



**VIA ELECTRONIC MAIL**

February 19, 2025

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**Subject: Quarterly Status Report No. 33 - Offsite Area  
Former Kop-Flex Facility Site, Hanover, Maryland**

Dear Tate:

On behalf of EMERSUB 16 LLC, a subsidiary of Emerson Electric Co. (Emerson), WSP USA Inc. (WSP) is submitting this quarterly status report describing the response action activities conducted in the Fourth Quarter of 2024 in the off-property portion of the Former Kop-Flex Inc. 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.

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

Kind regards,

Robert E. Johnson  
Vice President – Earth & Environment

Encl.

cc: Mr. Brian Deitz, Site Assessment and Remediation Division, MDE  
Mr. Moshood Oduwole, 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. 33 – OFFSITE AREA

## FORMER KOP-FLEX FACILITY SITE

October 2024 through December 2024

**Site Name:** Former Kop-Flex Inc.  
**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 2024 - DECEMBER 2024 REPORTING PERIOD

### SEMI-ANNUAL GROUNDWATER MONITORING ACTIVITIES

- The offsite monitoring wells screened in the Lower Patapsco aquifer and underlying Patuxent aquifer were sampled on November 11, 2024, with the exception of wells MW-31D in the residential area south of Reece Road and the paired MW-25D-130 and MW-25D-190 wells located in the Harmans Woods Housing Development. These wells could not be sampled due to cars being parked over the at-grade protective covers. Two of these three wells (MW-31D and MW-25D-130) were sampled on November 26, 2024. Well MW-25D-190 was not sampled until December 16, 2024, because the no-purge sampling device slipped from the tether during retrieval on November 26<sup>th</sup>, requiring the deployment and equilibration of another device prior to sampling.
- All groundwater samples were collected using a disposable no-purge sampling device (HydraSleeve™) previously deployed in each well. For most of the wells, the top of the HydraSleeve™ samplers were suspended at the midpoint of the screen such that retrieval would collect water from the overlying interval equal to the sampler length, which is 3.2 feet (Table 1). Longer HydraSleeve™ samplers were set in the paired MW-25D wells to collect a sufficient volume of water to allow for the collection of field quality control (QC) samples. Given their greater length, the top of these samplers was placed at a depth slightly below the screen mid-point to ensure the collection of water from within the screened interval of each well. A blind field duplicate sample was collected from MW-25D-130. A matrix-spike/matrix-spike-duplicate (MS/MSD) sample is typically collected from well MW-25D-190 during each sampling event; however, an MS/MSD was not collected from this well because the sample from this well was collected independently at a later date and would not be analytically linked with the other samples from the Site.
- 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, multi-parameter 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 for MW-25D-130 because the volume necessary to collect the field duplicate sample did not leave sufficient water for measurement of these field parameters.



## EVALUATION OF GROUNDWATER LEVEL DATA

- As part of the sampling activities, WSP measured the depth to water in all monitoring wells. Depth-to-water measurements obtained during the November and December field activities, along with previous monitoring events, are provided in Table 3. Wells where the water level was not measured on November 11, 2024, were measured on the date they were sampled as described above. The water level data provided in the table reflect the hydraulic heads under remedial pumping conditions from deep groundwater recovery well RW-1D only; recovery well RW-2D was off-line during the 4<sup>th</sup> quarter of 2024.
- A potentiometric surface contour map for the deep zone of the Lower Patapsco aquifer is shown in Figure 1 using the water level data obtained during the November 11, 2024, 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. The contours show a slight lowering of the potentiometric surface along the southern boundary of the former Kop-Flex Facility Site (Site) in response to groundwater pumping from well RW-1D. As indicated by the gradient in the potentiometric surface, the groundwater flow direction in the deep 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 in the offsite area to the south of the Site is limited to 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.

## GROUNDWATER SAMPLING RESULTS

- The analytical results for samples collected from the offsite monitoring wells in November and December 2024 are summarized in Table 4. Copies of the certified laboratory analytical reports for these samples are provided in Enclosures A (November 11, 2024, samples), Enclosure B (November 26, 2024, samples), and Enclosure C (December 2024 sample). 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 November and December 2024 samples are shown on Figure 2.
- No site-related COCs were detected in the shallow zone well MW-45 on the Williams Scotsman property (Table 4). Thus, the following discussion concerns the results for samples from the deep zone of the Lower Patapsco aquifer and underlying Patuxent aquifer.

## DEEP ZONE OF LOWER PATAPSCO AQUIFER NORTH OF THE SITE

Site-related COCs were detected in the sample from well MW-46D, which is screened in the upper-most portion of the deep zone of the Lower Patapsco aquifer on the neighboring Verizon property to the north of the Site. While MW-46D is not located hydraulically downgradient of the Site, the presence of detectable COC levels is most likely related to past releases at the Site due to the well's proximity to the Site. The total COC concentration in the MW-46D sample (71.9 micrograms per liter [ $\mu\text{g/l}$ ]) is less than the concentration observed in the June 2024 sample (Table 5). Concentrations of 1,1-DCA (7.4  $\mu\text{g/l}$ ), 1,1-DCE (36.5  $\mu\text{g/l}$ ), and 1,4-dioxane (26.8  $\mu\text{g/l}$ ) decreased in the November 2024 sample for this well but still exceeded their respective groundwater quality criteria (Table 4).<sup>1</sup> The latest concentrations of COCs detected – particularly 1,1-DCE and 1,4-dioxane – fall within a generally decreasing concentration trend at this well location which started around the 2021-

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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  $\mu\text{g/l}$ .



2022 timeframe (Table 5). The recent declines are believed to reflect the long-term change in COC concentrations within the in-flow, or capture, area upgradient of the deep recovery wells for the hydraulic containment system.

## DEEP ZONE OF LOWER PATAPSCO AQUIFER SOUTH OF THE SITE

- The analytical data indicate the detection of site-related COCs just over one mile hydraulically downgradient (south-southeast) of the Site, with the presence of these constituents limited to the deep zone of the Lower Patapsco aquifer. In the offsite area to the immediate south of the Site, the sample from monitoring well MW-24D on the adjoining Williams-Scotsman property had the highest concentration of site-related COCs (1,181 µg/l) in the deep zone of the Lower Patapsco aquifer. This total COC concentration is slightly higher than the total detected in May 2024 (1,154 µg/l) and is entirely attributable to an increase in the concentration of 1,4-dioxane. The change in total COCs does not appear to be indicative of a long-term trend and is similar to the fluctuations seen throughout the sampling history of the well.
- Further downgradient, a total concentration of site-related COCs of 126.8 µg/l was detected in the MW-25D-130 sample, which is less than from the May 2024 event (154.8 µg/l). The concentration of 1,1-DCE (92 µg/l), the primary VOC detected at this well decreased by 25 percent while the concentration of 1,4-dioxane (21.4 µg/l) increased by 30 percent between the two time periods. Overall, the historical trend for 1,4-dioxane in this well has either been slightly decreasing or asymptotic, whereas, since late 2021, the concentrations of 1,1-DCE have increased slightly after a period of long-term decline between 2014 and 2021.
- At the paired well MW-25D-190, which was sampled on December 16, 2024, the total site-related COC concentration of 34.2 µg/l was lower than that observed in the shallower well at this location (MW-25D-130) and comparable to the May 2024 sample result (see Table 5). Overall, the VOC concentrations in this well have decreased throughout its sampling history, and the last two sets of results represent the lowest concentrations observed at this location since sampling began in 2014. Even with the long-term decreasing trends, 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). Notable 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 within the deep zone of the Lower Patapsco aquifer. The concentration of 1,1-DCE (50.7 µg/l) in the groundwater sample collected from this well increased by 65 percent between May and November 2024 (Table 5). The concentration of 1,4-dioxane (11.7 µg/l) increased slightly relative to the May 2024 sample. These results are similar to those observed in December 2023, when a spike in the 1,1-DCE concentration, in particular, reached a historically high level.
- The most downgradient well with detectable concentrations of COCs (MW-33D-295) contained 1,1-DCE at 9.2 µg/l which was slightly above the comparative criterion (Table 4). This sample also had a low detection (3.9 µg/l) of 1,4-dioxane below the evaluation criterion. Overall, concentrations of 1,1-DCE in this well have exhibited a small increase since 2021, while the 1,4-dioxane levels have been generally stable.
- Groundwater samples from the remaining wells screened in the deep 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 (12.2 µg/l) exceeded the comparative criterion in the sample collected from MW-28D (Table 4). The sample from this well also contained 4.6 µg/l of 1,4-dioxane. No site-related COCs were detected in the groundwater sample from well MW-32D further to the south (Figure 2). In the area along the eastern plume boundary, the sample from well MW-29D, which is located east of the MW-25D well pair, had no detections of COCs. No site-related COCs were detected in the samples from wells around the leading edge of the deep zone plume (MW-31D, MW-34D, and MW-35D) (Table 4, Figure 2).



## PATUXENT AQUIFER

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 aquifer. Site-related COCs are not anticipated to be in the Patuxent aquifer due to the presence of a thick, clayey unit (Arundel Clay) overlying this aquifer that serves as an aquitard or geologic unit comprised of low permeability materials that significantly restricts the flow of groundwater and spreading of dissolved solutes. 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 separates the Lower Patapsco and Patuxent aquifers.

## 2.0 OFFSITE ACTIVITIES FOR THE NEXT REPORTING PERIOD (JANUARY 2025 THROUGH MARCH 2025)

No field activities are planned for the first quarter 2025 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 of 2025.

WSP will begin preparation of the 2024 Offsite Groundwater Monitoring Report during the first quarter of 2025. This report will be submitted to MDE and the U.S. Environmental Protection Agency (EPA), Region III in the spring of 2025.

## 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.

## 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)	Top of Screen (ft bgs)	Deployment Depth (ft bgs)	Sample Interval (ft bgs)
<b>Shallow LPA Zone</b>				
MW-45	38	28	33	29.8 - 33.0
<b>Deep LPA Zone</b>				
MW-24D	128.5	119	123.5	120.3 - 123.5
MW-25D-130	130	120	126.5	122.1-126.5
MW-25D-190	190	180	188.2	183.2 - 188.2
MW-28D	210	200	205	201.8 - 205.0
MW-29D	151	141	146	142.8 - 146.0
MW-30D-273	273	263	268	264.8 - 268.0
MW-31D	280	270	275	271.8 - 275.0
MW-32D	236	226	231	227.8 - 231.0
MW-33D-235	235	225	230	226.8 - 230.0
MW-33D-295	295	285	290	286.8 - 290.0
MW-34D	385	375	380	376.8 - 380.0
MW-35D	298	288	293	289.8 - 293.0
MW-46D	90	80	85	81.8 - 85.0
<b>Patuxent Aquifer</b>				
MW-30D-413	413	403	408	404.8 - 408
MW-36D	360	350	355	351.8 - 355.0

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

**Table 2**

**Field Hydrogeochemical Measurements - November and December 2024  
Offsite Monitoring Well Locations  
Former Kop-Flex Facility Site  
Hanover, MD (a)**

<b>Well ID</b>	<b>Temperature (°C)</b>	<b>pH</b>	<b>Specific Conductivity (mS/cm)</b>	<b>Turbidity (NTU)</b>
<b>Shallow LPA Zone</b>				
MW-45	17.69	4.92	0.311	> 1000
<b>Deep LPA Zone</b>				
MW-24D	16.97	5.52	0.107	233
MW-25-130	Not Measured			
MW-25-190	11.12	4.78	0.083	44.1
MW-28D	16.20	6.77	0.051	574
MW-29D	18.38	6.76	0.146	462
MW-30D-273	15.18	5.44	0.021	73.2
MW-31D	14.67	4.90	0.117	9.6
MW-32D	18.57	7.15	0.189	329
MW-33D-235	14.72	6.01	0.021	426
MW-33D-295	14.58	6.85	0.032	92.8
MW-34D	14.65	6.45	0.171	713
MW-35D	14.58	4.46	0.169	471
<b>Patuxent Aquifer</b>				
MW-30D-413	15.19	5.61	0.025	726
MW-36D	16.67	6.11	0.018	92.3

a/ °C = degrees Celsius; mS/cm = milliSiemens/centimeter; ORP = oxidation-reduction potential; mV = millivolts; NTU = nephelometric turbidity units; LPA = Lower Patapsco Aquifer.

Table 3

**Historical Groundwater Elevations (2015 through 2024)  
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								
MW-25S *	Shallow 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 *	Shallow 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	Shallow LPA	126.7	NM	-								
MW-24D	Deep LPA	129.1	50.9	78.20	49.29	79.81	NM	-	NM	-	44.38	84.72
MW-25D-130	Deep 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	Deep 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	Deep 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	Deep LPA	131.9	NM	-								
MW-30D-273	Deep LPA	153.5	NM	-								
MW-31D	Deep 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	Deep LPA	156.1	NM	-								
MW-33D-235	Deep 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	Deep 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	Deep LPA	183.9	NM	-								
MW-35D	Deep 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	Deep LPA	124.8	NM	-								
MW-30D-413	Patuxent	153.1	NM	-								
MW-36D	Patuxent	158.7	NM	-								

Notes:

LPA = Lower Patapsco Aquifer

NM = Not Measured

TOC = Top of Casing

\* Well abandoned in August 2019

a/ The field measurement was deemed inaccurate due to an error with the water level indicator

Table 3

**Historical Groundwater Elevations (2015 through 2024)  
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										
MW-25S *	Shallow 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 *	Shallow 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	Shallow LPA	126.7	NM	-	13.67	113.05	NM	-	NM	-	NM	-	12.98	113.74
MW-24D	Deep 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	Deep 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	Deep 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	Deep 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	Deep LPA	131.9	NM	-	64.94	66.98								
MW-30D-273	Deep LPA	153.5	NM	-	98.66	54.88								
MW-31D	Deep 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	Deep LPA	156.1	NM	-	97.90	58.24								
MW-33D-235	Deep 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	Deep 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	Deep LPA	183.9	NM	-	132.70	51.21								
MW-35D	Deep 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	Deep LPA	124.8	NM	-										
MW-30D-413	Patuxent	153.1	NM	-	138.10	15.03								
MW-36D	Patuxent	158.7	NM	-	141.75	16.96								

Notes:

LPA = Lower Patapsco Aquifer

NM = Not Measured

TOC = Top of Casing

\* Well abandoned in August 2019

a/ The field measurement was deemed inaccurate due to an error with the water level indicator

Table 3

**Historical Groundwater Elevations (2015 through 2024)  
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										
MW-25S *	Shallow LPA	130.6	NM	-	11.84	118.76	11.75	118.85	NM	-	NM	-	NM	-
MW-28S *	Shallow LPA	150.5	NM	-	24.33	126.17	23.30	127.20	NM	-	NM	-	NM	-
MW-45	Shallow LPA	126.7	NM	-	NM	-	11.98	114.74	11.75	114.97	NM	-	14.55	112.17
MW-24D	Deep LPA	129.1	NM	-	NM	-	48.92	80.18	49.67	79.43	52.37	76.73	51.12	77.98
MW-25D-130	Deep 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	Deep 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	Deep 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	Deep 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	Deep 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	Deep 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	Deep 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	Deep 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	Deep 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	Deep 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	Deep 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	Deep 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

a/ The field measurement was deemed inaccurate due to an error with the water level indicator

Table 3

**Historical Groundwater Elevations (2015 through 2024)  
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								
MW-25S *	Shallow LPA	130.6	NM	-	NM	-	NM	-	NM	-	-	0.00
MW-28S *	Shallow LPA	150.5	NM	-	NM	-	NM	-	NM	-	-	0.00
MW-45	Shallow LPA	126.7	NM	-	NM	-	NM	-	12.69	114.03	12.69	114.03
MW-24D	Deep 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	Deep LPA	130.5	55.55	74.95	54.95	75.55	60.50	70.00	56.11	74.39	NM	-
MW-25D-192	Deep LPA	130.5	54.70	75.80	54.23	76.27	59.50	71.00	55.32	75.18	NM	-
MW-28D	Deep 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	Deep 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	Deep 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	Deep LPA	162.5	102.73	59.77	NM	-	113.30	49.20	104.32	58.18	108.09	54.41
MW-32D	Deep 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	Deep LPA	178.6	119.72	58.88	119.10	59.50	NM	-	121.30	57.30	125.35	53.25
MW-33D-295	Deep 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	Deep 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	Deep 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	Deep 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

a/ The field measurement was deemed inaccurate due to an error with the water level indicator

Table 3

**Historical Groundwater Elevations (2015 through 2024)  
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		5/19/2024	
			Depth to Water	Groundwater Elevation								
MW-25S *	Shallow LPA	130.6	-	-	-	-	NM	-	-	-	-	-
MW-28S *	Shallow LPA	150.5	-	-	-	-	NM	-	-	-	-	-
MW-45	Shallow LPA	126.7	12.91	113.81	13.54	113.18	NM	-	13.54	113.18	12.40	114.32
MW-24D	Deep LPA	129.1	51.06	78.0	53.11	76.0	49.42	79.68	53.83	75.3	52.60	76.5
MW-25D-130	Deep LPA	130.5	60.22	70.3	60.00	70.5	57.68	72.82	61.12	69.4	60.67	69.8
MW-25D-192	Deep LPA	130.5	59.12	71.4	59.10	71.4	56.72	73.78	60.15	70.4	59.60	70.9
MW-28D	Deep LPA	150.5	93.51	57.0	90.81	59.7	89.06	61.44	92.66	57.8	93.36	57.1
MW-29D	Deep LPA	131.9	68.45	63.5	66.70	65.2	65.15	66.77	68.34	63.6	68.31	63.6
MW-30D-273	Deep LPA	153.5	104.25	49.3	100.23	53.3	98.76	54.78	102.50	51.0	NM	-
MW-31D	Deep LPA	162.5	114.2	48.3	109.24	53.3	107.82	54.68	111.54	51.0	NM	-
MW-32D	Deep LPA	156.1	104.98	51.2	100.23	55.9	98.47	57.67	102.17	54.0	103.71	52.4
MW-33D-235	Deep LPA	178.6	132.13	46.5	126.56	52.0	125.61	52.99	129.16	49.4	(a)	-
MW-33D-295	Deep LPA	178.3	131.85	46.5	126.29	52.0	125.39	52.91	128.89	49.4	131.57	46.7
MW-34D	Deep LPA	183.9	141.12	42.8	134.82	49.1	134.32	49.59	137.72	46.2	140.72	43.2
MW-35D	Deep LPA	177.8	132.35	45.5	126.60	51.2	126.53	51.27	129.71	48.1	131.83	46.0
MW-46D	Deep LPA	124.8	37.13	87.64	38.38	86.4	36.26	88.51	38.88	85.9	37.66	87.1
MW-30D-413	Patuxent	153.1	145.4	7.7	141.52	11.6	137.89	15.2	141.29	11.8	139.79	13.3
MW-36D	Patuxent	158.7	148.06	10.7	145.05	13.7	141.29	17.4	144.57	14.1	NM	-

Notes:

LPA = Lower Patapsco Aquifer

NM = Not Measured

TOC = Top of Casing

\* Well abandoned in August 2019

a/ The field measurement was deemed inaccurate due to an error with the water level indicator

Table 3

**Historical Groundwater Elevations (2015 through 2024)  
Offsite Monitoring Wells  
Former Kop-Flex Facility Site  
Hanover, Maryland**

Well ID	Aquifer/Zone	TOC Elevation	6/12/2024		11/11/2024		11/26/2024	
			Depth to Water	Groundwater Elevation	Depth to Water	Groundwater Elevation	Depth to Water	Groundwater Elevation
MW-25S *	Shallow LPA	130.6	-	-	-	-	-	-
MW-28S *	Shallow LPA	150.5	-	-	-	-	-	-
MW-45	Shallow LPA	126.7	NM	-	13.63	113.09	NM	-
MW-24D	Deep LPA	129.1	NM	-	54.70	74.4	NM	-
MW-25D-130	Deep LPA	130.5	NM	-	NM	-	63.31	67.2
MW-25D-192	Deep LPA	130.5	NM	-	NM	-	62.23	68.3
MW-28D	Deep LPA	150.5	NM	-	96.83	53.7	NM	-
MW-29D	Deep LPA	131.9	69.41	62.5	71.87	60.1	NM	-
MW-30D-273	Deep LPA	153.5	105.30	48.2	108.07	45.5	NM	-
MW-31D	Deep LPA	162.5	115.60	46.9	NM	-	117.69	44.8
MW-32D	Deep LPA	156.1	NM	-	107.55	48.6	NM	-
MW-33D-235	Deep LPA	178.6	133.30	45.3	135.94	42.7	NM	-
MW-33D-295	Deep LPA	178.3	132.96	45.3	135.65	42.7	NM	-
MW-34D	Deep LPA	183.9	NM	-	145.07	38.8	NM	-
MW-35D	Deep LPA	177.8	NM	-	136.37	41.4	NM	-
MW-46D	Deep LPA	124.8	38.32	86.5	39.80	85.0	NM	-
MW-30D-413	Patuxent	153.1	143.58	9.5	148.91	4.2	NM	-
MW-36D	Patuxent	158.7	146.41	12.3	151.72	7.0	NM	-

Notes:

LPA = Lower Patapsco Aquifer

NM = Not Measured

TOC = Top of Casing

\* Well abandoned in August 2019

a/ The field measurement was deemed inaccurate due to an error with the water level indicator

Table 4

Offsite Monitoring Well Sample Results  
Former Kop-Flex Facility Site  
Hanover, Maryland  
Fourth Quarter 2024

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 11/11/24	MW-24D 11/11/24	MW-25D-130 11/26/24	MW-200 (d) 11/26/24	MW-25D-190 12/16/24	MW-28D 11/11/24	MW-29D 11/11/24	MW-30D-273 11/11/24	MW-31D 11/26/24	MW-32D 11/11/24	
Methyl t-Butyl Ether	20		1.0 U	10.0 U	1.0 U	1.0 U	1.0	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1-Dichloroethane	2.8		1.0 U	73.8	6.8	6.7	4.9	1.0 U	1.0 U	1.3	1.0 U	1.0 U	1.0 U
1,2-Dichloroethane	5		1.0 U	10.0 U	1.0	1.1	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1-Dichloroethene	7		1.0 U	947	91.5	88.9	20.4	12.2	1.0 U	50.7	1.0 U	1.0 U	1.0 U
1,4-Dioxane	4.6 (c)		1.1 U	160	21.4	23.6	6.8	4.6	1.0 U	11.7	1.0 U	1.0 U	1.1 U
1,1,1-Trichloroethane	200		1.0 U	10.0 U	6.1	5.8	2.1	1.0 U	1.0 U	1.7	1.0 U	1.0 U	1.0 U
<b>Total CVOCs &amp; 1,4-Dioxane</b>			<i>ND</i>	<i>1,181</i>	<i>126.8</i>	<i>126.1</i>	<i>34.2</i>	<i>16.8</i>	<i>ND</i>	<i>65.4</i>	<i>ND</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/docum>

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  
Fourth Quarter 2024

Parameters (a)	Groundwater Quality Standards (µg/L) (b)	Well ID: Sampling Date:	DEEP (CONFINED) ZONE LOWER PATAPSCO AQUIFER					PATUXENT AQUIFER	
			MW-33D-235 11/11/24	MW-33D-295 11/11/24	MW-34D 11/11/24	MW-35D 11/11/24	MW-46D 11/10/24	MW-30D-413 11/11/24	MW-36D 11/11/24
Methyl t-Butyl Ether	<b>20</b>		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1-Dichloroethane	<b>2.8</b>		1.0 U	1.0 U	1.0 U	1.0 U	<b>7.4</b>	1.0 U	1.0 U
1,2-Dichloroethane	<b>5</b>		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1-Dichloroethene	<b>7</b>		1.0 U	<b>9.2</b>	1.0 U	1.0 U	<b>36.5</b>	1.0 U	1.0 U
1,4-Dioxane	<b>4.6 (c)</b>		1.0 U	3.9	1.0 U	1.0 U	<b>26.8</b>	1.0 U	1.0 U
1,1,1-Trichloroethane	<b>200</b>		1.0 U	1.0 U	1.0 U	1.0 U	1.2	1.0 U	1.0 U
<b>Total CVOCs &amp; 1,4-Dioxane</b>			<i>ND</i>	<i>13.1</i>	<i>ND</i>	<i>ND</i>	<i>71.9</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 6

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>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	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

Table 6

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	1,1,1-Dichloroethane	cis-1,2-Dichloroethane	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-45	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
	7/14/2023	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
	5/20/2024	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
11/11/2024	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	
<b>Deep Zone Lower Patapsco Wells</b>											
MW-24D	3/22/2016	12.5 U	<b>88.0</b>	<b>15.7</b>	<b>1,780</b>	12.5 U	<b>561</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</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</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</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</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</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</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</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</b>	20.0 U	4.4	4.0 U	4.0 U
	5/10/2021	6.2	<b>151</b>	<b>6.3</b>	<b>788</b>	7.2	<b>299</b>	25.0 U	10.9	5.0 U	5.0 U
	11/15/2021	10.0 U	<b>142</b>	10.0 U	<b>1,300</b>	10.0 U	<b>475</b>	25.0 U	16.1	5.0 U	5.0 U
	6/27/2022	3.6	<b>142</b>	<b>7.4</b>	<b>1,490</b>	6.9	<b>165</b>	1.0 U	18.5	1.0	<b>8.6</b>
	11/21/2022	2.8	<b>114</b>	<b>7.5</b>	<b>1,020</b>	5.5	<b>148</b>	1.0 U	15.3	1.2	<b>7.7</b>
	7/14/2023	1.6	<b>110</b>	<b>7.1</b>	<b>954</b>	4.8	<b>90</b>	10.0 U	14.8	1.1	<b>7.3</b>
	12/4/2023	10.0 U	<b>88.1</b>	10.0 U	<b>1,130</b>	10.0 U	<b>102</b>	10.0 U	11.9	10.0 U	10.0 U
5/20/2024	10.0 U	<b>76.8</b>	10.0 U	<b>999</b>	10.0 U	<b>78</b>	10.0 U	10.0 U	10.0 U	10.0 U	
11/11/2024	10.0 U	<b>73.8</b>	10.0 U	<b>947</b>	10.0 U	<b>160</b>	10.0 U	10.0 U	10.0 U	10.0 U	

Table 6

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-130	3/19/2015	10.0 U	38.6	10.8	854	10.0 U	446	200 U	8,930	100.0 U	100.0 U
	6/24/2015	1.0 U	37.1	8.9	1,030	4.6	303	2.0 U	46.3	1.2	6.8
	9/23/2015	10.0 U	29.7	10.0 U	697	10.0 U	295	20.0 U	32.3	10.0 U	14.2
	1/7/2016	5.0 U	33.4	9.7	800	5.0 U	398	10.0 U	5.0 U	5.0 U	6.1
	3/23/2016	5.0 U	24.5	8.0	676	5.0 U	302	10.0 U	26.2	5.0 U	5.0
	7/19/2016	10.0 U	39.3	10.2	1,090	4.9 J	367	14.3 J	37.0	10.0 U	6.5 J
	9/9/2016	5.0 U	27.9	6.4	661	5.0 U	241	12.0	25.0	5.0 U	5.0 U
	12/8/2016	1.0 U	6.7	1.5	171	1.0 U	13.6	2.0 U	6.9	1.0 U	1.0 U
	2/21/2017	1.0 U	7.2	1.7	194	1.0 U	69.1	2.0 U	7.0	1.0 U	1.2
	5/2/2017	2.0 U	6.5	2.0 U	174	2.0 U	61.0	4.0 U	5.0	2.0 U	2.0 U
	8/31/2017	2.0 U	7.4	1.7	193	2.0 U	57.9	4.0 U	6.9	2.0 U	2.0 U
	11/14/2017	2.0 U	5.1	1.3	151	0.6 J	58.5	5.0 U	6.4	1.0 U	1.1
	2/13/2018	2.0 U	6.3	2.0 U	154	2.0 U	67.1	5.0 U	6.4	1.0 U	1.0 U
	5/30/2018	2.0 U	5.0	1.4	144	2.0 U	53.9	5.0 U	5.3	1.0 U	1.0 U
	11/8/2018	2.0 U	4.4	1.1	109	2.0 U	40.2	5.0 U	1.0 U	1.0 U	1.0 U
	5/22/2019	1.0 U	3.7	1.0 U	96.2	1.0 U	38.4	5.0 U	4.2	1.0 U	1.0 U
	11/19/2019	1.0 U	2.7	1.0 U	62.1	1.0 U	31.0	5.0 U	1.0 U	1.0 U	1.0 U
	5/14/2020	1.0 U	3.3	1.0 U	69.1	1.0 U	32.6	5.0 U	1.0 U	1.0 U	1.0 U
	11/23/2020	1.0 U	3.3	1.0 U	76.0	1.0 U	32.4	5.0 U	4.9	1.0 U	1.0 U
	5/10/2021	1.0 U	3.0	1.0 U	50.8	1.0 U	30.2	5.0 U	3.1	1.0 U	1.0 U
	12/27/2021	1.0 U	3.0	1.0 U	45.5	1.0 U	29.1	5.0 U	3.3	1.0 U	1.0 U
	6/27/2022	1.0 U	4.2	1.0 U	65.6	1.0 U	15.6	1.0 U	5.0	1.0 U	1.0 U
	11/21/2022	1.0 U	5.5	1.0 U	80.2	1.0 U	16.1	1.0 U	5.6	1.0 U	1.0 U
	Duplicate 11/21/2022	1.0 U	5.3	1.0 U	76.2	1.0 U	19.1	1.0 U	5.6	1.0 U	1.0 U
	5/22/2023	1.0 U	4.3	1.0 U	52.0	1.0 U	21.3	1.0 U	4.5	1.0 U	1.0 U
	Duplicate 5/22/2023	1.0 U	5.0	1.0 U	60.0	1.0 U	21.0	1.0 U	5.2	1.0 U	1.0 U
	12/4/2023	10.0 U	6.9	1.1	110	1.0 U	28.4	1.0 U	6.2	1.0 U	1.0 U
	Duplicate 12/4/2023	10.0 U	5.9	1.0 U	100	1.0 U	23.7	1.0 U	5.6	1.0 U	1.0 U
5/20/2024	1.0 U	7.2	1.4	123	1.0 U	16.4	1.0 U	6.8	1.0 U	1.0 U	
Duplicate 5/20/2024	1.0 U	5.0	1.2	104	1.0 U	14.7	1.0 U	5.8	1.0 U	1.0 U	
11/26/2024	1.0 U	6.8	1.0	92	1.0 U	21.4	1.0 U	6.1	1.0 U	1.0 U	
Duplicate 11/26/2024	1.0 U	6.7	1.1	89	1.0 U	23.6	1.0 U	5.8	1.0 U	1.0 U	

Table 6

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-192	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	
5/20/2024	1.0 U	5.0	1.0 U	19.5	1.0 U	6.4	1.0 U	2.5	1.0 U	1.0 U	
12/16/2024	1.0 U	4.9	1.0 U	20.4	1.0 U	6.8	1.0 U	2.1	1.0 U	1.0 U	

Table 6

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-28D	3/17/2015	1.0 U	1.0 U	1.0 U	<b>10.6</b>	1.0 U	<b>5.0</b>	2.0 U	1.0 U	1.0 U	1.0 U
	6/23/2015	1.0 U	1.0 U	1.0 U	<b>12.8</b>	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	<b>14.3</b>	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	<b>11.5</b>	1.0 U	<b>5.5</b>	2.0 U	1.0 U	1.0 U	1.0 U
	3/23/2016	1.0 U	1.0 U	1.0 U	<b>9.1</b>	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	<b>10.1</b>	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	<b>12.0</b>	1.0 U	<b>5.0</b>	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	<b>7.6</b>	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	<b>10.0</b>	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	<b>8.1</b>	1.0 U	<b>5.1</b>	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	<b>8.3</b>	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	<b>13.3</b>	1.0 U	3.8	1.0 U	1.0 U	1.0 U	1.0 U	
5/20/2024	1.0 U	1.0 U	1.0 U	<b>13.2</b>	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	
11/11/2024	1.0 U	1.0 U	1.0 U	<b>12.2</b>	1.0 U	4.6	1.0 U	1.0 U	1.0 U	1.0 U	
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
	5/20/2024	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
11/11/2024	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 6

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-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
	5/20/2024	1.0 U	1.0 U	1.0 U	30.6	1.0 U	7.1	1.0 U	1.3	1.0 U	1.0 U
	11/11/2024	1.0 U	1.3	1.0 U	50.7	1.0 U	11.7	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 6

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	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
	6/12/2024	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
	11/26/2024	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
	5/20/2024	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
	11/11/2024	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 6

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-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	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	
5/20/2024	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	
11/11/2024	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 6

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
5/20/2024	1.0 U	1.0 U	1.0 U	6.7	1.0 U	3.6	1.0 U	1.0 U	1.0 U	1.0 U	
11/11/2024	1.0 U	1.0 U	1.0 U	9.2	1.0 U	3.9	1.0 U	1.0 U	1.0 U	1.0 U	

Table 6

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-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	1.4 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
	5/20/2024	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
	11/11/2024	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-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	2.0 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	2.0 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	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	0.16 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	
5/20/2024	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	
11/11/2024	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 6

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-46D</b>	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	<b>8.7</b>	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
	6/12/2024	1.0 U	<b>16.4</b>	1.0 U	<b>65.9</b>	1.0 U	<b>30.2</b>	1.0 U	2.4	1.0 U	1.0 U
	11/10/2024	1.0 U	<b>7.4</b>	1.0 U	<b>36.5</b>	1.0 U	<b>26.8</b>	1.0 U	1.2	1.0 U	1.0 U
	<b>Confined Patuxent Wells</b>										
<b>MW-30D-413</b>	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 6

**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
	5/20/2024	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.1 U	1.0 U	1.0 U	1.0 U	1.0 U
	11/11/2024	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.1 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
	5/20/2024	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
	11/11/2024	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U

(1) 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.

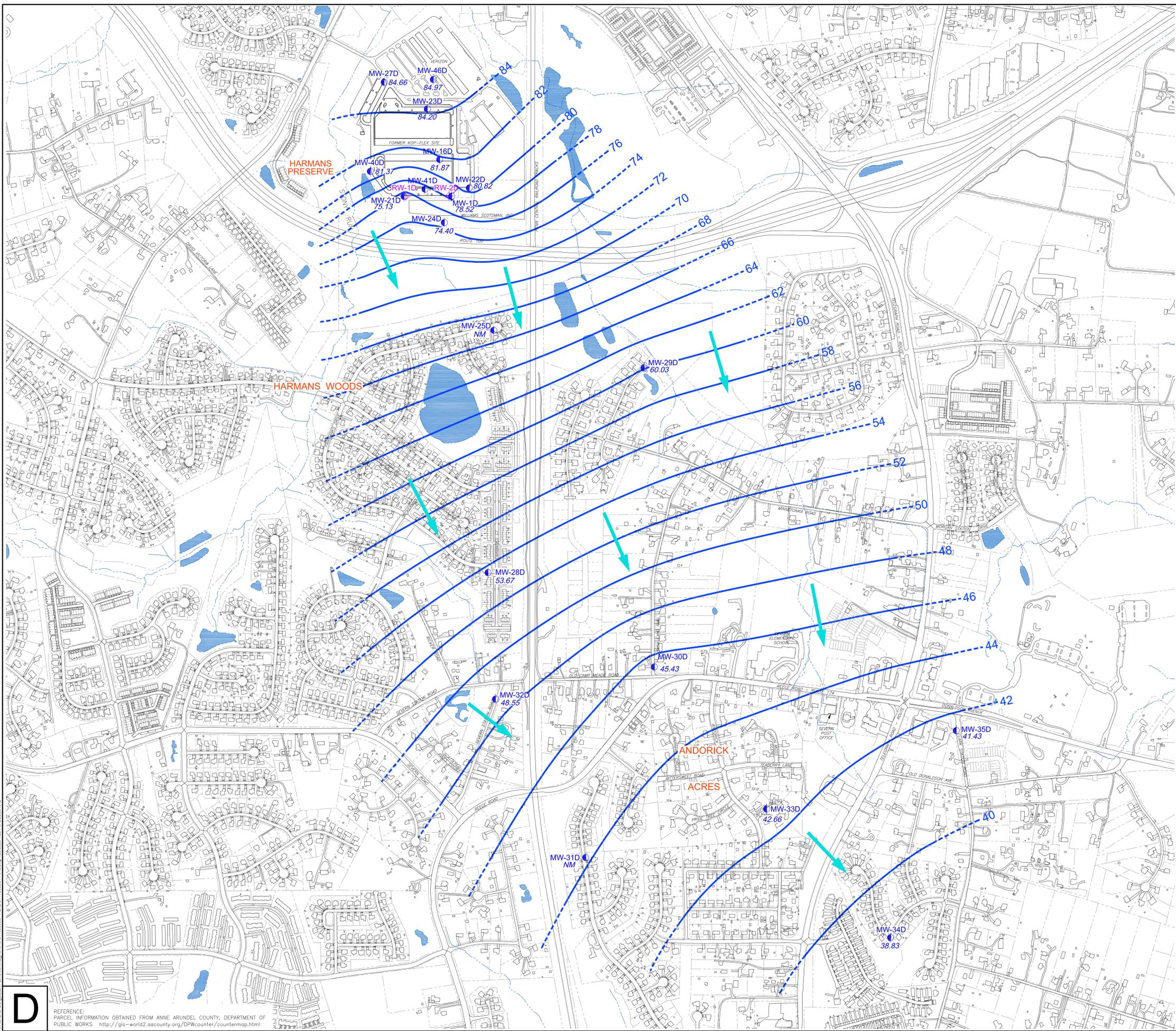
All sample concentrations in micrograms per liter (µg/l)

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

## FIGURES



**LEGEND**

- PROPERTY LINE
- STREAM
- WATER BODY
- MONITORING WELL
- RECOVERY WELL
- 53.67 GROUNDWATER SURFACE ELEVATION (FEET MSL)
- NM NOT MEASURED
- 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 AT RW-1D ONLY. RECOVERY WELL RW-2D WAS OFF-LINE DURING THE MONITORING EVENT.

REVISIONS	
REV	DESCRIPTION

DRAWN BY	CHECKED	APPROVED	DATE
Egg	Egg	Egg	12/17/2024
			1/29/2025

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**POTENTIOMETRIC SURFACE CONTOUR MAP DEEP CONFINED ZONE OF THE LOWER PATAPSCO AQUIFER**  
**NOVEMBER 2024**  
**FORMER KOP-FLEX FACILITY SITE**  
 HANOVER, MARYLAND

PREPARED FOR  
**EMERSUB 16 LLC**  
 ST. LOUIS, MISSOURI



WSP USA Inc.  
 13530 DULLES TECHNOLOGY DR, SUITE 300  
 HERRIDON, VA 20117  
 TEL: +1 703.709.6500

**FIGURE 1**

Drawing Number  
**314V5608.011-048**

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

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





ENXLOSURE A - CERTIFIED LABORATORY ANALYTICAL REPORT FOR  
OFFSTE MONITORING WELL SAMPLES (NOVEMBER 11, 2024)



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

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, NJ PA101

Analytical Results Report For

**WSP USA Inc.**

Project Kop Flex Off Site  
 Workorder 3387075  
 Report ID 369463 on 11/26/2024

### Certificate of Analysis

Enclosed are the analytical results for samples received by the laboratory on Nov 11, 2024.

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  
 Erik Reinert - 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>
3387075001	MW-35D	Ground Water	11/11/2024 08:50	11/11/2024 17:33	CBC	Collected By Client
3387075002	MW-34D	Ground Water	11/11/2024 09:10	11/11/2024 17:33	CBC	Collected By Client
3387075003	MW-33-295	Ground Water	11/11/2024 09:40	11/11/2024 17:33	CBC	Collected By Client
3387075004	MW-33-235	Ground Water	11/11/2024 09:50	11/11/2024 17:33	CBC	Collected By Client
3387075005	MW-30D-413	Ground Water	11/11/2024 10:10	11/11/2024 17:33	CBC	Collected By Client
3387075006	MW-30D-273	Ground Water	11/11/2024 10:25	11/11/2024 17:33	CBC	Collected By Client
3387075007	MW-29D	Ground Water	11/11/2024 10:50	11/11/2024 17:33	CBC	Collected By Client
3387075008	MW-32D	Ground Water	11/11/2024 11:15	11/11/2024 17:33	CBC	Collected By Client
3387075009	Trip Blank D	Ground Water	11/11/2024 00:00	11/11/2024 17:33	CBC	Collected By Client
3387075010	MW-28D	Ground Water	11/11/2024 11:45	11/11/2024 17:33	CBC	Collected By Client
3387075011	MW-36D	Ground Water	11/11/2024 12:00	11/11/2024 17:33	CBC	Collected By Client
3387075012	MW-45	Ground Water	11/11/2024 13:15	11/11/2024 17:33	CBC	Collected By Client
3387075013	MW-24D	Ground Water	11/11/2024 13:30	11/11/2024 17:33	CBC	Collected By Client
3387075014	Trip Blank E	Ground Water	11/11/2024 13:30	11/11/2024 17:33	CBC	Collected By Client
3387075015	MW-46D	Ground Water	11/10/2024 17:10	11/11/2024 17:33	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** Kop Flex Off Site  
**Workorder** 3387075

**Project Notations**

**Sample Notations**

**Lab ID**      **Sample ID**

**Result Notations**

**Notation Ref.**

- |   |   |
|---|---|
| 1 | 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 20. |
| 2 | 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 20.        |



### Detected Results Summary

Client Sample ID	MW-33-295	Collected	11/11/2024 09:40
Lab Sample ID	3387075003	Lab Receipt	11/11/2024 17:33

<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	3.9	ug/L	1.0	SW846 8270E SIM	#
<b>VOLATILE ORGANICS</b>					
1,1-Dichloroethene	9.2	ug/L	1.0	SW846 8260D	#



### Detected Results Summary

Client Sample ID MW-30D-273 Collected 11/11/2024 10:25  
Lab Sample ID 3387075006 Lab Receipt 11/11/2024 17:33

Compound	Result	Units	RDL	Method	Flag
<b>SEMIVOLATILE SIM</b>					
1,4-Dioxane	11.7	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	50.7	ug/L	1.0	SW846 8260D	#



### Detected Results Summary

Client Sample ID	MW-28D	Collected	11/11/2024 11:45
Lab Sample ID	3387075010	Lab Receipt	11/11/2024 17:33

<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	4.6	ug/L	1.1	SW846 8270E SIM	#
<b>VOLATILE ORGANICS</b>					
1,1-Dichloroethene	12.2	ug/L	1.0	SW846 8260D	#



### Detected Results Summary

Client Sample ID MW-24D Collected 11/11/2024 13:30  
Lab Sample ID 3387075013 Lab Receipt 11/11/2024 17:33

<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	160	ug/L	20.0	SW846 8270E SIM	#
<b>VOLATILE ORGANICS</b>					
1,1-Dichloroethane	73.8	ug/L	10.0	SW846 8260D	#
1,1-Dichloroethene	947	ug/L	10.0	SW846 8260D	#



### Detected Results Summary

Client Sample ID	MW-46D	Collected	11/10/2024 17:10
Lab Sample ID	3387075015	Lab Receipt	11/11/2024 17:33

<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	26.8	ug/L	10.0	SW846 8270E SIM	#
<b>VOLATILE ORGANICS</b>					
1,1,1-Trichloroethane	1.2	ug/L	1.0	SW846 8260D	#
1,1-Dichloroethane	7.4	ug/L	1.0	SW846 8260D	#
1,1-Dichloroethene	36.5	ug/L	1.0	SW846 8260D	#



## Results

Client Sample ID	MW-35D	Collected	11/11/2024 08:50
Lab Sample ID	3387075001	Lab Receipt	11/11/2024 17:33

### 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	11/18/2024 14:26	S7M	D

#### SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
2-Methylnapthalene-d10	7297-45-2	57.7%	29 - 112	11/18/2024 14:26	
Fluoranthene-d10	93951-69-0	80.2%	45 - 130	11/18/2024 14:26	

### 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	11/22/2024 17:00	ILY	A
1,1,1-Trichloroethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 17:00	ILY	A
1,1,2,2-Tetrachloroethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 17:00	ILY	A
1,1,2-Trichloroethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 17:00	ILY	A
1,1-Dichloroethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 17:00	ILY	A
1,1-Dichloroethene	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 17:00	ILY	A
1,1-Dichloropropene	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 17:00	ILY	A
1,2,3-Trichlorobenzene	2.0 U	U	ug/L	2.0	SW846 8260D	1	11/22/2024 17:00	ILY	A
1,2,3-Trichloropropane	2.0 U	U	ug/L	2.0	SW846 8260D	1	11/22/2024 17:00	ILY	A
1,2,4-Trichlorobenzene	2.0 U	U	ug/L	2.0	SW846 8260D	1	11/22/2024 17:00	ILY	A
1,2-Dibromo-3-chloropropane	7.0 U	U	ug/L	7.0	SW846 8260D	1	11/22/2024 17:00	ILY	A
1,2-Dibromoethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 17:00	ILY	A
1,2-Dichlorobenzene	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 17:00	ILY	A
1,2-Dichloroethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 17:00	ILY	A
1,2-Dichloropropane	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 17:00	ILY	A
1,3-Dichlorobenzene	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 17:00	ILY	A
1,3-Dichloropropane	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 17:00	ILY	A
1,4-Dichlorobenzene	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 17:00	ILY	A
2,2-Dichloropropane	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 17:00	ILY	A
2-Butanone	10.0 U	U	ug/L	10.0	SW846 8260D	1	11/22/2024 17:00	ILY	A
2-Hexanone	5.0 U	U	ug/L	5.0	SW846 8260D	1	11/22/2024 17:00	ILY	A
4-Methyl-2-Pentanone(MIBK)	5.0 U	U	ug/L	5.0	SW846 8260D	1	11/22/2024 17:00	ILY	A
Acetone	10.0 U	U	ug/L	10.0	SW846 8260D	1	11/22/2024 17:00	ILY	A
Benzene	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 17:00	ILY	A
Bromobenzene	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 17:00	ILY	A
Bromochloromethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 17:00	ILY	A
Bromodichloromethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 17:00	ILY	A
Bromoform	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 17:00	ILY	A
Bromomethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 17:00	ILY	A
Carbon Tetrachloride	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 17:00	ILY	A
Chlorobenzene	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 17:00	ILY	A
Chlorodibromomethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 17:00	ILY	A
Chloroethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 17:00	ILY	A
Chloroform	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 17:00	ILY	A
Chloromethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 17:00	ILY	A



## Results

Client Sample ID	MW-35D	Collected	11/11/2024 08:50
Lab Sample ID	3387075001	Lab Receipt	11/11/2024 17:33

### 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	11/22/2024 17:00	ILY	A
cis-1,3-Dichloropropene	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 17:00	ILY	A
Dibromomethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 17:00	ILY	A
Dichlorodifluoromethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 17:00	ILY	A
Diisopropyl ether	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 17:00	ILY	A
Ethylbenzene	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 17:00	ILY	A
Hexachlorobutadiene	5.0 U	U	ug/L	5.0	SW846 8260D	1	11/22/2024 17:00	ILY	A
Methyl t-Butyl Ether	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 17:00	ILY	A
Methylene Chloride	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 17:00	ILY	A
mp-Xylene	2.0 U	U	ug/L	2.0	SW846 8260D	1	11/22/2024 17:00	ILY	A
Naphthalene	2.0 U	U	ug/L	2.0	SW846 8260D	1	11/22/2024 17:00	ILY	A
o-Chlorotoluene	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 17:00	ILY	A
o-Xylene	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 17:00	ILY	A
p-Chlorotoluene	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 17:00	ILY	A
p-Isopropyltoluene	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 17:00	ILY	A
Styrene	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 17:00	ILY	A
Tetrachloroethene	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 17:00	ILY	A
Toluene	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 17:00	ILY	A
Total Xylenes	3.0 U	U	ug/L	3.0	SW846 8260D	1	11/22/2024 17:00	ILY	A
trans-1,2-Dichloroethene	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 17:00	ILY	A
trans-1,3-Dichloropropene	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 17:00	ILY	A
Trichloroethene	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 17:00	ILY	A
Trichlorofluoromethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 17:00	ILY	A
Vinyl Acetate	5.0 U	U	ug/L	5.0	SW846 8260D	1	11/22/2024 17:00	ILY	A
Vinyl Chloride	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 17:00	ILY	A

### SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
1,2-Dichloroethane-d4	17060-07-0	104 %	62 - 133	11/22/2024 17:00	
4-Bromofluorobenzene	460-00-4	100 %	79 - 114	11/22/2024 17:00	
Dibromofluoromethane	1868-53-7	98 %	78 - 116	11/22/2024 17:00	
Toluene-d8	2037-26-5	100 %	76 - 127	11/22/2024 17:00	



## Results

Client Sample ID	MW-34D	Collected	11/11/2024 09:10
Lab Sample ID	3387075002	Lab Receipt	11/11/2024 17:33

### 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	11/18/2024 15:21	S7M	D

### SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
2-Methylnapthalene-d10	7297-45-2	65.1%	29 - 112	11/18/2024 15:21	
Fluoranthene-d10	93951-69-0	79.4%	45 - 130	11/18/2024 15:21	

### VOLATILE ORGANICS

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
1,1,1,2-Tetrachloroethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 17:20	ILY	A
1,1,1-Trichloroethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 17:20	ILY	A
1,1,2,2-Tetrachloroethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 17:20	ILY	A
1,1,2-Trichloroethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 17:20	ILY	A
1,1-Dichloroethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 17:20	ILY	A
1,1-Dichloroethene	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 17:20	ILY	A
1,1-Dichloropropene	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 17:20	ILY	A
1,2,3-Trichlorobenzene	2.0 U	U	ug/L	2.0	SW846 8260D	1	11/22/2024 17:20	ILY	A
1,2,3-Trichloropropane	2.0 U	U	ug/L	2.0	SW846 8260D	1	11/22/2024 17:20	ILY	A
1,2,4-Trichlorobenzene	2.0 U	U	ug/L	2.0	SW846 8260D	1	11/22/2024 17:20	ILY	A
1,2-Dibromo-3-chloropropane	7.0 U	U	ug/L	7.0	SW846 8260D	1	11/22/2024 17:20	ILY	A
1,2-Dibromoethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 17:20	ILY	A
1,2-Dichlorobenzene	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 17:20	ILY	A
1,2-Dichloroethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 17:20	ILY	A
1,2-Dichloropropane	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 17:20	ILY	A
1,3-Dichlorobenzene	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 17:20	ILY	A
1,3-Dichloropropane	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 17:20	ILY	A
1,4-Dichlorobenzene	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 17:20	ILY	A
2,2-Dichloropropane	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 17:20	ILY	A
2-Butanone	10.0 U	U	ug/L	10.0	SW846 8260D	1	11/22/2024 17:20	ILY	A
2-Hexanone	5.0 U	U	ug/L	5.0	SW846 8260D	1	11/22/2024 17:20	ILY	A
4-Methyl-2-Pentanone(MIBK)	5.0 U	U	ug/L	5.0	SW846 8260D	1	11/22/2024 17:20	ILY	A
Acetone	10.0 U	U	ug/L	10.0	SW846 8260D	1	11/22/2024 17:20	ILY	A
Benzene	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 17:20	ILY	A
Bromobenzene	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 17:20	ILY	A
Bromochloromethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 17:20	ILY	A
Bromodichloromethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 17:20	ILY	A
Bromoform	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 17:20	ILY	A
Bromomethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 17:20	ILY	A
Carbon Tetrachloride	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 17:20	ILY	A
Chlorobenzene	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 17:20	ILY	A
Chlorodibromomethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 17:20	ILY	A
Chloroethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 17:20	ILY	A
Chloroform	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 17:20	ILY	A
Chloromethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 17:20	ILY	A



## Results

Client Sample ID	MW-34D	Collected	11/11/2024 09:10
Lab Sample ID	3387075002	Lab Receipt	11/11/2024 17:33

### 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	11/22/2024 17:20	ILY	A
cis-1,3-Dichloropropene	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 17:20	ILY	A
Dibromomethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 17:20	ILY	A
Dichlorodifluoromethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 17:20	ILY	A
Diisopropyl ether	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 17:20	ILY	A
Ethylbenzene	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 17:20	ILY	A
Hexachlorobutadiene	5.0 U	U	ug/L	5.0	SW846 8260D	1	11/22/2024 17:20	ILY	A
Methyl t-Butyl Ether	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 17:20	ILY	A
Methylene Chloride	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 17:20	ILY	A
mp-Xylene	2.0 U	U	ug/L	2.0	SW846 8260D	1	11/22/2024 17:20	ILY	A
Naphthalene	2.0 U	U	ug/L	2.0	SW846 8260D	1	11/22/2024 17:20	ILY	A
o-Chlorotoluene	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 17:20	ILY	A
o-Xylene	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 17:20	ILY	A
p-Chlorotoluene	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 17:20	ILY	A
p-Isopropyltoluene	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 17:20	ILY	A
Styrene	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 17:20	ILY	A
Tetrachloroethene	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 17:20	ILY	A
Toluene	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 17:20	ILY	A
Total Xylenes	3.0 U	U	ug/L	3.0	SW846 8260D	1	11/22/2024 17:20	ILY	A
trans-1,2-Dichloroethene	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 17:20	ILY	A
trans-1,3-Dichloropropene	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 17:20	ILY	A
Trichloroethene	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 17:20	ILY	A
Trichlorofluoromethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 17:20	ILY	A
Vinyl Acetate	5.0 U	U	ug/L	5.0	SW846 8260D	1	11/22/2024 17:20	ILY	A
Vinyl Chloride	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 17:20	ILY	A

### SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
1,2-Dichloroethane-d4	17060-07-0	102%	62 – 133	11/22/2024 17:20	
4-Bromofluorobenzene	460-00-4	101%	79 – 114	11/22/2024 17:20	
Dibromofluoromethane	1868-53-7	98.4%	78 – 116	11/22/2024 17:20	
Toluene-d8	2037-26-5	98.7%	76 – 127	11/22/2024 17:20	



## Results

Client Sample ID	MW-33-295	Collected	11/11/2024 09:40
Lab Sample ID	3387075003	Lab Receipt	11/11/2024 17:33

### SEMIVOLATILE SIM

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
1,4-Dioxane	3.9		ug/L	1.0	SW846 8270E SIM	1	11/18/2024 15:48	S7M	D

#### SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
2-Methylnapthalene-d10	7297-45-2	60.8%	29 - 112	11/18/2024 15:48	
Fluoranthene-d10	93951-69-0	75.5%	45 - 130	11/18/2024 15:48	

### 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	11/22/2024 19:41	BST	A
1,1,1-Trichloroethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 19:41	BST	A
1,1,2,2-Tetrachloroethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 19:41	BST	A
1,1,2-Trichloroethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 19:41	BST	A
1,1-Dichloroethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 19:41	BST	A
1,1-Dichloroethene	9.2		ug/L	1.0	SW846 8260D	1	11/22/2024 19:41	BST	A
1,1-Dichloropropene	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 19:41	BST	A
1,2,3-Trichlorobenzene	2.0 U	U	ug/L	2.0	SW846 8260D	1	11/22/2024 19:41	BST	A
1,2,3-Trichloropropane	2.0 U	U	ug/L	2.0	SW846 8260D	1	11/22/2024 19:41	BST	A
1,2,4-Trichlorobenzene	2.0 U	U	ug/L	2.0	SW846 8260D	1	11/22/2024 19:41	BST	A
1,2-Dibromo-3-chloropropane	7.0 U	U	ug/L	7.0	SW846 8260D	1	11/22/2024 19:41	BST	A
1,2-Dibromoethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 19:41	BST	A
1,2-Dichlorobenzene	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 19:41	BST	A
1,2-Dichloroethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 19:41	BST	A
1,2-Dichloropropane	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 19:41	BST	A
1,3-Dichlorobenzene	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 19:41	BST	A
1,3-Dichloropropane	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 19:41	BST	A
1,4-Dichlorobenzene	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 19:41	BST	A
2,2-Dichloropropane	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 19:41	BST	A
2-Butanone	10.0 U	U	ug/L	10.0	SW846 8260D	1	11/22/2024 19:41	BST	A
2-Hexanone	5.0 U	U	ug/L	5.0	SW846 8260D	1	11/22/2024 19:41	BST	A
4-Methyl-2-Pentanone(MIBK)	5.0 U	U	ug/L	5.0	SW846 8260D	1	11/22/2024 19:41	BST	A
Acetone	10.0 U	U	ug/L	10.0	SW846 8260D	1	11/22/2024 19:41	BST	A
Benzene	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 19:41	BST	A
Bromobenzene	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 19:41	BST	A
Bromochloromethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 19:41	BST	A
Bromodichloromethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 19:41	BST	A
Bromoform	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 19:41	BST	A
Bromomethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 19:41	BST	A
Carbon Tetrachloride	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 19:41	BST	A
Chlorobenzene	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 19:41	BST	A
Chlorodibromomethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 19:41	BST	A
Chloroethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 19:41	BST	A
Chloroform	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 19:41	BST	A
Chloromethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 19:41	BST	A



## Results

Client Sample ID	MW-33-295	Collected	11/11/2024 09:40
Lab Sample ID	3387075003	Lab Receipt	11/11/2024 17:33

### 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	11/22/2024 19:41	BST	A
cis-1,3-Dichloropropene	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 19:41	BST	A
Dibromomethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 19:41	BST	A
Dichlorodifluoromethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 19:41	BST	A
Diisopropyl ether	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 19:41	BST	A
Ethylbenzene	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 19:41	BST	A
Hexachlorobutadiene	5.0 U	U	ug/L	5.0	SW846 8260D	1	11/22/2024 19:41	BST	A
Methyl t-Butyl Ether	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 19:41	BST	A
Methylene Chloride	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 19:41	BST	A
mp-Xylene	2.0 U	U	ug/L	2.0	SW846 8260D	1	11/22/2024 19:41	BST	A
Naphthalene	2.0 U	U	ug/L	2.0	SW846 8260D	1	11/22/2024 19:41	BST	A
o-Chlorotoluene	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 19:41	BST	A
o-Xylene	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 19:41	BST	A
p-Chlorotoluene	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 19:41	BST	A
p-Isopropyltoluene	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 19:41	BST	A
Styrene	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 19:41	BST	A
Tetrachloroethene	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 19:41	BST	A
Toluene	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 19:41	BST	A
Total Xylenes	3.0 U	U	ug/L	3.0	SW846 8260D	1	11/22/2024 19:41	BST	A
trans-1,2-Dichloroethene	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 19:41	BST	A
trans-1,3-Dichloropropene	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 19:41	BST	A
Trichloroethene	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 19:41	BST	A
Trichlorofluoromethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 19:41	BST	A
Vinyl Acetate	5.0 U	U	ug/L	5.0	SW846 8260D	1	11/22/2024 19:41	BST	A
Vinyl Chloride	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 19:41	BST	A

### SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
1,2-Dichloroethane-d4	17060-07-0	100%	62 – 133	11/22/2024 19:41	
4-Bromofluorobenzene	460-00-4	98.8%	79 – 114	11/22/2024 19:41	
Dibromofluoromethane	1868-53-7	102%	78 – 116	11/22/2024 19:41	
Toluene-d8	2037-26-5	108%	76 – 127	11/22/2024 19:41	



## Results

Client Sample ID	MW-33-235	Collected	11/11/2024 09:50
Lab Sample ID	3387075004	Lab Receipt	11/11/2024 17:33

### 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	11/18/2024 16:43	S7M	D

### SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
2-Methylnaphthalene-d10	7297-45-2	59%	29 - 112	11/18/2024 16:43	
Fluoranthene-d10	93951-69-0	70.4%	45 - 130	11/18/2024 16:43	

### 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	11/22/2024 20:01	BST	A
1,1,1-Trichloroethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 20:01	BST	A
1,1,2,2-Tetrachloroethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 20:01	BST	A
1,1,2-Trichloroethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 20:01	BST	A
1,1-Dichloroethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 20:01	BST	A
1,1-Dichloroethene	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 20:01	BST	A
1,1-Dichloropropene	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 20:01	BST	A
1,2,3-Trichlorobenzene	2.0 U	U	ug/L	2.0	SW846 8260D	1	11/22/2024 20:01	BST	A
1,2,3-Trichloropropane	2.0 U	U	ug/L	2.0	SW846 8260D	1	11/22/2024 20:01	BST	A
1,2,4-Trichlorobenzene	2.0 U	U	ug/L	2.0	SW846 8260D	1	11/22/2024 20:01	BST	A
1,2-Dibromo-3-chloropropane	7.0 U	U	ug/L	7.0	SW846 8260D	1	11/22/2024 20:01	BST	A
1,2-Dibromoethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 20:01	BST	A
1,2-Dichlorobenzene	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 20:01	BST	A
1,2-Dichloroethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 20:01	BST	A
1,2-Dichloropropane	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 20:01	BST	A
1,3-Dichlorobenzene	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 20:01	BST	A
1,3-Dichloropropane	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 20:01	BST	A
1,4-Dichlorobenzene	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 20:01	BST	A
2,2-Dichloropropane	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 20:01	BST	A
2-Butanone	10.0 U	U	ug/L	10.0	SW846 8260D	1	11/22/2024 20:01	BST	A
2-Hexanone	5.0 U	U	ug/L	5.0	SW846 8260D	1	11/22/2024 20:01	BST	A
4-Methyl-2-Pentanone(MIBK)	5.0 U	U	ug/L	5.0	SW846 8260D	1	11/22/2024 20:01	BST	A
Acetone	10.0 U	U	ug/L	10.0	SW846 8260D	1	11/22/2024 20:01	BST	A
Benzene	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 20:01	BST	A
Bromobenzene	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 20:01	BST	A
Bromochloromethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 20:01	BST	A
Bromodichloromethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 20:01	BST	A
Bromoform	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 20:01	BST	A
Bromomethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 20:01	BST	A
Carbon Tetrachloride	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 20:01	BST	A
Chlorobenzene	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 20:01	BST	A
Chlorodibromomethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 20:01	BST	A
Chloroethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 20:01	BST	A
Chloroform	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 20:01	BST	A
Chloromethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 20:01	BST	A



## Results

Client Sample ID	MW-33-235	Collected	11/11/2024 09:50
Lab Sample ID	3387075004	Lab Receipt	11/11/2024 17:33

### 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	11/22/2024 20:01	BST	A
cis-1,3-Dichloropropene	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 20:01	BST	A
Dibromomethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 20:01	BST	A
Dichlorodifluoromethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 20:01	BST	A
Diisopropyl ether	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 20:01	BST	A
Ethylbenzene	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 20:01	BST	A
Hexachlorobutadiene	5.0 U	U	ug/L	5.0	SW846 8260D	1	11/22/2024 20:01	BST	A
Methyl t-Butyl Ether	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 20:01	BST	A
Methylene Chloride	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 20:01	BST	A
mp-Xylene	2.0 U	U	ug/L	2.0	SW846 8260D	1	11/22/2024 20:01	BST	A
Naphthalene	2.0 U	U	ug/L	2.0	SW846 8260D	1	11/22/2024 20:01	BST	A
o-Chlorotoluene	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 20:01	BST	A
o-Xylene	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 20:01	BST	A
p-Chlorotoluene	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 20:01	BST	A
p-Isopropyltoluene	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 20:01	BST	A
Styrene	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 20:01	BST	A
Tetrachloroethene	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 20:01	BST	A
Toluene	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 20:01	BST	A
Total Xylenes	3.0 U	U	ug/L	3.0	SW846 8260D	1	11/22/2024 20:01	BST	A
trans-1,2-Dichloroethene	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 20:01	BST	A
trans-1,3-Dichloropropene	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 20:01	BST	A
Trichloroethene	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 20:01	BST	A
Trichlorofluoromethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 20:01	BST	A
Vinyl Acetate	5.0 U	U	ug/L	5.0	SW846 8260D	1	11/22/2024 20:01	BST	A
Vinyl Chloride	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 20:01	BST	A

### SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
1,2-Dichloroethane-d4	17060-07-0	101%	62 – 133	11/22/2024 20:01	
4-Bromofluorobenzene	460-00-4	105%	79 – 114	11/22/2024 20:01	
Dibromofluoromethane	1868-53-7	103%	78 – 116	11/22/2024 20:01	
Toluene-d8	2037-26-5	108%	76 – 127	11/22/2024 20:01	



## Results

Client Sample ID	MW-30D-413	Collected	11/11/2024 10:10
Lab Sample ID	3387075005	Lab Receipt	11/11/2024 17:33

### 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	11/19/2024 14:07	S7M	D

### SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
2-Methylnaphthalene-d10	7297-45-2	61%	29 - 112	11/19/2024 14:07	
Fluoranthene-d10	93951-69-0	76.8%	45 - 130	11/19/2024 14:07	

### 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	11/22/2024 20:21	BST	A
1,1,1-Trichloroethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 20:21	BST	A
1,1,2,2-Tetrachloroethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 20:21	BST	A
1,1,2-Trichloroethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 20:21	BST	A
1,1-Dichloroethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 20:21	BST	A
1,1-Dichloroethene	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 20:21	BST	A
1,1-Dichloropropene	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 20:21	BST	A
1,2,3-Trichlorobenzene	2.0 U	U	ug/L	2.0	SW846 8260D	1	11/22/2024 20:21	BST	A
1,2,3-Trichloropropane	2.0 U	U	ug/L	2.0	SW846 8260D	1	11/22/2024 20:21	BST	A
1,2,4-Trichlorobenzene	2.0 U	U	ug/L	2.0	SW846 8260D	1	11/22/2024 20:21	BST	A
1,2-Dibromo-3-chloropropane	7.0 U	U	ug/L	7.0	SW846 8260D	1	11/22/2024 20:21	BST	A
1,2-Dibromoethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 20:21	BST	A
1,2-Dichlorobenzene	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 20:21	BST	A
1,2-Dichloroethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 20:21	BST	A
1,2-Dichloropropane	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 20:21	BST	A
1,3-Dichlorobenzene	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 20:21	BST	A
1,3-Dichloropropane	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 20:21	BST	A
1,4-Dichlorobenzene	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 20:21	BST	A
2,2-Dichloropropane	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 20:21	BST	A
2-Butanone	10.0 U	U	ug/L	10.0	SW846 8260D	1	11/22/2024 20:21	BST	A
2-Hexanone	5.0 U	U	ug/L	5.0	SW846 8260D	1	11/22/2024 20:21	BST	A
4-Methyl-2-Pentanone(MIBK)	5.0 U	U	ug/L	5.0	SW846 8260D	1	11/22/2024 20:21	BST	A
Acetone	10.0 U	U	ug/L	10.0	SW846 8260D	1	11/22/2024 20:21	BST	A
Benzene	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 20:21	BST	A
Bromobenzene	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 20:21	BST	A
Bromochloromethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 20:21	BST	A
Bromodichloromethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 20:21	BST	A
Bromoform	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 20:21	BST	A
Bromomethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 20:21	BST	A
Carbon Tetrachloride	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 20:21	BST	A
Chlorobenzene	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 20:21	BST	A
Chlorodibromomethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 20:21	BST	A
Chloroethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 20:21	BST	A
Chloroform	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 20:21	BST	A
Chloromethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 20:21	BST	A



## Results

Client Sample ID	MW-30D-413	Collected	11/11/2024 10:10
Lab Sample ID	3387075005	Lab Receipt	11/11/2024 17:33

### 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	11/22/2024 20:21	BST	A
cis-1,3-Dichloropropene	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 20:21	BST	A
Dibromomethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 20:21	BST	A
Dichlorodifluoromethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 20:21	BST	A
Diisopropyl ether	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 20:21	BST	A
Ethylbenzene	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 20:21	BST	A
Hexachlorobutadiene	5.0 U	U	ug/L	5.0	SW846 8260D	1	11/22/2024 20:21	BST	A
Methyl t-Butyl Ether	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 20:21	BST	A
Methylene Chloride	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 20:21	BST	A
mp-Xylene	2.0 U	U	ug/L	2.0	SW846 8260D	1	11/22/2024 20:21	BST	A
Naphthalene	2.0 U	U	ug/L	2.0	SW846 8260D	1	11/22/2024 20:21	BST	A
o-Chlorotoluene	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 20:21	BST	A
o-Xylene	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 20:21	BST	A
p-Chlorotoluene	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 20:21	BST	A
p-Isopropyltoluene	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 20:21	BST	A
Styrene	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 20:21	BST	A
Tetrachloroethene	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 20:21	BST	A
Toluene	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 20:21	BST	A
Total Xylenes	3.0 U	U	ug/L	3.0	SW846 8260D	1	11/22/2024 20:21	BST	A
trans-1,2-Dichloroethene	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 20:21	BST	A
trans-1,3-Dichloropropene	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 20:21	BST	A
Trichloroethene	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 20:21	BST	A
Trichlorofluoromethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 20:21	BST	A
Vinyl Acetate	5.0 U	U	ug/L	5.0	SW846 8260D	1	11/22/2024 20:21	BST	A
Vinyl Chloride	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 20:21	BST	A

### SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
1,2-Dichloroethane-d4	17060-07-0	100%	62 – 133	11/22/2024 20:21	
4-Bromofluorobenzene	460-00-4	102%	79 – 114	11/22/2024 20:21	
Dibromofluoromethane	1868-53-7	102%	78 – 116	11/22/2024 20:21	
Toluene-d8	2037-26-5	106%	76 – 127	11/22/2024 20:21	



## Results

Client Sample ID	MW-30D-273	Collected	11/11/2024 10:25
Lab Sample ID	3387075006	Lab Receipt	11/11/2024 17:33

### SEMIVOLATILE SIM

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
1,4-Dioxane	11.7		ug/L	1.0	SW846 8270E SIM	1	11/18/2024 17:38	S7M	D

#### SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
2-Methylnapthalene-d10	7297-45-2	57.9%	29 - 112	11/18/2024 17:38	
Fluoranthene-d10	93951-69-0	73.9%	45 - 130	11/18/2024 17:38	

### VOLATILE ORGANICS

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
1,1,1,2-Tetrachloroethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 20:41	BST	A
1,1,1-Trichloroethane	1.7		ug/L	1.0	SW846 8260D	1	11/22/2024 20:41	BST	A
1,1,2,2-Tetrachloroethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 20:41	BST	A
1,1,2-Trichloroethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 20:41	BST	A
1,1-Dichloroethane	1.3		ug/L	1.0	SW846 8260D	1	11/22/2024 20:41	BST	A
1,1-Dichloroethene	50.7		ug/L	1.0	SW846 8260D	1	11/22/2024 20:41	BST	A
1,1-Dichloropropene	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 20:41	BST	A
1,2,3-Trichlorobenzene	2.0 U	U	ug/L	2.0	SW846 8260D	1	11/22/2024 20:41	BST	A
1,2,3-Trichloropropane	2.0 U	U	ug/L	2.0	SW846 8260D	1	11/22/2024 20:41	BST	A
1,2,4-Trichlorobenzene	2.0 U	U	ug/L	2.0	SW846 8260D	1	11/22/2024 20:41	BST	A
1,2-Dibromo-3-chloropropane	7.0 U	U	ug/L	7.0	SW846 8260D	1	11/22/2024 20:41	BST	A
1,2-Dibromoethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 20:41	BST	A
1,2-Dichlorobenzene	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 20:41	BST	A
1,2-Dichloroethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 20:41	BST	A
1,2-Dichloropropane	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 20:41	BST	A
1,3-Dichlorobenzene	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 20:41	BST	A
1,3-Dichloropropane	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 20:41	BST	A
1,4-Dichlorobenzene	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 20:41	BST	A
2,2-Dichloropropane	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 20:41	BST	A
2-Butanone	10.0 U	U	ug/L	10.0	SW846 8260D	1	11/22/2024 20:41	BST	A
2-Hexanone	5.0 U	U	ug/L	5.0	SW846 8260D	1	11/22/2024 20:41	BST	A
4-Methyl-2-Pentanone(MIBK)	5.0 U	U	ug/L	5.0	SW846 8260D	1	11/22/2024 20:41	BST	A
Acetone	10.0 U	U	ug/L	10.0	SW846 8260D	1	11/22/2024 20:41	BST	A
Benzene	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 20:41	BST	A
Bromobenzene	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 20:41	BST	A
Bromochloromethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 20:41	BST	A
Bromodichloromethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 20:41	BST	A
Bromoform	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 20:41	BST	A
Bromomethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 20:41	BST	A
Carbon Tetrachloride	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 20:41	BST	A
Chlorobenzene	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 20:41	BST	A
Chlorodibromomethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 20:41	BST	A
Chloroethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 20:41	BST	A
Chloroform	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 20:41	BST	A
Chloromethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 20:41	BST	A



## Results

Client Sample ID	MW-30D-273	Collected	11/11/2024 10:25
Lab Sample ID	3387075006	Lab Receipt	11/11/2024 17:33

### 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	11/22/2024 20:41	BST	A
cis-1,3-Dichloropropene	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 20:41	BST	A
Dibromomethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 20:41	BST	A
Dichlorodifluoromethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 20:41	BST	A
Diisopropyl ether	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 20:41	BST	A
Ethylbenzene	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 20:41	BST	A
Hexachlorobutadiene	5.0 U	U	ug/L	5.0	SW846 8260D	1	11/22/2024 20:41	BST	A
Methyl t-Butyl Ether	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 20:41	BST	A
Methylene Chloride	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 20:41	BST	A
mp-Xylene	2.0 U	U	ug/L	2.0	SW846 8260D	1	11/22/2024 20:41	BST	A
Naphthalene	2.0 U	U	ug/L	2.0	SW846 8260D	1	11/22/2024 20:41	BST	A
o-Chlorotoluene	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 20:41	BST	A
o-Xylene	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 20:41	BST	A
p-Chlorotoluene	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 20:41	BST	A
p-Isopropyltoluene	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 20:41	BST	A
Styrene	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 20:41	BST	A
Tetrachloroethene	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 20:41	BST	A
Toluene	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 20:41	BST	A
Total Xylenes	3.0 U	U	ug/L	3.0	SW846 8260D	1	11/22/2024 20:41	BST	A
trans-1,2-Dichloroethene	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 20:41	BST	A
trans-1,3-Dichloropropene	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 20:41	BST	A
Trichloroethene	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 20:41	BST	A
Trichlorofluoromethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 20:41	BST	A
Vinyl Acetate	5.0 U	U	ug/L	5.0	SW846 8260D	1	11/22/2024 20:41	BST	A
Vinyl Chloride	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 20:41	BST	A

### SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
1,2-Dichloroethane-d4	17060-07-0	94.3%	62 - 133	11/22/2024 20:41	
4-Bromofluorobenzene	460-00-4	98.8%	79 - 114	11/22/2024 20:41	
Dibromofluoromethane	1868-53-7	95.7%	78 - 116	11/22/2024 20:41	
Toluene-d8	2037-26-5	101%	76 - 127	11/22/2024 20:41	



## Results

Client Sample ID	MW-29D	Collected	11/11/2024 10:50
Lab Sample ID	3387075007	Lab Receipt	11/11/2024 17:33

### 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	11/18/2024 18:06	S7M	D

#### SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
2-Methylnapthalene-d10	7297-45-2	62.8%	29 - 112	11/18/2024 18:06	
Fluoranthene-d10	93951-69-0	74.5%	45 - 130	11/18/2024 18:06	

### 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	11/22/2024 21:01	BST	A
1,1,1-Trichloroethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 21:01	BST	A
1,1,2,2-Tetrachloroethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 21:01	BST	A
1,1,2-Trichloroethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 21:01	BST	A
1,1-Dichloroethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 21:01	BST	A
1,1-Dichloroethene	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 21:01	BST	A
1,1-Dichloropropene	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 21:01	BST	A
1,2,3-Trichlorobenzene	2.0 U	U	ug/L	2.0	SW846 8260D	1	11/22/2024 21:01	BST	A
1,2,3-Trichloropropane	2.0 U	U	ug/L	2.0	SW846 8260D	1	11/22/2024 21:01	BST	A
1,2,4-Trichlorobenzene	2.0 U	U	ug/L	2.0	SW846 8260D	1	11/22/2024 21:01	BST	A
1,2-Dibromo-3-chloropropane	7.0 U	U	ug/L	7.0	SW846 8260D	1	11/22/2024 21:01	BST	A
1,2-Dibromoethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 21:01	BST	A
1,2-Dichlorobenzene	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 21:01	BST	A
1,2-Dichloroethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 21:01	BST	A
1,2-Dichloropropane	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 21:01	BST	A
1,3-Dichlorobenzene	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 21:01	BST	A
1,3-Dichloropropane	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 21:01	BST	A
1,4-Dichlorobenzene	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 21:01	BST	A
2,2-Dichloropropane	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 21:01	BST	A
2-Butanone	10.0 U	U	ug/L	10.0	SW846 8260D	1	11/22/2024 21:01	BST	A
2-Hexanone	5.0 U	U	ug/L	5.0	SW846 8260D	1	11/22/2024 21:01	BST	A
4-Methyl-2-Pentanone(MIBK)	5.0 U	U	ug/L	5.0	SW846 8260D	1	11/22/2024 21:01	BST	A
Acetone	10.0 U	U	ug/L	10.0	SW846 8260D	1	11/22/2024 21:01	BST	A
Benzene	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 21:01	BST	A
Bromobenzene	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 21:01	BST	A
Bromochloromethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 21:01	BST	A
Bromodichloromethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 21:01	BST	A
Bromoform	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 21:01	BST	A
Bromomethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 21:01	BST	A
Carbon Tetrachloride	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 21:01	BST	A
Chlorobenzene	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 21:01	BST	A
Chlorodibromomethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 21:01	BST	A
Chloroethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 21:01	BST	A
Chloroform	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 21:01	BST	A
Chloromethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 21:01	BST	A



## Results

Client Sample ID	MW-29D	Collected	11/11/2024 10:50
Lab Sample ID	3387075007	Lab Receipt	11/11/2024 17:33

### 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	11/22/2024 21:01	BST	A
cis-1,3-Dichloropropene	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 21:01	BST	A
Dibromomethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 21:01	BST	A
Dichlorodifluoromethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 21:01	BST	A
Diisopropyl ether	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 21:01	BST	A
Ethylbenzene	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 21:01	BST	A
Hexachlorobutadiene	5.0 U	U	ug/L	5.0	SW846 8260D	1	11/22/2024 21:01	BST	A
Methyl t-Butyl Ether	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 21:01	BST	A
Methylene Chloride	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 21:01	BST	A
mp-Xylene	2.0 U	U	ug/L	2.0	SW846 8260D	1	11/22/2024 21:01	BST	A
Naphthalene	2.0 U	U	ug/L	2.0	SW846 8260D	1	11/22/2024 21:01	BST	A
o-Chlorotoluene	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 21:01	BST	A
o-Xylene	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 21:01	BST	A
p-Chlorotoluene	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 21:01	BST	A
p-Isopropyltoluene	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 21:01	BST	A
Styrene	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 21:01	BST	A
Tetrachloroethene	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 21:01	BST	A
Toluene	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 21:01	BST	A
Total Xylenes	3.0 U	U	ug/L	3.0	SW846 8260D	1	11/22/2024 21:01	BST	A
trans-1,2-Dichloroethene	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 21:01	BST	A
trans-1,3-Dichloropropene	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 21:01	BST	A
Trichloroethene	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 21:01	BST	A
Trichlorofluoromethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 21:01	BST	A
Vinyl Acetate	5.0 U	U	ug/L	5.0	SW846 8260D	1	11/22/2024 21:01	BST	A
Vinyl Chloride	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 21:01	BST	A

### SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
1,2-Dichloroethane-d4	17060-07-0	102%	62 - 133	11/22/2024 21:01	
4-Bromofluorobenzene	460-00-4	104%	79 - 114	11/22/2024 21:01	
Dibromofluoromethane	1868-53-7	102%	78 - 116	11/22/2024 21:01	
Toluene-d8	2037-26-5	108%	76 - 127	11/22/2024 21:01	



## Results

Client Sample ID	MW-32D	Collected	11/11/2024 11:15
Lab Sample ID	3387075008	Lab Receipt	11/11/2024 17:33

### SEMIVOLATILE SIM

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
1,4-Dioxane	1.1 U	U	ug/L	1.1	SW846 8270E SIM	1	11/18/2024 18:34	S7M	D

### SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
2-Methylnaphthalene-d10	7297-45-2	65.4%	29 - 112	11/18/2024 18:34	
Fluoranthene-d10	93951-69-0	75.2%	45 - 130	11/18/2024 18:34	

### 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	11/22/2024 21:21	BST	A
1,1,1-Trichloroethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 21:21	BST	A
1,1,2,2-Tetrachloroethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 21:21	BST	A
1,1,2-Trichloroethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 21:21	BST	A
1,1-Dichloroethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 21:21	BST	A
1,1-Dichloroethene	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 21:21	BST	A
1,1-Dichloropropene	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 21:21	BST	A
1,2,3-Trichlorobenzene	2.0 U	U	ug/L	2.0	SW846 8260D	1	11/22/2024 21:21	BST	A
1,2,3-Trichloropropane	2.0 U	U	ug/L	2.0	SW846 8260D	1	11/22/2024 21:21	BST	A
1,2,4-Trichlorobenzene	2.0 U	U	ug/L	2.0	SW846 8260D	1	11/22/2024 21:21	BST	A
1,2-Dibromo-3-chloropropane	7.0 U	U	ug/L	7.0	SW846 8260D	1	11/22/2024 21:21	BST	A
1,2-Dibromoethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 21:21	BST	A
1,2-Dichlorobenzene	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 21:21	BST	A
1,2-Dichloroethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 21:21	BST	A
1,2-Dichloropropane	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 21:21	BST	A
1,3-Dichlorobenzene	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 21:21	BST	A
1,3-Dichloropropane	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 21:21	BST	A
1,4-Dichlorobenzene	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 21:21	BST	A
2,2-Dichloropropane	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 21:21	BST	A
2-Butanone	10.0 U	U	ug/L	10.0	SW846 8260D	1	11/22/2024 21:21	BST	A
2-Hexanone	5.0 U	U	ug/L	5.0	SW846 8260D	1	11/22/2024 21:21	BST	A
4-Methyl-2-Pentanone(MIBK)	5.0 U	U	ug/L	5.0	SW846 8260D	1	11/22/2024 21:21	BST	A
Acetone	10.0 U	U	ug/L	10.0	SW846 8260D	1	11/22/2024 21:21	BST	A
Benzene	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 21:21	BST	A
Bromobenzene	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 21:21	BST	A
Bromochloromethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 21:21	BST	A
Bromodichloromethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 21:21	BST	A
Bromoform	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 21:21	BST	A
Bromomethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 21:21	BST	A
Carbon Tetrachloride	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 21:21	BST	A
Chlorobenzene	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 21:21	BST	A
Chlorodibromomethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 21:21	BST	A
Chloroethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 21:21	BST	A
Chloroform	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 21:21	BST	A
Chloromethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 21:21	BST	A



## Results

Client Sample ID	MW-32D	Collected	11/11/2024 11:15
Lab Sample ID	3387075008	Lab Receipt	11/11/2024 17:33

### 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	11/22/2024 21:21	BST	A
cis-1,3-Dichloropropene	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 21:21	BST	A
Dibromomethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 21:21	BST	A
Dichlorodifluoromethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 21:21	BST	A
Diisopropyl ether	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 21:21	BST	A
Ethylbenzene	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 21:21	BST	A
Hexachlorobutadiene	5.0 U	U	ug/L	5.0	SW846 8260D	1	11/22/2024 21:21	BST	A
Methyl t-Butyl Ether	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 21:21	BST	A
Methylene Chloride	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 21:21	BST	A
mp-Xylene	2.0 U	U	ug/L	2.0	SW846 8260D	1	11/22/2024 21:21	BST	A
Naphthalene	2.0 U	U	ug/L	2.0	SW846 8260D	1	11/22/2024 21:21	BST	A
o-Chlorotoluene	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 21:21	BST	A
o-Xylene	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 21:21	BST	A
p-Chlorotoluene	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 21:21	BST	A
p-Isopropyltoluene	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 21:21	BST	A
Styrene	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 21:21	BST	A
Tetrachloroethene	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 21:21	BST	A
Toluene	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 21:21	BST	A
Total Xylenes	3.0 U	U	ug/L	3.0	SW846 8260D	1	11/22/2024 21:21	BST	A
trans-1,2-Dichloroethene	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 21:21	BST	A
trans-1,3-Dichloropropene	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 21:21	BST	A
Trichloroethene	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 21:21	BST	A
Trichlorofluoromethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 21:21	BST	A
Vinyl Acetate	5.0 U	U	ug/L	5.0	SW846 8260D	1	11/22/2024 21:21	BST	A
Vinyl Chloride	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 21:21	BST	A

### SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
1,2-Dichloroethane-d4	17060-07-0	97.1%	62 – 133	11/22/2024 21:21	
4-Bromofluorobenzene	460-00-4	100%	79 – 114	11/22/2024 21:21	
Dibromofluoromethane	1868-53-7	97.9%	78 – 116	11/22/2024 21:21	
Toluene-d8	2037-26-5	103%	76 – 127	11/22/2024 21:21	



## Results

Client Sample ID	Trip Blank D	Collected	11/11/2024 00:00
Lab Sample ID	3387075009	Lab Receipt	11/11/2024 17:33

### 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	11/22/2024 19:02	BST	A
1,1,1-Trichloroethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 19:02	BST	A
1,1,2,2-Tetrachloroethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 19:02	BST	A
1,1,2-Trichloroethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 19:02	BST	A
1,1-Dichloroethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 19:02	BST	A
1,1-Dichloroethene	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 19:02	BST	A
1,1-Dichloropropene	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 19:02	BST	A
1,2,3-Trichlorobenzene	2.0 U	U	ug/L	2.0	SW846 8260D	1	11/22/2024 19:02	BST	A
1,2,3-Trichloropropane	2.0 U	U	ug/L	2.0	SW846 8260D	1	11/22/2024 19:02	BST	A
1,2,4-Trichlorobenzene	2.0 U	U	ug/L	2.0	SW846 8260D	1	11/22/2024 19:02	BST	A
1,2-Dibromo-3-chloropropane	7.0 U	U	ug/L	7.0	SW846 8260D	1	11/22/2024 19:02	BST	A
1,2-Dibromoethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 19:02	BST	A
1,2-Dichlorobenzene	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 19:02	BST	A
1,2-Dichloroethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 19:02	BST	A
1,2-Dichloropropane	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 19:02	BST	A
1,3-Dichlorobenzene	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 19:02	BST	A
1,3-Dichloropropane	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 19:02	BST	A
1,4-Dichlorobenzene	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 19:02	BST	A
2,2-Dichloropropane	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 19:02	BST	A
2-Butanone	10.0 U	U	ug/L	10.0	SW846 8260D	1	11/22/2024 19:02	BST	A
2-Hexanone	5.0 U	U	ug/L	5.0	SW846 8260D	1	11/22/2024 19:02	BST	A
4-Methyl-2-Pentanone(MIBK)	5.0 U	U	ug/L	5.0	SW846 8260D	1	11/22/2024 19:02	BST	A
Acetone	10.0 U	U	ug/L	10.0	SW846 8260D	1	11/22/2024 19:02	BST	A
Benzene	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 19:02	BST	A
Bromobenzene	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 19:02	BST	A
Bromochloromethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 19:02	BST	A
Bromodichloromethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 19:02	BST	A
Bromoform	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 19:02	BST	A
Bromomethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 19:02	BST	A
Carbon Tetrachloride	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 19:02	BST	A
Chlorobenzene	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 19:02	BST	A
Chlorodibromomethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 19:02	BST	A
Chloroethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 19:02	BST	A
Chloroform	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 19:02	BST	A
Chloromethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 19:02	BST	A
cis-1,2-Dichloroethene	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 19:02	BST	A
cis-1,3-Dichloropropene	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 19:02	BST	A
Dibromomethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 19:02	BST	A
Dichlorodifluoromethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 19:02	BST	A
Diisopropyl ether	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 19:02	BST	A
Ethylbenzene	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 19:02	BST	A
Hexachlorobutadiene	5.0 U	U	ug/L	5.0	SW846 8260D	1	11/22/2024 19:02	BST	A
Methyl t-Butyl Ether	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 19:02	BST	A
Methylene Chloride	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 19:02	BST	A
mp-Xylene	2.0 U	U	ug/L	2.0	SW846 8260D	1	11/22/2024 19:02	BST	A
Naphthalene	2.0 U	U	ug/L	2.0	SW846 8260D	1	11/22/2024 19:02	BST	A
o-Chlorotoluene	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 19:02	BST	A



## Results

Client Sample ID	Trip Blank D	Collected	11/11/2024 00:00
Lab Sample ID	3387075009	Lab Receipt	11/11/2024 17:33

### 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	11/22/2024 19:02	BST	A
p-Chlorotoluene	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 19:02	BST	A
p-Isopropyltoluene	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 19:02	BST	A
Styrene	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 19:02	BST	A
Tetrachloroethene	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 19:02	BST	A
Toluene	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 19:02	BST	A
Total Xylenes	3.0 U	U	ug/L	3.0	SW846 8260D	1	11/22/2024 19:02	BST	A
trans-1,2-Dichloroethene	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 19:02	BST	A
trans-1,3-Dichloropropene	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 19:02	BST	A
Trichloroethene	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 19:02	BST	A
Trichlorofluoromethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 19:02	BST	A
Vinyl Acetate	5.0 U	U	ug/L	5.0	SW846 8260D	1	11/22/2024 19:02	BST	A
Vinyl Chloride	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 19:02	BST	A

### SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
1,2-Dichloroethane-d4	17060-07-0	94%	62 – 133	11/22/2024 19:02	
4-Bromofluorobenzene	460-00-4	97.5%	79 – 114	11/22/2024 19:02	
Dibromofluoromethane	1868-53-7	97.2%	78 – 116	11/22/2024 19:02	
Toluene-d8	2037-26-5	102%	76 – 127	11/22/2024 19:02	



## Results

Client Sample ID	MW-28D	Collected	11/11/2024 11:45
Lab Sample ID	3387075010	Lab Receipt	11/11/2024 17:33

### SEMIVOLATILE SIM

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
1,4-Dioxane	4.6		ug/L	1.1	SW846 8270E SIM	1	11/18/2024 19:01	S7M	D

#### SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
2-Methylnaphthalene-d10	7297-45-2	55.5%	29 – 112	11/18/2024 19:01	
Fluoranthene-d10	93951-69-0	63.1%	45 – 130	11/18/2024 19:01	

### 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	11/22/2024 21:41	BST	A
1,1,1-Trichloroethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 21:41	BST	A
1,1,2,2-Tetrachloroethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 21:41	BST	A
1,1,2-Trichloroethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 21:41	BST	A
1,1-Dichloroethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 21:41	BST	A
1,1-Dichloroethene	12.2		ug/L	1.0	SW846 8260D	1	11/22/2024 21:41	BST	A
1,1-Dichloropropene	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 21:41	BST	A
1,2,3-Trichlorobenzene	2.0 U	U	ug/L	2.0	SW846 8260D	1	11/22/2024 21:41	BST	A
1,2,3-Trichloropropane	2.0 U	U	ug/L	2.0	SW846 8260D	1	11/22/2024 21:41	BST	A
1,2,4-Trichlorobenzene	2.0 U	U	ug/L	2.0	SW846 8260D	1	11/22/2024 21:41	BST	A
1,2-Dibromo-3-chloropropane	7.0 U	U	ug/L	7.0	SW846 8260D	1	11/22/2024 21:41	BST	A
1,2-Dibromoethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 21:41	BST	A
1,2-Dichlorobenzene	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 21:41	BST	A
1,2-Dichloroethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 21:41	BST	A
1,2-Dichloropropane	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 21:41	BST	A
1,3-Dichlorobenzene	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 21:41	BST	A
1,3-Dichloropropane	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 21:41	BST	A
1,4-Dichlorobenzene	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 21:41	BST	A
2,2-Dichloropropane	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 21:41	BST	A
2-Butanone	10.0 U	U	ug/L	10.0	SW846 8260D	1	11/22/2024 21:41	BST	A
2-Hexanone	5.0 U	U	ug/L	5.0	SW846 8260D	1	11/22/2024 21:41	BST	A
4-Methyl-2-Pentanone(MIBK)	5.0 U	U	ug/L	5.0	SW846 8260D	1	11/22/2024 21:41	BST	A
Acetone	10.0 U	U	ug/L	10.0	SW846 8260D	1	11/22/2024 21:41	BST	A
Benzene	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 21:41	BST	A
Bromobenzene	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 21:41	BST	A
Bromochloromethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 21:41	BST	A
Bromodichloromethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 21:41	BST	A
Bromoform	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 21:41	BST	A
Bromomethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 21:41	BST	A
Carbon Tetrachloride	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 21:41	BST	A
Chlorobenzene	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 21:41	BST	A
Chlorodibromomethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 21:41	BST	A
Chloroethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 21:41	BST	A
Chloroform	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 21:41	BST	A
Chloromethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 21:41	BST	A



## Results

Client Sample ID	MW-28D	Collected	11/11/2024 11:45
Lab Sample ID	3387075010	Lab Receipt	11/11/2024 17:33

### 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	11/22/2024 21:41	BST	A
cis-1,3-Dichloropropene	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 21:41	BST	A
Dibromomethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 21:41	BST	A
Dichlorodifluoromethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 21:41	BST	A
Diisopropyl ether	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 21:41	BST	A
Ethylbenzene	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 21:41	BST	A
Hexachlorobutadiene	5.0 U	U	ug/L	5.0	SW846 8260D	1	11/22/2024 21:41	BST	A
Methyl t-Butyl Ether	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 21:41	BST	A
Methylene Chloride	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 21:41	BST	A
mp-Xylene	2.0 U	U	ug/L	2.0	SW846 8260D	1	11/22/2024 21:41	BST	A
Naphthalene	2.0 U	U	ug/L	2.0	SW846 8260D	1	11/22/2024 21:41	BST	A
o-Chlorotoluene	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 21:41	BST	A
o-Xylene	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 21:41	BST	A
p-Chlorotoluene	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 21:41	BST	A
p-Isopropyltoluene	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 21:41	BST	A
Styrene	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 21:41	BST	A
Tetrachloroethene	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 21:41	BST	A
Toluene	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 21:41	BST	A
Total Xylenes	3.0 U	U	ug/L	3.0	SW846 8260D	1	11/22/2024 21:41	BST	A
trans-1,2-Dichloroethene	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 21:41	BST	A
trans-1,3-Dichloropropene	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 21:41	BST	A
Trichloroethene	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 21:41	BST	A
Trichlorofluoromethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 21:41	BST	A
Vinyl Acetate	5.0 U	U	ug/L	5.0	SW846 8260D	1	11/22/2024 21:41	BST	A
Vinyl Chloride	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 21:41	BST	A

### SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
1,2-Dichloroethane-d4	17060-07-0	94.7%	62 – 133	11/22/2024 21:41	
4-Bromofluorobenzene	460-00-4	102%	79 – 114	11/22/2024 21:41	
Dibromofluoromethane	1868-53-7	97.7%	78 – 116	11/22/2024 21:41	
Toluene-d8	2037-26-5	102%	76 – 127	11/22/2024 21:41	



## Results

Client Sample ID	MW-36D	Collected	11/11/2024 12:00
Lab Sample ID	3387075011	Lab Receipt	11/11/2024 17:33

### 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	11/18/2024 19:29	S7M	D

### SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
2-Methylnaphthalene-d10	7297-45-2	54.7%	29 – 112	11/18/2024 19:29	
Fluoranthene-d10	93951-69-0	68.1%	45 – 130	11/18/2024 19:29	

### VOLATILE ORGANICS

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
1,1,1,2-Tetrachloroethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 22:01	BST	A
1,1,1-Trichloroethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 22:01	BST	A
1,1,2,2-Tetrachloroethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 22:01	BST	A
1,1,2-Trichloroethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 22:01	BST	A
1,1-Dichloroethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 22:01	BST	A
1,1-Dichloroethene	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 22:01	BST	A
1,1-Dichloropropene	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 22:01	BST	A
1,2,3-Trichlorobenzene	2.0 U	U	ug/L	2.0	SW846 8260D	1	11/22/2024 22:01	BST	A
1,2,3-Trichloropropane	2.0 U	U	ug/L	2.0	SW846 8260D	1	11/22/2024 22:01	BST	A
1,2,4-Trichlorobenzene	2.0 U	U	ug/L	2.0	SW846 8260D	1	11/22/2024 22:01	BST	A
1,2-Dibromo-3-chloropropane	7.0 U	U	ug/L	7.0	SW846 8260D	1	11/22/2024 22:01	BST	A
1,2-Dibromoethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 22:01	BST	A
1,2-Dichlorobenzene	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 22:01	BST	A
1,2-Dichloroethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 22:01	BST	A
1,2-Dichloropropane	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 22:01	BST	A
1,3-Dichlorobenzene	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 22:01	BST	A
1,3-Dichloropropane	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 22:01	BST	A
1,4-Dichlorobenzene	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 22:01	BST	A
2,2-Dichloropropane	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 22:01	BST	A
2-Butanone	10.0 U	U	ug/L	10.0	SW846 8260D	1	11/22/2024 22:01	BST	A
2-Hexanone	5.0 U	U	ug/L	5.0	SW846 8260D	1	11/22/2024 22:01	BST	A
4-Methyl-2-Pentanone(MIBK)	5.0 U	U	ug/L	5.0	SW846 8260D	1	11/22/2024 22:01	BST	A
Acetone	10.0 U	U	ug/L	10.0	SW846 8260D	1	11/22/2024 22:01	BST	A
Benzene	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 22:01	BST	A
Bromobenzene	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 22:01	BST	A
Bromochloromethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 22:01	BST	A
Bromodichloromethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 22:01	BST	A
Bromoform	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 22:01	BST	A
Bromomethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 22:01	BST	A
Carbon Tetrachloride	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 22:01	BST	A
Chlorobenzene	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 22:01	BST	A
Chlorodibromomethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 22:01	BST	A
Chloroethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 22:01	BST	A
Chloroform	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 22:01	BST	A
Chloromethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 22:01	BST	A



## Results

Client Sample ID	MW-36D	Collected	11/11/2024 12:00
Lab Sample ID	3387075011	Lab Receipt	11/11/2024 17:33

### 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	11/22/2024 22:01	BST	A
cis-1,3-Dichloropropene	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 22:01	BST	A
Dibromomethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 22:01	BST	A
Dichlorodifluoromethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 22:01	BST	A
Diisopropyl ether	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 22:01	BST	A
Ethylbenzene	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 22:01	BST	A
Hexachlorobutadiene	5.0 U	U	ug/L	5.0	SW846 8260D	1	11/22/2024 22:01	BST	A
Methyl t-Butyl Ether	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 22:01	BST	A
Methylene Chloride	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 22:01	BST	A
mp-Xylene	2.0 U	U	ug/L	2.0	SW846 8260D	1	11/22/2024 22:01	BST	A
Naphthalene	2.0 U	U	ug/L	2.0	SW846 8260D	1	11/22/2024 22:01	BST	A
o-Chlorotoluene	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 22:01	BST	A
o-Xylene	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 22:01	BST	A
p-Chlorotoluene	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 22:01	BST	A
p-Isopropyltoluene	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 22:01	BST	A
Styrene	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 22:01	BST	A
Tetrachloroethene	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 22:01	BST	A
Toluene	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 22:01	BST	A
Total Xylenes	3.0 U	U	ug/L	3.0	SW846 8260D	1	11/22/2024 22:01	BST	A
trans-1,2-Dichloroethene	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 22:01	BST	A
trans-1,3-Dichloropropene	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 22:01	BST	A
Trichloroethene	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 22:01	BST	A
Trichlorofluoromethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 22:01	BST	A
Vinyl Acetate	5.0 U	U	ug/L	5.0	SW846 8260D	1	11/22/2024 22:01	BST	A
Vinyl Chloride	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 22:01	BST	A

### SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
1,2-Dichloroethane-d4	17060-07-0	96.8%	62 – 133	11/22/2024 22:01	
4-Bromofluorobenzene	460-00-4	96.4%	79 – 114	11/22/2024 22:01	
Dibromofluoromethane	1868-53-7	97.3%	78 – 116	11/22/2024 22:01	
Toluene-d8	2037-26-5	101%	76 – 127	11/22/2024 22:01	



## Results

Client Sample ID	MW-45	Collected	11/11/2024 13:15
Lab Sample ID	3387075012	Lab Receipt	11/11/2024 17:33

### SEMIVOLATILE SIM

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
1,4-Dioxane	1.1 U	U	ug/L	1.1	SW846 8270E SIM	1	11/18/2024 19:56	S7M	D

#### SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
2-Methylnaphthalene-d10	7297-45-2	60.2%	29 - 112	11/18/2024 19:56	
Fluoranthene-d10	93951-69-0	72.3%	45 - 130	11/18/2024 19:56	

### 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	11/22/2024 22:21	BST	A
1,1,1-Trichloroethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 22:21	BST	A
1,1,2,2-Tetrachloroethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 22:21	BST	A
1,1,2-Trichloroethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 22:21	BST	A
1,1-Dichloroethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 22:21	BST	A
1,1-Dichloroethene	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 22:21	BST	A
1,1-Dichloropropene	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 22:21	BST	A
1,2,3-Trichlorobenzene	2.0 U	U	ug/L	2.0	SW846 8260D	1	11/22/2024 22:21	BST	A
1,2,3-Trichloropropane	2.0 U	U	ug/L	2.0	SW846 8260D	1	11/22/2024 22:21	BST	A
1,2,4-Trichlorobenzene	2.0 U	U	ug/L	2.0	SW846 8260D	1	11/22/2024 22:21	BST	A
1,2-Dibromo-3-chloropropane	7.0 U	U	ug/L	7.0	SW846 8260D	1	11/22/2024 22:21	BST	A
1,2-Dibromoethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 22:21	BST	A
1,2-Dichlorobenzene	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 22:21	BST	A
1,2-Dichloroethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 22:21	BST	A
1,2-Dichloropropane	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 22:21	BST	A
1,3-Dichlorobenzene	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 22:21	BST	A
1,3-Dichloropropane	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 22:21	BST	A
1,4-Dichlorobenzene	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 22:21	BST	A
2,2-Dichloropropane	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 22:21	BST	A
2-Butanone	10.0 U	U	ug/L	10.0	SW846 8260D	1	11/22/2024 22:21	BST	A
2-Hexanone	5.0 U	U	ug/L	5.0	SW846 8260D	1	11/22/2024 22:21	BST	A
4-Methyl-2-Pentanone(MIBK)	5.0 U	U	ug/L	5.0	SW846 8260D	1	11/22/2024 22:21	BST	A
Acetone	10.0 U	U	ug/L	10.0	SW846 8260D	1	11/22/2024 22:21	BST	A
Benzene	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 22:21	BST	A
Bromobenzene	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 22:21	BST	A
Bromochloromethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 22:21	BST	A
Bromodichloromethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 22:21	BST	A
Bromoform	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 22:21	BST	A
Bromomethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 22:21	BST	A
Carbon Tetrachloride	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 22:21	BST	A
Chlorobenzene	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 22:21	BST	A
Chlorodibromomethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 22:21	BST	A
Chloroethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 22:21	BST	A
Chloroform	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 22:21	BST	A
Chloromethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 22:21	BST	A



## Results

Client Sample ID	MW-45	Collected	11/11/2024 13:15
Lab Sample ID	3387075012	Lab Receipt	11/11/2024 17:33

### 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	11/22/2024 22:21	BST	A
cis-1,3-Dichloropropene	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 22:21	BST	A
Dibromomethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 22:21	BST	A
Dichlorodifluoromethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 22:21	BST	A
Diisopropyl ether	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 22:21	BST	A
Ethylbenzene	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 22:21	BST	A
Hexachlorobutadiene	5.0 U	U	ug/L	5.0	SW846 8260D	1	11/22/2024 22:21	BST	A
Methyl t-Butyl Ether	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 22:21	BST	A
Methylene Chloride	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 22:21	BST	A
mp-Xylene	2.0 U	U	ug/L	2.0	SW846 8260D	1	11/22/2024 22:21	BST	A
Naphthalene	2.0 U	U	ug/L	2.0	SW846 8260D	1	11/22/2024 22:21	BST	A
o-Chlorotoluene	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 22:21	BST	A
o-Xylene	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 22:21	BST	A
p-Chlorotoluene	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 22:21	BST	A
p-Isopropyltoluene	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 22:21	BST	A
Styrene	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 22:21	BST	A
Tetrachloroethene	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 22:21	BST	A
Toluene	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 22:21	BST	A
Total Xylenes	3.0 U	U	ug/L	3.0	SW846 8260D	1	11/22/2024 22:21	BST	A
trans-1,2-Dichloroethene	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 22:21	BST	A
trans-1,3-Dichloropropene	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 22:21	BST	A
Trichloroethene	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 22:21	BST	A
Trichlorofluoromethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 22:21	BST	A
Vinyl Acetate	5.0 U	U	ug/L	5.0	SW846 8260D	1	11/22/2024 22:21	BST	A
Vinyl Chloride	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 22:21	BST	A

### SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
1,2-Dichloroethane-d4	17060-07-0	96.8%	62 - 133	11/22/2024 22:21	
4-Bromofluorobenzene	460-00-4	101%	79 - 114	11/22/2024 22:21	
Dibromofluoromethane	1868-53-7	97.3%	78 - 116	11/22/2024 22:21	
Toluene-d8	2037-26-5	104%	76 - 127	11/22/2024 22:21	



## Results

Client Sample ID	MW-24D	Collected	11/11/2024 13:30
Lab Sample ID	3387075013	Lab Receipt	11/11/2024 17:33

### SEMIVOLATILE SIM

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
1,4-Dioxane	160		ug/L	20.0	SW846 8270E SIM	20	11/19/2024 15:29	S7M	D

#### SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
2-Methylnaphthalene-d10	7297-45-2	0*%	29 – 112	11/19/2024 15:29	1
2-Methylnaphthalene-d10	7297-45-2	69.7%	29 – 112	11/18/2024 20:24	
Fluoranthene-d10	93951-69-0	0*%	45 – 130	11/19/2024 15:29	2
Fluoranthene-d10	93951-69-0	85.8%	45 – 130	11/18/2024 20:24	

### 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	11/23/2024 01:20	BST	A
1,1,1-Trichloroethane	10.0 U	U	ug/L	10.0	SW846 8260D	10	11/23/2024 01:20	BST	A
1,1,2,2-Tetrachloroethane	10.0 U	U	ug/L	10.0	SW846 8260D	10	11/23/2024 01:20	BST	A
1,1,2-Trichloroethane	10.0 U	U	ug/L	10.0	SW846 8260D	10	11/23/2024 01:20	BST	A
1,1-Dichloroethane	73.8		ug/L	10.0	SW846 8260D	10	11/23/2024 01:20	BST	A
1,1-Dichloroethene	947		ug/L	10.0	SW846 8260D	10	11/23/2024 01:20	BST	A
1,1-Dichloropropene	10.0 U	U	ug/L	10.0	SW846 8260D	10	11/23/2024 01:20	BST	A
1,2,3-Trichlorobenzene	20.0 U	U	ug/L	20.0	SW846 8260D	10	11/23/2024 01:20	BST	A
1,2,3-Trichloropropane	20.0 U	U	ug/L	20.0	SW846 8260D	10	11/23/2024 01:20	BST	A
1,2,4-Trichlorobenzene	20.0 U	U	ug/L	20.0	SW846 8260D	10	11/23/2024 01:20	BST	A
1,2-Dibromo-3-chloropropane	70.0 U	U	ug/L	70.0	SW846 8260D	10	11/23/2024 01:20	BST	A
1,2-Dibromoethane	10.0 U	U	ug/L	10.0	SW846 8260D	10	11/23/2024 01:20	BST	A
1,2-Dichlorobenzene	10.0 U	U	ug/L	10.0	SW846 8260D	10	11/23/2024 01:20	BST	A
1,2-Dichloroethane	10.0 U	U	ug/L	10.0	SW846 8260D	10	11/23/2024 01:20	BST	A
1,2-Dichloropropane	10.0 U	U	ug/L	10.0	SW846 8260D	10	11/23/2024 01:20	BST	A
1,3-Dichlorobenzene	10.0 U	U	ug/L	10.0	SW846 8260D	10	11/23/2024 01:20	BST	A
1,3-Dichloropropane	10.0 U	U	ug/L	10.0	SW846 8260D	10	11/23/2024 01:20	BST	A
1,4-Dichlorobenzene	10.0 U	U	ug/L	10.0	SW846 8260D	10	11/23/2024 01:20	BST	A
2,2-Dichloropropane	10.0 U	U	ug/L	10.0	SW846 8260D	10	11/23/2024 01:20	BST	A
2-Butanone	100 U	U	ug/L	100	SW846 8260D	10	11/23/2024 01:20	BST	A
2-Hexanone	50.0 U	U	ug/L	50.0	SW846 8260D	10	11/23/2024 01:20	BST	A
4-Methyl-2-Pentanone(MIBK)	50.0 U	U	ug/L	50.0	SW846 8260D	10	11/23/2024 01:20	BST	A
Acetone	100 U	U	ug/L	100	SW846 8260D	10	11/23/2024 01:20	BST	A
Benzene	10.0 U	U	ug/L	10.0	SW846 8260D	10	11/23/2024 01:20	BST	A
Bromobenzene	10.0 U	U	ug/L	10.0	SW846 8260D	10	11/23/2024 01:20	BST	A
Bromochloromethane	10.0 U	U	ug/L	10.0	SW846 8260D	10	11/23/2024 01:20	BST	A
Bromodichloromethane	10.0 U	U	ug/L	10.0	SW846 8260D	10	11/23/2024 01:20	BST	A
Bromoform	10.0 U	U	ug/L	10.0	SW846 8260D	10	11/23/2024 01:20	BST	A
Bromomethane	10.0 U	U	ug/L	10.0	SW846 8260D	10	11/23/2024 01:20	BST	A
Carbon Tetrachloride	10.0 U	U	ug/L	10.0	SW846 8260D	10	11/23/2024 01:20	BST	A
Chlorobenzene	10.0 U	U	ug/L	10.0	SW846 8260D	10	11/23/2024 01:20	BST	A
Chlorodibromomethane	10.0 U	U	ug/L	10.0	SW846 8260D	10	11/23/2024 01:20	BST	A
Chloroethane	10.0 U	U	ug/L	10.0	SW846 8260D	10	11/23/2024 01:20	BST	A



## Results

Client Sample ID	MW-24D	Collected	11/11/2024 13:30
Lab Sample ID	3387075013	Lab Receipt	11/11/2024 17:33

### 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	11/23/2024 01:20	BST	A
Chloromethane	10.0 U	U	ug/L	10.0	SW846 8260D	10	11/23/2024 01:20	BST	A
cis-1,2-Dichloroethene	10.0 U	U	ug/L	10.0	SW846 8260D	10	11/23/2024 01:20	BST	A
cis-1,3-Dichloropropene	10.0 U	U	ug/L	10.0	SW846 8260D	10	11/23/2024 01:20	BST	A
Dibromomethane	10.0 U	U	ug/L	10.0	SW846 8260D	10	11/23/2024 01:20	BST	A
Dichlorodifluoromethane	10.0 U	U	ug/L	10.0	SW846 8260D	10	11/23/2024 01:20	BST	A
Diisopropyl ether	10.0 U	U	ug/L	10.0	SW846 8260D	10	11/23/2024 01:20	BST	A
Ethylbenzene	10.0 U	U	ug/L	10.0	SW846 8260D	10	11/23/2024 01:20	BST	A
Hexachlorobutadiene	50.0 U	U	ug/L	50.0	SW846 8260D	10	11/23/2024 01:20	BST	A
Methyl t-Butyl Ether	10.0 U	U	ug/L	10.0	SW846 8260D	10	11/23/2024 01:20	BST	A
Methylene Chloride	10.0 U	U	ug/L	10.0	SW846 8260D	10	11/23/2024 01:20	BST	A
mp-Xylene	20.0 U	U	ug/L	20.0	SW846 8260D	10	11/23/2024 01:20	BST	A
Naphthalene	20.0 U	U	ug/L	20.0	SW846 8260D	10	11/23/2024 01:20	BST	A
o-Chlorotoluene	10.0 U	U	ug/L	10.0	SW846 8260D	10	11/23/2024 01:20	BST	A
o-Xylene	10.0 U	U	ug/L	10.0	SW846 8260D	10	11/23/2024 01:20	BST	A
p-Chlorotoluene	10.0 U	U	ug/L	10.0	SW846 8260D	10	11/23/2024 01:20	BST	A
p-Isopropyltoluene	10.0 U	U	ug/L	10.0	SW846 8260D	10	11/23/2024 01:20	BST	A
Styrene	10.0 U	U	ug/L	10.0	SW846 8260D	10	11/23/2024 01:20	BST	A
Tetrachloroethene	10.0 U	U	ug/L	10.0	SW846 8260D	10	11/23/2024 01:20	BST	A
Toluene	10.0 U	U	ug/L	10.0	SW846 8260D	10	11/23/2024 01:20	BST	A
Total Xylenes	30.0 U	U	ug/L	30.0	SW846 8260D	10	11/23/2024 01:20	BST	A
trans-1,2-Dichloroethene	10.0 U	U	ug/L	10.0	SW846 8260D	10	11/23/2024 01:20	BST	A
trans-1,3-Dichloropropene	10.0 U	U	ug/L	10.0	SW846 8260D	10	11/23/2024 01:20	BST	A
Trichloroethene	10.0 U	U	ug/L	10.0	SW846 8260D	10	11/23/2024 01:20	BST	A
Trichlorofluoromethane	10.0 U	U	ug/L	10.0	SW846 8260D	10	11/23/2024 01:20	BST	A
Vinyl Acetate	50.0 U	U	ug/L	50.0	SW846 8260D	10	11/23/2024 01:20	BST	A
Vinyl Chloride	10.0 U	U	ug/L	10.0	SW846 8260D	10	11/23/2024 01:20	BST	A

### SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
1,2-Dichloroethane-d4	17060-07-0	94.7%	62 - 133	11/23/2024 01:20	
4-Bromofluorobenzene	460-00-4	103%	79 - 114	11/23/2024 01:20	
Dibromofluoromethane	1868-53-7	99.6%	78 - 116	11/23/2024 01:20	
Toluene-d8	2037-26-5	104%	76 - 127	11/23/2024 01:20	



## Results

Client Sample ID	Trip Blank E	Collected	11/11/2024 13:30
Lab Sample ID	3387075014	Lab Receipt	11/11/2024 17:33

### 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	11/22/2024 19:22	BST	A
1,1,1-Trichloroethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 19:22	BST	A
1,1,2,2-Tetrachloroethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 19:22	BST	A
1,1,2-Trichloroethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 19:22	BST	A
1,1-Dichloroethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 19:22	BST	A
1,1-Dichloroethene	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 19:22	BST	A
1,1-Dichloropropene	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 19:22	BST	A
1,2,3-Trichlorobenzene	2.0 U	U	ug/L	2.0	SW846 8260D	1	11/22/2024 19:22	BST	A
1,2,3-Trichloropropane	2.0 U	U	ug/L	2.0	SW846 8260D	1	11/22/2024 19:22	BST	A
1,2,4-Trichlorobenzene	2.0 U	U	ug/L	2.0	SW846 8260D	1	11/22/2024 19:22	BST	A
1,2-Dibromo-3-chloropropane	7.0 U	U	ug/L	7.0	SW846 8260D	1	11/22/2024 19:22	BST	A
1,2-Dibromoethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 19:22	BST	A
1,2-Dichlorobenzene	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 19:22	BST	A
1,2-Dichloroethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 19:22	BST	A
1,2-Dichloropropane	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 19:22	BST	A
1,3-Dichlorobenzene	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 19:22	BST	A
1,3-Dichloropropane	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 19:22	BST	A
1,4-Dichlorobenzene	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 19:22	BST	A
2,2-Dichloropropane	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 19:22	BST	A
2-Butanone	10.0 U	U	ug/L	10.0	SW846 8260D	1	11/22/2024 19:22	BST	A
2-Hexanone	5.0 U	U	ug/L	5.0	SW846 8260D	1	11/22/2024 19:22	BST	A
4-Methyl-2-Pentanone(MIBK)	5.0 U	U	ug/L	5.0	SW846 8260D	1	11/22/2024 19:22	BST	A
Acetone	10.0 U	U	ug/L	10.0	SW846 8260D	1	11/22/2024 19:22	BST	A
Benzene	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 19:22	BST	A
Bromobenzene	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 19:22	BST	A
Bromochloromethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 19:22	BST	A
Bromodichloromethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 19:22	BST	A
Bromoform	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 19:22	BST	A
Bromomethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 19:22	BST	A
Carbon Tetrachloride	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 19:22	BST	A
Chlorobenzene	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 19:22	BST	A
Chlorodibromomethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 19:22	BST	A
Chloroethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 19:22	BST	A
Chloroform	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 19:22	BST	A
Chloromethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 19:22	BST	A
cis-1,2-Dichloroethene	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 19:22	BST	A
cis-1,3-Dichloropropene	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 19:22	BST	A
Dibromomethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 19:22	BST	A
Dichlorodifluoromethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 19:22	BST	A
Diisopropyl ether	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 19:22	BST	A
Ethylbenzene	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 19:22	BST	A
Hexachlorobutadiene	5.0 U	U	ug/L	5.0	SW846 8260D	1	11/22/2024 19:22	BST	A
Methyl t-Butyl Ether	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 19:22	BST	A
Methylene Chloride	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 19:22	BST	A
mp-Xylene	2.0 U	U	ug/L	2.0	SW846 8260D	1	11/22/2024 19:22	BST	A
Naphthalene	2.0 U	U	ug/L	2.0	SW846 8260D	1	11/22/2024 19:22	BST	A
o-Chlorotoluene	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 19:22	BST	A



## Results

Client Sample ID	Trip Blank E	Collected	11/11/2024 13:30
Lab Sample ID	3387075014	Lab Receipt	11/11/2024 17:33

### 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	11/22/2024 19:22	BST	A
p-Chlorotoluene	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 19:22	BST	A
p-Isopropyltoluene	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 19:22	BST	A
Styrene	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 19:22	BST	A
Tetrachloroethene	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 19:22	BST	A
Toluene	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 19:22	BST	A
Total Xylenes	3.0 U	U	ug/L	3.0	SW846 8260D	1	11/22/2024 19:22	BST	A
trans-1,2-Dichloroethene	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 19:22	BST	A
trans-1,3-Dichloropropene	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 19:22	BST	A
Trichloroethene	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 19:22	BST	A
Trichlorofluoromethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 19:22	BST	A
Vinyl Acetate	5.0 U	U	ug/L	5.0	SW846 8260D	1	11/22/2024 19:22	BST	A
Vinyl Chloride	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 19:22	BST	A

### SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
1,2-Dichloroethane-d4	17060-07-0	99.7%	62 – 133	11/22/2024 19:22	
4-Bromofluorobenzene	460-00-4	102%	79 – 114	11/22/2024 19:22	
Dibromofluoromethane	1868-53-7	102%	78 – 116	11/22/2024 19:22	
Toluene-d8	2037-26-5	107%	76 – 127	11/22/2024 19:22	



## Results

Client Sample ID	MW-46D	Collected	11/10/2024 17:10
Lab Sample ID	3387075015	Lab Receipt	11/11/2024 17:33

### SEMIVOLATILE SIM

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
1,4-Dioxane	26.8		ug/L	10.0	SW846 8270E SIM	10	11/19/2024 15:02	S7M	D

### SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
2-Methylnaphthalene-d10	7297-45-2	63.7%	29 – 112	11/18/2024 20:51	
2-Methylnaphthalene-d10	7297-45-2	63.4%	29 – 112	11/19/2024 15:02	
Fluoranthene-d10	93951-69-0	76.1%	45 – 130	11/18/2024 20:51	
Fluoranthene-d10	93951-69-0	72.6%	45 – 130	11/19/2024 15:02	

### 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	11/22/2024 22:41	BST	A
1,1,1-Trichloroethane	1.2		ug/L	1.0	SW846 8260D	1	11/22/2024 22:41	BST	A
1,1,2,2-Tetrachloroethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 22:41	BST	A
1,1,2-Trichloroethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 22:41	BST	A
1,1-Dichloroethane	7.4		ug/L	1.0	SW846 8260D	1	11/22/2024 22:41	BST	A
1,1-Dichloroethene	36.5		ug/L	1.0	SW846 8260D	1	11/22/2024 22:41	BST	A
1,1-Dichloropropene	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 22:41	BST	A
1,2,3-Trichlorobenzene	2.0 U	U	ug/L	2.0	SW846 8260D	1	11/22/2024 22:41	BST	A
1,2,3-Trichloropropane	2.0 U	U	ug/L	2.0	SW846 8260D	1	11/22/2024 22:41	BST	A
1,2,4-Trichlorobenzene	2.0 U	U	ug/L	2.0	SW846 8260D	1	11/22/2024 22:41	BST	A
1,2-Dibromo-3-chloropropane	7.0 U	U	ug/L	7.0	SW846 8260D	1	11/22/2024 22:41	BST	A
1,2-Dibromoethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 22:41	BST	A
1,2-Dichlorobenzene	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 22:41	BST	A
1,2-Dichloroethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 22:41	BST	A
1,2-Dichloropropane	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 22:41	BST	A
1,3-Dichlorobenzene	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 22:41	BST	A
1,3-Dichloropropane	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 22:41	BST	A
1,4-Dichlorobenzene	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 22:41	BST	A
2,2-Dichloropropane	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 22:41	BST	A
2-Butanone	10.0 U	U	ug/L	10.0	SW846 8260D	1	11/22/2024 22:41	BST	A
2-Hexanone	5.0 U	U	ug/L	5.0	SW846 8260D	1	11/22/2024 22:41	BST	A
4-Methyl-2-Pentanone(MIBK)	5.0 U	U	ug/L	5.0	SW846 8260D	1	11/22/2024 22:41	BST	A
Acetone	10.0 U	U	ug/L	10.0	SW846 8260D	1	11/22/2024 22:41	BST	A
Benzene	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 22:41	BST	A
Bromobenzene	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 22:41	BST	A
Bromochloromethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 22:41	BST	A
Bromodichloromethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 22:41	BST	A
Bromoform	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 22:41	BST	A
Bromomethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 22:41	BST	A
Carbon Tetrachloride	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 22:41	BST	A
Chlorobenzene	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 22:41	BST	A
Chlorodibromomethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 22:41	BST	A
Chloroethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 22:41	BST	A



## Results

Client Sample ID	MW-46D	Collected	11/10/2024 17:10
Lab Sample ID	3387075015	Lab Receipt	11/11/2024 17:33

### VOLATILE ORGANICS (cont.)

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
Chloroform	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 22:41	BST	A
Chloromethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 22:41	BST	A
cis-1,2-Dichloroethene	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 22:41	BST	A
cis-1,3-Dichloropropene	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 22:41	BST	A
Dibromomethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 22:41	BST	A
Dichlorodifluoromethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 22:41	BST	A
Diisopropyl ether	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 22:41	BST	A
Ethylbenzene	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 22:41	BST	A
Hexachlorobutadiene	5.0 U	U	ug/L	5.0	SW846 8260D	1	11/22/2024 22:41	BST	A
Methyl t-Butyl Ether	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 22:41	BST	A
Methylene Chloride	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 22:41	BST	A
mp-Xylene	2.0 U	U	ug/L	2.0	SW846 8260D	1	11/22/2024 22:41	BST	A
Naphthalene	2.0 U	U	ug/L	2.0	SW846 8260D	1	11/22/2024 22:41	BST	A
o-Chlorotoluene	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 22:41	BST	A
o-Xylene	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 22:41	BST	A
p-Chlorotoluene	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 22:41	BST	A
p-Isopropyltoluene	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 22:41	BST	A
Styrene	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 22:41	BST	A
Tetrachloroethene	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 22:41	BST	A
Toluene	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 22:41	BST	A
Total Xylenes	3.0 U	U	ug/L	3.0	SW846 8260D	1	11/22/2024 22:41	BST	A
trans-1,2-Dichloroethene	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 22:41	BST	A
trans-1,3-Dichloropropene	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 22:41	BST	A
Trichloroethene	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 22:41	BST	A
Trichlorofluoromethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 22:41	BST	A
Vinyl Acetate	5.0 U	U	ug/L	5.0	SW846 8260D	1	11/22/2024 22:41	BST	A
Vinyl Chloride	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 22:41	BST	A

### SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
1,2-Dichloroethane-d4	17060-07-0	93.9%	62 - 133	11/22/2024 22:41	
4-Bromofluorobenzene	460-00-4	100%	79 - 114	11/22/2024 22:41	
Dibromofluoromethane	1868-53-7	94%	78 - 116	11/22/2024 22:41	
Toluene-d8	2037-26-5	100%	76 - 127	11/22/2024 22:41	



### Sample - Method Cross Reference Table

Lab ID	Sample ID	Analysis Method	Preparation Method	Leachate Method
3387075001	MW-35D	SW846 8270E SIM SW846 8260D	SW846 3510C N/A	
3387075002	MW-34D	SW846 8270E SIM SW846 8260D	SW846 3510C N/A	
3387075003	MW-33-295	SW846 8270E SIM SW846 8260D	SW846 3510C N/A	
3387075004	MW-33-235	SW846 8270E SIM SW846 8260D	SW846 3510C N/A	
3387075005	MW-30D-413	SW846 8270E SIM SW846 8260D	SW846 3510C N/A	
3387075006	MW-30D-273	SW846 8270E SIM SW846 8260D	SW846 3510C N/A	
3387075007	MW-29D	SW846 8270E SIM SW846 8260D	SW846 3510C N/A	
3387075008	MW-32D	SW846 8270E SIM SW846 8260D	SW846 3510C N/A	
3387075009	Trip Blank D	SW846 8260D	N/A	
3387075010	MW-28D	SW846 8270E SIM SW846 8260D	SW846 3510C N/A	
3387075011	MW-36D	SW846 8270E SIM SW846 8260D	SW846 3510C N/A	
3387075012	MW-45	SW846 8270E SIM SW846 8260D	SW846 3510C N/A	
3387075013	MW-24D	SW846 8270E SIM SW846 8260D	SW846 3510C N/A	
3387075014	Trip Blank E	SW846 8260D	N/A	
3387075015	MW-46D	SW846 8270E SIM SW846 8260D	SW846 3510C N/A	



**QUALITY CONTROL SAMPLES**

**SEMIVOLATILE SIM**

QC Batch			
QC Batch	1332545	Prep Method	SW846 3510C
Date	11/15/2024 08:20	Analysis Method	SW846 8270E SIM
Tech.	DEC		

Associated Samples			
3387075001	3387075002	3387075011	3387075003
3387075012	3387075004	3387075013	3387075005
3387075006	3387075015	3387075007	3387075008
3387075010			

**Method Blank** 3905826 (MB) Created on 11/15/2024 06:47 For QC Batch 1332545

**RESULTS**

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

**SURROGATES**

Compound	CAS No		Result (ug/L)	Expected (ug/L)	Rec. (%)	Limits (%)	Qualifiers
2-Methylnaphthalene-d10	7297-45-2	BLK	0.54	1	54.4	29 - 112	
Fluoranthene-d10	93951-69-0	BLK	0.78	1	77.6	45 - 130	

**Lab Control Standard** 3905827 (LCS) Created on 11/15/2024 06:47 For QC Batch 1332545

**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	0.48		1	47.8	22 - 75		U

**SURROGATES**

Compound	CAS No		Result (ug/L)	Expected (ug/L)	Rec. (%)	Limits (%)	Qualifiers
2-Methylnaphthalene-d10	7297-45-2	LCS	0.47	1	47.4	29 - 112	
Fluoranthene-d10	93951-69-0	LCS	0.67	1	66.9	45 - 130	

**Matrix Spike** 3905828 (MS) 3387075001 For QC Batch 1332545

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

**RESULTS**

Compound	CAS No		Result (ug/L)	Orig. Result (ug/L)	Spk Added (ug/L)	Rec. (%)	Limits (%)	RPD Limit (%)	Qualifiers
1,4-Dioxane	123-91-1	MS	0.68	0	1	68	22 - 75		U

**SURROGATES**

Compound	CAS No		Result (ug/L)	Expected (ug/L)	Rec. (%)	Limits (%)	Qualifiers
2-Methylnaphthalene-d10	7297-45-2	MS	0.7	1	70.5	29 - 112	



**QUALITY CONTROL SAMPLES**

**SEMIVOLATILE SIM (cont.)**

*SURROGATES*

Compound	CAS No		Result (ug/L)	Expected (ug/L)	Rec. (%)	Limits (%)	Qualifiers
Fluoranthene-d10	93951-69-0	MS	0.87	1	87.3	45 - 130	

**Duplicate** 3905829 (DUP) 3387075003 For QC Batch 1332545

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

*RESULTS*

Compound	CAS No		Result (ug/L)	Orig. Result (ug/L)		Qualifiers
1,4-Dioxane	123-91-1	DUP	3.7262	3.8990	RPD 4.53 (Max-30)	

*SURROGATES*

Compound	CAS No		Result (ug/L)	Expected (ug/L)	Rec. (%)	Limits (%)	Qualifiers
2-Methylnaphthalene-d10	7297-45-2	DUP	0.53	1	53.2	29 - 112	
Fluoranthene-d10	93951-69-0	DUP	0.69	1	68.9	45 - 130	



**QUALITY CONTROL SAMPLES**

**VOLATILE ORGANICS**

QC Batch			
QC Batch	1337882	Prep Method	N/A
Date	N/A	Analysis Method	SW846 8260D
Tech.			

Associated Samples	
3387075001	3387075002

**Matrix Spike** 3905935 (MS) 3387069014 (non-Project Sample) For QC Batch 1337882

\*\*\*\*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** 3905936 (MSD) 3387069014 (non-Project Sample) For QC Batch 1337882

**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	22.8	0	20	114	78 - 121		
1,1,1,2-Tetrachloroethane	630-20-6	MSD	22.9	0	20	114	78 - 121	RPD <u>0.40</u>	(Max-16)
1,1,1-Trichloroethane	71-55-6	MS	24.9	2	20	114	66 - 130		
1,1,1-Trichloroethane	71-55-6	MSD	24.7	2	20	114	66 - 130	RPD <u>0.64</u>	(Max-20)
1,1,2,2-Tetrachloroethane	79-34-5	MS	22.5	0	20	113	74 - 135		
1,1,2,2-Tetrachloroethane	79-34-5	MSD	22.7	0	20	114	74 - 135	RPD <u>0.84</u>	(Max-16)
1,1,2-Trichloroethane	79-00-5	MS	22.9	0	20	114	82 - 126		
1,1,2-Trichloroethane	79-00-5	MSD	23	0	20	115	82 - 126	RPD <u>0.37</u>	(Max-15)
1,1-Dichloroethane	75-34-3	MS	23.9	1.60	20	111	78 - 124		
1,1-Dichloroethane	75-34-3	MSD	23.4	1.60	20	109	78 - 124	RPD <u>2.10</u>	(Max-15)
1,1-Dichloroethene	75-35-4	MS	23.8	2	20	109	63 - 128		
1,1-Dichloroethene	75-35-4	MSD	23.3	2	20	107	63 - 128	RPD <u>1.98</u>	(Max-21)
1,1-Dichloropropene	563-58-6	MS	21.7	0	20	109	76 - 126		
1,1-Dichloropropene	563-58-6	MSD	21.5	0	20	107	76 - 126	RPD <u>1.22</u>	(Max-16)
1,2,3-Trichlorobenzene	87-61-6	MS	20.1	0	20	101	61 - 126		
1,2,3-Trichlorobenzene	87-61-6	MSD	20.1	0	20	101	61 - 126	RPD <u>0.09</u>	(Max-36)
1,2,3-Trichloropropane	96-18-4	MS	21.6	0	20	108	75 - 132		
1,2,3-Trichloropropane	96-18-4	MSD	22.4	0	20	112	75 - 132	RPD <u>3.29</u>	(Max-19)
1,2,4-Trichlorobenzene	120-82-1	MS	23	0	20	115	67 - 123		
1,2,4-Trichlorobenzene	120-82-1	MSD	23.1	0	20	116	67 - 123	RPD <u>0.62</u>	(Max-22)
1,2-Dibromo-3-chloropropane	96-12-8	MS	19.9	0	20	99.5	59 - 133		
1,2-Dibromo-3-chloropropane	96-12-8	MSD	19.8	0	20	99.2	59 - 133	RPD <u>0.31</u>	(Max-26)
1,2-Dibromoethane	106-93-4	MS	22.9	0	20	115	80 - 124		
1,2-Dibromoethane	106-93-4	MSD	22.5	0	20	113	80 - 124	RPD <u>1.74</u>	(Max-19)
1,2-Dichlorobenzene	95-50-1	MS	21.8	0	20	109	82 - 118		
1,2-Dichlorobenzene	95-50-1	MSD	21.3	0	20	107	82 - 118	RPD <u>2.33</u>	(Max-15)
1,2-Dichloroethane	107-06-2	MS	20.9	0	20	104	70 - 133		
1,2-Dichloroethane	107-06-2	MSD	20.7	0	20	103	70 - 133	RPD <u>0.97</u>	(Max-19)
1,2-Dichloropropane	78-87-5	MS	21.5	0	20	107	81 - 127		
1,2-Dichloropropane	78-87-5	MSD	21.3	0	20	106	81 - 127	RPD <u>1.03</u>	(Max-15)
1,3-Dichlorobenzene	541-73-1	MS	20.9	0	20	104	81 - 118		
1,3-Dichlorobenzene	541-73-1	MSD	21	0	20	105	81 - 118	RPD <u>0.74</u>	(Max-16)
1,3-Dichloropropane	142-28-9	MS	22.6	0	20	113	82 - 126		
1,3-Dichloropropane	142-28-9	MSD	22.4	0	20	112	82 - 126	RPD <u>0.75</u>	(Max-15)
1,4-Dichlorobenzene	106-46-7	MS	21.5	0	20	107	81 - 116		



QUALITY CONTROL SAMPLES

VOLATILE ORGANICS (cont.)

RESULTS

Compound	CAS No		Result (ug/L)	Orig. Result (ug/L)	Spk Added (ug/L)	Rec. (%)	Limits (%)	RPD Limit (%)	Qualifiers
1,4-Dichlorobenzene	106-46-7	MSD	20.9	0	20	104	81 - 116	RPD <u>2.93</u> (Max-15)	
2,2-Dichloropropane	594-20-7	MS	24	0	20	120	64 - 129		
2,2-Dichloropropane	594-20-7	MSD	24.1	0	20	120	64 - 129	RPD <u>0.20</u> (Max-18)	
2-Butanone	78-93-3	MS	108	0	100	108	50 - 152		
2-Butanone	78-93-3	MSD	104	0	100	104	50 - 152	RPD <u>3.42</u> (Max-16)	
2-Hexanone	591-78-6	MS	107	0	100	107	65 - 154		
2-Hexanone	591-78-6	MSD	106	0	100	106	65 - 154	RPD <u>1.06</u> (Max-17)	
4-Methyl-2-Pentanone(MIBK)	108-10-1	MS	107	0	100	107	71 - 146		
4-Methyl-2-Pentanone(MIBK)	108-10-1	MSD	107	0	100	107	71 - 146	RPD <u>0.52</u> (Max-16)	
Acetone	67-64-1	MS	93.2	0	100	93.2	40 - 151		
Acetone	67-64-1	MSD	91.2	0	100	91.2	40 - 151	RPD <u>2.11</u> (Max-40)	
Benzene	71-43-2	MS	21.9	0	20	110	80 - 124		
Benzene	71-43-2	MSD	21.6	0	20	108	80 - 124	RPD <u>1.35</u> (Max-26)	
Bromobenzene	108-86-1	MS	21.9	0	20	110	81 - 119		
Bromobenzene	108-86-1	MSD	21.7	0	20	109	81 - 119	RPD <u>0.87</u> (Max-17)	
Bromochloromethane	74-97-5	MS	23.2	0	20	116	73 - 117		
Bromochloromethane	74-97-5	MSD	22.6	0	20	113	73 - 117	RPD <u>2.66</u> (Max-19)	
Bromodichloromethane	75-27-4	MS	22.9	0	20	114	79 - 126		
Bromodichloromethane	75-27-4	MSD	22.6	0	20	113	79 - 126	RPD <u>1.22</u> (Max-16)	
Bromoform	75-25-2	MS	17.9	0	20	89.5	70 - 123		
Bromoform	75-25-2	MSD	18	0	20	89.9	70 - 123	RPD <u>0.44</u> (Max-16)	
Bromomethane	74-83-9	MS	15.4	0	20	77.1	45 - 148		
Bromomethane	74-83-9	MSD	15.4	0	20	76.9	45 - 148	RPD <u>0.30</u> (Max-26)	
Carbon Tetrachloride	56-23-5	MS	20.1	0	20	101	62 - 132		
Carbon Tetrachloride	56-23-5	MSD	20.2	0	20	101	62 - 132	RPD <u>0.19</u> (Max-17)	
Chlorobenzene	108-90-7	MS	22.5	0	20	112	85 - 117		
Chlorobenzene	108-90-7	MSD	22.2	0	20	111	85 - 117	RPD <u>1.14</u> (Max-15)	
Chlorodibromomethane	124-48-1	MS	19.1	0	20	95.3	77 - 122		
Chlorodibromomethane	124-48-1	MSD	19	0	20	95.1	77 - 122	RPD <u>0.20</u> (Max-15)	
Chloroethane	75-00-3	MS	21.8	0	20	109	51 - 142		
Chloroethane	75-00-3	MSD	20.2	0	20	101	51 - 142	RPD <u>7.66</u> (Max-24)	
Chloroform	67-66-3	MS	21.9	0.50	20	107	78 - 122		
Chloroform	67-66-3	MSD	21.4	0.50	20	104	78 - 122	RPD <u>2.66</u> (Max-16)	
Chloromethane	74-87-3	MS	21.5	0	20	107	38 - 156		
Chloromethane	74-87-3	MSD	20.2	0	20	101	38 - 156	RPD <u>5.95</u> (Max-27)	
cis-1,2-Dichloroethene	156-59-2	MS	22	0	20	110	78 - 125		
cis-1,2-Dichloroethene	156-59-2	MSD	21.9	0	20	109	78 - 125	RPD <u>0.65</u> (Max-21)	
cis-1,3-Dichloropropene	10061-01-5	MS	22.6	0	20	113	81 - 121		
cis-1,3-Dichloropropene	10061-01-5	MSD	22.6	0	20	113	81 - 121	RPD <u>0.04</u> (Max-16)	
Dibromomethane	74-95-3	MS	21.8	0	20	109	81 - 125		
Dibromomethane	74-95-3	MSD	21.8	0	20	109	81 - 125	RPD <u>0.01</u> (Max-16)	
Dichlorodifluoromethane	75-71-8	MS	19.4	0	20	97.1	17 - 166		
Dichlorodifluoromethane	75-71-8	MSD	17.7	0	20	88.6	17 - 166	RPD <u>9.21</u> (Max-24)	
Diisopropyl ether	108-20-3	MS	21.5	0	20	108	74 - 131		
Diisopropyl ether	108-20-3	MSD	21.4	0	20	107	74 - 131	RPD <u>0.67</u> (Max-15)	
Ethylbenzene	100-41-4	MS	22.7	0	20	114	80 - 124		
Ethylbenzene	100-41-4	MSD	22.9	0	20	114	80 - 124	RPD <u>0.76</u> (Max-19)	
Hexachlorobutadiene	87-68-3	MS	20.6	0	20	103	55 - 128		
Hexachlorobutadiene	87-68-3	MSD	22.2	0	20	111	55 - 128	RPD <u>7.61</u> (Max-35)	



QUALITY CONTROL SAMPLES

VOLATILE ORGANICS (cont.)

RESULTS

Compound	CAS No		Result (ug/L)	Orig. Result (ug/L)	Spk Added (ug/L)	Rec. (%)	Limits (%)	RPD Limit (%)	Qualifiers
Methyl t-Butyl Ether	1634-04-4	MS	21.9	0	20	110	69 - 115		
Methyl t-Butyl Ether	1634-04-4	MSD	21.7	0	20	109	69 - 115	RPD	<u>1.07</u> (Max-20)
Methylene Chloride	75-09-2	MS	21.8	0	20	109	76 - 121		
Methylene Chloride	75-09-2	MSD	21.4	0	20	107	76 - 121	RPD	<u>1.99</u> (Max-17)
mp-Xylene	108383/106423	MS	45.4	0	40	114	79 - 125		
mp-Xylene	108383/106423	MSD	45.3	0	40	113	79 - 125	RPD	<u>0.28</u> (Max-21)
Naphthalene	91-20-3	MS	18.3	0	20	91.7	56 - 134		
Naphthalene	91-20-3	MSD	18.8	0	20	93.9	56 - 134	RPD	<u>2.39</u> (Max-40)
o-Chlorotoluene	95-49-8	MS	21.8	0	20	109	78 - 126		
o-Chlorotoluene	95-49-8	MSD	21.9	0	20	109	78 - 126	RPD	<u>0.04</u> (Max-17)
o-Xylene	95-47-6	MS	22.4	0	20	112	79 - 124		
o-Xylene	95-47-6	MSD	22.1	0	20	111	79 - 124	RPD	<u>1.17</u> (Max-19)
p-Chlorotoluene	106-43-4	MS	21.6	0	20	108	78 - 125		
p-Chlorotoluene	106-43-4	MSD	21.8	0	20	109	78 - 125	RPD	<u>1.07</u> (Max-16)
p-Isopropyltoluene	99-87-6	MS	21.6	0	20	108	72 - 123		
p-Isopropyltoluene	99-87-6	MSD	22.1	0	20	111	72 - 123	RPD	<u>2.65</u> (Max-17)
Styrene	100-42-5	MS	23.3	0	20	117	79 - 123		
Styrene	100-42-5	MSD	23.4	0	20	117	79 - 123	RPD	<u>0.34</u> (Max-16)
Tetrachloroethene	127-18-4	MS	19.2	0	20	95.8	72 - 124		
Tetrachloroethene	127-18-4	MSD	19.6	0	20	97.9	72 - 124	RPD	<u>2.20</u> (Max-38)
Toluene	108-88-3	MS	22.2	0	20	111	80 - 125		
Toluene	108-88-3	MSD	22.2	0	20	111	80 - 125	RPD	<u>0.32</u> (Max-20)
Total Xylenes	1330-20-7	MS	67.8	0	60	113	79 - 125		
Total Xylenes	1330-20-7	MSD	67.5	0	60	112	79 - 125	RPD	<u>0.57</u> (Max-35)
trans-1,2-Dichloroethene	156-60-5	MS	21.9	0	20	110	71 - 122		
trans-1,2-Dichloroethene	156-60-5	MSD	21.6	0	20	108	71 - 122	RPD	<u>1.31</u> (Max-22)
trans-1,3-Dichloropropene	10061-02-6	MS	20.6	0	20	103	78 - 126		
trans-1,3-Dichloropropene	10061-02-6	MSD	20.5	0	20	103	78 - 126	RPD	<u>0.32</u> (Max-18)
Trichloroethene	79-01-6	MS	21.5	0	20	108	77 - 124		
Trichloroethene	79-01-6	MSD	21.2	0	20	106	77 - 124	RPD	<u>1.37</u> (Max-18)
Trichlorofluoromethane	75-69-4	MS	22	0	20	110	38 - 123		
Trichlorofluoromethane	75-69-4	MSD	19.9	0	20	99.4	38 - 123	RPD	<u>10.30</u> (Max-23)
Vinyl Acetate	108-05-4	MS	19.3	0	20	96.5	58 - 136		
Vinyl Acetate	108-05-4	MSD	18.7	0	20	93.5	58 - 136	RPD	<u>3.16</u> (Max-17)
Vinyl Chloride	75-01-4	MS	22.3	0	20	111	27 - 138		
Vinyl Chloride	75-01-4	MSD	20.6	0	20	103	27 - 138	RPD	<u>7.63</u> (Max-40)

SURROGATES

Compound	CAS No		Result (ug/L)	Expected (ug/L)	Rec. (%)	Limits (%)	Qualifiers
1,2-Dichloroethane-d4	17060-07-0	MS	31.7	30	106	62 - 133	
1,2-Dichloroethane-d4	17060-07-0	MSD	30.8	30	103	62 - 133	
4-Bromofluorobenzene	460-00-4	MS	30.3	30	101	79 - 114	
4-Bromofluorobenzene	460-00-4	MSD	29.7	30	98.9	79 - 114	
Dibromofluoromethane	1868-53-7	MS	30.4	30	101	78 - 116	
Dibromofluoromethane	1868-53-7	MSD	29.9	30	99.7	78 - 116	
Toluene-d8	2037-26-5	MS	30.2	30	101	76 - 127	
Toluene-d8	2037-26-5	MSD	30	30	99.9	76 - 127	



**QUALITY CONTROL SAMPLES**

**VOLATILE ORGANICS (cont.)**

Method Blank 3909072 (MB) Created on 11/22/2024 10:43 For QC Batch 1337882

RESULTS

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



**QUALITY CONTROL SAMPLES**

**VOLATILE ORGANICS (cont.)**

*RESULTS*

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

*SURROGATES*

Compound	CAS No		Result (ug/L)	Expected (ug/L)	Rec. (%)	Limits (%)	Qualifiers
1,2-Dichloroethane-d4	17060-07-0	BLK	30.9	30	103	62 - 133	
4-Bromofluorobenzene	460-00-4	BLK	29.7	30	99.1	79 - 114	
Dibromofluoromethane	1868-53-7	BLK	29	30	96.6	78 - 116	
Toluene-d8	2037-26-5	BLK	30	30	99.9	76 - 127	

**Lab Control Standard**

3909073 (LCS)

Created on 11/22/2024 10:43

For QC Batch 1337882

*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	22.5		20	112	78 - 121		
1,1,1-Trichloroethane	71-55-6	LCS	21.6		20	108	66 - 130		
1,1,2,2-Tetrachloroethane	79-34-5	LCS	21.4		20	107	74 - 135		
1,1,2-Trichloroethane	79-00-5	LCS	21.7		20	109	82 - 126		
1,1-Dichloroethane	75-34-3	LCS	20.8		20	104	78 - 124		
1,1-Dichloroethene	75-35-4	LCS	20.2		20	101	63 - 128		
1,1-Dichloropropene	563-58-6	LCS	21		20	105	76 - 126		
1,2,3-Trichlorobenzene	87-61-6	LCS	20.3		20	102	61 - 126		
1,2,3-Trichloropropane	96-18-4	LCS	20.7		20	104	75 - 132		
1,2,4-Trichlorobenzene	120-82-1	LCS	23.8		20	119	67 - 123		
1,2-Dibromo-3-chloropropane	96-12-8	LCS	19		20	95.1	59 - 133		
1,2-Dibromoethane	106-93-4	LCS	21.9		20	109	80 - 124		
1,2-Dichlorobenzene	95-50-1	LCS	21.8		20	109	82 - 118		
1,2-Dichloroethane	107-06-2	LCS	20.3		20	102	70 - 133		
1,2-Dichloropropane	78-87-5	LCS	20.5		20	103	81 - 127		
1,3-Dichlorobenzene	541-73-1	LCS	21.2		20	106	81 - 118		
1,3-Dichloropropane	142-28-9	LCS	21.4		20	107	82 - 126		



QUALITY CONTROL SAMPLES

VOLATILE ORGANICS (cont.)

RESULTS

Compound	CAS No		Result (ug/L)	Orig. Result (ug/L)	Spk Added (ug/L)	Rec. (%)	Limits (%)	RPD Limit (%)	Qualifiers
1,4-Dichlorobenzene	106-46-7	LCS	21.1		20	106	81 - 116		
2,2-Dichloropropane	594-20-7	LCS	23.3		20	116	64 - 129		
2-Butanone	78-93-3	LCS	107		100	107	50 - 152		
2-Hexanone	591-78-6	LCS	97.5		100	97.5	65 - 154		
4-Methyl-2-Pentanone(MIBK)	108-10-1	LCS	91.7		100	91.7	71 - 146		
Acetone	67-64-1	LCS	115		100	115	40 - 151		
Benzene	71-43-2	LCS	20.9		20	105	80 - 124		
Bromobenzene	108-86-1	LCS	21.9		20	110	81 - 119		
Bromochloromethane	74-97-5	LCS	22.7		20	113	73 - 117		
Bromodichloromethane	75-27-4	LCS	22.2		20	111	79 - 126		
Bromoform	75-25-2	LCS	17.8		20	89	70 - 123		
Bromomethane	74-83-9	LCS	16.9		20	84.4	45 - 148		
Carbon Tetrachloride	56-23-5	LCS	19.7		20	98.6	62 - 132		
Chlorobenzene	108-90-7	LCS	21.6		20	108	85 - 117		
Chlorodibromomethane	124-48-1	LCS	19		20	95	77 - 122		
Chloroethane	75-00-3	LCS	20.8		20	104	51 - 142		
Chloroform	67-66-3	LCS	20.6		20	103	78 - 122		
Chloromethane	74-87-3	LCS	20.2		20	101	38 - 156		
cis-1,2-Dichloroethene	156-59-2	LCS	21.1		20	106	78 - 125		
cis-1,3-Dichloropropene	10061-01-5	LCS	22.1		20	111	81 - 121		
Dibromomethane	74-95-3	LCS	20.8		20	104	81 - 125		
Dichlorodifluoromethane	75-71-8	LCS	19.6		20	97.9	17 - 166		
Diisopropyl ether	108-20-3	LCS	20.8		20	104	74 - 131		
Ethylbenzene	100-41-4	LCS	21.8		20	109	80 - 124		
Hexachlorobutadiene	87-68-3	LCS	22.6		20	113	55 - 128		
Methyl t-Butyl Ether	1634-04-4	LCS	21.1		20	105	69 - 115		
Methylene Chloride	75-09-2	LCS	20.9		20	105	76 - 121		
mp-Xylene	108383/106423	LCS	44.3		40	111	79 - 125		
Naphthalene	91-20-3	LCS	18.1		20	90.5	56 - 134		
o-Chlorotoluene	95-49-8	LCS	21.9		20	109	78 - 126		
o-Xylene	95-47-6	LCS	22		20	110	79 - 124		
p-Chlorotoluene	106-43-4	LCS	21.6		20	108	78 - 125		
p-Isopropyltoluene	99-87-6	LCS	22		20	110	72 - 123		
Styrene	100-42-5	LCS	23.3		20	117	79 - 123		
Tetrachloroethene	127-18-4	LCS	20.2		20	101	72 - 124		
Toluene	108-88-3	LCS	21.2		20	106	80 - 125		
Total Xylenes	1330-20-7	LCS	66.3		60	111	79 - 125		
trans-1,2-Dichloroethene	156-60-5	LCS	20.8		20	104	71 - 122		
trans-1,3-Dichloropropene	10061-02-6	LCS	20.1		20	101	78 - 126		
Trichloroethene	79-01-6	LCS	20.6		20	103	77 - 124		
Trichlorofluoromethane	75-69-4	LCS	21.8		20	109	38 - 123		
Vinyl Acetate	108-05-4	LCS	18.2		20	91.1	58 - 136		
Vinyl Chloride	75-01-4	LCS	21.6		20	108	27 - 138		



**QUALITY CONTROL SAMPLES**

**VOLATILE ORGANICS (cont.)**

*SURROGATES*

Compound	CAS No		Result (ug/L)	Expected (ug/L)	Rec. (%)	Limits (%)	Qualifiers
1,2-Dichloroethane-d4	17060-07-0	LCS	29.1	30	97.1	62 - 133	
4-Bromofluorobenzene	460-00-4	LCS	30.1	30	100	79 - 114	
Dibromofluoromethane	1868-53-7	LCS	29.8	30	99.5	78 - 116	
Toluene-d8	2037-26-5	LCS	29.6	30	98.7	76 - 127	

**QC Batch**

<u>QC Batch</u>	1338207	<u>Prep Method</u>	N/A
<u>Date</u>	N/A	<u>Analysis Method</u>	SW846 8260D
<u>Tech.</u>			

**Associated Samples**

3387075010	3387075011	3387075003	3387075012
3387075004	3387075013	3387075005	3387075014
3387075009	3387075015	3387075006	3387075007
3387075008			

**Method Blank** 3909301 (MB) Created on 11/22/2024 17:46 For QC Batch 1338207

*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



**QUALITY CONTROL SAMPLES**

**VOLATILE ORGANICS (cont.)**

*RESULTS*

Compound	CAS No		Result	Units	RDL	Qualifiers
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	28.9	30	96.3	62 - 133	
4-Bromofluorobenzene	460-00-4	BLK	30.2	30	101	79 - 114	
Dibromofluoromethane	1868-53-7	BLK	29.7	30	99.1	78 - 116	
Toluene-d8	2037-26-5	BLK	30.9	30	103	76 - 127	

**Lab Control Standard**

3909302 (LCS)

Created on 11/22/2024 17:46

For QC Batch 1338207

*RESULTS*

Compound	CAS No		Result (ug/L)	Orig. Result (ug/L)	Spk Added (ug/L)	Rec. (%)	Limits (%)	RPD Limit (%)	Qualifiers
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QUALITY CONTROL SAMPLES

VOLATILE ORGANICS (cont.)

RESULTS

Compound	CAS No		Result (ug/L)	Orig. Result (ug/L)	Spk Added (ug/L)	Rec. (%)	Limits (%)	RPD Limit (%)	Qualifiers
1,1,1,2-Tetrachloroethane	630-20-6	LCS	21.7		20	108	78 - 121		
1,1,1-Trichloroethane	71-55-6	LCS	19.7		20	98.3	66 - 130		
1,1,2,2-Tetrachloroethane	79-34-5	LCS	21.7		20	108	74 - 135		
1,1,2-Trichloroethane	79-00-5	LCS	21.2		20	106	82 - 126		
1,1-Dichloroethane	75-34-3	LCS	19.6		20	98.2	78 - 124		
1,1-Dichloroethene	75-35-4	LCS	19.3		20	96.4	63 - 128		
1,1-Dichloropropene	563-58-6	LCS	19.1		20	95.4	76 - 126		
1,2,3-Trichlorobenzene	87-61-6	LCS	21.6		20	108	61 - 126		
1,2,3-Trichloropropane	96-18-4	LCS	21.2		20	106	75 - 132		
1,2,4-Trichlorobenzene	120-82-1	LCS	23.9		20	119	67 - 123		
1,2-Dibromo-3-chloropropane	96-12-8	LCS	20.9		20	105	59 - 133		
1,2-Dibromoethane	106-93-4	LCS	19.6		20	97.9	80 - 124		
1,2-Dichlorobenzene	95-50-1	LCS	21.4		20	107	82 - 118		
1,2-Dichloroethane	107-06-2	LCS	20.7		20	104	70 - 133		
1,2-Dichloropropane	78-87-5	LCS	20.9		20	105	81 - 127		
1,3-Dichlorobenzene	541-73-1	LCS	21.5		20	107	81 - 118		
1,3-Dichloropropane	142-28-9	LCS	20.5		20	102	82 - 126		
1,4-Dichlorobenzene	106-46-7	LCS	21.7		20	108	81 - 116		
2,2-Dichloropropane	594-20-7	LCS	21.1		20	106	64 - 129		
2-Butanone	78-93-3	LCS	110		100	110	50 - 152		
2-Hexanone	591-78-6	LCS	112		100	112	65 - 154		
4-Methyl-2-Pentanone(MIBK)	108-10-1	LCS	103		100	103	71 - 146		
Acetone	67-64-1	LCS	121		100	121	40 - 151		
Benzene	71-43-2	LCS	19.8		20	98.9	80 - 124		
Bromobenzene	108-86-1	LCS	21		20	105	81 - 119		
Bromochloromethane	74-97-5	LCS	22		20	110	73 - 117		
Bromodichloromethane	75-27-4	LCS	22.1		20	111	79 - 126		
Bromoform	75-25-2	LCS	17.8		20	89	70 - 123		
Bromomethane	74-83-9	LCS	19.7		20	98.5	45 - 148		
Carbon Tetrachloride	56-23-5	LCS	18		20	90.1	62 - 132		
Chlorobenzene	108-90-7	LCS	20.3		20	102	85 - 117		
Chlorodibromomethane	124-48-1	LCS	21.1		20	105	77 - 122		
Chloroethane	75-00-3	LCS	21.7		20	108	51 - 142		
Chloroform	67-66-3	LCS	20.5		20	102	78 - 122		
Chloromethane	74-87-3	LCS	19.6		20	98.2	38 - 156		
cis-1,2-Dichloroethene	156-59-2	LCS	20.4		20	102	78 - 125		
cis-1,3-Dichloropropene	10061-01-5	LCS	20.7		20	104	81 - 121		
Dibromomethane	74-95-3	LCS	20.5		20	103	81 - 125		
Dichlorodifluoromethane	75-71-8	LCS	17		20	85.2	17 - 166		
Diisopropyl ether	108-20-3	LCS	21.7		20	109	74 - 131		
Ethylbenzene	100-41-4	LCS	20.2		20	101	80 - 124		
Hexachlorobutadiene	87-68-3	LCS	22.6		20	113	55 - 128		
Methyl t-Butyl Ether	1634-04-4	LCS	21.6		20	108	69 - 115		
Methylene Chloride	75-09-2	LCS	20.6		20	103	76 - 121		
mp-Xylene	108383/106423	LCS	41.5		40	104	79 - 125		
Naphthalene	91-20-3	LCS	19.2		20	96.1	56 - 134		
o-Chlorotoluene	95-49-8	LCS	21.7		20	109	78 - 126		



QUALITY CONTROL SAMPLES

VOLATILE ORGANICS (cont.)

RESULTS

Compound	CAS No		Result (ug/L)	Orig. Result (ug/L)	Spk Added (ug/L)	Rec. (%)	Limits (%)	RPD Limit (%)	Qualifiers
o-Xylene	95-47-6	LCS	20.1		20	101	79 - 124		
p-Chlorotoluene	106-43-4	LCS	21.9		20	109	78 - 125		
p-Isopropyltoluene	99-87-6	LCS	21.7		20	108	72 - 123		
Styrene	100-42-5	LCS	21.8		20	109	79 - 123		
Tetrachloroethene	127-18-4	LCS	16.9		20	84.6	72 - 124		
Toluene	108-88-3	LCS	20.1		20	100	80 - 125		
Total Xylenes	1330-20-7	LCS	61.6		60	103	79 - 125		
trans-1,2-Dichloroethene	156-60-5	LCS	20.2		20	101	71 - 122		
trans-1,3-Dichloropropene	10061-02-6	LCS	18.4		20	91.8	78 - 126		
Trichloroethene	79-01-6	LCS	19.2		20	95.9	77 - 124		
Trichlorofluoromethane	75-69-4	LCS	18.7		20	93.5	38 - 123		
Vinyl Acetate	108-05-4	LCS	17.7		20	88.7	58 - 136		
Vinyl Chloride	75-01-4	LCS	18.2		20	91.1	27 - 138		

SURROGATES

Compound	CAS No		Result (ug/L)	Expected (ug/L)	Rec. (%)	Limits (%)	Qualifiers
1,2-Dichloroethane-d4	17060-07-0	LCS	29.1	30	96.9	62 - 133	
4-Bromofluorobenzene	460-00-4	LCS	28.3	30	94.3	79 - 114	
Dibromofluoromethane	1868-53-7	LCS	28.5	30	95.1	78 - 116	
Toluene-d8	2037-26-5	LCS	28.7	30	95.5	76 - 127	

Matrix Spike 3909303 (MS) 3387075011 For QC Batch 1338207

\*\*\*\*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 3909304 (MSD) 3387075011 For QC Batch 1338207

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	21.7	0	20	109	78 - 121		
1,1,1,2-Tetrachloroethane	630-20-6	MSD	22.2	0	20	111	78 - 121	RPD 2.22 (Max-16)	
1,1,1-Trichloroethane	71-55-6	MS	22.8	0	20	114	66 - 130		
1,1,1-Trichloroethane	71-55-6	MSD	22.8	0	20	114	66 - 130	RPD 0.09 (Max-20)	
1,1,2,2-Tetrachloroethane	79-34-5	MS	20.1	0	20	100	74 - 135		
1,1,2,2-Tetrachloroethane	79-34-5	MSD	21.2	0	20	106	74 - 135	RPD 5.45 (Max-16)	
1,1,2-Trichloroethane	79-00-5	MS	20.7	0	20	103	82 - 126		
1,1,2-Trichloroethane	79-00-5	MSD	20.9	0	20	105	82 - 126	RPD 1.13 (Max-15)	
1,1-Dichloroethane	75-34-3	MS	21.4	0	20	107	78 - 124		
1,1-Dichloroethane	75-34-3	MSD	21	0	20	105	78 - 124	RPD 1.48 (Max-15)	
1,1-Dichloroethene	75-35-4	MS	22.4	0	20	112	63 - 128		
1,1-Dichloroethene	75-35-4	MSD	22.5	0	20	113	63 - 128	RPD 0.42 (Max-21)	
1,1-Dichloropropene	563-58-6	MS	22.4	0	20	112	76 - 126		
1,1-Dichloropropene	563-58-6	MSD	22.3	0	20	112	76 - 126	RPD 0.06 (Max-16)	



QUALITY CONTROL SAMPLES

VOLATILE ORGANICS (cont.)

RESULTS

Compound	CAS No		Result (ug/L)	Orig. Result (ug/L)	Spk Added (ug/L)	Rec. (%)	Limits (%)	RPD Limit (%)	Qualifiers
1,2,3-Trichlorobenzene	87-61-6	MS	20.9	0	20	105	61 - 126		
1,2,3-Trichlorobenzene	87-61-6	MSD	21.8	0	20	109	61 - 126	RPD	4.04 (Max-36)
1,2,3-Trichloropropane	96-18-4	MS	19.7	0	20	98.3	75 - 132		
1,2,3-Trichloropropane	96-18-4	MSD	20.3	0	20	102	75 - 132	RPD	3.35 (Max-19)
1,2,4-Trichlorobenzene	120-82-1	MS	23.2	0	20	116	67 - 123		
1,2,4-Trichlorobenzene	120-82-1	MSD	23.9	0	20	120	67 - 123	RPD	3.05 (Max-22)
1,2-Dibromo-3-chloropropane	96-12-8	MS	18.5	0	20	92.4	59 - 133		
1,2-Dibromo-3-chloropropane	96-12-8	MSD	19.3	0	20	96.4	59 - 133	RPD	4.20 (Max-26)
1,2-Dibromoethane	106-93-4	MS	19.3	0	20	96.6	80 - 124		
1,2-Dibromoethane	106-93-4	MSD	19.3	0	20	96.3	80 - 124	RPD	0.34 (Max-19)
1,2-Dichlorobenzene	95-50-1	MS	21	0	20	105	82 - 118		
1,2-Dichlorobenzene	95-50-1	MSD	21.7	0	20	109	82 - 118	RPD	3.27 (Max-15)
1,2-Dichloroethane	107-06-2	MS	20.2	0	20	101	70 - 133		
1,2-Dichloroethane	107-06-2	MSD	20	0	20	100	70 - 133	RPD	0.74 (Max-19)
1,2-Dichloropropane	78-87-5	MS	21.5	0	20	107	81 - 127		
1,2-Dichloropropane	78-87-5	MSD	21.5	0	20	108	81 - 127	RPD	0.31 (Max-15)
1,3-Dichlorobenzene	541-73-1	MS	21.1	0	20	106	81 - 118		
1,3-Dichlorobenzene	541-73-1	MSD	22.1	0	20	111	81 - 118	RPD	4.65 (Max-16)
1,3-Dichloropropane	142-28-9	MS	20.4	0	20	102	82 - 126		
1,3-Dichloropropane	142-28-9	MSD	20.1	0	20	101	82 - 126	RPD	1.49 (Max-15)
1,4-Dichlorobenzene	106-46-7	MS	21.3	0	20	107	81 - 116		
1,4-Dichlorobenzene	106-46-7	MSD	22	0	20	110	81 - 116	RPD	2.92 (Max-15)
2,2-Dichloropropane	594-20-7	MS	20.1	0	20	101	64 - 129		
2,2-Dichloropropane	594-20-7	MSD	19.9	0	20	99.3	64 - 129	RPD	1.33 (Max-18)
2-Butanone	78-93-3	MS	82.4	0	100	82.4	50 - 152		
2-Butanone	78-93-3	MSD	92.2	0	100	92.2	50 - 152	RPD	11.20 (Max-16)
2-Hexanone	591-78-6	MS	90.1	0	100	90.1	65 - 154		
2-Hexanone	591-78-6	MSD	91.3	0	100	91.3	65 - 154	RPD	1.29 (Max-17)
4-Methyl-2-Pentanone(MIBK)	108-10-1	MS	90.1	0	100	90.1	71 - 146		
4-Methyl-2-Pentanone(MIBK)	108-10-1	MSD	91	0	100	91	71 - 146	RPD	0.97 (Max-16)
Acetone	67-64-1	MS	81.8	0	100	81.8	40 - 151		
Acetone	67-64-1	MSD	80.4	0	100	80.4	40 - 151	RPD	1.76 (Max-40)
Benzene	71-43-2	MS	21.6	0	20	108	80 - 124		
Benzene	71-43-2	MSD	21.6	0	20	108	80 - 124	RPD	0.39 (Max-26)
Bromobenzene	108-86-1	MS	21.1	0	20	106	81 - 119		
Bromobenzene	108-86-1	MSD	21.9	0	20	109	81 - 119	RPD	3.49 (Max-17)
Bromochloromethane	74-97-5	MS	22.6	0	20	113	73 - 117		
Bromochloromethane	74-97-5	MSD	22.8	0	20	114	73 - 117	RPD	0.58 (Max-19)
Bromodichloromethane	75-27-4	MS	22.4	0	20	112	79 - 126		
Bromodichloromethane	75-27-4	MSD	22.6	0	20	113	79 - 126	RPD	0.66 (Max-16)
Bromoform	75-25-2	MS	16.8	0	20	84.2	70 - 123		
Bromoform	75-25-2	MSD	17.3	0	20	86.6	70 - 123	RPD	2.80 (Max-16)
Bromomethane	74-83-9	MS	22.1	0	20	110	45 - 148		
Bromomethane	74-83-9	MSD	23.4	0	20	117	45 - 148	RPD	6 (Max-26)
Carbon Tetrachloride	56-23-5	MS	22.7	0	20	114	62 - 132		
Carbon Tetrachloride	56-23-5	MSD	21.4	0	20	107	62 - 132	RPD	6.11 (Max-17)
Chlorobenzene	108-90-7	MS	21.2	0	20	106	85 - 117		
Chlorobenzene	108-90-7	MSD	21.4	0	20	107	85 - 117	RPD	1.16 (Max-15)
Chlorodibromomethane	124-48-1	MS	21.1	0	20	105	77 - 122		



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
Chlorodibromomethane	124-48-1	MSD	20.8	0	20	104	77 - 122	RPD <u>1.27</u> (Max-15)	
Chloroethane	75-00-3	MS	24.7	0	20	124	51 - 142		
Chloroethane	75-00-3	MSD	24.7	0	20	124	51 - 142	RPD <u>0.15</u> (Max-24)	
Chloroform	67-66-3	MS	21.6	0	20	108	78 - 122		
Chloroform	67-66-3	MSD	21.6	0	20	108	78 - 122	RPD <u>0.30</u> (Max-16)	
Chloromethane	74-87-3	MS	20.5	0	20	103	38 - 156		
Chloromethane	74-87-3	MSD	20.8	0	20	104	38 - 156	RPD <u>1.08</u> (Max-27)	
cis-1,2-Dichloroethene	156-59-2	MS	21.5	0	20	107	78 - 125		
cis-1,2-Dichloroethene	156-59-2	MSD	21.7	0	20	108	78 - 125	RPD <u>1.02</u> (Max-21)	
cis-1,3-Dichloropropene	10061-01-5	MS	20.2	0	20	101	81 - 121		
cis-1,3-Dichloropropene	10061-01-5	MSD	20.4	0	20	102	81 - 121	RPD <u>0.91</u> (Max-16)	
Dibromomethane	74-95-3	MS	20.8	0	20	104	81 - 125		
Dibromomethane	74-95-3	MSD	21	0	20	105	81 - 125	RPD <u>0.78</u> (Max-16)	
Dichlorodifluoromethane	75-71-8	MS	21.6	0	20	108	17 - 166		
Dichlorodifluoromethane	75-71-8	MSD	22.3	0	20	111	17 - 166	RPD <u>3.05</u> (Max-24)	
Diisopropyl ether	108-20-3	MS	21.1	0	20	105	74 - 131		
Diisopropyl ether	108-20-3	MSD	20.7	0	20	103	74 - 131	RPD <u>1.74</u> (Max-15)	
Ethylbenzene	100-41-4	MS	21.5	0	20	108	80 - 124		
Ethylbenzene	100-41-4	MSD	22.1	0	20	110	80 - 124	RPD <u>2.43</u> (Max-19)	
Hexachlorobutadiene	87-68-3	MS	23.5	0	20	117	55 - 128		
Hexachlorobutadiene	87-68-3	MSD	25.4	0	20	127	55 - 128	RPD <u>7.75</u> (Max-35)	
Methyl t-Butyl Ether	1634-04-4	MS	20.7	0	20	103	69 - 115		
Methyl t-Butyl Ether	1634-04-4	MSD	20.9	0	20	105	69 - 115	RPD <u>1.32</u> (Max-20)	
Methylene Chloride	75-09-2	MS	21.3	0	20	106	76 - 121		
Methylene Chloride	75-09-2	MSD	21.6	0	20	108	76 - 121	RPD <u>1.25</u> (Max-17)	
mp-Xylene	108383/106423	MS	43.4	0	40	109	79 - 125		
mp-Xylene	108383/106423	MSD	44.3	0	40	111	79 - 125	RPD <u>2.05</u> (Max-21)	
Naphthalene	91-20-3	MS	18.3	0	20	91.6	56 - 134		
Naphthalene	91-20-3	MSD	19.1	0	20	95.3	56 - 134	RPD <u>4</u> (Max-40)	
o-Chlorotoluene	95-49-8	MS	21.6	0	20	108	78 - 126		
o-Chlorotoluene	95-49-8	MSD	22.3	0	20	112	78 - 126	RPD <u>3.36</u> (Max-17)	
o-Xylene	95-47-6	MS	21.2	0	20	106	79 - 124		
o-Xylene	95-47-6	MSD	21.5	0	20	108	79 - 124	RPD <u>1.34</u> (Max-19)	
p-Chlorotoluene	106-43-4	MS	21.6	0	20	108	78 - 125		
p-Chlorotoluene	106-43-4	MSD	22.3	0	20	111	78 - 125	RPD <u>3.25</u> (Max-16)	
p-Isopropyltoluene	99-87-6	MS	22.5	0	20	112	72 - 123		
p-Isopropyltoluene	99-87-6	MSD	23.2	0	20	116	72 - 123	RPD <u>2.94</u> (Max-17)	
Styrene	100-42-5	MS	21.6	0	20	108	79 - 123		
Styrene	100-42-5	MSD	22.2	0	20	111	79 - 123	RPD <u>2.62</u> (Max-16)	
Tetrachloroethene	127-18-4	MS	19.4	0	20	97.2	72 - 124		
Tetrachloroethene	127-18-4	MSD	19.3	0	20	96.7	72 - 124	RPD <u>0.53</u> (Max-38)	
Toluene	108-88-3	MS	21.5	0	20	107	80 - 125		
Toluene	108-88-3	MSD	21.8	0	20	109	80 - 125	RPD <u>1.33</u> (Max-20)	
Total Xylenes	1330-20-7	MS	64.7	0	60	108	79 - 125		
Total Xylenes	1330-20-7	MSD	65.9	0	60	110	79 - 125	RPD <u>1.82</u> (Max-35)	
trans-1,2-Dichloroethene	156-60-5	MS	21.6	0	20	108	71 - 122		
trans-1,2-Dichloroethene	156-60-5	MSD	21.2	0	20	106	71 - 122	RPD <u>1.90</u> (Max-22)	
trans-1,3-Dichloropropene	10061-02-6	MS	17.5	0	20	87.4	78 - 126		
trans-1,3-Dichloropropene	10061-02-6	MSD	17.6	0	20	87.9	78 - 126	RPD <u>0.56</u> (Max-18)	



**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
Trichloroethene	79-01-6	MS	21.4	0	20	107	77 - 124		
Trichloroethene	79-01-6	MSD	21.3	0	20	106	77 - 124	RPD	<u>0.71</u> (Max-18)
Trichlorofluoromethane	75-69-4	MS	23.7	0	20	118	38 - 123		
Trichlorofluoromethane	75-69-4	MSD	24	0	20	120	38 - 123	RPD	<u>1.56</u> (Max-23)
Vinyl Acetate	108-05-4	MS	14.6	0	20	73.1	58 - 136		
Vinyl Acetate	108-05-4	MSD	14.9	0	20	74.7	58 - 136	RPD	<u>2.13</u> (Max-17)
Vinyl Chloride	75-01-4	MS	22.1	0	20	110	27 - 138		
Vinyl Chloride	75-01-4	MSD	22.2	0	20	111	27 - 138	RPD	<u>0.60</u> (Max-40)

*SURROGATES*

Compound	CAS No		Result (ug/L)	Expected (ug/L)	Rec. (%)	Limits (%)	Qualifiers
1,2-Dichloroethane-d4	17060-07-0	MS	29.9	30	99.6	62 - 133	
1,2-Dichloroethane-d4	17060-07-0	MSD	30.1	30	100	62 - 133	
4-Bromofluorobenzene	460-00-4	MS	28.5	30	95.1	79 - 114	
4-Bromofluorobenzene	460-00-4	MSD	28.6	30	95.3	79 - 114	
Dibromofluoromethane	1868-53-7	MS	30.2	30	101	78 - 116	
Dibromofluoromethane	1868-53-7	MSD	30.5	30	102	78 - 116	
Toluene-d8	2037-26-5	MS	29.6	30	98.7	76 - 127	
Toluene-d8	2037-26-5	MSD	29.9	30	99.5	76 - 127	



**QUALITY CONTROL DATA CROSS REFERENCE TABLE**

Lab ID	Sample ID	Preparation Method	Prep Batch	Prep Date/Time	By	Analysis Method	Anly Batch
3387075001	MW-35D	SW846 3510C	1332545	11/15/2024 08:20	DEC	SW846 8270E SIM	1334510
		N/A	N/A	N/A		SW846 8260D	1337882
3387075002	MW-34D	SW846 3510C	1332545	11/15/2024 08:20	DEC	SW846 8270E SIM	1334510
		N/A	N/A	N/A		SW846 8260D	1337882
3387075003	MW-33-295	SW846 3510C	1332545	11/15/2024 08:20	DEC	SW846 8270E SIM	1334510
		N/A	N/A	N/A		SW846 8260D	1338207
3387075004	MW-33-235	SW846 3510C	1332545	11/15/2024 08:20	DEC	SW846 8270E SIM	1334510
		N/A	N/A	N/A		SW846 8260D	1338207
3387075005	MW-30D-413	SW846 3510C	1332545	11/15/2024 08:20	DEC	SW846 8270E SIM	1335342
		N/A	N/A	N/A		SW846 8260D	1338207
3387075006	MW-30D-273	SW846 3510C	1332545	11/15/2024 08:20	DEC	SW846 8270E SIM	1334510
		N/A	N/A	N/A		SW846 8260D	1338207
3387075007	MW-29D	SW846 3510C	1332545	11/15/2024 08:20	DEC	SW846 8270E SIM	1334510
		N/A	N/A	N/A		SW846 8260D	1338207
3387075008	MW-32D	SW846 3510C	1332545	11/15/2024 08:20	DEC	SW846 8270E SIM	1334510
		N/A	N/A	N/A		SW846 8260D	1338207
3387075009	Trip Blank D	N/A	N/A	N/A		SW846 8260D	1338207
3387075010	MW-28D	SW846 3510C	1332545	11/15/2024 08:20	DEC	SW846 8270E SIM	1334510
		N/A	N/A	N/A		SW846 8260D	1338207
3387075011	MW-36D	SW846 3510C	1332545	11/15/2024 08:20	DEC	SW846 8270E SIM	1334510
		N/A	N/A	N/A		SW846 8260D	1338207
3387075012	MW-45	SW846 3510C	1332545	11/15/2024 08:20	DEC	SW846 8270E SIM	1334510
		N/A	N/A	N/A		SW846 8260D	1338207
3387075013	MW-24D	SW846 3510C	1332545	11/15/2024 08:20	DEC	SW846 8270E SIM	1335342
		SW846 3510C	1332545	11/15/2024 08:20	DEC	SW846 8270E SIM	1334510
		N/A	N/A	N/A		SW846 8260D	1338207
3387075014	Trip Blank E	N/A	N/A	N/A		SW846 8260D	1338207
3387075015	MW-46D	SW846 3510C	1332545	11/15/2024 08:20	DEC	SW846 8270E SIM	1334510
		SW846 3510C	1332545	11/15/2024 08:20	DEC	SW846 8270E SIM	1335342
		N/A	N/A	N/A		SW846 8260D	1338207



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.

Client Name: <b>WSP USA</b>		Container Type: <b>GAG</b>		Temp Taken By:		Therm ID:		WO Temp (°C)	
Address: <b>13530 Dulles Technology Dr. Suite 300 Herndon, VA</b>		Container Size: <b>1000</b>		Receipt Info completed by:		WV Containers 0-6°C		Y N NA	
Contact: <b>Eric Johnson</b>		Preservative: <b>FW</b>		Cooler Custody Seal Intact		Coolers & Samples Intact		Deviations? NO YES	
Phone#: <b>(703) 709-5600</b>		Orthophosphate Filtered? <b>Yes</b>		Sample Custody Seal Intact		Correct Containers Provided		If YES, list below	
Project Name#: <b>KUP FIX - OFF SITE</b>		Hexavalent Chromium Filtered? <b>No</b>		Received on Ice		Sample Label/COC Agree			
Bill To:		ANALYSIS / METHOD REQUESTED		VOA only: Trip Blank		Adequate Sample Volumes		Client contact:	
Purchase Order #: <b>P107846 US001</b>		Enter Number of C		NJ ≤ 4 days? <b>Y</b>		Sample Label/COC Agree		Date/Tech:	
TAT: <input checked="" type="checkbox"/> Normal-Standard TAT is 10-12 business days.		SDWA Sample Type (see key)		Courier/Tracking #		Correct Containers Provided		Sample(s) for Radiation testing? <b>Y</b>	
Date Required: <input checked="" type="checkbox"/> Rush-Subject to ALS approval and surcharges.		Matrix (See bottom of COC)		Receipt Info Completed By:		Correct Containers Provided		Reportable SDWA Sample(s)? <b>Y</b>	
Email? <input checked="" type="checkbox"/> <b>eric.johnson@wsp.com</b>		*G or C		Cooler Custody Seal Intact		Sample Label/COC Agree		SDWA State of Origin?	
Sample Description/Location		SDWA Sample Type (see key)		Received on Ice		Adequate Sample Volumes		PWSID #	
Date Collected		Enter Number of C		Correct Containers Provided		VOA Trip Blank		PWS Contact:	
Time		Enter Number of C		Sample Label/COC Agree		NJ ≤ 4 days? <b>Y</b>		PWS Phone #:	
1 <b>MN-25D</b>		<b>3</b>		Cooler & Samples Intact		VOA only: Trip Blank		SDWA Sample Type Key: <b>D=Distribution E=Entry Point</b>	
2 <b>MN-34D</b>		<b>3</b>		Correct Containers Provided		NJ ≤ 4 days? <b>Y</b>		<b>R=Raw P=Plant C=Check S=Special A=Annual Startup</b>	
3 <b>MW-33-295</b>		<b>3</b>		Adequate Sample Volumes		VOA only: Trip Blank		Sample/COC Remarks	
4 <b>MW-33-235</b>		<b>3</b>		CR6 Samples Filtered		NJ ≤ 4 days? <b>Y</b>		<b>No Sample OB 11/11/24</b>	
5 <b>MW-30D-413</b>		<b>3</b>		VOA Trip Blank		NJ ≤ 4 days? <b>Y</b>		<b>Extra set rec'd - see pg 2. will try YES (NO)</b>	
6 <b>MW-30D-273</b>		<b>3</b>		Rad Screen (uCi)		NJ ≤ 4 days? <b>Y</b>		<b>Internal Use: If less than 48 hours - notify lab upon receipt</b>	
7 <b>MW-29D</b>		<b>3</b>		Courier/Tracking #:		NJ ≤ 4 days? <b>Y</b>		Standard Lvl 1 <input type="checkbox"/>	
8 <b>MW-32D</b>		<b>3</b>		SDWA Compliance		NJ ≤ 4 days? <b>Y</b>		Standard Lvl 2 <input type="checkbox"/>	
9 <b>TRIP BLANK D</b>		<b>3</b>		PWSID		NJ ≤ 4 days? <b>Y</b>		Standard Lvl 3 <input type="checkbox"/>	
10 <b>TRIP BLANK D</b>		<b>3</b>		WV Containers 0-6°C		NJ ≤ 4 days? <b>Y</b>		Standard Lvl 4 <input type="checkbox"/>	
Circle Sample Collector: ALS Tech / Client ID:		Comments:		Received By / Company Name		Excel Summary		CLP-like <input type="checkbox"/>	
Date: <b>11/11/24</b>		Time: <b>3:25</b>		<b>Eric Johnson ALS 12:25 11-11-24</b>		Equis <input type="checkbox"/>		DOD <input type="checkbox"/>	
Date: <b>11-11-24</b>		Time: <b>17:35</b>		<b>Eric Johnson ALS</b>		Custom <input type="checkbox"/>		NJ RED <input type="checkbox"/>	
						Sample Disposal		NJ Full <input type="checkbox"/>	
						Lab <input type="checkbox"/>		NJ GW <input type="checkbox"/>	
						Special <input type="checkbox"/>		NY <input type="checkbox"/>	
						Other <input type="checkbox"/>		PA <input type="checkbox"/>	
								WV <input type="checkbox"/>	
								FL <input type="checkbox"/>	
								other <input type="checkbox"/>	



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 3387075 of  
ALS Quote #:

Client Name: <b>WSP USA</b>		Temp Taken By: _____		Receipt Information (completed by Receiving Lab)	
Address: <b>13530 Dulles Technology Dr. Suite 300 Herndon, VA</b>		Therm ID: _____		WO Temp (°C) Y N NA	
Contact: <b>Eric Johnson</b>		Receipt info completed by: _____		WV Containers 0-6°C Y N NA	
Phone#: <b>(703) 709-5600</b>		Cooler Custody Seals Intact		Deviations? NO YES	
Project Name#: <b>Kiprex-0FF site</b>		Sample Custody Seal Intact		IF YES, list below:	
Bill To: _____		Received on Ice		Y N NA	
Purchase Order #: <b>6102840 US001</b>		Coolers & Samples Intact		Y N	
TAT <input checked="" type="checkbox"/> Normal-Standard TAT is 10-12 business days.		Correct Containers Provided		Y N	
Rush-Subject to ALS approval and surcharges.		Sample Label/COC Agree		Y N	
Date Required: _____		Adequate Sample Volumes		Y N	
Email? <input checked="" type="checkbox"/> <b>eric.johnson@wsp.com</b> Approved? _____		VOA only: Trip Blank		Y N NA	
Date Collected		NJ ≤ 4 days? Y N		Client contact:	
Sample Description/Location (as it will appear on the lab report)		Courier/Tracking #		Date/Tech	
1 MW-28D		Sample(s) for Radiation testing? Y N		Rad Screen (uCi) _____	
2 MW-36D		Reportable SDWA Sample(s)? Y N		New Source? Y N	
3 MW-45		SDWA State of Origin? _____		New Source Contact: _____	
4 MW-24D		PWSID # _____		PWS Contact: _____	
5 _____		PWS Phone # _____		SDWA Sample Type Key: D=Distribution E=Entry Point	
6 _____		Enter Number of Containers Per Sample or Field Results Below.		R=Raw P=Plant C=Check S=Special A=Annual Startup	
7 MW-46D		VOCs - 8260		Sample/COC Remarks	
8 _____		VOCs - Imp blank		* <u>11-12-24</u>	
9 _____		1,4-dioxane 827D		<b>Contains Short Hold Testing YES</b> <input checked="" type="checkbox"/>	
10 TRIP BLANK E		Hexavalent Chromium Filtered? Yes No		Internal Use: if less than 48 hours - notify lab upon receipt	
Circle Sample Collector: ALS Tech / Client ID: _____		Orthophosphate Filtered? Yes No		Standard Lvl 1 <input type="checkbox"/> CLP-like <input type="checkbox"/> HSCA <input type="checkbox"/>	
Name: _____		ANALYSIS / METHOD REQUESTED		Standard Lvl 2 <input type="checkbox"/> DOD <input type="checkbox"/> Landfill <input type="checkbox"/>	
Date: _____		Received By / Company Name		Standard Lvl 3 <input type="checkbox"/> NJ RED <input type="checkbox"/> NJ GW <input type="checkbox"/>	
11/11/24 3:25		2 <b>Development/ALS 1525 11-11-24</b>		Standard Lvl 4 <input type="checkbox"/> NJ Full <input type="checkbox"/>	
11-11-24 1739		4 <b>Development/ALS</b>		Excel Summary	
_____		6 <b>Development/ALS</b>		Equis Lab <input type="checkbox"/>	
_____		8 <b>Development/ALS</b>		Custom Special <input type="checkbox"/>	
_____		10 <b>Development/ALS</b>		EDDS: _____	
_____		_____		State Samples Collected In	
_____		_____		NY <input type="checkbox"/>	
_____		_____		NJ <input type="checkbox"/>	
_____		_____		PA <input type="checkbox"/>	
_____		_____		WV <input type="checkbox"/>	
_____		_____		FL <input type="checkbox"/>	
_____		_____		other _____	

ENCLOSURE B - CERTIFIED LABORATORY ANALYTICAL REPORT FOR  
MONITORING WELL MW-31D AND MW-25D-130 SAMPLES (NOVEMBER 26,  
2024)



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

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, NJ PA101

Analytical Results Report For

**WSP USA Inc.**

Project [Kopflex Off Site](#)  
 Workorder [3389731](#)  
 Report ID [371908 on 12/5/2024](#)

### Certificate of Analysis

Enclosed are the analytical results for samples received by the laboratory on Nov 27, 2024.

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  
 Erik Reinert - 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>
3389731001	MW-31D	Ground Water	11/26/2024 10:45	11/27/2024 09:30	CBC	Collected By Client
3389731002	MW-25-130	Ground Water	11/26/2024 11:30	11/27/2024 09:30	CBC	Collected By Client
3389731003	MW-200	Ground Water	11/26/2024 09:00	11/27/2024 09:30	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 performed 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**    Kopflex Off Site  
**Workorder**    3389731

**Project Notations**

**Sample Notations**

**Lab ID**            **Sample ID**

**Result Notations**

**Notation Ref.**



**Detected Results Summary**

Client Sample ID	MW-25-130	Collected	11/26/2024 11:30
Lab Sample ID	3389731002	Lab Receipt	11/27/2024 09:30

<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	21.4	ug/L	5.4	SW846 8270E SIM	#
<b>VOLATILE ORGANICS</b>					
1,1,1-Trichloroethane	6.1	ug/L	1.0	SW846 8260D	#
1,1-Dichloroethane	6.8	ug/L	1.0	SW846 8260D	#
1,1-Dichloroethene	91.5	ug/L	1.0	SW846 8260D	#
1,2-Dichloroethane	1.0	ug/L	1.0	SW846 8260D	#



### Detected Results Summary

Client Sample ID	MW-200	Collected	11/26/2024 09:00
Lab Sample ID	3389731003	Lab Receipt	11/27/2024 09:30

<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	23.6	ug/L	5.4	SW846 8270E SIM	#
<b>VOLATILE ORGANICS</b>					
1,1,1-Trichloroethane	5.8	ug/L	1.0	SW846 8260D	#
1,1-Dichloroethane	6.7	ug/L	1.0	SW846 8260D	#
1,1-Dichloroethene	88.9	ug/L	1.0	SW846 8260D	#
1,2-Dichloroethane	1.1	ug/L	1.0	SW846 8260D	#



## Results

Client Sample ID	MW-31D	Collected	11/26/2024 10:45
Lab Sample ID	3389731001	Lab Receipt	11/27/2024 09:30

### 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	12/04/2024 02:17	M1O	D

#### SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
2-Methylnapthalene-d10	7297-45-2	59.1%	29 - 112	12/04/2024 02:17	
Fluoranthene-d10	93951-69-0	78%	45 - 130	12/04/2024 02:17	

### 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	12/03/2024 02:56	PDK	A
1,1,1-Trichloroethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/03/2024 02:56	PDK	A
1,1,2,2-Tetrachloroethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/03/2024 02:56	PDK	A
1,1,2-Trichloroethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/03/2024 02:56	PDK	A
1,1-Dichloroethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/03/2024 02:56	PDK	A
1,1-Dichloroethene	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/03/2024 02:56	PDK	A
1,1-Dichloropropene	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/03/2024 02:56	PDK	A
1,2,3-Trichlorobenzene	2.0 U	U	ug/L	2.0	SW846 8260D	1	12/03/2024 02:56	PDK	A
1,2,3-Trichloropropane	2.0 U	U	ug/L	2.0	SW846 8260D	1	12/03/2024 02:56	PDK	A
1,2,4-Trichlorobenzene	2.0 U	U	ug/L	2.0	SW846 8260D	1	12/03/2024 02:56	PDK	A
1,2-Dibromo-3-chloropropane	7.0 U	U	ug/L	7.0	SW846 8260D	1	12/03/2024 02:56	PDK	A
1,2-Dibromoethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/03/2024 02:56	PDK	A
1,2-Dichlorobenzene	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/03/2024 02:56	PDK	A
1,2-Dichloroethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/03/2024 02:56	PDK	A
1,2-Dichloropropane	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/03/2024 02:56	PDK	A
1,3-Dichlorobenzene	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/03/2024 02:56	PDK	A
1,3-Dichloropropane	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/03/2024 02:56	PDK	A
1,4-Dichlorobenzene	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/03/2024 02:56	PDK	A
2,2-Dichloropropane	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/03/2024 02:56	PDK	A
2-Butanone	10.0 U	U	ug/L	10.0	SW846 8260D	1	12/03/2024 02:56	PDK	A
2-Hexanone	5.0 U	U	ug/L	5.0	SW846 8260D	1	12/03/2024 02:56	PDK	A
4-Methyl-2-Pentanone(MIBK)	5.0 U	U	ug/L	5.0	SW846 8260D	1	12/03/2024 02:56	PDK	A
Acetone	10.0 U	U	ug/L	10.0	SW846 8260D	1	12/03/2024 02:56	PDK	A
Benzene	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/03/2024 02:56	PDK	A
Bromobenzene	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/03/2024 02:56	PDK	A
Bromochloromethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/03/2024 02:56	PDK	A
Bromodichloromethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/03/2024 02:56	PDK	A
Bromoform	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/03/2024 02:56	PDK	A
Bromomethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/03/2024 02:56	PDK	A
Carbon Tetrachloride	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/03/2024 02:56	PDK	A
Chlorobenzene	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/03/2024 02:56	PDK	A
Chlorodibromomethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/03/2024 02:56	PDK	A
Chloroethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/03/2024 02:56	PDK	A
Chloroform	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/03/2024 02:56	PDK	A
Chloromethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/03/2024 02:56	PDK	A



## Results

Client Sample ID	MW-31D	Collected	11/26/2024 10:45
Lab Sample ID	3389731001	Lab Receipt	11/27/2024 09:30

### 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	12/03/2024 02:56	PDK	A
cis-1,3-Dichloropropene	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/03/2024 02:56	PDK	A
Dibromomethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/03/2024 02:56	PDK	A
Dichlorodifluoromethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/03/2024 02:56	PDK	A
Diisopropyl ether	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/03/2024 02:56	PDK	A
Ethylbenzene	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/03/2024 02:56	PDK	A
Hexachlorobutadiene	5.0 U	U	ug/L	5.0	SW846 8260D	1	12/03/2024 02:56	PDK	A
Methyl t-Butyl Ether	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/03/2024 02:56	PDK	A
Methylene Chloride	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/03/2024 02:56	PDK	A
mp-Xylene	2.0 U	U	ug/L	2.0	SW846 8260D	1	12/03/2024 02:56	PDK	A
Naphthalene	2.0 U	U	ug/L	2.0	SW846 8260D	1	12/03/2024 02:56	PDK	A
o-Chlorotoluene	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/03/2024 02:56	PDK	A
o-Xylene	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/03/2024 02:56	PDK	A
p-Chlorotoluene	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/03/2024 02:56	PDK	A
p-Isopropyltoluene	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/03/2024 02:56	PDK	A
Styrene	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/03/2024 02:56	PDK	A
Tetrachloroethene	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/03/2024 02:56	PDK	A
Toluene	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/03/2024 02:56	PDK	A
Total Xylenes	3.0 U	U	ug/L	3.0	SW846 8260D	1	12/03/2024 02:56	PDK	A
trans-1,2-Dichloroethene	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/03/2024 02:56	PDK	A
trans-1,3-Dichloropropene	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/03/2024 02:56	PDK	A
Trichloroethene	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/03/2024 02:56	PDK	A
Trichlorofluoromethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/03/2024 02:56	PDK	A
Vinyl Acetate	5.0 U	U	ug/L	5.0	SW846 8260D	1	12/03/2024 02:56	PDK	A
Vinyl Chloride	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/03/2024 02:56	PDK	A

### SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
1,2-Dichloroethane-d4	17060-07-0	103%	62 - 133	12/03/2024 02:56	
4-Bromofluorobenzene	460-00-4	113%	79 - 114	12/03/2024 02:56	
Dibromofluoromethane	1868-53-7	104%	78 - 116	12/03/2024 02:56	
Toluene-d8	2037-26-5	109%	76 - 127	12/03/2024 02:56	



## Results

Client Sample ID	MW-25-130	Collected	11/26/2024 11:30
Lab Sample ID	3389731002	Lab Receipt	11/27/2024 09:30

### SEMIVOLATILE SIM

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
1,4-Dioxane	21.4		ug/L	5.4	SW846 8270E SIM	5	12/05/2024 03:23	M1O	D

### SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
2-Methylnaphthalene-d10	7297-45-2	57.4%	29 – 112	12/04/2024 02:44	
2-Methylnaphthalene-d10	7297-45-2	52.8%	29 – 112	12/05/2024 03:23	
Fluoranthene-d10	93951-69-0	74.4%	45 – 130	12/04/2024 02:44	
Fluoranthene-d10	93951-69-0	69.7%	45 – 130	12/05/2024 03:23	

### 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	12/03/2024 03:16	PDK	A
1,1,1-Trichloroethane	6.1		ug/L	1.0	SW846 8260D	1	12/03/2024 03:16	PDK	A
1,1,2,2-Tetrachloroethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/03/2024 03:16	PDK	A
1,1,2-Trichloroethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/03/2024 03:16	PDK	A
1,1-Dichloroethane	6.8		ug/L	1.0	SW846 8260D	1	12/03/2024 03:16	PDK	A
1,1-Dichloroethene	91.5		ug/L	1.0	SW846 8260D	1	12/03/2024 03:16	PDK	A
1,1-Dichloropropene	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/03/2024 03:16	PDK	A
1,2,3-Trichlorobenzene	2.0 U	U	ug/L	2.0	SW846 8260D	1	12/03/2024 03:16	PDK	A
1,2,3-Trichloropropane	2.0 U	U	ug/L	2.0	SW846 8260D	1	12/03/2024 03:16	PDK	A
1,2,4-Trichlorobenzene	2.0 U	U	ug/L	2.0	SW846 8260D	1	12/03/2024 03:16	PDK	A
1,2-Dibromo-3-chloropropane	7.0 U	U	ug/L	7.0	SW846 8260D	1	12/03/2024 03:16	PDK	A
1,2-Dibromoethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/03/2024 03:16	PDK	A
1,2-Dichlorobenzene	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/03/2024 03:16	PDK	A
1,2-Dichloroethane	1.0		ug/L	1.0	SW846 8260D	1	12/03/2024 03:16	PDK	A
1,2-Dichloropropane	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/03/2024 03:16	PDK	A
1,3-Dichlorobenzene	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/03/2024 03:16	PDK	A
1,3-Dichloropropane	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/03/2024 03:16	PDK	A
1,4-Dichlorobenzene	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/03/2024 03:16	PDK	A
2,2-Dichloropropane	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/03/2024 03:16	PDK	A
2-Butanone	10.0 U	U	ug/L	10.0	SW846 8260D	1	12/03/2024 03:16	PDK	A
2-Hexanone	5.0 U	U	ug/L	5.0	SW846 8260D	1	12/03/2024 03:16	PDK	A
4-Methyl-2-Pentanone(MIBK)	5.0 U	U	ug/L	5.0	SW846 8260D	1	12/03/2024 03:16	PDK	A
Acetone	10.0 U	U	ug/L	10.0	SW846 8260D	1	12/03/2024 03:16	PDK	A
Benzene	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/03/2024 03:16	PDK	A
Bromobenzene	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/03/2024 03:16	PDK	A
Bromochloromethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/03/2024 03:16	PDK	A
Bromodichloromethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/03/2024 03:16	PDK	A
Bromoform	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/03/2024 03:16	PDK	A
Bromomethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/03/2024 03:16	PDK	A
Carbon Tetrachloride	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/03/2024 03:16	PDK	A
Chlorobenzene	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/03/2024 03:16	PDK	A
Chlorodibromomethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/03/2024 03:16	PDK	A
Chloroethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/03/2024 03:16	PDK	A



## Results

Client Sample ID	MW-25-130	Collected	11/26/2024 11:30
Lab Sample ID	3389731002	Lab Receipt	11/27/2024 09:30

### VOLATILE ORGANICS (cont.)

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
Chloroform	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/03/2024 03:16	PDK	A
Chloromethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/03/2024 03:16	PDK	A
cis-1,2-Dichloroethene	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/03/2024 03:16	PDK	A
cis-1,3-Dichloropropene	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/03/2024 03:16	PDK	A
Dibromomethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/03/2024 03:16	PDK	A
Dichlorodifluoromethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/03/2024 03:16	PDK	A
Diisopropyl ether	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/03/2024 03:16	PDK	A
Ethylbenzene	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/03/2024 03:16	PDK	A
Hexachlorobutadiene	5.0 U	U	ug/L	5.0	SW846 8260D	1	12/03/2024 03:16	PDK	A
Methyl t-Butyl Ether	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/03/2024 03:16	PDK	A
Methylene Chloride	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/03/2024 03:16	PDK	A
mp-Xylene	2.0 U	U	ug/L	2.0	SW846 8260D	1	12/03/2024 03:16	PDK	A
Naphthalene	2.0 U	U	ug/L	2.0	SW846 8260D	1	12/03/2024 03:16	PDK	A
o-Chlorotoluene	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/03/2024 03:16	PDK	A
o-Xylene	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/03/2024 03:16	PDK	A
p-Chlorotoluene	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/03/2024 03:16	PDK	A
p-Isopropyltoluene	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/03/2024 03:16	PDK	A
Styrene	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/03/2024 03:16	PDK	A
Tetrachloroethene	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/03/2024 03:16	PDK	A
Toluene	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/03/2024 03:16	PDK	A
Total Xylenes	3.0 U	U	ug/L	3.0	SW846 8260D	1	12/03/2024 03:16	PDK	A
trans-1,2-Dichloroethene	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/03/2024 03:16	PDK	A
trans-1,3-Dichloropropene	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/03/2024 03:16	PDK	A
Trichloroethene	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/03/2024 03:16	PDK	A
Trichlorofluoromethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/03/2024 03:16	PDK	A
Vinyl Acetate	5.0 U	U	ug/L	5.0	SW846 8260D	1	12/03/2024 03:16	PDK	A
Vinyl Chloride	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/03/2024 03:16	PDK	A

### SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
1,2-Dichloroethane-d4	17060-07-0	101%	62 - 133	12/03/2024 03:16	
4-Bromofluorobenzene	460-00-4	96.6%	79 - 114	12/03/2024 03:16	
Dibromofluoromethane	1868-53-7	100%	78 - 116	12/03/2024 03:16	
Toluene-d8	2037-26-5	104%	76 - 127	12/03/2024 03:16	



## Results

Client Sample ID	MW-200	Collected	11/26/2024 09:00
Lab Sample ID	3389731003	Lab Receipt	11/27/2024 09:30

### SEMIVOLATILE SIM

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
1,4-Dioxane	23.6		ug/L	5.4	SW846 8270E SIM	5	12/05/2024 08:47	M1O	D

### SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
2-Methylnapthalene-d10	7297-45-2	54.2%	29 – 112	12/04/2024 01:50	
2-Methylnapthalene-d10	7297-45-2	52.1%	29 – 112	12/05/2024 08:47	
Fluoranthene-d10	93951-69-0	76.7%	45 – 130	12/04/2024 01:50	
Fluoranthene-d10	93951-69-0	72.7%	45 – 130	12/05/2024 08:47	

### 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	12/03/2024 03:36	PDK	A
1,1,1-Trichloroethane	5.8		ug/L	1.0	SW846 8260D	1	12/03/2024 03:36	PDK	A
1,1,2,2-Tetrachloroethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/03/2024 03:36	PDK	A
1,1,2-Trichloroethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/03/2024 03:36	PDK	A
1,1-Dichloroethane	6.7		ug/L	1.0	SW846 8260D	1	12/03/2024 03:36	PDK	A
1,1-Dichloroethene	88.9		ug/L	1.0	SW846 8260D	1	12/03/2024 03:36	PDK	A
1,1-Dichloropropene	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/03/2024 03:36	PDK	A
1,2,3-Trichlorobenzene	2.0 U	U	ug/L	2.0	SW846 8260D	1	12/03/2024 03:36	PDK	A
1,2,3-Trichloropropane	2.0 U	U	ug/L	2.0	SW846 8260D	1	12/03/2024 03:36	PDK	A
1,2,4-Trichlorobenzene	2.0 U	U	ug/L	2.0	SW846 8260D	1	12/03/2024 03:36	PDK	A
1,2-Dibromo-3-chloropropane	7.0 U	U	ug/L	7.0	SW846 8260D	1	12/03/2024 03:36	PDK	A
1,2-Dibromoethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/03/2024 03:36	PDK	A
1,2-Dichlorobenzene	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/03/2024 03:36	PDK	A
1,2-Dichloroethane	1.1		ug/L	1.0	SW846 8260D	1	12/03/2024 03:36	PDK	A
1,2-Dichloropropane	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/03/2024 03:36	PDK	A
1,3-Dichlorobenzene	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/03/2024 03:36	PDK	A
1,3-Dichloropropane	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/03/2024 03:36	PDK	A
1,4-Dichlorobenzene	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/03/2024 03:36	PDK	A
2,2-Dichloropropane	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/03/2024 03:36	PDK	A
2-Butanone	10.0 U	U	ug/L	10.0	SW846 8260D	1	12/03/2024 03:36	PDK	A
2-Hexanone	5.0 U	U	ug/L	5.0	SW846 8260D	1	12/03/2024 03:36	PDK	A
4-Methyl-2-Pentanone(MIBK)	5.0 U	U	ug/L	5.0	SW846 8260D	1	12/03/2024 03:36	PDK	A
Acetone	10.0 U	U	ug/L	10.0	SW846 8260D	1	12/03/2024 03:36	PDK	A
Benzene	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/03/2024 03:36	PDK	A
Bromobenzene	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/03/2024 03:36	PDK	A
Bromochloromethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/03/2024 03:36	PDK	A
Bromodichloromethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/03/2024 03:36	PDK	A
Bromoform	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/03/2024 03:36	PDK	A
Bromomethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/03/2024 03:36	PDK	A
Carbon Tetrachloride	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/03/2024 03:36	PDK	A
Chlorobenzene	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/03/2024 03:36	PDK	A
Chlorodibromomethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/03/2024 03:36	PDK	A
Chloroethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/03/2024 03:36	PDK	A



## Results

Client Sample ID	MW-200	Collected	11/26/2024 09:00
Lab Sample ID	3389731003	Lab Receipt	11/27/2024 09:30

### VOLATILE ORGANICS (cont.)

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
Chloroform	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/03/2024 03:36	PDK	A
Chloromethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/03/2024 03:36	PDK	A
cis-1,2-Dichloroethene	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/03/2024 03:36	PDK	A
cis-1,3-Dichloropropene	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/03/2024 03:36	PDK	A
Dibromomethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/03/2024 03:36	PDK	A
Dichlorodifluoromethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/03/2024 03:36	PDK	A
Diisopropyl ether	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/03/2024 03:36	PDK	A
Ethylbenzene	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/03/2024 03:36	PDK	A
Hexachlorobutadiene	5.0 U	U	ug/L	5.0	SW846 8260D	1	12/03/2024 03:36	PDK	A
Methyl t-Butyl Ether	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/03/2024 03:36	PDK	A
Methylene Chloride	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/03/2024 03:36	PDK	A
mp-Xylene	2.0 U	U	ug/L	2.0	SW846 8260D	1	12/03/2024 03:36	PDK	A
Naphthalene	2.0 U	U	ug/L	2.0	SW846 8260D	1	12/03/2024 03:36	PDK	A
o-Chlorotoluene	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/03/2024 03:36	PDK	A
o-Xylene	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/03/2024 03:36	PDK	A
p-Chlorotoluene	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/03/2024 03:36	PDK	A
p-Isopropyltoluene	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/03/2024 03:36	PDK	A
Styrene	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/03/2024 03:36	PDK	A
Tetrachloroethene	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/03/2024 03:36	PDK	A
Toluene	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/03/2024 03:36	PDK	A
Total Xylenes	3.0 U	U	ug/L	3.0	SW846 8260D	1	12/03/2024 03:36	PDK	A
trans-1,2-Dichloroethene	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/03/2024 03:36	PDK	A
trans-1,3-Dichloropropene	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/03/2024 03:36	PDK	A
Trichloroethene	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/03/2024 03:36	PDK	A
Trichlorofluoromethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/03/2024 03:36	PDK	A
Vinyl Acetate	5.0 U	U	ug/L	5.0	SW846 8260D	1	12/03/2024 03:36	PDK	A
Vinyl Chloride	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/03/2024 03:36	PDK	A

### SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
1,2-Dichloroethane-d4	17060-07-0	105%	62 - 133	12/03/2024 03:36	
4-Bromofluorobenzene	460-00-4	102%	79 - 114	12/03/2024 03:36	
Dibromofluoromethane	1868-53-7	103%	78 - 116	12/03/2024 03:36	
Toluene-d8	2037-26-5	105%	76 - 127	12/03/2024 03:36	



**Sample - Method Cross Reference Table**

Lab ID	Sample ID	Analysis Method	Preparation Method	Leachate Method
3389731001	MW-31D	SW846 8270E SIM SW846 8260D	SW846 3510C N/A	
3389731002	MW-25-130	SW846 8270E SIM SW846 8260D	SW846 3510C N/A	
3389731003	MW-200	SW846 8270E SIM SW846 8260D	SW846 3510C N/A	



**QUALITY CONTROL SAMPLES**

**SEMIVOLATILE SIM**

QC Batch			
QC Batch	1349696	Prep Method	SW846 3510C
Date	12/03/2024 08:45	Analysis Method	SW846 8270E SIM
Tech.	DEC		

Associated Samples		
3389731002	3389731003	3389731001

**Method Blank** 3912416 (MB) Created on 12/03/2024 07:15 For QC Batch 1349696

**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-Methylnaphthalene-d10	7297-45-2	BLK 0.59	1	59.5	29 - 112	
Fluoranthene-d10	93951-69-0	BLK 0.78	1	77.6	45 - 130	

**Lab Control Standard** 3912417 (LCS) Created on 12/03/2024 07:15 For QC Batch 1349696

**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 0.48		1	48.2	22 - 75		U

**SURROGATES**

Compound	CAS No	Result (ug/L)	Expected (ug/L)	Rec. (%)	Limits (%)	Qualifiers
2-Methylnaphthalene-d10	7297-45-2	LCS 0.58	1	58.3	29 - 112	
Fluoranthene-d10	93951-69-0	LCS 0.8	1	80.2	45 - 130	



**QUALITY CONTROL SAMPLES**

**VOLATILE ORGANICS**

QC Batch			
QC Batch	1349288	Prep Method	N/A
Date	N/A	Analysis Method	SW846 8260D
Tech.			

Associated Samples		
3389731001	3389731002	3389731003

**Duplicate** 3912354 (DUP) 3389013005 (non-Project Sample) For QC Batch 1349288

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

**RESULTS**

Compound	CAS No		Result (ug/L)	Orig. Result (ug/L)		Qualifiers
1,1,1,2-Tetrachloroethane	630-20-6	DUP	0	0	RPD 0 (Max-)	U
1,1,1-Trichloroethane	71-55-6	DUP	0	0	RPD 0 (Max-)	U
1,1,2,2-Tetrachloroethane	79-34-5	DUP	0	0	RPD 0 (Max-)	U
1,1,2-Trichloroethane	79-00-5	DUP	0	0	RPD 0 (Max-)	U
1,1-Dichloroethane	75-34-3	DUP	0	0	RPD 0 (Max-)	U
1,1-Dichloroethene	75-35-4	DUP	0	0	RPD 0 (Max-)	U
1,1-Dichloropropene	563-58-6	DUP	0	0	RPD 0 (Max-)	U
1,2,3-Trichlorobenzene	87-61-6	DUP	0	0	RPD 0 (Max-)	U
1,2,3-Trichloropropane	96-18-4	DUP	0	0	RPD 0 (Max-)	U
1,2,4-Trichlorobenzene	120-82-1	DUP	0	0	RPD 0 (Max-)	U
1,2-Dibromo-3-chloropropane	96-12-8	DUP	0	0	RPD 0 (Max-)	U
1,2-Dibromoethane	106-93-4	DUP	0	0	RPD 0 (Max-)	U
1,2-Dichlorobenzene	95-50-1	DUP	0	0	RPD 0 (Max-)	U
1,2-Dichloroethane	107-06-2	DUP	0	0	RPD 0 (Max-)	U
1,2-Dichloropropane	78-87-5	DUP	0	0	RPD 0 (Max-)	U
1,3-Dichlorobenzene	541-73-1	DUP	0	0	RPD 0 (Max-)	U
1,3-Dichloropropane	142-28-9	DUP	0	0	RPD 0 (Max-)	U
1,4-Dichlorobenzene	106-46-7	DUP	0	0	RPD 0 (Max-)	U
2,2-Dichloropropane	594-20-7	DUP	0	0	RPD 0 (Max-)	U
2-Butanone	78-93-3	DUP	0	0	RPD 0 (Max-)	U
2-Hexanone	591-78-6	DUP	0	0	RPD 0 (Max-)	U
4-Methyl-2-Pentanone(MIBK)	108-10-1	DUP	0	0	RPD 0 (Max-)	U
Acetone	67-64-1	DUP	0	0	RPD 0 (Max-)	U
Benzene	71-43-2	DUP	0	0	RPD 0 (Max-)	U
Bromobenzene	108-86-1	DUP	0	0	RPD 0 (Max-)	U
Bromochloromethane	74-97-5	DUP	0	0	RPD 0 (Max-)	U
Bromodichloromethane	75-27-4	DUP	0	0	RPD 0 (Max-)	U
Bromoform	75-25-2	DUP	0	0	RPD 0 (Max-)	U
Bromomethane	74-83-9	DUP	0	0	RPD 0 (Max-)	U
Carbon Tetrachloride	56-23-5	DUP	0	0	RPD 0 (Max-)	U
Chlorobenzene	108-90-7	DUP	0	0	RPD 0 (Max-)	U
Chlorodibromomethane	124-48-1	DUP	0	0	RPD 0 (Max-)	U
Chloroethane	75-00-3	DUP	0	0	RPD 0 (Max-)	U
Chloroform	67-66-3	DUP	4.9734	5.0609	RPD 1.74 (Max-)	U
Chloromethane	74-87-3	DUP	0	0	RPD 0 (Max-)	U



**QUALITY CONTROL SAMPLES**

**VOLATILE ORGANICS (cont.)**

**RESULTS**

Compound	CAS No		Result (ug/L)	Orig. Result (ug/L)			Qualifiers
cis-1,2-Dichloroethene	156-59-2	DUP	0	0	RPD	0 (Max-)	U
cis-1,3-Dichloropropene	10061-01-5	DUP	0	0	RPD	0 (Max-)	U
Dibromomethane	74-95-3	DUP	0	0	RPD	0 (Max-)	U
Dichlorodifluoromethane	75-71-8	DUP	0	0	RPD	0 (Max-)	U
Diisopropyl ether	108-20-3	DUP	0	0	RPD	0 (Max-)	U
Ethylbenzene	100-41-4	DUP	0	0	RPD	0 (Max-)	U
Hexachlorobutadiene	87-68-3	DUP	0	0	RPD	0 (Max-)	U
Methyl t-Butyl Ether	1634-04-4	DUP	0	0	RPD	0 (Max-)	U
Methylene Chloride	75-09-2	DUP	0	0	RPD	0 (Max-)	U
mp-Xylene	108383/106423	DUP	0	0	RPD	0 (Max-)	U
Naphthalene	91-20-3	DUP	0.4292	0.5382	RPD	22.50 (Max-)	U
o-Chlorotoluene	95-49-8	DUP	0	0	RPD	0 (Max-)	U
o-Xylene	95-47-6	DUP	0	0	RPD	0 (Max-)	U
p-Chlorotoluene	106-43-4	DUP	0	0	RPD	0 (Max-)	U
p-Isopropyltoluene	99-87-6	DUP	0	0	RPD	0 (Max-)	U
Styrene	100-42-5	DUP	0	0	RPD	0 (Max-)	U
Tetrachloroethene	127-18-4	DUP	0	0	RPD	0 (Max-)	U
Toluene	108-88-3	DUP	0	0	RPD	0 (Max-)	U
Total Xylenes	1330-20-7	DUP	0	0	RPD	0 (Max-)	U
trans-1,2-Dichloroethene	156-60-5	DUP	0	0	RPD	0 (Max-)	U
trans-1,3-Dichloropropene	10061-02-6	DUP	0	0	RPD	0 (Max-)	U
Trichloroethene	79-01-6	DUP	0	0	RPD	0 (Max-)	U
Trichlorofluoromethane	75-69-4	DUP	0	0	RPD	0 (Max-)	U
Vinyl Acetate	108-05-4	DUP	0	0	RPD	0 (Max-)	U
Vinyl Chloride	75-01-4	DUP	0	0	RPD	0 (Max-)	U

**SURROGATES**

Compound	CAS No		Result (ug/L)	Expected (ug/L)	Rec. (%)	Limits (%)	Qualifiers
1,2-Dichloroethane-d4	17060-07-0	DUP	30.6	30	102	62 - 133	
4-Bromofluorobenzene	460-00-4	DUP	28.9	30	96.3	79 - 114	
Dibromofluoromethane	1868-53-7	DUP	30.5	30	102	78 - 116	
Toluene-d8	2037-26-5	DUP	30.6	30	102	76 - 127	

**Matrix Spike** 3912355 (MS) 3389013007 (non-Project Sample) For QC Batch 1349288

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

**RESULTS**

Compound	CAS No		Result (ug/L)	Orig. Result (ug/L)	Spk Added (ug/L)	Rec. (%)	Limits (%)	RPD Limit (%)	Qualifiers
1,1,1,2-Tetrachloroethane	630-20-6	MS	21.3	0	20	107	78 - 121		
1,1,1-Trichloroethane	71-55-6	MS	21.9	0	20	109	66 - 130		
1,1,2,2-Tetrachloroethane	79-34-5	MS	20.1	0	20	100	74 - 135		
1,1,2-Trichloroethane	79-00-5	MS	20.7	0	20	103	82 - 126		



QUALITY CONTROL SAMPLES

VOLATILE ORGANICS (cont.)

RESULTS

Compound	CAS No		Result (ug/L)	Orig. Result (ug/L)	Spk Added (ug/L)	Rec. (%)	Limits (%)	RPD Limit (%)	Qualifiers
1,1-Dichloroethane	75-34-3	MS	20.5	0	20	102	78 - 124		
1,1-Dichloroethene	75-35-4	MS	21.4	0	20	107	63 - 128		
1,1-Dichloropropene	563-58-6	MS	20.9	0	20	105	76 - 126		
1,2,3-Trichlorobenzene	87-61-6	MS	19.6	0	20	98.1	61 - 126		
1,2,3-Trichloropropane	96-18-4	MS	20.1	0	20	100	75 - 132		
1,2,4-Trichlorobenzene	120-82-1	MS	21.1	0	20	106	67 - 123		
1,2-Dibromo-3-chloropropane	96-12-8	MS	18.1	0	20	90.4	59 - 133		
1,2-Dibromoethane	106-93-4	MS	20.6	0	20	103	80 - 124		
1,2-Dichlorobenzene	95-50-1	MS	20	0	20	99.8	82 - 118		
1,2-Dichloroethane	107-06-2	MS	19.7	0	20	98.6	70 - 133		
1,2-Dichloropropane	78-87-5	MS	20.8	0	20	104	81 - 127		
1,3-Dichlorobenzene	541-73-1	MS	19.5	0	20	97.3	81 - 118		
1,3-Dichloropropane	142-28-9	MS	20.2	0	20	101	82 - 126		
1,4-Dichlorobenzene	106-46-7	MS	19.5	0	20	97.5	81 - 116		
2,2-Dichloropropane	594-20-7	MS	20.9	0	20	105	64 - 129		
2-Butanone	78-93-3	MS	89.2	0	100	89.2	50 - 152		
2-Hexanone	591-78-6	MS	88.2	0	100	88.2	65 - 154		
4-Methyl-2-Pentanone(MIBK)	108-10-1	MS	91.9	0	100	91.9	71 - 146		
Acetone	67-64-1	MS	84.5	0	100	84.5	40 - 151		
Benzene	71-43-2	MS	20.8	0	20	104	80 - 124		
Bromobenzene	108-86-1	MS	20.2	0	20	101	81 - 119		
Bromochloromethane	74-97-5	MS	21.5	0	20	108	73 - 117		
Bromodichloromethane	75-27-4	MS	22	0	20	110	79 - 126		
Bromoform	75-25-2	MS	18.3	0	20	91.3	70 - 123		
Bromomethane	74-83-9	MS	15.3	0	20	76.5	45 - 148		
Carbon Tetrachloride	56-23-5	MS	19.2	0	20	96.2	62 - 132		
Chlorobenzene	108-90-7	MS	20.4	0	20	102	85 - 117		
Chlorodibromomethane	124-48-1	MS	18.4	0	20	91.9	77 - 122		
Chloroethane	75-00-3	MS	23.1	0	20	115	51 - 142		
Chloroform	67-66-3	MS	22.7	2.60	20	100	78 - 122		
Chloromethane	74-87-3	MS	19.1	0	20	95.3	38 - 156		
cis-1,2-Dichloroethene	156-59-2	MS	21	0	20	105	78 - 125		
cis-1,3-Dichloropropene	10061-01-5	MS	17.7	0	20	88.3	81 - 121		
Dibromomethane	74-95-3	MS	20.7	0	20	104	81 - 125		
Dichlorodifluoromethane	75-71-8	MS	16.6	0	20	82.9	17 - 166		
Diisopropyl ether	108-20-3	MS	20.6	0	20	103	74 - 131		
Ethylbenzene	100-41-4	MS	21.2	0	20	106	80 - 124		
Hexachlorobutadiene	87-68-3	MS	22.1	0	20	111	55 - 128		
Methyl t-Butyl Ether	1634-04-4	MS	20.5	0	20	103	69 - 115		
Methylene Chloride	75-09-2	MS	20.8	0	20	104	76 - 121		
mp-Xylene	108383/106423	MS	41.9	0	40	105	79 - 125		
Naphthalene	91-20-3	MS	18.1	0	20	90.7	56 - 134		
o-Chlorotoluene	95-49-8	MS	19.9	0	20	99.7	78 - 126		
o-Xylene	95-47-6	MS	21	0	20	105	79 - 124		
p-Chlorotoluene	106-43-4	MS	19.7	0	20	98.6	78 - 125		
p-Isopropyltoluene	99-87-6	MS	21.3	0	20	107	72 - 123		
Styrene	100-42-5	MS	17.7	0	20	88.6	79 - 123		



**QUALITY CONTROL SAMPLES**

**VOLATILE ORGANICS (cont.)**

*RESULTS*

Compound	CAS No		Result (ug/L)	Orig. Result (ug/L)	Spk Added (ug/L)	Rec. (%)	Limits (%)	RPD Limit (%)	Qualifiers
Tetrachloroethene	127-18-4	MS	19.5	0	20	97.5	72 - 124		
Toluene	108-88-3	MS	21.1	0	20	105	80 - 125		
Total Xylenes	1330-20-7	MS	62.8	0	60	105	79 - 125		
trans-1,2-Dichloroethene	156-60-5	MS	20.5	0	20	103	71 - 122		
trans-1,3-Dichloropropene	10061-02-6	MS	17.7	0	20	88.4	78 - 126		
Trichloroethene	79-01-6	MS	20	0	20	100	77 - 124		
Trichlorofluoromethane	75-69-4	MS	23.3	0	20	117	38 - 123		
Vinyl Acetate	108-05-4	MS	17.7	0	20	88.6	58 - 136		
Vinyl Chloride	75-01-4	MS	21.6	0	20	108	27 - 138		

*SURROGATES*

Compound	CAS No		Result (ug/L)	Expected (ug/L)	Rec. (%)	Limits (%)	Qualifiers
1,2-Dichloroethane-d4	17060-07-0	MS	32.3	30	108	62 - 133	
4-Bromofluorobenzene	460-00-4	MS	30.6	30	102	79 - 114	
Dibromofluoromethane	1868-53-7	MS	32.2	30	107	78 - 116	
Toluene-d8	2037-26-5	MS	31.5	30	105	76 - 127	

**Method Blank** 3912348 (MB) Created on 12/02/2024 22:20 For QC Batch 1349288

*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



QUALITY CONTROL SAMPLES

VOLATILE ORGANICS (cont.)

RESULTS

Compound	CAS No		Result	Units	RDL	Qualifiers
Benzene	71-43-2	BLK	1.0 U	ug/L	1.0	U
Bromobenzene	108-86-1	BLK	1.0 U	ug/L	1.0	U
Bromochloromethane	74-97-5	BLK	1.0 U	ug/L	1.0	U
Bromodichloromethane	75-27-4	BLK	1.0 U	ug/L	1.0	U
Bromoform	75-25-2	BLK	1.0 U	ug/L	1.0	U
Bromomethane	74-83-9	BLK	1.0 U	ug/L	1.0	U
Carbon Tetrachloride	56-23-5	BLK	1.0 U	ug/L	1.0	U
Chlorobenzene	108-90-7	BLK	1.0 U	ug/L	1.0	U
Chlorodibromomethane	124-48-1	BLK	1.0 U	ug/L	1.0	U
Chloroethane	75-00-3	BLK	1.0 U	ug/L	1.0	U
Chloroform	67-66-3	BLK	1.0 U	ug/L	1.0	U
Chloromethane	74-87-3	BLK	1.0 U	ug/L	1.0	U
cis-1,2-Dichloroethene	156-59-2	BLK	1.0 U	ug/L	1.0	U
cis-1,3-Dichloropropene	10061-01-5	BLK	1.0 U	ug/L	1.0	U
Dibromomethane	74-95-3	BLK	1.0 U	ug/L	1.0	U
Dichlorodifluoromethane	75-71-8	BLK	1.0 U	ug/L	1.0	U
Diisopropyl ether	108-20-3	BLK	1.0 U	ug/L	1.0	U
Ethylbenzene	100-41-4	BLK	1.0 U	ug/L	1.0	U
Hexachlorobutadiene	87-68-3	BLK	5.0 U	ug/L	5.0	U
Methyl t-Butyl Ether	1634-04-4	BLK	1.0 U	ug/L	1.0	U
Methylene Chloride	75-09-2	BLK	1.0 U	ug/L	1.0	U
mp-Xylene	108383/106423	BLK	2.0 U	ug/L	2.0	U
Naphthalene	91-20-3	BLK	2.0 U	ug/L	2.0	U
o-Chlorotoluene	95-49-8	BLK	1.0 U	ug/L	1.0	U
o-Xylene	95-47-6	BLK	1.0 U	ug/L	1.0	U
p-Chlorotoluene	106-43-4	BLK	1.0 U	ug/L	1.0	U
p-Isopropyltoluene	99-87-6	BLK	1.0 U	ug/L	1.0	U
Styrene	100-42-5	BLK	1.0 U	ug/L	1.0	U
Tetrachloroethene	127-18-4	BLK	1.0 U	ug/L	1.0	U
Toluene	108-88-3	BLK	1.0 U	ug/L	1.0	U
Total Xylenes	1330-20-7	BLK	3.0 U	ug/L	3.0	U
trans-1,2-Dichloroethene	156-60-5	BLK	1.0 U	ug/L	1.0	U
trans-1,3-Dichloropropene	10061-02-6	BLK	1.0 U	ug/L	1.0	U
Trichloroethene	79-01-6	BLK	1.0 U	ug/L	1.0	U
Trichlorofluoromethane	75-69-4	BLK	1.0 U	ug/L	1.0	U
Vinyl Acetate	108-05-4	BLK	5.0 U	ug/L	5.0	U
Vinyl Chloride	75-01-4	BLK	1.0 U	ug/L	1.0	U

SURROGATES

Compound	CAS No		Result (ug/L)	Expected (ug/L)	Rec. (%)	Limits (%)	Qualifiers
1,2-Dichloroethane-d4	17060-07-0	BLK	29.8	30	99.5	62 - 133	
4-Bromofluorobenzene	460-00-4	BLK	29.4	30	97.9	79 - 114	
Dibromofluoromethane	1868-53-7	BLK	29.5	30	98.2	78 - 116	
Toluene-d8	2037-26-5	BLK	29.9	30	99.6	76 - 127	



QUALITY CONTROL SAMPLES

VOLATILE ORGANICS (cont.)

Lab Control Standard

3912349 (LCS)

Created on 12/02/2024 22:20

For QC Batch 1349288

RESULTS

Compound	CAS No		Result (ug/L)	Orig. Result (ug/L)	Spk Added (ug/L)	Rec. (%)	Limits (%)	RPD Limit (%)	Qualifiers
1,1,1,2-Tetrachloroethane	630-20-6	LCS	21.6		20	108	78 - 121		
1,1,1-Trichloroethane	71-55-6	LCS	21		20	105	66 - 130		
1,1,2,2-Tetrachloroethane	79-34-5	LCS	22		20	110	74 - 135		
1,1,2-Trichloroethane	79-00-5	LCS	21.5		20	107	82 - 126		
1,1-Dichloroethane	75-34-3	LCS	19.9		20	99.3	78 - 124		
1,1-Dichloroethene	75-35-4	LCS	20.1		20	101	63 - 128		
1,1-Dichloropropene	563-58-6	LCS	20		20	99.9	76 - 126		
1,2,3-Trichlorobenzene	87-61-6	LCS	21.5		20	108	61 - 126		
1,2,3-Trichloropropane	96-18-4	LCS	20.8		20	104	75 - 132		
1,2,4-Trichlorobenzene	120-82-1	LCS	23.3		20	117	67 - 123		
1,2-Dibromo-3-chloropropane	96-12-8	LCS	20.4		20	102	59 - 133		
1,2-Dibromoethane	106-93-4	LCS	21.1		20	106	80 - 124		
1,2-Dichlorobenzene	95-50-1	LCS	20.9		20	104	82 - 118		
1,2-Dichloroethane	107-06-2	LCS	19.4		20	97	70 - 133		
1,2-Dichloropropane	78-87-5	LCS	20.5		20	102	81 - 127		
1,3-Dichlorobenzene	541-73-1	LCS	20.4		20	102	81 - 118		
1,3-Dichloropropane	142-28-9	LCS	21		20	105	82 - 126		
1,4-Dichlorobenzene	106-46-7	LCS	20.6		20	103	81 - 116		
2,2-Dichloropropane	594-20-7	LCS	21.9		20	109	64 - 129		
2-Butanone	78-93-3	LCS	111		100	111	50 - 152		
2-Hexanone	591-78-6	LCS	105		100	105	65 - 154		
4-Methyl-2-Pentanone(MIBK)	108-10-1	LCS	100		100	100	71 - 146		
Acetone	67-64-1	LCS	132		100	132	40 - 151		
Benzene	71-43-2	LCS	19.8		20	99.2	80 - 124		
Bromobenzene	108-86-1	LCS	20.7		20	104	81 - 119		
Bromochloromethane	74-97-5	LCS	21.8		20	109	73 - 117		
Bromodichloromethane	75-27-4	LCS	21.8		20	109	79 - 126		
Bromoform	75-25-2	LCS	20.4		20	102	70 - 123		
Bromomethane	74-83-9	LCS	16.2		20	80.9	45 - 148		
Carbon Tetrachloride	56-23-5	LCS	17.8		20	88.9	62 - 132		
Chlorobenzene	108-90-7	LCS	20.4		20	102	85 - 117		
Chlorodibromomethane	124-48-1	LCS	19		20	95	77 - 122		
Chloroethane	75-00-3	LCS	17.9		20	89.5	51 - 142		
Chloroform	67-66-3	LCS	19.6		20	98.1	78 - 122		
Chloromethane	74-87-3	LCS	17.2		20	85.9	38 - 156		
cis-1,2-Dichloroethene	156-59-2	LCS	20.3		20	101	78 - 125		
cis-1,3-Dichloropropene	10061-01-5	LCS	18.6		20	92.8	81 - 121		
Dibromomethane	74-95-3	LCS	21.1		20	106	81 - 125		
Dichlorodifluoromethane	75-71-8	LCS	14.5		20	72.4	17 - 166		
Diisopropyl ether	108-20-3	LCS	20.8		20	104	74 - 131		
Ethylbenzene	100-41-4	LCS	20.7		20	104	80 - 124		
Hexachlorobutadiene	87-68-3	LCS	25		20	125	55 - 128		
Methyl t-Butyl Ether	1634-04-4	LCS	21.1		20	105	69 - 115		
Methylene Chloride	75-09-2	LCS	20.8		20	104	76 - 121		



QUALITY CONTROL SAMPLES

VOLATILE ORGANICS (cont.)

RESULTS

Compound	CAS No		Result (ug/L)	Orig. Result (ug/L)	Spk Added (ug/L)	Rec. (%)	Limits (%)	RPD Limit (%)	Qualifiers
mp-Xylene	108383/106423	LCS	41.1		40	103	79 - 125		
Naphthalene	91-20-3	LCS	20.2		20	101	56 - 134		
o-Chlorotoluene	95-49-8	LCS	20.5		20	102	78 - 126		
o-Xylene	95-47-6	LCS	20.6		20	103	79 - 124		
p-Chlorotoluene	106-43-4	LCS	20.7		20	104	78 - 125		
p-Isopropyltoluene	99-87-6	LCS	21.7		20	109	72 - 123		
Styrene	100-42-5	LCS	18.6		20	93	79 - 123		
Tetrachloroethene	127-18-4	LCS	19.5		20	97.7	72 - 124		
Toluene	108-88-3	LCS	20.6		20	103	80 - 125		
Total Xylenes	1330-20-7	LCS	61.8		60	103	79 - 125		
trans-1,2-Dichloroethene	156-60-5	LCS	19.6		20	97.9	71 - 122		
trans-1,3-Dichloropropene	10061-02-6	LCS	18.8		20	93.8	78 - 126		
Trichloroethene	79-01-6	LCS	19.2		20	96.1	77 - 124		
Trichlorofluoromethane	75-69-4	LCS	19.4		20	96.8	38 - 123		
Vinyl Acetate	108-05-4	LCS	20.3		20	102	58 - 136		
Vinyl Chloride	75-01-4	LCS	18.3		20	91.5	27 - 138		

SURROGATES

Compound	CAS No		Result (ug/L)	Expected (ug/L)	Rec. (%)	Limits (%)	Qualifiers
1,2-Dichloroethane-d4	17060-07-0	LCS	28.5	30	95	62 - 133	
4-Bromofluorobenzene	460-00-4	LCS	29.6	30	98.7	79 - 114	
Dibromofluoromethane	1868-53-7	LCS	29.5	30	98.5	78 - 116	
Toluene-d8	2037-26-5	LCS	29.6	30	98.8	76 - 127	



### QUALITY CONTROL DATA CROSS REFERENCE TABLE

Lab ID	Sample ID	Preparation Method	Prep Batch	Prep Date/Time	By	Analysis Method	Anly Batch
3389731001	MW-31D	SW846 3510C	1349696	12/03/2024 08:45	DEC	SW846 8270E SIM	1350390
		N/A	N/A	N/A		SW846 8260D	1349288
3389731002	MW-25-130	SW846 3510C	1349696	12/03/2024 08:45	DEC	SW846 8270E SIM	1351113
		SW846 3510C	1349696	12/03/2024 08:45	DEC	SW846 8270E SIM	1350390
		N/A	N/A	N/A		SW846 8260D	1349288
3389731003	MW-200	SW846 3510C	1349696	12/03/2024 08:45	DEC	SW846 8270E SIM	1350390
		SW846 3510C	1349696	12/03/2024 08:45	DEC	SW846 8270E SIM	1351113
		N/A	N/A	N/A		SW846 8260D	1349288



3389732

Logged By: CXW  
PM: KLM



COC #: \_\_\_\_\_  
ALS Quote #: \_\_\_\_\_

**CHAIN OF CUSTODY/  
REQUEST FOR ANALYSIS**  
ALL SHADED AREAS MUST BE COMPLETED BY THE CLIENT /  
SAMPLER. INSTRUCTIONS ON THE BACK.

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



Client Name: Dayton Superior		Temp Taken By: DD		Therm ID: 571		WO Temp (°C): 4	
Address: 7130 Ambassador Drive Allentown, PA 18106		Receipt Info completed by: DD		WV Containers 0-6°C: Y N NA		Deviations? NO YES IF YES, list below:	
Contact: Troy Heiland		Cooler Custody Seals Intact: Y N NA		Cooler Custody Seal Intact: Y N NA		Received on Ice: Y N NA	
Phone#: 610-366-3890 x 47137		Coolers & Samples Intact: Y N NA		Correct Containers Provided: Y N NA		Client contact: _____	
Project Name#: Storm water samples		Sample Label/COC Agree: Y N NA		Adequate Sample Volumes: Y N NA		Courier/Tracking #: _____	
Bill To: SAME		VOA only: Trip Blank: Y N NA		NJ ≤ 4 days? Y N NA		New Source? Y N	
Purchase Order #: 348941		Samples for Radiation testing? Y N NA		Reportable SDWA Sample(s)? Y N NA		New Source Contact: _____	
TAT: <input checked="" type="checkbox"/> Normal-Standard TAT is 10-12 business days. <input type="checkbox"/> Rush-Subject to ALS approval and surcharges.		SDWA State of Origin? _____		PWSID # _____		PWS Contact: _____	
Date Required: _____		SDWA Sample Type (see key): _____		PWS Phone #: _____		SDWA Sample Type Key: D=Distribution E=Entry Point R=Raw P=Plant C=Check S=Special A=Annual Startup	
Email: <input checked="" type="checkbox"/> TroyHeiland@daytonsuperior.com		Enter Number of Containers Per Sample or Field Results Below.		Sample/COC Remarks		Contains Short Hold Testing YES NO	
Sample Description/Location (as it will appear on the lab report)	Date Collected mm/dd/yy	Time hh:mm	Yes	No	Hexavalent Chromium Filtered?	Yes	No
1 Outfall #1	11/26/24	8:40am	1	1			
2 Outfall #2	11/26/24	8:43am	1	1			
3 Outfall #3	11/26/24	8:46am	1	1			
4							
5							
6							
7							
8							
9							
10							
Circle Sample Collector: ALS Tech (Client ID): _____							
Name: Troy Heiland		Received By / Company Name		Data Deliverables		State Samples Collected In	
Date: 11/26/24 14:30	1	Troy Heiland / Dayton Superior		Standard Lvl 1 <input checked="" type="checkbox"/>		CLP-like <input type="checkbox"/>	
	2	UPS		Standard Lvl 2 <input type="checkbox"/>		DOD <input type="checkbox"/>	
	3	DD/ALS 11/27/24 0932		Standard Lvl 3 <input type="checkbox"/>		NJ RED <input type="checkbox"/>	
	4			Standard Lvl 4 <input type="checkbox"/>		NJ Full <input type="checkbox"/>	
	5			Excel Summary <input type="checkbox"/>		Sample Disposal	
	6			Equis <input type="checkbox"/>		Lab <input type="checkbox"/>	
	7			Custom <input type="checkbox"/>		Special <input type="checkbox"/>	
	8			EDDS: Format Type		NY <input type="checkbox"/>	
	9			E X C E		NJ <input type="checkbox"/>	
	10					PA <input checked="" type="checkbox"/>	
						WV <input type="checkbox"/>	
						FL <input type="checkbox"/>	
						other <input type="checkbox"/>	

\* G=Grab C=Composite \*\*Matrix - A=Air D=Drinking Water GW=Groundwater O=Oil LVL=Liquid Waste S=Solid/Solids/Judge SW=Surface Water WVP=Wipe WWT=Wastewater  
ALS SHIPPING ADDRESS: 301 Fulling Mill Road, Suite A, Middletown, PA 17057

ENCLOSURE C – CERTIFIED LABORATORY ANALYTICAL REPORT FOR  
MONITORING WELL MW-25D-192 SAMPLE (DECEMBER 16, 2024)



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

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, NJ PA101

Analytical Results Report For

**WSP USA Inc.**

Project [KopFlex Offsite](#)  
 Workorder [3392528](#)  
 Report ID [378239 on 12/31/2024](#)

### Certificate of Analysis

Enclosed are the analytical results for samples received by the laboratory on Dec 17, 2024.

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  
 Erik Reinert - 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.*



**Project** KopFlex Offsite  
**Workorder** 3392528

### 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>
3392528001	MW-25-190	Ground Water	12/16/2024 10:50	12/17/2024 10:17	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 performed 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** KopFlex Offsite  
**Workorder** 3392528

**Project Notations**

**Sample Notations**

**Lab ID**      **Sample ID**

**Result Notations**

**Notation Ref.**

1      The QC sample type LCS for method SW846 8260D was outside the control limits for the analyte Hexachlorobutadiene. The % Recovery was reported as 130 and the control limits were 55 to 128.



**Detected Results Summary**

Client Sample ID	MW-25-190	Collected	12/16/2024 10:50
Lab Sample ID	3392528001	Lab Receipt	12/17/2024 10:17

<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	6.8	ug/L	1.0	SW846 8270E SIM	#
<b>VOLATILE ORGANICS</b>					
1,1,1-Trichloroethane	2.1	ug/L	1.0	SW846 8260D	#
1,1-Dichloroethane	4.9	ug/L	1.0	SW846 8260D	#
1,1-Dichloroethene	20.4	ug/L	1.0	SW846 8260D	#
Methyl t-Butyl Ether	1.0	ug/L	1.0	SW846 8260D	#



## Results

Client Sample ID	MW-25-190	Collected	12/16/2024 10:50
Lab Sample ID	3392528001	Lab Receipt	12/17/2024 10:17

### SEMIVOLATILE SIM

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
1,4-Dioxane	6.8		ug/L	1.0	SW846 8270E SIM	1	12/20/2024 00:53	CGS	D

### SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
2-Methylnapthalene-d10	7297-45-2	76.1%	29 – 112	12/20/2024 00:53	
Fluoranthene-d10	93951-69-0	92%	45 – 130	12/20/2024 00:53	

### 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	12/20/2024 13:00	ILY	A
1,1,1-Trichloroethane	2.1		ug/L	1.0	SW846 8260D	1	12/20/2024 13:00	ILY	A
1,1,2,2-Tetrachloroethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/20/2024 13:00	ILY	A
1,1,2-Trichloroethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/20/2024 13:00	ILY	A
1,1-Dichloroethane	4.9		ug/L	1.0	SW846 8260D	1	12/20/2024 13:00	ILY	A
1,1-Dichloroethene	20.4		ug/L	1.0	SW846 8260D	1	12/20/2024 13:00	ILY	A
1,1-Dichloropropene	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/20/2024 13:00	ILY	A
1,2,3-Trichlorobenzene	2.0 U	U	ug/L	2.0	SW846 8260D	1	12/20/2024 13:00	ILY	A
1,2,3-Trichloropropane	2.0 U	U	ug/L	2.0	SW846 8260D	1	12/20/2024 13:00	ILY	A
1,2,4-Trichlorobenzene	2.0 U	U	ug/L	2.0	SW846 8260D	1	12/20/2024 13:00	ILY	A
1,2-Dibromo-3-chloropropane	7.0 U	U	ug/L	7.0	SW846 8260D	1	12/20/2024 13:00	ILY	A
1,2-Dibromoethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/20/2024 13:00	ILY	A
1,2-Dichlorobenzene	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/20/2024 13:00	ILY	A
1,2-Dichloroethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/20/2024 13:00	ILY	A
1,2-Dichloropropane	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/20/2024 13:00	ILY	A
1,3-Dichlorobenzene	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/20/2024 13:00	ILY	A
1,3-Dichloropropane	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/20/2024 13:00	ILY	A
1,4-Dichlorobenzene	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/20/2024 13:00	ILY	A
2,2-Dichloropropane	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/20/2024 13:00	ILY	A
2-Butanone	10.0 U	U	ug/L	10.0	SW846 8260D	1	12/20/2024 13:00	ILY	A
2-Hexanone	5.0 U	U	ug/L	5.0	SW846 8260D	1	12/20/2024 13:00	ILY	A
4-Methyl-2-Pentanone(MIBK)	5.0 U	U	ug/L	5.0	SW846 8260D	1	12/20/2024 13:00	ILY	A
Acetone	10.0 U	U	ug/L	10.0	SW846 8260D	1	12/20/2024 13:00	ILY	A
Benzene	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/20/2024 13:00	ILY	A
Bromobenzene	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/20/2024 13:00	ILY	A
Bromochloromethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/20/2024 13:00	ILY	A
Bromodichloromethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/20/2024 13:00	ILY	A
Bromoform	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/20/2024 13:00	ILY	A
Bromomethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/20/2024 13:00	ILY	A
Carbon Tetrachloride	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/20/2024 13:00	ILY	A
Chlorobenzene	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/20/2024 13:00	ILY	A
Chlorodibromomethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/20/2024 13:00	ILY	A
Chloroethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/20/2024 13:00	ILY	A
Chloroform	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/20/2024 13:00	ILY	A
Chloromethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/20/2024 13:00	ILY	A



## Results

Client Sample ID	MW-25-190	Collected	12/16/2024 10:50
Lab Sample ID	3392528001	Lab Receipt	12/17/2024 10:17

### 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	12/20/2024 13:00	ILY	A
cis-1,3-Dichloropropene	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/20/2024 13:00	ILY	A
Dibromomethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/20/2024 13:00	ILY	A
Dichlorodifluoromethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/20/2024 13:00	ILY	A
Diisopropyl ether	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/20/2024 13:00	ILY	A
Ethylbenzene	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/20/2024 13:00	ILY	A
Hexachlorobutadiene	5.0 U	U,1	ug/L	5.0	SW846 8260D	1	12/20/2024 13:00	ILY	A
Methyl t-Butyl Ether	1.0		ug/L	1.0	SW846 8260D	1	12/20/2024 13:00	ILY	A
Methylene Chloride	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/20/2024 13:00	ILY	A
mp-Xylene	2.0 U	U	ug/L	2.0	SW846 8260D	1	12/20/2024 13:00	ILY	A
Naphthalene	2.0 U	U	ug/L	2.0	SW846 8260D	1	12/20/2024 13:00	ILY	A
o-Chlorotoluene	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/20/2024 13:00	ILY	A
o-Xylene	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/20/2024 13:00	ILY	A
p-Chlorotoluene	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/20/2024 13:00	ILY	A
p-Isopropyltoluene	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/20/2024 13:00	ILY	A
Styrene	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/20/2024 13:00	ILY	A
Tetrachloroethene	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/20/2024 13:00	ILY	A
Toluene	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/20/2024 13:00	ILY	A
Total Xylenes	3.0 U	U	ug/L	3.0	SW846 8260D	1	12/20/2024 13:00	ILY	A
trans-1,2-Dichloroethene	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/20/2024 13:00	ILY	A
trans-1,3-Dichloropropene	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/20/2024 13:00	ILY	A
Trichloroethene	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/20/2024 13:00	ILY	A
Trichlorofluoromethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/20/2024 13:00	ILY	A
Vinyl Acetate	5.0 U	U	ug/L	5.0	SW846 8260D	1	12/20/2024 13:00	ILY	A
Vinyl Chloride	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/20/2024 13:00	ILY	A

### SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
1,2-Dichloroethane-d4	17060-07-0	103%	62 - 133	12/20/2024 13:00	
4-Bromofluorobenzene	460-00-4	93.2%	79 - 114	12/20/2024 13:00	
Dibromofluoromethane	1868-53-7	99.7%	78 - 116	12/20/2024 13:00	
Toluene-d8	2037-26-5	105%	76 - 127	12/20/2024 13:00	



**Sample - Method Cross Reference Table**

Lab ID	Sample ID	Analysis Method	Preparation Method	Leachate Method
3392528001	MW-25-190	SW846 8270E SIM SW846 8260D	SW846 3510C N/A	



**QUALITY CONTROL SAMPLES**

**SEMIVOLATILE SIM**

QC Batch			
QC Batch	1356816	Prep Method	SW846 3510C
Date	12/18/2024 09:40	Analysis Method	SW846 8270E SIM
Tech.	EJH		

Associated Samples
3392528001

**Duplicate** 3919807 (DUP) 3392038007 (non-Project Sample) For QC Batch 1356816

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

**RESULTS**

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

**SURROGATES**

Compound	CAS No		Result (ug/L)	Expected (ug/L)	Rec. (%)	Limits (%)	Qualifiers
2-Methylnapthalene-d10	7297-45-2	DUP	0.87	1	86.8	29 - 112	
Fluoranthene-d10	93951-69-0	DUP	1.1	1	113	45 - 130	

**Method Blank** 3919805 (MB) Created on 12/18/2024 08:07 For QC Batch 1356816

**RESULTS**

Compound	CAS No		Result	Units	RDL	Qualifiers
1,4-Dioxane	123-91-1	BLK	1.0	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	0.73	1	72.9	29 - 112	
Fluoranthene-d10	93951-69-0	BLK	0.87	1	87.2	45 - 130	

**Lab Control Standard** 3919806 (LCS) Created on 12/18/2024 08:07 For QC Batch 1356816

**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	0.43		1	42.9	22 - 75		U



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-Methylnapthalene-d10	7297-45-2	LCS	0.7	1	70.2	29 - 112	
Fluoranthene-d10	93951-69-0	LCS	0.86	1	86.5	45 - 130	



**QUALITY CONTROL SAMPLES**

**VOLATILE ORGANICS**

QC Batch		Prep Method	
QC Batch	1358219	Prep Method	N/A
Date	N/A	Analysis Method	SW846 8260D
Tech.			

**Associated Samples**  
 3392528001

**Matrix Spike** 3921681 (MS) 3392316003 (non-Project Sample) For QC Batch 1358219

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

**RESULTS**

Compound	CAS No		Result (ug/L)	Orig. Result (ug/L)	Spk Added (ug/L)	Rec. (%)	Limits (%)	RPD Limit (%)	Qualifiers
1,1,1,2-Tetrachloroethane	630-20-6	MS	22.2	0	20	111	78 - 121		
1,1,1-Trichloroethane	71-55-6	MS	21.5	0	20	107	66 - 130		
1,1,2,2-Tetrachloroethane	79-34-5	MS	24	0	20	120	74 - 135		
1,1,2-Trichloroethane	79-00-5	MS	22.2	0	20	111	82 - 126		
1,1-Dichloroethane	75-34-3	MS	20.1	0	20	101	78 - 124		
1,1-Dichloroethene	75-35-4	MS	20.6	0	20	103	63 - 128		
1,1-Dichloropropene	563-58-6	MS	20.6	0	20	103	76 - 126		
1,2,3-Trichlorobenzene	87-61-6	MS	21.9	0	20	110	61 - 126		
1,2,3-Trichloropropane	96-18-4	MS	22.8	0	20	114	75 - 132		
1,2,4-Trichlorobenzene	120-82-1	MS	23.7	0	20	118	67 - 123		
1,2-Dibromo-3-chloropropane	96-12-8	MS	21.6	0	20	108	59 - 133		
1,2-Dibromoethane	106-93-4	MS	22.4	0	20	112	80 - 124		
1,2-Dichlorobenzene	95-50-1	MS	22.3	0	20	111	82 - 118		
1,2-Dichloroethane	107-06-2	MS	19.3	0	20	96.4	70 - 133		
1,2-Dichloropropane	78-87-5	MS	20.6	0	20	103	81 - 127		
1,3-Dichlorobenzene	541-73-1	MS	21.8	0	20	109	81 - 118		
1,3-Dichloropropane	142-28-9	MS	21.7	0	20	109	82 - 126		
1,4-Dichlorobenzene	106-46-7	MS	21.8	0	20	109	81 - 116		
2,2-Dichloropropane	594-20-7	MS	20.3	0	20	102	64 - 129		
2-Butanone	78-93-3	MS	97.1	0	100	97.1	50 - 152		
2-Hexanone	591-78-6	MS	109	0	100	109	65 - 154		
4-Methyl-2-Pentanone(MIBK)	108-10-1	MS	111	0	100	111	71 - 146		
Acetone	67-64-1	MS	87.4	0	100	87.4	40 - 151		
Benzene	71-43-2	MS	20.4	0	20	102	80 - 124		
Bromobenzene	108-86-1	MS	22.4	0	20	112	81 - 119		
Bromochloromethane	74-97-5	MS	21.2	0	20	106	73 - 117		
Bromodichloromethane	75-27-4	MS	21.7	0	20	108	79 - 126		
Bromoform	75-25-2	MS	21.8	0	20	109	70 - 123		
Bromomethane	74-83-9	MS	15.6	0	20	78	45 - 148		
Carbon Tetrachloride	56-23-5	MS	18.6	0	20	93.1	62 - 132		
Chlorobenzene	108-90-7	MS	20.9	0	20	104	85 - 117		
Chlorodibromomethane	124-48-1	MS	19.4	0	20	97.1	77 - 122		
Chloroethane	75-00-3	MS	19.9	0	20	99.7	51 - 142		
Chloroform	67-66-3	MS	19.8	0	20	98.9	78 - 122		
Chloromethane	74-87-3	MS	17.4	0	20	87.2	38 - 156		
cis-1,2-Dichloroethene	156-59-2	MS	20.6	0	20	103	78 - 125		



QUALITY CONTROL SAMPLES

VOLATILE ORGANICS (cont.)

RESULTS

Compound	CAS No		Result (ug/L)	Orig. Result (ug/L)	Spk Added (ug/L)	Rec. (%)	Limits (%)	RPD Limit (%)	Qualifiers
cis-1,3-Dichloropropene	10061-01-5	MS	18.6	0	20	92.9	81 - 121		
Dibromomethane	74-95-3	MS	20.7	0	20	104	81 - 125		
Dichlorodifluoromethane	75-71-8	MS	17.6	0	20	88	17 - 166		
Diisopropyl ether	108-20-3	MS	20.2	0	20	101	74 - 131		
Ethylbenzene	100-41-4	MS	21.7	0	20	108	80 - 124		
Hexachlorobutadiene	87-68-3	MS	25	0	20	125	55 - 128		
Methyl t-Butyl Ether	1634-04-4	MS	20.2	0	20	101	69 - 115		
Methylene Chloride	75-09-2	MS	20.5	0	20	102	76 - 121		
mp-Xylene	108383/106423	MS	42.8	0	40	107	79 - 125		
Naphthalene	91-20-3	MS	21.9	0	20	110	56 - 134		
o-Chlorotoluene	95-49-8	MS	22.6	0	20	113	78 - 126		
o-Xylene	95-47-6	MS	21.5	0	20	107	79 - 124		
p-Chlorotoluene	106-43-4	MS	22.2	0	20	111	78 - 125		
p-Isopropyltoluene	99-87-6	MS	23.7	0	20	119	72 - 123		
Styrene	100-42-5	MS	20	0	20	99.9	79 - 123		
Tetrachloroethene	127-18-4	MS	19.7	0	20	98.7	72 - 124		
Toluene	108-88-3	MS	21.5	0	20	107	80 - 125		
Total Xylenes	1330-20-7	MS	64.3	0	60	107	79 - 125		
trans-1,2-Dichloroethene	156-60-5	MS	20.1	0	20	100	71 - 122		
trans-1,3-Dichloropropene	10061-02-6	MS	18.8	0	20	93.8	78 - 126		
Trichloroethene	79-01-6	MS	19.7	0	20	98.5	77 - 124		
Trichlorofluoromethane	75-69-4	MS	21.1	0	20	106	38 - 123		
Vinyl Acetate	108-05-4	MS	16.8	0	20	83.8	58 - 136		
Vinyl Chloride	75-01-4	MS	19.4	0	20	97	27 - 138		

SURROGATES

Compound	CAS No		Result (ug/L)	Expected (ug/L)	Rec. (%)	Limits (%)	Qualifiers
1,2-Dichloroethane-d4	17060-07-0	MS	29.7	30	99	62 - 133	
4-Bromofluorobenzene	460-00-4	MS	29.3	30	97.8	79 - 114	
Dibromofluoromethane	1868-53-7	MS	28.8	30	95.9	78 - 116	
Toluene-d8	2037-26-5	MS	29.4	30	98.1	76 - 127	

Method Blank

3921656 (MB)

Created on 12/20/2024 11:36

For QC Batch 1358219

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



QUALITY CONTROL SAMPLES

VOLATILE ORGANICS (cont.)

RESULTS

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



**QUALITY CONTROL SAMPLES**

**VOLATILE ORGANICS (cont.)**

*RESULTS*

Compound	CAS No	Result	Units	RDL	Qualifiers
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 30.2	30	101	62 - 133	
4-Bromofluorobenzene	460-00-4	BLK 29.9	30	99.6	79 - 114	
Dibromofluoromethane	1868-53-7	BLK 28.8	30	96.1	78 - 116	
Toluene-d8	2037-26-5	BLK 30.6	30	102	76 - 127	

**Lab Control Standard** 3921657 (LCS) Created on 12/20/2024 11:36 For QC Batch 1358219

*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 21.2		20	106	66 - 130		
1,1,2,2-Tetrachloroethane	79-34-5	LCS 22.5		20	112	74 - 135		
1,1,2-Trichloroethane	79-00-5	LCS 21.5		20	107	82 - 126		
1,1-Dichloroethane	75-34-3	LCS 20.2		20	101	78 - 124		
1,1-Dichloroethene	75-35-4	LCS 21.6		20	108	63 - 128		
1,1-Dichloropropene	563-58-6	LCS 20.2		20	101	76 - 126		
1,2,3-Trichlorobenzene	87-61-6	LCS 22.3		20	112	61 - 126		
1,2,3-Trichloropropane	96-18-4	LCS 21.4		20	107	75 - 132		
1,2,4-Trichlorobenzene	120-82-1	LCS 24.1		20	120	67 - 123		
1,2-Dibromo-3-chloropropane	96-12-8	LCS 20		20	100	59 - 133		
1,2-Dibromoethane	106-93-4	LCS 21.4		20	107	80 - 124		
1,2-Dichlorobenzene	95-50-1	LCS 22		20	110	82 - 118		
1,2-Dichloroethane	107-06-2	LCS 19.3		20	96.6	70 - 133		
1,2-Dichloropropane	78-87-5	LCS 20.5		20	103	81 - 127		
1,3-Dichlorobenzene	541-73-1	LCS 21.9		20	109	81 - 118		
1,3-Dichloropropane	142-28-9	LCS 21.2		20	106	82 - 126		
1,4-Dichlorobenzene	106-46-7	LCS 21.7		20	108	81 - 116		
2,2-Dichloropropane	594-20-7	LCS 22.3		20	111	64 - 129		
2-Butanone	78-93-3	LCS 89.2		100	89.2	50 - 152		
2-Hexanone	591-78-6	LCS 94.8		100	94.8	65 - 154		
4-Methyl-2-Pentanone(MIBK)	108-10-1	LCS 96.9		100	96.9	71 - 146		
Acetone	67-64-1	LCS 94.6		100	94.6	40 - 151		
Benzene	71-43-2	LCS 20.1		20	101	80 - 124		
Bromobenzene	108-86-1	LCS 22.1		20	110	81 - 119		
Bromochloromethane	74-97-5	LCS 21.3		20	106	73 - 117		
Bromodichloromethane	75-27-4	LCS 21.8		20	109	79 - 126		
Bromoform	75-25-2	LCS 21.3		20	106	70 - 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
Bromomethane	74-83-9	LCS	16.4		20	81.9	45 - 148		
Carbon Tetrachloride	56-23-5	LCS	18.9		20	94.3	62 - 132		
Chlorobenzene	108-90-7	LCS	20.5		20	103	85 - 117		
Chlorodibromomethane	124-48-1	LCS	19.1		20	95.4	77 - 122		
Chloroethane	75-00-3	LCS	19.7		20	98.3	51 - 142		
Chloroform	67-66-3	LCS	19.6		20	98.1	78 - 122		
Chloromethane	74-87-3	LCS	17.8		20	88.8	38 - 156		
cis-1,2-Dichloroethene	156-59-2	LCS	20.6		20	103	78 - 125		
cis-1,3-Dichloropropene	10061-01-5	LCS	19.2		20	96.1	81 - 121		
Dibromomethane	74-95-3	LCS	20.4		20	102	81 - 125		
Dichlorodifluoromethane	75-71-8	LCS	16.8		20	84	17 - 166		
Diisopropyl ether	108-20-3	LCS	20.7		20	104	74 - 131		
Ethylbenzene	100-41-4	LCS	21.2		20	106	80 - 124		
Hexachlorobutadiene	87-68-3	LCS	26		20	130*	55 - 128		
Methyl t-Butyl Ether	1634-04-4	LCS	20.2		20	101	69 - 115		
Methylene Chloride	75-09-2	LCS	21.1		20	105	76 - 121		
mp-Xylene	108383/106423	LCS	41.9		40	105	79 - 125		
Naphthalene	91-20-3	LCS	20.5		20	103	56 - 134		
o-Chlorotoluene	95-49-8	LCS	22		20	110	78 - 126		
o-Xylene	95-47-6	LCS	20.8		20	104	79 - 124		
p-Chlorotoluene	106-43-4	LCS	22.1		20	111	78 - 125		
p-Isopropyltoluene	99-87-6	LCS	23.2		20	116	72 - 123		
Styrene	100-42-5	LCS	19.9		20	99.5	79 - 123		
Tetrachloroethene	127-18-4	LCS	20.1		20	100	72 - 124		
Toluene	108-88-3	LCS	21.1		20	106	80 - 125		
Total Xylenes	1330-20-7	LCS	62.7		60	104	79 - 125		
trans-1,2-Dichloroethene	156-60-5	LCS	20.4		20	102	71 - 122		
trans-1,3-Dichloropropene	10061-02-6	LCS	19.2		20	95.8	78 - 126		
Trichloroethene	79-01-6	LCS	19.3		20	96.5	77 - 124		
Trichlorofluoromethane	75-69-4	LCS	19.3		20	96.7	38 - 123		
Vinyl Acetate	108-05-4	LCS	19.3		20	96.7	58 - 136		
Vinyl Chloride	75-01-4	LCS	18.8		20	94	27 - 138		

SURROGATES

Compound	CAS No		Result (ug/L)	Expected (ug/L)	Rec. (%)	Limits (%)	Qualifiers
1,2-Dichloroethane-d4	17060-07-0	LCS	28.8	30	95.8	62 - 133	
4-Bromofluorobenzene	460-00-4	LCS	29.6	30	98.5	79 - 114	
Dibromofluoromethane	1868-53-7	LCS	28.8	30	96	78 - 116	
Toluene-d8	2037-26-5	LCS	30.2	30	101	76 - 127	

Duplicate 3921680 (DUP) 3392528001 For QC Batch 1358219

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



QUALITY CONTROL SAMPLES

VOLATILE ORGANICS (cont.)

RESULTS

Compound	CAS No		Result (ug/L)	Orig. Result (ug/L)		Qualifiers
1,1,1,2-Tetrachloroethane	630-20-6	DUP	0	0	RPD	0 (Max-) U
1,1,1-Trichloroethane	71-55-6	DUP	2.1796	2.1094	RPD	3.27 (Max-) U
1,1,2,2-Tetrachloroethane	79-34-5	DUP	0	0	RPD	0 (Max-) U
1,1,2-Trichloroethane	79-00-5	DUP	0	0	RPD	0 (Max-) U
1,1-Dichloroethane	75-34-3	DUP	4.9556	4.8896	RPD	1.34 (Max-) U
1,1-Dichloroethene	75-35-4	DUP	21.2252	20.3893	RPD	4.02 (Max-) U
1,1-Dichloropropene	563-58-6	DUP	0	0	RPD	0 (Max-) U
1,2,3-Trichlorobenzene	87-61-6	DUP	0	0	RPD	0 (Max-) U
1,2,3-Trichloropropane	96-18-4	DUP	0	0	RPD	0 (Max-) U
1,2,4-Trichlorobenzene	120-82-1	DUP	0	0	RPD	0 (Max-) U
1,2-Dibromo-3-chloropropane	96-12-8	DUP	0	0	RPD	0 (Max-) U
1,2-Dibromoethane	106-93-4	DUP	0	0	RPD	0 (Max-) U
1,2-Dichlorobenzene	95-50-1	DUP	0	0	RPD	0 (Max-) U
1,2-Dichloroethane	107-06-2	DUP	0.3204	0	RPD	200 (Max-) U
1,2-Dichloropropane	78-87-5	DUP	0	0	RPD	0 (Max-) U
1,3-Dichlorobenzene	541-73-1	DUP	0	0	RPD	0 (Max-) U
1,3-Dichloropropane	142-28-9	DUP	0	0	RPD	0 (Max-) U
1,4-Dichlorobenzene	106-46-7	DUP	0	0	RPD	0 (Max-) U
2,2-Dichloropropane	594-20-7	DUP	0	0	RPD	0 (Max-) U
2-Butanone	78-93-3	DUP	0	0	RPD	0 (Max-) U
2-Hexanone	591-78-6	DUP	0	0	RPD	0 (Max-) U
4-Methyl-2-Pentanone(MIBK)	108-10-1	DUP	0	0	RPD	0 (Max-) U
Acetone	67-64-1	DUP	0	0	RPD	0 (Max-) U
Benzene	71-43-2	DUP	0	0	RPD	0 (Max-) U
Bromobenzene	108-86-1	DUP	0	0	RPD	0 (Max-) U
Bromochloromethane	74-97-5	DUP	0	0	RPD	0 (Max-) U
Bromodichloromethane	75-27-4	DUP	0	0	RPD	0 (Max-) U
Bromoform	75-25-2	DUP	0	0	RPD	0 (Max-) U
Bromomethane	74-83-9	DUP	0	0	RPD	0 (Max-) U
Carbon Tetrachloride	56-23-5	DUP	0	0	RPD	0 (Max-) U
Chlorobenzene	108-90-7	DUP	0	0	RPD	0 (Max-) U
Chlorodibromomethane	124-48-1	DUP	0	0	RPD	0 (Max-) U
Chloroethane	75-00-3	DUP	0	0	RPD	0 (Max-) U
Chloroform	67-66-3	DUP	0	0	RPD	0 (Max-) U
Chloromethane	74-87-3	DUP	0	0	RPD	0 (Max-) U
cis-1,2-Dichloroethene	156-59-2	DUP	0	0	RPD	0 (Max-) U
cis-1,3-Dichloropropene	10061-01-5	DUP	0	0	RPD	0 (Max-) U
Dibromomethane	74-95-3	DUP	0	0	RPD	0 (Max-) U
Dichlorodifluoromethane	75-71-8	DUP	0	0	RPD	0 (Max-) U
Diisopropyl ether	108-20-3	DUP	0	0	RPD	0 (Max-) U
Ethylbenzene	100-41-4	DUP	0	0	RPD	0 (Max-) U
Hexachlorobutadiene	87-68-3	DUP	0	0	RPD	0 (Max-) U
Methyl t-Butyl Ether	1634-04-4	DUP	1.0544	1.0380	RPD	1.57 (Max-) U
Methylene Chloride	75-09-2	DUP	0	0	RPD	0 (Max-) U
mp-Xylene	108383/106423	DUP	0	0	RPD	0 (Max-) U
Naphthalene	91-20-3	DUP	0	0	RPD	0 (Max-) U
o-Chlorotoluene	95-49-8	DUP	0	0	RPD	0 (Max-) U



QUALITY CONTROL SAMPLES

VOLATILE ORGANICS (cont.)

RESULTS

Compound	CAS No		Result (ug/L)	Orig. Result (ug/L)			Qualifiers
o-Xylene	95-47-6	DUP	0	0	RPD	0 (Max-)	U
p-Chlorotoluene	106-43-4	DUP	0	0	RPD	0 (Max-)	U
p-Isopropyltoluene	99-87-6	DUP	0	0	RPD	0 (Max-)	U
Styrene	100-42-5	DUP	0	0	RPD	0 (Max-)	U
Tetrachloroethene	127-18-4	DUP	0	0	RPD	0 (Max-)	U
Toluene	108-88-3	DUP	0	0	RPD	0 (Max-)	U
Total Xylenes	1330-20-7	DUP	0	0	RPD	0 (Max-)	U
trans-1,2-Dichloroethene	156-60-5	DUP	0	0	RPD	0 (Max-)	U
trans-1,3-Dichloropropene	10061-02-6	DUP	0	0	RPD	0 (Max-)	U
Trichloroethene	79-01-6	DUP	0	0	RPD	0 (Max-)	U
Trichlorofluoromethane	75-69-4	DUP	0	0	RPD	0 (Max-)	U
Vinyl Acetate	108-05-4	DUP	0	0	RPD	0 (Max-)	U
Vinyl Chloride	75-01-4	DUP	0	0	RPD	0 (Max-)	U

SURROGATES

Compound	CAS No		Result (ug/L)	Expected (ug/L)	Rec. (%)	Limits (%)	Qualifiers
1,2-Dichloroethane-d4	17060-07-0	DUP	31	30	103	62 - 133	
4-Bromofluorobenzene	460-00-4	DUP	27.3	30	91	79 - 114	
Dibromofluoromethane	1868-53-7	DUP	29.4	30	98.1	78 - 116	
Toluene-d8	2037-26-5	DUP	29.9	30	99.8	76 - 127	



**QUALITY CONTROL DATA CROSS REFERENCE TABLE**

Lab ID	Sample ID	Preparation Method	Prep Batch	Prep Date/Time	By	Analysis Method	Anly Batch
3392528001	MW-25-190	SW846 3510C	1356816	12/18/2024 09:40	EJH	SW846 8270E SIM	1357496
		N/A	N/A	N/A		SW846 8260D	1358219

