



VIA ELECTRONIC MAIL

March 3, 2024

Barbara Brown  
Voluntary Cleanup Program Section  
Land Restoration Program  
Maryland Department of the Environment  
1800 Washington Blvd., Suite 625  
Baltimore, Maryland 21230

**Subject: Quarterly Status Report No. 29- Offsite Area  
Former Kop-Flex Facility Site, Hanover, Maryland**

Dear Barbara:

On behalf of EMERSUB 16 LLC, a subsidiary of Emerson Electric Co., WSP USA Inc. (WSP) is submitting this quarterly status report describing the response action activities conducted in the Fourth Quarter of 2023 in the off-property portion of the Former Kop-Flex Facility Site in Hanover, Maryland (Site). In addition to this electronic version, a hard copy of the status report is being submitted to the Maryland Department of Environment (MDE) under separate cover. Overall, information presented on the hydrogeologic conditions and water quality for the impacted portion of the aquifer system are generally consistent with previously collected data, although there were slight changes in contaminant concentrations in a couple samples, which could be related to a minor change in the sampling methodology.

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:esr  
Encl.

cc: Mr. Brian Deitz, Site Assessment and Remediation Division, MDE  
Ms. Barbara Krupiarz, Land Restoration Program, MDE  
Mr. Oduwole Moshood, U.S. Environmental Protection Agency (EPA), Region III  
Mr. Stephen Clarke, Emerson Electric Co.  
Sheila Harvey, Esquire, Pillsbury Winthrop Shaw Pittman

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# QUARTERLY STATUS REPORT NO. 29 – OFFSITE AREA

## FORMER KOP-FLEX FACILITY SITE

October 2023 Through December 2023

**Site Name:** Former Kop-Flex Facility  
**Site Address:** 7555 Harmans Road  
Hanover, Maryland 21076

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

**Project Coordinator:** Eric Johnson, WSP USA  
**Alternate:** Lisa Kelly, WSP USA

## 1.0 OFFSITE ACTIVITIES CONDUCTED DURING OCTOBER 2023 - DECEMBER 2023 REPORTING PERIOD

- The offsite monitoring wells screened in the Lower Patapsco aquifer and underlying Patuxent aquifer were sampled on December 4, 2023, using a disposable passive sampling device (HydraSleeve™) previously deployed in each well. Since initiation of the passive sampling method in late 2016, the groundwater samples were collected using standard-size HydraSleeve™ samplers that were 30-inches (2.5 feet) in length. In 2022, WSP decided to change the analytical method used to analyze the groundwater samples for 1,4-dioxane from USEPA SW-846 Method 8260D with selected ion monitoring (SIM) to the more accurate USEPA SW-846 Method 8270E with SIM. Given the larger sample volume necessary for the 8270E test method, the standard HydraSleeve™ was not able to retrieve enough water for the 1,4-dioxane analysis and provide a sample aliquot for measurement of field hydrogeochemical parameters. Consequently, in December 2023, WSP switched to using longer (38-inch or 3.2-foot) HydraSleeve™ samplers, which provide sufficient volume for all required laboratory and field analyses. In addition, monitoring well MW-25D-190 was fitted with a SuperSleeve sampling device, which has an even longer length of 5 feet, to provide the necessary volume to collect the matrix spike/matrix spike duplicate samples. The top of the new HydraSleeves™ were suspended at the midpoint of the screen in each well such that retrieval would collect water from the overlying interval equal to the sampler length (Table 1). The new deployment depths differ from those for the previous (standard-size) HydraSleeve™ samplers, which were positioned at a depth slightly below the screen midpoint. Given the modified deployment depth and slightly greater sampler length, the newly deployed HydraSleeves™ samplers target a longer sampling interval within the upper portion of the well screen.
- 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. A separate aliquot of sample was then poured into the sampling cup of a hand-held water quality meter to measure temperature, pH, specific conductance, and turbidity in the field. The results of the field parameter measurements for each sampling location are provided in Table 2. Hydrogeochemical parameters could not be measured at MW-25D-130 and MW-25D-190 because the volume necessary to collect the field quality assurance/quality control samples at these two locations did not leave sufficient water for field measurement of these parameters.
- As part of the sampling activities, WSP measured the depth to water in all monitoring wells prior to sample collection. Depth-to-water measurements for the December 2023 and previous monitoring events are provided in Table 3. The water level data provided in the table reflect the hydraulic heads under remedial pumping conditions.



A potentiometric surface contour map for the deep confined zone of the Lower Patapsco aquifer is shown in Figure 1 using the water level data obtained during the December 2023 sampling activities. The general direction of groundwater flow in this portion of the Lower Patapsco aquifer is to the south-southeast and southeast in the offsite area, which is consistent with determinations from contour maps previously generated from data collected under remedial pumping conditions. A cone of depression centered around wells MW-1D and MW-21D is visible in the contoured data, which is imparted by remedial pumping at nearby recovery wells RW-1D and RW-2D. This cone of depression extends to the south beyond MW-24D on the William-Scotsman property. As indicated by the hydraulic head gradients, the groundwater flow direction in the deep confined zone of the Lower Patapsco aquifer differs from the direction of flow in the shallow zone of this aquifer, which is generally to the west-northwest across the site toward Stony Run. VOC-affected groundwater to the south of the Site occurs within the deep zone of the Lower Patapsco aquifer. Low permeability, clayey confining zones, or aquitards, together with local hydrologic conditions would prevent the migration of site-related contaminants from the deep zone of the Lower Patapsco aquifer to the shallow zone in the area. As discussed below, the Arundel Clay aquitard would prevent the migration of contaminants from the deep zone of the Lower Patapsco aquifer to the underlying Patuxent Aquifer.

- The analytical results for samples collected from the offsite monitoring wells in December 2023 are summarized in Table 4. Copies of the certified laboratory analytical reports for these samples are provided in Enclosure A. Historical groundwater sampling data for the offsite monitoring wells can be found in Table 5. Concentrations of the primary site-related constituents of concern (COCs) in the December 2023 samples are shown on Figure 2.
- The analytical data indicate the presence of site-related constituents just over one mile hydraulically downgradient (south-southeast) of the former Kop-Flex property in the deep, confined zone of the Lower Patapsco aquifer. Site-related COCs were also detected in the sample from well MW-46D on the neighboring Verizon property, which is located to the north of the former Kop-Flex facility. While MW-46D is not located hydraulically downgradient, the presence of detectable COC levels is most likely related to past releases at the Site, given the well's proximity to the former Kop-Flex facility. The total COC concentration in the MW-46D sample (89.1 micrograms per liter [ $\mu\text{g/l}$ ]) is greater than the historically low concentration of 22.4  $\mu\text{g/l}$  in May 2023 sample (Table 5). Concentrations of 1,1-DCA (8.7  $\mu\text{g/l}$ ), 1,1-DCE (51.5  $\mu\text{g/l}$ ), and 1,4-dioxane (27.3) increased and were detected at levels exceeding the comparative groundwater quality criteria (Table 4).<sup>1</sup> Regardless of the increases, the latest concentrations of COCs detected at this well – particularly 1,1-DCE and 1,4-dioxane – fall within a generally decreasing concentration trend (Table 5). The recent concentration declines since 2021-2022 are believed to reflect the long-term change in COC concentrations within the in-flow, or capture, area of the hydraulic containment system.
- Further downgradient, a total concentration of site-related COCs of 152.6  $\mu\text{g/l}$  was detected in the MW-25D-130 sample, which is 85 percent greater than the May 2023 event (82.1  $\mu\text{g/l}$ ). The concentration of 1,1-DCE (110  $\mu\text{g/l}$ ), the primary VOC detected at this well, increased by 110 percent between the May 2023 and December 2023 sampling events, and the concentration of 1,4-dioxane (28.4  $\mu\text{g/l}$ ) increased by 33 percent during the same time period. In contrast, the historical trend for concentrations of these two compounds has either been slightly decreasing or asymptotic. A possible explanation for the higher COC levels is the change in the sampling interval with the new HydraSleeve sampler compared to previous monitoring events, with higher contaminant mass flux in the sand deposits in communication with the upper portion of the screened interval compared to the sand-clay-clayey/silty sand sediments in the middle portion of the screen. Additional sampling data will need to be collected to further evaluate the potential existence of vertical changes in COC concentrations with the screened interval for this well.

At the paired well MW-25D-190, the total site-related COC concentration of 58.2  $\mu\text{g/l}$  was lower than that observed in the shallower well (MW-25D-130) and similar to the concentrations since May 2021 from this well, albeit with a slight

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<sup>1</sup> 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). The comparative criterion for 1,4-dioxane is the Maryland Department of the Environment Risk-Based action level of 4.6  $\mu\text{g/l}$ .



increase compared to the May 2023 sample (49.8 µg/l; see Table 5). Overall, the VOC concentrations in this well are noticeably lower than levels present in the pre-2021 monitoring events. Even with these concentration declines, the concentrations of 1,1-DCE, 1,1-DCA, and 1,4-dioxane are still above their respective comparative groundwater quality criteria.

- The majority of the sampling data for the deep zone monitoring wells located further downgradient indicated non-detect to low concentrations of site related COCs (Figure 2 and Table 4). The highest concentrations were detected in the sample from the well screened from 263-273 ft BGS at the MW-30D location, which is located along the presumed centerline of the COC plume. The concentration of 1,1-DCE (51 µg/l) in the groundwater sample collected from this well increased by nearly 50 percent between May and December 2023 sampling events. This is also the highest concentration of this compound detected during the sampling history of this well (Table 5). The concentration of 1,4-dioxane (9.6 µg/l) exhibited a more modest increase compared to the May 2023 sampling round (8.0 µg/l). Like the changes observed in the sample from MW-25D-130, the sampling interval for the new HydraSleeve may have affected the concentrations detected in the sample, with higher mass flux in the clayey sand and sand layer in communication with the upper portion of the screened interval compared to the sand and clayey sand deposits in the mid-screen section. The relative stability of the 1,4-dioxane concentrations between May and December 2023 may be due this compound being more mobile in groundwater than 1,1-DCE and other chlorinated VOCs, and therefore less susceptible to vertical changes in concentration. As with well MW-46D, the results of additional sampling events are needed to assess the potential existence of vertical changes in COC concentration within the screened interval.

Further downgradient, the concentration of 1,1-DCE (8.9 µg/l) slightly exceeded the comparative criterion in the sample collected from MW-33D-295 (Table 4). This sample also had a low detection (3.3 µg/l) of 1,4-dioxane, which was below the evaluation criterion.

- Groundwater samples from the remaining wells screened in the deep, confined zone of the Lower Patapsco aquifer are used to delineate the width and downgradient extent of the COC plume in the offsite area. For the western boundary of the plume, the concentration of 1,1-DCE (13.3 µg/l) slightly exceeded the comparative criterion in the sample collected from MW-28D (Table 4). The sample from this well also had a low detection (3.8 µg/l) of 1,4-dioxane, which was below the evaluation criterion. No site-related COCs were detected in the groundwater sample from well MW-32D further to the south (Figure 2) In the eastern plume boundary area, the sample from well MW-29D, which is located east of the MW-2D well pair, had non-detect COCs levels. The samples from wells around the leading edge of the plume (MW-31D, , MW-34D, and MW-35D) had non-detect results for all site-related COCs (Table 4, Figure 2).
- Monitoring well MW-36D and the deeper well at the MW-30D location (MW-30D-413) are screened in the Patuxent aquifer, which underlies the Lower Patapsco. Site-related COCs are not anticipated to be in the Patuxent aquifer, given the presence of a thick, clayey confining unit (Arundel Clay) overlying this aquifer that serves as an aquitard to groundwater flow and associated dissolved solute transport. Consistent with previous monitoring events, no site related COCs were detected in the samples from these wells, indicating constituents have not migrated downward through the Arundel Clay confining unit that hydraulically separates the Lower Patapsco and Patuxent aquifers.

## 2.0 PLANNED OFFSITE ACTIVITIES FOR NEXT REPORTING PERIOD (JANUARY 2024 THROUGH MARCH 2024)

No field activities are planned for the first quarter 2024 reporting period. Pursuant to the approved Offsite Groundwater Monitoring Plan (dated September 15, 2015), groundwater monitoring is currently conducted on a semi-annual schedule. Therefore, the next groundwater monitoring event for the offsite well network will be performed during the Spring (May) of 2024.

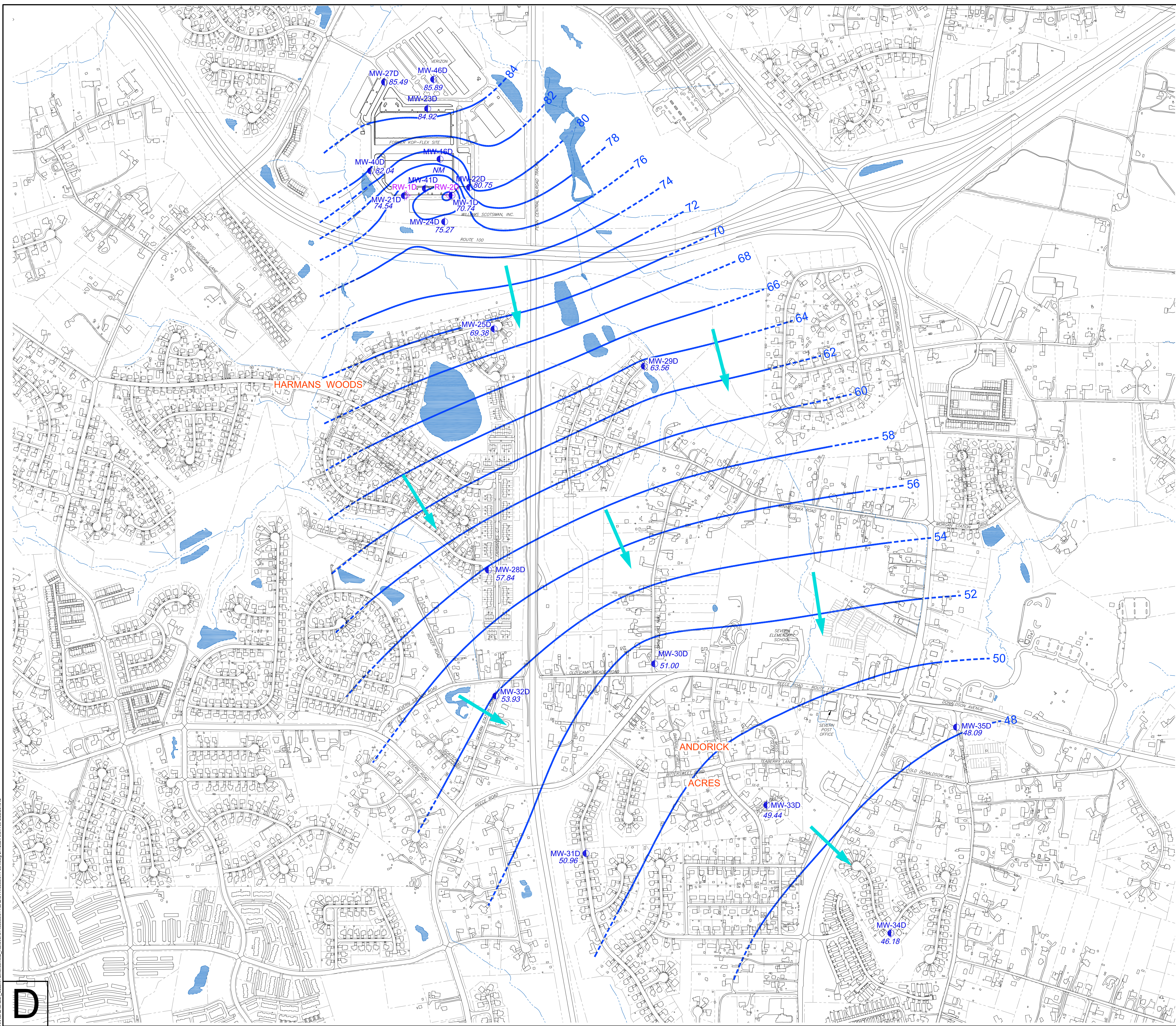


WSP will begin preparation of the 2023 Offsite Groundwater Monitoring Report during the first quarter of 2024. This report will be submitted to MDE and the U.S. Environmental Protection Agency (EPA), Region III in the spring of 2024.

### 3.0 KEY PERSONNEL/FACILITY CHANGES

There were no changes to either key project personnel or conditions relevant to the performance of the ongoing work in the offsite area.

## FIGURES



- LEGEND**
- PROPERTY LINE
  - STREAM
  - WATER BODY
  - MONITORING WELL
  - ◆ RECOVERY WELL
  - 72.18 GROUNDWATER SURFACE ELEVATION (FEET MSL)
  - GROUNDWATER SURFACE CONTOUR (DASHED WHERE INFERRED)
  - INFERRED GROUNDWATER FLOW DIRECTION

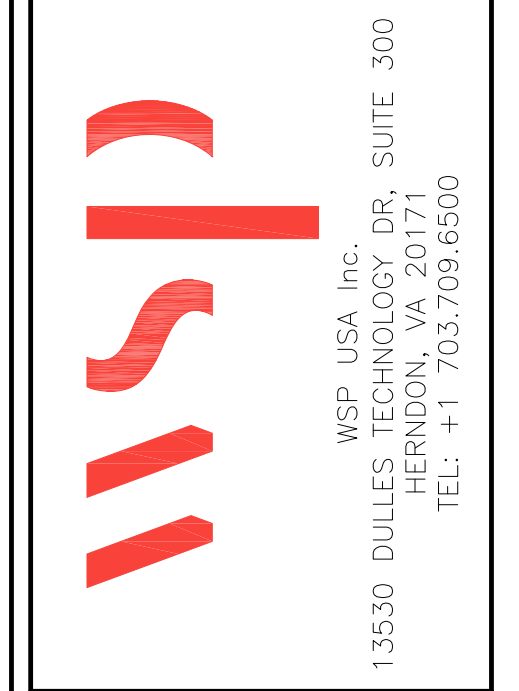
**NOTE:**  
FIGURE DEPICTS THE POTENTIOMETRIC SURFACE IN THE DEEP (CONFINED) ZONE OF THE LOWER PATAPSCO AQUIFER UNDER PUMPING CONDITIONS.

REVISIONS	
REV	DESCRIPTION

DRAWN BY	ECG	SEAL
CHECKED		
APPROVED		

DATE: \_\_\_\_\_

**POTENTIOMETRIC SURFACE CONTOUR MAP DEEP CONFINED ZONE OF THE LOWER PATAPSCO AQUIFER**  
**DECEMBER 2023**  
**FORMER KOP-FLEX FACILITY SITE**  
**HANOVER, MARYLAND**  
 PREPARED FOR  
**EMERSUB 16 LLC**  
**ST. LOUIS, MISSOURI**



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**FIGURE 1**  
 Drawing Number  
**314V5608.011-031**

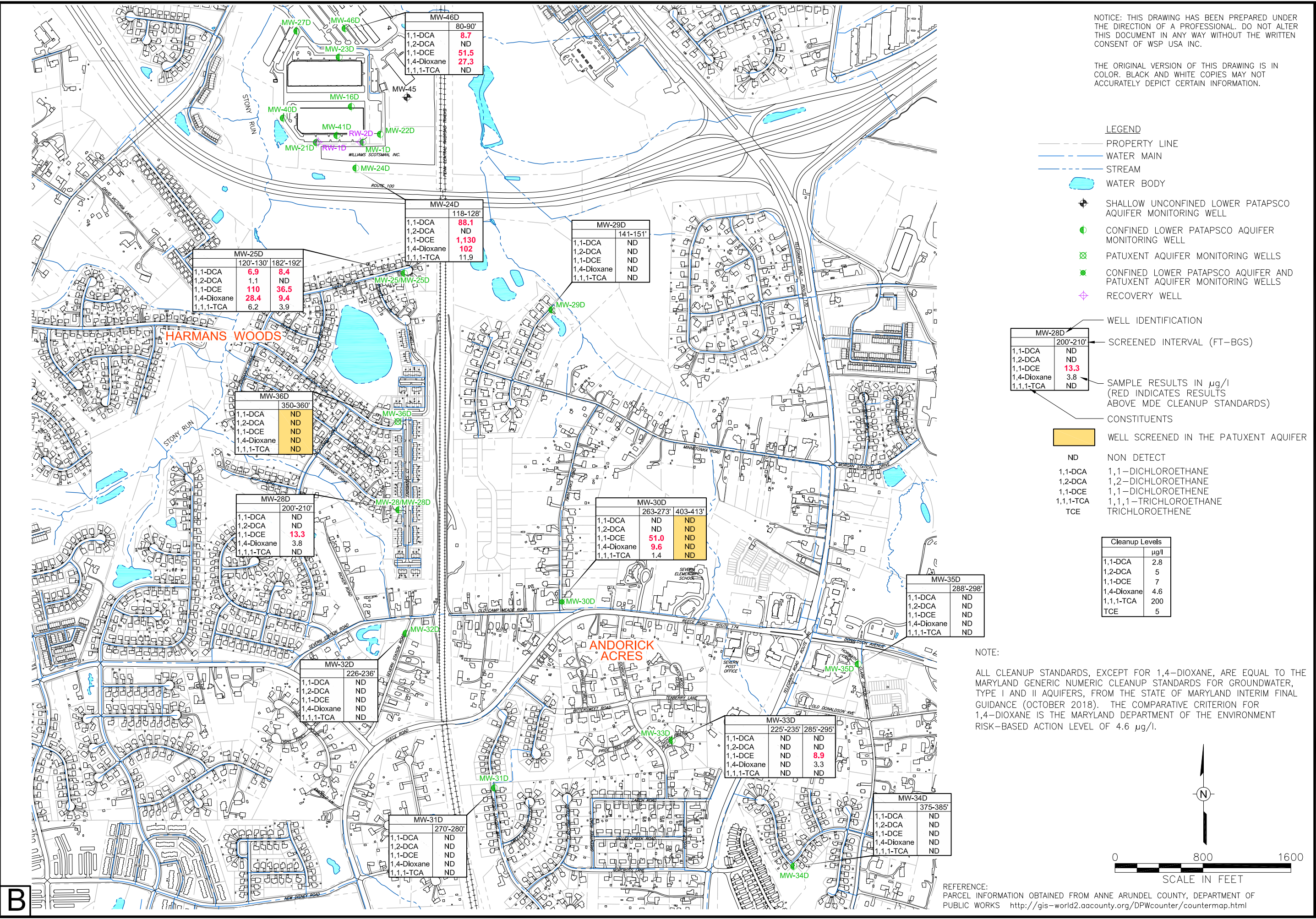
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Drawn By: EGC  
 Checked: ESR 2/17/2024  
 Approved: RJA  
 DWG Name: 314V5608.010-060x

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

FIGURE 2  
 GROUNDWATER MONITORING RESULTS  
 LOWER PATAPSCO AQUIFER AND PATUXENT AQUIFER  
 OFFSITE MONITORING WELLS - DECEMBER 2023

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REFERENCE:  
 PARCEL INFORMATION OBTAINED FROM ANNE ARUNDEL COUNTY, DEPARTMENT OF PUBLIC WORKS <http://gis-world2.aacounty.org/DPWcounter/countermap.html>



## TABLES

Table 1

**Hydrasleeve Deployment Depths and Sample Intervals - Offsite Monitoring Wells  
Former Kop-Flex Facility Site  
Hanover, Maryland (a)**

Well ID	Well Depth (ft bgs)	Previous (2016 - May 2023) HydraSleeve Sample			New (December 2023) HydraSleeve Samples		
		Top of Screen (ft bgs)	Deployment Depth (ft bgs)	Sample Interval (ft bgs)	Top of Screen (ft bgs)	Deployment Depth (ft bgs)	Sample Interval (ft bgs)
<b>Unconfined LPA</b>							
MW-45	38	28	34.5	32-34.5	28	33	29.8 - 33.0
<b>Confined LPA</b>							
MW-24D	128.5	118.5	124.5	122-124.5	119	123.5	120.3 - 123.5
MW-25D-130	130	120	127.5	125-127.5	120	126.5	122.1-126.5
MW-25D-190	190	180	187.5	185-187.5	180	188.2	183.2 - 188.2
MW-28D	210	200	207.5	205-207.5	200	205	201.8 - 205.0
MW-29D	151	141	149	146-148.5	141	146	142.8 - 146.0
MW-30D-273	273	263	270	267-269.5	263	268	264.8 - 268.0
MW-31D	280	270	277.5	275-277.5	270	275	271.8 - 275.0
MW-32D	236	226	236	233-235.5	226	231	227.8 - 231.0
MW-33D-235	235	225	232.5	230-232.5	225	230	226.8 - 230.0
MW-33D-295	295	285	292.5	290-292.5	285	290	286.8 - 290.0
MW-34D	385	375	382	379-381.5	375	380	376.8 - 380.0
MW-35D	298	288	295.5	293-295.5	288	293	289.8 - 293.0
MW-46D	90	80	86.5	84-86.5	80	85	81.8 - 85.0
<b>Patuxent Aquifer</b>							
MW-30D-413	413	403	410	407-409.5	403	408	404.8 - 408
MW-36D	360	350	360	357-359.5	350	355	351.8 - 355.0

a/ ft bgs = feet below ground surface; LPA = Lower Patapsco Aquifer

**Table 2**

**Field Hydrogeochemical Measurements - December 2023  
Offsite Monitoring Well Locations  
Former Kop-Flex Facility Site  
Hanover, MD (a)**

Well ID	Temp (°C)	pH	Sp. Cond (mS/cm)	Turb (NTU)
Unconfined LPA				
MW-45	13.17	4.72	0.461	86.3
Confined LPA				
MW-24D	12.16	5.56	0.15	42.5
MW-25-130	NM	NM	NM	NM
MW-25-190	NM	NM	NM	NM
MW-28D	10.7	5.45	0.064	34
MW-29D	10.48	5.55	0.124	360
MW-30D-273	9.85	4.41	0.029	71.3
MW-31D	10.14	4.15	0.05	402
MW-32D	10.6	6.01	0.243	145
MW-33D-235	10.38	5.44	0.031	121
MW-33D-295	10.31	4.82	0.032	51.3
MW-34D	10.78	5.99	0.195	800
MW-35D	10.87	4.41	0.937	103
Patuxent Aquifer				
MW-30D-413	9.95	4.17	0.029	295
MW-36D	10.62	4.63	0.024	90.3

a/ Temp = temperature; °C = degrees Celsius; Sp. Cond = specific conductance; mS/cm = milliSiemens/centimeter; Turb = Turbidity; NTU = nephelometric turbidity units; LPA = Lower Patapsco Aquifer; NM = not measured.

Table 3

**Historical Groundwater Elevations (2015 through 2023)  
Offsite Monitoring Wells  
Former Kop-Flex Facility Site  
Hanover, Maryland**

Well ID	Aquifer/Zone	TOC Elevation	3/17/2015		6/15/2015		9/21/2015		1/4/2016		3/21/2016	
			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-25S *	Unconfined LPA	130.6	12.84	117.76	12.46	118.14	14.33	116.27	13.48	117.12	12.75	117.85
MW-28S *	Unconfined LPA	150.5	25.56	124.94	25.24	125.26	25.88	124.62	25.35	125.15	25.34	125.16
MW-45	Unconfined LPA	126.7	NM	-	NM	-	NM	-	NM	-	NM	-
MW-24D	Confined LPA	129.1	50.9	78.20	49.29	79.81	NM	-	NM	-	44.38	84.72
MW-25D-130	Confined LPA	130.5	58.7	71.80	57.59	72.91	58.26	72.24	53.95	76.55	51.01	79.49
MW-25D-192	Confined LPA	130.5	59.99	70.51	56.4	74.10	57.23	73.27	53.05	77.45	50.27	80.23
MW-28D	Confined LPA	150.5	93.06	57.44	89.36	61.14	90.34	60.16	84.62	65.88	80.72	69.78
MW-29D	Confined LPA	131.9	NM	-	NM	-	NM	-	NM	-	NM	-
MW-30D-273	Confined LPA	153.5	NM	-	NM	-	NM	-	NM	-	NM	-
MW-31D	Confined LPA	162.5	114.02	48.48	108.58	53.92	109.51	52.99	102.44	60.06	98.41	64.09
MW-32D	Confined LPA	156.1	NM	-	NM	-	NM	-	NM	-	NM	-
MW-33D-235	Confined LPA	178.6	131.83	46.77	125.66	52.94	127.11	51.49	119.14	59.46	115.25	63.35
MW-33D-295	Confined LPA	178.3	131.52	46.78	125.42	52.88	126.91	51.39	118.90	59.40	114.96	63.34
MW-34D	Confined LPA	183.9	NM	-	NM	-	NM	-	NM	-	NM	-
MW-35D	Confined LPA	177.8	132.01	45.79	126.28	51.52	127.89	49.91	118.96	58.84	114.34	63.46
MW-46D	Confined LPA	124.8	NM	-	NM	-	NM	-	NM	-	NM	-
MW-30D-413	Patuxent	153.1	NM	-	NM	-	NM	-	NM	-	NM	-
MW-36D	Patuxent	158.7	NM	-	NM	-	NM	-	NM	-	NM	-

Notes:

LPA = Lower Patapsco Aquifer

NM = Not Measured

TOC = Top of Casing

\* Well abandoned in August 2019

Table 3

**Historical Groundwater Elevations (2015 through 2023)  
Offsite Monitoring Wells  
Former Kop-Flex Facility Site  
Hanover, Maryland**

Well ID	Aquifer/Zone	TOC Elevation	12/7/2016		5/1/2017		8/31/2017		11/14/2017		2/13/2018		5/31/2018	
			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-25S *	Unconfined LPA	130.6	14.61	115.99	14.02	116.58	14.09	116.51	14.6	116.00	14.56	116.04	13.10	117.50
MW-28S *	Unconfined LPA	150.5	26.8	123.70	27.4	123.10	27.2	123.30	27.22	123.28	27.48	123.02	27.42	123.08
MW-45	Unconfined LPA	126.7	NM	-	13.67	113.05	NM	-	NM	-	NM	-	12.98	113.74
MW-24D	Confined LPA	129.1	46.3	82.80	48.35	80.75	48.35	80.75	51.99	77.11	NM	-	50.94	78.16
MW-25D-130	Confined LPA	130.5	50.27	80.23	53.80	76.70	61.38	69.12	58.46	72.04	58.31	72.19	58.23	72.27
MW-25D-192	Confined LPA	130.5	52.4	78.10	53.11	77.39	60.36	70.14	58.71	71.79	57.49	73.01	57.40	73.10
MW-28D	Confined LPA	150.5	83.35	67.15	82.72	67.78	94.55	55.95	89.03	61.47	67.37	83.13	88.75	61.75
MW-29D	Confined LPA	131.9	NM	-	NM	-	NM	-	NM	-	NM	-	64.94	66.98
MW-30D-273	Confined LPA	153.5	NM	-	NM	-	NM	-	NM	-	NM	-	98.66	54.88
MW-31D	Confined LPA	162.5	114.20	48.30	100.24	62.26	115.67	46.83	107.21	55.29	106.29	56.21	106.80	55.70
MW-32D	Confined LPA	156.1	NM	-	NM	-	NM	-	NM	-	NM	-	97.90	58.24
MW-33D-235	Confined LPA	178.6	114.2	64.40	117.26	61.34	133.39	45.21	124.55	54.05	123.79	54.81	124.00	54.60
MW-33D-295	Confined LPA	178.3	131.50	46.80	117.03	61.27	133.14	45.16	124.36	53.94	123.60	54.70	123.83	54.47
MW-34D	Confined LPA	183.9	NM	-	NM	-	NM	-	NM	-	NM	-	132.70	51.21
MW-35D	Confined LPA	177.8	131.91	45.89	117.28	60.52	133.55	44.25	125.59	52.21	124.02	53.78	124.27	53.53
MW-46D	Confined LPA	124.8	NM	-	NM	-	NM	-	NM	-	NM	-	NM	-
MW-30D-413	Patuxent	153.1	NM	-	NM	-	NM	-	NM	-	NM	-	138.10	15.03
MW-36D	Patuxent	158.7	NM	-	NM	-	NM	-	NM	-	NM	-	141.75	16.96

Notes:

LPA = Lower Patapsco Aquifer

NM = Not Measured

TOC = Top of Casing

\* Well abandoned in August 2019

Table 3

**Historical Groundwater Elevations (2015 through 2023)  
Offsite Monitoring Wells  
Former Kop-Flex Facility Site  
Hanover, Maryland**

Well ID	Aquifer/Zone	TOC Elevation	8/23/2018		11/8/2018		2/19/2019		5/22/2019		8/6/2019		11/20/2019	
			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-25S *	Unconfined LPA	130.6	NM	-	11.84	118.76	11.75	118.85	NM	-	NM	-	NM	-
MW-28S *	Unconfined LPA	150.5	NM	-	24.33	126.17	23.30	127.20	NM	-	NM	-	NM	-
MW-45	Unconfined LPA	126.7	NM	-	NM	-	11.98	114.74	11.75	114.97	NM	-	14.55	112.17
MW-24D	Confined LPA	129.1	NM	-	NM	-	48.92	80.18	49.67	79.43	52.37	76.73	51.12	77.98
MW-25D-130	Confined LPA	130.5	59.53	70.97	58.75	71.75	54.96	75.54	56.23	74.27	60.79	69.71	59.94	70.56
MW-25D-192	Confined LPA	130.5	58.69	71.81	57.63	72.87	54.20	76.30	55.45	75.05	60.37	70.13	59.02	71.48
MW-28D	Confined LPA	150.5	90.98	59.52	88.30	62.20	84.78	65.72	86.96	63.54	94.24	56.26	91.37	59.13
MW-29D	Confined LPA	131.9	66.56	65.36	65.03	66.89	60.64	71.28	62.36	69.56	67.20	64.72	67.10	64.82
MW-30D-273	Confined LPA	153.5	100.70	52.84	98.14	55.40	93.10	60.44	95.74	57.80	104.75	48.79	101.12	52.42
MW-31D	Confined LPA	162.5	109.95	52.55	106.27	56.23	102.47	60.03	104.91	57.59	113.35	49.15	110.14	52.36
MW-32D	Confined LPA	156.1	100.65	55.49	98.97	57.17	93.79	62.35	97.02	59.12	99.43	56.71	101.56	54.58
MW-33D-235	Confined LPA	178.6	127.52	51.08	125.14	53.46	119.35	59.25	121.72	56.88	132.76	45.84	127.87	50.73
MW-33D-295	Confined LPA	178.3	127.34	50.96	125.69	52.61	119.10	59.20	NM	NA	131.14	47.16	127.65	50.65
MW-34D	Confined LPA	183.9	136.42	47.49	131.76	52.15	127.40	56.51	129.93	53.98	141.48	42.43	136.62	47.29
MW-35D	Confined LPA	177.8	128.19	49.61	123.64	54.16	119.18	58.62	121.65	56.15	127.51	50.29	129.89	47.91
MW-46D	Confined LPA	124.8	NM	-	NM	-	NM	-	35.47	89.30	38.40	86.37	37.90	86.87
MW-30D-413	Patuxent	153.1	143.75	9.38	140.62	12.51	130.73	22.40	137.25	15.88	145.27	7.86	143.64	9.49
MW-36D	Patuxent	158.7	146.32	12.39	143.85	14.86	134.83	23.88	141.30	17.41	147.65	11.06	146.75	11.96

Notes:

LPA = Lower Patapsco Aquifer

NM = Not Measured

TOC = Top of Casing

\* Well abandoned in August 2019

Table 3

**Historical Groundwater Elevations (2015 through 2023)  
Offsite Monitoring Wells  
Former Kop-Flex Facility Site  
Hanover, Maryland**

Well ID	Aquifer/Zone	TOC Elevation	2/12/2020		5/14/2020		11/23/2020		5/10/2021		11/15/2021	
			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-25S *	Unconfined LPA	130.6	NM	-	NM	-	NM	-	NM	-	-	0.00
MW-28S *	Unconfined LPA	150.5	NM	-	NM	-	NM	-	NM	-	-	0.00
MW-45	Unconfined LPA	126.7	NM	-	NM	-	NM	-	12.69	114.03	12.69	114.03
MW-24D	Confined LPA	129.1	50.10	79.00	48.80	80.30	53.02	76.08	50.01	79.09	49.40	79.70
MW-25D-130	Confined LPA	130.5	55.55	74.95	54.95	75.55	60.50	70.00	56.11	74.39	NM	-
MW-25D-192	Confined LPA	130.5	54.70	75.80	54.23	76.27	59.50	71.00	55.32	75.18	NM	-
MW-28D	Confined LPA	150.5	85.00	65.50	84.36	66.14	92.87	57.63	86.34	64.16	89.34	61.16
MW-29D	Confined LPA	131.9	61.28	70.64	60.61	71.31	67.75	64.17	62.15	69.77	64.82	67.10
MW-30D-273	Confined LPA	153.5	93.29	60.25	92.60	60.94	103.09	50.45	94.95	58.59	99.70	53.84
MW-31D	Confined LPA	162.5	102.73	59.77	NM	-	113.30	49.20	104.32	58.18	108.09	54.41
MW-32D	Confined LPA	156.1	92.35	63.79	94.31	61.83	103.76	52.38	95.58	60.56	99.72	56.42
MW-33D-235	Confined LPA	178.6	119.72	58.88	119.10	59.50	NM	-	121.30	57.30	125.35	53.25
MW-33D-295	Confined LPA	178.3	119.54	58.76	118.84	59.46	130.21	48.09	121.08	57.22	125.15	53.15
MW-34D	Confined LPA	183.9	127.75	56.16	127.01	56.90	139.08	44.83	129.41	54.50	133.82	50.09
MW-35D	Confined LPA	177.8	119.68	58.12	119.06	58.74	129.67	48.13	121.20	56.60	126.19	51.61
MW-46D	Confined LPA	124.8	36.13	88.64	35.73	89.04	37.72	87.05	35.95	88.82	35.95	88.82
MW-30D-413	Patuxent	153.1	128.12	25.01	127.25	25.88	142.22	10.91	134.60	18.53	140.69	12.44
MW-36D	Patuxent	158.7	132.11	26.60	131.08	27.63	145.25	13.46	137.95	20.76	143.70	15.01

Notes:

LPA = Lower Patapsco Aquifer

NM = Not Measured

TOC = Top of Casing

\* Well abandoned in August 2019

Table 3

**Historical Groundwater Elevations (2015 through 2023)  
Offsite Monitoring Wells  
Former Kop-Flex Facility Site  
Hanover, Maryland**

Well ID	Aquifer/Zone	TOC Elevation	6/27/2022		11/20/2022		5/22/2023		12/4/2023	
			Depth to Water	Groundwater Elevation	Depth to Water	Groundwater Elevation	Depth to Water	Groundwater Elevation	Depth to Water	Groundwater Elevation
MW-25S *	Unconfined LPA	130.6	-	-	-	-	NM	-	-	-
MW-28S *	Unconfined LPA	150.5	-	-	-	-	NM	-	-	-
MW-45	Unconfined LPA	126.7	12.91	113.81	13.54	113.18	NM	-	13.54	113.18
MW-24D	Confined LPA	129.1	51.06	78.0	53.11	76.0	49.42	79.68	53.83	75.3
MW-25D-130	Confined LPA	130.5	60.22	70.3	60.00	70.5	57.68	72.82	61.12	69.4
MW-25D-192	Confined LPA	130.5	59.12	71.4	59.10	71.4	56.72	73.78	60.15	70.4
MW-28D	Confined LPA	150.5	93.51	57.0	90.81	59.7	89.06	61.44	92.66	57.8
MW-29D	Confined LPA	131.9	68.45	63.5	66.70	65.2	65.15	66.77	68.34	63.6
MW-30D-273	Confined LPA	153.5	104.25	49.3	100.23	53.3	98.76	54.78	102.50	51.0
MW-31D	Confined LPA	162.5	114.2	48.3	109.24	53.3	107.82	54.68	111.54	51.0
MW-32D	Confined LPA	156.1	104.98	51.2	100.23	55.9	98.47	57.67	102.17	54.0
MW-33D-235	Confined LPA	178.6	132.13	46.5	126.56	52.0	125.61	52.99	129.16	49.4
MW-33D-295	Confined LPA	178.3	131.85	46.5	126.29	52.0	125.39	52.91	128.89	49.4
MW-34D	Confined LPA	183.9	141.12	42.8	134.82	49.1	134.32	49.59	137.72	46.2
MW-35D	Confined LPA	177.8	132.35	45.5	126.60	51.2	126.53	51.27	129.71	48.1
MW-46D	Confined LPA	124.8	37.13	87.64	38.38	86.4	36.26	88.51	38.88	85.9
MW-30D-413	Patuxent	153.1	145.4	7.7	141.52	11.6	137.89	15.2	141.29	11.8
MW-36D	Patuxent	158.7	148.06	10.7	145.05	13.7	141.29	17.4	144.57	14.1

Notes:

LPA = Lower Patapsco Aquifer

NM = Not Measured

TOC = Top of Casing

\* Well abandoned in August 2019



Table 4

Offsite Monitoring Well Sample Results  
Former Kop-Flex Facility Site  
Hanover, Maryland  
December 2023

Parameters (a)	Groundwater Quality Standards (µg/L) (b)	Well ID: Sampling Date:	SHALLOW ZONE LOWER PATAPSCO AQUIFER		DEEP (CONFINED) ZONE LOWER PATAPSCO AQUIFER							
			MW-45 12/4/23	MW-24D 12/4/23	MW-25D-130 12/4/23	DUP-120423 (d) 12/4/23	MW-25D-190 12/4/23	MW-28D 12/4/23	MW-29D 12/4/23	MW-30D-273 12/4/23	MW-31D 12/4/23	MW-32D 12/4/23
Methyl t-Butyl Ether	20		1.0 U	10.0 U	1.0 U	1.0 U	1.2	1.0 U	1.0 U	1.0 U	1.0 U	5.0 U
1,1-Dichloroethane	2.8		1.0 U	<b>88.1</b>	<b>6.9</b>	<b>5.9</b>	<b>8.4</b>	1.0 U	1.0 U	1.3	1.0 U	5.0 U
1,2-Dichloroethane	5		1.0 U	10.0 U	1.1	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	5.0 U
1,1-Dichloroethene	7		1.0 U	<b>1,130</b>	<b>110</b>	<b>100</b>	<b>36.5</b>	<b>13.3</b>	1.0 U	<b>51.0</b>	1.0 U	5.0 U
1,4-Dioxane	4.6 (c)		1.0 U	<b>102</b>	<b>28.4</b>	<b>23.7</b>	<b>9.4</b>	3.8	1.0 U	<b>9.6</b>	1.0 U	1.0 U
1,1,1-Trichloroethane	200		1.0 U	11.9	6.2	5.6	3.9	1.0 U	1.0 U	1.7	1.0 U	5.0 U
<b>Total CVOCs &amp; 1,4-Dioxane</b>			<i>ND</i>	<i>1,332</i>	<i>152.6</i>	<i>135.2</i>	<i>58.2</i>	<i>17.1</i>	<i>ND</i>	<i>63.6</i>	<i>ND</i>	<i>ND</i>

a/ U = not detected above the method detection limit; CVOC = chlorinated volatile organic compound.

**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/documen>

c/ Value represents the MDE risk-based action level.

d/ Field duplicate of sample from well MW-25D-130.

Table 4

Offsite Monitoring Well Sample Results  
Former Kop-Flex Facility Site  
Hanover, Maryland  
December 2023

Parameters (a)	Groundwater Quality Standards (µg/L) (b)	Well ID: Sampling Date:	DEEP (CONFINED) ZONE LOWER PATAPSCO AQUIFER					PATUXENT AQUIFER	
			MW-33D-235 12/4/23	MW-33D-295 12/4/23	MW-34D 12/4/23	MW-35D 12/4/23	MW-46D 12/3/23	MW-30D-413 12/4/23	MW-36D 12/4/23
Methyl t-Butyl Ether	20		1.0 U	1.0 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1-Dichloroethane	2.8		1.0 U	1.0 U	5.0 U	1.0 U	<b>8.7</b>	1.0 U	1.0 U
1,2-Dichloroethane	5		1.0 U	1.0 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1-Dichloroethene	7		1.0 U	<b>8.9</b>	5.0 U	1.0 U	<b>51.5</b>	1.0 U	1.0 U
1,4-Dioxane	4.6 (c)		1.0 U	3.3	1.0 U	1.0 U	<b>27.3</b>	1.0 U	1.0 U
1,1,1-Trichloroethane	200		1.0 U	1.0 U	5.0 U	1.0 U	1.6	1.0 U	1.0 U
<b>Total CVOCs &amp; 1,4-Dioxane</b>			<i>ND</i>	<i>12.2</i>	<i>ND</i>	<i>ND</i>	<i>89.1</i>	<i>ND</i>	<i>ND</i>

a/ U = not detected above the method detection limit; CVOC = chlorinated volatile organic compound.

**Bolded values indicate an exceedence of the Groundwater Quality Standards**

All sample concentrations in micrograms per liter (µg/l)

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

<https://mde.maryland.gov/programs/LAND/MarylandBrownfieldVCP/Documents/www.mde.state.md.us/assets/document/MDE>

c/ Value represents the MDE risk-based action level.

d/ Field duplicate of sample from well MW-25D-130.

Table 5

Historical Offsite Groundwater Sampling Results (2015 to Present)  
Former Kop-Flex Facility Site  
Hanover, Maryland

Well ID	Sample Date	Chloroethane	1,1-Dichloroethane	1,2-Dichloroethane	1,1-Dichloroethene	cis-1,2-Dichloroethene	1,4-Dioxane	Methylene Chloride	1,1,1-Trichloroethane	1,1,2-Trichloroethane	Trichloroethene
<b>Groundwater Quality Standard (µg/L)</b>		NE	2.8 (1)	5	7	70	4.6	5	200	5	5
<b>Shallow Zone Lower Patapsco Wells (b)</b>											
<b>MW-25 (c)</b>	3/19/2015	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
	6/24/2015	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
	9/23/2015	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
	1/6/2016	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
	3/23/2016	1.0 U	1.0 U	1.0 U	1.5	1.0 U	2.0 U	2.0 U	1.0 U	1.0 U	1.0 U
	7/20/2016	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
	9/8/2016	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
	12/8/2016	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
	2/21/2017	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	3.0	2.0 U	1.0 U	1.0 U	1.0 U
	5/2/2017	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
	8/31/2017	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
	11/14/2017	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	<b>11.7</b>	1.0 U	1.0 U	1.0 U
	2/13/2018	5.0 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
	5/30/2018	5.0 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
	<b>MW-28 (c)</b>	3/17/2015	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
6/23/2015		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
9/22/2015		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
1/5/2016		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
3/22/2016		1.0 U	1.0 U	1.0 U	6.2	1.0 U	2.0 U	2.0 U	1.0 U	1.0 U	1.0 U
7/19/2016		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
9/7/2016		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
12/8/2016		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
2/21/2017		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
5/2/2017		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
8/31/2017		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
11/14/2017		5.0 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
2/14/2018		5.0 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
5/30/2018		5.0 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
5/22/2023		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
<b>MW-45</b>	3/24/2017	1.0 U	1.0 U	1.9	1.0 U	2.3	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U
	6/28/2018	1.0 U	1.0 U	2.0 U	1.0 U	2.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U
	5/22/2019	1.0 U	1.0 U	2.0 U	1.0 U	2.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U
	12/8/2020	1.0 U	1.0 U	2.0 U	1.0 U	2.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U
	11/15/2021	1.0 U	1.0 U	2.0 U	1.0 U	2.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U
	6/27/2022	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
	11/21/2022	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
	12/4/2023	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

Table 5

Historical Offsite Groundwater Sampling Results (2015 to Present)  
Former Kop-Flex Facility Site  
Hanover, Maryland

Well ID	Sample Date	Chloroethane	1,1-Dichloroethane	1,2-Dichloroethane	1,1-Dichloroethene	cis-1,2-Dichloroethene	1,4-Dioxane	Methylene Chloride	1,1,1-Trichloroethane	1,1,2-Trichloroethane	Trichloroethene
Groundwater Quality Standard (µg/L)		NE	2.8 (1)	5	7	70	4.6	5	200	5	5
<b>Deep Zone Lower Patapsco Wells</b>											
<b>MW-24D</b>	3/22/2016	12.5 U	<b>88.0</b>	<b>15.7</b>	<b>1,780</b>	12.5 U	<b>561.0</b>	<b>39.4</b>	38.6	12.5 U	12.5 U
	12/8/2016	5.0 U	<b>36.1</b>	<b>5.2</b>	<b>701</b>	5.0 U	<b>192.0</b>	10.0 U	9.0	5.0 U	5.0 U
	5/2/2017	5.0 U	<b>40.4</b>	<b>5.6</b>	<b>830</b>	5.0 U	<b>216.0</b>	10.0 U	10.2	5.0 U	5.0 U
	11/14/2017	5.0 U	<b>28.1</b>	3.4	<b>803</b>	2.3	<b>212.0</b>	<b>11.7</b>	10.5	0.5 J	<b>5.9</b>
	5/30/2018	4.0 U	<b>26.6</b>	4.0 U	<b>529</b>	4.0 U	<b>187.0</b>	8.0 U	5.5	4.0 U	4.0 U
	11/7/2018	5.0 U	<b>29.8</b>	5.0 U	<b>560</b>	5.0 U	2.0 U	10.0 U	5.0 U	5.0 U	5.0 U
	5/22/2019	10.0 U	<b>66.2</b>	10.0 U	<b>1,190</b>	10.0 U	<b>359.0</b>	50.0 U	18.0	10.0 U	10.0 U
	11/19/2019	5.0 U	<b>54.5</b>	<b>6.6</b>	<b>868</b>	5.0 U	<b>155.0</b>	25.0 U	10.0	5.0 U	6.0 U
	5/12/2020	2.5 U	<b>25.0</b>	3.3	<b>402</b>	5.0 U	<b>139.0</b>	25.0 U	3.7	5.0 U	3.2
	11/23/2020	4.0 U	<b>73.5</b>	4.0 U	<b>505</b>	4.0 U	<b>208.0</b>	20.0 U	4.4	4.0 U	4.0 U
	5/10/2021	6.2	<b>151.0</b>	<b>6.3</b>	<b>788</b>	7.2	<b>299.0</b>	25.0 U	10.9	5.0 U	5.0 U
	11/15/2021	10.0 U	<b>142.0</b>	10.0 U	<b>1,300</b>	10.0 U	<b>475.0</b>	25.0 U	16.1	5.0 U	5.0 U
	6/27/2022	3.6	<b>142.0</b>	<b>7.4</b>	<b>1,490</b>	6.9	<b>165.0</b>	1.0 U	18.5	1.0	<b>8.6</b>
	11/21/2022	2.8	<b>114.0</b>	<b>7.5</b>	<b>1,020</b>	5.5	<b>148.0</b>	1.0 U	15.3	1.2	<b>7.7</b>
	12/4/2023	10.0 U	<b>88.1</b>	10.0 U	<b>1,130</b>	10.0 U	<b>102.0</b>	10.0 U	11.9	10.0 U	10.0 U
	<b>MW-25D-130</b>	3/19/2015	10.0 U	<b>38.6</b>	<b>10.8</b>	<b>854</b>	10.0 U	<b>446</b>	200 U	<b>8,930</b>	100 U
6/24/2015		1.0 U	<b>37.1</b>	<b>8.9</b>	<b>1,030</b>	4.6	<b>303</b>	2.0 U	46.3	1.2	<b>6.8</b>
9/23/2015		10.0 U	<b>29.7</b>	10.0 U	<b>697</b>	10.0 U	<b>295</b>	20.0 U	32.3	10.0 U	<b>14.2</b>
1/7/2016		5.0 U	<b>33.4</b>	<b>9.7</b>	<b>800</b>	5.0 U	<b>398</b>	10.0 U	5.0 U	5.0 U	<b>6.1</b>
3/23/2016		5.0 U	<b>24.5</b>	<b>8.0</b>	<b>676</b>	5.0 U	<b>302</b>	10.0 U	26.2	5.0 U	<b>5.0</b>
7/19/2016		10.0 U	<b>39.3</b>	<b>10.2</b>	<b>1,090</b>	4.9 J	<b>367</b>	14.3 J	37.0	10.0 U	<b>6.5</b> J
9/9/2016		5.0 U	<b>27.9</b>	<b>6.4</b>	<b>661</b>	5.0 U	<b>241</b>	<b>12.0</b>	25.0	5.0 U	5.0 U
12/8/2016		1.0 U	<b>6.7</b>	1.5	<b>171</b>	1.0 U	<b>13.6</b>	2.0 U	6.9	1.0 U	1.0 U
2/21/2017		1.0 U	<b>7.2</b>	1.7	<b>194</b>	1.0 U	<b>69.1</b>	2.0 U	7.0	1.0 U	1.2
5/2/2017		2.0 U	<b>6.5</b>	2.0 U	<b>174</b>	2.0 U	<b>61.0</b>	4.0 U	5.0	2.0 U	2.0 U
8/31/2017		2.0 U	<b>7.4</b>	1.7	<b>193</b>	2.0 U	<b>57.9</b>	4.0 U	6.9	2.0 U	2.0 U
11/14/2017		2.0 U	<b>5.1</b>	1.3	<b>151</b>	0.57 J	<b>58.5</b>	5.0 U	6.4	1.0 U	1.1
2/13/2018		2.0 U	<b>6.3</b>	2.0 U	<b>154</b>	2.0 U	<b>67.1</b>	5.0 U	6.4	1.0 U	1.0 U
5/30/2018		2.0 U	<b>5.0</b>	1.4	<b>144</b>	2.0 U	<b>53.9</b>	5.0 U	5.3	1.0 U	1.0 U
11/8/2018		2.0 U	<b>4.4</b>	1.1	<b>109</b>	2.0 U	<b>40.2</b>	5.0 U	1.0 U	1.0 U	1.0 U
5/22/2019		1.0 U	<b>3.7</b>	1.0 U	<b>96.2</b>	1.0 U	<b>38.4</b>	5.0 U	4.2	1.0 U	1.0 U
11/19/2019		1.0 U	2.7	1.0 U	<b>62.1</b>	1.0 U	<b>31.0</b>	5.0 U	1.0 U	1.0 U	1.0 U
5/14/2020		1.0 U	<b>3.3</b>	1.0 U	<b>69.1</b>	1.0 U	<b>32.6</b>	5.0 U	1.0 U	1.0 U	1.0 U
11/23/2020		1.0 U	<b>3.3</b>	1.0 U	<b>76.0</b>	1.0 U	<b>32.4</b>	5.0 U	4.9	1.0 U	1.0 U
5/10/2021		1.0 U	<b>3.0</b>	1.0 U	<b>50.8</b>	1.0 U	<b>30.2</b>	5.0 U	3.1	1.0 U	1.0 U
12/27/2021		1.0 U	<b>3.0</b>	1.0 U	<b>45.5</b>	1.0 U	<b>29.1</b>	5.0 U	3.3	1.0 U	1.0 U
6/27/2022		1.0 U	<b>4.2</b>	1.0 U	<b>65.6</b>	1.0 U	<b>15.6</b>	1.0 U	5.0	1.0 U	1.0 U
11/21/2022		1.0 U	<b>5.5</b>	1.0 U	<b>80.2</b>	1.0 U	<b>16.1</b>	1.0 U	5.6	1.0 U	1.0 U
<i>Duplicate</i> 11/21/2022	1.0 U	<b>5.3</b>	1.0 U	<b>76.2</b>	1.0 U	<b>19.1</b>	1.0 U	5.6	1.0 U	1.0 U	
5/22/2023	1.0 U	<b>4.3</b>	1.0 U	<b>52.0</b>	1.0 U	<b>21.3</b>	1.0 U	4.5	1.0 U	1.0 U	
<i>Duplicate</i> 5/22/2023	1.0 U	<b>5.0</b>	1.0 U	<b>60.0</b>	1.0 U	<b>21.0</b>	1.0 U	5.2	1.0 U	1.0 U	
12/4/2023	10.0 U	<b>6.9</b>	1.1	<b>110.0</b>	1.0 U	<b>28.4</b>	1.0 U	6.2	1.0 U	1.0 U	
<i>Duplicate</i> 12/4/2023	10.0 U	<b>5.9</b>	1.0 U	<b>100.0</b>	1.0 U	<b>23.7</b>	1.0 U	5.6	1.0 U	1.0 U	

Table 5

Historical Offsite Groundwater Sampling Results (2015 to Present)  
Former Kop-Flex Facility Site  
Hanover, Maryland

Well ID	Sample Date	Chloroethane	1,1-Dichloroethane	1,2-Dichloroethane	1,1-Dichloroethene	cis-1,2-Dichloroethene	1,4-Dioxane	Methylene Chloride	1,1,1-Trichloroethane	1,1,2-Trichloroethane	Trichloroethene
Groundwater Quality Standard (µg/L)		NE	2.8 (1)	5	7	70	4.6	5	200	5	5
MW-25D-190	3/19/2015	1.0 U	11.7	1.0 U	53.0	1.0 U	49.4	2.0 U	13.7	1.0 U	1.0 U
	6/25/2015	1.0 U	11.9	1.0 U	59.4	1.0 U	39.8	2.0 U	14.2	1.0 U	1.0 U
	9/22/2015	1.0 U	13.9	1.0 U	51.4	1.0 U	45.0	2.0 U	12.9	1.0 U	1.3
	1/7/2016	1.0 U	11.7	1.0 U	47.2	1.0 U	41.7	2.0 U	12.5	1.0 U	1.0 U
	3/23/2016	1.0 U	10.3	1.0 U	43.3	1.0 U	42.2	2.0 U	11.3	1.0 U	1.0 U
	7/20/2016	1.0 U	11.7	0.73 J	54.9	1.0 U	54.4	2.0 U	11.1	1.0 U	1.0 U
	9/8/2016	1.0 U	12.9	1.0 U	56.8	1.0 U	39.3	2.0 U	12.6	1.0 U	1.0 U
	12/8/2016	1.0 U	16.1	1.0 U	64.6	1.0 U	51.3	2.0 U	13.3	1.0 U	1.0 U
	2/21/2017	1.0 U	14.0	1.0 U	63.3	1.0 U	52.1	2.0 U	11.6	1.0 U	1.0 U
	5/2/2017	1.0 U	16.9	1.0 U	81.0	1.0 U	53.1	2.0 U	13.5	1.0 U	1.0 U
	8/31/2017	1.0 U	15.7	1.0 U	62.5	1.0 U	44.3	2.0 U	13.1	1.0 U	1.0 U
	11/14/2017	5.0 U	13.6	0.67 J	67.2	1.0 U	56.7	5.0 U	13.6	1.0 U	1.0 U
	2/13/2018	5.0 U	13.7	1.0 U	69.2	1.0 U	42.7	5.0 U	11.0	1.0 U	1.0 U
	5/30/2018	5.0 U	10.8	1.0 U	58.3	1.0 U	50.8	5.0 U	7.2	1.0 U	1.0 U
	11/8/2018	5.0 U	13.7	1.0 U	61.0	1.0 U	49.3	5.0 U	9.8	1.0 U	1.0 U
	5/22/2019	1.0 U	11.8	1.0 U	51.7	1.0 U	36.7	5.0 U	8.5	1.0 U	1.0 U
	11/19/2019	1.0 U	12.6	1.0 U	53.2	1.0 U	41.1	5.0 U	1.0 U	1.0 U	1.0 U
	5/14/2020	1.0 U	12.8	1.0 U	58.0	1.0 U	41.1	5.0 U	1.0 U	1.0 U	1.0 U
	11/23/2020	1.0 U	11.3	1.0 U	46.9	1.0 U	41.5	5.0 U	5.8	1.0 U	1.0 U
	5/10/2021	1.0 U	6.5	1.0 U	28.3	1.0 U	22.6	5.0 U	3.2	1.0 U	1.0 U
	12/27/2021	1.0 U	6.2	1.0 U	26.0	1.0 U	21.6	5.0 U	3.4	1.0 U	1.0 U
	6/27/2022	1.0 U	8.8	1.0 U	37.3	1.0 U	11.6	1.0 U	4.7	1.0 U	1.0 U
	11/21/2022	1.0 U	7.3	1.0 U	29.1	1.0 U	10.2	1.0 U	3.7	1.0 U	1.0 U
	5/22/2023	1.0 U	7.1	1.0 U	30.1	1.0 U	9.0	1.0 U	3.6	1.0 U	1.0 U
	12/4/2023	1.0 U	8.4	1.0 U	36.5	1.0 U	9.4	1.0 U	3.9	1.0 U	1.0 U
	MW-28D	3/17/2015	1.0 U	1.0 U	1.0 U	10.6	1.0 U	5.0	2.0 U	1.0 U	1.0 U
6/23/2015		1.0 U	1.0 U	1.0 U	12.8	1.0 U	4.5	2.0 U	1.0 U	1.0 U	1.0 U
9/22/2015		1.0 U	1.0 U	1.0 U	14.3	1.0 U	4.4	2.0 U	1.0 U	1.0 U	1.0 U
1/5/2016		1.0 U	1.0 U	1.0 U	11.5	1.0 U	5.5	2.0 U	1.0 U	1.0 U	1.0 U
3/23/2016		1.0 U	1.0 U	1.0 U	9.1	1.0 U	4.0	2.0 U	1.0 U	1.0 U	1.0 U
7/19/2016		1.0 U	1.0 U	0.25 J	10.1	1.0 U	2.0 U	2.0 U	1.0 U	1.0 U	1.0 U
9/7/2016		1.0 U	1.0 U	1.0 U	12.0	1.0 U	5.0	2.0 U	1.0 U	1.0 U	1.0 U
12/8/2016		1.0 U	1.0 U	1.0 U	6.3	1.0 U	2.0 U	2.0 U	1.0 U	1.0 U	1.0 U
2/21/2017		1.0 U	1.0 U	1.0 U	4.6	1.0 U	3.0	2.0 U	1.0 U	1.0 U	1.0 U
5/2/2017		1.0 U	1.0 U	1.0 U	5.8	1.0 U	2.7	2.0 U	1.0 U	1.0 U	1.0 U
8/31/2017		1.0 U	1.0 U	1.0 U	5.0	1.0 U	2.7	2.0 U	1.0 U	1.0 U	1.0 U
11/14/2017		5.0 U	1.0 U	1.0 U	5.5	1.0 U	3.5	5.0 U	1.0 U	1.0 U	1.0 U
2/14/2018		5.0 U	1.0 U	1.0 U	4.3	1.0 U	2.8	5.0 U	1.0 U	1.0 U	1.0 U
5/30/2018		5.0 U	1.0 U	1.0 U	6.1	1.0 U	2.4	5.0 U	1.0 U	1.0 U	1.0 U
11/8/2018		5.0 U	1.0 U	1.0 U	6.9	1.0 U	2.3	5.0 U	1.0 U	1.0 U	1.0 U
5/22/2019		1.0 U	1.0 U	1.0 U	5.2	1.0 U	3.5	5.0 U	1.0 U	1.0 U	1.0 U
11/20/2019		1.0 U	1.0 U	1.0 U	6.1	1.0 U	3.9	5.0 U	1.0 U	1.0 U	1.0 U
5/14/2020		1.0 U	1.0 U	1.0 U	4.0	1.0 U	3.4	5.0 U	1.0 U	1.0 U	1.0 U
11/23/2020		1.0 U	1.0 U	1.0 U	7.6	1.0 U	4.2	5.0 U	1.0 U	1.0 U	1.0 U
5/10/2021		1.0 U	1.0 U	1.0 U	10.0	1.0 U	4.3	5.0 U	1.0 U	1.0 U	1.0 U
11/15/2021		1.0 U	1.0 U	1.0 U	8.1	1.0 U	5.1	5.0 U	1.0 U	1.0 U	1.0 U
6/27/2022		1.0 U	1.0 U	1.0 U	4.0	1.0 U	2.1	1.0 U	1.0 U	1.0 U	1.0 U
11/21/2022		1.0 U	1.0 U	1.0 U	6.2	1.0 U	3.1	1.0 U	1.0 U	1.0 U	1.0 U
5/22/2023		1.0 U	1.0 U	1.0 U	8.3	1.0 U	1.8	1.0 U	1.0 U	1.0 U	1.0 U
12/4/2023		1.0 U	1.0 U	1.0 U	13.3	1.0 U	3.8	1.0 U	1.0 U	1.0 U	1.0 U

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Former Kop-Flex Facility Site  
Hanover, Maryland

Well ID	Sample Date	Chloroethane	1,1-Dichloroethane	1,2-Dichloroethane	1,1-Dichloroethene	cis-1,2-Dichloroethene	1,4-Dioxane	Methylene Chloride	1,1,1-Trichloroethane	1,1,2-Trichloroethane	Trichloroethene
Groundwater Quality Standard (µg/L)		NE	2.8 (1)	5	7	70	4.6	5	200	5	5
MW-29D	5/21/2018	5.0 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
	8/23/2018	5.0 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
	11/8/2018	5.0 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
	2/19/2019	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
	5/22/2019	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
	11/20/2019	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
	5/14/2020	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
	11/23/2020	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
	5/10/2021	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
	11/15/2021	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
	6/27/2022	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.5 U	1.0 U	1.0 U	1.0 U	1.0 U
	11/21/2022	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
	5/22/2023	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.3 U	1.0 U	1.0 U	1.0 U	1.0 U
	5/22/2023	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
MW-30D-273	5/31/2018	5.0 U	1.0 U	1.0 U	27.4	1.0 U	16.4	5.0 U	1.0 U	1.0 U	1.0 U
	8/23/2018	5.0 U	1.0	1.0 U	40.7	1.0 U	24.5	5.0 U	1.7	1.0 U	1.0 U
	11/8/2018	5.0 U	1.2	1.0 U	44.0	1.0 U	22.2	5.0 U	2.1	1.0 U	1.0 U
	2/19/2019	1.0 U	1.1	1.0 U	47.2	1.0 U	23.1	5.0 U	1.0 U	1.0 U	1.0 U
	5/22/2019	1.0 U	1.1	1.0 U	44.2	1.0 U	22.7	5.0 U	2.0	1.0 U	1.0 U
	11/20/2019	1.0 U	1.1	1.0 U	43.3	1.0 U	22.8	5.0 U	1.0 U	1.0 U	1.0 U
	5/14/2020	1.0 U	1.0	1.0 U	42.7	1.0 U	20.9	5.0 U	1.0 U	1.0 U	1.0 U
	11/23/2020	1.0 U	1.0	1.0 U	39.5	1.0 U	19.5	5.0 U	1.0 U	1.0 U	1.0 U
	5/10/2021	1.0 U	1.0	1.0 U	36.9	1.0 U	18.2	5.0 U	1.0 U	1.0 U	1.0 U
	11/15/2021	1.0 U	1.0	1.0 U	34.1	1.0 U	16.6	5.0 U	1.4	1.0 U	1.0 U
	6/27/2022	1.0 U	1.0 U	1.0 U	34.5	1.0 U	7.5	1.0 U	1.3	1.0 U	1.0 U
	11/21/2022	1.0 U	1.0 U	1.0 U	31.3	1.0 U	7.0	1.0 U	1.2	1.0 U	1.0 U
	5/22/2023	1.0 U	1.0 U	1.0 U	35.1	1.0 U	8.0	1.0 U	1.4	1.0 U	1.0 U
	12/4/2023	1.0 U	1.3	1.0 U	51.0	1.0 U	9.6	1.0 U	1.7	1.0 U	1.0 U
MW-31D	3/17/2015	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
	6/24/2015	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
	9/22/2015	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
	1/6/2016	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
	3/21/2016	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
	7/19/2016	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
	9/6/2016	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
	12/8/2016	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
	2/21/2017	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
	5/2/2017	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
	8/31/2017	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
	11/14/2017	5.0 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
	2/14/2018	5.0 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
	5/31/2018	5.0 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
	11/8/2018	5.0 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
	5/22/2019	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
	11/20/2019	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
	6/2/2020	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
	11/23/2020	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
	5/10/2021	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
11/15/2021	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	
6/27/2022	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.1 U	1.0 U	1.0 U	1.0 U	1.0 U	

Table 5

Historical Offsite Groundwater Sampling Results (2015 to Present)  
Former Kop-Flex Facility Site  
Hanover, Maryland

Well ID	Sample Date	Chloroethane	1,1-Dichloroethane	1,2-Dichloroethane	1,1-Dichloroethene	cis-1,2-Dichloroethene	1,4-Dioxane	Methylene Chloride	1,1,1-Trichloroethane	1,1,2-Trichloroethane	Trichloroethene
Groundwater Quality Standard (µg/L)		NE	2.8 (1)	5	7	70	4.6	5	200	5	5
MW-31D (continued)	11/21/2022	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
	5/22/2023	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.1 U	1.0 U	1.0 U	1.0 U	1.0 U
	12/4/2023	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.1 U	1.0 U	1.0 U	1.0 U	1.0 U
MW-32D	5/31/2018	5.0 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
	8/23/2018	5.0 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
	11/8/2018	5.0 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
	2/19/2019	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
	5/22/2019	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
	11/20/2019	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
	5/14/2020	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
	11/23/2020	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
	5/10/2021	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
	11/15/2021	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
	6/27/2022	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.2 U	1.0 U	1.0 U	1.0 U	1.0 U
	11/21/2022	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
	5/22/2023	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.7 U	1.0 U	1.0 U	1.0 U	1.0 U
	12/4/2023	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	1.0 U	5.0 U	5.0 U	5.0 U	5.0 U
	MW-33D-235	3/18/2015	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
6/23/2015		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
9/21/2015		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
1/4/2016		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
3/21/2016		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	3.0	2.0 U	1.0 U	1.0 U	1.0 U
7/18/2016		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
9/7/2016		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
12/8/2016		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
2/21/2017		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
5/2/2017		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
8/31/2017		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
11/14/2017		5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	4.3	12.0	1.0 U	1.0 U	1.0 U
2/13/2018		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
5/31/2018		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
11/8/2018		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
5/22/2019		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
11/20/2019		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
5/14/2020		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
11/23/2020		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
5/10/2021		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
11/15/2021	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	
6/27/2022	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.1 U	1.0 U	1.0 U	1.0 U	1.0 U	
11/21/2022	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	
5/22/2023	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.5 U	1.0 U	1.0 U	1.0 U	1.0 U	
12/4/2023	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	

Table 5

Historical Offsite Groundwater Sampling Results (2015 to Present)  
Former Kop-Flex Facility Site  
Hanover, Maryland

Well ID	Sample Date	Chloroethane	1,1-Dichloroethane	1,2-Dichloroethane	1,1-Dichloroethene	cis-1,2-Dichloroethene	1,4-Dioxane	Methylene Chloride	1,1,1-Trichloroethane	1,1,2-Trichloroethane	Trichloroethene
Groundwater Quality Standard (µg/L)		NE	2.8 (1)	5	7	70	4.6	5	200	5	5
MW-33D-295	3/18/2015	1.0 U	1.0 U	1.0 U	4.6	1.0 U	8.0	2.0 U	1.0 U	1.0 U	1.0 U
	6/23/2015	1.0 U	1.0 U	1.0 U	3.3	1.0 U	6.8	2.0 U	1.0 U	1.0 U	1.0 U
	9/21/2015	1.0 U	1.0 U	1.0 U	4.8	1.0 U	6.8	2.0 U	1.0 U	1.0 U	1.0 U
	1/4/2016	1.0 U	1.0 U	1.0 U	3.7	1.0 U	7.6	2.0 U	1.0 U	1.0 U	1.0 U
	3/21/2016	1.0 U	1.0 U	1.0 U	3.9	1.0 U	7.8	2.0 U	1.0 U	1.0 U	1.0 U
	7/18/2016	1.0 U	1.0 U	0.36 J	3.2	1.0 U	5.1	2.0 U	1.0 U	1.0 U	1.0 U
	9/7/2016	1.0 U	1.0 U	1.0 U	3.8	1.0 U	7.4	2.0 U	1.0 U	1.0 U	1.0 U
	12/8/2016	1.0 U	1.0 U	1.0 U	5.4	1.0 U	7.4	2.0 U	1.0 U	1.0 U	1.0 U
	2/21/2017	1.0 U	1.0 U	1.0 U	4.0	1.0 U	6.8	2.0 U	1.0 U	1.0 U	1.0 U
	5/2/2017	1.0 U	1.0 U	1.0 U	5.3	1.0 U	7.4	2.0 U	1.0 U	1.0 U	1.0 U
	8/31/2017	1.0 U	1.0 U	1.0 U	5.6	1.0 U	6.3	2.0 U	1.0 U	1.0 U	1.0 U
	11/14/2017	5.0 U	1.0 U	1.0 U	3.4	1.0 U	9.7	11.5	0.49 J	1.0 U	1.0 U
	2/13/2018	5.0 U	1.0 U	1.0 U	4.6	1.0 U	6.9	2.0 U	0.49 J	1.0 U	1.0 U
	5/31/2018	5.0 U	1.0 U	1.0 U	4.6	1.0 U	6.9	2.0 U	0.49 J	1.0 U	1.0 U
	11/8/2018	5.0 U	1.0 U	1.0 U	4.2	1.0 U	6.1	2.0 U	1.0 U	1.0 U	1.0 U
	5/22/2019	1.0 U	1.0 U	1.0 U	4.5	1.0 U	6.1	5.0 U	1.0 U	1.0 U	1.0 U
	11/20/2019	1.0 U	1.0 U	1.0 U	3.7	1.0 U	6.3	5.0 U	1.0 U	1.0 U	1.0 U
	5/14/2020	1.0 U	1.0 U	1.0 U	4.4	1.0 U	6.0	5.0 U	1.0 U	1.0 U	1.0 U
	11/23/2020	1.0 U	1.0 U	1.0 U	3.6	1.0 U	6.0	5.0 U	1.0 U	1.0 U	1.0 U
	5/10/2021	1.0 U	1.0 U	1.0 U	4.4	1.0 U	5.6	5.0 U	1.0 U	1.0 U	1.0 U
	11/15/2021	1.0 U	1.0 U	1.0 U	4.2	1.0 U	6.1	5.0 U	1.0 U	1.0 U	1.0 U
	6/27/2022	1.0 U	1.0 U	1.0 U	5.1	1.0 U	3.0	1.0 U	1.0 U	1.0 U	1.0 U
	11/21/2022	1.0 U	1.0 U	1.0 U	6.0	1.0 U	3.1	1.0 U	1.0 U	1.0 U	1.0 U
5/22/2023	1.0 U	1.0 U	1.0 U	6.8	1.0 U	2.2	1.0 U	1.0 U	1.0 U	1.0 U	
12/4/2023	1.0 U	1.0 U	1.0 U	8.9	1.0 U	3.3	1.0 U	1.0 U	1.0 U	1.0 U	
MW-34D	5/31/2018	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
	8/23/2018	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
	11/8/2018	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
	2/19/2019	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
	5/22/2019	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
	11/20/2019	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
	5/14/2020	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
	11/23/2020	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
	5/10/2021	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
	11/15/2021	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
	6/27/2022	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U
	11/21/2022	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
	5/22/2023	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.4 U	1.0 U	1.0 U	1.0 U
	12/4/2023	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	1.0 U	5.0 U	5.0 U	5.0 U	5.0 U



Table 5

**Historical Offsite Groundwater Sampling Results (2015 to Present)**  
**Former Kop-Flex Facility Site**  
**Hanover, Maryland**

Well ID	Sample Date	Chloroethane	1,1-Dichloroethane	1,2-Dichloroethane	1,1-Dichloroethene	cis-1,2-Dichloroethene	1,4-Dioxane	Methylene Chloride	1,1,1-Trichloroethane	1,1,2-Trichloroethane	Trichloroethene
Groundwater Quality Standard (µg/L)		NE	2.8 (1)	5	7	70	4.6	5	200	5	5
MW-35D	3/18/2015	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
	6/22/2015	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
	9/21/2015	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
	1/6/2016	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
	4/15/2016	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
	7/18/2016	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
	9/6/2016	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
	12/8/2016	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
	2/21/2017	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
	5/2/2017	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
	8/31/2017	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
	11/14/2017	5.0 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
	2/14/2018	5.0 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
	5/31/2018	5.0 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
	11/8/2018	5.0 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
	5/22/2019	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
	11/20/2019	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
	5/14/2020	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
	11/23/2020	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
	5/10/2021	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
	11/15/2021	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
	6/27/2022	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.16 U	1.0 U	1.0 U	1.0 U	1.0 U
	11/21/2022	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
5/22/2023	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	
12/4/2023	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	
MW-46D	5/30/2018	1.0 U	13.7	1.0 U	<b>29.4</b>	1.0 U	<b>73.5</b>	2.0 U	1.2	1.0 U	1.0 U
	11/7/2018	1.0 U	22.1	1.2	<b>99.6</b>	1.0 U	<b>96.7</b>	2.0 U	7.7	1.0 U	1.0 U
	5/21/2019	1.0 U	<b>26.1</b>	1.0	<b>125</b>	1.0 U	<b>88.0</b>	5.0 U	10.2	1.0 U	1.0 U
	11/19/2019	1.0 U	<b>23.4</b>	1.4	<b>114</b>	1.0	<b>96.3</b>	5.0 U	1.0 U	1.0 U	1.0 U
	5/12/2020	1.0 U	<b>20.7</b>	1.4	<b>98</b>	1.0	<b>63.0</b>	5.0 U	1.0 U	1.0 U	1.0 U
	11/23/2020	1.0 U	<b>18.4</b>	1.0 U	<b>124</b>	1.0 U	<b>29.8</b>	5.0 U	6.4	1.0 U	1.0 U
	5/9/2021	1.0 U	<b>25.7</b>	1.5	<b>116</b>	1.0 U	<b>99.3</b>	5.0 U	7.8	1.0 U	1.0 U
	11/15/2021	1.0 U	<b>19.9</b>	1.0 U	<b>87</b>	1.0 U	<b>79.9</b>	5.0 U	4.8	1.0 U	1.0 U
	6/27/2022	1.0 U	<b>20.7</b>	1.0 U	<b>92</b>	1.0 U	<b>23.4</b>	5.0 U	5.7	1.0 U	1.0 U
	11/21/2022	1.0 U	<b>15.7</b>	1.0 U	<b>74.9</b>	1.0 U	<b>40.1</b>	1.0 U	3.6	1.0 U	1.0 U
	5/21/2023	1.0 U	1.2	1.0 U	<b>19.2</b>	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
	12/4/2023	1.0 U	8.7	1.0 U	<b>51.5</b>	1.0 U	<b>27.3</b>	1.0 U	1.6	1.0 U	1.0 U
	<b>Confined Patuxent Wells</b>										
MW-30D-413	5/31/2018	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
	8/23/2018	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
	11/8/2018	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
	2/19/2019	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
	5/22/2019	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
	11/20/2019	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
	5/14/2020	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
	11/23/2020	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
	5/10/2021	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
	11/15/2021	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
6/27/2022	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.10 U	1.0 U	1.0 U	1.0 U	1.0 U	

Table 5

**Historical Offsite Groundwater Sampling Results (2015 to Present)  
Former Kop-Flex Facility Site  
Hanover, Maryland**

Well ID	Sample Date	Chloroethane	1,1-Dichloroethane	1,2-Dichloroethane	1,1-Dichloroethene	cis-1,2-Dichloroethene	1,4-Dioxane	Methylene Chloride	1,1,1-Trichloroethane	1,1,2-Trichloroethane	Trichloroethene
Groundwater Quality Standard (µg/L)		NE	2.8 (1)	5	7	70	4.6	5	200	5	5
<b>MW-30D-413 (continued)</b>	11/21/2022	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
	5/22/2023	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.4 U	1.0 U	1.0 U	1.0 U	1.0 U
	12/4/2023	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.4 U	1.0 U	1.0 U	1.0 U	1.0 U
<b>MW-36D</b>	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
	8/23/2018	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
	11/8/2018	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
	2/19/2019	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
	5/22/2019	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
	11/20/2019	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
	5/14/2020	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
	11/23/2020	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
	5/10/2021	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
	11/15/2021	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
	6/27/2022	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.17 U	1.0 U	1.0 U	1.0 U	1.0 U
	11/21/2022	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
	5/22/2023	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
	12/4/2023	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.5 U	1.0 U	1.0 U	1.0 U	1.0 U

(1) MDE GW Quality Standard changed from 90 µg/L to 2.8 µg/L in October 2018

a/ U = not detected above the method detection limit; J = estimated concentration between the reporting limit and method detection limit.

**Bolded values indicate an exceedence of the Groundwater Quality Standards**

Dashed line marks change from quarterly to semi-annual sampling frequency at the well.

All sample concentrations in micrograms per liter (µg/l)

NS = well not sampled

b/ Wells screened in this portion of the Lower Patapsco aquifer were removed from the monitoring program after the May 2018 sampling event.

c/ Well decommissioned in August 2019

ENCLOSURE A – LABORATORY ANALYTICAL REPORT FOR OFFSITE  
GROUNDWATER MONITORING WELL SAMPLES (DECEMBER 2023)



Main Site: 301 Fulling Mill Road | Middletown, PA 17057 | Phone: 717-944-5541 | Fax: 717-944-1430 | [www.alsglobal.com](http://www.alsglobal.com)  
 Associated Site: 20 Riverside Drive | Spring City, PA 19475 | Phone: 610-948-4903 | Fax: 717-944-1430 |

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 Offsi  
 Workorder 3335524  
 Report ID 288686 on 12/13/2023

### Certificate of Analysis

Enclosed are the analytical results for samples received by the laboratory on Dec 04, 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](http://www.alsglobal.com/en/Our-Services/Life-Sciences/Environmental/Downloads).

This laboratory report may not be reproduced, except in full, without the written approval of ALS Global.  
 ALS Middletown: 301 Fulling Mill Road, Middletown, PA 17057 : 717-944-5541.

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

*Susan Scherer*

**Susan Scherer**  
 Project Coordinator

(ALS Digital Signature)

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



### Sample Summary

<u>Lab ID</u>	<u>Sample ID</u>	<u>Matrix</u>	<u>Date Collected</u>	<u>Date Received</u>	<u>Collector</u>	<u>Collection Company</u>
3335524001	MW-24D	Ground Water	12/04/2023 13:45	12/04/2023 18:15	CBC	Collected By Client
3335524002	MW-25D-130	Ground Water	12/04/2023 12:00	12/04/2023 18:15	CBC	Collected By Client
3335524003	MW-25D-190	Ground Water	12/04/2023 12:15	12/04/2023 18:15	CBC	Collected By Client
3335524004	MW-28D	Ground Water	12/04/2023 11:20	12/04/2023 18:15	CBC	Collected By Client
3335524005	MW-29D	Ground Water	12/04/2023 10:45	12/04/2023 18:15	CBC	Collected By Client
3335524006	MW-30D-273	Ground Water	12/04/2023 10:20	12/04/2023 18:15	CBC	Collected By Client
3335524007	MW-30D-413	Ground Water	12/04/2023 10:30	12/04/2023 18:15	CBC	Collected By Client
3335524008	MW-31D	Ground Water	12/04/2023 10:00	12/04/2023 18:15	CBC	Collected By Client
3335524009	MW-32D	Ground Water	12/04/2023 11:10	12/04/2023 18:15	CBC	Collected By Client
3335524010	MW-33D-235	Ground Water	12/04/2023 09:25	12/04/2023 18:15	CBC	Collected By Client
3335524011	MW-33D-295	Ground Water	12/04/2023 09:30	12/04/2023 18:15	CBC	Collected By Client
3335524012	MW-34D	Ground Water	12/04/2023 09:05	12/04/2023 18:15	CBC	Collected By Client
3335524013	MW-35D	Ground Water	12/04/2023 08:45	12/04/2023 18:15	CBC	Collected By Client
3335524014	MW-36D	Ground Water	12/04/2023 11:45	12/04/2023 18:15	CBC	Collected By Client
3335524015	DUP-120423	Ground Water	12/04/2023 09:45	12/04/2023 18:15	CBC	Collected By Client
3335524016	Trip Blank A	Ground Water	12/04/2023 00:00	12/04/2023 18:15	CBC	Collected By Client
3335524017	Trip Blank B	Ground Water	12/04/2023 00:00	12/04/2023 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, including but not limited to the following EPA Method reference revisions:  
 EPA 300.1 Rev. 1.0-1997  
 EPA 300.0 Rev. 2.1-1993  
 EPA 353.2 Rev. 2.0-1993  
 EPA 410.4 Rev. 1.0-1993  
 EPA 420.4 Rev. 1.0-1993  
 EPA 365.1 Rev. 2.0-1993  
 EPA 200.7 Rev. 4.4-1994  
 EPA 200.8 Rev. 5.4-1994  
 EPA 245.1 Rev. 3.0-1994
- 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		
3335524009	MW-32D	S1	This sample was analyzed at a dilution in the 8260 volatiles analysis due to matrix. Reporting limits were adjusted accordingly.
3335524012	MW-34D	S2	This sample was analyzed at a dilution in the 8260 volatiles analysis due to matrix. Reporting limits were adjusted accordingly.

### 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 51% and the control limits were 70 to 130%.
2	The QC sample type LCS for method SW846 8260D was outside the control limits for the analyte Chloroethane. The % Recovery was reported as 49.9 and the control limits were 51 to 142.
3	The surrogate 2-Methylnaphthalene-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 40.
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 40.
5	The QC sample type MS for method SW846 8260D was outside the control limits for the analyte Bromochloromethane. The % Recovery was reported as 118 and the control limits were 73 to 117.
6	The QC sample type MS for method SW846 8260D was outside the control limits for the analyte 1,1-Dichloroethane. The % Recovery was reported as 126 and the control limits were 78 to 124.
7	The QC sample type MS for method SW846 8260D was outside the control limits for the analyte 1,1-Dichloroethene. The % Recovery was reported as 136 and the control limits were 63 to 128.
8	The QC sample type MS for method SW846 8260D was outside the control limits for the analyte cis-1,2-Dichloroethene. The % Recovery was reported as 126 and the control limits were 78 to 125.
9	The QC sample type MS for method SW846 8260D was outside the control limits for the analyte trans-1,2-Dichloroethene. The % Recovery was reported as 129 and the control limits were 71 to 122.
10	The QC sample type MS for method SW846 8260D was outside the control limits for the analyte 1,1-Dichloropropene. The % Recovery was reported as 128 and the control limits were 76 to 126.
11	The QC sample type MS for method SW846 8260D was outside the control limits for the analyte Methyl t-Butyl Ether. The % Recovery was reported as 119 and the control limits were 69 to 115.
12	The QC sample type MSD for method SW846 8260D was outside the control limits for the analyte Methyl t-Butyl Ether. The % Recovery was reported as 117 and the control limits were 69 to 115.
13	The QC sample type MSD for method SW846 8270E SIM was outside the control limits for the analyte 1,4-Dioxane. The % Recovery was reported as 21.5 and the control limits were 22 to 75.



**Detected Results Summary**

Client Sample ID	MW-24D	Collected	12/04/2023 13:45
Lab Sample ID	3335524001	Lab Receipt	12/04/2023 18:15

<u>Compound</u>	<u>Result</u>	<u>Units</u>	<u>RDL</u>	<u>Method</u>	<u>Flag</u>
<b>SEMIVOLATILE SIM</b>					
1,4-Dioxane	102	ug/L	40.0	SW846 8270E SIM	#
<b>VOLATILE ORGANICS</b>					
1,1,1-Trichloroethane	11.9	ug/L	10.0	SW846 8260D	#
1,1-Dichloroethane	88.1	ug/L	10.0	SW846 8260D	#
1,1-Dichloroethene	1130	ug/L	10.0	SW846 8260D	#





### Detected Results Summary

Client Sample ID	MW-25D-130	Collected	12/04/2023 12:00
Lab Sample ID	3335524002	Lab Receipt	12/04/2023 18:15

Compound	Result	Units	RDL	Method	Flag
<b>SEMIVOLATILE SIM</b>					
1,4-Dioxane	28.4	ug/L	2.5	SW846 8270E SIM	#
<b>VOLATILE ORGANICS</b>					
1,1,1-Trichloroethane	6.2	ug/L	1.0	SW846 8260D	#
1,1-Dichloroethane	6.9	ug/L	1.0	SW846 8260D	#
1,1-Dichloroethene	110	ug/L	1.0	SW846 8260D	#
1,2-Dichloroethane	1.1	ug/L	1.0	SW846 8260D	#



**Detected Results Summary**

Client Sample ID	MW-25D-190	Collected	12/04/2023 12:15
Lab Sample ID	3335524003	Lab Receipt	12/04/2023 18:15

<u>Compound</u>	<u>Result</u>	<u>Units</u>	<u>RDL</u>	<u>Method</u>	<u>Flag</u>
<b>SEMIVOLATILE SIM</b>					
1,4-Dioxane	9.4	ug/L	5.0	SW846 8270E SIM	#
<b>VOLATILE ORGANICS</b>					
1,1,1-Trichloroethane	3.9	ug/L	1.0	SW846 8260D	#
1,1-Dichloroethane	8.4	ug/L	1.0	SW846 8260D	#
1,1-Dichloroethene	36.5	ug/L	1.0	SW846 8260D	#
Methyl t-Butyl Ether	1.2	ug/L	1.0	SW846 8260D	#



**Detected Results Summary**

Client Sample ID	MW-28D	Collected	12/04/2023 11:20
Lab Sample ID	3335524004	Lab Receipt	12/04/2023 18:15

<u>Compound</u>	<u>Result</u>	<u>Units</u>	<u>RDL</u>	<u>Method</u>	<u>Flag</u>
<b>SEMIVOLATILE SIM</b>					
1,4-Dioxane	3.8	ug/L	1.0	SW846 8270E SIM	#
<b>VOLATILE ORGANICS</b>					
1,1-Dichloroethene	13.3	ug/L	1.0	SW846 8260D	#



### Detected Results Summary

Client Sample ID	MW-30D-273	Collected	12/04/2023 10:20
Lab Sample ID	3335524006	Lab Receipt	12/04/2023 18:15

<u>Compound</u>	<u>Result</u>	<u>Units</u>	<u>RDL</u>	<u>Method</u>	<u>Flag</u>
<b>SEMIVOLATILE SIM</b>					
1,4-Dioxane	9.6	ug/L	1.0	SW846 8270E SIM	#
<b>VOLATILE ORGANICS</b>					
1,1,1-Trichloroethane	1.7	ug/L	1.0	SW846 8260D	#
1,1-Dichloroethane	1.3	ug/L	1.0	SW846 8260D	#
1,1-Dichloroethene	51.0	ug/L	1.0	SW846 8260D	#



### Detected Results Summary

Client Sample ID	MW-33D-295	Collected	12/04/2023 09:30
Lab Sample ID	3335524011	Lab Receipt	12/04/2023 18:15

<u>Compound</u>	<u>Result</u>	<u>Units</u>	<u>RDL</u>	<u>Method</u>	<u>Flag</u>
<b>SEMIVOLATILE SIM</b>					
1,4-Dioxane	3.3	ug/L	1.0	SW846 8270E SIM	#
<b>VOLATILE ORGANICS</b>					
1,1-Dichloroethene	8.9	ug/L	1.0	SW846 8260D	#



**Detected Results Summary**

Client Sample ID	DUP-120423	Collected	12/04/2023 09:45
Lab Sample ID	3335524015	Lab Receipt	12/04/2023 18:15

<u>Compound</u>	<u>Result</u>	<u>Units</u>	<u>RDL</u>	<u>Method</u>	<u>Flag</u>
<b>SEMIVOLATILE SIM</b>					
1,4-Dioxane	23.7	ug/L	5.0	SW846 8270E SIM	#
<b>VOLATILE ORGANICS</b>					
1,1,1-Trichloroethane	5.6	ug/L	1.0	SW846 8260D	#
1,1-Dichloroethane	5.9	ug/L	1.0	SW846 8260D	#
1,1-Dichloroethene	100	ug/L	1.0	SW846 8260D	#



## Results

Client Sample ID	MW-24D	Collected	12/04/2023 13:45
Lab Sample ID	3335524001	Lab Receipt	12/04/2023 18:15

### SEMIVOLATILE SIM

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
1,4-Dioxane	102		ug/L	40.0	SW846 8270E SIM	40	12/12/2023 07:15	S7M	C

### SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
2-Methylnaphthalene-d10	7297-45-2	62.6%	29 - 112	12/06/2023 21:24	
2-Methylnaphthalene-d10	7297-45-2	0*%	29 - 112	12/12/2023 07:15	3
Fluoranthene-d10	93951-69-0	83.5%	45 - 130	12/06/2023 21:24	
Fluoranthene-d10	93951-69-0	0*%	45 - 130	12/12/2023 07:15	4

### VOLATILE ORGANICS

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
1,1,1,2-Tetrachloroethane	10.0 U	U	ug/L	10.0	SW846 8260D	10	12/07/2023 18:28	AHI	A
1,1,1-Trichloroethane	11.9		ug/L	10.0	SW846 8260D	10	12/07/2023 18:28	AHI	A
1,1,2,2-Tetrachloroethane	10.0 U	U	ug/L	10.0	SW846 8260D	10	12/07/2023 18:28	AHI	A
1,1,2-Trichloroethane	10.0 U	U	ug/L	10.0	SW846 8260D	10	12/07/2023 18:28	AHI	A
1,1-Dichloroethane	88.1		ug/L	10.0	SW846 8260D	10	12/07/2023 18:28	AHI	A
1,1-Dichloroethene	1130		ug/L	10.0	SW846 8260D	10	12/07/2023 18:28	AHI	A
1,1-Dichloropropene	10.0 U	U	ug/L	10.0	SW846 8260D	10	12/07/2023 18:28	AHI	A
1,2,3-Trichlorobenzene	20.0 U	U	ug/L	20.0	SW846 8260D	10	12/07/2023 18:28	AHI	A
1,2,3-Trichloropropane	20.0 U	U	ug/L	20.0	SW846 8260D	10	12/07/2023 18:28	AHI	A
1,2,4-Trichlorobenzene	20.0 U	U	ug/L	20.0	SW846 8260D	10	12/07/2023 18:28	AHI	A
1,2-Dibromo-3-chloropropane	70.0 U	U	ug/L	70.0	SW846 8260D	10	12/07/2023 18:28	AHI	A
1,2-Dibromoethane	10.0 U	U	ug/L	10.0	SW846 8260D	10	12/07/2023 18:28	AHI	A
1,2-Dichlorobenzene	10.0 U	U	ug/L	10.0	SW846 8260D	10	12/07/2023 18:28	AHI	A
1,2-Dichloroethane	10.0 U	U	ug/L	10.0	SW846 8260D	10	12/07/2023 18:28	AHI	A
1,2-Dichloropropane	10.0 U	U	ug/L	10.0	SW846 8260D	10	12/07/2023 18:28	AHI	A
1,3-Dichlorobenzene	10.0 U	U	ug/L	10.0	SW846 8260D	10	12/07/2023 18:28	AHI	A
1,3-Dichloropropane	10.0 U	U	ug/L	10.0	SW846 8260D	10	12/07/2023 18:28	AHI	A
1,4-Dichlorobenzene	10.0 U	U	ug/L	10.0	SW846 8260D	10	12/07/2023 18:28	AHI	A
2,2-Dichloropropane	10.0 U	U	ug/L	10.0	SW846 8260D	10	12/07/2023 18:28	AHI	A
2-Butanone	100 U	U	ug/L	100	SW846 8260D	10	12/07/2023 18:28	AHI	A
2-Hexanone	50.0 U	U	ug/L	50.0	SW846 8260D	10	12/07/2023 18:28	AHI	A
4-Methyl-2-Pentanone(MIBK)	50.0 U	U	ug/L	50.0	SW846 8260D	10	12/07/2023 18:28	AHI	A
Acetone	100 U	U	ug/L	100	SW846 8260D	10	12/07/2023 18:28	AHI	A
Benzene	10.0 U	U	ug/L	10.0	SW846 8260D	10	12/07/2023 18:28	AHI	A
Bromobenzene	10.0 U	U	ug/L	10.0	SW846 8260D	10	12/07/2023 18:28	AHI	A
Bromochloromethane	10.0 U	U	ug/L	10.0	SW846 8260D	10	12/07/2023 18:28	AHI	A
Bromodichloromethane	10.0 U	U	ug/L	10.0	SW846 8260D	10	12/07/2023 18:28	AHI	A
Bromoform	10.0 U	U	ug/L	10.0	SW846 8260D	10	12/07/2023 18:28	AHI	A
Bromomethane	10.0 U	U	ug/L	10.0	SW846 8260D	10	12/07/2023 18:28	AHI	A
Carbon Tetrachloride	10.0 U	U	ug/L	10.0	SW846 8260D	10	12/07/2023 18:28	AHI	A
Chlorobenzene	10.0 U	U	ug/L	10.0	SW846 8260D	10	12/07/2023 18:28	AHI	A
Chlorodibromomethane	10.0 U	U	ug/L	10.0	SW846 8260D	10	12/07/2023 18:28	AHI	A
Chloroethane	10.0 U	U,1,2	ug/L	10.0	SW846 8260D	10	12/07/2023 18:28	AHI	A



## Results

Client Sample ID	MW-24D	Collected	12/04/2023 13:45
Lab Sample ID	3335524001	Lab Receipt	12/04/2023 18:15

### VOLATILE ORGANICS (cont.)

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
Chloroform	10.0 U	U	ug/L	10.0	SW846 8260D	10	12/07/2023 18:28	AHI	A
Chloromethane	10.0 U	U	ug/L	10.0	SW846 8260D	10	12/07/2023 18:28	AHI	A
cis-1,2-Dichloroethene	10.0 U	U	ug/L	10.0	SW846 8260D	10	12/07/2023 18:28	AHI	A
cis-1,3-Dichloropropene	10.0 U	U	ug/L	10.0	SW846 8260D	10	12/07/2023 18:28	AHI	A
Dibromomethane	10.0 U	U	ug/L	10.0	SW846 8260D	10	12/07/2023 18:28	AHI	A
Dichlorodifluoromethane	10.0 U	U	ug/L	10.0	SW846 8260D	10	12/07/2023 18:28	AHI	A
Diisopropyl ether	10.0 U	U	ug/L	10.0	SW846 8260D	10	12/07/2023 18:28	AHI	A
Ethylbenzene	10.0 U	U	ug/L	10.0	SW846 8260D	10	12/07/2023 18:28	AHI	A
Hexachlorobutadiene	50.0 U	U	ug/L	50.0	SW846 8260D	10	12/07/2023 18:28	AHI	A
Methyl t-Butyl Ether	10.0 U	U	ug/L	10.0	SW846 8260D	10	12/07/2023 18:28	AHI	A
Methylene Chloride	10.0 U	U	ug/L	10.0	SW846 8260D	10	12/07/2023 18:28	AHI	A
mp-Xylene	20.0 U	U	ug/L	20.0	SW846 8260D	10	12/07/2023 18:28	AHI	A
Naphthalene	20.0 U	U	ug/L	20.0	SW846 8260D	10	12/07/2023 18:28	AHI	A
o-Chlorotoluene	10.0 U	U	ug/L	10.0	SW846 8260D	10	12/07/2023 18:28	AHI	A
o-Xylene	10.0 U	U	ug/L	10.0	SW846 8260D	10	12/07/2023 18:28	AHI	A
p-Chlorotoluene	10.0 U	U	ug/L	10.0	SW846 8260D	10	12/07/2023 18:28	AHI	A
p-Isopropyltoluene	10.0 U	U	ug/L	10.0	SW846 8260D	10	12/07/2023 18:28	AHI	A
Styrene	10.0 U	U	ug/L	10.0	SW846 8260D	10	12/07/2023 18:28	AHI	A
Tetrachloroethene	10.0 U	U	ug/L	10.0	SW846 8260D	10	12/07/2023 18:28	AHI	A
Toluene	10.0 U	U	ug/L	10.0	SW846 8260D	10	12/07/2023 18:28	AHI	A
Total Xylenes	30.0 U	U	ug/L	30.0	SW846 8260D	10	12/07/2023 18:28	AHI	A
trans-1,2-Dichloroethene	10.0 U	U	ug/L	10.0	SW846 8260D	10	12/07/2023 18:28	AHI	A
trans-1,3-Dichloropropene	10.0 U	U	ug/L	10.0	SW846 8260D	10	12/07/2023 18:28	AHI	A
Trichloroethene	10.0 U	U	ug/L	10.0	SW846 8260D	10	12/07/2023 18:28	AHI	A
Trichlorofluoromethane	10.0 U	U	ug/L	10.0	SW846 8260D	10	12/07/2023 18:28	AHI	A
Vinyl Acetate	50.0 U	U	ug/L	50.0	SW846 8260D	10	12/07/2023 18:28	AHI	A
Vinyl Chloride	10.0 U	U	ug/L	10.0	SW846 8260D	10	12/07/2023 18:28	AHI	A

### SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
1,2-Dichloroethane-d4	17060-07-0	104%	62 - 133	12/07/2023 18:28	
4-Bromofluorobenzene	460-00-4	101%	79 - 114	12/07/2023 18:28	
Dibromofluoromethane	1868-53-7	103%	78 - 116	12/07/2023 18:28	
Toluene-d8	2037-26-5	103%	76 - 127	12/07/2023 18:28	





## Results

Client Sample ID	MW-25D-130	Collected	12/04/2023 12:00
Lab Sample ID	3335524002	Lab Receipt	12/04/2023 18:15

### SEMIVOLATILE SIM

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
1,4-Dioxane	28.4		ug/L	2.5	SW846 8270E SIM	1	12/06/2023 21:51	M1O	C

### SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
2-Methylnapthalene-d10	7297-45-2	65.5%	29 - 112	12/06/2023 21:51	
Fluoranthene-d10	93951-69-0	71.2%	45 - 130	12/06/2023 21:51	

### VOLATILE ORGANICS

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
1,1,1,2-Tetrachloroethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/07/2023 13:02	AHI	A
1,1,1-Trichloroethane	6.2		ug/L	1.0	SW846 8260D	1	12/07/2023 13:02	AHI	A
1,1,2,2-Tetrachloroethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/07/2023 13:02	AHI	A
1,1,2-Trichloroethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/07/2023 13:02	AHI	A
1,1-Dichloroethane	6.9		ug/L	1.0	SW846 8260D	1	12/07/2023 13:02	AHI	A
1,1-Dichloroethene	110		ug/L	1.0	SW846 8260D	1	12/07/2023 13:02	AHI	A
1,1-Dichloropropene	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/07/2023 13:02	AHI	A
1,2,3-Trichlorobenzene	2.0 U	U	ug/L	2.0	SW846 8260D	1	12/07/2023 13:02	AHI	A
1,2,3-Trichloropropane	2.0 U	U	ug/L	2.0	SW846 8260D	1	12/07/2023 13:02	AHI	A
1,2,4-Trichlorobenzene	2.0 U	U	ug/L	2.0	SW846 8260D	1	12/07/2023 13:02	AHI	A
1,2-Dibromo-3-chloropropane	7.0 U	U	ug/L	7.0	SW846 8260D	1	12/07/2023 13:02	AHI	A
1,2-Dibromoethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/07/2023 13:02	AHI	A
1,2-Dichlorobenzene	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/07/2023 13:02	AHI	A
1,2-Dichloroethane	1.1		ug/L	1.0	SW846 8260D	1	12/07/2023 13:02	AHI	A
1,2-Dichloropropane	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/07/2023 13:02	AHI	A
1,3-Dichlorobenzene	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/07/2023 13:02	AHI	A
1,3-Dichloropropane	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/07/2023 13:02	AHI	A
1,4-Dichlorobenzene	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/07/2023 13:02	AHI	A
2,2-Dichloropropane	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/07/2023 13:02	AHI	A
2-Butanone	10.0 U	U	ug/L	10.0	SW846 8260D	1	12/07/2023 13:02	AHI	A
2-Hexanone	5.0 U	U	ug/L	5.0	SW846 8260D	1	12/07/2023 13:02	AHI	A
4-Methyl-2-Pentanone(MIBK)	5.0 U	U	ug/L	5.0	SW846 8260D	1	12/07/2023 13:02	AHI	A
Acetone	10.0 U	U	ug/L	10.0	SW846 8260D	1	12/07/2023 13:02	AHI	A
Benzene	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/07/2023 13:02	AHI	A
Bromobenzene	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/07/2023 13:02	AHI	A
Bromochloromethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/07/2023 13:02	AHI	A
Bromodichloromethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/07/2023 13:02	AHI	A
Bromoform	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/07/2023 13:02	AHI	A
Bromomethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/07/2023 13:02	AHI	A
Carbon Tetrachloride	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/07/2023 13:02	AHI	A
Chlorobenzene	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/07/2023 13:02	AHI	A
Chlorodibromomethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/07/2023 13:02	AHI	A
Chloroethane	1.0 U	U,1,2	ug/L	1.0	SW846 8260D	1	12/07/2023 13:02	AHI	A
Chloroform	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/07/2023 13:02	AHI	A
Chloromethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/07/2023 13:02	AHI	A



## Results

Client Sample ID	MW-25D-130	Collected	12/04/2023 12:00
Lab Sample ID	3335524002	Lab Receipt	12/04/2023 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	12/07/2023 13:02	AHI	A
cis-1,3-Dichloropropene	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/07/2023 13:02	AHI	A
Dibromomethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/07/2023 13:02	AHI	A
Dichlorodifluoromethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/07/2023 13:02	AHI	A
Diisopropyl ether	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/07/2023 13:02	AHI	A
Ethylbenzene	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/07/2023 13:02	AHI	A
Hexachlorobutadiene	5.0 U	U	ug/L	5.0	SW846 8260D	1	12/07/2023 13:02	AHI	A
Methyl t-Butyl Ether	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/07/2023 13:02	AHI	A
Methylene Chloride	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/07/2023 13:02	AHI	A
mp-Xylene	2.0 U	U	ug/L	2.0	SW846 8260D	1	12/07/2023 13:02	AHI	A
Naphthalene	2.0 U	U	ug/L	2.0	SW846 8260D	1	12/07/2023 13:02	AHI	A
o-Chlorotoluene	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/07/2023 13:02	AHI	A
o-Xylene	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/07/2023 13:02	AHI	A
p-Chlorotoluene	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/07/2023 13:02	AHI	A
p-Isopropyltoluene	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/07/2023 13:02	AHI	A
Styrene	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/07/2023 13:02	AHI	A
Tetrachloroethene	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/07/2023 13:02	AHI	A
Toluene	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/07/2023 13:02	AHI	A
Total Xylenes	3.0 U	U	ug/L	3.0	SW846 8260D	1	12/07/2023 13:02	AHI	A
trans-1,2-Dichloroethene	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/07/2023 13:02	AHI	A
trans-1,3-Dichloropropene	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/07/2023 13:02	AHI	A
Trichloroethene	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/07/2023 13:02	AHI	A
Trichlorofluoromethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/07/2023 13:02	AHI	A
Vinyl Acetate	5.0 U	U	ug/L	5.0	SW846 8260D	1	12/07/2023 13:02	AHI	A
Vinyl Chloride	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/07/2023 13:02	AHI	A

### SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
1,2-Dichloroethane-d4	17060-07-0	104 %	62 – 133	12/07/2023 13:02	
4-Bromofluorobenzene	460-00-4	105 %	79 – 114	12/07/2023 13:02	
Dibromofluoromethane	1868-53-7	102 %	78 – 116	12/07/2023 13:02	
Toluene-d8	2037-26-5	103 %	76 – 127	12/07/2023 13:02	



## Results

Client Sample ID	MW-25D-190	Collected	12/04/2023 12:15
Lab Sample ID	3335524003	Lab Receipt	12/04/2023 18:15

### SEMIVOLATILE SIM

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
1,4-Dioxane	9.4	13	ug/L	5.0	SW846 8270E SIM	1	12/06/2023 22:17	M1O	C

### SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
2-Methylnapthalene-d10	7297-45-2	59%	29 - 112	12/06/2023 22:17	
Fluoranthene-d10	93951-69-0	67.2%	45 - 130	12/06/2023 22:17	

### VOLATILE ORGANICS

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
1,1,1,2-Tetrachloroethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/07/2023 13:25	AHI	A
1,1,1-Trichloroethane	3.9		ug/L	1.0	SW846 8260D	1	12/07/2023 13:25	AHI	A
1,1,2,2-Tetrachloroethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/07/2023 13:25	AHI	A
1,1,2-Trichloroethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/07/2023 13:25	AHI	A
1,1-Dichloroethane	8.4	6	ug/L	1.0	SW846 8260D	1	12/07/2023 13:25	AHI	A
1,1-Dichloroethene	36.5	7	ug/L	1.0	SW846 8260D	1	12/07/2023 13:25	AHI	A
1,1-Dichloropropene	1.0 U	U,10	ug/L	1.0	SW846 8260D	1	12/07/2023 13:25	AHI	A
1,2,3-Trichlorobenzene	2.0 U	U	ug/L	2.0	SW846 8260D	1	12/07/2023 13:25	AHI	A
1,2,3-Trichloropropane	2.0 U	U	ug/L	2.0	SW846 8260D	1	12/07/2023 13:25	AHI	A
1,2,4-Trichlorobenzene	2.0 U	U	ug/L	2.0	SW846 8260D	1	12/07/2023 13:25	AHI	A
1,2-Dibromo-3-chloropropane	7.0 U	U	ug/L	7.0	SW846 8260D	1	12/07/2023 13:25	AHI	A
1,2-Dibromoethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/07/2023 13:25	AHI	A
1,2-Dichlorobenzene	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/07/2023 13:25	AHI	A
1,2-Dichloroethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/07/2023 13:25	AHI	A
1,2-Dichloropropane	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/07/2023 13:25	AHI	A
1,3-Dichlorobenzene	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/07/2023 13:25	AHI	A
1,3-Dichloropropane	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/07/2023 13:25	AHI	A
1,4-Dichlorobenzene	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/07/2023 13:25	AHI	A
2,2-Dichloropropane	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/07/2023 13:25	AHI	A
2-Butanone	10.0 U	U	ug/L	10.0	SW846 8260D	1	12/07/2023 13:25	AHI	A
2-Hexanone	5.0 U	U	ug/L	5.0	SW846 8260D	1	12/07/2023 13:25	AHI	A
4-Methyl-2-Pentanone(MIBK)	5.0 U	U	ug/L	5.0	SW846 8260D	1	12/07/2023 13:25	AHI	A
Acetone	10.0 U	U	ug/L	10.0	SW846 8260D	1	12/07/2023 13:25	AHI	A
Benzene	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/07/2023 13:25	AHI	A
Bromobenzene	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/07/2023 13:25	AHI	A
Bromochloromethane	1.0 U	U,5	ug/L	1.0	SW846 8260D	1	12/07/2023 13:25	AHI	A
Bromodichloromethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/07/2023 13:25	AHI	A
Bromoform	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/07/2023 13:25	AHI	A
Bromomethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/07/2023 13:25	AHI	A
Carbon Tetrachloride	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/07/2023 13:25	AHI	A
Chlorobenzene	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/07/2023 13:25	AHI	A
Chlorodibromomethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/07/2023 13:25	AHI	A
Chloroethane	1.0 U	U,1,2	ug/L	1.0	SW846 8260D	1	12/07/2023 13:25	AHI	A
Chloroform	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/07/2023 13:25	AHI	A
Chloromethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/07/2023 13:25	AHI	A



## Results

Client Sample ID	MW-25D-190	Collected	12/04/2023 12:15
Lab Sample ID	3335524003	Lab Receipt	12/04/2023 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,8	ug/L	1.0	SW846 8260D	1	12/07/2023 13:25	AHI	A
cis-1,3-Dichloropropene	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/07/2023 13:25	AHI	A
Dibromomethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/07/2023 13:25	AHI	A
Dichlorodifluoromethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/07/2023 13:25	AHI	A
Diisopropyl ether	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/07/2023 13:25	AHI	A
Ethylbenzene	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/07/2023 13:25	AHI	A
Hexachlorobutadiene	5.0 U	U	ug/L	5.0	SW846 8260D	1	12/07/2023 13:25	AHI	A
Methyl t-Butyl Ether	1.2	11,12	ug/L	1.0	SW846 8260D	1	12/07/2023 13:25	AHI	A
Methylene Chloride	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/07/2023 13:25	AHI	A
mp-Xylene	2.0 U	U	ug/L	2.0	SW846 8260D	1	12/07/2023 13:25	AHI	A
Naphthalene	2.0 U	U	ug/L	2.0	SW846 8260D	1	12/07/2023 13:25	AHI	A
o-Chlorotoluene	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/07/2023 13:25	AHI	A
o-Xylene	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/07/2023 13:25	AHI	A
p-Chlorotoluene	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/07/2023 13:25	AHI	A
p-Isopropyltoluene	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/07/2023 13:25	AHI	A
Styrene	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/07/2023 13:25	AHI	A
Tetrachloroethene	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/07/2023 13:25	AHI	A
Toluene	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/07/2023 13:25	AHI	A
Total Xylenes	3.0 U	U	ug/L	3.0	SW846 8260D	1	12/07/2023 13:25	AHI	A
trans-1,2-Dichloroethene	1.0 U	U,9	ug/L	1.0	SW846 8260D	1	12/07/2023 13:25	AHI	A
trans-1,3-Dichloropropene	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/07/2023 13:25	AHI	A
Trichloroethene	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/07/2023 13:25	AHI	A
Trichlorofluoromethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/07/2023 13:25	AHI	A
Vinyl Acetate	5.0 U	U	ug/L	5.0	SW846 8260D	1	12/07/2023 13:25	AHI	A
Vinyl Chloride	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/07/2023 13:25	AHI	A

### SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
1,2-Dichloroethane-d4	17060-07-0	104%	62 – 133	12/07/2023 13:25	
4-Bromofluorobenzene	460-00-4	106%	79 – 114	12/07/2023 13:25	
Dibromofluoromethane	1868-53-7	100%	78 – 116	12/07/2023 13:25	
Toluene-d8	2037-26-5	101%	76 – 127	12/07/2023 13:25	



## Results

Client Sample ID	MW-28D	Collected	12/04/2023 11:20
Lab Sample ID	3335524004	Lab Receipt	12/04/2023 18:15

### SEMIVOLATILE SIM

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
1,4-Dioxane	3.8		ug/L	1.0	SW846 8270E SIM	1	12/06/2023 23:35	M1O	C

### SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
2-Methylnaphthalene-d10	7297-45-2	66.8%	29 – 112	12/06/2023 23:35	
Fluoranthene-d10	93951-69-0	83.8%	45 – 130	12/06/2023 23:35	

### VOLATILE ORGANICS

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
1,1,1,2-Tetrachloroethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/07/2023 13:48	AHI	A
1,1,1-Trichloroethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/07/2023 13:48	AHI	A
1,1,2,2-Tetrachloroethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/07/2023 13:48	AHI	A
1,1,2-Trichloroethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/07/2023 13:48	AHI	A
1,1-Dichloroethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/07/2023 13:48	AHI	A
1,1-Dichloroethene	13.3		ug/L	1.0	SW846 8260D	1	12/07/2023 13:48	AHI	A
1,1-Dichloropropene	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/07/2023 13:48	AHI	A
1,2,3-Trichlorobenzene	2.0 U	U	ug/L	2.0	SW846 8260D	1	12/07/2023 13:48	AHI	A
1,2,3-Trichloropropane	2.0 U	U	ug/L	2.0	SW846 8260D	1	12/07/2023 13:48	AHI	A
1,2,4-Trichlorobenzene	2.0 U	U	ug/L	2.0	SW846 8260D	1	12/07/2023 13:48	AHI	A
1,2-Dibromo-3-chloropropane	7.0 U	U	ug/L	7.0	SW846 8260D	1	12/07/2023 13:48	AHI	A
1,2-Dibromoethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/07/2023 13:48	AHI	A
1,2-Dichlorobenzene	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/07/2023 13:48	AHI	A
1,2-Dichloroethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/07/2023 13:48	AHI	A
1,2-Dichloropropane	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/07/2023 13:48	AHI	A
1,3-Dichlorobenzene	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/07/2023 13:48	AHI	A
1,3-Dichloropropane	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/07/2023 13:48	AHI	A
1,4-Dichlorobenzene	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/07/2023 13:48	AHI	A
2,2-Dichloropropane	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/07/2023 13:48	AHI	A
2-Butanone	10.0 U	U	ug/L	10.0	SW846 8260D	1	12/07/2023 13:48	AHI	A
2-Hexanone	5.0 U	U	ug/L	5.0	SW846 8260D	1	12/07/2023 13:48	AHI	A
4-Methyl-2-Pentanone(MIBK)	5.0 U	U	ug/L	5.0	SW846 8260D	1	12/07/2023 13:48	AHI	A
Acetone	10.0 U	U	ug/L	10.0	SW846 8260D	1	12/07/2023 13:48	AHI	A
Benzene	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/07/2023 13:48	AHI	A
Bromobenzene	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/07/2023 13:48	AHI	A
Bromochloromethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/07/2023 13:48	AHI	A
Bromodichloromethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/07/2023 13:48	AHI	A
Bromoform	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/07/2023 13:48	AHI	A
Bromomethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/07/2023 13:48	AHI	A
Carbon Tetrachloride	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/07/2023 13:48	AHI	A
Chlorobenzene	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/07/2023 13:48	AHI	A
Chlorodibromomethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/07/2023 13:48	AHI	A
Chloroethane	1.0 U	U,1,2	ug/L	1.0	SW846 8260D	1	12/07/2023 13:48	AHI	A
Chloroform	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/07/2023 13:48	AHI	A
Chloromethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/07/2023 13:48	AHI	A



## Results

Client Sample ID	MW-28D	Collected	12/04/2023 11:20
Lab Sample ID	3335524004	Lab Receipt	12/04/2023 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	12/07/2023 13:48	AHI	A
cis-1,3-Dichloropropene	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/07/2023 13:48	AHI	A
Dibromomethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/07/2023 13:48	AHI	A
Dichlorodifluoromethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/07/2023 13:48	AHI	A
Diisopropyl ether	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/07/2023 13:48	AHI	A
Ethylbenzene	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/07/2023 13:48	AHI	A
Hexachlorobutadiene	5.0 U	U	ug/L	5.0	SW846 8260D	1	12/07/2023 13:48	AHI	A
Methyl t-Butyl Ether	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/07/2023 13:48	AHI	A
Methylene Chloride	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/07/2023 13:48	AHI	A
mp-Xylene	2.0 U	U	ug/L	2.0	SW846 8260D	1	12/07/2023 13:48	AHI	A
Naphthalene	2.0 U	U	ug/L	2.0	SW846 8260D	1	12/07/2023 13:48	AHI	A
o-Chlorotoluene	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/07/2023 13:48	AHI	A
o-Xylene	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/07/2023 13:48	AHI	A
p-Chlorotoluene	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/07/2023 13:48	AHI	A
p-Isopropyltoluene	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/07/2023 13:48	AHI	A
Styrene	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/07/2023 13:48	AHI	A
Tetrachloroethene	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/07/2023 13:48	AHI	A
Toluene	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/07/2023 13:48	AHI	A
Total Xylenes	3.0 U	U	ug/L	3.0	SW846 8260D	1	12/07/2023 13:48	AHI	A
trans-1,2-Dichloroethene	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/07/2023 13:48	AHI	A
trans-1,3-Dichloropropene	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/07/2023 13:48	AHI	A
Trichloroethene	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/07/2023 13:48	AHI	A
Trichlorofluoromethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/07/2023 13:48	AHI	A
Vinyl Acetate	5.0 U	U	ug/L	5.0	SW846 8260D	1	12/07/2023 13:48	AHI	A
Vinyl Chloride	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/07/2023 13:48	AHI	A

### SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
1,2-Dichloroethane-d4	17060-07-0	105%	62 - 133	12/07/2023 13:48	
4-Bromofluorobenzene	460-00-4	104%	79 - 114	12/07/2023 13:48	
Dibromofluoromethane	1868-53-7	102%	78 - 116	12/07/2023 13:48	
Toluene-d8	2037-26-5	103%	76 - 127	12/07/2023 13:48	



## Results

Client Sample ID	MW-29D	Collected	12/04/2023 10:45
Lab Sample ID	3335524005	Lab Receipt	12/04/2023 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	12/07/2023 00:02	M1O	C

#### SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
2-Methylnapthalene-d10	7297-45-2	62.9%	29 - 112	12/07/2023 00:02	
Fluoranthene-d10	93951-69-0	76.4%	45 - 130	12/07/2023 00:02	

### VOLATILE ORGANICS

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
1,1,1,2-Tetrachloroethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/07/2023 14:12	AHI	A
1,1,1-Trichloroethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/07/2023 14:12	AHI	A
1,1,2,2-Tetrachloroethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/07/2023 14:12	AHI	A
1,1,2-Trichloroethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/07/2023 14:12	AHI	A
1,1-Dichloroethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/07/2023 14:12	AHI	A
1,1-Dichloroethene	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/07/2023 14:12	AHI	A
1,1-Dichloropropene	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/07/2023 14:12	AHI	A
1,2,3-Trichlorobenzene	2.0 U	U	ug/L	2.0	SW846 8260D	1	12/07/2023 14:12	AHI	A
1,2,3-Trichloropropane	2.0 U	U	ug/L	2.0	SW846 8260D	1	12/07/2023 14:12	AHI	A
1,2,4-Trichlorobenzene	2.0 U	U	ug/L	2.0	SW846 8260D	1	12/07/2023 14:12	AHI	A
1,2-Dibromo-3-chloropropane	7.0 U	U	ug/L	7.0	SW846 8260D	1	12/07/2023 14:12	AHI	A
1,2-Dibromoethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/07/2023 14:12	AHI	A
1,2-Dichlorobenzene	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/07/2023 14:12	AHI	A
1,2-Dichloroethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/07/2023 14:12	AHI	A
1,2-Dichloropropane	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/07/2023 14:12	AHI	A
1,3-Dichlorobenzene	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/07/2023 14:12	AHI	A
1,3-Dichloropropane	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/07/2023 14:12	AHI	A
1,4-Dichlorobenzene	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/07/2023 14:12	AHI	A
2,2-Dichloropropane	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/07/2023 14:12	AHI	A
2-Butanone	10.0 U	U	ug/L	10.0	SW846 8260D	1	12/07/2023 14:12	AHI	A
2-Hexanone	5.0 U	U	ug/L	5.0	SW846 8260D	1	12/07/2023 14:12	AHI	A
4-Methyl-2-Pentanone(MIBK)	5.0 U	U	ug/L	5.0	SW846 8260D	1	12/07/2023 14:12	AHI	A
Acetone	10.0 U	U	ug/L	10.0	SW846 8260D	1	12/07/2023 14:12	AHI	A
Benzene	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/07/2023 14:12	AHI	A
Bromobenzene	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/07/2023 14:12	AHI	A
Bromochloromethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/07/2023 14:12	AHI	A
Bromodichloromethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/07/2023 14:12	AHI	A
Bromoform	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/07/2023 14:12	AHI	A
Bromomethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/07/2023 14:12	AHI	A
Carbon Tetrachloride	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/07/2023 14:12	AHI	A
Chlorobenzene	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/07/2023 14:12	AHI	A
Chlorodibromomethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/07/2023 14:12	AHI	A
Chloroethane	1.0 U	U,1,2	ug/L	1.0	SW846 8260D	1	12/07/2023 14:12	AHI	A
Chloroform	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/07/2023 14:12	AHI	A
Chloromethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/07/2023 14:12	AHI	A



## Results

Client Sample ID	MW-29D	Collected	12/04/2023 10:45
Lab Sample ID	3335524005	Lab Receipt	12/04/2023 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	12/07/2023 14:12	AHI	A
cis-1,3-Dichloropropene	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/07/2023 14:12	AHI	A
Dibromomethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/07/2023 14:12	AHI	A
Dichlorodifluoromethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/07/2023 14:12	AHI	A
Diisopropyl ether	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/07/2023 14:12	AHI	A
Ethylbenzene	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/07/2023 14:12	AHI	A
Hexachlorobutadiene	5.0 U	U	ug/L	5.0	SW846 8260D	1	12/07/2023 14:12	AHI	A
Methyl t-Butyl Ether	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/07/2023 14:12	AHI	A
Methylene Chloride	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/07/2023 14:12	AHI	A
mp-Xylene	2.0 U	U	ug/L	2.0	SW846 8260D	1	12/07/2023 14:12	AHI	A
Naphthalene	2.0 U	U	ug/L	2.0	SW846 8260D	1	12/07/2023 14:12	AHI	A
o-Chlorotoluene	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/07/2023 14:12	AHI	A
o-Xylene	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/07/2023 14:12	AHI	A
p-Chlorotoluene	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/07/2023 14:12	AHI	A
p-Isopropyltoluene	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/07/2023 14:12	AHI	A
Styrene	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/07/2023 14:12	AHI	A
Tetrachloroethene	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/07/2023 14:12	AHI	A
Toluene	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/07/2023 14:12	AHI	A
Total Xylenes	3.0 U	U	ug/L	3.0	SW846 8260D	1	12/07/2023 14:12	AHI	A
trans-1,2-Dichloroethene	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/07/2023 14:12	AHI	A
trans-1,3-Dichloropropene	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/07/2023 14:12	AHI	A
Trichloroethene	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/07/2023 14:12	AHI	A
Trichlorofluoromethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/07/2023 14:12	AHI	A
Vinyl Acetate	5.0 U	U	ug/L	5.0	SW846 8260D	1	12/07/2023 14:12	AHI	A
Vinyl Chloride	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/07/2023 14:12	AHI	A

### SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
1,2-Dichloroethane-d4	17060-07-0	103%	62 – 133	12/07/2023 14:12	
4-Bromofluorobenzene	460-00-4	101%	79 – 114	12/07/2023 14:12	
Dibromofluoromethane	1868-53-7	101%	78 – 116	12/07/2023 14:12	
Toluene-d8	2037-26-5	101%	76 – 127	12/07/2023 14:12	





## Results

Client Sample ID	MW-30D-273	Collected	12/04/2023 10:20
Lab Sample ID	3335524006	Lab Receipt	12/04/2023 18:15

### SEMIVOLATILE SIM

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
1,4-Dioxane	9.6		ug/L	1.0	SW846 8270E SIM	1	12/07/2023 00:28	M1O	C

#### SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
2-Methylnapthalene-d10	7297-45-2	58.3%	29 - 112	12/07/2023 00:28	
Fluoranthene-d10	93951-69-0	80.3%	45 - 130	12/07/2023 00:28	

### VOLATILE ORGANICS

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
1,1,1,2-Tetrachloroethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/07/2023 14:35	AHI	A
1,1,1-Trichloroethane	1.7		ug/L	1.0	SW846 8260D	1	12/07/2023 14:35	AHI	A
1,1,2,2-Tetrachloroethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/07/2023 14:35	AHI	A
1,1,2-Trichloroethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/07/2023 14:35	AHI	A
1,1-Dichloroethane	1.3		ug/L	1.0	SW846 8260D	1	12/07/2023 14:35	AHI	A
1,1-Dichloroethene	51.0		ug/L	1.0	SW846 8260D	1	12/07/2023 14:35	AHI	A
1,1-Dichloropropene	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/07/2023 14:35	AHI	A
1,2,3-Trichlorobenzene	2.0 U	U	ug/L	2.0	SW846 8260D	1	12/07/2023 14:35	AHI	A
1,2,3-Trichloropropane	2.0 U	U	ug/L	2.0	SW846 8260D	1	12/07/2023 14:35	AHI	A
1,2,4-Trichlorobenzene	2.0 U	U	ug/L	2.0	SW846 8260D	1	12/07/2023 14:35	AHI	A
1,2-Dibromo-3-chloropropane	7.0 U	U	ug/L	7.0	SW846 8260D	1	12/07/2023 14:35	AHI	A
1,2-Dibromoethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/07/2023 14:35	AHI	A
1,2-Dichlorobenzene	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/07/2023 14:35	AHI	A
1,2-Dichloroethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/07/2023 14:35	AHI	A
1,2-Dichloropropane	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/07/2023 14:35	AHI	A
1,3-Dichlorobenzene	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/07/2023 14:35	AHI	A
1,3-Dichloropropane	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/07/2023 14:35	AHI	A
1,4-Dichlorobenzene	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/07/2023 14:35	AHI	A
2,2-Dichloropropane	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/07/2023 14:35	AHI	A
2-Butanone	10.0 U	U	ug/L	10.0	SW846 8260D	1	12/07/2023 14:35	AHI	A
2-Hexanone	5.0 U	U	ug/L	5.0	SW846 8260D	1	12/07/2023 14:35	AHI	A
4-Methyl-2-Pentanone(MIBK)	5.0 U	U	ug/L	5.0	SW846 8260D	1	12/07/2023 14:35	AHI	A
Acetone	10.0 U	U	ug/L	10.0	SW846 8260D	1	12/07/2023 14:35	AHI	A
Benzene	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/07/2023 14:35	AHI	A
Bromobenzene	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/07/2023 14:35	AHI	A
Bromochloromethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/07/2023 14:35	AHI	A
Bromodichloromethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/07/2023 14:35	AHI	A
Bromoform	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/07/2023 14:35	AHI	A
Bromomethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/07/2023 14:35	AHI	A
Carbon Tetrachloride	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/07/2023 14:35	AHI	A
Chlorobenzene	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/07/2023 14:35	AHI	A
Chlorodibromomethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/07/2023 14:35	AHI	A
Chloroethane	1.0 U	U,1,2	ug/L	1.0	SW846 8260D	1	12/07/2023 14:35	AHI	A
Chloroform	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/07/2023 14:35	AHI	A
Chloromethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/07/2023 14:35	AHI	A



## Results

Client Sample ID	MW-30D-273	Collected	12/04/2023 10:20
Lab Sample ID	3335524006	Lab Receipt	12/04/2023 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	12/07/2023 14:35	AHI	A
cis-1,3-Dichloropropene	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/07/2023 14:35	AHI	A
Dibromomethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/07/2023 14:35	AHI	A
Dichlorodifluoromethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/07/2023 14:35	AHI	A
Diisopropyl ether	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/07/2023 14:35	AHI	A
Ethylbenzene	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/07/2023 14:35	AHI	A
Hexachlorobutadiene	5.0 U	U	ug/L	5.0	SW846 8260D	1	12/07/2023 14:35	AHI	A
Methyl t-Butyl Ether	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/07/2023 14:35	AHI	A
Methylene Chloride	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/07/2023 14:35	AHI	A
mp-Xylene	2.0 U	U	ug/L	2.0	SW846 8260D	1	12/07/2023 14:35	AHI	A
Naphthalene	2.0 U	U	ug/L	2.0	SW846 8260D	1	12/07/2023 14:35	AHI	A
o-Chlorotoluene	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/07/2023 14:35	AHI	A
o-Xylene	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/07/2023 14:35	AHI	A
p-Chlorotoluene	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/07/2023 14:35	AHI	A
p-Isopropyltoluene	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/07/2023 14:35	AHI	A
Styrene	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/07/2023 14:35	AHI	A
Tetrachloroethene	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/07/2023 14:35	AHI	A
Toluene	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/07/2023 14:35	AHI	A
Total Xylenes	3.0 U	U	ug/L	3.0	SW846 8260D	1	12/07/2023 14:35	AHI	A
trans-1,2-Dichloroethene	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/07/2023 14:35	AHI	A
trans-1,3-Dichloropropene	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/07/2023 14:35	AHI	A
Trichloroethene	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/07/2023 14:35	AHI	A
Trichlorofluoromethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/07/2023 14:35	AHI	A
Vinyl Acetate	5.0 U	U	ug/L	5.0	SW846 8260D	1	12/07/2023 14:35	AHI	A
Vinyl Chloride	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/07/2023 14:35	AHI	A

### SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
1,2-Dichloroethane-d4	17060-07-0	103%	62 – 133	12/07/2023 14:35	
4-Bromofluorobenzene	460-00-4	104%	79 – 114	12/07/2023 14:35	
Dibromofluoromethane	1868-53-7	101%	78 – 116	12/07/2023 14:35	
Toluene-d8	2037-26-5	102%	76 – 127	12/07/2023 14:35	



## Results

Client Sample ID	MW-30D-413	Collected	12/04/2023 10:30
Lab Sample ID	3335524007	Lab Receipt	12/04/2023 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	12/07/2023 00:54	M1O	C

#### SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
2-Methylnaphthalene-d10	7297-45-2	60%	29 - 112	12/07/2023 00:54	
Fluoranthene-d10	93951-69-0	75.7%	45 - 130	12/07/2023 00:54	

### VOLATILE ORGANICS

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
1,1,1,2-Tetrachloroethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/07/2023 14:58	AHI	A
1,1,1-Trichloroethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/07/2023 14:58	AHI	A
1,1,2,2-Tetrachloroethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/07/2023 14:58	AHI	A
1,1,2-Trichloroethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/07/2023 14:58	AHI	A
1,1-Dichloroethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/07/2023 14:58	AHI	A
1,1-Dichloroethene	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/07/2023 14:58	AHI	A
1,1-Dichloropropene	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/07/2023 14:58	AHI	A
1,2,3-Trichlorobenzene	2.0 U	U	ug/L	2.0	SW846 8260D	1	12/07/2023 14:58	AHI	A
1,2,3-Trichloropropane	2.0 U	U	ug/L	2.0	SW846 8260D	1	12/07/2023 14:58	AHI	A
1,2,4-Trichlorobenzene	2.0 U	U	ug/L	2.0	SW846 8260D	1	12/07/2023 14:58	AHI	A
1,2-Dibromo-3-chloropropane	7.0 U	U	ug/L	7.0	SW846 8260D	1	12/07/2023 14:58	AHI	A
1,2-Dibromoethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/07/2023 14:58	AHI	A
1,2-Dichlorobenzene	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/07/2023 14:58	AHI	A
1,2-Dichloroethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/07/2023 14:58	AHI	A
1,2-Dichloropropane	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/07/2023 14:58	AHI	A
1,3-Dichlorobenzene	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/07/2023 14:58	AHI	A
1,3-Dichloropropane	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/07/2023 14:58	AHI	A
1,4-Dichlorobenzene	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/07/2023 14:58	AHI	A
2,2-Dichloropropane	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/07/2023 14:58	AHI	A
2-Butanone	10.0 U	U	ug/L	10.0	SW846 8260D	1	12/07/2023 14:58	AHI	A
2-Hexanone	5.0 U	U	ug/L	5.0	SW846 8260D	1	12/07/2023 14:58	AHI	A
4-Methyl-2-Pentanone(MIBK)	5.0 U	U	ug/L	5.0	SW846 8260D	1	12/07/2023 14:58	AHI	A
Acetone	10.0 U	U	ug/L	10.0	SW846 8260D	1	12/07/2023 14:58	AHI	A
Benzene	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/07/2023 14:58	AHI	A
Bromobenzene	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/07/2023 14:58	AHI	A
Bromochloromethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/07/2023 14:58	AHI	A
Bromodichloromethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/07/2023 14:58	AHI	A
Bromoform	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/07/2023 14:58	AHI	A
Bromomethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/07/2023 14:58	AHI	A
Carbon Tetrachloride	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/07/2023 14:58	AHI	A
Chlorobenzene	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/07/2023 14:58	AHI	A
Chlorodibromomethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/07/2023 14:58	AHI	A
Chloroethane	1.0 U	U,1,2	ug/L	1.0	SW846 8260D	1	12/07/2023 14:58	AHI	A
Chloroform	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/07/2023 14:58	AHI	A
Chloromethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/07/2023 14:58	AHI	A



## Results

Client Sample ID	MW-30D-413	Collected	12/04/2023 10:30
Lab Sample ID	3335524007	Lab Receipt	12/04/2023 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	12/07/2023 14:58	AHI	A
cis-1,3-Dichloropropene	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/07/2023 14:58	AHI	A
Dibromomethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/07/2023 14:58	AHI	A
Dichlorodifluoromethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/07/2023 14:58	AHI	A
Diisopropyl ether	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/07/2023 14:58	AHI	A
Ethylbenzene	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/07/2023 14:58	AHI	A
Hexachlorobutadiene	5.0 U	U	ug/L	5.0	SW846 8260D	1	12/07/2023 14:58	AHI	A
Methyl t-Butyl Ether	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/07/2023 14:58	AHI	A
Methylene Chloride	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/07/2023 14:58	AHI	A
mp-Xylene	2.0 U	U	ug/L	2.0	SW846 8260D	1	12/07/2023 14:58	AHI	A
Naphthalene	2.0 U	U	ug/L	2.0	SW846 8260D	1	12/07/2023 14:58	AHI	A
o-Chlorotoluene	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/07/2023 14:58	AHI	A
o-Xylene	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/07/2023 14:58	AHI	A
p-Chlorotoluene	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/07/2023 14:58	AHI	A
p-Isopropyltoluene	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/07/2023 14:58	AHI	A
Styrene	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/07/2023 14:58	AHI	A
Tetrachloroethene	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/07/2023 14:58	AHI	A
Toluene	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/07/2023 14:58	AHI	A
Total Xylenes	3.0 U	U	ug/L	3.0	SW846 8260D	1	12/07/2023 14:58	AHI	A
trans-1,2-Dichloroethene	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/07/2023 14:58	AHI	A
trans-1,3-Dichloropropene	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/07/2023 14:58	AHI	A
Trichloroethene	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/07/2023 14:58	AHI	A
Trichlorofluoromethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/07/2023 14:58	AHI	A
Vinyl Acetate	5.0 U	U	ug/L	5.0	SW846 8260D	1	12/07/2023 14:58	AHI	A
Vinyl Chloride	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/07/2023 14:58	AHI	A

### SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
1,2-Dichloroethane-d4	17060-07-0	102%	62 – 133	12/07/2023 14:58	
4-Bromofluorobenzene	460-00-4	101%	79 – 114	12/07/2023 14:58	
Dibromofluoromethane	1868-53-7	102%	78 – 116	12/07/2023 14:58	
Toluene-d8	2037-26-5	102%	76 – 127	12/07/2023 14:58	



## Results

Client Sample ID	MW-31D	Collected	12/04/2023 10:00
Lab Sample ID	3335524008	Lab Receipt	12/04/2023 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	12/07/2023 01:20	M1O	C

#### SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
2-Methylnapthalene-d10	7297-45-2	59.6%	29 – 112	12/07/2023 01:20	
Fluoranthene-d10	93951-69-0	78.7%	45 – 130	12/07/2023 01:20	

### VOLATILE ORGANICS

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
1,1,1,2-Tetrachloroethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/07/2023 15:22	AHI	A
1,1,1-Trichloroethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/07/2023 15:22	AHI	A
1,1,2,2-Tetrachloroethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/07/2023 15:22	AHI	A
1,1,2-Trichloroethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/07/2023 15:22	AHI	A
1,1-Dichloroethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/07/2023 15:22	AHI	A
1,1-Dichloroethene	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/07/2023 15:22	AHI	A
1,1-Dichloropropene	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/07/2023 15:22	AHI	A
1,2,3-Trichlorobenzene	2.0 U	U	ug/L	2.0	SW846 8260D	1	12/07/2023 15:22	AHI	A
1,2,3-Trichloropropane	2.0 U	U	ug/L	2.0	SW846 8260D	1	12/07/2023 15:22	AHI	A
1,2,4-Trichlorobenzene	2.0 U	U	ug/L	2.0	SW846 8260D	1	12/07/2023 15:22	AHI	A
1,2-Dibromo-3-chloropropane	7.0 U	U	ug/L	7.0	SW846 8260D	1	12/07/2023 15:22	AHI	A
1,2-Dibromoethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/07/2023 15:22	AHI	A
1,2-Dichlorobenzene	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/07/2023 15:22	AHI	A
1,2-Dichloroethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/07/2023 15:22	AHI	A
1,2-Dichloropropane	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/07/2023 15:22	AHI	A
1,3-Dichlorobenzene	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/07/2023 15:22	AHI	A
1,3-Dichloropropane	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/07/2023 15:22	AHI	A
1,4-Dichlorobenzene	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/07/2023 15:22	AHI	A
2,2-Dichloropropane	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/07/2023 15:22	AHI	A
2-Butanone	10.0 U	U	ug/L	10.0	SW846 8260D	1	12/07/2023 15:22	AHI	A
2-Hexanone	5.0 U	U	ug/L	5.0	SW846 8260D	1	12/07/2023 15:22	AHI	A
4-Methyl-2-Pentanone(MIBK)	5.0 U	U	ug/L	5.0	SW846 8260D	1	12/07/2023 15:22	AHI	A
Acetone	10.0 U	U	ug/L	10.0	SW846 8260D	1	12/07/2023 15:22	AHI	A
Benzene	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/07/2023 15:22	AHI	A
Bromobenzene	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/07/2023 15:22	AHI	A
Bromochloromethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/07/2023 15:22	AHI	A
Bromodichloromethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/07/2023 15:22	AHI	A
Bromoform	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/07/2023 15:22	AHI	A
Bromomethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/07/2023 15:22	AHI	A
Carbon Tetrachloride	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/07/2023 15:22	AHI	A
Chlorobenzene	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/07/2023 15:22	AHI	A
Chlorodibromomethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/07/2023 15:22	AHI	A
Chloroethane	1.0 U	U,1,2	ug/L	1.0	SW846 8260D	1	12/07/2023 15:22	AHI	A
Chloroform	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/07/2023 15:22	AHI	A
Chloromethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/07/2023 15:22	AHI	A



## Results

Client Sample ID	MW-31D	Collected	12/04/2023 10:00
Lab Sample ID	3335524008	Lab Receipt	12/04/2023 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	12/07/2023 15:22	AHI	A
cis-1,3-Dichloropropene	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/07/2023 15:22	AHI	A
Dibromomethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/07/2023 15:22	AHI	A
Dichlorodifluoromethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/07/2023 15:22	AHI	A
Diisopropyl ether	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/07/2023 15:22	AHI	A
Ethylbenzene	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/07/2023 15:22	AHI	A
Hexachlorobutadiene	5.0 U	U	ug/L	5.0	SW846 8260D	1	12/07/2023 15:22	AHI	A
Methyl t-Butyl Ether	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/07/2023 15:22	AHI	A
Methylene Chloride	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/07/2023 15:22	AHI	A
mp-Xylene	2.0 U	U	ug/L	2.0	SW846 8260D	1	12/07/2023 15:22	AHI	A
Naphthalene	2.0 U	U	ug/L	2.0	SW846 8260D	1	12/07/2023 15:22	AHI	A
o-Chlorotoluene	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/07/2023 15:22	AHI	A
o-Xylene	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/07/2023 15:22	AHI	A
p-Chlorotoluene	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/07/2023 15:22	AHI	A
p-Isopropyltoluene	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/07/2023 15:22	AHI	A
Styrene	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/07/2023 15:22	AHI	A
Tetrachloroethene	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/07/2023 15:22	AHI	A
Toluene	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/07/2023 15:22	AHI	A
Total Xylenes	3.0 U	U	ug/L	3.0	SW846 8260D	1	12/07/2023 15:22	AHI	A
trans-1,2-Dichloroethene	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/07/2023 15:22	AHI	A
trans-1,3-Dichloropropene	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/07/2023 15:22	AHI	A
Trichloroethene	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/07/2023 15:22	AHI	A
Trichlorofluoromethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/07/2023 15:22	AHI	A
Vinyl Acetate	5.0 U	U	ug/L	5.0	SW846 8260D	1	12/07/2023 15:22	AHI	A
Vinyl Chloride	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/07/2023 15:22	AHI	A

### SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
1,2-Dichloroethane-d4	17060-07-0	103%	62 - 133	12/07/2023 15:22	
4-Bromofluorobenzene	460-00-4	101%	79 - 114	12/07/2023 15:22	
Dibromofluoromethane	1868-53-7	102%	78 - 116	12/07/2023 15:22	
Toluene-d8	2037-26-5	104%	76 - 127	12/07/2023 15:22	



## Results

Client Sample ID	MW-32D	Collected	12/04/2023 11:10
Lab Sample ID	3335524009	Lab Receipt	12/04/2023 18:15

### SEMIVOLATILE SIM

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
1,4-Dioxane	1.0 U	U,S1	ug/L	1.0	SW846 8270E SIM	1	12/07/2023 01:46	M1O	C

#### SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
2-Methylnaphthalene-d10	7297-45-2	39.1%	29 – 112	12/07/2023 01:46	
Fluoranthene-d10	93951-69-0	72%	45 – 130	12/07/2023 01:46	

### VOLATILE ORGANICS

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
1,1,1,2-Tetrachloroethane	5.0 U	U,S1	ug/L	5.0	SW846 8260D	5	12/07/2023 16:32	AHI	A
1,1,1-Trichloroethane	5.0 U	U,S1	ug/L	5.0	SW846 8260D	5	12/07/2023 16:32	AHI	A
1,1,2,2-Tetrachloroethane	5.0 U	U,S1	ug/L	5.0	SW846 8260D	5	12/07/2023 16:32	AHI	A
1,1,2-Trichloroethane	5.0 U	U,S1	ug/L	5.0	SW846 8260D	5	12/07/2023 16:32	AHI	A
1,1-Dichloroethane	5.0 U	U,S1	ug/L	5.0	SW846 8260D	5	12/07/2023 16:32	AHI	A
1,1-Dichloroethene	5.0 U	U,S1	ug/L	5.0	SW846 8260D	5	12/07/2023 16:32	AHI	A
1,1-Dichloropropene	5.0 U	U,S1	ug/L	5.0	SW846 8260D	5	12/07/2023 16:32	AHI	A
1,2,3-Trichlorobenzene	10.0 U	U,S1	ug/L	10.0	SW846 8260D	5	12/07/2023 16:32	AHI	A
1,2,3-Trichloropropane	10.0 U	U,S1	ug/L	10.0	SW846 8260D	5	12/07/2023 16:32	AHI	A
1,2,4-Trichlorobenzene	10.0 U	U,S1	ug/L	10.0	SW846 8260D	5	12/07/2023 16:32	AHI	A
1,2-Dibromo-3-chloropropane	35.0 U	U,S1	ug/L	35.0	SW846 8260D	5	12/07/2023 16:32	AHI	A
1,2-Dibromoethane	5.0 U	U,S1	ug/L	5.0	SW846 8260D	5	12/07/2023 16:32	AHI	A
1,2-Dichlorobenzene	5.0 U	U,S1	ug/L	5.0	SW846 8260D	5	12/07/2023 16:32	AHI	A
1,2-Dichloroethane	5.0 U	U,S1	ug/L	5.0	SW846 8260D	5	12/07/2023 16:32	AHI	A
1,2-Dichloropropane	5.0 U	U,S1	ug/L	5.0	SW846 8260D	5	12/07/2023 16:32	AHI	A
1,3-Dichlorobenzene	5.0 U	U,S1	ug/L	5.0	SW846 8260D	5	12/07/2023 16:32	AHI	A
1,3-Dichloropropane	5.0 U	U,S1	ug/L	5.0	SW846 8260D	5	12/07/2023 16:32	AHI	A
1,4-Dichlorobenzene	5.0 U	U,S1	ug/L	5.0	SW846 8260D	5	12/07/2023 16:32	AHI	A
2,2-Dichloropropane	5.0 U	U,S1	ug/L	5.0	SW846 8260D	5	12/07/2023 16:32	AHI	A
2-Butanone	50.0 U	U,S1	ug/L	50.0	SW846 8260D	5	12/07/2023 16:32	AHI	A
2-Hexanone	25.0 U	U,S1	ug/L	25.0	SW846 8260D	5	12/07/2023 16:32	AHI	A
4-Methyl-2-Pentanone(MIBK)	25.0 U	U,S1	ug/L	25.0	SW846 8260D	5	12/07/2023 16:32	AHI	A
Acetone	50.0 U	U,S1	ug/L	50.0	SW846 8260D	5	12/07/2023 16:32	AHI	A
Benzene	5.0 U	U,S1	ug/L	5.0	SW846 8260D	5	12/07/2023 16:32	AHI	A
Bromobenzene	5.0 U	U,S1	ug/L	5.0	SW846 8260D	5	12/07/2023 16:32	AHI	A
Bromochloromethane	5.0 U	U,S1	ug/L	5.0	SW846 8260D	5	12/07/2023 16:32	AHI	A
Bromodichloromethane	5.0 U	U,S1	ug/L	5.0	SW846 8260D	5	12/07/2023 16:32	AHI	A
Bromoform	5.0 U	U,S1	ug/L	5.0	SW846 8260D	5	12/07/2023 16:32	AHI	A
Bromomethane	5.0 U	U,S1	ug/L	5.0	SW846 8260D	5	12/07/2023 16:32	AHI	A
Carbon Tetrachloride	5.0 U	U,S1	ug/L	5.0	SW846 8260D	5	12/07/2023 16:32	AHI	A
Chlorobenzene	5.0 U	U,S1	ug/L	5.0	SW846 8260D	5	12/07/2023 16:32	AHI	A
Chlorodibromomethane	5.0 U	U,S1	ug/L	5.0	SW846 8260D	5	12/07/2023 16:32	AHI	A
Chloroethane	5.0 U	U,1,2,S1	ug/L	5.0	SW846 8260D	5	12/07/2023 16:32	AHI	A
Chloroform	5.0 U	U,S1	ug/L	5.0	SW846 8260D	5	12/07/2023 16:32	AHI	A
Chloromethane	5.0 U	U,S1	ug/L	5.0	SW846 8260D	5	12/07/2023 16:32	AHI	A



## Results

Client Sample ID	MW-32D	Collected	12/04/2023 11:10
Lab Sample ID	3335524009	Lab Receipt	12/04/2023 18:15

### VOLATILE ORGANICS (cont.)

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
cis-1,2-Dichloroethene	5.0 U	U,S1	ug/L	5.0	SW846 8260D	5	12/07/2023 16:32	AHI	A
cis-1,3-Dichloropropene	5.0 U	U,S1	ug/L	5.0	SW846 8260D	5	12/07/2023 16:32	AHI	A
Dibromomethane	5.0 U	U,S1	ug/L	5.0	SW846 8260D	5	12/07/2023 16:32	AHI	A
Dichlorodifluoromethane	5.0 U	U,S1	ug/L	5.0	SW846 8260D	5	12/07/2023 16:32	AHI	A
Diisopropyl ether	5.0 U	U,S1	ug/L	5.0	SW846 8260D	5	12/07/2023 16:32	AHI	A
Ethylbenzene	5.0 U	U,S1	ug/L	5.0	SW846 8260D	5	12/07/2023 16:32	AHI	A
Hexachlorobutadiene	25.0 U	U,S1	ug/L	25.0	SW846 8260D	5	12/07/2023 16:32	AHI	A
Methyl t-Butyl Ether	5.0 U	U,S1	ug/L	5.0	SW846 8260D	5	12/07/2023 16:32	AHI	A
Methylene Chloride	5.0 U	U,S1	ug/L	5.0	SW846 8260D	5	12/07/2023 16:32	AHI	A
mp-Xylene	10.0 U	U,S1	ug/L	10.0	SW846 8260D	5	12/07/2023 16:32	AHI	A
Naphthalene	10.0 U	U,S1	ug/L	10.0	SW846 8260D	5	12/07/2023 16:32	AHI	A
o-Chlorotoluene	5.0 U	U,S1	ug/L	5.0	SW846 8260D	5	12/07/2023 16:32	AHI	A
o-Xylene	5.0 U	U,S1	ug/L	5.0	SW846 8260D	5	12/07/2023 16:32	AHI	A
p-Chlorotoluene	5.0 U	U,S1	ug/L	5.0	SW846 8260D	5	12/07/2023 16:32	AHI	A
p-Isopropyltoluene	5.0 U	U,S1	ug/L	5.0	SW846 8260D	5	12/07/2023 16:32	AHI	A
Styrene	5.0 U	U,S1	ug/L	5.0	SW846 8260D	5	12/07/2023 16:32	AHI	A
Tetrachloroethene	5.0 U	U,S1	ug/L	5.0	SW846 8260D	5	12/07/2023 16:32	AHI	A
Toluene	5.0 U	U,S1	ug/L	5.0	SW846 8260D	5	12/07/2023 16:32	AHI	A
Total Xylenes	15.0 U	U,S1	ug/L	15.0	SW846 8260D	5	12/07/2023 16:32	AHI	A
trans-1,2-Dichloroethene	5.0 U	U,S1	ug/L	5.0	SW846 8260D	5	12/07/2023 16:32	AHI	A
trans-1,3-Dichloropropene	5.0 U	U,S1	ug/L	5.0	SW846 8260D	5	12/07/2023 16:32	AHI	A
Trichloroethene	5.0 U	U,S1	ug/L	5.0	SW846 8260D	5	12/07/2023 16:32	AHI	A
Trichlorofluoromethane	5.0 U	U,S1	ug/L	5.0	SW846 8260D	5	12/07/2023 16:32	AHI	A
Vinyl Acetate	25.0 U	U,S1	ug/L	25.0	SW846 8260D	5	12/07/2023 16:32	AHI	A
Vinyl Chloride	5.0 U	U,S1	ug/L	5.0	SW846 8260D	5	12/07/2023 16:32	AHI	A

### SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
1,2-Dichloroethane-d4	17060-07-0	104%	62 - 133	12/07/2023 16:32	
4-Bromofluorobenzene	460-00-4	102%	79 - 114	12/07/2023 16:32	
Dibromofluoromethane	1868-53-7	104%	78 - 116	12/07/2023 16:32	
Toluene-d8	2037-26-5	103%	76 - 127	12/07/2023 16:32	





## Results

Client Sample ID	MW-33D-235	Collected	12/04/2023 09:25
Lab Sample ID	3335524010	Lab Receipt	12/04/2023 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	12/07/2023 02:13	M1O	C

#### SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
2-Methylnapthalene-d10	7297-45-2	62.1%	29 - 112	12/07/2023 02:13	
Fluoranthene-d10	93951-69-0	76.2%	45 - 130	12/07/2023 02:13	

### VOLATILE ORGANICS

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
1,1,1,2-Tetrachloroethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/07/2023 15:45	AHI	A
1,1,1-Trichloroethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/07/2023 15:45	AHI	A
1,1,2,2-Tetrachloroethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/07/2023 15:45	AHI	A
1,1,2-Trichloroethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/07/2023 15:45	AHI	A
1,1-Dichloroethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/07/2023 15:45	AHI	A
1,1-Dichloroethene	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/07/2023 15:45	AHI	A
1,1-Dichloropropene	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/07/2023 15:45	AHI	A
1,2,3-Trichlorobenzene	2.0 U	U	ug/L	2.0	SW846 8260D	1	12/07/2023 15:45	AHI	A
1,2,3-Trichloropropane	2.0 U	U	ug/L	2.0	SW846 8260D	1	12/07/2023 15:45	AHI	A
1,2,4-Trichlorobenzene	2.0 U	U	ug/L	2.0	SW846 8260D	1	12/07/2023 15:45	AHI	A
1,2-Dibromo-3-chloropropane	7.0 U	U	ug/L	7.0	SW846 8260D	1	12/07/2023 15:45	AHI	A
1,2-Dibromoethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/07/2023 15:45	AHI	A
1,2-Dichlorobenzene	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/07/2023 15:45	AHI	A
1,2-Dichloroethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/07/2023 15:45	AHI	A
1,2-Dichloropropane	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/07/2023 15:45	AHI	A
1,3-Dichlorobenzene	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/07/2023 15:45	AHI	A
1,3-Dichloropropane	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/07/2023 15:45	AHI	A
1,4-Dichlorobenzene	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/07/2023 15:45	AHI	A
2,2-Dichloropropane	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/07/2023 15:45	AHI	A
2-Butanone	10.0 U	U	ug/L	10.0	SW846 8260D	1	12/07/2023 15:45	AHI	A
2-Hexanone	5.0 U	U	ug/L	5.0	SW846 8260D	1	12/07/2023 15:45	AHI	A
4-Methyl-2-Pentanone(MIBK)	5.0 U	U	ug/L	5.0	SW846 8260D	1	12/07/2023 15:45	AHI	A
Acetone	10.0 U	U	ug/L	10.0	SW846 8260D	1	12/07/2023 15:45	AHI	A
Benzene	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/07/2023 15:45	AHI	A
Bromobenzene	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/07/2023 15:45	AHI	A
Bromochloromethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/07/2023 15:45	AHI	A
Bromodichloromethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/07/2023 15:45	AHI	A
Bromoform	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/07/2023 15:45	AHI	A
Bromomethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/07/2023 15:45	AHI	A
Carbon Tetrachloride	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/07/2023 15:45	AHI	A
Chlorobenzene	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/07/2023 15:45	AHI	A
Chlorodibromomethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/07/2023 15:45	AHI	A
Chloroethane	1.0 U	U,1,2	ug/L	1.0	SW846 8260D	1	12/07/2023 15:45	AHI	A
Chloroform	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/07/2023 15:45	AHI	A
Chloromethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/07/2023 15:45	AHI	A



## Results

Client Sample ID	MW-33D-235	Collected	12/04/2023 09:25
Lab Sample ID	3335524010	Lab Receipt	12/04/2023 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	12/07/2023 15:45	AHI	A
cis-1,3-Dichloropropene	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/07/2023 15:45	AHI	A
Dibromomethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/07/2023 15:45	AHI	A
Dichlorodifluoromethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/07/2023 15:45	AHI	A
Diisopropyl ether	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/07/2023 15:45	AHI	A
Ethylbenzene	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/07/2023 15:45	AHI	A
Hexachlorobutadiene	5.0 U	U	ug/L	5.0	SW846 8260D	1	12/07/2023 15:45	AHI	A
Methyl t-Butyl Ether	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/07/2023 15:45	AHI	A
Methylene Chloride	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/07/2023 15:45	AHI	A
mp-Xylene	2.0 U	U	ug/L	2.0	SW846 8260D	1	12/07/2023 15:45	AHI	A
Naphthalene	2.0 U	U	ug/L	2.0	SW846 8260D	1	12/07/2023 15:45	AHI	A
o-Chlorotoluene	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/07/2023 15:45	AHI	A
o-Xylene	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/07/2023 15:45	AHI	A
p-Chlorotoluene	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/07/2023 15:45	AHI	A
p-Isopropyltoluene	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/07/2023 15:45	AHI	A
Styrene	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/07/2023 15:45	AHI	A
Tetrachloroethene	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/07/2023 15:45	AHI	A
Toluene	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/07/2023 15:45	AHI	A
Total Xylenes	3.0 U	U	ug/L	3.0	SW846 8260D	1	12/07/2023 15:45	AHI	A
trans-1,2-Dichloroethene	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/07/2023 15:45	AHI	A
trans-1,3-Dichloropropene	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/07/2023 15:45	AHI	A
Trichloroethene	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/07/2023 15:45	AHI	A
Trichlorofluoromethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/07/2023 15:45	AHI	A
Vinyl Acetate	5.0 U	U	ug/L	5.0	SW846 8260D	1	12/07/2023 15:45	AHI	A
Vinyl Chloride	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/07/2023 15:45	AHI	A

### SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
1,2-Dichloroethane-d4	17060-07-0	102%	62 – 133	12/07/2023 15:45	
4-Bromofluorobenzene	460-00-4	102%	79 – 114	12/07/2023 15:45	
Dibromofluoromethane	1868-53-7	101%	78 – 116	12/07/2023 15:45	
Toluene-d8	2037-26-5	102%	76 – 127	12/07/2023 15:45	



## Results

Client Sample ID	MW-33D-295	Collected	12/04/2023 09:30
Lab Sample ID	3335524011	Lab Receipt	12/04/2023 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	12/07/2023 02:39	M1O	C

### SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
2-Methylnapthalene-d10	7297-45-2	65.9%	29 – 112	12/07/2023 02:39	
Fluoranthene-d10	93951-69-0	87.2%	45 – 130	12/07/2023 02:39	

### VOLATILE ORGANICS

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
1,1,1,2-Tetrachloroethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/07/2023 16:08	AHI	A
1,1,1-Trichloroethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/07/2023 16:08	AHI	A
1,1,2,2-Tetrachloroethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/07/2023 16:08	AHI	A
1,1,2-Trichloroethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/07/2023 16:08	AHI	A
1,1-Dichloroethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/07/2023 16:08	AHI	A
1,1-Dichloroethene	8.9		ug/L	1.0	SW846 8260D	1	12/07/2023 16:08	AHI	A
1,1-Dichloropropene	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/07/2023 16:08	AHI	A
1,2,3-Trichlorobenzene	2.0 U	U	ug/L	2.0	SW846 8260D	1	12/07/2023 16:08	AHI	A
1,2,3-Trichloropropane	2.0 U	U	ug/L	2.0	SW846 8260D	1	12/07/2023 16:08	AHI	A
1,2,4-Trichlorobenzene	2.0 U	U	ug/L	2.0	SW846 8260D	1	12/07/2023 16:08	AHI	A
1,2-Dibromo-3-chloropropane	7.0 U	U	ug/L	7.0	SW846 8260D	1	12/07/2023 16:08	AHI	A
1,2-Dibromoethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/07/2023 16:08	AHI	A
1,2-Dichlorobenzene	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/07/2023 16:08	AHI	A
1,2-Dichloroethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/07/2023 16:08	AHI	A
1,2-Dichloropropane	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/07/2023 16:08	AHI	A
1,3-Dichlorobenzene	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/07/2023 16:08	AHI	A
1,3-Dichloropropane	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/07/2023 16:08	AHI	A
1,4-Dichlorobenzene	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/07/2023 16:08	AHI	A
2,2-Dichloropropane	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/07/2023 16:08	AHI	A
2-Butanone	10.0 U	U	ug/L	10.0	SW846 8260D	1	12/07/2023 16:08	AHI	A
2-Hexanone	5.0 U	U	ug/L	5.0	SW846 8260D	1	12/07/2023 16:08	AHI	A
4-Methyl-2-Pentanone(MIBK)	5.0 U	U	ug/L	5.0	SW846 8260D	1	12/07/2023 16:08	AHI	A
Acetone	10.0 U	U	ug/L	10.0	SW846 8260D	1	12/07/2023 16:08	AHI	A
Benzene	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/07/2023 16:08	AHI	A
Bromobenzene	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/07/2023 16:08	AHI	A
Bromochloromethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/07/2023 16:08	AHI	A
Bromodichloromethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/07/2023 16:08	AHI	A
Bromoform	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/07/2023 16:08	AHI	A
Bromomethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/07/2023 16:08	AHI	A
Carbon Tetrachloride	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/07/2023 16:08	AHI	A
Chlorobenzene	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/07/2023 16:08	AHI	A
Chlorodibromomethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/07/2023 16:08	AHI	A
Chloroethane	1.0 U	U,1,2	ug/L	1.0	SW846 8260D	1	12/07/2023 16:08	AHI	A
Chloroform	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/07/2023 16:08	AHI	A
Chloromethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/07/2023 16:08	AHI	A



## Results

Client Sample ID	MW-33D-295	Collected	12/04/2023 09:30
Lab Sample ID	3335524011	Lab Receipt	12/04/2023 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	12/07/2023 16:08	AHI	A
cis-1,3-Dichloropropene	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/07/2023 16:08	AHI	A
Dibromomethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/07/2023 16:08	AHI	A
Dichlorodifluoromethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/07/2023 16:08	AHI	A
Diisopropyl ether	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/07/2023 16:08	AHI	A
Ethylbenzene	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/07/2023 16:08	AHI	A
Hexachlorobutadiene	5.0 U	U	ug/L	5.0	SW846 8260D	1	12/07/2023 16:08	AHI	A
Methyl t-Butyl Ether	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/07/2023 16:08	AHI	A
Methylene Chloride	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/07/2023 16:08	AHI	A
mp-Xylene	2.0 U	U	ug/L	2.0	SW846 8260D	1	12/07/2023 16:08	AHI	A
Naphthalene	2.0 U	U	ug/L	2.0	SW846 8260D	1	12/07/2023 16:08	AHI	A
o-Chlorotoluene	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/07/2023 16:08	AHI	A
o-Xylene	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/07/2023 16:08	AHI	A
p-Chlorotoluene	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/07/2023 16:08	AHI	A
p-Isopropyltoluene	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/07/2023 16:08	AHI	A
Styrene	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/07/2023 16:08	AHI	A
Tetrachloroethene	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/07/2023 16:08	AHI	A
Toluene	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/07/2023 16:08	AHI	A
Total Xylenes	3.0 U	U	ug/L	3.0	SW846 8260D	1	12/07/2023 16:08	AHI	A
trans-1,2-Dichloroethene	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/07/2023 16:08	AHI	A
trans-1,3-Dichloropropene	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/07/2023 16:08	AHI	A
Trichloroethene	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/07/2023 16:08	AHI	A
Trichlorofluoromethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/07/2023 16:08	AHI	A
Vinyl Acetate	5.0 U	U	ug/L	5.0	SW846 8260D	1	12/07/2023 16:08	AHI	A
Vinyl Chloride	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/07/2023 16:08	AHI	A

### SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
1,2-Dichloroethane-d4	17060-07-0	103%	62 – 133	12/07/2023 16:08	
4-Bromofluorobenzene	460-00-4	106%	79 – 114	12/07/2023 16:08	
Dibromofluoromethane	1868-53-7	102%	78 – 116	12/07/2023 16:08	
Toluene-d8	2037-26-5	103%	76 – 127	12/07/2023 16:08	



## Results

Client Sample ID	MW-34D	Collected	12/04/2023 09:05
Lab Sample ID	3335524012	Lab Receipt	12/04/2023 18:15

### SEMIVOLATILE SIM

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
1,4-Dioxane	1.0 U	U,S2	ug/L	1.0	SW846 8270E SIM	1	12/07/2023 03:31	M1O	C

### SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
2-Methylnaphthalene-d10	7297-45-2	41.5%	29 - 112	12/07/2023 03:31	
Fluoranthene-d10	93951-69-0	81.9%	45 - 130	12/07/2023 03:31	

### VOLATILE ORGANICS

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
1,1,1,2-Tetrachloroethane	5.0 U	U,S2	ug/L	5.0	SW846 8260D	5	12/07/2023 16:55	AHI	A
1,1,1-Trichloroethane	5.0 U	U,S2	ug/L	5.0	SW846 8260D	5	12/07/2023 16:55	AHI	A
1,1,2,2-Tetrachloroethane	5.0 U	U,S2	ug/L	5.0	SW846 8260D	5	12/07/2023 16:55	AHI	A
1,1,2-Trichloroethane	5.0 U	U,S2	ug/L	5.0	SW846 8260D	5	12/07/2023 16:55	AHI	A
1,1-Dichloroethane	5.0 U	U,S2	ug/L	5.0	SW846 8260D	5	12/07/2023 16:55	AHI	A
1,1-Dichloroethene	5.0 U	U,S2	ug/L	5.0	SW846 8260D	5	12/07/2023 16:55	AHI	A
1,1-Dichloropropene	5.0 U	U,S2	ug/L	5.0	SW846 8260D	5	12/07/2023 16:55	AHI	A
1,2,3-Trichlorobenzene	10.0 U	U,S2	ug/L	10.0	SW846 8260D	5	12/07/2023 16:55	AHI	A
1,2,3-Trichloropropane	10.0 U	U,S2	ug/L	10.0	SW846 8260D	5	12/07/2023 16:55	AHI	A
1,2,4-Trichlorobenzene	10.0 U	U,S2	ug/L	10.0	SW846 8260D	5	12/07/2023 16:55	AHI	A
1,2-Dibromo-3-chloropropane	35.0 U	U,S2	ug/L	35.0	SW846 8260D	5	12/07/2023 16:55	AHI	A
1,2-Dibromoethane	5.0 U	U,S2	ug/L	5.0	SW846 8260D	5	12/07/2023 16:55	AHI	A
1,2-Dichlorobenzene	5.0 U	U,S2	ug/L	5.0	SW846 8260D	5	12/07/2023 16:55	AHI	A
1,2-Dichloroethane	5.0 U	U,S2	ug/L	5.0	SW846 8260D	5	12/07/2023 16:55	AHI	A
1,2-Dichloropropane	5.0 U	U,S2	ug/L	5.0	SW846 8260D	5	12/07/2023 16:55	AHI	A
1,3-Dichlorobenzene	5.0 U	U,S2	ug/L	5.0	SW846 8260D	5	12/07/2023 16:55	AHI	A
1,3-Dichloropropane	5.0 U	U,S2	ug/L	5.0	SW846 8260D	5	12/07/2023 16:55	AHI	A
1,4-Dichlorobenzene	5.0 U	U,S2	ug/L	5.0	SW846 8260D	5	12/07/2023 16:55	AHI	A
2,2-Dichloropropane	5.0 U	U,S2	ug/L	5.0	SW846 8260D	5	12/07/2023 16:55	AHI	A
2-Butanone	50.0 U	U,S2	ug/L	50.0	SW846 8260D	5	12/07/2023 16:55	AHI	A
2-Hexanone	25.0 U	U,S2	ug/L	25.0	SW846 8260D	5	12/07/2023 16:55	AHI	A
4-Methyl-2-Pentanone(MIBK)	25.0 U	U,S2	ug/L	25.0	SW846 8260D	5	12/07/2023 16:55	AHI	A
Acetone	50.0 U	U,S2	ug/L	50.0	SW846 8260D	5	12/07/2023 16:55	AHI	A
Benzene	5.0 U	U,S2	ug/L	5.0	SW846 8260D	5	12/07/2023 16:55	AHI	A
Bromobenzene	5.0 U	U,S2	ug/L	5.0	SW846 8260D	5	12/07/2023 16:55	AHI	A
Bromochloromethane	5.0 U	U,S2	ug/L	5.0	SW846 8260D	5	12/07/2023 16:55	AHI	A
Bromodichloromethane	5.0 U	U,S2	ug/L	5.0	SW846 8260D	5	12/07/2023 16:55	AHI	A
Bromoform	5.0 U	U,S2	ug/L	5.0	SW846 8260D	5	12/07/2023 16:55	AHI	A
Bromomethane	5.0 U	U,S2	ug/L	5.0	SW846 8260D	5	12/07/2023 16:55	AHI	A
Carbon Tetrachloride	5.0 U	U,S2	ug/L	5.0	SW846 8260D	5	12/07/2023 16:55	AHI	A
Chlorobenzene	5.0 U	U,S2	ug/L	5.0	SW846 8260D	5	12/07/2023 16:55	AHI	A
Chlorodibromomethane	5.0 U	U,S2	ug/L	5.0	SW846 8260D	5	12/07/2023 16:55	AHI	A
Chloroethane	5.0 U	U,1,2,S2	ug/L	5.0	SW846 8260D	5	12/07/2023 16:55	AHI	A
Chloroform	5.0 U	U,S2	ug/L	5.0	SW846 8260D	5	12/07/2023 16:55	AHI	A
Chloromethane	5.0 U	U,S2	ug/L	5.0	SW846 8260D	5	12/07/2023 16:55	AHI	A



## Results

Client Sample ID	MW-34D	Collected	12/04/2023 09:05
Lab Sample ID	3335524012	Lab Receipt	12/04/2023 18:15

### VOLATILE ORGANICS (cont.)

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
cis-1,2-Dichloroethene	5.0 U	U,S2	ug/L	5.0	SW846 8260D	5	12/07/2023 16:55	AHI	A
cis-1,3-Dichloropropene	5.0 U	U,S2	ug/L	5.0	SW846 8260D	5	12/07/2023 16:55	AHI	A
Dibromomethane	5.0 U	U,S2	ug/L	5.0	SW846 8260D	5	12/07/2023 16:55	AHI	A
Dichlorodifluoromethane	5.0 U	U,S2	ug/L	5.0	SW846 8260D	5	12/07/2023 16:55	AHI	A
Diisopropyl ether	5.0 U	U,S2	ug/L	5.0	SW846 8260D	5	12/07/2023 16:55	AHI	A
Ethylbenzene	5.0 U	U,S2	ug/L	5.0	SW846 8260D	5	12/07/2023 16:55	AHI	A
Hexachlorobutadiene	25.0 U	U,S2	ug/L	25.0	SW846 8260D	5	12/07/2023 16:55	AHI	A
Methyl t-Butyl Ether	5.0 U	U,S2	ug/L	5.0	SW846 8260D	5	12/07/2023 16:55	AHI	A
Methylene Chloride	5.0 U	U,S2	ug/L	5.0	SW846 8260D	5	12/07/2023 16:55	AHI	A
mp-Xylene	10.0 U	U,S2	ug/L	10.0	SW846 8260D	5	12/07/2023 16:55	AHI	A
Naphthalene	10.0 U	U,S2	ug/L	10.0	SW846 8260D	5	12/07/2023 16:55	AHI	A
o-Chlorotoluene	5.0 U	U,S2	ug/L	5.0	SW846 8260D	5	12/07/2023 16:55	AHI	A
o-Xylene	5.0 U	U,S2	ug/L	5.0	SW846 8260D	5	12/07/2023 16:55	AHI	A
p-Chlorotoluene	5.0 U	U,S2	ug/L	5.0	SW846 8260D	5	12/07/2023 16:55	AHI	A
p-Isopropyltoluene	5.0 U	U,S2	ug/L	5.0	SW846 8260D	5	12/07/2023 16:55	AHI	A
Styrene	5.0 U	U,S2	ug/L	5.0	SW846 8260D	5	12/07/2023 16:55	AHI	A
Tetrachloroethene	5.0 U	U,S2	ug/L	5.0	SW846 8260D	5	12/07/2023 16:55	AHI	A
Toluene	5.0 U	U,S2	ug/L	5.0	SW846 8260D	5	12/07/2023 16:55	AHI	A
Total Xylenes	15.0 U	U,S2	ug/L	15.0	SW846 8260D	5	12/07/2023 16:55	AHI	A
trans-1,2-Dichloroethene	5.0 U	U,S2	ug/L	5.0	SW846 8260D	5	12/07/2023 16:55	AHI	A
trans-1,3-Dichloropropene	5.0 U	U,S2	ug/L	5.0	SW846 8260D	5	12/07/2023 16:55	AHI	A
Trichloroethene	5.0 U	U,S2	ug/L	5.0	SW846 8260D	5	12/07/2023 16:55	AHI	A
Trichlorofluoromethane	5.0 U	U,S2	ug/L	5.0	SW846 8260D	5	12/07/2023 16:55	AHI	A
Vinyl Acetate	25.0 U	U,S2	ug/L	25.0	SW846 8260D	5	12/07/2023 16:55	AHI	A
Vinyl Chloride	5.0 U	U,S2	ug/L	5.0	SW846 8260D	5	12/07/2023 16:55	AHI	A

### SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
1,2-Dichloroethane-d4	17060-07-0	105%	62 - 133	12/07/2023 16:55	
4-Bromofluorobenzene	460-00-4	101%	79 - 114	12/07/2023 16:55	
Dibromofluoromethane	1868-53-7	102%	78 - 116	12/07/2023 16:55	
Toluene-d8	2037-26-5	102%	76 - 127	12/07/2023 16:55	



## Results

Client Sample ID	MW-35D	Collected	12/04/2023 08:45
Lab Sample ID	3335524013	Lab Receipt	12/04/2023 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	12/07/2023 03:57	M10	C

### SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
2-Methylnapthalene-d10	7297-45-2	63.5%	29 - 112	12/07/2023 03:57	
Fluoranthene-d10	93951-69-0	70.3%	45 - 130	12/07/2023 03:57	

### VOLATILE ORGANICS

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
1,1,1,2-Tetrachloroethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/11/2023 16:29	ILY	A
1,1,1-Trichloroethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/11/2023 16:29	ILY	A
1,1,2,2-Tetrachloroethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/11/2023 16:29	ILY	A
1,1,2-Trichloroethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/11/2023 16:29	ILY	A
1,1-Dichloroethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/11/2023 16:29	ILY	A
1,1-Dichloroethene	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/11/2023 16:29	ILY	A
1,1-Dichloropropene	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/11/2023 16:29	ILY	A
1,2,3-Trichlorobenzene	2.0 U	U	ug/L	2.0	SW846 8260D	1	12/11/2023 16:29	ILY	A
1,2,3-Trichloropropane	2.0 U	U	ug/L	2.0	SW846 8260D	1	12/11/2023 16:29	ILY	A
1,2,4-Trichlorobenzene	2.0 U	U	ug/L	2.0	SW846 8260D	1	12/11/2023 16:29	ILY	A
1,2-Dibromo-3-chloropropane	7.0 U	U	ug/L	7.0	SW846 8260D	1	12/11/2023 16:29	ILY	A
1,2-Dibromoethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/11/2023 16:29	ILY	A
1,2-Dichlorobenzene	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/11/2023 16:29	ILY	A
1,2-Dichloroethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/11/2023 16:29	ILY	A
1,2-Dichloropropane	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/11/2023 16:29	ILY	A
1,3-Dichlorobenzene	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/11/2023 16:29	ILY	A
1,3-Dichloropropane	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/11/2023 16:29	ILY	A
1,4-Dichlorobenzene	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/11/2023 16:29	ILY	A
2,2-Dichloropropane	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/11/2023 16:29	ILY	A
2-Butanone	10.0 U	U	ug/L	10.0	SW846 8260D	1	12/11/2023 16:29	ILY	A
2-Hexanone	5.0 U	U	ug/L	5.0	SW846 8260D	1	12/11/2023 16:29	ILY	A
4-Methyl-2-Pentanone(MIBK)	5.0 U	U	ug/L	5.0	SW846 8260D	1	12/11/2023 16:29	ILY	A
Acetone	10.0 U	U	ug/L	10.0	SW846 8260D	1	12/11/2023 16:29	ILY	A
Benzene	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/11/2023 16:29	ILY	A
Bromobenzene	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/11/2023 16:29	ILY	A
Bromochloromethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/11/2023 16:29	ILY	A
Bromodichloromethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/11/2023 16:29	ILY	A
Bromoform	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/11/2023 16:29	ILY	A
Bromomethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/11/2023 16:29	ILY	A
Carbon Tetrachloride	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/11/2023 16:29	ILY	A
Chlorobenzene	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/11/2023 16:29	ILY	A
Chlorodibromomethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/11/2023 16:29	ILY	A
Chloroethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/11/2023 16:29	ILY	A
Chloroform	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/11/2023 16:29	ILY	A
Chloromethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/11/2023 16:29	ILY	A



## Results

Client Sample ID	MW-35D	Collected	12/04/2023 08:45
Lab Sample ID	3335524013	Lab Receipt	12/04/2023 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	12/11/2023 16:29	ILY	A
cis-1,3-Dichloropropene	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/11/2023 16:29	ILY	A
Dibromomethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/11/2023 16:29	ILY	A
Dichlorodifluoromethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/11/2023 16:29	ILY	A
Diisopropyl ether	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/11/2023 16:29	ILY	A
Ethylbenzene	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/11/2023 16:29	ILY	A
Hexachlorobutadiene	5.0 U	U	ug/L	5.0	SW846 8260D	1	12/11/2023 16:29	ILY	A
Methyl t-Butyl Ether	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/11/2023 16:29	ILY	A
Methylene Chloride	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/11/2023 16:29	ILY	A
mp-Xylene	2.0 U	U	ug/L	2.0	SW846 8260D	1	12/11/2023 16:29	ILY	A
Naphthalene	2.0 U	U	ug/L	2.0	SW846 8260D	1	12/11/2023 16:29	ILY	A
o-Chlorotoluene	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/11/2023 16:29	ILY	A
o-Xylene	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/11/2023 16:29	ILY	A
p-Chlorotoluene	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/11/2023 16:29	ILY	A
p-Isopropyltoluene	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/11/2023 16:29	ILY	A
Styrene	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/11/2023 16:29	ILY	A
Tetrachloroethene	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/11/2023 16:29	ILY	A
Toluene	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/11/2023 16:29	ILY	A
Total Xylenes	3.0 U	U	ug/L	3.0	SW846 8260D	1	12/11/2023 16:29	ILY	A
trans-1,2-Dichloroethene	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/11/2023 16:29	ILY	A
trans-1,3-Dichloropropene	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/11/2023 16:29	ILY	A
Trichloroethene	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/11/2023 16:29	ILY	A
Trichlorofluoromethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/11/2023 16:29	ILY	A
Vinyl Acetate	5.0 U	U	ug/L	5.0	SW846 8260D	1	12/11/2023 16:29	ILY	A
Vinyl Chloride	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/11/2023 16:29	ILY	A

### SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
1,2-Dichloroethane-d4	17060-07-0	105%	62 – 133	12/11/2023 16:29	
4-Bromofluorobenzene	460-00-4	85.5%	79 – 114	12/11/2023 16:29	
Dibromofluoromethane	1868-53-7	94.9%	78 – 116	12/11/2023 16:29	
Toluene-d8	2037-26-5	92.6%	76 – 127	12/11/2023 16:29	





## Results

Client Sample ID	MW-36D	Collected	12/04/2023 11:45
Lab Sample ID	3335524014	Lab Receipt	12/04/2023 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	12/07/2023 04:24	M1O	C

#### SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
2-Methylnapthalene-d10	7297-45-2	66.5%	29 - 112	12/07/2023 04:24	
Fluoranthene-d10	93951-69-0	79.5%	45 - 130	12/07/2023 04:24	

### VOLATILE ORGANICS

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
1,1,1,2-Tetrachloroethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/11/2023 16:49	ILY	A
1,1,1-Trichloroethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/11/2023 16:49	ILY	A
1,1,2,2-Tetrachloroethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/11/2023 16:49	ILY	A
1,1,2-Trichloroethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/11/2023 16:49	ILY	A
1,1-Dichloroethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/11/2023 16:49	ILY	A
1,1-Dichloroethene	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/11/2023 16:49	ILY	A
1,1-Dichloropropene	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/11/2023 16:49	ILY	A
1,2,3-Trichlorobenzene	2.0 U	U	ug/L	2.0	SW846 8260D	1	12/11/2023 16:49	ILY	A
1,2,3-Trichloropropane	2.0 U	U	ug/L	2.0	SW846 8260D	1	12/11/2023 16:49	ILY	A
1,2,4-Trichlorobenzene	2.0 U	U	ug/L	2.0	SW846 8260D	1	12/11/2023 16:49	ILY	A
1,2-Dibromo-3-chloropropane	7.0 U	U	ug/L	7.0	SW846 8260D	1	12/11/2023 16:49	ILY	A
1,2-Dibromoethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/11/2023 16:49	ILY	A
1,2-Dichlorobenzene	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/11/2023 16:49	ILY	A
1,2-Dichloroethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/11/2023 16:49	ILY	A
1,2-Dichloropropane	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/11/2023 16:49	ILY	A
1,3-Dichlorobenzene	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/11/2023 16:49	ILY	A
1,3-Dichloropropane	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/11/2023 16:49	ILY	A
1,4-Dichlorobenzene	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/11/2023 16:49	ILY	A
2,2-Dichloropropane	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/11/2023 16:49	ILY	A
2-Butanone	10.0 U	U	ug/L	10.0	SW846 8260D	1	12/11/2023 16:49	ILY	A
2-Hexanone	5.0 U	U	ug/L	5.0	SW846 8260D	1	12/11/2023 16:49	ILY	A
4-Methyl-2-Pentanone(MIBK)	5.0 U	U	ug/L	5.0	SW846 8260D	1	12/11/2023 16:49	ILY	A
Acetone	10.0 U	U	ug/L	10.0	SW846 8260D	1	12/11/2023 16:49	ILY	A
Benzene	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/11/2023 16:49	ILY	A
Bromobenzene	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/11/2023 16:49	ILY	A
Bromochloromethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/11/2023 16:49	ILY	A
Bromodichloromethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/11/2023 16:49	ILY	A
Bromoform	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/11/2023 16:49	ILY	A
Bromomethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/11/2023 16:49	ILY	A
Carbon Tetrachloride	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/11/2023 16:49	ILY	A
Chlorobenzene	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/11/2023 16:49	ILY	A
Chlorodibromomethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/11/2023 16:49	ILY	A
Chloroethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/11/2023 16:49	ILY	A
Chloroform	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/11/2023 16:49	ILY	A
Chloromethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/11/2023 16:49	ILY	A



## Results

Client Sample ID	MW-36D	Collected	12/04/2023 11:45
Lab Sample ID	3335524014	Lab Receipt	12/04/2023 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	12/11/2023 16:49	ILY	A
cis-1,3-Dichloropropene	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/11/2023 16:49	ILY	A
Dibromomethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/11/2023 16:49	ILY	A
Dichlorodifluoromethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/11/2023 16:49	ILY	A
Diisopropyl ether	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/11/2023 16:49	ILY	A
Ethylbenzene	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/11/2023 16:49	ILY	A
Hexachlorobutadiene	5.0 U	U	ug/L	5.0	SW846 8260D	1	12/11/2023 16:49	ILY	A
Methyl t-Butyl Ether	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/11/2023 16:49	ILY	A
Methylene Chloride	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/11/2023 16:49	ILY	A
mp-Xylene	2.0 U	U	ug/L	2.0	SW846 8260D	1	12/11/2023 16:49	ILY	A
Naphthalene	2.0 U	U	ug/L	2.0	SW846 8260D	1	12/11/2023 16:49	ILY	A
o-Chlorotoluene	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/11/2023 16:49	ILY	A
o-Xylene	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/11/2023 16:49	ILY	A
p-Chlorotoluene	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/11/2023 16:49	ILY	A
p-Isopropyltoluene	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/11/2023 16:49	ILY	A
Styrene	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/11/2023 16:49	ILY	A
Tetrachloroethene	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/11/2023 16:49	ILY	A
Toluene	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/11/2023 16:49	ILY	A
Total Xylenes	3.0 U	U	ug/L	3.0	SW846 8260D	1	12/11/2023 16:49	ILY	A
trans-1,2-Dichloroethene	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/11/2023 16:49	ILY	A
trans-1,3-Dichloropropene	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/11/2023 16:49	ILY	A
Trichloroethene	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/11/2023 16:49	ILY	A
Trichlorofluoromethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/11/2023 16:49	ILY	A
Vinyl Acetate	5.0 U	U	ug/L	5.0	SW846 8260D	1	12/11/2023 16:49	ILY	A
Vinyl Chloride	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/11/2023 16:49	ILY	A

### SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
1,2-Dichloroethane-d4	17060-07-0	105%	62 - 133	12/11/2023 16:49	
4-Bromofluorobenzene	460-00-4	99.8%	79 - 114	12/11/2023 16:49	
Dibromofluoromethane	1868-53-7	96.5%	78 - 116	12/11/2023 16:49	
Toluene-d8	2037-26-5	96.8%	76 - 127	12/11/2023 16:49	



## Results

Client Sample ID	DUP-120423	Collected	12/04/2023 09:45
Lab Sample ID	3335524015	Lab Receipt	12/04/2023 18:15

### SEMIVOLATILE SIM

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
1,4-Dioxane	23.7		ug/L	5.0	SW846 8270E SIM	1	12/12/2023 07:41	S7M	C

### SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
2-Methylnapthalene-d10	7297-45-2	69.9%	29 – 112	12/12/2023 07:41	
Fluoranthene-d10	93951-69-0	74.1%	45 – 130	12/12/2023 07:41	

### VOLATILE ORGANICS

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
1,1,1,2-Tetrachloroethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/11/2023 17:10	ILY	A
1,1,1-Trichloroethane	5.6		ug/L	1.0	SW846 8260D	1	12/11/2023 17:10	ILY	A
1,1,2,2-Tetrachloroethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/11/2023 17:10	ILY	A
1,1,2-Trichloroethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/11/2023 17:10	ILY	A
1,1-Dichloroethane	5.9		ug/L	1.0	SW846 8260D	1	12/11/2023 17:10	ILY	A
1,1-Dichloroethene	100		ug/L	1.0	SW846 8260D	1	12/11/2023 17:10	ILY	A
1,1-Dichloropropene	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/11/2023 17:10	ILY	A
1,2,3-Trichlorobenzene	2.0 U	U	ug/L	2.0	SW846 8260D	1	12/11/2023 17:10	ILY	A
1,2,3-Trichloropropane	2.0 U	U	ug/L	2.0	SW846 8260D	1	12/11/2023 17:10	ILY	A
1,2,4-Trichlorobenzene	2.0 U	U	ug/L	2.0	SW846 8260D	1	12/11/2023 17:10	ILY	A
1,2-Dibromo-3-chloropropane	7.0 U	U	ug/L	7.0	SW846 8260D	1	12/11/2023 17:10	ILY	A
1,2-Dibromoethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/11/2023 17:10	ILY	A
1,2-Dichlorobenzene	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/11/2023 17:10	ILY	A
1,2-Dichloroethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/11/2023 17:10	ILY	A
1,2-Dichloropropane	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/11/2023 17:10	ILY	A
1,3-Dichlorobenzene	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/11/2023 17:10	ILY	A
1,3-Dichloropropane	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/11/2023 17:10	ILY	A
1,4-Dichlorobenzene	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/11/2023 17:10	ILY	A
2,2-Dichloropropane	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/11/2023 17:10	ILY	A
2-Butanone	10.0 U	U	ug/L	10.0	SW846 8260D	1	12/11/2023 17:10	ILY	A
2-Hexanone	5.0 U	U	ug/L	5.0	SW846 8260D	1	12/11/2023 17:10	ILY	A
4-Methyl-2-Pentanone(MIBK)	5.0 U	U	ug/L	5.0	SW846 8260D	1	12/11/2023 17:10	ILY	A
Acetone	10.0 U	U	ug/L	10.0	SW846 8260D	1	12/11/2023 17:10	ILY	A
Benzene	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/11/2023 17:10	ILY	A
Bromobenzene	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/11/2023 17:10	ILY	A
Bromochloromethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/11/2023 17:10	ILY	A
Bromodichloromethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/11/2023 17:10	ILY	A
Bromoform	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/11/2023 17:10	ILY	A
Bromomethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/11/2023 17:10	ILY	A
Carbon Tetrachloride	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/11/2023 17:10	ILY	A
Chlorobenzene	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/11/2023 17:10	ILY	A
Chlorodibromomethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/11/2023 17:10	ILY	A
Chloroethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/11/2023 17:10	ILY	A
Chloroform	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/11/2023 17:10	ILY	A
Chloromethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/11/2023 17:10	ILY	A



## Results

Client Sample ID	DUP-120423	Collected	12/04/2023 09:45
Lab Sample ID	3335524015	Lab Receipt	12/04/2023 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	12/11/2023 17:10	ILY	A
cis-1,3-Dichloropropene	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/11/2023 17:10	ILY	A
Dibromomethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/11/2023 17:10	ILY	A
Dichlorodifluoromethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/11/2023 17:10	ILY	A
Diisopropyl ether	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/11/2023 17:10	ILY	A
Ethylbenzene	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/11/2023 17:10	ILY	A
Hexachlorobutadiene	5.0 U	U	ug/L	5.0	SW846 8260D	1	12/11/2023 17:10	ILY	A
Methyl t-Butyl Ether	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/11/2023 17:10	ILY	A
Methylene Chloride	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/11/2023 17:10	ILY	A
mp-Xylene	2.0 U	U	ug/L	2.0	SW846 8260D	1	12/11/2023 17:10	ILY	A
Naphthalene	2.0 U	U	ug/L	2.0	SW846 8260D	1	12/11/2023 17:10	ILY	A
o-Chlorotoluene	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/11/2023 17:10	ILY	A
o-Xylene	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/11/2023 17:10	ILY	A
p-Chlorotoluene	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/11/2023 17:10	ILY	A
p-Isopropyltoluene	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/11/2023 17:10	ILY	A
Styrene	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/11/2023 17:10	ILY	A
Tetrachloroethene	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/11/2023 17:10	ILY	A
Toluene	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/11/2023 17:10	ILY	A
Total Xylenes	3.0 U	U	ug/L	3.0	SW846 8260D	1	12/11/2023 17:10	ILY	A
trans-1,2-Dichloroethene	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/11/2023 17:10	ILY	A
trans-1,3-Dichloropropene	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/11/2023 17:10	ILY	A
Trichloroethene	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/11/2023 17:10	ILY	A
Trichlorofluoromethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/11/2023 17:10	ILY	A
Vinyl Acetate	5.0 U	U	ug/L	5.0	SW846 8260D	1	12/11/2023 17:10	ILY	A
Vinyl Chloride	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/11/2023 17:10	ILY	A

### SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
1,2-Dichloroethane-d4	17060-07-0	106%	62 - 133	12/11/2023 17:10	
4-Bromofluorobenzene	460-00-4	88.8%	79 - 114	12/11/2023 17:10	
Dibromofluoromethane	1868-53-7	98.1%	78 - 116	12/11/2023 17:10	
Toluene-d8	2037-26-5	90.5%	76 - 127	12/11/2023 17:10	



## Results

Client Sample ID	Trip Blank A	Collected	12/04/2023 00:00
Lab Sample ID	3335524016	Lab Receipt	12/04/2023 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	ug/L	1.0	SW846 8260D	1	12/11/2023 12:44	ILY	A
1,1,1-Trichloroethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/11/2023 12:44	ILY	A
1,1,2,2-Tetrachloroethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/11/2023 12:44	ILY	A
1,1,2-Trichloroethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/11/2023 12:44	ILY	A
1,1-Dichloroethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/11/2023 12:44	ILY	A
1,1-Dichloroethene	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/11/2023 12:44	ILY	A
1,1-Dichloropropene	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/11/2023 12:44	ILY	A
1,2,3-Trichlorobenzene	2.0 U	U	ug/L	2.0	SW846 8260D	1	12/11/2023 12:44	ILY	A
1,2,3-Trichloropropane	2.0 U	U	ug/L	2.0	SW846 8260D	1	12/11/2023 12:44	ILY	A
1,2,4-Trichlorobenzene	2.0 U	U	ug/L	2.0	SW846 8260D	1	12/11/2023 12:44	ILY	A
1,2-Dibromo-3-chloropropane	7.0 U	U	ug/L	7.0	SW846 8260D	1	12/11/2023 12:44	ILY	A
1,2-Dibromoethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/11/2023 12:44	ILY	A
1,2-Dichlorobenzene	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/11/2023 12:44	ILY	A
1,2-Dichloroethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/11/2023 12:44	ILY	A
1,2-Dichloropropane	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/11/2023 12:44	ILY	A
1,3-Dichlorobenzene	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/11/2023 12:44	ILY	A
1,3-Dichloropropane	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/11/2023 12:44	ILY	A
1,4-Dichlorobenzene	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/11/2023 12:44	ILY	A
2,2-Dichloropropane	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/11/2023 12:44	ILY	A
2-Butanone	10.0 U	U	ug/L	10.0	SW846 8260D	1	12/11/2023 12:44	ILY	A
2-Hexanone	5.0 U	U	ug/L	5.0	SW846 8260D	1	12/11/2023 12:44	ILY	A
4-Methyl-2-Pentanone(MIBK)	5.0 U	U	ug/L	5.0	SW846 8260D	1	12/11/2023 12:44	ILY	A
Acetone	10.0 U	U	ug/L	10.0	SW846 8260D	1	12/11/2023 12:44	ILY	A
Benzene	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/11/2023 12:44	ILY	A
Bromobenzene	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/11/2023 12:44	ILY	A
Bromochloromethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/11/2023 12:44	ILY	A
Bromodichloromethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/11/2023 12:44	ILY	A
Bromoform	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/11/2023 12:44	ILY	A
Bromomethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/11/2023 12:44	ILY	A
Carbon Tetrachloride	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/11/2023 12:44	ILY	A
Chlorobenzene	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/11/2023 12:44	ILY	A
Chlorodibromomethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/11/2023 12:44	ILY	A
Chloroethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/11/2023 12:44	ILY	A
Chloroform	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/11/2023 12:44	ILY	A
Chloromethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/11/2023 12:44	ILY	A
cis-1,2-Dichloroethene	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/11/2023 12:44	ILY	A
cis-1,3-Dichloropropene	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/11/2023 12:44	ILY	A
Dibromomethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/11/2023 12:44	ILY	A
Dichlorodifluoromethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/11/2023 12:44	ILY	A
Diisopropyl ether	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/11/2023 12:44	ILY	A
Ethylbenzene	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/11/2023 12:44	ILY	A
Hexachlorobutadiene	5.0 U	U	ug/L	5.0	SW846 8260D	1	12/11/2023 12:44	ILY	A
Methyl t-Butyl Ether	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/11/2023 12:44	ILY	A
Methylene Chloride	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/11/2023 12:44	ILY	A
mp-Xylene	2.0 U	U	ug/L	2.0	SW846 8260D	1	12/11/2023 12:44	ILY	A
Naphthalene	2.0 U	U	ug/L	2.0	SW846 8260D	1	12/11/2023 12:44	ILY	A
o-Chlorotoluene	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/11/2023 12:44	ILY	A



## Results

Client Sample ID	Trip Blank A	Collected	12/04/2023 00:00
Lab Sample ID	3335524016	Lab Receipt	12/04/2023 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	12/11/2023 12:44	ILY	A
p-Chlorotoluene	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/11/2023 12:44	ILY	A
p-Isopropyltoluene	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/11/2023 12:44	ILY	A
Styrene	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/11/2023 12:44	ILY	A
Tetrachloroethene	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/11/2023 12:44	ILY	A
Toluene	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/11/2023 12:44	ILY	A
Total Xylenes	3.0 U	U	ug/L	3.0	SW846 8260D	1	12/11/2023 12:44	ILY	A
trans-1,2-Dichloroethene	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/11/2023 12:44	ILY	A
trans-1,3-Dichloropropene	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/11/2023 12:44	ILY	A
Trichloroethene	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/11/2023 12:44	ILY	A
Trichlorofluoromethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/11/2023 12:44	ILY	A
Vinyl Acetate	5.0 U	U	ug/L	5.0	SW846 8260D	1	12/11/2023 12:44	ILY	A
Vinyl Chloride	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/11/2023 12:44	ILY	A

### SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
1,2-Dichloroethane-d4	17060-07-0	101%	62 – 133	12/11/2023 12:44	
4-Bromofluorobenzene	460-00-4	94.8%	79 – 114	12/11/2023 12:44	
Dibromofluoromethane	1868-53-7	97.9%	78 – 116	12/11/2023 12:44	
Toluene-d8	2037-26-5	93.5%	76 – 127	12/11/2023 12:44	



## Results

Client Sample ID	Trip Blank B	Collected	12/04/2023 00:00
Lab Sample ID	3335524017	Lab Receipt	12/04/2023 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	ug/L	1.0	SW846 8260D	1	12/11/2023 13:05	ILY	A
1,1,1-Trichloroethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/11/2023 13:05	ILY	A
1,1,2,2-Tetrachloroethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/11/2023 13:05	ILY	A
1,1,2-Trichloroethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/11/2023 13:05	ILY	A
1,1-Dichloroethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/11/2023 13:05	ILY	A
1,1-Dichloroethene	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/11/2023 13:05	ILY	A
1,1-Dichloropropene	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/11/2023 13:05	ILY	A
1,2,3-Trichlorobenzene	2.0 U	U	ug/L	2.0	SW846 8260D	1	12/11/2023 13:05	ILY	A
1,2,3-Trichloropropane	2.0 U	U	ug/L	2.0	SW846 8260D	1	12/11/2023 13:05	ILY	A
1,2,4-Trichlorobenzene	2.0 U	U	ug/L	2.0	SW846 8260D	1	12/11/2023 13:05	ILY	A
1,2-Dibromo-3-chloropropane	7.0 U	U	ug/L	7.0	SW846 8260D	1	12/11/2023 13:05	ILY	A
1,2-Dibromoethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/11/2023 13:05	ILY	A
1,2-Dichlorobenzene	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/11/2023 13:05	ILY	A
1,2-Dichloroethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/11/2023 13:05	ILY	A
1,2-Dichloropropane	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/11/2023 13:05	ILY	A
1,3-Dichlorobenzene	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/11/2023 13:05	ILY	A
1,3-Dichloropropane	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/11/2023 13:05	ILY	A
1,4-Dichlorobenzene	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/11/2023 13:05	ILY	A
2,2-Dichloropropane	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/11/2023 13:05	ILY	A
2-Butanone	10.0 U	U	ug/L	10.0	SW846 8260D	1	12/11/2023 13:05	ILY	A
2-Hexanone	5.0 U	U	ug/L	5.0	SW846 8260D	1	12/11/2023 13:05	ILY	A
4-Methyl-2-Pentanone(MIBK)	5.0 U	U	ug/L	5.0	SW846 8260D	1	12/11/2023 13:05	ILY	A
Acetone	10.0 U	U	ug/L	10.0	SW846 8260D	1	12/11/2023 13:05	ILY	A
Benzene	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/11/2023 13:05	ILY	A
Bromobenzene	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/11/2023 13:05	ILY	A
Bromochloromethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/11/2023 13:05	ILY	A
Bromodichloromethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/11/2023 13:05	ILY	A
Bromoform	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/11/2023 13:05	ILY	A
Bromomethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/11/2023 13:05	ILY	A
Carbon Tetrachloride	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/11/2023 13:05	ILY	A
Chlorobenzene	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/11/2023 13:05	ILY	A
Chlorodibromomethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/11/2023 13:05	ILY	A
Chloroethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/11/2023 13:05	ILY	A
Chloroform	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/11/2023 13:05	ILY	A
Chloromethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/11/2023 13:05	ILY	A
cis-1,2-Dichloroethene	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/11/2023 13:05	ILY	A
cis-1,3-Dichloropropene	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/11/2023 13:05	ILY	A
Dibromomethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/11/2023 13:05	ILY	A
Dichlorodifluoromethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/11/2023 13:05	ILY	A
Diisopropyl ether	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/11/2023 13:05	ILY	A
Ethylbenzene	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/11/2023 13:05	ILY	A
Hexachlorobutadiene	5.0 U	U	ug/L	5.0	SW846 8260D	1	12/11/2023 13:05	ILY	A
Methyl t-Butyl Ether	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/11/2023 13:05	ILY	A
Methylene Chloride	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/11/2023 13:05	ILY	A
mp-Xylene	2.0 U	U	ug/L	2.0	SW846 8260D	1	12/11/2023 13:05	ILY	A
Naphthalene	2.0 U	U	ug/L	2.0	SW846 8260D	1	12/11/2023 13:05	ILY	A
o-Chlorotoluene	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/11/2023 13:05	ILY	A



## Results

Client Sample ID	Trip Blank B	Collected	12/04/2023 00:00
Lab Sample ID	3335524017	Lab Receipt	12/04/2023 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	12/11/2023 13:05	ILY	A
p-Chlorotoluene	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/11/2023 13:05	ILY	A
p-Isopropyltoluene	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/11/2023 13:05	ILY	A
Styrene	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/11/2023 13:05	ILY	A
Tetrachloroethene	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/11/2023 13:05	ILY	A
Toluene	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/11/2023 13:05	ILY	A
Total Xylenes	3.0 U	U	ug/L	3.0	SW846 8260D	1	12/11/2023 13:05	ILY	A
trans-1,2-Dichloroethene	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/11/2023 13:05	ILY	A
trans-1,3-Dichloropropene	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/11/2023 13:05	ILY	A
Trichloroethene	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/11/2023 13:05	ILY	A
Trichlorofluoromethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/11/2023 13:05	ILY	A
Vinyl Acetate	5.0 U	U	ug/L	5.0	SW846 8260D	1	12/11/2023 13:05	ILY	A
Vinyl Chloride	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/11/2023 13:05	ILY	A

### SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
1,2-Dichloroethane-d4	17060-07-0	104%	62 – 133	12/11/2023 13:05	
4-Bromofluorobenzene	460-00-4	103%	79 – 114	12/11/2023 13:05	
Dibromofluoromethane	1868-53-7	97.5%	78 – 116	12/11/2023 13:05	
Toluene-d8	2037-26-5	97.2%	76 – 127	12/11/2023 13:05	





### Sample - Method Cross Reference Table

Lab ID	Sample ID	Analysis Method	Preparation Method	Leachate Method
3335524001	MW-24D	SW846 8270E SIM SW846 8260D	SW846 3510C N/A	
3335524002	MW-25D-130	SW846 8270E SIM SW846 8260D	SW846 3510C N/A	
3335524003	MW-25D-190	SW846 8270E SIM SW846 8260D	SW846 3510C N/A	
3335524004	MW-28D	SW846 8270E SIM SW846 8260D	SW846 3510C N/A	
3335524005	MW-29D	SW846 8270E SIM SW846 8260D	SW846 3510C N/A	
3335524006	MW-30D-273	SW846 8270E SIM SW846 8260D	SW846 3510C N/A	
3335524007	MW-30D-413	SW846 8270E SIM SW846 8260D	SW846 3510C N/A	
3335524008	MW-31D	SW846 8270E SIM SW846 8260D	SW846 3510C N/A	
3335524009	MW-32D	SW846 8270E SIM SW846 8260D	SW846 3510C N/A	
3335524010	MW-33D-235	SW846 8270E SIM SW846 8260D	SW846 3510C N/A	
3335524011	MW-33D-295	SW846 8270E SIM SW846 8260D	SW846 3510C N/A	
3335524012	MW-34D	SW846 8270E SIM SW846 8260D	SW846 3510C N/A	
3335524013	MW-35D	SW846 8270E SIM SW846 8260D	SW846 3510C N/A	
3335524014	MW-36D	SW846 8270E SIM SW846 8260D	SW846 3510C N/A	
3335524015	DUP-120423	SW846 8270E SIM SW846 8260D	SW846 3510C N/A	
3335524016	Trip Blank A	SW846 8260D	N/A	
3335524017	Trip Blank B	SW846 8260D	N/A	



**QUALITY CONTROL SAMPLES**

**SEMIVOLATILE SIM**

QC Batch			
QC Batch	1096958	Prep Method	SW846 3510C
Date	12/06/2023 09:00	Analysis Method	SW846 8270E SIM
Tech.	SRL		

Associated Samples			
3335524013	3335524004	3335524014	3335524005
3335524006	3335524015	3335524007	3335524008
3335524009	3335524010	3335524001	3335524002
3335524011	3335524003	3335524012	

**Method Blank** 3758523 (MB) Created on 12/05/2023 12:07 For QC Batch 1096958

**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	0.71	1	71.3	29 - 112
Fluoranthene-d10	93951-69-0	BLK	0.83	1	83	45 - 130

**Lab Control Standard** 3758524 (LCS) Created on 12/05/2023 12:07 For QC Batch 1096958

**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	0.57	1	56.8	22 - 75		U

**SURROGATES**

Compound	CAS No	Result (ug/L)	Expected (ug/L)	Rec. (%)	Limits (%)	Qualifiers
2-Methylnapthalene-d10	7297-45-2	LCS	0.65	1	64.5	29 - 112
Fluoranthene-d10	93951-69-0	LCS	0.83	1	82.7	45 - 130

**Matrix Spike** 3758525 (MS) 3335524003 For QC Batch 1096958

\*\*\*\*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** 3758526 (MSD) 3335524003 For QC Batch 1096958

**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	11.70	9.40	5	46	22 - 75	
1,4-Dioxane	123-91-1	MSD	10.50	9.40	5	21.5*	22 - 75	RPD 11.10 (Max-30)



**QUALITY CONTROL SAMPLES**

**SEMIVOLATILE SIM (cont.)**

*SURROGATES*

<u>Compound</u>	<u>CAS No</u>		<u>Result</u> <u>(ug/L)</u>	<u>Expected</u> <u>(ug/L)</u>	<u>Rec.</u> <u>(%)</u>	<u>Limits (%)</u>	<u>Qualifiers</u>
2-Methylnaphthalene-d10	7297-45-2	MS	3	5	59.6	29 - 112	
2-Methylnaphthalene-d10	7297-45-2	MSD	3	5	59.9	29 - 112	
Fluoranthene-d10	93951-69-0	MS	3.60	5	71.9	45 - 130	
Fluoranthene-d10	93951-69-0	MSD	3.50	5	69.5	45 - 130	



## QUALITY CONTROL SAMPLES

### VOLATILE ORGANICS

**QC Batch**

<u>QC Batch</u>	1097850	<u>Prep Method</u>	N/A
<u>Date</u>	N/A	<u>Analysis Method</u>	SW846 8260D
<u>Tech.</u>			

**Associated Samples**

3335524003	3335524012	3335524004	3335524005
3335524006	3335524007	3335524008	3335524001
3335524002	3335524010	3335524011	3335524009

**Method Blank**

3759543 (MB)

Created on 12/07/2023 10:47

For QC Batch 1097850

**RESULTS**

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



**QUALITY CONTROL SAMPLES**

**VOLATILE ORGANICS (cont.)**

*RESULTS*

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

*SURROGATES*

Compound	CAS No		Result (ug/L)	Expected (ug/L)	Rec. (%)	Limits (%)	Qualifiers
1,2-Dichloroethane-d4	17060-07-0	BLK	30	30	100	62 - 133	
4-Bromofluorobenzene	460-00-4	BLK	31.20	30	104	79 - 114	
Dibromofluoromethane	1868-53-7	BLK	29.50	30	98.3	78 - 116	
Toluene-d8	2037-26-5	BLK	30.80	30	103	76 - 127	

**Lab Control Standard**

3759544 (LCS)

Created on 12/07/2023 10:47

For QC Batch 1097850

*RESULTS*

Compound	CAS No		Result (ug/L)	Orig. Result (ug/L)	Spk Added (ug/L)	Rec. (%)	Limits (%)	RPD Limit (%)	Qualifiers
1,1,1,2-Tetrachloroethane	630-20-6	LCS	20.40		20	102	78 - 121		
1,1,1-Trichloroethane	71-55-6	LCS	21.70		20	108	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	19.60		20	98.2	82 - 126		
1,1-Dichloroethane	75-34-3	LCS	21.10		20	105	78 - 124		
1,1-Dichloroethene	75-35-4	LCS	22		20	110	63 - 128		
1,1-Dichloropropene	563-58-6	LCS	21.80		20	109	76 - 126		
1,2,3-Trichlorobenzene	87-61-6	LCS	22.80		20	114	61 - 126		
1,2,3-Trichloropropane	96-18-4	LCS	20.50		20	102	75 - 132		
1,2,4-Trichlorobenzene	120-82-1	LCS	23.40		20	117	67 - 123		
1,2-Dibromo-3-chloropropane	96-12-8	LCS	20.20		20	101	59 - 133		



QUALITY CONTROL SAMPLES

VOLATILE ORGANICS (cont.)

RESULTS

Compound	CAS No		Result (ug/L)	Orig. Result (ug/L)	Spk Added (ug/L)	Rec. (%)	Limits (%)	RPD Limit (%)	Qualifiers
1,2-Dibromoethane	106-93-4	LCS	20		20	99.8	80 - 124		
1,2-Dichlorobenzene	95-50-1	LCS	21		20	105	82 - 118		
1,2-Dichloroethane	107-06-2	LCS	19.80		20	99.1	70 - 133		
1,2-Dichloropropane	78-87-5	LCS	20.80		20	104	81 - 127		
1,3-Dichlorobenzene	541-73-1	LCS	21		20	105	81 - 118		
1,3-Dichloropropane	142-28-9	LCS	20.20		20	101	82 - 126		
1,4-Dichlorobenzene	106-46-7	LCS	20.80		20	104	81 - 116		
2,2-Dichloropropane	594-20-7	LCS	22.80		20	114	64 - 129		
2-Butanone	78-93-3	LCS	117		100	117	50 - 152		
2-Hexanone	591-78-6	LCS	101		100	101	65 - 154		
4-Methyl-2-Pentanone(MIBK)	108-10-1	LCS	109		100	109	71 - 146		
Acetone	67-64-1	LCS	112		100	112	40 - 151		
Benzene	71-43-2	LCS	21.30		20	107	80 - 124		
Bromobenzene	108-86-1	LCS	20		20	99.9	81 - 119		
Bromochloromethane	74-97-5	LCS	20.50		20	102	73 - 117		
Bromodichloromethane	75-27-4	LCS	20.90		20	104	79 - 126		
Bromoform	75-25-2	LCS	20.30		20	101	70 - 123		
Bromomethane	74-83-9	LCS	20.60		20	103	45 - 148		
Carbon Tetrachloride	56-23-5	LCS	21.50		20	108	62 - 132		
Chlorobenzene	108-90-7	LCS	19.70		20	98.7	85 - 117		
Chlorodibromomethane	124-48-1	LCS	19.80		20	99	77 - 122		
Chloroethane	75-00-3	LCS	10		20	49.9*	51 - 142		
Chloroform	67-66-3	LCS	21.20		20	106	78 - 122		
Chloromethane	74-87-3	LCS	15.90		20	79.4	38 - 156		
cis-1,2-Dichloroethene	156-59-2	LCS	22.10		20	110	78 - 125		
cis-1,3-Dichloropropene	10061-01-5	LCS	20.70		20	104	81 - 121		
Dibromomethane	74-95-3	LCS	20.50		20	103	81 - 125		
Dichlorodifluoromethane	75-71-8	LCS	13.40		20	67	17 - 166		
Diisopropyl ether	108-20-3	LCS	21.30		20	106	74 - 131		
Ethylbenzene	100-41-4	LCS	20.90		20	105	80 - 124		
Hexachlorobutadiene	87-68-3	LCS	25.50		20	128	55 - 128		
Methyl t-Butyl Ether	1634-04-4	LCS	21		20	105	69 - 115		
Methylene Chloride	75-09-2	LCS	20.60		20	103	76 - 121		
mp-Xylene	108383/106423	LCS	41.70		40	104	79 - 125		
Naphthalene	91-20-3	LCS	19.10		20	95.3	56 - 134		
o-Chlorotoluene	95-49-8	LCS	19.40		20	97	78 - 126		
o-Xylene	95-47-6	LCS	18.30		20	91.6	79 - 124		
p-Chlorotoluene	106-43-4	LCS	19		20	95	78 - 125		
p-Isopropyltoluene	99-87-6	LCS	20.60		20	103	72 - 123		
Styrene	100-42-5	LCS	19.30		20	96.7	79 - 123		
Tetrachloroethene	127-18-4	LCS	19.60		20	98.1	72 - 124		
Toluene	108-88-3	LCS	19.50		20	97.6	80 - 125		
Total Xylenes	1330-20-7	LCS	60.10		60	100	79 - 125		
trans-1,2-Dichloroethene	156-60-5	LCS	22.20		20	111	71 - 122		
trans-1,3-Dichloropropene	10061-02-6	LCS	20.70		20	103	78 - 126		
Trichloroethene	79-01-6	LCS	20.70		20	103	77 - 124		
Trichlorofluoromethane	75-69-4	LCS	12.80		20	64.2	38 - 123		



QUALITY CONTROL SAMPLES

VOLATILE ORGANICS (cont.)

RESULTS

Compound	CAS No		Result (ug/L)	Orig. Result (ug/L)	Spk Added (ug/L)	Rec. (%)	Limits (%)	RPD Limit (%)	Qualifiers
Vinyl Acetate	108-05-4	LCS	20.60		20	103	58 - 136		
Vinyl Chloride	75-01-4	LCS	15		20	75.1	27 - 138		

SURROGATES

Compound	CAS No		Result (ug/L)	Expected (ug/L)	Rec. (%)	Limits (%)	Qualifiers
1,2-Dichloroethane-d4	17060-07-0	LCS	30.90	30	103	62 - 133	
4-Bromofluorobenzene	460-00-4	LCS	29.70	30	99.1	79 - 114	
Dibromofluoromethane	1868-53-7	LCS	29.60	30	98.8	78 - 116	
Toluene-d8	2037-26-5	LCS	29.60	30	98.7	76 - 127	

Matrix Spike 3759545 (MS) 3335524003 For QC Batch 1097850

\*\*\*\*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 3759546 (MSD) 3335524003 For QC Batch 1097850

RESULTS

Compound	CAS No		Result (ug/L)	Orig. Result (ug/L)	Spk Added (ug/L)	Rec. (%)	Limits (%)	RPD Limit (%)	Qualifiers
1,1,1,2-Tetrachloroethane	630-20-6	MS	22.80	0	20	114	78 - 121		
1,1,1,2-Tetrachloroethane	630-20-6	MSD	22.30	0	20	112	78 - 121	RPD 2.31 (Max-16)	
1,1,1-Trichloroethane	71-55-6	MS	29.20	3.90	20	126	66 - 130		
1,1,1-Trichloroethane	71-55-6	MSD	27.90	3.90	20	120	66 - 130	RPD 4.33 (Max-20)	
1,1,2,2-Tetrachloroethane	79-34-5	MS	24.20	0	20	121	74 - 135		
1,1,2,2-Tetrachloroethane	79-34-5	MSD	24.10	0	20	120	74 - 135	RPD 0.40 (Max-16)	
1,1,2-Trichloroethane	79-00-5	MS	22.70	0	20	114	82 - 126		
1,1,2-Trichloroethane	79-00-5	MSD	21.90	0	20	110	82 - 126	RPD 3.71 (Max-15)	
1,1-Dichloroethane	75-34-3	MS	33.70	8.40	20	126*	78 - 124		
1,1-Dichloroethane	75-34-3	MSD	31.60	8.40	20	116	78 - 124	RPD 6.44 (Max-15)	
1,1-Dichloroethene	75-35-4	MS	63.70	37	20	136*	63 - 128		
1,1-Dichloroethene	75-35-4	MSD	59.80	37	20	116	63 - 128	RPD 6.25 (Max-21)	
1,1-Dichloropropene	563-58-6	MS	25.70	0	20	128*	76 - 126		
1,1-Dichloropropene	563-58-6	MSD	24.50	0	20	123	76 - 126	RPD 4.63 (Max-16)	
1,2,3-Trichlorobenzene	87-61-6	MS	21.80	0	20	109	61 - 126		
1,2,3-Trichlorobenzene	87-61-6	MSD	21.80	0	20	109	61 - 126	RPD 0.12 (Max-36)	
1,2,3-Trichloropropane	96-18-4	MS	22.80	0	20	114	75 - 132		
1,2,3-Trichloropropane	96-18-4	MSD	23.10	0	20	116	75 - 132	RPD 1.41 (Max-19)	
1,2,4-Trichlorobenzene	120-82-1	MS	22.20	0	20	111	67 - 123		
1,2,4-Trichlorobenzene	120-82-1	MSD	22.30	0	20	112	67 - 123	RPD 0.69 (Max-22)	
1,2-Dibromo-3-chloropropane	96-12-8	MS	21.60	0	20	108	59 - 133		
1,2-Dibromo-3-chloropropane	96-12-8	MSD	21.70	0	20	109	59 - 133	RPD 0.63 (Max-26)	
1,2-Dibromoethane	106-93-4	MS	22.40	0	20	112	80 - 124		
1,2-Dibromoethane	106-93-4	MSD	21.80	0	20	109	80 - 124	RPD 2.77 (Max-19)	
1,2-Dichlorobenzene	95-50-1	MS	22.80	0	20	114	82 - 118		
1,2-Dichlorobenzene	95-50-1	MSD	23.20	0	20	116	82 - 118	RPD 1.88 (Max-15)	



QUALITY CONTROL SAMPLES

VOLATILE ORGANICS (cont.)

RESULTS

Compound	CAS No		Result (ug/L)	Orig. Result (ug/L)	Spk Added (ug/L)	Rec. (%)	Limits (%)	RPD Limit (%)	Qualifiers
1,2-Dichloroethane	107-06-2	MS	23.20	0.41	20	114	70 - 133		
1,2-Dichloroethane	107-06-2	MSD	22.30	0.41	20	110	70 - 133	RPD	<u>3.56</u> (Max-19)
1,2-Dichloropropane	78-87-5	MS	24	0	20	120	81 - 127		
1,2-Dichloropropane	78-87-5	MSD	23.20	0	20	116	81 - 127	RPD	<u>3.46</u> (Max-15)
1,3-Dichlorobenzene	541-73-1	MS	22.70	0	20	114	81 - 118		
1,3-Dichlorobenzene	541-73-1	MSD	23	0	20	115	81 - 118	RPD	<u>1.24</u> (Max-16)
1,3-Dichloropropane	142-28-9	MS	23.30	0	20	116	82 - 126		
1,3-Dichloropropane	142-28-9	MSD	22.80	0	20	114	82 - 126	RPD	<u>2.15</u> (Max-15)
1,4-Dichlorobenzene	106-46-7	MS	22.60	0	20	113	81 - 116		
1,4-Dichlorobenzene	106-46-7	MSD	22.80	0	20	114	81 - 116	RPD	<u>0.75</u> (Max-15)
2,2-Dichloropropane	594-20-7	MS	22.30	0	20	112	64 - 129		
2,2-Dichloropropane	594-20-7	MSD	21.10	0	20	105	64 - 129	RPD	<u>5.86</u> (Max-18)
2-Butanone	78-93-3	MS	123	0	100	123	50 - 152		
2-Butanone	78-93-3	MSD	127	0	100	127	50 - 152	RPD	<u>3.51</u> (Max-16)
2-Hexanone	591-78-6	MS	111	0	100	111	65 - 154		
2-Hexanone	591-78-6	MSD	111	0	100	111	65 - 154	RPD	<u>0.22</u> (Max-17)
4-Methyl-2-Pentanone(MIBK)	108-10-1	MS	123	0	100	123	71 - 146		
4-Methyl-2-Pentanone(MIBK)	108-10-1	MSD	123	0	100	123	71 - 146	RPD	<u>0.16</u> (Max-16)
Acetone	67-64-1	MS	105	0	100	105	40 - 151		
Acetone	67-64-1	MSD	105	0	100	105	40 - 151	RPD	<u>0.67</u> (Max-40)
Benzene	71-43-2	MS	24.80	0	20	124	80 - 124		
Benzene	71-43-2	MSD	23.60	0	20	118	80 - 124	RPD	<u>5.10</u> (Max-26)
Bromobenzene	108-86-1	MS	23.10	0	20	116	81 - 119		
Bromobenzene	108-86-1	MSD	22.60	0	20	113	81 - 119	RPD	<u>2.15</u> (Max-17)
Bromochloromethane	74-97-5	MS	23.60	0	20	118*	73 - 117		
Bromochloromethane	74-97-5	MSD	23.30	0	20	117	73 - 117	RPD	<u>1.23</u> (Max-19)
Bromodichloromethane	75-27-4	MS	23.80	0	20	119	79 - 126		
Bromodichloromethane	75-27-4	MSD	22.70	0	20	114	79 - 126	RPD	<u>4.89</u> (Max-16)
Bromoform	75-25-2	MS	20.90	0	20	105	70 - 123		
Bromoform	75-25-2	MSD	20.30	0	20	101	70 - 123	RPD	<u>2.99</u> (Max-16)
Bromomethane	74-83-9	MS	22	0	20	110	45 - 148		
Bromomethane	74-83-9	MSD	20.30	0	20	101	45 - 148	RPD	<u>8.30</u> (Max-26)
Carbon Tetrachloride	56-23-5	MS	24.30	0	20	122	62 - 132		
Carbon Tetrachloride	56-23-5	MSD	23.70	0	20	118	62 - 132	RPD	<u>2.77</u> (Max-17)
Chlorobenzene	108-90-7	MS	22.20	0	20	111	85 - 117		
Chlorobenzene	108-90-7	MSD	21.70	0	20	109	85 - 117	RPD	<u>2.31</u> (Max-15)
Chlorodibromomethane	124-48-1	MS	21.50	0	20	108	77 - 122		
Chlorodibromomethane	124-48-1	MSD	21.50	0	20	107	77 - 122	RPD	<u>0.26</u> (Max-15)
Chloroethane	75-00-3	MS	13	0	20	64.8	51 - 142		
Chloroethane	75-00-3	MSD	10.90	0	20	54.6	51 - 142	RPD	<u>17.10</u> (Max-24)
Chloroform	67-66-3	MS	23.10	0	20	115	78 - 122		
Chloroform	67-66-3	MSD	22.50	0	20	112	78 - 122	RPD	<u>2.63</u> (Max-16)
Chloromethane	74-87-3	MS	16.50	0	20	82.5	38 - 156		
Chloromethane	74-87-3	MSD	16.50	0	20	82.4	38 - 156	RPD	<u>0.07</u> (Max-27)
cis-1,2-Dichloroethene	156-59-2	MS	25.30	0	20	126*	78 - 125		
cis-1,2-Dichloroethene	156-59-2	MSD	24.40	0	20	122	78 - 125	RPD	<u>3.63</u> (Max-21)
cis-1,3-Dichloropropene	10061-01-5	MS	21.80	0	20	109	81 - 121		
cis-1,3-Dichloropropene	10061-01-5	MSD	21.20	0	20	106	81 - 121	RPD	<u>2.44</u> (Max-16)
Dibromomethane	74-95-3	MS	23.50	0	20	117	81 - 125		





QUALITY CONTROL SAMPLES

VOLATILE ORGANICS (cont.)

RESULTS

Compound	CAS No		Result (ug/L)	Orig. Result (ug/L)	Spk Added (ug/L)	Rec. (%)	Limits (%)	RPD Limit (%)	Qualifiers
Dibromomethane	74-95-3	MSD	22.80	0	20	114	81 - 125	RPD <u>2.68</u> (Max-16)	
Dichlorodifluoromethane	75-71-8	MS	15.60	0	20	78.1	17 - 166		
Dichlorodifluoromethane	75-71-8	MSD	15	0	20	75.1	17 - 166	RPD <u>3.92</u> (Max-24)	
Diisopropyl ether	108-20-3	MS	24.70	0	20	123	74 - 131		
Diisopropyl ether	108-20-3	MSD	24.20	0	20	121	74 - 131	RPD <u>2.04</u> (Max-15)	
Ethylbenzene	100-41-4	MS	23.60	0	20	118	80 - 124		
Ethylbenzene	100-41-4	MSD	23.30	0	20	116	80 - 124	RPD <u>1.48</u> (Max-19)	
Hexachlorobutadiene	87-68-3	MS	23.40	0	20	117	55 - 128		
Hexachlorobutadiene	87-68-3	MSD	21.10	0	20	106	55 - 128	RPD <u>10.30</u> (Max-35)	
Methyl t-Butyl Ether	1634-04-4	MS	25	1.20	20	119*	69 - 115		
Methyl t-Butyl Ether	1634-04-4	MSD	24.70	1.20	20	117*	69 - 115	RPD <u>1.27</u> (Max-20)	
Methylene Chloride	75-09-2	MS	24	0	20	120	76 - 121		
Methylene Chloride	75-09-2	MSD	22.90	0	20	114	76 - 121	RPD <u>4.83</u> (Max-17)	
mp-Xylene	108383/106423	MS	47.30	0	40	118	79 - 125		
mp-Xylene	108383/106423	MSD	46.50	0	40	116	79 - 125	RPD <u>1.69</u> (Max-21)	
Naphthalene	91-20-3	MS	18.90	0	20	94.6	56 - 134		
Naphthalene	91-20-3	MSD	20.10	0	20	100	56 - 134	RPD <u>5.79</u> (Max-40)	
o-Chlorotoluene	95-49-8	MS	21.90	0	20	109	78 - 126		
o-Chlorotoluene	95-49-8	MSD	22.20	0	20	111	78 - 126	RPD <u>1.28</u> (Max-17)	
o-Xylene	95-47-6	MS	20.60	0	20	103	79 - 124		
o-Xylene	95-47-6	MSD	20.50	0	20	102	79 - 124	RPD <u>0.71</u> (Max-19)	
p-Chlorotoluene	106-43-4	MS	21.10	0	20	106	78 - 125		
p-Chlorotoluene	106-43-4	MSD	21.50	0	20	107	78 - 125	RPD <u>1.70</u> (Max-16)	
p-Isopropyltoluene	99-87-6	MS	20.90	0	20	105	72 - 123		
p-Isopropyltoluene	99-87-6	MSD	21	0	20	105	72 - 123	RPD <u>0.60</u> (Max-17)	
Styrene	100-42-5	MS	21.70	0	20	108	79 - 123		
Styrene	100-42-5	MSD	21.60	0	20	108	79 - 123	RPD <u>0.35</u> (Max-16)	
Tetrachloroethene	127-18-4	MS	21.10	0	20	106	72 - 124		
Tetrachloroethene	127-18-4	MSD	21.10	0	20	106	72 - 124	RPD <u>0.10</u> (Max-38)	
Toluene	108-88-3	MS	22	0	20	110	80 - 125		
Toluene	108-88-3	MSD	21.40	0	20	107	80 - 125	RPD <u>2.64</u> (Max-20)	
Total Xylenes	1330-20-7	MS	67.90	0	60	113	79 - 125		
Total Xylenes	1330-20-7	MSD	67	0	60	112	79 - 125	RPD <u>1.39</u> (Max-35)	
trans-1,2-Dichloroethene	156-60-5	MS	25.70	0	20	129*	71 - 122		
trans-1,2-Dichloroethene	156-60-5	MSD	23.90	0	20	120	71 - 122	RPD <u>7.25</u> (Max-22)	
trans-1,3-Dichloropropene	10061-02-6	MS	22.10	0	20	110	78 - 126		
trans-1,3-Dichloropropene	10061-02-6	MSD	21.90	0	20	109	78 - 126	RPD <u>0.92</u> (Max-18)	
Trichloroethene	79-01-6	MS	23.80	0	20	119	77 - 124		
Trichloroethene	79-01-6	MSD	22.70	0	20	113	77 - 124	RPD <u>5.09</u> (Max-18)	
Trichlorofluoromethane	75-69-4	MS	19.70	0	20	98.6	38 - 123		
Trichlorofluoromethane	75-69-4	MSD	17.40	0	20	87.2	38 - 123	RPD <u>12.30</u> (Max-23)	
Vinyl Acetate	108-05-4	MS	18.30	0	20	91.6	58 - 136		
Vinyl Acetate	108-05-4	MSD	18.50	0	20	92.4	58 - 136	RPD <u>0.89</u> (Max-17)	
Vinyl Chloride	75-01-4	MS	19.50	0	20	97.6	27 - 138		
Vinyl Chloride	75-01-4	MSD	17.60	0	20	87.9	27 - 138	RPD <u>10.50</u> (Max-40)	



QUALITY CONTROL SAMPLES

VOLATILE ORGANICS (cont.)

SURROGATES

Compound	CAS No		Result (ug/L)	Expected (ug/L)	Rec. (%)	Limits (%)	Qualifiers
1,2-Dichloroethane-d4	17060-07-0	MS	30.40	30	101	62 - 133	
1,2-Dichloroethane-d4	17060-07-0	MSD	31.90	30	106	62 - 133	
4-Bromofluorobenzene	460-00-4	MS	30.20	30	101	79 - 114	
4-Bromofluorobenzene	460-00-4	MSD	29.90	30	99.5	79 - 114	
Dibromofluoromethane	1868-53-7	MS	29.60	30	98.6	78 - 116	
Dibromofluoromethane	1868-53-7	MSD	29.70	30	99	78 - 116	
Toluene-d8	2037-26-5	MS	29.20	30	97.4	76 - 127	
Toluene-d8	2037-26-5	MSD	28.90	30	96.5	76 - 127	

QC Batch

Associated Samples

QC Batch	1100336	Prep Method	N/A
Date	N/A	Analysis Method	SW846 8260D
Tech.			

3335524013	3335524014	3335524015	3335524016
3335524017			

Matrix Spike 3760897 (MS) 3335862010 (non-Project Sample) For QC Batch 1100336

\*\*\*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 3760898 (MSD) 3335862010 (non-Project Sample) For QC Batch 1100336

RESULTS

Compound	CAS No		Result (ug/L)	Orig. Result (ug/L)	Spk Added (ug/L)	Rec. (%)	Limits (%)	RPD Limit (%)	Qualifiers
1,1,1,2-Tetrachloroethane	630-20-6	MS	20.70	0	20	104	78 - 121		
1,1,1,2-Tetrachloroethane	630-20-6	MSD	21.60	0	20	108	78 - 121	RPD 3.90 (Max-16)	
1,1,1-Trichloroethane	71-55-6	MS	23.60	0	20	118	66 - 130		
1,1,1-Trichloroethane	71-55-6	MSD	23	0	20	115	66 - 130	RPD 2.32 (Max-20)	
1,1,2,2-Tetrachloroethane	79-34-5	MS	19.80	0	20	98.8	74 - 135		
1,1,2,2-Tetrachloroethane	79-34-5	MSD	21.20	0	20	106	74 - 135	RPD 7.25 (Max-16)	
1,1,2-Trichloroethane	79-00-5	MS	20.50	0	20	102	82 - 126		
1,1,2-Trichloroethane	79-00-5	MSD	21.80	0	20	109	82 - 126	RPD 6.39 (Max-15)	
1,1-Dichloroethane	75-34-3	MS	23.10	0	20	116	78 - 124		
1,1-Dichloroethane	75-34-3	MSD	22.70	0	20	114	78 - 124	RPD 1.74 (Max-15)	
1,1-Dichloroethene	75-35-4	MS	27.50	0	20	137*	63 - 128		
1,1-Dichloroethene	75-35-4	MSD	27	0	20	135*	63 - 128	RPD 1.69 (Max-21)	
1,1-Dichloropropene	563-58-6	MS	23.30	0	20	117	76 - 126		
1,1-Dichloropropene	563-58-6	MSD	22.80	0	20	114	76 - 126	RPD 2.43 (Max-16)	
1,2,3-Trichlorobenzene	87-61-6	MS	18.70	0	20	93.3	61 - 126		
1,2,3-Trichlorobenzene	87-61-6	MSD	20.10	0	20	100	61 - 126	RPD 7.38 (Max-36)	
1,2,3-Trichloropropane	96-18-4	MS	20.50	0	20	102	75 - 132		
1,2,3-Trichloropropane	96-18-4	MSD	22.40	0	20	112	75 - 132	RPD 8.77 (Max-19)	
1,2,4-Trichlorobenzene	120-82-1	MS	18.30	0	20	91.7	67 - 123		
1,2,4-Trichlorobenzene	120-82-1	MSD	19.40	0	20	97.1	67 - 123	RPD 5.73 (Max-22)	
1,2-Dibromo-3-chloropropane	96-12-8	MS	17.30	0	20	86.6	59 - 133		



QUALITY CONTROL SAMPLES

VOLATILE ORGANICS (cont.)

RESULTS

Compound	CAS No		Result (ug/L)	Orig. Result (ug/L)	Spk Added (ug/L)	Rec. (%)	Limits (%)	RPD Limit (%)	Qualifiers
1,2-Dibromo-3-chloropropane	96-12-8	MSD	19.60	0	20	98.2	59 - 133	RPD 12.60 (Max-26)	
1,2-Dibromoethane	106-93-4	MS	19.70	0	20	98.5	80 - 124		
1,2-Dibromoethane	106-93-4	MSD	21.30	0	20	107	80 - 124	RPD 7.87 (Max-19)	
1,2-Dichlorobenzene	95-50-1	MS	19.10	0	20	95.6	82 - 118		
1,2-Dichlorobenzene	95-50-1	MSD	20.50	0	20	102	82 - 118	RPD 6.93 (Max-15)	
1,2-Dichloroethane	107-06-2	MS	21.80	0	20	109	70 - 133		
1,2-Dichloroethane	107-06-2	MSD	22	0	20	110	70 - 133	RPD 1.08 (Max-19)	
1,2-Dichloropropane	78-87-5	MS	21.90	0	20	109	81 - 127		
1,2-Dichloropropane	78-87-5	MSD	21.70	0	20	109	81 - 127	RPD 0.54 (Max-15)	
1,3-Dichlorobenzene	541-73-1	MS	19	0	20	94.9	81 - 118		
1,3-Dichlorobenzene	541-73-1	MSD	20.30	0	20	101	81 - 118	RPD 6.67 (Max-16)	
1,3-Dichloropropane	142-28-9	MS	20.50	0	20	103	82 - 126		
1,3-Dichloropropane	142-28-9	MSD	21.90	0	20	110	82 - 126	RPD 6.68 (Max-15)	
1,4-Dichlorobenzene	106-46-7	MS	19.30	0	20	96.4	81 - 116		
1,4-Dichlorobenzene	106-46-7	MSD	20.40	0	20	102	81 - 116	RPD 5.88 (Max-15)	
2,2-Dichloropropane	594-20-7	MS	20.80	0	20	104	64 - 129		
2,2-Dichloropropane	594-20-7	MSD	20	0	20	99.9	64 - 129	RPD 4.06 (Max-18)	
2-Butanone	78-93-3	MS	98.40	0	100	98.4	50 - 152		
2-Butanone	78-93-3	MSD	103	0	100	103	50 - 152	RPD 4.45 (Max-16)	
2-Hexanone	591-78-6	MS	99.20	0	100	99.2	65 - 154		
2-Hexanone	591-78-6	MSD	109	0	100	109	65 - 154	RPD 9.54 (Max-17)	
4-Methyl-2-Pentanone(MIBK)	108-10-1	MS	102	0	100	102	71 - 146		
4-Methyl-2-Pentanone(MIBK)	108-10-1	MSD	111	0	100	111	71 - 146	RPD 8.28 (Max-16)	
Acetone	67-64-1	MS	101	0	100	101	40 - 151		
Acetone	67-64-1	MSD	106	0	100	106	40 - 151	RPD 4.97 (Max-40)	
Benzene	71-43-2	MS	22.10	0	20	111	80 - 124		
Benzene	71-43-2	MSD	22	0	20	110	80 - 124	RPD 0.69 (Max-26)	
Bromobenzene	108-86-1	MS	19.50	0	20	97.6	81 - 119		
Bromobenzene	108-86-1	MSD	21	0	20	105	81 - 119	RPD 7.40 (Max-17)	
Bromochloromethane	74-97-5	MS	22.40	0	20	112	73 - 117		
Bromochloromethane	74-97-5	MSD	22.30	0	20	112	73 - 117	RPD 0.23 (Max-19)	
Bromodichloromethane	75-27-4	MS	21.30	0	20	107	79 - 126		
Bromodichloromethane	75-27-4	MSD	21.60	0	20	108	79 - 126	RPD 1.36 (Max-16)	
Bromoform	75-25-2	MS	18.50	0	20	92.6	70 - 123		
Bromoform	75-25-2	MSD	20.70	0	20	103	70 - 123	RPD 11 (Max-16)	
Bromomethane	74-83-9	MS	23.20	0	20	116	45 - 148		
Bromomethane	74-83-9	MSD	22.70	0	20	113	45 - 148	RPD 2.43 (Max-26)	
Carbon Tetrachloride	56-23-5	MS	26.90	0	20	134*	62 - 132		
Carbon Tetrachloride	56-23-5	MSD	26.30	0	20	132	62 - 132	RPD 1.99 (Max-17)	
Chlorobenzene	108-90-7	MS	20.10	0	20	100	85 - 117		
Chlorobenzene	108-90-7	MSD	20.70	0	20	104	85 - 117	RPD 3.24 (Max-15)	
Chlorodibromomethane	124-48-1	MS	20.10	0	20	100	77 - 122		
Chlorodibromomethane	124-48-1	MSD	21.20	0	20	106	77 - 122	RPD 5.48 (Max-15)	
Chloroethane	75-00-3	MS	22.80	0	20	114	51 - 142		
Chloroethane	75-00-3	MSD	22.20	0	20	111	51 - 142	RPD 2.75 (Max-24)	
Chloroform	67-66-3	MS	22.50	0	20	112	78 - 122		
Chloroform	67-66-3	MSD	21.50	0	20	108	78 - 122	RPD 4.22 (Max-16)	
Chloromethane	74-87-3	MS	18.50	0	20	92.4	38 - 156		
Chloromethane	74-87-3	MSD	17.70	0	20	88.7	38 - 156	RPD 4.16 (Max-27)	



QUALITY CONTROL SAMPLES

VOLATILE ORGANICS (cont.)

RESULTS

Compound	CAS No		Result (ug/L)	Orig. Result (ug/L)	Spk Added (ug/L)	Rec. (%)	Limits (%)	RPD Limit (%)	Qualifiers
cis-1,2-Dichloroethene	156-59-2	MS	23.10	0	20	115	78 - 125		
cis-1,2-Dichloroethene	156-59-2	MSD	22.50	0	20	113	78 - 125	RPD	<u>2.20</u> (Max-21)
cis-1,3-Dichloropropene	10061-01-5	MS	19.20	0	20	96	81 - 121		
cis-1,3-Dichloropropene	10061-01-5	MSD	20.70	0	20	103	81 - 121	RPD	<u>7.31</u> (Max-16)
Dibromomethane	74-95-3	MS	21.40	0	20	107	81 - 125		
Dibromomethane	74-95-3	MSD	21.50	0	20	108	81 - 125	RPD	<u>0.66</u> (Max-16)
Dichlorodifluoromethane	75-71-8	MS	18.60	0	20	92.8	17 - 166		
Dichlorodifluoromethane	75-71-8	MSD	18.10	0	20	90.3	17 - 166	RPD	<u>2.82</u> (Max-24)
Diisopropyl ether	108-20-3	MS	21.80	0	20	109	74 - 131		
Diisopropyl ether	108-20-3	MSD	21.60	0	20	108	74 - 131	RPD	<u>0.96</u> (Max-15)
Ethylbenzene	100-41-4	MS	20.50	0	20	102	80 - 124		
Ethylbenzene	100-41-4	MSD	21.50	0	20	107	80 - 124	RPD	<u>4.57</u> (Max-19)
Hexachlorobutadiene	87-68-3	MS	19.60	0	20	98.2	55 - 128		
Hexachlorobutadiene	87-68-3	MSD	20.70	0	20	103	55 - 128	RPD	<u>5.08</u> (Max-35)
Methyl t-Butyl Ether	1634-04-4	MS	21.40	0	20	107	69 - 115		
Methyl t-Butyl Ether	1634-04-4	MSD	22.10	0	20	111	69 - 115	RPD	<u>3.22</u> (Max-20)
Methylene Chloride	75-09-2	MS	22.70	0	20	113	76 - 121		
Methylene Chloride	75-09-2	MSD	22.50	0	20	112	76 - 121	RPD	<u>0.74</u> (Max-17)
mp-Xylene	108383/106423	MS	41.70	0	40	104	79 - 125		
mp-Xylene	108383/106423	MSD	42.60	0	40	107	79 - 125	RPD	<u>2.26</u> (Max-21)
Naphthalene	91-20-3	MS	18.40	0	20	92.2	56 - 134		
Naphthalene	91-20-3	MSD	20.20	0	20	101	56 - 134	RPD	<u>9.26</u> (Max-40)
o-Chlorotoluene	95-49-8	MS	20.80	0	20	104	78 - 126		
o-Chlorotoluene	95-49-8	MSD	21.70	0	20	109	78 - 126	RPD	<u>4.48</u> (Max-17)
o-Xylene	95-47-6	MS	20.20	0	20	101	79 - 124		
o-Xylene	95-47-6	MSD	20.80	0	20	104	79 - 124	RPD	<u>2.82</u> (Max-19)
p-Chlorotoluene	106-43-4	MS	20.10	0	20	100	78 - 125		
p-Chlorotoluene	106-43-4	MSD	21.10	0	20	106	78 - 125	RPD	<u>5.09</u> (Max-16)
p-Isopropyltoluene	99-87-6	MS	20.70	0	20	103	72 - 123		
p-Isopropyltoluene	99-87-6	MSD	22.30	0	20	112	72 - 123	RPD	<u>7.55</u> (Max-17)
Styrene	100-42-5	MS	20.20	0	20	101	79 - 123		
Styrene	100-42-5	MSD	21	0	20	105	79 - 123	RPD	<u>4.04</u> (Max-16)
Tetrachloroethene	127-18-4	MS	19	0	20	95	72 - 124		
Tetrachloroethene	127-18-4	MSD	19.80	0	20	98.9	72 - 124	RPD	<u>4.06</u> (Max-38)
Toluene	108-88-3	MS	21	0	20	105	80 - 125		
Toluene	108-88-3	MSD	21.60	0	20	108	80 - 125	RPD	<u>2.70</u> (Max-20)
Total Xylenes	1330-20-7	MS	61.90	0	60	103	79 - 125		
Total Xylenes	1330-20-7	MSD	63.40	0	60	106	79 - 125	RPD	<u>2.44</u> (Max-35)
trans-1,2-Dichloroethene	156-60-5	MS	23.90	0	20	120	71 - 122		
trans-1,2-Dichloroethene	156-60-5	MSD	23.60	0	20	118	71 - 122	RPD	<u>1.66</u> (Max-22)
trans-1,3-Dichloropropene	10061-02-6	MS	20.40	0	20	102	78 - 126		
trans-1,3-Dichloropropene	10061-02-6	MSD	21.50	0	20	108	78 - 126	RPD	<u>5.47</u> (Max-18)
Trichloroethene	79-01-6	MS	21.50	0	20	107	77 - 124		
Trichloroethene	79-01-6	MSD	21.20	0	20	106	77 - 124	RPD	<u>1.42</u> (Max-18)
Trichlorofluoromethane	75-69-4	MS	22.50	0	20	113	38 - 123		
Trichlorofluoromethane	75-69-4	MSD	22.20	0	20	111	38 - 123	RPD	<u>1.24</u> (Max-23)
Vinyl Acetate	108-05-4	MS	20	0	20	100	58 - 136		
Vinyl Acetate	108-05-4	MSD	20.20	0	20	101	58 - 136	RPD	<u>0.92</u> (Max-17)



QUALITY CONTROL SAMPLES

VOLATILE ORGANICS (cont.)

RESULTS

Compound	CAS No		Result (ug/L)	Orig. Result (ug/L)	Spk Added (ug/L)	Rec. (%)	Limits (%)	RPD Limit (%)	Qualifiers
Vinyl Chloride	75-01-4	MS	20.90	0	20	105	27 - 138		
Vinyl Chloride	75-01-4	MSD	20.30	0	20	101	27 - 138	RPD <u>3.19</u> (Max-40)	

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	31.40	30	105	62 - 133	
4-Bromofluorobenzene	460-00-4	MS	28.10	30	93.6	79 - 114	
4-Bromofluorobenzene	460-00-4	MSD	28.20	30	93.9	79 - 114	
Dibromofluoromethane	1868-53-7	MS	30.40	30	101	78 - 116	
Dibromofluoromethane	1868-53-7	MSD	29.60	30	98.5	78 - 116	
Toluene-d8	2037-26-5	MS	29.20	30	97.3	76 - 127	
Toluene-d8	2037-26-5	MSD	27.70	30	92.3	76 - 127	

Method Blank

3760895 (MB)

Created on 12/11/2023 11:09

For QC Batch 1100336

RESULTS

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



QUALITY CONTROL SAMPLES

VOLATILE ORGANICS (cont.)

RESULTS

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

SURROGATES

Compound	CAS No		Result (ug/L)	Expected (ug/L)	Rec. (%)	Limits (%)	Qualifiers
1,2-Dichloroethane-d4	17060-07-0	BLK	28.30	30	94.5	62 - 133	
4-Bromofluorobenzene	460-00-4	BLK	26.50	30	88.3	79 - 114	
Dibromofluoromethane	1868-53-7	BLK	27.80	30	92.5	78 - 116	
Toluene-d8	2037-26-5	BLK	29	30	96.8	76 - 127	



QUALITY CONTROL SAMPLES

VOLATILE ORGANICS (cont.)

Lab Control Standard

3760896 (LCS)

Created on 12/11/2023 11:09

For QC Batch 1100336

RESULTS

Compound	CAS No		Result (ug/L)	Orig. Result (ug/L)	Spk Added (ug/L)	Rec. (%)	Limits (%)	RPD Limit (%)	Qualifiers
1,1,1,2-Tetrachloroethane	630-20-6	LCS	22		20	110	78 - 121		
1,1,1-Trichloroethane	71-55-6	LCS	20.50		20	102	66 - 130		
1,1,2,2-Tetrachloroethane	79-34-5	LCS	20		20	100	74 - 135		
1,1,2-Trichloroethane	79-00-5	LCS	20.80		20	104	82 - 126		
1,1-Dichloroethane	75-34-3	LCS	20.10		20	101	78 - 124		
1,1-Dichloroethene	75-35-4	LCS	22.70		20	114	63 - 128		
1,1-Dichloropropene	563-58-6	LCS	20.30		20	102	76 - 126		
1,2,3-Trichlorobenzene	87-61-6	LCS	21.40		20	107	61 - 126		
1,2,3-Trichloropropane	96-18-4	LCS	20.30		20	102	75 - 132		
1,2,4-Trichlorobenzene	120-82-1	LCS	21.30		20	107	67 - 123		
1,2-Dibromo-3-chloropropane	96-12-8	LCS	18.40		20	91.8	59 - 133		
1,2-Dibromoethane	106-93-4	LCS	21.30		20	107	80 - 124		
1,2-Dichlorobenzene	95-50-1	LCS	20.30		20	102	82 - 118		
1,2-Dichloroethane	107-06-2	LCS	18.90		20	94.3	70 - 133		
1,2-Dichloropropane	78-87-5	LCS	20		20	99.8	81 - 127		
1,3-Dichlorobenzene	541-73-1	LCS	20.30		20	101	81 - 118		
1,3-Dichloropropane	142-28-9	LCS	21		20	105	82 - 126		
1,4-Dichlorobenzene	106-46-7	LCS	20.70		20	103	81 - 116		
2,2-Dichloropropane	594-20-7	LCS	20.40		20	102	64 - 129		
2-Butanone	78-93-3	LCS	100		100	100	50 - 152		
2-Hexanone	591-78-6	LCS	108		100	108	65 - 154		
4-Methyl-2-Pentanone(MIBK)	108-10-1	LCS	103		100	103	71 - 146		
Acetone	67-64-1	LCS	119		100	119	40 - 151		
Benzene	71-43-2	LCS	20.40		20	102	80 - 124		
Bromobenzene	108-86-1	LCS	20		20	100	81 - 119		
Bromochloromethane	74-97-5	LCS	21.10		20	106	73 - 117		
Bromodichloromethane	75-27-4	LCS	20.20		20	101	79 - 126		
Bromoform	75-25-2	LCS	21.30		20	106	70 - 123		
Bromomethane	74-83-9	LCS	20.50		20	103	45 - 148		
Carbon Tetrachloride	56-23-5	LCS	20.40		20	102	62 - 132		
Chlorobenzene	108-90-7	LCS	20.90		20	104	85 - 117		
Chlorodibromomethane	124-48-1	LCS	21.20		20	106	77 - 122		
Chloroethane	75-00-3	LCS	15.70		20	78.5	51 - 142		
Chloroform	67-66-3	LCS	20.50		20	102	78 - 122		
Chloromethane	74-87-3	LCS	15.90		20	79.5	38 - 156		
cis-1,2-Dichloroethene	156-59-2	LCS	20.10		20	100	78 - 125		
cis-1,3-Dichloropropene	10061-01-5	LCS	20.70		20	103	81 - 121		
Dibromomethane	74-95-3	LCS	20.40		20	102	81 - 125		
Dichlorodifluoromethane	75-71-8	LCS	16.10		20	80.4	17 - 166		
Diisopropyl ether	108-20-3	LCS	19.30		20	96.5	74 - 131		
Ethylbenzene	100-41-4	LCS	20.80		20	104	80 - 124		
Hexachlorobutadiene	87-68-3	LCS	22.90		20	114	55 - 128		
Methyl t-Butyl Ether	1634-04-4	LCS	20.30		20	101	69 - 115		
Methylene Chloride	75-09-2	LCS	20.90		20	105	76 - 121		



QUALITY CONTROL SAMPLES

VOLATILE ORGANICS (cont.)

RESULTS

Compound	CAS No		Result (ug/L)	Orig. Result (ug/L)	Spk Added (ug/L)	Rec. (%)	Limits (%)	RPD Limit (%)	Qualifiers
mp-Xylene	108383/106423	LCS	42.30		40	106	79 - 125		
Naphthalene	91-20-3	LCS	21.50		20	108	56 - 134		
o-Chlorotoluene	95-49-8	LCS	20		20	100	78 - 126		
o-Xylene	95-47-6	LCS	21.30		20	106	79 - 124		
p-Chlorotoluene	106-43-4	LCS	20.20		20	101	78 - 125		
p-Isopropyltoluene	99-87-6	LCS	21.80		20	109	72 - 123		
Styrene	100-42-5	LCS	21.30		20	106	79 - 123		
Tetrachloroethene	127-18-4	LCS	20.60		20	103	72 - 124		
Toluene	108-88-3	LCS	20.50		20	103	80 - 125		
Total Xylenes	1330-20-7	LCS	63.60		60	106	79 - 125		
trans-1,2-Dichloroethene	156-60-5	LCS	20.60		20	103	71 - 122		
trans-1,3-Dichloropropene	10061-02-6	LCS	21.20		20	106	78 - 126		
Trichloroethene	79-01-6	LCS	19.60		20	97.8	77 - 124		
Trichlorofluoromethane	75-69-4	LCS	17.60		20	88	38 - 123		
Vinyl Acetate	108-05-4	LCS	22.50		20	113	58 - 136		
Vinyl Chloride	75-01-4	LCS	15.30		20	76.3	27 - 138		

SURROGATES

Compound	CAS No		Result (ug/L)	Expected (ug/L)	Rec. (%)	Limits (%)	Qualifiers
1,2-Dichloroethane-d4	17060-07-0	LCS	28.70	30	95.7	62 - 133	
4-Bromofluorobenzene	460-00-4	LCS	27.20	30	90.6	79 - 114	
Dibromofluoromethane	1868-53-7	LCS	29.20	30	97.5	78 - 116	
Toluene-d8	2037-26-5	LCS	29.30	30	97.7	76 - 127	





### QUALITY CONTROL DATA CROSS REFERENCE TABLE

Lab ID	Sample ID	Preparation Method	Prep Batch	Prep Date/Time	By	Analysis Method	Anly Batch
3335524001	MW-24D	SW846 3510C	1096958	12/06/2023 09:00	SRL	SW846 8270E SIM	1097498
		SW846 3510C	1096958	12/06/2023 09:00	SRL	SW846 8270E SIM	1100662
		N/A	N/A	N/A		SW846 8260D	1097850
3335524002	MW-25D-130	SW846 3510C	1096958	12/06/2023 09:00	SRL	SW846 8270E SIM	1097498
		N/A	N/A	N/A		SW846 8260D	1097850
3335524003	MW-25D-190	SW846 3510C	1096958	12/06/2023 09:00	SRL	SW846 8270E SIM	1097498
		N/A	N/A	N/A		SW846 8260D	1097850
3335524004	MW-28D	SW846 3510C	1096958	12/06/2023 09:00	SRL	SW846 8270E SIM	1097498
		N/A	N/A	N/A		SW846 8260D	1097850
3335524005	MW-29D	SW846 3510C	1096958	12/06/2023 09:00	SRL	SW846 8270E SIM	1097498
		N/A	N/A	N/A		SW846 8260D	1097850
3335524006	MW-30D-273	SW846 3510C	1096958	12/06/2023 09:00	SRL	SW846 8270E SIM	1097498
		N/A	N/A	N/A		SW846 8260D	1097850
3335524007	MW-30D-413	SW846 3510C	1096958	12/06/2023 09:00	SRL	SW846 8270E SIM	1097498
		N/A	N/A	N/A		SW846 8260D	1097850
3335524008	MW-31D	SW846 3510C	1096958	12/06/2023 09:00	SRL	SW846 8270E SIM	1097498
		N/A	N/A	N/A		SW846 8260D	1097850
3335524009	MW-32D	SW846 3510C	1096958	12/06/2023 09:00	SRL	SW846 8270E SIM	1097498
		N/A	N/A	N/A		SW846 8260D	1097850
3335524010	MW-33D-235	SW846 3510C	1096958	12/06/2023 09:00	SRL	SW846 8270E SIM	1097498
		N/A	N/A	N/A		SW846 8260D	1097850
3335524011	MW-33D-295	SW846 3510C	1096958	12/06/2023 09:00	SRL	SW846 8270E SIM	1097498
		N/A	N/A	N/A		SW846 8260D	1097850
3335524012	MW-34D	SW846 3510C	1096958	12/06/2023 09:00	SRL	SW846 8270E SIM	1097498
		N/A	N/A	N/A		SW846 8260D	1097850
3335524013	MW-35D	SW846 3510C	1096958	12/06/2023 09:00	SRL	SW846 8270E SIM	1097498
		N/A	N/A	N/A		SW846 8260D	1100336
3335524014	MW-36D	SW846 3510C	1096958	12/06/2023 09:00	SRL	SW846 8270E SIM	1097498
		N/A	N/A	N/A		SW846 8260D	1100336
3335524015	DUP-120423	SW846 3510C	1096958	12/06/2023 09:00	SRL	SW846 8270E SIM	1100662
		N/A	N/A	N/A		SW846 8260D	1100336
3335524016	Trip Blank A	N/A	N/A	N/A		SW846 8260D	1100336
3335524017	Trip Blank B	N/A	N/A	N/A		SW846 8260D	1100336



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.



3335524

Logged By: SLS  
PM: SJB

3524 of

Client Name: WSP USA Inc		Container Type: C6 A6	Yes	No	Hexavalent Chromium Filtered?	Yes	No
Address: 13530 Dulles Technology Dr Suite 300 Herndon VA 20171		Container Size: VOA 250ml					
Contact: Eric Johnson		Preservative: HCl None					
Phone#: (703) 709-6500		Orthophosphate Filtered?					
Project Name#: Ksp-Flex Offsite / 31405608.011		ANALYSIS / METHOD REQUESTED					
Bill To:		Enter Number of Containers Per Sample or Field Results Below.					
Purchase Order #:		SDWA Sample Type (see key)					
TAT <input checked="" type="checkbox"/> Normal-Standard TAT is 10-12 business days.		* G or C					
Date Required: <input type="checkbox"/> Rush-Subject to ALS approval and surcharges.		**Matrix (See bottom of COC)					
Email: <input type="checkbox"/> Approved?		1,4 Diclor 8370					
		VOCs 8360					
		SDWA State of Origin?					
		Sample(s) for Radiation testing? Y N					
		Reportable SDWA Sample(s)? Y N					
		SDWA State of Origin?					
		PWSID #					
		PWS Contact: PWS Phone #:					
		SDWA Sample Type Key: D=Distribution E=Entry Point					
		R=Raw P=Plant C=Check S=Special A=Annual Startup					
		Sample/COC Remarks					
		Contains Short Hold Testing YES NO					
		Internal Use: If less than 48 hours - notify lab upon receipt					
		Data Deliverables				State Samples Collected In	
		Standard Lvl 1				HSCA	
		Standard Lvl 2				CLP-like	
		Standard Lvl 3				DOD	
		Standard Lvl 4				NJ RED	
		Excel Summary				NJ Full	
		Equis				Sample Disposal	
		Custom				Lab	
		EDDS:				Special	
		Formal Type				other	



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

**CHAIN OF CUSTODY/  
 REQUEST FOR ANALYSIS**

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

COC #: 2 of 2 335524 of  
 ALS Quote #:

Client Name: WSP USA Inc		Container Type: CG AG		Temp Taken By:		Receipt Information (completed by Receiving Lab)	
Address: 13530 Duques Technology Dr Suite 300 Herndon VA 20171		Container: VOA 250ml Preservative: HCl None		Therm ID:		WO Temp (°C) Y N NA	
Contact: Eric Johnson		Orthophosphate Filtered? Yes No		Hexavalent Chromium Filtered? Yes No		Receipt Info completed by: WV Containers 0-6°C Y N NA	
Phone#: (703) 709-6500		ANALYSIS / METHOD REQUESTED		Correct Containers Provided Y N		Deviations? NO YES IF YES, list below	
Project Name#: KOP Flex Offsite / 31405608.011		Enter Number of Containers Per Sample or Field Results Below.		Sample Label/COC Agree Y N		Sample Custody Seals Intact Y N NA	
Bill To:		SDWA Sample Type (see key)		Adequate Sample Volumes Y N		Sample Custody Seal Intact Y N NA	
Purchase Order #:		Matrix (See bottom of COC)		VOA only: Trip Blank Y N		Received on Ice Y N NA	
TAT <input checked="" type="checkbox"/> Normal-Standard TAT is 10-12 business days.		*G or C		NJ ≤ 4 days? Y N		Coolers & Samples Intact Y N	
Rush-Subject to ALS approval and surcharges. <input type="checkbox"/>		VOCs 8860		Courier/Tracking #		Correct Containers Provided Y N	
Date Required: Approved? <input type="checkbox"/>		1/4 Dioxin 8270		Samples for Radiation testing? Y N		Sample Label/COC Agree Y N	
Email: <input type="checkbox"/>		SDWA State of Origin? _____		Reportable SDWA Sample(s)? Y N		Adequate Sample Volumes Y N	
Sample Description/Location (as it will appear on the lab report)		Time (hh:mm)		SDWA State of Origin? _____		VOA only: Trip Blank Y N	
Date Collected (mm/dd/yy)		Enter Number of Containers Per Sample or Field Results Below.		PWSID # _____		NJ ≤ 4 days? Y N	
1 MW-33D-295 10/04/23 0930		2 MW-34D 10/04/23 0905		PWS Contact _____		Coolers & Samples Intact Y N	
3 MW-35D 12/04/23 0845		4 MW-36D 12/04/23 1145		PWS Phone # _____		Correct Containers Provided Y N	
5 MW-25D-19D MSMP 12/04/23 1215		6 MW-25D-19DMSD 12/04/23 1215		SDWA Sample Type Key: D=Distribution E=Entry Point		Sample Label/COC Agree Y N	
7 DUP-120423 12/04/23 0945		8 Trip Blank A		R=Raw P=Plant C=Check S=Special A=Annual Startup		Adequate Sample Volumes Y N	
9 Trip Blank B		10		Sample/COC Remarks		Sample Custody Seal Intact Y N NA	
Circle Sample Collector: ALS Tech/Client		Comments:		Contains Short Hold Testing YES NO		Received on Ice Y N NA	
Name:		Relinquished By / Company Name		Internal Use: If less than 48 hours - notify lab upon receipt		Coolers & Samples Intact Y N	
Date: 12/14/23 1605		WSP		Standard Lvl 1 <input type="checkbox"/>		Correct Containers Provided Y N	
12-4-23 185		AS / 2100		Standard Lvl 2 <input checked="" type="checkbox"/>		Sample Label/COC Agree Y N	
				Standard Lvl 3 <input type="checkbox"/>		Adequate Sample Volumes Y N	
				Standard Lvl 4 <input type="checkbox"/>		VOA only: Trip Blank Y N	
				Excel Summary <input checked="" type="checkbox"/>		NJ ≤ 4 days? Y N	
				Equis <input type="checkbox"/>		Courier/Tracking #	
				Custom <input type="checkbox"/>		Samples for Radiation testing? Y N	
				Special <input type="checkbox"/>		Reportable SDWA Sample(s)? Y N	
				Lab <input type="checkbox"/>		SDWA State of Origin? _____	
				Other <input type="checkbox"/>		PWSID # _____	
				HSCA <input type="checkbox"/>		PWS Contact _____	
				Landfill <input type="checkbox"/>		PWS Phone # _____	
				NJ RED <input type="checkbox"/>		SDWA Sample Type Key: D=Distribution E=Entry Point	
				NJ Full <input type="checkbox"/>		R=Raw P=Plant C=Check S=Special A=Annual Startup	
				NJ GW <input type="checkbox"/>		Sample/COC Remarks	
				Sample Disposal		Contains Short Hold Testing YES NO	
				Lab <input type="checkbox"/>		Internal Use: If less than 48 hours - notify lab upon receipt	
				Special <input type="checkbox"/>		Standard Lvl 1 <input type="checkbox"/>	
				Other <input type="checkbox"/>		Standard Lvl 2 <input checked="" type="checkbox"/>	
				NY <input type="checkbox"/>		Standard Lvl 3 <input type="checkbox"/>	
				NJ <input type="checkbox"/>		Standard Lvl 4 <input type="checkbox"/>	
				PA <input type="checkbox"/>		Excel Summary <input checked="" type="checkbox"/>	
				WV <input type="checkbox"/>		Equis <input type="checkbox"/>	
				FL <input type="checkbox"/>		Custom <input type="checkbox"/>	
				other <input type="checkbox"/>		Lab <input type="checkbox"/>	
						Special <input type="checkbox"/>	