100	104	65 - 154		
4-Methyl-2-Pentanone(MIBK)	108-10-1	LCS	109		100	109	71 - 146		
Acetone	67-64-1	LCS	106		100	106	40 - 151		
Benzene	71-43-2	LCS	20.60		20	103	80 - 124		
Bromobenzene	108-86-1	LCS	20.80		20	104	81 - 119		
Bromochloromethane	74-97-5	LCS	17.80		20	89	73 - 117		
Bromodichloromethane	75-27-4	LCS	19.90		20	99.5	79 - 126		
Bromoform	75-25-2	LCS	18.80		20	94	70 - 123		
Bromomethane	74-83-9	LCS	17.20		20	85.8	45 - 148		
Carbon Tetrachloride	56-23-5	LCS	20.90		20	104	62 - 132		
Chlorobenzene	108-90-7	LCS	20.20		20	101	85 - 117		
Chlorodibromomethane	124-48-1	LCS	19.40		20	97	77 - 122		
Chloroethane	75-00-3	LCS	13.70		20	68.5	51 - 142		
Chloroform	67-66-3	LCS	21		20	105	78 - 122		
Chloromethane	74-87-3	LCS	21.90		20	110	38 - 156		
cis-1,2-Dichloroethene	156-59-2	LCS	20.40		20	102	78 - 125		
cis-1,3-Dichloropropene	10061-01-5	LCS	19.80		20	99	81 - 121		
Dibromomethane	74-95-3	LCS	20.70		20	104	81 - 125		
Dichlorodifluoromethane	75-71-8	LCS	25.30		20	127	17 - 166		
Diisopropyl ether	108-20-3	LCS	21.60		20	108	74 - 131		
Ethylbenzene	100-41-4	LCS	20.40		20	102	80 - 124		
Hexachlorobutadiene	87-68-3	LCS	24.10		20	121	55 - 128		
Methyl t-Butyl Ether	1634-04-4	LCS	21.30		20	107	69 - 115		
Methylene Chloride	75-09-2	LCS	21.80		20	109	76 - 121		
mp-Xylene	108383/106423	LCS	41.70		40	104	79 - 125		
Naphthalene	91-20-3	LCS	21.30		20	106	56 - 134		
o-Chlorotoluene	95-49-8	LCS	20.90		20	105	78 - 126		
o-Xylene	95-47-6	LCS	19.90		20	99.5	79 - 124		
p-Chlorotoluene	106-43-4	LCS	20.60		20	103	78 - 125		
p-Isopropyltoluene	99-87-6	LCS	21.70		20	108	72 - 123		
Styrene	100-42-5	LCS	21.30		20	106	79 - 123		
Tetrachloroethene	127-18-4	LCS	20.30		20	101	72 - 124		
Toluene	108-88-3	LCS	20.60		20	103	80 - 125		
Total Xylenes	1330-20-7	LCS	61.60		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	20.40		20	102	78 - 126		
Trichloroethene	79-01-6	LCS	19.50		20	97.7	77 - 124		
Trichlorofluoromethane	75-69-4	LCS	16		20	80.1	38 - 123		
Vinyl Acetate	108-05-4	LCS	19.30		20	96.6	58 - 136		
Vinyl Chloride	75-01-4	LCS	21.60		20	108	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	30	30	100	62 - 133	
4-Bromofluorobenzene	460-00-4	LCS	30.10	30	100	79 - 114	
Dibromofluoromethane	1868-53-7	LCS	30.50	30	102	78 - 116	
Toluene-d8	2037-26-5	LCS	30.40	30	101	76 - 127	

QC Batch

QC Batch	1009215	Prep Method	N/A
Date	N/A	Analysis Method	SW846 8260D
Tech.			

Associated Samples

3304367005	3304367006	3304367007	3304367008
3304367009	3304367010	3304367011	3304367012
3304367013	3304367014	3304367015	3304367016
3304367017	3304367018	3304367019	3304367020
3304367021			

Matrix Spike 3677797 (MS) 3305818001 (non-Project Sample) For QC Batch 1009215

****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 3677798 (MSD) 3305818001 (non-Project Sample) For QC Batch 1009215

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	16.20	0	20	81.1	78 - 121		
1,1,1,2-Tetrachloroethane	630-20-6	MSD	15.70	0	20	78.3	78 - 121	RPD 3.44 (Max-16)	
1,1,1-Trichloroethane	71-55-6	MS	23.30	0	20	117	66 - 130		
1,1,1-Trichloroethane	71-55-6	MSD	21.40	0	20	107	66 - 130	RPD 8.43 (Max-20)	
1,1,2,2-Tetrachloroethane	79-34-5	MS	21.60	0	20	108	74 - 135		
1,1,2,2-Tetrachloroethane	79-34-5	MSD	21.20	0	20	106	74 - 135	RPD 1.77 (Max-16)	
1,1,2-Trichloroethane	79-00-5	MS	20.60	0	20	103	82 - 126		
1,1,2-Trichloroethane	79-00-5	MSD	19.80	0	20	98.8	82 - 126	RPD 4.12 (Max-15)	
1,1-Dichloroethane	75-34-3	MS	22.70	0	20	114	78 - 124		
1,1-Dichloroethane	75-34-3	MSD	20.90	0	20	104	78 - 124	RPD 8.67 (Max-15)	
1,1-Dichloroethene	75-35-4	MS	25.50	0	20	128	63 - 128		
1,1-Dichloroethene	75-35-4	MSD	23.10	0	20	116	63 - 128	RPD 9.95 (Max-21)	
1,1-Dichloropropene	563-58-6	MS	22.70	0	20	114	76 - 126		
1,1-Dichloropropene	563-58-6	MSD	20.90	0	20	105	76 - 126	RPD 8.13 (Max-16)	
1,2,3-Trichlorobenzene	87-61-6	MS	20.30	0	20	102	61 - 126		
1,2,3-Trichlorobenzene	87-61-6	MSD	20.80	0	20	104	61 - 126	RPD 2.18 (Max-36)	
1,2,3-Trichloropropane	96-18-4	MS	21.40	0	20	107	75 - 132		
1,2,3-Trichloropropane	96-18-4	MSD	20.90	0	20	104	75 - 132	RPD 2.54 (Max-19)	
1,2,4-Trichlorobenzene	120-82-1	MS	19.90	0	20	99.5	67 - 123		
1,2,4-Trichlorobenzene	120-82-1	MSD	20.20	0	20	101	67 - 123	RPD 1.59 (Max-22)	
1,2-Dibromo-3-chloropropane	96-12-8	MS	17.70	0	20	88.6	59 - 133		
1,2-Dibromo-3-chloropropane	96-12-8	MSD	17.80	0	20	89.1	59 - 133	RPD 0.60 (Max-26)	
1,2-Dibromoethane	106-93-4	MS	20	0	20	100	80 - 124		

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	MSD	19.30	0	20	96.6	80 - 124	RPD 3.43 (Max-19)	
1,2-Dichlorobenzene	95-50-1	MS	20.90	0	20	104	82 - 118		
1,2-Dichlorobenzene	95-50-1	MSD	20.30	0	20	101	82 - 118	RPD 2.78 (Max-15)	
1,2-Dichloroethane	107-06-2	MS	21.50	0	20	107	70 - 133		
1,2-Dichloroethane	107-06-2	MSD	20.90	0	20	105	70 - 133	RPD 2.49 (Max-19)	
1,2-Dichloropropane	78-87-5	MS	21.80	0	20	109	81 - 127		
1,2-Dichloropropane	78-87-5	MSD	20.70	0	20	104	81 - 127	RPD 5.24 (Max-15)	
1,3-Dichlorobenzene	541-73-1	MS	20.50	0	20	103	81 - 118		
1,3-Dichlorobenzene	541-73-1	MSD	19.80	0	20	99.1	81 - 118	RPD 3.50 (Max-16)	
1,3-Dichloropropane	142-28-9	MS	20	0	20	100	82 - 126		
1,3-Dichloropropane	142-28-9	MSD	19.60	0	20	97.8	82 - 126	RPD 2.27 (Max-15)	
1,4-Dichlorobenzene	106-46-7	MS	21.20	0	20	106	81 - 116		
1,4-Dichlorobenzene	106-46-7	MSD	20.10	0	20	100	81 - 116	RPD 5.63 (Max-15)	
2,2-Dichloropropane	594-20-7	MS	19.50	0	20	97.3	64 - 129		
2,2-Dichloropropane	594-20-7	MSD	17.90	0	20	89.7	64 - 129	RPD 8.13 (Max-18)	
2-Butanone	78-93-3	MS	120	0	100	120	50 - 152		
2-Butanone	78-93-3	MSD	122	0	100	122	50 - 152	RPD 2.37 (Max-16)	
2-Hexanone	591-78-6	MS	111	0	100	111	65 - 154		
2-Hexanone	591-78-6	MSD	112	0	100	112	65 - 154	RPD 0.41 (Max-17)	
4-Methyl-2-Pentanone(MIBK)	108-10-1	MS	119	0	100	119	71 - 146		
4-Methyl-2-Pentanone(MIBK)	108-10-1	MSD	119	0	100	119	71 - 146	RPD 0.67 (Max-16)	
Acetone	67-64-1	MS	112	0	100	112	40 - 151		
Acetone	67-64-1	MSD	114	0	100	114	40 - 151	RPD 1.84 (Max-40)	
Benzene	71-43-2	MS	22.10	0	20	110	80 - 124		
Benzene	71-43-2	MSD	20.80	0	20	104	80 - 124	RPD 6.12 (Max-26)	
Bromobenzene	108-86-1	MS	21.10	0	20	105	81 - 119		
Bromobenzene	108-86-1	MSD	20.20	0	20	101	81 - 119	RPD 4.10 (Max-17)	
Bromochloromethane	74-97-5	MS	18.30	0	20	91.7	73 - 117		
Bromochloromethane	74-97-5	MSD	17.60	0	20	88.2	73 - 117	RPD 3.92 (Max-19)	
Bromodichloromethane	75-27-4	MS	23.50	2.60	20	105	79 - 126		
Bromodichloromethane	75-27-4	MSD	22.80	2.60	20	101	79 - 126	RPD 3.04 (Max-16)	
Bromoform	75-25-2	MS	17.80	0	20	89.1	70 - 123		
Bromoform	75-25-2	MSD	17.40	0	20	87	70 - 123	RPD 2.33 (Max-16)	
Bromomethane	74-83-9	MS	18.30	0	20	91.4	45 - 148		
Bromomethane	74-83-9	MSD	17.70	0	20	88.3	45 - 148	RPD 3.50 (Max-26)	
Carbon Tetrachloride	56-23-5	MS	22.20	0	20	111	62 - 132		
Carbon Tetrachloride	56-23-5	MSD	21.20	0	20	106	62 - 132	RPD 4.82 (Max-17)	
Chlorobenzene	108-90-7	MS	20.50	0	20	102	85 - 117		
Chlorobenzene	108-90-7	MSD	19.50	0	20	97.3	85 - 117	RPD 5.09 (Max-15)	
Chlorodibromomethane	124-48-1	MS	19.40	0.51	20	94.6	77 - 122		
Chlorodibromomethane	124-48-1	MSD	18.70	0.51	20	90.9	77 - 122	RPD 3.79 (Max-15)	
Chloroethane	75-00-3	MS	15.10	0	20	75.3	51 - 142		
Chloroethane	75-00-3	MSD	14.60	0	20	72.8	51 - 142	RPD 3.33 (Max-24)	
Chloroform	67-66-3	MS	31.40	8.50	20	115	78 - 122		
Chloroform	67-66-3	MSD	30.10	8.50	20	108	78 - 122	RPD 4.22 (Max-16)	
Chloromethane	74-87-3	MS	25.20	0	20	126	38 - 156		
Chloromethane	74-87-3	MSD	22.70	0	20	114	38 - 156	RPD 10.10 (Max-27)	
cis-1,2-Dichloroethene	156-59-2	MS	22.30	0	20	112	78 - 125		
cis-1,2-Dichloroethene	156-59-2	MSD	21.10	0	20	106	78 - 125	RPD 5.37 (Max-21)	

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-1,3-Dichloropropene	10061-01-5	MS	18.90	0	20	94.5	81 - 121		
cis-1,3-Dichloropropene	10061-01-5	MSD	18.30	0	20	91.4	81 - 121	RPD 3.32 (Max-16)	
Dibromomethane	74-95-3	MS	21.40	0	20	107	81 - 125		
Dibromomethane	74-95-3	MSD	20.60	0	20	103	81 - 125	RPD 3.78 (Max-16)	
Dichlorodifluoromethane	75-71-8	MS	28.80	0	20	144	17 - 166		
Dichlorodifluoromethane	75-71-8	MSD	26.20	0	20	131	17 - 166	RPD 9.55 (Max-24)	
Diisopropyl ether	108-20-3	MS	23.90	0	20	120	74 - 131		
Diisopropyl ether	108-20-3	MSD	22.90	0	20	114	74 - 131	RPD 4.53 (Max-15)	
Ethylbenzene	100-41-4	MS	20.90	0	20	105	80 - 124		
Ethylbenzene	100-41-4	MSD	19.80	0	20	99	80 - 124	RPD 5.51 (Max-19)	
Hexachlorobutadiene	87-68-3	MS	23	0	20	115	55 - 128		
Hexachlorobutadiene	87-68-3	MSD	21.20	0	20	106	55 - 128	RPD 8.09 (Max-35)	
Methyl t-Butyl Ether	1634-04-4	MS	22.60	0	20	113	69 - 115		
Methyl t-Butyl Ether	1634-04-4	MSD	22	0	20	110	69 - 115	RPD 2.60 (Max-20)	
Methylene Chloride	75-09-2	MS	23.10	0	20	116	76 - 121		
Methylene Chloride	75-09-2	MSD	22.20	0	20	111	76 - 121	RPD 4.04 (Max-17)	
mp-Xylene	108383/106423	MS	42.80	0	40	107	79 - 125		
mp-Xylene	108383/106423	MSD	41	0	40	103	79 - 125	RPD 4.09 (Max-21)	
Naphthalene	91-20-3	MS	19.70	0	20	98.5	56 - 134		
Naphthalene	91-20-3	MSD	20.10	0	20	101	56 - 134	RPD 2.11 (Max-40)	
o-Chlorotoluene	95-49-8	MS	22.10	0	20	111	78 - 126		
o-Chlorotoluene	95-49-8	MSD	21.20	0	20	106	78 - 126	RPD 4.30 (Max-17)	
o-Xylene	95-47-6	MS	20.50	0	20	103	79 - 124		
o-Xylene	95-47-6	MSD	19.70	0	20	98.4	79 - 124	RPD 4.23 (Max-19)	
p-Chlorotoluene	106-43-4	MS	21.40	0	20	107	78 - 125		
p-Chlorotoluene	106-43-4	MSD	20.60	0	20	103	78 - 125	RPD 4.02 (Max-16)	
p-Isopropyltoluene	99-87-6	MS	21.90	0	20	109	72 - 123		
p-Isopropyltoluene	99-87-6	MSD	22.20	0	20	111	72 - 123	RPD 1.52 (Max-17)	
Styrene	100-42-5	MS	21.90	0	20	110	79 - 123		
Styrene	100-42-5	MSD	20.70	0	20	103	79 - 123	RPD 5.88 (Max-16)	
Tetrachloroethene	127-18-4	MS	20	0	20	100	72 - 124		
Tetrachloroethene	127-18-4	MSD	19	0	20	94.9	72 - 124	RPD 5.36 (Max-38)	
Toluene	108-88-3	MS	21.40	0	20	107	80 - 125		
Toluene	108-88-3	MSD	20.30	0	20	102	80 - 125	RPD 5.06 (Max-20)	
Total Xylenes	1330-20-7	MS	63.30	0	60	105	79 - 125		
Total Xylenes	1330-20-7	MSD	60.70	0	60	101	79 - 125	RPD 4.13 (Max-35)	
trans-1,2-Dichloroethene	156-60-5	MS	22.90	0	20	114	71 - 122		
trans-1,2-Dichloroethene	156-60-5	MSD	21.40	0	20	107	71 - 122	RPD 6.82 (Max-22)	
trans-1,3-Dichloropropene	10061-02-6	MS	19.60	0	20	98.2	78 - 126		
trans-1,3-Dichloropropene	10061-02-6	MSD	18.70	0	20	93.7	78 - 126	RPD 4.72 (Max-18)	
Trichloroethene	79-01-6	MS	21.20	0	20	106	77 - 124		
Trichloroethene	79-01-6	MSD	19.90	0	20	99.6	77 - 124	RPD 6.25 (Max-18)	
Trichlorofluoromethane	75-69-4	MS	17.80	0	20	89.2	38 - 123		
Trichlorofluoromethane	75-69-4	MSD	16.60	0	20	83.1	38 - 123	RPD 7.08 (Max-23)	
Vinyl Acetate	108-05-4	MS	18.10	0	20	90.6	58 - 136		
Vinyl Acetate	108-05-4	MSD	17.50	0	20	87.5	58 - 136	RPD 3.58 (Max-17)	
Vinyl Chloride	75-01-4	MS	24.90	0	20	125	27 - 138		
Vinyl Chloride	75-01-4	MSD	22.70	0	20	113	27 - 138	RPD 9.51 (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	31.60	30	105	62 - 133	
1,2-Dichloroethane-d4	17060-07-0	MSD	30.80	30	103	62 - 133	
4-Bromofluorobenzene	460-00-4	MS	29.70	30	99	79 - 114	
4-Bromofluorobenzene	460-00-4	MSD	30	30	100	79 - 114	
Dibromofluoromethane	1868-53-7	MS	30.80	30	103	78 - 116	
Dibromofluoromethane	1868-53-7	MSD	30.30	30	101	78 - 116	
Toluene-d8	2037-26-5	MS	29.40	30	98	76 - 127	
Toluene-d8	2037-26-5	MSD	29.30	30	97.7	76 - 127	

Method Blank 3677761 (MB) Created on 06/02/2023 10:53 For QC Batch 1009215

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	30.90	30	103	62 - 133	
4-Bromofluorobenzene	460-00-4	BLK	29.60	30	98.6	79 - 114	
Dibromofluoromethane	1868-53-7	BLK	28.30	30	94.5	78 - 116	
Toluene-d8	2037-26-5	BLK	29.40	30	98	76 - 127	

Lab Control Standard 3677762 (LCS) Created on 06/02/2023 10:53 For QC Batch 1009215

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	16.30		20	81.5	78 - 121		
1,1,1-Trichloroethane	71-55-6	LCS	22.10		20	111	66 - 130		
1,1,2,2-Tetrachloroethane	79-34-5	LCS	21.30		20	106	74 - 135		
1,1,2-Trichloroethane	79-00-5	LCS	20.30		20	102	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	20.90		20	105	78 - 124		
1,1-Dichloroethene	75-35-4	LCS	23.30		20	116	63 - 128		
1,1-Dichloropropene	563-58-6	LCS	21.40		20	107	76 - 126		
1,2,3-Trichlorobenzene	87-61-6	LCS	22.30		20	112	61 - 126		
1,2,3-Trichloropropane	96-18-4	LCS	21.10		20	106	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	17.90		20	89.5	59 - 133		
1,2-Dibromoethane	106-93-4	LCS	19.60		20	98.2	80 - 124		
1,2-Dichlorobenzene	95-50-1	LCS	20.80		20	104	82 - 118		
1,2-Dichloroethane	107-06-2	LCS	20.90		20	104	70 - 133		
1,2-Dichloropropane	78-87-5	LCS	20.70		20	104	81 - 127		
1,3-Dichlorobenzene	541-73-1	LCS	20.50		20	103	81 - 118		
1,3-Dichloropropane	142-28-9	LCS	19.80		20	99.1	82 - 126		
1,4-Dichlorobenzene	106-46-7	LCS	21		20	105	81 - 116		
2,2-Dichloropropane	594-20-7	LCS	21.90		20	110	64 - 129		
2-Butanone	78-93-3	LCS	112		100	112	50 - 152		
2-Hexanone	591-78-6	LCS	109		100	109	65 - 154		
4-Methyl-2-Pentanone(MIBK)	108-10-1	LCS	115		100	115	71 - 146		
Acetone	67-64-1	LCS	112		100	112	40 - 151		
Benzene	71-43-2	LCS	21.20		20	106	80 - 124		
Bromobenzene	108-86-1	LCS	21		20	105	81 - 119		
Bromochloromethane	74-97-5	LCS	17.70		20	88.5	73 - 117		
Bromodichloromethane	75-27-4	LCS	20.20		20	101	79 - 126		
Bromoform	75-25-2	LCS	18.90		20	94.3	70 - 123		
Bromomethane	74-83-9	LCS	18.30		20	91.6	45 - 148		
Carbon Tetrachloride	56-23-5	LCS	21.80		20	109	62 - 132		
Chlorobenzene	108-90-7	LCS	20.30		20	101	85 - 117		
Chlorodibromomethane	124-48-1	LCS	19		20	95	77 - 122		
Chloroethane	75-00-3	LCS	13.90		20	69.6	51 - 142		
Chloroform	67-66-3	LCS	21.80		20	109	78 - 122		
Chloromethane	74-87-3	LCS	21.80		20	109	38 - 156		
cis-1,2-Dichloroethene	156-59-2	LCS	21.30		20	106	78 - 125		
cis-1,3-Dichloropropene	10061-01-5	LCS	19.70		20	98.7	81 - 121		
Dibromomethane	74-95-3	LCS	20.90		20	104	81 - 125		
Dichlorodifluoromethane	75-71-8	LCS	24		20	120	17 - 166		
Diisopropyl ether	108-20-3	LCS	23		20	115	74 - 131		
Ethylbenzene	100-41-4	LCS	20.40		20	102	80 - 124		
Hexachlorobutadiene	87-68-3	LCS	24.50		20	123	55 - 128		
Methyl t-Butyl Ether	1634-04-4	LCS	22.30		20	112	69 - 115		
Methylene Chloride	75-09-2	LCS	22.10		20	110	76 - 121		
mp-Xylene	108383/106423	LCS	42.60		40	106	79 - 125		
Naphthalene	91-20-3	LCS	21.50		20	107	56 - 134		
o-Chlorotoluene	95-49-8	LCS	21.70		20	109	78 - 126		
o-Xylene	95-47-6	LCS	20.60		20	103	79 - 124		
p-Chlorotoluene	106-43-4	LCS	21.30		20	106	78 - 125		
p-Isopropyltoluene	99-87-6	LCS	22		20	110	72 - 123		
Styrene	100-42-5	LCS	21.60		20	108	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	20.30		20	101	72 - 124		
Toluene	108-88-3	LCS	21.10		20	106	80 - 125		
Total Xylenes	1330-20-7	LCS	63.20		60	105	79 - 125		
trans-1,2-Dichloroethene	156-60-5	LCS	21.90		20	109	71 - 122		
trans-1,3-Dichloropropene	10061-02-6	LCS	20.40		20	102	78 - 126		
Trichloroethene	79-01-6	LCS	20.20		20	101	77 - 124		
Trichlorofluoromethane	75-69-4	LCS	16.80		20	84.2	38 - 123		
Vinyl Acetate	108-05-4	LCS	19.80		20	99.1	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	30.80	30	103	62 - 133	
4-Bromofluorobenzene	460-00-4	LCS	30.20	30	101	79 - 114	
Dibromofluoromethane	1868-53-7	LCS	30.50	30	102	78 - 116	
Toluene-d8	2037-26-5	LCS	29.80	30	99.2	76 - 127	

QC Batch

QC Batch	1012322	Prep Method	N/A
Date	N/A	Analysis Method	SW846 8260D
Tech.			

Associated Samples

3304367008

Method Blank 3680419 (MB) Created on 06/09/2023 00:01 For QC Batch 1012322

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

QUALITY CONTROL SAMPLES

VOLATILE ORGANICS (cont.)

RESULTS

Compound	CAS No		Result	Units	RDL	Qualifiers
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
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

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	BLK	27.50	30	91.7	62 - 133	
4-Bromofluorobenzene	460-00-4	BLK	31.10	30	104	79 - 114	
Dibromofluoromethane	1868-53-7	BLK	30.50	30	102	78 - 116	
Toluene-d8	2037-26-5	BLK	30.40	30	101	76 - 127	

Lab Control Standard 3680420 (LCS) Created on 06/09/2023 00:01 For QC Batch 1012322

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	17.40		20	86.8	78 - 121		
1,1,1-Trichloroethane	71-55-6	LCS	17		20	84.9	66 - 130		
1,1,2,2-Tetrachloroethane	79-34-5	LCS	19.40		20	96.8	74 - 135		
1,1,2-Trichloroethane	79-00-5	LCS	18.10		20	90.5	82 - 126		
1,1-Dichloroethane	75-34-3	LCS	17		20	85.1	78 - 124		
1,1-Dichloroethene	75-35-4	LCS	17.50		20	87.6	63 - 128		
1,1-Dichloropropene	563-58-6	LCS	17.70		20	88.4	76 - 126		
1,2,3-Trichlorobenzene	87-61-6	LCS	31.60		20	158*	61 - 126		
1,2,3-Trichloropropane	96-18-4	LCS	19		20	95	75 - 132		
1,2,4-Trichlorobenzene	120-82-1	LCS	19.70		20	98.4	67 - 123		
1,2-Dibromo-3-chloropropane	96-12-8	LCS	16.50		20	82.6	59 - 133		
1,2-Dibromoethane	106-93-4	LCS	18.20		20	91.2	80 - 124		
1,2-Dichlorobenzene	95-50-1	LCS	18.50		20	92.7	82 - 118		
1,2-Dichloroethane	107-06-2	LCS	17		20	85	70 - 133		
1,2-Dichloropropane	78-87-5	LCS	18.30		20	91.4	81 - 127		
1,3-Dichlorobenzene	541-73-1	LCS	18.30		20	91.6	81 - 118		
1,3-Dichloropropane	142-28-9	LCS	18		20	89.9	82 - 126		
1,4-Dichlorobenzene	106-46-7	LCS	17.70		20	88.5	81 - 116		
2,2-Dichloropropane	594-20-7	LCS	17.90		20	89.4	64 - 129		
2-Butanone	78-93-3	LCS	124		100	124	50 - 152		
2-Hexanone	591-78-6	LCS	110		100	110	65 - 154		
4-Methyl-2-Pentanone(MIBK)	108-10-1	LCS	108		100	108	71 - 146		
Acetone	67-64-1	LCS	104		100	104	40 - 151		
Benzene	71-43-2	LCS	18.20		20	90.8	80 - 124		
Bromobenzene	108-86-1	LCS	17.50		20	87.6	81 - 119		
Bromochloromethane	74-97-5	LCS	19.70		20	98.4	73 - 117		
Bromodichloromethane	75-27-4	LCS	17.70		20	88.3	79 - 126		
Bromoform	75-25-2	LCS	18		20	90	70 - 123		
Bromomethane	74-83-9	LCS	20.20		20	101	45 - 148		
Carbon Tetrachloride	56-23-5	LCS	16.70		20	83.4	62 - 132		
Chlorobenzene	108-90-7	LCS	17.80		20	89.1	85 - 117		
Chlorodibromomethane	124-48-1	LCS	18.40		20	91.9	77 - 122		
Chloroethane	75-00-3	LCS	19.90		20	99.4	51 - 142		
Chloroform	67-66-3	LCS	17.80		20	88.8	78 - 122		
Chloromethane	74-87-3	LCS	19.50		20	97.5	38 - 156		
cis-1,2-Dichloroethene	156-59-2	LCS	18.30		20	91.4	78 - 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
cis-1,3-Dichloropropene	10061-01-5	LCS	17.90		20	89.7	81 - 121		
Dibromomethane	74-95-3	LCS	19.50		20	97.6	81 - 125		
Dichlorodifluoromethane	75-71-8	LCS	21.70		20	108	17 - 166		
Diisopropyl ether	108-20-3	LCS	19		20	95	74 - 131		
Ethylbenzene	100-41-4	LCS	18		20	89.8	80 - 124		
Hexachlorobutadiene	87-68-3	LCS	22.40		20	112	55 - 128		
Methyl t-Butyl Ether	1634-04-4	LCS	19.10		20	95.4	69 - 115		
Methylene Chloride	75-09-2	LCS	18.10		20	90.5	76 - 121		
mp-Xylene	108383/106423	LCS	36.20		40	90.4	79 - 125		
Naphthalene	91-20-3	LCS	25.20		20	126	56 - 134		
o-Chlorotoluene	95-49-8	LCS	17.80		20	88.9	78 - 126		
o-Xylene	95-47-6	LCS	17.70		20	88.5	79 - 124		
p-Chlorotoluene	106-43-4	LCS	17.90		20	89.7	78 - 125		
p-Isopropyltoluene	99-87-6	LCS	19.80		20	98.8	72 - 123		
Styrene	100-42-5	LCS	18.50		20	92.5	79 - 123		
Tetrachloroethene	127-18-4	LCS	17.10		20	85.7	72 - 124		
Toluene	108-88-3	LCS	17.30		20	86.3	80 - 125		
Total Xylenes	1330-20-7	LCS	53.90		60	89.8	79 - 125		
trans-1,2-Dichloroethene	156-60-5	LCS	17.20		20	85.9	71 - 122		
trans-1,3-Dichloropropene	10061-02-6	LCS	18.80		20	93.9	78 - 126		
Trichloroethene	79-01-6	LCS	17.40		20	86.8	77 - 124		
Trichlorofluoromethane	75-69-4	LCS	16.90		20	84.7	38 - 123		
Vinyl Acetate	108-05-4	LCS	18.40		20	92	58 - 136		
Vinyl Chloride	75-01-4	LCS	18.90		20	94.7	27 - 138		

SURROGATES

Compound	CAS No		Result (ug/L)	Expected (ug/L)	Rec. (%)	Limits (%)	Qualifiers
1,2-Dichloroethane-d4	17060-07-0	LCS	27.80	30	92.6	62 - 133	
4-Bromofluorobenzene	460-00-4	LCS	28.80	30	95.9	79 - 114	
Dibromofluoromethane	1868-53-7	LCS	30.60	30	102	78 - 116	
Toluene-d8	2037-26-5	LCS	29.30	30	97.6	76 - 127	

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Lab ID	Sample ID	Preparation Method	Prep Batch	Prep Date/Time	By	Analysis Method	Anly Batch
3304367001	MW-01D	SW846 3510C	1005881	05/24/2023 10:10	SRL	SW846 8270E SIM	1006374
		N/A	N/A	N/A		SW846 8260D	1008495
3304367002	MW-22D	SW846 3510C	1005881	05/24/2023 10:10	SRL	SW846 8270E SIM	1006374
		N/A	N/A	N/A		SW846 8260D	1008495
3304367003	MW-04R	SW846 3510C	1005881	05/24/2023 10:10	SRL	SW846 8270E SIM	1006374
		SW846 3510C	1005881	05/24/2023 10:10	SRL	SW846 8270E SIM	1007328
		N/A	N/A	N/A		SW846 8260D	1008495
3304367004	MW-20	SW846 3510C	1005881	05/24/2023 10:10	SRL	SW846 8270E SIM	1006374
		SW846 3510C	1005881	05/24/2023 10:10	SRL	SW846 8270E SIM	1007328
		N/A	N/A	N/A		SW846 8260D	1008495
3304367005	MW-09	SW846 3510C	1005881	05/24/2023 10:10	SRL	SW846 8270E SIM	1006374
		N/A	N/A	N/A		SW846 8260D	1009215
3304367006	MW-23D	SW846 3510C	1005881	05/24/2023 10:10	SRL	SW846 8270E SIM	1006374
		SW846 3510C	1005881	05/24/2023 10:10	SRL	SW846 8270E SIM	1007328
		N/A	N/A	N/A		SW846 8260D	1009215
3304367007	MW-46D	SW846 3510C	1005881	05/24/2023 10:10	SRL	SW846 8270E SIM	1006374
		N/A	N/A	N/A		SW846 8260D	1009215
3304367008	MW-16	SW846 3510C	1005881	05/24/2023 10:10	SRL	SW846 8270E SIM	1006374
		SW846 3510C	1005881	05/24/2023 10:10	SRL	SW846 8270E SIM	1007328
		N/A	N/A	N/A		SW846 8260D	1009215
		N/A	N/A	N/A		SW846 8260D	1012322
3304367009	MW-16D	SW846 3510C	1005881	05/24/2023 10:10	SRL	SW846 8270E SIM	1006374
		SW846 3510C	1005881	05/24/2023 10:10	SRL	SW846 8270E SIM	1007328
		N/A	N/A	N/A		SW846 8260D	1009215
3304367010	DUP-052123	SW846 3510C	1005881	05/24/2023 10:10	SRL	SW846 8270E SIM	1006374
		SW846 3510C	1005881	05/24/2023 10:10	SRL	SW846 8270E SIM	1007328
		N/A	N/A	N/A		SW846 8260D	1009215
3304367011	MW-43	SW846 3510C	1005881	05/24/2023 10:10	SRL	SW846 8270E SIM	1006374
		N/A	N/A	N/A		SW846 8260D	1009215
3304367012	MW-39	SW846 3510C	1005881	05/24/2023 10:10	SRL	SW846 8270E SIM	1006374
		N/A	N/A	N/A		SW846 8260D	1009215
3304367013	MW-42	SW846 3510C	1005881	05/24/2023 10:10	SRL	SW846 8270E SIM	1006374
		N/A	N/A	N/A		SW846 8260D	1009215
3304367014	MW-18	SW846 3510C	1005881	05/24/2023 10:10	SRL	SW846 8270E SIM	1006374
		N/A	N/A	N/A		SW846 8260D	1009215
3304367015	MW-40D	SW846 3510C	1005881	05/24/2023 10:10	SRL	SW846 8270E SIM	1006374
		N/A	N/A	N/A		SW846 8260D	1009215
3304367016	MW-38R	SW846 3510C	1005881	05/24/2023 10:10	SRL	SW846 8270E SIM	1006374
		SW846 3510C	1005881	05/24/2023 10:10	SRL	SW846 8270E SIM	1007328
		N/A	N/A	N/A		SW846 8260D	1009215
3304367017	MW-05R	SW846 3510C	1005881	05/24/2023 10:10	SRL	SW846 8270E SIM	1006374
		N/A	N/A	N/A		SW846 8260D	1009215
3304367018	MW-44	SW846 3510C	1005881	05/24/2023 10:10	SRL	SW846 8270E SIM	1006374
		N/A	N/A	N/A		SW846 8260D	1009215
3304367019	MW-21D	SW846 3510C	1005881	05/24/2023 10:10	SRL	SW846 8270E SIM	1006374
		N/A	N/A	N/A		SW846 8260D	1009215
3304367020	Trip Blank A	N/A	N/A	N/A		SW846 8260D	1009215
3304367021	Trip Blank B	N/A	N/A	N/A		SW846 8260D	1009215

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

CHAIN OF CUSTODY/ REQUEST FOR ANALYSIS

3304367

Logged By: SLS
PM: SJB

347

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

(Completed by Receiving Lab)

Client Name: WSP

Address: 13530 Dulles Technology Dr
Suite 300
Herndon VA 20171

Contact: Eric Johnson
Phone#: (703) 709-6500
Project Name/#: Kop-Flex Onsite / 31405608.000
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] Eric.Johnson@wsp.com

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 / 8260	1,4 Dioxane / 8270 SIM									
						Container Type	CG	AG								
						Container Size	40mL	250 mL								
						Preservative	HCl	None								
1 MW-01D	5/21/23	1500		G	GW	2X	2X									
2 MW-22D	5/21/23	1515		G	GW	2X	2X									
3 MW-04R	5/21/23	1525		G	GW	2X	2X									
4 MW-20	5/21/23	1535		G	GW	2X	2X									
5 MW-09	5/21/23	1555		G	GW	2X	2X									
6 MW-23D	5/21/23	1610		G	GW	2X	2X									
7 MW-46D	5/21/23	1625		G	GW	2X	2X									
8 MW-16	5/21/23	1650		G	GW	2X	2X									
9 MW-16D	5/21/23	1705		G	GW	2X	2X									
10 DUP-052123	5/21/23	1300		G	GW	2X	2X									

Orthophosphate Filtered? Y N (NA) Hexavalent Chromium Filtered? Y N (NA)

ANALYSIS / METHOD REQUESTED

Enter Number of Containers Per Sample or Field Results Below.

Circle Sample Collector: ALS Tech / Client
Name: Elliott M ID:

Comments: DPB 5/22/23

Date:	Time	Relinquished By / Company Name		Received By / Company Name
5/22/23	1505	1 Elliott M WSP	2	
5/22/23	1815	3	4	
		5	6	
		7	8	
		9	10	

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

Temp By:	WO Temp (°C)	Therm ID
DPB	3	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	
Correct Containers Provided	Y	N	
Sample Label/COC Agree	Y	N	NA
Adequate Sample Volumes	Y	N	
CR6 Samples Filtered	Y	N	NA
OP Samples Filtered	Y	N	NA
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

Deviations? NO YES
If YES, list below:

Client contact:
Date/Tech:

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

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

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 [ ]

EDDs: [ ] 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

6/13/2023 6:58 PM

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 #: 3304367 — 2 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/#: Kop-Flex Onsite / 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] eric.johnson@wsp.com

	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 / 8260	1,4 Dioxane / 8270E
							CG	AG			
							40mL	250mL			
							HCl	None			
1	MW-43	5/21/23	1125		G	GW	2X	2X			
2	MW-39	5/21/23	1135		G	GW	2X	2X			
3	MW-42	5/21/23	1145		G	GW	2X	2X			
4	MW-18	5/21/23	1200		G	GW	2X	2X			
5	MW-40D	5/21/23	1210		G	GW	2X	2X			
6	~~RW-1S~~	~~5/21/23~~	~~1215~~								
7	MW-38R	5/21/23	1335		G	GW	2X	2X			
8	MW-05R	5/21/23	1355		G	GW	2X	2X			
9	MW-44	5/21/23	1405		G	GW	2X	2X			
10	MW-21D	5/21/23	1420		G	GW	2X	2X			

Orthophosphate Filtered? Y N (NA) Hexavalent Chromium Filtered? Y N (NA)

ANALYSIS / METHOD REQUESTED

Enter Number of Containers Per Sample or Field Results Below.

Circle Sample Collector: ALS Tech / Client
Name: Elliott M ID:

Comments: DP 5/22/23

Date:	Time		Relinquished By / Company Name		Received By / Company Name
5/22/23	1505	1	WSP	2	
5/22/23	1215	3		4	
		5		6	
		7		8	
		9		10	

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

NJ ≤ 4 days? Y N
Courier/Tracking #:

Deviations? NO YES
If YES, list below:

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

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 [ ] _____

EDDs: [ ] 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

Rev 11.14.22

3 4 4 A A 0 x A 3

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 #: 3304367 — 3 of 3
ALS Quote #:

Client Name: WSP
Address: 13530 Dulles Technology Dr Suite 300 Herndon VA 20171
Contact: Eric Johnson
Phone#:
Project Name/#: 31495608.010
Bill To:
Purchase Order #:
TAT ☐ Normal-Standard TAT is 10-12 business days. ☐ Rush-Subject to ALS approval and surcharges.
Date Required: Approved?
Email? ☐

Container Type / Container Size / Preservative

Orthophosphate Filtered? Y N NA Hexavalent Chromium Filtered? Y N NA

ANALYSIS / 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									
							Enter Number of Containers Per Sample or Field Results Below.									
1	Trip Blank A					W	2									
2	Trip Blank B					W	2									
3						W	3									
4						W	5/22/23									
5																
6																
7																
8																
9																
10																

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

Comments:

Date:	Time		Relinquished By / Company Name		Received By / Company Name
5/22/23	1505	1	WSP	2	
5/22/23	1615	3		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
NJ ≤ 4 days? Y N
Courier/Tracking #:_____
Deviations? NO YES
If YES, llist below:
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

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 ☐ _____

EDDs: ☐ Excel Summary ☐ Equis ☐ Custom

Sample Disposal: ☐ Lab ☐ Special

EDDS: Format Type

State Samples Collected In: ☐ NY ☐ NJ ☐ PA ☐ WV ☐ FL ☐ other

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

Rev 11.14.22