



VIA ELECTRONIC MAIL

August 28, 2023

Richelle Hanson, Project Manager
Voluntary Cleanup Program
Maryland Department of the Environment
Land and Materials Administration
1800 Washington Blvd., Suite 625
Baltimore, Maryland 21230

Subject: **Quarterly Status Report No. 27 - Offsite Area**
Former Kop-Flex Facility Site, Hanover, Maryland

Dear Richelle:

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

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

Kind regards,

Robert E. Johnson
Vice President – Earth & Environment

REJ:esr

Encl.

cc: Mr. John Hopkins, 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. 27 – OFFSITE AREA
FORMER KOP-FLEX FACILITY SITE
April 2023 Through June 2023

Site Name: Former Kop-Flex Facility
Site Address: 7555 Harman's 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 APRIL 2023 - JUNE 2023
REPORTING PERIOD**

Most of the offsite monitoring wells screened in the Lower Patapsco aquifer and underlying Patuxent aquifer were sampled on May 22, 2023, using a disposable passive sampling device (HydraSleeve™) previously deployed in each well. Each HydraSleeve™ sampler was carefully retrieved from the well and the requisite volume of the water immediately transferred to the appropriate laboratory-supplied containers. The sample retrieval depths for each well were consistent with those from previous monitoring events and are provided further below. Given the size of the deployed HydraSleeve™ samplers and the sample volume required by the analytical methods, the remaining volume of water was insufficient to obtain measurements of the field parameters – temperature, pH, specific conductivity, and turbidity. For future monitoring events, WSP plans to deploy larger HydraSleeve™ samplers in all wells to enable the collection of sufficient water volume for the measurement of field parameters.

Groundwater samples were not collected from shallow well MW-45 and deep well MW-24D on the Williams-Scotsman, Inc. (WilScot) property that borders the former Kop-Flex property to the south and east because HydraSleeve™ sample bags were not deployed in these wells following the November 2022 monitoring event. Upon discovery of this situation, the WSP field team placed HydraSleeve™ samplers in wells MW-45 and MW-24D during the May 2023 sampling activities. Groundwater samples were collected from these two wells during the week of July 10th following the minimum 2-week equilibration period and the results will be included in the next quarterly report.

- As part of the sampling activities, WSP measured the depth to water in all monitoring wells prior to sample collection. Depth-to-water measurements for the deep monitoring wells are provided in the table below. The water level data provided in the table reflect the hydraulic heads under non-remedial pumping conditions as the remediation pumping wells were not operating at the time. Historical water level measurements are also provided in Table 1 (attached).

WELL ID	HYDROLOGIC UNIT	DEPTH TO WATER (FT BGS)	WELL DEPTH (FT BGS)	WELL SCREEN INTERVAL (FT BGS)	SAMPLE INTERVAL (FT BGS)
MW-24D	Confined Lower Patapsco	49.44	128	118 – 128	122 – 124.5
MW-25D-130	Confined Lower Patapsco	57.68	130	120 – 130	125 – 127.5
MW-25D-192	Confined Lower Patapsco	56.72	192	182 – 192	185 – 187.5
MW-28D	Confined Lower Patapsco	89.06	210	200 – 210	205 – 207.5
MW-29D	Confined Lower Patapsco	65.15	151	141 – 151	146 – 148.5
MW-30D-273	Confined Lower Patapsco	98.76	273	263 – 273	267 – 269.5
MW-30D-413	Patuxent	137.89	413	403 – 413	407 – 409.5
MW-31D	Confined Lower Patapsco	107.82	280	270 – 280	275 – 277.5
MW-32D	Confined Lower Patapsco	98.47	236	226 – 236	233 – 235.5
MW-33D-235	Confined Lower Patapsco	125.61	235	225 – 235	230 – 232.5
MW-33D-295	Confined Lower Patapsco	125.39	295	285 – 295	290 – 292.5
MW-34D	Confined Lower Patapsco	134.32	385	375 – 385	379 – 381.5
MW-35D	Confined Lower Patapsco	126.53	298	288 – 298	293 – 295.5
MW-36D	Patuxent	141.29	360	350 – 360	357 – 359.5
MW-46D	Confined Lower Patapsco	36.26	90	80 – 90	84 – 86.5

FT BGS = feet below ground surface

A potentiometric surface contour map for the deep confined zone of the Lower Patapsco aquifer is shown in Figure 1 using the water level data obtained during the May 2023 sampling activities. The general direction of groundwater flow in this portion of the Lower Patapsco aquifer is to the south-southeast in the offsite area, which is consistent with determinations from contour maps previously generated from data collected under non-remedial pumping conditions. As indicated by the hydraulic head gradients, the groundwater flow direction in the deep confined zone of the Lower Patapsco aquifer differs from the direction of flow in the shallow zone of this aquifer, which is generally to the west-northwest toward Stony Run. VOC-affected groundwater emanating from the Site is limited to the deep zone of the

Lower Patapsco Aquifer offsite. 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 of the Lower Patapsco Aquifer in the area. As discussed below, the Arundel Clay aquitard would prevent the migration of contaminants from the deep zone of the Lower Patapsco Aquifer to the underlying Patuxent Aquifer

- The analytical results for samples collected from the offsite monitoring wells in May 2023 are summarized in Table 2. Copies of the certified laboratory analytical reports for these samples are provided in Enclosure A. Historical groundwater sampling data for the offsite monitoring wells can be found in Table 3. Concentrations of the primary site-related constituents of concern (COCs) in the May 2023 samples are shown on Figure 2.
- The analytical data indicate the presence of site-related constituents just over one mile hydraulically downgradient (south-southeast) of the former Kop-Flex property in the deep, confined zone of the Lower Patapsco Aquifer. Site-related COCs were also detected in the sample from well MW-46D on the neighboring Verizon property, which is located to the north of the former Kop-Flex facility. While MW-46D is not located hydraulically downgradient of the site, the presence of detectable COC levels is most likely related to past releases at the Site, given the well's proximity to the former Kop-Flex facility. The total COC concentration in the MW-46D sample (22.4 micrograms per liter [$\mu\text{g/l}$]) is 80 percent less than the level present in the previous (November 2022) sample (134.3 $\mu\text{g/l}$) and constitutes the single greatest decrease in total COC concentrations since monitoring began. The concentrations of individual COCs, 1,1-dichloroethene (DCE), 1,1-dichloroethane (DCA) and 1,4-dioxane all decreased (Table 3), with only 1,1-DCE (19.2 $\mu\text{g/l}$) detected at a level exceeding the comparative groundwater quality criteria (Table 2).¹ Both 1,1,1-trichloroethane (TCA) and 1,4-dioxane were not present at detectable concentrations in the sample. Historically, concentration changes in this well were believed to reflect natural fluctuations in constituent levels inherent to samples collected during groundwater monitoring activities. It cannot be ruled out however, that the recent concentration declines may reflect the long-term change in COC concentrations within the in-flow, or capture, area of the hydraulic containment system.

Further downgradient, a total concentration of site-related COCs of 82.1 $\mu\text{g/l}$ was detected in the MW-25D-130 sample, which is 23 percent lower than the November 2022 event (107.4 $\mu\text{g/l}$). The concentration of 1,1-DCE (52 $\mu\text{g/l}$), the primary VOC detected at this well, decreased by 35 percent between the November 2022 and May 2023 sampling events, whereas the concentration of 1,4-dioxane (21.3 $\mu\text{g/l}$) increased by 32 percent during the same time period.

At MW-25D-192, within the same well pair, the total site-related COC concentration of 49.8 $\mu\text{g/l}$ was lower than that observed in the shallower well (MW-25D-130) and comparable to the concentrations detected in the 2021 and 2022 samples from this well. Overall, the VOC concentrations in this well are noticeably lower than levels present in the pre-2021 monitoring events. A decreasing trend in the concentrations of 1,1-DCA, 1,1-DCE, 1,4-dioxane, and 1,1-TCA projects as far back as 2018. Even with these concentration declines, the concentrations of 1,1-DCE, 1,1-DCA, and 1,4-dioxane are still above their respective comparative groundwater quality criteria.

- The majority of the sampling data for the deep zone monitoring wells located further downgradient indicated non-detect to low concentrations of site related COCs (Figure 2 and Table 2). The highest concentrations were detected in the sample from the well screened from 263-273 ft BGS at the MW-30D location, which is located along the presumed centerline of the COC plume. The groundwater sample from this well (MW-30D-273) contained 1,1-DCE at a concentration of 35.1 $\mu\text{g/l}$ and 1,4-dioxane at a concentration of 8.0 $\mu\text{g/l}$, both above their respective groundwater quality criteria. Broadly, the concentrations of 1,1-DCE and 1,4-dioxane have gradually decreased at this location since their highest levels in February 2019, and August 2018, respectively (Table 3). During the May 2023 sampling event, the

¹ 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 $\mu\text{g/l}$.



concentrations of these two compounds increased by 12 to 14 percent from the historically low values detected in November 2022.

The concentration of 1,1-DCE (8.3 µg/l) exceeded the comparative criterion in the sample collected from MW-28D. This sample also had a very low detection (1.8 µg/l) of 1,4-dioxane, which was below the evaluation criterion.

The samples from the remaining offsite wells screened in the deep, confined zone of the Lower Patapsco aquifer (MW-29D, MW-31D, MW-32D, MW-33D-295, MW-34D, and MW-35D) had non-detect results for all site-related COCs (Table 2, Figure 2). These monitoring wells are used to delineate the width and downgradient extent of the COC plume in this portion of the 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. Site-related COCs are not anticipated to be in the Patuxent aquifer, given the presence of a thick, clayey confining unit (Arundel Clay) overlying this aquifer that serves as an aquitard to groundwater flow and associated dissolved solute transport. Consistent with previous monitoring events, no site-related COCs were detected in the samples from these wells, indicating constituents have not migrated downward through the Arundel Clay confining unit that hydraulically separates the Lower Patapsco and Patuxent aquifers.

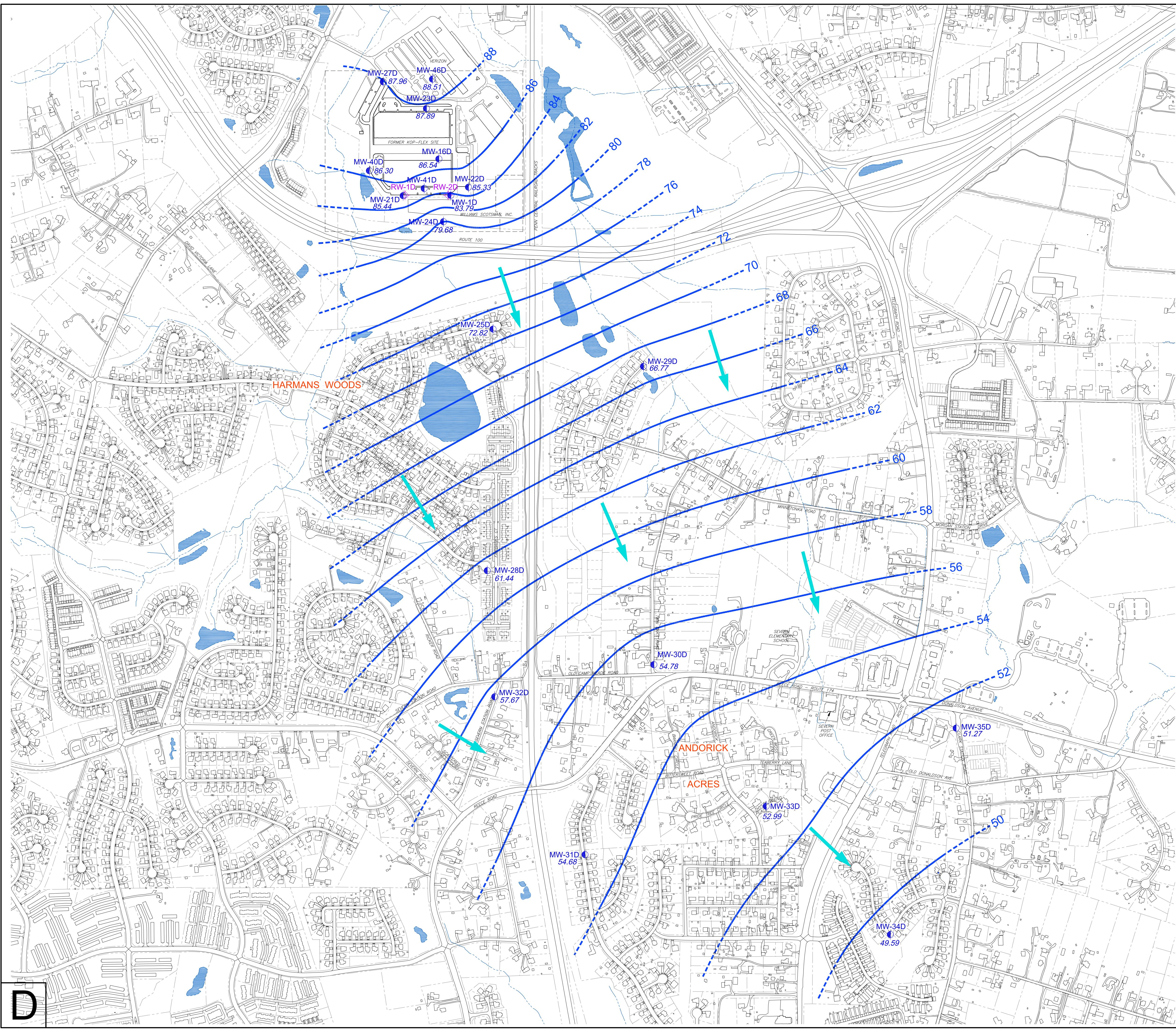
2.0 PLANNED OFFSITE ACTIVITIES FOR NEXT REPORTING PERIOD (JULY 2023 THROUGH SEPTEMBER 2023)

- Collect groundwater samples from wells MW-24D and MW-45 on the WilScot property in mid-July 2023 (completed).
- Submit the 2022 Offsite Groundwater Monitoring Report to MDE and the U.S. Environmental Protection Agency (EPA), Region III.

3.0 KEY PERSONNEL/FACILITY CHANGES

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

FIGURES



LEGEND

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

NOTE:

FIGURE DEPICTS THE POTENIOMETRIC SURFACE IN THE DEEP (CONFINED) ZONE OF THE LOWER PATAPSCO AQUIFER UNDER NON-PUMPING CONDITIONS.

REVISIONS		DESCRIPTION	
REV	DATE	REV	DATE

**POTENIOMETRIC SURFACE CONTOUR MAP DEEP
CONFINED ZONE OF THE LOWER PATAPSCO AQUIFER**

Former KOP-FLEX FACILITY SITE
HANCOCK, MARYLAND

EMERSUB 16 LLC
ST. LOUIS, MISSOURI

PREPARED FOR

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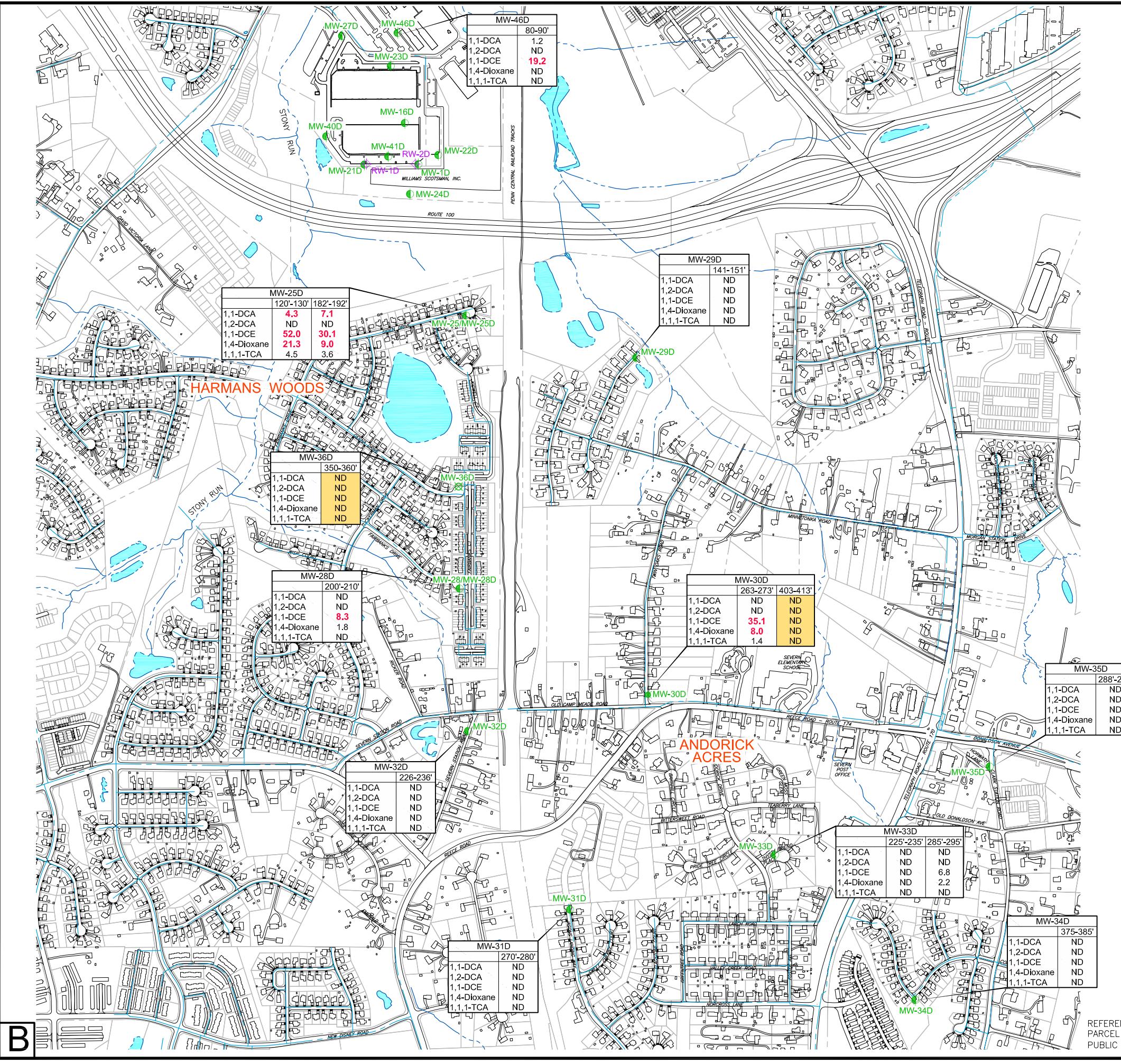
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DATE: **MAY 2023**

DRAWN BY: **EGC** **EE** **8/3/2023**

CHECKED: **EE** **8/3/2023**

APPROVED: **EE** **8/3/2023**



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Drawn By: EGC
Checked: ESR 8/16/2023
Approved: RG
DWG Name: 314V5608.010-045

FORMER KOP-FLEX FACILITY
HANOVER, MARYLAND

PREPARED FOR
EMERSUB 16 LLC
ST. LOUIS, MISSOURI

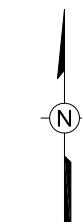
FIGURE 2

GROUNDWATER MONITORING RESULTS
LOWER PATAPSCO AQUIFER AND PATUXENT AQUIFER
OFFSITE MONITORING WELLS – MAY 2023

LEGEND	
PROPERTY LINE	
WATER MAIN	
STREAM	
WATER BODY	
CONFINED LOWER PATAPSCO AQUIFER MONITORING WELL	●
PATUXENT AQUIFER MONITORING WELLS	☒
CONFINED LOWER PATAPSCO AQUIFER AND PATUXENT AQUIFER MONITORING WELLS	●☒
RECOVERY WELL	◇
WELL IDENTIFICATION	
SCREENED INTERVAL (FT-BGS)	MW-28D
SAMPLE RESULTS IN µg/l (RED INDICATES RESULTS ABOVE MDE CLEANUP STANDARDS)	1,1-DCA ND 1,2-DCA ND 1,1-DCE 8.3 1,4-Dioxane 1.8 1,1,1-TCA ND
CONSTITUENTS	
ND	
1,1-DCA	1,1-DICHLOROETHANE
1,2-DCA	1,2-DICHLOROETHANE
1,1-DCE	1,1-DICHLOROETHENE
1,1,1-TCA	1,1,1-TRICHLOROETHANE
TCE	TRICHLOROETHENE
WELL SCREENED IN THE PATUXENT AQUIFER	
NON DETECT	
1,1-DCA	2.8
1,2-DCA	5
1,1-DCE	7
1,4-Dioxane	4.6
1,1,1-TCA	200
TCE	5
Cleanup Levels	
	µg/l
1,1-DCA	2.8
1,2-DCA	5
1,1-DCE	7
1,4-Dioxane	4.6
1,1,1-TCA	200
TCE	5

NOTE:

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 µg/l.



0 800 1600
SCALE IN FEET

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

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TABLES

Table 1

Historical Groundwater Elevations (2015 through Present)
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		12/7/2016	
			Depth to Water	Groundwater Elevation										
MW-25S *	Unconfined LPA	130.6	12.84	117.76	12.46	118.14	14.33	116.27	13.48	117.12	12.75	117.85	14.61	115.99
MW-28S *	Unconfined LPA	150.5	25.56	124.94	25.24	125.26	25.88	124.62	25.35	125.15	25.34	125.16	26.8	123.70
MW-45	Unconfined LPA	126.7	NM	-										
MW-24D	Confined LPA	129.1	50.9	78.20	49.29	79.81	NM	-	NM	-	44.38	84.72	46.3	82.80
MW-25D-130	Confined LPA	130.5	58.7	71.80	57.59	72.91	58.26	72.24	53.95	76.55	51.01	79.49	50.27	80.23
MW-25D-192	Confined LPA	130.5	59.99	70.51	56.4	74.10	57.23	73.27	53.05	77.45	50.27	80.23	52.4	78.10
MW-28D	Confined LPA	150.5	93.06	57.44	89.36	61.14	90.34	60.16	84.62	65.88	80.72	69.78	83.35	67.15
MW-29D	Confined LPA	131.9	NM	-										
MW-30D-273	Confined LPA	153.5	NM	-										
MW-31D	Confined LPA	162.5	114.02	48.48	108.58	53.92	109.51	52.99	102.44	60.06	98.41	64.09	114.20	48.30
MW-32D	Confined LPA	156.1	NM	-										
MW-33D-235	Confined LPA	178.6	131.83	46.77	125.66	52.94	127.11	51.49	119.14	59.46	115.25	63.35	114.2	64.40
MW-33D-295	Confined LPA	178.3	131.52	46.78	125.42	52.88	126.91	51.39	118.90	59.40	114.96	63.34	131.50	46.80
MW-34D	Confined LPA	183.9	NM	-										
MW-35D	Confined LPA	177.8	132.01	45.79	126.28	51.52	127.89	49.91	118.96	58.84	114.34	63.46	131.91	45.89
MW-46D	Confined 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

Table 1

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

Well ID	Aquifer/Zone	TOC Elevation	5/1/2017		8/31/2017		11/14/2017		2/13/2018		5/31/2018		8/23/2018		11/8/2018	
			Depth to Water	Groundwater Elevation												
MW-25S *	Unconfined LPA	130.6	14.02	116.58	14.09	116.51	14.6	116.00	14.56	116.04	13.10	117.50	NM	-	11.84	118.76
MW-28S *	Unconfined LPA	150.5	27.4	123.10	27.2	123.30	27.22	123.28	27.48	123.02	27.42	123.08	NM	-	24.33	126.17
MW-45	Unconfined LPA	126.7	13.67	113.05	NM	-	NM	-	NM	-	12.98	113.74	NM	-	NM	-
MW-24D	Confined LPA	129.1	48.35	80.75	48.35	80.75	51.99	77.11	NM	50.94	78.16	NM	-	NM	-	
MW-25D-130	Confined LPA	130.5	53.80	76.70	61.38	69.12	58.46	72.04	58.31	72.19	58.23	72.27	59.53	70.97	58.75	71.75
MW-25D-192	Confined LPA	130.5	53.11	77.39	60.36	70.14	58.71	71.79	57.49	73.01	57.40	73.10	58.69	71.81	57.63	72.87
MW-28D	Confined LPA	150.5	82.72	67.78	94.55	55.95	89.03	61.47	67.37	83.13	88.75	61.75	90.98	59.52	88.30	62.20
MW-29D	Confined LPA	131.9	NM	-	NM	-	NM	-	NM	-	64.94	66.98	66.56	65.36	65.03	66.89
MW-30D-273	Confined LPA	153.5	NM	-	NM	-	NM	-	NM	-	98.66	54.88	100.70	52.84	98.14	55.40
MW-31D	Confined LPA	162.5	100.24	62.26	115.67	46.83	107.21	55.29	106.29	56.21	106.80	55.70	109.95	52.55	106.27	56.23
MW-32D	Confined LPA	156.1	NM	-	NM	-	NM	-	NM	-	97.90	58.24	100.65	55.49	98.97	57.17
MW-33D-235	Confined LPA	178.6	117.26	61.34	133.39	45.21	124.55	54.05	123.79	54.81	124.00	54.60	127.52	51.08	125.14	53.46
MW-33D-295	Confined LPA	178.3	117.03	61.27	133.14	45.16	124.36	53.94	123.60	54.70	123.83	54.47	127.34	50.96	125.69	52.61
MW-34D	Confined LPA	183.9	NM	-	NM	-	NM	-	NM	-	132.70	51.21	136.42	47.49	131.76	52.15
MW-35D	Confined LPA	177.8	117.28	60.52	133.55	44.25	125.59	52.21	124.02	53.78	124.27	53.53	128.19	49.61	123.64	54.16
MW-46D	Confined LPA	124.8	NM	-												
MW-30D-413	Patuxent	153.1	NM	-	NM	-	NM	-	NM	-	138.10	15.03	143.75	9.38	140.62	12.51
MW-36D	Patuxent	158.7	NM	-	NM	-	NM	-	NM	-	141.75	16.96	146.32	12.39	143.85	14.86

Notes:

LPA = Lower Patapsco Aquifer

NM = Not Measured

TOC = Top of Casing

* Well abandoned in August 2019

Table 1

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

Well ID	Aquifer/Zone	TOC Elevation	2/19/2019		5/22/2019		8/6/2019		11/20/2019		2/12/2020		5/14/2020	
			Depth to Water	Groundwater Elevation										
MW-25S *	Unconfined LPA	130.6	11.75	118.85	NM	-								
MW-28S *	Unconfined LPA	150.5	23.30	127.20	NM	-								
MW-45	Unconfined LPA	126.7	11.98	114.74	11.75	114.97	NM	-	14.55	112.17	NM	-	NM	-
MW-24D	Confined LPA	129.1	48.92	80.18	49.67	79.43	52.37	76.73	51.12	77.98	50.10	79.00	48.80	80.30
MW-25D-130	Confined LPA	130.5	54.96	75.54	56.23	74.27	60.79	69.71	59.94	70.56	55.55	74.95	54.95	75.55
MW-25D-192	Confined LPA	130.5	54.20	76.30	55.45	75.05	60.37	70.13	59.02	71.48	54.70	75.80	54.23	76.27
MW-28D	Confined LPA	150.5	84.78	65.72	86.96	63.54	94.24	56.26	91.37	59.13	85.00	65.50	84.36	66.14
MW-29D	Confined LPA	131.9	60.64	71.28	62.36	69.56	67.20	64.72	67.10	64.82	61.28	70.64	60.61	71.31
MW-30D-273	Confined LPA	153.5	93.10	60.44	95.74	57.80	104.75	48.79	101.12	52.42	93.29	60.25	92.60	60.94
MW-31D	Confined LPA	162.5	102.47	60.03	104.91	57.59	113.35	49.15	110.14	52.36	102.73	59.77	NM	-
MW-32D	Confined LPA	156.1	93.79	62.35	97.02	59.12	99.43	56.71	101.56	54.58	92.35	63.79	94.31	61.83
MW-33D-235	Confined LPA	178.6	119.35	59.25	121.72	56.88	132.76	45.84	127.87	50.73	119.72	58.88	119.10	59.50
MW-33D-295	Confined LPA	178.3	119.10	59.20	NM	NA	131.14	47.16	127.65	50.65	119.54	58.76	118.84	59.46
MW-34D	Confined LPA	183.9	127.40	56.51	129.93	53.98	141.48	42.43	136.62	47.29	127.75	56.16	127.01	56.90
MW-35D	Confined LPA	177.8	119.18	58.62	121.65	56.15	127.51	50.29	129.89	47.91	119.68	58.12	119.06	58.74
MW-46D	Confined LPA	124.8	NM	-	35.47	89.30	38.40	86.37	37.90	86.87	36.13	88.64	35.73	89.04
MW-30D-413	Patuxent	153.1	130.73	22.40	137.25	15.88	145.27	7.86	143.64	9.49	128.12	25.01	127.25	25.88
MW-36D	Patuxent	158.7	134.83	23.88	141.30	17.41	147.65	11.06	146.75	11.96	132.11	26.60	131.08	27.63

Notes:

LPA = Lower Patapsco Aquifer

NM = Not Measured

TOC = Top of Casing

* Well abandoned in August 2019

Table 1

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

Well ID	Aquifer/Zone	TOC Elevation	11/23/2020		5/10/2021		11/15/2021		6/27/2022		11/20/2022		5/22/2023	
			Depth to Water	Groundwater Elevation										
MW-25S *	Unconfined LPA	130.6	NM	-										
MW-28S *	Unconfined LPA	150.5	NM	-										
MW-45	Unconfined LPA	126.7	NM	-	12.69	114.03	12.69	114.03	12.91	113.8	13.54	113.2	NM	-
MW-24D	Confined LPA	129.1	53.02	76.08	50.01	79.09	49.40	79.70	51.06	78.0	53.11	76.0	49.42	79.68
MW-25D-130	Confined LPA	130.5	60.50	70.00	56.11	74.39	NM	-	60.22	70.3	60.00	70.5	57.68	72.82
MW-25D-192	Confined LPA	130.5	59.50	71.00	55.32	75.18	NM	-	59.12	71.4	59.10	71.4	56.72	73.78
MW-28D	Confined LPA	150.5	92.87	57.63	86.34	64.16	89.34	61.16	93.51	57.0	90.81	59.7	89.06	61.44
MW-29D	Confined LPA	131.9	67.75	64.17	62.15	69.77	64.82	67.10	68.45	63.5	66.70	65.2	65.15	66.77
MW-30D-273	Confined LPA	153.5	103.09	50.45	94.95	58.59	99.70	53.84	104.25	49.3	100.23	53.3	98.76	54.78
MW-31D	Confined LPA	162.5	113.30	49.20	104.32	58.18	108.09	54.41	114.2	48.3	109.24	53.3	107.82	54.68
MW-32D	Confined LPA	156.1	103.76	52.38	95.58	60.56	99.72	56.42	104.98	51.2	100.23	55.9	98.47	57.67
MW-33D-235	Confined LPA	178.6	NM	-	121.30	57.30	125.35	53.25	132.13	46.5	126.56	52.0	125.61	52.99
MW-33D-295	Confined LPA	178.3	130.21	48.09	121.08	57.22	125.15	53.15	131.85	46.5	126.29	52.0	125.39	52.91
MW-34D	Confined LPA	183.9	139.08	44.83	129.41	54.50	133.82	50.09	141.12	42.8	134.82	49.1	134.32	49.59
MW-35D	Confined LPA	177.8	129.67	48.13	121.20	56.60	126.19	51.61	132.35	45.5	126.60	51.2	126.53	51.27
MW-46D	Confined LPA	124.8	37.72	87.05	35.95	88.82	35.95	88.82	37.13	87.64	38.38	86.4	36.26	88.51
MW-30D-413	Patuxent	153.1	142.22	10.91	134.60	18.53	140.69	12.44	145.4	7.7	141.52	11.6	137.89	15.2
MW-36D	Patuxent	158.7	145.25	13.46	137.95	20.76	143.70	15.01	148.06	10.7	145.05	13.7	141.29	17.4

Notes:

LPA = Lower Patapsco Aquifer

NM = Not Measured

TOC = Top of Casing

* Well abandoned in August 2019

Table 2

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

Parameters (a)	Groundwater Quality Standards ($\mu\text{g/L}$) (b)	Well ID: Sampling Date:	DEEP (CONFINED) ZONE LOWER PATAPSCO AQUIFER							
			MW-25D-130 05/22/23	DUP-052223 (d) 05/22/23	MW-25D-190 05/22/23	MW-28D 05/22/23	MW-29D 05/22/23	MW-30D-273 05/22/23	MW-31D 05/22/23	MW-32D 05/22/23
Methyl t-Butyl Ether	20		1.0 U	1.0 U	1.4	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1-Dichloroethane	2.8		4.3	5.0	7.1	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1-Dichloroethene	7		52.0	60.0	30.1	8.3	1.0 U	35.1	1.0 U	1.0 U
1,4-Dioxane	4.6 (c)		21.3	21.0	9.0	1.8	1.3 U	8.0	1.0 U	1.7 U
1,1,1-Trichloroethane	200		4.5	5.2	3.6	1.0 U	1.0 U	1.4	1.0 U	1.0 U
Total CVOCs & 1,4-Dioxane			82.1	91.2	49.8	10.1	ND	44.5	ND	ND

Table 2

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

Parameters (a)	Groundwater Quality Standards ($\mu\text{g/L}$) (b)	DEEP (CONFINED) ZONE LOWER PATAPSCO AQUIFER					PATUXENT AQUIFER		
		Well ID: Sampling Date:	MW-33D-235 05/22/23	MW-33D-295 05/22/23	MW-34D 05/22/23	MW-35D 05/22/23	MW-46D 05/21/23	MW-30D-413 05/22/23	MW-36D 05/22/23
Methyl t-Butyl Ether	20		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1-Dichloroethane	2.8		1.0 U	1.0 U	1.0 U	1.0 U	1.2	1.0 U	1.0 U
1,1-Dichloroethene	7		1.0 U	6.8	1.0 U	1.0 U	19.2	1.0 U	1.0 U
1,4-Dioxane	4.6 (c)		1.5 U	2.2	1.4 U	1.0 U	1.0 U	1.4 U	1.5 U
1,1,1-Trichloroethane	200		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Total CVOCs & 1,4-Dioxane			<i>ND</i>	9.0	<i>ND</i>	<i>ND</i>	20.4	<i>ND</i>	<i>ND</i>

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

Bolded values indicate an exceedance of the Groundwater Quality Standards

All sample concentrations in micrograms per liter ($\mu\text{g/l}$)

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/>

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

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

Table 3

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
		NE	2.8 (1)	5	7	70	4.6	5	200	5	5
	Groundwater Quality Standard (µg/L)										
Shallow Zone Lower Patapsco Wells (b)											
MW-25 (c)	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	11.7	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
MW-28 (c)	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
	5/22/2023	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	2.0 U	1.0 U	1.0 U	1.0 U
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

Table 3

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
Deep Zone Lower Patapsco Wells											
MW-24D	3/22/2016	12.5 U	88.0	15.7	1,780	12.5 U	561.0	39.4	38.6	12.5 U	12.5 U
	12/8/2016	5.0 U	36.1	5.2	701	5.0 U	192.0	10.0 U	9.0	5.0 U	5.0 U
	5/2/2017	5.0 U	40.4	5.6	830	5.0 U	216.0	10.0 U	10.2	5.0 U	5.0 U
	11/14/2017	5.0 U	28.1	3.4	803	2.3	212.0	11.7	10.5	0.5 J	5.9
	5/30/2018	4.0 U	26.6	4.0 U	529	4.0 U	187.0	8.0 U	5.5	4.0 U	4.0 U
	11/7/2018	5.0 U	29.8	5.0 U	560	5.0 U	2.0 U	10.0 U	5.0 U	5.0 U	5.0 U
	5/22/2019	10.0 U	66.2	10.0 U	1,190	10.0 U	359.0	50.0 U	18.0	10.0 U	10.0 U
	11/19/2019	5.0 U	54.5	6.6	868	5.0 U	155.0	25.0 U	10.0	5.0 U	6.0 U
	5/12/2020	2.5 U	25.0	3.3	402	5.0 U	139.0	25.0 U	3.7	5.0 U	3.2
	11/23/2020	4.0 U	73.5	4.0 U	505	4.0 U	208.0	20.0 U	4.4	4.0 U	4.0 U
	5/10/2021	6.2	151.0	6.3	788	7.2	299.0	25.0 U	10.9	5.0 U	5.0 U
	11/15/2021	10.0 U	142.0	10.0 U	1,300	10.0 U	475.0	25.0 U	16.1	5.0 U	5.0 U
	6/27/2022	3.6	142.0	7.4	1,490	6.9	165.0	1.0 U	18.5	1.0	8.6
	11/21/2022	2.8	114.0	7.5	1,020	5.5	148.0	1.0 U	15.3	1.2	7.7
MW-25D-130	3/19/2015	10.0 U	38.6	10.8	854	10.0 U	446	200 U	8,930	100 U	100 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	0.57 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

Table 3

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

Table 3

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

Table 3

Historical 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
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
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

Table 3

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
		NE	2.8 (1)	5	7	70	4.6	5	200	5	5
	Groundwater Quality Standard (µg/L)										
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
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	1.0 U	1.3	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

Table 3

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
		NE	2.8 (1)	5	7	70	4.6	5	200	5	5
	Groundwater Quality Standard (µg/L)										
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
MW-46D	5/30/2018	1.0 U	13.7	1.0 U	29.4	1.0 U	73.5	2.0 U	1.2	1.0 U	1.0 U
	11/7/2018	1.0 U	22.1	1.2	99.6	1.0 U	96.7	2.0 U	7.7	1.0 U	1.0 U
	5/21/2019	1.0 U	26.1	1.0	125	1.0 U	88.0	5.0 U	10.2	1.0 U	1.0 U
	11/19/2019	1.0 U	23.4	1.4	114	1.0	96.3	5.0 U	1.0 U	1.0 U	1.0 U
	5/12/2020	1.0 U	20.7	1.4	98	1.0	63.0	5.0 U	1.0 U	1.0 U	1.0 U
	11/23/2020	1.0 U	18.4	1.0 U	124	1.0 U	29.8	5.0 U	6.4	1.0 U	1.0 U
	5/9/2021	1.0 U	25.7	1.5	116	1.0 U	99.3	5.0 U	7.8	1.0 U	1.0 U
	11/15/2021	1.0 U	19.9	1.0 U	87	1.0 U	79.9	5.0 U	4.8	1.0 U	1.0 U
	6/27/2022	1.0 U	20.7	1.0 U	92	1.0 U	23.4	5.0 U	5.7	1.0 U	1.0 U
	11/21/2022	1.0 U	15.7	1.0 U	74.9	1.0 U	40.1	1.0 U	3.6	1.0 U	1.0 U
Confined Patuxent Wells	5/21/2023	1.0 U	1.2	1.0 U	19.2	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
	MW-30D-413	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
	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 3

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
		NE	2.8 (1)	5	7	70	4.6	5	200	5	5
	Groundwater Quality Standard (µg/L)										
MW-30D-413	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
MW-36D	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	1.5 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 exceedance of the Groundwater Quality Standards

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

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

NS = well not sampled

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

c/ Well decommissioned in August 2019

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



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

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

Analytical Results Report For

WSP USA Inc.

Project Former KOP-Flex Facility Onsite
Workorder 3304366
Report ID 264398 on 8/16/2023 (Revised report. See Project Notations Section.)

Certificate of Analysis

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

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

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

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

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

Recipient(s):

Elliott Martynkiewicz - WSP USA Inc.
Eric Johnson - WSP USA INC

Susan Scherer

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

Susan Scherer
Project Coordinator

(ALS Digital Signature)

Sample Summary

Lab ID	Sample ID	Matrix	Date Collected	Date Received	Collector	Collection Company
3304366001	MW-35D	Ground Water	05/22/2023 08:25	05/22/2023 18:15	CBC	Collected By Client
3304366002	MW-34D	Ground Water	05/22/2023 09:00	05/22/2023 18:15	CBC	Collected By Client
3304366003	MW-33D-295	Ground Water	05/22/2023 09:20	05/22/2023 18:15	CBC	Collected By Client
3304366004	MW-33D-235	Ground Water	05/22/2023 09:35	05/22/2023 18:15	CBC	Collected By Client
3304366005	MW-31D	Ground Water	05/22/2023 09:50	05/22/2023 18:15	CBC	Collected By Client
3304366006	MW-30D-413	Ground Water	05/22/2023 10:10	05/22/2023 18:15	CBC	Collected By Client
3304366007	MW-30D-273	Ground Water	05/22/2023 10:20	05/22/2023 18:15	CBC	Collected By Client
3304366008	MW-29D	Ground Water	05/22/2023 10:45	05/22/2023 18:15	CBC	Collected By Client
3304366009	MW-32D	Ground Water	05/22/2023 11:05	05/22/2023 18:15	CBC	Collected By Client
3304366010	MW-28D	Ground Water	05/22/2023 12:25	05/22/2023 18:15	CBC	Collected By Client
3304366011	MW-36D	Ground Water	05/22/2023 12:40	05/22/2023 18:15	CBC	Collected By Client
3304366012	MW-25D-130	Ground Water	05/22/2023 13:45	05/22/2023 18:15	CBC	Collected By Client
3304366013	DUP-052223	Ground Water	05/22/2023 11:30	05/22/2023 18:15	CBC	Collected By Client
3304366014	MW-25D-190	Ground Water	05/22/2023 14:00	05/22/2023 18:15	CBC	Collected By Client
3304366015	Trip Blank A	Ground Water	05/22/2023 00:00	05/22/2023 18:15	CBC	Collected By Client
3304366016	Trip Blank B	Ground Water	05/22/2023 00:00	05/22/2023 18:15	CBC	Collected By Client

Reference

Notes

- Samples collected by ALS personnel are done so in accordance with the procedures set forth in the ALS Field Sampling Plan (20 - Field Services Sampling Plan).
- Except as qualified, Clean Water Act sample analyses are consistent with methodology requirements in 40 CFR Part 136, 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 Former KOP-Flex Facility Onsit
Workorder 3304366

Project Notations

- P1** This certificate of analysis was modified based on the inquiry from Erik Reinert on 08/07/23 regarding the dilutions raised reporting limits in SEMIVOLATILE SIM [1,4-Dioxane] on 3304366012 & 3304366013. The results of the initial undiluted run for the samples exceeded the calibration range. The samples were re-analyzed at a dilution to bring into the calibration range. Profile specific reporting limits were set up for this project at 1 ug/L. Although the analyte was diluted into the calibration range, the elevated profile specific PQL was greater than the detected result. The project limit was adjusted back to the default for these two samples so the detection will be above the reporting detection limit. SJS 08/16/23

Sample Notations

Lab ID Sample ID

Result Notations

Notation Ref.

- 1 The initial calibration verification for method SW846 8260D was outside the control limits for the analyte chloroethane. The % Recovery was reported as 68% and the control limits were 70 to 130%.
- 2 This compound was recovered below the 20 percent 8260D criteria in the continuing calibration verification associated with this sample.
- 3 The surrogate Fluoranthene-d10 for method SW846 8270E SIM was outside of control limits. The % Recovery was reported as 38.2 and the control limits were 45 to 130. This result was reported at a dilution of 1.
- 4 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.
- 5 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.
- 6 The QC sample type MS for method SW846 8270E SIM was outside the control limits for the analyte 1,4-Dioxane. The % Recovery was reported as 137 and the control limits were 22 to 75.
- 7 The QC sample type MSD for method SW846 8270E SIM was outside the control limits for the analyte 1,4-Dioxane. The RPD was reported as 56.8 and the upper control limit is 30.
- 8 The QC sample type MSD for method SW846 8270E SIM was outside the control limits for the analyte 1,4-Dioxane. The % Recovery was reported as -316 and the control limits were 22 to 75.

Detected Results Summary

Client Sample ID	MW-33D-295	Collected	05/22/2023 09:20
Lab Sample ID	3304366003	Lab Receipt	05/22/2023 18:15

<u>Compound</u>	<u>Result</u>	<u>Units</u>	<u>RDL</u>	<u>Method</u>	<u>Flag</u>
SEMICVOLATILE SIM					
1,4-Dioxane	2.2	ug/L	1.4	SW846 8270E SIM	#
VOLATILE ORGANICS					
1,1-Dichloroethene	6.8	ug/L	1.0	SW846 8260D	#

Detected Results Summary

Client Sample ID	MW-30D-273	Collected	05/22/2023 10:20
Lab Sample ID	3304366007	Lab Receipt	05/22/2023 18:15

<u>Compound</u>	<u>Result</u>	<u>Units</u>	<u>RDL</u>	<u>Method</u>	<u>Flag</u>
SEMICVOLATILE SIM					
1,4-Dioxane	8.0	ug/L	1.0	SW846 8270E SIM	#
VOLATILE ORGANICS					
1,1,1-Trichloroethane	1.4	ug/L	1.0	SW846 8260D	#
1,1-Dichloroethene	35.1	ug/L	1.0	SW846 8260D	#

Detected Results Summary

Client Sample ID	MW-28D	Collected	05/22/2023 12:25
Lab Sample ID	3304366010	Lab Receipt	05/22/2023 18:15

<u>Compound</u>	<u>Result</u>	<u>Units</u>	<u>RDL</u>	<u>Method</u>	<u>Flag</u>
SEMICVOLATILE SIM					
1,4-Dioxane	1.8	ug/L	1.0	SW846 8270E SIM	#
VOLATILE ORGANICS					
1,1-Dichloroethene	8.3	ug/L	1.0	SW846 8260D	#

Detected Results Summary

Client Sample ID	MW-25D-130	Collected	05/22/2023 13:45
Lab Sample ID	3304366012	Lab Receipt	05/22/2023 18:15

Compound	Result	Units	RDL	Method	Flag
SEMICVOLATILE SIM					
1,4-Dioxane	21.3	ug/L	2.1	SW846 8270E SIM	#
VOLATILE ORGANICS					
1,1,1-Trichloroethane	4.5	ug/L	1.0	SW846 8260D	#
1,1-Dichloroethane	4.3	ug/L	1.0	SW846 8260D	#
1,1-Dichloroethene	52.0	ug/L	1.0	SW846 8260D	#

Detected Results Summary

Client Sample ID	DUP-052223	Collected	05/22/2023 11:30
Lab Sample ID	3304366013	Lab Receipt	05/22/2023 18:15

<u>Compound</u>	<u>Result</u>	<u>Units</u>	<u>RDL</u>	<u>Method</u>	<u>Flag</u>
SEMICVOLATILE SIM					
1,4-Dioxane	21.0	ug/L	2.6	SW846 8270E SIM	#
VOLATILE ORGANICS					
1,1,1-Trichloroethane	5.2	ug/L	1.0	SW846 8260D	#
1,1-Dichloroethane	5.0	ug/L	1.0	SW846 8260D	#
1,1-Dichloroethene	60.0	ug/L	1.0	SW846 8260D	#

Detected Results Summary

Client Sample ID	MW-25D-190	Collected	05/22/2023 14:00
Lab Sample ID	3304366014	Lab Receipt	05/22/2023 18:15

<u>Compound</u>	<u>Result</u>	<u>Units</u>	<u>RDL</u>	<u>Method</u>	<u>Flag</u>
SEMICVOLATILE SIM					
1,4-Dioxane	9.0	ug/L	1.0	SW846 8270E SIM	#
VOLATILE ORGANICS					
1,1,1-Trichloroethane	3.6	ug/L	1.0	SW846 8260D	#
1,1-Dichloroethane	7.1	ug/L	1.0	SW846 8260D	#
1,1-Dichloroethene	30.1	ug/L	1.0	SW846 8260D	#
Methyl t-Butyl Ether	1.4	ug/L	1.0	SW846 8260D	#



Project Former KOP-Flex Facility Onsit
Workorder 3304366

Results

Client Sample ID	MW-35D	Collected	05/22/2023 08:25
Lab Sample ID	3304366001	Lab Receipt	05/22/2023 18:15

SEMIVOLATILE SIM

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
1,4-Dioxane	1.0 U	U,P1	ug/L	1.0	SW846 8270E SIM	1	05/25/2023 07:40	GEC	C

SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
2-Methylnaphthalene-d10	7297-45-2	55.9%	29 – 112	05/25/2023 07:40	
Fluoranthene-d10	93951-69-0	73.3%	45 – 130	05/25/2023 07:40	

VOLATILE ORGANICS

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
1,1,1,2-Tetrachloroethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 12:28	TMP	A
1,1,1-Trichloroethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 12:28	TMP	A
1,1,2,2-Tetrachloroethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 12:28	TMP	A
1,1,2-Trichloroethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 12:28	TMP	A
1,1-Dichloroethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 12:28	TMP	A
1,1-Dichloroethene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 12:28	TMP	A
1,1-Dichloropropene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 12:28	TMP	A
1,2,3-Trichlorobenzene	2.0 U	U,P1	ug/L	2.0	SW846 8260D	1	06/01/2023 12:28	TMP	A
1,2,3-Trichloropropane	2.0 U	U,P1	ug/L	2.0	SW846 8260D	1	06/01/2023 12:28	TMP	A
1,2,4-Trichlorobenzene	2.0 U	U,P1	ug/L	2.0	SW846 8260D	1	06/01/2023 12:28	TMP	A
1,2-Dibromo-3-chloropropane	7.0 U	U,P1	ug/L	7.0	SW846 8260D	1	06/01/2023 12:28	TMP	A
1,2-Dibromoethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 12:28	TMP	A
1,2-Dichlorobenzene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 12:28	TMP	A
1,2-Dichloroethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 12:28	TMP	A
1,2-Dichloropropane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 12:28	TMP	A
1,3-Dichlorobenzene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 12:28	TMP	A
1,3-Dichloropropane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 12:28	TMP	A
1,4-Dichlorobenzene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 12:28	TMP	A
2,2-Dichloropropane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 12:28	TMP	A
2-Butanone	10.0 U	U,P1	ug/L	10.0	SW846 8260D	1	06/01/2023 12:28	TMP	A
2-Hexanone	5.0 U	U,P1	ug/L	5.0	SW846 8260D	1	06/01/2023 12:28	TMP	A
4-Methyl-2-Pentanone(MIBK)	5.0 U	U,P1	ug/L	5.0	SW846 8260D	1	06/01/2023 12:28	TMP	A
Acetone	10.0 U	U,P1	ug/L	10.0	SW846 8260D	1	06/01/2023 12:28	TMP	A
Benzene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 12:28	TMP	A
Bromobenzene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 12:28	TMP	A
Bromochloromethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 12:28	TMP	A
Bromodichloromethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 12:28	TMP	A
Bromoform	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 12:28	TMP	A
Bromomethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 12:28	TMP	A
Carbon Tetrachloride	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 12:28	TMP	A
Chlorobenzene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 12:28	TMP	A
Chlorodibromomethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 12:28	TMP	A
Chloroethane	1.0 U	U,I,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 12:28	TMP	A
Chloroform	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 12:28	TMP	A
Chloromethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 12:28	TMP	A

Results

Client Sample ID	MW-35D	Collected	05/22/2023 08:25
Lab Sample ID	3304366001	Lab Receipt	05/22/2023 18:15

VOLATILE ORGANICS (cont.)

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
cis-1,2-Dichloroethene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 12:28	TMP	A
cis-1,3-Dichloropropene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 12:28	TMP	A
Dibromomethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 12:28	TMP	A
Dichlorodifluoromethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 12:28	TMP	A
Diisopropyl ether	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 12:28	TMP	A
Ethylbenzene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 12:28	TMP	A
Hexachlorobutadiene	5.0 U	U,P1	ug/L	5.0	SW846 8260D	1	06/01/2023 12:28	TMP	A
Methyl t-Butyl Ether	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 12:28	TMP	A
Methylene Chloride	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 12:28	TMP	A
mp-Xylene	2.0 U	U,P1	ug/L	2.0	SW846 8260D	1	06/01/2023 12:28	TMP	A
Naphthalene	2.0 U	U,P1	ug/L	2.0	SW846 8260D	1	06/01/2023 12:28	TMP	A
o-Chlorotoluene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 12:28	TMP	A
o-Xylene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 12:28	TMP	A
p-Chlorotoluene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 12:28	TMP	A
p-Isopropyltoluene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 12:28	TMP	A
Styrene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 12:28	TMP	A
Tetrachloroethene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 12:28	TMP	A
Toluene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 12:28	TMP	A
Total Xylenes	3.0 U	U,P1	ug/L	3.0	SW846 8260D	1	06/01/2023 12:28	TMP	A
trans-1,2-Dichloroethene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 12:28	TMP	A
trans-1,3-Dichloropropene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 12:28	TMP	A
Trichloroethene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 12:28	TMP	A
Trichlorofluoromethane	1.0 U	U,2,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 12:28	TMP	A
Vinyl Acetate	5.0 U	U,P1	ug/L	5.0	SW846 8260D	1	06/01/2023 12:28	TMP	A
Vinyl Chloride	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 12:28	TMP	A

SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
1,2-Dichloroethane-d4	17060-07-0	98.7%	62 – 133	06/01/2023 12:28	
4-Bromofluorobenzene	460-00-4	100%	79 – 114	06/01/2023 12:28	
Dibromofluoromethane	1868-53-7	94.2%	78 – 116	06/01/2023 12:28	
Toluene-d8	2037-26-5	99.5%	76 – 127	06/01/2023 12:28	



Project Former KOP-Flex Facility Onsit
Workorder 3304366

Results

Client Sample ID	MW-34D	Collected	05/22/2023 09:00
Lab Sample ID	3304366002	Lab Receipt	05/22/2023 18:15

SEMIVOLATILE SIM

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
1,4-Dioxane	1.4 U	U,P1	ug/L	1.4	SW846 8270E SIM	1	05/25/2023 08:07	GEC	C

SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
2-Methylnaphthalene-d10	7297-45-2	55.1%	29 – 112	05/25/2023 08:07	
Fluoranthene-d10	93951-69-0	59.8%	45 – 130	05/25/2023 08:07	

VOLATILE ORGANICS

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
1,1,1,2-Tetrachloroethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 12:51	TMP	A
1,1,1-Trichloroethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 12:51	TMP	A
1,1,2,2-Tetrachloroethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 12:51	TMP	A
1,1,2-Trichloroethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 12:51	TMP	A
1,1-Dichloroethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 12:51	TMP	A
1,1-Dichloroethene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 12:51	TMP	A
1,1-Dichloropropene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 12:51	TMP	A
1,2,3-Trichlorobenzene	2.0 U	U,P1	ug/L	2.0	SW846 8260D	1	06/01/2023 12:51	TMP	A
1,2,3-Trichloropropane	2.0 U	U,P1	ug/L	2.0	SW846 8260D	1	06/01/2023 12:51	TMP	A
1,2,4-Trichlorobenzene	2.0 U	U,P1	ug/L	2.0	SW846 8260D	1	06/01/2023 12:51	TMP	A
1,2-Dibromo-3-chloropropane	7.0 U	U,P1	ug/L	7.0	SW846 8260D	1	06/01/2023 12:51	TMP	A
1,2-Dibromoethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 12:51	TMP	A
1,2-Dichlorobenzene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 12:51	TMP	A
1,2-Dichloroethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 12:51	TMP	A
1,2-Dichloropropane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 12:51	TMP	A
1,3-Dichlorobenzene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 12:51	TMP	A
1,3-Dichloropropane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 12:51	TMP	A
1,4-Dichlorobenzene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 12:51	TMP	A
2,2-Dichloropropane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 12:51	TMP	A
2-Butanone	10.0 U	U,P1	ug/L	10.0	SW846 8260D	1	06/01/2023 12:51	TMP	A
2-Hexanone	5.0 U	U,P1	ug/L	5.0	SW846 8260D	1	06/01/2023 12:51	TMP	A
4-Methyl-2-Pentanone(MIBK)	5.0 U	U,P1	ug/L	5.0	SW846 8260D	1	06/01/2023 12:51	TMP	A
Acetone	10.0 U	U,P1	ug/L	10.0	SW846 8260D	1	06/01/2023 12:51	TMP	A
Benzene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 12:51	TMP	A
Bromobenzene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 12:51	TMP	A
Bromochloromethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 12:51	TMP	A
Bromodichloromethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 12:51	TMP	A
Bromoform	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 12:51	TMP	A
Bromomethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 12:51	TMP	A
Carbon Tetrachloride	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 12:51	TMP	A
Chlorobenzene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 12:51	TMP	A
Chlorodibromomethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 12:51	TMP	A
Chloroethane	1.0 U	U,I,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 12:51	TMP	A
Chloroform	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 12:51	TMP	A
Chloromethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 12:51	TMP	A

Results

Client Sample ID	MW-34D	Collected	05/22/2023 09:00
Lab Sample ID	3304366002	Lab Receipt	05/22/2023 18:15

VOLATILE ORGANICS (cont.)

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
cis-1,2-Dichloroethene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 12:51	TMP	A
cis-1,3-Dichloropropene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 12:51	TMP	A
Dibromomethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 12:51	TMP	A
Dichlorodifluoromethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 12:51	TMP	A
Diisopropyl ether	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 12:51	TMP	A
Ethylbenzene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 12:51	TMP	A
Hexachlorobutadiene	5.0 U	U,P1	ug/L	5.0	SW846 8260D	1	06/01/2023 12:51	TMP	A
Methyl t-Butyl Ether	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 12:51	TMP	A
Methylene Chloride	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 12:51	TMP	A
mp-Xylene	2.0 U	U,P1	ug/L	2.0	SW846 8260D	1	06/01/2023 12:51	TMP	A
Naphthalene	2.0 U	U,P1	ug/L	2.0	SW846 8260D	1	06/01/2023 12:51	TMP	A
o-Chlorotoluene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 12:51	TMP	A
o-Xylene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 12:51	TMP	A
p-Chlorotoluene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 12:51	TMP	A
p-Isopropyltoluene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 12:51	TMP	A
Styrene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 12:51	TMP	A
Tetrachloroethene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 12:51	TMP	A
Toluene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 12:51	TMP	A
Total Xylenes	3.0 U	U,P1	ug/L	3.0	SW846 8260D	1	06/01/2023 12:51	TMP	A
trans-1,2-Dichloroethene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 12:51	TMP	A
trans-1,3-Dichloropropene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 12:51	TMP	A
Trichloroethene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 12:51	TMP	A
Trichlorofluoromethane	1.0 U	U,2,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 12:51	TMP	A
Vinyl Acetate	5.0 U	U,P1	ug/L	5.0	SW846 8260D	1	06/01/2023 12:51	TMP	A
Vinyl Chloride	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 12:51	TMP	A

SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
1,2-Dichloroethane-d4	17060-07-0	98.6%	62 – 133	06/01/2023 12:51	
4-Bromofluorobenzene	460-00-4	98.4%	79 – 114	06/01/2023 12:51	
Dibromofluoromethane	1868-53-7	95.5%	78 – 116	06/01/2023 12:51	
Toluene-d8	2037-26-5	99.9%	76 – 127	06/01/2023 12:51	



Project Former KOP-Flex Facility Onsit
Workorder 3304366

Results

Client Sample ID	MW-33D-295	Collected	05/22/2023 09:20
Lab Sample ID	3304366003	Lab Receipt	05/22/2023 18:15

SEMIVOLATILE SIM

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
1,4-Dioxane	2.2	P1	ug/L	1.4	SW846 8270E SIM	1	05/25/2023 08:34	GEC	C

SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
2-Methylnaphthalene-d10	7297-45-2	46%	29 – 112	05/25/2023 08:34	
Fluoranthene-d10	93951-69-0	76.1%	45 – 130	05/25/2023 08:34	

VOLATILE ORGANICS

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
1,1,1,2-Tetrachloroethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 13:14	TMP	A
1,1,1-Trichloroethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 13:14	TMP	A
1,1,2,2-Tetrachloroethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 13:14	TMP	A
1,1,2-Trichloroethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 13:14	TMP	A
1,1-Dichloroethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 13:14	TMP	A
1,1-Dichloroethene	6.8	P1	ug/L	1.0	SW846 8260D	1	06/01/2023 13:14	TMP	A
1,1-Dichloropropene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 13:14	TMP	A
1,2,3-Trichlorobenzene	2.0 U	U,P1	ug/L	2.0	SW846 8260D	1	06/01/2023 13:14	TMP	A
1,2,3-Trichloropropane	2.0 U	U,P1	ug/L	2.0	SW846 8260D	1	06/01/2023 13:14	TMP	A
1,2,4-Trichlorobenzene	2.0 U	U,P1	ug/L	2.0	SW846 8260D	1	06/01/2023 13:14	TMP	A
1,2-Dibromo-3-chloropropane	7.0 U	U,P1	ug/L	7.0	SW846 8260D	1	06/01/2023 13:14	TMP	A
1,2-Dibromoethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 13:14	TMP	A
1,2-Dichlorobenzene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 13:14	TMP	A
1,2-Dichloroethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 13:14	TMP	A
1,2-Dichloropropane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 13:14	TMP	A
1,3-Dichlorobenzene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 13:14	TMP	A
1,3-Dichloropropane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 13:14	TMP	A
1,4-Dichlorobenzene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 13:14	TMP	A
2,2-Dichloropropane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 13:14	TMP	A
2-Butanone	10.0 U	U,P1	ug/L	10.0	SW846 8260D	1	06/01/2023 13:14	TMP	A
2-Hexanone	5.0 U	U,P1	ug/L	5.0	SW846 8260D	1	06/01/2023 13:14	TMP	A
4-Methyl-2-Pentanone(MIBK)	5.0 U	U,P1	ug/L	5.0	SW846 8260D	1	06/01/2023 13:14	TMP	A
Acetone	10.0 U	U,P1	ug/L	10.0	SW846 8260D	1	06/01/2023 13:14	TMP	A
Benzene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 13:14	TMP	A
Bromobenzene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 13:14	TMP	A
Bromochloromethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 13:14	TMP	A
Bromodichloromethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 13:14	TMP	A
Bromoform	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 13:14	TMP	A
Bromomethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 13:14	TMP	A
Carbon Tetrachloride	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 13:14	TMP	A
Chlorobenzene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 13:14	TMP	A
Chlorodibromomethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 13:14	TMP	A
Chloroethane	1.0 U	U,I,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 13:14	TMP	A
Chloroform	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 13:14	TMP	A
Chloromethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 13:14	TMP	A



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Workorder 3304366

Results

Client Sample ID	MW-33D-295	Collected	05/22/2023 09:20
Lab Sample ID	3304366003	Lab Receipt	05/22/2023 18:15

VOLATILE ORGANICS (cont.)

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
cis-1,2-Dichloroethene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 13:14	TMP	A
cis-1,3-Dichloropropene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 13:14	TMP	A
Dibromomethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 13:14	TMP	A
Dichlorodifluoromethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 13:14	TMP	A
Diisopropyl ether	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 13:14	TMP	A
Ethylbenzene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 13:14	TMP	A
Hexachlorobutadiene	5.0 U	U,P1	ug/L	5.0	SW846 8260D	1	06/01/2023 13:14	TMP	A
Methyl t-Butyl Ether	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 13:14	TMP	A
Methylene Chloride	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 13:14	TMP	A
mp-Xylene	2.0 U	U,P1	ug/L	2.0	SW846 8260D	1	06/01/2023 13:14	TMP	A
Naphthalene	2.0 U	U,P1	ug/L	2.0	SW846 8260D	1	06/01/2023 13:14	TMP	A
o-Chlorotoluene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 13:14	TMP	A
o-Xylene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 13:14	TMP	A
p-Chlorotoluene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 13:14	TMP	A
p-Isopropyltoluene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 13:14	TMP	A
Styrene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 13:14	TMP	A
Tetrachloroethene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 13:14	TMP	A
Toluene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 13:14	TMP	A
Total Xylenes	3.0 U	U,P1	ug/L	3.0	SW846 8260D	1	06/01/2023 13:14	TMP	A
trans-1,2-Dichloroethene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 13:14	TMP	A
trans-1,3-Dichloropropene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 13:14	TMP	A
Trichloroethene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 13:14	TMP	A
Trichlorofluoromethane	1.0 U	U,2,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 13:14	TMP	A
Vinyl Acetate	5.0 U	U,P1	ug/L	5.0	SW846 8260D	1	06/01/2023 13:14	TMP	A
Vinyl Chloride	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 13:14	TMP	A

SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
1,2-Dichloroethane-d4	17060-07-0	102%	62 – 133	06/01/2023 13:14	
4-Bromofluorobenzene	460-00-4	98.7%	79 – 114	06/01/2023 13:14	
Dibromofluoromethane	1868-53-7	95.5%	78 – 116	06/01/2023 13:14	
Toluene-d8	2037-26-5	99.4%	76 – 127	06/01/2023 13:14	



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Workorder 3304366

Results

Client Sample ID	MW-33D-235	Collected	05/22/2023 09:35
Lab Sample ID	3304366004	Lab Receipt	05/22/2023 18:15

SEMIVOLATILE SIM

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
1,4-Dioxane	1.5 U	U,P1	ug/L	1.5	SW846 8270E SIM	1	05/25/2023 09:02	GEC	C

SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
2-Methylnaphthalene-d10	7297-45-2	51.8%	29 – 112	05/25/2023 09:02	
Fluoranthene-d10	93951-69-0	77.6%	45 – 130	05/25/2023 09:02	

VOLATILE ORGANICS

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
1,1,1,2-Tetrachloroethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 13:37	TMP	A
1,1,1-Trichloroethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 13:37	TMP	A
1,1,2,2-Tetrachloroethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 13:37	TMP	A
1,1,2-Trichloroethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 13:37	TMP	A
1,1-Dichloroethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 13:37	TMP	A
1,1-Dichloroethene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 13:37	TMP	A
1,1-Dichloropropene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 13:37	TMP	A
1,2,3-Trichlorobenzene	2.0 U	U,P1	ug/L	2.0	SW846 8260D	1	06/01/2023 13:37	TMP	A
1,2,3-Trichloropropane	2.0 U	U,P1	ug/L	2.0	SW846 8260D	1	06/01/2023 13:37	TMP	A
1,2,4-Trichlorobenzene	2.0 U	U,P1	ug/L	2.0	SW846 8260D	1	06/01/2023 13:37	TMP	A
1,2-Dibromo-3-chloropropane	7.0 U	U,P1	ug/L	7.0	SW846 8260D	1	06/01/2023 13:37	TMP	A
1,2-Dibromoethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 13:37	TMP	A
1,2-Dichlorobenzene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 13:37	TMP	A
1,2-Dichloroethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 13:37	TMP	A
1,2-Dichloropropane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 13:37	TMP	A
1,3-Dichlorobenzene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 13:37	TMP	A
1,3-Dichloropropane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 13:37	TMP	A
1,4-Dichlorobenzene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 13:37	TMP	A
2,2-Dichloropropane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 13:37	TMP	A
2-Butanone	10.0 U	U,P1	ug/L	10.0	SW846 8260D	1	06/01/2023 13:37	TMP	A
2-Hexanone	5.0 U	U,P1	ug/L	5.0	SW846 8260D	1	06/01/2023 13:37	TMP	A
4-Methyl-2-Pentanone(MIBK)	5.0 U	U,P1	ug/L	5.0	SW846 8260D	1	06/01/2023 13:37	TMP	A
Acetone	10.0 U	U,P1	ug/L	10.0	SW846 8260D	1	06/01/2023 13:37	TMP	A
Benzene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 13:37	TMP	A
Bromobenzene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 13:37	TMP	A
Bromochloromethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 13:37	TMP	A
Bromodichloromethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 13:37	TMP	A
Bromoform	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 13:37	TMP	A
Bromomethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 13:37	TMP	A
Carbon Tetrachloride	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 13:37	TMP	A
Chlorobenzene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 13:37	TMP	A
Chlorodibromomethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 13:37	TMP	A
Chloroethane	1.0 U	U,I,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 13:37	TMP	A
Chloroform	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 13:37	TMP	A
Chloromethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 13:37	TMP	A

Results

Client Sample ID	MW-33D-235	Collected	05/22/2023 09:35
Lab Sample ID	3304366004	Lab Receipt	05/22/2023 18:15

VOLATILE ORGANICS (cont.)

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
cis-1,2-Dichloroethene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 13:37	TMP	A
cis-1,3-Dichloropropene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 13:37	TMP	A
Dibromomethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 13:37	TMP	A
Dichlorodifluoromethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 13:37	TMP	A
Diisopropyl ether	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 13:37	TMP	A
Ethylbenzene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 13:37	TMP	A
Hexachlorobutadiene	5.0 U	U,P1	ug/L	5.0	SW846 8260D	1	06/01/2023 13:37	TMP	A
Methyl t-Butyl Ether	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 13:37	TMP	A
Methylene Chloride	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 13:37	TMP	A
mp-Xylene	2.0 U	U,P1	ug/L	2.0	SW846 8260D	1	06/01/2023 13:37	TMP	A
Naphthalene	2.0 U	U,P1	ug/L	2.0	SW846 8260D	1	06/01/2023 13:37	TMP	A
o-Chlorotoluene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 13:37	TMP	A
o-Xylene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 13:37	TMP	A
p-Chlorotoluene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 13:37	TMP	A
p-Isopropyltoluene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 13:37	TMP	A
Styrene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 13:37	TMP	A
Tetrachloroethene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 13:37	TMP	A
Toluene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 13:37	TMP	A
Total Xylenes	3.0 U	U,P1	ug/L	3.0	SW846 8260D	1	06/01/2023 13:37	TMP	A
trans-1,2-Dichloroethene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 13:37	TMP	A
trans-1,3-Dichloropropene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 13:37	TMP	A
Trichloroethene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 13:37	TMP	A
Trichlorofluoromethane	1.0 U	U,2,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 13:37	TMP	A
Vinyl Acetate	5.0 U	U,P1	ug/L	5.0	SW846 8260D	1	06/01/2023 13:37	TMP	A
Vinyl Chloride	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 13:37	TMP	A

SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
1,2-Dichloroethane-d4	17060-07-0	102%	62 – 133	06/01/2023 13:37	
4-Bromofluorobenzene	460-00-4	98.3%	79 – 114	06/01/2023 13:37	
Dibromofluoromethane	1868-53-7	96.9%	78 – 116	06/01/2023 13:37	
Toluene-d8	2037-26-5	99.8%	76 – 127	06/01/2023 13:37	



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Workorder 3304366

Results

Client Sample ID	MW-31D	Collected	05/22/2023 09:50
Lab Sample ID	3304366005	Lab Receipt	05/22/2023 18:15

SEMIVOLATILE SIM

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
1,4-Dioxane	1.0 U	U,P1	ug/L	1.0	SW846 8270E SIM	1	05/25/2023 09:29	GEC	C

SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
2-Methylnaphthalene-d10	7297-45-2	53.1%	29 – 112	05/25/2023 09:29	
Fluoranthene-d10	93951-69-0	74%	45 – 130	05/25/2023 09:29	

VOLATILE ORGANICS

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
1,1,1,2-Tetrachloroethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 14:00	TMP	A
1,1,1-Trichloroethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 14:00	TMP	A
1,1,2,2-Tetrachloroethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 14:00	TMP	A
1,1,2-Trichloroethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 14:00	TMP	A
1,1-Dichloroethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 14:00	TMP	A
1,1-Dichloroethene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 14:00	TMP	A
1,1-Dichloropropene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 14:00	TMP	A
1,2,3-Trichlorobenzene	2.0 U	U,P1	ug/L	2.0	SW846 8260D	1	06/01/2023 14:00	TMP	A
1,2,3-Trichloropropane	2.0 U	U,P1	ug/L	2.0	SW846 8260D	1	06/01/2023 14:00	TMP	A
1,2,4-Trichlorobenzene	2.0 U	U,P1	ug/L	2.0	SW846 8260D	1	06/01/2023 14:00	TMP	A
1,2-Dibromo-3-chloropropane	7.0 U	U,P1	ug/L	7.0	SW846 8260D	1	06/01/2023 14:00	TMP	A
1,2-Dibromoethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 14:00	TMP	A
1,2-Dichlorobenzene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 14:00	TMP	A
1,2-Dichloroethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 14:00	TMP	A
1,2-Dichloropropane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 14:00	TMP	A
1,3-Dichlorobenzene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 14:00	TMP	A
1,3-Dichloropropane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 14:00	TMP	A
1,4-Dichlorobenzene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 14:00	TMP	A
2,2-Dichloropropane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 14:00	TMP	A
2-Butanone	10.0 U	U,P1	ug/L	10.0	SW846 8260D	1	06/01/2023 14:00	TMP	A
2-Hexanone	5.0 U	U,P1	ug/L	5.0	SW846 8260D	1	06/01/2023 14:00	TMP	A
4-Methyl-2-Pentanone(MIBK)	5.0 U	U,P1	ug/L	5.0	SW846 8260D	1	06/01/2023 14:00	TMP	A
Acetone	10.0 U	U,P1	ug/L	10.0	SW846 8260D	1	06/01/2023 14:00	TMP	A
Benzene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 14:00	TMP	A
Bromobenzene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 14:00	TMP	A
Bromochloromethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 14:00	TMP	A
Bromodichloromethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 14:00	TMP	A
Bromoform	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 14:00	TMP	A
Bromomethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 14:00	TMP	A
Carbon Tetrachloride	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 14:00	TMP	A
Chlorobenzene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 14:00	TMP	A
Chlorodibromomethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 14:00	TMP	A
Chloroethane	1.0 U	U,I,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 14:00	TMP	A
Chloroform	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 14:00	TMP	A
Chloromethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 14:00	TMP	A



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Workorder 3304366

Results

Client Sample ID	MW-31D	Collected	05/22/2023 09:50
Lab Sample ID	3304366005	Lab Receipt	05/22/2023 18:15

VOLATILE ORGANICS (cont.)

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
cis-1,2-Dichloroethene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 14:00	TMP	A
cis-1,3-Dichloropropene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 14:00	TMP	A
Dibromomethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 14:00	TMP	A
Dichlorodifluoromethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 14:00	TMP	A
Diisopropyl ether	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 14:00	TMP	A
Ethylbenzene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 14:00	TMP	A
Hexachlorobutadiene	5.0 U	U,P1	ug/L	5.0	SW846 8260D	1	06/01/2023 14:00	TMP	A
Methyl t-Butyl Ether	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 14:00	TMP	A
Methylene Chloride	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 14:00	TMP	A
mp-Xylene	2.0 U	U,P1	ug/L	2.0	SW846 8260D	1	06/01/2023 14:00	TMP	A
Naphthalene	2.0 U	U,P1	ug/L	2.0	SW846 8260D	1	06/01/2023 14:00	TMP	A
o-Chlorotoluene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 14:00	TMP	A
o-Xylene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 14:00	TMP	A
p-Chlorotoluene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 14:00	TMP	A
p-Isopropyltoluene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 14:00	TMP	A
Styrene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 14:00	TMP	A
Tetrachloroethene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 14:00	TMP	A
Toluene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 14:00	TMP	A
Total Xylenes	3.0 U	U,P1	ug/L	3.0	SW846 8260D	1	06/01/2023 14:00	TMP	A
trans-1,2-Dichloroethene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 14:00	TMP	A
trans-1,3-Dichloropropene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 14:00	TMP	A
Trichloroethene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 14:00	TMP	A
Trichlorofluoromethane	1.0 U	U,2,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 14:00	TMP	A
Vinyl Acetate	5.0 U	U,P1	ug/L	5.0	SW846 8260D	1	06/01/2023 14:00	TMP	A
Vinyl Chloride	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 14:00	TMP	A

SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
1,2-Dichloroethane-d4	17060-07-0	100%	62 – 133	06/01/2023 14:00	
4-Bromofluorobenzene	460-00-4	98.7%	79 – 114	06/01/2023 14:00	
Dibromofluoromethane	1868-53-7	95.2%	78 – 116	06/01/2023 14:00	
Toluene-d8	2037-26-5	99%	76 – 127	06/01/2023 14:00	



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Workorder 3304366

Results

Client Sample ID	MW-30D-413	Collected	05/22/2023 10:10
Lab Sample ID	3304366006	Lab Receipt	05/22/2023 18:15

SEMIVOLATILE SIM

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
1,4-Dioxane	1.4 U	U,P1	ug/L	1.4	SW846 8270E SIM	1	05/25/2023 09:57	GEC	C

SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
2-Methylnaphthalene-d10	7297-45-2	52.6%	29 – 112	05/25/2023 09:57	
Fluoranthene-d10	93951-69-0	75.8%	45 – 130	05/25/2023 09:57	

VOLATILE ORGANICS

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
1,1,1,2-Tetrachloroethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 14:23	TMP	A
1,1,1-Trichloroethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 14:23	TMP	A
1,1,2,2-Tetrachloroethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 14:23	TMP	A
1,1,2-Trichloroethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 14:23	TMP	A
1,1-Dichloroethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 14:23	TMP	A
1,1-Dichloroethene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 14:23	TMP	A
1,1-Dichloropropene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 14:23	TMP	A
1,2,3-Trichlorobenzene	2.0 U	U,P1	ug/L	2.0	SW846 8260D	1	06/01/2023 14:23	TMP	A
1,2,3-Trichloropropane	2.0 U	U,P1	ug/L	2.0	SW846 8260D	1	06/01/2023 14:23	TMP	A
1,2,4-Trichlorobenzene	2.0 U	U,P1	ug/L	2.0	SW846 8260D	1	06/01/2023 14:23	TMP	A
1,2-Dibromo-3-chloropropane	7.0 U	U,P1	ug/L	7.0	SW846 8260D	1	06/01/2023 14:23	TMP	A
1,2-Dibromoethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 14:23	TMP	A
1,2-Dichlorobenzene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 14:23	TMP	A
1,2-Dichloroethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 14:23	TMP	A
1,2-Dichloropropane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 14:23	TMP	A
1,3-Dichlorobenzene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 14:23	TMP	A
1,3-Dichloropropane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 14:23	TMP	A
1,4-Dichlorobenzene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 14:23	TMP	A
2,2-Dichloropropane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 14:23	TMP	A
2-Butanone	10.0 U	U,P1	ug/L	10.0	SW846 8260D	1	06/01/2023 14:23	TMP	A
2-Hexanone	5.0 U	U,P1	ug/L	5.0	SW846 8260D	1	06/01/2023 14:23	TMP	A
4-Methyl-2-Pentanone(MIBK)	5.0 U	U,P1	ug/L	5.0	SW846 8260D	1	06/01/2023 14:23	TMP	A
Acetone	10.0 U	U,P1	ug/L	10.0	SW846 8260D	1	06/01/2023 14:23	TMP	A
Benzene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 14:23	TMP	A
Bromobenzene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 14:23	TMP	A
Bromochloromethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 14:23	TMP	A
Bromodichloromethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 14:23	TMP	A
Bromoform	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 14:23	TMP	A
Bromomethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 14:23	TMP	A
Carbon Tetrachloride	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 14:23	TMP	A
Chlorobenzene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 14:23	TMP	A
Chlorodibromomethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 14:23	TMP	A
Chloroethane	1.0 U	U,I,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 14:23	TMP	A
Chloroform	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 14:23	TMP	A
Chloromethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 14:23	TMP	A



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Workorder 3304366

Results

Client Sample ID	MW-30D-413	Collected	05/22/2023 10:10
Lab Sample ID	3304366006	Lab Receipt	05/22/2023 18:15

VOLATILE ORGANICS (cont.)

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
cis-1,2-Dichloroethene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 14:23	TMP	A
cis-1,3-Dichloropropene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 14:23	TMP	A
Dibromomethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 14:23	TMP	A
Dichlorodifluoromethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 14:23	TMP	A
Diisopropyl ether	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 14:23	TMP	A
Ethylbenzene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 14:23	TMP	A
Hexachlorobutadiene	5.0 U	U,P1	ug/L	5.0	SW846 8260D	1	06/01/2023 14:23	TMP	A
Methyl t-Butyl Ether	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 14:23	TMP	A
Methylene Chloride	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 14:23	TMP	A
mp-Xylene	2.0 U	U,P1	ug/L	2.0	SW846 8260D	1	06/01/2023 14:23	TMP	A
Naphthalene	2.0 U	U,P1	ug/L	2.0	SW846 8260D	1	06/01/2023 14:23	TMP	A
o-Chlorotoluene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 14:23	TMP	A
o-Xylene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 14:23	TMP	A
p-Chlorotoluene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 14:23	TMP	A
p-Isopropyltoluene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 14:23	TMP	A
Styrene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 14:23	TMP	A
Tetrachloroethene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 14:23	TMP	A
Toluene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 14:23	TMP	A
Total Xylenes	3.0 U	U,P1	ug/L	3.0	SW846 8260D	1	06/01/2023 14:23	TMP	A
trans-1,2-Dichloroethene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 14:23	TMP	A
trans-1,3-Dichloropropene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 14:23	TMP	A
Trichloroethene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 14:23	TMP	A
Trichlorofluoromethane	1.0 U	U,2,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 14:23	TMP	A
Vinyl Acetate	5.0 U	U,P1	ug/L	5.0	SW846 8260D	1	06/01/2023 14:23	TMP	A
Vinyl Chloride	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 14:23	TMP	A

SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
1,2-Dichloroethane-d4	17060-07-0	98.5%	62 – 133	06/01/2023 14:23	
4-Bromofluorobenzene	460-00-4	99.1%	79 – 114	06/01/2023 14:23	
Dibromofluoromethane	1868-53-7	94.3%	78 – 116	06/01/2023 14:23	
Toluene-d8	2037-26-5	99%	76 – 127	06/01/2023 14:23	



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Workorder 3304366

Results

Client Sample ID	MW-30D-273	Collected	05/22/2023 10:20
Lab Sample ID	3304366007	Lab Receipt	05/22/2023 18:15

SEMIVOLATILE SIM

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
1,4-Dioxane	8.0	P1	ug/L	1.0	SW846 8270E SIM	1	05/25/2023 10:24	GEC	C

SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
2-Methylnaphthalene-d10	7297-45-2	57.8%	29 – 112	05/25/2023 10:24	
Fluoranthene-d10	93951-69-0	73%	45 – 130	05/25/2023 10:24	

VOLATILE ORGANICS

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
1,1,1,2-Tetrachloroethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 14:46	TMP	A
1,1,1-Trichloroethane	1.4	P1	ug/L	1.0	SW846 8260D	1	06/01/2023 14:46	TMP	A
1,1,2,2-Tetrachloroethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 14:46	TMP	A
1,1,2-Trichloroethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 14:46	TMP	A
1,1-Dichloroethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 14:46	TMP	A
1,1-Dichloroethene	35.1	P1	ug/L	1.0	SW846 8260D	1	06/01/2023 14:46	TMP	A
1,1-Dichloropropene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 14:46	TMP	A
1,2,3-Trichlorobenzene	2.0 U	U,P1	ug/L	2.0	SW846 8260D	1	06/01/2023 14:46	TMP	A
1,2,3-Trichloropropane	2.0 U	U,P1	ug/L	2.0	SW846 8260D	1	06/01/2023 14:46	TMP	A
1,2,4-Trichlorobenzene	2.0 U	U,P1	ug/L	2.0	SW846 8260D	1	06/01/2023 14:46	TMP	A
1,2-Dibromo-3-chloropropane	7.0 U	U,P1	ug/L	7.0	SW846 8260D	1	06/01/2023 14:46	TMP	A
1,2-Dibromoethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 14:46	TMP	A
1,2-Dichlorobenzene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 14:46	TMP	A
1,2-Dichloroethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 14:46	TMP	A
1,2-Dichloropropane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 14:46	TMP	A
1,3-Dichlorobenzene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 14:46	TMP	A
1,3-Dichloropropane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 14:46	TMP	A
1,4-Dichlorobenzene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 14:46	TMP	A
2,2-Dichloropropane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 14:46	TMP	A
2-Butanone	10.0 U	U,P1	ug/L	10.0	SW846 8260D	1	06/01/2023 14:46	TMP	A
2-Hexanone	5.0 U	U,P1	ug/L	5.0	SW846 8260D	1	06/01/2023 14:46	TMP	A
4-Methyl-2-Pentanone(MIBK)	5.0 U	U,P1	ug/L	5.0	SW846 8260D	1	06/01/2023 14:46	TMP	A
Acetone	10.0 U	U,P1	ug/L	10.0	SW846 8260D	1	06/01/2023 14:46	TMP	A
Benzene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 14:46	TMP	A
Bromobenzene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 14:46	TMP	A
Bromochloromethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 14:46	TMP	A
Bromodichloromethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 14:46	TMP	A
Bromoform	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 14:46	TMP	A
Bromomethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 14:46	TMP	A
Carbon Tetrachloride	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 14:46	TMP	A
Chlorobenzene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 14:46	TMP	A
Chlorodibromomethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 14:46	TMP	A
Chloroethane	1.0 U	U,1,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 14:46	TMP	A
Chloroform	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 14:46	TMP	A
Chloromethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 14:46	TMP	A

Results

Client Sample ID	MW-30D-273	Collected	05/22/2023 10:20
Lab Sample ID	3304366007	Lab Receipt	05/22/2023 18:15

VOLATILE ORGANICS (cont.)

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
cis-1,2-Dichloroethene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 14:46	TMP	A
cis-1,3-Dichloropropene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 14:46	TMP	A
Dibromomethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 14:46	TMP	A
Dichlorodifluoromethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 14:46	TMP	A
Diisopropyl ether	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 14:46	TMP	A
Ethylbenzene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 14:46	TMP	A
Hexachlorobutadiene	5.0 U	U,P1	ug/L	5.0	SW846 8260D	1	06/01/2023 14:46	TMP	A
Methyl t-Butyl Ether	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 14:46	TMP	A
Methylene Chloride	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 14:46	TMP	A
mp-Xylene	2.0 U	U,P1	ug/L	2.0	SW846 8260D	1	06/01/2023 14:46	TMP	A
Naphthalene	2.0 U	U,P1	ug/L	2.0	SW846 8260D	1	06/01/2023 14:46	TMP	A
o-Chlorotoluene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 14:46	TMP	A
o-Xylene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 14:46	TMP	A
p-Chlorotoluene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 14:46	TMP	A
p-Isopropyltoluene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 14:46	TMP	A
Styrene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 14:46	TMP	A
Tetrachloroethene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 14:46	TMP	A
Toluene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 14:46	TMP	A
Total Xylenes	3.0 U	U,P1	ug/L	3.0	SW846 8260D	1	06/01/2023 14:46	TMP	A
trans-1,2-Dichloroethene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 14:46	TMP	A
trans-1,3-Dichloropropene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 14:46	TMP	A
Trichloroethene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 14:46	TMP	A
Trichlorofluoromethane	1.0 U	U,2,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 14:46	TMP	A
Vinyl Acetate	5.0 U	U,P1	ug/L	5.0	SW846 8260D	1	06/01/2023 14:46	TMP	A
Vinyl Chloride	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 14:46	TMP	A

SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
1,2-Dichloroethane-d4	17060-07-0	99.4%	62 – 133	06/01/2023 14:46	
4-Bromofluorobenzene	460-00-4	98%	79 – 114	06/01/2023 14:46	
Dibromofluoromethane	1868-53-7	93.4%	78 – 116	06/01/2023 14:46	
Toluene-d8	2037-26-5	98%	76 – 127	06/01/2023 14:46	



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Workorder 3304366

Results

Client Sample ID	MW-29D	Collected	05/22/2023 10:45
Lab Sample ID	3304366008	Lab Receipt	05/22/2023 18:15

SEMIVOLATILE SIM

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
1,4-Dioxane	1.3 U	U,P1	ug/L	1.3	SW846 8270E SIM	1	05/25/2023 10:52	GEC	C

SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
2-Methylnaphthalene-d10	7297-45-2	58.4%	29 – 112	05/25/2023 10:52	
Fluoranthene-d10	93951-69-0	67.2%	45 – 130	05/25/2023 10:52	

VOLATILE ORGANICS

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
1,1,1,2-Tetrachloroethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 15:09	TMP	A
1,1,1-Trichloroethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 15:09	TMP	A
1,1,2,2-Tetrachloroethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 15:09	TMP	A
1,1,2-Trichloroethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 15:09	TMP	A
1,1-Dichloroethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 15:09	TMP	A
1,1-Dichloroethene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 15:09	TMP	A
1,1-Dichloropropene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 15:09	TMP	A
1,2,3-Trichlorobenzene	2.0 U	U,P1	ug/L	2.0	SW846 8260D	1	06/01/2023 15:09	TMP	A
1,2,3-Trichloropropane	2.0 U	U,P1	ug/L	2.0	SW846 8260D	1	06/01/2023 15:09	TMP	A
1,2,4-Trichlorobenzene	2.0 U	U,P1	ug/L	2.0	SW846 8260D	1	06/01/2023 15:09	TMP	A
1,2-Dibromo-3-chloropropane	7.0 U	U,P1	ug/L	7.0	SW846 8260D	1	06/01/2023 15:09	TMP	A
1,2-Dibromoethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 15:09	TMP	A
1,2-Dichlorobenzene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 15:09	TMP	A
1,2-Dichloroethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 15:09	TMP	A
1,2-Dichloropropane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 15:09	TMP	A
1,3-Dichlorobenzene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 15:09	TMP	A
1,3-Dichloropropane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 15:09	TMP	A
1,4-Dichlorobenzene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 15:09	TMP	A
2,2-Dichloropropane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 15:09	TMP	A
2-Butanone	10.0 U	U,P1	ug/L	10.0	SW846 8260D	1	06/01/2023 15:09	TMP	A
2-Hexanone	5.0 U	U,P1	ug/L	5.0	SW846 8260D	1	06/01/2023 15:09	TMP	A
4-Methyl-2-Pentanone(MIBK)	5.0 U	U,P1	ug/L	5.0	SW846 8260D	1	06/01/2023 15:09	TMP	A
Acetone	10.0 U	U,P1	ug/L	10.0	SW846 8260D	1	06/01/2023 15:09	TMP	A
Benzene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 15:09	TMP	A
Bromobenzene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 15:09	TMP	A
Bromochloromethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 15:09	TMP	A
Bromodichloromethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 15:09	TMP	A
Bromoform	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 15:09	TMP	A
Bromomethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 15:09	TMP	A
Carbon Tetrachloride	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 15:09	TMP	A
Chlorobenzene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 15:09	TMP	A
Chlorodibromomethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 15:09	TMP	A
Chloroethane	1.0 U	U,I,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 15:09	TMP	A
Chloroform	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 15:09	TMP	A
Chloromethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 15:09	TMP	A



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Workorder 3304366

Results

Client Sample ID	MW-29D	Collected	05/22/2023 10:45
Lab Sample ID	3304366008	Lab Receipt	05/22/2023 18:15

VOLATILE ORGANICS (cont.)

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
cis-1,2-Dichloroethene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 15:09	TMP	A
cis-1,3-Dichloropropene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 15:09	TMP	A
Dibromomethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 15:09	TMP	A
Dichlorodifluoromethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 15:09	TMP	A
Diisopropyl ether	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 15:09	TMP	A
Ethylbenzene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 15:09	TMP	A
Hexachlorobutadiene	5.0 U	U,P1	ug/L	5.0	SW846 8260D	1	06/01/2023 15:09	TMP	A
Methyl t-Butyl Ether	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 15:09	TMP	A
Methylene Chloride	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 15:09	TMP	A
mp-Xylene	2.0 U	U,P1	ug/L	2.0	SW846 8260D	1	06/01/2023 15:09	TMP	A
Naphthalene	2.0 U	U,P1	ug/L	2.0	SW846 8260D	1	06/01/2023 15:09	TMP	A
o-Chlorotoluene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 15:09	TMP	A
o-Xylene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 15:09	TMP	A
p-Chlorotoluene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 15:09	TMP	A
p-Isopropyltoluene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 15:09	TMP	A
Styrene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 15:09	TMP	A
Tetrachloroethene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 15:09	TMP	A
Toluene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 15:09	TMP	A
Total Xylenes	3.0 U	U,P1	ug/L	3.0	SW846 8260D	1	06/01/2023 15:09	TMP	A
trans-1,2-Dichloroethene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 15:09	TMP	A
trans-1,3-Dichloropropene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 15:09	TMP	A
Trichloroethene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 15:09	TMP	A
Trichlorofluoromethane	1.0 U	U,2,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 15:09	TMP	A
Vinyl Acetate	5.0 U	U,P1	ug/L	5.0	SW846 8260D	1	06/01/2023 15:09	TMP	A
Vinyl Chloride	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 15:09	TMP	A

SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
1,2-Dichloroethane-d4	17060-07-0	100%	62 – 133	06/01/2023 15:09	
4-Bromofluorobenzene	460-00-4	97%	79 – 114	06/01/2023 15:09	
Dibromofluoromethane	1868-53-7	95.1%	78 – 116	06/01/2023 15:09	
Toluene-d8	2037-26-5	98.8%	76 – 127	06/01/2023 15:09	



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Workorder 3304366

Results

Client Sample ID	MW-32D	Collected	05/22/2023 11:05
Lab Sample ID	3304366009	Lab Receipt	05/22/2023 18:15

SEMIVOLATILE SIM

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
1,4-Dioxane	1.7 U	U,P1	ug/L	1.7	SW846 8270E SIM	1	05/25/2023 11:19	GEC	C

SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
2-Methylnaphthalene-d10	7297-45-2	50.4%	29 – 112	05/25/2023 11:19	
Fluoranthene-d10	93951-69-0	38.2*%	45 – 130	05/25/2023 11:19	3

VOLATILE ORGANICS

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
1,1,1,2-Tetrachloroethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 15:32	TMP	A
1,1,1-Trichloroethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 15:32	TMP	A
1,1,2,2-Tetrachloroethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 15:32	TMP	A
1,1,2-Trichloroethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 15:32	TMP	A
1,1-Dichloroethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 15:32	TMP	A
1,1-Dichloroethene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 15:32	TMP	A
1,1-Dichloropropene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 15:32	TMP	A
1,2,3-Trichlorobenzene	2.0 U	U,P1	ug/L	2.0	SW846 8260D	1	06/01/2023 15:32	TMP	A
1,2,3-Trichloropropane	2.0 U	U,P1	ug/L	2.0	SW846 8260D	1	06/01/2023 15:32	TMP	A
1,2,4-Trichlorobenzene	2.0 U	U,P1	ug/L	2.0	SW846 8260D	1	06/01/2023 15:32	TMP	A
1,2-Dibromo-3-chloropropane	7.0 U	U,P1	ug/L	7.0	SW846 8260D	1	06/01/2023 15:32	TMP	A
1,2-Dibromoethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 15:32	TMP	A
1,2-Dichlorobenzene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 15:32	TMP	A
1,2-Dichloroethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 15:32	TMP	A
1,2-Dichloropropane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 15:32	TMP	A
1,3-Dichlorobenzene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 15:32	TMP	A
1,3-Dichloropropane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 15:32	TMP	A
1,4-Dichlorobenzene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 15:32	TMP	A
2,2-Dichloropropane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 15:32	TMP	A
2-Butanone	10.0 U	U,P1	ug/L	10.0	SW846 8260D	1	06/01/2023 15:32	TMP	A
2-Hexanone	5.0 U	U,P1	ug/L	5.0	SW846 8260D	1	06/01/2023 15:32	TMP	A
4-Methyl-2-Pentanone(MIBK)	5.0 U	U,P1	ug/L	5.0	SW846 8260D	1	06/01/2023 15:32	TMP	A
Acetone	10.0 U	U,P1	ug/L	10.0	SW846 8260D	1	06/01/2023 15:32	TMP	A
Benzene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 15:32	TMP	A
Bromobenzene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 15:32	TMP	A
Bromochloromethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 15:32	TMP	A
Bromodichloromethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 15:32	TMP	A
Bromoform	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 15:32	TMP	A
Bromomethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 15:32	TMP	A
Carbon Tetrachloride	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 15:32	TMP	A
Chlorobenzene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 15:32	TMP	A
Chlorodibromomethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 15:32	TMP	A
Chloroethane	1.0 U	U,I,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 15:32	TMP	A
Chloroform	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 15:32	TMP	A
Chloromethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 15:32	TMP	A

Results

Client Sample ID	MW-32D	Collected	05/22/2023 11:05
Lab Sample ID	3304366009	Lab Receipt	05/22/2023 18:15

VOLATILE ORGANICS (cont.)

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
cis-1,2-Dichloroethene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 15:32	TMP	A
cis-1,3-Dichloropropene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 15:32	TMP	A
Dibromomethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 15:32	TMP	A
Dichlorodifluoromethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 15:32	TMP	A
Diisopropyl ether	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 15:32	TMP	A
Ethylbenzene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 15:32	TMP	A
Hexachlorobutadiene	5.0 U	U,P1	ug/L	5.0	SW846 8260D	1	06/01/2023 15:32	TMP	A
Methyl t-Butyl Ether	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 15:32	TMP	A
Methylene Chloride	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 15:32	TMP	A
mp-Xylene	2.0 U	U,P1	ug/L	2.0	SW846 8260D	1	06/01/2023 15:32	TMP	A
Naphthalene	2.0 U	U,P1	ug/L	2.0	SW846 8260D	1	06/01/2023 15:32	TMP	A
o-Chlorotoluene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 15:32	TMP	A
o-Xylene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 15:32	TMP	A
p-Chlorotoluene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 15:32	TMP	A
p-Isopropyltoluene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 15:32	TMP	A
Styrene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 15:32	TMP	A
Tetrachloroethene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 15:32	TMP	A
Toluene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 15:32	TMP	A
Total Xylenes	3.0 U	U,P1	ug/L	3.0	SW846 8260D	1	06/01/2023 15:32	TMP	A
trans-1,2-Dichloroethene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 15:32	TMP	A
trans-1,3-Dichloropropene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 15:32	TMP	A
Trichloroethene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 15:32	TMP	A
Trichlorofluoromethane	1.0 U	U,2,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 15:32	TMP	A
Vinyl Acetate	5.0 U	U,P1	ug/L	5.0	SW846 8260D	1	06/01/2023 15:32	TMP	A
Vinyl Chloride	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 15:32	TMP	A

SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
1,2-Dichloroethane-d4	17060-07-0	99.8%	62 – 133	06/01/2023 15:32	
4-Bromofluorobenzene	460-00-4	97.3%	79 – 114	06/01/2023 15:32	
Dibromofluoromethane	1868-53-7	95.8%	78 – 116	06/01/2023 15:32	
Toluene-d8	2037-26-5	98.2%	76 – 127	06/01/2023 15:32	



Project Former KOP-Flex Facility Onsit
Workorder 3304366

Results

Client Sample ID	MW-28D	Collected	05/22/2023 12:25
Lab Sample ID	3304366010	Lab Receipt	05/22/2023 18:15

SEMIVOLATILE SIM

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
1,4-Dioxane	1.8	P1	ug/L	1.0	SW846 8270E SIM	1	05/25/2023 11:46	GEC	C

SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
2-Methylnaphthalene-d10	7297-45-2	44.1%	29 – 112	05/25/2023 11:46	
Fluoranthene-d10	93951-69-0	72.6%	45 – 130	05/25/2023 11:46	

VOLATILE ORGANICS

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
1,1,1,2-Tetrachloroethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 15:55	TMP	A
1,1,1-Trichloroethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 15:55	TMP	A
1,1,2,2-Tetrachloroethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 15:55	TMP	A
1,1,2-Trichloroethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 15:55	TMP	A
1,1-Dichloroethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 15:55	TMP	A
1,1-Dichloroethene	8.3	P1	ug/L	1.0	SW846 8260D	1	06/01/2023 15:55	TMP	A
1,1-Dichloropropene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 15:55	TMP	A
1,2,3-Trichlorobenzene	2.0 U	U,P1	ug/L	2.0	SW846 8260D	1	06/01/2023 15:55	TMP	A
1,2,3-Trichloropropane	2.0 U	U,P1	ug/L	2.0	SW846 8260D	1	06/01/2023 15:55	TMP	A
1,2,4-Trichlorobenzene	2.0 U	U,P1	ug/L	2.0	SW846 8260D	1	06/01/2023 15:55	TMP	A
1,2-Dibromo-3-chloropropane	7.0 U	U,P1	ug/L	7.0	SW846 8260D	1	06/01/2023 15:55	TMP	A
1,2-Dibromoethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 15:55	TMP	A
1,2-Dichlorobenzene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 15:55	TMP	A
1,2-Dichloroethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 15:55	TMP	A
1,2-Dichloropropane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 15:55	TMP	A
1,3-Dichlorobenzene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 15:55	TMP	A
1,3-Dichloropropane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 15:55	TMP	A
1,4-Dichlorobenzene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 15:55	TMP	A
2,2-Dichloropropane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 15:55	TMP	A
2-Butanone	10.0 U	U,P1	ug/L	10.0	SW846 8260D	1	06/01/2023 15:55	TMP	A
2-Hexanone	5.0 U	U,P1	ug/L	5.0	SW846 8260D	1	06/01/2023 15:55	TMP	A
4-Methyl-2-Pentanone(MIBK)	5.0 U	U,P1	ug/L	5.0	SW846 8260D	1	06/01/2023 15:55	TMP	A
Acetone	10.0 U	U,P1	ug/L	10.0	SW846 8260D	1	06/01/2023 15:55	TMP	A
Benzene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 15:55	TMP	A
Bromobenzene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 15:55	TMP	A
Bromochloromethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 15:55	TMP	A
Bromodichloromethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 15:55	TMP	A
Bromoform	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 15:55	TMP	A
Bromomethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 15:55	TMP	A
Carbon Tetrachloride	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 15:55	TMP	A
Chlorobenzene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 15:55	TMP	A
Chlorodibromomethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 15:55	TMP	A
Chloroethane	1.0 U	U,I,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 15:55	TMP	A
Chloroform	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 15:55	TMP	A
Chloromethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 15:55	TMP	A



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Workorder 3304366

Results

Client Sample ID	MW-28D	Collected	05/22/2023 12:25
Lab Sample ID	3304366010	Lab Receipt	05/22/2023 18:15

VOLATILE ORGANICS (cont.)

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
cis-1,2-Dichloroethene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 15:55	TMP	A
cis-1,3-Dichloropropene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 15:55	TMP	A
Dibromomethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 15:55	TMP	A
Dichlorodifluoromethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 15:55	TMP	A
Diisopropyl ether	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 15:55	TMP	A
Ethylbenzene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 15:55	TMP	A
Hexachlorobutadiene	5.0 U	U,P1	ug/L	5.0	SW846 8260D	1	06/01/2023 15:55	TMP	A
Methyl t-Butyl Ether	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 15:55	TMP	A
Methylene Chloride	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 15:55	TMP	A
mp-Xylene	2.0 U	U,P1	ug/L	2.0	SW846 8260D	1	06/01/2023 15:55	TMP	A
Naphthalene	2.0 U	U,P1	ug/L	2.0	SW846 8260D	1	06/01/2023 15:55	TMP	A
o-Chlorotoluene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 15:55	TMP	A
o-Xylene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 15:55	TMP	A
p-Chlorotoluene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 15:55	TMP	A
p-Isopropyltoluene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 15:55	TMP	A
Styrene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 15:55	TMP	A
Tetrachloroethene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 15:55	TMP	A
Toluene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 15:55	TMP	A
Total Xylenes	3.0 U	U,P1	ug/L	3.0	SW846 8260D	1	06/01/2023 15:55	TMP	A
trans-1,2-Dichloroethene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 15:55	TMP	A
trans-1,3-Dichloropropene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 15:55	TMP	A
Trichloroethene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 15:55	TMP	A
Trichlorofluoromethane	1.0 U	U,2,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 15:55	TMP	A
Vinyl Acetate	5.0 U	U,P1	ug/L	5.0	SW846 8260D	1	06/01/2023 15:55	TMP	A
Vinyl Chloride	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 15:55	TMP	A

SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
1,2-Dichloroethane-d4	17060-07-0	98.1%	62 – 133	06/01/2023 15:55	
4-Bromofluorobenzene	460-00-4	97.9%	79 – 114	06/01/2023 15:55	
Dibromofluoromethane	1868-53-7	94.5%	78 – 116	06/01/2023 15:55	
Toluene-d8	2037-26-5	98.8%	76 – 127	06/01/2023 15:55	



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Workorder 3304366

Results

Client Sample ID	MW-36D	Collected	05/22/2023 12:40
Lab Sample ID	3304366011	Lab Receipt	05/22/2023 18:15

SEMIVOLATILE SIM

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
1,4-Dioxane	1.5 U	U,P1	ug/L	1.5	SW846 8270E SIM	1	05/25/2023 12:14	GEC	C

SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
2-Methylnaphthalene-d10	7297-45-2	45.8%	29 – 112	05/25/2023 12:14	
Fluoranthene-d10	93951-69-0	65.1%	45 – 130	05/25/2023 12:14	

VOLATILE ORGANICS

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
1,1,1,2-Tetrachloroethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 16:18	TMP	A
1,1,1-Trichloroethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 16:18	TMP	A
1,1,2,2-Tetrachloroethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 16:18	TMP	A
1,1,2-Trichloroethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 16:18	TMP	A
1,1-Dichloroethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 16:18	TMP	A
1,1-Dichloroethene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 16:18	TMP	A
1,1-Dichloropropene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 16:18	TMP	A
1,2,3-Trichlorobenzene	2.0 U	U,P1	ug/L	2.0	SW846 8260D	1	06/01/2023 16:18	TMP	A
1,2,3-Trichloropropane	2.0 U	U,P1	ug/L	2.0	SW846 8260D	1	06/01/2023 16:18	TMP	A
1,2,4-Trichlorobenzene	2.0 U	U,P1	ug/L	2.0	SW846 8260D	1	06/01/2023 16:18	TMP	A
1,2-Dibromo-3-chloropropane	7.0 U	U,P1	ug/L	7.0	SW846 8260D	1	06/01/2023 16:18	TMP	A
1,2-Dibromoethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 16:18	TMP	A
1,2-Dichlorobenzene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 16:18	TMP	A
1,2-Dichloroethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 16:18	TMP	A
1,2-Dichloropropane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 16:18	TMP	A
1,3-Dichlorobenzene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 16:18	TMP	A
1,3-Dichloropropane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 16:18	TMP	A
1,4-Dichlorobenzene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 16:18	TMP	A
2,2-Dichloropropane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 16:18	TMP	A
2-Butanone	10.0 U	U,P1	ug/L	10.0	SW846 8260D	1	06/01/2023 16:18	TMP	A
2-Hexanone	5.0 U	U,P1	ug/L	5.0	SW846 8260D	1	06/01/2023 16:18	TMP	A
4-Methyl-2-Pentanone(MIBK)	5.0 U	U,P1	ug/L	5.0	SW846 8260D	1	06/01/2023 16:18	TMP	A
Acetone	10.0 U	U,P1	ug/L	10.0	SW846 8260D	1	06/01/2023 16:18	TMP	A
Benzene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 16:18	TMP	A
Bromobenzene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 16:18	TMP	A
Bromochloromethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 16:18	TMP	A
Bromodichloromethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 16:18	TMP	A
Bromoform	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 16:18	TMP	A
Bromomethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 16:18	TMP	A
Carbon Tetrachloride	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 16:18	TMP	A
Chlorobenzene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 16:18	TMP	A
Chlorodibromomethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 16:18	TMP	A
Chloroethane	1.0 U	U,I,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 16:18	TMP	A
Chloroform	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 16:18	TMP	A
Chloromethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 16:18	TMP	A



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Workorder 3304366

Results

Client Sample ID	MW-36D	Collected	05/22/2023 12:40
Lab Sample ID	3304366011	Lab Receipt	05/22/2023 18:15

VOLATILE ORGANICS (cont.)

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
cis-1,2-Dichloroethene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 16:18	TMP	A
cis-1,3-Dichloropropene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 16:18	TMP	A
Dibromomethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 16:18	TMP	A
Dichlorodifluoromethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 16:18	TMP	A
Diisopropyl ether	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 16:18	TMP	A
Ethylbenzene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 16:18	TMP	A
Hexachlorobutadiene	5.0 U	U,P1	ug/L	5.0	SW846 8260D	1	06/01/2023 16:18	TMP	A
Methyl t-Butyl Ether	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 16:18	TMP	A
Methylene Chloride	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 16:18	TMP	A
mp-Xylene	2.0 U	U,P1	ug/L	2.0	SW846 8260D	1	06/01/2023 16:18	TMP	A
Naphthalene	2.0 U	U,P1	ug/L	2.0	SW846 8260D	1	06/01/2023 16:18	TMP	A
o-Chlorotoluene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 16:18	TMP	A
o-Xylene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 16:18	TMP	A
p-Chlorotoluene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 16:18	TMP	A
p-Isopropyltoluene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 16:18	TMP	A
Styrene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 16:18	TMP	A
Tetrachloroethene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 16:18	TMP	A
Toluene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 16:18	TMP	A
Total Xylenes	3.0 U	U,P1	ug/L	3.0	SW846 8260D	1	06/01/2023 16:18	TMP	A
trans-1,2-Dichloroethene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 16:18	TMP	A
trans-1,3-Dichloropropene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 16:18	TMP	A
Trichloroethene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 16:18	TMP	A
Trichlorofluoromethane	1.0 U	U,2,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 16:18	TMP	A
Vinyl Acetate	5.0 U	U,P1	ug/L	5.0	SW846 8260D	1	06/01/2023 16:18	TMP	A
Vinyl Chloride	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 16:18	TMP	A

SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
1,2-Dichloroethane-d4	17060-07-0	100%	62 – 133	06/01/2023 16:18	
4-Bromofluorobenzene	460-00-4	98.2%	79 – 114	06/01/2023 16:18	
Dibromofluoromethane	1868-53-7	95.7%	78 – 116	06/01/2023 16:18	
Toluene-d8	2037-26-5	98.8%	76 – 127	06/01/2023 16:18	



Project Former KOP-Flex Facility Onsit
Workorder 3304366

Results

Client Sample ID	MW-25D-130	Collected	05/22/2023 13:45
Lab Sample ID	3304366012	Lab Receipt	05/22/2023 18:15

SEMOVOLATILE SIM

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
1,4-Dioxane	21.3	P1	ug/L	2.1	SW846 8270E SIM	20	05/25/2023 14:57	GEC	C

SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
2-Methylnaphthalene-d10	7297-45-2	50.9%	29 – 112	05/25/2023 12:41	
2-Methylnaphthalene-d10	7297-45-2	0*%	29 – 112	05/25/2023 14:57	4
Fluoranthene-d10	93951-69-0	68.3%	45 – 130	05/25/2023 12:41	
Fluoranthene-d10	93951-69-0	0*%	45 – 130	05/25/2023 14:57	5

VOLATILE ORGANICS

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
1,1,1,2-Tetrachloroethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 16:41	TMP	A
1,1,1-Trichloroethane	4.5	P1	ug/L	1.0	SW846 8260D	1	06/01/2023 16:41	TMP	A
1,1,2,2-Tetrachloroethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 16:41	TMP	A
1,1,2-Trichloroethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 16:41	TMP	A
1,1-Dichloroethane	4.3	P1	ug/L	1.0	SW846 8260D	1	06/01/2023 16:41	TMP	A
1,1-Dichloroethene	52.0	P1	ug/L	1.0	SW846 8260D	1	06/01/2023 16:41	TMP	A
1,1-Dichloropropene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 16:41	TMP	A
1,2,3-Trichlorobenzene	2.0 U	U,P1	ug/L	2.0	SW846 8260D	1	06/01/2023 16:41	TMP	A
1,2,3-Trichloropropane	2.0 U	U,P1	ug/L	2.0	SW846 8260D	1	06/01/2023 16:41	TMP	A
1,2,4-Trichlorobenzene	2.0 U	U,P1	ug/L	2.0	SW846 8260D	1	06/01/2023 16:41	TMP	A
1,2-Dibromo-3-chloropropane	7.0 U	U,P1	ug/L	7.0	SW846 8260D	1	06/01/2023 16:41	TMP	A
1,2-Dibromoethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 16:41	TMP	A
1,2-Dichlorobenzene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 16:41	TMP	A
1,2-Dichloroethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 16:41	TMP	A
1,2-Dichloropropane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 16:41	TMP	A
1,3-Dichlorobenzene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 16:41	TMP	A
1,3-Dichloropropane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 16:41	TMP	A
1,4-Dichlorobenzene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 16:41	TMP	A
2,2-Dichloropropane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 16:41	TMP	A
2-Butanone	10.0 U	U,P1	ug/L	10.0	SW846 8260D	1	06/01/2023 16:41	TMP	A
2-Hexanone	5.0 U	U,P1	ug/L	5.0	SW846 8260D	1	06/01/2023 16:41	TMP	A
4-Methyl-2-Pentanone(MIBK)	5.0 U	U,P1	ug/L	5.0	SW846 8260D	1	06/01/2023 16:41	TMP	A
Acetone	10.0 U	U,P1	ug/L	10.0	SW846 8260D	1	06/01/2023 16:41	TMP	A
Benzene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 16:41	TMP	A
Bromobenzene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 16:41	TMP	A
Bromochloromethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 16:41	TMP	A
Bromodichloromethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 16:41	TMP	A
Bromoform	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 16:41	TMP	A
Bromomethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 16:41	TMP	A
Carbon Tetrachloride	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 16:41	TMP	A
Chlorobenzene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 16:41	TMP	A
Chlorodibromomethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 16:41	TMP	A
Chloroethane	1.0 U	U,1,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 16:41	TMP	A

Results

Client Sample ID	MW-25D-130	Collected	05/22/2023 13:45
Lab Sample ID	3304366012	Lab Receipt	05/22/2023 18:15

VOLATILE ORGANICS (cont.)

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
Chloroform	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 16:41	TMP	A
Chloromethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 16:41	TMP	A
cis-1,2-Dichloroethene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 16:41	TMP	A
cis-1,3-Dichloropropene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 16:41	TMP	A
Dibromomethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 16:41	TMP	A
Dichlorodifluoromethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 16:41	TMP	A
Diisopropyl ether	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 16:41	TMP	A
Ethylbenzene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 16:41	TMP	A
Hexachlorobutadiene	5.0 U	U,P1	ug/L	5.0	SW846 8260D	1	06/01/2023 16:41	TMP	A
Methyl t-Butyl Ether	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 16:41	TMP	A
Methylene Chloride	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 16:41	TMP	A
mp-Xylene	2.0 U	U,P1	ug/L	2.0	SW846 8260D	1	06/01/2023 16:41	TMP	A
Naphthalene	2.0 U	U,P1	ug/L	2.0	SW846 8260D	1	06/01/2023 16:41	TMP	A
o-Chlorotoluene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 16:41	TMP	A
o-Xylene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 16:41	TMP	A
p-Chlorotoluene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 16:41	TMP	A
p-Isopropyltoluene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 16:41	TMP	A
Styrene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 16:41	TMP	A
Tetrachloroethene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 16:41	TMP	A
Toluene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 16:41	TMP	A
Total Xylenes	3.0 U	U,P1	ug/L	3.0	SW846 8260D	1	06/01/2023 16:41	TMP	A
trans-1,2-Dichloroethene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 16:41	TMP	A
trans-1,3-Dichloropropene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 16:41	TMP	A
Trichloroethene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 16:41	TMP	A
Trichlorofluoromethane	1.0 U	U,2,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 16:41	TMP	A
Vinyl Acetate	5.0 U	U,P1	ug/L	5.0	SW846 8260D	1	06/01/2023 16:41	TMP	A
Vinyl Chloride	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 16:41	TMP	A

SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
1,2-Dichloroethane-d4	17060-07-0	103%	62 – 133	06/01/2023 16:41	
4-Bromofluorobenzene	460-00-4	96.5%	79 – 114	06/01/2023 16:41	
Dibromofluoromethane	1868-53-7	96.1%	78 – 116	06/01/2023 16:41	
Toluene-d8	2037-26-5	98.7%	76 – 127	06/01/2023 16:41	



Project Former KOP-Flex Facility Onsit
Workorder 3304366

Results

Client Sample ID	DUP-052223	Collected	05/22/2023 11:30
Lab Sample ID	3304366013	Lab Receipt	05/22/2023 18:15

SEMOVOLATILE SIM

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
1,4-Dioxane	21.0	P1	ug/L	2.6	SW846 8270E SIM	20	05/25/2023 15:25	GEC	C

SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
2-Methylnaphthalene-d10	7297-45-2	61.3%	29 – 112	05/25/2023 13:09	
2-Methylnaphthalene-d10	7297-45-2	0*%	29 – 112	05/25/2023 15:25	4
Fluoranthene-d10	93951-69-0	78.3%	45 – 130	05/25/2023 13:09	
Fluoranthene-d10	93951-69-0	80.9%	45 – 130	05/25/2023 15:25	

VOLATILE ORGANICS

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
1,1,1,2-Tetrachloroethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 17:04	TMP	A
1,1,1-Trichloroethane	5.2	P1	ug/L	1.0	SW846 8260D	1	06/01/2023 17:04	TMP	A
1,1,2,2-Tetrachloroethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 17:04	TMP	A
1,1,2-Trichloroethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 17:04	TMP	A
1,1-Dichloroethane	5.0	P1	ug/L	1.0	SW846 8260D	1	06/01/2023 17:04	TMP	A
1,1-Dichloroethene	60.0	P1	ug/L	1.0	SW846 8260D	1	06/01/2023 17:04	TMP	A
1,1-Dichloropropene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 17:04	TMP	A
1,2,3-Trichlorobenzene	2.0 U	U,P1	ug/L	2.0	SW846 8260D	1	06/01/2023 17:04	TMP	A
1,2,3-Trichloropropane	2.0 U	U,P1	ug/L	2.0	SW846 8260D	1	06/01/2023 17:04	TMP	A
1,2,4-Trichlorobenzene	2.0 U	U,P1	ug/L	2.0	SW846 8260D	1	06/01/2023 17:04	TMP	A
1,2-Dibromo-3-chloropropane	7.0 U	U,P1	ug/L	7.0	SW846 8260D	1	06/01/2023 17:04	TMP	A
1,2-Dibromoethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 17:04	TMP	A
1,2-Dichlorobenzene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 17:04	TMP	A
1,2-Dichloroethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 17:04	TMP	A
1,2-Dichloropropane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 17:04	TMP	A
1,3-Dichlorobenzene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 17:04	TMP	A
1,3-Dichloropropane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 17:04	TMP	A
1,4-Dichlorobenzene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 17:04	TMP	A
2,2-Dichloropropane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 17:04	TMP	A
2-Butanone	10.0 U	U,P1	ug/L	10.0	SW846 8260D	1	06/01/2023 17:04	TMP	A
2-Hexanone	5.0 U	U,P1	ug/L	5.0	SW846 8260D	1	06/01/2023 17:04	TMP	A
4-Methyl-2-Pentanone(MIBK)	5.0 U	U,P1	ug/L	5.0	SW846 8260D	1	06/01/2023 17:04	TMP	A
Acetone	10.0 U	U,P1	ug/L	10.0	SW846 8260D	1	06/01/2023 17:04	TMP	A
Benzene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 17:04	TMP	A
Bromobenzene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 17:04	TMP	A
Bromochloromethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 17:04	TMP	A
Bromodichloromethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 17:04	TMP	A
Bromoform	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 17:04	TMP	A
Bromomethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 17:04	TMP	A
Carbon Tetrachloride	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 17:04	TMP	A
Chlorobenzene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 17:04	TMP	A
Chlorodibromomethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 17:04	TMP	A
Chloroethane	1.0 U	U,1,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 17:04	TMP	A

Results

Client Sample ID	DUP-052223	Collected	05/22/2023 11:30
Lab Sample ID	3304366013	Lab Receipt	05/22/2023 18:15

VOLATILE ORGANICS (cont.)

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
Chloroform	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 17:04	TMP	A
Chloromethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 17:04	TMP	A
cis-1,2-Dichloroethene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 17:04	TMP	A
cis-1,3-Dichloropropene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 17:04	TMP	A
Dibromomethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 17:04	TMP	A
Dichlorodifluoromethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 17:04	TMP	A
Diisopropyl ether	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 17:04	TMP	A
Ethylbenzene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 17:04	TMP	A
Hexachlorobutadiene	5.0 U	U,P1	ug/L	5.0	SW846 8260D	1	06/01/2023 17:04	TMP	A
Methyl t-Butyl Ether	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 17:04	TMP	A
Methylene Chloride	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 17:04	TMP	A
mp-Xylene	2.0 U	U,P1	ug/L	2.0	SW846 8260D	1	06/01/2023 17:04	TMP	A
Naphthalene	2.0 U	U,P1	ug/L	2.0	SW846 8260D	1	06/01/2023 17:04	TMP	A
o-Chlorotoluene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 17:04	TMP	A
o-Xylene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 17:04	TMP	A
p-Chlorotoluene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 17:04	TMP	A
p-Isopropyltoluene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 17:04	TMP	A
Styrene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 17:04	TMP	A
Tetrachloroethene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 17:04	TMP	A
Toluene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 17:04	TMP	A
Total Xylenes	3.0 U	U,P1	ug/L	3.0	SW846 8260D	1	06/01/2023 17:04	TMP	A
trans-1,2-Dichloroethene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 17:04	TMP	A
trans-1,3-Dichloropropene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 17:04	TMP	A
Trichloroethene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 17:04	TMP	A
Trichlorofluoromethane	1.0 U	U,2,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 17:04	TMP	A
Vinyl Acetate	5.0 U	U,P1	ug/L	5.0	SW846 8260D	1	06/01/2023 17:04	TMP	A
Vinyl Chloride	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 17:04	TMP	A

SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
1,2-Dichloroethane-d4	17060-07-0	103%	62 – 133	06/01/2023 17:04	
4-Bromofluorobenzene	460-00-4	98.5%	79 – 114	06/01/2023 17:04	
Dibromofluoromethane	1868-53-7	97.1%	78 – 116	06/01/2023 17:04	
Toluene-d8	2037-26-5	99%	76 – 127	06/01/2023 17:04	



Project Former KOP-Flex Facility Onsit
Workorder 3304366

Results

Client Sample ID	MW-25D-190	Collected	05/22/2023 14:00
Lab Sample ID	3304366014	Lab Receipt	05/22/2023 18:15

SEMIVOLATILE SIM

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
1,4-Dioxane	9.0	6,7,8,P1	ug/L	1.0	SW846 8270E SIM	1	05/25/2023 13:36	GEC	G

SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
2-Methylnaphthalene-d10	7297-45-2	55.8%	29 – 112	05/25/2023 13:36	
Fluoranthene-d10	93951-69-0	52.4%	45 – 130	05/25/2023 13:36	

VOLATILE ORGANICS

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
1,1,1,2-Tetrachloroethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 17:27	TMP	A
1,1,1-Trichloroethane	3.6	P1	ug/L	1.0	SW846 8260D	1	06/01/2023 17:27	TMP	A
1,1,2,2-Tetrachloroethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 17:27	TMP	A
1,1,2-Trichloroethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 17:27	TMP	A
1,1-Dichloroethane	7.1	P1	ug/L	1.0	SW846 8260D	1	06/01/2023 17:27	TMP	A
1,1-Dichloroethene	30.1	P1	ug/L	1.0	SW846 8260D	1	06/01/2023 17:27	TMP	A
1,1-Dichloropropene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 17:27	TMP	A
1,2,3-Trichlorobenzene	2.0 U	U,P1	ug/L	2.0	SW846 8260D	1	06/01/2023 17:27	TMP	A
1,2,3-Trichloropropane	2.0 U	U,P1	ug/L	2.0	SW846 8260D	1	06/01/2023 17:27	TMP	A
1,2,4-Trichlorobenzene	2.0 U	U,P1	ug/L	2.0	SW846 8260D	1	06/01/2023 17:27	TMP	A
1,2-Dibromo-3-chloropropane	7.0 U	U,P1	ug/L	7.0	SW846 8260D	1	06/01/2023 17:27	TMP	A
1,2-Dibromoethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 17:27	TMP	A
1,2-Dichlorobenzene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 17:27	TMP	A
1,2-Dichloroethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 17:27	TMP	A
1,2-Dichloropropane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 17:27	TMP	A
1,3-Dichlorobenzene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 17:27	TMP	A
1,3-Dichloropropane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 17:27	TMP	A
1,4-Dichlorobenzene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 17:27	TMP	A
2,2-Dichloropropane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 17:27	TMP	A
2-Butanone	10.0 U	U,P1	ug/L	10.0	SW846 8260D	1	06/01/2023 17:27	TMP	A
2-Hexanone	5.0 U	U,P1	ug/L	5.0	SW846 8260D	1	06/01/2023 17:27	TMP	A
4-Methyl-2-Pentanone(MIBK)	5.0 U	U,P1	ug/L	5.0	SW846 8260D	1	06/01/2023 17:27	TMP	A
Acetone	10.0 U	U,P1	ug/L	10.0	SW846 8260D	1	06/01/2023 17:27	TMP	A
Benzene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 17:27	TMP	A
Bromobenzene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 17:27	TMP	A
Bromochloromethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 17:27	TMP	A
Bromodichloromethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 17:27	TMP	A
Bromoform	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 17:27	TMP	A
Bromomethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 17:27	TMP	A
Carbon Tetrachloride	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 17:27	TMP	A
Chlorobenzene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 17:27	TMP	A
Chlorodibromomethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 17:27	TMP	A
Chloroethane	1.0 U	U,1,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 17:27	TMP	A
Chloroform	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 17:27	TMP	A
Chloromethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 17:27	TMP	A

Results

Client Sample ID	MW-25D-190	Collected	05/22/2023 14:00
Lab Sample ID	3304366014	Lab Receipt	05/22/2023 18:15

VOLATILE ORGANICS (cont.)

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
cis-1,2-Dichloroethene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 17:27	TMP	A
cis-1,3-Dichloropropene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 17:27	TMP	A
Dibromomethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 17:27	TMP	A
Dichlorodifluoromethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 17:27	TMP	A
Diisopropyl ether	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 17:27	TMP	A
Ethylbenzene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 17:27	TMP	A
Hexachlorobutadiene	5.0 U	U,P1	ug/L	5.0	SW846 8260D	1	06/01/2023 17:27	TMP	A
Methyl t-Butyl Ether	1.4	P1	ug/L	1.0	SW846 8260D	1	06/01/2023 17:27	TMP	A
Methylene Chloride	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 17:27	TMP	A
mp-Xylene	2.0 U	U,P1	ug/L	2.0	SW846 8260D	1	06/01/2023 17:27	TMP	A
Naphthalene	2.0 U	U,P1	ug/L	2.0	SW846 8260D	1	06/01/2023 17:27	TMP	A
o-Chlorotoluene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 17:27	TMP	A
o-Xylene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 17:27	TMP	A
p-Chlorotoluene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 17:27	TMP	A
p-Isopropyltoluene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 17:27	TMP	A
Styrene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 17:27	TMP	A
Tetrachloroethene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 17:27	TMP	A
Toluene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 17:27	TMP	A
Total Xylenes	3.0 U	U,P1	ug/L	3.0	SW846 8260D	1	06/01/2023 17:27	TMP	A
trans-1,2-Dichloroethene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 17:27	TMP	A
trans-1,3-Dichloropropene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 17:27	TMP	A
Trichloroethene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 17:27	TMP	A
Trichlorofluoromethane	1.0 U	U,2,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 17:27	TMP	A
Vinyl Acetate	5.0 U	U,P1	ug/L	5.0	SW846 8260D	1	06/01/2023 17:27	TMP	A
Vinyl Chloride	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 17:27	TMP	A

SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
1,2-Dichloroethane-d4	17060-07-0	102%	62 – 133	06/01/2023 17:27	
4-Bromofluorobenzene	460-00-4	99%	79 – 114	06/01/2023 17:27	
Dibromofluoromethane	1868-53-7	95.2%	78 – 116	06/01/2023 17:27	
Toluene-d8	2037-26-5	99.8%	76 – 127	06/01/2023 17:27	



Results

Client Sample ID	Trip Blank A	Collected	05/22/2023 00:00
Lab Sample ID	3304366015	Lab Receipt	05/22/2023 18:15

VOLATILE ORGANICS

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
1,1,1,2-Tetrachloroethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 11:42	TMP	A
1,1,1-Trichloroethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 11:42	TMP	A
1,1,2,2-Tetrachloroethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 11:42	TMP	A
1,1,2-Trichloroethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 11:42	TMP	A
1,1-Dichloroethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 11:42	TMP	A
1,1-Dichloroethene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 11:42	TMP	A
1,1-Dichloropropene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 11:42	TMP	A
1,2,3-Trichlorobenzene	2.0 U	U,P1	ug/L	2.0	SW846 8260D	1	06/01/2023 11:42	TMP	A
1,2,3-Trichloropropane	2.0 U	U,P1	ug/L	2.0	SW846 8260D	1	06/01/2023 11:42	TMP	A
1,2,4-Trichlorobenzene	2.0 U	U,P1	ug/L	2.0	SW846 8260D	1	06/01/2023 11:42	TMP	A
1,2-Dibromo-3-chloropropane	7.0 U	U,P1	ug/L	7.0	SW846 8260D	1	06/01/2023 11:42	TMP	A
1,2-Dibromoethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 11:42	TMP	A
1,2-Dichlorobenzene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 11:42	TMP	A
1,2-Dichloroethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 11:42	TMP	A
1,2-Dichloropropane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 11:42	TMP	A
1,3-Dichlorobenzene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 11:42	TMP	A
1,3-Dichloropropane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 11:42	TMP	A
1,4-Dichlorobenzene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 11:42	TMP	A
2,2-Dichloropropane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 11:42	TMP	A
2-Butanone	10.0 U	U,P1	ug/L	10.0	SW846 8260D	1	06/01/2023 11:42	TMP	A
2-Hexanone	5.0 U	U,P1	ug/L	5.0	SW846 8260D	1	06/01/2023 11:42	TMP	A
4-Methyl-2-Pentanone(MIBK)	5.0 U	U,P1	ug/L	5.0	SW846 8260D	1	06/01/2023 11:42	TMP	A
Acetone	10.0 U	U,P1	ug/L	10.0	SW846 8260D	1	06/01/2023 11:42	TMP	A
Benzene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 11:42	TMP	A
Bromobenzene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 11:42	TMP	A
Bromochloromethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 11:42	TMP	A
Bromodichloromethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 11:42	TMP	A
Bromoform	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 11:42	TMP	A
Bromomethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 11:42	TMP	A
Carbon Tetrachloride	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 11:42	TMP	A
Chlorobenzene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 11:42	TMP	A
Chlorodibromomethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 11:42	TMP	A
Chloroethane	1.0 U	U,1,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 11:42	TMP	A
Chloroform	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 11:42	TMP	A
Chloromethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 11:42	TMP	A
cis-1,2-Dichloroethene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 11:42	TMP	A
cis-1,3-Dichloropropene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 11:42	TMP	A
Dibromomethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 11:42	TMP	A
Dichlorodifluoromethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 11:42	TMP	A
Diisopropyl ether	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 11:42	TMP	A
Ethylbenzene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 11:42	TMP	A
Hexachlorobutadiene	5.0 U	U,P1	ug/L	5.0	SW846 8260D	1	06/01/2023 11:42	TMP	A
Methyl t-Butyl Ether	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 11:42	TMP	A
Methylene Chloride	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 11:42	TMP	A
mp-Xylene	2.0 U	U,P1	ug/L	2.0	SW846 8260D	1	06/01/2023 11:42	TMP	A
Naphthalene	2.0 U	U,P1	ug/L	2.0	SW846 8260D	1	06/01/2023 11:42	TMP	A
o-Chlorotoluene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 11:42	TMP	A

Results

Client Sample ID	Trip Blank A	Collected	05/22/2023 00:00
Lab Sample ID	3304366015	Lab Receipt	05/22/2023 18:15

VOLATILE ORGANICS (cont.)

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
o-Xylene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 11:42	TMP	A
p-Chlorotoluene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 11:42	TMP	A
p-Isopropyltoluene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 11:42	TMP	A
Styrene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 11:42	TMP	A
Tetrachloroethene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 11:42	TMP	A
Toluene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 11:42	TMP	A
Total Xylenes	3.0 U	U,P1	ug/L	3.0	SW846 8260D	1	06/01/2023 11:42	TMP	A
trans-1,2-Dichloroethene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 11:42	TMP	A
trans-1,3-Dichloropropene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 11:42	TMP	A
Trichloroethene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 11:42	TMP	A
Trichlorofluoromethane	1.0 U	U,2,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 11:42	TMP	A
Vinyl Acetate	5.0 U	U,P1	ug/L	5.0	SW846 8260D	1	06/01/2023 11:42	TMP	A
Vinyl Chloride	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 11:42	TMP	A

SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
1,2-Dichloroethane-d4	17060-07-0	100%	62 – 133	06/01/2023 11:42	
4-Bromofluorobenzene	460-00-4	101%	79 – 114	06/01/2023 11:42	
Dibromofluoromethane	1868-53-7	94.2%	78 – 116	06/01/2023 11:42	
Toluene-d8	2037-26-5	100%	76 – 127	06/01/2023 11:42	



Results

Client Sample ID	Trip Blank B	Collected	05/22/2023 00:00
Lab Sample ID	3304366016	Lab Receipt	05/22/2023 18:15

VOLATILE ORGANICS

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
1,1,1,2-Tetrachloroethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 12:05	TMP	A
1,1,1-Trichloroethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 12:05	TMP	A
1,1,2,2-Tetrachloroethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 12:05	TMP	A
1,1,2-Trichloroethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 12:05	TMP	A
1,1-Dichloroethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 12:05	TMP	A
1,1-Dichloroethene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 12:05	TMP	A
1,1-Dichloropropene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 12:05	TMP	A
1,2,3-Trichlorobenzene	2.0 U	U,P1	ug/L	2.0	SW846 8260D	1	06/01/2023 12:05	TMP	A
1,2,3-Trichloropropane	2.0 U	U,P1	ug/L	2.0	SW846 8260D	1	06/01/2023 12:05	TMP	A
1,2,4-Trichlorobenzene	2.0 U	U,P1	ug/L	2.0	SW846 8260D	1	06/01/2023 12:05	TMP	A
1,2-Dibromo-3-chloropropane	7.0 U	U,P1	ug/L	7.0	SW846 8260D	1	06/01/2023 12:05	TMP	A
1,2-Dibromoethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 12:05	TMP	A
1,2-Dichlorobenzene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 12:05	TMP	A
1,2-Dichloroethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 12:05	TMP	A
1,2-Dichloropropane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 12:05	TMP	A
1,3-Dichlorobenzene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 12:05	TMP	A
1,3-Dichloropropane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 12:05	TMP	A
1,4-Dichlorobenzene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 12:05	TMP	A
2,2-Dichloropropane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 12:05	TMP	A
2-Butanone	10.0 U	U,P1	ug/L	10.0	SW846 8260D	1	06/01/2023 12:05	TMP	A
2-Hexanone	5.0 U	U,P1	ug/L	5.0	SW846 8260D	1	06/01/2023 12:05	TMP	A
4-Methyl-2-Pentanone(MIBK)	5.0 U	U,P1	ug/L	5.0	SW846 8260D	1	06/01/2023 12:05	TMP	A
Acetone	10.0 U	U,P1	ug/L	10.0	SW846 8260D	1	06/01/2023 12:05	TMP	A
Benzene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 12:05	TMP	A
Bromobenzene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 12:05	TMP	A
Bromochloromethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 12:05	TMP	A
Bromodichloromethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 12:05	TMP	A
Bromoform	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 12:05	TMP	A
Bromomethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 12:05	TMP	A
Carbon Tetrachloride	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 12:05	TMP	A
Chlorobenzene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 12:05	TMP	A
Chlorodibromomethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 12:05	TMP	A
Chloroethane	1.0 U	U,1,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 12:05	TMP	A
Chloroform	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 12:05	TMP	A
Chloromethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 12:05	TMP	A
cis-1,2-Dichloroethene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 12:05	TMP	A
cis-1,3-Dichloropropene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 12:05	TMP	A
Dibromomethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 12:05	TMP	A
Dichlorodifluoromethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 12:05	TMP	A
Diisopropyl ether	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 12:05	TMP	A
Ethylbenzene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 12:05	TMP	A
Hexachlorobutadiene	5.0 U	U,P1	ug/L	5.0	SW846 8260D	1	06/01/2023 12:05	TMP	A
Methyl t-Butyl Ether	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 12:05	TMP	A
Methylene Chloride	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 12:05	TMP	A
mp-Xylene	2.0 U	U,P1	ug/L	2.0	SW846 8260D	1	06/01/2023 12:05	TMP	A
Naphthalene	2.0 U	U,P1	ug/L	2.0	SW846 8260D	1	06/01/2023 12:05	TMP	A
o-Chlorotoluene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 12:05	TMP	A

Results

Client Sample ID	Trip Blank B	Collected	05/22/2023 00:00
Lab Sample ID	3304366016	Lab Receipt	05/22/2023 18:15

VOLATILE ORGANICS (cont.)

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
o-Xylene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 12:05	TMP	A
p-Chlorotoluene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 12:05	TMP	A
p-Isopropyltoluene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 12:05	TMP	A
Styrene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 12:05	TMP	A
Tetrachloroethene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 12:05	TMP	A
Toluene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 12:05	TMP	A
Total Xylenes	3.0 U	U,P1	ug/L	3.0	SW846 8260D	1	06/01/2023 12:05	TMP	A
trans-1,2-Dichloroethene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 12:05	TMP	A
trans-1,3-Dichloropropene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 12:05	TMP	A
Trichloroethene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 12:05	TMP	A
Trichlorofluoromethane	1.0 U	U,2,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 12:05	TMP	A
Vinyl Acetate	5.0 U	U,P1	ug/L	5.0	SW846 8260D	1	06/01/2023 12:05	TMP	A
Vinyl Chloride	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	06/01/2023 12:05	TMP	A

SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
1,2-Dichloroethane-d4	17060-07-0	99.9%	62 – 133	06/01/2023 12:05	
4-Bromofluorobenzene	460-00-4	97.3%	79 – 114	06/01/2023 12:05	
Dibromofluoromethane	1868-53-7	95.5%	78 – 116	06/01/2023 12:05	
Toluene-d8	2037-26-5	98.6%	76 – 127	06/01/2023 12:05	

Sample - Method Cross Reference Table

Lab ID	Sample ID	Analysis Method	Preparation Method	Leachate Method
3304366001	MW-35D	SW846 8270E SIM SW846 8260D	SW846 3510C N/A	
3304366002	MW-34D	SW846 8270E SIM SW846 8260D	SW846 3510C N/A	
3304366003	MW-33D-295	SW846 8270E SIM SW846 8260D	SW846 3510C N/A	
3304366004	MW-33D-235	SW846 8270E SIM SW846 8260D	SW846 3510C N/A	
3304366005	MW-31D	SW846 8270E SIM SW846 8260D	SW846 3510C N/A	
3304366006	MW-30D-413	SW846 8270E SIM SW846 8260D	SW846 3510C N/A	
3304366007	MW-30D-273	SW846 8270E SIM SW846 8260D	SW846 3510C N/A	
3304366008	MW-29D	SW846 8270E SIM SW846 8260D	SW846 3510C N/A	
3304366009	MW-32D	SW846 8270E SIM SW846 8260D	SW846 3510C N/A	
3304366010	MW-28D	SW846 8270E SIM SW846 8260D	SW846 3510C N/A	
3304366011	MW-36D	SW846 8270E SIM SW846 8260D	SW846 3510C N/A	
3304366012	MW-25D-130	SW846 8270E SIM SW846 8260D	SW846 3510C N/A	
3304366013	DUP-052223	SW846 8270E SIM SW846 8260D	SW846 3510C N/A	
3304366014	MW-25D-190	SW846 8270E SIM SW846 8260D	SW846 3510C N/A	
3304366015	Trip Blank A	SW846 8260D	N/A	
3304366016	Trip Blank B	SW846 8260D	N/A	



Project Former KOP-Flex Facility Onsit
Workorder 3304366

QUALITY CONTROL SAMPLES

SEMOVOLATILE SIM

QC Batch				Associated Samples			
<u>QC Batch</u>	1005851	<u>Prep Method</u>	SW846 3510C	3304366001	3304366002	3304366003	3304366004
<u>Date</u>	05/24/2023 09:20	<u>Analysis Method</u>	SW846 8270E SIM	3304366005	3304366006	3304366007	3304366008
<u>Tech.</u>	AJW			3304366009	3304366010	3304366011	3304366012
				3304366013	3304366014		

Method Blank	3673724 (MB)	Created on 05/23/2023 22:44	For QC Batch <u>1005851</u>
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RESULTS

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

SURROGATES

Compound	CAS No	Result	Expected	Rec.	Limits (%)	Qualifiers
2-Methylnaphthalene-d10	7297-45-2	BLK	0.63	1	63.1	29 - 112
Fluoranthene-d10	93951-69-0	BLK	0.81	1	81.2	45 - 130

Lab Control Standard	3673725 (LCS)	Created on 05/23/2023 22:44	For QC Batch <u>1005851</u>
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RESULTS

Compound	CAS No	Result	Orig. Result	Spk Added	Rec.	Limits (%)	RPD Limit (%)	Qualifiers
1,4-Dioxane	123-91-1	LCS	0.41	1	40.6	22 - 75		

SURROGATES

Compound	CAS No	Result	Expected	Rec.	Limits (%)	Qualifiers
2-Methylnaphthalene-d10	7297-45-2	LCS	0.60	1	60.3	29 - 112
Fluoranthene-d10	93951-69-0	LCS	0.78	1	77.6	45 - 130

Matrix Spike	3673726 (MS)	3304366014	For QC Batch <u>1005851</u>
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****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	3673727 (MSD)	3304366014	For QC Batch <u>1005851</u>
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RESULTS

Compound	CAS No	Result	Orig. Result	Spk Added	Rec.	Limits (%)	RPD Limit (%)	Qualifiers
1,4-Dioxane	123-91-1	MS	10.40	9	1.10	NC	22 - 75	
1,4-Dioxane	123-91-1	MSD	5.80	9	1	NC	22 - 75	RPD <u>56.80*</u> (Max-30)

QUALITY CONTROL SAMPLES

SEMIVOLATILE SIM (cont.)

SURROGATES

<u>Compound</u>	<u>CAS No</u>		<u>Result</u> (ug/L)	<u>Expected</u> (ug/L)	<u>Rec.</u> (%)	<u>Limits (%)</u>	<u>Qualifiers</u>
2-Methylnaphthalene-d10	7297-45-2	MS	0.65	1.10	61.4	29 - 112	
2-Methylnaphthalene-d10	7297-45-2	MSD	0.39	1	39.1	29 - 112	
Fluoranthene-d10	93951-69-0	MS	0.75	1.10	70.3	45 - 130	
Fluoranthene-d10	93951-69-0	MSD	0.65	1	64.9	45 - 130	

QUALITY CONTROL SAMPLES

VOLATILE ORGANICS

QC Batch

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

Associated Samples

3304366001	3304366002	3304366003	3304366004
3304366005	3304366006	3304366007	3304366008
3304366009	3304366010	3304366011	3304366012
3304366013	3304366014	3304366015	3304366016

Method Blank

3677099 (MB)

 Created on 06/01/2023 10:14

 For QC Batch 1008495
RESULTS

Compound	CAS No		Result	Units	RDL	Qualifiers
1,1,2-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

QUALITY CONTROL SAMPLES

VOLATILE ORGANICS (cont.)

RESULTS

<u>Compound</u>	<u>CAS No</u>	<u>Result</u>	<u>Units</u>	<u>RDL</u>	<u>Qualifiers</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
m-p-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

<u>Compound</u>	<u>CAS No</u>	<u>Result</u> (ug/L)	<u>Expected</u> (ug/L)	<u>Rec.</u> (%)	<u>Limits (%)</u>	<u>Qualifiers</u>
1,2-Dichloroethane-d4	17060-07-0	BLK	29.80	30	99.4	62 - 133
4-Bromofluorobenzene	460-00-4	BLK	28.60	30	95.4	79 - 114
Dibromofluoromethane	1868-53-7	BLK	28.40	30	94.6	78 - 116
Toluene-d8	2037-26-5	BLK	29.70	30	99.1	76 - 127

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

RESULTS

<u>Compound</u>	<u>CAS No</u>	<u>Result</u> (ug/L)	<u>Orig. Result</u> (ug/L)	<u>Spk Added</u> (ug/L)	<u>Rec. (%)</u>	<u>Limits (%)</u>	<u>RPD Limit (%)</u>	<u>Qualifiers</u>
1,1,2-Tetrachloroethane	630-20-6	LCS	16.50	20	82.7	78 - 121		
1,1,1-Trichloroethane	71-55-6	LCS	20.70	20	103	66 - 130		
1,1,2,2-Tetrachloroethane	79-34-5	LCS	20.60	20	103	74 - 135		
1,1,2-Trichloroethane	79-00-5	LCS	19.90	20	99.4	82 - 126		
1,1-Dichloroethane	75-34-3	LCS	19.70	20	98.4	78 - 124		
1,1-Dichloroethene	75-35-4	LCS	22.30	20	111	63 - 128		
1,1-Dichloropropene	563-58-6	LCS	20.60	20	103	76 - 126		
1,2,3-Trichlorobenzene	87-61-6	LCS	21.90	20	110	61 - 126		
1,2,3-Trichloropropane	96-18-4	LCS	20.70	20	104	75 - 132		
1,2,4-Trichlorobenzene	120-82-1	LCS	20.70	20	104	67 - 123		

QUALITY CONTROL SAMPLES

VOLATILE ORGANICS (cont.)

RESULTS

Compound	CAS No	Result (ug/L)	Orig. Result (ug/L)	Spk Added (ug/L)	Rec. (%)	Limits (%)	RPD Limit (%)	Qualifiers
1,2-Dibromo-3-chloropropane	96-12-8	LCS	17	20	85	59 - 133		
1,2-Dibromoethane	106-93-4	LCS	20.10	20	100	80 - 124		
1,2-Dichlorobenzene	95-50-1	LCS	20.40	20	102	82 - 118		
1,2-Dichloroethane	107-06-2	LCS	19.90	20	99.3	70 - 133		
1,2-Dichloropropane	78-87-5	LCS	19.50	20	97.4	81 - 127		
1,3-Dichlorobenzene	541-73-1	LCS	20	20	100	81 - 118		
1,3-Dichloropropane	142-28-9	LCS	19.80	20	98.9	82 - 126		
1,4-Dichlorobenzene	106-46-7	LCS	20.70	20	103	81 - 116		
2,2-Dichloropropane	594-20-7	LCS	20.70	20	104	64 - 129		
2-Butanone	78-93-3	LCS	107	100	107	50 - 152		
2-Hexanone	591-78-6	LCS	104	100	104	65 - 154		
4-Methyl-2-Pentanone(MIBK)	108-10-1	LCS	109	100	109	71 - 146		
Acetone	67-64-1	LCS	106	100	106	40 - 151		
Benzene	71-43-2	LCS	20.60	20	103	80 - 124		
Bromobenzene	108-86-1	LCS	20.80	20	104	81 - 119		
Bromochloromethane	74-97-5	LCS	17.80	20	89	73 - 117		
Bromodichloromethane	75-27-4	LCS	19.90	20	99.5	79 - 126		
Bromoform	75-25-2	LCS	18.80	20	94	70 - 123		
Bromomethane	74-83-9	LCS	17.20	20	85.8	45 - 148		
Carbon Tetrachloride	56-23-5	LCS	20.90	20	104	62 - 132		
Chlorobenzene	108-90-7	LCS	20.20	20	101	85 - 117		
Chlorodibromomethane	124-48-1	LCS	19.40	20	97	77 - 122		
Chloroethane	75-00-3	LCS	13.70	20	68.5	51 - 142		
Chloroform	67-66-3	LCS	21	20	105	78 - 122		
Chloromethane	74-87-3	LCS	21.90	20	110	38 - 156		
cis-1,2-Dichloroethene	156-59-2	LCS	20.40	20	102	78 - 125		
cis-1,3-Dichloropropene	10061-01-5	LCS	19.80	20	99	81 - 121		
Dibromomethane	74-95-3	LCS	20.70	20	104	81 - 125		
Dichlorodifluoromethane	75-71-8	LCS	25.30	20	127	17 - 166		
Diisopropyl ether	108-20-3	LCS	21.60	20	108	74 - 131		
Ethylbenzene	100-41-4	LCS	20.40	20	102	80 - 124		
Hexachlorobutadiene	87-68-3	LCS	24.10	20	121	55 - 128		
Methyl t-Butyl Ether	1634-04-4	LCS	21.30	20	107	69 - 115		
Methylene Chloride	75-09-2	LCS	21.80	20	109	76 - 121		
mp-Xylene	108383/106423	LCS	41.70	40	104	79 - 125		
Naphthalene	91-20-3	LCS	21.30	20	106	56 - 134		
o-Chlorotoluene	95-49-8	LCS	20.90	20	105	78 - 126		
o-Xylene	95-47-6	LCS	19.90	20	99.5	79 - 124		
p-Chlorotoluene	106-43-4	LCS	20.60	20	103	78 - 125		
p-Isopropyltoluene	99-87-6	LCS	21.70	20	108	72 - 123		
Styrene	100-42-5	LCS	21.30	20	106	79 - 123		
Tetrachloroethene	127-18-4	LCS	20.30	20	101	72 - 124		
Toluene	108-88-3	LCS	20.60	20	103	80 - 125		
Total Xylenes	1330-20-7	LCS	61.60	60	103	79 - 125		
trans-1,2-Dichloroethene	156-60-5	LCS	20.30	20	102	71 - 122		
trans-1,3-Dichloropropene	10061-02-6	LCS	20.40	20	102	78 - 126		
Trichloroethene	79-01-6	LCS	19.50	20	97.7	77 - 124		



Project Former KOP-Flex Facility Onsit
Workorder 3304366

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
Trichlorofluoromethane	75-69-4	LCS	16		20	80.1	38 - 123		
Vinyl Acetate	108-05-4	LCS	19.30		20	96.6	58 - 136		
Vinyl Chloride	75-01-4	LCS	21.60		20	108	27 - 138		

SURROGATES

Compound	CAS No		Result (ug/L)	Expected (ug/L)	Rec. (%)	Limits (%)	Qualifiers
1,2-Dichloroethane-d4	17060-07-0	LCS	30	30	100	62 - 133	
4-Bromofluorobenzene	460-00-4	LCS	30.10	30	100	79 - 114	
Dibromofluoromethane	1868-53-7	LCS	30.50	30	102	78 - 116	
Toluene-d8	2037-26-5	LCS	30.40	30	101	76 - 127	

Matrix Spike 3677151 (MS) 3304366014 For QC Batch 1008495

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

Matrix Spike Duplicate 3677152 (MSD) 3304366014 For QC Batch 1008495

RESULTS

Compound	CAS No		Result (ug/L)	Orig. Result (ug/L)	Spk Added (ug/L)	Rec. (%)	Limits (%)	RPD Limit (%)	Qualifiers
1,1,1,2-Tetrachloroethane	630-20-6	MS	16.80	0	20	84.1	78 - 121		
1,1,1,2-Tetrachloroethane	630-20-6	MSD	16.40	0	20	81.8	78 - 121	RPD <u>2.74</u> (Max-16)	
1,1,1-Trichloroethane	71-55-6	MS	26.90	3.60	20	117	66 - 130		
1,1,1-Trichloroethane	71-55-6	MSD	25.20	3.60	20	108	66 - 130	RPD <u>6.52</u> (Max-20)	
1,1,2,2-Tetrachloroethane	79-34-5	MS	21.50	0	20	108	74 - 135		
1,1,2,2-Tetrachloroethane	79-34-5	MSD	21.50	0	20	107	74 - 135	RPD <u>0.34</u> (Max-16)	
1,1,2-Trichloroethane	79-00-5	MS	20.80	0	20	104	82 - 126		
1,1,2-Trichloroethane	79-00-5	MSD	20.90	0	20	104	82 - 126	RPD <u>0.50</u> (Max-15)	
1,1-Dichloroethane	75-34-3	MS	29.40	7.10	20	111	78 - 124		
1,1-Dichloroethane	75-34-3	MSD	28	7.10	20	104	78 - 124	RPD <u>4.85</u> (Max-15)	
1,1-Dichloroethene	75-35-4	MS	53.20	30.10	20	115	63 - 128		
1,1-Dichloroethene	75-35-4	MSD	49.90	30.10	20	98.8	63 - 128	RPD <u>6.44</u> (Max-21)	
1,1-Dichloropropene	563-58-6	MS	22.70	0	20	113	76 - 126		
1,1-Dichloropropene	563-58-6	MSD	21.30	0	20	107	76 - 126	RPD <u>6.15</u> (Max-16)	
1,2,3-Trichlorobenzene	87-61-6	MS	20.30	0	20	102	61 - 126		
1,2,3-Trichlorobenzene	87-61-6	MSD	20.80	0	20	104	61 - 126	RPD <u>2.24</u> (Max-36)	
1,2,3-Trichloropropane	96-18-4	MS	21.90	0	20	110	75 - 132		
1,2,3-Trichloropropane	96-18-4	MSD	21.80	0	20	109	75 - 132	RPD <u>0.55</u> (Max-19)	
1,2,4-Trichlorobenzene	120-82-1	MS	19.90	0	20	99.3	67 - 123		
1,2,4-Trichlorobenzene	120-82-1	MSD	20.20	0	20	101	67 - 123	RPD <u>1.43</u> (Max-22)	
1,2-Dibromo-3-chloropropane	96-12-8	MS	17.50	0	20	87.7	59 - 133		
1,2-Dibromo-3-chloropropane	96-12-8	MSD	17.10	0	20	85.7	59 - 133	RPD <u>2.34</u> (Max-26)	
1,2-Dibromoethane	106-93-4	MS	20.10	0	20	101	80 - 124		
1,2-Dibromoethane	106-93-4	MSD	20	0	20	100	80 - 124	RPD <u>0.47</u> (Max-19)	
1,2-Dichlorobenzene	95-50-1	MS	20.90	0	20	104	82 - 118		

QUALITY CONTROL SAMPLES

VOLATILE ORGANICS (cont.)

RESULTS

Compound	CAS No		Result (ug/L)	Orig. Result (ug/L)	Spk Added (ug/L)	Rec. (%)	Limits (%)	RPD Limit (%)	Qualifiers
								RPD	0.65 (Max-15)
1,2-Dichlorobenzene	95-50-1	MSD	20.70	0	20	104	82 - 118	RPD	<u>0.65</u> (Max-15)
1,2-Dichloroethane	107-06-2	MS	21.50	0	20	108	70 - 133		
1,2-Dichloroethane	107-06-2	MSD	20.90	0	20	104	70 - 133	RPD	<u>3.08</u> (Max-19)
1,2-Dichloropropane	78-87-5	MS	21	0	20	105	81 - 127		
1,2-Dichloropropane	78-87-5	MSD	20.40	0	20	102	81 - 127	RPD	<u>2.93</u> (Max-15)
1,3-Dichlorobenzene	541-73-1	MS	20.50	0	20	102	81 - 118		
1,3-Dichlorobenzene	541-73-1	MSD	20.10	0	20	101	81 - 118	RPD	<u>1.68</u> (Max-16)
1,3-Dichloropropane	142-28-9	MS	20.60	0	20	103	82 - 126		
1,3-Dichloropropane	142-28-9	MSD	20.10	0	20	101	82 - 126	RPD	<u>2.30</u> (Max-15)
1,4-Dichlorobenzene	106-46-7	MS	21.20	0	20	106	81 - 116		
1,4-Dichlorobenzene	106-46-7	MSD	20.70	0	20	103	81 - 116	RPD	<u>2.64</u> (Max-15)
2,2-Dichloropropane	594-20-7	MS	19.40	0	20	97.1	64 - 129		
2,2-Dichloropropane	594-20-7	MSD	18.10	0	20	90.4	64 - 129	RPD	<u>7.17</u> (Max-18)
2-Butanone	78-93-3	MS	120	0	100	120	50 - 152		
2-Butanone	78-93-3	MSD	121	0	100	121	50 - 152	RPD	<u>0.29</u> (Max-16)
2-Hexanone	591-78-6	MS	111	0	100	111	65 - 154		
2-Hexanone	591-78-6	MSD	110	0	100	110	65 - 154	RPD	<u>0.89</u> (Max-17)
4-Methyl-2-Pentanone(MIBK)	108-10-1	MS	117	0	100	117	71 - 146		
4-Methyl-2-Pentanone(MIBK)	108-10-1	MSD	116	0	100	116	71 - 146	RPD	<u>0.76</u> (Max-16)
Acetone	67-64-1	MS	109	0	100	109	40 - 151		
Acetone	67-64-1	MSD	107	0	100	107	40 - 151	RPD	<u>1.85</u> (Max-40)
Benzene	71-43-2	MS	22.10	0	20	111	80 - 124		
Benzene	71-43-2	MSD	20.70	0	20	103	80 - 124	RPD	<u>6.92</u> (Max-26)
Bromobenzene	108-86-1	MS	21.40	0	20	107	81 - 119		
Bromobenzene	108-86-1	MSD	20.90	0	20	104	81 - 119	RPD	<u>2.58</u> (Max-17)
Bromochloromethane	74-97-5	MS	18	0	20	89.9	73 - 117		
Bromochloromethane	74-97-5	MSD	17.30	0	20	86.7	73 - 117	RPD	<u>3.66</u> (Max-19)
Bromodichloromethane	75-27-4	MS	21	0	20	105	79 - 126		
Bromodichloromethane	75-27-4	MSD	19.90	0	20	99.5	79 - 126	RPD	<u>5.33</u> (Max-16)
Bromoform	75-25-2	MS	17.60	0	20	88	70 - 123		
Bromoform	75-25-2	MSD	17.70	0	20	88.4	70 - 123	RPD	<u>0.44</u> (Max-16)
Bromomethane	74-83-9	MS	16.70	0	20	83.7	45 - 148		
Bromomethane	74-83-9	MSD	16.90	0	20	84.3	45 - 148	RPD	<u>0.66</u> (Max-26)
Carbon Tetrachloride	56-23-5	MS	22.60	0	20	113	62 - 132		
Carbon Tetrachloride	56-23-5	MSD	20.40	0	20	102	62 - 132	RPD	<u>10.40</u> (Max-17)
Chlorobenzene	108-90-7	MS	21	0	20	105	85 - 117		
Chlorobenzene	108-90-7	MSD	20.10	0	20	101	85 - 117	RPD	<u>4.04</u> (Max-15)
Chlorodibromomethane	124-48-1	MS	19.20	0	20	96.2	77 - 122		
Chlorodibromomethane	124-48-1	MSD	19	0	20	95.1	77 - 122	RPD	<u>1.18</u> (Max-15)
Chloroethane	75-00-3	MS	14	0	20	70.1	51 - 142		
Chloroethane	75-00-3	MSD	13.60	0	20	68.2	51 - 142	RPD	<u>2.69</u> (Max-24)
Chloroform	67-66-3	MS	22.50	0	20	112	78 - 122		
Chloroform	67-66-3	MSD	21.70	0	20	108	78 - 122	RPD	<u>3.62</u> (Max-16)
Chloromethane	74-87-3	MS	24.50	0	20	123	38 - 156		
Chloromethane	74-87-3	MSD	22.60	0	20	113	38 - 156	RPD	<u>8.14</u> (Max-27)
cis-1,2-Dichloroethene	156-59-2	MS	22.30	0	20	111	78 - 125		
cis-1,2-Dichloroethene	156-59-2	MSD	20.80	0	20	104	78 - 125	RPD	<u>6.91</u> (Max-21)
cis-1,3-Dichloropropene	10061-01-5	MS	19.80	0	20	98.8	81 - 121		
cis-1,3-Dichloropropene	10061-01-5	MSD	19	0	20	94.8	81 - 121	RPD	<u>4.12</u> (Max-16)

QUALITY CONTROL SAMPLES

VOLATILE ORGANICS (cont.)

RESULTS

Compound	CAS No		Result (ug/L)	Orig. Result (ug/L)	Spk Added (ug/L)	Rec. (%)	Limits (%)	RPD Limit (%)	Qualifiers
Dibromomethane	74-95-3	MS	21	0	20	105	81 - 125		
Dibromomethane	74-95-3	MSD	21	0	20	105	81 - 125	RPD <u>0.12</u> (Max-16)	
Dichlorodifluoromethane	75-71-8	MS	28.40	0	20	142	17 - 166		
Dichlorodifluoromethane	75-71-8	MSD	26.20	0	20	131	17 - 166	RPD <u>7.94</u> (Max-24)	
Diisopropyl ether	108-20-3	MS	23.20	0	20	116	74 - 131		
Diisopropyl ether	108-20-3	MSD	22.40	0	20	112	74 - 131	RPD <u>3.72</u> (Max-15)	
Ethylbenzene	100-41-4	MS	21.60	0	20	108	80 - 124		
Ethylbenzene	100-41-4	MSD	20.50	0	20	102	80 - 124	RPD <u>5.32</u> (Max-19)	
Hexachlorobutadiene	87-68-3	MS	22.80	0	20	114	55 - 128		
Hexachlorobutadiene	87-68-3	MSD	21.40	0	20	107	55 - 128	RPD <u>6.34</u> (Max-35)	
Methyl t-Butyl Ether	1634-04-4	MS	23.80	1.40	20	112	69 - 115		
Methyl t-Butyl Ether	1634-04-4	MSD	23.70	1.40	20	112	69 - 115	RPD <u>0.52</u> (Max-20)	
Methylene Chloride	75-09-2	MS	22.40	0	20	112	76 - 121		
Methylene Chloride	75-09-2	MSD	21.80	0	20	109	76 - 121	RPD <u>2.66</u> (Max-17)	
mp-Xylene	108383/106423	MS	43.60	0	40	109	79 - 125		
mp-Xylene	108383/106423	MSD	41.60	0	40	104	79 - 125	RPD <u>4.63</u> (Max-21)	
Naphthalene	91-20-3	MS	19.50	0	20	97.6	56 - 134		
Naphthalene	91-20-3	MSD	20.20	0	20	101	56 - 134	RPD <u>3.54</u> (Max-40)	
o-Chlorotoluene	95-49-8	MS	21.80	0	20	109	78 - 126		
o-Chlorotoluene	95-49-8	MSD	21.40	0	20	107	78 - 126	RPD <u>1.92</u> (Max-17)	
o-Xylene	95-47-6	MS	21	0	20	105	79 - 124		
o-Xylene	95-47-6	MSD	20.30	0	20	101	79 - 124	RPD <u>3.59</u> (Max-19)	
p-Chlorotoluene	106-43-4	MS	21.30	0	20	107	78 - 125		
p-Chlorotoluene	106-43-4	MSD	20.80	0	20	104	78 - 125	RPD <u>2.46</u> (Max-16)	
p-Isopropyltoluene	99-87-6	MS	22.30	0	20	112	72 - 123		
p-Isopropyltoluene	99-87-6	MSD	22.60	0	20	113	72 - 123	RPD <u>1.10</u> (Max-17)	
Styrene	100-42-5	MS	21.40	0	20	107	79 - 123		
Styrene	100-42-5	MSD	20.80	0	20	104	79 - 123	RPD <u>2.77</u> (Max-16)	
Tetrachloroethene	127-18-4	MS	20.90	0	20	105	72 - 124		
Tetrachloroethene	127-18-4	MSD	19.90	0	20	99.3	72 - 124	RPD <u>5.32</u> (Max-38)	
Toluene	108-88-3	MS	21.70	0	20	108	80 - 125		
Toluene	108-88-3	MSD	20.50	0	20	103	80 - 125	RPD <u>5.46</u> (Max-20)	
Total Xylenes	1330-20-7	MS	64.70	0	60	108	79 - 125		
Total Xylenes	1330-20-7	MSD	61.90	0	60	103	79 - 125	RPD <u>4.29</u> (Max-35)	
trans-1,2-Dichloroethene	156-60-5	MS	22.80	0	20	114	71 - 122		
trans-1,2-Dichloroethene	156-60-5	MSD	20.90	0	20	105	71 - 122	RPD <u>8.73</u> (Max-22)	
trans-1,3-Dichloropropene	10061-02-6	MS	20.10	0	20	101	78 - 126		
trans-1,3-Dichloropropene	10061-02-6	MSD	19.90	0	20	99.5	78 - 126	RPD <u>0.98</u> (Max-18)	
Trichloroethene	79-01-6	MS	21.70	0	20	108	77 - 124		
Trichloroethene	79-01-6	MSD	20.30	0	20	102	77 - 124	RPD <u>6.42</u> (Max-18)	
Trichlorofluoromethane	75-69-4	MS	16.90	0	20	84.5	38 - 123		
Trichlorofluoromethane	75-69-4	MSD	15.80	0	20	79	38 - 123	RPD <u>6.67</u> (Max-23)	
Vinyl Acetate	108-05-4	MS	15.90	0	20	79.6	58 - 136		
Vinyl Acetate	108-05-4	MSD	16.20	0	20	80.8	58 - 136	RPD <u>1.45</u> (Max-17)	
Vinyl Chloride	75-01-4	MS	24.30	0	20	121	27 - 138		
Vinyl Chloride	75-01-4	MSD	22	0	20	110	27 - 138	RPD <u>9.79</u> (Max-40)	

QUALITY CONTROL SAMPLES

VOLATILE ORGANICS (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>Limits (%)</u>	<u>Qualifiers</u>
1,2-Dichloroethane-d4	17060-07-0	MS	30.40	30	101	62 - 133	
1,2-Dichloroethane-d4	17060-07-0	MSD	30.30	30	101	62 - 133	
4-Bromofluorobenzene	460-00-4	MS	29.90	30	99.6	79 - 114	
4-Bromofluorobenzene	460-00-4	MSD	29.80	30	99.5	79 - 114	
Dibromofluoromethane	1868-53-7	MS	30.20	30	101	78 - 116	
Dibromofluoromethane	1868-53-7	MSD	29.80	30	99.3	78 - 116	
Toluene-d8	2037-26-5	MS	29.50	30	98.4	76 - 127	
Toluene-d8	2037-26-5	MSD	29.60	30	98.6	76 - 127	

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Lab ID	Sample ID	Preparation Method	Prep Batch	Prep Date/Time	By	Analysis Method	Anly Batch
3304366001	MW-35D	SW846 3510C N/A	1005851 N/A	05/24/2023 09:20 N/A	AJW	SW846 8270E SIM SW846 8260D	1006130 1008495
3304366002	MW-34D	SW846 3510C N/A	1005851 N/A	05/24/2023 09:20 N/A	AJW	SW846 8270E SIM SW846 8260D	1006130 1008495
3304366003	MW-33D-295	SW846 3510C N/A	1005851 N/A	05/24/2023 09:20 N/A	AJW	SW846 8270E SIM SW846 8260D	1006130 1008495
3304366004	MW-33D-235	SW846 3510C N/A	1005851 N/A	05/24/2023 09:20 N/A	AJW	SW846 8270E SIM SW846 8260D	1006130 1008495
3304366005	MW-31D	SW846 3510C N/A	1005851 N/A	05/24/2023 09:20 N/A	AJW	SW846 8270E SIM SW846 8260D	1006130 1008495
3304366006	MW-30D-413	SW846 3510C N/A	1005851 N/A	05/24/2023 09:20 N/A	AJW	SW846 8270E SIM SW846 8260D	1006130 1008495
3304366007	MW-30D-273	SW846 3510C N/A	1005851 N/A	05/24/2023 09:20 N/A	AJW	SW846 8270E SIM SW846 8260D	1006130 1008495
3304366008	MW-29D	SW846 3510C N/A	1005851 N/A	05/24/2023 09:20 N/A	AJW	SW846 8270E SIM SW846 8260D	1006130 1008495
3304366009	MW-32D	SW846 3510C N/A	1005851 N/A	05/24/2023 09:20 N/A	AJW	SW846 8270E SIM SW846 8260D	1006130 1008495
3304366010	MW-28D	SW846 3510C N/A	1005851 N/A	05/24/2023 09:20 N/A	AJW	SW846 8270E SIM SW846 8260D	1006130 1008495
3304366011	MW-36D	SW846 3510C N/A	1005851 N/A	05/24/2023 09:20 N/A	AJW	SW846 8270E SIM SW846 8260D	1006130 1008495
3304366012	MW-25D-130	SW846 3510C N/A	1005851 N/A	05/24/2023 09:20 N/A	AJW	SW846 8270E SIM SW846 8260D	1006130 1008495
3304366013	DUP-052223	SW846 3510C N/A	1005851 N/A	05/24/2023 09:20 N/A	AJW	SW846 8270E SIM SW846 8260D	1006130 1008495
3304366014	MW-25D-190	SW846 3510C N/A	1005851 N/A	05/24/2023 09:20 N/A	AJW	SW846 8270E SIM SW846 8260D	1006130 1008495
3304366015	Trip Blank A	N/A	N/A	N/A		SW846 8260D	1008495
3304366016	Trip Blank B	N/A	N/A	N/A		SW846 8260D	1008495



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 CLIE
SAMPLER. INSTRUCTIONS ON THE BACK.**



Client Name: <u>WSP</u>	Container Type: <u>Jar</u>	temp taken by: <u>A6</u>	Therm ID: <u></u>
Address: <u>13530 Dulles Technology Dr</u>	Container Size: <u>1L</u>	Receipt Info completed by: <u></u>	WO Temp (°C) <u></u>
<u>Suite 300</u>	Preservative: <u>HCl</u>	Cooler Custody Seals Intact <input checked="" type="checkbox"/>	Y N NA
<u>Henderson VA 20171</u>	Orthophosphate Filtered? <input checked="" type="checkbox"/>	Temp By: <u>30</u>	Therm ID: <u>\$70</u>
Contact: <u>Eric Johnson</u>	Hexavalent Chromium Filtered? <input checked="" type="checkbox"/>	DBP: <u>Y N</u>	Deviations? NO YES If YES, list below:
Phone#: <u>(703) 703-16500</u>	ANALYSIS / METHOD REQUESTED	Client contact: <u></u>	Date/Tech: <u></u>
Project Name#: <u>Op-Flex Offsite / 31405608:01</u>	VOCs <u>836</u>	Correct Container's Provided <input checked="" type="checkbox"/>	Y N NA
Bill To:	Matrix (See bottom of COC)	Sample Custody Seal Intact <input checked="" type="checkbox"/>	Y N NA
Purchase Order #:	SDWA Sample Type (see key)	Received on Ice <input checked="" type="checkbox"/>	Y N NA
<input checked="" type="checkbox"/> Normal Standard TAT is 10-12 business days. <input type="checkbox"/> Rush Subject to ALS approval and surcharges.	*G or C	Cooler & Samplers Intact <input checked="" type="checkbox"/>	Y N NA
Date Required:	SDWA Compliance PWSID	Adequate Sample Volumes <input checked="" type="checkbox"/>	Y N NA
Email? <input type="checkbox"/>	WV Containers 0-6°C	CR6 Samples Filtered <input checked="" type="checkbox"/>	Y N NA
Comments: <u>Eric.johnson@wsp.com</u>	R=Raw P=Plant C=Check S=Special A=Annual Startup	OP Samples Filtered <input checked="" type="checkbox"/>	Y N NA

Enter Number of Containers Per Sample or Field Results Below.									
	Date Collected	Time	mm/dd/yy						
B 1	M/W - 3/5/0	5/22/23	0825	G 2 X 2X					
B 2	M/W - 3/4/0	5/22/23	0900	G 2 X 2X					
A 3	M/W - 3/3/0 - 2/25	5/22/23	0920	G 2 X 2X					
B 4	M/W - 3/3/0 - 2/25	5/22/23	0935	G 2 X 2X					
B 5	M/W - 3/1/0	5/22/23	0950	G 2 X 2X					
B 6	M/W - 3/0/0 - 4/13	5/22/23	1010	G 2 X 2X					
B 7	M/W - 3/0/0 - 2/23	5/22/23	1020	G 2 X 2X					
B 8	M/W - 2/29/0	5/22/23	1045	G 2 X 2X					
B 9	M/W - 3/2/0	5/22/23	1105	G 2 X 2X					
B 10	M/W - 2/28/0	5/22/23	1225	G 2 X 2X					
Circle Sample Collector: ALS Tech /Client ID: <u>E11047 M</u>				Comments: <u>836</u>	Contains Short Hold Testing YES NO				
Name: <u>E11047 M</u>	Relinquished By / Company Name: <u>WSP</u>	Received By / Company Name: <u>WSP</u>	Date: <u>5/22/23</u>	Time: <u>1:00 PM</u>	EDS: <u>EDS</u>	Standard Lvl 1 <input type="checkbox"/>	CLP-like <input type="checkbox"/>	HSCA <input type="checkbox"/>	State Samples Collected In NY <input type="checkbox"/>
			Date: <u>5/22/23</u>	Time: <u>1:00 PM</u>	EDS: <u>EDS</u>	Standard Lvl 2 <input type="checkbox"/>	DOD <input type="checkbox"/>	Landfill <input type="checkbox"/>	NY <input type="checkbox"/>
			Date: <u>5/22/23</u>	Time: <u>1:00 PM</u>	EDS: <u>EDS</u>	Standard Lvl 3 <input type="checkbox"/>	NJ RED <input type="checkbox"/>	NJ GW <input type="checkbox"/>	NJ <input type="checkbox"/>
			Date: <u>5/22/23</u>	Time: <u>1:00 PM</u>	EDS: <u>EDS</u>	Standard Lvl 4 <input type="checkbox"/>	NJ Full <input type="checkbox"/>		PA <input type="checkbox"/>
			Date: <u>5/22/23</u>	Time: <u>1:00 PM</u>	EDS: <u>EDS</u>	Excel Summary <input type="checkbox"/>	Sample Disposal <input type="checkbox"/>	Lab <input type="checkbox"/>	WV <input type="checkbox"/>
			Date: <u>5/22/23</u>	Time: <u>1:00 PM</u>	EDS: <u>EDS</u>	Custom <input type="checkbox"/>	Special <input type="checkbox"/>	Special <input type="checkbox"/>	FL <input type="checkbox"/>
			Date: <u>5/22/23</u>	Time: <u>1:00 PM</u>	EDS: <u>EDS</u>				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 #:	3304366	of
ALS Quote #:		2

Client Name: <u>ASPC</u>		Container Type <u>Air</u>	Temp <u>25°</u>	W/O temp <u>(°C)</u>	Receipt Info completed by: _____	Therm ID: _____
Address: 13530 Dulles Technology Dr Suite 300 Herndon VA 20171		Container Size <u>4L</u>	Cooler Custody Seals Intact	WV Containers 0-6°C <input type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> NA	Deviations? NO YES If YES, list below:	
		Preservative <u>HCl</u>	Sample Custody Seal Intact	<input type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> NA		
			Received on Ice	<input type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> NA		
			Coolers & Samples Intact	<input type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> NA		
			Correct Containers Provided	<input type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> NA		
			Sample Label/COC Agree	<input type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> NA		
			Adequate Sample Volumes	<input type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> NA		
			VOA only: Headspace Present	<input type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> NA		
			VOA only: Trip Blank NL < 4 days? <input type="checkbox"/> Y <input type="checkbox"/> N	<input type="checkbox"/> Courier/Tracking # _____	Date/Tech: _____	
			Sample(s) for Radiation testing? <input type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> NA	<input type="checkbox"/> Reportable SDWA Sample(s)? <input type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> NA	Rad Screen (uCi) <input type="checkbox"/> Y <input type="checkbox"/> N	
			SDWA State of Origin? _____	<input type="checkbox"/> New Source Contact: _____		
			PWSID # _____	<input type="checkbox"/> PWS Contact: _____	PWS Phone #: _____	
			SDWA Sample Type (see key) *G or C **Matrix (See bottom of COC)			
			SDWA Sample Type Key: D=Distribution E=Entry Point R=Raw P=Plant C=Check S=Special A=Annual Startup			
			Data Deliverables Standard Lvl 1 <input type="checkbox"/> CLP like <input type="checkbox"/> HSCA Standard Lvl 2 <input type="checkbox"/> DOD <input type="checkbox"/> Landfill Standard Lvl 3 <input type="checkbox"/> NJ RED <input type="checkbox"/> NJ GW Standard Lvl 4 <input type="checkbox"/> NJ Full <input type="checkbox"/> Other			
			Sample Disposal EDDS <input type="checkbox"/> Excel Summary <input type="checkbox"/> Sample Disposal EDDS <input type="checkbox"/> Equis <input type="checkbox"/> Lab <input type="checkbox"/> Special <input type="checkbox"/> Custom <input type="checkbox"/> Other			
			EDDS: Format Type <input type="checkbox"/> Form <input type="checkbox"/> Lab <input type="checkbox"/> Special <input type="checkbox"/> Custom <input type="checkbox"/> Other			
			Comments: <u>MSMD has 6 total bottles</u>			
Circle Sample Collector: ALS Tech/ <u>Client</u> Name: <u>Elliott M</u>		Relinquished By / Company Name <u>LSP</u>			Received BY Company Name <u>LSP</u>	
Date: <u>5/22/23</u>	Time: <u>1505</u>					
<u>5/22/23</u>	<u>1215</u>					
9						
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