



VIA ELECTRONIC MAIL

August 8, 2022

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. 23 - 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 2022 in the offsite portion of the Former Kop-Flex Facility Site (Site) in Hanover, Maryland. 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, the information presented on the hydrogeologic conditions and water quality for the impacted portion of the aquifer system in the offsite area is 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
Senior Technical Manager – Earth & Environment

REJ:jne
K:\Emerson\Kop-Flex_Reports_Progress Reports\MDE Reports\2022\3_2nd Q 2022

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. 23 – OFFSITE AREA
FORMER KOP-FLEX FACILITY SITE
April 2022 Through June 2022

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 2022 – JUNE 2022
REPORTING PERIOD**

- Offsite monitoring wells screened in the Lower Patapsco aquifer and underlying Patuxent aquifer were sampled on June 26 and 27, 2022 using a disposable passive sampling device (HydraSleeve™) that had been deployed following the sampling of the wells in November 2021. At each well location, the Hydrasleeve™ sampler was carefully removed, and the groundwater sample immediately collected in the appropriate laboratory-supplied containers. The sample retrieval depths for each well were consistent with those from previous monitoring events and are provided below.

As part of the sampling activities, WSP measured the depth to water in all offsite monitoring wells. Depth to water measurements for monitoring wells completed in the deep (confined) zone of the Lower Patapsco aquifer and Patuxent aquifer are provided in the table below. Since the onsite hydraulic containment system was shut down several weeks before measuring the depth to water in the monitoring wells, the water level data provided in the table reflect the hydraulic heads under non-remedial pumping conditions. Historical water level measurements are provided in Table 1.

WELL ID	HYDROSTRATIGRAPHIC UNIT	DEPTH TO WATER (FT BGS)	WELL DEPTH (FT BGS)	WELL SCREEN INTERVAL (FT BGS)	SAMPLE INTERVAL (FT BGS)
MW-24D	Confined Lower Patapsco	51.06	128	118 – 128	122 – 124.5
MW-25D-130	Confined Lower Patapsco	60.22	130	120 – 130	125 – 127.5
MW-25D-192	Confined Lower Patapsco	59.12	192	182 – 192	185 – 187.5
MW-28D	Confined Lower Patapsco	93.51	210	200 – 210	205 – 207.5
MW-29D	Confined Lower Patapsco	68.45	151	141 – 151	146 – 148.5
MW-30D-273	Confined Lower Patapsco	104.25	273	263 – 273	267 – 269.5

WELL ID	HYDROSTRATIGRAPHIC UNIT	DEPTH TO WATER (FT BGS)	WELL DEPTH (FT BGS)	WELL SCREEN INTERVAL (FT BGS)	SAMPLE INTERVAL (FT BGS)
MW-30D-413	Patuxent	145.4	413	403 – 413	407 – 409.5
MW-31D	Confined Lower Patapsco	114.2	280	270 – 280	275 – 277.5
MW-32D	Confined Lower Patapsco	104.98	236	226 – 236	233 – 235.5
MW-33D-235	Confined Lower Patapsco	132.16	235	225 – 235	230 – 232.5
MW-33D-295	Confined Lower Patapsco	131.85	295	285 – 295	290 – 292.5
MW-34D	Confined Lower Patapsco	141.12	385	375 – 385	379 – 381.5
MW-35D	Confined Lower Patapsco	132.35	298	288 – 298	293 – 295.5
MW-36D	Patuxent	148.06	360	350 – 360	357 – 359.5
MW-46D	Confined Lower Patapsco	37.13	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 June 2022 sampling activities. The contours in Figure 1 reflect the potentiometric surface under non-pumping conditions. The general direction of groundwater flow in this portion of the Lower Patapsco aquifer is to the south-southeast in the offsite area south of Maryland Route 100, which is consistent with determinations from contour maps generated for previous monitoring events. 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 north and west toward Stony Run.
- The analytical results for samples collected from the offsite monitoring wells in June 2022 are summarized in Table 2. Copies of the certified laboratory analytical reports for these samples are provided in Enclosure A.¹ 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 June 2022 samples are shown on Figure 2.
- No site-related COCs were detected in the sample collected from the shallow zone monitoring well located to the east of the former Kop-Flex facility on the Williams-Scotsman property.
- The analytical data indicates 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 deep zone 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

¹ The analytical results for the groundwater sample collected from well MW-46D were included in the laboratory report for the samples from the onsite monitoring wells. The laboratory analytical report for the onsite well samples will be provided in the quarterly report for the on-property portion of the Former Kop-Flex Facility Site.



of the site, the presence of detectable COC levels in groundwater from this well is most likely due to the past releases at the Site, given this well's close proximity to the former Kop-Flex facility. This total COCs concentration in the MW-46D sample (142 micrograms per liter [$\mu\text{g/l}$]) is less than the levels present in the May 2021 and November 2021 samples (250 $\mu\text{g/l}$ and 192.5 $\mu\text{g/l}$, respectively). The concentrations of 1,1-dichloroethene (DCE); 1,1-dichloroethane (DCA); and 1,4-dioxane show a decrease from the May and November 2021 sampling events. However, each of these COCs exceeded their respective comparative groundwater quality criteria (Table 2).

In the offsite area to the immediate south, the sample from monitoring well MW-24D on the adjoining Williams-Scotsman property had the highest concentration of site-related COCs (1,816 $\mu\text{g/l}$). However, this total COC level is less than the concentration in the November 2021 sample (1,943.1 $\mu\text{g/l}$). Further downgradient, a total concentration of site-related COCs of 90 $\mu\text{g/l}$ was detected in the MW-25D-130 sample, which is very similar to the levels from both 2021 sampling events, and greater than the concentrations in the sample from the deeper well MW-25D-192 at this location (62 $\mu\text{g/l}$). The concentrations of site-related COCs, particularly 1,1-DCE; and 1,4-dioxane, in the MW-25D-130 samples appear to be stabilizing or continuing to decrease. The results for well MW-25D-192 showed comparable COC concentrations to the 2021 samples, which are noticeably lower than levels detected during the 2018 through 2020 monitoring events. While the total concentrations of site-related COCs appear to be decreasing or stabilizing in the portion of the deep zone screened by MW-25D-192, the concentrations of 1,1-DCE, 1,1-DCA, and 1,4-dioxane remain above their respective comparative groundwater quality criteria.

The majority of the sampling data for the deep, confined Lower Patapsco aquifer monitoring wells located further downgradient indicated non-detect to low concentrations of site-related COCs (Figure 2 and Table 2). The only sample with COC concentrations that exceeded their respective comparative criteria was from the well screened from 263-273 ft BGS at the MW-30D location, which is located along the presumed center-line of the VOC plume. The groundwater sample from this well (MW-30D-273) contained 1,1-DCE at 34.5 $\mu\text{g/l}$ and 1,4-dioxane at 7.5 $\mu\text{g/l}$, both above their respective groundwater quality criteria. The concentration of 1,1-DCE is very similar to the results from the previous sampling events. However, the concentration of 1,4-dioxane is noticeably lower than the November 2021 sample (16.6 $\mu\text{g/l}$). Concentrations of 1,1-DCE and 1,4-dioxane in the MW-28D sample and 1,4-dioxane in the sample from the deeper well at the MW-33D location, which had exceeded their respective comparative criteria in recent samples, were below these numerical values in the June 2022 samples.

The sample results for the remaining offsite wells screened in the deep, confined zone of the Lower Patapsco aquifer (MW-29D, MW-31D, MW-32D, MW-34D and MW-35D) were non-detect for all site-related COCs. These monitoring wells are used to further 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 (413-foot BGS) are screened in the Patuxent aquifer, which underlies the Lower Patapsco aquifer. Consistent with previous monitoring events, no site-related COCs were detected in the samples from these wells (Figure 2). These results continue to indicate that COCs have not migrated downward through the Arundel Clay confining unit that underlies the Lower Patapsco aquifer and mixed with the groundwater moving through the Patuxent aquifer.

2.0 PLANNED OFFSITE ACTIVITIES FOR NEXT REPORTING PERIOD (JULY 2022 – SEPTEMBER 2022)

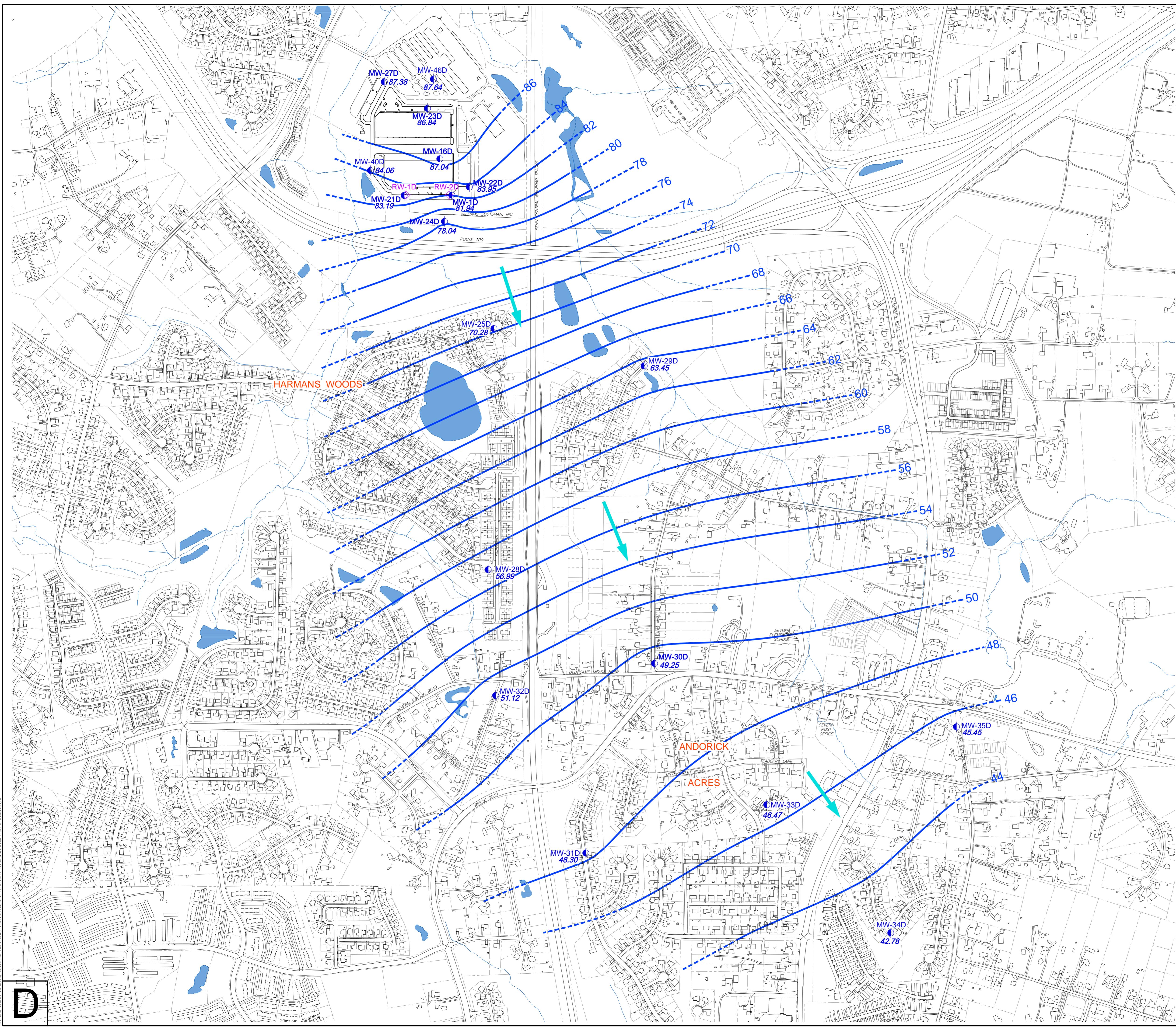
No field activities are planned for the third quarter 2022 reporting period. Pursuant to the approved Offsite Groundwater Monitoring Plan (dated September 15, 2015), groundwater monitoring is currently conducted on a semi-annual schedule. Therefore, the next groundwater monitoring event for the offsite well network will be performed sometime during the late Fall (mid-November to early December) of 2022.



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 at the offsite area.

FIGURES



REVISIONS		DESCRIPTION	
REV	DATE	REV	DATE

**POTENIOMETRIC SURFACE CONTOUR MAP DEEP
CONFINED ZONE OF THE LOWER PATAPSCO AQUIFER
JUNE 2022**

**FORMER KOP-FLEX FACILITY SITE
HANOVER, MARYLAND**

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

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13530 DULLES TECHNOLOGY DR, SUITE 300
HERNDON, VA 20171
TEL: +1 703.709.6300

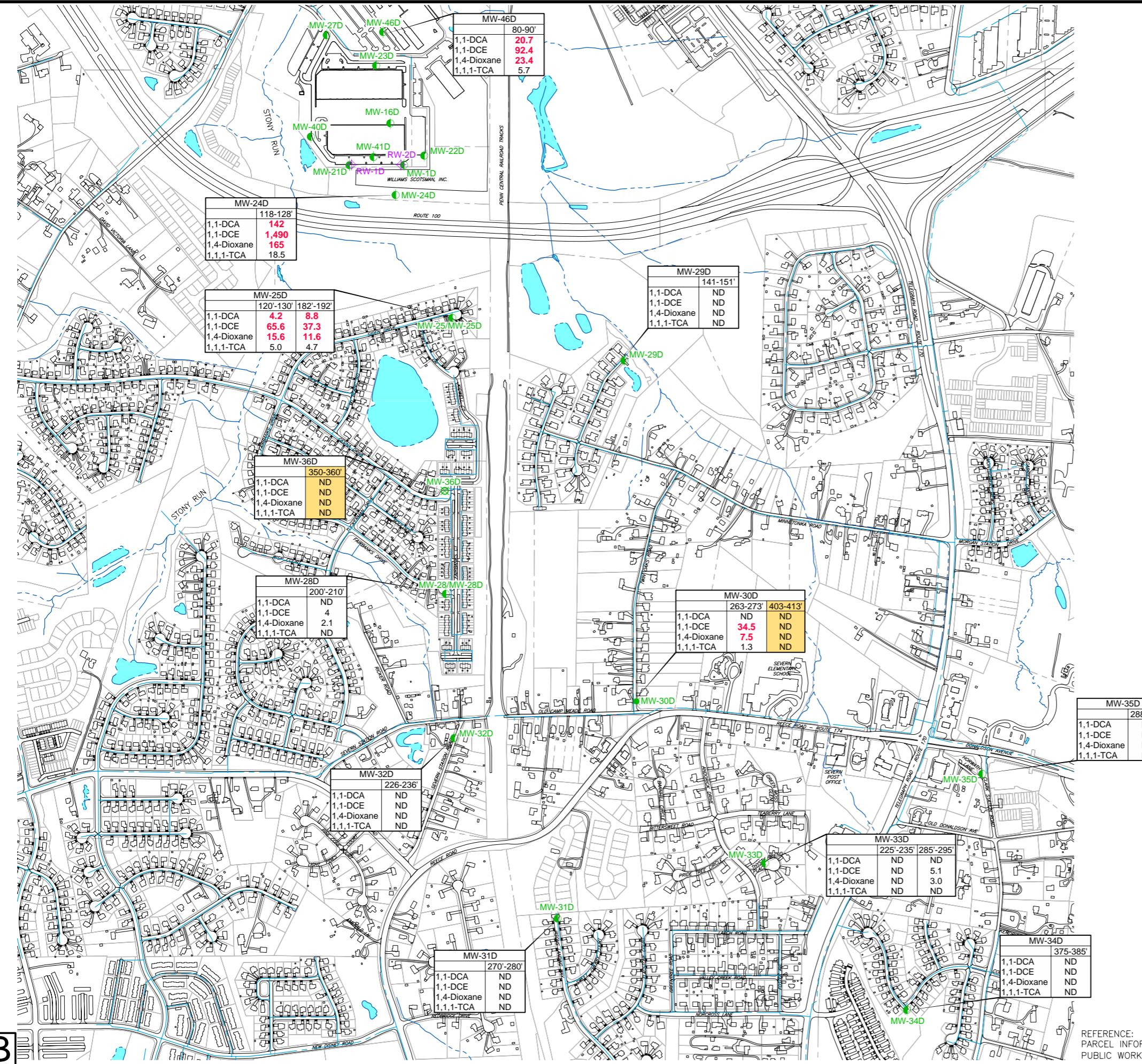
FIGURE 1

Drawing Number
314V1545.011-103

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

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SCALE IN FEET

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

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FIGURE 2

GROUNDWATER MONITORING RESULTS
LOWER PATAPSCO AQUIFER AND PATUXENT AQUIFER
OFFSITE MONITORING WELLS – JUNE 2022

FORMER KOP-FLEX FACILITY

HANOVER, MARYLAND

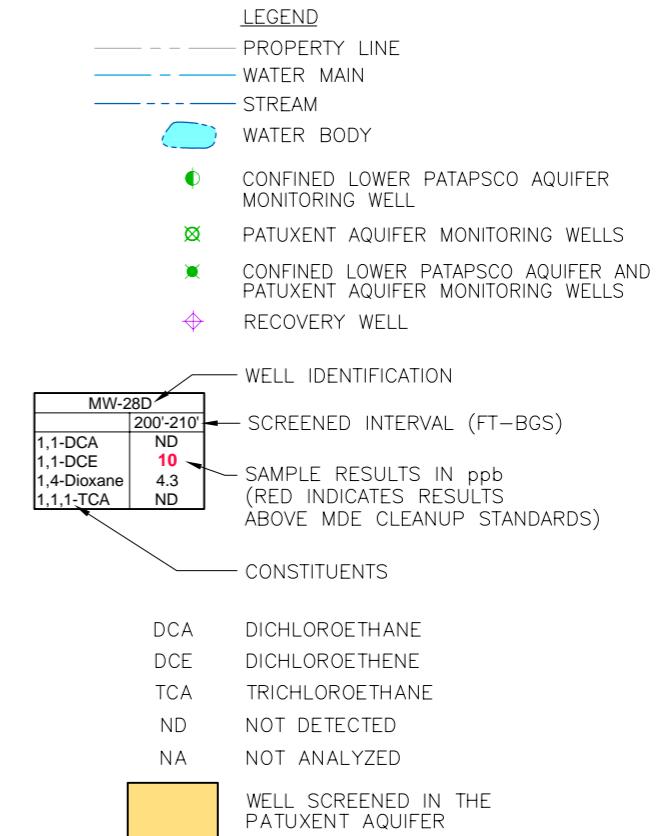
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EMERSUB 16 LLC
ST. LOUIS, MISSOURI

Drawn By: EGC

Checked: RG

Approved: RG

DWG Name: 314V1545.011-104



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

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TABLES

Table 1

Historical Groundwater Elevations (2015 through 2021)
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-25-130	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-25-192	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 2021)
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-25-130	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-25-192	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 2021)
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	
			<i>Depth to Water</i>	<i>Groundwater Elevation</i>								
MW-25S *	Unconfined LPA	130.6	11.75	118.85	NM	-	NM	-	NM	-	NM	-
MW-28S *	Unconfined LPA	150.5	23.30	127.20	NM	-	NM	-	NM	-	NM	-
MW-45	Unconfined LPA	126.7	11.98	114.74	11.75	114.97	NM	-	14.55	112.17	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
MW-25-130	Confined LPA	130.5	54.96	75.54	56.23	74.27	60.79	69.71	59.94	70.56	55.55	74.95
MW-25-192	Confined LPA	130.5	54.20	76.30	55.45	75.05	60.37	70.13	59.02	71.48	54.70	75.80
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
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
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
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
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
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
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
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
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
MW-46D	Confined LPA	124.8	NM	-	35.47	89.30	38.40	86.37	37.90	86.87	36.13	88.64
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
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

Notes:

LPA = Lower Patapsco Aquifer

NM = Not Measured

TOC = Top of Casing

* Well abandoned in August 2019

Table 1

Historical Groundwater Elevations (2015 through 2021)
Offsite Monitoring Wells
Former Kop-Flex Facility Site
Hanover, Maryland

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

Notes:

LPA = Lower Patapsco Aquifer

NM = Not Measured

TOC = Top of Casing

* Well abandoned in August 2019

Table 2

Offsite Monitoring Well Sample Results
Former Kop-Flex Facility Site
Hanover, Maryland
June 2022

Well ID	Hydrostratigraphic Unit	Sample Date	Parameter	1,1-Dichloroethane	1,2-Dichloroethane	1,1-Dichloroethene	cis-1,2-Dichloroethene	1,4-Dioxane	1,1,1-Trichloroethane	1,1,2-Trichloroethane	Trichloroethene	Total Detected CVOCs + 1,4-Dioxane
			MDE GW Quality Standard (b)	2.8	5	7	70	4.6 (c)	200	5	5	
MW 45	Shallow Zone, LPA	6/27/2022		1.0 U	1.0 U	1.0 U	1.0 U	.10 U	1.0 U	1.0 U	1.0 U	---
MW-24D	Deep Zone, LPA	6/27/2022		142	7.4	1,490	6.9	165	18.5	1.0	8.6	1,816
MW-25D-130	Deep Zone, LPA	6/27/2022		4.2	1.0 U	65.6	1.0 U	15.6	5.0	1.0 U	1.0 U	90
MW-25D-192	Deep Zone, LPA	6/27/2022		8.8	1.0 U	37.3	1.0 U	11.6	4.7	1.0 U	1.0 U	62
MW-28D	Deep Zone, LPA	6/27/2022		1.0 U	1.0 U	4.0	1.0 U	2.1	1.0 U	1.0 U	1.0 U	6
MW-29D	Deep Zone, LPA	6/27/2022		1.0 U	1.0 U	1.0 U	1.0 U	.50 U	1.0 U	1.0 U	1.0 U	---
MW-30D-273	Deep Zone, LPA	6/27/2022		1.0 U	1.0 U	34.5	1.0 U	7.5	1.3	1.0 U	1.0 U	43
MW-31D	Deep Zone, LPA	6/27/2022		1.0 U	1.0 U	1.0 U	1.0 U	.14 U	1.0 U	1.0 U	1.0 U	---
Mw-32D	Deep Zone, LPA	6/27/2022		1.0 U	1.0 U	1.0 U	1.0 U	.15 U	1.0 U	1.0 U	1.0 U	---
MW-33D-235	Deep Zone, LPA	6/27/2022		1.0 U	1.0 U	1.0 U	1.0 U	.10 U	1.0 U	1.0 U	1.0 U	---
MW-33D-295	Deep Zone, LPA	6/27/2022		1.0 U	1.0 U	5.1	1.0 U	3	1.0 U	1.0 U	1.0 U	8
MW-34D	Deep Zone, LPA	6/27/2022		1.0 U	1.0 U	1.0 U	1.0 U	.50 U	1.0 U	1.0 U	1.0 U	---
MW-35D	Deep Zone, LPA	6/27/2022		1.0 U	1.0 U	1.0 U	1.0 U	.16 U	1.0 U	1.0 U	1.0 U	---
MW-46D	Deep Zone, LPA	6/27/2022		20.7	1.0 U	92.4	1.0 U	23.4	5.7	1.0 U	1.0 U	142
MW-36D	Patuxent Aquifer	6/27/2022		1.0 U	1.0 U	1.0 U	1.0 U	.17 U	1.0 U	1.0 U	1.0 U	---
MW -30D-413	Patuxent Aquifer	6/27/2022		1.0 U	1.0 U	1.0 U	1.0 U	.10 U	1.0 U	1.0 U	1.0 U	---

a/ U = not detected above the method detection limit.

Bolded values indicate an exceedance of the Groundwater Quality Standards

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

ND = Not Detected in Laboratory Analysis

LPA = Lower Patapsco Aquifer

b/ Source:

<http://www.mde.maryland.gov/assets/document/Final%20Update%20No%202.1%20dated%205-20>

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

Table 3

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

Well ID	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)	2.8 (1)	5	7	70	4.6	5	200	5	5
Sample Date									
Shallow Zone Lower Patapsco Wells (b)									
MW-25 (c)									
3/19/2015	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	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	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	2.0 U	2.0 U	1.0 U	1.0 U	1.0 U
3/23/2016	1.0 U	1.0 U	1.5	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	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	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	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	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	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	2.0 U	2.0 U	1.0 U	1.0 U	1.0 U
11/14/2017	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	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	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	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	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	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	2.0 U	2.0 U	1.0 U	1.0 U	1.0 U
3/22/2016	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	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	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	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	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	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	2.0 U	2.0 U	1.0 U	1.0 U	1.0 U
11/14/2017	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	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	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
MW-45									
3/24/2017	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	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	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	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	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
Deep Zone Lower Patapsco Wells									
MW-24D									
3/22/2016	88.0	15.7	1,780	12.5 U	561	39.4	38.6	12.5 U	12.5 U
12/8/2016	36.1	5.2	701	5.0 U	192	10.0 U	9.0	5.0 U	5.0 U
5/2/2017	40.4	5.6	830	5.0 U	216	10.0 U	10.2	5.0 U	5.0 U
11/14/2017	28.1	3.4	803	2.3	212	11.7	10.5	0.5 J	5.9
5/30/2018	26.6	4.0 U	529	4.0 U	187	8.0 U	5.5	4.0 U	4.0 U
11/7/2018	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	66.2	10.0 U	1,190	10.0 U	359	50.0 U	18	10.0 U	10.0 U
11/19/2019	54.5	6.6	868	5.0 U	155	25.0 U	10	5.0 U	6.0 U
5/12/2020	25	3.3	402	5.0 U	139	25.0 U	3.7	5.0 U	3.2
11/23/2020	73.5	4.0 U	505	4.0 U	208	20.0 U	4.4	4.0 U	4.0 U
5/10/2021	151.0	6.3	788	7.2	299	25.0 U	10.9	5.0 U	5.0 U
11/15/2021	142.0	10.0 U	1300	10.0 U	475	25.0 U	16.1	5.0 U	5.0 U
6/27/2022	142.0	7.4	1490	6.9	165	1.0 U	18.5	1.0	8.6
MW-25D-130									
3/19/2015	38.6	10.8	854	10.0 U	446	200 U	8,930	100 U	100 U
6/24/2015	37.1	8.9	1,030	4.6	303	2.0 U	46.3	1.2	6.8
9/23/2015	29.7	10.0 U	697	10.0 U	295	20.0 U	32.3	10.0 U	14.2
1/7/2016	33.4	9.7	800	5.0 U	398	10.0 U	5.0 U	5.0 U	6.1
3/23/2016	24.5	8.0	676	5.0 U	302	10.0 U	26.2	5.0 U	5.0
7/19/2016	39.3	10.2	1,090	4.9 J	367	14.3 J	37.0	10.0 U	6.5 J
9/9/2016	27.9	6.4	661	5.0 U	241	12.0	25.0	5.0 U	5.0 U
12/8/2016	6.7	1.5	171	1.0 U	13.6	2.0 U	6.9	1.0 U	1.0 U
2/21/2017	7.2	1.7	194	1.0 U	69.1	2.0 U	7.0	1.0 U	1.2
5/2/2017	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	7.4	1.7	193	2.0 U	57.9	4.0 U	6.9	2.0 U	2.0 U
11/14/2017	5.1	1.3	151	0.57 J	58.5	5.0 U	6.4	1.0 U	1.1
2/13/2018	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	5.0	1.4	144	2.0 U	53.9	5.0 U	5.3	1.0 U	1.0 U
11/8/2018	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	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	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	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	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	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	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	4.2	1.0 U	65.6	1.0 U	15.6	1.0 U	5.0	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		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)	2.8 (1)	5	7	70	4.6	5	200	5	5
MW-25D-192	3/19/2015	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	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	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	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	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	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	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	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	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	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	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	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	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	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	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	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	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	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	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	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	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	8.8	1.0 U	37.3	1.0 U	11.6	1.0 U	4.7	1.0 U	1.0 U
MW-28D	3/17/2015	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	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	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	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	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	0.25 J	10.1	1.0 U	2.0	2.0 U	1.0 U	1.0 U	1.0 U
	9/7/2016	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	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	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	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	5.0	1.0 U	2.7	2.0 U	1.0 U	1.0 U	1.0 U
	11/14/2017	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	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	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	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	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	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	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	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	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	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	4.0	1.0 U	2.1	1.0 U	1.0 U	1.0 U	1.0 U
MW-29D	5/21/2018	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	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	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	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	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	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	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	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	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	2.0 U	5.0 U	1.0 U	1.0 U	1.0 U
MW-30D-273	5/31/2018	1.0 U	1.0 U	27.4	1.0 U	16.4	5.0 U	1.0 U	1.0 U	1.0 U
	8/23/2018	1.0	1.0 U	40.7	1.0 U	24.5	5.0 U	1.7	1.0 U	1.0 U
	11/8/2018	1.2	1.0 U	44.0	1.0 U	22.2	5.0 U	2.1	1.0 U	1.0 U
	2/19/2019	1.1	1.0 U	47.2	1.0 U	23.1	5.0 U	1.0 U	1.0 U	1.0 U
	5/22/2019	1.1	1.0 U	44.2	1.0 U	22.7	5.0 U	2.0	1.0 U	1.0 U
	11/20/2019	1.1	1.0 U	43.3	1.0 U	22.8	5.0 U	1.0 U	1.0 U	1.0 U
	5/14/2020	1.0	1.0 U	42.7	1.0 U	20.9	5.0 U	1.0 U	1.0 U	1.0 U
	11/23/2020	1.0	1.0 U	39.5	1.0 U	19.5	5.0 U	1.0 U	1.0 U	1.0 U
	5/10/2021	1.0	1.0 U	36.9	1.0 U	18.2	5.0 U	1.0 U	1.0 U	1.0 U
	11/15/2021	1.0	1.0 U	34.1	1.0 U	16.6	5.0 U	1.4	1.0 U	1.0 U
	6/27/2022	1.0 U	1.0 U	34.5	1.0 U	7.5	1.0 U	1.3	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	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)	2.8 (1)	5	7	70	4.6	5	200	5	5
MW-31D									
3/17/2015	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	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	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	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	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	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	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	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	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	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	2.0 U	2.0 U	1.0 U	1.0 U	1.0 U
11/14/2017	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	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	5.0 U	1.0 U	1.0 U	1.0 U
5/31/2018	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	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	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	2.0 U	5.0 U	1.0 U	1.0 U	1.0 U
6/2/2020	1.0 U	1.0 U	1.0 U	1.0 U	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	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	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	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	0.1 U	1.0 U	1.0 U	1.0 U	1.0 U
MW-32D									
5/31/2018	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	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	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	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	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	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	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	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	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	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	0.2 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	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	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	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	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	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	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	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	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	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	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	2.0 U	2.0 U	1.0 U	1.0 U	1.0 U
11/14/2017	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	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	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	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	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	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	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	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	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	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	0.1 U	1.0 U	1.0 U	1.0 U	1.0 U
MW-33D-295									
3/18/2015	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	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	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	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	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	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	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	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	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	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	5.6	1.0 U	6.3	2.0 U	1.0 U	1.0 U	1.0 U
11/14/2017	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	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	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	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	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	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	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	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	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	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	5.1	1.0 U	3.0	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		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 ($\mu\text{g/L}$)	2.8 (1)	5	7	70	4.6	5	200	5	5	
MW-34D	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	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 2.0 U 2.0 U 5.0 U 5.0 U 5.0 U 5.0 U 5.0 U 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
MW-35D	3/18/2015 6/22/2015 9/21/2015 1/6/2016 4/15/2016 7/18/2016 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 5/14/2020 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 2.0 U 2.0 U 5.0 U	1.0 U 1.0 U	1.0 U 1.0 U	1.0 U 1.0 U	
MW-46D	5/30/2018 11/7/2018 5/21/2019 11/19/2019 5/12/2020 11/23/2020 5/9/2021 11/15/2021	13.7 22.1 26.1 23.4 20.7 18.4 25.7 19.9	1.0 U 1.2 1.0 1.4 1.4 1.0 U 1.5 1.0 U	29.4 99.6 125 114 98 124 116 87	1.0 U 1.0 U 1.0 U 1.0 U 1.0 U 1.0 U 1.0 U 1.0 U	73.5 96.7 88.0 96.3 63.0 29.8 99.3 79.9	2.0 U 2.0 U 5.0 U 5.0 U 5.0 U 5.0 U 5.0 U 0.1 U	1.2 7.7 10.2 1.0 U 1.0 U 6.4 7.8 4.8	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 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
Confined Patuxent Wells MW-30D-413	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	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 5.0 U 5.0 U 5.0 U 5.0 U 5.0 U 0.1 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 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 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-36D	5/30/2018 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	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 5.0 U 5.0 U 5.0 U 5.0 U 5.0 U 0.2 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 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 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) MDE GW Quality Standard changed from 90 $\mu\text{g/L}$ to 2.8 $\mu\text{g/L}$ 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 ($\mu\text{g/l}$)

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 (JUNE 2022)**



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

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

Analytical Results Report For

WSP USA Inc.

Project Former KOP-Flex Facility Offsite
Workorder 3250322
Report ID 185101 on 8/1/2022

Certificate of Analysis

Enclosed are the analytical results for samples received by the laboratory on Jun 27, 2022.

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

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

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

This laboratory report may not be reproduced, except in full, without the written approval of ALS Global.

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

Recipient(s):

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

Susan Scherer

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
3250322001	MW-36D	Ground Water	06/27/2022 11:50	06/27/2022 19:00	CBC	Collected By Client
3250322002	MW-25D-130	Ground Water	06/27/2022 14:30	06/27/2022 19:00	CBC	Collected By Client
3250322003	MW-25D-190	Ground Water	06/27/2022 14:10	06/27/2022 19:00	CBC	Collected By Client
3250322004	MW-45	Ground Water	06/27/2022 13:10	06/27/2022 19:00	CBC	Collected By Client
3250322005	MW-24D	Ground Water	06/27/2022 13:25	06/27/2022 19:00	CBC	Collected By Client
3250322006	DUP-062722	Ground Water	06/27/2022 12:00	06/27/2022 19:00	CBC	Collected By Client
3250322007	MW-35D	Ground Water	06/27/2022 08:55	06/27/2022 19:00	CBC	Collected By Client
3250322008	MW-34D	Ground Water	06/27/2022 09:15	06/27/2022 19:00	CBC	Collected By Client
3250322009	MW-31D	Ground Water	06/27/2022 09:55	06/27/2022 19:00	CBC	Collected By Client
3250322010	MW-33D-235	Ground Water	06/27/2022 09:30	06/27/2022 19:00	CBC	Collected By Client
3250322011	MW-33D-295	Ground Water	06/27/2022 09:40	06/27/2022 19:00	CBC	Collected By Client
3250322012	MW-30D-273	Ground Water	06/27/2022 10:30	06/27/2022 19:00	CBC	Collected By Client
3250322013	MW-30D-413	Ground Water	06/27/2022 10:20	06/27/2022 19:00	CBC	Collected By Client
3250322014	MW-29D	Ground Water	06/27/2022 10:45	06/27/2022 19:00	CBC	Collected By Client
3250322015	MW-32D	Ground Water	06/27/2022 11:00	06/27/2022 19:00	CBC	Collected By Client
3250322016	MW-28D	Ground Water	06/27/2022 11:35	06/27/2022 19:00	CBC	Collected By Client
3250322017	Trip Blank	Ground Water	06/27/2022 00:00	06/27/2022 19:00	CBC	Collected By Client

Reference

Notes

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

Standard Acronyms/Flags

J	Indicates an estimated value between the Method Detection Limit (MDL) and the Practical Quantitation Limit (PQL) for the analyte
U	Indicates that the analyte was Not Detected (ND) above the MDL
N	Indicates presumptive evidence of the presence of a compound
MDL	Method Detection Limit
PQL	Practical Quantitation Limit
RDL	Reporting Detection Limit
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 Offsite
Workorder 3250322

Project Notations

- P1** This certificate of analysis was modified based on the email request from Eric Johnson 08/01/22. SJS 08/01/22
We are going to need ALS to make a correction to the attached lab report for samples from the Former Kop-Flex Facility Site. This correction involves changing the Client Sample ID "MW-45D" to "MW-45". This was an error on our part as the incorrect sample ID was indicated on the chain-of-custody form provided with the samples. Our apologies for not catching this error before the laboratory report was issued for the samples.

Please let us know when we will able to receive the revised report. Thanks for your help.

Sample Notations

Lab ID Sample ID

Result Notations

Notation Ref.

- 1 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 -71.2 and the control limits were 22 to 75.
- 2 The QC sample type MSD for method SW846 8260D was outside the control limits for the analyte Bromochloromethane. The % Recovery was reported as 121 and the control limits were 73 to 117.
- 3 The QC sample type MS for method SW846 8260D was outside the control limits for the analyte Bromochloromethane. The % Recovery was reported as 125 and the control limits were 73 to 117.

Detected Results Summary

Client Sample ID	MW-25D-130	Collected	06/27/2022 14:30	
Lab Sample ID	3250322002	Lab Receipt	06/27/2022 19:00	
Compound	Result	Units	RDL	Method
SEMICVOLATILE SIM				
1,4-Dioxane	15.6	ug/L	2.0	SW846 8270E SIM
VOLATILE ORGANICS				
1,1,1-Trichloroethane	5.0	ug/L	1.0	SW846 8260D
1,1-Dichloroethane	4.2	ug/L	1.0	SW846 8260D
1,1-Dichloroethene	65.6	ug/L	1.0	SW846 8260D

Detected Results Summary

Client Sample ID	MW-25D-190	Collected	06/27/2022 14:10		
Lab Sample ID	3250322003	Lab Receipt	06/27/2022 19:00		
Compound	Result	Units	RDL	Method	Flag
SEMICVOLATILE SIM					
1,4-Dioxane	11.6	ug/L	0.10	SW846 8270E SIM	#
VOLATILE ORGANICS					
1,1,1-Trichloroethane	4.7	ug/L	1.0	SW846 8260D	#
1,1-Dichloroethane	8.8	ug/L	1.0	SW846 8260D	#
1,1-Dichloroethene	37.3	ug/L	1.0	SW846 8260D	#
Methyl t-Butyl Ether	1.1	ug/L	1.0	SW846 8260D	#

Detected Results Summary

Client Sample ID	MW-24D	Collected	06/27/2022 13:25
Lab Sample ID	3250322005	Lab Receipt	06/27/2022 19:00

Compound	Result	Units	RDL	Method	Flag
SEMICVOLATILE SIM					
1,4-Dioxane	165	ug/L	2.9	SW846 8270E SIM	#
VOLATILE ORGANICS					
1,1,1-Trichloroethane	18.5	ug/L	1.0	SW846 8260D	#
1,1,2-Trichloroethane	1.0	ug/L	1.0	SW846 8260D	#
1,1-Dichloroethane	142	ug/L	1.0	SW846 8260D	#
1,1-Dichloroethene	1490	ug/L	20.0	SW846 8260D	#
1,2-Dichloroethane	7.4	ug/L	1.0	SW846 8260D	#
Chloroethane	3.6	ug/L	1.0	SW846 8260D	#
cis-1,2-Dichloroethene	6.9	ug/L	1.0	SW846 8260D	#
Tetrachloroethene	1.5	ug/L	1.0	SW846 8260D	#
Trichloroethene	8.6	ug/L	1.0	SW846 8260D	#

Detected Results Summary

Client Sample ID	DUP-062722	Collected	06/27/2022 12:00
Lab Sample ID	3250322006	Lab Receipt	06/27/2022 19:00

<u>Compound</u>	<u>Result</u>	<u>Units</u>	<u>RDL</u>	<u>Method</u>	<u>Flag</u>
SEMICVOLATILE SIM					
1,4-Dioxane	13.4	ug/L	0.40	SW846 8270E SIM	#
VOLATILE ORGANICS					
1,1,1-Trichloroethane	4.8	ug/L	1.0	SW846 8260D	#
1,1-Dichloroethane	4.1	ug/L	1.0	SW846 8260D	#
1,1-Dichloroethene	63.9	ug/L	1.0	SW846 8260D	#

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Detected Results Summary

Client Sample ID	MW-33D-295	Collected	06/27/2022 09:40	
Lab Sample ID	3250322011	Lab Receipt	06/27/2022 19:00	
Compound	Result	Units	RDL	Method
SEMICVOLATILE SIM				
1,4-Dioxane	3.0	ug/L	0.14	SW846 8270E SIM
VOLATILE ORGANICS				
1,1-Dichloroethene	5.1	ug/L	1.0	SW846 8260D
				#

Detected Results Summary

Client Sample ID	MW-30D-273	Collected	06/27/2022 10:30	
Lab Sample ID	3250322012	Lab Receipt	06/27/2022 19:00	
Compound	Result	Units	RDL	Method
SEMICVOLATILE SIM				
1,4-Dioxane	7.5	ug/L	0.17	SW846 8270E SIM
VOLATILE ORGANICS				
1,1,1-Trichloroethane	1.3	ug/L	1.0	SW846 8260D
1,1-Dichloroethene	34.5	ug/L	1.0	SW846 8260D

Detected Results Summary

Client Sample ID	MW-28D	Collected	06/27/2022 11:35		
Lab Sample ID	3250322016	Lab Receipt	06/27/2022 19:00		
Compound	Result	Units	RDL	Method	Flag
SEMICVOLATILE SIM					
1,4-Dioxane	2.1	ug/L	0.17	SW846 8270E SIM	#
VOLATILE ORGANICS					
1,1-Dichloroethene	4.0	ug/L	1.0	SW846 8260D	#



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Results

Client Sample ID	MW-36D	Collected	06/27/2022 11:50
Lab Sample ID	3250322001	Lab Receipt	06/27/2022 19:00

SEMIVOLATILE SIM

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
1,4-Dioxane	0.17 U	U,P1	ug/L	0.17	SW846 8270E SIM	1	07/05/2022 11:45	GEC	A

SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
2-Methylnaphthalene-d10	7297-45-2	58.5%	29 – 112	07/05/2022 11:45	
Fluoranthene-d10	93951-69-0	89.2%	45 – 130	07/05/2022 11:45	

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	07/07/2022 03:30	PDK	C
1,1,1-Trichloroethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 03:30	PDK	C
1,1,2,2-Tetrachloroethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 03:30	PDK	C
1,1,2-Trichloroethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 03:30	PDK	C
1,1-Dichloroethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 03:30	PDK	C
1,1-Dichloroethene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 03:30	PDK	C
1,1-Dichloropropene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 03:30	PDK	C
1,2,3-Trichlorobenzene	2.0 U	U,P1	ug/L	2.0	SW846 8260D	1	07/07/2022 03:30	PDK	C
1,2,3-Trichloropropane	2.0 U	U,P1	ug/L	2.0	SW846 8260D	1	07/07/2022 03:30	PDK	C
1,2,4-Trichlorobenzene	2.0 U	U,P1	ug/L	2.0	SW846 8260D	1	07/07/2022 03:30	PDK	C
1,2-Dibromo-3-chloropropane	7.0 U	U,P1	ug/L	7.0	SW846 8260D	1	07/07/2022 03:30	PDK	C
1,2-Dibromoethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 03:30	PDK	C
1,2-Dichlorobenzene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 03:30	PDK	C
1,2-Dichloroethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 03:30	PDK	C
1,2-Dichloropropane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 03:30	PDK	C
1,3-Dichlorobenzene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 03:30	PDK	C
1,3-Dichloropropane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 03:30	PDK	C
1,4-Dichlorobenzene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 03:30	PDK	C
2,2-Dichloropropane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 03:30	PDK	C
2-Butanone	10.0 U	U,P1	ug/L	10.0	SW846 8260D	1	07/07/2022 03:30	PDK	C
2-Hexanone	5.0 U	U,P1	ug/L	5.0	SW846 8260D	1	07/07/2022 03:30	PDK	C
4-Methyl-2-Pentanone(MIBK)	5.0 U	U,P1	ug/L	5.0	SW846 8260D	1	07/07/2022 03:30	PDK	C
Acetone	10.0 U	U,P1	ug/L	10.0	SW846 8260D	1	07/07/2022 03:30	PDK	C
Benzene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 03:30	PDK	C
Bromobenzene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 03:30	PDK	C
Bromochloromethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 03:30	PDK	C
Bromodichloromethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 03:30	PDK	C
Bromoform	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 03:30	PDK	C
Bromomethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 03:30	PDK	C
Carbon Tetrachloride	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 03:30	PDK	C
Chlorobenzene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 03:30	PDK	C
Chlorodibromomethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 03:30	PDK	C
Chloroethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 03:30	PDK	C
Chloroform	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 03:30	PDK	C
Chloromethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 03:30	PDK	C

Results

Client Sample ID	MW-36D	Collected	06/27/2022 11:50
Lab Sample ID	3250322001	Lab Receipt	06/27/2022 19:00

VOLATILE ORGANICS (cont.)

<u>Compound</u>	<u>Result</u>	<u>Flag</u>	<u>Units</u>	<u>RDL</u>	<u>Method</u>	<u>Dilution</u>	<u>Analysis Date/Time</u>	<u>By</u>	<u>Cntr</u>
cis-1,2-Dichloroethene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 03:30	PDK	C
cis-1,3-Dichloropropene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 03:30	PDK	C
Dibromomethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 03:30	PDK	C
Dichlorodifluoromethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 03:30	PDK	C
Diisopropyl ether	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 03:30	PDK	C
Ethylbenzene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 03:30	PDK	C
Hexachlorobutadiene	5.0 U	U,P1	ug/L	5.0	SW846 8260D	1	07/07/2022 03:30	PDK	C
Methyl t-Butyl Ether	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 03:30	PDK	C
Methylene Chloride	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 03:30	PDK	C
mp-Xylene	2.0 U	U,P1	ug/L	2.0	SW846 8260D	1	07/07/2022 03:30	PDK	C
Naphthalene	2.0 U	U,P1	ug/L	2.0	SW846 8260D	1	07/07/2022 03:30	PDK	C
o-Chlorotoluene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 03:30	PDK	C
o-Xylene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 03:30	PDK	C
p-Chlorotoluene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 03:30	PDK	C
p-Isopropyltoluene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 03:30	PDK	C
Styrene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 03:30	PDK	C
Tetrachloroethene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 03:30	PDK	C
Toluene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 03:30	PDK	C
Total Xylenes	3.0 U	U,P1	ug/L	3.0	SW846 8260D	1	07/07/2022 03:30	PDK	C
trans-1,2-Dichloroethene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 03:30	PDK	C
trans-1,3-Dichloropropene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 03:30	PDK	C
Trichloroethene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 03:30	PDK	C
Trichlorofluoromethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 03:30	PDK	C
Vinyl Acetate	5.0 U	U,P1	ug/L	5.0	SW846 8260D	1	07/07/2022 03:30	PDK	C
Vinyl Chloride	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 03:30	PDK	C

SURROGATES

<u>Compound</u>	<u>CAS No</u>	<u>Recovery</u>	<u>Limits(%)</u>	<u>Analysis Date/Time</u>	<u>Qualifiers</u>
1,2-Dichloroethane-d4	17060-07-0	92.1%	62 – 133	07/07/2022 03:30	
4-Bromofluorobenzene	460-00-4	98%	79 – 114	07/07/2022 03:30	
Dibromofluoromethane	1868-53-7	92.7%	78 – 116	07/07/2022 03:30	
Toluene-d8	2037-26-5	96.2%	76 – 127	07/07/2022 03:30	



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Results

Client Sample ID	MW-25D-130	Collected	06/27/2022 14:30
Lab Sample ID	3250322002	Lab Receipt	06/27/2022 19:00

SEMOVOLATILE SIM

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
1,4-Dioxane	15.6	P1	ug/L	2.0	SW846 8270E SIM	20	07/06/2022 14:52	GEC	A

SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
2-Methylnaphthalene-d10	7297-45-2	0*%	29 – 112	07/06/2022 14:52	
2-Methylnaphthalene-d10	7297-45-2	64.9%	29 – 112	07/05/2022 12:13	
Fluoranthene-d10	93951-69-0	0*%	45 – 130	07/06/2022 14:52	
Fluoranthene-d10	93951-69-0	87.1%	45 – 130	07/05/2022 12:13	

VOLATILE ORGANICS

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
1,1,1,2-Tetrachloroethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 03:52	PDK	C
1,1,1-Trichloroethane	5.0	P1	ug/L	1.0	SW846 8260D	1	07/07/2022 03:52	PDK	C
1,1,2,2-Tetrachloroethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 03:52	PDK	C
1,1,2-Trichloroethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 03:52	PDK	C
1,1-Dichloroethane	4.2	P1	ug/L	1.0	SW846 8260D	1	07/07/2022 03:52	PDK	C
1,1-Dichloroethene	65.6	P1	ug/L	1.0	SW846 8260D	1	07/07/2022 03:52	PDK	C
1,1-Dichloropropene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 03:52	PDK	C
1,2,3-Trichlorobenzene	2.0 U	U,P1	ug/L	2.0	SW846 8260D	1	07/07/2022 03:52	PDK	C
1,2,3-Trichloropropane	2.0 U	U,P1	ug/L	2.0	SW846 8260D	1	07/07/2022 03:52	PDK	C
1,2,4-Trichlorobenzene	2.0 U	U,P1	ug/L	2.0	SW846 8260D	1	07/07/2022 03:52	PDK	C
1,2-Dibromo-3-chloropropane	7.0 U	U,P1	ug/L	7.0	SW846 8260D	1	07/07/2022 03:52	PDK	C
1,2-Dibromoethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 03:52	PDK	C
1,2-Dichlorobenzene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 03:52	PDK	C
1,2-Dichloroethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 03:52	PDK	C
1,2-Dichloropropane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 03:52	PDK	C
1,3-Dichlorobenzene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 03:52	PDK	C
1,3-Dichloropropane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 03:52	PDK	C
1,4-Dichlorobenzene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 03:52	PDK	C
2,2-Dichloropropane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 03:52	PDK	C
2-Butanone	10.0 U	U,P1	ug/L	10.0	SW846 8260D	1	07/07/2022 03:52	PDK	C
2-Hexanone	5.0 U	U,P1	ug/L	5.0	SW846 8260D	1	07/07/2022 03:52	PDK	C
4-Methyl-2-Pentanone(MIBK)	5.0 U	U,P1	ug/L	5.0	SW846 8260D	1	07/07/2022 03:52	PDK	C
Acetone	10.0 U	U,P1	ug/L	10.0	SW846 8260D	1	07/07/2022 03:52	PDK	C
Benzene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 03:52	PDK	C
Bromobenzene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 03:52	PDK	C
Bromochloromethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 03:52	PDK	C
Bromodichloromethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 03:52	PDK	C
Bromoform	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 03:52	PDK	C
Bromomethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 03:52	PDK	C
Carbon Tetrachloride	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 03:52	PDK	C
Chlorobenzene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 03:52	PDK	C
Chlorodibromomethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 03:52	PDK	C
Chloroethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 03:52	PDK	C

Results

Client Sample ID	MW-25D-130	Collected	06/27/2022 14:30
Lab Sample ID	3250322002	Lab Receipt	06/27/2022 19:00

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	07/07/2022 03:52	PDK	C
Chloromethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 03:52	PDK	C
cis-1,2-Dichloroethene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 03:52	PDK	C
cis-1,3-Dichloropropene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 03:52	PDK	C
Dibromomethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 03:52	PDK	C
Dichlorodifluoromethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 03:52	PDK	C
Diisopropyl ether	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 03:52	PDK	C
Ethylbenzene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 03:52	PDK	C
Hexachlorobutadiene	5.0 U	U,P1	ug/L	5.0	SW846 8260D	1	07/07/2022 03:52	PDK	C
Methyl t-Butyl Ether	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 03:52	PDK	C
Methylene Chloride	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 03:52	PDK	C
mp-Xylene	2.0 U	U,P1	ug/L	2.0	SW846 8260D	1	07/07/2022 03:52	PDK	C
Naphthalene	2.0 U	U,P1	ug/L	2.0	SW846 8260D	1	07/07/2022 03:52	PDK	C
o-Chlorotoluene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 03:52	PDK	C
o-Xylene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 03:52	PDK	C
p-Chlorotoluene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 03:52	PDK	C
p-Isopropyltoluene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 03:52	PDK	C
Styrene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 03:52	PDK	C
Tetrachloroethene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 03:52	PDK	C
Toluene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 03:52	PDK	C
Total Xylenes	3.0 U	U,P1	ug/L	3.0	SW846 8260D	1	07/07/2022 03:52	PDK	C
trans-1,2-Dichloroethene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 03:52	PDK	C
trans-1,3-Dichloropropene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 03:52	PDK	C
Trichloroethene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 03:52	PDK	C
Trichlorofluoromethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 03:52	PDK	C
Vinyl Acetate	5.0 U	U,P1	ug/L	5.0	SW846 8260D	1	07/07/2022 03:52	PDK	C
Vinyl Chloride	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 03:52	PDK	C

SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
1,2-Dichloroethane-d4	17060-07-0	84%	62 – 133	07/07/2022 03:52	
4-Bromofluorobenzene	460-00-4	96.2%	79 – 114	07/07/2022 03:52	
Dibromofluoromethane	1868-53-7	89.3%	78 – 116	07/07/2022 03:52	
Toluene-d8	2037-26-5	97.8%	76 – 127	07/07/2022 03:52	



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Workorder 3250322

Results

Client Sample ID	MW-25D-190	Collected	06/27/2022 14:10
Lab Sample ID	3250322003	Lab Receipt	06/27/2022 19:00

SEMIVOLATILE SIM

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
1,4-Dioxane	11.6	1,P1	ug/L	0.10	SW846 8270E SIM	1	07/05/2022 12:40	GEC	A

SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
2-Methylnaphthalene-d10	7297-45-2	72.7%	29 – 112	07/05/2022 12:40	
Fluoranthene-d10	93951-69-0	90.5%	45 – 130	07/05/2022 12:40	

VOLATILE ORGANICS

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
1,1,1,2-Tetrachloroethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 04:15	PDK	C
1,1,1-Trichloroethane	4.7	P1	ug/L	1.0	SW846 8260D	1	07/07/2022 04:15	PDK	C
1,1,2,2-Tetrachloroethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 04:15	PDK	C
1,1,2-Trichloroethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 04:15	PDK	C
1,1-Dichloroethane	8.8	P1	ug/L	1.0	SW846 8260D	1	07/07/2022 04:15	PDK	C
1,1-Dichloroethene	37.3	P1	ug/L	1.0	SW846 8260D	1	07/07/2022 04:15	PDK	C
1,1-Dichloropropene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 04:15	PDK	C
1,2,3-Trichlorobenzene	2.0 U	U,P1	ug/L	2.0	SW846 8260D	1	07/07/2022 04:15	PDK	C
1,2,3-Trichloropropane	2.0 U	U,P1	ug/L	2.0	SW846 8260D	1	07/07/2022 04:15	PDK	C
1,2,4-Trichlorobenzene	2.0 U	U,P1	ug/L	2.0	SW846 8260D	1	07/07/2022 04:15	PDK	C
1,2-Dibromo-3-chloropropane	7.0 U	U,P1	ug/L	7.0	SW846 8260D	1	07/07/2022 04:15	PDK	C
1,2-Dibromoethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 04:15	PDK	C
1,2-Dichlorobenzene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 04:15	PDK	C
1,2-Dichloroethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 04:15	PDK	C
1,2-Dichloropropane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 04:15	PDK	C
1,3-Dichlorobenzene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 04:15	PDK	C
1,3-Dichloropropane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 04:15	PDK	C
1,4-Dichlorobenzene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 04:15	PDK	C
2,2-Dichloropropane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 04:15	PDK	C
2-Butanone	10.0 U	U,P1	ug/L	10.0	SW846 8260D	1	07/07/2022 04:15	PDK	C
2-Hexanone	5.0 U	U,P1	ug/L	5.0	SW846 8260D	1	07/07/2022 04:15	PDK	C
4-Methyl-2-Pentanone(MIBK)	5.0 U	U,P1	ug/L	5.0	SW846 8260D	1	07/07/2022 04:15	PDK	C
Acetone	10.0 U	U,P1	ug/L	10.0	SW846 8260D	1	07/07/2022 04:15	PDK	C
Benzene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 04:15	PDK	C
Bromobenzene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 04:15	PDK	C
Bromochloromethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 04:15	PDK	C
Bromodichloromethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 04:15	PDK	C
Bromoform	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 04:15	PDK	C
Bromomethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 04:15	PDK	C
Carbon Tetrachloride	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 04:15	PDK	C
Chlorobenzene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 04:15	PDK	C
Chlorodibromomethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 04:15	PDK	C
Chloroethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 04:15	PDK	C
Chloroform	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 04:15	PDK	C
Chloromethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 04:15	PDK	C

Results

Client Sample ID	MW-25D-190	Collected	06/27/2022 14:10
Lab Sample ID	3250322003	Lab Receipt	06/27/2022 19:00

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	07/07/2022 04:15	PDK	C
cis-1,3-Dichloropropene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 04:15	PDK	C
Dibromomethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 04:15	PDK	C
Dichlorodifluoromethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 04:15	PDK	C
Diisopropyl ether	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 04:15	PDK	C
Ethylbenzene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 04:15	PDK	C
Hexachlorobutadiene	5.0 U	U,P1	ug/L	5.0	SW846 8260D	1	07/07/2022 04:15	PDK	C
Methyl t-Butyl Ether	1.1	P1	ug/L	1.0	SW846 8260D	1	07/07/2022 04:15	PDK	C
Methylene Chloride	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 04:15	PDK	C
mp-Xylene	2.0 U	U,P1	ug/L	2.0	SW846 8260D	1	07/07/2022 04:15	PDK	C
Naphthalene	2.0 U	U,P1	ug/L	2.0	SW846 8260D	1	07/07/2022 04:15	PDK	C
o-Chlorotoluene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 04:15	PDK	C
o-Xylene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 04:15	PDK	C
p-Chlorotoluene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 04:15	PDK	C
p-Isopropyltoluene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 04:15	PDK	C
Styrene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 04:15	PDK	C
Tetrachloroethene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 04:15	PDK	C
Toluene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 04:15	PDK	C
Total Xylenes	3.0 U	U,P1	ug/L	3.0	SW846 8260D	1	07/07/2022 04:15	PDK	C
trans-1,2-Dichloroethene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 04:15	PDK	C
trans-1,3-Dichloropropene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 04:15	PDK	C
Trichloroethene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 04:15	PDK	C
Trichlorofluoromethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 04:15	PDK	C
Vinyl Acetate	5.0 U	U,P1	ug/L	5.0	SW846 8260D	1	07/07/2022 04:15	PDK	C
Vinyl Chloride	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 04:15	PDK	C

SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
1,2-Dichloroethane-d4	17060-07-0	84.1%	62 – 133	07/07/2022 04:15	
4-Bromofluorobenzene	460-00-4	92.6%	79 – 114	07/07/2022 04:15	
Dibromofluoromethane	1868-53-7	87.7%	78 – 116	07/07/2022 04:15	
Toluene-d8	2037-26-5	98.8%	76 – 127	07/07/2022 04:15	



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Workorder 3250322

Results

Client Sample ID	MW-45	Collected	06/27/2022 13:10
Lab Sample ID	3250322004	Lab Receipt	06/27/2022 19:00

SEMIVOLATILE SIM

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
1,4-Dioxane	0.10 U	U,P1	ug/L	0.10	SW846 8270E SIM	1	07/05/2022 13:34	GEC	A

SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
2-Methylnaphthalene-d10	7297-45-2	75.3%	29 – 112	07/05/2022 13:34	
Fluoranthene-d10	93951-69-0	86.7%	45 – 130	07/05/2022 13:34	

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	07/07/2022 04:37	PDK	C
1,1,1-Trichloroethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 04:37	PDK	C
1,1,2,2-Tetrachloroethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 04:37	PDK	C
1,1,2-Trichloroethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 04:37	PDK	C
1,1-Dichloroethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 04:37	PDK	C
1,1-Dichloroethene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 04:37	PDK	C
1,1-Dichloropropene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 04:37	PDK	C
1,2,3-Trichlorobenzene	2.0 U	U,P1	ug/L	2.0	SW846 8260D	1	07/07/2022 04:37	PDK	C
1,2,3-Trichloropropane	2.0 U	U,P1	ug/L	2.0	SW846 8260D	1	07/07/2022 04:37	PDK	C
1,2,4-Trichlorobenzene	2.0 U	U,P1	ug/L	2.0	SW846 8260D	1	07/07/2022 04:37	PDK	C
1,2-Dibromo-3-chloropropane	7.0 U	U,P1	ug/L	7.0	SW846 8260D	1	07/07/2022 04:37	PDK	C
1,2-Dibromoethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 04:37	PDK	C
1,2-Dichlorobenzene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 04:37	PDK	C
1,2-Dichloroethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 04:37	PDK	C
1,2-Dichloropropane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 04:37	PDK	C
1,3-Dichlorobenzene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 04:37	PDK	C
1,3-Dichloropropane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 04:37	PDK	C
1,4-Dichlorobenzene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 04:37	PDK	C
2,2-Dichloropropane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 04:37	PDK	C
2-Butanone	10.0 U	U,P1	ug/L	10.0	SW846 8260D	1	07/07/2022 04:37	PDK	C
2-Hexanone	5.0 U	U,P1	ug/L	5.0	SW846 8260D	1	07/07/2022 04:37	PDK	C
4-Methyl-2-Pentanone(MIBK)	5.0 U	U,P1	ug/L	5.0	SW846 8260D	1	07/07/2022 04:37	PDK	C
Acetone	10.0 U	U,P1	ug/L	10.0	SW846 8260D	1	07/07/2022 04:37	PDK	C
Benzene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 04:37	PDK	C
Bromobenzene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 04:37	PDK	C
Bromochloromethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 04:37	PDK	C
Bromodichloromethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 04:37	PDK	C
Bromoform	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 04:37	PDK	C
Bromomethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 04:37	PDK	C
Carbon Tetrachloride	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 04:37	PDK	C
Chlorobenzene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 04:37	PDK	C
Chlorodibromomethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 04:37	PDK	C
Chloroethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 04:37	PDK	C
Chloroform	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 04:37	PDK	C
Chloromethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 04:37	PDK	C

Results

Client Sample ID	MW-45	Collected	06/27/2022 13:10
Lab Sample ID	3250322004	Lab Receipt	06/27/2022 19:00

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	07/07/2022 04:37	PDK	C
cis-1,3-Dichloropropene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 04:37	PDK	C
Dibromomethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 04:37	PDK	C
Dichlorodifluoromethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 04:37	PDK	C
Diisopropyl ether	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 04:37	PDK	C
Ethylbenzene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 04:37	PDK	C
Hexachlorobutadiene	5.0 U	U,P1	ug/L	5.0	SW846 8260D	1	07/07/2022 04:37	PDK	C
Methyl t-Butyl Ether	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 04:37	PDK	C
Methylene Chloride	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 04:37	PDK	C
mp-Xylene	2.0 U	U,P1	ug/L	2.0	SW846 8260D	1	07/07/2022 04:37	PDK	C
Naphthalene	2.0 U	U,P1	ug/L	2.0	SW846 8260D	1	07/07/2022 04:37	PDK	C
o-Chlorotoluene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 04:37	PDK	C
o-Xylene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 04:37	PDK	C
p-Chlorotoluene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 04:37	PDK	C
p-Isopropyltoluene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 04:37	PDK	C
Styrene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 04:37	PDK	C
Tetrachloroethene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 04:37	PDK	C
Toluene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 04:37	PDK	C
Total Xylenes	3.0 U	U,P1	ug/L	3.0	SW846 8260D	1	07/07/2022 04:37	PDK	C
trans-1,2-Dichloroethene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 04:37	PDK	C
trans-1,3-Dichloropropene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 04:37	PDK	C
Trichloroethene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 04:37	PDK	C
Trichlorofluoromethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 04:37	PDK	C
Vinyl Acetate	5.0 U	U,P1	ug/L	5.0	SW846 8260D	1	07/07/2022 04:37	PDK	C
Vinyl Chloride	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 04:37	PDK	C

SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
1,2-Dichloroethane-d4	17060-07-0	84%	62 – 133	07/07/2022 04:37	
4-Bromofluorobenzene	460-00-4	95.1 %	79 – 114	07/07/2022 04:37	
Dibromofluoromethane	1868-53-7	87.2%	78 – 116	07/07/2022 04:37	
Toluene-d8	2037-26-5	97.8%	76 – 127	07/07/2022 04:37	



Project Former KOP-Flex Facility Offsi
Workorder 3250322

Results

Client Sample ID	MW-24D	Collected	06/27/2022 13:25
Lab Sample ID	3250322005	Lab Receipt	06/27/2022 19:00

SEMOVOLATILE SIM

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
1,4-Dioxane	165	P1	ug/L	2.9	SW846 8270E SIM	20	07/06/2022 15:22	GEC	A

SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
2-Methylnaphthalene-d10	7297-45-2	0*%	29 – 112	07/06/2022 15:22	
2-Methylnaphthalene-d10	7297-45-2	63.6%	29 – 112	07/05/2022 14:01	
Fluoranthene-d10	93951-69-0	0*%	45 – 130	07/06/2022 15:22	
Fluoranthene-d10	93951-69-0	85.3%	45 – 130	07/05/2022 14:01	

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	07/07/2022 04:59	PDK	C
1,1,1-Trichloroethane	18.5	P1	ug/L	1.0	SW846 8260D	1	07/07/2022 04:59	PDK	C
1,1,2,2-Tetrachloroethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 04:59	PDK	C
1,1,2-Trichloroethane	1.0	P1	ug/L	1.0	SW846 8260D	1	07/07/2022 04:59	PDK	C
1,1-Dichloroethane	142	P1	ug/L	1.0	SW846 8260D	1	07/07/2022 04:59	PDK	C
1,1-Dichloroethene	1490	P1	ug/L	20.0	SW846 8260D	20	07/09/2022 12:16	TMP	D
1,1-Dichloropropene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 04:59	PDK	C
1,2,3-Trichlorobenzene	2.0 U	U,P1	ug/L	2.0	SW846 8260D	1	07/07/2022 04:59	PDK	C
1,2,3-Trichloropropane	2.0 U	U,P1	ug/L	2.0	SW846 8260D	1	07/07/2022 04:59	PDK	C
1,2,4-Trichlorobenzene	2.0 U	U,P1	ug/L	2.0	SW846 8260D	1	07/07/2022 04:59	PDK	C
1,2-Dibromo-3-chloropropane	7.0 U	U,P1	ug/L	7.0	SW846 8260D	1	07/07/2022 04:59	PDK	C
1,2-Dibromoethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 04:59	PDK	C
1,2-Dichlorobenzene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 04:59	PDK	C
1,2-Dichloroethane	7.4	P1	ug/L	1.0	SW846 8260D	1	07/07/2022 04:59	PDK	C
1,2-Dichloropropane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 04:59	PDK	C
1,3-Dichlorobenzene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 04:59	PDK	C
1,3-Dichloropropane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 04:59	PDK	C
1,4-Dichlorobenzene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 04:59	PDK	C
2,2-Dichloropropane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 04:59	PDK	C
2-Butanone	10.0 U	U,P1	ug/L	10.0	SW846 8260D	1	07/07/2022 04:59	PDK	C
2-Hexanone	5.0 U	U,P1	ug/L	5.0	SW846 8260D	1	07/07/2022 04:59	PDK	C
4-Methyl-2-Pentanone(MIBK)	5.0 U	U,P1	ug/L	5.0	SW846 8260D	1	07/07/2022 04:59	PDK	C
Acetone	10.0 U	U,P1	ug/L	10.0	SW846 8260D	1	07/07/2022 04:59	PDK	C
Benzene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 04:59	PDK	C
Bromobenzene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 04:59	PDK	C
Bromochloromethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 04:59	PDK	C
Bromodichloromethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 04:59	PDK	C
Bromoform	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 04:59	PDK	C
Bromomethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 04:59	PDK	C
Carbon Tetrachloride	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 04:59	PDK	C
Chlorobenzene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 04:59	PDK	C
Chlorodibromomethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 04:59	PDK	C
Chloroethane	3.6	P1	ug/L	1.0	SW846 8260D	1	07/07/2022 04:59	PDK	C

Results

Client Sample ID	MW-24D	Collected	06/27/2022 13:25
Lab Sample ID	3250322005	Lab Receipt	06/27/2022 19:00

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	07/07/2022 04:59	PDK	C
Chloromethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 04:59	PDK	C
cis-1,2-Dichloroethene	6.9	P1	ug/L	1.0	SW846 8260D	1	07/07/2022 04:59	PDK	C
cis-1,3-Dichloropropene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 04:59	PDK	C
Dibromomethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 04:59	PDK	C
Dichlorodifluoromethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 04:59	PDK	C
Diisopropyl ether	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 04:59	PDK	C
Ethylbenzene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 04:59	PDK	C
Hexachlorobutadiene	5.0 U	U,P1	ug/L	5.0	SW846 8260D	1	07/07/2022 04:59	PDK	C
Methyl t-Butyl Ether	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 04:59	PDK	C
Methylene Chloride	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 04:59	PDK	C
mp-Xylene	2.0 U	U,P1	ug/L	2.0	SW846 8260D	1	07/07/2022 04:59	PDK	C
Naphthalene	2.0 U	U,P1	ug/L	2.0	SW846 8260D	1	07/07/2022 04:59	PDK	C
o-Chlorotoluene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 04:59	PDK	C
o-Xylene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 04:59	PDK	C
p-Chlorotoluene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 04:59	PDK	C
p-Isopropyltoluene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 04:59	PDK	C
Styrene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 04:59	PDK	C
Tetrachloroethene	1.5	P1	ug/L	1.0	SW846 8260D	1	07/07/2022 04:59	PDK	C
Toluene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 04:59	PDK	C
Total Xylenes	3.0 U	U,P1	ug/L	3.0	SW846 8260D	1	07/07/2022 04:59	PDK	C
trans-1,2-Dichloroethene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 04:59	PDK	C
trans-1,3-Dichloropropene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 04:59	PDK	C
Trichloroethene	8.6	P1	ug/L	1.0	SW846 8260D	1	07/07/2022 04:59	PDK	C
Trichlorofluoromethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 04:59	PDK	C
Vinyl Acetate	5.0 U	U,P1	ug/L	5.0	SW846 8260D	1	07/07/2022 04:59	PDK	C
Vinyl Chloride	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 04:59	PDK	C

SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
1,2-Dichloroethane-d4	17060-07-0	97.2%	62 – 133	07/09/2022 12:16	
1,2-Dichloroethane-d4	17060-07-0	83.9%	62 – 133	07/07/2022 04:59	
4-Bromofluorobenzene	460-00-4	97%	79 – 114	07/09/2022 12:16	
4-Bromofluorobenzene	460-00-4	98.6%	79 – 114	07/07/2022 04:59	
Dibromofluoromethane	1868-53-7	93.8%	78 – 116	07/09/2022 12:16	
Dibromofluoromethane	1868-53-7	90%	78 – 116	07/07/2022 04:59	
Toluene-d8	2037-26-5	91.9%	76 – 127	07/09/2022 12:16	
Toluene-d8	2037-26-5	97.2%	76 – 127	07/07/2022 04:59	



Project Former KOP-Flex Facility Offsi
Workorder 3250322

Results

Client Sample ID	DUP-062722	Collected	06/27/2022 12:00
Lab Sample ID	3250322006	Lab Receipt	06/27/2022 19:00

SEMOVOLATILE SIM

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
1,4-Dioxane	13.4	P1	ug/L	0.40	SW846 8270E SIM	4	07/06/2022 15:51	GEC	A

SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
2-Methylnaphthalene-d10	7297-45-2	57.1%	29 – 112	07/06/2022 15:51	
2-Methylnaphthalene-d10	7297-45-2	59.7%	29 – 112	07/05/2022 14:29	
Fluoranthene-d10	93951-69-0	77.8%	45 – 130	07/06/2022 15:51	
Fluoranthene-d10	93951-69-0	77.5%	45 – 130	07/05/2022 14:29	

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	07/07/2022 05:21	PDK	C
1,1,1-Trichloroethane	4.8	P1	ug/L	1.0	SW846 8260D	1	07/07/2022 05:21	PDK	C
1,1,2,2-Tetrachloroethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 05:21	PDK	C
1,1,2-Trichloroethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 05:21	PDK	C
1,1-Dichloroethane	4.1	P1	ug/L	1.0	SW846 8260D	1	07/07/2022 05:21	PDK	C
1,1-Dichloroethene	63.9	P1	ug/L	1.0	SW846 8260D	1	07/07/2022 05:21	PDK	C
1,1-Dichloropropene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 05:21	PDK	C
1,2,3-Trichlorobenzene	2.0 U	U,P1	ug/L	2.0	SW846 8260D	1	07/07/2022 05:21	PDK	C
1,2,3-Trichloropropane	2.0 U	U,P1	ug/L	2.0	SW846 8260D	1	07/07/2022 05:21	PDK	C
1,2,4-Trichlorobenzene	2.0 U	U,P1	ug/L	2.0	SW846 8260D	1	07/07/2022 05:21	PDK	C
1,2-Dibromo-3-chloropropane	7.0 U	U,P1	ug/L	7.0	SW846 8260D	1	07/07/2022 05:21	PDK	C
1,2-Dibromoethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 05:21	PDK	C
1,2-Dichlorobenzene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 05:21	PDK	C
1,2-Dichloroethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 05:21	PDK	C
1,2-Dichloropropane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 05:21	PDK	C
1,3-Dichlorobenzene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 05:21	PDK	C
1,3-Dichloropropane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 05:21	PDK	C
1,4-Dichlorobenzene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 05:21	PDK	C
2,2-Dichloropropane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 05:21	PDK	C
2-Butanone	10.0 U	U,P1	ug/L	10.0	SW846 8260D	1	07/07/2022 05:21	PDK	C
2-Hexanone	5.0 U	U,P1	ug/L	5.0	SW846 8260D	1	07/07/2022 05:21	PDK	C
4-Methyl-2-Pentanone(MIBK)	5.0 U	U,P1	ug/L	5.0	SW846 8260D	1	07/07/2022 05:21	PDK	C
Acetone	10.0 U	U,P1	ug/L	10.0	SW846 8260D	1	07/07/2022 05:21	PDK	C
Benzene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 05:21	PDK	C
Bromobenzene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 05:21	PDK	C
Bromochloromethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 05:21	PDK	C
Bromodichloromethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 05:21	PDK	C
Bromoform	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 05:21	PDK	C
Bromomethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 05:21	PDK	C
Carbon Tetrachloride	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 05:21	PDK	C
Chlorobenzene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 05:21	PDK	C
Chlorodibromomethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 05:21	PDK	C
Chloroethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 05:21	PDK	C

Results

Client Sample ID	DUP-062722	Collected	06/27/2022 12:00
Lab Sample ID	3250322006	Lab Receipt	06/27/2022 19:00

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	07/07/2022 05:21	PDK	C
Chloromethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 05:21	PDK	C
cis-1,2-Dichloroethene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 05:21	PDK	C
cis-1,3-Dichloropropene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 05:21	PDK	C
Dibromomethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 05:21	PDK	C
Dichlorodifluoromethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 05:21	PDK	C
Diisopropyl ether	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 05:21	PDK	C
Ethylbenzene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 05:21	PDK	C
Hexachlorobutadiene	5.0 U	U,P1	ug/L	5.0	SW846 8260D	1	07/07/2022 05:21	PDK	C
Methyl t-Butyl Ether	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 05:21	PDK	C
Methylene Chloride	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 05:21	PDK	C
mp-Xylene	2.0 U	U,P1	ug/L	2.0	SW846 8260D	1	07/07/2022 05:21	PDK	C
Naphthalene	2.0 U	U,P1	ug/L	2.0	SW846 8260D	1	07/07/2022 05:21	PDK	C
o-Chlorotoluene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 05:21	PDK	C
o-Xylene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 05:21	PDK	C
p-Chlorotoluene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 05:21	PDK	C
p-Isopropyltoluene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 05:21	PDK	C
Styrene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 05:21	PDK	C
Tetrachloroethene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 05:21	PDK	C
Toluene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 05:21	PDK	C
Total Xylenes	3.0 U	U,P1	ug/L	3.0	SW846 8260D	1	07/07/2022 05:21	PDK	C
trans-1,2-Dichloroethene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 05:21	PDK	C
trans-1,3-Dichloropropene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 05:21	PDK	C
Trichloroethene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 05:21	PDK	C
Trichlorofluoromethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 05:21	PDK	C
Vinyl Acetate	5.0 U	U,P1	ug/L	5.0	SW846 8260D	1	07/07/2022 05:21	PDK	C
Vinyl Chloride	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 05:21	PDK	C

SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
1,2-Dichloroethane-d4	17060-07-0	81.2%	62 – 133	07/07/2022 05:21	
4-Bromofluorobenzene	460-00-4	95.3%	79 – 114	07/07/2022 05:21	
Dibromofluoromethane	1868-53-7	85.1%	78 – 116	07/07/2022 05:21	
Toluene-d8	2037-26-5	98.2%	76 – 127	07/07/2022 05:21	



Project Former KOP-Flex Facility Offsite
Workorder 3250322

Results

Client Sample ID	MW-35D	Collected	06/27/2022 08:55
Lab Sample ID	3250322007	Lab Receipt	06/27/2022 19:00

SEMIVOLATILE SIM

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
1,4-Dioxane	0.16 U	U,P1	ug/L	0.16	SW846 8270E SIM	1	07/05/2022 14:56	GEC	A

SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
2-Methylnaphthalene-d10	7297-45-2	67.7%	29 – 112	07/05/2022 14:56	
Fluoranthene-d10	93951-69-0	94.6%	45 – 130	07/05/2022 14:56	

VOLATILE ORGANICS

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
1,1,1,2-Tetrachloroethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 05:44	PDK	C
1,1,1-Trichloroethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 05:44	PDK	C
1,1,2,2-Tetrachloroethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 05:44	PDK	C
1,1,2-Trichloroethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 05:44	PDK	C
1,1-Dichloroethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 05:44	PDK	C
1,1-Dichloroethene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 05:44	PDK	C
1,1-Dichloropropene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 05:44	PDK	C
1,2,3-Trichlorobenzene	2.0 U	U,P1	ug/L	2.0	SW846 8260D	1	07/07/2022 05:44	PDK	C
1,2,3-Trichloropropane	2.0 U	U,P1	ug/L	2.0	SW846 8260D	1	07/07/2022 05:44	PDK	C
1,2,4-Trichlorobenzene	2.0 U	U,P1	ug/L	2.0	SW846 8260D	1	07/07/2022 05:44	PDK	C
1,2-Dibromo-3-chloropropane	7.0 U	U,P1	ug/L	7.0	SW846 8260D	1	07/07/2022 05:44	PDK	C
1,2-Dibromoethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 05:44	PDK	C
1,2-Dichlorobenzene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 05:44	PDK	C
1,2-Dichloroethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 05:44	PDK	C
1,2-Dichloropropane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 05:44	PDK	C
1,3-Dichlorobenzene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 05:44	PDK	C
1,3-Dichloropropane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 05:44	PDK	C
1,4-Dichlorobenzene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 05:44	PDK	C
2,2-Dichloropropane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 05:44	PDK	C
2-Butanone	10.0 U	U,P1	ug/L	10.0	SW846 8260D	1	07/07/2022 05:44	PDK	C
2-Hexanone	5.0 U	U,P1	ug/L	5.0	SW846 8260D	1	07/07/2022 05:44	PDK	C
4-Methyl-2-Pentanone(MIBK)	5.0 U	U,P1	ug/L	5.0	SW846 8260D	1	07/07/2022 05:44	PDK	C
Acetone	10.0 U	U,P1	ug/L	10.0	SW846 8260D	1	07/07/2022 05:44	PDK	C
Benzene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 05:44	PDK	C
Bromobenzene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 05:44	PDK	C
Bromochloromethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 05:44	PDK	C
Bromodichloromethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 05:44	PDK	C
Bromoform	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 05:44	PDK	C
Bromomethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 05:44	PDK	C
Carbon Tetrachloride	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 05:44	PDK	C
Chlorobenzene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 05:44	PDK	C
Chlorodibromomethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 05:44	PDK	C
Chloroethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 05:44	PDK	C
Chloroform	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 05:44	PDK	C
Chloromethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 05:44	PDK	C

Results

Client Sample ID	MW-35D	Collected	06/27/2022 08:55
Lab Sample ID	3250322007	Lab Receipt	06/27/2022 19:00

VOLATILE ORGANICS (cont.)

<u>Compound</u>	<u>Result</u>	<u>Flag</u>	<u>Units</u>	<u>RDL</u>	<u>Method</u>	<u>Dilution</u>	<u>Analysis Date/Time</u>	<u>By</u>	<u>Cntr</u>
cis-1,2-Dichloroethene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 05:44	PDK	C
cis-1,3-Dichloropropene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 05:44	PDK	C
Dibromomethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 05:44	PDK	C
Dichlorodifluoromethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 05:44	PDK	C
Diisopropyl ether	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 05:44	PDK	C
Ethylbenzene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 05:44	PDK	C
Hexachlorobutadiene	5.0 U	U,P1	ug/L	5.0	SW846 8260D	1	07/07/2022 05:44	PDK	C
Methyl t-Butyl Ether	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 05:44	PDK	C
Methylene Chloride	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 05:44	PDK	C
mp-Xylene	2.0 U	U,P1	ug/L	2.0	SW846 8260D	1	07/07/2022 05:44	PDK	C
Naphthalene	2.0 U	U,P1	ug/L	2.0	SW846 8260D	1	07/07/2022 05:44	PDK	C
o-Chlorotoluene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 05:44	PDK	C
o-Xylene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 05:44	PDK	C
p-Chlorotoluene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 05:44	PDK	C
p-Isopropyltoluene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 05:44	PDK	C
Styrene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 05:44	PDK	C
Tetrachloroethene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 05:44	PDK	C
Toluene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 05:44	PDK	C
Total Xylenes	3.0 U	U,P1	ug/L	3.0	SW846 8260D	1	07/07/2022 05:44	PDK	C
trans-1,2-Dichloroethene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 05:44	PDK	C
trans-1,3-Dichloropropene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 05:44	PDK	C
Trichloroethene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 05:44	PDK	C
Trichlorofluoromethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 05:44	PDK	C
Vinyl Acetate	5.0 U	U,P1	ug/L	5.0	SW846 8260D	1	07/07/2022 05:44	PDK	C
Vinyl Chloride	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 05:44	PDK	C

SURROGATES

<u>Compound</u>	<u>CAS No</u>	<u>Recovery</u>	<u>Limits(%)</u>	<u>Analysis Date/Time</u>	<u>Qualifiers</u>
1,2-Dichloroethane-d4	17060-07-0	83.8%	62 – 133	07/07/2022 05:44	
4-Bromofluorobenzene	460-00-4	101%	79 – 114	07/07/2022 05:44	
Dibromofluoromethane	1868-53-7	87.8%	78 – 116	07/07/2022 05:44	
Toluene-d8	2037-26-5	98.5%	76 – 127	07/07/2022 05:44	



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Workorder 3250322

Results

Client Sample ID	MW-34D	Collected	06/27/2022 09:15
Lab Sample ID	3250322008	Lab Receipt	06/27/2022 19:00

SEMIVOLATILE SIM

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
1,4-Dioxane	0.50 U	U,P1	ug/L	0.50	SW846 8270E SIM	1	07/05/2022 15:23	GEC	A

SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
2-Methylnaphthalene-d10	7297-45-2	66.1%	29 – 112	07/05/2022 15:23	
Fluoranthene-d10	93951-69-0	85.4%	45 – 130	07/05/2022 15:23	

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	07/07/2022 06:06	PDK	C
1,1,1-Trichloroethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 06:06	PDK	C
1,1,2,2-Tetrachloroethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 06:06	PDK	C
1,1,2-Trichloroethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 06:06	PDK	C
1,1-Dichloroethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 06:06	PDK	C
1,1-Dichloroethene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 06:06	PDK	C
1,1-Dichloropropene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 06:06	PDK	C
1,2,3-Trichlorobenzene	2.0 U	U,P1	ug/L	2.0	SW846 8260D	1	07/07/2022 06:06	PDK	C
1,2,3-Trichloropropane	2.0 U	U,P1	ug/L	2.0	SW846 8260D	1	07/07/2022 06:06	PDK	C
1,2,4-Trichlorobenzene	2.0 U	U,P1	ug/L	2.0	SW846 8260D	1	07/07/2022 06:06	PDK	C
1,2-Dibromo-3-chloropropane	7.0 U	U,P1	ug/L	7.0	SW846 8260D	1	07/07/2022 06:06	PDK	C
1,2-Dibromoethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 06:06	PDK	C
1,2-Dichlorobenzene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 06:06	PDK	C
1,2-Dichloroethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 06:06	PDK	C
1,2-Dichloropropane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 06:06	PDK	C
1,3-Dichlorobenzene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 06:06	PDK	C
1,3-Dichloropropane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 06:06	PDK	C
1,4-Dichlorobenzene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 06:06	PDK	C
2,2-Dichloropropane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 06:06	PDK	C
2-Butanone	10.0 U	U,P1	ug/L	10.0	SW846 8260D	1	07/07/2022 06:06	PDK	C
2-Hexanone	5.0 U	U,P1	ug/L	5.0	SW846 8260D	1	07/07/2022 06:06	PDK	C
4-Methyl-2-Pentanone(MIBK)	5.0 U	U,P1	ug/L	5.0	SW846 8260D	1	07/07/2022 06:06	PDK	C
Acetone	10.0 U	U,P1	ug/L	10.0	SW846 8260D	1	07/07/2022 06:06	PDK	C
Benzene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 06:06	PDK	C
Bromobenzene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 06:06	PDK	C
Bromochloromethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 06:06	PDK	C
Bromodichloromethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 06:06	PDK	C
Bromoform	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 06:06	PDK	C
Bromomethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 06:06	PDK	C
Carbon Tetrachloride	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 06:06	PDK	C
Chlorobenzene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 06:06	PDK	C
Chlorodibromomethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 06:06	PDK	C
Chloroethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 06:06	PDK	C
Chloroform	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 06:06	PDK	C
Chloromethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 06:06	PDK	C

Results

Client Sample ID	MW-34D	Collected	06/27/2022 09:15
Lab Sample ID	3250322008	Lab Receipt	06/27/2022 19:00

VOLATILE ORGANICS (cont.)

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

SURROGATES

<u>Compound</u>	<u>CAS No</u>	<u>Recovery</u>	<u>Limits(%)</u>	<u>Analysis Date/Time</u>	<u>Qualifiers</u>
1,2-Dichloroethane-d4	17060-07-0	94.1%	62 – 133	07/07/2022 06:06	
4-Bromofluorobenzene	460-00-4	96%	79 – 114	07/07/2022 06:06	
Dibromofluoromethane	1868-53-7	90.9%	78 – 116	07/07/2022 06:06	
Toluene-d8	2037-26-5	93%	76 – 127	07/07/2022 06:06	



Project Former KOP-Flex Facility Offsi
Workorder 3250322

Results

Client Sample ID	MW-31D	Collected	06/27/2022 09:55
Lab Sample ID	3250322009	Lab Receipt	06/27/2022 19:00

SEMIVOLATILE SIM

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
1,4-Dioxane	0.14 U	U,P1	ug/L	0.14	SW846 8270E SIM	1	07/05/2022 15:51	GEC	A

SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
2-Methylnaphthalene-d10	7297-45-2	63.9%	29 – 112	07/05/2022 15:51	
Fluoranthene-d10	93951-69-0	83.5%	45 – 130	07/05/2022 15:51	

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	07/07/2022 06:28	PDK	C
1,1,1-Trichloroethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 06:28	PDK	C
1,1,2,2-Tetrachloroethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 06:28	PDK	C
1,1,2-Trichloroethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 06:28	PDK	C
1,1-Dichloroethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 06:28	PDK	C
1,1-Dichloroethene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 06:28	PDK	C
1,1-Dichloropropene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 06:28	PDK	C
1,2,3-Trichlorobenzene	2.0 U	U,P1	ug/L	2.0	SW846 8260D	1	07/07/2022 06:28	PDK	C
1,2,3-Trichloropropane	2.0 U	U,P1	ug/L	2.0	SW846 8260D	1	07/07/2022 06:28	PDK	C
1,2,4-Trichlorobenzene	2.0 U	U,P1	ug/L	2.0	SW846 8260D	1	07/07/2022 06:28	PDK	C
1,2-Dibromo-3-chloropropane	7.0 U	U,P1	ug/L	7.0	SW846 8260D	1	07/07/2022 06:28	PDK	C
1,2-Dibromoethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 06:28	PDK	C
1,2-Dichlorobenzene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 06:28	PDK	C
1,2-Dichloroethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 06:28	PDK	C
1,2-Dichloropropane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 06:28	PDK	C
1,3-Dichlorobenzene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 06:28	PDK	C
1,3-Dichloropropane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 06:28	PDK	C
1,4-Dichlorobenzene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 06:28	PDK	C
2,2-Dichloropropane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 06:28	PDK	C
2-Butanone	10.0 U	U,P1	ug/L	10.0	SW846 8260D	1	07/07/2022 06:28	PDK	C
2-Hexanone	5.0 U	U,P1	ug/L	5.0	SW846 8260D	1	07/07/2022 06:28	PDK	C
4-Methyl-2-Pentanone(MIBK)	5.0 U	U,P1	ug/L	5.0	SW846 8260D	1	07/07/2022 06:28	PDK	C
Acetone	10.0 U	U,P1	ug/L	10.0	SW846 8260D	1	07/07/2022 06:28	PDK	C
Benzene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 06:28	PDK	C
Bromobenzene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 06:28	PDK	C
Bromochloromethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 06:28	PDK	C
Bromodichloromethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 06:28	PDK	C
Bromoform	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 06:28	PDK	C
Bromomethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 06:28	PDK	C
Carbon Tetrachloride	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 06:28	PDK	C
Chlorobenzene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 06:28	PDK	C
Chlorodibromomethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 06:28	PDK	C
Chloroethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 06:28	PDK	C
Chloroform	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 06:28	PDK	C
Chloromethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 06:28	PDK	C

Results

Client Sample ID	MW-31D	Collected	06/27/2022 09:55
Lab Sample ID	3250322009	Lab Receipt	06/27/2022 19:00

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	07/07/2022 06:28	PDK	C
cis-1,3-Dichloropropene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 06:28	PDK	C
Dibromomethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 06:28	PDK	C
Dichlorodifluoromethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 06:28	PDK	C
Diisopropyl ether	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 06:28	PDK	C
Ethylbenzene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 06:28	PDK	C
Hexachlorobutadiene	5.0 U	U,P1	ug/L	5.0	SW846 8260D	1	07/07/2022 06:28	PDK	C
Methyl t-Butyl Ether	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 06:28	PDK	C
Methylene Chloride	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 06:28	PDK	C
mp-Xylene	2.0 U	U,P1	ug/L	2.0	SW846 8260D	1	07/07/2022 06:28	PDK	C
Naphthalene	2.0 U	U,P1	ug/L	2.0	SW846 8260D	1	07/07/2022 06:28	PDK	C
o-Chlorotoluene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 06:28	PDK	C
o-Xylene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 06:28	PDK	C
p-Chlorotoluene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 06:28	PDK	C
p-Isopropyltoluene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 06:28	PDK	C
Styrene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 06:28	PDK	C
Tetrachloroethene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 06:28	PDK	C
Toluene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 06:28	PDK	C
Total Xylenes	3.0 U	U,P1	ug/L	3.0	SW846 8260D	1	07/07/2022 06:28	PDK	C
trans-1,2-Dichloroethene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 06:28	PDK	C
trans-1,3-Dichloropropene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 06:28	PDK	C
Trichloroethene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 06:28	PDK	C
Trichlorofluoromethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 06:28	PDK	C
Vinyl Acetate	5.0 U	U,P1	ug/L	5.0	SW846 8260D	1	07/07/2022 06:28	PDK	C
Vinyl Chloride	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 06:28	PDK	C

SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
1,2-Dichloroethane-d4	17060-07-0	93.1%	62 – 133	07/07/2022 06:28	
4-Bromofluorobenzene	460-00-4	97.3%	79 – 114	07/07/2022 06:28	
Dibromofluoromethane	1868-53-7	91.2%	78 – 116	07/07/2022 06:28	
Toluene-d8	2037-26-5	94.1%	76 – 127	07/07/2022 06:28	



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Workorder 3250322

Results

Client Sample ID	MW-33D-235	Collected	06/27/2022 09:30
Lab Sample ID	3250322010	Lab Receipt	06/27/2022 19:00

SEMIVOLATILE SIM

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
1,4-Dioxane	0.10 U	U,P1	ug/L	0.10	SW846 8270E SIM	1	07/05/2022 16:18	GEC	A

SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
2-Methylnaphthalene-d10	7297-45-2	48.7%	29 – 112	07/05/2022 16:18	
Fluoranthene-d10	93951-69-0	73.5%	45 – 130	07/05/2022 16:18	

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	07/07/2022 06:51	PDK	C
1,1,1-Trichloroethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 06:51	PDK	C
1,1,2,2-Tetrachloroethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 06:51	PDK	C
1,1,2-Trichloroethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 06:51	PDK	C
1,1-Dichloroethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 06:51	PDK	C
1,1-Dichloroethene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 06:51	PDK	C
1,1-Dichloropropene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 06:51	PDK	C
1,2,3-Trichlorobenzene	2.0 U	U,P1	ug/L	2.0	SW846 8260D	1	07/07/2022 06:51	PDK	C
1,2,3-Trichloropropane	2.0 U	U,P1	ug/L	2.0	SW846 8260D	1	07/07/2022 06:51	PDK	C
1,2,4-Trichlorobenzene	2.0 U	U,P1	ug/L	2.0	SW846 8260D	1	07/07/2022 06:51	PDK	C
1,2-Dibromo-3-chloropropane	7.0 U	U,P1	ug/L	7.0	SW846 8260D	1	07/07/2022 06:51	PDK	C
1,2-Dibromoethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 06:51	PDK	C
1,2-Dichlorobenzene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 06:51	PDK	C
1,2-Dichloroethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 06:51	PDK	C
1,2-Dichloropropane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 06:51	PDK	C
1,3-Dichlorobenzene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 06:51	PDK	C
1,3-Dichloropropane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 06:51	PDK	C
1,4-Dichlorobenzene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 06:51	PDK	C
2,2-Dichloropropane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 06:51	PDK	C
2-Butanone	10.0 U	U,P1	ug/L	10.0	SW846 8260D	1	07/07/2022 06:51	PDK	C
2-Hexanone	5.0 U	U,P1	ug/L	5.0	SW846 8260D	1	07/07/2022 06:51	PDK	C
4-Methyl-2-Pentanone(MIBK)	5.0 U	U,P1	ug/L	5.0	SW846 8260D	1	07/07/2022 06:51	PDK	C
Acetone	10.0 U	U,P1	ug/L	10.0	SW846 8260D	1	07/07/2022 06:51	PDK	C
Benzene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 06:51	PDK	C
Bromobenzene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 06:51	PDK	C
Bromochloromethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 06:51	PDK	C
Bromodichloromethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 06:51	PDK	C
Bromoform	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 06:51	PDK	C
Bromomethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 06:51	PDK	C
Carbon Tetrachloride	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 06:51	PDK	C
Chlorobenzene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 06:51	PDK	C
Chlorodibromomethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 06:51	PDK	C
Chloroethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 06:51	PDK	C
Chloroform	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 06:51	PDK	C
Chloromethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 06:51	PDK	C

Results

Client Sample ID	MW-33D-235	Collected	06/27/2022 09:30
Lab Sample ID	3250322010	Lab Receipt	06/27/2022 19:00

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	07/07/2022 06:51	PDK	C
cis-1,3-Dichloropropene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 06:51	PDK	C
Dibromomethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 06:51	PDK	C
Dichlorodifluoromethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 06:51	PDK	C
Diisopropyl ether	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 06:51	PDK	C
Ethylbenzene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 06:51	PDK	C
Hexachlorobutadiene	5.0 U	U,P1	ug/L	5.0	SW846 8260D	1	07/07/2022 06:51	PDK	C
Methyl t-Butyl Ether	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 06:51	PDK	C
Methylene Chloride	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 06:51	PDK	C
mp-Xylene	2.0 U	U,P1	ug/L	2.0	SW846 8260D	1	07/07/2022 06:51	PDK	C
Naphthalene	2.0 U	U,P1	ug/L	2.0	SW846 8260D	1	07/07/2022 06:51	PDK	C
o-Chlorotoluene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 06:51	PDK	C
o-Xylene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 06:51	PDK	C
p-Chlorotoluene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 06:51	PDK	C
p-Isopropyltoluene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 06:51	PDK	C
Styrene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 06:51	PDK	C
Tetrachloroethene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 06:51	PDK	C
Toluene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 06:51	PDK	C
Total Xylenes	3.0 U	U,P1	ug/L	3.0	SW846 8260D	1	07/07/2022 06:51	PDK	C
trans-1,2-Dichloroethene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 06:51	PDK	C
trans-1,3-Dichloropropene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 06:51	PDK	C
Trichloroethene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 06:51	PDK	C
Trichlorofluoromethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 06:51	PDK	C
Vinyl Acetate	5.0 U	U,P1	ug/L	5.0	SW846 8260D	1	07/07/2022 06:51	PDK	C
Vinyl Chloride	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 06:51	PDK	C

SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
1,2-Dichloroethane-d4	17060-07-0	83.6%	62 – 133	07/07/2022 06:51	
4-Bromofluorobenzene	460-00-4	96.1%	79 – 114	07/07/2022 06:51	
Dibromofluoromethane	1868-53-7	87.1%	78 – 116	07/07/2022 06:51	
Toluene-d8	2037-26-5	99.3%	76 – 127	07/07/2022 06:51	



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Workorder 3250322

Results

Client Sample ID	MW-33D-295	Collected	06/27/2022 09:40
Lab Sample ID	3250322011	Lab Receipt	06/27/2022 19:00

SEMIVOLATILE SIM

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
1,4-Dioxane	3.0	P1	ug/L	0.14	SW846 8270E SIM	1	07/05/2022 16:45	GEC	A

SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
2-Methylnaphthalene-d10	7297-45-2	66.8%	29 – 112	07/05/2022 16:45	
Fluoranthene-d10	93951-69-0	93.8%	45 – 130	07/05/2022 16:45	

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	07/07/2022 07:13	PDK	C
1,1,1-Trichloroethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 07:13	PDK	C
1,1,2,2-Tetrachloroethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 07:13	PDK	C
1,1,2-Trichloroethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 07:13	PDK	C
1,1-Dichloroethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 07:13	PDK	C
1,1-Dichloroethene	5.1	P1	ug/L	1.0	SW846 8260D	1	07/07/2022 07:13	PDK	C
1,1-Dichloropropene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 07:13	PDK	C
1,2,3-Trichlorobenzene	2.0 U	U,P1	ug/L	2.0	SW846 8260D	1	07/07/2022 07:13	PDK	C
1,2,3-Trichloropropane	2.0 U	U,P1	ug/L	2.0	SW846 8260D	1	07/07/2022 07:13	PDK	C
1,2,4-Trichlorobenzene	2.0 U	U,P1	ug/L	2.0	SW846 8260D	1	07/07/2022 07:13	PDK	C
1,2-Dibromo-3-chloropropane	7.0 U	U,P1	ug/L	7.0	SW846 8260D	1	07/07/2022 07:13	PDK	C
1,2-Dibromoethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 07:13	PDK	C
1,2-Dichlorobenzene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 07:13	PDK	C
1,2-Dichloroethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 07:13	PDK	C
1,2-Dichloropropane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 07:13	PDK	C
1,3-Dichlorobenzene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 07:13	PDK	C
1,3-Dichloropropane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 07:13	PDK	C
1,4-Dichlorobenzene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 07:13	PDK	C
2,2-Dichloropropane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 07:13	PDK	C
2-Butanone	10.0 U	U,P1	ug/L	10.0	SW846 8260D	1	07/07/2022 07:13	PDK	C
2-Hexanone	5.0 U	U,P1	ug/L	5.0	SW846 8260D	1	07/07/2022 07:13	PDK	C
4-Methyl-2-Pentanone(MIBK)	5.0 U	U,P1	ug/L	5.0	SW846 8260D	1	07/07/2022 07:13	PDK	C
Acetone	10.0 U	U,P1	ug/L	10.0	SW846 8260D	1	07/07/2022 07:13	PDK	C
Benzene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 07:13	PDK	C
Bromobenzene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 07:13	PDK	C
Bromochloromethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 07:13	PDK	C
Bromodichloromethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 07:13	PDK	C
Bromoform	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 07:13	PDK	C
Bromomethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 07:13	PDK	C
Carbon Tetrachloride	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 07:13	PDK	C
Chlorobenzene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 07:13	PDK	C
Chlorodibromomethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 07:13	PDK	C
Chloroethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 07:13	PDK	C
Chloroform	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 07:13	PDK	C
Chloromethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 07:13	PDK	C

Results

Client Sample ID	MW-33D-295	Collected	06/27/2022 09:40
Lab Sample ID	3250322011	Lab Receipt	06/27/2022 19:00

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	07/07/2022 07:13	PDK	C
cis-1,3-Dichloropropene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 07:13	PDK	C
Dibromomethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 07:13	PDK	C
Dichlorodifluoromethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 07:13	PDK	C
Diisopropyl ether	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 07:13	PDK	C
Ethylbenzene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 07:13	PDK	C
Hexachlorobutadiene	5.0 U	U,P1	ug/L	5.0	SW846 8260D	1	07/07/2022 07:13	PDK	C
Methyl t-Butyl Ether	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 07:13	PDK	C
Methylene Chloride	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 07:13	PDK	C
mp-Xylene	2.0 U	U,P1	ug/L	2.0	SW846 8260D	1	07/07/2022 07:13	PDK	C
Naphthalene	2.0 U	U,P1	ug/L	2.0	SW846 8260D	1	07/07/2022 07:13	PDK	C
o-Chlorotoluene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 07:13	PDK	C
o-Xylene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 07:13	PDK	C
p-Chlorotoluene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 07:13	PDK	C
p-Isopropyltoluene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 07:13	PDK	C
Styrene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 07:13	PDK	C
Tetrachloroethene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 07:13	PDK	C
Toluene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 07:13	PDK	C
Total Xylenes	3.0 U	U,P1	ug/L	3.0	SW846 8260D	1	07/07/2022 07:13	PDK	C
trans-1,2-Dichloroethene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 07:13	PDK	C
trans-1,3-Dichloropropene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 07:13	PDK	C
Trichloroethene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 07:13	PDK	C
Trichlorofluoromethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 07:13	PDK	C
Vinyl Acetate	5.0 U	U,P1	ug/L	5.0	SW846 8260D	1	07/07/2022 07:13	PDK	C
Vinyl Chloride	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 07:13	PDK	C

SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
1,2-Dichloroethane-d4	17060-07-0	93.2%	62 – 133	07/07/2022 07:13	
4-Bromofluorobenzene	460-00-4	98%	79 – 114	07/07/2022 07:13	
Dibromofluoromethane	1868-53-7	93.3%	78 – 116	07/07/2022 07:13	
Toluene-d8	2037-26-5	94.1%	76 – 127	07/07/2022 07:13	



Project Former KOP-Flex Facility Offsi
Workorder 3250322

Results

Client Sample ID	MW-30D-273	Collected	06/27/2022 10:30
Lab Sample ID	3250322012	Lab Receipt	06/27/2022 19:00

SEMIVOLATILE SIM

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
1,4-Dioxane	7.5	P1	ug/L	0.17	SW846 8270E SIM	1	07/05/2022 17:13	GEC	A

SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
2-Methylnaphthalene-d10	7297-45-2	66.1%	29 – 112	07/05/2022 17:13	
Fluoranthene-d10	93951-69-0	95.6%	45 – 130	07/05/2022 17:13	

VOLATILE ORGANICS

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
1,1,1,2-Tetrachloroethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 07:35	PDK	C
1,1,1-Trichloroethane	1.3	P1	ug/L	1.0	SW846 8260D	1	07/07/2022 07:35	PDK	C
1,1,2,2-Tetrachloroethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 07:35	PDK	C
1,1,2-Trichloroethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 07:35	PDK	C
1,1-Dichloroethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 07:35	PDK	C
1,1-Dichloroethene	34.5	P1	ug/L	1.0	SW846 8260D	1	07/07/2022 07:35	PDK	C
1,1-Dichloropropene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 07:35	PDK	C
1,2,3-Trichlorobenzene	2.0 U	U,P1	ug/L	2.0	SW846 8260D	1	07/07/2022 07:35	PDK	C
1,2,3-Trichloropropane	2.0 U	U,P1	ug/L	2.0	SW846 8260D	1	07/07/2022 07:35	PDK	C
1,2,4-Trichlorobenzene	2.0 U	U,P1	ug/L	2.0	SW846 8260D	1	07/07/2022 07:35	PDK	C
1,2-Dibromo-3-chloropropane	7.0 U	U,P1	ug/L	7.0	SW846 8260D	1	07/07/2022 07:35	PDK	C
1,2-Dibromoethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 07:35	PDK	C
1,2-Dichlorobenzene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 07:35	PDK	C
1,2-Dichloroethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 07:35	PDK	C
1,2-Dichloropropane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 07:35	PDK	C
1,3-Dichlorobenzene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 07:35	PDK	C
1,3-Dichloropropane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 07:35	PDK	C
1,4-Dichlorobenzene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 07:35	PDK	C
2,2-Dichloropropane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 07:35	PDK	C
2-Butanone	10.0 U	U,P1	ug/L	10.0	SW846 8260D	1	07/07/2022 07:35	PDK	C
2-Hexanone	5.0 U	U,P1	ug/L	5.0	SW846 8260D	1	07/07/2022 07:35	PDK	C
4-Methyl-2-Pentanone(MIBK)	5.0 U	U,P1	ug/L	5.0	SW846 8260D	1	07/07/2022 07:35	PDK	C
Acetone	10.0 U	U,P1	ug/L	10.0	SW846 8260D	1	07/07/2022 07:35	PDK	C
Benzene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 07:35	PDK	C
Bromobenzene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 07:35	PDK	C
Bromochloromethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 07:35	PDK	C
Bromodichloromethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 07:35	PDK	C
Bromoform	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 07:35	PDK	C
Bromomethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 07:35	PDK	C
Carbon Tetrachloride	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 07:35	PDK	C
Chlorobenzene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 07:35	PDK	C
Chlorodibromomethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 07:35	PDK	C
Chloroethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 07:35	PDK	C
Chloroform	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 07:35	PDK	C
Chloromethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 07:35	PDK	C

Results

Client Sample ID	MW-30D-273	Collected	06/27/2022 10:30
Lab Sample ID	3250322012	Lab Receipt	06/27/2022 19:00

VOLATILE ORGANICS (cont.)

<u>Compound</u>	<u>Result</u>	<u>Flag</u>	<u>Units</u>	<u>RDL</u>	<u>Method</u>	<u>Dilution</u>	<u>Analysis Date/Time</u>	<u>By</u>	<u>Cntr</u>
cis-1,2-Dichloroethene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 07:35	PDK	C
cis-1,3-Dichloropropene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 07:35	PDK	C
Dibromomethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 07:35	PDK	C
Dichlorodifluoromethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 07:35	PDK	C
Diisopropyl ether	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 07:35	PDK	C
Ethylbenzene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 07:35	PDK	C
Hexachlorobutadiene	5.0 U	U,P1	ug/L	5.0	SW846 8260D	1	07/07/2022 07:35	PDK	C
Methyl t-Butyl Ether	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 07:35	PDK	C
Methylene Chloride	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 07:35	PDK	C
mp-Xylene	2.0 U	U,P1	ug/L	2.0	SW846 8260D	1	07/07/2022 07:35	PDK	C
Naphthalene	2.0 U	U,P1	ug/L	2.0	SW846 8260D	1	07/07/2022 07:35	PDK	C
o-Chlorotoluene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 07:35	PDK	C
o-Xylene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 07:35	PDK	C
p-Chlorotoluene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 07:35	PDK	C
p-Isopropyltoluene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 07:35	PDK	C
Styrene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 07:35	PDK	C
Tetrachloroethene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 07:35	PDK	C
Toluene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 07:35	PDK	C
Total Xylenes	3.0 U	U,P1	ug/L	3.0	SW846 8260D	1	07/07/2022 07:35	PDK	C
trans-1,2-Dichloroethene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 07:35	PDK	C
trans-1,3-Dichloropropene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 07:35	PDK	C
Trichloroethene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 07:35	PDK	C
Trichlorofluoromethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 07:35	PDK	C
Vinyl Acetate	5.0 U	U,P1	ug/L	5.0	SW846 8260D	1	07/07/2022 07:35	PDK	C
Vinyl Chloride	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 07:35	PDK	C

SURROGATES

<u>Compound</u>	<u>CAS No</u>	<u>Recovery</u>	<u>Limits(%)</u>	<u>Analysis Date/Time</u>	<u>Qualifiers</u>
1,2-Dichloroethane-d4	17060-07-0	88.9%	62 – 133	07/07/2022 07:35	
4-Bromofluorobenzene	460-00-4	97.5%	79 – 114	07/07/2022 07:35	
Dibromofluoromethane	1868-53-7	91.7%	78 – 116	07/07/2022 07:35	
Toluene-d8	2037-26-5	97%	76 – 127	07/07/2022 07:35	



Project Former KOP-Flex Facility Offsi
Workorder 3250322

Results

Client Sample ID	MW-30D-413	Collected	06/27/2022 10:20
Lab Sample ID	3250322013	Lab Receipt	06/27/2022 19:00

SEMIVOLATILE SIM

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
1,4-Dioxane	0.10 U	U,P1	ug/L	0.10	SW846 8270E SIM	1	07/05/2022 17:40	GEC	A

SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
2-Methylnaphthalene-d10	7297-45-2	63.2%	29 – 112	07/05/2022 17:40	
Fluoranthene-d10	93951-69-0	87.2%	45 – 130	07/05/2022 17:40	

VOLATILE ORGANICS

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
1,1,1,2-Tetrachloroethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 07:57	PDK	C
1,1,1-Trichloroethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 07:57	PDK	C
1,1,2,2-Tetrachloroethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 07:57	PDK	C
1,1,2-Trichloroethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 07:57	PDK	C
1,1-Dichloroethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 07:57	PDK	C
1,1-Dichloroethene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 07:57	PDK	C
1,1-Dichloropropene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 07:57	PDK	C
1,2,3-Trichlorobenzene	2.0 U	U,P1	ug/L	2.0	SW846 8260D	1	07/07/2022 07:57	PDK	C
1,2,3-Trichloropropane	2.0 U	U,P1	ug/L	2.0	SW846 8260D	1	07/07/2022 07:57	PDK	C
1,2,4-Trichlorobenzene	2.0 U	U,P1	ug/L	2.0	SW846 8260D	1	07/07/2022 07:57	PDK	C
1,2-Dibromo-3-chloropropane	7.0 U	U,P1	ug/L	7.0	SW846 8260D	1	07/07/2022 07:57	PDK	C
1,2-Dibromoethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 07:57	PDK	C
1,2-Dichlorobenzene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 07:57	PDK	C
1,2-Dichloroethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 07:57	PDK	C
1,2-Dichloropropane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 07:57	PDK	C
1,3-Dichlorobenzene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 07:57	PDK	C
1,3-Dichloropropane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 07:57	PDK	C
1,4-Dichlorobenzene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 07:57	PDK	C
2,2-Dichloropropane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 07:57	PDK	C
2-Butanone	10.0 U	U,P1	ug/L	10.0	SW846 8260D	1	07/07/2022 07:57	PDK	C
2-Hexanone	5.0 U	U,P1	ug/L	5.0	SW846 8260D	1	07/07/2022 07:57	PDK	C
4-Methyl-2-Pentanone(MIBK)	5.0 U	U,P1	ug/L	5.0	SW846 8260D	1	07/07/2022 07:57	PDK	C
Acetone	10.0 U	U,P1	ug/L	10.0	SW846 8260D	1	07/07/2022 07:57	PDK	C
Benzene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 07:57	PDK	C
Bromobenzene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 07:57	PDK	C
Bromochloromethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 07:57	PDK	C
Bromodichloromethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 07:57	PDK	C
Bromoform	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 07:57	PDK	C
Bromomethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 07:57	PDK	C
Carbon Tetrachloride	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 07:57	PDK	C
Chlorobenzene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 07:57	PDK	C
Chlorodibromomethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 07:57	PDK	C
Chloroethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 07:57	PDK	C
Chloroform	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 07:57	PDK	C
Chloromethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 07:57	PDK	C

Results

Client Sample ID	MW-30D-413	Collected	06/27/2022 10:20
Lab Sample ID	3250322013	Lab Receipt	06/27/2022 19:00

VOLATILE ORGANICS (cont.)

<u>Compound</u>	<u>Result</u>	<u>Flag</u>	<u>Units</u>	<u>RDL</u>	<u>Method</u>	<u>Dilution</u>	<u>Analysis Date/Time</u>	<u>By</u>	<u>Cntr</u>
cis-1,2-Dichloroethene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 07:57	PDK	C
cis-1,3-Dichloropropene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 07:57	PDK	C
Dibromomethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 07:57	PDK	C
Dichlorodifluoromethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 07:57	PDK	C
Diisopropyl ether	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 07:57	PDK	C
Ethylbenzene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 07:57	PDK	C
Hexachlorobutadiene	5.0 U	U,P1	ug/L	5.0	SW846 8260D	1	07/07/2022 07:57	PDK	C
Methyl t-Butyl Ether	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 07:57	PDK	C
Methylene Chloride	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 07:57	PDK	C
mp-Xylene	2.0 U	U,P1	ug/L	2.0	SW846 8260D	1	07/07/2022 07:57	PDK	C
Naphthalene	2.0 U	U,P1	ug/L	2.0	SW846 8260D	1	07/07/2022 07:57	PDK	C
o-Chlorotoluene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 07:57	PDK	C
o-Xylene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 07:57	PDK	C
p-Chlorotoluene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 07:57	PDK	C
p-Isopropyltoluene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 07:57	PDK	C
Styrene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 07:57	PDK	C
Tetrachloroethene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 07:57	PDK	C
Toluene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 07:57	PDK	C
Total Xylenes	3.0 U	U,P1	ug/L	3.0	SW846 8260D	1	07/07/2022 07:57	PDK	C
trans-1,2-Dichloroethene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 07:57	PDK	C
trans-1,3-Dichloropropene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 07:57	PDK	C
Trichloroethene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 07:57	PDK	C
Trichlorofluoromethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 07:57	PDK	C
Vinyl Acetate	5.0 U	U,P1	ug/L	5.0	SW846 8260D	1	07/07/2022 07:57	PDK	C
Vinyl Chloride	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 07:57	PDK	C

SURROGATES

<u>Compound</u>	<u>CAS No</u>	<u>Recovery</u>	<u>Limits(%)</u>	<u>Analysis Date/Time</u>	<u>Qualifiers</u>
1,2-Dichloroethane-d4	17060-07-0	92.2%	62 – 133	07/07/2022 07:57	
4-Bromofluorobenzene	460-00-4	97.7%	79 – 114	07/07/2022 07:57	
Dibromofluoromethane	1868-53-7	91.2%	78 – 116	07/07/2022 07:57	
Toluene-d8	2037-26-5	93.8%	76 – 127	07/07/2022 07:57	



Project Former KOP-Flex Facility Offsite
Workorder 3250322

Results

Client Sample ID	MW-29D	Collected	06/27/2022 10:45
Lab Sample ID	3250322014	Lab Receipt	06/27/2022 19:00

SEMIVOLATILE SIM

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
1,4-Dioxane	0.50 U	U,P1	ug/L	0.50	SW846 8270E SIM	1	07/05/2022 18:07	GEC	A

SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
2-Methylnaphthalene-d10	7297-45-2	67.2%	29 – 112	07/05/2022 18:07	
Fluoranthene-d10	93951-69-0	82%	45 – 130	07/05/2022 18:07	

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	07/07/2022 08:19	PDK	C
1,1,1-Trichloroethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 08:19	PDK	C
1,1,2,2-Tetrachloroethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 08:19	PDK	C
1,1,2-Trichloroethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 08:19	PDK	C
1,1-Dichloroethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 08:19	PDK	C
1,1-Dichloroethene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 08:19	PDK	C
1,1-Dichloropropene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 08:19	PDK	C
1,2,3-Trichlorobenzene	2.0 U	U,P1	ug/L	2.0	SW846 8260D	1	07/07/2022 08:19	PDK	C
1,2,3-Trichloropropane	2.0 U	U,P1	ug/L	2.0	SW846 8260D	1	07/07/2022 08:19	PDK	C
1,2,4-Trichlorobenzene	2.0 U	U,P1	ug/L	2.0	SW846 8260D	1	07/07/2022 08:19	PDK	C
1,2-Dibromo-3-chloropropane	7.0 U	U,P1	ug/L	7.0	SW846 8260D	1	07/07/2022 08:19	PDK	C
1,2-Dibromoethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 08:19	PDK	C
1,2-Dichlorobenzene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 08:19	PDK	C
1,2-Dichloroethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 08:19	PDK	C
1,2-Dichloropropane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 08:19	PDK	C
1,3-Dichlorobenzene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 08:19	PDK	C
1,3-Dichloropropane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 08:19	PDK	C
1,4-Dichlorobenzene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 08:19	PDK	C
2,2-Dichloropropane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 08:19	PDK	C
2-Butanone	10.0 U	U,P1	ug/L	10.0	SW846 8260D	1	07/07/2022 08:19	PDK	C
2-Hexanone	5.0 U	U,P1	ug/L	5.0	SW846 8260D	1	07/07/2022 08:19	PDK	C
4-Methyl-2-Pentanone(MIBK)	5.0 U	U,P1	ug/L	5.0	SW846 8260D	1	07/07/2022 08:19	PDK	C
Acetone	10.0 U	U,P1	ug/L	10.0	SW846 8260D	1	07/07/2022 08:19	PDK	C
Benzene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 08:19	PDK	C
Bromobenzene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 08:19	PDK	C
Bromochloromethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 08:19	PDK	C
Bromodichloromethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 08:19	PDK	C
Bromoform	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 08:19	PDK	C
Bromomethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 08:19	PDK	C
Carbon Tetrachloride	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 08:19	PDK	C
Chlorobenzene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 08:19	PDK	C
Chlorodibromomethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 08:19	PDK	C
Chloroethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 08:19	PDK	C
Chloroform	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 08:19	PDK	C
Chloromethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 08:19	PDK	C

Results

Client Sample ID	MW-29D	Collected	06/27/2022 10:45
Lab Sample ID	3250322014	Lab Receipt	06/27/2022 19:00

VOLATILE ORGANICS (cont.)

<u>Compound</u>	<u>Result</u>	<u>Flag</u>	<u>Units</u>	<u>RDL</u>	<u>Method</u>	<u>Dilution</u>	<u>Analysis Date/Time</u>	<u>By</u>	<u>Cntr</u>
cis-1,2-Dichloroethene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 08:19	PDK	C
cis-1,3-Dichloropropene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 08:19	PDK	C
Dibromomethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 08:19	PDK	C
Dichlorodifluoromethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 08:19	PDK	C
Diisopropyl ether	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 08:19	PDK	C
Ethylbenzene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 08:19	PDK	C
Hexachlorobutadiene	5.0 U	U,P1	ug/L	5.0	SW846 8260D	1	07/07/2022 08:19	PDK	C
Methyl t-Butyl Ether	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 08:19	PDK	C
Methylene Chloride	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 08:19	PDK	C
mp-Xylene	2.0 U	U,P1	ug/L	2.0	SW846 8260D	1	07/07/2022 08:19	PDK	C
Naphthalene	2.0 U	U,P1	ug/L	2.0	SW846 8260D	1	07/07/2022 08:19	PDK	C
o-Chlorotoluene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 08:19	PDK	C
o-Xylene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 08:19	PDK	C
p-Chlorotoluene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 08:19	PDK	C
p-Isopropyltoluene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 08:19	PDK	C
Styrene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 08:19	PDK	C
Tetrachloroethene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 08:19	PDK	C
Toluene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 08:19	PDK	C
Total Xylenes	3.0 U	U,P1	ug/L	3.0	SW846 8260D	1	07/07/2022 08:19	PDK	C
trans-1,2-Dichloroethene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 08:19	PDK	C
trans-1,3-Dichloropropene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 08:19	PDK	C
Trichloroethene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 08:19	PDK	C
Trichlorofluoromethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 08:19	PDK	C
Vinyl Acetate	5.0 U	U,P1	ug/L	5.0	SW846 8260D	1	07/07/2022 08:19	PDK	C
Vinyl Chloride	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 08:19	PDK	C

SURROGATES

<u>Compound</u>	<u>CAS No</u>	<u>Recovery</u>	<u>Limits(%)</u>	<u>Analysis Date/Time</u>	<u>Qualifiers</u>
1,2-Dichloroethane-d4	17060-07-0	92%	62 – 133	07/07/2022 08:19	
4-Bromofluorobenzene	460-00-4	96.7%	79 – 114	07/07/2022 08:19	
Dibromofluoromethane	1868-53-7	91.1%	78 – 116	07/07/2022 08:19	
Toluene-d8	2037-26-5	94.2%	76 – 127	07/07/2022 08:19	



Project Former KOP-Flex Facility Offsi
Workorder 3250322

Results

Client Sample ID	MW-32D	Collected	06/27/2022 11:00
Lab Sample ID	3250322015	Lab Receipt	06/27/2022 19:00

SEMIVOLATILE SIM

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
1,4-Dioxane	0.15 U	U,P1	ug/L	0.15	SW846 8270E SIM	1	07/05/2022 18:35	GEC	A

SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
2-Methylnaphthalene-d10	7297-45-2	64.9%	29 – 112	07/05/2022 18:35	
Fluoranthene-d10	93951-69-0	67.4%	45 – 130	07/05/2022 18:35	

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	07/07/2022 08:42	PDK	C
1,1,1-Trichloroethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 08:42	PDK	C
1,1,2,2-Tetrachloroethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 08:42	PDK	C
1,1,2-Trichloroethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 08:42	PDK	C
1,1-Dichloroethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 08:42	PDK	C
1,1-Dichloroethene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 08:42	PDK	C
1,1-Dichloropropene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 08:42	PDK	C
1,2,3-Trichlorobenzene	2.0 U	U,P1	ug/L	2.0	SW846 8260D	1	07/07/2022 08:42	PDK	C
1,2,3-Trichloropropane	2.0 U	U,P1	ug/L	2.0	SW846 8260D	1	07/07/2022 08:42	PDK	C
1,2,4-Trichlorobenzene	2.0 U	U,P1	ug/L	2.0	SW846 8260D	1	07/07/2022 08:42	PDK	C
1,2-Dibromo-3-chloropropane	7.0 U	U,P1	ug/L	7.0	SW846 8260D	1	07/07/2022 08:42	PDK	C
1,2-Dibromoethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 08:42	PDK	C
1,2-Dichlorobenzene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 08:42	PDK	C
1,2-Dichloroethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 08:42	PDK	C
1,2-Dichloropropane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 08:42	PDK	C
1,3-Dichlorobenzene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 08:42	PDK	C
1,3-Dichloropropane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 08:42	PDK	C
1,4-Dichlorobenzene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 08:42	PDK	C
2,2-Dichloropropane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 08:42	PDK	C
2-Butanone	10.0 U	U,P1	ug/L	10.0	SW846 8260D	1	07/07/2022 08:42	PDK	C
2-Hexanone	5.0 U	U,P1	ug/L	5.0	SW846 8260D	1	07/07/2022 08:42	PDK	C
4-Methyl-2-Pentanone(MIBK)	5.0 U	U,P1	ug/L	5.0	SW846 8260D	1	07/07/2022 08:42	PDK	C
Acetone	10.0 U	U,P1	ug/L	10.0	SW846 8260D	1	07/07/2022 08:42	PDK	C
Benzene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 08:42	PDK	C
Bromobenzene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 08:42	PDK	C
Bromochloromethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 08:42	PDK	C
Bromodichloromethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 08:42	PDK	C
Bromoform	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 08:42	PDK	C
Bromomethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 08:42	PDK	C
Carbon Tetrachloride	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 08:42	PDK	C
Chlorobenzene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 08:42	PDK	C
Chlorodibromomethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 08:42	PDK	C
Chloroethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 08:42	PDK	C
Chloroform	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 08:42	PDK	C
Chloromethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 08:42	PDK	C

Results

Client Sample ID	MW-32D	Collected	06/27/2022 11:00
Lab Sample ID	3250322015	Lab Receipt	06/27/2022 19:00

VOLATILE ORGANICS (cont.)

<u>Compound</u>	<u>Result</u>	<u>Flag</u>	<u>Units</u>	<u>RDL</u>	<u>Method</u>	<u>Dilution</u>	<u>Analysis Date/Time</u>	<u>By</u>	<u>Cntr</u>
cis-1,2-Dichloroethene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 08:42	PDK	C
cis-1,3-Dichloropropene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 08:42	PDK	C
Dibromomethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 08:42	PDK	C
Dichlorodifluoromethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 08:42	PDK	C
Diisopropyl ether	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 08:42	PDK	C
Ethylbenzene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 08:42	PDK	C
Hexachlorobutadiene	5.0 U	U,P1	ug/L	5.0	SW846 8260D	1	07/07/2022 08:42	PDK	C
Methyl t-Butyl Ether	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 08:42	PDK	C
Methylene Chloride	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 08:42	PDK	C
mp-Xylene	2.0 U	U,P1	ug/L	2.0	SW846 8260D	1	07/07/2022 08:42	PDK	C
Naphthalene	2.0 U	U,P1	ug/L	2.0	SW846 8260D	1	07/07/2022 08:42	PDK	C
o-Chlorotoluene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 08:42	PDK	C
o-Xylene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 08:42	PDK	C
p-Chlorotoluene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 08:42	PDK	C
p-Isopropyltoluene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 08:42	PDK	C
Styrene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 08:42	PDK	C
Tetrachloroethene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 08:42	PDK	C
Toluene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 08:42	PDK	C
Total Xylenes	3.0 U	U,P1	ug/L	3.0	SW846 8260D	1	07/07/2022 08:42	PDK	C
trans-1,2-Dichloroethene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 08:42	PDK	C
trans-1,3-Dichloropropene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 08:42	PDK	C
Trichloroethene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 08:42	PDK	C
Trichlorofluoromethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 08:42	PDK	C
Vinyl Acetate	5.0 U	U,P1	ug/L	5.0	SW846 8260D	1	07/07/2022 08:42	PDK	C
Vinyl Chloride	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 08:42	PDK	C

SURROGATES

<u>Compound</u>	<u>CAS No</u>	<u>Recovery</u>	<u>Limits(%)</u>	<u>Analysis Date/Time</u>	<u>Qualifiers</u>
1,2-Dichloroethane-d4	17060-07-0	89.7%	62 – 133	07/07/2022 08:42	
4-Bromofluorobenzene	460-00-4	95.4 %	79 – 114	07/07/2022 08:42	
Dibromofluoromethane	1868-53-7	90.3 %	78 – 116	07/07/2022 08:42	
Toluene-d8	2037-26-5	96.7 %	76 – 127	07/07/2022 08:42	



Project Former KOP-Flex Facility Offsi
Workorder 3250322

Results

Client Sample ID	MW-28D	Collected	06/27/2022 11:35
Lab Sample ID	3250322016	Lab Receipt	06/27/2022 19:00

SEMIVOLATILE SIM

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
1,4-Dioxane	2.1	P1	ug/L	0.17	SW846 8270E SIM	1	07/06/2022 11:35	GEC	A

SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
2-Methylnaphthalene-d10	7297-45-2	72.4%	29 – 112	07/06/2022 11:35	
Fluoranthene-d10	93951-69-0	85.6%	45 – 130	07/06/2022 11:35	

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	07/07/2022 14:27	TMP	C
1,1,1-Trichloroethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 14:27	TMP	C
1,1,2,2-Tetrachloroethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 14:27	TMP	C
1,1,2-Trichloroethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 14:27	TMP	C
1,1-Dichloroethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 14:27	TMP	C
1,1-Dichloroethene	4.0	P1	ug/L	1.0	SW846 8260D	1	07/07/2022 14:27	TMP	C
1,1-Dichloropropene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 14:27	TMP	C
1,2,3-Trichlorobenzene	2.0 U	U,P1	ug/L	2.0	SW846 8260D	1	07/07/2022 14:27	TMP	C
1,2,3-Trichloropropane	2.0 U	U,P1	ug/L	2.0	SW846 8260D	1	07/07/2022 14:27	TMP	C
1,2,4-Trichlorobenzene	2.0 U	U,P1	ug/L	2.0	SW846 8260D	1	07/07/2022 14:27	TMP	C
1,2-Dibromo-3-chloropropane	7.0 U	U,P1	ug/L	7.0	SW846 8260D	1	07/07/2022 14:27	TMP	C
1,2-Dibromoethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 14:27	TMP	C
1,2-Dichlorobenzene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 14:27	TMP	C
1,2-Dichloroethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 14:27	TMP	C
1,2-Dichloropropane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 14:27	TMP	C
1,3-Dichlorobenzene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 14:27	TMP	C
1,3-Dichloropropane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 14:27	TMP	C
1,4-Dichlorobenzene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 14:27	TMP	C
2,2-Dichloropropane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 14:27	TMP	C
2-Butanone	10.0 U	U,P1	ug/L	10.0	SW846 8260D	1	07/07/2022 14:27	TMP	C
2-Hexanone	5.0 U	U,P1	ug/L	5.0	SW846 8260D	1	07/07/2022 14:27	TMP	C
4-Methyl-2-Pentanone(MIBK)	5.0 U	U,P1	ug/L	5.0	SW846 8260D	1	07/07/2022 14:27	TMP	C
Acetone	10.0 U	U,P1	ug/L	10.0	SW846 8260D	1	07/07/2022 14:27	TMP	C
Benzene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 14:27	TMP	C
Bromobenzene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 14:27	TMP	C
Bromochloromethane	1.0 U	U,2,3,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 14:27	TMP	C
Bromodichloromethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 14:27	TMP	C
Bromoform	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 14:27	TMP	C
Bromomethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 14:27	TMP	C
Carbon Tetrachloride	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 14:27	TMP	C
Chlorobenzene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 14:27	TMP	C
Chlorodibromomethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 14:27	TMP	C
Chloroethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 14:27	TMP	C
Chloroform	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 14:27	TMP	C
Chloromethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 14:27	TMP	C

Results

Client Sample ID	MW-28D	Collected	06/27/2022 11:35
Lab Sample ID	3250322016	Lab Receipt	06/27/2022 19:00

VOLATILE ORGANICS (cont.)

<u>Compound</u>	<u>Result</u>	<u>Flag</u>	<u>Units</u>	<u>RDL</u>	<u>Method</u>	<u>Dilution</u>	<u>Analysis Date/Time</u>	<u>By</u>	<u>Cntr</u>
cis-1,2-Dichloroethene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 14:27	TMP	C
cis-1,3-Dichloropropene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 14:27	TMP	C
Dibromomethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 14:27	TMP	C
Dichlorodifluoromethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 14:27	TMP	C
Diisopropyl ether	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 14:27	TMP	C
Ethylbenzene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 14:27	TMP	C
Hexachlorobutadiene	5.0 U	U,P1	ug/L	5.0	SW846 8260D	1	07/07/2022 14:27	TMP	C
Methyl t-Butyl Ether	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 14:27	TMP	C
Methylene Chloride	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 14:27	TMP	C
mp-Xylene	2.0 U	U,P1	ug/L	2.0	SW846 8260D	1	07/07/2022 14:27	TMP	C
Naphthalene	2.0 U	U,P1	ug/L	2.0	SW846 8260D	1	07/07/2022 14:27	TMP	C
o-Chlorotoluene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 14:27	TMP	C
o-Xylene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 14:27	TMP	C
p-Chlorotoluene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 14:27	TMP	C
p-Isopropyltoluene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 14:27	TMP	C
Styrene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 14:27	TMP	C
Tetrachloroethene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 14:27	TMP	C
Toluene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 14:27	TMP	C
Total Xylenes	3.0 U	U,P1	ug/L	3.0	SW846 8260D	1	07/07/2022 14:27	TMP	C
trans-1,2-Dichloroethene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 14:27	TMP	C
trans-1,3-Dichloropropene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 14:27	TMP	C
Trichloroethene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 14:27	TMP	C
Trichlorofluoromethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 14:27	TMP	C
Vinyl Acetate	5.0 U	U,P1	ug/L	5.0	SW846 8260D	1	07/07/2022 14:27	TMP	C
Vinyl Chloride	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 14:27	TMP	C

SURROGATES

<u>Compound</u>	<u>CAS No</u>	<u>Recovery</u>	<u>Limits(%)</u>	<u>Analysis Date/Time</u>	<u>Qualifiers</u>
1,2-Dichloroethane-d4	17060-07-0	97.2%	62 – 133	07/07/2022 14:27	
4-Bromofluorobenzene	460-00-4	109 %	79 – 114	07/07/2022 14:27	
Dibromofluoromethane	1868-53-7	105 %	78 – 116	07/07/2022 14:27	
Toluene-d8	2037-26-5	100 %	76 – 127	07/07/2022 14:27	



Project Former KOP-Flex Facility Offsite
Workorder 3250322

Results

Client Sample ID	Trip Blank	Collected	06/27/2022 00:00
Lab Sample ID	3250322017	Lab Receipt	06/27/2022 19:00

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	07/07/2022 14:04	TMP	A
1,1,1-Trichloroethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 14:04	TMP	A
1,1,2,2-Tetrachloroethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 14:04	TMP	A
1,1,2-Trichloroethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 14:04	TMP	A
1,1-Dichloroethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 14:04	TMP	A
1,1-Dichloroethene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 14:04	TMP	A
1,1-Dichloropropene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 14:04	TMP	A
1,2,3-Trichlorobenzene	2.0 U	U,P1	ug/L	2.0	SW846 8260D	1	07/07/2022 14:04	TMP	A
1,2,3-Trichloropropane	2.0 U	U,P1	ug/L	2.0	SW846 8260D	1	07/07/2022 14:04	TMP	A
1,2,4-Trichlorobenzene	2.0 U	U,P1	ug/L	2.0	SW846 8260D	1	07/07/2022 14:04	TMP	A
1,2-Dibromo-3-chloropropane	7.0 U	U,P1	ug/L	7.0	SW846 8260D	1	07/07/2022 14:04	TMP	A
1,2-Dibromoethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 14:04	TMP	A
1,2-Dichlorobenzene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 14:04	TMP	A
1,2-Dichloroethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 14:04	TMP	A
1,2-Dichloropropane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 14:04	TMP	A
1,3-Dichlorobenzene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 14:04	TMP	A
1,3-Dichloropropane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 14:04	TMP	A
1,4-Dichlorobenzene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 14:04	TMP	A
2,2-Dichloropropane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 14:04	TMP	A
2-Butanone	10.0 U	U,P1	ug/L	10.0	SW846 8260D	1	07/07/2022 14:04	TMP	A
2-Hexanone	5.0 U	U,P1	ug/L	5.0	SW846 8260D	1	07/07/2022 14:04	TMP	A
4-Methyl-2-Pentanone(MIBK)	5.0 U	U,P1	ug/L	5.0	SW846 8260D	1	07/07/2022 14:04	TMP	A
Acetone	10.0 U	U,P1	ug/L	10.0	SW846 8260D	1	07/07/2022 14:04	TMP	A
Benzene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 14:04	TMP	A
Bromobenzene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 14:04	TMP	A
Bromochloromethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 14:04	TMP	A
Bromodichloromethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 14:04	TMP	A
Bromoform	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 14:04	TMP	A
Bromomethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 14:04	TMP	A
Carbon Tetrachloride	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 14:04	TMP	A
Chlorobenzene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 14:04	TMP	A
Chlorodibromomethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 14:04	TMP	A
Chloroethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 14:04	TMP	A
Chloroform	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 14:04	TMP	A
Chloromethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 14:04	TMP	A
cis-1,2-Dichloroethene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 14:04	TMP	A
cis-1,3-Dichloropropene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 14:04	TMP	A
Dibromomethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 14:04	TMP	A
Dichlorodifluoromethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 14:04	TMP	A
Diisopropyl ether	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 14:04	TMP	A
Ethylbenzene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 14:04	TMP	A
Hexachlorobutadiene	5.0 U	U,P1	ug/L	5.0	SW846 8260D	1	07/07/2022 14:04	TMP	A
Methyl t-Butyl Ether	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 14:04	TMP	A
Methylene Chloride	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 14:04	TMP	A
mp-Xylene	2.0 U	U,P1	ug/L	2.0	SW846 8260D	1	07/07/2022 14:04	TMP	A
Naphthalene	2.0 U	U,P1	ug/L	2.0	SW846 8260D	1	07/07/2022 14:04	TMP	A
o-Chlorotoluene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 14:04	TMP	A

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Results

Client Sample ID	Trip Blank	Collected	06/27/2022 00:00
Lab Sample ID	3250322017	Lab Receipt	06/27/2022 19:00

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	07/07/2022 14:04	TMP	A
p-Chlorotoluene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 14:04	TMP	A
p-Isopropyltoluene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 14:04	TMP	A
Styrene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 14:04	TMP	A
Tetrachloroethene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 14:04	TMP	A
Toluene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 14:04	TMP	A
Total Xylenes	3.0 U	U,P1	ug/L	3.0	SW846 8260D	1	07/07/2022 14:04	TMP	A
trans-1,2-Dichloroethene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 14:04	TMP	A
trans-1,3-Dichloropropene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 14:04	TMP	A
Trichloroethene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 14:04	TMP	A
Trichlorofluoromethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 14:04	TMP	A
Vinyl Acetate	5.0 U	U,P1	ug/L	5.0	SW846 8260D	1	07/07/2022 14:04	TMP	A
Vinyl Chloride	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	07/07/2022 14:04	TMP	A

SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
1,2-Dichloroethane-d4	17060-07-0	97.3%	62 – 133	07/07/2022 14:04	
4-Bromofluorobenzene	460-00-4	110%	79 – 114	07/07/2022 14:04	
Dibromofluoromethane	1868-53-7	106%	78 – 116	07/07/2022 14:04	
Toluene-d8	2037-26-5	99.2%	76 – 127	07/07/2022 14:04	

Sample - Method Cross Reference Table

Lab ID	Sample ID	Analysis Method	Preparation Method	Leachate Method
3250322001	MW-36D	SW846 8270E SIM SW846 8260D	SW846 3510C N/A	
3250322002	MW-25D-130	SW846 8270E SIM SW846 8260D	SW846 3510C N/A	
3250322003	MW-25D-190	SW846 8270E SIM SW846 8260D	SW846 3510C N/A	
3250322004	MW-45	SW846 8270E SIM SW846 8260D	SW846 3510C N/A	
3250322005	MW-24D	SW846 8270E SIM SW846 8260D SW846 8260D	SW846 3510C N/A N/A	
3250322006	DUP-062722	SW846 8270E SIM SW846 8260D	SW846 3510C N/A	
3250322007	MW-35D	SW846 8270E SIM SW846 8260D	SW846 3510C N/A	
3250322008	MW-34D	SW846 8270E SIM SW846 8260D	SW846 3510C N/A	
3250322009	MW-31D	SW846 8270E SIM SW846 8260D	SW846 3510C N/A	
3250322010	MW-33D-235	SW846 8270E SIM SW846 8260D	SW846 3510C N/A	
3250322011	MW-33D-295	SW846 8270E SIM SW846 8260D	SW846 3510C N/A	
3250322012	MW-30D-273	SW846 8270E SIM SW846 8260D	SW846 3510C N/A	
3250322013	MW-30D-413	SW846 8270E SIM SW846 8260D	SW846 3510C N/A	
3250322014	MW-29D	SW846 8270E SIM SW846 8260D	SW846 3510C N/A	
3250322015	MW-32D	SW846 8270E SIM SW846 8260D	SW846 3510C N/A	
3250322016	MW-28D	SW846 8270E SIM SW846 8260D	SW846 3510C N/A	
3250322017	Trip Blank	SW846 8260D	N/A	

QUALITY CONTROL SAMPLES

SEMIVOLATILE SIM

QC Batch

<u>QC Batch</u>	860435	<u>Prep Method</u>	SW846 3510C
<u>Date</u>	06/30/2022 16:35	<u>Analysis Method</u>	SW846 8270E SIM
<u>Tech.</u>	JIH		

Associated Samples

3250322007	3250322009	3250322001	3250322010
3250322002	3250322015	3250322011	3250322003
3250322012	3250322004	3250322013	3250322005
3250322014	3250322016	3250322006	3250322008

Method Blank

3523740 (MB)

Created on 06/30/2022 12:04

For QC Batch 860435

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	0.74	1	74.3 - 112	
Fluoranthene-d10	93951-69-0	BLK	0.92	1	91.5 - 130	

Lab Control Standard

3523741 (LCS)

Created on 06/30/2022 12:04

For QC Batch 860435

RESULTS

Compound	CAS No	Result	Orig. Result	Spk Added	Rec.	Limits (%)	RPD Limit (%)	Qualifiers
1,4-Dioxane	123-91-1	LCS	0.51	1	50.7	22 - 75		

SURROGATES

Compound	CAS No	Result	Expected	Rec.	Limits (%)	Qualifiers
2-Methylnaphthalene-d10	7297-45-2	LCS	0.79	1	79.4 - 112	
Fluoranthene-d10	93951-69-0	LCS	0.94	1	93.7 - 130	

Matrix Spike

3523742 (MS)

3250322003

For QC Batch 860435

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

RESULTS

Compound	CAS No	Result	Orig. Result	Spk Added	Rec.	Limits (%)	RPD Limit (%)	Qualifiers
1,4-Dioxane	123-91-1	MS	10.80	11.60	1	NC	22 - 75	

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	0.67	1	66.6	29 - 112	
Fluoranthene-d10	93951-69-0	MS	0.55	1	55.3	45 - 130	

Duplicate 3523743 (DUP) 3250322015 For QC Batch 860435

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

RESULTS

<u>Compound</u>	<u>CAS No</u>		<u>Result</u> (ug/L)	<u>Orig. Result</u> (ug/L)		<u>Qualifiers</u>
1,4-Dioxane	123-91-1	DUP	0	0	RPD 0 (Max-30)	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>
2-Methylnaphthalene-d10	7297-45-2	DUP	0.59	1	59.3	29 - 112	
Fluoranthene-d10	93951-69-0	DUP	0.72	1	71.7	45 - 130	



Project Former KOP-Flex Facility Offsi
Workorder 3250322

QUALITY CONTROL SAMPLES

VOLATILE ORGANICS

QC Batch

<u>QC Batch</u>	862258	<u>Prep Method</u>	N/A
<u>Date</u>	N/A	<u>Analysis Method</u>	SW846 8260D
<u>Tech.</u>			

Associated Samples

3250322006	3250322008	3250322007	3250322009
3250322001	3250322014	3250322010	3250322002
3250322015	3250322011	3250322003	3250322012
3250322004	3250322013	3250322005	

Method Blank

3525816 (MB)

Created on 07/06/2022 21:00

For QC Batch 862258

RESULTS

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



Project Former KOP-Flex Facility Offsi
Workorder 3250322

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	26.70	30	89.1	62 - 133	
4-Bromofluorobenzene	460-00-4	BLK	29.30	30	97.6	79 - 114	
Dibromofluoromethane	1868-53-7	BLK	27	30	89.9	78 - 116	
Toluene-d8	2037-26-5	BLK	28.60	30	95.4	76 - 127	

Lab Control Standard 3525817 (LCS) Created on 07/06/2022 21:00 For QC Batch 862258

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>
1,1,1,2-Tetrachloroethane	630-20-6	LCS	18.90		20	94.6	78 - 121		
1,1,1-Trichloroethane	71-55-6	LCS	19.20		20	95.9	66 - 130		
1,1,2,2-Tetrachloroethane	79-34-5	LCS	18.30		20	91.4	74 - 135		
1,1,2-Trichloroethane	79-00-5	LCS	19.10		20	95.4	82 - 126		
1,1-Dichloroethane	75-34-3	LCS	18.40		20	92.2	78 - 124		
1,1-Dichloroethene	75-35-4	LCS	19.20		20	95.9	63 - 128		
1,1-Dichloropropene	563-58-6	LCS	19.50		20	97.7	76 - 126		
1,2,3-Trichlorobenzene	87-61-6	LCS	22.20		20	111	61 - 126		
1,2,3-Trichloropropane	96-18-4	LCS	19.40		20	96.9	75 - 132		
1,2,4-Trichlorobenzene	120-82-1	LCS	20.60		20	103	67 - 123		

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QUALITY CONTROL SAMPLES

VOLATILE ORGANICS (cont.)

RESULTS

Compound	CAS No		Result (ug/L)	Orig. Result (ug/L)	Spk Added (ug/L)	Rec. (%)	Limits (%)	RPD Limit (%)	Qualifiers
1,2-Dibromo-3-chloropropane	96-12-8	LCS	18		20	90.1	59 - 133		
1,2-Dibromoethane	106-93-4	LCS	19.40		20	96.9	80 - 124		
1,2-Dichlorobenzene	95-50-1	LCS	17.90		20	89.4	82 - 118		
1,2-Dichloroethane	107-06-2	LCS	18.10		20	90.6	70 - 133		
1,2-Dichloropropane	78-87-5	LCS	17.90		20	89.7	81 - 127		
1,3-Dichlorobenzene	541-73-1	LCS	17.80		20	89.1	81 - 118		
1,3-Dichloropropane	142-28-9	LCS	19.10		20	95.7	82 - 126		
1,4-Dichlorobenzene	106-46-7	LCS	18.30		20	91.4	81 - 116		
2,2-Dichloropropane	594-20-7	LCS	19.90		20	99.6	64 - 129		
2-Butanone	78-93-3	LCS	102		100	102	50 - 152		
2-Hexanone	591-78-6	LCS	94.20		100	94.2	65 - 154		
4-Methyl-2-Pentanone(MIBK)	108-10-1	LCS	107		100	107	71 - 146		
Acetone	67-64-1	LCS	84.40		100	84.4	40 - 151		
Benzene	71-43-2	LCS	19.30		20	96.5	80 - 124		
Bromobenzene	108-86-1	LCS	18.50		20	92.6	81 - 119		
Bromochloromethane	74-97-5	LCS	19.10		20	95.5	73 - 117		
Bromodichloromethane	75-27-4	LCS	18.80		20	93.9	79 - 126		
Bromoform	75-25-2	LCS	18.80		20	93.9	70 - 123		
Bromomethane	74-83-9	LCS	14.10		20	70.3	45 - 148		
Carbon Tetrachloride	56-23-5	LCS	19		20	94.9	62 - 132		
Chlorobenzene	108-90-7	LCS	18.50		20	92.6	85 - 117		
Chlorodibromomethane	124-48-1	LCS	19.30		20	96.4	77 - 122		
Chloroethane	75-00-3	LCS	17.30		20	86.3	51 - 142		
Chloroform	67-66-3	LCS	18.90		20	94.6	78 - 122		
Chloromethane	74-87-3	LCS	16.60		20	82.9	38 - 156		
cis-1,2-Dichloroethene	156-59-2	LCS	19.30		20	96.5	78 - 125		
cis-1,3-Dichloropropene	10061-01-5	LCS	19.30		20	96.3	81 - 121		
Dibromomethane	74-95-3	LCS	19.30		20	96.3	81 - 125		
Dichlorodifluoromethane	75-71-8	LCS	18.20		20	90.8	17 - 166		
Diisopropyl ether	108-20-3	LCS	18.20		20	90.8	74 - 131		
Ethylbenzene	100-41-4	LCS	19.40		20	97.2	80 - 124		
Hexachlorobutadiene	87-68-3	LCS	21		20	105	55 - 128		
Methyl t-Butyl Ether	1634-04-4	LCS	19.10		20	95.4	69 - 115		
Methylene Chloride	75-09-2	LCS	17.50		20	87.3	76 - 121		
mp-Xylene	108383/106423	LCS	39.50		40	98.8	79 - 125		
Naphthalene	91-20-3	LCS	21.80		20	109	56 - 134		
o-Chlorotoluene	95-49-8	LCS	18.30		20	91.5	78 - 126		
o-Xylene	95-47-6	LCS	19.20		20	95.8	79 - 124		
p-Chlorotoluene	106-43-4	LCS	19		20	95	78 - 125		
p-Isopropyltoluene	99-87-6	LCS	19.10		20	95.5	72 - 123		
Styrene	100-42-5	LCS	19.30		20	96.3	79 - 123		
Tetrachloroethene	127-18-4	LCS	18.80		20	94	72 - 124		
Toluene	108-88-3	LCS	19.90		20	99.3	80 - 125		
Total Xylenes	1330-20-7	LCS	58.70		60	97.8	79 - 125		
trans-1,2-Dichloroethene	156-60-5	LCS	18.30		20	91.6	71 - 122		
trans-1,3-Dichloropropene	10061-02-6	LCS	20.30		20	101	78 - 126		
Trichloroethene	79-01-6	LCS	17.50		20	87.6	77 - 124		

QUALITY CONTROL SAMPLES

VOLATILE ORGANICS (cont.)

RESULTS

<u>Compound</u>	<u>CAS No</u>		<u>Result</u> (ug/L)	<u>Orig.</u> <u>Result</u> (ug/L)	<u>Spk</u> <u>Added</u> (ug/L)	<u>Rec.</u> (%)	<u>Limits (%)</u>	<u>RPD Limit (%)</u>	<u>Qualifiers</u>
Trichlorofluoromethane	75-69-4	LCS	18.70		20	93.5	38 - 123		
Vinyl Acetate	108-05-4	LCS	17.20		20	86	58 - 136		
Vinyl Chloride	75-01-4	LCS	17.60		20	88	27 - 138		

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	LCS	28.80	30	96	62 - 133	
4-Bromofluorobenzene	460-00-4	LCS	27.70	30	92.5	79 - 114	
Dibromofluoromethane	1868-53-7	LCS	27.90	30	93.2	78 - 116	
Toluene-d8	2037-26-5	LCS	28.40	30	94.7	76 - 127	

QC Batch

QC Batch 862548
Date N/A
Tech.

Prep Method N/A
Analysis Method SW846 8260D

Associated Samples

3250322016 3250322017

Method Blank

3526094 (MB)

Created on 07/07/2022 11:14

For QC Batch 862548

RESULTS

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

QUALITY CONTROL SAMPLES

VOLATILE ORGANICS (cont.)

RESULTS

Compound	CAS No		Result	Units	RDL	Qualifiers
Acetone	67-64-1	BLK	10.0	U ug/L	10.0	U
Benzene	71-43-2	BLK	1.0	U ug/L	1.0	U
Bromobenzene	108-86-1	BLK	1.0	U ug/L	1.0	U
Bromochloromethane	74-97-5	BLK	1.0	U ug/L	1.0	U
Bromodichloromethane	75-27-4	BLK	1.0	U ug/L	1.0	U
Bromoform	75-25-2	BLK	1.0	U ug/L	1.0	U
Bromomethane	74-83-9	BLK	1.0	U ug/L	1.0	U
Carbon Tetrachloride	56-23-5	BLK	1.0	U ug/L	1.0	U
Chlorobenzene	108-90-7	BLK	1.0	U ug/L	1.0	U
Chlorodibromomethane	124-48-1	BLK	1.0	U ug/L	1.0	U
Chloroethane	75-00-3	BLK	1.0	U ug/L	1.0	U
Chloroform	67-66-3	BLK	1.0	U ug/L	1.0	U
Chloromethane	74-87-3	BLK	1.0	U ug/L	1.0	U
cis-1,2-Dichloroethene	156-59-2	BLK	1.0	U ug/L	1.0	U
cis-1,3-Dichloropropene	10061-01-5	BLK	1.0	U ug/L	1.0	U
Dibromomethane	74-95-3	BLK	1.0	U ug/L	1.0	U
Dichlorodifluoromethane	75-71-8	BLK	1.0	U ug/L	1.0	U
Diisopropyl ether	108-20-3	BLK	1.0	U ug/L	1.0	U
Ethylbenzene	100-41-4	BLK	1.0	U ug/L	1.0	U
Hexachlorobutadiene	87-68-3	BLK	5.0	U ug/L	5.0	U
Methyl t-Butyl Ether	1634-04-4	BLK	1.0	U ug/L	1.0	U
Methylene Chloride	75-09-2	BLK	1.0	U ug/L	1.0	U
mp-Xylene	108383/106423	BLK	2.0	U ug/L	2.0	U
Naphthalene	91-20-3	BLK	2.0	U ug/L	2.0	U
o-Chlorotoluene	95-49-8	BLK	1.0	U ug/L	1.0	U
o-Xylene	95-47-6	BLK	1.0	U ug/L	1.0	U
p-Chlorotoluene	106-43-4	BLK	1.0	U ug/L	1.0	U
p-Isopropyltoluene	99-87-6	BLK	1.0	U ug/L	1.0	U
Styrene	100-42-5	BLK	1.0	U ug/L	1.0	U
Tetrachloroethene	127-18-4	BLK	1.0	U ug/L	1.0	U
Toluene	108-88-3	BLK	1.0	U ug/L	1.0	U
Total Xylenes	1330-20-7	BLK	3.0	U ug/L	3.0	U
trans-1,2-Dichloroethene	156-60-5	BLK	1.0	U ug/L	1.0	U
trans-1,3-Dichloropropene	10061-02-6	BLK	1.0	U ug/L	1.0	U
Trichloroethene	79-01-6	BLK	1.0	U ug/L	1.0	U
Trichlorofluoromethane	75-69-4	BLK	1.0	U ug/L	1.0	U
Vinyl Acetate	108-05-4	BLK	5.0	U ug/L	5.0	U
Vinyl Chloride	75-01-4	BLK	1.0	U ug/L	1.0	U

SURROGATES

Compound	CAS No		Result (ug/L)	Expected (ug/L)	Rec. (%)	Limits (%)	Qualifiers
1,2-Dichloroethane-d4	17060-07-0	BLK	29.80	30	99.3	62 - 133	
4-Bromofluorobenzene	460-00-4	BLK	33.40	30	111	79 - 114	
Dibromofluoromethane	1868-53-7	BLK	31.90	30	106	78 - 116	
Toluene-d8	2037-26-5	BLK	30.20	30	101	76 - 127	

QUALITY CONTROL SAMPLES

VOLATILE ORGANICS (cont.)

Lab Control Standard 3526095 (LCS) Created on 07/07/2022 11:14 For QC Batch 862548

RESULTS

<u>Compound</u>	<u>CAS No</u>	<u>Result</u> (<u>ug/L</u>)	<u>Orig.</u> <u>Result</u> (<u>ug/L</u>)	<u>Spk</u> <u>Added</u> (<u>ug/L</u>)	<u>Rec.</u> (%)	<u>Limits (%)</u>	<u>RPD Limit (%)</u>	<u>Qualifiers</u>
1,1,1,2-Tetrachloroethane	630-20-6	LCS	20.90	20	105	78 - 121		
1,1,1-Trichloroethane	71-55-6	LCS	20.70	20	104	66 - 130		
1,1,2,2-Tetrachloroethane	79-34-5	LCS	18.20	20	90.9	74 - 135		
1,1,2-Trichloroethane	79-00-5	LCS	19	20	95.2	82 - 126		
1,1-Dichloroethane	75-34-3	LCS	19.20	20	96.2	78 - 124		
1,1-Dichloroethene	75-35-4	LCS	20.90	20	105	63 - 128		
1,1-Dichloropropene	563-58-6	LCS	20.90	20	104	76 - 126		
1,2,3-Trichlorobenzene	87-61-6	LCS	19.60	20	97.8	61 - 126		
1,2,3-Trichloropropane	96-18-4	LCS	18.70	20	93.7	75 - 132		
1,2,4-Trichlorobenzene	120-82-1	LCS	21	20	105	67 - 123		
1,2-Dibromo-3-chloropropane	96-12-8	LCS	14.80	20	74.1	59 - 133		
1,2-Dibromoethane	106-93-4	LCS	19.90	20	99.7	80 - 124		
1,2-Dichlorobenzene	95-50-1	LCS	19	20	94.8	82 - 118		
1,2-Dichloroethane	107-06-2	LCS	19.30	20	96.6	70 - 133		
1,2-Dichloropropane	78-87-5	LCS	19.20	20	96	81 - 127		
1,3-Dichlorobenzene	541-73-1	LCS	19	20	95	81 - 118		
1,3-Dichloropropane	142-28-9	LCS	19.10	20	95.3	82 - 126		
1,4-Dichlorobenzene	106-46-7	LCS	18.80	20	94.1	81 - 116		
2,2-Dichloropropane	594-20-7	LCS	22.40	20	112	64 - 129		
2-Butanone	78-93-3	LCS	101	100	101	50 - 152		
2-Hexanone	591-78-6	LCS	78.10	100	78.1	65 - 154		
4-Methyl-2-Pentanone(MIBK)	108-10-1	LCS	91.20	100	91.2	71 - 146		
Acetone	67-64-1	LCS	98.20	100	98.2	40 - 151		
Benzene	71-43-2	LCS	20.80	20	104	80 - 124		
Bromobenzene	108-86-1	LCS	19.70	20	98.7	81 - 119		
Bromochloromethane	74-97-5	LCS	22	20	110	73 - 117		
Bromodichloromethane	75-27-4	LCS	20	20	100	79 - 126		
Bromoform	75-25-2	LCS	17.70	20	88.7	70 - 123		
Bromomethane	74-83-9	LCS	19.20	20	96	45 - 148		
Carbon Tetrachloride	56-23-5	LCS	20.30	20	102	62 - 132		
Chlorobenzene	108-90-7	LCS	19.70	20	98.6	85 - 117		
Chlorodibromomethane	124-48-1	LCS	18.50	20	92.4	77 - 122		
Chloroethane	75-00-3	LCS	18.60	20	93	51 - 142		
Chloroform	67-66-3	LCS	19.90	20	99.7	78 - 122		
Chloromethane	74-87-3	LCS	19	20	94.9	38 - 156		
cis-1,2-Dichloroethene	156-59-2	LCS	19.70	20	98.3	78 - 125		
cis-1,3-Dichloropropene	10061-01-5	LCS	19.50	20	97.7	81 - 121		
Dibromomethane	74-95-3	LCS	20.40	20	102	81 - 125		
Dichlorodifluoromethane	75-71-8	LCS	20.40	20	102	17 - 166		
Diisopropyl ether	108-20-3	LCS	18.60	20	93.2	74 - 131		
Ethylbenzene	100-41-4	LCS	20.70	20	103	80 - 124		
Hexachlorobutadiene	87-68-3	LCS	24.60	20	123	55 - 128		
Methyl t-Butyl Ether	1634-04-4	LCS	20.50	20	102	69 - 115		
Methylene Chloride	75-09-2	LCS	19.30	20	96.5	76 - 121		

QUALITY CONTROL SAMPLES

VOLATILE ORGANICS (cont.)

RESULTS

Compound	CAS No		Result (ug/L)	Orig. Result (ug/L)	Spk Added (ug/L)	Rec. (%)	Limits (%)	RPD Limit (%)	Qualifiers
mp-Xylene	108383/106423	LCS	42		40	105	79 - 125		
Naphthalene	91-20-3	LCS	18		20	90.2	56 - 134		
o-Chlorotoluene	95-49-8	LCS	19		20	94.8	78 - 126		
o-Xylene	95-47-6	LCS	21.10		20	106	79 - 124		
p-Chlorotoluene	106-43-4	LCS	19		20	94.8	78 - 125		
p-Isopropyltoluene	99-87-6	LCS	21.50		20	108	72 - 123		
Styrene	100-42-5	LCS	19.50		20	97.7	79 - 123		
Tetrachloroethene	127-18-4	LCS	19.20		20	95.8	72 - 124		
Toluene	108-88-3	LCS	20.30		20	101	80 - 125		
Total Xylenes	1330-20-7	LCS	63.10		60	105	79 - 125		
trans-1,2-Dichloroethene	156-60-5	LCS	20.10		20	101	71 - 122		
trans-1,3-Dichloropropene	10061-02-6	LCS	20.20		20	101	78 - 126		
Trichloroethene	79-01-6	LCS	19.30		20	96.6	77 - 124		
Trichlorofluoromethane	75-69-4	LCS	21.80		20	109	38 - 123		
Vinyl Acetate	108-05-4	LCS	17.40		20	86.9	58 - 136		
Vinyl Chloride	75-01-4	LCS	20.20		20	101	27 - 138		

SURROGATES

Compound	CAS No		Result (ug/L)	Expected (ug/L)	Rec. (%)	Limits (%)	Qualifiers
1,2-Dichloroethane-d4	17060-07-0	LCS	27.60	30	92.1	62 - 133	
4-Bromofluorobenzene	460-00-4	LCS	31.80	30	106	79 - 114	
Dibromofluoromethane	1868-53-7	LCS	30.40	30	101	78 - 116	
Toluene-d8	2037-26-5	LCS	29.20	30	97.4	76 - 127	

Matrix Spike 3526186 (MS) 3250322016 For QC Batch 862548

****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 3526187 (MSD) 3250322016 For QC Batch 862548

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	23.60	0	20	118	78 - 121		
1,1,1,2-Tetrachloroethane	630-20-6	MSD	23.40	0	20	117	78 - 121	RPD <u>0.86</u> (Max-16)	
1,1,1-Trichloroethane	71-55-6	MS	23.90	0	20	120	66 - 130		
1,1,1-Trichloroethane	71-55-6	MSD	24	0	20	120	66 - 130	RPD <u>0.46</u> (Max-20)	
1,1,2,2-Tetrachloroethane	79-34-5	MS	17.90	0	20	89.5	74 - 135		
1,1,2,2-Tetrachloroethane	79-34-5	MSD	18.10	0	20	90.3	74 - 135	RPD <u>0.92</u> (Max-16)	
1,1,2-Trichloroethane	79-00-5	MS	20.90	0	20	104	82 - 126		
1,1,2-Trichloroethane	79-00-5	MSD	20.50	0	20	103	82 - 126	RPD <u>1.62</u> (Max-15)	
1,1-Dichloroethane	75-34-3	MS	22.40	0	20	112	78 - 124		
1,1-Dichloroethane	75-34-3	MSD	22.10	0	20	110	78 - 124	RPD <u>1.49</u> (Max-15)	
1,1-Dichloroethene	75-35-4	MS	27.90	4	20	119	63 - 128		

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
				4	20		63 - 128	RPD 0.85 (Max-21)	
1,1-Dichloroethene	75-35-4	MSD	27.70	4	20	118	63 - 128	RPD 0.85 (Max-21)	
1,1-Dichloropropene	563-58-6	MS	24.80	0	20	124	76 - 126		
1,1-Dichloropropene	563-58-6	MSD	24.50	0	20	122	76 - 126	RPD 1.46 (Max-16)	
1,2,3-Trichlorobenzene	87-61-6	MS	14	0	20	70	61 - 126		
1,2,3-Trichlorobenzene	87-61-6	MSD	16.20	0	20	80.8	61 - 126	RPD 14.20 (Max-36)	
1,2,3-Trichloropropane	96-18-4	MS	17.70	0	20	88.7	75 - 132		
1,2,3-Trichloropropane	96-18-4	MSD	17.80	0	20	89	75 - 132	RPD 0.36 (Max-19)	
1,2,4-Trichlorobenzene	120-82-1	MS	17.70	0	20	88.4	67 - 123		
1,2,4-Trichlorobenzene	120-82-1	MSD	19.70	0	20	98.4	67 - 123	RPD 10.60 (Max-22)	
1,2-Dibromo-3-chloropropane	96-12-8	MS	12.60	0	20	63.1	59 - 133		
1,2-Dibromo-3-chloropropane	96-12-8	MSD	13	0	20	64.9	59 - 133	RPD 2.84 (Max-26)	
1,2-Dibromoethane	106-93-4	MS	20.80	0	20	104	80 - 124		
1,2-Dibromoethane	106-93-4	MSD	20.90	0	20	104	80 - 124	RPD 0.59 (Max-19)	
1,2-Dichlorobenzene	95-50-1	MS	20.10	0	20	100	82 - 118		
1,2-Dichlorobenzene	95-50-1	MSD	20.70	0	20	103	82 - 118	RPD 2.91 (Max-15)	
1,2-Dichloroethane	107-06-2	MS	21.10	0	20	105	70 - 133		
1,2-Dichloroethane	107-06-2	MSD	20.40	0	20	102	70 - 133	RPD 3.15 (Max-19)	
1,2-Dichloropropane	78-87-5	MS	22.20	0	20	111	81 - 127		
1,2-Dichloropropane	78-87-5	MSD	21.70	0	20	108	81 - 127	RPD 2.27 (Max-15)	
1,3-Dichlorobenzene	541-73-1	MS	20.40	0	20	102	81 - 118		
1,3-Dichlorobenzene	541-73-1	MSD	21.20	0	20	106	81 - 118	RPD 3.88 (Max-16)	
1,3-Dichloropropane	142-28-9	MS	20.80	0	20	104	82 - 126		
1,3-Dichloropropane	142-28-9	MSD	20.60	0	20	103	82 - 126	RPD 1.07 (Max-15)	
1,4-Dichlorobenzene	106-46-7	MS	19.80	0	20	99	81 - 116		
1,4-Dichlorobenzene	106-46-7	MSD	20.80	0	20	104	81 - 116	RPD 4.77 (Max-15)	
2,2-Dichloropropane	594-20-7	MS	23.70	0	20	118	64 - 129		
2,2-Dichloropropane	594-20-7	MSD	23.50	0	20	118	64 - 129	RPD 0.66 (Max-18)	
2-Butanone	78-93-3	MS	92.40	0	100	92.4	50 - 152		
2-Butanone	78-93-3	MSD	90.10	0	100	90.1	50 - 152	RPD 2.53 (Max-16)	
2-Hexanone	591-78-6	MS	70	0	100	70	65 - 154		
2-Hexanone	591-78-6	MSD	70.10	0	100	70.1	65 - 154	RPD 0.24 (Max-17)	
4-Methyl-2-Pentanone(MIBK)	108-10-1	MS	84.80	0	100	84.8	71 - 146		
4-Methyl-2-Pentanone(MIBK)	108-10-1	MSD	85.20	0	100	85.2	71 - 146	RPD 0.43 (Max-16)	
Acetone	67-64-1	MS	80.90	0	100	80.9	40 - 151		
Acetone	67-64-1	MSD	80.90	0	100	80.9	40 - 151	RPD 0.06 (Max-40)	
Benzene	71-43-2	MS	23.80	0	20	119	80 - 124		
Benzene	71-43-2	MSD	23.60	0	20	118	80 - 124	RPD 0.63 (Max-26)	
Bromobenzene	108-86-1	MS	22	0	20	110	81 - 119		
Bromobenzene	108-86-1	MSD	22.20	0	20	111	81 - 119	RPD 0.71 (Max-17)	
Bromochloromethane	74-97-5	MS	25	0	20	125*	73 - 117		
Bromochloromethane	74-97-5	MSD	24.20	0	20	121*	73 - 117	RPD 3.19 (Max-19)	
Bromodichloromethane	75-27-4	MS	22.80	0	20	114	79 - 126		
Bromodichloromethane	75-27-4	MSD	22.50	0	20	112	79 - 126	RPD 1.44 (Max-16)	
Bromoform	75-25-2	MS	17.80	0	20	88.9	70 - 123		
Bromoform	75-25-2	MSD	17.90	0	20	89.6	70 - 123	RPD 0.71 (Max-16)	
Bromomethane	74-83-9	MS	22.80	0	20	114	45 - 148		
Bromomethane	74-83-9	MSD	22.40	0	20	112	45 - 148	RPD 2.01 (Max-26)	
Carbon Tetrachloride	56-23-5	MS	24	0	20	120	62 - 132		
Carbon Tetrachloride	56-23-5	MSD	24.30	0	20	121	62 - 132	RPD 1.12 (Max-17)	

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QUALITY CONTROL SAMPLES

VOLATILE ORGANICS (cont.)

RESULTS

Compound	CAS No		Result (ug/L)	Orig. Result (ug/L)	Spk Added (ug/L)	Rec. (%)	Limits (%)	RPD Limit (%)	Qualifiers
Chlorobenzene	108-90-7	MS	22.40	0	20	112	85 - 117		
Chlorobenzene	108-90-7	MSD	22.20	0	20	111	85 - 117	RPD <u>1.01</u> (Max-15)	
Chlorodibromomethane	124-48-1	MS	20.20	0	20	101	77 - 122		
Chlorodibromomethane	124-48-1	MSD	20.10	0	20	100	77 - 122	RPD <u>0.68</u> (Max-15)	
Chloroethane	75-00-3	MS	19.60	0	20	97.9	51 - 142		
Chloroethane	75-00-3	MSD	19.40	0	20	97.1	51 - 142	RPD <u>0.80</u> (Max-24)	
Chloroform	67-66-3	MS	22.70	0	20	113	78 - 122		
Chloroform	67-66-3	MSD	22.20	0	20	111	78 - 122	RPD <u>2.02</u> (Max-16)	
Chloromethane	74-87-3	MS	19.80	0	20	99	38 - 156		
Chloromethane	74-87-3	MSD	19.40	0	20	97	38 - 156	RPD <u>2.06</u> (Max-27)	
cis-1,2-Dichloroethene	156-59-2	MS	22.60	0	20	113	78 - 125		
cis-1,2-Dichloroethene	156-59-2	MSD	22.10	0	20	110	78 - 125	RPD <u>2.44</u> (Max-21)	
cis-1,3-Dichloropropene	10061-01-5	MS	21.70	0	20	109	81 - 121		
cis-1,3-Dichloropropene	10061-01-5	MSD	21.70	0	20	108	81 - 121	RPD <u>0.25</u> (Max-16)	
Dibromomethane	74-95-3	MS	22.10	0	20	111	81 - 125		
Dibromomethane	74-95-3	MSD	21.60	0	20	108	81 - 125	RPD <u>2.20</u> (Max-16)	
Dichlorodifluoromethane	75-71-8	MS	22.70	0	20	114	17 - 166		
Dichlorodifluoromethane	75-71-8	MSD	22.60	0	20	113	17 - 166	RPD <u>0.74</u> (Max-24)	
Diisopropyl ether	108-20-3	MS	20.60	0	20	103	74 - 131		
Diisopropyl ether	108-20-3	MSD	20.20	0	20	101	74 - 131	RPD <u>2.11</u> (Max-15)	
Ethylbenzene	100-41-4	MS	23.60	0	20	118	80 - 124		
Ethylbenzene	100-41-4	MSD	23.70	0	20	118	80 - 124	RPD <u>0.40</u> (Max-19)	
Hexachlorobutadiene	87-68-3	MS	21.60	0	20	108	55 - 128		
Hexachlorobutadiene	87-68-3	MSD	22.80	0	20	114	55 - 128	RPD <u>5.51</u> (Max-35)	
Methyl t-Butyl Ether	1634-04-4	MS	21.70	0	20	108	69 - 115		
Methyl t-Butyl Ether	1634-04-4	MSD	21.40	0	20	107	69 - 115	RPD <u>1.47</u> (Max-20)	
Methylene Chloride	75-09-2	MS	22.10	0	20	111	76 - 121		
Methylene Chloride	75-09-2	MSD	21.80	0	20	109	76 - 121	RPD <u>1.56</u> (Max-17)	
mp-Xylene	108383/106423	MS	47.60	0	40	119	79 - 125		
mp-Xylene	108383/106423	MSD	47.80	0	40	119	79 - 125	RPD <u>0.44</u> (Max-21)	
Naphthalene	91-20-3	MS	13.30	0	20	66.5	56 - 134		
Naphthalene	91-20-3	MSD	14.60	0	20	72.8	56 - 134	RPD <u>9.02</u> (Max-40)	
o-Chlorotoluene	95-49-8	MS	21.10	0	20	105	78 - 126		
o-Chlorotoluene	95-49-8	MSD	21.90	0	20	110	78 - 126	RPD <u>3.85</u> (Max-17)	
o-Xylene	95-47-6	MS	23.90	0	20	119	79 - 124		
o-Xylene	95-47-6	MSD	24	0	20	120	79 - 124	RPD <u>0.59</u> (Max-19)	
p-Chlorotoluene	106-43-4	MS	21.10	0	20	105	78 - 125		
p-Chlorotoluene	106-43-4	MSD	21.50	0	20	107	78 - 125	RPD <u>1.89</u> (Max-16)	
p-Isopropyltoluene	99-87-6	MS	22.80	0	20	114	72 - 123		
p-Isopropyltoluene	99-87-6	MSD	24.50	0	20	123	72 - 123	RPD <u>7.51</u> (Max-17)	
Styrene	100-42-5	MS	22.30	0	20	111	79 - 123		
Styrene	100-42-5	MSD	22.70	0	20	113	79 - 123	RPD <u>1.81</u> (Max-16)	
Tetrachloroethene	127-18-4	MS	21.50	0	20	108	72 - 124		
Tetrachloroethene	127-18-4	MSD	21.90	0	20	109	72 - 124	RPD <u>1.58</u> (Max-38)	
Toluene	108-88-3	MS	23.50	0	20	118	80 - 125		
Toluene	108-88-3	MSD	23.40	0	20	117	80 - 125	RPD <u>0.42</u> (Max-20)	
Total Xylenes	1330-20-7	MS	71.40	0	60	119	79 - 125		
Total Xylenes	1330-20-7	MSD	71.80	0	60	120	79 - 125	RPD <u>0.49</u> (Max-35)	

QUALITY CONTROL SAMPLES

VOLATILE ORGANICS (cont.)

RESULTS

Compound	CAS No		Result (ug/L)	Orig. Result (ug/L)	Spk Added (ug/L)	Rec. (%)	Limits (%)	RPD Limit (%)	Qualifiers
trans-1,2-Dichloroethene	156-60-5	MS	23.20	0	20	116	71 - 122		
trans-1,2-Dichloroethene	156-60-5	MSD	23.10	0	20	116	71 - 122	RPD <u>0.36</u> (Max-22)	
trans-1,3-Dichloropropene	10061-02-6	MS	21.60	0	20	108	78 - 126		
trans-1,3-Dichloropropene	10061-02-6	MSD	21.20	0	20	106	78 - 126	RPD <u>1.89</u> (Max-18)	
Trichloroethene	79-01-6	MS	22.20	0	20	111	77 - 124		
Trichloroethene	79-01-6	MSD	22.10	0	20	110	77 - 124	RPD <u>0.82</u> (Max-18)	
Trichlorofluoromethane	75-69-4	MS	23.20	0	20	116	38 - 123		
Trichlorofluoromethane	75-69-4	MSD	23.30	0	20	117	38 - 123	RPD <u>0.36</u> (Max-23)	
Vinyl Acetate	108-05-4	MS	15.90	0	20	79.5	58 - 136		
Vinyl Acetate	108-05-4	MSD	15.80	0	20	78.9	58 - 136	RPD <u>0.79</u> (Max-17)	
Vinyl Chloride	75-01-4	MS	21.80	0	20	109	27 - 138		
Vinyl Chloride	75-01-4	MSD	21.30	0	20	106	27 - 138	RPD <u>2.54</u> (Max-40)	

SURROGATES

Compound	CAS No		Result (ug/L)	Expected (ug/L)	Rec. (%)	Limits (%)	Qualifiers
1,2-Dichloroethane-d4	17060-07-0	MS	27.80	30	92.7	62 - 133	
1,2-Dichloroethane-d4	17060-07-0	MSD	27.30	30	91	62 - 133	
4-Bromofluorobenzene	460-00-4	MS	32.40	30	108	79 - 114	
4-Bromofluorobenzene	460-00-4	MSD	33.20	30	111	79 - 114	
Dibromofluoromethane	1868-53-7	MS	31.50	30	105	78 - 116	
Dibromofluoromethane	1868-53-7	MSD	31.30	30	104	78 - 116	
Toluene-d8	2037-26-5	MS	30	30	100	76 - 127	
Toluene-d8	2037-26-5	MSD	30	30	100	76 - 127	

QC Batch

QC Batch	863189	Prep Method	N/A
Date	N/A	Analysis Method	SW846 8260D
Tech.			

Associated Samples

3250322005

Method Blank

3527297 (MB)

Created on 07/09/2022 09:04

For QC Batch 863189

RESULTS

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

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>
1,2,4-Trichlorobenzene	120-82-1	BLK	2.0	U ug/L	2.0	U
1,2-Dibromo-3-chloropropane	96-12-8	BLK	7.0	U ug/L	7.0	U
1,2-Dibromoethane	106-93-4	BLK	1.0	U ug/L	1.0	U
1,2-Dichlorobenzene	95-50-1	BLK	1.0	U ug/L	1.0	U
1,2-Dichloroethane	107-06-2	BLK	1.0	U ug/L	1.0	U
1,2-Dichloropropane	78-87-5	BLK	1.0	U ug/L	1.0	U
1,3-Dichlorobenzene	541-73-1	BLK	1.0	U ug/L	1.0	U
1,3-Dichloropropane	142-28-9	BLK	1.0	U ug/L	1.0	U
1,4-Dichlorobenzene	106-46-7	BLK	1.0	U ug/L	1.0	U
2,2-Dichloropropane	594-20-7	BLK	1.0	U ug/L	1.0	U
2-Butanone	78-93-3	BLK	10.0	U ug/L	10.0	U
2-Hexanone	591-78-6	BLK	5.0	U ug/L	5.0	U
4-Methyl-2-Pentanone(MIBK)	108-10-1	BLK	5.0	U ug/L	5.0	U
Acetone	67-64-1	BLK	10.0	U ug/L	10.0	U
Benzene	71-43-2	BLK	1.0	U ug/L	1.0	U
Bromobenzene	108-86-1	BLK	1.0	U ug/L	1.0	U
Bromochloromethane	74-97-5	BLK	1.0	U ug/L	1.0	U
Bromodichloromethane	75-27-4	BLK	1.0	U ug/L	1.0	U
Bromoform	75-25-2	BLK	1.0	U ug/L	1.0	U
Bromomethane	74-83-9	BLK	1.0	U ug/L	1.0	U
Carbon Tetrachloride	56-23-5	BLK	1.0	U ug/L	1.0	U
Chlorobenzene	108-90-7	BLK	1.0	U ug/L	1.0	U
Chlorodibromomethane	124-48-1	BLK	1.0	U ug/L	1.0	U
Chloroethane	75-00-3	BLK	1.0	U ug/L	1.0	U
Chloroform	67-66-3	BLK	1.0	U ug/L	1.0	U
Chloromethane	74-87-3	BLK	1.0	U ug/L	1.0	U
cis-1,2-Dichloroethene	156-59-2	BLK	1.0	U ug/L	1.0	U
cis-1,3-Dichloropropene	10061-01-5	BLK	1.0	U ug/L	1.0	U
Dibromomethane	74-95-3	BLK	1.0	U ug/L	1.0	U
Dichlorodifluoromethane	75-71-8	BLK	1.0	U ug/L	1.0	U
Diisopropyl ether	108-20-3	BLK	1.0	U ug/L	1.0	U
Ethylbenzene	100-41-4	BLK	1.0	U ug/L	1.0	U
Hexachlorobutadiene	87-68-3	BLK	5.0	U ug/L	5.0	U
Methyl t-Butyl Ether	1634-04-4	BLK	1.0	U ug/L	1.0	U
Methylene Chloride	75-09-2	BLK	1.0	U ug/L	1.0	U
mp-Xylene	108383/106423	BLK	2.0	U ug/L	2.0	U
Naphthalene	91-20-3	BLK	2.0	U ug/L	2.0	U
o-Chlorotoluene	95-49-8	BLK	1.0	U ug/L	1.0	U
o-Xylene	95-47-6	BLK	1.0	U ug/L	1.0	U
p-Chlorotoluene	106-43-4	BLK	1.0	U ug/L	1.0	U
p-Isopropyltoluene	99-87-6	BLK	1.0	U ug/L	1.0	U
Styrene	100-42-5	BLK	1.0	U ug/L	1.0	U
Tetrachloroethene	127-18-4	BLK	1.0	U ug/L	1.0	U
Toluene	108-88-3	BLK	1.0	U ug/L	1.0	U
Total Xylenes	1330-20-7	BLK	3.0	U ug/L	3.0	U
trans-1,2-Dichloroethene	156-60-5	BLK	1.0	U ug/L	1.0	U
trans-1,3-Dichloropropene	10061-02-6	BLK	1.0	U ug/L	1.0	U
Trichloroethene	79-01-6	BLK	1.0	U ug/L	1.0	U

QUALITY CONTROL SAMPLES

VOLATILE ORGANICS (cont.)

RESULTS

Compound	CAS No		Result	Units	RDL	Qualifiers
Trichlorofluoromethane	75-69-4	BLK	1.0	U ug/L	1.0	U
Vinyl Acetate	108-05-4	BLK	5.0	U ug/L	5.0	U
Vinyl Chloride	75-01-4	BLK	1.0	U ug/L	1.0	U

SURROGATES

Compound	CAS No		Result (ug/L)	Expected (ug/L)	Rec. (%)	Limits (%)	Qualifiers
1,2-Dichloroethane-d4	17060-07-0	BLK	28.80	30	96	62 - 133	
4-Bromofluorobenzene	460-00-4	BLK	29.60	30	98.7	79 - 114	
Dibromofluoromethane	1868-53-7	BLK	27.50	30	91.8	78 - 116	
Toluene-d8	2037-26-5	BLK	27.80	30	92.6	76 - 127	

Lab Control Standard 3527298 (LCS) Created on 07/09/2022 09:04 For QC Batch 863189

RESULTS

Compound	CAS No		Result (ug/L)	Orig. Result (ug/L)	Spk Added (ug/L)	Rec. (%)	Limits (%)	RPD Limit (%)	Qualifiers
1,1,1,2-Tetrachloroethane	630-20-6	LCS	17.80		20	89.2	78 - 121		
1,1,1-Trichloroethane	71-55-6	LCS	19.90		20	99.7	66 - 130		
1,1,2,2-Tetrachloroethane	79-34-5	LCS	19.40		20	97	74 - 135		
1,1,2-Trichloroethane	79-00-5	LCS	18.60		20	92.9	82 - 126		
1,1-Dichloroethane	75-34-3	LCS	20.60		20	103	78 - 124		
1,1-Dichloroethene	75-35-4	LCS	21.60		20	108	63 - 128		
1,1-Dichloropropene	563-58-6	LCS	21.50		20	108	76 - 126		
1,2,3-Trichlorobenzene	87-61-6	LCS	21.90		20	109	61 - 126		
1,2,3-Trichloropropane	96-18-4	LCS	19.50		20	97.6	75 - 132		
1,2,4-Trichlorobenzene	120-82-1	LCS	21.50		20	108	67 - 123		
1,2-Dibromo-3-chloropropane	96-12-8	LCS	20.90		20	105	59 - 133		
1,2-Dibromoethane	106-93-4	LCS	19		20	94.8	80 - 124		
1,2-Dichlorobenzene	95-50-1	LCS	18.30		20	91.7	82 - 118		
1,2-Dichloroethane	107-06-2	LCS	20		20	99.9	70 - 133		
1,2-Dichloropropane	78-87-5	LCS	20.60		20	103	81 - 127		
1,3-Dichlorobenzene	541-73-1	LCS	17.70		20	88.4	81 - 118		
1,3-Dichloropropane	142-28-9	LCS	18.30		20	91.5	82 - 126		
1,4-Dichlorobenzene	106-46-7	LCS	18.40		20	92	81 - 116		
2,2-Dichloropropane	594-20-7	LCS	21.50		20	108	64 - 129		
2-Butanone	78-93-3	LCS	121		100	121	50 - 152		
2-Hexanone	591-78-6	LCS	104		100	104	65 - 154		
4-Methyl-2-Pentanone(MIBK)	108-10-1	LCS	116		100	116	71 - 146		
Acetone	67-64-1	LCS	109		100	109	40 - 151		
Benzene	71-43-2	LCS	20.80		20	104	80 - 124		
Bromobenzene	108-86-1	LCS	18.50		20	92.4	81 - 119		
Bromochloromethane	74-97-5	LCS	18.60		20	93	73 - 117		
Bromodichloromethane	75-27-4	LCS	19.60		20	98.1	79 - 126		
Bromoform	75-25-2	LCS	18.80		20	93.8	70 - 123		
Bromomethane	74-83-9	LCS	17.50		20	87.3	45 - 148		

QUALITY CONTROL SAMPLES

VOLATILE ORGANICS (cont.)

RESULTS

<u>Compound</u>	<u>CAS No</u>		<u>Result</u> (ug/L)	<u>Orig.</u> <u>Result</u> (ug/L)	<u>Spk</u> <u>Added</u> (ug/L)	<u>Rec.</u> (%)	<u>Limits (%)</u>	<u>RPD Limit (%)</u>	<u>Qualifiers</u>
Carbon Tetrachloride	56-23-5	LCS	19.90		20	99.5	62 - 132		
Chlorobenzene	108-90-7	LCS	17.70		20	88.7	85 - 117		
Chlorodibromomethane	124-48-1	LCS	17.90		20	89.6	77 - 122		
Chloroethane	75-00-3	LCS	22.50		20	112	51 - 142		
Chloroform	67-66-3	LCS	19.80		20	98.9	78 - 122		
Chloromethane	74-87-3	LCS	19.50		20	97.6	38 - 156		
cis-1,2-Dichloroethene	156-59-2	LCS	21.60		20	108	78 - 125		
cis-1,3-Dichloropropene	10061-01-5	LCS	19		20	94.9	81 - 121		
Dibromomethane	74-95-3	LCS	19.80		20	99	81 - 125		
Dichlorodifluoromethane	75-71-8	LCS	19.50		20	97.7	17 - 166		
Diisopropyl ether	108-20-3	LCS	21.60		20	108	74 - 131		
Ethylbenzene	100-41-4	LCS	18.60		20	93.2	80 - 124		
Hexachlorobutadiene	87-68-3	LCS	21.60		20	108	55 - 128		
Methyl t-Butyl Ether	1634-04-4	LCS	20.10		20	100	69 - 115		
Methylene Chloride	75-09-2	LCS	18.40		20	92	76 - 121		
mp-Xylene	108383/106423	LCS	37.50		40	93.7	79 - 125		
Naphthalene	91-20-3	LCS	26		20	130	56 - 134		
o-Chlorotoluene	95-49-8	LCS	19.30		20	96.3	78 - 126		
o-Xylene	95-47-6	LCS	18.20		20	91.2	79 - 124		
p-Chlorotoluene	106-43-4	LCS	20		20	99.8	78 - 125		
p-Isopropyltoluene	99-87-6	LCS	19.50		20	97.5	72 - 123		
Styrene	100-42-5	LCS	20.10		20	101	79 - 123		
Tetrachloroethene	127-18-4	LCS	17.10		20	85.3	72 - 124		
Toluene	108-88-3	LCS	19.20		20	95.8	80 - 125		
Total Xylenes	1330-20-7	LCS	55.70		60	92.9	79 - 125		
trans-1,2-Dichloroethene	156-60-5	LCS	20.90		20	105	71 - 122		
trans-1,3-Dichloropropene	10061-02-6	LCS	20.10		20	101	78 - 126		
Trichloroethene	79-01-6	LCS	18.50		20	92.5	77 - 124		
Trichlorofluoromethane	75-69-4	LCS	20.50		20	102	38 - 123		
Vinyl Acetate	108-05-4	LCS	17.40		20	86.8	58 - 136		
Vinyl Chloride	75-01-4	LCS	21.60		20	108	27 - 138		

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	LCS	29.80	30	99.5	62 - 133	
4-Bromofluorobenzene	460-00-4	LCS	27.80	30	92.6	79 - 114	
Dibromofluoromethane	1868-53-7	LCS	28.40	30	94.7	78 - 116	
Toluene-d8	2037-26-5	LCS	26.90	30	89.7	76 - 127	

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Lab ID	Sample ID	Preparation Method	Prep Batch	Prep Date/Time	By	Analysis Method	Anly Batch
3250322001	MW-36D	SW846 3510C N/A	860435 N/A	06/30/2022 16:35 N/A	J1H	SW846 8270E SIM SW846 8260D	861785 862258
3250322002	MW-25D-130	SW846 3510C SW846 3510C N/A	860435 860435 N/A	06/30/2022 16:35 06/30/2022 16:35 N/A	J1H J1H	SW846 8270E SIM SW846 8270E SIM SW846 8260D	862222 861785 862258
3250322003	MW-25D-190	SW846 3510C N/A	860435 N/A	06/30/2022 16:35 N/A	J1H	SW846 8270E SIM SW846 8260D	861785 862258
3250322004	MW-45	SW846 3510C N/A	860435 N/A	06/30/2022 16:35 N/A	J1H	SW846 8270E SIM SW846 8260D	861785 862258
3250322005	MW-24D	SW846 3510C SW846 3510C N/A N/A	860435 860435 N/A N/A	06/30/2022 16:35 06/30/2022 16:35 N/A N/A	J1H J1H	SW846 8270E SIM SW846 8270E SIM SW846 8260D SW846 8260D	862222 861785 863189 862258
3250322006	DUP-062722	SW846 3510C SW846 3510C N/A	860435 860435 N/A	06/30/2022 16:35 06/30/2022 16:35 N/A	J1H J1H	SW846 8270E SIM SW846 8270E SIM SW846 8260D	862222 861785 862258
3250322007	MW-35D	SW846 3510C N/A	860435 N/A	06/30/2022 16:35 N/A	J1H	SW846 8270E SIM SW846 8260D	861785 862258
3250322008	MW-34D	SW846 3510C N/A	860435 N/A	06/30/2022 16:35 N/A	J1H	SW846 8270E SIM SW846 8260D	861785 862258
3250322009	MW-31D	SW846 3510C N/A	860435 N/A	06/30/2022 16:35 N/A	J1H	SW846 8270E SIM SW846 8260D	861785 862258
3250322010	MW-33D-235	SW846 3510C N/A	860435 N/A	06/30/2022 16:35 N/A	J1H	SW846 8270E SIM SW846 8260D	861785 862258
3250322011	MW-33D-295	SW846 3510C N/A	860435 N/A	06/30/2022 16:35 N/A	J1H	SW846 8270E SIM SW846 8260D	861785 862258
3250322012	MW-30D-273	SW846 3510C N/A	860435 N/A	06/30/2022 16:35 N/A	J1H	SW846 8270E SIM SW846 8260D	861785 862258
3250322013	MW-30D-413	SW846 3510C N/A	860435 N/A	06/30/2022 16:35 N/A	J1H	SW846 8270E SIM SW846 8260D	861785 862258
3250322014	MW-29D	SW846 3510C N/A	860435 N/A	06/30/2022 16:35 N/A	J1H	SW846 8270E SIM SW846 8260D	861785 862258
3250322015	MW-32D	SW846 3510C N/A	860435 N/A	06/30/2022 16:35 N/A	J1H	SW846 8270E SIM SW846 8260D	861785 862258
3250322016	MW-28D	SW846 3510C N/A	860435 N/A	06/30/2022 16:35 N/A	J1H	SW846 8270E SIM SW846 8260D	861785 862548
3250322017	Trip Blank	N/A	N/A	N/A		SW846 8260D	862548



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 #: 26
ALS Quote #:

Client Name: WSSD		Container Type: Vials	Container Size: 40	Preservative: N/A	Temp Taken By: WSSD	Temp Info completed by: WSSD	WO Temp (°C): 34
Address: 13530 Quiles Technology Dr Suite 300 Herndon VA 20171				Receipt Info completed by: WSSD		WV Containers 0-6°C: Y	NA Deviations? NO
Phone#: (703) 762-6500				Cooler Custody Seals Intact: Y		NA Deviations? YES	If YES, list below: if YES, list below.
Project Name#: Kop-Flex offsite 31400 USGS				Sample Custody Seal Intact: Y		NA Deviations? NA	
Bill To:				Received on Ice: Y		NA Deviations? NA	
Purchase Order #:				Coolers & Samples Intact: Y		NA Deviations? NA	
TAT: <input checked="" type="checkbox"/> Normal, Standard TAT is 10-12 business days. <input type="checkbox"/> Rush Subject to ALS approval and surcharges.				Correct Containers Provided: Y		NA Deviations? NA	
Data Required: <input type="checkbox"/> Approved? <input checked="" type="checkbox"/> Y				Sample Label/COC Agree: Y		NA Deviations? NA	
Email?: <input type="checkbox"/>				Adequate Sample Volumes: Y		NA Deviations? NA	
Sample Description/Location (as it will appear on the lab report)		Date Collected	Time	Enter Number of Containers Per Sample or Field Results Below	VOA only: Headspace Present: Y		
1	MW - 3GD	6/27/22	11:50	6	GW	2	2
2	MW - 250 - 130	6/27/22	14:30	6	GW	2	2
3	MW - 250 - 190	6/27/22	14:10	6	GW	2	2
4	MW - 3 - MW - 450	6/27/22	13:10	6	GW	2	2
5	MW - 24D	6/27/22	13:35	6	GW	2	2
6	MW - 250 - 130 / MS	6/27/22	14:30	6	GW	2	2
7	MW - 250 - 130 / MSD	6/27/22	14:30	6	GW	2	2
8	DWP - 0637222	6/27/22	13:00	6	GW	2	2
9	TriP Blank	6/27/22	-	6	GW	2	2
10				6	GW	2	2
SAMPLED BY (Please Print, if MD include Sampler #): E11047 Mwankwase, Z		Comments: 					
Date:	Time	Relinquished By / Company Name					
6/27/22	5:05	Chet H. S. W.					
6/27/2022	19:00	AIS					
		6					
		8					
		10					

Receipt Information (Completed by receiving Lab)		Therm ID: S10
Temp Taken By: WSSD		WO Temp (°C): 34
Receipt Info completed by: WSSD		WV Containers 0-6°C: Y
Cooler Custody Seals Intact: Y		NA Deviations? NO
Sample Custody Seal Intact: Y		NA Deviations? YES
Received on Ice: Y		NA Deviations? NA
Coolers & Samples Intact: Y		NA Deviations? NA
Correct Containers Provided: Y		NA Deviations? NA
Sample Label/COC Agree: Y		NA Deviations? NA
Adequate Sample Volumes: Y		NA Deviations? NA
VOA only: Headspace Present: Y		NA Deviations? NA
NJ ≤ 1 day? Y		NA Deviations? NA
Courier/Tracking #: 		NA Deviations? NA
Sample(s) for Radiation testing? Y		NA Deviations? NA
Reportable SDWA Sample(s)? Y		NA Deviations? NA
SDWA State of Origin? 		NA Deviations? NA
PWSID# 		NA Deviations? NA
PWS Contact: 		NA Deviations? NA
PWS Phone #: 		NA Deviations? NA

SDWA Sample Type Key:
R=Raw P=Plant C=Check S=Special A=Annual Startup

Sample/COC Remarks

Contains Short Hold Testing **YES** **NO**

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

Delivery Dates	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	State Samples Collected In NY <input type="checkbox"/>
	Standard Lvl 4 <input type="checkbox"/> NJ Full <input type="checkbox"/>	Excell Summary <input checked="" type="checkbox"/> Equis <input type="checkbox"/> Custom <input type="checkbox"/> Lab <input type="checkbox"/> Special <input type="checkbox"/>	Sample Disposal <input checked="" type="checkbox"/> Lab <input type="checkbox"/>	State Samples Collected In NJ <input type="checkbox"/>
	EDDS: Form Type 			PA <input type="checkbox"/> WV <input type="checkbox"/> FL <input type="checkbox"/> ND other <input type="checkbox"/>

**CHAIN OF CUSTODY
REQUEST FOR ANALYSIS**

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

COC #:	1 of 2	3250322	of
ALS Quote #:			

Client Name: WSSD				Container Type: DA				Temp Taken By: KSD Therm ID: 540 WO Temp (°C) 4					
Address: 13530 Dulles Technology Dr Suite 300 Herndon VA 20171				Preservative: W New				Receipt Info completed by: WV Containers 0-6°C Y N NA Cooler Custody Seals intact Y N NA Deviations? NO YES If YES, list below. Sample Custody Seal intact Y N NA Received on Ice Y N NA Coolers & Samples Intact Y N NA					
Contact: Eric Johnson Phone#: (703) 709-6500				ANALYSIS/METHOD REQUESTED				Correct Containers Provided Y N NA Sample Label/COC Agree Y N NA Adequate Sample Volumes Y N NA VOA only, Headspace Present Y N NA VOA only, Trip Blank Y N NA NJ ≤ 4 days? Y N Courier/Tracking #: 574					
Project Name#: Kop Flex Offsite 3140545.C01				Bill To:				Client contact: Date/Tech: Y N New Source? Y N New Source Contact: Rad Screen (uCi) Y N					
Purchase Order #: Normal-Standard TAT is 10-12 business days.				Temp Taken By: KSD WO Temp (°C) 540				Sample(s) for Radiation testing? Y N Reportable SDWA Samples? Y N SDWA State of Origin? WA					
TAT <input type="checkbox"/> Rush-Subject to ALS approval and surcharges.				Therm ID: 574				SDWA Sample Type Key: D=Distribution E=Entry Point R=Raw P=Plant C=Check S=Special A=Annual Startup					
Date Required: Approved?				Email? Y				PWSID# 574					
Sample Description/Location <small>(as it will appear on the lab report)</small>				Date Collected <small>mm/dd/yy</small>				Enter Number of Cont: 5 or C					
1	MW-350	6/27/22	0855	G	CW	2	2	SDWA Sample Type Key: EPA 8266 VOC					
2	MW-340	6/27/22	0915	G	CW	2	2	Matrix <small>(See bottom of COC)</small>					
3	MW-310	6/27/22	0935	G	CW	2	2	EPA 8270 14-Dilute					
4	MW-330 - 235	6/27/22	0930	G	CW	2	2	VOA Headspace Present					
5	MW-330 - 295	6/27/22	0940	G	CW	2	2	VOA Trip Blank					
6	MW-300 - 273	6/27/22	1030	G	CW	2	2	NJ≤ 4 Days? Y N					
7	MW-300 - 413	6/27/22	1030	G	CW	2	2	Rad Screen (uCi) Y N					
8	MW-290	6/27/22	1045	G	CW	2	2	Courier/Tracking #: 574					
9	MW-300	6/27/22	1100	G	CW	2	2	SDWA Compliance					
10	MW-280	6/27/22	1135	G	CW	2	2	PWSID 574					
SAMPLER BY (Please Print, if MD include Sampler #): Elliott Mechanical Consult				Comments: Comments:				WV Containers 0-6°C Y N NA					
Date: 6/27/22	Time: 1525	Relinquished By / Company Name: KSD		Received By / Company Name: D. B. Johnson		Comments: Comments:		Deliverables Data Excel Summary					
G=Grab C=Composite				Comments: Comments:				Standard Lvl 1 <input type="checkbox"/> CLP like		HSCA <input type="checkbox"/>		State Samples Collected In NY NJ PA WV FL	
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E=Earth F=Soil C=Composite				Comments: Comments:				Standard Lvl 3 <input type="checkbox"/> NJ RED		NJ Full <input type="checkbox"/>		Comments: Comments:	
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Susan Scherer

From: Johnson, Eric <Eric.Johnson@wsp.com>
Sent: Monday, August 01, 2022 3:48 PM
To: Susan Scherer
Cc: Martynkiewicz, Elliott
Subject: [EXTERNAL] - FW: Former KOP-Flex Facility Offsi[3250322]
Attachments: 3250322_180765.pdf

CAUTION: This email originated from outside of ALS. Do not click links or open attachments unless you recognize the sender and are sure content is relevant to you.

Susan-

We are going to need ALS to make a correction to the attached lab report for samples from the Former Kop-Flex Facility Site. This correction involves changing the Client Sample ID "MW-45D" to "MW-45". This was an error on our part as the incorrect sample ID was indicated on the chain-of-custody form provided with the samples. Our apologies for not catching this error before the laboratory report was issued for the samples.

Please let us know when we will able to receive the revised report. Thanks for your help.

Eric



Eric Johnson
Senior Technical Manager
Professional Geologist

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M+ 1 703-626-0670
eric.johnson@wsp.com

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

wsp.com

From: ALMDT.LIMSAutoEmail@alsglobal.com <ALMDT.LIMSAutoEmail@alsglobal.com>
Sent: Monday, July 11, 2022 10:04 PM
To: Martynkiewicz, Elliott <Elliott.Martynkiewicz@wsp.com>; Johnson, Eric <Eric.Johnson@wsp.com>
Subject: Former KOP-Flex Facility Offsi[3250322]

**The EDD files are delivered as attachments to this email.
Please do no reply to this automated sender account. An ALS representative can be contacted by using the information provided in the signature below.**

Kind Regards,

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Environmental
USA



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301 Fulling Mill Road
Middletown, PA 17057

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