

HUMPHREY IMPOUNDMENT SEMI-ANNUAL 2ND HALF 2024 INTERIM MEASURE REPORT

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SPARROWS POINT, MARYLAND**

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1.0 INTRODUCTION

ARM Group LLC (ARM), on behalf of Tradepoint Atlantic (TPA), has prepared this Semi-Annual 2nd Half 2024 Interim Measures (IM) Report for a portion of TPA property (formerly Sparrows Point Terminal, LLC) that has been designated as the Humphrey Impoundment located in Area B: Parcel B14 (the Site). Parcel B14 is comprised of 60.3 acres of the approximately 3,100-acre former steel making facility (**Figure 1**). The majority of Parcel B14 is occupied by the Humphrey Impoundment, which is approximately 43 acres in size. The Humphrey Impoundment has been identified as a Special Study Area due to the wastes which were historically managed within the area, and potential environmental releases which could have occurred due to its construction (slag base and sides). The *T Work Plan for the Humphrey Impoundment* (Revision 2 dated March 29, 2022) was submitted to the Maryland Department of the Environment (MDE) and United States Environmental Protection Agency (USEPA), hereby referred to as the Agencies. The IM Work Plan for the Humphrey Impoundment was proposed as a component of the final remedy for Parcel B14 for the impoundment and the wastes contained within the impoundment. The IM Work Plan proposed groundwater and surface water sampling and gauging to monitor the Site conditions as the Humphrey Impoundment is filled, in preparation for development.

This 2nd Half 2024 IM Report summarizes groundwater and surface water sampling and gauging results from July through December 2024. The approved IM proposed gauging and sampling of groundwater and surface water around the perimeter and in the vicinity of the Humphrey Impoundment to assess the interaction of the impoundment with groundwater and surface water and to monitor the effectiveness of the proposed IM at reducing migration of contaminants to groundwater and the potential need for additional contingent groundwater remedies. These gauging and sampling activities include the adjacent areas of Parcel B24 and portions of the Tin Mill Canal (TMC).

1.1. SITE DESCRIPTION AND HISTORY

In preparation for development, filling activities for the Humphrey Impoundment commenced in January 2022 and have continued through 2024. The impoundment is being filled in quadrants. Filling of the impoundment is now approximately 95% complete and paving is approximately 50% complete. Future use for the impoundment will include a Stormwater Management Regional Pond and a parking lot.

From the late 1800s until 2012, the production and manufacturing of steel was conducted at Sparrows Point. Iron and steel production operations and processes at Sparrows Point included raw material handling, coke production, sinter production, iron production, steel production, and semi-finished and finished product preparation. In 1970, Sparrows Point was the largest steel facility in the United States, producing hot and cold rolled sheets, coated materials, pipes, plates, and rod and wire. The steel making operations at Sparrows Point ceased in fall 2012.

The majority of Parcel B14, as shown in **Figure 1**, is occupied by the Humphrey Impoundment, which is approximately 43 acres in size. As stated in the Description of Current Conditions (DCC) Report prepared by Rust Environment and Infrastructure, dated January 1998, the USEPA identified the Humphrey Impoundment as a potential concern due to the wastes which were historically managed within the impoundment, and potential environmental releases which could have occurred due to its construction (slag base and sides).

Between 1950 and 1970, Humphrey Creek existed as open water (the impoundment did not yet exist) and received wastewater from various steel processing areas including the Hot Strip Mill, Cold Sheet Mill, Tin Mill, and Rod & Wire Mill. Following construction of the TMC (ca. 1969), from 1970 to 1985 the Humphrey Impoundment was used as a dewatering area for on-site sludges and slurry materials generated from the Basic Oxygen Furnace and various on-site water treatment plants. Materials that were dewatered within the impoundment included: Blast Oxygen Furnace slurry; Blast Furnace G, H, J, K, and L thickener sludges; Humphrey Creek Wastewater Treatment Plant (HCWWTP) sludge; Sinter Plant slurry; Open Hearth (No.4) slurry; waste oil pit sludge and non-recoverable waste oil residue; and pre-limer clarifier sludge. Since 1985, the impoundment was used for sludge/slurry dewatering in emergency scenarios only (i.e., when upsets had occurred in the on-site water treatment systems). The MDE was notified prior to these emergency uses. According to the DCC Report, all the wastes that were placed inside the impoundment were determined to be non-hazardous.

2.0 INTERIM MEASURE RESULTS

2.1. GROUNDWATER SAMPLING

In December 2021, perimeter monitoring wells were installed at Humphrey Impoundment. Starting in January 2022, multiple rounds of monthly groundwater sampling data were collected in accordance with the *Humphrey Impoundment IM Work Plan* (Revision 2 dated March 29, 2022). On November 7, 2022, the Agencies approved a reduction in groundwater and surface water sampling frequency from monthly to quarterly. On October 30, 2023, the Agencies approved a reduction in gauging frequency from monthly to quarterly. On September 13, 2024, the Agencies approved an additional reduction in groundwater gauging, groundwater sampling, and surface water sampling frequency from quarterly to semi-annually.

As shown on **Figure 2**, groundwater samples were originally collected from 19 monitoring wells around the perimeter of the impoundment. These wells are HI10-MWS, HI11-MWS, HI12-MWS, HI13-MWS, HI14-MWS, HI15-MWS, HI16-MWS, HI17-MWS, HI18-MWS, HI19-MWS, HI20-MWS (replaced with HI20R2-MWS), HI21-MWS, HI22-MWS, TM04-PZM006, TM08R-PZM007, TS03-PDP002, HI02-PZM006 (replaced with HI02R2-PZM006), HI04-PZM006 (now abandoned), and HI07-PZM005 (replaced with HI07R-PZM005).

Groundwater samples were analyzed for volatile organic compounds (VOCs) via the USEPA method 8260 and semi-volatile organic compounds (SVOCs) via USEPA method 8270 during the groundwater monitoring events. Groundwater analytical results for the monitoring sampling are included in **Table 1** and **Table 2**. Project Action Limit (PAL) exceedances for the sampling round are shown on **Figure 3**.

The groundwater PALs are based on the USEPA Maximum Contaminant Level or the USEPA Regional Screening Level for tap water. The laboratory reports are included in **Appendix A**.

2.1.1. 2nd Half 2024 Groundwater Sampling

During the 2nd Half 2024 sampling event (conducted between August 26 and September 6, 2024), 18 monitoring wells were sampled. Benzene exceedances of the groundwater PAL (5 micrograms per liter, or $\mu\text{g/L}$) were observed in two baseline monitoring wells: HI19-MWS (11 $\mu\text{g/L}$) and TM04-PZM006 (380 $\mu\text{g/L}$). Measured benzene concentrations are consistent with historical values observed at these locations.

Naphthalene exceedances of the groundwater PAL (0.12 $\mu\text{g/L}$) were observed at 14 of 18 baseline monitoring wells sampled, with the maximum concentration observed in TM04-PZM006 (130 $\mu\text{g/L}$). Naphthalene concentrations are consistent with historical values observed at these locations except for monitoring well HI10-MWS. Monitoring well HI10-MWS naphthalene concentrations since October 2023 have been elevated (between 30 and 50 $\mu\text{g/L}$) above previous concentrations (all below 10 $\mu\text{g/L}$). Naphthalene concentrations at monitoring well HI10-MWS will continue to

be monitored for trend changes in the upcoming sampling events. In the 1st Half 2024 Semi-Annual Report, it was noted that naphthalene concentrations in TM04-PZM006 had been fluctuating over the last several quarters. The 2nd Half 2024 naphthalene concentration (130 µg/L) is similar to the historical range for this well; TM04-PZM006 will continue to be monitored for trend changes.

Benz[a]anthracene exceedances of the groundwater PAL (0.03 µg/L) were observed in eight of the 18 monitoring wells samples, with the maximum concentration observed in HI13-MWS and HI20R2-MWS (each 0.13 µg/L). Benz[a]anthracene concentrations are consistent with historical values observed at these locations. There were also exceedances for dibenz[a,h]anthracene (0.09 µg/L in HI20R2-MWS versus a PAL of 0.025 µg/L) and 1,1-biphenyl (1.0 µg/L in HI19-MWS versus a PAL of 0.83 µg/L).

2.1.2. Groundwater Sampling Trends

Benzene and naphthalene historic groundwater sampling results are compiled in **Table 2**. Trend plots for benzene and naphthalene (for wells where PAL exceedances have been identified in one or more monitoring events) are included as **Figure 4** and **Figure 5**, respectively. Overall, benzene and naphthalene concentrations in the wells do not appear to be changing as the impoundment is being filled (beginning in January 2022).

As shown on **Figure 4**, monitoring well location TM04-PZM006 continues to be the main area of benzene groundwater impact. Historically, groundwater sampling results for this area are available from December 2001, July 2004, October 2017, and October 2021. A Mann-Kendall analysis of the benzene and naphthalene groundwater concentrations was conducted via the ChemStat 6.5 statistical software from 2001 – August 2024. Monitoring well TM04-PZM006 was evaluated with a 95% confidence factor; no statistically significant increasing or decreasing trends were identified for benzene, however, a statistically significant decreasing trend was identified for naphthalene. The analysis output file is included in **Appendix B**.

2.1.3. B24 Groundwater Sampling

On August 26 and 29th, 2024, ARM sampled all three shallow monitoring wells on Parcel B24: B24-001-MWS, B24-002-MWS and TS03-DDP002. These three monitoring wells are located to the west of the impoundment and were included in the monitoring program as sentinel wells to identify potential migration towards Bear Creek.

The three monitoring wells were sampled for VOCs via USEPA Method 8260 and SVOCs by USEPA Method 8270 SIM. All results from the 2nd Half 2024 sampling event are included in **Table 3**. The laboratory reports are included in **Appendix A**. All groundwater PAL exceedances are included in **Figure 3**.

Benzene did not exceed the groundwater PAL in the three Parcel B24 sentinel monitoring wells. Additionally, there were no VOC exceedances in the three Parcel B24 wells. For SVOCs,

naphthalene exceeded the groundwater PAL (0.12 µg/L) in two wells, with observed concentrations of 0.53 µg/L in B24-001-MWS and 0.69 µg/L in B24-002-MWS. Groundwater concentrations at the Parcel B24 sentinel monitoring wells have remained low since sampling began in May 2022 (following well installation in April 2022).

2.2. SURFACE WATER SAMPLING

Surface water samples were collected in August 2024 from four locations: TMC-Outlet (End of Canal), TMC-TM04 (adjacent to TM04-PZM006), TMC-Bend (from the bend in the TMC in the southeastern corner of B14, adjacent to HI15-MWS), and TMC-Rail Bridge (Mid Canal) (refer to **Figure 2**). All surface water samples were analyzed for VOCs via USEPA Method 8260 and SVOCs by USEPA Method 8270 SIM.

For comparison purposes, the USEPA Region 4 Surface Water Screening Values (for freshwater and chronic) (Region 4 Ecological Risk Assessment Supplemental Guidance, March 2018) were included in **Table 4** for parameters with detections. The laboratory reports are included in **Appendix A**. Benzene and naphthalene did not exceed these freshwater screening levels. Benzene and naphthalene historic surface water sampling results are compiled in **Table 5**.

For the 2nd half of 2024, benzene and naphthalene did not exceed the freshwater screening levels (160 µg/L and 21 µg/L) ranging from non-detect to 0.22 µg/L for benzene, and non-detect to 0.32 µg/L for naphthalene.

Carbon disulfide was the only exceedance of surface water screening levels (15 µg/L), with a concentration of 17 µg/L in TMC-OUTLET. There were no other exceedances of surface water screening levels in the 2nd Half of 2024.

2.3. GROUNDWATER ELEVATION

To assess potential impacts from the IM on groundwater flow direction, TPA is conducting groundwater gauging throughout the duration of the development/remedial activities. On October 30, 2023, the Agencies approved a reduction in gauging frequency from monthly to quarterly. Gauging results are summarized in **Table 6**. Gauging results from the 2nd Half 2024 have been used to create groundwater elevation contour maps, included as **Figure 6**. The following wells are not included in the gauging: HI04-PZM006 (abandoned) and HI20R2-MWS (not surveyed).

During groundwater monitoring events, each groundwater point was checked for the presence of nonaqueous phase liquid (NAPL) using an oil-water interface probe. Apart from monitoring well HI17-MWS and HI20R-MWS, discussed below, NAPL was not identified in any of the monitoring wells.

2.4. NAPL OBSERVATIONS

During groundwater gauging on April 18, 2022, approximately 0.02 ft of NAPL was identified in HI17-MWS. MDE was notified of the NAPL detection on April 19, 2022. HI17-MWS was gauged at least weekly following this detection, with NAPL thickness ranging from the initial detection of 0.02 ft to not measurable. Three enhanced fluid recovery events were conducted at HI17-MWS between April and May 2022; minimal product was recovered. In July 2022, a 10-foot-long trench was advanced to groundwater within the impoundment, approximately 20 feet west of HI17-MWS. No NAPL was observed within the trench for several weeks prior to backfilling.

Since July 2022, absorbent socks have been utilized in HI17-MWS, with an absorbent sock placed into the well for one month and then removed for one month to evaluate the amount of potential NAPL recharge into the well. A summary of NAPL observations during the 2nd Half of 2024 is provided in **Table 7**. NAPL thickness has not increased at this location, remaining at less than 0.02 ft. Absorbent socks will continue to be used at this location to remove NAPL from the well.

Monitoring well HI20-MWS was abandoned in March 2023 due to anticipated development activities on Sub-Parcel B8-1. Monitoring well HI20R-MWS was installed in January 2024, approximately 53 feet south of the previous well location due to construction of the Parcel B8-1 building pad; the HI20R-MWS location is within Parcel B14/Humphrey Impoundment (refer to **Figure 2**). During well installation, a black tar-like substance was observed at several depths in the boring. Monitoring well HI20R-MWS was developed on January 25, 2024, and no NAPL was identified. On February 20, 2024, the monitoring well was gauged before the Q1 2024 sampling event; 0.73 ft of NAPL was observed in the well. An absorbent sock was deployed in the well. However, subsequent gauging at HI20R-MWS have identified trace NAPL only; the initial NAPL observation appears to have been an erroneous measurement due to the thicker nature of the NAPL. A summary of NAPL observations during the 2nd Half of 2024 is provided in **Table 7**; only trace NAPL was observed. This location will continue to be gauged, and absorbent socks deployed as needed.

3.0 SUMMARY AND CONCLUSIONS

The *IM Work Plan for the Humphrey Impoundment* (Revision 2 dated March 29, 2022) was proposed as a component of the final remedy for the waste material contained in the Parcel B14 impoundment. The IM Work Plan proposed groundwater and surface water gauging and sampling to monitor the site conditions as the Humphrey Impoundment is filled, in preparation for development.

Filling of the impoundment is approximately 95% complete, with paving approximately 50% complete. Since commencement of the filling of HI, there have been no significant changes in groundwater concentrations, surface water concentrations, or groundwater elevations, and no seasonal trends have been identified. TMC surface-water elevation continues to be largely controlled at the HCWWTP intake. Groundwater gauging, groundwater sampling, and surface water sampling will continue to be conducted on a semi-annual basis.

Monitoring wells HI17-MWS and HI20R-MWS, where NAPL/sheen has been observed, will continue to be gauged monthly, with absorbent socks deployed as needed.

The next IM Report will be submitted following completion of groundwater and surface water activities for the first half of 2025.

FIGURES

 Parcel Boundary
 Site Boundary
 Private Property



Parcel B14

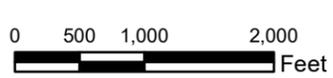
Tradepoint Atlantic Property
Parcel B14 Site Location

February 20, 2023

Figure
1



ARM Group LLC
Engineers and Scientists



Tradepoint Atlantic

Sparrows Point

Baltimore County, MD

ARM Project No. 21010214

P:\EnviroAnalytics_Group\160443M_EAG_TPA_Redevelopment\GIS\Parcel B\14 IM Contours_24.mxd



NOTES:

- "NS" = Not Sampled
- "NE" = No Exceedances
- Results are in ug/L
- Groundwater sampling took place August 26, 2024 - September 6, 2024.

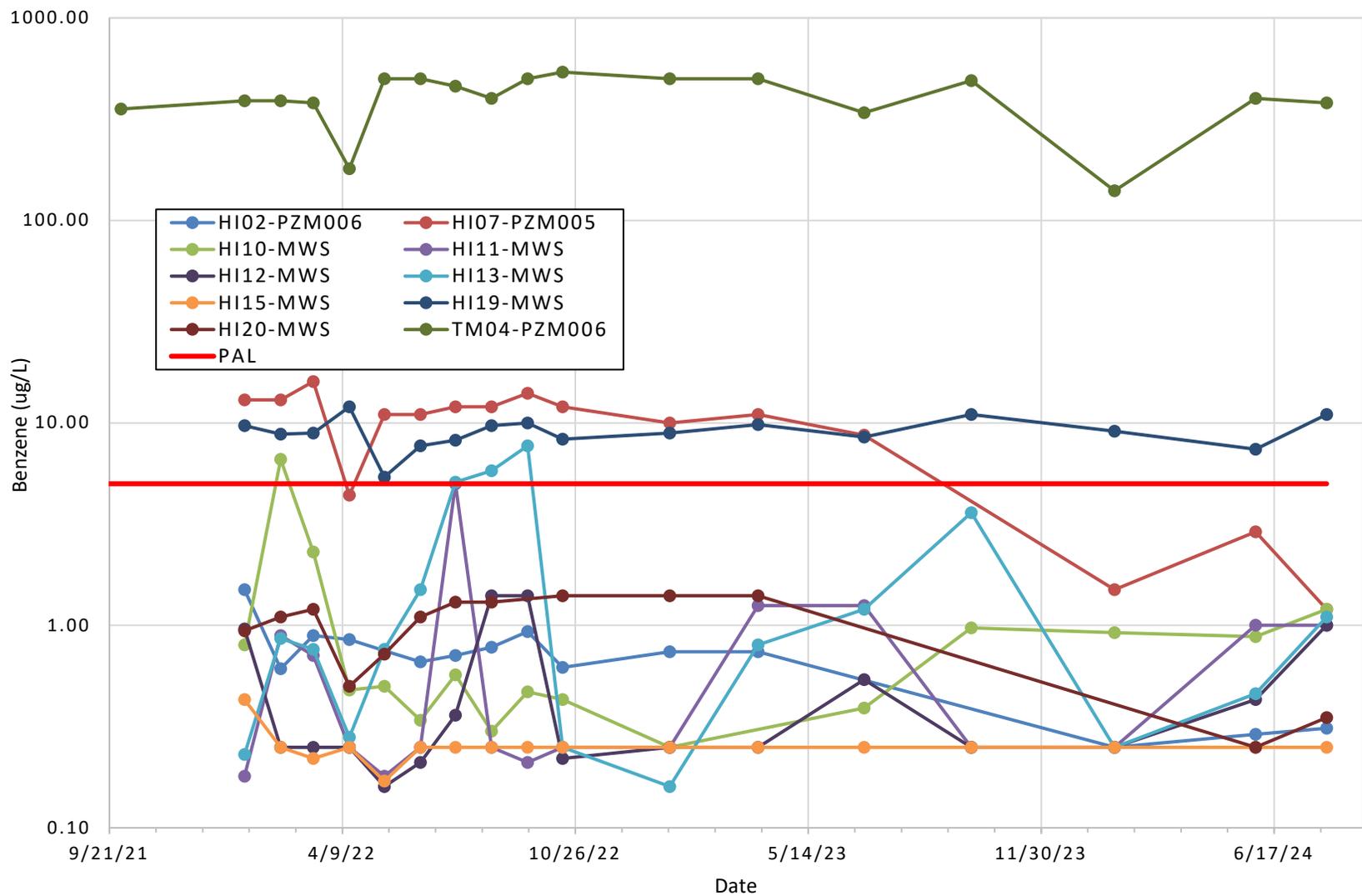
**Groundwater PAL Exceedances
(Benzene and Naphthalene)
2 nd Half 2024
March 25, 2025**

**Figure
3**

ARM Group LLC
Engineers and Scientists

0 105 210 420
Feet

Tradepoint Atlantic
Sparrows Point
Baltimore County, MD
ARM Project 21010214



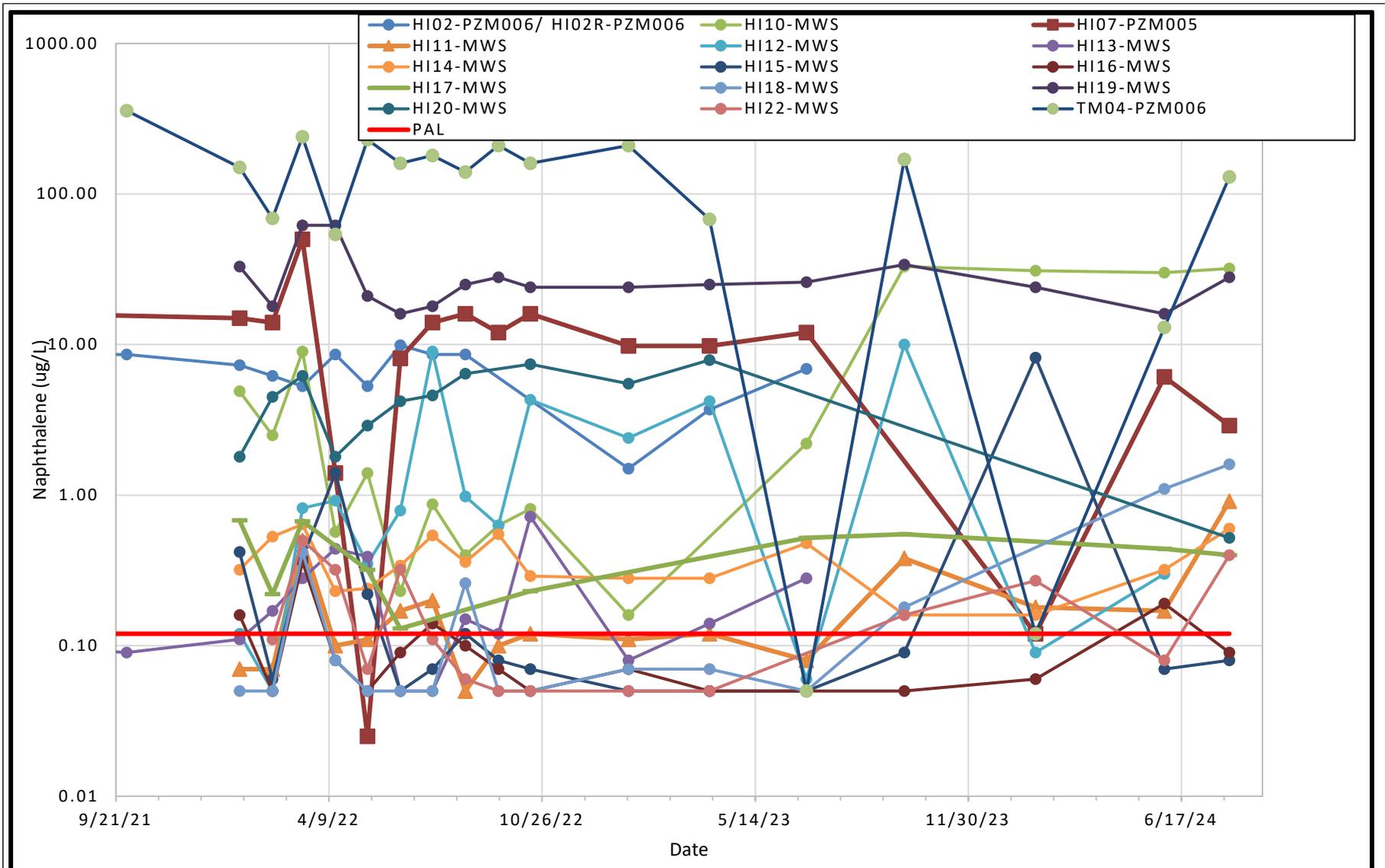
ARM Group LLC
Engineers and Scientists

Parcel B14
Tradepoint Atlantic
Sparrows Point, Maryland

B14 Historic Groundwater Results for Benzene

February 2025

**Figure
4**



Parcel B14
Tradepoint Atlantic
Sparrows Point, Maryland

B14 Historic Groundwater
Results for Naphthalene
February 2025

Figure
5



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NOTES:

- "NM" = Not Measured
- Groundwater elevations are in feet above mean sea level.
- Groundwater elevation gauging took place on August 7, 2024.

Monitoring Well Data:

Well ID	Elevation (feet)
HI04-PZM006	
HI19-MWS	0.88
HI18-MWS	0.39
HI17-MWS	NM
TM08R-PZM007	0.43
HI16-MWS	0.47
HI15-MWS	0.4
HI14-MWS	0.14
HI13-MWS	0.19
HI12-MWS	0.52
TM04-PZM006	-0.98
HI11-MWS	-2.54
HI10-MWS	0.39
HI22-MWS	2.85
HI20R-MWS	DRY
HI20R2-MWS	NM
HI07R-PZM005	2.05
HI02R-PZM006	3.17
HI21-MWS	0.86
TS03-PDP002	0.89
B24-001-MWS	0.82
B24-002-MWS	1.8

TABLES

**Table 1 - Parcel B14 2nd Half 2024 IM Report
Summary of Organics Detected in B14 Groundwater**

Parameter	Units	PAL	HI02R-PZM006	HI07-PZM005	HI10-MWS	HI11-MWS	HI12-MWS	HI13-MWS	HI14-MWS	HI15-MWS	HI16-MWS
			8/26/2024	8/26/2024	8/27/2024	8/27/2024	9/6/2024	8/27/2024	8/27/2024	8/27/2024	8/26/2024
SVOCs											
1,1-Biphenyl	µg/L	0.83	2 U	2 U	0.4 J	2 U	2 U	2 U	2 U	2 U	2 U
2,4-Dimethylphenol	µg/L	360	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
2-Methylnaphthalene	µg/L	36	0.85	0.67	2.2	0.06 J	0.04 J	0.11	0.07 J	0.1 U	0.1 U
2-Methylphenol	µg/L	930	NS	NS	NS	NS	NS	NS	NS	NS	NS
3&4-Methylphenol(m&p Cresol)	µg/L	930	5 U	1.4 J	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Acenaphthene	µg/L	530	1.3	0.57	2.3	0.04 J	0.36	0.06 J	1.9	0.03 J	0.04 J
Acenaphthylene	µg/L	530	0.05 J	0.32	0.68	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Anthracene	µg/L	1,800	0.17	0.34	0.42	0.03 J	0.14	0.06 J	0.21	0.04 J	0.1 U
Benz[a]anthracene	µg/L	0.03	0.05 U	0.07	0.04 J	0.05 U	0.06	0.13	0.05 U	0.05 U	0.05 U
Benzo[a]pyrene	µg/L	0.2	0.1 U	0.1 U	0.1 U	0.1 U	0.05 J	0.14	0.1 U	0.1 U	0.1 U
Benzo[b]fluoranthene	µg/L	0.25	0.05 U	0.03 J	0.05 U	0.05 U	0.07	0.18	0.05 U	0.05 U	0.05 U
Benzo[g,h,i]perylene	µg/L	--	0.1 U	0.1 U	0.1 U	0.1 U	0.05 J	0.1 J	0.1 U	0.1 U	0.1 U
Benzo[k]fluoranthene	µg/L	2.5	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.07 J	0.1 U	0.1 U	0.1 U
bis(2-Ethylhexyl)phthalate	µg/L	6.0	3 U	3 U	3 U	3 U	3 U	2.1 J	3 U	3 U	3 U
Carbazole	µg/L	--	2 U	2 U	5.5	2 U	2 U	2 U	2 U	2 U	2 U
Chrysene	µg/L	25	0.1 U	0.05 J	0.1 U	0.1 U	0.04 J	0.1 J	0.1 U	0.1 U	0.1 U
Dibenz[a,h]anthracene	µg/L	0.025	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
Fluoranthene	µg/L	800	0.21	1.2	0.67	0.06 J	0.21	0.22	0.28	0.1 U	0.1 U
Fluorene	µg/L	290	1	0.8	2	0.1 U	0.16	0.04 J	0.95	0.1 U	0.1 U
Indeno[1,2,3-c,d]pyrene	µg/L	0.25	0.1 U	0.1 U	0.1 U	0.1 U	0.05 J	0.09 J	0.1 U	0.1 U	0.1 U
Naphthalene	µg/L	0.12	6.9	2.9	32	0.91	0.09 J	0.28	0.6	0.08 J	0.09 J
Phenanthrene	µg/L	--	1.1	1.7	2.9	0.07	0.31	0.18	0.98	0.05 U	0.05 U
Phenol	µg/L	5,800	1.3 J	5 U	3.1 J	4.1 J	2.6 J	0.64 J	5 U	5 U	0.78 J
Pyrene	µg/L	120	0.14	0.81	0.49	0.07 J	0.18	0.21	0.17	0.1 U	0.1 U
VOCs											
1,1-Dichloroethane	µg/L	2.7	NS	NS	NS	NS	NS	NS	NS	NS	NS
2-Butanone (MEK)	µg/L	5,600	NS	NS	NS	NS	NS	NS	NS	NS	NS
Acetone	µg/L	14,000	1.7 J	2.1 J	5 U	3.7 J	4.2 J	5 U	5 U	1.5 J	5 U
Benzene	µg/L	5.0	0.31 J	2.1	1.2	1	1	1.1	0.5 U	0.5 U	0.5 U
Bromomethane	µg/L	7.5	NS	NS	NS	NS	NS	NS	NS	NS	NS
Chloromethane	µg/L	190	NS	NS	NS	NS	NS	NS	NS	NS	NS
Cyclohexane	µg/L	13,000	NS	NS	NS	NS	NS	NS	NS	NS	NS
Ethylbenzene	µg/L	700	0.5 U	0.5 U	0.19 J	0.5 U	0.5	0.5 U	0.5 U	0.5 U	0.5 U
Isopropylbenzene	µg/L	450	NS	NS	NS	NS	NS	NS	NS	NS	NS
m&p-Xylene	µg/L		NS	NS	0.50 J	NS	NS	NS	NS	NS	NS
o-Xylene	µg/L		NS	NS	NS	NS	NS	NS	NS	NS	NS
Toluene	µg/L	1,000	0.75 U	1.4	0.5 J	0.75 U	0.75 U	0.75 U	0.75 U	0.75 U	0.75 U
Vinyl chloride	µg/L	2.0	1 U	1 U	1 U	1 U	1 U	0.2 J	1 U	1 U	1 U
Xylenes	µg/L	10,000	1 U	0.87 J	0.6 J	1 U	1 U	1 U	1 U	1 U	1 U

Detections in bold

Values in red indicate an exceedance of the groundwater Project Action Limit (PAL)

U: This analyte was not detected in the sample. The numeric value represents the sample quantitation/detection limit.

J: The positive result reported for this analyte is a quantitative estimate.

µg/L: micrograms per liter

PAL: Project Action Limit

**Table 1 - Parcel B14 2nd Half 2024 IM Report
Summary of Organics Detected in B14 Groundwater**

Parameter	Units	PAL	HI17-MWS	HI18-MWS	HI19-MWS	HI20R2-MWS	HI21-MWS	HI22-MWS	TM04-PZM006	TM08R-PZM007	TS03-PDP002
			9/6/2024	8/26/2024	8/27/2024	8/27/2024	8/27/2024	8/27/2024	8/27/2024	8/27/2024	8/26/2024
SVOCs											
1,1-Biphenyl	µg/L	0.83	2 U	2 U	1 J	2 U	2 U	2 U	2 U	2 U	2 U
2,4-Dimethylphenol	µg/L	360	2.4 J	5 U	100	6.9	5 U	5 U	9.7	5 U	5 U
2-Methylnaphthalene	µg/L	36	0.24	0.09 J	2.6	0.06 J	0.03 J	0.05 J	1.2	0.1 U	0.1 U
2-Methylphenol	µg/L	930	NS	NS	NS	NS	NS	NS	NS	NS	NS
3&4-Methylphenol(m&p Cresol)	µg/L	930	5 U	5 U	28	6.8	5 U	5 U	5 U	5 U	5 U
Acenaphthene	µg/L	530	0.15	0.16	0.8	0.17	0.1 U	0.1 U	0.39	0.1 U	0.1 U
Acenaphthylene	µg/L	530	0.1 U	0.05 J	0.51	0.1 U	0.1 U	0.1 U	2.2	0.1 U	0.1 U
Anthracene	µg/L	1,800	0.31	0.32	0.28	0.05 J	0.1 U	0.1 U	0.06 J	0.08 J	0.1 U
Benz[a]anthracene	µg/L	0.03	0.1	0.05 U	0.04 J	0.13	0.05 U	0.05 U	0.05	0.05 U	0.05 U
Benzo[a]pyrene	µg/L	0.2	0.1 U	0.1 U	0.1 U	0.17	0.1 U	0.1 U	0.05 J	0.1 U	0.1 U
Benzo[b]fluoranthene	µg/L	0.25	0.03 J	0.05 U	0.05 U	0.23	0.05 U	0.05 U	0.08	0.05 U	0.05 U
Benzo[g,h,i]perylene	µg/L	--	0.1 U	0.1 U	0.1 U	0.2	0.1 U	0.1 U	0.05 J	0.1 U	0.1 U
Benzo[k]fluoranthene	µg/L	2.5	0.1 U	0.1 U	0.1 U	0.11	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
bis(2-Ethylhexyl)phthalate	µg/L	6.0	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U
Carbazole	µg/L	--	2 U	2 U	2.6	2 U	2 U	2 U	0.79 J	2 U	2 U
Chrysene	µg/L	25	0.05 J	0.1 U	0.1 U	0.11	0.1 U	0.1 U	0.04 J	0.1 U	0.1 U
Dibenz[a,h]anthracene	µg/L	0.025	0.05 U	0.05 U	0.05 U	0.09	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
Fluoranthene	µg/L	800	0.2	0.06 J	0.5	0.27	0.1 U	0.1 U	0.13	0.2	0.1 U
Fluorene	µg/L	290	0.11	0.08 J	0.95	0.16	0.03 J	0.1 U	0.23	0.1 U	0.1 U
Indeno[1,2,3-c,d]pyrene	µg/L	0.25	0.1 U	0.1 U	0.1 U	0.18	0.1 U	0.1 U	0.05 J	0.1 U	0.1 U
Naphthalene	µg/L	0.12	0.4	1.6	28	0.52	0.38	0.4	130	0.13	0.04 J
Phenanthrene	µg/L	--	0.14	0.06	1.8	0.2	0.04 J	0.04 J	0.32	0.05 U	10 U
Phenol	µg/L	5,800	5 U	5 U	1.9 J	5 U	5 U	5 U	5 U	0.92 J	0.96 J
Pyrene	µg/L	120	0.1 J	0.06 J	0.33	0.26	0.1 U	0.1 U	0.11	0.15	0.1 U
VOCs											
1,1-Dichloroethane	µg/L	2.7	NS	NS	NS	NS	NS	NS	NS	NS	NS
2-Butanone (MEK)	µg/L	5,600	NS	NS	NS	NS	NS	NS	NS	NS	NS
Acetone	µg/L	14,000	3.5 J	1.8 J	1.5 J	1.5 J	5 U	5 U	20 U	5 U	5 U
Benzene	µg/L	5.0	0.5 U	0.16 J	11	0.35 J	0.5 U	0.23 J	380	0.5 U	0.5 U
Bromomethane	µg/L	7.5	NS	NS	NS	NS	NS	NS	NS	NS	NS
Chloromethane	µg/L	190	NS	NS	NS	NS	NS	NS	NS	NS	NS
Cyclohexane	µg/L	13,000	NS	NS	NS	NS	NS	NS	NS	NS	NS
Ethylbenzene	µg/L	700	0.5 U	0.5 U	0.24 J	0.5 U	0.5 U	0.5 U	4.7	0.5 U	0.5 U
Isopropylbenzene	µg/L	450	NS	NS	NS	NS	NS	NS	NS	NS	NS
m&p-Xylene	µg/L		NS	NS	2.5	NS	NS	NS	5.1	NS	NS
o-Xylene	µg/L		NS	NS	1.3	NS	NS	NS	NS	NS	NS
Toluene	µg/L	1,000	76	0.75 U	4.2	0.75 U	0.75 U	0.75 U	2.3 J	0.75 U	0.75 U
Vinyl chloride	µg/L	2.0	1 U	1 U	1 U	1 U	1 U	1 U	0.57 J	1 U	1 U
Xylenes	µg/L	10,000	1 U	1 U	3.8	1 U	1 U	1 U	5.1	1 U	1 U

Detections in bold

Values in red indicate an exceedance of the groundwater Project Action Limit (PAL)

U: This analyte was not detected in the sample. The numeric value represents the sample quantitation/detection limit.

J: The positive result reported for this analyte is a quantitative estimate.

µg/L: micrograms per liter

PAL: Project Action Limit

**Table 2 - Parcel B14 2nd Half 2024 IM Report
Parcel B14 Historic Groundwater Sampling**

Well ID	PAL	Benzene (µg/L)																				
		Dec-01	Jul-04	Oct-17	Oct-21	Jan-22	Feb-22	Mar-22	Apr-22	May-22	Jun-22	Jul-22	Aug-22	Sep-22	Oct-22	Jan-23	Apr-23	Jul-23	Oct-23	Feb-24	Jun-24	Aug-24
HI02-PZM006 / HI02R-PZM006	5	1.2		0.88 J	NS	1.5	0.61	0.89	0.85	0.75	0.66	0.71	0.78	0.93	0.62	0.74	0.74			0.5 U	0.29 J	0.31 J
HI04-PZM006 / HI04R-MWS	5	1 U		1 U	NS	0.5 U	0.5 U	0.50 U	0.5 U													
HI07-PZM005 / HI07R-PZM005	5	25	16	16.2	NS	13.0	13.0	16.0	4.4	11	11	12.0	12.0	14	12	10	11	8.7		1.5	2.9	2.1
HI10-MWS	5					0.8	6.6	2.3	0.48 J	1.0 U	0.34 J	0.57	0.30 J	0.47 J	0.43 J	0.50 U	0.69	0.39 J	0.97	0.92	0.88	1.2
HI11-MWS	5					0.18 J	0.89	0.71	0.5 U	0.18 J	0.50 U	10 U	0.50 U	0.21 J	0.50 U	0.50 U	2.5 U	2.5 U	0.5 U	0.5 U	2 U	1
HI12-MWS	5					0.96	0.5 U	0.50 U	0.5 U	0.16 J	0.21 J	0.36 J	1.4	1.4	0.22 J	0.50 U	0.5 U	0.54	0.5 U	0.5 U	0.43 J	1
HI13-MWS	5					0.23 J	0.86	0.76	0.28 J	0.76	1.5	5.1	5.8	7.7	0.50 U	0.16 J	0.8	1.2	3.6	0.5 U	0.46 J	1.1
HI14-MWS	5					0.5 U	0.5 U	0.50 U	0.5 U	0.5 U	0.5 U	0.5 U	0.50 U	0.50 U	0.50 U	0.50 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
HI15-MWS	5					0.43 J	0.5 U	0.22 J	0.5 U	0.17 J	0.5 U	0.5 U	0.50 U	0.50 U	0.50 U	0.50 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
HI16-MWS	5					0.5 U	0.5 U	0.50 U	0.5 U	0.5 U	0.5 U	0.5 U	0.50 U	0.50 U	0.50 U	0.50 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
HI17-MWS	5					0.5 U	0.5 U	0.50 U	NS (b)	0.5 U	0.5 U	NS (b)	NS (b)	NS (b)	0.50 U	NS (b)	0.5 U					
HI18-MWS	5					0.5 U	0.5 U	0.50 U	0.5 U	0.5 U	2.5 U	0.5 U	0.50 U	0.50 U	0.50 U	0.50 U	0.5 U	0.5 U	0.5 U	0.5 U	0.23 J	0.16 J
HI19-MWS	5					9.7	8.8	8.9	12	5.4	7.7	8.2	9.7	10	8.3	8.9	9.8	8.5	11	9.1	7.4	11
HI20-MWS / HI20R-MWS / HI20R2-MWS	5					0.94	1.1	1.2	0.50	0.72	1.10	1.3	1.3	NS (c)	1.4	1.4	1.4				0.5 U	0.35 J
HI21-MWS	5									0.50 U	0.5 U	0.5 U	0.50 U	0.50 U	0.50 U	0.50 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.05 U
HI22-MWS	5						2.5 U	0.50 U	5 U	0.50 U	2.5 U	5 U	0.50 U	0.50 U	0.50 U	0.50 U	2.5 U	NS	0.3 J	0.44 J	0.46 J	0.23 J
TM04-PZM006	5	1400	610	653	355	390	390	380	180	500	500	460	400	500	540	500	500	340	490	140	400	380
TM08R-PZM007	5	1 U		1 U	NS	0.5 U	0.5 U	0.50 U	0.50 U	0.50 U	0.5 U	0.5 U	0.50 U	0.50 U	0.50 U	0.50 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U

Detections in bold

Values in red indicate an exceedance of the Project Action Limit (PAL)

U: This analyte was not detected in the sample. The numeric value represents the sample quantitation / detection limit.

J: The positive result reported for this analyte is a quantitative estimate.

B: The analyte was detected above the reporting limits in the associated method blank.

NS: Not Sampled

µg/L: micrograms per liter

PAL: Project Action Limit

(a) Analysis was re-run due to B qualifier.

(b) HI17-MWS was not sampled in January 2023 due to trace NAPL.

(c) HI20-MWS was within an active demolition area and could not be safely accessed.

	Well not installed
	Well damaged/abandoned

**Table 2 - Parcel B14 2nd Half 2024 IM Report
Parcel B14 Historic Groundwater Sampling**

Well ID	PAL	Naphthalene (µg/L)																				
		Dec-01	Jul-04	Oct-17	Oct-21	Jan-22	Feb-22	Mar-22	Apr-22	May-22	Jun-22	Jul-22	Aug-22	Sep-22	Oct-22	Jan-23	Apr-23	Jul-23	Oct-23	Feb-24	Jun-24	Sep-24
HI02-PZM006 / HI02R-PZM006	0.12	7.3 J		5.1	NS	5.2	2.5	7.3	8.6	7.3	6.2	5.3	8.6	5.3	9.9	8.6	8.6			1.5	3.7	6.9
HI04-PZM006 / HI04R-MWS	0.12			0.15	NS	0.1 U	0.1 U	1.0 U	0.06 J													
HI07-PZM005 / HI07R-PZM005	0.12	40	16	26.1	NS	15	14.0	50	1.4	0.05 J	8.1	14.0	16	12	16	10	9.8	12		0.12	6.1	2.9
HI10-MWS	0.12					4.9	2.5	9.0	0.57	1.4	0.23	0.87	0.4	0.63	0.81	0.16	2.8	2.2 B	33	31	30	50
HI11-MWS	0.12					0.07 J	0.07 J	1.0 U	0.10	0.11	0.17	0.20	0.10 U	0.10	0.12	0.11	0.12	0.08 JB	0.38	0.18	0.17	0.91
HI12-MWS	0.12					0.12	0.1 U	0.82 J	0.92	0.35	0.79	9.0	0.98	0.63	4.3	2.4	4.2	0.06 J	10	0.09 J	0.30	0.09 J
HI13-MWS	0.12					0.07 J	0.11	0.40 J	0.09 J	0.11	0.17	0.28	0.44	0.39	0.1 U	0.10 U	0.15	0.12 B	0.72 B	0.08 J	0.12	0.28
HI14-MWS	0.12					0.32	0.53	0.64 J	0.23	0.24	0.34	0.54	0.36	0.55	0.29	0.28	0.28	0.48	0.16	0.16	0.32	0.6
HI15-MWS	0.12					0.42	0.06 J	0.38 J	1.4	0.22	0.10 U	0.07 J	0.12	0.08 J	0.07 J	0.10 U	0.1 U	0.1 U	0.09 J	8.2	0.05 J	0.08 J
HI16-MWS	0.12					0.16	0.1 U	0.36 J	0.08 J	0.10 U	0.09 J	0.14	0.10 J	0.07 J	0.1 U	0.07 J	0.1 U	0.1 U	0.1 U	0.06 JB	0.19	0.09 J
HI17-MWS	0.12					0.68	0.22	0.67 J	NS (b)	0.32	0.13	NS (b)	NS (b)	NS (b)	0.23	NS (b)	0.27	0.52	0.55	0.44 B	0.39	0.4
HI18-MWS	0.12					0.1 U	0.1 U	0.42 J	0.08 J	0.10 U	0.05 JB	0.1 U	0.26	0.10 U	0.05 J	0.07 J	0.07 J	0.1 U	0.18	0.44 B	1.1	1.6
HI19-MWS	0.12					33	18.0	62	62	21	16	18.0	25	28	24	24	25	26	34	24	3.3	53
HI20-MWS / HI20R-MWS / HI20R2-MWS	0.12					1.8	4.5	6.2	1.8	2.9	4.2	4.6	6.4	NS (c)	7.4	5.5	7.9				0.16	0.52
HI21-MWS	0.12									0.07 J	0.06 J	0.06 J	0.26 B / 0.07 J (a)	0.08 J	0.12	0.10 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.38
HI22-MWS	0.12					0.11	1.0 U	0.32	0.07 J	0.32	0.11	0.06 J	0.10 U	0.10 U	0.10 U	0.1 U	NS	0.16 J	0.27	0.08 J	0.4	
TM04-PZM006	0.12	200	51	405	358	150 E	69	240	54	230	160	180	140	210	160	210	68	0.1 U	170	0.12	13.0	130.0
TM08R-PZM007	0.12	10 U		0.096 J	NS	0.1 U	0.10	1.0 U	0.1 U	0.10 U	0.10 U	0.1 U	0.10 U	0.10 U	0.10 U	0.1 U	0.1 U	0.1 U	0.1 U	0.05 JB	0.1 U	0.13

Detections in bold

Values in red indicate an exceedance of the Project Action Limit (PAL)

U: This analyte was not detected in the sample. The numeric value represents the sample quantitation / detection limit.

J: The positive result reported for this analyte is a quantitative estimate.

B: The analyte was detected above the reporting limits in the associated method blank.

E: Analyte concentration is greater than the reporting limit; however, the reported concentration should be considered estimated.

NS: Not Sampled

µg/L: micrograms per liter

PAL: Project Action Limit

(a) Analysis was re-run due to B qualifier.

(b) HI17-MWS was not sampled due to trace NAPL.

(c) HI20-MWS was within an active demolition area and could not be safely accessed.

	Well not installed
	Well damaged/abandoned

**Table 3 - Parcel B14 2nd Half 2024 IM Report
Summary of Organics Detected in B24 Groundwater**

Parameter	Units	PAL	B24-001-MWS	B24-002-MWS	TS03-PDP002
			8/29/2024	8/26/2024	8/26/2024
SVOCs					
2-Methylnaphthalene	µg/L	36	0.09 J	0.09 J	<i>0.1 U</i>
Acenaphthene	µg/L	530	0.08 J	0.14	<i>0.1 U</i>
Acenaphthylene	µg/L	530	<i>0.1 U</i>	0.05 J	<i>0.1 U</i>
Anthracene	µg/L	1,800	0.03 J	ND	<i>0.1 U</i>
Fluoranthene	µg/L	800	0.08 J	0.07 J	<i>0.1 U</i>
Fluorene	µg/L	290	0.08 J	0.11	<i>0.1 U</i>
Naphthalene	µg/L	0.12	0.53	0.69	0.04 J
Phenanthrene	µg/L	--	0.15	0.08	<i>10 U</i>
Phenol	µg/L	5,800	1.7 J	1.4 J	0.96 J
Pyrene	µg/L	120	0.06 J	0.07 J	<i>0.1 U</i>
VOCs					
Acetone	µg/L	14,000	<i>5 U</i>	2.8 J	<i>5 U</i>
Carbon Disulfide	µg/L	810	<i>5 U</i>	0.73 J	<i>5 U</i>
Toulene	µg/L	1,000	<i>0.75 U</i>	0.52 J	<i>0.75 U</i>

Detections in bold

Values in red indicate an exceedance of the groundwater Project Action Limit (PAL)

U: This analyte was not detected in the sample. The numeric value represents the sample quantitation/detection limit.

J: The positive result reported for this analyte is a quantitative estimate.

µg/L: micrograms per liter

PAL: Project Action Limit

**Table 4 - Parcel B14 2nd Half 2024 IM Report
Summary of Organics Detected in B14 Surface Water**

Parameter	Units	EPA Region 4 Surface Water (Freshwater, Chronic)	TMC-BEND	TMC- OUTLET	TMC-RAIL BRIDGE	TMC-TM04
SVOCs by EPA 8270D / PAHs by EPA 8270D SIM						
2-Methylnaphthalene	µg/L	72	0.05 J	<i>0.1 U</i>	<i>0.1 U</i>	<i>0.1 U</i>
Acenaphthene	µg/L	56	0.06 J	0.08 J	0.08 J	0.06 J
Fluoranthene	µg/L	7.1	<i>0.1 U</i>	0.05 J	0.04 J	<i>0.1 U</i>
Fluorene	µg/L	39	0.06 J	0.06 J	0.07 J	0.05 J
Naphthalene	µg/L	21	0.32	<i>0.1 U</i>	0.04 J	<i>0.1 U</i>
Phenanthrene	µg/L	2.3	0.07	0.07	0.1	0.05
Phenol	µg/L	160	<i>5 U</i>	3.5 J	<i>5 U</i>	5.1
VOCs by EPA 8260C						
Acetone	µg/L	1700	6.2	5.4	8.9	4.7 J
Benzene	µg/L	160	<i>0.5 U</i>	<i>0.5 U</i>	0.22 J	<i>0.5 U</i>
Carbon disulfide	µg/L	15	0.35 J	17	<i>5 U</i>	0.8 J
Chloroform	µg/L	140	0.35 J	1.3	<i>0.75 U</i>	0.45 J

Notes:

Detections in bold

Exceedances of EPA Region 4 Surface Water Screening Levels (freshwater, chronic) in red

U: This analyte was not detected in the sample. The numeric value represents the sample quantitation/detection limit

J: Estimated Value. The Target analyte concentration is below the quantitation limit (RL), but above the Method Detection Limit (MDL).

µg/L: micrograms per liter

**Table 5 - Parcel B14 2nd Half 2024 IM Report
Parcel B14 Historic Surface Water Sampling**

Benzene (µg/L)																			
Location	GW PAL	EPA Region 4 SW	2/4/22	2/9/22	3/21/22	4/19/22	5/18/22	6/16/22	7/29/22	8/23/22	9/19/22	10/26/22	1/12/23	4/6/23	7/18/23	10/4/23	2/8/24	6/11/24	8/26/24
TMC-Bend	5	160	NS	NS	0.50 U	0.5 U	0.50 U	0.50 U	0.5 U	0.50 U	0.21 J	0.50 U	0.50 U	0.5 U	0.25 J	0.5 U	0.38 J	0.19 J	0.5 U
TMC-Outlet	5	160	1 U	1.84	0.50 U	0.54	0.82	0.50 U	0.17 J	2.1	0.05 U	1.0	0.20 J	0.62	0.62	0.5 U	0.50	0.27 J	0.5 U
TMC-Rail Bridge	5	160	5 U	1 U	0.50 U	0.5 U	0.50 U	0.50 U	0.5 U	0.16 J	0.22 J	0.50 U	0.50 J	0.5 U	0.22 J	0.5 U	0.38 J	0.21 J	0.22 J
TMC-TM04	5	160	5 U	3.49	0.16 J	2.0	1.1	0.50 U	0.5 U	1.2	0.29 J	0.50 U	0.20 J	0.51	0.51	0.5 U	0.52	0.25 J	0.5 U

Naphthalene (µg/L)																			
Location	GW PAL	EPA Region 4 SW	2/4/22	2/9/22	3/21/22	4/19/22	5/18/22	6/16/22	7/29/22	8/23/22	9/19/22	10/26/22	1/12/23	4/6/23	7/18/23	10/4/23	2/8/24	6/11/24	8/26/24
TMC-Bend	0.12	21	NS	NS	0.03 J	0.62	0.06 J	0.06 J	0.17	0.10 U	0.11	0.10 U	0.10 U	0.15	0.15	0.13	2 U	0.1 U	0.32
TMC-Outlet	0.12	21	1 U	3.33	0.03 J	1.2	0.10 U	0.10 U	0.22	0.10 U	0.06 J	0.10 U	0.10 U	0.1 U	0.1 U	0.1 U	0.88 J	0.1 U	0.1 U
TMC-Rail Bridge	0.12	21	1 U	1 U	0.10 U	0.58	0.05 J	0.10 U	1.1	0.10 U	0.11	0.06 J	0.10 U	0.1 U	0.27	0.08 J	1.4 J	0.07 J	0.04 J
TMC-TM04	0.12	21	1 U	1.3	0.03 J	0.79	0.10 U	0.12	0.12	0.10 U	0.14	0.10 U	0.10 U	0.34	0.34	0.1 U	0.63 J	0.1 U	0.1 U

Detections in bold

Exceedances of EPA Region 4 Surface Water Screening Levels (freshwater, chronic) in red

U: This analyte was not detected in the sample. The numeric value represents the sample quantitation / detection limit.

J: The positive result reported for this analyte is a quantitative estimate.

B: The analyte was detected above the reporting limits in the associated method blank.

µg/L: micrograms per liter

PAL: Project Action Limit

Starting in March 2022, naphthalene was analyzed by SIM PAH.

**Table 6 - Parcel B14 2nd Half 2024 IM Report
Parcel B14 Groundwater Elevation**

Well Designation	Installation Date	Top of Casing (ft, AMSL)	8/7/2024	
			Depth to Water (ft)	Groundwater Elevation (ft, AMSL)
B24-001-MWS	4/27/2022	11.30	10.48	0.82
B24-002-MWS	4/28/2022	12.43	10.63	1.80
HI02R-PZM006 (b)	1/26/2024	11.61	8.44	3.17
HI04-PZM006 (c)	9/26/2001	12.26	NM	NM
HI07R-PZM005 (b)	1/25/2024	11.65	9.60	2.05
HI10-MWS	12/21/2021	12.50	12.11	0.39
HI11-MWS	12/30/2021	13.08	15.62	-2.54
HI12-MWS	12/30/2021	11.54	11.02	0.52
HI13-MWS	12/22/2021	11.29	11.10	0.19
HI14-MWS	12/22/2021	14.65	14.51	0.14
HI15-MWS	1/3/2022	13.43	13.03	0.40
HI16-MWS	12/22/2021	10.53	10.06	0.47
HI17-MWS (a)	12/23/2021	10.11	10.71	-0.60
HI18-MWS	12/23/2021	9.35	8.96	0.39
HI19-MWS	12/29/2021	10.18	9.30	0.88
HI20R-MWS (a)	1/25/2024	11.49	DRY	DRY
HI20R2-MWS	3/20/2024	(c)	18.13	NA
HI21-MWS	4/27/2022	12.56	11.65	0.91
HI22-MWS	12/30/2021	11.49	8.64	2.85
TM04-PZM006	3/25/1983	12.00	12.98	-0.98
TM08R-PZM007	11/19/2021	9.92	9.49	0.43
TS03-PDP002	8/11/2000	13.53	12.64	0.89

Notes:

- (a) Absorbent socks utilized to address minor NAPL impacts.
- (b) Replacement well installed in January 2024 and surveyed in March 2024.
- (c) Well abandoned.

ft, AMSL = feet above mean sea level

**Table 7 - Parcel B14 2nd Half 2024 IM Report
Parcel B14 NAPL Gauging**

Sample ID	Installation Date	Well Total Depth (Feet bgs)	Screen Interval (Feet bgs)	Riser Stick-Up (Feet)	9/12/2024			10/16/2024			11/6/2024			12/4/2024		
					Depth to NAPL (Feet TOC)	Depth to Water (Feet TOC)	NAPL Thickness (Feet)	Depth to NAPL (Feet TOC)	Depth to Water (Feet TOC)	NAPL Thickness (Feet)	Depth to NAPL (Feet TOC)	Depth to Water (Feet TOC)	NAPL Thickness (Feet)	Depth to NAPL (Feet TOC)	Depth to Water (Feet TOC)	NAPL Thickness (Feet)
HI17-MWS	12/23/2021	20	5-20	2.13	trace	10.23	-	9.4	9.42	0.02	NM	NM	-	trace	10.41	-
HI20R-MWS	1/25/2024	15	5-15	3	trace	10.89	-	NM	NM	-	trace	10.43	-	NM	NM	-

HI17-MWS: Absorbent sock deployed.

HI20R-MWS: Absorbent sock deployed.

HI17-MWS: Absorbnet sock deployed.

HI20R-MWS: Absorbent sock removed; 1/2 saturated with product.

HI17-MWS: Absorbent sock removed; 1/2 saturated with product.

HI20R-MWS: Absorbent sock deployed.

HI17-MWS: Absorbent sock deployed.

HI20R-MWS: Absorbent sock removed; 1/2 saturated with product.

NM = Not Measured

SHADED = NAPL Detection

bgs = below ground surface

TOC = Top of Casing

APPENDIX A



ANALYTICAL REPORT

Lab Number:	L2448657
Client:	Tradepoint Atlantic 1600 Sparrows Point Boulevard Baltimore, MD 21219
ATTN:	Robert Tworkowski
Phone:	(443) 649-5073
Project Name:	B14 GWS
Project Number:	Not Specified
Report Date:	09/04/24

The original project report/data package is held by Alpha Analytical. This report/data package is paginated and should be reproduced only in its entirety. Alpha Analytical holds no responsibility for results and/or data that are not consistent with the original.

Certifications & Approvals: MA (M-MA086), NH NELAP (2064), CT (PH-0826), IL (200077), IN (C-MA-03), KY (KY98045), ME (MA00086), MD (348), NJ (MA935), NY (11148), NC (25700/666), OR (MA-1316), PA (68-03671), RI (LAO00065), TX (T104704476), VT (VT-0935), VA (460195), USDA (Permit #525-23-122-91930A1).

Eight Walkup Drive, Westborough, MA 01581-1019
508-898-9220 (Fax) 508-898-9193 800-624-9220 - www.alphalab.com



Project Name: B14 GWS
Project Number: Not Specified

Lab Number: L2448657
Report Date: 09/04/24

Alpha Sample ID	Client ID	Matrix	Sample Location	Collection Date/Time	Receive Date
L2448657-01	B24-002-MWS	WATER	B14	08/26/24 09:10	08/26/24
L2448657-02	TS03-PDP002	WATER	B14	08/26/24 10:15	08/26/24
L2448657-03	HI02R-PZM006	WATER	B14	08/26/24 12:17	08/26/24
L2448657-04	H18-MWS	WATER	B14	08/26/24 14:05	08/26/24
L2448657-05	HI07R-PZM005	WATER	B14	08/26/24 13:10	08/26/24
L2448657-06	TM08R-PZM007	WATER	B14	08/26/24 14:46	08/26/24
L2448657-07	HI16-MWS	WATER	B14	08/26/24 15:20	08/26/24
L2448657-08	TRIP BLANK	WATER	B14	08/26/24 00:00	08/26/24

Project Name: B14 GWS
Project Number: Not Specified

Lab Number: L2448657
Report Date: 09/04/24

Case Narrative

The samples were received in accordance with the Chain of Custody and no significant deviations were encountered during the preparation or analysis unless otherwise noted. Sample Receipt, Container Information, and the Chain of Custody are located at the back of the report.

Results contained within this report relate only to the samples submitted under this Alpha Lab Number and meet NELAP requirements for all NELAP accredited parameters unless otherwise noted in the following narrative. The data presented in this report is organized by parameter (i.e. VOC, SVOC, etc.). Sample specific Quality Control data (i.e. Surrogate Spike Recovery) is reported at the end of the target analyte list for each individual sample, followed by the Laboratory Batch Quality Control at the end of each parameter. Tentatively Identified Compounds (TICs), if requested, are reported for compounds identified to be present and are not part of the method/program Target Compound List, even if only a subset of the TCL are being reported. If a sample was re-analyzed or re-extracted due to a required quality control corrective action and if both sets of data are reported, the Laboratory ID of the re-analysis or re-extraction is designated with an "R" or "RE", respectively.

When multiple Batch Quality Control elements are reported (e.g. more than one LCS), the associated samples for each element are noted in the grey shaded header line of each data table. Any Laboratory Batch, Sample Specific % recovery or RPD value that is outside the listed Acceptance Criteria is bolded in the report. In reference to questions H (CAM) or 4 (RCP) when "NO" is checked, the performance criteria for CAM and RCP methods allow for some quality control failures to occur and still be within method compliance. In these instances, the specific failure is not narrated but noted in the associated QC Outlier Summary Report, located directly after the Case Narrative. QC information is also incorporated in the Data Usability Assessment table (Format 11) of our Data Merger tool, where it can be reviewed in conjunction with the sample result, associated regulatory criteria and any associated data usability implications.

Soil/sediments and solids are reported on a dry weight basis unless otherwise noted. Tissues are reported "as received" or on a wet weight basis, unless otherwise noted. Definitions of all data qualifiers and acronyms used in this report are provided in the Glossary located at the back of the report.

HOLD POLICY - For samples submitted on hold, Alpha's policy is to hold samples (with the exception of Air canisters) free of charge for 21 calendar days from the date the project is completed. After 21 calendar days, we will dispose of all samples submitted including those put on hold unless you have contacted your Alpha Project Manager and made arrangements for Alpha to continue to hold the samples. Air canisters will be disposed after 3 business days from the date the project is completed.

Please contact Project Management at 800-624-9220 with any questions.

Project Name: B14 GWS
Project Number: Not Specified

Lab Number: L2448657
Report Date: 09/04/24

Case Narrative (continued)

Report Submission

All non-detect (ND) or estimated concentrations (J-qualified) have been quantitated to the limit noted in the MDL column.

I, the undersigned, attest under the pains and penalties of perjury that, to the best of my knowledge and belief and based upon my personal inquiry of those responsible for providing the information contained in this analytical report, such information is accurate and complete. This certificate of analysis is not complete unless this page accompanies any and all pages of this report.

Authorized Signature:

Tiffani Morrissey - Tiffani Morrissey

Title: Technical Director/Representative

Date: 09/04/24

ORGANICS

VOLATILES

Project Name: B14 GWS
Project Number: Not Specified

Lab Number: L2448657
Report Date: 09/04/24

SAMPLE RESULTS

Lab ID: L2448657-01
 Client ID: B24-002-MWS
 Sample Location: B14

Date Collected: 08/26/24 09:10
 Date Received: 08/26/24
 Field Prep: Not Specified

Sample Depth:

Matrix: Water
 Analytical Method: 1,8260D
 Analytical Date: 08/29/24 14:52
 Analyst: MAG

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Dichlorodifluoromethane	ND		ug/l	5.0	0.24	1
Chloromethane	ND		ug/l	2.5	0.20	1
Vinyl chloride	ND		ug/l	1.0	0.07	1
Bromomethane	ND		ug/l	1.0	0.26	1
Chloroethane	ND		ug/l	1.0	0.13	1
Trichlorofluoromethane	ND		ug/l	2.5	0.16	1
1,1-Dichloroethene	ND		ug/l	0.50	0.17	1
Carbon disulfide	0.73	J	ug/l	5.0	0.30	1
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND		ug/l	2.5	0.15	1
Methylene chloride	ND		ug/l	2.5	0.68	1
Acetone	2.8	J	ug/l	5.0	1.5	1
trans-1,2-Dichloroethene	ND		ug/l	0.75	0.16	1
Methyl Acetate	ND		ug/l	2.0	0.23	1
Methyl tert butyl ether	ND		ug/l	1.0	0.17	1
1,1-Dichloroethane	ND		ug/l	0.75	0.21	1
cis-1,2-Dichloroethene	ND		ug/l	0.50	0.19	1
Cyclohexane	ND		ug/l	10	0.27	1
Chloroform	ND		ug/l	0.75	0.22	1
Carbon tetrachloride	ND		ug/l	0.50	0.13	1
1,1,1-Trichloroethane	ND		ug/l	0.50	0.16	1
2-Butanone	ND		ug/l	5.0	1.9	1
Benzene	ND		ug/l	0.50	0.16	1
1,2-Dichloroethane	ND		ug/l	0.50	0.13	1
Trichloroethene	ND		ug/l	0.50	0.18	1
1,2-Dichloropropane	ND		ug/l	1.0	0.14	1
Bromodichloromethane	ND		ug/l	0.50	0.19	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	0.14	1
Toluene	0.52	J	ug/l	0.75	0.20	1

Project Name: B14 GWS
Project Number: Not Specified

Lab Number: L2448657
Report Date: 09/04/24

SAMPLE RESULTS

Lab ID: L2448657-01
 Client ID: B24-002-MWS
 Sample Location: B14

Date Collected: 08/26/24 09:10
 Date Received: 08/26/24
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Tetrachloroethene	ND		ug/l	0.50	0.18	1
4-Methyl-2-pentanone	ND		ug/l	5.0	0.42	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	0.16	1
1,3-Dichloropropene, Total	ND		ug/l	0.50	0.14	1
1,1,2-Trichloroethane	ND		ug/l	0.75	0.14	1
Dibromochloromethane	ND		ug/l	0.50	0.15	1
1,2-Dibromoethane	ND		ug/l	2.0	0.19	1
2-Hexanone	ND		ug/l	5.0	0.52	1
Chlorobenzene	ND		ug/l	0.50	0.18	1
Ethylbenzene	ND		ug/l	0.50	0.17	1
p/m-Xylene	ND		ug/l	1.0	0.33	1
o-Xylene	ND		ug/l	1.0	0.39	1
Xylenes, Total	ND		ug/l	1.0	0.33	1
Styrene	ND		ug/l	1.0	0.36	1
Bromoform	ND		ug/l	2.0	0.25	1
Isopropylbenzene	ND		ug/l	0.50	0.19	1
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	0.17	1
1,3-Dichlorobenzene	ND		ug/l	2.5	0.19	1
1,4-Dichlorobenzene	ND		ug/l	2.5	0.19	1
1,2-Dichlorobenzene	ND		ug/l	2.5	0.18	1
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	0.35	1
1,2,4-Trichlorobenzene	ND		ug/l	2.5	0.22	1
1,2,3-Trichlorobenzene	ND		ug/l	2.5	0.23	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	107		70-130
Toluene-d8	99		70-130
4-Bromofluorobenzene	99		70-130
Dibromofluoromethane	107		70-130

Project Name: B14 GWS
Project Number: Not Specified

Lab Number: L2448657
Report Date: 09/04/24

SAMPLE RESULTS

Lab ID: L2448657-01
 Client ID: B24-002-MWS
 Sample Location: B14

Date Collected: 08/26/24 09:10
 Date Received: 08/26/24
 Field Prep: Not Specified

Sample Depth:

Matrix: Water
 Analytical Method: 1,8260D-SIM(M)
 Analytical Date: 08/29/24 14:52
 Analyst: MAG

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
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Volatile Organics by GC/MS-SIM - Westborough Lab						
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1,1,2,2-Tetrachloroethane	ND		ug/l	0.050	0.006	1
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Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	108		70-130
4-Bromofluorobenzene	96		70-130

Project Name: B14 GWS
Project Number: Not Specified

Lab Number: L2448657
Report Date: 09/04/24

SAMPLE RESULTS

Lab ID: L2448657-02
 Client ID: TS03-PDP002
 Sample Location: B14

Date Collected: 08/26/24 10:15
 Date Received: 08/26/24
 Field Prep: Not Specified

Sample Depth:

Matrix: Water
 Analytical Method: 1,8260D
 Analytical Date: 08/29/24 14:25
 Analyst: MAG

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Dichlorodifluoromethane	ND		ug/l	5.0	0.24	1
Chloromethane	ND		ug/l	2.5	0.20	1
Vinyl chloride	ND		ug/l	1.0	0.07	1
Bromomethane	ND		ug/l	1.0	0.26	1
Chloroethane	ND		ug/l	1.0	0.13	1
Trichlorofluoromethane	ND		ug/l	2.5	0.16	1
1,1-Dichloroethene	ND		ug/l	0.50	0.17	1
Carbon disulfide	ND		ug/l	5.0	0.30	1
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND		ug/l	2.5	0.15	1
Methylene chloride	ND		ug/l	2.5	0.68	1
Acetone	ND		ug/l	5.0	1.5	1
trans-1,2-Dichloroethene	ND		ug/l	0.75	0.16	1
Methyl Acetate	ND		ug/l	2.0	0.23	1
Methyl tert butyl ether	ND		ug/l	1.0	0.17	1
1,1-Dichloroethane	ND		ug/l	0.75	0.21	1
cis-1,2-Dichloroethene	ND		ug/l	0.50	0.19	1
Cyclohexane	ND		ug/l	10	0.27	1
Chloroform	ND		ug/l	0.75	0.22	1
Carbon tetrachloride	ND		ug/l	0.50	0.13	1
1,1,1-Trichloroethane	ND		ug/l	0.50	0.16	1
2-Butanone	ND		ug/l	5.0	1.9	1
Benzene	ND		ug/l	0.50	0.16	1
1,2-Dichloroethane	ND		ug/l	0.50	0.13	1
Trichloroethene	ND		ug/l	0.50	0.18	1
1,2-Dichloropropane	ND		ug/l	1.0	0.14	1
Bromodichloromethane	ND		ug/l	0.50	0.19	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	0.14	1
Toluene	ND		ug/l	0.75	0.20	1

Project Name: B14 GWS
Project Number: Not Specified

Lab Number: L2448657
Report Date: 09/04/24

SAMPLE RESULTS

Lab ID: L2448657-02
 Client ID: TS03-PDP002
 Sample Location: B14

Date Collected: 08/26/24 10:15
 Date Received: 08/26/24
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Tetrachloroethene	ND		ug/l	0.50	0.18	1
4-Methyl-2-pentanone	ND		ug/l	5.0	0.42	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	0.16	1
1,3-Dichloropropene, Total	ND		ug/l	0.50	0.14	1
1,1,2-Trichloroethane	ND		ug/l	0.75	0.14	1
Dibromochloromethane	ND		ug/l	0.50	0.15	1
1,2-Dibromoethane	ND		ug/l	2.0	0.19	1
2-Hexanone	ND		ug/l	5.0	0.52	1
Chlorobenzene	ND		ug/l	0.50	0.18	1
Ethylbenzene	ND		ug/l	0.50	0.17	1
p/m-Xylene	ND		ug/l	1.0	0.33	1
o-Xylene	ND		ug/l	1.0	0.39	1
Xylenes, Total	ND		ug/l	1.0	0.33	1
Styrene	ND		ug/l	1.0	0.36	1
Bromoform	ND		ug/l	2.0	0.25	1
Isopropylbenzene	ND		ug/l	0.50	0.19	1
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	0.17	1
1,3-Dichlorobenzene	ND		ug/l	2.5	0.19	1
1,4-Dichlorobenzene	ND		ug/l	2.5	0.19	1
1,2-Dichlorobenzene	ND		ug/l	2.5	0.18	1
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	0.35	1
1,2,4-Trichlorobenzene	ND		ug/l	2.5	0.22	1
1,2,3-Trichlorobenzene	ND		ug/l	2.5	0.23	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	109		70-130
Toluene-d8	98		70-130
4-Bromofluorobenzene	98		70-130
Dibromofluoromethane	111		70-130

Project Name: B14 GWS
Project Number: Not Specified

Lab Number: L2448657
Report Date: 09/04/24

SAMPLE RESULTS

Lab ID: L2448657-02
 Client ID: TS03-PDP002
 Sample Location: B14

Date Collected: 08/26/24 10:15
 Date Received: 08/26/24
 Field Prep: Not Specified

Sample Depth:

Matrix: Water
 Analytical Method: 1,8260D-SIM(M)
 Analytical Date: 08/29/24 14:25
 Analyst: MAG

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
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Volatile Organics by GC/MS-SIM - Westborough Lab						
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1,1,2,2-Tetrachloroethane	ND		ug/l	0.050	0.006	1
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Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	108		70-130
4-Bromofluorobenzene	96		70-130

Project Name: B14 GWS
Project Number: Not Specified

Lab Number: L2448657
Report Date: 09/04/24

SAMPLE RESULTS

Lab ID: L2448657-03
 Client ID: HI02R-PZM006
 Sample Location: B14

Date Collected: 08/26/24 12:17
 Date Received: 08/26/24
 Field Prep: Not Specified

Sample Depth:

Matrix: Water
 Analytical Method: 1,8260D
 Analytical Date: 08/29/24 13:59
 Analyst: MAG

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Dichlorodifluoromethane	ND		ug/l	5.0	0.24	1
Chloromethane	ND		ug/l	2.5	0.20	1
Vinyl chloride	ND		ug/l	1.0	0.07	1
Bromomethane	ND		ug/l	1.0	0.26	1
Chloroethane	ND		ug/l	1.0	0.13	1
Trichlorofluoromethane	ND		ug/l	2.5	0.16	1
1,1-Dichloroethene	ND		ug/l	0.50	0.17	1
Carbon disulfide	ND		ug/l	5.0	0.30	1
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND		ug/l	2.5	0.15	1
Methylene chloride	ND		ug/l	2.5	0.68	1
Acetone	1.7	J	ug/l	5.0	1.5	1
trans-1,2-Dichloroethene	ND		ug/l	0.75	0.16	1
Methyl Acetate	ND		ug/l	2.0	0.23	1
Methyl tert butyl ether	ND		ug/l	1.0	0.17	1
1,1-Dichloroethane	ND		ug/l	0.75	0.21	1
cis-1,2-Dichloroethene	ND		ug/l	0.50	0.19	1
Cyclohexane	ND		ug/l	10	0.27	1
Chloroform	ND		ug/l	0.75	0.22	1
Carbon tetrachloride	ND		ug/l	0.50	0.13	1
1,1,1-Trichloroethane	ND		ug/l	0.50	0.16	1
2-Butanone	ND		ug/l	5.0	1.9	1
Benzene	0.31	J	ug/l	0.50	0.16	1
1,2-Dichloroethane	ND		ug/l	0.50	0.13	1
Trichloroethene	ND		ug/l	0.50	0.18	1
1,2-Dichloropropane	ND		ug/l	1.0	0.14	1
Bromodichloromethane	ND		ug/l	0.50	0.19	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	0.14	1
Toluene	ND		ug/l	0.75	0.20	1

Project Name: B14 GWS
Project Number: Not Specified

Lab Number: L2448657
Report Date: 09/04/24

SAMPLE RESULTS

Lab ID: L2448657-03
 Client ID: HI02R-PZM006
 Sample Location: B14

Date Collected: 08/26/24 12:17
 Date Received: 08/26/24
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Tetrachloroethene	ND		ug/l	0.50	0.18	1
4-Methyl-2-pentanone	ND		ug/l	5.0	0.42	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	0.16	1
1,3-Dichloropropene, Total	ND		ug/l	0.50	0.14	1
1,1,2-Trichloroethane	ND		ug/l	0.75	0.14	1
Dibromochloromethane	ND		ug/l	0.50	0.15	1
1,2-Dibromoethane	ND		ug/l	2.0	0.19	1
2-Hexanone	ND		ug/l	5.0	0.52	1
Chlorobenzene	ND		ug/l	0.50	0.18	1
Ethylbenzene	ND		ug/l	0.50	0.17	1
p/m-Xylene	ND		ug/l	1.0	0.33	1
o-Xylene	ND		ug/l	1.0	0.39	1
Xylenes, Total	ND		ug/l	1.0	0.33	1
Styrene	ND		ug/l	1.0	0.36	1
Bromoform	ND		ug/l	2.0	0.25	1
Isopropylbenzene	ND		ug/l	0.50	0.19	1
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	0.17	1
1,3-Dichlorobenzene	ND		ug/l	2.5	0.19	1
1,4-Dichlorobenzene	ND		ug/l	2.5	0.19	1
1,2-Dichlorobenzene	ND		ug/l	2.5	0.18	1
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	0.35	1
1,2,4-Trichlorobenzene	ND		ug/l	2.5	0.22	1
1,2,3-Trichlorobenzene	ND		ug/l	2.5	0.23	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	108		70-130
Toluene-d8	100		70-130
4-Bromofluorobenzene	99		70-130
Dibromofluoromethane	107		70-130

Project Name: B14 GWS
Project Number: Not Specified

Lab Number: L2448657
Report Date: 09/04/24

SAMPLE RESULTS

Lab ID: L2448657-03
 Client ID: HI02R-PZM006
 Sample Location: B14

Date Collected: 08/26/24 12:17
 Date Received: 08/26/24
 Field Prep: Not Specified

Sample Depth:

Matrix: Water
 Analytical Method: 1,8260D-SIM(M)
 Analytical Date: 08/29/24 13:59
 Analyst: MAG

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
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Volatile Organics by GC/MS-SIM - Westborough Lab						
1,1,2,2-Tetrachloroethane	ND		ug/l	0.050	0.006	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	108		70-130
4-Bromofluorobenzene	97		70-130

Project Name: B14 GWS
Project Number: Not Specified

Lab Number: L2448657
Report Date: 09/04/24

SAMPLE RESULTS

Lab ID: L2448657-04
 Client ID: H18-MWS
 Sample Location: B14

Date Collected: 08/26/24 14:05
 Date Received: 08/26/24
 Field Prep: Not Specified

Sample Depth:

Matrix: Water
 Analytical Method: 1,8260D
 Analytical Date: 08/29/24 13:32
 Analyst: MAG

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Dichlorodifluoromethane	ND		ug/l	5.0	0.24	1
Chloromethane	ND		ug/l	2.5	0.20	1
Vinyl chloride	ND		ug/l	1.0	0.07	1
Bromomethane	ND		ug/l	1.0	0.26	1
Chloroethane	ND		ug/l	1.0	0.13	1
Trichlorofluoromethane	ND		ug/l	2.5	0.16	1
1,1-Dichloroethene	ND		ug/l	0.50	0.17	1
Carbon disulfide	ND		ug/l	5.0	0.30	1
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND		ug/l	2.5	0.15	1
Methylene chloride	ND		ug/l	2.5	0.68	1
Acetone	1.8	J	ug/l	5.0	1.5	1
trans-1,2-Dichloroethene	ND		ug/l	0.75	0.16	1
Methyl Acetate	ND		ug/l	2.0	0.23	1
Methyl tert butyl ether	ND		ug/l	1.0	0.17	1
1,1-Dichloroethane	ND		ug/l	0.75	0.21	1
cis-1,2-Dichloroethene	ND		ug/l	0.50	0.19	1
Cyclohexane	ND		ug/l	10	0.27	1
Chloroform	ND		ug/l	0.75	0.22	1
Carbon tetrachloride	ND		ug/l	0.50	0.13	1
1,1,1-Trichloroethane	ND		ug/l	0.50	0.16	1
2-Butanone	ND		ug/l	5.0	1.9	1
Benzene	0.16	J	ug/l	0.50	0.16	1
1,2-Dichloroethane	ND		ug/l	0.50	0.13	1
Trichloroethene	ND		ug/l	0.50	0.18	1
1,2-Dichloropropane	ND		ug/l	1.0	0.14	1
Bromodichloromethane	ND		ug/l	0.50	0.19	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	0.14	1
Toluene	ND		ug/l	0.75	0.20	1

Project Name: B14 GWS
Project Number: Not Specified

Lab Number: L2448657
Report Date: 09/04/24

SAMPLE RESULTS

Lab ID: L2448657-04
Client ID: H18-MWS
Sample Location: B14

Date Collected: 08/26/24 14:05
Date Received: 08/26/24
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Tetrachloroethene	ND		ug/l	0.50	0.18	1
4-Methyl-2-pentanone	ND		ug/l	5.0	0.42	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	0.16	1
1,3-Dichloropropene, Total	ND		ug/l	0.50	0.14	1
1,1,2-Trichloroethane	ND		ug/l	0.75	0.14	1
Dibromochloromethane	ND		ug/l	0.50	0.15	1
1,2-Dibromoethane	ND		ug/l	2.0	0.19	1
2-Hexanone	ND		ug/l	5.0	0.52	1
Chlorobenzene	ND		ug/l	0.50	0.18	1
Ethylbenzene	ND		ug/l	0.50	0.17	1
p/m-Xylene	ND		ug/l	1.0	0.33	1
o-Xylene	ND		ug/l	1.0	0.39	1
Xylenes, Total	ND		ug/l	1.0	0.33	1
Styrene	ND		ug/l	1.0	0.36	1
Bromoform	ND		ug/l	2.0	0.25	1
Isopropylbenzene	ND		ug/l	0.50	0.19	1
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	0.17	1
1,3-Dichlorobenzene	ND		ug/l	2.5	0.19	1
1,4-Dichlorobenzene	ND		ug/l	2.5	0.19	1
1,2-Dichlorobenzene	ND		ug/l	2.5	0.18	1
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	0.35	1
1,2,4-Trichlorobenzene	ND		ug/l	2.5	0.22	1
1,2,3-Trichlorobenzene	ND		ug/l	2.5	0.23	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	108		70-130
Toluene-d8	100		70-130
4-Bromofluorobenzene	99		70-130
Dibromofluoromethane	109		70-130

Project Name: B14 GWS
Project Number: Not Specified

Lab Number: L2448657
Report Date: 09/04/24

SAMPLE RESULTS

Lab ID: L2448657-04
 Client ID: H18-MWS
 Sample Location: B14

Date Collected: 08/26/24 14:05
 Date Received: 08/26/24
 Field Prep: Not Specified

Sample Depth:

Matrix: Water
 Analytical Method: 1,8260D-SIM(M)
 Analytical Date: 08/29/24 13:32
 Analyst: MAG

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
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Volatile Organics by GC/MS-SIM - Westborough Lab						
1,1,2,2-Tetrachloroethane	ND		ug/l	0.050	0.006	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	108		70-130
4-Bromofluorobenzene	96		70-130

Project Name: B14 GWS
Project Number: Not Specified

Lab Number: L2448657
Report Date: 09/04/24

SAMPLE RESULTS

Lab ID: L2448657-05
 Client ID: HI07R-PZM005
 Sample Location: B14

Date Collected: 08/26/24 13:10
 Date Received: 08/26/24
 Field Prep: Not Specified

Sample Depth:

Matrix: Water
 Analytical Method: 1,8260D
 Analytical Date: 08/29/24 13:05
 Analyst: MAG

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Dichlorodifluoromethane	ND		ug/l	5.0	0.24	1
Chloromethane	ND		ug/l	2.5	0.20	1
Vinyl chloride	ND		ug/l	1.0	0.07	1
Bromomethane	ND		ug/l	1.0	0.26	1
Chloroethane	ND		ug/l	1.0	0.13	1
Trichlorofluoromethane	ND		ug/l	2.5	0.16	1
1,1-Dichloroethene	ND		ug/l	0.50	0.17	1
Carbon disulfide	ND		ug/l	5.0	0.30	1
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND		ug/l	2.5	0.15	1
Methylene chloride	ND		ug/l	2.5	0.68	1
Acetone	2.1	J	ug/l	5.0	1.5	1
trans-1,2-Dichloroethene	ND		ug/l	0.75	0.16	1
Methyl Acetate	ND		ug/l	2.0	0.23	1
Methyl tert butyl ether	ND		ug/l	1.0	0.17	1
1,1-Dichloroethane	ND		ug/l	0.75	0.21	1
cis-1,2-Dichloroethene	ND		ug/l	0.50	0.19	1
Cyclohexane	ND		ug/l	10	0.27	1
Chloroform	ND		ug/l	0.75	0.22	1
Carbon tetrachloride	ND		ug/l	0.50	0.13	1
1,1,1-Trichloroethane	ND		ug/l	0.50	0.16	1
2-Butanone	ND		ug/l	5.0	1.9	1
Benzene	2.1		ug/l	0.50	0.16	1
1,2-Dichloroethane	ND		ug/l	0.50	0.13	1
Trichloroethene	ND		ug/l	0.50	0.18	1
1,2-Dichloropropane	ND		ug/l	1.0	0.14	1
Bromodichloromethane	ND		ug/l	0.50	0.19	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	0.14	1
Toluene	1.4		ug/l	0.75	0.20	1

Project Name: B14 GWS
Project Number: Not Specified

Lab Number: L2448657
Report Date: 09/04/24

SAMPLE RESULTS

Lab ID: L2448657-05
 Client ID: HI07R-PZM005
 Sample Location: B14

Date Collected: 08/26/24 13:10
 Date Received: 08/26/24
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Tetrachloroethene	ND		ug/l	0.50	0.18	1
4-Methyl-2-pentanone	ND		ug/l	5.0	0.42	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	0.16	1
1,3-Dichloropropene, Total	ND		ug/l	0.50	0.14	1
1,1,2-Trichloroethane	ND		ug/l	0.75	0.14	1
Dibromochloromethane	ND		ug/l	0.50	0.15	1
1,2-Dibromoethane	ND		ug/l	2.0	0.19	1
2-Hexanone	ND		ug/l	5.0	0.52	1
Chlorobenzene	ND		ug/l	0.50	0.18	1
Ethylbenzene	ND		ug/l	0.50	0.17	1
p/m-Xylene	0.87	J	ug/l	1.0	0.33	1
o-Xylene	ND		ug/l	1.0	0.39	1
Xylenes, Total	0.87	J	ug/l	1.0	0.33	1
Styrene	ND		ug/l	1.0	0.36	1
Bromoform	ND		ug/l	2.0	0.25	1
Isopropylbenzene	ND		ug/l	0.50	0.19	1
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	0.17	1
1,3-Dichlorobenzene	ND		ug/l	2.5	0.19	1
1,4-Dichlorobenzene	ND		ug/l	2.5	0.19	1
1,2-Dichlorobenzene	ND		ug/l	2.5	0.18	1
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	0.35	1
1,2,4-Trichlorobenzene	ND		ug/l	2.5	0.22	1
1,2,3-Trichlorobenzene	ND		ug/l	2.5	0.23	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	108		70-130
Toluene-d8	102		70-130
4-Bromofluorobenzene	100		70-130
Dibromofluoromethane	106		70-130

Project Name: B14 GWS
Project Number: Not Specified

Lab Number: L2448657
Report Date: 09/04/24

SAMPLE RESULTS

Lab ID: L2448657-05
 Client ID: HI07R-PZM005
 Sample Location: B14

Date Collected: 08/26/24 13:10
 Date Received: 08/26/24
 Field Prep: Not Specified

Sample Depth:

Matrix: Water
 Analytical Method: 1,8260D-SIM(M)
 Analytical Date: 08/29/24 13:05
 Analyst: MAG

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
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Volatile Organics by GC/MS-SIM - Westborough Lab						
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1,1,2,2-Tetrachloroethane	ND		ug/l	0.050	0.006	1
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Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	107		70-130
4-Bromofluorobenzene	96		70-130

Project Name: B14 GWS
Project Number: Not Specified

Lab Number: L2448657
Report Date: 09/04/24

SAMPLE RESULTS

Lab ID: L2448657-06
 Client ID: TM08R-PZM007
 Sample Location: B14

Date Collected: 08/26/24 14:46
 Date Received: 08/26/24
 Field Prep: Not Specified

Sample Depth:

Matrix: Water
 Analytical Method: 1,8260D
 Analytical Date: 08/30/24 12:35
 Analyst: TMS

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Dichlorodifluoromethane	ND		ug/l	5.0	0.24	1
Chloromethane	ND		ug/l	2.5	0.20	1
Vinyl chloride	ND		ug/l	1.0	0.07	1
Bromomethane	ND		ug/l	1.0	0.26	1
Chloroethane	ND		ug/l	1.0	0.13	1
Trichlorofluoromethane	ND		ug/l	2.5	0.16	1
1,1-Dichloroethene	ND		ug/l	0.50	0.17	1
Carbon disulfide	ND		ug/l	5.0	0.30	1
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND		ug/l	2.5	0.15	1
Methylene chloride	ND		ug/l	2.5	0.68	1
Acetone	ND		ug/l	5.0	1.5	1
trans-1,2-Dichloroethene	ND		ug/l	0.75	0.16	1
Methyl Acetate	ND		ug/l	2.0	0.23	1
Methyl tert butyl ether	ND		ug/l	1.0	0.17	1
1,1-Dichloroethane	ND		ug/l	0.75	0.21	1
cis-1,2-Dichloroethene	ND		ug/l	0.50	0.19	1
Cyclohexane	ND		ug/l	10	0.27	1
Chloroform	ND		ug/l	0.75	0.22	1
Carbon tetrachloride	ND		ug/l	0.50	0.13	1
1,1,1-Trichloroethane	ND		ug/l	0.50	0.16	1
2-Butanone	ND		ug/l	5.0	1.9	1
Benzene	ND		ug/l	0.50	0.16	1
1,2-Dichloroethane	ND		ug/l	0.50	0.13	1
Trichloroethene	ND		ug/l	0.50	0.18	1
1,2-Dichloropropane	ND		ug/l	1.0	0.14	1
Bromodichloromethane	ND		ug/l	0.50	0.19	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	0.14	1
Toluene	ND		ug/l	0.75	0.20	1

Project Name: B14 GWS
Project Number: Not Specified

Lab Number: L2448657
Report Date: 09/04/24

SAMPLE RESULTS

Lab ID: L2448657-06
 Client ID: TM08R-PZM007
 Sample Location: B14

Date Collected: 08/26/24 14:46
 Date Received: 08/26/24
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Tetrachloroethene	ND		ug/l	0.50	0.18	1
4-Methyl-2-pentanone	ND		ug/l	5.0	0.42	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	0.16	1
1,3-Dichloropropene, Total	ND		ug/l	0.50	0.14	1
1,1,2-Trichloroethane	ND		ug/l	0.75	0.14	1
Dibromochloromethane	ND		ug/l	0.50	0.15	1
1,2-Dibromoethane	ND		ug/l	2.0	0.19	1
2-Hexanone	ND		ug/l	5.0	0.52	1
Chlorobenzene	ND		ug/l	0.50	0.18	1
Ethylbenzene	ND		ug/l	0.50	0.17	1
p/m-Xylene	ND		ug/l	1.0	0.33	1
o-Xylene	ND		ug/l	1.0	0.39	1
Xylenes, Total	ND		ug/l	1.0	0.33	1
Styrene	ND		ug/l	1.0	0.36	1
Bromoform	ND		ug/l	2.0	0.25	1
Isopropylbenzene	ND		ug/l	0.50	0.19	1
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	0.17	1
1,3-Dichlorobenzene	ND		ug/l	2.5	0.19	1
1,4-Dichlorobenzene	ND		ug/l	2.5	0.19	1
1,2-Dichlorobenzene	ND		ug/l	2.5	0.18	1
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	0.35	1
1,2,4-Trichlorobenzene	ND		ug/l	2.5	0.22	1
1,2,3-Trichlorobenzene	ND		ug/l	2.5	0.23	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	109		70-130
Toluene-d8	99		70-130
4-Bromofluorobenzene	99		70-130
Dibromofluoromethane	108		70-130

Project Name: B14 GWS
Project Number: Not Specified

Lab Number: L2448657
Report Date: 09/04/24

SAMPLE RESULTS

Lab ID: L2448657-06
 Client ID: TM08R-PZM007
 Sample Location: B14

Date Collected: 08/26/24 14:46
 Date Received: 08/26/24
 Field Prep: Not Specified

Sample Depth:

Matrix: Water
 Analytical Method: 1,8260D-SIM(M)
 Analytical Date: 08/30/24 12:35
 Analyst: TMS

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
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Volatile Organics by GC/MS-SIM - Westborough Lab						
1,1,2,2-Tetrachloroethane	ND		ug/l	0.050	0.006	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	109		70-130
4-Bromofluorobenzene	96		70-130

Project Name: B14 GWS
Project Number: Not Specified

Lab Number: L2448657
Report Date: 09/04/24

SAMPLE RESULTS

Lab ID: L2448657-07
 Client ID: HI16-MWS
 Sample Location: B14

Date Collected: 08/26/24 15:20
 Date Received: 08/26/24
 Field Prep: Not Specified

Sample Depth:

Matrix: Water
 Analytical Method: 1,8260D
 Analytical Date: 08/30/24 13:02
 Analyst: TMS

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Dichlorodifluoromethane	ND		ug/l	5.0	0.24	1
Chloromethane	ND		ug/l	2.5	0.20	1
Vinyl chloride	ND		ug/l	1.0	0.07	1
Bromomethane	ND		ug/l	1.0	0.26	1
Chloroethane	ND		ug/l	1.0	0.13	1
Trichlorofluoromethane	ND		ug/l	2.5	0.16	1
1,1-Dichloroethene	ND		ug/l	0.50	0.17	1
Carbon disulfide	ND		ug/l	5.0	0.30	1
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND		ug/l	2.5	0.15	1
Methylene chloride	ND		ug/l	2.5	0.68	1
Acetone	ND		ug/l	5.0	1.5	1
trans-1,2-Dichloroethene	ND		ug/l	0.75	0.16	1
Methyl Acetate	ND		ug/l	2.0	0.23	1
Methyl tert butyl ether	ND		ug/l	1.0	0.17	1
1,1-Dichloroethane	ND		ug/l	0.75	0.21	1
cis-1,2-Dichloroethene	ND		ug/l	0.50	0.19	1
Cyclohexane	ND		ug/l	10	0.27	1
Chloroform	ND		ug/l	0.75	0.22	1
Carbon tetrachloride	ND		ug/l	0.50	0.13	1
1,1,1-Trichloroethane	ND		ug/l	0.50	0.16	1
2-Butanone	ND		ug/l	5.0	1.9	1
Benzene	ND		ug/l	0.50	0.16	1
1,2-Dichloroethane	ND		ug/l	0.50	0.13	1
Trichloroethene	ND		ug/l	0.50	0.18	1
1,2-Dichloropropane	ND		ug/l	1.0	0.14	1
Bromodichloromethane	ND		ug/l	0.50	0.19	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	0.14	1
Toluene	ND		ug/l	0.75	0.20	1

Project Name: B14 GWS
Project Number: Not Specified

Lab Number: L2448657
Report Date: 09/04/24

SAMPLE RESULTS

Lab ID: L2448657-07
 Client ID: HI16-MWS
 Sample Location: B14

Date Collected: 08/26/24 15:20
 Date Received: 08/26/24
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Tetrachloroethene	ND		ug/l	0.50	0.18	1
4-Methyl-2-pentanone	ND		ug/l	5.0	0.42	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	0.16	1
1,3-Dichloropropene, Total	ND		ug/l	0.50	0.14	1
1,1,2-Trichloroethane	ND		ug/l	0.75	0.14	1
Dibromochloromethane	ND		ug/l	0.50	0.15	1
1,2-Dibromoethane	ND		ug/l	2.0	0.19	1
2-Hexanone	ND		ug/l	5.0	0.52	1
Chlorobenzene	ND		ug/l	0.50	0.18	1
Ethylbenzene	ND		ug/l	0.50	0.17	1
p/m-Xylene	ND		ug/l	1.0	0.33	1
o-Xylene	ND		ug/l	1.0	0.39	1
Xylenes, Total	ND		ug/l	1.0	0.33	1
Styrene	ND		ug/l	1.0	0.36	1
Bromoform	ND		ug/l	2.0	0.25	1
Isopropylbenzene	ND		ug/l	0.50	0.19	1
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	0.17	1
1,3-Dichlorobenzene	ND		ug/l	2.5	0.19	1
1,4-Dichlorobenzene	ND		ug/l	2.5	0.19	1
1,2-Dichlorobenzene	ND		ug/l	2.5	0.18	1
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	0.35	1
1,2,4-Trichlorobenzene	ND		ug/l	2.5	0.22	1
1,2,3-Trichlorobenzene	ND		ug/l	2.5	0.23	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	107		70-130
Toluene-d8	99		70-130
4-Bromofluorobenzene	100		70-130
Dibromofluoromethane	109		70-130

Project Name: B14 GWS
Project Number: Not Specified

Lab Number: L2448657
Report Date: 09/04/24

SAMPLE RESULTS

Lab ID: L2448657-07
 Client ID: HI16-MWS
 Sample Location: B14

Date Collected: 08/26/24 15:20
 Date Received: 08/26/24
 Field Prep: Not Specified

Sample Depth:

Matrix: Water
 Analytical Method: 1,8260D-SIM(M)
 Analytical Date: 08/30/24 13:02
 Analyst: TMS

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
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Volatile Organics by GC/MS-SIM - Westborough Lab						
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1,1,2,2-Tetrachloroethane	ND		ug/l	0.050	0.006	1
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Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	107		70-130
4-Bromofluorobenzene	96		70-130

Project Name: B14 GWS
Project Number: Not Specified

Lab Number: L2448657
Report Date: 09/04/24

SAMPLE RESULTS

Lab ID: L2448657-08
 Client ID: TRIP BLANK
 Sample Location: B14

Date Collected: 08/26/24 00:00
 Date Received: 08/26/24
 Field Prep: Not Specified

Sample Depth:
 Matrix: Water
 Analytical Method: 1,8260D
 Analytical Date: 08/30/24 09:53
 Analyst: TMS

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Dichlorodifluoromethane	ND		ug/l	5.0	0.24	1
Chloromethane	ND		ug/l	2.5	0.20	1
Vinyl chloride	ND		ug/l	1.0	0.07	1
Bromomethane	ND		ug/l	1.0	0.26	1
Chloroethane	ND		ug/l	1.0	0.13	1
Trichlorofluoromethane	ND		ug/l	2.5	0.16	1
1,1-Dichloroethene	ND		ug/l	0.50	0.17	1
Carbon disulfide	ND		ug/l	5.0	0.30	1
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND		ug/l	2.5	0.15	1
Methylene chloride	ND		ug/l	2.5	0.68	1
Acetone	ND		ug/l	5.0	1.5	1
trans-1,2-Dichloroethene	ND		ug/l	0.75	0.16	1
Methyl Acetate	ND		ug/l	2.0	0.23	1
Methyl tert butyl ether	ND		ug/l	1.0	0.17	1
1,1-Dichloroethane	ND		ug/l	0.75	0.21	1
cis-1,2-Dichloroethene	ND		ug/l	0.50	0.19	1
Cyclohexane	ND		ug/l	10	0.27	1
Chloroform	ND		ug/l	0.75	0.22	1
Carbon tetrachloride	ND		ug/l	0.50	0.13	1
1,1,1-Trichloroethane	ND		ug/l	0.50	0.16	1
2-Butanone	ND		ug/l	5.0	1.9	1
Benzene	ND		ug/l	0.50	0.16	1
1,2-Dichloroethane	ND		ug/l	0.50	0.13	1
Trichloroethene	ND		ug/l	0.50	0.18	1
1,2-Dichloropropane	ND		ug/l	1.0	0.14	1
Bromodichloromethane	ND		ug/l	0.50	0.19	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	0.14	1
Toluene	ND		ug/l	0.75	0.20	1

Project Name: B14 GWS
Project Number: Not Specified

Lab Number: L2448657
Report Date: 09/04/24

SAMPLE RESULTS

Lab ID: L2448657-08
 Client ID: TRIP BLANK
 Sample Location: B14

Date Collected: 08/26/24 00:00
 Date Received: 08/26/24
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Tetrachloroethene	ND		ug/l	0.50	0.18	1
4-Methyl-2-pentanone	ND		ug/l	5.0	0.42	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	0.16	1
1,3-Dichloropropene, Total	ND		ug/l	0.50	0.14	1
1,1,2-Trichloroethane	ND		ug/l	0.75	0.14	1
Dibromochloromethane	ND		ug/l	0.50	0.15	1
1,2-Dibromoethane	ND		ug/l	2.0	0.19	1
2-Hexanone	ND		ug/l	5.0	0.52	1
Chlorobenzene	ND		ug/l	0.50	0.18	1
Ethylbenzene	ND		ug/l	0.50	0.17	1
p/m-Xylene	ND		ug/l	1.0	0.33	1
o-Xylene	ND		ug/l	1.0	0.39	1
Xylenes, Total	ND		ug/l	1.0	0.33	1
Styrene	ND		ug/l	1.0	0.36	1
Bromoform	ND		ug/l	2.0	0.25	1
Isopropylbenzene	ND		ug/l	0.50	0.19	1
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	0.17	1
1,3-Dichlorobenzene	ND		ug/l	2.5	0.19	1
1,4-Dichlorobenzene	ND		ug/l	2.5	0.19	1
1,2-Dichlorobenzene	ND		ug/l	2.5	0.18	1
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	0.35	1
1,2,4-Trichlorobenzene	ND		ug/l	2.5	0.22	1
1,2,3-Trichlorobenzene	ND		ug/l	2.5	0.23	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	109		70-130
Toluene-d8	99		70-130
4-Bromofluorobenzene	99		70-130
Dibromofluoromethane	104		70-130

Project Name: B14 GWS
Project Number: Not Specified

Lab Number: L2448657
Report Date: 09/04/24

SAMPLE RESULTS

Lab ID: L2448657-08
 Client ID: TRIP BLANK
 Sample Location: B14

Date Collected: 08/26/24 00:00
 Date Received: 08/26/24
 Field Prep: Not Specified

Sample Depth:

Matrix: Water
 Analytical Method: 1,8260D-SIM(M)
 Analytical Date: 08/30/24 09:53
 Analyst: TMS

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
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Volatile Organics by GC/MS-SIM - Westborough Lab						
1,1,2,2-Tetrachloroethane	ND		ug/l	0.050	0.006	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	108		70-130
4-Bromofluorobenzene	97		70-130

Project Name: B14 GWS
Project Number: Not Specified

Lab Number: L2448657
Report Date: 09/04/24

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260D
Analytical Date: 08/29/24 04:58
Analyst: MCM

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 01-05 Batch: WG1965760-5					
Dichlorodifluoromethane	ND		ug/l	5.0	0.24
Chloromethane	ND		ug/l	2.5	0.20
Vinyl chloride	ND		ug/l	1.0	0.07
Bromomethane	ND		ug/l	1.0	0.26
Chloroethane	ND		ug/l	1.0	0.13
Trichlorofluoromethane	ND		ug/l	2.5	0.16
1,1-Dichloroethene	ND		ug/l	0.50	0.17
Carbon disulfide	ND		ug/l	5.0	0.30
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND		ug/l	2.5	0.15
Methylene chloride	ND		ug/l	2.5	0.68
Acetone	ND		ug/l	5.0	1.5
trans-1,2-Dichloroethene	ND		ug/l	0.75	0.16
Methyl Acetate	ND		ug/l	2.0	0.23
Methyl tert butyl ether	ND		ug/l	1.0	0.17
1,1-Dichloroethane	ND		ug/l	0.75	0.21
cis-1,2-Dichloroethene	ND		ug/l	0.50	0.19
Cyclohexane	ND		ug/l	10	0.27
Chloroform	ND		ug/l	0.75	0.22
Carbon tetrachloride	ND		ug/l	0.50	0.13
1,1,1-Trichloroethane	ND		ug/l	0.50	0.16
2-Butanone	ND		ug/l	5.0	1.9
Benzene	ND		ug/l	0.50	0.16
1,2-Dichloroethane	ND		ug/l	0.50	0.13
Trichloroethene	ND		ug/l	0.50	0.18
1,2-Dichloropropane	ND		ug/l	1.0	0.14
Bromodichloromethane	ND		ug/l	0.50	0.19
cis-1,3-Dichloropropene	ND		ug/l	0.50	0.14
Toluene	ND		ug/l	0.75	0.20
Tetrachloroethene	ND		ug/l	0.50	0.18

Project Name: B14 GWS
Project Number: Not Specified

Lab Number: L2448657
Report Date: 09/04/24

Method Blank Analysis Batch Quality Control

Analytical Method: 1,8260D
Analytical Date: 08/29/24 04:58
Analyst: MCM

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 01-05 Batch: WG1965760-5					
4-Methyl-2-pentanone	ND		ug/l	5.0	0.42
trans-1,3-Dichloropropene	ND		ug/l	0.50	0.16
1,3-Dichloropropene, Total	ND		ug/l	0.50	0.14
1,1,2-Trichloroethane	ND		ug/l	0.75	0.14
Dibromochloromethane	ND		ug/l	0.50	0.15
1,2-Dibromoethane	ND		ug/l	2.0	0.19
2-Hexanone	ND		ug/l	5.0	0.52
Chlorobenzene	ND		ug/l	0.50	0.18
Ethylbenzene	ND		ug/l	0.50	0.17
p/m-Xylene	ND		ug/l	1.0	0.33
o-Xylene	ND		ug/l	1.0	0.39
Xylenes, Total	ND		ug/l	1.0	0.33
Styrene	ND		ug/l	1.0	0.36
Bromoform	ND		ug/l	2.0	0.25
Isopropylbenzene	ND		ug/l	0.50	0.19
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	0.17
1,3-Dichlorobenzene	ND		ug/l	2.5	0.19
1,4-Dichlorobenzene	ND		ug/l	2.5	0.19
1,2-Dichlorobenzene	ND		ug/l	2.5	0.18
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	0.35
1,2,4-Trichlorobenzene	ND		ug/l	2.5	0.22
1,2,3-Trichlorobenzene	ND		ug/l	2.5	0.23

Project Name: B14 GWS
Project Number: Not Specified

Lab Number: L2448657
Report Date: 09/04/24

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260D
Analytical Date: 08/29/24 04:58
Analyst: MCM

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 01-05 Batch: WG1965760-5					

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	106		70-130
Toluene-d8	100		70-130
4-Bromofluorobenzene	103		70-130
Dibromofluoromethane	103		70-130

Project Name: B14 GWS
Project Number: Not Specified

Lab Number: L2448657
Report Date: 09/04/24

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260D-SIM(M)
Analytical Date: 08/29/24 06:46
Analyst: MCM

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS-SIM - Westborough Lab for sample(s): 01-05 Batch: WG1965761-5					
1,1,2,2-Tetrachloroethane	ND		ug/l	0.050	0.006

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	107		70-130
4-Bromofluorobenzene	97		70-130

Project Name: B14 GWS
Project Number: Not Specified

Lab Number: L2448657
Report Date: 09/04/24

**Method Blank Analysis
Batch Quality Control**

Analytical Method: 1,8260D-SIM(M)
Analytical Date: 08/30/24 05:50
Analyst: MCM

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS-SIM - Westborough Lab for sample(s): 06-08 Batch: WG1966175-5					
1,1,2,2-Tetrachloroethane	ND		ug/l	0.050	0.006

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	106		70-130
4-Bromofluorobenzene	98		70-130

Project Name: B14 GWS
Project Number: Not Specified

Lab Number: L2448657
Report Date: 09/04/24

Method Blank Analysis Batch Quality Control

Analytical Method: 1,8260D
Analytical Date: 08/30/24 05:50
Analyst: MCM

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 06-08 Batch: WG1966199-5					
Dichlorodifluoromethane	ND		ug/l	5.0	0.24
Chloromethane	ND		ug/l	2.5	0.20
Vinyl chloride	ND		ug/l	1.0	0.07
Bromomethane	ND		ug/l	1.0	0.26
Chloroethane	ND		ug/l	1.0	0.13
Trichlorofluoromethane	ND		ug/l	2.5	0.16
1,1-Dichloroethene	ND		ug/l	0.50	0.17
Carbon disulfide	ND		ug/l	5.0	0.30
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND		ug/l	2.5	0.15
Methylene chloride	ND		ug/l	2.5	0.68
Acetone	ND		ug/l	5.0	1.5
trans-1,2-Dichloroethene	ND		ug/l	0.75	0.16
Methyl Acetate	ND		ug/l	2.0	0.23
Methyl tert butyl ether	ND		ug/l	1.0	0.17
1,1-Dichloroethane	ND		ug/l	0.75	0.21
cis-1,2-Dichloroethene	ND		ug/l	0.50	0.19
Cyclohexane	ND		ug/l	10	0.27
Chloroform	ND		ug/l	0.75	0.22
Carbon tetrachloride	ND		ug/l	0.50	0.13
1,1,1-Trichloroethane	ND		ug/l	0.50	0.16
2-Butanone	ND		ug/l	5.0	1.9
Benzene	ND		ug/l	0.50	0.16
1,2-Dichloroethane	ND		ug/l	0.50	0.13
Trichloroethene	ND		ug/l	0.50	0.18
1,2-Dichloropropane	ND		ug/l	1.0	0.14
Bromodichloromethane	ND		ug/l	0.50	0.19
cis-1,3-Dichloropropene	ND		ug/l	0.50	0.14
Toluene	ND		ug/l	0.75	0.20
Tetrachloroethene	ND		ug/l	0.50	0.18

Project Name: B14 GWS
Project Number: Not Specified

Lab Number: L2448657
Report Date: 09/04/24

Method Blank Analysis Batch Quality Control

Analytical Method: 1,8260D
Analytical Date: 08/30/24 05:50
Analyst: MCM

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 06-08 Batch: WG1966199-5					
4-Methyl-2-pentanone	ND		ug/l	5.0	0.42
trans-1,3-Dichloropropene	ND		ug/l	0.50	0.16
1,3-Dichloropropene, Total	ND		ug/l	0.50	0.14
1,1,2-Trichloroethane	ND		ug/l	0.75	0.14
Dibromochloromethane	ND		ug/l	0.50	0.15
1,2-Dibromoethane	ND		ug/l	2.0	0.19
2-Hexanone	ND		ug/l	5.0	0.52
Chlorobenzene	ND		ug/l	0.50	0.18
Ethylbenzene	ND		ug/l	0.50	0.17
p/m-Xylene	ND		ug/l	1.0	0.33
o-Xylene	ND		ug/l	1.0	0.39
Xylenes, Total	ND		ug/l	1.0	0.33
Styrene	ND		ug/l	1.0	0.36
Bromoform	ND		ug/l	2.0	0.25
Isopropylbenzene	ND		ug/l	0.50	0.19
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	0.17
1,3-Dichlorobenzene	ND		ug/l	2.5	0.19
1,4-Dichlorobenzene	ND		ug/l	2.5	0.19
1,2-Dichlorobenzene	ND		ug/l	2.5	0.18
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	0.35
1,2,4-Trichlorobenzene	ND		ug/l	2.5	0.22
1,2,3-Trichlorobenzene	ND		ug/l	2.5	0.23

Project Name: B14 GWS
Project Number: Not Specified

Lab Number: L2448657
Report Date: 09/04/24

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260D
Analytical Date: 08/30/24 05:50
Analyst: MCM

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 06-08 Batch: WG1966199-5					

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	107		70-130
Toluene-d8	99		70-130
4-Bromofluorobenzene	101		70-130
Dibromofluoromethane	104		70-130

Lab Control Sample Analysis

Batch Quality Control

Project Name: B14 GWS
Project Number: Not Specified

Lab Number: L2448657
Report Date: 09/04/24

Parameter	LCS		LCSD		%Recovery Limits	RPD	Qual	RPD Limits
	%Recovery	Qual	%Recovery	Qual				
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-05 Batch: WG1965760-3 WG1965760-4								
Dichlorodifluoromethane	99		92		36-147	7		20
Chloromethane	91		84		64-130	8		20
Vinyl chloride	92		88		55-140	4		20
Bromomethane	77		71		39-139	8		20
Chloroethane	86		86		55-138	0		20
Trichlorofluoromethane	110		100		62-150	10		20
1,1-Dichloroethene	110		100		61-145	10		20
Carbon disulfide	110		100		51-130	10		20
1,1,2-Trichloro-1,2,2-Trifluoroethane	110		110		70-130	0		20
Methylene chloride	100		99		70-130	1		20
Acetone	110		110		58-148	0		20
trans-1,2-Dichloroethene	110		100		70-130	10		20
Methyl Acetate	91		89		70-130	2		20
Methyl tert butyl ether	110		100		63-130	10		20
1,1-Dichloroethane	110		100		70-130	10		20
cis-1,2-Dichloroethene	110		100		70-130	10		20
Cyclohexane	110		110		70-130	0		20
Chloroform	110		100		70-130	10		20
Carbon tetrachloride	120		110		63-132	9		20
1,1,1-Trichloroethane	110		110		67-130	0		20
2-Butanone	100		96		63-138	4		20
Benzene	110		100		70-130	10		20
1,2-Dichloroethane	110		110		70-130	0		20

Lab Control Sample Analysis

Batch Quality Control

Project Name: B14 GWS
Project Number: Not Specified

Lab Number: L2448657
Report Date: 09/04/24

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-05 Batch: WG1965760-3 WG1965760-4								
Trichloroethene	110		110		70-130	0		20
1,2-Dichloropropane	110		100		70-130	10		20
Bromodichloromethane	110		100		67-130	10		20
cis-1,3-Dichloropropene	110		100		70-130	10		20
Toluene	110		100		70-130	10		20
Tetrachloroethene	110		110		70-130	0		20
4-Methyl-2-pentanone	100		96		59-130	4		20
trans-1,3-Dichloropropene	100		95		70-130	5		20
1,1,2-Trichloroethane	110		100		70-130	10		20
Dibromochloromethane	110		100		63-130	10		20
1,2-Dibromoethane	110		100		70-130	10		20
2-Hexanone	120		100		57-130	18		20
Chlorobenzene	110		100		75-130	10		20
Ethylbenzene	110		100		70-130	10		20
p/m-Xylene	110		105		70-130	5		20
o-Xylene	110		105		70-130	5		20
Styrene	110		100		70-130	10		20
Bromoform	110		100		54-136	10		20
Isopropylbenzene	110		100		70-130	10		20
1,1,2,2-Tetrachloroethane	100		95		67-130	5		20
1,3-Dichlorobenzene	110		100		70-130	10		20
1,4-Dichlorobenzene	110		110		70-130	0		20
1,2-Dichlorobenzene	110		100		70-130	10		20

Lab Control Sample Analysis

Batch Quality Control

Project Name: B14 GWS
Project Number: Not Specified

Lab Number: L2448657
Report Date: 09/04/24

Parameter	LCS		LCSD		%Recovery Limits	RPD	RPD	
	%Recovery	Qual	%Recovery	Qual			Qual	Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-05 Batch: WG1965760-3 WG1965760-4								
1,2-Dibromo-3-chloropropane	100		100		41-144	0		20
1,2,4-Trichlorobenzene	120		110		70-130	9		20
1,2,3-Trichlorobenzene	120		110		70-130	9		20

Surrogate	LCS		LCSD		Acceptance Criteria
	%Recovery	Qual	%Recovery	Qual	
1,2-Dichloroethane-d4	100		98		70-130
Toluene-d8	100		98		70-130
4-Bromofluorobenzene	102		100		70-130
Dibromofluoromethane	96		97		70-130

Lab Control Sample Analysis

Batch Quality Control

Project Name: B14 GWS
Project Number: Not Specified

Lab Number: L2448657
Report Date: 09/04/24

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS-SIM - Westborough Lab Associated sample(s): 01-05 Batch: WG1965761-3 WG1965761-4								
1,1,1,2-Tetrachloroethane	91		92		70-130	1		25

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
1,2-Dichloroethane-d4	109		106		70-130
4-Bromofluorobenzene	97		97		70-130

Lab Control Sample Analysis

Batch Quality Control

Project Name: B14 GWS
Project Number: Not Specified

Lab Number: L2448657
Report Date: 09/04/24

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS-SIM - Westborough Lab Associated sample(s): 06-08 Batch: WG1966175-3 WG1966175-4								
1,1,2,2-Tetrachloroethane	93		92		70-130	1		25

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
1,2-Dichloroethane-d4	107		108		70-130
4-Bromofluorobenzene	98		98		70-130

Lab Control Sample Analysis

Batch Quality Control

Project Name: B14 GWS
Project Number: Not Specified

Lab Number: L2448657
Report Date: 09/04/24

Parameter	LCS		LCSD		%Recovery Limits	RPD	Qual	RPD Limits
	%Recovery	Qual	%Recovery	Qual				
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 06-08 Batch: WG1966199-3 WG1966199-4								
Dichlorodifluoromethane	86		89		36-147	3		20
Chloromethane	83		86		64-130	4		20
Vinyl chloride	84		86		55-140	2		20
Bromomethane	54		64		39-139	17		20
Chloroethane	81		84		55-138	4		20
Trichlorofluoromethane	100		100		62-150	0		20
1,1-Dichloroethene	100		100		61-145	0		20
Carbon disulfide	100		100		51-130	0		20
1,1,2-Trichloro-1,2,2-Trifluoroethane	100		110		70-130	10		20
Methylene chloride	98		99		70-130	1		20
Acetone	90		89		58-148	1		20
trans-1,2-Dichloroethene	100		100		70-130	0		20
Methyl Acetate	90		90		70-130	0		20
Methyl tert butyl ether	100		100		63-130	0		20
1,1-Dichloroethane	100		100		70-130	0		20
cis-1,2-Dichloroethene	100		100		70-130	0		20
Cyclohexane	100		100		70-130	0		20
Chloroform	100		100		70-130	0		20
Carbon tetrachloride	110		110		63-132	0		20
1,1,1-Trichloroethane	110		110		67-130	0		20
2-Butanone	99		94		63-138	5		20
Benzene	100		100		70-130	0		20
1,2-Dichloroethane	100		100		70-130	0		20

Lab Control Sample Analysis

Batch Quality Control

Project Name: B14 GWS
Project Number: Not Specified

Lab Number: L2448657
Report Date: 09/04/24

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 06-08 Batch: WG1966199-3 WG1966199-4								
Trichloroethene	110		110		70-130	0		20
1,2-Dichloropropane	100		100		70-130	0		20
Bromodichloromethane	100		100		67-130	0		20
cis-1,3-Dichloropropene	100		100		70-130	0		20
Toluene	100		100		70-130	0		20
Tetrachloroethene	110		100		70-130	10		20
4-Methyl-2-pentanone	97		93		59-130	4		20
trans-1,3-Dichloropropene	96		92		70-130	4		20
1,1,2-Trichloroethane	100		100		70-130	0		20
Dibromochloromethane	100		100		63-130	0		20
1,2-Dibromoethane	100		100		70-130	0		20
2-Hexanone	110		100		57-130	10		20
Chlorobenzene	100		100		75-130	0		20
Ethylbenzene	110		100		70-130	10		20
p/m-Xylene	105		105		70-130	0		20
o-Xylene	100		105		70-130	5		20
Styrene	105		100		70-130	5		20
Bromoform	97		95		54-136	2		20
Isopropylbenzene	100		100		70-130	0		20
1,1,2,2-Tetrachloroethane	95		92		67-130	3		20
1,3-Dichlorobenzene	100		100		70-130	0		20
1,4-Dichlorobenzene	100		110		70-130	10		20
1,2-Dichlorobenzene	100		100		70-130	0		20

Lab Control Sample Analysis

Batch Quality Control

Project Name: B14 GWS
Project Number: Not Specified

Lab Number: L2448657
Report Date: 09/04/24

Parameter	LCS		LCSD		%Recovery Limits	RPD	RPD	
	%Recovery	Qual	%Recovery	Qual			Qual	Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 06-08 Batch: WG1966199-3 WG1966199-4								
1,2-Dibromo-3-chloropropane	95		98		41-144	3		20
1,2,4-Trichlorobenzene	110		110		70-130	0		20
1,2,3-Trichlorobenzene	110		110		70-130	0		20

Surrogate	LCS		LCSD		Acceptance Criteria
	%Recovery	Qual	%Recovery	Qual	
1,2-Dichloroethane-d4	99		100		70-130
Toluene-d8	101		100		70-130
4-Bromofluorobenzene	100		100		70-130
Dibromofluoromethane	97		99		70-130

SEMIVOLATILES

Project Name: B14 GWS
Project Number: Not Specified

Lab Number: L2448657
Report Date: 09/04/24

SAMPLE RESULTS

Lab ID: L2448657-01
 Client ID: B24-002-MWS
 Sample Location: B14

Date Collected: 08/26/24 09:10
 Date Received: 08/26/24
 Field Prep: Not Specified

Sample Depth:

Matrix: Water
 Analytical Method: 1,8270E
 Analytical Date: 08/31/24 21:42
 Analyst: EK

Extraction Method: EPA 3510C
 Extraction Date: 08/30/24 20:34

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Benzaldehyde	ND		ug/l	5.0	1.1	1
Phenol	1.4	J	ug/l	5.0	0.35	1
Bis(2-chloroethyl)ether	ND		ug/l	2.0	0.39	1
2-Chlorophenol	ND		ug/l	2.0	0.65	1
2-Methylphenol	ND		ug/l	5.0	2.3	1
Bis(2-chloroisopropyl)ether	ND		ug/l	2.0	0.40	1
Acetophenone	ND		ug/l	5.0	0.92	1
n-Nitrosodi-n-propylamine	ND		ug/l	5.0	0.91	1
3-Methylphenol/4-Methylphenol	ND		ug/l	5.0	1.4	1
Hexachloroethane	ND		ug/l	2.0	0.20	1
Nitrobenzene	ND		ug/l	1.4	0.20	1
Isophorone	ND		ug/l	5.0	0.86	1
2,4-Dimethylphenol	ND		ug/l	5.0	2.0	1
Bis(2-chloroethoxy)methane	ND		ug/l	5.0	0.84	1
2,4-Dichlorophenol	ND		ug/l	5.0	1.7	1
Naphthalene	0.56	J	ug/l	2.0	0.54	1
4-Chloroaniline	ND		ug/l	3.7	0.47	1
Hexachlorobutadiene	ND		ug/l	2.0	0.36	1
Caprolactam	ND		ug/l	10	1.2	1
2-Methylnaphthalene	ND		ug/l	2.0	0.37	1
Hexachlorocyclopentadiene	ND		ug/l	20	1.2	1
1,2,4,5-Tetrachlorobenzene	ND		ug/l	1.7	0.24	1
2,4,6-Trichlorophenol	ND		ug/l	5.0	2.1	1
2,4,5-Trichlorophenol	ND		ug/l	5.0	2.1	1
Biphenyl	ND		ug/l	2.0	0.20	1
2-Chloronaphthalene	ND		ug/l	2.0	0.35	1
2-Nitroaniline	ND		ug/l	5.0	1.0	1
2,6-Dinitrotoluene	ND		ug/l	5.0	0.84	1

Project Name: B14 GWS
Project Number: Not Specified

Lab Number: L2448657
Report Date: 09/04/24

SAMPLE RESULTS

Lab ID: L2448657-01
 Client ID: B24-002-MWS
 Sample Location: B14

Date Collected: 08/26/24 09:10
 Date Received: 08/26/24
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Acenaphthylene	ND		ug/l	2.0	0.32	1
Acenaphthene	ND		ug/l	2.0	0.40	1
2,4-Dinitrophenol	ND		ug/l	20	5.4	1
2,4-Dinitrotoluene	ND		ug/l	5.0	0.54	1
2,3,4,6-Tetrachlorophenol	ND		ug/l	5.0	2.2	1
Diethyl phthalate	ND		ug/l	5.0	0.76	1
Fluorene	ND		ug/l	2.0	0.44	1
4-Nitroaniline	ND		ug/l	5.0	1.4	1
NDPA/DPA	ND		ug/l	2.0	0.92	1
Hexachlorobenzene	ND		ug/l	2.0	0.45	1
Pentachlorophenol	ND		ug/l	10	2.5	1
Phenanthrene	ND		ug/l	2.0	0.42	1
Anthracene	ND		ug/l	2.0	0.47	1
Carbazole	ND		ug/l	2.0	0.31	1
Di-n-butylphthalate	ND		ug/l	5.0	0.96	1
Fluoranthene	ND		ug/l	2.0	0.41	1
Pyrene	ND		ug/l	2.0	0.41	1
3,3'-Dichlorobenzidine	ND		ug/l	5.0	1.8	1
Benzo(a)anthracene	ND		ug/l	2.0	0.32	1
Chrysene	ND		ug/l	1.5	0.22	1
Bis(2-ethylhexyl)phthalate	ND		ug/l	3.0	1.4	1
Di-n-octylphthalate	ND		ug/l	5.0	2.3	1
Benzo(b)fluoranthene	ND		ug/l	2.0	0.53	1
Benzo(k)fluoranthene	ND		ug/l	2.0	0.62	1
Benzo(a)pyrene	ND		ug/l	2.0	0.37	1
Indeno(1,2,3-cd)pyrene	ND		ug/l	2.0	0.48	1
Dibenzo(a,h)anthracene	ND		ug/l	2.0	0.29	1
Benzo(ghi)perylene	ND		ug/l	2.0	0.37	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	30		21-120
Phenol-d6	25		10-120
Nitrobenzene-d5	77		23-120
2-Fluorobiphenyl	70		15-120
2,4,6-Tribromophenol	51		10-120
4-Terphenyl-d14	79		41-149

Project Name: B14 GWS
Project Number: Not Specified

Lab Number: L2448657
Report Date: 09/04/24

SAMPLE RESULTS

Lab ID: L2448657-01
 Client ID: B24-002-MWS
 Sample Location: B14

Date Collected: 08/26/24 09:10
 Date Received: 08/26/24
 Field Prep: Not Specified

Sample Depth:
 Matrix: Water
 Analytical Method: 1,8270E-SIM
 Analytical Date: 09/03/24 16:18
 Analyst: RP

Extraction Method: EPA 3510C
 Extraction Date: 08/30/24 20:34

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS-SIM - Westborough Lab						
Naphthalene	0.69		ug/l	0.10	0.02	1
2-Methylnaphthalene	0.09	J	ug/l	0.10	0.03	1
Acenaphthylene	0.05	J	ug/l	0.10	0.02	1
Acenaphthene	0.14		ug/l	0.10	0.02	1
Fluorene	0.11		ug/l	0.10	0.03	1
Phenanthrene	0.08		ug/l	0.05	0.04	1
Anthracene	ND		ug/l	0.10	0.02	1
Fluoranthene	0.07	J	ug/l	0.10	0.03	1
Pyrene	0.07	J	ug/l	0.10	0.04	1
Benzo(a)anthracene	ND		ug/l	0.05	0.03	1
Chrysene	ND		ug/l	0.10	0.03	1
Benzo(b)fluoranthene	ND		ug/l	0.05	0.03	1
Benzo(k)fluoranthene	ND		ug/l	0.10	0.03	1
Benzo(a)pyrene	ND		ug/l	0.10	0.02	1
Indeno(1,2,3-cd)pyrene	ND		ug/l	0.10	0.02	1
Dibenzo(a,h)anthracene	ND		ug/l	0.05	0.02	1
Benzo(ghi)perylene	ND		ug/l	0.10	0.02	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
Nitrobenzene-d5	73		23-120
2-Fluorobiphenyl	88		15-120
4-Terphenyl-d14	66		41-149

Project Name: B14 GWS
Project Number: Not Specified

Lab Number: L2448657
Report Date: 09/04/24

SAMPLE RESULTS

Lab ID: L2448657-02
 Client ID: TS03-PDP002
 Sample Location: B14

Date Collected: 08/26/24 10:15
 Date Received: 08/26/24
 Field Prep: Not Specified

Sample Depth:

Matrix: Water
 Analytical Method: 1,8270E
 Analytical Date: 08/31/24 18:31
 Analyst: EK

Extraction Method: EPA 3510C
 Extraction Date: 08/30/24 20:34

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Benzaldehyde	ND		ug/l	5.0	1.1	1
Phenol	0.96	J	ug/l	5.0	0.35	1
Bis(2-chloroethyl)ether	ND		ug/l	2.0	0.39	1
2-Chlorophenol	ND		ug/l	2.0	0.65	1
2-Methylphenol	ND		ug/l	5.0	2.3	1
Bis(2-chloroisopropyl)ether	ND		ug/l	2.0	0.40	1
Acetophenone	ND		ug/l	5.0	0.92	1
n-Nitrosodi-n-propylamine	ND		ug/l	5.0	0.91	1
3-Methylphenol/4-Methylphenol	ND		ug/l	5.0	1.4	1
Hexachloroethane	ND		ug/l	2.0	0.20	1
Nitrobenzene	ND		ug/l	1.4	0.20	1
Isophorone	ND		ug/l	5.0	0.86	1
2,4-Dimethylphenol	ND		ug/l	5.0	2.0	1
Bis(2-chloroethoxy)methane	ND		ug/l	5.0	0.84	1
2,4-Dichlorophenol	ND		ug/l	5.0	1.7	1
Naphthalene	ND		ug/l	2.0	0.54	1
4-Chloroaniline	ND		ug/l	3.7	0.47	1
Hexachlorobutadiene	ND		ug/l	2.0	0.36	1
Caprolactam	ND		ug/l	10	1.2	1
2-Methylnaphthalene	ND		ug/l	2.0	0.37	1
Hexachlorocyclopentadiene	ND		ug/l	20	1.2	1
1,2,4,5-Tetrachlorobenzene	ND		ug/l	1.7	0.24	1
2,4,6-Trichlorophenol	ND		ug/l	5.0	2.1	1
2,4,5-Trichlorophenol	ND		ug/l	5.0	2.1	1
Biphenyl	ND		ug/l	2.0	0.20	1
2-Chloronaphthalene	ND		ug/l	2.0	0.35	1
2-Nitroaniline	ND		ug/l	5.0	1.0	1
2,6-Dinitrotoluene	ND		ug/l	5.0	0.84	1

Project Name: B14 GWS
Project Number: Not Specified

Lab Number: L2448657
Report Date: 09/04/24

SAMPLE RESULTS

Lab ID: L2448657-02
 Client ID: TS03-PDP002
 Sample Location: B14

Date Collected: 08/26/24 10:15
 Date Received: 08/26/24
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Acenaphthylene	ND		ug/l	2.0	0.32	1
Acenaphthene	ND		ug/l	2.0	0.40	1
2,4-Dinitrophenol	ND		ug/l	20	5.4	1
2,4-Dinitrotoluene	ND		ug/l	5.0	0.54	1
2,3,4,6-Tetrachlorophenol	ND		ug/l	5.0	2.2	1
Diethyl phthalate	ND		ug/l	5.0	0.76	1
Fluorene	ND		ug/l	2.0	0.44	1
4-Nitroaniline	ND		ug/l	5.0	1.4	1
NDPA/DPA	ND		ug/l	2.0	0.92	1
Hexachlorobenzene	ND		ug/l	2.0	0.45	1
Pentachlorophenol	ND		ug/l	10	2.5	1
Phenanthrene	ND		ug/l	2.0	0.42	1
Anthracene	ND		ug/l	2.0	0.47	1
Carbazole	ND		ug/l	2.0	0.31	1
Di-n-butylphthalate	ND		ug/l	5.0	0.96	1
Fluoranthene	ND		ug/l	2.0	0.41	1
Pyrene	ND		ug/l	2.0	0.41	1
3,3'-Dichlorobenzidine	ND		ug/l	5.0	1.8	1
Benzo(a)anthracene	ND		ug/l	2.0	0.32	1
Chrysene	ND		ug/l	1.5	0.22	1
Bis(2-ethylhexyl)phthalate	ND		ug/l	3.0	1.4	1
Di-n-octylphthalate	ND		ug/l	5.0	2.3	1
Benzo(b)fluoranthene	ND		ug/l	2.0	0.53	1
Benzo(k)fluoranthene	ND		ug/l	2.0	0.62	1
Benzo(a)pyrene	ND		ug/l	2.0	0.37	1
Indeno(1,2,3-cd)pyrene	ND		ug/l	2.0	0.48	1
Dibenzo(a,h)anthracene	ND		ug/l	2.0	0.29	1
Benzo(ghi)perylene	ND		ug/l	2.0	0.37	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	49		21-120
Phenol-d6	33		10-120
Nitrobenzene-d5	70		23-120
2-Fluorobiphenyl	68		15-120
2,4,6-Tribromophenol	73		10-120
4-Terphenyl-d14	81		41-149

Project Name: B14 GWS
Project Number: Not Specified

Lab Number: L2448657
Report Date: 09/04/24

SAMPLE RESULTS

Lab ID: L2448657-02
 Client ID: TS03-PDP002
 Sample Location: B14

Date Collected: 08/26/24 10:15
 Date Received: 08/26/24
 Field Prep: Not Specified

Sample Depth:
 Matrix: Water
 Analytical Method: 1,8270E-SIM
 Analytical Date: 09/03/24 16:34
 Analyst: RP

Extraction Method: EPA 3510C
 Extraction Date: 08/30/24 20:34

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS-SIM - Westborough Lab						
Naphthalene	0.04	J	ug/l	0.10	0.02	1
2-Methylnaphthalene	ND		ug/l	0.10	0.03	1
Acenaphthylene	ND		ug/l	0.10	0.02	1
Acenaphthene	ND		ug/l	0.10	0.02	1
Fluorene	ND		ug/l	0.10	0.03	1
Phenanthrene	ND		ug/l	0.05	0.04	1
Anthracene	ND		ug/l	0.10	0.02	1
Fluoranthene	ND		ug/l	0.10	0.03	1
Pyrene	ND		ug/l	0.10	0.04	1
Benzo(a)anthracene	ND		ug/l	0.05	0.03	1
Chrysene	ND		ug/l	0.10	0.03	1
Benzo(b)fluoranthene	ND		ug/l	0.05	0.03	1
Benzo(k)fluoranthene	ND		ug/l	0.10	0.03	1
Benzo(a)pyrene	ND		ug/l	0.10	0.02	1
Indeno(1,2,3-cd)pyrene	ND		ug/l	0.10	0.02	1
Dibenzo(a,h)anthracene	ND		ug/l	0.05	0.02	1
Benzo(ghi)perylene	ND		ug/l	0.10	0.02	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
Nitrobenzene-d5	81		23-120
2-Fluorobiphenyl	81		15-120
4-Terphenyl-d14	73		41-149

Project Name: B14 GWS
Project Number: Not Specified

Lab Number: L2448657
Report Date: 09/04/24

SAMPLE RESULTS

Lab ID: L2448657-03
 Client ID: HI02R-PZM006
 Sample Location: B14

Date Collected: 08/26/24 12:17
 Date Received: 08/26/24
 Field Prep: Not Specified

Sample Depth:

Matrix: Water
 Analytical Method: 1,8270E
 Analytical Date: 08/31/24 18:53
 Analyst: EK

Extraction Method: EPA 3510C
 Extraction Date: 08/30/24 20:34

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Benzaldehyde	ND		ug/l	5.0	1.1	1
Phenol	1.3	J	ug/l	5.0	0.35	1
Bis(2-chloroethyl)ether	ND		ug/l	2.0	0.39	1
2-Chlorophenol	ND		ug/l	2.0	0.65	1
2-Methylphenol	ND		ug/l	5.0	2.3	1
Bis(2-chloroisopropyl)ether	ND		ug/l	2.0	0.40	1
Acetophenone	ND		ug/l	5.0	0.92	1
n-Nitrosodi-n-propylamine	ND		ug/l	5.0	0.91	1
3-Methylphenol/4-Methylphenol	ND		ug/l	5.0	1.4	1
Hexachloroethane	ND		ug/l	2.0	0.20	1
Nitrobenzene	ND		ug/l	1.4	0.20	1
Isophorone	ND		ug/l	5.0	0.86	1
2,4-Dimethylphenol	ND		ug/l	5.0	2.0	1
Bis(2-chloroethoxy)methane	ND		ug/l	5.0	0.84	1
2,4-Dichlorophenol	ND		ug/l	5.0	1.7	1
Naphthalene	5.9		ug/l	2.0	0.54	1
4-Chloroaniline	ND		ug/l	3.7	0.47	1
Hexachlorobutadiene	ND		ug/l	2.0	0.36	1
Caprolactam	ND		ug/l	10	1.2	1
2-Methylnaphthalene	ND		ug/l	2.0	0.37	1
Hexachlorocyclopentadiene	ND		ug/l	20	1.2	1
1,2,4,5-Tetrachlorobenzene	ND		ug/l	1.7	0.24	1
2,4,6-Trichlorophenol	ND		ug/l	5.0	2.1	1
2,4,5-Trichlorophenol	ND		ug/l	5.0	2.1	1
Biphenyl	ND		ug/l	2.0	0.20	1
2-Chloronaphthalene	ND		ug/l	2.0	0.35	1
2-Nitroaniline	ND		ug/l	5.0	1.0	1
2,6-Dinitrotoluene	ND		ug/l	5.0	0.84	1

Project Name: B14 GWS
Project Number: Not Specified

Lab Number: L2448657
Report Date: 09/04/24

SAMPLE RESULTS

Lab ID: L2448657-03
 Client ID: HI02R-PZM006
 Sample Location: B14

Date Collected: 08/26/24 12:17
 Date Received: 08/26/24
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Acenaphthylene	ND		ug/l	2.0	0.32	1
Acenaphthene	1.0	J	ug/l	2.0	0.40	1
2,4-Dinitrophenol	ND		ug/l	20	5.4	1
2,4-Dinitrotoluene	ND		ug/l	5.0	0.54	1
2,3,4,6-Tetrachlorophenol	ND		ug/l	5.0	2.2	1
Diethyl phthalate	ND		ug/l	5.0	0.76	1
Fluorene	0.81	J	ug/l	2.0	0.44	1
4-Nitroaniline	ND		ug/l	5.0	1.4	1
NDPA/DPA	ND		ug/l	2.0	0.92	1
Hexachlorobenzene	ND		ug/l	2.0	0.45	1
Pentachlorophenol	ND		ug/l	10	2.5	1
Phenanthrene	1.1	J	ug/l	2.0	0.42	1
Anthracene	ND		ug/l	2.0	0.47	1
Carbazole	ND		ug/l	2.0	0.31	1
Di-n-butylphthalate	ND		ug/l	5.0	0.96	1
Fluoranthene	ND		ug/l	2.0	0.41	1
Pyrene	ND		ug/l	2.0	0.41	1
3,3'-Dichlorobenzidine	ND		ug/l	5.0	1.8	1
Benzo(a)anthracene	ND		ug/l	2.0	0.32	1
Chrysene	ND		ug/l	1.5	0.22	1
Bis(2-ethylhexyl)phthalate	ND		ug/l	3.0	1.4	1
Di-n-octylphthalate	ND		ug/l	5.0	2.3	1
Benzo(b)fluoranthene	ND		ug/l	2.0	0.53	1
Benzo(k)fluoranthene	ND		ug/l	2.0	0.62	1
Benzo(a)pyrene	ND		ug/l	2.0	0.37	1
Indeno(1,2,3-cd)pyrene	ND		ug/l	2.0	0.48	1
Dibenzo(a,h)anthracene	ND		ug/l	2.0	0.29	1
Benzo(ghi)perylene	ND		ug/l	2.0	0.37	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	19	Q	21-120
Phenol-d6	24		10-120
Nitrobenzene-d5	65		23-120
2-Fluorobiphenyl	71		15-120
2,4,6-Tribromophenol	31		10-120
4-Terphenyl-d14	77		41-149

Project Name: B14 GWS
Project Number: Not Specified

Lab Number: L2448657
Report Date: 09/04/24

SAMPLE RESULTS

Lab ID: L2448657-03
 Client ID: HI02R-PZM006
 Sample Location: B14

Date Collected: 08/26/24 12:17
 Date Received: 08/26/24
 Field Prep: Not Specified

Sample Depth:

Matrix: Water
 Analytical Method: 1,8270E-SIM
 Analytical Date: 09/03/24 16:51
 Analyst: RP

Extraction Method: EPA 3510C
 Extraction Date: 08/30/24 20:34

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS-SIM - Westborough Lab						
Naphthalene	6.9		ug/l	0.10	0.02	1
2-Methylnaphthalene	0.85		ug/l	0.10	0.03	1
Acenaphthylene	0.05	J	ug/l	0.10	0.02	1
Acenaphthene	1.3		ug/l	0.10	0.02	1
Fluorene	1.0		ug/l	0.10	0.03	1
Phenanthrene	1.1		ug/l	0.05	0.04	1
Anthracene	0.17		ug/l	0.10	0.02	1
Fluoranthene	0.21		ug/l	0.10	0.03	1
Pyrene	0.14		ug/l	0.10	0.04	1
Benzo(a)anthracene	ND		ug/l	0.05	0.03	1
Chrysene	ND		ug/l	0.10	0.03	1
Benzo(b)fluoranthene	ND		ug/l	0.05	0.03	1
Benzo(k)fluoranthene	ND		ug/l	0.10	0.03	1
Benzo(a)pyrene	ND		ug/l	0.10	0.02	1
Indeno(1,2,3-cd)pyrene	ND		ug/l	0.10	0.02	1
Dibenzo(a,h)anthracene	ND		ug/l	0.05	0.02	1
Benzo(ghi)perylene	ND		ug/l	0.10	0.02	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
Nitrobenzene-d5	75		23-120
2-Fluorobiphenyl	80		15-120
4-Terphenyl-d14	65		41-149

Project Name: B14 GWS
Project Number: Not Specified

Lab Number: L2448657
Report Date: 09/04/24

SAMPLE RESULTS

Lab ID: L2448657-04
 Client ID: H18-MWS
 Sample Location: B14

Date Collected: 08/26/24 14:05
 Date Received: 08/26/24
 Field Prep: Not Specified

Sample Depth:

Matrix: Water
 Analytical Method: 1,8270E
 Analytical Date: 08/31/24 19:15
 Analyst: EK

Extraction Method: EPA 3510C
 Extraction Date: 08/30/24 20:34

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Benzaldehyde	ND		ug/l	5.0	1.1	1
Phenol	ND		ug/l	5.0	0.35	1
Bis(2-chloroethyl)ether	ND		ug/l	2.0	0.39	1
2-Chlorophenol	ND		ug/l	2.0	0.65	1
2-Methylphenol	ND		ug/l	5.0	2.3	1
Bis(2-chloroisopropyl)ether	ND		ug/l	2.0	0.40	1
Acetophenone	ND		ug/l	5.0	0.92	1
n-Nitrosodi-n-propylamine	ND		ug/l	5.0	0.91	1
3-Methylphenol/4-Methylphenol	ND		ug/l	5.0	1.4	1
Hexachloroethane	ND		ug/l	2.0	0.20	1
Nitrobenzene	ND		ug/l	1.4	0.20	1
Isophorone	ND		ug/l	5.0	0.86	1
2,4-Dimethylphenol	ND		ug/l	5.0	2.0	1
Bis(2-chloroethoxy)methane	ND		ug/l	5.0	0.84	1
2,4-Dichlorophenol	ND		ug/l	5.0	1.7	1
Naphthalene	1.4	J	ug/l	2.0	0.54	1
4-Chloroaniline	ND		ug/l	3.7	0.47	1
Hexachlorobutadiene	ND		ug/l	2.0	0.36	1
Caprolactam	ND		ug/l	10	1.2	1
2-Methylnaphthalene	ND		ug/l	2.0	0.37	1
Hexachlorocyclopentadiene	ND		ug/l	20	1.2	1
1,2,4,5-Tetrachlorobenzene	ND		ug/l	1.7	0.24	1
2,4,6-Trichlorophenol	ND		ug/l	5.0	2.1	1
2,4,5-Trichlorophenol	ND		ug/l	5.0	2.1	1
Biphenyl	ND		ug/l	2.0	0.20	1
2-Chloronaphthalene	ND		ug/l	2.0	0.35	1
2-Nitroaniline	ND		ug/l	5.0	1.0	1
2,6-Dinitrotoluene	ND		ug/l	5.0	0.84	1

Project Name: B14 GWS
Project Number: Not Specified

Lab Number: L2448657
Report Date: 09/04/24

SAMPLE RESULTS

Lab ID: L2448657-04
 Client ID: H18-MWS
 Sample Location: B14

Date Collected: 08/26/24 14:05
 Date Received: 08/26/24
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Acenaphthylene	ND		ug/l	2.0	0.32	1
Acenaphthene	ND		ug/l	2.0	0.40	1
2,4-Dinitrophenol	ND		ug/l	20	5.4	1
2,4-Dinitrotoluene	ND		ug/l	5.0	0.54	1
2,3,4,6-Tetrachlorophenol	ND		ug/l	5.0	2.2	1
Diethyl phthalate	ND		ug/l	5.0	0.76	1
Fluorene	ND		ug/l	2.0	0.44	1
4-Nitroaniline	ND		ug/l	5.0	1.4	1
NDPA/DPA	ND		ug/l	2.0	0.92	1
Hexachlorobenzene	ND		ug/l	2.0	0.45	1
Pentachlorophenol	ND		ug/l	10	2.5	1
Phenanthrene	ND		ug/l	2.0	0.42	1
Anthracene	ND		ug/l	2.0	0.47	1
Carbazole	ND		ug/l	2.0	0.31	1
Di-n-butylphthalate	ND		ug/l	5.0	0.96	1
Fluoranthene	ND		ug/l	2.0	0.41	1
Pyrene	ND		ug/l	2.0	0.41	1
3,3'-Dichlorobenzidine	ND		ug/l	5.0	1.8	1
Benzo(a)anthracene	ND		ug/l	2.0	0.32	1
Chrysene	ND		ug/l	1.5	0.22	1
Bis(2-ethylhexyl)phthalate	ND		ug/l	3.0	1.4	1
Di-n-octylphthalate	ND		ug/l	5.0	2.3	1
Benzo(b)fluoranthene	ND		ug/l	2.0	0.53	1
Benzo(k)fluoranthene	ND		ug/l	2.0	0.62	1
Benzo(a)pyrene	ND		ug/l	2.0	0.37	1
Indeno(1,2,3-cd)pyrene	ND		ug/l	2.0	0.48	1
Dibenzo(a,h)anthracene	ND		ug/l	2.0	0.29	1
Benzo(ghi)perylene	ND		ug/l	2.0	0.37	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	46		21-120
Phenol-d6	34		10-120
Nitrobenzene-d5	70		23-120
2-Fluorobiphenyl	67		15-120
2,4,6-Tribromophenol	86		10-120
4-Terphenyl-d14	79		41-149

Project Name: B14 GWS
Project Number: Not Specified

Lab Number: L2448657
Report Date: 09/04/24

SAMPLE RESULTS

Lab ID: L2448657-04
 Client ID: H18-MWS
 Sample Location: B14

Date Collected: 08/26/24 14:05
 Date Received: 08/26/24
 Field Prep: Not Specified

Sample Depth:
 Matrix: Water
 Analytical Method: 1,8270E-SIM
 Analytical Date: 09/03/24 17:07
 Analyst: RP

Extraction Method: EPA 3510C
 Extraction Date: 08/30/24 20:34

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS-SIM - Westborough Lab						
Naphthalene	1.6		ug/l	0.10	0.02	1
2-Methylnaphthalene	0.09	J	ug/l	0.10	0.03	1
Acenaphthylene	0.05	J	ug/l	0.10	0.02	1
Acenaphthene	0.16		ug/l	0.10	0.02	1
Fluorene	0.08	J	ug/l	0.10	0.03	1
Phenanthrene	0.06		ug/l	0.05	0.04	1
Anthracene	0.32		ug/l	0.10	0.02	1
Fluoranthene	0.06	J	ug/l	0.10	0.03	1
Pyrene	0.06	J	ug/l	0.10	0.04	1
Benzo(a)anthracene	ND		ug/l	0.05	0.03	1
Chrysene	ND		ug/l	0.10	0.03	1
Benzo(b)fluoranthene	ND		ug/l	0.05	0.03	1
Benzo(k)fluoranthene	ND		ug/l	0.10	0.03	1
Benzo(a)pyrene	ND		ug/l	0.10	0.02	1
Indeno(1,2,3-cd)pyrene	ND		ug/l	0.10	0.02	1
Dibenzo(a,h)anthracene	ND		ug/l	0.05	0.02	1
Benzo(ghi)perylene	ND		ug/l	0.10	0.02	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
Nitrobenzene-d5	76		23-120
2-Fluorobiphenyl	73		15-120
4-Terphenyl-d14	62		41-149

Project Name: B14 GWS
Project Number: Not Specified

Lab Number: L2448657
Report Date: 09/04/24

SAMPLE RESULTS

Lab ID: L2448657-05
 Client ID: HI07R-PZM005
 Sample Location: B14

Date Collected: 08/26/24 13:10
 Date Received: 08/26/24
 Field Prep: Not Specified

Sample Depth:

Matrix: Water
 Analytical Method: 1,8270E
 Analytical Date: 08/31/24 19:38
 Analyst: EK

Extraction Method: EPA 3510C
 Extraction Date: 08/30/24 20:34

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Benzaldehyde	ND		ug/l	5.0	1.1	1
Phenol	ND		ug/l	5.0	0.35	1
Bis(2-chloroethyl)ether	ND		ug/l	2.0	0.39	1
2-Chlorophenol	ND		ug/l	2.0	0.65	1
2-Methylphenol	ND		ug/l	5.0	2.3	1
Bis(2-chloroisopropyl)ether	ND		ug/l	2.0	0.40	1
Acetophenone	ND		ug/l	5.0	0.92	1
n-Nitrosodi-n-propylamine	ND		ug/l	5.0	0.91	1
3-Methylphenol/4-Methylphenol	1.4	J	ug/l	5.0	1.4	1
Hexachloroethane	ND		ug/l	2.0	0.20	1
Nitrobenzene	ND		ug/l	1.4	0.20	1
Isophorone	ND		ug/l	5.0	0.86	1
2,4-Dimethylphenol	ND		ug/l	5.0	2.0	1
Bis(2-chloroethoxy)methane	ND		ug/l	5.0	0.84	1
2,4-Dichlorophenol	ND		ug/l	5.0	1.7	1
Naphthalene	2.5		ug/l	2.0	0.54	1
4-Chloroaniline	ND		ug/l	3.7	0.47	1
Hexachlorobutadiene	ND		ug/l	2.0	0.36	1
Caprolactam	ND		ug/l	10	1.2	1
2-Methylnaphthalene	ND		ug/l	2.0	0.37	1
Hexachlorocyclopentadiene	ND		ug/l	20	1.2	1
1,2,4,5-Tetrachlorobenzene	ND		ug/l	1.7	0.24	1
2,4,6-Trichlorophenol	ND		ug/l	5.0	2.1	1
2,4,5-Trichlorophenol	ND		ug/l	5.0	2.1	1
Biphenyl	ND		ug/l	2.0	0.20	1
2-Chloronaphthalene	ND		ug/l	2.0	0.35	1
2-Nitroaniline	ND		ug/l	5.0	1.0	1
2,6-Dinitrotoluene	ND		ug/l	5.0	0.84	1

Project Name: B14 GWS
Project Number: Not Specified

Lab Number: L2448657
Report Date: 09/04/24

SAMPLE RESULTS

Lab ID: L2448657-05
 Client ID: HI07R-PZM005
 Sample Location: B14

Date Collected: 08/26/24 13:10
 Date Received: 08/26/24
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Acenaphthylene	ND		ug/l	2.0	0.32	1
Acenaphthene	ND		ug/l	2.0	0.40	1
2,4-Dinitrophenol	ND		ug/l	20	5.4	1
2,4-Dinitrotoluene	ND		ug/l	5.0	0.54	1
2,3,4,6-Tetrachlorophenol	ND		ug/l	5.0	2.2	1
Diethyl phthalate	ND		ug/l	5.0	0.76	1
Fluorene	ND		ug/l	2.0	0.44	1
4-Nitroaniline	ND		ug/l	5.0	1.4	1
NDPA/DPA	ND		ug/l	2.0	0.92	1
Hexachlorobenzene	ND		ug/l	2.0	0.45	1
Pentachlorophenol	5.9	J	ug/l	10	2.5	1
Phenanthrene	1.5	J	ug/l	2.0	0.42	1
Anthracene	ND		ug/l	2.0	0.47	1
Carbazole	ND		ug/l	2.0	0.31	1
Di-n-butylphthalate	ND		ug/l	5.0	0.96	1
Fluoranthene	0.99	J	ug/l	2.0	0.41	1
Pyrene	0.74	J	ug/l	2.0	0.41	1
3,3'-Dichlorobenzidine	ND		ug/l	5.0	1.8	1
Benzo(a)anthracene	ND		ug/l	2.0	0.32	1
Chrysene	ND		ug/l	1.5	0.22	1
Bis(2-ethylhexyl)phthalate	ND		ug/l	3.0	1.4	1
Di-n-octylphthalate	ND		ug/l	5.0	2.3	1
Benzo(b)fluoranthene	ND		ug/l	2.0	0.53	1
Benzo(k)fluoranthene	ND		ug/l	2.0	0.62	1
Benzo(a)pyrene	ND		ug/l	2.0	0.37	1
Indeno(1,2,3-cd)pyrene	ND		ug/l	2.0	0.48	1
Dibenzo(a,h)anthracene	ND		ug/l	2.0	0.29	1
Benzo(ghi)perylene	ND		ug/l	2.0	0.37	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	48		21-120
Phenol-d6	35		10-120
Nitrobenzene-d5	66		23-120
2-Fluorobiphenyl	64		15-120
2,4,6-Tribromophenol	88		10-120
4-Terphenyl-d14	72		41-149

Project Name: B14 GWS
Project Number: Not Specified

Lab Number: L2448657
Report Date: 09/04/24

SAMPLE RESULTS

Lab ID: L2448657-05
 Client ID: HI07R-PZM005
 Sample Location: B14

Date Collected: 08/26/24 13:10
 Date Received: 08/26/24
 Field Prep: Not Specified

Sample Depth:

Matrix: Water
 Analytical Method: 1,8270E-SIM
 Analytical Date: 09/03/24 17:23
 Analyst: RP

Extraction Method: EPA 3510C
 Extraction Date: 08/30/24 20:34

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS-SIM - Westborough Lab						
Naphthalene	2.9		ug/l	0.10	0.02	1
2-Methylnaphthalene	0.67		ug/l	0.10	0.03	1
Acenaphthylene	0.32		ug/l	0.10	0.02	1
Acenaphthene	0.57		ug/l	0.10	0.02	1
Fluorene	0.80		ug/l	0.10	0.03	1
Phenanthrene	1.7		ug/l	0.05	0.04	1
Anthracene	0.34		ug/l	0.10	0.02	1
Fluoranthene	1.2		ug/l	0.10	0.03	1
Pyrene	0.81		ug/l	0.10	0.04	1
Benzo(a)anthracene	0.07		ug/l	0.05	0.03	1
Chrysene	0.05	J	ug/l	0.10	0.03	1
Benzo(b)fluoranthene	0.03	J	ug/l	0.05	0.03	1
Benzo(k)fluoranthene	ND		ug/l	0.10	0.03	1
Benzo(a)pyrene	ND		ug/l	0.10	0.02	1
Indeno(1,2,3-cd)pyrene	ND		ug/l	0.10	0.02	1
Dibenzo(a,h)anthracene	ND		ug/l	0.05	0.02	1
Benzo(ghi)perylene	ND		ug/l	0.10	0.02	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
Nitrobenzene-d5	73		23-120
2-Fluorobiphenyl	73		15-120
4-Terphenyl-d14	63		41-149

Project Name: B14 GWS
Project Number: Not Specified

Lab Number: L2448657
Report Date: 09/04/24

SAMPLE RESULTS

Lab ID: L2448657-06
 Client ID: TM08R-PZM007
 Sample Location: B14

Date Collected: 08/26/24 14:46
 Date Received: 08/26/24
 Field Prep: Not Specified

Sample Depth:

Matrix: Water
 Analytical Method: 1,8270E
 Analytical Date: 08/31/24 20:00
 Analyst: EK

Extraction Method: EPA 3510C
 Extraction Date: 08/30/24 20:34

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Benzaldehyde	ND		ug/l	5.0	1.1	1
Phenol	0.92	J	ug/l	5.0	0.35	1
Bis(2-chloroethyl)ether	ND		ug/l	2.0	0.39	1
2-Chlorophenol	ND		ug/l	2.0	0.65	1
2-Methylphenol	ND		ug/l	5.0	2.3	1
Bis(2-chloroisopropyl)ether	ND		ug/l	2.0	0.40	1
Acetophenone	ND		ug/l	5.0	0.92	1
n-Nitrosodi-n-propylamine	ND		ug/l	5.0	0.91	1
3-Methylphenol/4-Methylphenol	ND		ug/l	5.0	1.4	1
Hexachloroethane	ND		ug/l	2.0	0.20	1
Nitrobenzene	ND		ug/l	1.4	0.20	1
Isophorone	ND		ug/l	5.0	0.86	1
2,4-Dimethylphenol	ND		ug/l	5.0	2.0	1
Bis(2-chloroethoxy)methane	ND		ug/l	5.0	0.84	1
2,4-Dichlorophenol	ND		ug/l	5.0	1.7	1
Naphthalene	ND		ug/l	2.0	0.54	1
4-Chloroaniline	ND		ug/l	3.7	0.47	1
Hexachlorobutadiene	ND		ug/l	2.0	0.36	1
Caprolactam	ND		ug/l	10	1.2	1
2-Methylnaphthalene	ND		ug/l	2.0	0.37	1
Hexachlorocyclopentadiene	ND		ug/l	20	1.2	1
1,2,4,5-Tetrachlorobenzene	ND		ug/l	1.7	0.24	1
2,4,6-Trichlorophenol	ND		ug/l	5.0	2.1	1
2,4,5-Trichlorophenol	ND		ug/l	5.0	2.1	1
Biphenyl	ND		ug/l	2.0	0.20	1
2-Chloronaphthalene	ND		ug/l	2.0	0.35	1
2-Nitroaniline	ND		ug/l	5.0	1.0	1
2,6-Dinitrotoluene	ND		ug/l	5.0	0.84	1

Project Name: B14 GWS
Project Number: Not Specified

Lab Number: L2448657
Report Date: 09/04/24

SAMPLE RESULTS

Lab ID: L2448657-06
 Client ID: TM08R-PZM007
 Sample Location: B14

Date Collected: 08/26/24 14:46
 Date Received: 08/26/24
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Acenaphthylene	ND		ug/l	2.0	0.32	1
Acenaphthene	ND		ug/l	2.0	0.40	1
2,4-Dinitrophenol	ND		ug/l	20	5.4	1
2,4-Dinitrotoluene	ND		ug/l	5.0	0.54	1
2,3,4,6-Tetrachlorophenol	ND		ug/l	5.0	2.2	1
Diethyl phthalate	ND		ug/l	5.0	0.76	1
Fluorene	ND		ug/l	2.0	0.44	1
4-Nitroaniline	ND		ug/l	5.0	1.4	1
NDPA/DPA	ND		ug/l	2.0	0.92	1
Hexachlorobenzene	ND		ug/l	2.0	0.45	1
Pentachlorophenol	ND		ug/l	10	2.5	1
Phenanthrene	ND		ug/l	2.0	0.42	1
Anthracene	ND		ug/l	2.0	0.47	1
Carbazole	ND		ug/l	2.0	0.31	1
Di-n-butylphthalate	ND		ug/l	5.0	0.96	1
Fluoranthene	ND		ug/l	2.0	0.41	1
Pyrene	ND		ug/l	2.0	0.41	1
3,3'-Dichlorobenzidine	ND		ug/l	5.0	1.8	1
Benzo(a)anthracene	ND		ug/l	2.0	0.32	1
Chrysene	ND		ug/l	1.5	0.22	1
Bis(2-ethylhexyl)phthalate	ND		ug/l	3.0	1.4	1
Di-n-octylphthalate	ND		ug/l	5.0	2.3	1
Benzo(b)fluoranthene	ND		ug/l	2.0	0.53	1
Benzo(k)fluoranthene	ND		ug/l	2.0	0.62	1
Benzo(a)pyrene	ND		ug/l	2.0	0.37	1
Indeno(1,2,3-cd)pyrene	ND		ug/l	2.0	0.48	1
Dibenzo(a,h)anthracene	ND		ug/l	2.0	0.29	1
Benzo(ghi)perylene	ND		ug/l	2.0	0.37	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	31		21-120
Phenol-d6	25		10-120
Nitrobenzene-d5	61		23-120
2-Fluorobiphenyl	63		15-120
2,4,6-Tribromophenol	54		10-120
4-Terphenyl-d14	69		41-149

Project Name: B14 GWS
Project Number: Not Specified

Lab Number: L2448657
Report Date: 09/04/24

SAMPLE RESULTS

Lab ID: L2448657-06
 Client ID: TM08R-PZM007
 Sample Location: B14

Date Collected: 08/26/24 14:46
 Date Received: 08/26/24
 Field Prep: Not Specified

Sample Depth:

Matrix: Water
 Analytical Method: 1,8270E-SIM
 Analytical Date: 09/03/24 17:40
 Analyst: RP

Extraction Method: EPA 3510C
 Extraction Date: 08/30/24 20:39

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS-SIM - Westborough Lab						
Naphthalene	0.13		ug/l	0.10	0.02	1
2-Methylnaphthalene	ND		ug/l	0.10	0.03	1
Acenaphthylene	ND		ug/l	0.10	0.02	1
Acenaphthene	ND		ug/l	0.10	0.02	1
Fluorene	ND		ug/l	0.10	0.03	1
Phenanthrene	ND		ug/l	0.05	0.04	1
Anthracene	0.08	J	ug/l	0.10	0.02	1
Fluoranthene	0.20		ug/l	0.10	0.03	1
Pyrene	0.15		ug/l	0.10	0.04	1
Benzo(a)anthracene	ND		ug/l	0.05	0.03	1
Chrysene	ND		ug/l	0.10	0.03	1
Benzo(b)fluoranthene	ND		ug/l	0.05	0.03	1
Benzo(k)fluoranthene	ND		ug/l	0.10	0.03	1
Benzo(a)pyrene	ND		ug/l	0.10	0.02	1
Indeno(1,2,3-cd)pyrene	ND		ug/l	0.10	0.02	1
Dibenzo(a,h)anthracene	ND		ug/l	0.05	0.02	1
Benzo(ghi)perylene	ND		ug/l	0.10	0.02	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
Nitrobenzene-d5	71		23-120
2-Fluorobiphenyl	71		15-120
4-Terphenyl-d14	60		41-149

Project Name: B14 GWS
Project Number: Not Specified

Lab Number: L2448657
Report Date: 09/04/24

SAMPLE RESULTS

Lab ID: L2448657-07
 Client ID: HI16-MWS
 Sample Location: B14

Date Collected: 08/26/24 15:20
 Date Received: 08/26/24
 Field Prep: Not Specified

Sample Depth:

Matrix: Water
 Analytical Method: 1,8270E
 Analytical Date: 08/31/24 20:22
 Analyst: EK

Extraction Method: EPA 3510C
 Extraction Date: 08/30/24 20:34

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Benzaldehyde	ND		ug/l	5.0	1.1	1
Phenol	0.78	J	ug/l	5.0	0.35	1
Bis(2-chloroethyl)ether	ND		ug/l	2.0	0.39	1
2-Chlorophenol	ND		ug/l	2.0	0.65	1
2-Methylphenol	ND		ug/l	5.0	2.3	1
Bis(2-chloroisopropyl)ether	ND		ug/l	2.0	0.40	1
Acetophenone	ND		ug/l	5.0	0.92	1
n-Nitrosodi-n-propylamine	ND		ug/l	5.0	0.91	1
3-Methylphenol/4-Methylphenol	ND		ug/l	5.0	1.4	1
Hexachloroethane	ND		ug/l	2.0	0.20	1
Nitrobenzene	ND		ug/l	1.4	0.20	1
Isophorone	ND		ug/l	5.0	0.86	1
2,4-Dimethylphenol	ND		ug/l	5.0	2.0	1
Bis(2-chloroethoxy)methane	ND		ug/l	5.0	0.84	1
2,4-Dichlorophenol	ND		ug/l	5.0	1.7	1
Naphthalene	ND		ug/l	2.0	0.54	1
4-Chloroaniline	ND		ug/l	3.7	0.47	1
Hexachlorobutadiene	ND		ug/l	2.0	0.36	1
Caprolactam	ND		ug/l	10	1.2	1
2-Methylnaphthalene	ND		ug/l	2.0	0.37	1
Hexachlorocyclopentadiene	ND		ug/l	20	1.2	1
1,2,4,5-Tetrachlorobenzene	ND		ug/l	1.7	0.24	1
2,4,6-Trichlorophenol	ND		ug/l	5.0	2.1	1
2,4,5-Trichlorophenol	ND		ug/l	5.0	2.1	1
Biphenyl	ND		ug/l	2.0	0.20	1
2-Chloronaphthalene	ND		ug/l	2.0	0.35	1
2-Nitroaniline	ND		ug/l	5.0	1.0	1
2,6-Dinitrotoluene	ND		ug/l	5.0	0.84	1

Project Name: B14 GWS
Project Number: Not Specified

Lab Number: L2448657
Report Date: 09/04/24

SAMPLE RESULTS

Lab ID: L2448657-07
 Client ID: HI16-MWS
 Sample Location: B14

Date Collected: 08/26/24 15:20
 Date Received: 08/26/24
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Acenaphthylene	ND		ug/l	2.0	0.32	1
Acenaphthene	ND		ug/l	2.0	0.40	1
2,4-Dinitrophenol	ND		ug/l	20	5.4	1
2,4-Dinitrotoluene	ND		ug/l	5.0	0.54	1
2,3,4,6-Tetrachlorophenol	ND		ug/l	5.0	2.2	1
Diethyl phthalate	ND		ug/l	5.0	0.76	1
Fluorene	ND		ug/l	2.0	0.44	1
4-Nitroaniline	ND		ug/l	5.0	1.4	1
NDPA/DPA	ND		ug/l	2.0	0.92	1
Hexachlorobenzene	ND		ug/l	2.0	0.45	1
Pentachlorophenol	ND		ug/l	10	2.5	1
Phenanthrene	ND		ug/l	2.0	0.42	1
Anthracene	ND		ug/l	2.0	0.47	1
Carbazole	ND		ug/l	2.0	0.31	1
Di-n-butylphthalate	ND		ug/l	5.0	0.96	1
Fluoranthene	ND		ug/l	2.0	0.41	1
Pyrene	ND		ug/l	2.0	0.41	1
3,3'-Dichlorobenzidine	ND		ug/l	5.0	1.8	1
Benzo(a)anthracene	ND		ug/l	2.0	0.32	1
Chrysene	ND		ug/l	1.5	0.22	1
Bis(2-ethylhexyl)phthalate	ND		ug/l	3.0	1.4	1
Di-n-octylphthalate	ND		ug/l	5.0	2.3	1
Benzo(b)fluoranthene	ND		ug/l	2.0	0.53	1
Benzo(k)fluoranthene	ND		ug/l	2.0	0.62	1
Benzo(a)pyrene	ND		ug/l	2.0	0.37	1
Indeno(1,2,3-cd)pyrene	ND		ug/l	2.0	0.48	1
Dibenzo(a,h)anthracene	ND		ug/l	2.0	0.29	1
Benzo(ghi)perylene	ND		ug/l	2.0	0.37	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	13	Q	21-120
Phenol-d6	17		10-120
Nitrobenzene-d5	54		23-120
2-Fluorobiphenyl	49		15-120
2,4,6-Tribromophenol	30		10-120
4-Terphenyl-d14	60		41-149

Project Name: B14 GWS
Project Number: Not Specified

Lab Number: L2448657
Report Date: 09/04/24

SAMPLE RESULTS

Lab ID: L2448657-07
 Client ID: HI16-MWS
 Sample Location: B14

Date Collected: 08/26/24 15:20
 Date Received: 08/26/24
 Field Prep: Not Specified

Sample Depth:
 Matrix: Water
 Analytical Method: 1,8270E-SIM
 Analytical Date: 09/03/24 17:56
 Analyst: RP

Extraction Method: EPA 3510C
 Extraction Date: 08/30/24 20:39

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS-SIM - Westborough Lab						
Naphthalene	0.09	J	ug/l	0.10	0.02	1
2-Methylnaphthalene	ND		ug/l	0.10	0.03	1
Acenaphthylene	ND		ug/l	0.10	0.02	1
Acenaphthene	0.04	J	ug/l	0.10	0.02	1
Fluorene	ND		ug/l	0.10	0.03	1
Phenanthrene	ND		ug/l	0.05	0.04	1
Anthracene	ND		ug/l	0.10	0.02	1
Fluoranthene	ND		ug/l	0.10	0.03	1
Pyrene	ND		ug/l	0.10	0.04	1
Benzo(a)anthracene	ND		ug/l	0.05	0.03	1
Chrysene	ND		ug/l	0.10	0.03	1
Benzo(b)fluoranthene	ND		ug/l	0.05	0.03	1
Benzo(k)fluoranthene	ND		ug/l	0.10	0.03	1
Benzo(a)pyrene	ND		ug/l	0.10	0.02	1
Indeno(1,2,3-cd)pyrene	ND		ug/l	0.10	0.02	1
Dibenzo(a,h)anthracene	ND		ug/l	0.05	0.02	1
Benzo(ghi)perylene	ND		ug/l	0.10	0.02	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
Nitrobenzene-d5	61		23-120
2-Fluorobiphenyl	56		15-120
4-Terphenyl-d14	57		41-149

Project Name: B14 GWS
Project Number: Not Specified

Lab Number: L2448657
Report Date: 09/04/24

Method Blank Analysis Batch Quality Control

Analytical Method: 1,8270E
Analytical Date: 08/31/24 13:24
Analyst: CMM

Extraction Method: EPA 3510C
Extraction Date: 08/30/24 20:34

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 01-07 Batch: WG1966246-1					
Benzaldehyde	ND		ug/l	5.0	1.1
Phenol	ND		ug/l	5.0	0.35
Bis(2-chloroethyl)ether	ND		ug/l	2.0	0.39
2-Chlorophenol	ND		ug/l	2.0	0.65
2-Methylphenol	ND		ug/l	5.0	2.3
Bis(2-chloroisopropyl)ether	ND		ug/l	2.0	0.40
Acetophenone	ND		ug/l	5.0	0.92
n-Nitrosodi-n-propylamine	ND		ug/l	5.0	0.91
3-Methylphenol/4-Methylphenol	ND		ug/l	5.0	1.4
Hexachloroethane	ND		ug/l	2.0	0.20
Nitrobenzene	ND		ug/l	1.4	0.20
Isophorone	ND		ug/l	5.0	0.86
2,4-Dimethylphenol	ND		ug/l	5.0	2.0
Bis(2-chloroethoxy)methane	ND		ug/l	5.0	0.84
2,4-Dichlorophenol	ND		ug/l	5.0	1.7
Naphthalene	ND		ug/l	2.0	0.54
4-Chloroaniline	ND		ug/l	3.7	0.47
Hexachlorobutadiene	ND		ug/l	2.0	0.36
Caprolactam	ND		ug/l	10	1.2
2-Methylnaphthalene	ND		ug/l	2.0	0.37
Hexachlorocyclopentadiene	ND		ug/l	20	1.2
1,2,4,5-Tetrachlorobenzene	ND		ug/l	1.7	0.24
2,4,6-Trichlorophenol	ND		ug/l	5.0	2.1
2,4,5-Trichlorophenol	ND		ug/l	5.0	2.1
Biphenyl	ND		ug/l	2.0	0.20
2-Chloronaphthalene	ND		ug/l	2.0	0.35
2-Nitroaniline	ND		ug/l	5.0	1.0
2,6-Dinitrotoluene	ND		ug/l	5.0	0.84
Acenaphthylene	ND		ug/l	2.0	0.32

Project Name: B14 GWS
Project Number: Not Specified

Lab Number: L2448657
Report Date: 09/04/24

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270E
Analytical Date: 08/31/24 13:24
Analyst: CMM

Extraction Method: EPA 3510C
Extraction Date: 08/30/24 20:34

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 01-07 Batch: WG1966246-1					
Acenaphthene	ND		ug/l	2.0	0.40
2,4-Dinitrophenol	ND		ug/l	20	5.4
2,4-Dinitrotoluene	ND		ug/l	5.0	0.54
2,3,4,6-Tetrachlorophenol	ND		ug/l	5.0	2.2
Diethyl phthalate	ND		ug/l	5.0	0.76
Fluorene	ND		ug/l	2.0	0.44
4-Nitroaniline	ND		ug/l	5.0	1.4
NDPA/DPA	ND		ug/l	2.0	0.92
Hexachlorobenzene	ND		ug/l	2.0	0.45
Pentachlorophenol	ND		ug/l	10	2.5
Phenanthrene	ND		ug/l	2.0	0.42
Anthracene	ND		ug/l	2.0	0.47
Carbazole	ND		ug/l	2.0	0.31
Di-n-butylphthalate	ND		ug/l	5.0	0.96
Fluoranthene	ND		ug/l	2.0	0.41
Pyrene	ND		ug/l	2.0	0.41
3,3'-Dichlorobenzidine	ND		ug/l	5.0	1.8
Benzo(a)anthracene	ND		ug/l	2.0	0.32
Chrysene	ND		ug/l	1.5	0.22
Bis(2-ethylhexyl)phthalate	ND		ug/l	3.0	1.4
Di-n-octylphthalate	ND		ug/l	5.0	2.3
Benzo(b)fluoranthene	ND		ug/l	2.0	0.53
Benzo(k)fluoranthene	ND		ug/l	2.0	0.62
Benzo(a)pyrene	ND		ug/l	2.0	0.37
Indeno(1,2,3-cd)pyrene	ND		ug/l	2.0	0.48
Dibenzo(a,h)anthracene	ND		ug/l	2.0	0.29
Benzo(ghi)perylene	ND		ug/l	2.0	0.37

Project Name: B14 GWS
Project Number: Not Specified

Lab Number: L2448657
Report Date: 09/04/24

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270E
Analytical Date: 08/31/24 13:24
Analyst: CMM

Extraction Method: EPA 3510C
Extraction Date: 08/30/24 20:34

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 01-07 Batch: WG1966246-1					

Surrogate	%Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	49		21-120
Phenol-d6	32		10-120
Nitrobenzene-d5	72		23-120
2-Fluorobiphenyl	68		15-120
2,4,6-Tribromophenol	73		10-120
4-Terphenyl-d14	77		41-149

Project Name: B14 GWS
Project Number: Not Specified

Lab Number: L2448657
Report Date: 09/04/24

**Method Blank Analysis
Batch Quality Control**

Analytical Method: 1,8270E-SIM
Analytical Date: 09/03/24 14:07
Analyst: RP

Extraction Method: EPA 3510C
Extraction Date: 08/30/24 20:34

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS-SIM - Westborough Lab for sample(s): 01-07 Batch: WG1966248-1					
Naphthalene	ND		ug/l	0.10	0.02
2-Methylnaphthalene	ND		ug/l	0.10	0.03
Acenaphthylene	ND		ug/l	0.10	0.02
Acenaphthene	ND		ug/l	0.10	0.02
Fluorene	ND		ug/l	0.10	0.03
Phenanthrene	ND		ug/l	0.05	0.04
Anthracene	ND		ug/l	0.10	0.02
Fluoranthene	ND		ug/l	0.10	0.03
Pyrene	ND		ug/l	0.10	0.04
Benzo(a)anthracene	ND		ug/l	0.05	0.03
Chrysene	ND		ug/l	0.10	0.03
Benzo(b)fluoranthene	ND		ug/l	0.05	0.03
Benzo(k)fluoranthene	ND		ug/l	0.10	0.03
Benzo(a)pyrene	ND		ug/l	0.10	0.02
Indeno(1,2,3-cd)pyrene	ND		ug/l	0.10	0.02
Dibenzo(a,h)anthracene	ND		ug/l	0.05	0.02
Benzo(ghi)perylene	ND		ug/l	0.10	0.02

Surrogate	%Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	45		21-120
Phenol-d6	34		10-120
Nitrobenzene-d5	76		23-120
2-Fluorobiphenyl	77		15-120
2,4,6-Tribromophenol	75		10-120
4-Terphenyl-d14	68		41-149

Lab Control Sample Analysis

Batch Quality Control

Project Name: B14 GWS
Project Number: Not Specified

Lab Number: L2448657
Report Date: 09/04/24

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-07 Batch: WG1966246-2 WG1966246-3								
Benzaldehyde	62		65		40-140	5		30
Phenol	34		39		12-110	14		30
Bis(2-chloroethyl)ether	76		78		40-140	3		30
2-Chlorophenol	72		76		27-123	5		30
2-Methylphenol	65		74		30-130	13		30
Bis(2-chloroisopropyl)ether	83		83		40-140	0		30
Acetophenone	71		75		39-129	5		30
n-Nitrosodi-n-propylamine	82		84		29-132	2		30
3-Methylphenol/4-Methylphenol	68		72		30-130	6		30
Hexachloroethane	61		64		40-140	5		30
Nitrobenzene	76		79		40-140	4		30
Isophorone	79		82		40-140	4		30
2,4-Dimethylphenol	64		68		30-130	6		30
Bis(2-chloroethoxy)methane	80		81		40-140	1		30
2,4-Dichlorophenol	78		83		30-130	6		30
Naphthalene	69		71		40-140	3		30
4-Chloroaniline	77		68		40-140	12		30
Hexachlorobutadiene	60		61		40-140	2		30
Caprolactam	43		46		10-130	7		30
2-Methylnaphthalene	71		72		40-140	1		30
Hexachlorocyclopentadiene	43		45		40-140	5		30
1,2,4,5-Tetrachlorobenzene	61		62		2-134	2		30
2,4,6-Trichlorophenol	82		84		30-130	2		30

Lab Control Sample Analysis

Batch Quality Control

Project Name: B14 GWS
Project Number: Not Specified

Lab Number: L2448657
Report Date: 09/04/24

Parameter	LCS		LCSD		%Recovery Limits	RPD	Qual	RPD Limits
	%Recovery	Qual	%Recovery	Qual				
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-07 Batch: WG1966246-2 WG1966246-3								
2,4,5-Trichlorophenol	88		93		30-130	6		30
Biphenyl	66		69		40-140	4		30
2-Chloronaphthalene	69		73		40-140	6		30
2-Nitroaniline	85		92		52-143	8		30
2,6-Dinitrotoluene	80		90		40-140	12		30
Acenaphthylene	75		80		45-123	6		30
Acenaphthene	75		75		37-111	0		30
2,4-Dinitrophenol	92		95		20-130	3		30
2,4-Dinitrotoluene	82		89		48-143	8		30
2,3,4,6-Tetrachlorophenol	96		96		54-145	0		30
Diethyl phthalate	84		85		40-140	1		30
Fluorene	77		80		40-140	4		30
4-Nitroaniline	78		85		51-143	9		30
NDPA/DPA	82		82		40-140	0		30
Hexachlorobenzene	77		77		40-140	0		30
Pentachlorophenol	87		93		9-103	7		30
Phenanthrene	82		81		40-140	1		30
Anthracene	84		86		40-140	2		30
Carbazole	85		88		55-144	3		30
Di-n-butylphthalate	99		98		40-140	1		30
Fluoranthene	87		88		40-140	1		30
Pyrene	88		90		26-127	2		30
3,3'-Dichlorobenzidine	88		83		40-140	6		30

Lab Control Sample Analysis

Batch Quality Control

Project Name: B14 GWS
Project Number: Not Specified

Lab Number: L2448657
Report Date: 09/04/24

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-07 Batch: WG1966246-2 WG1966246-3								
Benzo(a)anthracene	78		76		40-140	3		30
Chrysene	83		78		40-140	6		30
Bis(2-ethylhexyl)phthalate	99		92		40-140	7		30
Di-n-octylphthalate	102		96		40-140	6		30
Benzo(b)fluoranthene	77		73		40-140	5		30
Benzo(k)fluoranthene	91		84		40-140	8		30
Benzo(a)pyrene	85		80		40-140	6		30
Indeno(1,2,3-cd)pyrene	77		74		40-140	4		30
Dibenzo(a,h)anthracene	84		80		40-140	5		30
Benzo(ghi)perylene	82		76		40-140	8		30

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
2-Fluorophenol	50		56		21-120
Phenol-d6	34		39		10-120
Nitrobenzene-d5	76		77		23-120
2-Fluorobiphenyl	73		74		15-120
2,4,6-Tribromophenol	84		85		10-120
4-Terphenyl-d14	79		81		41-149

Lab Control Sample Analysis

Batch Quality Control

Project Name: B14 GWS
Project Number: Not Specified

Lab Number: L2448657
Report Date: 09/04/24

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS-SIM - Westborough Lab Associated sample(s): 01-07 Batch: WG1966248-2 WG1966248-3								
Naphthalene	69		70		40-140	1		40
2-Methylnaphthalene	70		71		40-140	1		40
Acenaphthylene	70		72		40-140	3		40
Acenaphthene	79		80		37-111	1		40
Fluorene	76		75		40-140	1		40
Phenanthrene	83		83		40-140	0		40
Anthracene	85		85		40-140	0		40
Fluoranthene	79		75		40-140	5		40
Pyrene	79		75		26-127	5		40
Benzo(a)anthracene	86		86		40-140	0		40
Chrysene	80		80		40-140	0		40
Benzo(b)fluoranthene	78		77		40-140	1		40
Benzo(k)fluoranthene	79		79		40-140	0		40
Benzo(a)pyrene	77		76		40-140	1		40
Indeno(1,2,3-cd)pyrene	81		79		40-140	3		40
Dibenzo(a,h)anthracene	77		75		40-140	3		40
Benzo(ghi)perylene	77		74		40-140	4		40

Lab Control Sample Analysis

Batch Quality Control

Project Name: B14 GWS
Project Number: Not Specified

Lab Number: L2448657
Report Date: 09/04/24

Parameter	<i>LCS</i> %Recovery	<i>Qual</i>	<i>LCSD</i> %Recovery	<i>Qual</i>	<i>%Recovery</i> Limits	<i>RPD</i>	<i>Qual</i>	<i>RPD</i> Limits
Semivolatile Organics by GC/MS-SIM - Westborough Lab Associated sample(s): 01-07 Batch: WG1966248-2 WG1966248-3								

<i>Surrogate</i>	<i>LCS</i> %Recovery	<i>Qual</i>	<i>LCSD</i> %Recovery	<i>Qual</i>	<i>Acceptance</i> Criteria
2-Fluorophenol	47		50		21-120
Phenol-d6	36		40		10-120
Nitrobenzene-d5	72		72		23-120
2-Fluorobiphenyl	74		76		15-120
2,4,6-Tribromophenol	83		81		10-120
4-Terphenyl-d14	68		65		41-149

Project Name: B14 GWS
Project Number: Not Specified

Lab Number: L2448657
Report Date: 09/04/24

Sample Receipt and Container Information

Were project specific reporting limits specified?

YES

Cooler Information

Cooler	Custody Seal
A	Absent
B	Absent

Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L2448657-01A	Vial HCl preserved	B	NA		4.4	Y	Absent		PA-8260-SIM(14),PA-8260(14)
L2448657-01B	Vial HCl preserved	B	NA		4.4	Y	Absent		PA-8260-SIM(14),PA-8260(14)
L2448657-01C	Vial HCl preserved	B	NA		4.4	Y	Absent		PA-8260-SIM(14),PA-8260(14)
L2448657-01D	Amber 100ml unpreserved	B	12	12	4.4	Y	Absent		PA-8270SIM-RVT(7),PA-8270-RVT(7)
L2448657-01E	Amber 100ml unpreserved	B	12	12	4.4	Y	Absent		PA-8270SIM-RVT(7),PA-8270-RVT(7)
L2448657-02A	Vial HCl preserved	B	NA		4.4	Y	Absent		PA-8260-SIM(14),PA-8260(14)
L2448657-02B	Vial HCl preserved	B	NA		4.4	Y	Absent		PA-8260-SIM(14),PA-8260(14)
L2448657-02C	Vial HCl preserved	B	NA		4.4	Y	Absent		PA-8260-SIM(14),PA-8260(14)
L2448657-02D	Amber 100ml unpreserved	B	7	7	4.4	Y	Absent		PA-8270-RVT(7),PA-8270SIM-RVT(7)
L2448657-02E	Amber 100ml unpreserved	B	7	7	4.4	Y	Absent		PA-8270-RVT(7),PA-8270SIM-RVT(7)
L2448657-03A	Vial HCl preserved	B	NA		4.4	Y	Absent		PA-8260-SIM(14),PA-8260(14)
L2448657-03B	Vial HCl preserved	B	NA		4.4	Y	Absent		PA-8260-SIM(14),PA-8260(14)
L2448657-03C	Vial HCl preserved	B	NA		4.4	Y	Absent		PA-8260-SIM(14),PA-8260(14)
L2448657-03D	Amber 100ml unpreserved	B	9	9	4.4	Y	Absent		PA-8270SIM-RVT(7),PA-8270-RVT(7)
L2448657-03E	Amber 100ml unpreserved	B	9	9	4.4	Y	Absent		PA-8270SIM-RVT(7),PA-8270-RVT(7)
L2448657-04A	Vial HCl preserved	B	NA		4.4	Y	Absent		PA-8260-SIM(14),PA-8260(14)
L2448657-04B	Vial HCl preserved	B	NA		4.4	Y	Absent		PA-8260-SIM(14),PA-8260(14)
L2448657-04C	Vial HCl preserved	B	NA		4.4	Y	Absent		PA-8260-SIM(14),PA-8260(14)
L2448657-04D	Amber 100ml unpreserved	B	7	7	4.4	Y	Absent		PA-8270-RVT(7),PA-8270SIM-RVT(7)
L2448657-04E	Amber 100ml unpreserved	B	7	7	4.4	Y	Absent		PA-8270-RVT(7),PA-8270SIM-RVT(7)
L2448657-05A	Vial HCl preserved	B	NA		4.4	Y	Absent		PA-8260-SIM(14),PA-8260(14)
L2448657-05B	Vial HCl preserved	B	NA		4.4	Y	Absent		PA-8260-SIM(14),PA-8260(14)

Project Name: B14 GWS**Lab Number:** L2448657**Project Number:** Not Specified**Report Date:** 09/04/24**Container Information**

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L2448657-05C	Vial HCl preserved	B	NA		4.4	Y	Absent		PA-8260-SIM(14),PA-8260(14)
L2448657-05D	Amber 100ml unpreserved	B	12	12	4.4	Y	Absent		PA-8270-RVT(7),PA-8270SIM-RVT(7)
L2448657-05E	Amber 100ml unpreserved	B	12	12	4.4	Y	Absent		PA-8270-RVT(7),PA-8270SIM-RVT(7)
L2448657-06A	Vial HCl preserved	B	NA		4.4	Y	Absent		PA-8260-SIM(14),PA-8260(14)
L2448657-06B	Vial HCl preserved	B	NA		4.4	Y	Absent		PA-8260-SIM(14),PA-8260(14)
L2448657-06C	Vial HCl preserved	B	NA		4.4	Y	Absent		PA-8260-SIM(14),PA-8260(14)
L2448657-06D	Amber 100ml unpreserved	B	6	6	4.4	Y	Absent		PA-8270-RVT(7),PA-8270SIM-RVT(7)
L2448657-06E	Amber 100ml unpreserved	B	6	6	4.4	Y	Absent		PA-8270-RVT(7),PA-8270SIM-RVT(7)
L2448657-07A	Vial HCl preserved	B	NA		4.4	Y	Absent		PA-8260-SIM(14),PA-8260(14)
L2448657-07B	Vial HCl preserved	B	NA		4.4	Y	Absent		PA-8260-SIM(14),PA-8260(14)
L2448657-07C	Vial HCl preserved	B	NA		4.4	Y	Absent		PA-8260-SIM(14),PA-8260(14)
L2448657-07D	Amber 100ml unpreserved	B	6	6	4.4	Y	Absent		PA-8270SIM-RVT(7),PA-8270-RVT(7)
L2448657-07E	Amber 100ml unpreserved	B	6	6	4.4	Y	Absent		PA-8270SIM-RVT(7),PA-8270-RVT(7)
L2448657-08A	Vial HCl preserved	B	NA		4.4	Y	Absent		PA-8260-SIM(14),PA-8260(14)
L2448657-08B	Vial HCl preserved	B	NA		4.4	Y	Absent		PA-8260-SIM(14),PA-8260(14)
L2448657-08C	Vial HCl preserved	B	NA		4.4	Y	Absent		PA-8260-SIM(14),PA-8260(14)
L2448657-08D	Vial HCl preserved	B	NA		4.4	Y	Absent		PA-8260-SIM(14),PA-8260(14)

Project Name: B14 GWS
Project Number: Not Specified

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GLOSSARY

Acronyms

DL	- Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the limit of quantitation (LOQ). The DL includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
EDL	- Estimated Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The EDL includes any adjustments from dilutions, concentrations or moisture content, where applicable. The use of EDLs is specific to the analysis of PAHs using Solid-Phase Microextraction (SPME).
EMPC	- Estimated Maximum Possible Concentration: The concentration that results from the signal present at the retention time of an analyte when the ions meet all of the identification criteria except the ion abundance ratio criteria. An EMPC is a worst-case estimate of the concentration.
EPA	- Environmental Protection Agency.
LCS	- Laboratory Control Sample: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
LCSD	- Laboratory Control Sample Duplicate: Refer to LCS.
LFB	- Laboratory Fortified Blank: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
LOD	- Limit of Detection: This value represents the level to which a target analyte can reliably be detected for a specific analyte in a specific matrix by a specific method. The LOD includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
LOQ	- Limit of Quantitation: The value at which an instrument can accurately measure an analyte at a specific concentration. The LOQ includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.) Limit of Quantitation: The value at which an instrument can accurately measure an analyte at a specific concentration. The LOQ includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
MDL	- Method Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The MDL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
MS	- Matrix Spike Sample: A sample prepared by adding a known mass of target analyte to a specified amount of matrix sample for which an independent estimate of target analyte concentration is available. For Method 332.0, the spike recovery is calculated using the native concentration, including estimated values.
MSD	- Matrix Spike Sample Duplicate: Refer to MS.
NA	- Not Applicable.
NC	- Not Calculated: Term is utilized when one or more of the results utilized in the calculation are non-detect at the parameter's reporting unit.
NDPA/DPA	- N-Nitrosodiphenylamine/Diphenylamine.
NI	- Not Ignitable.
NP	- Non-Plastic: Term is utilized for the analysis of Atterberg Limits in soil.
NR	- No Results: Term is utilized when 'No Target Compounds Requested' is reported for the analysis of Volatile or Semivolatile Organic TIC only requests.
RL	- Reporting Limit: The value at which an instrument can accurately measure an analyte at a specific concentration. The RL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
RPD	- Relative Percent Difference: The results from matrix and/or matrix spike duplicates are primarily designed to assess the precision of analytical results in a given matrix and are expressed as relative percent difference (RPD). Values which are less than five times the reporting limit for any individual parameter are evaluated by utilizing the absolute difference between the values; although the RPD value will be provided in the report.
SRM	- Standard Reference Material: A reference sample of a known or certified value that is of the same or similar matrix as the associated field samples.
STLP	- Semi-dynamic Tank Leaching Procedure per EPA Method 1315.
TEF	- Toxic Equivalency Factors: The values assigned to each dioxin and furan to evaluate their toxicity relative to 2,3,7,8-TCDD.
TEQ	- Toxic Equivalent: The measure of a sample's toxicity derived by multiplying each dioxin and furan by its corresponding TEF and then summing the resulting values.
TIC	- Tentatively Identified Compound: A compound that has been identified to be present and is not part of the target compound list (TCL) for the method and/or program. All TICs are qualitatively identified and reported as estimated concentrations.

Report Format: DU Report with 'J' Qualifiers



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Footnotes

- 1 - The reference for this analyte should be considered modified since this analyte is absent from the target analyte list of the original method.

Terms

Analytical Method: Both the document from which the method originates and the analytical reference method. (Example: EPA 8260B is shown as 1,8260B.) The codes for the reference method documents are provided in the References section of the Addendum.

Chlordane: The target compound Chlordane (CAS No. 57-74-9) is reported for GC ECD analyses. Per EPA, this compound "refers to a mixture of chlordane isomers, other chlorinated hydrocarbons and numerous other components." (Reference: USEPA Toxicological Review of Chlordane, In Support of Summary Information on the Integrated Risk Information System (IRIS), December 1997.)

Difference: With respect to Total Oxidizable Precursor (TOP) Assay analysis, the difference is defined as the Post-Treatment value minus the Pre-Treatment value.

Final pH: As it pertains to Sample Receipt & Container Information section of the report, Final pH reflects pH of container determined after adjustment at the laboratory, if applicable. If no adjustment required, value reflects Initial pH.

Frozen Date/Time: With respect to Volatile Organics in soil, Frozen Date/Time reflects the date/time at which associated Reagent Water-preserved vials were initially frozen. Note: If frozen date/time is beyond 48 hours from sample collection, value will be reflected in 'bold'.

Gasoline Range Organics (GRO): Gasoline Range Organics (GRO) results include all chromatographic peaks eluting from Methyl tert butyl ether through Naphthalene, with the exception of GRO analysis in support of State of Ohio programs, which includes all chromatographic peaks eluting from Hexane through Dodecane.

Initial pH: As it pertains to Sample Receipt & Container Information section of the report, Initial pH reflects pH of container determined upon receipt, if applicable.

PAH Total: With respect to Alkylated PAH analyses, the 'PAHs, Total' result is defined as the summation of results for all or a subset of the following compounds: Naphthalene, C1-C4 Naphthalenes, 2-Methylnaphthalene, 1-Methylnaphthalene, Biphenyl, Acenaphthylene, Acenaphthene, Fluorene, C1-C3 Fluorenes, Phenanthrene, C1-C4 Phenanthrenes/Anthracenes, Anthracene, Fluoranthene, Pyrene, C1-C4 Fluoranthenes/Pyrenes, Benz(a)anthracene, Chrysene, C1-C4 Chrysenes, Benzo(b)fluoranthene, Benzo(j)+(k)fluoranthene, Benzo(e)pyrene, Benzo(a)pyrene, Perylene, Indeno(1,2,3-cd)pyrene, Dibenz(ah)+(ac)anthracene, Benzo(g,h,i)perylene. If a 'Total' result is requested, the results of its individual components will also be reported.

PFAS Total: With respect to PFAS analyses, the 'PFAS, Total (5)' result is defined as the summation of results for: PFHpA, PFHxS, PFOA, PFNA and PFOS. In addition, the 'PFAS, Total (6)' result is defined as the summation of results for: PFHpA, PFHxS, PFOA, PFNA, PFDA and PFOS. For MassDEP DW compliance analysis only, the 'PFAS, Total (6)' result is defined as the summation of results at or above the RL. Note: If a 'Total' result is requested, the results of its individual components will also be reported.

Total: With respect to Organic analyses, a 'Total' result is defined as the summation of results for individual isomers or Aroclors. If a 'Total' result is requested, the results of its individual components will also be reported. This is applicable to 'Total' results for methods 8260, 8081 and 8082.

Data Qualifiers

- A** - Spectra identified as "Aldol Condensates" are byproducts of the extraction/concentration procedures when acetone is introduced in the process.
- B** - The analyte was detected above the reporting limit in the associated method blank. Flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For MCP-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For DOD-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank AND the analyte was detected above one-half the reporting limit (or above the reporting limit for common lab contaminants) in the associated method blank. For NJ-Air-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte above the reporting limit. For NJ-related projects (excluding Air), flag only applies to associated field samples that have detectable concentrations of the analyte, which was detected above the reporting limit in the associated method blank or above five times the reporting limit for common lab contaminants (Phthalates, Acetone, Methylene Chloride, 2-Butanone).
- C** - Co-elution: The target analyte co-elutes with a known lab standard (i.e. surrogate, internal standards, etc.) for co-extracted analyses.
- D** - Concentration of analyte was quantified from diluted analysis. Flag only applies to field samples that have detectable concentrations of the analyte.
- E** - Concentration of analyte exceeds the range of the calibration curve and/or linear range of the instrument.
- F** - The ratio of quantifier ion response to qualifier ion response falls outside of the laboratory criteria. Results are considered to be an estimated maximum concentration.
- G** - The concentration may be biased high due to matrix interferences (i.e. co-elution) with non-target compound(s). The result should be considered estimated.
- H** - The analysis of pH was performed beyond the regulatory-required holding time of 15 minutes from the time of sample collection.
- I** - The lower value for the two columns has been reported due to obvious interference.
- J** - Estimated value. The Target analyte concentration is below the quantitation limit (RL), but above the Method Detection Limit (MDL) or Estimated Detection Limit (EDL) for SPME-related analyses. This represents an estimated concentration for Tentatively

Report Format: DU Report with 'J' Qualifiers



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Data Qualifiers

Identified Compounds (TICs). For calculated parameters, this represents that one or more values used in the calculation were estimated.

- M** - Reporting Limit (RL) exceeds the MCP CAM Reporting Limit for this analyte.
- ND** - Not detected at the method detection limit (MDL) for the sample, or estimated detection limit (EDL) for SPME-related analyses.
- NJ** - Presumptive evidence of compound. This represents an estimated concentration for Tentatively Identified Compounds (TICs), where the identification is based on a mass spectral library search.
- P** - The RPD between the results for the two columns exceeds the method-specified criteria.
- Q** - The quality control sample exceeds the associated acceptance criteria. For DOD-related projects, LCS and/or Continuing Calibration Standard exceedences are also qualified on all associated sample results. Note: This flag is not applicable for matrix spike recoveries when the sample concentration is greater than 4x the spike added or for batch duplicate RPD when the sample concentrations are less than 5x the RL. (Metals only.)
- R** - Analytical results are from sample re-analysis.
- RE** - Analytical results are from sample re-extraction.
- S** - Analytical results are from modified screening analysis.
- V** - The surrogate associated with this target analyte has a recovery outside the QC acceptance limits. (Applicable to MassDEP DW Compliance samples only.)
- Z** - The batch matrix spike and/or duplicate associated with this target analyte has a recovery/RPD outside the QC acceptance limits. (Applicable to MassDEP DW Compliance samples only.)

Report Format: DU Report with 'J' Qualifiers



Project Name: B14 GWS
Project Number: Not Specified

Lab Number: L2448657
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REFERENCES

- 1 Test Methods for Evaluating Solid Waste: Physical/Chemical Methods. EPA SW-846. Third Edition. Updates I - VI, 2018.

LIMITATION OF LIABILITIES

Alpha Analytical performs services with reasonable care and diligence normal to the analytical testing laboratory industry. In the event of an error, the sole and exclusive responsibility of Alpha Analytical shall be to re-perform the work at it's own expense. In no event shall Alpha Analytical be held liable for any incidental, consequential or special damages, including but not limited to, damages in any way connected with the use of, interpretation of, information or analysis provided by Alpha Analytical.

We strongly urge our clients to comply with EPA protocol regarding sample volume, preservation, cooling, containers, sampling procedures, holding time and splitting of samples in the field.



Certification Information

The following analytes are not included in our Primary NELAP Scope of Accreditation:

Westborough Facility

EPA 624.1: m/p-xylene, o-xylene, Naphthalene

EPA 625.1: alpha-Terpineol

EPA 8260D: NPW: 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene; SCM: Iodomethane (methyl iodide), 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene.

EPA 8270E: NPW: Dimethylnaphthalene,1,4-Diphenylhydrazine, alpha-Terpineol, Azobenzene; SCM: Dimethylnaphthalene,1,4-Diphenylhydrazine.

SM4500: NPW: Amenable Cyanide; SCM: Total Phosphorus, TKN, NO₂, NO₃.

Mansfield Facility

SM 2540D: TSS.

EPA TO-15: Halothane, 2,4,4-Trimethyl-2-pentene, 2,4,4-Trimethyl-1-pentene, Thiophene, 2-Methylthiophene,

3-Methylthiophene, 2-Ethylthiophene, 1,2,3-Trimethylbenzene, Indan, Indene, 1,2,4,5-Tetramethylbenzene, Benzothiophene, 1-Methylnaphthalene.

Nonpotable Water: EPA RSK-175 Dissolved Gases

Biological Tissue Matrix: EPA 3050B

The following analytes are included in our Massachusetts DEP Scope of Accreditation

Westborough Facility:

Drinking Water

EPA 300.0: Chloride, Nitrate-N, Fluoride, Sulfate; **EPA 353.2:** Nitrate-N, Nitrite-N; **SM4500NO3-F:** Nitrate-N, Nitrite-N; **SM4500F-C, SM4500CN-CE,**

EPA 180.1, SM2130B, SM4500Cl-D, SM2320B, SM2540C, SM4500H-B, SM4500NO2-B

EPA 524.2: THMs and VOCs; **EPA 504.1:** EDB, DBCP.

Microbiology: SM9215B; SM9223-P/A, SM9223B-Colilert-QT, SM9222D.

Non-Potable Water

SM4500H,B, EPA 120.1, SM2510B, SM2540C, SM2320B, SM4500CL-E, SM4500F-BC, SM4500NH3-BH: Ammonia-N and Kjeldahl-N, **EPA 350.1:**

Ammonia-N, **LACHAT 10-107-06-1-B:** Ammonia-N, **EPA 351.1, SM4500NO3-F, EPA 353.2:** Nitrate-N, **SM4500P-E, SM4500P-B, E, SM4500SO4-E,**

SM5220D, EPA 410.4, SM5210B, SM5310C, SM4500CL-D, EPA 1664, EPA 420.1, SM4500-CN-CE, SM2540D, EPA 300: Chloride, Sulfate, Nitrate.

EPA 624.1: Volatile Halocarbons & Aromatics,

EPA 608.3: Chlordane, Toxaphene, Aldrin, alpha-BHC, beta-BHC, gamma-BHC, delta-BHC, Dieldrin, DDD, DDE, DDT, Endosulfan I, Endosulfan II,

Endosulfan sulfate, Endrin, Endrin Aldehyde, Heptachlor, Heptachlor Epoxide, PCBs

EPA 625.1: SVOC (Acid/Base/Neutral Extractables).

Microbiology: SM9223B-Colilert-QT; Enterolert-QT, EPA 1600, EPA 1603, SM9222D.

Mansfield Facility:

Drinking Water

EPA 200.7: Al, Ba, Cd, Cr, Cu, Fe, Mn, Ni, Na, Ag, Ca, Zn. **EPA 200.8:** Al, Sb, As, Ba, Be, Cd, Cr, Cu, Pb, Mn, Ni, Se, Ag, TL, Zn. **EPA 245.1** Hg.

EPA 522, EPA 537.1.

Non-Potable Water

EPA 200.7: Al, Sb, As, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Mo, Ni, K, Se, Ag, Na, Sr, TL, Ti, V, Zn.

EPA 200.8: Al, Sb, As, Be, Cd, Cr, Cu, Fe, Pb, Mn, Ni, K, Se, Ag, Na, TL, Zn.

EPA 245.1 Hg.

SM2340B

For a complete listing of analytes and methods, please contact your Alpha Project Manager.



ANALYTICAL REPORT

Lab Number:	L2448938
Client:	Tradepoint Atlantic 1600 Sparrows Point Boulevard Baltimore, MD 21219
ATTN:	Robert Tworkowski
Phone:	(443) 649-5073
Project Name:	B14 GWS
Project Number:	Not Specified
Report Date:	09/09/24

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Certifications & Approvals: MA (M-MA086), NH NELAP (2064), CT (PH-0826), IL (200077), IN (C-MA-03), KY (KY98045), ME (MA00086), MD (348), NJ (MA935), NY (11148), NC (25700/666), OR (MA-1316), PA (68-03671), RI (LAO00065), TX (T104704476), VT (VT-0935), VA (460195), USDA (Permit #525-23-122-91930A1).

Eight Walkup Drive, Westborough, MA 01581-1019
508-898-9220 (Fax) 508-898-9193 800-624-9220 - www.alphalab.com



Project Name: B14 GWS
Project Number: Not Specified

Lab Number: L2448938
Report Date: 09/09/24

Alpha Sample ID	Client ID	Matrix	Sample Location	Collection Date/Time	Receive Date
L2448938-01	HI15-MWS	WATER	B14	08/26/24 16:40	08/27/24
L2448938-02	HI14-MWS	WATER	B14	08/27/24 07:05	08/27/24
L2448938-03	HI13-MWS	WATER	B14	08/27/24 07:50	08/27/24
L2448938-04	HI11-MWS	WATER	B14	08/27/24 10:00	08/27/24
L2448938-05	TM04-PZM006	WATER	B14	08/27/24 09:20	08/27/24
L2448938-06	HI22-MWS	WATER	B14	08/27/24 12:17	08/27/24
L2448938-07	HI10-MWS	WATER	B14	08/27/24 11:25	08/27/24
L2448938-08	HI21-MWS	WATER	B14	08/27/24 13:22	08/27/24
L2448938-09	HI19-MWS	WATER	B14	08/27/24 14:25	08/27/24
L2448938-10	FIELD BLANK	WATER	B14	08/27/24 15:00	08/27/24
L2448938-11	TRIP BLANK	WATER	B14	08/26/24 00:00	08/27/24
L2448938-12	HI20R2-MWS	WATER	B14	08/27/24 16:30	08/27/24

Project Name: B14 GWS
Project Number: Not Specified

Lab Number: L2448938
Report Date: 09/09/24

Case Narrative

The samples were received in accordance with the Chain of Custody and no significant deviations were encountered during the preparation or analysis unless otherwise noted. Sample Receipt, Container Information, and the Chain of Custody are located at the back of the report.

Results contained within this report relate only to the samples submitted under this Alpha Lab Number and meet NELAP requirements for all NELAP accredited parameters unless otherwise noted in the following narrative. The data presented in this report is organized by parameter (i.e. VOC, SVOC, etc.). Sample specific Quality Control data (i.e. Surrogate Spike Recovery) is reported at the end of the target analyte list for each individual sample, followed by the Laboratory Batch Quality Control at the end of each parameter. Tentatively Identified Compounds (TICs), if requested, are reported for compounds identified to be present and are not part of the method/program Target Compound List, even if only a subset of the TCL are being reported. If a sample was re-analyzed or re-extracted due to a required quality control corrective action and if both sets of data are reported, the Laboratory ID of the re-analysis or re-extraction is designated with an "R" or "RE", respectively.

When multiple Batch Quality Control elements are reported (e.g. more than one LCS), the associated samples for each element are noted in the grey shaded header line of each data table. Any Laboratory Batch, Sample Specific % recovery or RPD value that is outside the listed Acceptance Criteria is bolded in the report. In reference to questions H (CAM) or 4 (RCP) when "NO" is checked, the performance criteria for CAM and RCP methods allow for some quality control failures to occur and still be within method compliance. In these instances, the specific failure is not narrated but noted in the associated QC Outlier Summary Report, located directly after the Case Narrative. QC information is also incorporated in the Data Usability Assessment table (Format 11) of our Data Merger tool, where it can be reviewed in conjunction with the sample result, associated regulatory criteria and any associated data usability implications.

Soil/sediments and solids are reported on a dry weight basis unless otherwise noted. Tissues are reported "as received" or on a wet weight basis, unless otherwise noted. Definitions of all data qualifiers and acronyms used in this report are provided in the Glossary located at the back of the report.

HOLD POLICY - For samples submitted on hold, Alpha's policy is to hold samples (with the exception of Air canisters) free of charge for 21 calendar days from the date the project is completed. After 21 calendar days, we will dispose of all samples submitted including those put on hold unless you have contacted your Alpha Project Manager and made arrangements for Alpha to continue to hold the samples. Air canisters will be disposed after 3 business days from the date the project is completed.

Please contact Project Management at 800-624-9220 with any questions.

Project Name: B14 GWS
Project Number: Not Specified

Lab Number: L2448938
Report Date: 09/09/24

Case Narrative (continued)

Report Submission

All non-detect (ND) or estimated concentrations (J-qualified) have been quantitated to the limit noted in the MDL column.

Sample Receipt

L2448938-12: A sample identified as "HI20R2-MWS" was received, but not listed on the chain of custody. At the client's request, this sample was analyzed.

Volatile Organics by SIM

L2448938-05D: The sample has an elevated detection limit due to the dilution required by the elevated concentrations of non-target compounds in the sample.

Semivolatile Organics

L2448938-02: The surrogate recoveries were outside the acceptance criteria for 2-fluorophenol (7%) and phenol-d6 (9%); however, the criteria were achieved upon re-extraction outside of holding time. The results of both extractions are reported.

L2448938-04: The surrogate recovery was outside the acceptance criteria for 2-fluorophenol (5%); however, the criteria were achieved upon re-extraction outside of holding time. The results of both extractions are reported.

L2448938-08: The surrogate recoveries were outside the acceptance criteria for 2-fluorophenol (5%) and 2,4,6-tribromophenol (0%); however, the criteria were achieved upon re-extraction outside of holding time. The results of both extractions are reported.

L2448938-12: The surrogate recovery was outside the acceptance criteria for 2-fluorophenol (7%); however, re-extraction outside of holding time achieved a similar result: 2,4,6-tribromophenol (6%). The results of both extractions are reported.

I, the undersigned, attest under the pains and penalties of perjury that, to the best of my knowledge and belief and based upon my personal inquiry of those responsible for providing the information contained in this analytical report, such information is accurate and complete. This certificate of analysis is not complete unless this page accompanies any and all pages of this report.

Authorized Signature:

 Kelly Stenstrom

Title: Technical Director/Representative

Date: 09/09/24

ORGANICS

VOLATILES

Project Name: B14 GWS
Project Number: Not Specified

Lab Number: L2448938
Report Date: 09/09/24

SAMPLE RESULTS

Lab ID: L2448938-01
 Client ID: HI15-MWS
 Sample Location: B14

Date Collected: 08/26/24 16:40
 Date Received: 08/27/24
 Field Prep: Not Specified

Sample Depth:

Matrix: Water
 Analytical Method: 1,8260D
 Analytical Date: 09/01/24 21:42
 Analyst: MAG

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Dichlorodifluoromethane	ND		ug/l	5.0	0.24	1
Chloromethane	ND		ug/l	2.5	0.20	1
Vinyl chloride	ND		ug/l	1.0	0.07	1
Bromomethane	ND		ug/l	1.0	0.26	1
Chloroethane	ND		ug/l	1.0	0.13	1
Trichlorofluoromethane	ND		ug/l	2.5	0.16	1
1,1-Dichloroethene	ND		ug/l	0.50	0.17	1
Carbon disulfide	ND		ug/l	5.0	0.30	1
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND		ug/l	2.5	0.15	1
Methylene chloride	ND		ug/l	2.5	0.68	1
Acetone	1.5	J	ug/l	5.0	1.5	1
trans-1,2-Dichloroethene	ND		ug/l	0.75	0.16	1
Methyl Acetate	ND		ug/l	2.0	0.23	1
Methyl tert butyl ether	ND		ug/l	1.0	0.17	1
1,1-Dichloroethane	ND		ug/l	0.75	0.21	1
cis-1,2-Dichloroethene	ND		ug/l	0.50	0.19	1
Cyclohexane	ND		ug/l	10	0.27	1
Chloroform	ND		ug/l	0.75	0.22	1
Carbon tetrachloride	ND		ug/l	0.50	0.13	1
1,1,1-Trichloroethane	ND		ug/l	0.50	0.16	1
2-Butanone	ND		ug/l	5.0	1.9	1
Benzene	ND		ug/l	0.50	0.16	1
1,2-Dichloroethane	ND		ug/l	0.50	0.13	1
Trichloroethene	ND		ug/l	0.50	0.18	1
1,2-Dichloropropane	ND		ug/l	1.0	0.14	1
Bromodichloromethane	ND		ug/l	0.50	0.19	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	0.14	1
Toluene	ND		ug/l	0.75	0.20	1

Project Name: B14 GWS
Project Number: Not Specified

Lab Number: L2448938
Report Date: 09/09/24

SAMPLE RESULTS

Lab ID: L2448938-01
 Client ID: HI15-MWS
 Sample Location: B14

Date Collected: 08/26/24 16:40
 Date Received: 08/27/24
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Tetrachloroethene	ND		ug/l	0.50	0.18	1
4-Methyl-2-pentanone	ND		ug/l	5.0	0.42	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	0.16	1
1,3-Dichloropropene, Total	ND		ug/l	0.50	0.14	1
1,1,2-Trichloroethane	ND		ug/l	0.75	0.14	1
Dibromochloromethane	ND		ug/l	0.50	0.15	1
1,2-Dibromoethane	ND		ug/l	2.0	0.19	1
2-Hexanone	ND		ug/l	5.0	0.52	1
Chlorobenzene	ND		ug/l	0.50	0.18	1
Ethylbenzene	ND		ug/l	0.50	0.17	1
p/m-Xylene	ND		ug/l	1.0	0.33	1
o-Xylene	ND		ug/l	1.0	0.39	1
Xylenes, Total	ND		ug/l	1.0	0.33	1
Styrene	ND		ug/l	1.0	0.36	1
Bromoform	ND		ug/l	2.0	0.25	1
Isopropylbenzene	ND		ug/l	0.50	0.19	1
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	0.17	1
1,3-Dichlorobenzene	ND		ug/l	2.5	0.19	1
1,4-Dichlorobenzene	ND		ug/l	2.5	0.19	1
1,2-Dichlorobenzene	ND		ug/l	2.5	0.18	1
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	0.35	1
1,2,4-Trichlorobenzene	ND		ug/l	2.5	0.22	1
1,2,3-Trichlorobenzene	ND		ug/l	2.5	0.23	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	108		70-130
Toluene-d8	99		70-130
4-Bromofluorobenzene	101		70-130
Dibromofluoromethane	108		70-130

Project Name: B14 GWS
Project Number: Not Specified

Lab Number: L2448938
Report Date: 09/09/24

SAMPLE RESULTS

Lab ID: L2448938-01
 Client ID: HI15-MWS
 Sample Location: B14

Date Collected: 08/26/24 16:40
 Date Received: 08/27/24
 Field Prep: Not Specified

Sample Depth:

Matrix: Water
 Analytical Method: 1,8260D-SIM(M)
 Analytical Date: 09/01/24 21:42
 Analyst: MAG

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
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Volatile Organics by GC/MS-SIM - Westborough Lab						
1,1,2,2-Tetrachloroethane	ND		ug/l	0.050	0.006	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	107		70-130
4-Bromofluorobenzene	97		70-130

Project Name: B14 GWS
Project Number: Not Specified

Lab Number: L2448938
Report Date: 09/09/24

SAMPLE RESULTS

Lab ID: L2448938-02
 Client ID: HI14-MWS
 Sample Location: B14

Date Collected: 08/27/24 07:05
 Date Received: 08/27/24
 Field Prep: Not Specified

Sample Depth:

Matrix: Water
 Analytical Method: 1,8260D
 Analytical Date: 09/01/24 22:09
 Analyst: MAG

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Dichlorodifluoromethane	ND		ug/l	5.0	0.24	1
Chloromethane	ND		ug/l	2.5	0.20	1
Vinyl chloride	ND		ug/l	1.0	0.07	1
Bromomethane	ND		ug/l	1.0	0.26	1
Chloroethane	ND		ug/l	1.0	0.13	1
Trichlorofluoromethane	ND		ug/l	2.5	0.16	1
1,1-Dichloroethene	ND		ug/l	0.50	0.17	1
Carbon disulfide	ND		ug/l	5.0	0.30	1
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND		ug/l	2.5	0.15	1
Methylene chloride	ND		ug/l	2.5	0.68	1
Acetone	ND		ug/l	5.0	1.5	1
trans-1,2-Dichloroethene	ND		ug/l	0.75	0.16	1
Methyl Acetate	ND		ug/l	2.0	0.23	1
Methyl tert butyl ether	ND		ug/l	1.0	0.17	1
1,1-Dichloroethane	ND		ug/l	0.75	0.21	1
cis-1,2-Dichloroethene	ND		ug/l	0.50	0.19	1
Cyclohexane	ND		ug/l	10	0.27	1
Chloroform	ND		ug/l	0.75	0.22	1
Carbon tetrachloride	ND		ug/l	0.50	0.13	1
1,1,1-Trichloroethane	ND		ug/l	0.50	0.16	1
2-Butanone	ND		ug/l	5.0	1.9	1
Benzene	ND		ug/l	0.50	0.16	1
1,2-Dichloroethane	ND		ug/l	0.50	0.13	1
Trichloroethene	ND		ug/l	0.50	0.18	1
1,2-Dichloropropane	ND		ug/l	1.0	0.14	1
Bromodichloromethane	ND		ug/l	0.50	0.19	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	0.14	1
Toluene	ND		ug/l	0.75	0.20	1

Project Name: B14 GWS
Project Number: Not Specified

Lab Number: L2448938
Report Date: 09/09/24

SAMPLE RESULTS

Lab ID: L2448938-02
 Client ID: HI14-MWS
 Sample Location: B14

Date Collected: 08/27/24 07:05
 Date Received: 08/27/24
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Tetrachloroethene	ND		ug/l	0.50	0.18	1
4-Methyl-2-pentanone	ND		ug/l	5.0	0.42	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	0.16	1
1,3-Dichloropropene, Total	ND		ug/l	0.50	0.14	1
1,1,2-Trichloroethane	ND		ug/l	0.75	0.14	1
Dibromochloromethane	ND		ug/l	0.50	0.15	1
1,2-Dibromoethane	ND		ug/l	2.0	0.19	1
2-Hexanone	ND		ug/l	5.0	0.52	1
Chlorobenzene	ND		ug/l	0.50	0.18	1
Ethylbenzene	ND		ug/l	0.50	0.17	1
p/m-Xylene	ND		ug/l	1.0	0.33	1
o-Xylene	ND		ug/l	1.0	0.39	1
Xylenes, Total	ND		ug/l	1.0	0.33	1
Styrene	ND		ug/l	1.0	0.36	1
Bromoform	ND		ug/l	2.0	0.25	1
Isopropylbenzene	ND		ug/l	0.50	0.19	1
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	0.17	1
1,3-Dichlorobenzene	ND		ug/l	2.5	0.19	1
1,4-Dichlorobenzene	ND		ug/l	2.5	0.19	1
1,2-Dichlorobenzene	ND		ug/l	2.5	0.18	1
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	0.35	1
1,2,4-Trichlorobenzene	ND		ug/l	2.5	0.22	1
1,2,3-Trichlorobenzene	ND		ug/l	2.5	0.23	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	109		70-130
Toluene-d8	99		70-130
4-Bromofluorobenzene	98		70-130
Dibromofluoromethane	106		70-130

Project Name: B14 GWS
Project Number: Not Specified

Lab Number: L2448938
Report Date: 09/09/24

SAMPLE RESULTS

Lab ID: L2448938-02
 Client ID: HI14-MWS
 Sample Location: B14

Date Collected: 08/27/24 07:05
 Date Received: 08/27/24
 Field Prep: Not Specified

Sample Depth:

Matrix: Water
 Analytical Method: 1,8260D-SIM(M)
 Analytical Date: 09/01/24 22:09
 Analyst: MAG

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
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Volatile Organics by GC/MS-SIM - Westborough Lab						
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1,1,2,2-Tetrachloroethane	ND		ug/l	0.050	0.006	1
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Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	108		70-130
4-Bromofluorobenzene	97		70-130

Project Name: B14 GWS
Project Number: Not Specified

Lab Number: L2448938
Report Date: 09/09/24

SAMPLE RESULTS

Lab ID: L2448938-03
 Client ID: HI13-MWS
 Sample Location: B14

Date Collected: 08/27/24 07:50
 Date Received: 08/27/24
 Field Prep: Not Specified

Sample Depth:

Matrix: Water
 Analytical Method: 1,8260D
 Analytical Date: 09/01/24 22:36
 Analyst: MAG

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Dichlorodifluoromethane	ND		ug/l	5.0	0.24	1
Chloromethane	ND		ug/l	2.5	0.20	1
Vinyl chloride	0.20	J	ug/l	1.0	0.07	1
Bromomethane	ND		ug/l	1.0	0.26	1
Chloroethane	ND		ug/l	1.0	0.13	1
Trichlorofluoromethane	ND		ug/l	2.5	0.16	1
1,1-Dichloroethene	ND		ug/l	0.50	0.17	1
Carbon disulfide	ND		ug/l	5.0	0.30	1
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND		ug/l	2.5	0.15	1
Methylene chloride	ND		ug/l	2.5	0.68	1
Acetone	ND		ug/l	5.0	1.5	1
trans-1,2-Dichloroethene	ND		ug/l	0.75	0.16	1
Methyl Acetate	ND		ug/l	2.0	0.23	1
Methyl tert butyl ether	ND		ug/l	1.0	0.17	1
1,1-Dichloroethane	ND		ug/l	0.75	0.21	1
cis-1,2-Dichloroethene	0.24	J	ug/l	0.50	0.19	1
Cyclohexane	ND		ug/l	10	0.27	1
Chloroform	ND		ug/l	0.75	0.22	1
Carbon tetrachloride	ND		ug/l	0.50	0.13	1
1,1,1-Trichloroethane	ND		ug/l	0.50	0.16	1
2-Butanone	ND		ug/l	5.0	1.9	1
Benzene	1.1		ug/l	0.50	0.16	1
1,2-Dichloroethane	ND		ug/l	0.50	0.13	1
Trichloroethene	ND		ug/l	0.50	0.18	1
1,2-Dichloropropane	ND		ug/l	1.0	0.14	1
Bromodichloromethane	ND		ug/l	0.50	0.19	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	0.14	1
Toluene	ND		ug/l	0.75	0.20	1

Project Name: B14 GWS
Project Number: Not Specified

Lab Number: L2448938
Report Date: 09/09/24

SAMPLE RESULTS

Lab ID: L2448938-03
Client ID: HI13-MWS
Sample Location: B14

Date Collected: 08/27/24 07:50
Date Received: 08/27/24
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Tetrachloroethene	ND		ug/l	0.50	0.18	1
4-Methyl-2-pentanone	ND		ug/l	5.0	0.42	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	0.16	1
1,3-Dichloropropene, Total	ND		ug/l	0.50	0.14	1
1,1,2-Trichloroethane	ND		ug/l	0.75	0.14	1
Dibromochloromethane	ND		ug/l	0.50	0.15	1
1,2-Dibromoethane	ND		ug/l	2.0	0.19	1
2-Hexanone	ND		ug/l	5.0	0.52	1
Chlorobenzene	ND		ug/l	0.50	0.18	1
Ethylbenzene	ND		ug/l	0.50	0.17	1
p/m-Xylene	ND		ug/l	1.0	0.33	1
o-Xylene	ND		ug/l	1.0	0.39	1
Xylenes, Total	ND		ug/l	1.0	0.33	1
Styrene	ND		ug/l	1.0	0.36	1
Bromoform	ND		ug/l	2.0	0.25	1
Isopropylbenzene	ND		ug/l	0.50	0.19	1
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	0.17	1
1,3-Dichlorobenzene	ND		ug/l	2.5	0.19	1
1,4-Dichlorobenzene	ND		ug/l	2.5	0.19	1
1,2-Dichlorobenzene	ND		ug/l	2.5	0.18	1
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	0.35	1
1,2,4-Trichlorobenzene	ND		ug/l	2.5	0.22	1
1,2,3-Trichlorobenzene	ND		ug/l	2.5	0.23	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	106		70-130
Toluene-d8	98		70-130
4-Bromofluorobenzene	98		70-130
Dibromofluoromethane	105		70-130

Project Name: B14 GWS
Project Number: Not Specified

Lab Number: L2448938
Report Date: 09/09/24

SAMPLE RESULTS

Lab ID: L2448938-03
 Client ID: HI13-MWS
 Sample Location: B14

Date Collected: 08/27/24 07:50
 Date Received: 08/27/24
 Field Prep: Not Specified

Sample Depth:

Matrix: Water
 Analytical Method: 1,8260D-SIM(M)
 Analytical Date: 09/01/24 22:36
 Analyst: MAG

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
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Volatile Organics by GC/MS-SIM - Westborough Lab						
1,1,2,2-Tetrachloroethane	ND		ug/l	0.050	0.006	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	108		70-130
4-Bromofluorobenzene	97		70-130

Project Name: B14 GWS
Project Number: Not Specified

Lab Number: L2448938
Report Date: 09/09/24

SAMPLE RESULTS

Lab ID: L2448938-04
 Client ID: HI11-MWS
 Sample Location: B14

Date Collected: 08/27/24 10:00
 Date Received: 08/27/24
 Field Prep: Not Specified

Sample Depth:

Matrix: Water
 Analytical Method: 1,8260D
 Analytical Date: 09/01/24 23:03
 Analyst: MAG

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Dichlorodifluoromethane	ND		ug/l	5.0	0.24	1
Chloromethane	ND		ug/l	2.5	0.20	1
Vinyl chloride	ND		ug/l	1.0	0.07	1
Bromomethane	ND		ug/l	1.0	0.26	1
Chloroethane	ND		ug/l	1.0	0.13	1
Trichlorofluoromethane	ND		ug/l	2.5	0.16	1
1,1-Dichloroethene	ND		ug/l	0.50	0.17	1
Carbon disulfide	ND		ug/l	5.0	0.30	1
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND		ug/l	2.5	0.15	1
Methylene chloride	ND		ug/l	2.5	0.68	1
Acetone	3.7	J	ug/l	5.0	1.5	1
trans-1,2-Dichloroethene	ND		ug/l	0.75	0.16	1
Methyl Acetate	ND		ug/l	2.0	0.23	1
Methyl tert butyl ether	ND		ug/l	1.0	0.17	1
1,1-Dichloroethane	ND		ug/l	0.75	0.21	1
cis-1,2-Dichloroethene	ND		ug/l	0.50	0.19	1
Cyclohexane	ND		ug/l	10	0.27	1
Chloroform	ND		ug/l	0.75	0.22	1
Carbon tetrachloride	ND		ug/l	0.50	0.13	1
1,1,1-Trichloroethane	ND		ug/l	0.50	0.16	1
2-Butanone	ND		ug/l	5.0	1.9	1
Benzene	1.0		ug/l	0.50	0.16	1
1,2-Dichloroethane	ND		ug/l	0.50	0.13	1
Trichloroethene	ND		ug/l	0.50	0.18	1
1,2-Dichloropropane	ND		ug/l	1.0	0.14	1
Bromodichloromethane	ND		ug/l	0.50	0.19	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	0.14	1
Toluene	ND		ug/l	0.75	0.20	1

Project Name: B14 GWS
Project Number: Not Specified

Lab Number: L2448938
Report Date: 09/09/24

SAMPLE RESULTS

Lab ID: L2448938-04
 Client ID: HI11-MWS
 Sample Location: B14

Date Collected: 08/27/24 10:00
 Date Received: 08/27/24
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Tetrachloroethene	ND		ug/l	0.50	0.18	1
4-Methyl-2-pentanone	ND		ug/l	5.0	0.42	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	0.16	1
1,3-Dichloropropene, Total	ND		ug/l	0.50	0.14	1
1,1,2-Trichloroethane	ND		ug/l	0.75	0.14	1
Dibromochloromethane	ND		ug/l	0.50	0.15	1
1,2-Dibromoethane	ND		ug/l	2.0	0.19	1
2-Hexanone	ND		ug/l	5.0	0.52	1
Chlorobenzene	ND		ug/l	0.50	0.18	1
Ethylbenzene	ND		ug/l	0.50	0.17	1
p/m-Xylene	ND		ug/l	1.0	0.33	1
o-Xylene	ND		ug/l	1.0	0.39	1
Xylenes, Total	ND		ug/l	1.0	0.33	1
Styrene	ND		ug/l	1.0	0.36	1
Bromoform	ND		ug/l	2.0	0.25	1
Isopropylbenzene	ND		ug/l	0.50	0.19	1
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	0.17	1
1,3-Dichlorobenzene	ND		ug/l	2.5	0.19	1
1,4-Dichlorobenzene	ND		ug/l	2.5	0.19	1
1,2-Dichlorobenzene	ND		ug/l	2.5	0.18	1
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	0.35	1
1,2,4-Trichlorobenzene	ND		ug/l	2.5	0.22	1
1,2,3-Trichlorobenzene	ND		ug/l	2.5	0.23	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	106		70-130
Toluene-d8	99		70-130
4-Bromofluorobenzene	100		70-130
Dibromofluoromethane	105		70-130

Project Name: B14 GWS
Project Number: Not Specified

Lab Number: L2448938
Report Date: 09/09/24

SAMPLE RESULTS

Lab ID: L2448938-04
 Client ID: HI11-MWS
 Sample Location: B14

Date Collected: 08/27/24 10:00
 Date Received: 08/27/24
 Field Prep: Not Specified

Sample Depth:

Matrix: Water
 Analytical Method: 1,8260D-SIM(M)
 Analytical Date: 09/01/24 23:03
 Analyst: MAG

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
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Volatile Organics by GC/MS-SIM - Westborough Lab						
1,1,2,2-Tetrachloroethane	ND		ug/l	0.050	0.006	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	108		70-130
4-Bromofluorobenzene	97		70-130

Project Name: B14 GWS
Project Number: Not Specified

Lab Number: L2448938
Report Date: 09/09/24

SAMPLE RESULTS

Lab ID: L2448938-05 D
 Client ID: TM04-PZM006
 Sample Location: B14

Date Collected: 08/27/24 09:20
 Date Received: 08/27/24
 Field Prep: Not Specified

Sample Depth:

Matrix: Water
 Analytical Method: 1,8260D
 Analytical Date: 09/01/24 23:30
 Analyst: MAG

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Dichlorodifluoromethane	ND		ug/l	20	0.98	4
Chloromethane	ND		ug/l	10	0.80	4
Vinyl chloride	0.57	J	ug/l	4.0	0.28	4
Bromomethane	ND		ug/l	4.0	1.0	4
Chloroethane	ND		ug/l	4.0	0.54	4
Trichlorofluoromethane	ND		ug/l	10	0.64	4
1,1-Dichloroethene	ND		ug/l	2.0	0.68	4
Carbon disulfide	ND		ug/l	20	1.2	4
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND		ug/l	10	0.59	4
Methylene chloride	ND		ug/l	10	2.7	4
Acetone	ND		ug/l	20	5.8	4
trans-1,2-Dichloroethene	ND		ug/l	3.0	0.65	4
Methyl Acetate	ND		ug/l	8.0	0.94	4
Methyl tert butyl ether	ND		ug/l	4.0	0.66	4
1,1-Dichloroethane	ND		ug/l	3.0	0.84	4
cis-1,2-Dichloroethene	ND		ug/l	2.0	0.75	4
Cyclohexane	ND		ug/l	40	1.1	4
Chloroform	ND		ug/l	3.0	0.89	4
Carbon tetrachloride	ND		ug/l	2.0	0.54	4
1,1,1-Trichloroethane	ND		ug/l	2.0	0.63	4
2-Butanone	ND		ug/l	20	7.8	4
Benzene	380		ug/l	2.0	0.64	4
1,2-Dichloroethane	ND		ug/l	2.0	0.53	4
Trichloroethene	ND		ug/l	2.0	0.70	4
1,2-Dichloropropane	ND		ug/l	4.0	0.55	4
Bromodichloromethane	ND		ug/l	2.0	0.77	4
cis-1,3-Dichloropropene	ND		ug/l	2.0	0.58	4
Toluene	2.3	J	ug/l	3.0	0.81	4

Project Name: B14 GWS
Project Number: Not Specified

Lab Number: L2448938
Report Date: 09/09/24

SAMPLE RESULTS

Lab ID: L2448938-05 D
 Client ID: TM04-PZM006
 Sample Location: B14

Date Collected: 08/27/24 09:20
 Date Received: 08/27/24
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Tetrachloroethene	ND		ug/l	2.0	0.72	4
4-Methyl-2-pentanone	ND		ug/l	20	1.7	4
trans-1,3-Dichloropropene	ND		ug/l	2.0	0.66	4
1,3-Dichloropropene, Total	ND		ug/l	2.0	0.58	4
1,1,2-Trichloroethane	ND		ug/l	3.0	0.58	4
Dibromochloromethane	ND		ug/l	2.0	0.60	4
1,2-Dibromoethane	ND		ug/l	8.0	0.77	4
2-Hexanone	ND		ug/l	20	2.1	4
Chlorobenzene	ND		ug/l	2.0	0.71	4
Ethylbenzene	4.7		ug/l	2.0	0.67	4
p/m-Xylene	5.1		ug/l	4.0	1.3	4
o-Xylene	ND		ug/l	4.0	1.6	4
Xylenes, Total	5.1		ug/l	4.0	1.3	4
Styrene	ND		ug/l	4.0	1.4	4
Bromoform	ND		ug/l	8.0	0.99	4
Isopropylbenzene	ND		ug/l	2.0	0.75	4
1,1,2,2-Tetrachloroethane	ND		ug/l	2.0	0.67	4
1,3-Dichlorobenzene	ND		ug/l	10	0.74	4
1,4-Dichlorobenzene	ND		ug/l	10	0.75	4
1,2-Dichlorobenzene	ND		ug/l	10	0.74	4
1,2-Dibromo-3-chloropropane	ND		ug/l	10	1.4	4
1,2,4-Trichlorobenzene	ND		ug/l	10	0.88	4
1,2,3-Trichlorobenzene	ND		ug/l	10	0.94	4

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	103		70-130
Toluene-d8	99		70-130
4-Bromofluorobenzene	102		70-130
Dibromofluoromethane	99		70-130

Project Name: B14 GWS
Project Number: Not Specified

Lab Number: L2448938
Report Date: 09/09/24

SAMPLE RESULTS

Lab ID: L2448938-05 D
 Client ID: TM04-PZM006
 Sample Location: B14

Date Collected: 08/27/24 09:20
 Date Received: 08/27/24
 Field Prep: Not Specified

Sample Depth:

Matrix: Water
 Analytical Method: 1,8260D-SIM(M)
 Analytical Date: 09/01/24 23:30
 Analyst: MAG

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
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Volatile Organics by GC/MS-SIM - Westborough Lab						
1,1,2,2-Tetrachloroethane	ND		ug/l	0.200	0.023	4

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	104		70-130
4-Bromofluorobenzene	97		70-130

Project Name: B14 GWS
Project Number: Not Specified

Lab Number: L2448938
Report Date: 09/09/24

SAMPLE RESULTS

Lab ID: L2448938-06
 Client ID: HI22-MWS
 Sample Location: B14

Date Collected: 08/27/24 12:17
 Date Received: 08/27/24
 Field Prep: Not Specified

Sample Depth:

Matrix: Water
 Analytical Method: 1,8260D
 Analytical Date: 09/01/24 23:57
 Analyst: MAG

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Dichlorodifluoromethane	ND		ug/l	5.0	0.24	1
Chloromethane	ND		ug/l	2.5	0.20	1
Vinyl chloride	ND		ug/l	1.0	0.07	1
Bromomethane	ND		ug/l	1.0	0.26	1
Chloroethane	ND		ug/l	1.0	0.13	1
Trichlorofluoromethane	ND		ug/l	2.5	0.16	1
1,1-Dichloroethene	ND		ug/l	0.50	0.17	1
Carbon disulfide	1.1	J	ug/l	5.0	0.30	1
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND		ug/l	2.5	0.15	1
Methylene chloride	ND		ug/l	2.5	0.68	1
Acetone	ND		ug/l	5.0	1.5	1
trans-1,2-Dichloroethene	ND		ug/l	0.75	0.16	1
Methyl Acetate	ND		ug/l	2.0	0.23	1
Methyl tert butyl ether	ND		ug/l	1.0	0.17	1
1,1-Dichloroethane	ND		ug/l	0.75	0.21	1
cis-1,2-Dichloroethene	ND		ug/l	0.50	0.19	1
Cyclohexane	ND		ug/l	10	0.27	1
Chloroform	ND		ug/l	0.75	0.22	1
Carbon tetrachloride	ND		ug/l	0.50	0.13	1
1,1,1-Trichloroethane	ND		ug/l	0.50	0.16	1
2-Butanone	ND		ug/l	5.0	1.9	1
Benzene	0.23	J	ug/l	0.50	0.16	1
1,2-Dichloroethane	ND		ug/l	0.50	0.13	1
Trichloroethene	ND		ug/l	0.50	0.18	1
1,2-Dichloropropane	ND		ug/l	1.0	0.14	1
Bromodichloromethane	ND		ug/l	0.50	0.19	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	0.14	1
Toluene	ND		ug/l	0.75	0.20	1

Project Name: B14 GWS
Project Number: Not Specified

Lab Number: L2448938
Report Date: 09/09/24

SAMPLE RESULTS

Lab ID: L2448938-06
 Client ID: HI22-MWS
 Sample Location: B14

Date Collected: 08/27/24 12:17
 Date Received: 08/27/24
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Tetrachloroethene	ND		ug/l	0.50	0.18	1
4-Methyl-2-pentanone	ND		ug/l	5.0	0.42	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	0.16	1
1,3-Dichloropropene, Total	ND		ug/l	0.50	0.14	1
1,1,2-Trichloroethane	ND		ug/l	0.75	0.14	1
Dibromochloromethane	ND		ug/l	0.50	0.15	1
1,2-Dibromoethane	ND		ug/l	2.0	0.19	1
2-Hexanone	ND		ug/l	5.0	0.52	1
Chlorobenzene	ND		ug/l	0.50	0.18	1
Ethylbenzene	ND		ug/l	0.50	0.17	1
p/m-Xylene	ND		ug/l	1.0	0.33	1
o-Xylene	ND		ug/l	1.0	0.39	1
Xylenes, Total	ND		ug/l	1.0	0.33	1
Styrene	ND		ug/l	1.0	0.36	1
Bromoform	ND		ug/l	2.0	0.25	1
Isopropylbenzene	ND		ug/l	0.50	0.19	1
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	0.17	1
1,3-Dichlorobenzene	ND		ug/l	2.5	0.19	1
1,4-Dichlorobenzene	ND		ug/l	2.5	0.19	1
1,2-Dichlorobenzene	ND		ug/l	2.5	0.18	1
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	0.35	1
1,2,4-Trichlorobenzene	ND		ug/l	2.5	0.22	1
1,2,3-Trichlorobenzene	ND		ug/l	2.5	0.23	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	108		70-130
Toluene-d8	101		70-130
4-Bromofluorobenzene	99		70-130
Dibromofluoromethane	108		70-130

Project Name: B14 GWS
Project Number: Not Specified

Lab Number: L2448938
Report Date: 09/09/24

SAMPLE RESULTS

Lab ID: L2448938-06
 Client ID: HI22-MWS
 Sample Location: B14

Date Collected: 08/27/24 12:17
 Date Received: 08/27/24
 Field Prep: Not Specified

Sample Depth:

Matrix: Water
 Analytical Method: 1,8260D-SIM(M)
 Analytical Date: 09/01/24 23:57
 Analyst: MAG

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
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Volatile Organics by GC/MS-SIM - Westborough Lab						
1,1,2,2-Tetrachloroethane	ND		ug/l	0.050	0.006	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	109		70-130
4-Bromofluorobenzene	97		70-130

Project Name: B14 GWS
Project Number: Not Specified

Lab Number: L2448938
Report Date: 09/09/24

SAMPLE RESULTS

Lab ID: L2448938-07
 Client ID: HI10-MWS
 Sample Location: B14

Date Collected: 08/27/24 11:25
 Date Received: 08/27/24
 Field Prep: Not Specified

Sample Depth:

Matrix: Water
 Analytical Method: 1,8260D
 Analytical Date: 09/02/24 00:24
 Analyst: MAG

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Dichlorodifluoromethane	ND		ug/l	5.0	0.24	1
Chloromethane	ND		ug/l	2.5	0.20	1
Vinyl chloride	ND		ug/l	1.0	0.07	1
Bromomethane	ND		ug/l	1.0	0.26	1
Chloroethane	ND		ug/l	1.0	0.13	1
Trichlorofluoromethane	ND		ug/l	2.5	0.16	1
1,1-Dichloroethene	ND		ug/l	0.50	0.17	1
Carbon disulfide	ND		ug/l	5.0	0.30	1
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND		ug/l	2.5	0.15	1
Methylene chloride	ND		ug/l	2.5	0.68	1
Acetone	ND		ug/l	5.0	1.5	1
trans-1,2-Dichloroethene	ND		ug/l	0.75	0.16	1
Methyl Acetate	ND		ug/l	2.0	0.23	1
Methyl tert butyl ether	ND		ug/l	1.0	0.17	1
1,1-Dichloroethane	ND		ug/l	0.75	0.21	1
cis-1,2-Dichloroethene	ND		ug/l	0.50	0.19	1
Cyclohexane	ND		ug/l	10	0.27	1
Chloroform	ND		ug/l	0.75	0.22	1
Carbon tetrachloride	ND		ug/l	0.50	0.13	1
1,1,1-Trichloroethane	ND		ug/l	0.50	0.16	1
2-Butanone	ND		ug/l	5.0	1.9	1
Benzene	1.2		ug/l	0.50	0.16	1
1,2-Dichloroethane	ND		ug/l	0.50	0.13	1
Trichloroethene	ND		ug/l	0.50	0.18	1
1,2-Dichloropropane	ND		ug/l	1.0	0.14	1
Bromodichloromethane	ND		ug/l	0.50	0.19	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	0.14	1
Toluene	0.50	J	ug/l	0.75	0.20	1

Project Name: B14 GWS
Project Number: Not Specified

Lab Number: L2448938
Report Date: 09/09/24

SAMPLE RESULTS

Lab ID: L2448938-07
 Client ID: HI10-MWS
 Sample Location: B14

Date Collected: 08/27/24 11:25
 Date Received: 08/27/24
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Tetrachloroethene	ND		ug/l	0.50	0.18	1
4-Methyl-2-pentanone	ND		ug/l	5.0	0.42	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	0.16	1
1,3-Dichloropropene, Total	ND		ug/l	0.50	0.14	1
1,1,2-Trichloroethane	ND		ug/l	0.75	0.14	1
Dibromochloromethane	ND		ug/l	0.50	0.15	1
1,2-Dibromoethane	ND		ug/l	2.0	0.19	1
2-Hexanone	ND		ug/l	5.0	0.52	1
Chlorobenzene	ND		ug/l	0.50	0.18	1
Ethylbenzene	0.19	J	ug/l	0.50	0.17	1
p/m-Xylene	0.60	J	ug/l	1.0	0.33	1
o-Xylene	ND		ug/l	1.0	0.39	1
Xylenes, Total	0.60	J	ug/l	1.0	0.33	1
Styrene	ND		ug/l	1.0	0.36	1
Bromoform	ND		ug/l	2.0	0.25	1
Isopropylbenzene	ND		ug/l	0.50	0.19	1
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	0.17	1
1,3-Dichlorobenzene	ND		ug/l	2.5	0.19	1
1,4-Dichlorobenzene	ND		ug/l	2.5	0.19	1
1,2-Dichlorobenzene	ND		ug/l	2.5	0.18	1
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	0.35	1
1,2,4-Trichlorobenzene	ND		ug/l	2.5	0.22	1
1,2,3-Trichlorobenzene	ND		ug/l	2.5	0.23	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	108		70-130
Toluene-d8	96		70-130
4-Bromofluorobenzene	98		70-130
Dibromofluoromethane	107		70-130

Project Name: B14 GWS
Project Number: Not Specified

Lab Number: L2448938
Report Date: 09/09/24

SAMPLE RESULTS

Lab ID: L2448938-07
 Client ID: HI10-MWS
 Sample Location: B14

Date Collected: 08/27/24 11:25
 Date Received: 08/27/24
 Field Prep: Not Specified

Sample Depth:

Matrix: Water
 Analytical Method: 1,8260D-SIM(M)
 Analytical Date: 09/02/24 00:24
 Analyst: MAG

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
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Volatile Organics by GC/MS-SIM - Westborough Lab						
1,1,2,2-Tetrachloroethane	ND		ug/l	0.050	0.006	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	110		70-130
4-Bromofluorobenzene	97		70-130

Project Name: B14 GWS
Project Number: Not Specified

Lab Number: L2448938
Report Date: 09/09/24

SAMPLE RESULTS

Lab ID: L2448938-08
 Client ID: HI21-MWS
 Sample Location: B14

Date Collected: 08/27/24 13:22
 Date Received: 08/27/24
 Field Prep: Not Specified

Sample Depth:

Matrix: Water
 Analytical Method: 1,8260D
 Analytical Date: 09/02/24 00:51
 Analyst: MAG

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Dichlorodifluoromethane	ND		ug/l	5.0	0.24	1
Chloromethane	ND		ug/l	2.5	0.20	1
Vinyl chloride	ND		ug/l	1.0	0.07	1
Bromomethane	ND		ug/l	1.0	0.26	1
Chloroethane	ND		ug/l	1.0	0.13	1
Trichlorofluoromethane	ND		ug/l	2.5	0.16	1
1,1-Dichloroethene	ND		ug/l	0.50	0.17	1
Carbon disulfide	ND		ug/l	5.0	0.30	1
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND		ug/l	2.5	0.15	1
Methylene chloride	ND		ug/l	2.5	0.68	1
Acetone	ND		ug/l	5.0	1.5	1
trans-1,2-Dichloroethene	ND		ug/l	0.75	0.16	1
Methyl Acetate	ND		ug/l	2.0	0.23	1
Methyl tert butyl ether	ND		ug/l	1.0	0.17	1
1,1-Dichloroethane	ND		ug/l	0.75	0.21	1
cis-1,2-Dichloroethene	ND		ug/l	0.50	0.19	1
Cyclohexane	ND		ug/l	10	0.27	1
Chloroform	ND		ug/l	0.75	0.22	1
Carbon tetrachloride	ND		ug/l	0.50	0.13	1
1,1,1-Trichloroethane	ND		ug/l	0.50	0.16	1
2-Butanone	ND		ug/l	5.0	1.9	1
Benzene	ND		ug/l	0.50	0.16	1
1,2-Dichloroethane	ND		ug/l	0.50	0.13	1
Trichloroethene	ND		ug/l	0.50	0.18	1
1,2-Dichloropropane	ND		ug/l	1.0	0.14	1
Bromodichloromethane	ND		ug/l	0.50	0.19	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	0.14	1
Toluene	ND		ug/l	0.75	0.20	1

Project Name: B14 GWS
Project Number: Not Specified

Lab Number: L2448938
Report Date: 09/09/24

SAMPLE RESULTS

Lab ID: L2448938-08
 Client ID: HI21-MWS
 Sample Location: B14

Date Collected: 08/27/24 13:22
 Date Received: 08/27/24
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Tetrachloroethene	ND		ug/l	0.50	0.18	1
4-Methyl-2-pentanone	ND		ug/l	5.0	0.42	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	0.16	1
1,3-Dichloropropene, Total	ND		ug/l	0.50	0.14	1
1,1,2-Trichloroethane	ND		ug/l	0.75	0.14	1
Dibromochloromethane	ND		ug/l	0.50	0.15	1
1,2-Dibromoethane	ND		ug/l	2.0	0.19	1
2-Hexanone	ND		ug/l	5.0	0.52	1
Chlorobenzene	ND		ug/l	0.50	0.18	1
Ethylbenzene	ND		ug/l	0.50	0.17	1
p/m-Xylene	ND		ug/l	1.0	0.33	1
o-Xylene	ND		ug/l	1.0	0.39	1
Xylenes, Total	ND		ug/l	1.0	0.33	1
Styrene	ND		ug/l	1.0	0.36	1
Bromoform	ND		ug/l	2.0	0.25	1
Isopropylbenzene	ND		ug/l	0.50	0.19	1
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	0.17	1
1,3-Dichlorobenzene	ND		ug/l	2.5	0.19	1
1,4-Dichlorobenzene	ND		ug/l	2.5	0.19	1
1,2-Dichlorobenzene	ND		ug/l	2.5	0.18	1
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	0.35	1
1,2,4-Trichlorobenzene	ND		ug/l	2.5	0.22	1
1,2,3-Trichlorobenzene	ND		ug/l	2.5	0.23	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	109		70-130
Toluene-d8	99		70-130
4-Bromofluorobenzene	100		70-130
Dibromofluoromethane	108		70-130

Project Name: B14 GWS
Project Number: Not Specified

Lab Number: L2448938
Report Date: 09/09/24

SAMPLE RESULTS

Lab ID: L2448938-08
 Client ID: HI21-MWS
 Sample Location: B14

Date Collected: 08/27/24 13:22
 Date Received: 08/27/24
 Field Prep: Not Specified

Sample Depth:

Matrix: Water
 Analytical Method: 1,8260D-SIM(M)
 Analytical Date: 09/02/24 00:51
 Analyst: MAG

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
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Volatile Organics by GC/MS-SIM - Westborough Lab						
1,1,2,2-Tetrachloroethane	ND		ug/l	0.050	0.006	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	109		70-130
4-Bromofluorobenzene	97		70-130

Project Name: B14 GWS
Project Number: Not Specified

Lab Number: L2448938
Report Date: 09/09/24

SAMPLE RESULTS

Lab ID: L2448938-09
 Client ID: HI19-MWS
 Sample Location: B14

Date Collected: 08/27/24 14:25
 Date Received: 08/27/24
 Field Prep: Not Specified

Sample Depth:

Matrix: Water
 Analytical Method: 1,8260D
 Analytical Date: 09/02/24 01:18
 Analyst: MAG

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Dichlorodifluoromethane	ND		ug/l	5.0	0.24	1
Chloromethane	ND		ug/l	2.5	0.20	1
Vinyl chloride	ND		ug/l	1.0	0.07	1
Bromomethane	ND		ug/l	1.0	0.26	1
Chloroethane	ND		ug/l	1.0	0.13	1
Trichlorofluoromethane	ND		ug/l	2.5	0.16	1
1,1-Dichloroethene	ND		ug/l	0.50	0.17	1
Carbon disulfide	ND		ug/l	5.0	0.30	1
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND		ug/l	2.5	0.15	1
Methylene chloride	ND		ug/l	2.5	0.68	1
Acetone	1.5	J	ug/l	5.0	1.5	1
trans-1,2-Dichloroethene	ND		ug/l	0.75	0.16	1
Methyl Acetate	ND		ug/l	2.0	0.23	1
Methyl tert butyl ether	ND		ug/l	1.0	0.17	1
1,1-Dichloroethane	ND		ug/l	0.75	0.21	1
cis-1,2-Dichloroethene	ND		ug/l	0.50	0.19	1
Cyclohexane	ND		ug/l	10	0.27	1
Chloroform	ND		ug/l	0.75	0.22	1
Carbon tetrachloride	ND		ug/l	0.50	0.13	1
1,1,1-Trichloroethane	ND		ug/l	0.50	0.16	1
2-Butanone	ND		ug/l	5.0	1.9	1
Benzene	11		ug/l	0.50	0.16	1
1,2-Dichloroethane	ND		ug/l	0.50	0.13	1
Trichloroethene	ND		ug/l	0.50	0.18	1
1,2-Dichloropropane	ND		ug/l	1.0	0.14	1
Bromodichloromethane	ND		ug/l	0.50	0.19	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	0.14	1
Toluene	4.2		ug/l	0.75	0.20	1

Project Name: B14 GWS
Project Number: Not Specified

Lab Number: L2448938
Report Date: 09/09/24

SAMPLE RESULTS

Lab ID: L2448938-09
 Client ID: HI19-MWS
 Sample Location: B14

Date Collected: 08/27/24 14:25
 Date Received: 08/27/24
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Tetrachloroethene	ND		ug/l	0.50	0.18	1
4-Methyl-2-pentanone	ND		ug/l	5.0	0.42	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	0.16	1
1,3-Dichloropropene, Total	ND		ug/l	0.50	0.14	1
1,1,2-Trichloroethane	ND		ug/l	0.75	0.14	1
Dibromochloromethane	ND		ug/l	0.50	0.15	1
1,2-Dibromoethane	ND		ug/l	2.0	0.19	1
2-Hexanone	ND		ug/l	5.0	0.52	1
Chlorobenzene	ND		ug/l	0.50	0.18	1
Ethylbenzene	0.24	J	ug/l	0.50	0.17	1
p/m-Xylene	2.5		ug/l	1.0	0.33	1
o-Xylene	1.3		ug/l	1.0	0.39	1
Xylenes, Total	3.8		ug/l	1.0	0.33	1
Styrene	ND		ug/l	1.0	0.36	1
Bromoform	ND		ug/l	2.0	0.25	1
Isopropylbenzene	ND		ug/l	0.50	0.19	1
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	0.17	1
1,3-Dichlorobenzene	ND		ug/l	2.5	0.19	1
1,4-Dichlorobenzene	ND		ug/l	2.5	0.19	1
1,2-Dichlorobenzene	ND		ug/l	2.5	0.18	1
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	0.35	1
1,2,4-Trichlorobenzene	ND		ug/l	2.5	0.22	1
1,2,3-Trichlorobenzene	ND		ug/l	2.5	0.23	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	107		70-130
Toluene-d8	100		70-130
4-Bromofluorobenzene	101		70-130
Dibromofluoromethane	108		70-130

Project Name: B14 GWS
Project Number: Not Specified

Lab Number: L2448938
Report Date: 09/09/24

SAMPLE RESULTS

Lab ID: L2448938-09
 Client ID: HI19-MWS
 Sample Location: B14

Date Collected: 08/27/24 14:25
 Date Received: 08/27/24
 Field Prep: Not Specified

Sample Depth:

Matrix: Water
 Analytical Method: 1,8260D-SIM(M)
 Analytical Date: 09/02/24 01:18
 Analyst: MAG

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS-SIM - Westborough Lab						
1,1,2,2-Tetrachloroethane	0.017	J	ug/l	0.050	0.006	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	108		70-130
4-Bromofluorobenzene	96		70-130

Project Name: B14 GWS
Project Number: Not Specified

Lab Number: L2448938
Report Date: 09/09/24

SAMPLE RESULTS

Lab ID: L2448938-10
 Client ID: FIELD BLANK
 Sample Location: B14

Date Collected: 08/27/24 15:00
 Date Received: 08/27/24
 Field Prep: Not Specified

Sample Depth:

Matrix: Water
 Analytical Method: 1,8260D
 Analytical Date: 09/02/24 01:45
 Analyst: MAG

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Dichlorodifluoromethane	ND		ug/l	5.0	0.24	1
Chloromethane	ND		ug/l	2.5	0.20	1
Vinyl chloride	ND		ug/l	1.0	0.07	1
Bromomethane	ND		ug/l	1.0	0.26	1
Chloroethane	ND		ug/l	1.0	0.13	1
Trichlorofluoromethane	ND		ug/l	2.5	0.16	1
1,1-Dichloroethene	ND		ug/l	0.50	0.17	1
Carbon disulfide	ND		ug/l	5.0	0.30	1
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND		ug/l	2.5	0.15	1
Methylene chloride	ND		ug/l	2.5	0.68	1
Acetone	ND		ug/l	5.0	1.5	1
trans-1,2-Dichloroethene	ND		ug/l	0.75	0.16	1
Methyl Acetate	ND		ug/l	2.0	0.23	1
Methyl tert butyl ether	ND		ug/l	1.0	0.17	1
1,1-Dichloroethane	ND		ug/l	0.75	0.21	1
cis-1,2-Dichloroethene	ND		ug/l	0.50	0.19	1
Cyclohexane	ND		ug/l	10	0.27	1
Chloroform	ND		ug/l	0.75	0.22	1
Carbon tetrachloride	ND		ug/l	0.50	0.13	1
1,1,1-Trichloroethane	ND		ug/l	0.50	0.16	1
2-Butanone	ND		ug/l	5.0	1.9	1
Benzene	ND		ug/l	0.50	0.16	1
1,2-Dichloroethane	ND		ug/l	0.50	0.13	1
Trichloroethene	ND		ug/l	0.50	0.18	1
1,2-Dichloropropane	ND		ug/l	1.0	0.14	1
Bromodichloromethane	ND		ug/l	0.50	0.19	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	0.14	1
Toluene	ND		ug/l	0.75	0.20	1

Project Name: B14 GWS
Project Number: Not Specified

Lab Number: L2448938
Report Date: 09/09/24

SAMPLE RESULTS

Lab ID: L2448938-10
 Client ID: FIELD BLANK
 Sample Location: B14

Date Collected: 08/27/24 15:00
 Date Received: 08/27/24
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Tetrachloroethene	ND		ug/l	0.50	0.18	1
4-Methyl-2-pentanone	ND		ug/l	5.0	0.42	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	0.16	1
1,3-Dichloropropene, Total	ND		ug/l	0.50	0.14	1
1,1,2-Trichloroethane	ND		ug/l	0.75	0.14	1
Dibromochloromethane	ND		ug/l	0.50	0.15	1
1,2-Dibromoethane	ND		ug/l	2.0	0.19	1
2-Hexanone	ND		ug/l	5.0	0.52	1
Chlorobenzene	ND		ug/l	0.50	0.18	1
Ethylbenzene	ND		ug/l	0.50	0.17	1
p/m-Xylene	ND		ug/l	1.0	0.33	1
o-Xylene	ND		ug/l	1.0	0.39	1
Xylenes, Total	ND		ug/l	1.0	0.33	1
Styrene	ND		ug/l	1.0	0.36	1
Bromoform	ND		ug/l	2.0	0.25	1
Isopropylbenzene	ND		ug/l	0.50	0.19	1
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	0.17	1
1,3-Dichlorobenzene	ND		ug/l	2.5	0.19	1
1,4-Dichlorobenzene	ND		ug/l	2.5	0.19	1
1,2-Dichlorobenzene	ND		ug/l	2.5	0.18	1
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	0.35	1
1,2,4-Trichlorobenzene	ND		ug/l	2.5	0.22	1
1,2,3-Trichlorobenzene	ND		ug/l	2.5	0.23	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	109		70-130
Toluene-d8	101		70-130
4-Bromofluorobenzene	99		70-130
Dibromofluoromethane	110		70-130

Project Name: B14 GWS
Project Number: Not Specified

Lab Number: L2448938
Report Date: 09/09/24

SAMPLE RESULTS

Lab ID: L2448938-10
 Client ID: FIELD BLANK
 Sample Location: B14

Date Collected: 08/27/24 15:00
 Date Received: 08/27/24
 Field Prep: Not Specified

Sample Depth:

Matrix: Water
 Analytical Method: 1,8260D-SIM(M)
 Analytical Date: 09/02/24 01:45
 Analyst: MAG

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
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Volatile Organics by GC/MS-SIM - Westborough Lab						
1,1,2,2-Tetrachloroethane	ND		ug/l	0.050	0.006	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	109		70-130
4-Bromofluorobenzene	97		70-130

Project Name: B14 GWS
Project Number: Not Specified

Lab Number: L2448938
Report Date: 09/09/24

SAMPLE RESULTS

Lab ID: L2448938-11
 Client ID: TRIP BLANK
 Sample Location: B14

Date Collected: 08/26/24 00:00
 Date Received: 08/27/24
 Field Prep: Not Specified

Sample Depth:
 Matrix: Water
 Analytical Method: 1,8260D
 Analytical Date: 09/02/24 02:12
 Analyst: MAG

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Dichlorodifluoromethane	ND		ug/l	5.0	0.24	1
Chloromethane	ND		ug/l	2.5	0.20	1
Vinyl chloride	ND		ug/l	1.0	0.07	1
Bromomethane	ND		ug/l	1.0	0.26	1
Chloroethane	ND		ug/l	1.0	0.13	1
Trichlorofluoromethane	ND		ug/l	2.5	0.16	1
1,1-Dichloroethene	ND		ug/l	0.50	0.17	1
Carbon disulfide	ND		ug/l	5.0	0.30	1
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND		ug/l	2.5	0.15	1
Methylene chloride	ND		ug/l	2.5	0.68	1
Acetone	ND		ug/l	5.0	1.5	1
trans-1,2-Dichloroethene	ND		ug/l	0.75	0.16	1
Methyl Acetate	ND		ug/l	2.0	0.23	1
Methyl tert butyl ether	ND		ug/l	1.0	0.17	1
1,1-Dichloroethane	ND		ug/l	0.75	0.21	1
cis-1,2-Dichloroethene	ND		ug/l	0.50	0.19	1
Cyclohexane	ND		ug/l	10	0.27	1
Chloroform	ND		ug/l	0.75	0.22	1
Carbon tetrachloride	ND		ug/l	0.50	0.13	1
1,1,1-Trichloroethane	ND		ug/l	0.50	0.16	1
2-Butanone	ND		ug/l	5.0	1.9	1
Benzene	ND		ug/l	0.50	0.16	1
1,2-Dichloroethane	ND		ug/l	0.50	0.13	1
Trichloroethene	ND		ug/l	0.50	0.18	1
1,2-Dichloropropane	ND		ug/l	1.0	0.14	1
Bromodichloromethane	ND		ug/l	0.50	0.19	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	0.14	1
Toluene	ND		ug/l	0.75	0.20	1

Project Name: B14 GWS
Project Number: Not Specified

Lab Number: L2448938
Report Date: 09/09/24

SAMPLE RESULTS

Lab ID: L2448938-11
 Client ID: TRIP BLANK
 Sample Location: B14

Date Collected: 08/26/24 00:00
 Date Received: 08/27/24
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Tetrachloroethene	ND		ug/l	0.50	0.18	1
4-Methyl-2-pentanone	ND		ug/l	5.0	0.42	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	0.16	1
1,3-Dichloropropene, Total	ND		ug/l	0.50	0.14	1
1,1,2-Trichloroethane	ND		ug/l	0.75	0.14	1
Dibromochloromethane	ND		ug/l	0.50	0.15	1
1,2-Dibromoethane	ND		ug/l	2.0	0.19	1
2-Hexanone	ND		ug/l	5.0	0.52	1
Chlorobenzene	ND		ug/l	0.50	0.18	1
Ethylbenzene	ND		ug/l	0.50	0.17	1
p/m-Xylene	ND		ug/l	1.0	0.33	1
o-Xylene	ND		ug/l	1.0	0.39	1
Xylenes, Total	ND		ug/l	1.0	0.33	1
Styrene	ND		ug/l	1.0	0.36	1
Bromoform	ND		ug/l	2.0	0.25	1
Isopropylbenzene	ND		ug/l	0.50	0.19	1
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	0.17	1
1,3-Dichlorobenzene	ND		ug/l	2.5	0.19	1
1,4-Dichlorobenzene	ND		ug/l	2.5	0.19	1
1,2-Dichlorobenzene	ND		ug/l	2.5	0.18	1
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	0.35	1
1,2,4-Trichlorobenzene	ND		ug/l	2.5	0.22	1
1,2,3-Trichlorobenzene	ND		ug/l	2.5	0.23	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	108		70-130
Toluene-d8	101		70-130
4-Bromofluorobenzene	101		70-130
Dibromofluoromethane	111		70-130

Project Name: B14 GWS
Project Number: Not Specified

Lab Number: L2448938
Report Date: 09/09/24

SAMPLE RESULTS

Lab ID: L2448938-11
 Client ID: TRIP BLANK
 Sample Location: B14

Date Collected: 08/26/24 00:00
 Date Received: 08/27/24
 Field Prep: Not Specified

Sample Depth:

Matrix: Water
 Analytical Method: 1,8260D-SIM(M)
 Analytical Date: 09/02/24 02:12
 Analyst: MAG

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
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Volatile Organics by GC/MS-SIM - Westborough Lab						
1,1,2,2-Tetrachloroethane	ND		ug/l	0.050	0.006	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	109		70-130
4-Bromofluorobenzene	97		70-130

Project Name: B14 GWS
Project Number: Not Specified

Lab Number: L2448938
Report Date: 09/09/24

SAMPLE RESULTS

Lab ID: L2448938-12
 Client ID: HI20R2-MWS
 Sample Location: B14

Date Collected: 08/27/24 16:30
 Date Received: 08/27/24
 Field Prep: Not Specified

Sample Depth:

Matrix: Water
 Analytical Method: 1,8260D
 Analytical Date: 09/02/24 02:39
 Analyst: MAG

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Dichlorodifluoromethane	ND		ug/l	5.0	0.24	1
Chloromethane	ND		ug/l	2.5	0.20	1
Vinyl chloride	ND		ug/l	1.0	0.07	1
Bromomethane	ND		ug/l	1.0	0.26	1
Chloroethane	ND		ug/l	1.0	0.13	1
Trichlorofluoromethane	ND		ug/l	2.5	0.16	1
1,1-Dichloroethene	ND		ug/l	0.50	0.17	1
Carbon disulfide	ND		ug/l	5.0	0.30	1
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND		ug/l	2.5	0.15	1
Methylene chloride	ND		ug/l	2.5	0.68	1
Acetone	1.5	J	ug/l	5.0	1.5	1
trans-1,2-Dichloroethene	ND		ug/l	0.75	0.16	1
Methyl Acetate	ND		ug/l	2.0	0.23	1
Methyl tert butyl ether	ND		ug/l	1.0	0.17	1
1,1-Dichloroethane	ND		ug/l	0.75	0.21	1
cis-1,2-Dichloroethene	ND		ug/l	0.50	0.19	1
Cyclohexane	ND		ug/l	10	0.27	1
Chloroform	ND		ug/l	0.75	0.22	1
Carbon tetrachloride	ND		ug/l	0.50	0.13	1
1,1,1-Trichloroethane	ND		ug/l	0.50	0.16	1
2-Butanone	ND		ug/l	5.0	1.9	1
Benzene	0.35	J	ug/l	0.50	0.16	1
1,2-Dichloroethane	ND		ug/l	0.50	0.13	1
Trichloroethene	ND		ug/l	0.50	0.18	1
1,2-Dichloropropane	ND		ug/l	1.0	0.14	1
Bromodichloromethane	ND		ug/l	0.50	0.19	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	0.14	1
Toluene	ND		ug/l	0.75	0.20	1

Project Name: B14 GWS
Project Number: Not Specified

Lab Number: L2448938
Report Date: 09/09/24

SAMPLE RESULTS

Lab ID: L2448938-12
 Client ID: HI20R2-MWS
 Sample Location: B14

Date Collected: 08/27/24 16:30
 Date Received: 08/27/24
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Tetrachloroethene	ND		ug/l	0.50	0.18	1
4-Methyl-2-pentanone	ND		ug/l	5.0	0.42	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	0.16	1
1,3-Dichloropropene, Total	ND		ug/l	0.50	0.14	1
1,1,2-Trichloroethane	ND		ug/l	0.75	0.14	1
Dibromochloromethane	ND		ug/l	0.50	0.15	1
1,2-Dibromoethane	ND		ug/l	2.0	0.19	1
2-Hexanone	ND		ug/l	5.0	0.52	1
Chlorobenzene	ND		ug/l	0.50	0.18	1
Ethylbenzene	ND		ug/l	0.50	0.17	1
p/m-Xylene	ND		ug/l	1.0	0.33	1
o-Xylene	ND		ug/l	1.0	0.39	1
Xylenes, Total	ND		ug/l	1.0	0.33	1
Styrene	ND		ug/l	1.0	0.36	1
Bromoform	ND		ug/l	2.0	0.25	1
Isopropylbenzene	ND		ug/l	0.50	0.19	1
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	0.17	1
1,3-Dichlorobenzene	ND		ug/l	2.5	0.19	1
1,4-Dichlorobenzene	ND		ug/l	2.5	0.19	1
1,2-Dichlorobenzene	ND		ug/l	2.5	0.18	1
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	0.35	1
1,2,4-Trichlorobenzene	ND		ug/l	2.5	0.22	1
1,2,3-Trichlorobenzene	ND		ug/l	2.5	0.23	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	108		70-130
Toluene-d8	99		70-130
4-Bromofluorobenzene	99		70-130
Dibromofluoromethane	112		70-130

Project Name: B14 GWS
Project Number: Not Specified

Lab Number: L2448938
Report Date: 09/09/24

SAMPLE RESULTS

Lab ID: L2448938-12
 Client ID: HI20R2-MWS
 Sample Location: B14

Date Collected: 08/27/24 16:30
 Date Received: 08/27/24
 Field Prep: Not Specified

Sample Depth:

Matrix: Water
 Analytical Method: 1,8260D-SIM(M)
 Analytical Date: 09/02/24 02:39
 Analyst: MAG

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
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Volatile Organics by GC/MS-SIM - Westborough Lab						
1,1,2,2-Tetrachloroethane	ND		ug/l	0.050	0.006	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	110		70-130
4-Bromofluorobenzene	95		70-130

Project Name: B14 GWS
Project Number: Not Specified

Lab Number: L2448938
Report Date: 09/09/24

Method Blank Analysis Batch Quality Control

Analytical Method: 1,8260D
Analytical Date: 09/01/24 18:59
Analyst: MAG

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 01-12 Batch: WG1966912-5					
Dichlorodifluoromethane	ND		ug/l	5.0	0.24
Chloromethane	ND		ug/l	2.5	0.20
Vinyl chloride	ND		ug/l	1.0	0.07
Bromomethane	ND		ug/l	1.0	0.26
Chloroethane	ND		ug/l	1.0	0.13
Trichlorofluoromethane	ND		ug/l	2.5	0.16
1,1-Dichloroethene	ND		ug/l	0.50	0.17
Carbon disulfide	ND		ug/l	5.0	0.30
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND		ug/l	2.5	0.15
Methylene chloride	ND		ug/l	2.5	0.68
Acetone	ND		ug/l	5.0	1.5
trans-1,2-Dichloroethene	ND		ug/l	0.75	0.16
Methyl Acetate	ND		ug/l	2.0	0.23
Methyl tert butyl ether	ND		ug/l	1.0	0.17
1,1-Dichloroethane	ND		ug/l	0.75	0.21
cis-1,2-Dichloroethene	ND		ug/l	0.50	0.19
Cyclohexane	ND		ug/l	10	0.27
Chloroform	ND		ug/l	0.75	0.22
Carbon tetrachloride	ND		ug/l	0.50	0.13
1,1,1-Trichloroethane	ND		ug/l	0.50	0.16
2-Butanone	ND		ug/l	5.0	1.9
Benzene	ND		ug/l	0.50	0.16
1,2-Dichloroethane	ND		ug/l	0.50	0.13
Trichloroethene	ND		ug/l	0.50	0.18
1,2-Dichloropropane	ND		ug/l	1.0	0.14
Bromodichloromethane	ND		ug/l	0.50	0.19
cis-1,3-Dichloropropene	ND		ug/l	0.50	0.14
Toluene	ND		ug/l	0.75	0.20
Tetrachloroethene	ND		ug/l	0.50	0.18

Project Name: B14 GWS
Project Number: Not Specified

Lab Number: L2448938
Report Date: 09/09/24

Method Blank Analysis Batch Quality Control

Analytical Method: 1,8260D
Analytical Date: 09/01/24 18:59
Analyst: MAG

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 01-12 Batch: WG1966912-5					
4-Methyl-2-pentanone	ND		ug/l	5.0	0.42
trans-1,3-Dichloropropene	ND		ug/l	0.50	0.16
1,3-Dichloropropene, Total	ND		ug/l	0.50	0.14
1,1,2-Trichloroethane	ND		ug/l	0.75	0.14
Dibromochloromethane	ND		ug/l	0.50	0.15
1,2-Dibromoethane	ND		ug/l	2.0	0.19
2-Hexanone	ND		ug/l	5.0	0.52
Chlorobenzene	ND		ug/l	0.50	0.18
Ethylbenzene	ND		ug/l	0.50	0.17
p/m-Xylene	ND		ug/l	1.0	0.33
o-Xylene	ND		ug/l	1.0	0.39
Xylenes, Total	ND		ug/l	1.0	0.33
Styrene	ND		ug/l	1.0	0.36
Bromoform	ND		ug/l	2.0	0.25
Isopropylbenzene	ND		ug/l	0.50	0.19
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	0.17
1,3-Dichlorobenzene	ND		ug/l	2.5	0.19
1,4-Dichlorobenzene	ND		ug/l	2.5	0.19
1,2-Dichlorobenzene	ND		ug/l	2.5	0.18
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	0.35
1,2,4-Trichlorobenzene	ND		ug/l	2.5	0.22
1,2,3-Trichlorobenzene	ND		ug/l	2.5	0.23

Project Name: B14 GWS
Project Number: Not Specified

Lab Number: L2448938
Report Date: 09/09/24

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260D
Analytical Date: 09/01/24 18:59
Analyst: MAG

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 01-12 Batch: WG1966912-5					

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	108		70-130
Toluene-d8	100		70-130
4-Bromofluorobenzene	101		70-130
Dibromofluoromethane	102		70-130

Project Name: B14 GWS
Project Number: Not Specified

Lab Number: L2448938
Report Date: 09/09/24

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260D-SIM(M)
Analytical Date: 09/01/24 18:59
Analyst: MAG

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS-SIM - Westborough Lab for sample(s): 01-12 Batch: WG1966916-5					
1,1,2,2-Tetrachloroethane	ND		ug/l	0.050	0.006

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	106		70-130
4-Bromofluorobenzene	98		70-130

Lab Control Sample Analysis

Batch Quality Control

Project Name: B14 GWS
Project Number: Not Specified

Lab Number: L2448938
Report Date: 09/09/24

Parameter	LCS		LCSD		%Recovery Limits	RPD	Qual	RPD Limits
	%Recovery	Qual	%Recovery	Qual				
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-12 Batch: WG1966912-3 WG1966912-4								
Dichlorodifluoromethane	73		70		36-147	4		20
Chloromethane	73		71		64-130	3		20
Vinyl chloride	78		74		55-140	5		20
Bromomethane	36	Q	36	Q	39-139	0		20
Chloroethane	73		72		55-138	1		20
Trichlorofluoromethane	91		88		62-150	3		20
1,1-Dichloroethene	93		90		61-145	3		20
Carbon disulfide	92		89		51-130	3		20
1,1,2-Trichloro-1,2,2-Trifluoroethane	94		91		70-130	3		20
Methylene chloride	90		88		70-130	2		20
Acetone	84		83		58-148	1		20
trans-1,2-Dichloroethene	96		91		70-130	5		20
Methyl Acetate	84		82		70-130	2		20
Methyl tert butyl ether	97		95		63-130	2		20
1,1-Dichloroethane	94		92		70-130	2		20
cis-1,2-Dichloroethene	93		92		70-130	1		20
Cyclohexane	98		94		70-130	4		20
Chloroform	92		92		70-130	0		20
Carbon tetrachloride	100		99		63-132	1		20
1,1,1-Trichloroethane	98		97		67-130	1		20
2-Butanone	99		91		63-138	8		20
Benzene	93		92		70-130	1		20
1,2-Dichloroethane	97		96		70-130	1		20

Lab Control Sample Analysis

Batch Quality Control

Project Name: B14 GWS
Project Number: Not Specified

Lab Number: L2448938
Report Date: 09/09/24

Parameter	LCS		LCSD		%Recovery Limits	RPD	Qual	RPD Limits
	%Recovery	Qual	%Recovery	Qual				
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-12 Batch: WG1966912-3 WG1966912-4								
Trichloroethene	100		97		70-130	3		20
1,2-Dichloropropane	94		93		70-130	1		20
Bromodichloromethane	99		97		67-130	2		20
cis-1,3-Dichloropropene	96		96		70-130	0		20
Toluene	95		92		70-130	3		20
Tetrachloroethene	97		93		70-130	4		20
4-Methyl-2-pentanone	90		88		59-130	2		20
trans-1,3-Dichloropropene	88		87		70-130	1		20
1,1,2-Trichloroethane	97		94		70-130	3		20
Dibromochloromethane	97		94		63-130	3		20
1,2-Dibromoethane	94		94		70-130	0		20
2-Hexanone	100		97		57-130	3		20
Chlorobenzene	96		94		75-130	2		20
Ethylbenzene	97		93		70-130	4		20
p/m-Xylene	95		90		70-130	5		20
o-Xylene	95		90		70-130	5		20
Styrene	95		90		70-130	5		20
Bromoform	93		92		54-136	1		20
Isopropylbenzene	94		91		70-130	3		20
1,1,1,2-Tetrachloroethane	88		89		67-130	1		20
1,3-Dichlorobenzene	97		94		70-130	3		20
1,4-Dichlorobenzene	98		96		70-130	2		20
1,2-Dichlorobenzene	94		92		70-130	2		20

Lab Control Sample Analysis

Batch Quality Control

Project Name: B14 GWS
Project Number: Not Specified

Lab Number: L2448938
Report Date: 09/09/24

Parameter	LCS		LCSD		%Recovery Limits	RPD	RPD	
	%Recovery	Qual	%Recovery	Qual			Qual	Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-12 Batch: WG1966912-3 WG1966912-4								
1,2-Dibromo-3-chloropropane	93		90		41-144	3		20
1,2,4-Trichlorobenzene	100		98		70-130	2		20
1,2,3-Trichlorobenzene	98		97		70-130	1		20

Surrogate	LCS		LCSD		Acceptance Criteria
	%Recovery	Qual	%Recovery	Qual	
1,2-Dichloroethane-d4	106		99		70-130
Toluene-d8	98		100		70-130
4-Bromofluorobenzene	102		100		70-130
Dibromofluoromethane	96		96		70-130

Lab Control Sample Analysis

Batch Quality Control

Project Name: B14 GWS
Project Number: Not Specified

Lab Number: L2448938
Report Date: 09/09/24

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS-SIM - Westborough Lab Associated sample(s): 01-12 Batch: WG1966916-3 WG1966916-4								
1,1,1,2-Tetrachloroethane	82		80		70-130	2		25

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
1,2-Dichloroethane-d4	105		106		70-130
4-Bromofluorobenzene	100		99		70-130

SEMIVOLATILES

Project Name: B14 GWS
Project Number: Not Specified

Lab Number: L2448938
Report Date: 09/09/24

SAMPLE RESULTS

Lab ID: L2448938-01
 Client ID: HI15-MWS
 Sample Location: B14

Date Collected: 08/26/24 16:40
 Date Received: 08/27/24
 Field Prep: Not Specified

Sample Depth:

Matrix: Water
 Analytical Method: 1,8270E
 Analytical Date: 09/02/24 00:35
 Analyst: SMZ

Extraction Method: EPA 3510C
 Extraction Date: 08/31/24 11:05

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Benzaldehyde	ND		ug/l	5.0	1.1	1
Phenol	ND		ug/l	5.0	0.35	1
Bis(2-chloroethyl)ether	ND		ug/l	2.0	0.39	1
2-Chlorophenol	ND		ug/l	2.0	0.65	1
2-Methylphenol	ND		ug/l	5.0	2.3	1
Bis(2-chloroisopropyl)ether	ND		ug/l	2.0	0.40	1
Acetophenone	ND		ug/l	5.0	0.92	1
n-Nitrosodi-n-propylamine	ND		ug/l	5.0	0.91	1
3-Methylphenol/4-Methylphenol	ND		ug/l	5.0	1.4	1
Hexachloroethane	ND		ug/l	2.0	0.20	1
Nitrobenzene	ND		ug/l	1.4	0.20	1
Isophorone	ND		ug/l	5.0	0.86	1
2,4-Dimethylphenol	ND		ug/l	5.0	2.0	1
Bis(2-chloroethoxy)methane	ND		ug/l	5.0	0.84	1
2,4-Dichlorophenol	ND		ug/l	5.0	1.7	1
Naphthalene	ND		ug/l	2.0	0.54	1
4-Chloroaniline	ND		ug/l	3.7	0.47	1
Hexachlorobutadiene	ND		ug/l	2.0	0.36	1
Caprolactam	ND		ug/l	10	1.2	1
2-Methylnaphthalene	ND		ug/l	2.0	0.37	1
Hexachlorocyclopentadiene	ND		ug/l	20	1.2	1
1,2,4,5-Tetrachlorobenzene	ND		ug/l	1.7	0.24	1
2,4,6-Trichlorophenol	ND		ug/l	5.0	2.1	1
2,4,5-Trichlorophenol	ND		ug/l	5.0	2.1	1
Biphenyl	ND		ug/l	2.0	0.20	1
2-Chloronaphthalene	ND		ug/l	2.0	0.35	1
2-Nitroaniline	ND		ug/l	5.0	1.0	1
2,6-Dinitrotoluene	ND		ug/l	5.0	0.84	1

Project Name: B14 GWS
Project Number: Not Specified

Lab Number: L2448938
Report Date: 09/09/24

SAMPLE RESULTS

Lab ID: L2448938-01
 Client ID: HI15-MWS
 Sample Location: B14

Date Collected: 08/26/24 16:40
 Date Received: 08/27/24
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Acenaphthylene	ND		ug/l	2.0	0.32	1
Acenaphthene	ND		ug/l	2.0	0.40	1
2,4-Dinitrophenol	ND		ug/l	20	5.4	1
2,4-Dinitrotoluene	ND		ug/l	5.0	0.54	1
2,3,4,6-Tetrachlorophenol	ND		ug/l	5.0	2.2	1
Diethyl phthalate	ND		ug/l	5.0	0.76	1
Fluorene	ND		ug/l	2.0	0.44	1
4-Nitroaniline	ND		ug/l	5.0	1.4	1
NDPA/DPA	ND		ug/l	2.0	0.92	1
Hexachlorobenzene	ND		ug/l	2.0	0.45	1
Pentachlorophenol	ND		ug/l	10	2.5	1
Phenanthrene	ND		ug/l	2.0	0.42	1
Anthracene	ND		ug/l	2.0	0.47	1
Carbazole	ND		ug/l	2.0	0.31	1
Di-n-butylphthalate	ND		ug/l	5.0	0.96	1
Fluoranthene	ND		ug/l	2.0	0.41	1
Pyrene	ND		ug/l	2.0	0.41	1
3,3'-Dichlorobenzidine	ND		ug/l	5.0	1.8	1
Benzo(a)anthracene	ND		ug/l	2.0	0.32	1
Chrysene	ND		ug/l	1.5	0.22	1
Bis(2-ethylhexyl)phthalate	ND		ug/l	3.0	1.4	1
Di-n-octylphthalate	ND		ug/l	5.0	2.3	1
Benzo(b)fluoranthene	ND		ug/l	2.0	0.53	1
Benzo(k)fluoranthene	ND		ug/l	2.0	0.62	1
Benzo(a)pyrene	ND		ug/l	2.0	0.37	1
Indeno(1,2,3-cd)pyrene	ND		ug/l	2.0	0.48	1
Dibenzo(a,h)anthracene	ND		ug/l	2.0	0.29	1
Benzo(ghi)perylene	ND		ug/l	2.0	0.37	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	29		21-120
Phenol-d6	28		10-120
Nitrobenzene-d5	84		23-120
2-Fluorobiphenyl	79		15-120
2,4,6-Tribromophenol	41		10-120
4-Terphenyl-d14	94		41-149

Project Name: B14 GWS
Project Number: Not Specified

Lab Number: L2448938
Report Date: 09/09/24

SAMPLE RESULTS

Lab ID: L2448938-01
 Client ID: HI15-MWS
 Sample Location: B14

Date Collected: 08/26/24 16:40
 Date Received: 08/27/24
 Field Prep: Not Specified

Sample Depth:

Matrix: Water
 Analytical Method: 1,8270E-SIM
 Analytical Date: 09/03/24 18:13
 Analyst: DV

Extraction Method: EPA 3510C
 Extraction Date: 08/31/24 11:05

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS-SIM - Westborough Lab						
Naphthalene	0.08	J	ug/l	0.10	0.02	1
2-Methylnaphthalene	ND		ug/l	0.10	0.03	1
Acenaphthylene	ND		ug/l	0.10	0.02	1
Acenaphthene	0.03	J	ug/l	0.10	0.02	1
Fluorene	ND		ug/l	0.10	0.03	1
Phenanthrene	ND		ug/l	0.05	0.04	1
Anthracene	0.04	J	ug/l	0.10	0.02	1
Fluoranthene	ND		ug/l	0.10	0.03	1
Pyrene	ND		ug/l	0.10	0.04	1
Benzo(a)anthracene	ND		ug/l	0.05	0.03	1
Chrysene	ND		ug/l	0.10	0.03	1
Benzo(b)fluoranthene	ND		ug/l	0.05	0.03	1
Benzo(k)fluoranthene	ND		ug/l	0.10	0.03	1
Benzo(a)pyrene	ND		ug/l	0.10	0.02	1
Indeno(1,2,3-cd)pyrene	ND		ug/l	0.10	0.02	1
Dibenzo(a,h)anthracene	ND		ug/l	0.05	0.02	1
Benzo(ghi)perylene	ND		ug/l	0.10	0.02	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	27		21-120
Phenol-d6	29		10-120
Nitrobenzene-d5	84		23-120
2-Fluorobiphenyl	82		15-120
2,4,6-Tribromophenol	43		10-120
4-Terphenyl-d14	71		41-149

Project Name: B14 GWS
Project Number: Not Specified

Lab Number: L2448938
Report Date: 09/09/24

SAMPLE RESULTS

Lab ID: L2448938-02
 Client ID: HI14-MWS
 Sample Location: B14

Date Collected: 08/27/24 07:05
 Date Received: 08/27/24
 Field Prep: Not Specified

Sample Depth:

Matrix: Water
 Analytical Method: 1,8270E
 Analytical Date: 09/03/24 23:58
 Analyst: RMP

Extraction Method: EPA 3510C
 Extraction Date: 09/01/24 19:30

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Benzaldehyde	ND		ug/l	5.0	1.1	1
Phenol	ND		ug/l	5.0	0.35	1
Bis(2-chloroethyl)ether	ND		ug/l	2.0	0.39	1
2-Chlorophenol	ND		ug/l	2.0	0.65	1
2-Methylphenol	ND		ug/l	5.0	2.3	1
Bis(2-chloroisopropyl)ether	ND		ug/l	2.0	0.40	1
Acetophenone	ND		ug/l	5.0	0.92	1
n-Nitrosodi-n-propylamine	ND		ug/l	5.0	0.91	1
3-Methylphenol/4-Methylphenol	ND		ug/l	5.0	1.4	1
Hexachloroethane	ND		ug/l	2.0	0.20	1
Nitrobenzene	ND		ug/l	1.4	0.20	1
Isophorone	ND		ug/l	5.0	0.86	1
2,4-Dimethylphenol	ND		ug/l	5.0	2.0	1
Bis(2-chloroethoxy)methane	ND		ug/l	5.0	0.84	1
2,4-Dichlorophenol	ND		ug/l	5.0	1.7	1
Naphthalene	ND		ug/l	2.0	0.54	1
4-Chloroaniline	ND		ug/l	3.7	0.47	1
Hexachlorobutadiene	ND		ug/l	2.0	0.36	1
Caprolactam	ND		ug/l	10	1.2	1
2-Methylnaphthalene	ND		ug/l	2.0	0.37	1
Hexachlorocyclopentadiene	ND		ug/l	20	1.2	1
1,2,4,5-Tetrachlorobenzene	ND		ug/l	1.7	0.24	1
2,4,6-Trichlorophenol	ND		ug/l	5.0	2.1	1
2,4,5-Trichlorophenol	ND		ug/l	5.0	2.1	1
Biphenyl	ND		ug/l	2.0	0.20	1
2-Chloronaphthalene	ND		ug/l	2.0	0.35	1
2-Nitroaniline	ND		ug/l	5.0	1.0	1
2,6-Dinitrotoluene	ND		ug/l	5.0	0.84	1

Project Name: B14 GWS
Project Number: Not Specified

Lab Number: L2448938
Report Date: 09/09/24

SAMPLE RESULTS

Lab ID: L2448938-02
 Client ID: HI14-MWS
 Sample Location: B14

Date Collected: 08/27/24 07:05
 Date Received: 08/27/24
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Acenaphthylene	ND		ug/l	2.0	0.32	1
Acenaphthene	1.5	J	ug/l	2.0	0.40	1
2,4-Dinitrophenol	ND		ug/l	20	5.4	1
2,4-Dinitrotoluene	ND		ug/l	5.0	0.54	1
2,3,4,6-Tetrachlorophenol	ND		ug/l	5.0	2.2	1
Diethyl phthalate	ND		ug/l	5.0	0.76	1
Fluorene	0.74	J	ug/l	2.0	0.44	1
4-Nitroaniline	ND		ug/l	5.0	1.4	1
NDPA/DPA	ND		ug/l	2.0	0.92	1
Hexachlorobenzene	ND		ug/l	2.0	0.45	1
Pentachlorophenol	ND		ug/l	10	2.5	1
Phenanthrene	0.72	J	ug/l	2.0	0.42	1
Anthracene	ND		ug/l	2.0	0.47	1
Carbazole	ND		ug/l	2.0	0.31	1
Di-n-butylphthalate	ND		ug/l	5.0	0.96	1
Fluoranthene	ND		ug/l	2.0	0.41	1
Pyrene	ND		ug/l	2.0	0.41	1
3,3'-Dichlorobenzidine	ND		ug/l	5.0	1.8	1
Benzo(a)anthracene	ND		ug/l	2.0	0.32	1
Chrysene	ND		ug/l	1.5	0.22	1
Bis(2-ethylhexyl)phthalate	ND		ug/l	3.0	1.4	1
Di-n-octylphthalate	ND		ug/l	5.0	2.3	1
Benzo(b)fluoranthene	ND		ug/l	2.0	0.53	1
Benzo(k)fluoranthene	ND		ug/l	2.0	0.62	1
Benzo(a)pyrene	ND		ug/l	2.0	0.37	1
Indeno(1,2,3-cd)pyrene	ND		ug/l	2.0	0.48	1
Dibenzo(a,h)anthracene	ND		ug/l	2.0	0.29	1
Benzo(ghi)perylene	ND		ug/l	2.0	0.37	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	7	Q	21-120
Phenol-d6	9	Q	10-120
Nitrobenzene-d5	49		23-120
2-Fluorobiphenyl	54		15-120
2,4,6-Tribromophenol	13		10-120
4-Terphenyl-d14	57		41-149

Project Name: B14 GWS
Project Number: Not Specified

Lab Number: L2448938
Report Date: 09/09/24

SAMPLE RESULTS

Lab ID: L2448938-02
 Client ID: HI14-MWS
 Sample Location: B14

Date Collected: 08/27/24 07:05
 Date Received: 08/27/24
 Field Prep: Not Specified

Sample Depth:

Matrix: Water
 Analytical Method: 1,8270E-SIM
 Analytical Date: 09/05/24 17:27
 Analyst: RP

Extraction Method: EPA 3510C
 Extraction Date: 09/01/24 19:30

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS-SIM - Westborough Lab						
Naphthalene	0.60		ug/l	0.10	0.02	1
2-Methylnaphthalene	0.07	J	ug/l	0.10	0.03	1
Acenaphthylene	ND		ug/l	0.10	0.02	1
Acenaphthene	1.9		ug/l	0.10	0.02	1
Fluorene	0.95		ug/l	0.10	0.03	1
Phenanthrene	0.98		ug/l	0.05	0.04	1
Anthracene	0.21		ug/l	0.10	0.02	1
Fluoranthene	0.28		ug/l	0.10	0.03	1
Pyrene	0.17		ug/l	0.10	0.04	1
Benzo(a)anthracene	ND		ug/l	0.05	0.03	1
Chrysene	ND		ug/l	0.10	0.03	1
Benzo(b)fluoranthene	ND		ug/l	0.05	0.03	1
Benzo(k)fluoranthene	ND		ug/l	0.10	0.03	1
Benzo(a)pyrene	ND		ug/l	0.10	0.02	1
Indeno(1,2,3-cd)pyrene	ND		ug/l	0.10	0.02	1
Dibenzo(a,h)anthracene	ND		ug/l	0.05	0.02	1
Benzo(ghi)perylene	ND		ug/l	0.10	0.02	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
Nitrobenzene-d5	59		23-120
2-Fluorobiphenyl	65		15-120
4-Terphenyl-d14	52		41-149

Project Name: B14 GWS
Project Number: Not Specified

Lab Number: L2448938
Report Date: 09/09/24

SAMPLE RESULTS

Lab ID: L2448938-02 RE
 Client ID: HI14-MWS
 Sample Location: B14

Date Collected: 08/27/24 07:05
 Date Received: 08/27/24
 Field Prep: Not Specified

Sample Depth:

Matrix: Water
 Analytical Method: 1,8270E
 Analytical Date: 09/05/24 09:24
 Analyst: LJJ

Extraction Method: EPA 3510C
 Extraction Date: 09/04/24 18:33

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Benzaldehyde	ND		ug/l	5.0	1.1	1
Phenol	0.41	J	ug/l	5.0	0.35	1
Bis(2-chloroethyl)ether	ND		ug/l	2.0	0.39	1
2-Chlorophenol	ND		ug/l	2.0	0.65	1
2-Methylphenol	ND		ug/l	5.0	2.3	1
Bis(2-chloroisopropyl)ether	ND		ug/l	2.0	0.40	1
Acetophenone	ND		ug/l	5.0	0.92	1
n-Nitrosodi-n-propylamine	ND		ug/l	5.0	0.91	1
3-Methylphenol/4-Methylphenol	ND		ug/l	5.0	1.4	1
Hexachloroethane	ND		ug/l	2.0	0.20	1
Nitrobenzene	ND		ug/l	1.4	0.20	1
Isophorone	ND		ug/l	5.0	0.86	1
2,4-Dimethylphenol	ND		ug/l	5.0	2.0	1
Bis(2-chloroethoxy)methane	ND		ug/l	5.0	0.84	1
2,4-Dichlorophenol	ND		ug/l	5.0	1.7	1
Naphthalene	ND		ug/l	2.0	0.54	1
4-Chloroaniline	ND		ug/l	3.7	0.47	1
Hexachlorobutadiene	ND		ug/l	2.0	0.36	1
Caprolactam	ND		ug/l	10	1.2	1
2-Methylnaphthalene	ND		ug/l	2.0	0.37	1
Hexachlorocyclopentadiene	ND		ug/l	20	1.2	1
1,2,4,5-Tetrachlorobenzene	ND		ug/l	1.7	0.24	1
2,4,6-Trichlorophenol	ND		ug/l	5.0	2.1	1
2,4,5-Trichlorophenol	ND		ug/l	5.0	2.1	1
Biphenyl	ND		ug/l	2.0	0.20	1
2-Chloronaphthalene	ND		ug/l	2.0	0.35	1
2-Nitroaniline	ND		ug/l	5.0	1.0	1
2,6-Dinitrotoluene	ND		ug/l	5.0	0.84	1

Project Name: B14 GWS
Project Number: Not Specified

Lab Number: L2448938
Report Date: 09/09/24

SAMPLE RESULTS

Lab ID: L2448938-02 RE
 Client ID: HI14-MWS
 Sample Location: B14

Date Collected: 08/27/24 07:05
 Date Received: 08/27/24
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Acenaphthylene	ND		ug/l	2.0	0.32	1
Acenaphthene	1.8	J	ug/l	2.0	0.40	1
2,4-Dinitrophenol	ND		ug/l	20	5.4	1
2,4-Dinitrotoluene	ND		ug/l	5.0	0.54	1
2,3,4,6-Tetrachlorophenol	ND		ug/l	5.0	2.2	1
Diethyl phthalate	ND		ug/l	5.0	0.76	1
Fluorene	0.78	J	ug/l	2.0	0.44	1
4-Nitroaniline	ND		ug/l	5.0	1.4	1
NDPA/DPA	ND		ug/l	2.0	0.92	1
Hexachlorobenzene	ND		ug/l	2.0	0.45	1
Pentachlorophenol	ND		ug/l	10	2.5	1
Phenanthrene	0.91	J	ug/l	2.0	0.42	1
Anthracene	ND		ug/l	2.0	0.47	1
Carbazole	ND		ug/l	2.0	0.31	1
Di-n-butylphthalate	ND		ug/l	5.0	0.96	1
Fluoranthene	ND		ug/l	2.0	0.41	1
Pyrene	ND		ug/l	2.0	0.41	1
3,3'-Dichlorobenzidine	ND		ug/l	5.0	1.8	1
Benzo(a)anthracene	ND		ug/l	2.0	0.32	1
Chrysene	ND		ug/l	1.5	0.22	1
Bis(2-ethylhexyl)phthalate	ND		ug/l	3.0	1.4	1
Di-n-octylphthalate	ND		ug/l	5.0	2.3	1
Benzo(b)fluoranthene	ND		ug/l	2.0	0.53	1
Benzo(k)fluoranthene	ND		ug/l	2.0	0.62	1
Benzo(a)pyrene	ND		ug/l	2.0	0.37	1
Indeno(1,2,3-cd)pyrene	ND		ug/l	2.0	0.48	1
Dibenzo(a,h)anthracene	ND		ug/l	2.0	0.29	1
Benzo(ghi)perylene	ND		ug/l	2.0	0.37	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	27		21-120
Phenol-d6	21		10-120
Nitrobenzene-d5	56		23-120
2-Fluorobiphenyl	52		15-120
2,4,6-Tribromophenol	48		10-120
4-Terphenyl-d14	64		41-149

Project Name: B14 GWS
Project Number: Not Specified

Lab Number: L2448938
Report Date: 09/09/24

SAMPLE RESULTS

Lab ID: L2448938-03
 Client ID: HI13-MWS
 Sample Location: B14

Date Collected: 08/27/24 07:50
 Date Received: 08/27/24
 Field Prep: Not Specified

Sample Depth:

Matrix: Water
 Analytical Method: 1,8270E
 Analytical Date: 09/04/24 00:23
 Analyst: RMP

Extraction Method: EPA 3510C
 Extraction Date: 09/01/24 19:30

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Benzaldehyde	ND		ug/l	5.0	1.1	1
Phenol	0.64	J	ug/l	5.0	0.35	1
Bis(2-chloroethyl)ether	ND		ug/l	2.0	0.39	1
2-Chlorophenol	ND		ug/l	2.0	0.65	1
2-Methylphenol	ND		ug/l	5.0	2.3	1
Bis(2-chloroisopropyl)ether	ND		ug/l	2.0	0.40	1
Acetophenone	ND		ug/l	5.0	0.92	1
n-Nitrosodi-n-propylamine	ND		ug/l	5.0	0.91	1
3-Methylphenol/4-Methylphenol	ND		ug/l	5.0	1.4	1
Hexachloroethane	ND		ug/l	2.0	0.20	1
Nitrobenzene	ND		ug/l	1.4	0.20	1
Isophorone	ND		ug/l	5.0	0.86	1
2,4-Dimethylphenol	ND		ug/l	5.0	2.0	1
Bis(2-chloroethoxy)methane	ND		ug/l	5.0	0.84	1
2,4-Dichlorophenol	ND		ug/l	5.0	1.7	1
Naphthalene	ND		ug/l	2.0	0.54	1
4-Chloroaniline	ND		ug/l	3.7	0.47	1
Hexachlorobutadiene	ND		ug/l	2.0	0.36	1
Caprolactam	ND		ug/l	10	1.2	1
2-Methylnaphthalene	ND		ug/l	2.0	0.37	1
Hexachlorocyclopentadiene	ND		ug/l	20	1.2	1
1,2,4,5-Tetrachlorobenzene	ND		ug/l	1.7	0.24	1
2,4,6-Trichlorophenol	ND		ug/l	5.0	2.1	1
2,4,5-Trichlorophenol	ND		ug/l	5.0	2.1	1
Biphenyl	ND		ug/l	2.0	0.20	1
2-Chloronaphthalene	ND		ug/l	2.0	0.35	1
2-Nitroaniline	ND		ug/l	5.0	1.0	1
2,6-Dinitrotoluene	ND		ug/l	5.0	0.84	1

Project Name: B14 GWS
Project Number: Not Specified

Lab Number: L2448938
Report Date: 09/09/24

SAMPLE RESULTS

Lab ID: L2448938-03
 Client ID: HI13-MWS
 Sample Location: B14

Date Collected: 08/27/24 07:50
 Date Received: 08/27/24
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Acenaphthylene	ND		ug/l	2.0	0.32	1
Acenaphthene	ND		ug/l	2.0	0.40	1
2,4-Dinitrophenol	ND		ug/l	20	5.4	1
2,4-Dinitrotoluene	ND		ug/l	5.0	0.54	1
2,3,4,6-Tetrachlorophenol	ND		ug/l	5.0	2.2	1
Diethyl phthalate	ND		ug/l	5.0	0.76	1
Fluorene	ND		ug/l	2.0	0.44	1
4-Nitroaniline	ND		ug/l	5.0	1.4	1
NDPA/DPA	ND		ug/l	2.0	0.92	1
Hexachlorobenzene	ND		ug/l	2.0	0.45	1
Pentachlorophenol	ND		ug/l	10	2.5	1
Phenanthrene	ND		ug/l	2.0	0.42	1
Anthracene	ND		ug/l	2.0	0.47	1
Carbazole	ND		ug/l	2.0	0.31	1
Di-n-butylphthalate	ND		ug/l	5.0	0.96	1
Fluoranthene	ND		ug/l	2.0	0.41	1
Pyrene	ND		ug/l	2.0	0.41	1
3,3'-Dichlorobenzidine	ND		ug/l	5.0	1.8	1
Benzo(a)anthracene	ND		ug/l	2.0	0.32	1
Chrysene	ND		ug/l	1.5	0.22	1
Bis(2-ethylhexyl)phthalate	2.1	J	ug/l	3.0	1.4	1
Di-n-octylphthalate	ND		ug/l	5.0	2.3	1
Benzo(b)fluoranthene	ND		ug/l	2.0	0.53	1
Benzo(k)fluoranthene	ND		ug/l	2.0	0.62	1
Benzo(a)pyrene	ND		ug/l	2.0	0.37	1
Indeno(1,2,3-cd)pyrene	ND		ug/l	2.0	0.48	1
Dibenzo(a,h)anthracene	ND		ug/l	2.0	0.29	1
Benzo(ghi)perylene	ND		ug/l	2.0	0.37	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	14	Q	21-120
Phenol-d6	16		10-120
Nitrobenzene-d5	51		23-120
2-Fluorobiphenyl	54		15-120
2,4,6-Tribromophenol	26		10-120
4-Terphenyl-d14	57		41-149

Project Name: B14 GWS
Project Number: Not Specified

Lab Number: L2448938
Report Date: 09/09/24

SAMPLE RESULTS

Lab ID: L2448938-03
 Client ID: HI13-MWS
 Sample Location: B14

Date Collected: 08/27/24 07:50
 Date Received: 08/27/24
 Field Prep: Not Specified

Sample Depth:
 Matrix: Water
 Analytical Method: 1,8270E-SIM
 Analytical Date: 09/05/24 17:43
 Analyst: RP

Extraction Method: EPA 3510C
 Extraction Date: 09/01/24 19:30

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS-SIM - Westborough Lab						
Naphthalene	0.28		ug/l	0.10	0.02	1
2-Methylnaphthalene	0.11		ug/l	0.10	0.03	1
Acenaphthylene	ND		ug/l	0.10	0.02	1
Acenaphthene	0.06	J	ug/l	0.10	0.02	1
Fluorene	0.04	J	ug/l	0.10	0.03	1
Phenanthrene	0.18		ug/l	0.05	0.04	1
Anthracene	0.06	J	ug/l	0.10	0.02	1
Fluoranthene	0.22		ug/l	0.10	0.03	1
Pyrene	0.21		ug/l	0.10	0.04	1
Benzo(a)anthracene	0.13		ug/l	0.05	0.03	1
Chrysene	0.10	J	ug/l	0.10	0.03	1
Benzo(b)fluoranthene	0.18		ug/l	0.05	0.03	1
Benzo(k)fluoranthene	0.07	J	ug/l	0.10	0.03	1
Benzo(a)pyrene	0.14		ug/l	0.10	0.02	1
Indeno(1,2,3-cd)pyrene	0.09	J	ug/l	0.10	0.02	1
Dibenzo(a,h)anthracene	ND		ug/l	0.05	0.02	1
Benzo(ghi)perylene	0.10	J	ug/l	0.10	0.02	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
Nitrobenzene-d5	60		23-120
2-Fluorobiphenyl	67		15-120
4-Terphenyl-d14	55		41-149

Project Name: B14 GWS
Project Number: Not Specified

Lab Number: L2448938
Report Date: 09/09/24

SAMPLE RESULTS

Lab ID: L2448938-04
 Client ID: HI11-MWS
 Sample Location: B14

Date Collected: 08/27/24 10:00
 Date Received: 08/27/24
 Field Prep: Not Specified

Sample Depth:

Matrix: Water
 Analytical Method: 1,8270E
 Analytical Date: 09/04/24 00:48
 Analyst: RMP

Extraction Method: EPA 3510C
 Extraction Date: 09/01/24 19:30

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Benzaldehyde	ND		ug/l	5.0	1.1	1
Phenol	0.72	J	ug/l	5.0	0.35	1
Bis(2-chloroethyl)ether	ND		ug/l	2.0	0.39	1
2-Chlorophenol	ND		ug/l	2.0	0.65	1
2-Methylphenol	ND		ug/l	5.0	2.3	1
Bis(2-chloroisopropyl)ether	ND		ug/l	2.0	0.40	1
Acetophenone	ND		ug/l	5.0	0.92	1
n-Nitrosodi-n-propylamine	ND		ug/l	5.0	0.91	1
3-Methylphenol/4-Methylphenol	ND		ug/l	5.0	1.4	1
Hexachloroethane	ND		ug/l	2.0	0.20	1
Nitrobenzene	ND		ug/l	1.4	0.20	1
Isophorone	ND		ug/l	5.0	0.86	1
2,4-Dimethylphenol	ND		ug/l	5.0	2.0	1
Bis(2-chloroethoxy)methane	ND		ug/l	5.0	0.84	1
2,4-Dichlorophenol	ND		ug/l	5.0	1.7	1
Naphthalene	0.88	J	ug/l	2.0	0.54	1
4-Chloroaniline	ND		ug/l	3.7	0.47	1
Hexachlorobutadiene	ND		ug/l	2.0	0.36	1
Caprolactam	ND		ug/l	10	1.2	1
2-Methylnaphthalene	ND		ug/l	2.0	0.37	1
Hexachlorocyclopentadiene	ND		ug/l	20	1.2	1
1,2,4,5-Tetrachlorobenzene	ND		ug/l	1.7	0.24	1
2,4,6-Trichlorophenol	ND		ug/l	5.0	2.1	1
2,4,5-Trichlorophenol	ND		ug/l	5.0	2.1	1
Biphenyl	ND		ug/l	2.0	0.20	1
2-Chloronaphthalene	ND		ug/l	2.0	0.35	1
2-Nitroaniline	ND		ug/l	5.0	1.0	1
2,6-Dinitrotoluene	ND		ug/l	5.0	0.84	1

Project Name: B14 GWS
Project Number: Not Specified

Lab Number: L2448938
Report Date: 09/09/24

SAMPLE RESULTS

Lab ID: L2448938-04
 Client ID: HI11-MWS
 Sample Location: B14

Date Collected: 08/27/24 10:00
 Date Received: 08/27/24
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Acenaphthylene	ND		ug/l	2.0	0.32	1
Acenaphthene	ND		ug/l	2.0	0.40	1
2,4-Dinitrophenol	ND		ug/l	20	5.4	1
2,4-Dinitrotoluene	ND		ug/l	5.0	0.54	1
2,3,4,6-Tetrachlorophenol	ND		ug/l	5.0	2.2	1
Diethyl phthalate	ND		ug/l	5.0	0.76	1
Fluorene	ND		ug/l	2.0	0.44	1
4-Nitroaniline	ND		ug/l	5.0	1.4	1
NDPA/DPA	ND		ug/l	2.0	0.92	1
Hexachlorobenzene	ND		ug/l	2.0	0.45	1
Pentachlorophenol	ND		ug/l	10	2.5	1
Phenanthrene	ND		ug/l	2.0	0.42	1
Anthracene	ND		ug/l	2.0	0.47	1
Carbazole	ND		ug/l	2.0	0.31	1
Di-n-butylphthalate	ND		ug/l	5.0	0.96	1
Fluoranthene	ND		ug/l	2.0	0.41	1
Pyrene	ND		ug/l	2.0	0.41	1
3,3'-Dichlorobenzidine	ND		ug/l	5.0	1.8	1
Benzo(a)anthracene	ND		ug/l	2.0	0.32	1
Chrysene	ND		ug/l	1.5	0.22	1
Bis(2-ethylhexyl)phthalate	ND		ug/l	3.0	1.4	1
Di-n-octylphthalate	ND		ug/l	5.0	2.3	1
Benzo(b)fluoranthene	ND		ug/l	2.0	0.53	1
Benzo(k)fluoranthene	ND		ug/l	2.0	0.62	1
Benzo(a)pyrene	ND		ug/l	2.0	0.37	1
Indeno(1,2,3-cd)pyrene	ND		ug/l	2.0	0.48	1
Dibenzo(a,h)anthracene	ND		ug/l	2.0	0.29	1
Benzo(ghi)perylene	ND		ug/l	2.0	0.37	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	5	Q	21-120
Phenol-d6	11		10-120
Nitrobenzene-d5	62		23-120
2-Fluorobiphenyl	64		15-120
2,4,6-Tribromophenol	11		10-120
4-Terphenyl-d14	72		41-149

Project Name: B14 GWS
Project Number: Not Specified

Lab Number: L2448938
Report Date: 09/09/24

SAMPLE RESULTS

Lab ID: L2448938-04
 Client ID: HI11-MWS
 Sample Location: B14

Date Collected: 08/27/24 10:00
 Date Received: 08/27/24
 Field Prep: Not Specified

Sample Depth:
 Matrix: Water
 Analytical Method: 1,8270E-SIM
 Analytical Date: 09/05/24 17:59
 Analyst: RP

Extraction Method: EPA 3510C
 Extraction Date: 09/01/24 19:30

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS-SIM - Westborough Lab						
Naphthalene	0.91		ug/l	0.10	0.02	1
2-Methylnaphthalene	0.06	J	ug/l	0.10	0.03	1
Acenaphthylene	ND		ug/l	0.10	0.02	1
Acenaphthene	0.04	J	ug/l	0.10	0.02	1
Fluorene	ND		ug/l	0.10	0.03	1
Phenanthrene	0.07		ug/l	0.05	0.04	1
Anthracene	0.03	J	ug/l	0.10	0.02	1
Fluoranthene	0.06	J	ug/l	0.10	0.03	1
Pyrene	0.07	J	ug/l	0.10	0.04	1
Benzo(a)anthracene	ND		ug/l	0.05	0.03	1
Chrysene	ND		ug/l	0.10	0.03	1
Benzo(b)fluoranthene	ND		ug/l	0.05	0.03	1
Benzo(k)fluoranthene	ND		ug/l	0.10	0.03	1
Benzo(a)pyrene	ND		ug/l	0.10	0.02	1
Indeno(1,2,3-cd)pyrene	ND		ug/l	0.10	0.02	1
Dibenzo(a,h)anthracene	ND		ug/l	0.05	0.02	1
Benzo(ghi)perylene	ND		ug/l	0.10	0.02	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
Nitrobenzene-d5	55		23-120
2-Fluorobiphenyl	59		15-120
4-Terphenyl-d14	49		41-149

Project Name: B14 GWS
Project Number: Not Specified

Lab Number: L2448938
Report Date: 09/09/24

SAMPLE RESULTS

Lab ID: L2448938-04 RE
 Client ID: HI11-MWS
 Sample Location: B14

Date Collected: 08/27/24 10:00
 Date Received: 08/27/24
 Field Prep: Not Specified

Sample Depth:

Matrix: Water
 Analytical Method: 1,8270E
 Analytical Date: 09/05/24 09:46
 Analyst: LJJ

Extraction Method: EPA 3510C
 Extraction Date: 09/04/24 18:33

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Benzaldehyde	ND		ug/l	5.0	1.1	1
Phenol	4.1	J	ug/l	5.0	0.35	1
Bis(2-chloroethyl)ether	ND		ug/l	2.0	0.39	1
2-Chlorophenol	ND		ug/l	2.0	0.65	1
2-Methylphenol	ND		ug/l	5.0	2.3	1
Bis(2-chloroisopropyl)ether	ND		ug/l	2.0	0.40	1
Acetophenone	ND		ug/l	5.0	0.92	1
n-Nitrosodi-n-propylamine	ND		ug/l	5.0	0.91	1
3-Methylphenol/4-Methylphenol	ND		ug/l	5.0	1.4	1
Hexachloroethane	ND		ug/l	2.0	0.20	1
Nitrobenzene	ND		ug/l	1.4	0.20	1
Isophorone	ND		ug/l	5.0	0.86	1
2,4-Dimethylphenol	ND		ug/l	5.0	2.0	1
Bis(2-chloroethoxy)methane	ND		ug/l	5.0	0.84	1
2,4-Dichlorophenol	ND		ug/l	5.0	1.7	1
Naphthalene	0.87	J	ug/l	2.0	0.54	1
4-Chloroaniline	ND		ug/l	3.7	0.47	1
Hexachlorobutadiene	ND		ug/l	2.0	0.36	1
Caprolactam	ND		ug/l	10	1.2	1
2-Methylnaphthalene	ND		ug/l	2.0	0.37	1
Hexachlorocyclopentadiene	ND		ug/l	20	1.2	1
1,2,4,5-Tetrachlorobenzene	ND		ug/l	1.7	0.24	1
2,4,6-Trichlorophenol	ND		ug/l	5.0	2.1	1
2,4,5-Trichlorophenol	ND		ug/l	5.0	2.1	1
Biphenyl	ND		ug/l	2.0	0.20	1
2-Chloronaphthalene	ND		ug/l	2.0	0.35	1
2-Nitroaniline	ND		ug/l	5.0	1.0	1
2,6-Dinitrotoluene	ND		ug/l	5.0	0.84	1

Project Name: B14 GWS
Project Number: Not Specified

Lab Number: L2448938
Report Date: 09/09/24

SAMPLE RESULTS

Lab ID: L2448938-04 RE
 Client ID: HI11-MWS
 Sample Location: B14

Date Collected: 08/27/24 10:00
 Date Received: 08/27/24
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Acenaphthylene	ND		ug/l	2.0	0.32	1
Acenaphthene	ND		ug/l	2.0	0.40	1
2,4-Dinitrophenol	ND		ug/l	20	5.4	1
2,4-Dinitrotoluene	ND		ug/l	5.0	0.54	1
2,3,4,6-Tetrachlorophenol	ND		ug/l	5.0	2.2	1
Diethyl phthalate	ND		ug/l	5.0	0.76	1
Fluorene	ND		ug/l	2.0	0.44	1
4-Nitroaniline	ND		ug/l	5.0	1.4	1
NDPA/DPA	ND		ug/l	2.0	0.92	1
Hexachlorobenzene	ND		ug/l	2.0	0.45	1
Pentachlorophenol	ND		ug/l	10	2.5	1
Phenanthrene	ND		ug/l	2.0	0.42	1
Anthracene	ND		ug/l	2.0	0.47	1
Carbazole	ND		ug/l	2.0	0.31	1
Di-n-butylphthalate	ND		ug/l	5.0	0.96	1
Fluoranthene	ND		ug/l	2.0	0.41	1
Pyrene	ND		ug/l	2.0	0.41	1
3,3'-Dichlorobenzidine	ND		ug/l	5.0	1.8	1
Benzo(a)anthracene	ND		ug/l	2.0	0.32	1
Chrysene	ND		ug/l	1.5	0.22	1
Bis(2-ethylhexyl)phthalate	ND		ug/l	3.0	1.4	1
Di-n-octylphthalate	ND		ug/l	5.0	2.3	1
Benzo(b)fluoranthene	ND		ug/l	2.0	0.53	1
Benzo(k)fluoranthene	ND		ug/l	2.0	0.62	1
Benzo(a)pyrene	ND		ug/l	2.0	0.37	1
Indeno(1,2,3-cd)pyrene	ND		ug/l	2.0	0.48	1
Dibenzo(a,h)anthracene	ND		ug/l	2.0	0.29	1
Benzo(ghi)perylene	ND		ug/l	2.0	0.37	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	42		21-120
Phenol-d6	31		10-120
Nitrobenzene-d5	65		23-120
2-Fluorobiphenyl	56		15-120
2,4,6-Tribromophenol	73		10-120
4-Terphenyl-d14	64		41-149

Project Name: B14 GWS
Project Number: Not Specified

Lab Number: L2448938
Report Date: 09/09/24

SAMPLE RESULTS

Lab ID: L2448938-05
 Client ID: TM04-PZM006
 Sample Location: B14

Date Collected: 08/27/24 09:20
 Date Received: 08/27/24
 Field Prep: Not Specified

Sample Depth:

Matrix: Water
 Analytical Method: 1,8270E
 Analytical Date: 09/05/24 11:54
 Analyst: IM

Extraction Method: EPA 3510C
 Extraction Date: 09/01/24 19:30

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Benzaldehyde	ND		ug/l	5.0	1.1	1
Phenol	ND		ug/l	5.0	0.35	1
Bis(2-chloroethyl)ether	ND		ug/l	2.0	0.39	1
2-Chlorophenol	ND		ug/l	2.0	0.65	1
2-Methylphenol	ND		ug/l	5.0	2.3	1
Bis(2-chloroisopropyl)ether	ND		ug/l	2.0	0.40	1
Acetophenone	ND		ug/l	5.0	0.92	1
n-Nitrosodi-n-propylamine	ND		ug/l	5.0	0.91	1
3-Methylphenol/4-Methylphenol	ND		ug/l	5.0	1.4	1
Hexachloroethane	ND		ug/l	2.0	0.20	1
Nitrobenzene	ND		ug/l	1.4	0.20	1
Isophorone	ND		ug/l	5.0	0.86	1
2,4-Dimethylphenol	9.7		ug/l	5.0	2.0	1
Bis(2-chloroethoxy)methane	ND		ug/l	5.0	0.84	1
2,4-Dichlorophenol	ND		ug/l	5.0	1.7	1
Naphthalene	140		ug/l	2.0	0.54	1
4-Chloroaniline	ND		ug/l	3.7	0.47	1
Hexachlorobutadiene	ND		ug/l	2.0	0.36	1
Caprolactam	ND		ug/l	10	1.2	1
2-Methylnaphthalene	1.4	J	ug/l	2.0	0.37	1
Hexachlorocyclopentadiene	ND		ug/l	20	1.2	1
1,2,4,5-Tetrachlorobenzene	ND		ug/l	1.7	0.24	1
2,4,6-Trichlorophenol	ND		ug/l	5.0	2.1	1
2,4,5-Trichlorophenol	ND		ug/l	5.0	2.1	1
Biphenyl	ND		ug/l	2.0	0.20	1
2-Chloronaphthalene	ND		ug/l	2.0	0.35	1
2-Nitroaniline	ND		ug/l	5.0	1.0	1
2,6-Dinitrotoluene	ND		ug/l	5.0	0.84	1

Project Name: B14 GWS
Project Number: Not Specified

Lab Number: L2448938
Report Date: 09/09/24

SAMPLE RESULTS

Lab ID: L2448938-05
 Client ID: TM04-PZM006
 Sample Location: B14

Date Collected: 08/27/24 09:20
 Date Received: 08/27/24
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Acenaphthylene	2.6		ug/l	2.0	0.32	1
Acenaphthene	ND		ug/l	2.0	0.40	1
2,4-Dinitrophenol	ND		ug/l	20	5.4	1
2,4-Dinitrotoluene	ND		ug/l	5.0	0.54	1
2,3,4,6-Tetrachlorophenol	ND		ug/l	5.0	2.2	1
Diethyl phthalate	ND		ug/l	5.0	0.76	1
Fluorene	ND		ug/l	2.0	0.44	1
4-Nitroaniline	ND		ug/l	5.0	1.4	1
NDPA/DPA	ND		ug/l	2.0	0.92	1
Hexachlorobenzene	ND		ug/l	2.0	0.45	1
Pentachlorophenol	ND		ug/l	10	2.5	1
Phenanthrene	ND		ug/l	2.0	0.42	1
Anthracene	ND		ug/l	2.0	0.47	1
Carbazole	0.79	J	ug/l	2.0	0.31	1
Di-n-butylphthalate	2.0	J	ug/l	5.0	0.96	1
Fluoranthene	ND		ug/l	2.0	0.41	1
Pyrene	ND		ug/l	2.0	0.41	1
3,3'-Dichlorobenzidine	ND		ug/l	5.0	1.8	1
Benzo(a)anthracene	ND		ug/l	2.0	0.32	1
Chrysene	ND		ug/l	1.5	0.22	1
Bis(2-ethylhexyl)phthalate	ND		ug/l	3.0	1.4	1
Di-n-octylphthalate	ND		ug/l	5.0	2.3	1
Benzo(b)fluoranthene	ND		ug/l	2.0	0.53	1
Benzo(k)fluoranthene	ND		ug/l	2.0	0.62	1
Benzo(a)pyrene	ND		ug/l	2.0	0.37	1
Indeno(1,2,3-cd)pyrene	ND		ug/l	2.0	0.48	1
Dibenzo(a,h)anthracene	ND		ug/l	2.0	0.29	1
Benzo(ghi)perylene	ND		ug/l	2.0	0.37	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	18	Q	21-120
Phenol-d6	20		10-120
Nitrobenzene-d5	73		23-120
2-Fluorobiphenyl	71		15-120
2,4,6-Tribromophenol	31		10-120
4-Terphenyl-d14	85		41-149

Project Name: B14 GWS
Project Number: Not Specified

Lab Number: L2448938
Report Date: 09/09/24

SAMPLE RESULTS

Lab ID: L2448938-05
 Client ID: TM04-PZM006
 Sample Location: B14

Date Collected: 08/27/24 09:20
 Date Received: 08/27/24
 Field Prep: Not Specified

Sample Depth:
 Matrix: Water
 Analytical Method: 1,8270E-SIM
 Analytical Date: 09/05/24 18:16
 Analyst: RP

Extraction Method: EPA 3510C
 Extraction Date: 09/01/24 19:30

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS-SIM - Westborough Lab						
Naphthalene	70	E	ug/l	0.10	0.02	1
2-Methylnaphthalene	1.2		ug/l	0.10	0.03	1
Acenaphthylene	2.2		ug/l	0.10	0.02	1
Acenaphthene	0.39		ug/l	0.10	0.02	1
Fluorene	0.23		ug/l	0.10	0.03	1
Phenanthrene	0.32		ug/l	0.05	0.04	1
Anthracene	0.06	J	ug/l	0.10	0.02	1
Fluoranthene	0.13		ug/l	0.10	0.03	1
Pyrene	0.11		ug/l	0.10	0.04	1
Benzo(a)anthracene	0.05		ug/l	0.05	0.03	1
Chrysene	0.04	J	ug/l	0.10	0.03	1
Benzo(b)fluoranthene	0.08		ug/l	0.05	0.03	1
Benzo(k)fluoranthene	ND		ug/l	0.10	0.03	1
Benzo(a)pyrene	0.05	J	ug/l	0.10	0.02	1
Indeno(1,2,3-cd)pyrene	0.05	J	ug/l	0.10	0.02	1
Dibenzo(a,h)anthracene	ND		ug/l	0.05	0.02	1
Benzo(ghi)perylene	0.05	J	ug/l	0.10	0.02	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
Nitrobenzene-d5	51		23-120
2-Fluorobiphenyl	53		15-120
4-Terphenyl-d14	47		41-149

Project Name: B14 GWS
Project Number: Not Specified

Lab Number: L2448938
Report Date: 09/09/24

SAMPLE RESULTS

Lab ID: L2448938-05 D
 Client ID: TM04-PZM006
 Sample Location: B14

Date Collected: 08/27/24 09:20
 Date Received: 08/27/24
 Field Prep: Not Specified

Sample Depth:

Matrix: Water
 Analytical Method: 1,8270E-SIM
 Analytical Date: 09/06/24 18:14
 Analyst: JJW

Extraction Method: EPA 3510C
 Extraction Date: 09/01/24 19:30

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS-SIM - Westborough Lab						
Naphthalene	130		ug/l	0.50	0.12	5

Project Name: B14 GWS
Project Number: Not Specified

Lab Number: L2448938
Report Date: 09/09/24

SAMPLE RESULTS

Lab ID: L2448938-06
 Client ID: HI22-MWS
 Sample Location: B14

Date Collected: 08/27/24 12:17
 Date Received: 08/27/24
 Field Prep: Not Specified

Sample Depth:

Matrix: Water
 Analytical Method: 1,8270E
 Analytical Date: 09/05/24 12:19
 Analyst: IM

Extraction Method: EPA 3510C
 Extraction Date: 09/01/24 19:30

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Benzaldehyde	ND		ug/l	5.0	1.1	1
Phenol	ND		ug/l	5.0	0.35	1
Bis(2-chloroethyl)ether	ND		ug/l	2.0	0.39	1
2-Chlorophenol	ND		ug/l	2.0	0.65	1
2-Methylphenol	ND		ug/l	5.0	2.3	1
Bis(2-chloroisopropyl)ether	ND		ug/l	2.0	0.40	1
Acetophenone	ND		ug/l	5.0	0.92	1
n-Nitrosodi-n-propylamine	ND		ug/l	5.0	0.91	1
3-Methylphenol/4-Methylphenol	ND		ug/l	5.0	1.4	1
Hexachloroethane	ND		ug/l	2.0	0.20	1
Nitrobenzene	ND		ug/l	1.4	0.20	1
Isophorone	ND		ug/l	5.0	0.86	1
2,4-Dimethylphenol	ND		ug/l	5.0	2.0	1
Bis(2-chloroethoxy)methane	ND		ug/l	5.0	0.84	1
2,4-Dichlorophenol	ND		ug/l	5.0	1.7	1
Naphthalene	ND		ug/l	2.0	0.54	1
4-Chloroaniline	ND		ug/l	3.7	0.47	1
Hexachlorobutadiene	ND		ug/l	2.0	0.36	1
Caprolactam	ND		ug/l	10	1.2	1
2-Methylnaphthalene	ND		ug/l	2.0	0.37	1
Hexachlorocyclopentadiene	ND		ug/l	20	1.2	1
1,2,4,5-Tetrachlorobenzene	ND		ug/l	1.7	0.24	1
2,4,6-Trichlorophenol	ND		ug/l	5.0	2.1	1
2,4,5-Trichlorophenol	ND		ug/l	5.0	2.1	1
Biphenyl	ND		ug/l	2.0	0.20	1
2-Chloronaphthalene	ND		ug/l	2.0	0.35	1
2-Nitroaniline	ND		ug/l	5.0	1.0	1
2,6-Dinitrotoluene	ND		ug/l	5.0	0.84	1

Project Name: B14 GWS
Project Number: Not Specified

Lab Number: L2448938
Report Date: 09/09/24

SAMPLE RESULTS

Lab ID: L2448938-06
 Client ID: HI22-MWS
 Sample Location: B14

Date Collected: 08/27/24 12:17
 Date Received: 08/27/24
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Acenaphthylene	ND		ug/l	2.0	0.32	1
Acenaphthene	ND		ug/l	2.0	0.40	1
2,4-Dinitrophenol	ND		ug/l	20	5.4	1
2,4-Dinitrotoluene	ND		ug/l	5.0	0.54	1
2,3,4,6-Tetrachlorophenol	ND		ug/l	5.0	2.2	1
Diethyl phthalate	ND		ug/l	5.0	0.76	1
Fluorene	ND		ug/l	2.0	0.44	1
4-Nitroaniline	ND		ug/l	5.0	1.4	1
NDPA/DPA	ND		ug/l	2.0	0.92	1
Hexachlorobenzene	ND		ug/l	2.0	0.45	1
Pentachlorophenol	ND		ug/l	10	2.5	1
Phenanthrene	ND		ug/l	2.0	0.42	1
Anthracene	ND		ug/l	2.0	0.47	1
Carbazole	ND		ug/l	2.0	0.31	1
Di-n-butylphthalate	ND		ug/l	5.0	0.96	1
Fluoranthene	ND		ug/l	2.0	0.41	1
Pyrene	ND		ug/l	2.0	0.41	1
3,3'-Dichlorobenzidine	ND		ug/l	5.0	1.8	1
Benzo(a)anthracene	ND		ug/l	2.0	0.32	1
Chrysene	ND		ug/l	1.5	0.22	1
Bis(2-ethylhexyl)phthalate	ND		ug/l	3.0	1.4	1
Di-n-octylphthalate	ND		ug/l	5.0	2.3	1
Benzo(b)fluoranthene	ND		ug/l	2.0	0.53	1
Benzo(k)fluoranthene	ND		ug/l	2.0	0.62	1
Benzo(a)pyrene	ND		ug/l	2.0	0.37	1
Indeno(1,2,3-cd)pyrene	ND		ug/l	2.0	0.48	1
Dibenzo(a,h)anthracene	ND		ug/l	2.0	0.29	1
Benzo(ghi)perylene	ND		ug/l	2.0	0.37	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	28		21-120
Phenol-d6	28		10-120
Nitrobenzene-d5	79		23-120
2-Fluorobiphenyl	70		15-120
2,4,6-Tribromophenol	35		10-120
4-Terphenyl-d14	80		41-149

Project Name: B14 GWS
Project Number: Not Specified

Lab Number: L2448938
Report Date: 09/09/24

SAMPLE RESULTS

Lab ID: L2448938-06
 Client ID: HI22-MWS
 Sample Location: B14

Date Collected: 08/27/24 12:17
 Date Received: 08/27/24
 Field Prep: Not Specified

Sample Depth:

Matrix: Water
 Analytical Method: 1,8270E-SIM
 Analytical Date: 09/05/24 18:32
 Analyst: RP

Extraction Method: EPA 3510C
 Extraction Date: 09/01/24 19:30

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS-SIM - Westborough Lab						
Naphthalene	0.40		ug/l	0.10	0.02	1
2-Methylnaphthalene	0.05	J	ug/l	0.10	0.03	1
Acenaphthylene	ND		ug/l	0.10	0.02	1
Acenaphthene	ND		ug/l	0.10	0.02	1
Fluorene	ND		ug/l	0.10	0.03	1
Phenanthrene	0.04	J	ug/l	0.05	0.04	1
Anthracene	ND		ug/l	0.10	0.02	1
Fluoranthene	ND		ug/l	0.10	0.03	1
Pyrene	ND		ug/l	0.10	0.04	1
Benzo(a)anthracene	ND		ug/l	0.05	0.03	1
Chrysene	ND		ug/l	0.10	0.03	1
Benzo(b)fluoranthene	ND		ug/l	0.05	0.03	1
Benzo(k)fluoranthene	ND		ug/l	0.10	0.03	1
Benzo(a)pyrene	ND		ug/l	0.10	0.02	1
Indeno(1,2,3-cd)pyrene	ND		ug/l	0.10	0.02	1
Dibenzo(a,h)anthracene	ND		ug/l	0.05	0.02	1
Benzo(ghi)perylene	ND		ug/l	0.10	0.02	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
Nitrobenzene-d5	54		23-120
2-Fluorobiphenyl	55		15-120
4-Terphenyl-d14	47		41-149

Project Name: B14 GWS
Project Number: Not Specified

Lab Number: L2448938
Report Date: 09/09/24

SAMPLE RESULTS

Lab ID: L2448938-07
 Client ID: HI10-MWS
 Sample Location: B14

Date Collected: 08/27/24 11:25
 Date Received: 08/27/24
 Field Prep: Not Specified

Sample Depth:

Matrix: Water
 Analytical Method: 1,8270E
 Analytical Date: 09/05/24 12:45
 Analyst: IM

Extraction Method: EPA 3510C
 Extraction Date: 09/01/24 19:30

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Benzaldehyde	ND		ug/l	5.0	1.1	1
Phenol	3.1	J	ug/l	5.0	0.35	1
Bis(2-chloroethyl)ether	ND		ug/l	2.0	0.39	1
2-Chlorophenol	ND		ug/l	2.0	0.65	1
2-Methylphenol	ND		ug/l	5.0	2.3	1
Bis(2-chloroisopropyl)ether	ND		ug/l	2.0	0.40	1
Acetophenone	ND		ug/l	5.0	0.92	1
n-Nitrosodi-n-propylamine	ND		ug/l	5.0	0.91	1
3-Methylphenol/4-Methylphenol	ND		ug/l	5.0	1.4	1
Hexachloroethane	ND		ug/l	2.0	0.20	1
Nitrobenzene	ND		ug/l	1.4	0.20	1
Isophorone	ND		ug/l	5.0	0.86	1
2,4-Dimethylphenol	ND		ug/l	5.0	2.0	1
Bis(2-chloroethoxy)methane	ND		ug/l	5.0	0.84	1
2,4-Dichlorophenol	ND		ug/l	5.0	1.7	1
Naphthalene	50		ug/l	2.0	0.54	1
4-Chloroaniline	ND		ug/l	3.7	0.47	1
Hexachlorobutadiene	ND		ug/l	2.0	0.36	1
Caprolactam	ND		ug/l	10	1.2	1
2-Methylnaphthalene	2.6		ug/l	2.0	0.37	1
Hexachlorocyclopentadiene	ND		ug/l	20	1.2	1
1,2,4,5-Tetrachlorobenzene	ND		ug/l	1.7	0.24	1
2,4,6-Trichlorophenol	ND		ug/l	5.0	2.1	1
2,4,5-Trichlorophenol	ND		ug/l	5.0	2.1	1
Biphenyl	0.40	J	ug/l	2.0	0.20	1
2-Chloronaphthalene	ND		ug/l	2.0	0.35	1
2-Nitroaniline	ND		ug/l	5.0	1.0	1
2,6-Dinitrotoluene	ND		ug/l	5.0	0.84	1

Project Name: B14 GWS
Project Number: Not Specified

Lab Number: L2448938
Report Date: 09/09/24

SAMPLE RESULTS

Lab ID: L2448938-07
 Client ID: HI10-MWS
 Sample Location: B14

Date Collected: 08/27/24 11:25
 Date Received: 08/27/24
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Acenaphthylene	0.73	J	ug/l	2.0	0.32	1
Acenaphthene	3.0		ug/l	2.0	0.40	1
2,4-Dinitrophenol	ND		ug/l	20	5.4	1
2,4-Dinitrotoluene	ND		ug/l	5.0	0.54	1
2,3,4,6-Tetrachlorophenol	ND		ug/l	5.0	2.2	1
Diethyl phthalate	ND		ug/l	5.0	0.76	1
Fluorene	2.6		ug/l	2.0	0.44	1
4-Nitroaniline	ND		ug/l	5.0	1.4	1
NDPA/DPA	ND		ug/l	2.0	0.92	1
Hexachlorobenzene	ND		ug/l	2.0	0.45	1
Pentachlorophenol	ND		ug/l	10	2.5	1
Phenanthrene	3.9		ug/l	2.0	0.42	1
Anthracene	ND		ug/l	2.0	0.47	1
Carbazole	5.5		ug/l	2.0	0.31	1
Di-n-butylphthalate	ND		ug/l	5.0	0.96	1
Fluoranthene	0.89	J	ug/l	2.0	0.41	1
Pyrene	0.59	J	ug/l	2.0	0.41	1
3,3'-Dichlorobenzidine	ND		ug/l	5.0	1.8	1
Benzo(a)anthracene	ND		ug/l	2.0	0.32	1
Chrysene	ND		ug/l	1.5	0.22	1
Bis(2-ethylhexyl)phthalate	ND		ug/l	3.0	1.4	1
Di-n-octylphthalate	ND		ug/l	5.0	2.3	1
Benzo(b)fluoranthene	ND		ug/l	2.0	0.53	1
Benzo(k)fluoranthene	ND		ug/l	2.0	0.62	1
Benzo(a)pyrene	ND		ug/l	2.0	0.37	1
Indeno(1,2,3-cd)pyrene	ND		ug/l	2.0	0.48	1
Dibenzo(a,h)anthracene	ND		ug/l	2.0	0.29	1
Benzo(ghi)perylene	ND		ug/l	2.0	0.37	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	28		21-120
Phenol-d6	27		10-120
Nitrobenzene-d5	83		23-120
2-Fluorobiphenyl	79		15-120
2,4,6-Tribromophenol	37		10-120
4-Terphenyl-d14	85		41-149

Project Name: B14 GWS
Project Number: Not Specified

Lab Number: L2448938
Report Date: 09/09/24

SAMPLE RESULTS

Lab ID: L2448938-07
 Client ID: HI10-MWS
 Sample Location: B14

Date Collected: 08/27/24 11:25
 Date Received: 08/27/24
 Field Prep: Not Specified

Sample Depth:
 Matrix: Water
 Analytical Method: 1,8270E-SIM
 Analytical Date: 09/05/24 18:49
 Analyst: RP

Extraction Method: EPA 3510C
 Extraction Date: 09/01/24 19:30

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS-SIM - Westborough Lab						
Naphthalene	32		ug/l	0.10	0.02	1
2-Methylnaphthalene	2.2		ug/l	0.10	0.03	1
Acenaphthylene	0.68		ug/l	0.10	0.02	1
Acenaphthene	2.3		ug/l	0.10	0.02	1
Fluorene	2.0		ug/l	0.10	0.03	1
Phenanthrene	2.9		ug/l	0.05	0.04	1
Anthracene	0.42		ug/l	0.10	0.02	1
Fluoranthene	0.67		ug/l	0.10	0.03	1
Pyrene	0.49		ug/l	0.10	0.04	1
Benzo(a)anthracene	0.04	J	ug/l	0.05	0.03	1
Chrysene	ND		ug/l	0.10	0.03	1
Benzo(b)fluoranthene	ND		ug/l	0.05	0.03	1
Benzo(k)fluoranthene	ND		ug/l	0.10	0.03	1
Benzo(a)pyrene	ND		ug/l	0.10	0.02	1
Indeno(1,2,3-cd)pyrene	ND		ug/l	0.10	0.02	1
Dibenzo(a,h)anthracene	ND		ug/l	0.05	0.02	1
Benzo(ghi)perylene	ND		ug/l	0.10	0.02	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
Nitrobenzene-d5	57		23-120
2-Fluorobiphenyl	60		15-120
4-Terphenyl-d14	50		41-149

Project Name: B14 GWS
Project Number: Not Specified

Lab Number: L2448938
Report Date: 09/09/24

SAMPLE RESULTS

Lab ID: L2448938-08
 Client ID: HI21-MWS
 Sample Location: B14

Date Collected: 08/27/24 13:22
 Date Received: 08/27/24
 Field Prep: Not Specified

Sample Depth:

Matrix: Water
 Analytical Method: 1,8270E
 Analytical Date: 09/04/24 02:30
 Analyst: RMP

Extraction Method: EPA 3510C
 Extraction Date: 09/01/24 19:30

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Benzaldehyde	ND		ug/l	5.0	1.1	1
Phenol	ND		ug/l	5.0	0.35	1
Bis(2-chloroethyl)ether	ND		ug/l	2.0	0.39	1
2-Chlorophenol	ND		ug/l	2.0	0.65	1
2-Methylphenol	ND		ug/l	5.0	2.3	1
Bis(2-chloroisopropyl)ether	ND		ug/l	2.0	0.40	1
Acetophenone	ND		ug/l	5.0	0.92	1
n-Nitrosodi-n-propylamine	ND		ug/l	5.0	0.91	1
3-Methylphenol/4-Methylphenol	ND		ug/l	5.0	1.4	1
Hexachloroethane	ND		ug/l	2.0	0.20	1
Nitrobenzene	ND		ug/l	1.4	0.20	1
Isophorone	ND		ug/l	5.0	0.86	1
2,4-Dimethylphenol	ND		ug/l	5.0	2.0	1
Bis(2-chloroethoxy)methane	ND		ug/l	5.0	0.84	1
2,4-Dichlorophenol	ND		ug/l	5.0	1.7	1
Naphthalene	ND		ug/l	2.0	0.54	1
4-Chloroaniline	ND		ug/l	3.7	0.47	1
Hexachlorobutadiene	ND		ug/l	2.0	0.36	1
Caprolactam	ND		ug/l	10	1.2	1
2-Methylnaphthalene	ND		ug/l	2.0	0.37	1
Hexachlorocyclopentadiene	ND		ug/l	20	1.2	1
1,2,4,5-Tetrachlorobenzene	ND		ug/l	1.7	0.24	1
2,4,6-Trichlorophenol	ND		ug/l	5.0	2.1	1
2,4,5-Trichlorophenol	ND		ug/l	5.0	2.1	1
Biphenyl	ND		ug/l	2.0	0.20	1
2-Chloronaphthalene	ND		ug/l	2.0	0.35	1
2-Nitroaniline	ND		ug/l	5.0	1.0	1
2,6-Dinitrotoluene	ND		ug/l	5.0	0.84	1

Project Name: B14 GWS
Project Number: Not Specified

Lab Number: L2448938
Report Date: 09/09/24

SAMPLE RESULTS

Lab ID: L2448938-08
 Client ID: HI21-MWS
 Sample Location: B14

Date Collected: 08/27/24 13:22
 Date Received: 08/27/24
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Acenaphthylene	ND		ug/l	2.0	0.32	1
Acenaphthene	ND		ug/l	2.0	0.40	1
2,4-Dinitrophenol	ND		ug/l	20	5.4	1
2,4-Dinitrotoluene	ND		ug/l	5.0	0.54	1
2,3,4,6-Tetrachlorophenol	ND		ug/l	5.0	2.2	1
Diethyl phthalate	ND		ug/l	5.0	0.76	1
Fluorene	ND		ug/l	2.0	0.44	1
4-Nitroaniline	ND		ug/l	5.0	1.4	1
NDPA/DPA	ND		ug/l	2.0	0.92	1
Hexachlorobenzene	ND		ug/l	2.0	0.45	1
Pentachlorophenol	ND		ug/l	10	2.5	1
Phenanthrene	ND		ug/l	2.0	0.42	1
Anthracene	ND		ug/l	2.0	0.47	1
Carbazole	ND		ug/l	2.0	0.31	1
Di-n-butylphthalate	ND		ug/l	5.0	0.96	1
Fluoranthene	ND		ug/l	2.0	0.41	1
Pyrene	ND		ug/l	2.0	0.41	1
3,3'-Dichlorobenzidine	ND		ug/l	5.0	1.8	1
Benzo(a)anthracene	ND		ug/l	2.0	0.32	1
Chrysene	ND		ug/l	1.5	0.22	1
Bis(2-ethylhexyl)phthalate	ND		ug/l	3.0	1.4	1
Di-n-octylphthalate	ND		ug/l	5.0	2.3	1
Benzo(b)fluoranthene	ND		ug/l	2.0	0.53	1
Benzo(k)fluoranthene	ND		ug/l	2.0	0.62	1
Benzo(a)pyrene	ND		ug/l	2.0	0.37	1
Indeno(1,2,3-cd)pyrene	ND		ug/l	2.0	0.48	1
Dibenzo(a,h)anthracene	ND		ug/l	2.0	0.29	1
Benzo(ghi)perylene	ND		ug/l	2.0	0.37	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	5	Q	21-120
Phenol-d6	12		10-120
Nitrobenzene-d5	52		23-120
2-Fluorobiphenyl	56		15-120
2,4,6-Tribromophenol	0	Q	10-120
4-Terphenyl-d14	64		41-149

Project Name: B14 GWS
Project Number: Not Specified

Lab Number: L2448938
Report Date: 09/09/24

SAMPLE RESULTS

Lab ID: L2448938-08
 Client ID: HI21-MWS
 Sample Location: B14

Date Collected: 08/27/24 13:22
 Date Received: 08/27/24
 Field Prep: Not Specified

Sample Depth:
 Matrix: Water
 Analytical Method: 1,8270E-SIM
 Analytical Date: 09/05/24 19:05
 Analyst: RP

Extraction Method: EPA 3510C
 Extraction Date: 09/01/24 19:30

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS-SIM - Westborough Lab						
Naphthalene	0.38		ug/l	0.10	0.02	1
2-Methylnaphthalene	0.03	J	ug/l	0.10	0.03	1
Acenaphthylene	ND		ug/l	0.10	0.02	1
Acenaphthene	ND		ug/l	0.10	0.02	1
Fluorene	0.03	J	ug/l	0.10	0.03	1
Phenanthrene	0.04	J	ug/l	0.05	0.04	1
Anthracene	ND		ug/l	0.10	0.02	1
Fluoranthene	ND		ug/l	0.10	0.03	1
Pyrene	ND		ug/l	0.10	0.04	1
Benzo(a)anthracene	ND		ug/l	0.05	0.03	1
Chrysene	ND		ug/l	0.10	0.03	1
Benzo(b)fluoranthene	ND		ug/l	0.05	0.03	1
Benzo(k)fluoranthene	ND		ug/l	0.10	0.03	1
Benzo(a)pyrene	ND		ug/l	0.10	0.02	1
Indeno(1,2,3-cd)pyrene	ND		ug/l	0.10	0.02	1
Dibenzo(a,h)anthracene	ND		ug/l	0.05	0.02	1
Benzo(ghi)perylene	ND		ug/l	0.10	0.02	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
Nitrobenzene-d5	60		23-120
2-Fluorobiphenyl	64		15-120
4-Terphenyl-d14	55		41-149

Project Name: B14 GWS
Project Number: Not Specified

Lab Number: L2448938
Report Date: 09/09/24

SAMPLE RESULTS

Lab ID: L2448938-08 RE
 Client ID: HI21-MWS
 Sample Location: B14

Date Collected: 08/27/24 13:22
 Date Received: 08/27/24
 Field Prep: Not Specified

Sample Depth:

Matrix: Water
 Analytical Method: 1,8270E
 Analytical Date: 09/05/24 10:09
 Analyst: LJJ

Extraction Method: EPA 3510C
 Extraction Date: 09/04/24 18:33

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Benzaldehyde	ND		ug/l	5.0	1.1	1
Phenol	ND		ug/l	5.0	0.35	1
Bis(2-chloroethyl)ether	ND		ug/l	2.0	0.39	1
2-Chlorophenol	ND		ug/l	2.0	0.65	1
2-Methylphenol	ND		ug/l	5.0	2.3	1
Bis(2-chloroisopropyl)ether	ND		ug/l	2.0	0.40	1
Acetophenone	ND		ug/l	5.0	0.92	1
n-Nitrosodi-n-propylamine	ND		ug/l	5.0	0.91	1
3-Methylphenol/4-Methylphenol	ND		ug/l	5.0	1.4	1
Hexachloroethane	ND		ug/l	2.0	0.20	1
Nitrobenzene	ND		ug/l	1.4	0.20	1
Isophorone	ND		ug/l	5.0	0.86	1
2,4-Dimethylphenol	ND		ug/l	5.0	2.0	1
Bis(2-chloroethoxy)methane	ND		ug/l	5.0	0.84	1
2,4-Dichlorophenol	ND		ug/l	5.0	1.7	1
Naphthalene	ND		ug/l	2.0	0.54	1
4-Chloroaniline	ND		ug/l	3.7	0.47	1
Hexachlorobutadiene	ND		ug/l	2.0	0.36	1
Caprolactam	ND		ug/l	10	1.2	1
2-Methylnaphthalene	ND		ug/l	2.0	0.37	1
Hexachlorocyclopentadiene	ND		ug/l	20	1.2	1
1,2,4,5-Tetrachlorobenzene	ND		ug/l	1.7	0.24	1
2,4,6-Trichlorophenol	ND		ug/l	5.0	2.1	1
2,4,5-Trichlorophenol	ND		ug/l	5.0	2.1	1
Biphenyl	ND		ug/l	2.0	0.20	1
2-Chloronaphthalene	ND		ug/l	2.0	0.35	1
2-Nitroaniline	ND		ug/l	5.0	1.0	1
2,6-Dinitrotoluene	ND		ug/l	5.0	0.84	1

Project Name: B14 GWS
Project Number: Not Specified

Lab Number: L2448938
Report Date: 09/09/24

SAMPLE RESULTS

Lab ID: L2448938-08 RE
 Client ID: HI21-MWS
 Sample Location: B14

Date Collected: 08/27/24 13:22
 Date Received: 08/27/24
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Acenaphthylene	ND		ug/l	2.0	0.32	1
Acenaphthene	ND		ug/l	2.0	0.40	1
2,4-Dinitrophenol	ND		ug/l	20	5.4	1
2,4-Dinitrotoluene	ND		ug/l	5.0	0.54	1
2,3,4,6-Tetrachlorophenol	ND		ug/l	5.0	2.2	1
Diethyl phthalate	ND		ug/l	5.0	0.76	1
Fluorene	ND		ug/l	2.0	0.44	1
4-Nitroaniline	ND		ug/l	5.0	1.4	1
NDPA/DPA	ND		ug/l	2.0	0.92	1
Hexachlorobenzene	ND		ug/l	2.0	0.45	1
Pentachlorophenol	ND		ug/l	10	2.5	1
Phenanthrene	ND		ug/l	2.0	0.42	1
Anthracene	ND		ug/l	2.0	0.47	1
Carbazole	ND		ug/l	2.0	0.31	1
Di-n-butylphthalate	ND		ug/l	5.0	0.96	1
Fluoranthene	ND		ug/l	2.0	0.41	1
Pyrene	ND		ug/l	2.0	0.41	1
3,3'-Dichlorobenzidine	ND		ug/l	5.0	1.8	1
Benzo(a)anthracene	ND		ug/l	2.0	0.32	1
Chrysene	ND		ug/l	1.5	0.22	1
Bis(2-ethylhexyl)phthalate	ND		ug/l	3.0	1.4	1
Di-n-octylphthalate	ND		ug/l	5.0	2.3	1
Benzo(b)fluoranthene	ND		ug/l	2.0	0.53	1
Benzo(k)fluoranthene	ND		ug/l	2.0	0.62	1
Benzo(a)pyrene	ND		ug/l	2.0	0.37	1
Indeno(1,2,3-cd)pyrene	ND		ug/l	2.0	0.48	1
Dibenzo(a,h)anthracene	ND		ug/l	2.0	0.29	1
Benzo(ghi)perylene	ND		ug/l	2.0	0.37	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	38		21-120
Phenol-d6	29		10-120
Nitrobenzene-d5	60		23-120
2-Fluorobiphenyl	58		15-120
2,4,6-Tribromophenol	73		10-120
4-Terphenyl-d14	74		41-149

Project Name: B14 GWS
Project Number: Not Specified

Lab Number: L2448938
Report Date: 09/09/24

SAMPLE RESULTS

Lab ID: L2448938-09
 Client ID: HI19-MWS
 Sample Location: B14

Date Collected: 08/27/24 14:25
 Date Received: 08/27/24
 Field Prep: Not Specified

Sample Depth:

Matrix: Water
 Analytical Method: 1,8270E
 Analytical Date: 09/05/24 13:10
 Analyst: IM

Extraction Method: EPA 3510C
 Extraction Date: 09/01/24 19:30

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Benzaldehyde	ND		ug/l	5.0	1.1	1
Phenol	1.9	J	ug/l	5.0	0.35	1
Bis(2-chloroethyl)ether	ND		ug/l	2.0	0.39	1
2-Chlorophenol	ND		ug/l	2.0	0.65	1
2-Methylphenol	ND		ug/l	5.0	2.3	1
Bis(2-chloroisopropyl)ether	ND		ug/l	2.0	0.40	1
Acetophenone	ND		ug/l	5.0	0.92	1
n-Nitrosodi-n-propylamine	ND		ug/l	5.0	0.91	1
3-Methylphenol/4-Methylphenol	28		ug/l	5.0	1.4	1
Hexachloroethane	ND		ug/l	2.0	0.20	1
Nitrobenzene	ND		ug/l	1.4	0.20	1
Isophorone	ND		ug/l	5.0	0.86	1
2,4-Dimethylphenol	100		ug/l	5.0	2.0	1
Bis(2-chloroethoxy)methane	ND		ug/l	5.0	0.84	1
2,4-Dichlorophenol	ND		ug/l	5.0	1.7	1
Naphthalene	53		ug/l	2.0	0.54	1
4-Chloroaniline	ND		ug/l	3.7	0.47	1
Hexachlorobutadiene	ND		ug/l	2.0	0.36	1
Caprolactam	ND		ug/l	10	1.2	1
2-Methylnaphthalene	3.7		ug/l	2.0	0.37	1
Hexachlorocyclopentadiene	ND		ug/l	20	1.2	1
1,2,4,5-Tetrachlorobenzene	ND		ug/l	1.7	0.24	1
2,4,6-Trichlorophenol	ND		ug/l	5.0	2.1	1
2,4,5-Trichlorophenol	ND		ug/l	5.0	2.1	1
Biphenyl	1.0	J	ug/l	2.0	0.20	1
2-Chloronaphthalene	ND		ug/l	2.0	0.35	1
2-Nitroaniline	ND		ug/l	5.0	1.0	1
2,6-Dinitrotoluene	ND		ug/l	5.0	0.84	1

Project Name: B14 GWS
Project Number: Not Specified

Lab Number: L2448938
Report Date: 09/09/24

SAMPLE RESULTS

Lab ID: L2448938-09
 Client ID: HI19-MWS
 Sample Location: B14

Date Collected: 08/27/24 14:25
 Date Received: 08/27/24
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Acenaphthylene	0.66	J	ug/l	2.0	0.32	1
Acenaphthene	1.1	J	ug/l	2.0	0.40	1
2,4-Dinitrophenol	ND		ug/l	20	5.4	1
2,4-Dinitrotoluene	ND		ug/l	5.0	0.54	1
2,3,4,6-Tetrachlorophenol	ND		ug/l	5.0	2.2	1
Diethyl phthalate	ND		ug/l	5.0	0.76	1
Fluorene	1.4	J	ug/l	2.0	0.44	1
4-Nitroaniline	ND		ug/l	5.0	1.4	1
NDPA/DPA	ND		ug/l	2.0	0.92	1
Hexachlorobenzene	ND		ug/l	2.0	0.45	1
Pentachlorophenol	ND		ug/l	10	2.5	1
Phenanthrene	2.8		ug/l	2.0	0.42	1
Anthracene	ND		ug/l	2.0	0.47	1
Carbazole	2.6		ug/l	2.0	0.31	1
Di-n-butylphthalate	ND		ug/l	5.0	0.96	1
Fluoranthene	0.77	J	ug/l	2.0	0.41	1
Pyrene	0.47	J	ug/l	2.0	0.41	1
3,3'-Dichlorobenzidine	ND		ug/l	5.0	1.8	1
Benzo(a)anthracene	ND		ug/l	2.0	0.32	1
Chrysene	ND		ug/l	1.5	0.22	1
Bis(2-ethylhexyl)phthalate	ND		ug/l	3.0	1.4	1
Di-n-octylphthalate	ND		ug/l	5.0	2.3	1
Benzo(b)fluoranthene	ND		ug/l	2.0	0.53	1
Benzo(k)fluoranthene	ND		ug/l	2.0	0.62	1
Benzo(a)pyrene	ND		ug/l	2.0	0.37	1
Indeno(1,2,3-cd)pyrene	ND		ug/l	2.0	0.48	1
Dibenzo(a,h)anthracene	ND		ug/l	2.0	0.29	1
Benzo(ghi)perylene	ND		ug/l	2.0	0.37	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	34		21-120
Phenol-d6	35		10-120
Nitrobenzene-d5	92		23-120
2-Fluorobiphenyl	88		15-120
2,4,6-Tribromophenol	62		10-120
4-Terphenyl-d14	102		41-149

Project Name: B14 GWS
Project Number: Not Specified

Lab Number: L2448938
Report Date: 09/09/24

SAMPLE RESULTS

Lab ID: L2448938-09
 Client ID: HI19-MWS
 Sample Location: B14

Date Collected: 08/27/24 14:25
 Date Received: 08/27/24
 Field Prep: Not Specified

Sample Depth:
 Matrix: Water
 Analytical Method: 1,8270E-SIM
 Analytical Date: 09/05/24 19:21
 Analyst: RP

Extraction Method: EPA 3510C
 Extraction Date: 09/01/24 19:30

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS-SIM - Westborough Lab						
Naphthalene	28		ug/l	0.10	0.02	1
2-Methylnaphthalene	2.6		ug/l	0.10	0.03	1
Acenaphthylene	0.51		ug/l	0.10	0.02	1
Acenaphthene	0.80		ug/l	0.10	0.02	1
Fluorene	0.95		ug/l	0.10	0.03	1
Phenanthrene	1.8		ug/l	0.05	0.04	1
Anthracene	0.28		ug/l	0.10	0.02	1
Fluoranthene	0.50		ug/l	0.10	0.03	1
Pyrene	0.33		ug/l	0.10	0.04	1
Benzo(a)anthracene	0.04	J	ug/l	0.05	0.03	1
Chrysene	ND		ug/l	0.10	0.03	1
Benzo(b)fluoranthene	ND		ug/l	0.05	0.03	1
Benzo(k)fluoranthene	ND		ug/l	0.10	0.03	1
Benzo(a)pyrene	ND		ug/l	0.10	0.02	1
Indeno(1,2,3-cd)pyrene	ND		ug/l	0.10	0.02	1
Dibenzo(a,h)anthracene	ND		ug/l	0.05	0.02	1
Benzo(ghi)perylene	ND		ug/l	0.10	0.02	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
Nitrobenzene-d5	53		23-120
2-Fluorobiphenyl	56		15-120
4-Terphenyl-d14	48		41-149

Project Name: B14 GWS
Project Number: Not Specified

Lab Number: L2448938
Report Date: 09/09/24

SAMPLE RESULTS

Lab ID: L2448938-10
 Client ID: FIELD BLANK
 Sample Location: B14

Date Collected: 08/27/24 15:00
 Date Received: 08/27/24
 Field Prep: Not Specified

Sample Depth:

Matrix: Water
 Analytical Method: 1,8270E
 Analytical Date: 09/04/24 03:21
 Analyst: RMP

Extraction Method: EPA 3510C
 Extraction Date: 09/01/24 19:30

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Benzaldehyde	ND		ug/l	5.0	1.1	1
Phenol	2.7	J	ug/l	5.0	0.35	1
Bis(2-chloroethyl)ether	ND		ug/l	2.0	0.39	1
2-Chlorophenol	ND		ug/l	2.0	0.65	1
2-Methylphenol	ND		ug/l	5.0	2.3	1
Bis(2-chloroisopropyl)ether	ND		ug/l	2.0	0.40	1
Acetophenone	ND		ug/l	5.0	0.92	1
n-Nitrosodi-n-propylamine	ND		ug/l	5.0	0.91	1
3-Methylphenol/4-Methylphenol	ND		ug/l	5.0	1.4	1
Hexachloroethane	ND		ug/l	2.0	0.20	1
Nitrobenzene	ND		ug/l	1.4	0.20	1
Isophorone	ND		ug/l	5.0	0.86	1
2,4-Dimethylphenol	ND		ug/l	5.0	2.0	1
Bis(2-chloroethoxy)methane	ND		ug/l	5.0	0.84	1
2,4-Dichlorophenol	ND		ug/l	5.0	1.7	1
Naphthalene	ND		ug/l	2.0	0.54	1
4-Chloroaniline	ND		ug/l	3.7	0.47	1
Hexachlorobutadiene	ND		ug/l	2.0	0.36	1
Caprolactam	7.7	J	ug/l	10	1.2	1
2-Methylnaphthalene	ND		ug/l	2.0	0.37	1
Hexachlorocyclopentadiene	ND		ug/l	20	1.2	1
1,2,4,5-Tetrachlorobenzene	ND		ug/l	1.7	0.24	1
2,4,6-Trichlorophenol	ND		ug/l	5.0	2.1	1
2,4,5-Trichlorophenol	ND		ug/l	5.0	2.1	1
Biphenyl	ND		ug/l	2.0	0.20	1
2-Chloronaphthalene	ND		ug/l	2.0	0.35	1
2-Nitroaniline	ND		ug/l	5.0	1.0	1
2,6-Dinitrotoluene	ND		ug/l	5.0	0.84	1

Project Name: B14 GWS
Project Number: Not Specified

Lab Number: L2448938
Report Date: 09/09/24

SAMPLE RESULTS

Lab ID: L2448938-10
 Client ID: FIELD BLANK
 Sample Location: B14

Date Collected: 08/27/24 15:00
 Date Received: 08/27/24
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Acenaphthylene	ND		ug/l	2.0	0.32	1
Acenaphthene	ND		ug/l	2.0	0.40	1
2,4-Dinitrophenol	ND		ug/l	20	5.4	1
2,4-Dinitrotoluene	ND		ug/l	5.0	0.54	1
2,3,4,6-Tetrachlorophenol	ND		ug/l	5.0	2.2	1
Diethyl phthalate	ND		ug/l	5.0	0.76	1
Fluorene	ND		ug/l	2.0	0.44	1
4-Nitroaniline	ND		ug/l	5.0	1.4	1
NDPA/DPA	ND		ug/l	2.0	0.92	1
Hexachlorobenzene	ND		ug/l	2.0	0.45	1
Pentachlorophenol	ND		ug/l	10	2.5	1
Phenanthrene	ND		ug/l	2.0	0.42	1
Anthracene	ND		ug/l	2.0	0.47	1
Carbazole	ND		ug/l	2.0	0.31	1
Di-n-butylphthalate	ND		ug/l	5.0	0.96	1
Fluoranthene	ND		ug/l	2.0	0.41	1
Pyrene	ND		ug/l	2.0	0.41	1
3,3'-Dichlorobenzidine	ND		ug/l	5.0	1.8	1
Benzo(a)anthracene	ND		ug/l	2.0	0.32	1
Chrysene	ND		ug/l	1.5	0.22	1
Bis(2-ethylhexyl)phthalate	ND		ug/l	3.0	1.4	1
Di-n-octylphthalate	ND		ug/l	5.0	2.3	1
Benzo(b)fluoranthene	ND		ug/l	2.0	0.53	1
Benzo(k)fluoranthene	ND		ug/l	2.0	0.62	1
Benzo(a)pyrene	ND		ug/l	2.0	0.37	1
Indeno(1,2,3-cd)pyrene	ND		ug/l	2.0	0.48	1
Dibenzo(a,h)anthracene	ND		ug/l	2.0	0.29	1
Benzo(ghi)perylene	ND		ug/l	2.0	0.37	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	40		21-120
Phenol-d6	27		10-120
Nitrobenzene-d5	68		23-120
2-Fluorobiphenyl	71		15-120
2,4,6-Tribromophenol	62		10-120
4-Terphenyl-d14	76		41-149

Project Name: B14 GWS
Project Number: Not Specified

Lab Number: L2448938
Report Date: 09/09/24

SAMPLE RESULTS

Lab ID: L2448938-10
 Client ID: FIELD BLANK
 Sample Location: B14

Date Collected: 08/27/24 15:00
 Date Received: 08/27/24
 Field Prep: Not Specified

Sample Depth:
 Matrix: Water
 Analytical Method: 1,8270E-SIM
 Analytical Date: 09/05/24 19:38
 Analyst: RP

Extraction Method: EPA 3510C
 Extraction Date: 09/01/24 19:30

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS-SIM - Westborough Lab						
Naphthalene	0.05	J	ug/l	0.10	0.02	1
2-Methylnaphthalene	0.03	J	ug/l	0.10	0.03	1
Acenaphthylene	ND		ug/l	0.10	0.02	1
Acenaphthene	ND		ug/l	0.10	0.02	1
Fluorene	ND		ug/l	0.10	0.03	1
Phenanthrene	ND		ug/l	0.05	0.04	1
Anthracene	ND		ug/l	0.10	0.02	1
Fluoranthene	ND		ug/l	0.10	0.03	1
Pyrene	ND		ug/l	0.10	0.04	1
Benzo(a)anthracene	ND		ug/l	0.05	0.03	1
Chrysene	ND		ug/l	0.10	0.03	1
Benzo(b)fluoranthene	ND		ug/l	0.05	0.03	1
Benzo(k)fluoranthene	ND		ug/l	0.10	0.03	1
Benzo(a)pyrene	ND		ug/l	0.10	0.02	1
Indeno(1,2,3-cd)pyrene	ND		ug/l	0.10	0.02	1
Dibenzo(a,h)anthracene	ND		ug/l	0.05	0.02	1
Benzo(ghi)perylene	ND		ug/l	0.10	0.02	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
Nitrobenzene-d5	59		23-120
2-Fluorobiphenyl	63		15-120
4-Terphenyl-d14	51		41-149

Project Name: B14 GWS
Project Number: Not Specified

Lab Number: L2448938
Report Date: 09/09/24

SAMPLE RESULTS

Lab ID: L2448938-12
 Client ID: HI20R2-MWS
 Sample Location: B14

Date Collected: 08/27/24 16:30
 Date Received: 08/27/24
 Field Prep: Not Specified

Sample Depth:

Matrix: Water
 Analytical Method: 1,8270E
 Analytical Date: 09/04/24 03:46
 Analyst: RMP

Extraction Method: EPA 3510C
 Extraction Date: 09/01/24 19:30

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Benzaldehyde	ND		ug/l	5.0	1.1	1
Phenol	ND		ug/l	5.0	0.35	1
Bis(2-chloroethyl)ether	ND		ug/l	2.0	0.39	1
2-Chlorophenol	ND		ug/l	2.0	0.65	1
2-Methylphenol	ND		ug/l	5.0	2.3	1
Bis(2-chloroisopropyl)ether	ND		ug/l	2.0	0.40	1
Acetophenone	ND		ug/l	5.0	0.92	1
n-Nitrosodi-n-propylamine	ND		ug/l	5.0	0.91	1
3-Methylphenol/4-Methylphenol	3.4	J	ug/l	5.0	1.4	1
Hexachloroethane	ND		ug/l	2.0	0.20	1
Nitrobenzene	ND		ug/l	1.4	0.20	1
Isophorone	ND		ug/l	5.0	0.86	1
2,4-Dimethylphenol	5.2		ug/l	5.0	2.0	1
Bis(2-chloroethoxy)methane	ND		ug/l	5.0	0.84	1
2,4-Dichlorophenol	ND		ug/l	5.0	1.7	1
Naphthalene	ND		ug/l	2.0	0.54	1
4-Chloroaniline	ND		ug/l	3.7	0.47	1
Hexachlorobutadiene	ND		ug/l	2.0	0.36	1
Caprolactam	ND		ug/l	10	1.2	1
2-Methylnaphthalene	ND		ug/l	2.0	0.37	1
Hexachlorocyclopentadiene	ND		ug/l	20	1.2	1
1,2,4,5-Tetrachlorobenzene	ND		ug/l	1.7	0.24	1
2,4,6-Trichlorophenol	ND		ug/l	5.0	2.1	1
2,4,5-Trichlorophenol	ND		ug/l	5.0	2.1	1
Biphenyl	ND		ug/l	2.0	0.20	1
2-Chloronaphthalene	ND		ug/l	2.0	0.35	1
2-Nitroaniline	ND		ug/l	5.0	1.0	1
2,6-Dinitrotoluene	ND		ug/l	5.0	0.84	1

Project Name: B14 GWS
Project Number: Not Specified

Lab Number: L2448938
Report Date: 09/09/24

SAMPLE RESULTS

Lab ID: L2448938-12
 Client ID: HI20R2-MWS
 Sample Location: B14

Date Collected: 08/27/24 16:30
 Date Received: 08/27/24
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Acenaphthylene	ND		ug/l	2.0	0.32	1
Acenaphthene	ND		ug/l	2.0	0.40	1
2,4-Dinitrophenol	ND		ug/l	20	5.4	1
2,4-Dinitrotoluene	ND		ug/l	5.0	0.54	1
2,3,4,6-Tetrachlorophenol	ND		ug/l	5.0	2.2	1
Diethyl phthalate	ND		ug/l	5.0	0.76	1
Fluorene	ND		ug/l	2.0	0.44	1
4-Nitroaniline	ND		ug/l	5.0	1.4	1
NDPA/DPA	ND		ug/l	2.0	0.92	1
Hexachlorobenzene	ND		ug/l	2.0	0.45	1
Pentachlorophenol	ND		ug/l	10	2.5	1
Phenanthrene	ND		ug/l	2.0	0.42	1
Anthracene	ND		ug/l	2.0	0.47	1
Carbazole	ND		ug/l	2.0	0.31	1
Di-n-butylphthalate	ND		ug/l	5.0	0.96	1
Fluoranthene	ND		ug/l	2.0	0.41	1
Pyrene	ND		ug/l	2.0	0.41	1
3,3'-Dichlorobenzidine	ND		ug/l	5.0	1.8	1
Benzo(a)anthracene	ND		ug/l	2.0	0.32	1
Chrysene	ND		ug/l	1.5	0.22	1
Bis(2-ethylhexyl)phthalate	ND		ug/l	3.0	1.4	1
Di-n-octylphthalate	ND		ug/l	5.0	2.3	1
Benzo(b)fluoranthene	ND		ug/l	2.0	0.53	1
Benzo(k)fluoranthene	ND		ug/l	2.0	0.62	1
Benzo(a)pyrene	ND		ug/l	2.0	0.37	1
Indeno(1,2,3-cd)pyrene	ND		ug/l	2.0	0.48	1
Dibenzo(a,h)anthracene	ND		ug/l	2.0	0.29	1
Benzo(ghi)perylene	ND		ug/l	2.0	0.37	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	7	Q	21-120
Phenol-d6	12		10-120
Nitrobenzene-d5	58		23-120
2-Fluorobiphenyl	62		15-120
2,4,6-Tribromophenol	11		10-120
4-Terphenyl-d14	70		41-149

Project Name: B14 GWS
Project Number: Not Specified

Lab Number: L2448938
Report Date: 09/09/24

SAMPLE RESULTS

Lab ID: L2448938-12
 Client ID: HI20R2-MWS
 Sample Location: B14

Date Collected: 08/27/24 16:30
 Date Received: 08/27/24
 Field Prep: Not Specified

Sample Depth:

Matrix: Water
 Analytical Method: 1,8270E-SIM
 Analytical Date: 09/05/24 20:11
 Analyst: RP

Extraction Method: EPA 3510C
 Extraction Date: 09/01/24 19:30

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS-SIM - Westborough Lab						
Naphthalene	0.52		ug/l	0.10	0.02	1
2-Methylnaphthalene	0.06	J	ug/l	0.10	0.03	1
Acenaphthylene	ND		ug/l	0.10	0.02	1
Acenaphthene	0.17		ug/l	0.10	0.02	1
Fluorene	0.16		ug/l	0.10	0.03	1
Phenanthrene	0.20		ug/l	0.05	0.04	1
Anthracene	0.05	J	ug/l	0.10	0.02	1
Fluoranthene	0.27		ug/l	0.10	0.03	1
Pyrene	0.26		ug/l	0.10	0.04	1
Benzo(a)anthracene	0.13		ug/l	0.05	0.03	1
Chrysene	0.11		ug/l	0.10	0.03	1
Benzo(b)fluoranthene	0.23		ug/l	0.05	0.03	1
Benzo(k)fluoranthene	0.11		ug/l	0.10	0.03	1
Benzo(a)pyrene	0.17		ug/l	0.10	0.02	1
Indeno(1,2,3-cd)pyrene	0.18		ug/l	0.10	0.02	1
Dibenzo(a,h)anthracene	0.09		ug/l	0.05	0.02	1
Benzo(ghi)perylene	0.20		ug/l	0.10	0.02	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
Nitrobenzene-d5	54		23-120
2-Fluorobiphenyl	59		15-120
4-Terphenyl-d14	50		41-149

Project Name: B14 GWS
Project Number: Not Specified

Lab Number: L2448938
Report Date: 09/09/24

SAMPLE RESULTS

Lab ID: L2448938-12 RE
 Client ID: HI20R2-MWS
 Sample Location: B14

Date Collected: 08/27/24 16:30
 Date Received: 08/27/24
 Field Prep: Not Specified

Sample Depth:

Matrix: Water
 Analytical Method: 1,8270E
 Analytical Date: 09/06/24 16:29
 Analyst: EK

Extraction Method: EPA 3510C
 Extraction Date: 09/05/24 16:26

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Benzaldehyde	ND		ug/l	5.0	1.1	1
Phenol	ND		ug/l	5.0	0.35	1
Bis(2-chloroethyl)ether	ND		ug/l	2.0	0.39	1
2-Chlorophenol	ND		ug/l	2.0	0.65	1
2-Methylphenol	ND		ug/l	5.0	2.3	1
Bis(2-chloroisopropyl)ether	ND		ug/l	2.0	0.40	1
Acetophenone	ND		ug/l	5.0	0.92	1
n-Nitrosodi-n-propylamine	ND		ug/l	5.0	0.91	1
3-Methylphenol/4-Methylphenol	6.8		ug/l	5.0	1.4	1
Hexachloroethane	ND		ug/l	2.0	0.20	1
Nitrobenzene	ND		ug/l	1.4	0.20	1
Isophorone	ND		ug/l	5.0	0.86	1
2,4-Dimethylphenol	6.9		ug/l	5.0	2.0	1
Bis(2-chloroethoxy)methane	ND		ug/l	5.0	0.84	1
2,4-Dichlorophenol	ND		ug/l	5.0	1.7	1
Naphthalene	ND		ug/l	2.0	0.54	1
4-Chloroaniline	ND		ug/l	3.7	0.47	1
Hexachlorobutadiene	ND		ug/l	2.0	0.36	1
Caprolactam	ND		ug/l	10	1.2	1
2-Methylnaphthalene	ND		ug/l	2.0	0.37	1
Hexachlorocyclopentadiene	ND		ug/l	20	1.2	1
1,2,4,5-Tetrachlorobenzene	ND		ug/l	1.7	0.24	1
2,4,6-Trichlorophenol	ND		ug/l	5.0	2.1	1
2,4,5-Trichlorophenol	ND		ug/l	5.0	2.1	1
Biphenyl	ND		ug/l	2.0	0.20	1
2-Chloronaphthalene	ND		ug/l	2.0	0.35	1
2-Nitroaniline	ND		ug/l	5.0	1.0	1
2,6-Dinitrotoluene	ND		ug/l	5.0	0.84	1

Project Name: B14 GWS
Project Number: Not Specified

Lab Number: L2448938
Report Date: 09/09/24

SAMPLE RESULTS

Lab ID: L2448938-12 RE
 Client ID: HI20R2-MWS
 Sample Location: B14

Date Collected: 08/27/24 16:30
 Date Received: 08/27/24
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Acenaphthylene	ND		ug/l	2.0	0.32	1
Acenaphthene	ND		ug/l	2.0	0.40	1
2,4-Dinitrophenol	ND		ug/l	20	5.4	1
2,4-Dinitrotoluene	ND		ug/l	5.0	0.54	1
2,3,4,6-Tetrachlorophenol	ND		ug/l	5.0	2.2	1
Diethyl phthalate	ND		ug/l	5.0	0.76	1
Fluorene	ND		ug/l	2.0	0.44	1
4-Nitroaniline	ND		ug/l	5.0	1.4	1
NDPA/DPA	ND		ug/l	2.0	0.92	1
Hexachlorobenzene	ND		ug/l	2.0	0.45	1
Pentachlorophenol	ND		ug/l	10	2.5	1
Phenanthrene	ND		ug/l	2.0	0.42	1
Anthracene	ND		ug/l	2.0	0.47	1
Carbazole	ND		ug/l	2.0	0.31	1
Di-n-butylphthalate	ND		ug/l	5.0	0.96	1
Fluoranthene	ND		ug/l	2.0	0.41	1
Pyrene	ND		ug/l	2.0	0.41	1
3,3'-Dichlorobenzidine	ND		ug/l	5.0	1.8	1
Benzo(a)anthracene	ND		ug/l	2.0	0.32	1
Chrysene	ND		ug/l	1.5	0.22	1
Bis(2-ethylhexyl)phthalate	ND		ug/l	3.0	1.4	1
Di-n-octylphthalate	ND		ug/l	5.0	2.3	1
Benzo(b)fluoranthene	ND		ug/l	2.0	0.53	1
Benzo(k)fluoranthene	ND		ug/l	2.0	0.62	1
Benzo(a)pyrene	ND		ug/l	2.0	0.37	1
Indeno(1,2,3-cd)pyrene	ND		ug/l	2.0	0.48	1
Dibenzo(a,h)anthracene	ND		ug/l	2.0	0.29	1
Benzo(ghi)perylene	ND		ug/l	2.0	0.37	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	39		21-120
Phenol-d6	31		10-120
Nitrobenzene-d5	75		23-120
2-Fluorobiphenyl	67		15-120
2,4,6-Tribromophenol	6	Q	10-120
4-Terphenyl-d14	76		41-149

Project Name: B14 GWS
Project Number: Not Specified

Lab Number: L2448938
Report Date: 09/09/24

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270E
Analytical Date: 08/31/24 13:24
Analyst: CMM

Extraction Method: EPA 3510C
Extraction Date: 08/30/24 20:34

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 01 Batch: WG1966246-1					
Benzaldehyde	ND		ug/l	5.0	1.1
Phenol	ND		ug/l	5.0	0.35
Bis(2-chloroethyl)ether	ND		ug/l	2.0	0.39
2-Chlorophenol	ND		ug/l	2.0	0.65
2-Methylphenol	ND		ug/l	5.0	2.3
Bis(2-chloroisopropyl)ether	ND		ug/l	2.0	0.40
Acetophenone	ND		ug/l	5.0	0.92
n-Nitrosodi-n-propylamine	ND		ug/l	5.0	0.91
3-Methylphenol/4-Methylphenol	ND		ug/l	5.0	1.4
Hexachloroethane	ND		ug/l	2.0	0.20
Nitrobenzene	ND		ug/l	1.4	0.20
Isophorone	ND		ug/l	5.0	0.86
2,4-Dimethylphenol	ND		ug/l	5.0	2.0
Bis(2-chloroethoxy)methane	ND		ug/l	5.0	0.84
2,4-Dichlorophenol	ND		ug/l	5.0	1.7
Naphthalene	ND		ug/l	2.0	0.54
4-Chloroaniline	ND		ug/l	3.7	0.47
Hexachlorobutadiene	ND		ug/l	2.0	0.36
Caprolactam	ND		ug/l	10	1.2
2-Methylnaphthalene	ND		ug/l	2.0	0.37
Hexachlorocyclopentadiene	ND		ug/l	20	1.2
1,2,4,5-Tetrachlorobenzene	ND		ug/l	1.7	0.24
2,4,6-Trichlorophenol	ND		ug/l	5.0	2.1
2,4,5-Trichlorophenol	ND		ug/l	5.0	2.1
Biphenyl	ND		ug/l	2.0	0.20
2-Chloronaphthalene	ND		ug/l	2.0	0.35
2-Nitroaniline	ND		ug/l	5.0	1.0
2,6-Dinitrotoluene	ND		ug/l	5.0	0.84
Acenaphthylene	ND		ug/l	2.0	0.32

Project Name: B14 GWS
Project Number: Not Specified

Lab Number: L2448938
Report Date: 09/09/24

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270E
Analytical Date: 08/31/24 13:24
Analyst: CMM

Extraction Method: EPA 3510C
Extraction Date: 08/30/24 20:34

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 01 Batch: WG1966246-1					
Acenaphthene	ND		ug/l	2.0	0.40
2,4-Dinitrophenol	ND		ug/l	20	5.4
2,4-Dinitrotoluene	ND		ug/l	5.0	0.54
2,3,4,6-Tetrachlorophenol	ND		ug/l	5.0	2.2
Diethyl phthalate	ND		ug/l	5.0	0.76
Fluorene	ND		ug/l	2.0	0.44
4-Nitroaniline	ND		ug/l	5.0	1.4
NDPA/DPA	ND		ug/l	2.0	0.92
Hexachlorobenzene	ND		ug/l	2.0	0.45
Pentachlorophenol	ND		ug/l	10	2.5
Phenanthrene	ND		ug/l	2.0	0.42
Anthracene	ND		ug/l	2.0	0.47
Carbazole	ND		ug/l	2.0	0.31
Di-n-butylphthalate	ND		ug/l	5.0	0.96
Fluoranthene	ND		ug/l	2.0	0.41
Pyrene	ND		ug/l	2.0	0.41
3,3'-Dichlorobenzidine	ND		ug/l	5.0	1.8
Benzo(a)anthracene	ND		ug/l	2.0	0.32
Chrysene	ND		ug/l	1.5	0.22
Bis(2-ethylhexyl)phthalate	ND		ug/l	3.0	1.4
Di-n-octylphthalate	ND		ug/l	5.0	2.3
Benzo(b)fluoranthene	ND		ug/l	2.0	0.53
Benzo(k)fluoranthene	ND		ug/l	2.0	0.62
Benzo(a)pyrene	ND		ug/l	2.0	0.37
Indeno(1,2,3-cd)pyrene	ND		ug/l	2.0	0.48
Dibenzo(a,h)anthracene	ND		ug/l	2.0	0.29
Benzo(ghi)perylene	ND		ug/l	2.0	0.37

Project Name: B14 GWS
Project Number: Not Specified

Lab Number: L2448938
Report Date: 09/09/24

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270E
Analytical Date: 08/31/24 13:24
Analyst: CMM

Extraction Method: EPA 3510C
Extraction Date: 08/30/24 20:34

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 01 Batch: WG1966246-1					

Surrogate	%Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	49		21-120
Phenol-d6	32		10-120
Nitrobenzene-d5	72		23-120
2-Fluorobiphenyl	68		15-120
2,4,6-Tribromophenol	73		10-120
4-Terphenyl-d14	77		41-149

Project Name: B14 GWS
Project Number: Not Specified

Lab Number: L2448938
Report Date: 09/09/24

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270E-SIM
Analytical Date: 09/03/24 14:07
Analyst: RP

Extraction Method: EPA 3510C
Extraction Date: 08/30/24 20:34

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS-SIM - Westborough Lab for sample(s): 01 Batch: WG1966248-1					
Naphthalene	ND		ug/l	0.10	0.02
2-Methylnaphthalene	ND		ug/l	0.10	0.03
Acenaphthylene	ND		ug/l	0.10	0.02
Acenaphthene	ND		ug/l	0.10	0.02
Fluorene	ND		ug/l	0.10	0.03
Phenanthrene	ND		ug/l	0.05	0.04
Anthracene	ND		ug/l	0.10	0.02
Fluoranthene	ND		ug/l	0.10	0.03
Pyrene	ND		ug/l	0.10	0.04
Benzo(a)anthracene	ND		ug/l	0.05	0.03
Chrysene	ND		ug/l	0.10	0.03
Benzo(b)fluoranthene	ND		ug/l	0.05	0.03
Benzo(k)fluoranthene	ND		ug/l	0.10	0.03
Benzo(a)pyrene	ND		ug/l	0.10	0.02
Indeno(1,2,3-cd)pyrene	ND		ug/l	0.10	0.02
Dibenzo(a,h)anthracene	ND		ug/l	0.05	0.02
Benzo(ghi)perylene	ND		ug/l	0.10	0.02

Surrogate	%Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	45		21-120
Phenol-d6	34		10-120
Nitrobenzene-d5	76		23-120
2-Fluorobiphenyl	77		15-120
2,4,6-Tribromophenol	75		10-120
4-Terphenyl-d14	68		41-149

Project Name: B14 GWS
Project Number: Not Specified

Lab Number: L2448938
Report Date: 09/09/24

Method Blank Analysis Batch Quality Control

Analytical Method: 1,8270E
Analytical Date: 09/03/24 22:16
Analyst: RMP

Extraction Method: EPA 3510C
Extraction Date: 09/01/24 19:30

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 02-10,12 Batch: WG1966501-1					
Benzaldehyde	ND		ug/l	5.0	1.1
Phenol	ND		ug/l	5.0	0.35
Bis(2-chloroethyl)ether	ND		ug/l	2.0	0.39
2-Chlorophenol	ND		ug/l	2.0	0.65
2-Methylphenol	ND		ug/l	5.0	2.3
Bis(2-chloroisopropyl)ether	ND		ug/l	2.0	0.40
Acetophenone	ND		ug/l	5.0	0.92
n-Nitrosodi-n-propylamine	ND		ug/l	5.0	0.91
3-Methylphenol/4-Methylphenol	ND		ug/l	5.0	1.4
Hexachloroethane	ND		ug/l	2.0	0.20
Nitrobenzene	ND		ug/l	1.4	0.20
Isophorone	ND		ug/l	5.0	0.86
2,4-Dimethylphenol	ND		ug/l	5.0	2.0
Bis(2-chloroethoxy)methane	ND		ug/l	5.0	0.84
2,4-Dichlorophenol	ND		ug/l	5.0	1.7
Naphthalene	ND		ug/l	2.0	0.54
4-Chloroaniline	ND		ug/l	3.7	0.47
Hexachlorobutadiene	ND		ug/l	2.0	0.36
Caprolactam	ND		ug/l	10	1.2
2-Methylnaphthalene	ND		ug/l	2.0	0.37
Hexachlorocyclopentadiene	ND		ug/l	20	1.2
1,2,4,5-Tetrachlorobenzene	ND		ug/l	1.7	0.24
2,4,6-Trichlorophenol	ND		ug/l	5.0	2.1
2,4,5-Trichlorophenol	ND		ug/l	5.0	2.1
Biphenyl	ND		ug/l	2.0	0.20
2-Chloronaphthalene	ND		ug/l	2.0	0.35
2-Nitroaniline	ND		ug/l	5.0	1.0
2,6-Dinitrotoluene	ND		ug/l	5.0	0.84
Acenaphthylene	ND		ug/l	2.0	0.32

Project Name: B14 GWS
Project Number: Not Specified

Lab Number: L2448938
Report Date: 09/09/24

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270E
Analytical Date: 09/03/24 22:16
Analyst: RMP

Extraction Method: EPA 3510C
Extraction Date: 09/01/24 19:30

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 02-10,12 Batch: WG1966501-1					
Acenaphthene	ND		ug/l	2.0	0.40
2,4-Dinitrophenol	ND		ug/l	20	5.4
2,4-Dinitrotoluene	ND		ug/l	5.0	0.54
2,3,4,6-Tetrachlorophenol	ND		ug/l	5.0	2.2
Diethyl phthalate	ND		ug/l	5.0	0.76
Fluorene	ND		ug/l	2.0	0.44
4-Nitroaniline	ND		ug/l	5.0	1.4
NDPA/DPA	ND		ug/l	2.0	0.92
Hexachlorobenzene	ND		ug/l	2.0	0.45
Pentachlorophenol	ND		ug/l	10	2.5
Phenanthrene	ND		ug/l	2.0	0.42
Anthracene	ND		ug/l	2.0	0.47
Carbazole	ND		ug/l	2.0	0.31
Di-n-butylphthalate	ND		ug/l	5.0	0.96
Fluoranthene	ND		ug/l	2.0	0.41
Pyrene	ND		ug/l	2.0	0.41
3,3'-Dichlorobenzidine	ND		ug/l	5.0	1.8
Benzo(a)anthracene	ND		ug/l	2.0	0.32
Chrysene	ND		ug/l	1.5	0.22
Bis(2-ethylhexyl)phthalate	ND		ug/l	3.0	1.4
Di-n-octylphthalate	ND		ug/l	5.0	2.3
Benzo(b)fluoranthene	ND		ug/l	2.0	0.53
Benzo(k)fluoranthene	ND		ug/l	2.0	0.62
Benzo(a)pyrene	ND		ug/l	2.0	0.37
Indeno(1,2,3-cd)pyrene	ND		ug/l	2.0	0.48
Dibenzo(a,h)anthracene	ND		ug/l	2.0	0.29
Benzo(ghi)perylene	ND		ug/l	2.0	0.37

Project Name: B14 GWS
Project Number: Not Specified

Lab Number: L2448938
Report Date: 09/09/24

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270E
Analytical Date: 09/03/24 22:16
Analyst: RMP

Extraction Method: EPA 3510C
Extraction Date: 09/01/24 19:30

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 02-10,12 Batch: WG1966501-1					

Surrogate	%Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	15	Q	21-120
Phenol-d6	16		10-120
Nitrobenzene-d5	55		23-120
2-Fluorobiphenyl	57		15-120
2,4,6-Tribromophenol	26		10-120
4-Terphenyl-d14	65		41-149

Project Name: B14 GWS
Project Number: Not Specified

Lab Number: L2448938
Report Date: 09/09/24

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270E-SIM
Analytical Date: 09/05/24 19:54
Analyst: RP

Extraction Method: EPA 3510C
Extraction Date: 09/01/24 19:30

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS-SIM - Westborough Lab for sample(s): 02-10,12 Batch: WG1966502-1					
Naphthalene	0.04	J	ug/l	0.10	0.02
2-Methylnaphthalene	ND		ug/l	0.10	0.03
Acenaphthylene	ND		ug/l	0.10	0.02
Acenaphthene	ND		ug/l	0.10	0.02
Fluorene	ND		ug/l	0.10	0.03
Phenanthrene	0.04	J	ug/l	0.05	0.04
Anthracene	ND		ug/l	0.10	0.02
Fluoranthene	0.06	J	ug/l	0.10	0.03
Pyrene	0.05	J	ug/l	0.10	0.04
Benzo(a)anthracene	0.03	J	ug/l	0.05	0.03
Chrysene	ND		ug/l	0.10	0.03
Benzo(b)fluoranthene	0.05	J	ug/l	0.05	0.03
Benzo(k)fluoranthene	ND		ug/l	0.10	0.03
Benzo(a)pyrene	ND		ug/l	0.10	0.02
Indeno(1,2,3-cd)pyrene	ND		ug/l	0.10	0.02
Dibenzo(a,h)anthracene	ND		ug/l	0.05	0.02
Benzo(ghi)perylene	ND		ug/l	0.10	0.02

Surrogate	%Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	22		21-120
Phenol-d6	25		10-120
Nitrobenzene-d5	82		23-120
2-Fluorobiphenyl	86		15-120
2,4,6-Tribromophenol	43		10-120
4-Terphenyl-d14	75		41-149

Project Name: B14 GWS
Project Number: Not Specified

Lab Number: L2448938
Report Date: 09/09/24

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270E
Analytical Date: 09/04/24 20:26
Analyst: MRG

Extraction Method: EPA 3510C
Extraction Date: 09/04/24 08:25

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 02,04,08 Batch: WG1967221-1					
Benzaldehyde	ND		ug/l	5.0	1.1
Phenol	ND		ug/l	5.0	0.35
Bis(2-chloroethyl)ether	ND		ug/l	2.0	0.39
2-Chlorophenol	ND		ug/l	2.0	0.65
2-Methylphenol	ND		ug/l	5.0	2.3
Bis(2-chloroisopropyl)ether	ND		ug/l	2.0	0.40
Acetophenone	ND		ug/l	5.0	0.92
n-Nitrosodi-n-propylamine	ND		ug/l	5.0	0.91
3-Methylphenol/4-Methylphenol	ND		ug/l	5.0	1.4
Hexachloroethane	ND		ug/l	2.0	0.20
Nitrobenzene	ND		ug/l	1.4	0.20
Isophorone	ND		ug/l	5.0	0.86
2,4-Dimethylphenol	ND		ug/l	5.0	2.0
Bis(2-chloroethoxy)methane	ND		ug/l	5.0	0.84
2,4-Dichlorophenol	ND		ug/l	5.0	1.7
Naphthalene	ND		ug/l	2.0	0.54
4-Chloroaniline	ND		ug/l	3.7	0.47
Hexachlorobutadiene	ND		ug/l	2.0	0.36
Caprolactam	ND		ug/l	10	1.2
2-Methylnaphthalene	ND		ug/l	2.0	0.37
Hexachlorocyclopentadiene	ND		ug/l	20	1.2
1,2,4,5-Tetrachlorobenzene	ND		ug/l	1.7	0.24
2,4,6-Trichlorophenol	ND		ug/l	5.0	2.1
2,4,5-Trichlorophenol	ND		ug/l	5.0	2.1
Biphenyl	ND		ug/l	2.0	0.20
2-Chloronaphthalene	ND		ug/l	2.0	0.35
2-Nitroaniline	ND		ug/l	5.0	1.0
2,6-Dinitrotoluene	ND		ug/l	5.0	0.84
Acenaphthylene	ND		ug/l	2.0	0.32

Project Name: B14 GWS
Project Number: Not Specified

Lab Number: L2448938
Report Date: 09/09/24

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270E
Analytical Date: 09/04/24 20:26
Analyst: MRG

Extraction Method: EPA 3510C
Extraction Date: 09/04/24 08:25

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 02,04,08 Batch: WG1967221-1					
Acenaphthene	ND		ug/l	2.0	0.40
2,4-Dinitrophenol	ND		ug/l	20	5.4
2,4-Dinitrotoluene	ND		ug/l	5.0	0.54
2,3,4,6-Tetrachlorophenol	ND		ug/l	5.0	2.2
Diethyl phthalate	ND		ug/l	5.0	0.76
Fluorene	ND		ug/l	2.0	0.44
4-Nitroaniline	ND		ug/l	5.0	1.4
NDPA/DPA	ND		ug/l	2.0	0.92
Hexachlorobenzene	ND		ug/l	2.0	0.45
Pentachlorophenol	ND		ug/l	10	2.5
Phenanthrene	ND		ug/l	2.0	0.42
Anthracene	ND		ug/l	2.0	0.47
Carbazole	ND		ug/l	2.0	0.31
Di-n-butylphthalate	ND		ug/l	5.0	0.96
Fluoranthene	ND		ug/l	2.0	0.41
Pyrene	ND		ug/l	2.0	0.41
3,3'-Dichlorobenzidine	ND		ug/l	5.0	1.8
Benzo(a)anthracene	ND		ug/l	2.0	0.32
Chrysene	ND		ug/l	1.5	0.22
Bis(2-ethylhexyl)phthalate	ND		ug/l	3.0	1.4
Di-n-octylphthalate	ND		ug/l	5.0	2.3
Benzo(b)fluoranthene	ND		ug/l	2.0	0.53
Benzo(k)fluoranthene	ND		ug/l	2.0	0.62
Benzo(a)pyrene	ND		ug/l	2.0	0.37
Indeno(1,2,3-cd)pyrene	ND		ug/l	2.0	0.48
Dibenzo(a,h)anthracene	ND		ug/l	2.0	0.29
Benzo(ghi)perylene	ND		ug/l	2.0	0.37

Project Name: B14 GWS
Project Number: Not Specified

Lab Number: L2448938
Report Date: 09/09/24

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270E
Analytical Date: 09/04/24 20:26
Analyst: MRG

Extraction Method: EPA 3510C
Extraction Date: 09/04/24 08:25

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 02,04,08 Batch: WG1967221-1					

Surrogate	%Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	47		21-120
Phenol-d6	30		10-120
Nitrobenzene-d5	60		23-120
2-Fluorobiphenyl	68		15-120
2,4,6-Tribromophenol	93		10-120
4-Terphenyl-d14	83		41-149

Project Name: B14 GWS
Project Number: Not Specified

Lab Number: L2448938
Report Date: 09/09/24

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270E
Analytical Date: 09/06/24 12:24
Analyst: SMZ

Extraction Method: EPA 3510C
Extraction Date: 09/05/24 16:26

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 12 Batch: WG1968077-1					
Benzaldehyde	ND		ug/l	5.0	1.1
Phenol	ND		ug/l	5.0	0.35
Bis(2-chloroethyl)ether	ND		ug/l	2.0	0.39
2-Chlorophenol	ND		ug/l	2.0	0.65
2-Methylphenol	ND		ug/l	5.0	2.3
Bis(2-chloroisopropyl)ether	ND		ug/l	2.0	0.40
Acetophenone	ND		ug/l	5.0	0.92
n-Nitrosodi-n-propylamine	ND		ug/l	5.0	0.91
3-Methylphenol/4-Methylphenol	ND		ug/l	5.0	1.4
Hexachloroethane	ND		ug/l	2.0	0.20
Nitrobenzene	ND		ug/l	1.4	0.20
Isophorone	ND		ug/l	5.0	0.86
2,4-Dimethylphenol	ND		ug/l	5.0	2.0
Bis(2-chloroethoxy)methane	ND		ug/l	5.0	0.84
2,4-Dichlorophenol	ND		ug/l	5.0	1.7
Naphthalene	ND		ug/l	2.0	0.54
4-Chloroaniline	ND		ug/l	3.7	0.47
Hexachlorobutadiene	ND		ug/l	2.0	0.36
Caprolactam	ND		ug/l	10	1.2
2-Methylnaphthalene	ND		ug/l	2.0	0.37
Hexachlorocyclopentadiene	ND		ug/l	20	1.2
1,2,4,5-Tetrachlorobenzene	ND		ug/l	1.7	0.24
2,4,6-Trichlorophenol	ND		ug/l	5.0	2.1
2,4,5-Trichlorophenol	ND		ug/l	5.0	2.1
Biphenyl	ND		ug/l	2.0	0.20
2-Chloronaphthalene	ND		ug/l	2.0	0.35
2-Nitroaniline	ND		ug/l	5.0	1.0
2,6-Dinitrotoluene	ND		ug/l	5.0	0.84
Acenaphthylene	ND		ug/l	2.0	0.32

Project Name: B14 GWS
Project Number: Not Specified

Lab Number: L2448938
Report Date: 09/09/24

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270E
Analytical Date: 09/06/24 12:24
Analyst: SMZ

Extraction Method: EPA 3510C
Extraction Date: 09/05/24 16:26

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 12 Batch: WG1968077-1					
Acenaphthene	ND		ug/l	2.0	0.40
2,4-Dinitrophenol	ND		ug/l	20	5.4
2,4-Dinitrotoluene	ND		ug/l	5.0	0.54
2,3,4,6-Tetrachlorophenol	ND		ug/l	5.0	2.2
Diethyl phthalate	ND		ug/l	5.0	0.76
Fluorene	ND		ug/l	2.0	0.44
4-Nitroaniline	ND		ug/l	5.0	1.4
NDPA/DPA	ND		ug/l	2.0	0.92
Hexachlorobenzene	ND		ug/l	2.0	0.45
Pentachlorophenol	ND		ug/l	10	2.5
Phenanthrene	ND		ug/l	2.0	0.42
Anthracene	ND		ug/l	2.0	0.47
Carbazole	ND		ug/l	2.0	0.31
Di-n-butylphthalate	ND		ug/l	5.0	0.96
Fluoranthene	ND		ug/l	2.0	0.41
Pyrene	ND		ug/l	2.0	0.41
3,3'-Dichlorobenzidine	ND		ug/l	5.0	1.8
Benzo(a)anthracene	ND		ug/l	2.0	0.32
Chrysene	ND		ug/l	1.5	0.22
Bis(2-ethylhexyl)phthalate	ND		ug/l	3.0	1.4
Di-n-octylphthalate	ND		ug/l	5.0	2.3
Benzo(b)fluoranthene	ND		ug/l	2.0	0.53
Benzo(k)fluoranthene	ND		ug/l	2.0	0.62
Benzo(a)pyrene	ND		ug/l	2.0	0.37
Indeno(1,2,3-cd)pyrene	ND		ug/l	2.0	0.48
Dibenzo(a,h)anthracene	ND		ug/l	2.0	0.29
Benzo(ghi)perylene	ND		ug/l	2.0	0.37

Project Name: B14 GWS
Project Number: Not Specified

Lab Number: L2448938
Report Date: 09/09/24

**Method Blank Analysis
Batch Quality Control**

Analytical Method: 1,8270E
Analytical Date: 09/06/24 12:24
Analyst: SMZ

Extraction Method: EPA 3510C
Extraction Date: 09/05/24 16:26

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 12 Batch: WG1968077-1					

Surrogate	%Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	49		21-120
Phenol-d6	36		10-120
Nitrobenzene-d5	70		23-120
2-Fluorobiphenyl	72		15-120
2,4,6-Tribromophenol	62		10-120
4-Terphenyl-d14	81		41-149

Lab Control Sample Analysis

Batch Quality Control

Project Name: B14 GWS
Project Number: Not Specified

Lab Number: L2448938
Report Date: 09/09/24

Parameter	LCS		LCSD		%Recovery Limits	RPD	RPD	
	%Recovery	Qual	%Recovery	Qual			Qual	Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01 Batch: WG1966246-2 WG1966246-3								
Benzaldehyde	62		65		40-140	5		30
Phenol	34		39		12-110	14		30
Bis(2-chloroethyl)ether	76		78		40-140	3		30
2-Chlorophenol	72		76		27-123	5		30
2-Methylphenol	65		74		30-130	13		30
Bis(2-chloroisopropyl)ether	83		83		40-140	0		30
Acetophenone	71		75		39-129	5		30
n-Nitrosodi-n-propylamine	82		84		29-132	2		30
3-Methylphenol/4-Methylphenol	68		72		30-130	6		30
Hexachloroethane	61		64		40-140	5		30
Nitrobenzene	76		79		40-140	4		30
Isophorone	79		82		40-140	4		30
2,4-Dimethylphenol	64		68		30-130	6		30
Bis(2-chloroethoxy)methane	80		81		40-140	1		30
2,4-Dichlorophenol	78		83		30-130	6		30
Naphthalene	69		71		40-140	3		30
4-Chloroaniline	77		68		40-140	12		30
Hexachlorobutadiene	60		61		40-140	2		30
Caprolactam	43		46		10-130	7		30
2-Methylnaphthalene	71		72		40-140	1		30
Hexachlorocyclopentadiene	43		45		40-140	5		30
1,2,4,5-Tetrachlorobenzene	61		62		2-134	2		30
2,4,6-Trichlorophenol	82		84		30-130	2		30

Lab Control Sample Analysis

Batch Quality Control

Project Name: B14 GWS
Project Number: Not Specified

Lab Number: L2448938
Report Date: 09/09/24

Parameter	LCS		LCSD		%Recovery Limits	RPD	Qual	RPD Limits
	%Recovery	Qual	%Recovery	Qual				
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01 Batch: WG1966246-2 WG1966246-3								
2,4,5-Trichlorophenol	88		93		30-130	6		30
Biphenyl	66		69		40-140	4		30
2-Chloronaphthalene	69		73		40-140	6		30
2-Nitroaniline	85		92		52-143	8		30
2,6-Dinitrotoluene	80		90		40-140	12		30
Acenaphthylene	75		80		45-123	6		30
Acenaphthene	75		75		37-111	0		30
2,4-Dinitrophenol	92		95		20-130	3		30
2,4-Dinitrotoluene	82		89		48-143	8		30
2,3,4,6-Tetrachlorophenol	96		96		54-145	0		30
Diethyl phthalate	84		85		40-140	1		30
Fluorene	77		80		40-140	4		30
4-Nitroaniline	78		85		51-143	9		30
NDPA/DPA	82		82		40-140	0		30
Hexachlorobenzene	77		77		40-140	0		30
Pentachlorophenol	87		93		9-103	7		30
Phenanthrene	82		81		40-140	1		30
Anthracene	84		86		40-140	2		30
Carbazole	85		88		55-144	3		30
Di-n-butylphthalate	99		98		40-140	1		30
Fluoranthene	87		88		40-140	1		30
Pyrene	88		90		26-127	2		30
3,3'-Dichlorobenzidine	88		83		40-140	6		30

Lab Control Sample Analysis Batch Quality Control

Project Name: B14 GWS
Project Number: Not Specified

Lab Number: L2448938
Report Date: 09/09/24

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01 Batch: WG1966246-2 WG1966246-3								
Benzo(a)anthracene	78		76		40-140	3		30
Chrysene	83		78		40-140	6		30
Bis(2-ethylhexyl)phthalate	99		92		40-140	7		30
Di-n-octylphthalate	102		96		40-140	6		30
Benzo(b)fluoranthene	77		73		40-140	5		30
Benzo(k)fluoranthene	91		84		40-140	8		30
Benzo(a)pyrene	85		80		40-140	6		30
Indeno(1,2,3-cd)pyrene	77		74		40-140	4		30
Dibenzo(a,h)anthracene	84		80		40-140	5		30
Benzo(ghi)perylene	82		76		40-140	8		30

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
2-Fluorophenol	50		56		21-120
Phenol-d6	34		39		10-120
Nitrobenzene-d5	76		77		23-120
2-Fluorobiphenyl	73		74		15-120
2,4,6-Tribromophenol	84		85		10-120
4-Terphenyl-d14	79		81		41-149

Lab Control Sample Analysis

Batch Quality Control

Project Name: B14 GWS
Project Number: Not Specified

Lab Number: L2448938
Report Date: 09/09/24

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS-SIM - Westborough Lab Associated sample(s): 01 Batch: WG1966248-2 WG1966248-3								
Naphthalene	69		70		40-140	1		40
2-Methylnaphthalene	70		71		40-140	1		40
Acenaphthylene	70		72		40-140	3		40
Acenaphthene	79		80		37-111	1		40
Fluorene	76		75		40-140	1		40
Phenanthrene	83		83		40-140	0		40
Anthracene	85		85		40-140	0		40
Fluoranthene	79		75		40-140	5		40
Pyrene	79		75		26-127	5		40
Benzo(a)anthracene	86		86		40-140	0		40
Chrysene	80		80		40-140	0		40
Benzo(b)fluoranthene	78		77		40-140	1		40
Benzo(k)fluoranthene	79		79		40-140	0		40
Benzo(a)pyrene	77		76		40-140	1		40
Indeno(1,2,3-cd)pyrene	81		79		40-140	3		40
Dibenzo(a,h)anthracene	77		75		40-140	3		40
Benzo(ghi)perylene	77		74		40-140	4		40

Lab Control Sample Analysis

Batch Quality Control

Project Name: B14 GWS
Project Number: Not Specified

Lab Number: L2448938
Report Date: 09/09/24

Parameter	<i>LCS</i> %Recovery	<i>Qual</i>	<i>LCSD</i> %Recovery	<i>Qual</i>	<i>%Recovery</i> Limits	<i>RPD</i>	<i>Qual</i>	<i>RPD</i> Limits
Semivolatile Organics by GC/MS-SIM - Westborough Lab Associated sample(s): 01 Batch: WG1966248-2 WG1966248-3								

<i>Surrogate</i>	<i>LCS</i> %Recovery	<i>Qual</i>	<i>LCSD</i> %Recovery	<i>Qual</i>	<i>Acceptance</i> Criteria
2-Fluorophenol	47		50		21-120
Phenol-d6	36		40		10-120
Nitrobenzene-d5	72		72		23-120
2-Fluorobiphenyl	74		76		15-120
2,4,6-Tribromophenol	83		81		10-120
4-Terphenyl-d14	68		65		41-149

Lab Control Sample Analysis

Batch Quality Control

Project Name: B14 GWS
Project Number: Not Specified

Lab Number: L2448938
Report Date: 09/09/24

Parameter	LCS		LCSD		%Recovery Limits	RPD	Qual	RPD Limits
	%Recovery	Qual	%Recovery	Qual				
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 02-10,12 Batch: WG1966501-2 WG1966501-3								
Benzaldehyde	48		44		40-140	9		30
Phenol	26		24		12-110	8		30
Bis(2-chloroethyl)ether	58		52		40-140	11		30
2-Chlorophenol	56		42		27-123	29		30
2-Methylphenol	52		41		30-130	24		30
Bis(2-chloroisopropyl)ether	70		64		40-140	9		30
Acetophenone	61		56		39-129	9		30
n-Nitrosodi-n-propylamine	64		57		29-132	12		30
3-Methylphenol/4-Methylphenol	48		43		30-130	11		30
Hexachloroethane	56		51		40-140	9		30
Nitrobenzene	58		54		40-140	7		30
Isophorone	60		55		40-140	9		30
2,4-Dimethylphenol	48		22	Q	30-130	74	Q	30
Bis(2-chloroethoxy)methane	62		57		40-140	8		30
2,4-Dichlorophenol	63		48		30-130	27		30
Naphthalene	56		50		40-140	11		30
4-Chloroaniline	38	Q	40		40-140	5		30
Hexachlorobutadiene	60		55		40-140	9		30
Caprolactam	45		45		10-130	0		30
2-Methylnaphthalene	60		54		40-140	11		30
Hexachlorocyclopentadiene	51		46		40-140	10		30
1,2,4,5-Tetrachlorobenzene	53		50		2-134	6		30
2,4,6-Trichlorophenol	68		34		30-130	67	Q	30

Lab Control Sample Analysis

Batch Quality Control

Project Name: B14 GWS
Project Number: Not Specified

Lab Number: L2448938
Report Date: 09/09/24

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 02-10,12 Batch: WG1966501-2 WG1966501-3								
2,4,5-Trichlorophenol	70		47		30-130	39	Q	30
Biphenyl	57		52		40-140	9		30
2-Chloronaphthalene	61		54		40-140	12		30
2-Nitroaniline	66		62		52-143	6		30
2,6-Dinitrotoluene	71		65		40-140	9		30
Acenaphthylene	61		56		45-123	9		30
Acenaphthene	59		54		37-111	9		30
2,4-Dinitrophenol	94		61		20-130	43	Q	30
2,4-Dinitrotoluene	64		58		48-143	10		30
2,3,4,6-Tetrachlorophenol	77		36	Q	54-145	73	Q	30
Diethyl phthalate	72		64		40-140	12		30
Fluorene	63		56		40-140	12		30
4-Nitroaniline	60		57		51-143	5		30
NDPA/DPA	67		60		40-140	11		30
Hexachlorobenzene	71		65		40-140	9		30
Pentachlorophenol	90		58		9-103	43	Q	30
Phenanthrene	60		56		40-140	7		30
Anthracene	62		57		40-140	8		30
Carbazole	62		56		55-144	10		30
Di-n-butylphthalate	73		66		40-140	10		30
Fluoranthene	66		60		40-140	10		30
Pyrene	64		58		26-127	10		30
3,3'-Dichlorobenzidine	44		40		40-140	10		30

Lab Control Sample Analysis

Batch Quality Control

Project Name: B14 GWS
Project Number: Not Specified

Lab Number: L2448938
Report Date: 09/09/24

Parameter	LCS		LCSD		%Recovery Limits	RPD	RPD	
	%Recovery	Qual	%Recovery	Qual			Qual	Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 02-10,12 Batch: WG1966501-2 WG1966501-3								
Benzo(a)anthracene	58		54		40-140	7		30
Chrysene	58		53		40-140	9		30
Bis(2-ethylhexyl)phthalate	72		68		40-140	6		30
Di-n-octylphthalate	77		74		40-140	4		30
Benzo(b)fluoranthene	64		61		40-140	5		30
Benzo(k)fluoranthene	58		56		40-140	4		30
Benzo(a)pyrene	61		58		40-140	5		30
Indeno(1,2,3-cd)pyrene	66		58		40-140	13		30
Dibenzo(a,h)anthracene	66		58		40-140	13		30
Benzo(ghi)perylene	68		61		40-140	11		30

Surrogate	LCS		LCSD		Acceptance Criteria
	%Recovery	Qual	%Recovery	Qual	
2-Fluorophenol	37		22		21-120
Phenol-d6	26		21		10-120
Nitrobenzene-d5	52		50		23-120
2-Fluorobiphenyl	57		52		15-120
2,4,6-Tribromophenol	66		42		10-120
4-Terphenyl-d14	66		57		41-149

Lab Control Sample Analysis

Batch Quality Control

Project Name: B14 GWS
Project Number: Not Specified

Lab Number: L2448938
Report Date: 09/09/24

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS-SIM - Westborough Lab Associated sample(s): 02-10,12 Batch: WG1966502-2 WG1966502-3								
Naphthalene	55		63		40-140	14		40
2-Methylnaphthalene	58		66		40-140	13		40
Acenaphthylene	58		67		40-140	14		40
Acenaphthene	60		70		37-111	15		40
Fluorene	60		69		40-140	14		40
Phenanthrene	62		73		40-140	16		40
Anthracene	65		76		40-140	16		40
Fluoranthene	59		67		40-140	13		40
Pyrene	59		67		26-127	13		40
Benzo(a)anthracene	65		77		40-140	17		40
Chrysene	58		69		40-140	17		40
Benzo(b)fluoranthene	56		68		40-140	19		40
Benzo(k)fluoranthene	59		68		40-140	14		40
Benzo(a)pyrene	56		67		40-140	18		40
Indeno(1,2,3-cd)pyrene	60		71		40-140	17		40
Dibenzo(a,h)anthracene	56		67		40-140	18		40
Benzo(ghi)perylene	56		66		40-140	16		40

Lab Control Sample Analysis

Batch Quality Control

Project Name: B14 GWS
Project Number: Not Specified

Lab Number: L2448938
Report Date: 09/09/24

Parameter	<i>LCS</i> %Recovery	<i>Qual</i>	<i>LCSD</i> %Recovery	<i>Qual</i>	<i>%Recovery</i> Limits	<i>RPD</i>	<i>Qual</i>	<i>RPD</i> Limits
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Semivolatile Organics by GC/MS-SIM - Westborough Lab Associated sample(s): 02-10,12 Batch: WG1966502-2 WG1966502-3

<i>Surrogate</i>	<i>LCS</i> %Recovery	<i>Qual</i>	<i>LCSD</i> %Recovery	<i>Qual</i>	<i>Acceptance</i> Criteria
2-Fluorophenol	37		29		21-120
Phenol-d6	28		32		10-120
Nitrobenzene-d5	57		66		23-120
2-Fluorobiphenyl	59		67		15-120
2,4,6-Tribromophenol	66		55		10-120
4-Terphenyl-d14	51		59		41-149

Lab Control Sample Analysis

Batch Quality Control

Project Name: B14 GWS
Project Number: Not Specified

Lab Number: L2448938
Report Date: 09/09/24

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 02,04,08 Batch: WG1967221-2 WG1967221-3								
Benzaldehyde	58		54		40-140	7		30
Phenol	38		25		12-110	41	Q	30
Bis(2-chloroethyl)ether	65		61		40-140	6		30
2-Chlorophenol	74		41		27-123	57	Q	30
2-Methylphenol	72		64		30-130	12		30
Bis(2-chloroisopropyl)ether	44		42		40-140	5		30
Acetophenone	73		70		39-129	4		30
n-Nitrosodi-n-propylamine	66		64		29-132	3		30
3-Methylphenol/4-Methylphenol	67		60		30-130	11		30
Hexachloroethane	42		50		40-140	17		30
Nitrobenzene	67		68		40-140	1		30
Isophorone	71		69		40-140	3		30
2,4-Dimethylphenol	74		71		30-130	4		30
Bis(2-chloroethoxy)methane	70		66		40-140	6		30
2,4-Dichlorophenol	88		49		30-130	57	Q	30
Naphthalene	60		62		40-140	3		30
4-Chloroaniline	64		62		40-140	3		30
Hexachlorobutadiene	55		70		40-140	24		30
Caprolactam	44		44		10-130	0		30
2-Methylnaphthalene	66		67		40-140	2		30
Hexachlorocyclopentadiene	49		53		40-140	8		30
1,2,4,5-Tetrachlorobenzene	65		68		2-134	5		30
2,4,6-Trichlorophenol	96		47		30-130	69	Q	30

Lab Control Sample Analysis

Batch Quality Control

Project Name: B14 GWS
Project Number: Not Specified

Lab Number: L2448938
Report Date: 09/09/24

Parameter	LCS	Qual	LCS	Qual	%Recovery	RPD	Qual	RPD
	%Recovery		%Recovery		Limits			Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 02,04,08 Batch: WG1967221-2 WG1967221-3								
2,4,5-Trichlorophenol	102		52		30-130	65	Q	30
Biphenyl	68		65		40-140	5		30
2-Chloronaphthalene	71		68		40-140	4		30
2-Nitroaniline	96		88		52-143	9		30
2,6-Dinitrotoluene	95		91		40-140	4		30
Acenaphthylene	75		72		45-123	4		30
Acenaphthene	70		66		37-111	6		30
2,4-Dinitrophenol	116		68		20-130	52	Q	30
2,4-Dinitrotoluene	87		81		48-143	7		30
2,3,4,6-Tetrachlorophenol	110		50	Q	54-145	75	Q	30
Diethyl phthalate	92		86		40-140	7		30
Fluorene	78		71		40-140	9		30
4-Nitroaniline	81		75		51-143	8		30
NDPA/DPA	86		76		40-140	12		30
Hexachlorobenzene	106		98		40-140	8		30
Pentachlorophenol	119	Q	71		9-103	51	Q	30
Phenanthrene	74		68		40-140	8		30
Anthracene	78		71		40-140	9		30
Carbazole	77		71		55-144	8		30
Di-n-butylphthalate	90		81		40-140	11		30
Fluoranthene	85		75		40-140	13		30
Pyrene	81		74		26-127	9		30
3,3'-Dichlorobenzidine	68		61		40-140	11		30

Lab Control Sample Analysis

Batch Quality Control

Project Name: B14 GWS
Project Number: Not Specified

Lab Number: L2448938
Report Date: 09/09/24

Parameter	LCS		LCSD		%Recovery Limits	RPD	RPD	
	%Recovery	Qual	%Recovery	Qual			Qual	Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 02,04,08 Batch: WG1967221-2 WG1967221-3								
Benzo(a)anthracene	73		67		40-140	9		30
Chrysene	72		66		40-140	9		30
Bis(2-ethylhexyl)phthalate	85		80		40-140	6		30
Di-n-octylphthalate	92		85		40-140	8		30
Benzo(b)fluoranthene	80		75		40-140	6		30
Benzo(k)fluoranthene	78		73		40-140	7		30
Benzo(a)pyrene	85		77		40-140	10		30
Indeno(1,2,3-cd)pyrene	82		78		40-140	5		30
Dibenzo(a,h)anthracene	86		77		40-140	11		30
Benzo(ghi)perylene	88		80		40-140	10		30

Surrogate	LCS		LCSD		Acceptance Criteria
	%Recovery	Qual	%Recovery	Qual	
2-Fluorophenol	53		23		21-120
Phenol-d6	36		22		10-120
Nitrobenzene-d5	60		60		23-120
2-Fluorobiphenyl	70		68		15-120
2,4,6-Tribromophenol	106		55		10-120
4-Terphenyl-d14	81		74		41-149

Lab Control Sample Analysis

Batch Quality Control

Project Name: B14 GWS
Project Number: Not Specified

Lab Number: L2448938
Report Date: 09/09/24

Parameter	LCS		LCSD		%Recovery Limits	RPD	Qual	RPD Limits
	%Recovery	Qual	%Recovery	Qual				
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 12 Batch: WG1968077-2 WG1968077-3								
Benzaldehyde	61		72		40-140	17		30
Phenol	44		48		12-110	9		30
Bis(2-chloroethyl)ether	69		84		40-140	20		30
2-Chlorophenol	70		80		27-123	13		30
2-Methylphenol	69		67		30-130	3		30
Bis(2-chloroisopropyl)ether	33	Q	42		40-140	24		30
Acetophenone	71		79		39-129	11		30
n-Nitrosodi-n-propylamine	68		83		29-132	20		30
3-Methylphenol/4-Methylphenol	61		73		30-130	18		30
Hexachloroethane	64		70		40-140	9		30
Nitrobenzene	72		87		40-140	19		30
Isophorone	69		86		40-140	22		30
2,4-Dimethylphenol	55		57		30-130	4		30
Bis(2-chloroethoxy)methane	72		81		40-140	12		30
2,4-Dichlorophenol	72		78		30-130	8		30
Naphthalene	66		73		40-140	10		30
4-Chloroaniline	56		70		40-140	22		30
Hexachlorobutadiene	68		67		40-140	1		30
Caprolactam	17		18		10-130	6		30
2-Methylnaphthalene	74		76		40-140	3		30
Hexachlorocyclopentadiene	54		56		40-140	4		30
1,2,4,5-Tetrachlorobenzene	68		69		2-134	1		30
2,4,6-Trichlorophenol	69		80		30-130	15		30

Lab Control Sample Analysis

Batch Quality Control

Project Name: B14 GWS
Project Number: Not Specified

Lab Number: L2448938
Report Date: 09/09/24

Parameter	LCS		LCSD		%Recovery Limits	RPD	Qual	RPD Limits
	%Recovery	Qual	%Recovery	Qual				
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 12 Batch: WG1968077-2 WG1968077-3								
2,4,5-Trichlorophenol	75		88		30-130	16		30
Biphenyl	64		74		40-140	14		30
2-Chloronaphthalene	74		77		40-140	4		30
2-Nitroaniline	86		84		52-143	2		30
2,6-Dinitrotoluene	80		78		40-140	3		30
Acenaphthylene	70		79		45-123	12		30
Acenaphthene	70		77		37-111	10		30
2,4-Dinitrophenol	42		71		20-130	51	Q	30
2,4-Dinitrotoluene	80		84		48-143	5		30
2,3,4,6-Tetrachlorophenol	67		84		54-145	23		30
Diethyl phthalate	67		76		40-140	13		30
Fluorene	75		79		40-140	5		30
4-Nitroaniline	83		89		51-143	7		30
NDPA/DPA	73		79		40-140	8		30
Hexachlorobenzene	64		73		40-140	13		30
Pentachlorophenol	56		64		9-103	13		30
Phenanthrene	76		81		40-140	6		30
Anthracene	79		87		40-140	10		30
Carbazole	79		90		55-144	13		30
Di-n-butylphthalate	79		87		40-140	10		30
Fluoranthene	77		84		40-140	9		30
Pyrene	80		90		26-127	12		30
3,3'-Dichlorobenzidine	73		69		40-140	6		30

Lab Control Sample Analysis

Batch Quality Control

Project Name: B14 GWS
Project Number: Not Specified

Lab Number: L2448938
Report Date: 09/09/24

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 12 Batch: WG1968077-2 WG1968077-3								
Benzo(a)anthracene	75		82		40-140	9		30
Chrysene	73		81		40-140	10		30
Bis(2-ethylhexyl)phthalate	73		86		40-140	16		30
Di-n-octylphthalate	78		88		40-140	12		30
Benzo(b)fluoranthene	77		85		40-140	10		30
Benzo(k)fluoranthene	76		88		40-140	15		30
Benzo(a)pyrene	79		87		40-140	10		30
Indeno(1,2,3-cd)pyrene	75		93		40-140	21		30
Dibenzo(a,h)anthracene	82		88		40-140	7		30
Benzo(ghi)perylene	77		86		40-140	11		30

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
2-Fluorophenol	48		61		21-120
Phenol-d6	38		47		10-120
Nitrobenzene-d5	72		82		23-120
2-Fluorobiphenyl	70		79		15-120
2,4,6-Tribromophenol	64		75		10-120
4-Terphenyl-d14	75		87		41-149

Project Name: B14 GWS
Project Number: Not Specified

Lab Number: L2448938
Report Date: 09/09/24

Sample Receipt and Container Information

Were project specific reporting limits specified?

YES

Cooler Information

Cooler **Custody Seal**
A Absent

Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L2448938-01A	Vial HCl preserved	A	NA		5.1	Y	Absent		PA-8260-SIM(14),PA-8260(14)
L2448938-01B	Vial HCl preserved	A	NA		5.1	Y	Absent		PA-8260-SIM(14),PA-8260(14)
L2448938-01C	Vial HCl preserved	A	NA		5.1	Y	Absent		PA-8260-SIM(14),PA-8260(14)
L2448938-01D	Amber 100ml unpreserved	A	7	7	5.1	Y	Absent		PA-8270-RVT(7),PA-8270SIM-RVT(7)
L2448938-01E	Amber 100ml unpreserved	A	7	7	5.1	Y	Absent		PA-8270-RVT(7),PA-8270SIM-RVT(7)
L2448938-02A	Vial HCl preserved	A	NA		5.1	Y	Absent		PA-8260-SIM(14),PA-8260(14)
L2448938-02B	Vial HCl preserved	A	NA		5.1	Y	Absent		PA-8260-SIM(14),PA-8260(14)
L2448938-02C	Vial HCl preserved	A	NA		5.1	Y	Absent		PA-8260-SIM(14),PA-8260(14)
L2448938-02D	Amber 100ml unpreserved	A	7	7	5.1	Y	Absent		PA-8270-RVT(7),PA-8270SIM-RVT(7)
L2448938-02E	Amber 100ml unpreserved	A	7	7	5.1	Y	Absent		PA-8270-RVT(7),PA-8270SIM-RVT(7)
L2448938-03A	Vial HCl preserved	A	NA		5.1	Y	Absent		PA-8260-SIM(14),PA-8260(14)
L2448938-03B	Vial HCl preserved	A	NA		5.1	Y	Absent		PA-8260-SIM(14),PA-8260(14)
L2448938-03C	Vial HCl preserved	A	NA		5.1	Y	Absent		PA-8260-SIM(14),PA-8260(14)
L2448938-03D	Amber 100ml unpreserved	A	7	7	5.1	Y	Absent		PA-8270-RVT(7),PA-8270SIM-RVT(7)
L2448938-03E	Amber 100ml unpreserved	A	7	7	5.1	Y	Absent		PA-8270-RVT(7),PA-8270SIM-RVT(7)
L2448938-04A	Vial HCl preserved	A	NA		5.1	Y	Absent		PA-8260-SIM(14),PA-8260(14)
L2448938-04B	Vial HCl preserved	A	NA		5.1	Y	Absent		PA-8260-SIM(14),PA-8260(14)
L2448938-04C	Vial HCl preserved	A	NA		5.1	Y	Absent		PA-8260-SIM(14),PA-8260(14)
L2448938-04D	Amber 100ml unpreserved	A	11	11	5.1	Y	Absent		PA-8270-RVT(7),PA-8270SIM-RVT(7)
L2448938-04E	Amber 100ml unpreserved	A	11	11	5.1	Y	Absent		PA-8270-RVT(7),PA-8270SIM-RVT(7)
L2448938-05A	Vial HCl preserved	A	NA		5.1	Y	Absent		PA-8260-SIM(14),PA-8260(14)
L2448938-05B	Vial HCl preserved	A	NA		5.1	Y	Absent		PA-8260-SIM(14),PA-8260(14)
L2448938-05C	Vial HCl preserved	A	NA		5.1	Y	Absent		PA-8260-SIM(14),PA-8260(14)

Project Name: B14 GWS**Lab Number:** L2448938**Project Number:** Not Specified**Report Date:** 09/09/24**Container Information**

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L2448938-05D	Amber 100ml unpreserved	A	9	9	5.1	Y	Absent		PA-8270-RVT(7),PA-8270SIM-RVT(7)
L2448938-05E	Amber 100ml unpreserved	A	9	9	5.1	Y	Absent		PA-8270-RVT(7),PA-8270SIM-RVT(7)
L2448938-06A	Vial HCl preserved	A	NA		5.1	Y	Absent		PA-8260-SIM(14),PA-8260(14)
L2448938-06B	Vial HCl preserved	A	NA		5.1	Y	Absent		PA-8260-SIM(14),PA-8260(14)
L2448938-06C	Vial HCl preserved	A	NA		5.1	Y	Absent		PA-8260-SIM(14),PA-8260(14)
L2448938-06D	Amber 100ml unpreserved	A	8	8	5.1	Y	Absent		PA-8270SIM-RVT(7),PA-8270-RVT(7)
L2448938-06E	Amber 100ml unpreserved	A	8	8	5.1	Y	Absent		PA-8270SIM-RVT(7),PA-8270-RVT(7)
L2448938-07A	Vial HCl preserved	A	NA		5.1	Y	Absent		PA-8260-SIM(14),PA-8260(14)
L2448938-07B	Vial HCl preserved	A	NA		5.1	Y	Absent		PA-8260-SIM(14),PA-8260(14)
L2448938-07C	Vial HCl preserved	A	NA		5.1	Y	Absent		PA-8260-SIM(14),PA-8260(14)
L2448938-07D	Amber 100ml unpreserved	A	11	11	5.1	Y	Absent		PA-8270SIM-RVT(7),PA-8270-RVT(7)
L2448938-07E	Amber 100ml unpreserved	A	11	11	5.1	Y	Absent		PA-8270SIM-RVT(7),PA-8270-RVT(7)
L2448938-08A	Vial HCl preserved	A	NA		5.1	Y	Absent		PA-8260-SIM(14),PA-8260(14)
L2448938-08B	Vial HCl preserved	A	NA		5.1	Y	Absent		PA-8260-SIM(14),PA-8260(14)
L2448938-08C	Vial HCl preserved	A	NA		5.1	Y	Absent		PA-8260-SIM(14),PA-8260(14)
L2448938-08D	Amber 100ml unpreserved	A	6	6	5.1	Y	Absent		PA-8270-RVT(7),PA-8270SIM-RVT(7)
L2448938-08E	Amber 100ml unpreserved	A	6	6	5.1	Y	Absent		PA-8270-RVT(7),PA-8270SIM-RVT(7)
L2448938-09A	Vial HCl preserved	A	NA		5.1	Y	Absent		PA-8260-SIM(14),PA-8260(14)
L2448938-09B	Vial HCl preserved	A	NA		5.1	Y	Absent		PA-8260-SIM(14),PA-8260(14)
L2448938-09C	Vial HCl preserved	A	NA		5.1	Y	Absent		PA-8260-SIM(14),PA-8260(14)
L2448938-09D	Amber 100ml unpreserved	A	11	11	5.1	Y	Absent		PA-8270-RVT(7),PA-8270SIM-RVT(7)
L2448938-09E	Amber 100ml unpreserved	A	11	11	5.1	Y	Absent		PA-8270-RVT(7),PA-8270SIM-RVT(7)
L2448938-10A	Vial HCl preserved	A	NA		5.1	Y	Absent		PA-8260-SIM(14),PA-8260(14)
L2448938-10B	Vial HCl preserved	A	NA		5.1	Y	Absent		PA-8260-SIM(14),PA-8260(14)
L2448938-10C	Vial HCl preserved	A	NA		5.1	Y	Absent		PA-8260-SIM(14),PA-8260(14)
L2448938-10D	Amber 100ml unpreserved	A	6	6	5.1	Y	Absent		PA-8270SIM-RVT(7),PA-8270-RVT(7)
L2448938-10E	Amber 100ml unpreserved	A	6	6	5.1	Y	Absent		PA-8270SIM-RVT(7),PA-8270-RVT(7)
L2448938-11A	Vial HCl preserved	A	NA		5.1	Y	Absent		PA-8260-SIM(14),PA-8260(14)

Project Name: B14 GWS
Project Number: Not Specified

Serial_No:09092414:28
Lab Number: L2448938
Report Date: 09/09/24

Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L2448938-11B	Vial HCl preserved	A	NA		5.1	Y	Absent		PA-8260-SIM(14),PA-8260(14)
L2448938-11C	Vial HCl preserved	A	NA		5.1	Y	Absent		PA-8260-SIM(14),PA-8260(14)
L2448938-11D	Vial HCl preserved	A	NA		5.1	Y	Absent		PA-8260-SIM(14),PA-8260(14)
L2448938-12A	Vial HCl preserved	A	NA		5.1	Y	Absent		PA-8260-SIM(14),PA-8260(14)
L2448938-12B	Vial HCl preserved	A	NA		5.1	Y	Absent		PA-8260-SIM(14),PA-8260(14)
L2448938-12C	Vial HCl preserved	A	NA		5.1	Y	Absent		PA-8260-SIM(14),PA-8260(14)
L2448938-12D	Amber 100ml unpreserved	A	7	7	5.1	Y	Absent		PA-8270SIM-RVT(7),PA-8270-RVT(7)
L2448938-12E	Amber 100ml unpreserved	A	7	7	5.1	Y	Absent		PA-8270SIM-RVT(7),PA-8270-RVT(7)

Project Name: B14 GWS
Project Number: Not Specified

Lab Number: L2448938
Report Date: 09/09/24

GLOSSARY

Acronyms

DL	- Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the limit of quantitation (LOQ). The DL includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
EDL	- Estimated Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The EDL includes any adjustments from dilutions, concentrations or moisture content, where applicable. The use of EDLs is specific to the analysis of PAHs using Solid-Phase Microextraction (SPME).
EMPC	- Estimated Maximum Possible Concentration: The concentration that results from the signal present at the retention time of an analyte when the ions meet all of the identification criteria except the ion abundance ratio criteria. An EMPC is a worst-case estimate of the concentration.
EPA	- Environmental Protection Agency.
LCS	- Laboratory Control Sample: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
LCSD	- Laboratory Control Sample Duplicate: Refer to LCS.
LFB	- Laboratory Fortified Blank: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
LOD	- Limit of Detection: This value represents the level to which a target analyte can reliably be detected for a specific analyte in a specific matrix by a specific method. The LOD includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
LOQ	- Limit of Quantitation: The value at which an instrument can accurately measure an analyte at a specific concentration. The LOQ includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.) Limit of Quantitation: The value at which an instrument can accurately measure an analyte at a specific concentration. The LOQ includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
MDL	- Method Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The MDL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
MS	- Matrix Spike Sample: A sample prepared by adding a known mass of target analyte to a specified amount of matrix sample for which an independent estimate of target analyte concentration is available. For Method 332.0, the spike recovery is calculated using the native concentration, including estimated values.
MSD	- Matrix Spike Sample Duplicate: Refer to MS.
NA	- Not Applicable.
NC	- Not Calculated: Term is utilized when one or more of the results utilized in the calculation are non-detect at the parameter's reporting unit.
NDPA/DPA	- N-Nitrosodiphenylamine/Diphenylamine.
NI	- Not Ignitable.
NP	- Non-Plastic: Term is utilized for the analysis of Atterberg Limits in soil.
NR	- No Results: Term is utilized when 'No Target Compounds Requested' is reported for the analysis of Volatile or Semivolatile Organic TIC only requests.
RL	- Reporting Limit: The value at which an instrument can accurately measure an analyte at a specific concentration. The RL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
RPD	- Relative Percent Difference: The results from matrix and/or matrix spike duplicates are primarily designed to assess the precision of analytical results in a given matrix and are expressed as relative percent difference (RPD). Values which are less than five times the reporting limit for any individual parameter are evaluated by utilizing the absolute difference between the values; although the RPD value will be provided in the report.
SRM	- Standard Reference Material: A reference sample of a known or certified value that is of the same or similar matrix as the associated field samples.
STLP	- Semi-dynamic Tank Leaching Procedure per EPA Method 1315.
TEF	- Toxic Equivalency Factors: The values assigned to each dioxin and furan to evaluate their toxicity relative to 2,3,7,8-TCDD.
TEQ	- Toxic Equivalent: The measure of a sample's toxicity derived by multiplying each dioxin and furan by its corresponding TEF and then summing the resulting values.
TIC	- Tentatively Identified Compound: A compound that has been identified to be present and is not part of the target compound list (TCL) for the method and/or program. All TICs are qualitatively identified and reported as estimated concentrations.

Report Format: DU Report with 'J' Qualifiers



Project Name: B14 GWS
Project Number: Not Specified

Lab Number: L2448938
Report Date: 09/09/24

Footnotes

- 1 - The reference for this analyte should be considered modified since this analyte is absent from the target analyte list of the original method.

Terms

Analytical Method: Both the document from which the method originates and the analytical reference method. (Example: EPA 8260B is shown as 1,8260B.) The codes for the reference method documents are provided in the References section of the Addendum.

Chlordane: The target compound Chlordane (CAS No. 57-74-9) is reported for GC ECD analyses. Per EPA, this compound "refers to a mixture of chlordane isomers, other chlorinated hydrocarbons and numerous other components." (Reference: USEPA Toxicological Review of Chlordane, In Support of Summary Information on the Integrated Risk Information System (IRIS), December 1997.)

Difference: With respect to Total Oxidizable Precursor (TOP) Assay analysis, the difference is defined as the Post-Treatment value minus the Pre-Treatment value.

Final pH: As it pertains to Sample Receipt & Container Information section of the report, Final pH reflects pH of container determined after adjustment at the laboratory, if applicable. If no adjustment required, value reflects Initial pH.

Frozen Date/Time: With respect to Volatile Organics in soil, Frozen Date/Time reflects the date/time at which associated Reagent Water-preserved vials were initially frozen. Note: If frozen date/time is beyond 48 hours from sample collection, value will be reflected in 'bold'.

Gasoline Range Organics (GRO): Gasoline Range Organics (GRO) results include all chromatographic peaks eluting from Methyl tert butyl ether through Naphthalene, with the exception of GRO analysis in support of State of Ohio programs, which includes all chromatographic peaks eluting from Hexane through Dodecane.

Initial pH: As it pertains to Sample Receipt & Container Information section of the report, Initial pH reflects pH of container determined upon receipt, if applicable.

PAH Total: With respect to Alkylated PAH analyses, the 'PAHs, Total' result is defined as the summation of results for all or a subset of the following compounds: Naphthalene, C1-C4 Naphthalenes, 2-Methylnaphthalene, 1-Methylnaphthalene, Biphenyl, Acenaphthylene, Acenaphthene, Fluorene, C1-C3 Fluorenes, Phenanthrene, C1-C4 Phenanthrenes/Anthracenes, Anthracene, Fluoranthene, Pyrene, C1-C4 Fluoranthenes/Pyrenes, Benz(a)anthracene, Chrysene, C1-C4 Chrysenes, Benzo(b)fluoranthene, Benzo(j)+(k)fluoranthene, Benzo(e)pyrene, Benzo(a)pyrene, Perylene, Indeno(1,2,3-cd)pyrene, Dibenz(ah)+(ac)anthracene, Benzo(g,h,i)perylene. If a 'Total' result is requested, the results of its individual components will also be reported.

PFAS Total: With respect to PFAS analyses, the 'PFAS, Total (5)' result is defined as the summation of results for: PFHpA, PFHxS, PFOA, PFNA and PFOS. In addition, the 'PFAS, Total (6)' result is defined as the summation of results for: PFHpA, PFHxS, PFOA, PFNA, PFDA and PFOS. For MassDEP DW compliance analysis only, the 'PFAS, Total (6)' result is defined as the summation of results at or above the RL. Note: If a 'Total' result is requested, the results of its individual components will also be reported.

Total: With respect to Organic analyses, a 'Total' result is defined as the summation of results for individual isomers or Aroclors. If a 'Total' result is requested, the results of its individual components will also be reported. This is applicable to 'Total' results for methods 8260, 8081 and 8082.

Data Qualifiers

- A** - Spectra identified as "Aldol Condensates" are byproducts of the extraction/concentration procedures when acetone is introduced in the process.
- B** - The analyte was detected above the reporting limit in the associated method blank. Flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For MCP-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For DOD-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank AND the analyte was detected above one-half the reporting limit (or above the reporting limit for common lab contaminants) in the associated method blank. For NJ-Air-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte above the reporting limit. For NJ-related projects (excluding Air), flag only applies to associated field samples that have detectable concentrations of the analyte, which was detected above the reporting limit in the associated method blank or above five times the reporting limit for common lab contaminants (Phthalates, Acetone, Methylene Chloride, 2-Butanone).
- C** - Co-elution: The target analyte co-elutes with a known lab standard (i.e. surrogate, internal standards, etc.) for co-extracted analyses.
- D** - Concentration of analyte was quantified from diluted analysis. Flag only applies to field samples that have detectable concentrations of the analyte.
- E** - Concentration of analyte exceeds the range of the calibration curve and/or linear range of the instrument.
- F** - The ratio of quantifier ion response to qualifier ion response falls outside of the laboratory criteria. Results are considered to be an estimated maximum concentration.
- G** - The concentration may be biased high due to matrix interferences (i.e. co-elution) with non-target compound(s). The result should be considered estimated.
- H** - The analysis of pH was performed beyond the regulatory-required holding time of 15 minutes from the time of sample collection.
- I** - The lower value for the two columns has been reported due to obvious interference.
- J** - Estimated value. The Target analyte concentration is below the quantitation limit (RL), but above the Method Detection Limit (MDL) or Estimated Detection Limit (EDL) for SPME-related analyses. This represents an estimated concentration for Tentatively

Report Format: DU Report with 'J' Qualifiers



Project Name: B14 GWS
Project Number: Not Specified

Lab Number: L2448938
Report Date: 09/09/24

Data Qualifiers

Identified Compounds (TICs). For calculated parameters, this represents that one or more values used in the calculation were estimated.

- M** - Reporting Limit (RL) exceeds the MCP CAM Reporting Limit for this analyte.
- ND** - Not detected at the method detection limit (MDL) for the sample, or estimated detection limit (EDL) for SPME-related analyses.
- NJ** - Presumptive evidence of compound. This represents an estimated concentration for Tentatively Identified Compounds (TICs), where the identification is based on a mass spectral library search.
- P** - The RPD between the results for the two columns exceeds the method-specified criteria.
- Q** - The quality control sample exceeds the associated acceptance criteria. For DOD-related projects, LCS and/or Continuing Calibration Standard exceedences are also qualified on all associated sample results. Note: This flag is not applicable for matrix spike recoveries when the sample concentration is greater than 4x the spike added or for batch duplicate RPD when the sample concentrations are less than 5x the RL. (Metals only.)
- R** - Analytical results are from sample re-analysis.
- RE** - Analytical results are from sample re-extraction.
- S** - Analytical results are from modified screening analysis.
- V** - The surrogate associated with this target analyte has a recovery outside the QC acceptance limits. (Applicable to MassDEP DW Compliance samples only.)
- Z** - The batch matrix spike and/or duplicate associated with this target analyte has a recovery/RPD outside the QC acceptance limits. (Applicable to MassDEP DW Compliance samples only.)

Project Name: B14 GWS
Project Number: Not Specified

Lab Number: L2448938
Report Date: 09/09/24

REFERENCES

- 1 Test Methods for Evaluating Solid Waste: Physical/Chemical Methods. EPA SW-846. Third Edition. Updates I - VI, 2018.

LIMITATION OF LIABILITIES

Alpha Analytical performs services with reasonable care and diligence normal to the analytical testing laboratory industry. In the event of an error, the sole and exclusive responsibility of Alpha Analytical shall be to re-perform the work at it's own expense. In no event shall Alpha Analytical be held liable for any incidental, consequential or special damages, including but not limited to, damages in any way connected with the use of, interpretation of, information or analysis provided by Alpha Analytical.

We strongly urge our clients to comply with EPA protocol regarding sample volume, preservation, cooling, containers, sampling procedures, holding time and splitting of samples in the field.



Certification Information

The following analytes are not included in our Primary NELAP Scope of Accreditation:

Westborough Facility

EPA 624.1: m/p-xylene, o-xylene, Naphthalene

EPA 625.1: alpha-Terpineol

EPA 8260D: NPW: 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene; SCM: Iodomethane (methyl iodide), 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene.

EPA 8270E: NPW: Dimethylnaphthalene,1,4-Diphenylhydrazine, alpha-Terpineol, Azobenzene; SCM: Dimethylnaphthalene,1,4-Diphenylhydrazine.

SM4500: NPW: Amenable Cyanide; SCM: Total Phosphorus, TKN, NO₂, NO₃.

Mansfield Facility

SM 2540D: TSS.

EPA TO-15: Halothane, 2,4,4-Trimethyl-2-pentene, 2,4,4-Trimethyl-1-pentene, Thiophene, 2-Methylthiophene,

3-Methylthiophene, 2-Ethylthiophene, 1,2,3-Trimethylbenzene, Indan, Indene, 1,2,4,5-Tetramethylbenzene, Benzothiophene, 1-Methylnaphthalene.

Nonpotable Water: EPA RSK-175 Dissolved Gases

Biological Tissue Matrix: EPA 3050B

The following analytes are included in our Massachusetts DEP Scope of Accreditation

Westborough Facility:

Drinking Water

EPA 300.0: Chloride, Nitrate-N, Fluoride, Sulfate; **EPA 353.2:** Nitrate-N, Nitrite-N; **SM4500NO3-F:** Nitrate-N, Nitrite-N; **SM4500F-C, SM4500CN-CE,**

EPA 180.1, SM2130B, SM4500Cl-D, SM2320B, SM2540C, SM4500H-B, SM4500NO2-B

EPA 524.2: THMs and VOCs; **EPA 504.1:** EDB, DBCP.

Microbiology: SM9215B; SM9223-P/A, SM9223B-Colilert-QT, SM9222D.

Non-Potable Water

SM4500H,B, EPA 120.1, SM2510B, SM2540C, SM2320B, SM4500CL-E, SM4500F-BC, SM4500NH3-BH: Ammonia-N and Kjeldahl-N, **EPA 350.1:**

Ammonia-N, **LACHAT 10-107-06-1-B:** Ammonia-N, **EPA 351.1, SM4500NO3-F, EPA 353.2:** Nitrate-N, **SM4500P-E, SM4500P-B, E, SM4500SO4-E,**

SM5220D, EPA 410.4, SM5210B, SM5310C, SM4500CL-D, EPA 1664, EPA 420.1, SM4500-CN-CE, SM2540D, EPA 300: Chloride, Sulfate, Nitrate.

EPA 624.1: Volatile Halocarbons & Aromatics,

EPA 608.3: Chlordane, Toxaphene, Aldrin, alpha-BHC, beta-BHC, gamma-BHC, delta-BHC, Dieldrin, DDD, DDE, DDT, Endosulfan I, Endosulfan II, Endosulfan sulfate, Endrin, Endrin Aldehyde, Heptachlor, Heptachlor Epoxide, PCBs

EPA 625.1: SVOC (Acid/Base/Neutral Extractables).

Microbiology: SM9223B-Colilert-QT; Enterolert-QT, EPA 1600, EPA 1603, SM9222D.

Mansfield Facility:

Drinking Water

EPA 200.7: Al, Ba, Cd, Cr, Cu, Fe, Mn, Ni, Na, Ag, Ca, Zn. **EPA 200.8:** Al, Sb, As, Ba, Be, Cd, Cr, Cu, Pb, Mn, Ni, Se, Ag, TL, Zn. **EPA 245.1** Hg.

EPA 522, EPA 537.1.

Non-Potable Water

EPA 200.7: Al, Sb, As, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Mo, Ni, K, Se, Ag, Na, Sr, TL, Ti, V, Zn.

EPA 200.8: Al, Sb, As, Be, Cd, Cr, Cu, Fe, Pb, Mn, Ni, K, Se, Ag, Na, TL, Zn.

EPA 245.1 Hg.

SM2340B

For a complete listing of analytes and methods, please contact your Alpha Project Manager.



CHAIN OF CUSTODY

PAGE 1 OF 2

Date Rec'd in Lab: 8/28/24
Report Information - Data Deliverables

Client Information
Client: TPA
Address: 6995 Detrick Blvd Sparrows Point, MD
Phone:
Fax:
Email: jberne@comcast.net kquille@armstrong.net
 These samples have been previously analyzed by Alpha

Project Information
Project Name: 314 GWS
Project Location: B14
Project #:
Project Manager:
ALPHA Quote #:
Turn-Around Time
 Standard RUSH (only confirmed if pre-approved)
Date Due: Time:

FAX EMAIL Same as Client info PO #:
 ADEx Add'l Deliverables
Regulatory Requirements/Report Limits
State /Fed Program Criteria

Other Project Specific Requirements/Comments/Detection Limits:

ANALYSIS
VOCs 0266
SVOCs 0270 sum

SAMPLE HANDLING
Filtration _____
 Done
 Not needed
 Lab to do Preservation
 Lab to do
(Please specify below)

TOTAL # BOTTLES

ALPHA Lab ID (Lab Use Only)	Sample ID	Collection		Sample Matrix	Sampler's Initials	Analysis		Sample Specific Comments
		Date	Time			VOCs	SVOCs	
48938-01	H115-mws	8/26/24	1640	W	wkf	X	X	PH 8.42
-02	H114-mws	8/27/24	905	W	wkf	X	X	PH 8.10
-03	H113-mws	8/27/24	750	W	wkf	X	X	PH 9.59
-04	H111-mws	8/27/24	1000	W	wkf	X	X	PH 11.32
-05	TM04-P2mo.6	8/27/24	920	W	wkf	X	X	PH 9.57
-06	H122-mws	8/27/24	1217	W	wkf	X	X	PH 8.42
-07	H110-mws	8/27/24	1125	W	wkf	X	X	PH 11.32
-08	H121-mws	8/27/24	1322	W	wkf	X	X	PH 7.38
-09	H119-mws	8/27/24	1425	W	wkf	X	X	PH 11.5)
-10	Field Blank	8/27/24	1500	W	wkf	X	X	

Container Type
Preservative

Please print clearly, legibly and completely. Samples can not be logged in and turnaround time clock will not start until any ambiguities are resolved. All samples submitted are subject to Alpha's Terms and Conditions. See reverse side.

Relinquished By: *Anthony Green* Date/Time: 8/27/24 1700
Received By: *Anthony Green* Date/Time: 8/27/24 1700
Anthony Green *Anthony Green*

8/28/24 03:25



ANALYTICAL REPORT

Lab Number:	L2449492
Client:	Tradepoint Atlantic 1600 Sparrows Point Boulevard Baltimore, MD 21219
ATTN:	Robert Tworkowski
Phone:	(443) 649-5073
Project Name:	B14 GW
Project Number:	21010214
Report Date:	09/09/24

The original project report/data package is held by Alpha Analytical. This report/data package is paginated and should be reproduced only in its entirety. Alpha Analytical holds no responsibility for results and/or data that are not consistent with the original.

Certifications & Approvals: MA (M-MA086), NH NELAP (2064), CT (PH-0826), IL (200077), IN (C-MA-03), KY (KY98045), ME (MA00086), MD (348), NJ (MA935), NY (11148), NC (25700/666), OR (MA-1316), PA (68-03671), RI (LAO00065), TX (T104704476), VT (VT-0935), VA (460195), USDA (Permit #525-23-122-91930A1).

Eight Walkup Drive, Westborough, MA 01581-1019
508-898-9220 (Fax) 508-898-9193 800-624-9220 - www.alphalab.com



Project Name: B14 GW
Project Number: 21010214

Lab Number: L2449492
Report Date: 09/09/24

Alpha Sample ID	Client ID	Matrix	Sample Location	Collection Date/Time	Receive Date
L2449492-01	B24-001-MWS	WATER	B14	08/29/24 12:20	08/29/24
L2449492-02	TB-001	WATER	B14	08/29/24 00:00	08/29/24

Project Name: B14 GW
Project Number: 21010214

Lab Number: L2449492
Report Date: 09/09/24

Case Narrative

The samples were received in accordance with the Chain of Custody and no significant deviations were encountered during the preparation or analysis unless otherwise noted. Sample Receipt, Container Information, and the Chain of Custody are located at the back of the report.

Results contained within this report relate only to the samples submitted under this Alpha Lab Number and meet NELAP requirements for all NELAP accredited parameters unless otherwise noted in the following narrative. The data presented in this report is organized by parameter (i.e. VOC, SVOC, etc.). Sample specific Quality Control data (i.e. Surrogate Spike Recovery) is reported at the end of the target analyte list for each individual sample, followed by the Laboratory Batch Quality Control at the end of each parameter. Tentatively Identified Compounds (TICs), if requested, are reported for compounds identified to be present and are not part of the method/program Target Compound List, even if only a subset of the TCL are being reported. If a sample was re-analyzed or re-extracted due to a required quality control corrective action and if both sets of data are reported, the Laboratory ID of the re-analysis or re-extraction is designated with an "R" or "RE", respectively.

When multiple Batch Quality Control elements are reported (e.g. more than one LCS), the associated samples for each element are noted in the grey shaded header line of each data table. Any Laboratory Batch, Sample Specific % recovery or RPD value that is outside the listed Acceptance Criteria is bolded in the report. In reference to questions H (CAM) or 4 (RCP) when "NO" is checked, the performance criteria for CAM and RCP methods allow for some quality control failures to occur and still be within method compliance. In these instances, the specific failure is not narrated but noted in the associated QC Outlier Summary Report, located directly after the Case Narrative. QC information is also incorporated in the Data Usability Assessment table (Format 11) of our Data Merger tool, where it can be reviewed in conjunction with the sample result, associated regulatory criteria and any associated data usability implications.

Soil/sediments and solids are reported on a dry weight basis unless otherwise noted. Tissues are reported "as received" or on a wet weight basis, unless otherwise noted. Definitions of all data qualifiers and acronyms used in this report are provided in the Glossary located at the back of the report.

HOLD POLICY - For samples submitted on hold, Alpha's policy is to hold samples (with the exception of Air canisters) free of charge for 21 calendar days from the date the project is completed. After 21 calendar days, we will dispose of all samples submitted including those put on hold unless you have contacted your Alpha Project Manager and made arrangements for Alpha to continue to hold the samples. Air canisters will be disposed after 3 business days from the date the project is completed.

Please contact Project Management at 800-624-9220 with any questions.

Project Name: B14 GW
Project Number: 21010214

Lab Number: L2449492
Report Date: 09/09/24

Case Narrative (continued)

Report Submission

All non-detect (ND) or estimated concentrations (J-qualified) have been quantitated to the limit noted in the MDL column.

Sample Receipt

L2449492-02: Headspace was noted in the sample containers submitted for PA Volatile Organics - EPA 8260D, PA VOCs - EPA 8260D-SIM. The analysis was performed at the client's request.

Volatile Organics

L2449492-02: Headspace was noted in the sample container utilized for analysis.

Volatile Organics by SIM

L2449492-02: Headspace was noted in the sample container utilized for analysis.

I, the undersigned, attest under the pains and penalties of perjury that, to the best of my knowledge and belief and based upon my personal inquiry of those responsible for providing the information contained in this analytical report, such information is accurate and complete. This certificate of analysis is not complete unless this page accompanies any and all pages of this report.

Authorized Signature:

 Caitlin Walukevich

Title: Technical Director/Representative

Date: 09/09/24

ORGANICS

VOLATILES

Project Name: B14 GW
Project Number: 21010214

Lab Number: L2449492
Report Date: 09/09/24

SAMPLE RESULTS

Lab ID: L2449492-01
 Client ID: B24-001-MWS
 Sample Location: B14

Date Collected: 08/29/24 12:20
 Date Received: 08/29/24
 Field Prep: Not Specified

Sample Depth:

Matrix: Water
 Analytical Method: 1,8260D
 Analytical Date: 09/02/24 03:06
 Analyst: MAG

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Dichlorodifluoromethane	ND		ug/l	5.0	0.24	1
Chloromethane	ND		ug/l	2.5	0.20	1
Vinyl chloride	ND		ug/l	1.0	0.07	1
Bromomethane	ND		ug/l	1.0	0.26	1
Chloroethane	ND		ug/l	1.0	0.13	1
Trichlorofluoromethane	ND		ug/l	2.5	0.16	1
1,1-Dichloroethene	ND		ug/l	0.50	0.17	1
Carbon disulfide	ND		ug/l	5.0	0.30	1
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND		ug/l	2.5	0.15	1
Methylene chloride	ND		ug/l	2.5	0.68	1
Acetone	ND		ug/l	5.0	1.5	1
trans-1,2-Dichloroethene	ND		ug/l	0.75	0.16	1
Methyl Acetate	ND		ug/l	2.0	0.23	1
Methyl tert butyl ether	ND		ug/l	1.0	0.17	1
1,1-Dichloroethane	ND		ug/l	0.75	0.21	1
cis-1,2-Dichloroethene	ND		ug/l	0.50	0.19	1
Cyclohexane	ND		ug/l	10	0.27	1
Chloroform	ND		ug/l	0.75	0.22	1
Carbon tetrachloride	ND		ug/l	0.50	0.13	1
1,1,1-Trichloroethane	ND		ug/l	0.50	0.16	1
2-Butanone	ND		ug/l	5.0	1.9	1
Benzene	ND		ug/l	0.50	0.16	1
1,2-Dichloroethane	ND		ug/l	0.50	0.13	1
Trichloroethene	ND		ug/l	0.50	0.18	1
1,2-Dichloropropane	ND		ug/l	1.0	0.14	1
Bromodichloromethane	ND		ug/l	0.50	0.19	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	0.14	1
Toluene	ND		ug/l	0.75	0.20	1

Project Name: B14 GW
Project Number: 21010214

Lab Number: L2449492
Report Date: 09/09/24

SAMPLE RESULTS

Lab ID: L2449492-01
Client ID: B24-001-MWS
Sample Location: B14

Date Collected: 08/29/24 12:20
Date Received: 08/29/24
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Tetrachloroethene	ND		ug/l	0.50	0.18	1
4-Methyl-2-pentanone	ND		ug/l	5.0	0.42	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	0.16	1
1,3-Dichloropropene, Total	ND		ug/l	0.50	0.14	1
1,1,2-Trichloroethane	ND		ug/l	0.75	0.14	1
Dibromochloromethane	ND		ug/l	0.50	0.15	1
1,2-Dibromoethane	ND		ug/l	2.0	0.19	1
2-Hexanone	ND		ug/l	5.0	0.52	1
Chlorobenzene	ND		ug/l	0.50	0.18	1
Ethylbenzene	ND		ug/l	0.50	0.17	1
p/m-Xylene	ND		ug/l	1.0	0.33	1
o-Xylene	ND		ug/l	1.0	0.39	1
Xylenes, Total	ND		ug/l	1.0	0.33	1
Styrene	ND		ug/l	1.0	0.36	1
Bromoform	ND		ug/l	2.0	0.25	1
Isopropylbenzene	ND		ug/l	0.50	0.19	1
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	0.17	1
1,3-Dichlorobenzene	ND		ug/l	2.5	0.19	1
1,4-Dichlorobenzene	ND		ug/l	2.5	0.19	1
1,2-Dichlorobenzene	ND		ug/l	2.5	0.18	1
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	0.35	1
1,2,4-Trichlorobenzene	ND		ug/l	2.5	0.22	1
1,2,3-Trichlorobenzene	ND		ug/l	2.5	0.23	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	110		70-130
Toluene-d8	99		70-130
4-Bromofluorobenzene	97		70-130
Dibromofluoromethane	112		70-130

Project Name: B14 GW
Project Number: 21010214

Lab Number: L2449492
Report Date: 09/09/24

SAMPLE RESULTS

Lab ID: L2449492-01
 Client ID: B24-001-MWS
 Sample Location: B14

Date Collected: 08/29/24 12:20
 Date Received: 08/29/24
 Field Prep: Not Specified

Sample Depth:

Matrix: Water
 Analytical Method: 1,8260D-SIM(M)
 Analytical Date: 09/02/24 03:06
 Analyst: MAG

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
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Volatile Organics by GC/MS-SIM - Westborough Lab						
1,1,2,2-Tetrachloroethane	ND		ug/l	0.050	0.006	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	110		70-130
4-Bromofluorobenzene	96		70-130

Project Name: B14 GW
Project Number: 21010214

Lab Number: L2449492
Report Date: 09/09/24

SAMPLE RESULTS

Lab ID: L2449492-02
 Client ID: TB-001
 Sample Location: B14

Date Collected: 08/29/24 00:00
 Date Received: 08/29/24
 Field Prep: Not Specified

Sample Depth:

Matrix: Water
 Analytical Method: 1,8260D
 Analytical Date: 09/02/24 03:33
 Analyst: MAG

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Dichlorodifluoromethane	ND		ug/l	5.0	0.24	1
Chloromethane	ND		ug/l	2.5	0.20	1
Vinyl chloride	ND		ug/l	1.0	0.07	1
Bromomethane	ND		ug/l	1.0	0.26	1
Chloroethane	ND		ug/l	1.0	0.13	1
Trichlorofluoromethane	ND		ug/l	2.5	0.16	1
1,1-Dichloroethene	ND		ug/l	0.50	0.17	1
Carbon disulfide	ND		ug/l	5.0	0.30	1
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND		ug/l	2.5	0.15	1
Methylene chloride	ND		ug/l	2.5	0.68	1
Acetone	ND		ug/l	5.0	1.5	1
trans-1,2-Dichloroethene	ND		ug/l	0.75	0.16	1
Methyl Acetate	ND		ug/l	2.0	0.23	1
Methyl tert butyl ether	ND		ug/l	1.0	0.17	1
1,1-Dichloroethane	ND		ug/l	0.75	0.21	1
cis-1,2-Dichloroethene	ND		ug/l	0.50	0.19	1
Cyclohexane	ND		ug/l	10	0.27	1
Chloroform	ND		ug/l	0.75	0.22	1
Carbon tetrachloride	ND		ug/l	0.50	0.13	1
1,1,1-Trichloroethane	ND		ug/l	0.50	0.16	1
2-Butanone	ND		ug/l	5.0	1.9	1
Benzene	ND		ug/l	0.50	0.16	1
1,2-Dichloroethane	ND		ug/l	0.50	0.13	1
Trichloroethene	ND		ug/l	0.50	0.18	1
1,2-Dichloropropane	ND		ug/l	1.0	0.14	1
Bromodichloromethane	ND		ug/l	0.50	0.19	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	0.14	1
Toluene	ND		ug/l	0.75	0.20	1

Project Name: B14 GW
Project Number: 21010214

Lab Number: L2449492
Report Date: 09/09/24

SAMPLE RESULTS

Lab ID: L2449492-02
Client ID: TB-001
Sample Location: B14

Date Collected: 08/29/24 00:00
Date Received: 08/29/24
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Tetrachloroethene	ND		ug/l	0.50	0.18	1
4-Methyl-2-pentanone	ND		ug/l	5.0	0.42	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	0.16	1
1,3-Dichloropropene, Total	ND		ug/l	0.50	0.14	1
1,1,2-Trichloroethane	ND		ug/l	0.75	0.14	1
Dibromochloromethane	ND		ug/l	0.50	0.15	1
1,2-Dibromoethane	ND		ug/l	2.0	0.19	1
2-Hexanone	ND		ug/l	5.0	0.52	1
Chlorobenzene	ND		ug/l	0.50	0.18	1
Ethylbenzene	ND		ug/l	0.50	0.17	1
p/m-Xylene	ND		ug/l	1.0	0.33	1
o-Xylene	ND		ug/l	1.0	0.39	1
Xylenes, Total	ND		ug/l	1.0	0.33	1
Styrene	ND		ug/l	1.0	0.36	1
Bromoform	ND		ug/l	2.0	0.25	1
Isopropylbenzene	ND		ug/l	0.50	0.19	1
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	0.17	1
1,3-Dichlorobenzene	ND		ug/l	2.5	0.19	1
1,4-Dichlorobenzene	ND		ug/l	2.5	0.19	1
1,2-Dichlorobenzene	ND		ug/l	2.5	0.18	1
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	0.35	1
1,2,4-Trichlorobenzene	ND		ug/l	2.5	0.22	1
1,2,3-Trichlorobenzene	ND		ug/l	2.5	0.23	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	107		70-130
Toluene-d8	99		70-130
4-Bromofluorobenzene	99		70-130
Dibromofluoromethane	114		70-130

Project Name: B14 GW
Project Number: 21010214

Lab Number: L2449492
Report Date: 09/09/24

SAMPLE RESULTS

Lab ID: L2449492-02
 Client ID: TB-001
 Sample Location: B14

Date Collected: 08/29/24 00:00
 Date Received: 08/29/24
 Field Prep: Not Specified

Sample Depth:

Matrix: Water
 Analytical Method: 1,8260D-SIM(M)
 Analytical Date: 09/02/24 03:33
 Analyst: MAG

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
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Volatile Organics by GC/MS-SIM - Westborough Lab						
1,1,2,2-Tetrachloroethane	ND		ug/l	0.050	0.006	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	110		70-130
4-Bromofluorobenzene	97		70-130

Project Name: B14 GW
Project Number: 21010214

Lab Number: L2449492
Report Date: 09/09/24

**Method Blank Analysis
Batch Quality Control**

Analytical Method: 1,8260D
Analytical Date: 09/01/24 18:59
Analyst: MAG

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 01-02 Batch: WG1966912-5					
Dichlorodifluoromethane	ND		ug/l	5.0	0.24
Chloromethane	ND		ug/l	2.5	0.20
Vinyl chloride	ND		ug/l	1.0	0.07
Bromomethane	ND		ug/l	1.0	0.26
Chloroethane	ND		ug/l	1.0	0.13
Trichlorofluoromethane	ND		ug/l	2.5	0.16
1,1-Dichloroethene	ND		ug/l	0.50	0.17
Carbon disulfide	ND		ug/l	5.0	0.30
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND		ug/l	2.5	0.15
Methylene chloride	ND		ug/l	2.5	0.68
Acetone	ND		ug/l	5.0	1.5
trans-1,2-Dichloroethene	ND		ug/l	0.75	0.16
Methyl Acetate	ND		ug/l	2.0	0.23
Methyl tert butyl ether	ND		ug/l	1.0	0.17
1,1-Dichloroethane	ND		ug/l	0.75	0.21
cis-1,2-Dichloroethene	ND		ug/l	0.50	0.19
Cyclohexane	ND		ug/l	10	0.27
Chloroform	ND		ug/l	0.75	0.22
Carbon tetrachloride	ND		ug/l	0.50	0.13
1,1,1-Trichloroethane	ND		ug/l	0.50	0.16
2-Butanone	ND		ug/l	5.0	1.9
Benzene	ND		ug/l	0.50	0.16
1,2-Dichloroethane	ND		ug/l	0.50	0.13
Trichloroethene	ND		ug/l	0.50	0.18
1,2-Dichloropropane	ND		ug/l	1.0	0.14
Bromodichloromethane	ND		ug/l	0.50	0.19
cis-1,3-Dichloropropene	ND		ug/l	0.50	0.14
Toluene	ND		ug/l	0.75	0.20
Tetrachloroethene	ND		ug/l	0.50	0.18

Project Name: B14 GW
Project Number: 21010214

Lab Number: L2449492
Report Date: 09/09/24

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260D
Analytical Date: 09/01/24 18:59
Analyst: MAG

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 01-02 Batch: WG1966912-5					
4-Methyl-2-pentanone	ND		ug/l	5.0	0.42
trans-1,3-Dichloropropene	ND		ug/l	0.50	0.16
1,3-Dichloropropene, Total	ND		ug/l	0.50	0.14
1,1,2-Trichloroethane	ND		ug/l	0.75	0.14
Dibromochloromethane	ND		ug/l	0.50	0.15
1,2-Dibromoethane	ND		ug/l	2.0	0.19
2-Hexanone	ND		ug/l	5.0	0.52
Chlorobenzene	ND		ug/l	0.50	0.18
Ethylbenzene	ND		ug/l	0.50	0.17
p/m-Xylene	ND		ug/l	1.0	0.33
o-Xylene	ND		ug/l	1.0	0.39
Xylenes, Total	ND		ug/l	1.0	0.33
Styrene	ND		ug/l	1.0	0.36
Bromoform	ND		ug/l	2.0	0.25
Isopropylbenzene	ND		ug/l	0.50	0.19
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	0.17
1,3-Dichlorobenzene	ND		ug/l	2.5	0.19
1,4-Dichlorobenzene	ND		ug/l	2.5	0.19
1,2-Dichlorobenzene	ND		ug/l	2.5	0.18
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	0.35
1,2,4-Trichlorobenzene	ND		ug/l	2.5	0.22
1,2,3-Trichlorobenzene	ND		ug/l	2.5	0.23

Project Name: B14 GW
Project Number: 21010214

Lab Number: L2449492
Report Date: 09/09/24

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260D
Analytical Date: 09/01/24 18:59
Analyst: MAG

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 01-02 Batch: WG1966912-5					

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	108		70-130
Toluene-d8	100		70-130
4-Bromofluorobenzene	101		70-130
Dibromofluoromethane	102		70-130

Project Name: B14 GW
Project Number: 21010214

Lab Number: L2449492
Report Date: 09/09/24

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260D-SIM(M)
Analytical Date: 09/01/24 18:59
Analyst: MAG

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS-SIM - Westborough Lab for sample(s): 01-02 Batch: WG1966916-5					
1,1,2,2-Tetrachloroethane	ND		ug/l	0.050	0.006

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	106		70-130
4-Bromofluorobenzene	98		70-130

Lab Control Sample Analysis

Batch Quality Control

Project Name: B14 GW
Project Number: 21010214

Lab Number: L2449492
Report Date: 09/09/24

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-02 Batch: WG1966912-3 WG1966912-4								
Dichlorodifluoromethane	73		70		36-147	4		20
Chloromethane	73		71		64-130	3		20
Vinyl chloride	78		74		55-140	5		20
Bromomethane	36	Q	36	Q	39-139	0		20
Chloroethane	73		72		55-138	1		20
Trichlorofluoromethane	91		88		62-150	3		20
1,1-Dichloroethene	93		90		61-145	3		20
Carbon disulfide	92		89		51-130	3		20
1,1,2-Trichloro-1,2,2-Trifluoroethane	94		91		70-130	3		20
Methylene chloride	90		88		70-130	2		20
Acetone	84		83		58-148	1		20
trans-1,2-Dichloroethene	96		91		70-130	5		20
Methyl Acetate	84		82		70-130	2		20
Methyl tert butyl ether	97		95		63-130	2		20
1,1-Dichloroethane	94		92		70-130	2		20
cis-1,2-Dichloroethene	93		92		70-130	1		20
Cyclohexane	98		94		70-130	4		20
Chloroform	92		92		70-130	0		20
Carbon tetrachloride	100		99		63-132	1		20
1,1,1-Trichloroethane	98		97		67-130	1		20
2-Butanone	99		91		63-138	8		20
Benzene	93		92		70-130	1		20
1,2-Dichloroethane	97		96		70-130	1		20

Lab Control Sample Analysis

Batch Quality Control

Project Name: B14 GW
Project Number: 21010214

Lab Number: L2449492
Report Date: 09/09/24

Parameter	LCS		LCSD		%Recovery Limits	RPD	Qual	RPD Limits
	%Recovery	Qual	%Recovery	Qual				
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-02 Batch: WG1966912-3 WG1966912-4								
Trichloroethene	100		97		70-130	3		20
1,2-Dichloropropane	94		93		70-130	1		20
Bromodichloromethane	99		97		67-130	2		20
cis-1,3-Dichloropropene	96		96		70-130	0		20
Toluene	95		92		70-130	3		20
Tetrachloroethene	97		93		70-130	4		20
4-Methyl-2-pentanone	90		88		59-130	2		20
trans-1,3-Dichloropropene	88		87		70-130	1		20
1,1,2-Trichloroethane	97		94		70-130	3		20
Dibromochloromethane	97		94		63-130	3		20
1,2-Dibromoethane	94		94		70-130	0		20
2-Hexanone	100		97		57-130	3		20
Chlorobenzene	96		94		75-130	2		20
Ethylbenzene	97		93		70-130	4		20
p/m-Xylene	95		90		70-130	5		20
o-Xylene	95		90		70-130	5		20
Styrene	95		90		70-130	5		20
Bromoform	93		92		54-136	1		20
Isopropylbenzene	94		91		70-130	3		20
1,1,1,2-Tetrachloroethane	88		89		67-130	1		20
1,3-Dichlorobenzene	97		94		70-130	3		20
1,4-Dichlorobenzene	98		96		70-130	2		20
1,2-Dichlorobenzene	94		92		70-130	2		20

Lab Control Sample Analysis

Batch Quality Control

Project Name: B14 GW
Project Number: 21010214

Lab Number: L2449492
Report Date: 09/09/24

Parameter	LCS		LCSD		%Recovery Limits	RPD	RPD	
	%Recovery	Qual	%Recovery	Qual			Qual	Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-02 Batch: WG1966912-3 WG1966912-4								
1,2-Dibromo-3-chloropropane	93		90		41-144	3		20
1,2,4-Trichlorobenzene	100		98		70-130	2		20
1,2,3-Trichlorobenzene	98		97		70-130	1		20

Surrogate	LCS		LCSD		Acceptance Criteria
	%Recovery	Qual	%Recovery	Qual	
1,2-Dichloroethane-d4	106		99		70-130
Toluene-d8	98		100		70-130
4-Bromofluorobenzene	102		100		70-130
Dibromofluoromethane	96		96		70-130

Lab Control Sample Analysis

Batch Quality Control

Project Name: B14 GW
Project Number: 21010214

Lab Number: L2449492
Report Date: 09/09/24

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS-SIM - Westborough Lab Associated sample(s): 01-02 Batch: WG1966916-3 WG1966916-4								
1,1,2,2-Tetrachloroethane	82		80		70-130	2		25

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
1,2-Dichloroethane-d4	105		106		70-130
4-Bromofluorobenzene	100		99		70-130

SEMIVOLATILES

Project Name: B14 GW
Project Number: 21010214

Lab Number: L2449492
Report Date: 09/09/24

SAMPLE RESULTS

Lab ID: L2449492-01
 Client ID: B24-001-MWS
 Sample Location: B14

Date Collected: 08/29/24 12:20
 Date Received: 08/29/24
 Field Prep: Not Specified

Sample Depth:

Matrix: Water
 Analytical Method: 1,8270E
 Analytical Date: 09/06/24 16:19
 Analyst: GMR

Extraction Method: EPA 3510C
 Extraction Date: 09/05/24 16:26

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Benzaldehyde	ND		ug/l	5.0	1.1	1
Phenol	1.7	J	ug/l	5.0	0.35	1
Bis(2-chloroethyl)ether	ND		ug/l	2.0	0.39	1
2-Chlorophenol	ND		ug/l	2.0	0.65	1
2-Methylphenol	ND		ug/l	5.0	2.3	1
Bis(2-chloroisopropyl)ether	ND		ug/l	2.0	0.40	1
Acetophenone	ND		ug/l	5.0	0.92	1
n-Nitrosodi-n-propylamine	ND		ug/l	5.0	0.91	1
3-Methylphenol/4-Methylphenol	ND		ug/l	5.0	1.4	1
Hexachloroethane	ND		ug/l	2.0	0.20	1
Nitrobenzene	ND		ug/l	1.4	0.20	1
Isophorone	ND		ug/l	5.0	0.86	1
2,4-Dimethylphenol	ND		ug/l	5.0	2.0	1
Bis(2-chloroethoxy)methane	ND		ug/l	5.0	0.84	1
2,4-Dichlorophenol	ND		ug/l	5.0	1.7	1
Naphthalene	ND		ug/l	2.0	0.54	1
4-Chloroaniline	ND		ug/l	3.7	0.47	1
Hexachlorobutadiene	ND		ug/l	2.0	0.36	1
Caprolactam	ND		ug/l	10	1.2	1
2-Methylnaphthalene	ND		ug/l	2.0	0.37	1
Hexachlorocyclopentadiene	ND		ug/l	20	1.2	1
1,2,4,5-Tetrachlorobenzene	ND		ug/l	1.7	0.24	1
2,4,6-Trichlorophenol	ND		ug/l	5.0	2.1	1
2,4,5-Trichlorophenol	ND		ug/l	5.0	2.1	1
Biphenyl	ND		ug/l	2.0	0.20	1
2-Chloronaphthalene	ND		ug/l	2.0	0.35	1
2-Nitroaniline	ND		ug/l	5.0	1.0	1
2,6-Dinitrotoluene	ND		ug/l	5.0	0.84	1

Project Name: B14 GW
Project Number: 21010214

Lab Number: L2449492
Report Date: 09/09/24

SAMPLE RESULTS

Lab ID: L2449492-01
 Client ID: B24-001-MWS
 Sample Location: B14

Date Collected: 08/29/24 12:20
 Date Received: 08/29/24
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Acenaphthylene	ND		ug/l	2.0	0.32	1
Acenaphthene	ND		ug/l	2.0	0.40	1
2,4-Dinitrophenol	ND		ug/l	20	5.4	1
2,4-Dinitrotoluene	ND		ug/l	5.0	0.54	1
2,3,4,6-Tetrachlorophenol	ND		ug/l	5.0	2.2	1
Diethyl phthalate	ND		ug/l	5.0	0.76	1
Fluorene	ND		ug/l	2.0	0.44	1
4-Nitroaniline	ND		ug/l	5.0	1.4	1
NDPA/DPA	ND		ug/l	2.0	0.92	1
Hexachlorobenzene	ND		ug/l	2.0	0.45	1
Pentachlorophenol	ND		ug/l	10	2.5	1
Phenanthrene	ND		ug/l	2.0	0.42	1
Anthracene	ND		ug/l	2.0	0.47	1
Carbazole	ND		ug/l	2.0	0.31	1
Di-n-butylphthalate	ND		ug/l	5.0	0.96	1
Fluoranthene	ND		ug/l	2.0	0.41	1
Pyrene	ND		ug/l	2.0	0.41	1
3,3'-Dichlorobenzidine	ND		ug/l	5.0	1.8	1
Benzo(a)anthracene	ND		ug/l	2.0	0.32	1
Chrysene	ND		ug/l	1.5	0.22	1
Bis(2-ethylhexyl)phthalate	ND		ug/l	3.0	1.4	1
Di-n-octylphthalate	ND		ug/l	5.0	2.3	1
Benzo(b)fluoranthene	ND		ug/l	2.0	0.53	1
Benzo(k)fluoranthene	ND		ug/l	2.0	0.62	1
Benzo(a)pyrene	ND		ug/l	2.0	0.37	1
Indeno(1,2,3-cd)pyrene	ND		ug/l	2.0	0.48	1
Dibenzo(a,h)anthracene	ND		ug/l	2.0	0.29	1
Benzo(ghi)perylene	ND		ug/l	2.0	0.37	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	29		21-120
Phenol-d6	31		10-120
Nitrobenzene-d5	73		23-120
2-Fluorobiphenyl	72		15-120
2,4,6-Tribromophenol	33		10-120
4-Terphenyl-d14	80		41-149

Project Name: B14 GW
Project Number: 21010214

Lab Number: L2449492
Report Date: 09/09/24

SAMPLE RESULTS

Lab ID: L2449492-01
 Client ID: B24-001-MWS
 Sample Location: B14

Date Collected: 08/29/24 12:20
 Date Received: 08/29/24
 Field Prep: Not Specified

Sample Depth:
 Matrix: Water
 Analytical Method: 1,8270E-SIM
 Analytical Date: 09/06/24 22:56
 Analyst: JJW

Extraction Method: EPA 3510C
 Extraction Date: 09/05/24 16:30

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS-SIM - Westborough Lab						
Naphthalene	0.53		ug/l	0.10	0.02	1
2-Methylnaphthalene	0.09	J	ug/l	0.10	0.03	1
Acenaphthylene	ND		ug/l	0.10	0.02	1
Acenaphthene	0.08	J	ug/l	0.10	0.02	1
Fluorene	0.08	J	ug/l	0.10	0.03	1
Phenanthrene	0.15		ug/l	0.05	0.04	1
Anthracene	0.03	J	ug/l	0.10	0.02	1
Fluoranthene	0.08	J	ug/l	0.10	0.03	1
Pyrene	0.06	J	ug/l	0.10	0.04	1
Benzo(a)anthracene	ND		ug/l	0.05	0.03	1
Chrysene	ND		ug/l	0.10	0.03	1
Benzo(b)fluoranthene	ND		ug/l	0.05	0.03	1
Benzo(k)fluoranthene	ND		ug/l	0.10	0.03	1
Benzo(a)pyrene	ND		ug/l	0.10	0.02	1
Indeno(1,2,3-cd)pyrene	ND		ug/l	0.10	0.02	1
Dibenzo(a,h)anthracene	ND		ug/l	0.05	0.02	1
Benzo(ghi)perylene	ND		ug/l	0.10	0.02	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
Nitrobenzene-d5	72		23-120
2-Fluorobiphenyl	77		15-120
4-Terphenyl-d14	67		41-149

Project Name: B14 GW
Project Number: 21010214

Lab Number: L2449492
Report Date: 09/09/24

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270E
Analytical Date: 09/06/24 12:24
Analyst: SMZ

Extraction Method: EPA 3510C
Extraction Date: 09/05/24 16:26

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 01 Batch: WG1968077-1					
Benzaldehyde	ND		ug/l	5.0	1.1
Phenol	ND		ug/l	5.0	0.35
Bis(2-chloroethyl)ether	ND		ug/l	2.0	0.39
2-Chlorophenol	ND		ug/l	2.0	0.65
2-Methylphenol	ND		ug/l	5.0	2.3
Bis(2-chloroisopropyl)ether	ND		ug/l	2.0	0.40
Acetophenone	ND		ug/l	5.0	0.92
n-Nitrosodi-n-propylamine	ND		ug/l	5.0	0.91
3-Methylphenol/4-Methylphenol	ND		ug/l	5.0	1.4
Hexachloroethane	ND		ug/l	2.0	0.20
Nitrobenzene	ND		ug/l	1.4	0.20
Isophorone	ND		ug/l	5.0	0.86
2,4-Dimethylphenol	ND		ug/l	5.0	2.0
Bis(2-chloroethoxy)methane	ND		ug/l	5.0	0.84
2,4-Dichlorophenol	ND		ug/l	5.0	1.7
Naphthalene	ND		ug/l	2.0	0.54
4-Chloroaniline	ND		ug/l	3.7	0.47
Hexachlorobutadiene	ND		ug/l	2.0	0.36
Caprolactam	ND		ug/l	10	1.2
2-Methylnaphthalene	ND		ug/l	2.0	0.37
Hexachlorocyclopentadiene	ND		ug/l	20	1.2
1,2,4,5-Tetrachlorobenzene	ND		ug/l	1.7	0.24
2,4,6-Trichlorophenol	ND		ug/l	5.0	2.1
2,4,5-Trichlorophenol	ND		ug/l	5.0	2.1
Biphenyl	ND		ug/l	2.0	0.20
2-Chloronaphthalene	ND		ug/l	2.0	0.35
2-Nitroaniline	ND		ug/l	5.0	1.0
2,6-Dinitrotoluene	ND		ug/l	5.0	0.84
Acenaphthylene	ND		ug/l	2.0	0.32

Project Name: B14 GW
Project Number: 21010214

Lab Number: L2449492
Report Date: 09/09/24

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270E
Analytical Date: 09/06/24 12:24
Analyst: SMZ

Extraction Method: EPA 3510C
Extraction Date: 09/05/24 16:26

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 01 Batch: WG1968077-1					
Acenaphthene	ND		ug/l	2.0	0.40
2,4-Dinitrophenol	ND		ug/l	20	5.4
2,4-Dinitrotoluene	ND		ug/l	5.0	0.54
2,3,4,6-Tetrachlorophenol	ND		ug/l	5.0	2.2
Diethyl phthalate	ND		ug/l	5.0	0.76
Fluorene	ND		ug/l	2.0	0.44
4-Nitroaniline	ND		ug/l	5.0	1.4
NDPA/DPA	ND		ug/l	2.0	0.92
Hexachlorobenzene	ND		ug/l	2.0	0.45
Pentachlorophenol	ND		ug/l	10	2.5
Phenanthrene	ND		ug/l	2.0	0.42
Anthracene	ND		ug/l	2.0	0.47
Carbazole	ND		ug/l	2.0	0.31
Di-n-butylphthalate	ND		ug/l	5.0	0.96
Fluoranthene	ND		ug/l	2.0	0.41
Pyrene	ND		ug/l	2.0	0.41
3,3'-Dichlorobenzidine	ND		ug/l	5.0	1.8
Benzo(a)anthracene	ND		ug/l	2.0	0.32
Chrysene	ND		ug/l	1.5	0.22
Bis(2-ethylhexyl)phthalate	ND		ug/l	3.0	1.4
Di-n-octylphthalate	ND		ug/l	5.0	2.3
Benzo(b)fluoranthene	ND		ug/l	2.0	0.53
Benzo(k)fluoranthene	ND		ug/l	2.0	0.62
Benzo(a)pyrene	ND		ug/l	2.0	0.37
Indeno(1,2,3-cd)pyrene	ND		ug/l	2.0	0.48
Dibenzo(a,h)anthracene	ND		ug/l	2.0	0.29
Benzo(ghi)perylene	ND		ug/l	2.0	0.37

Project Name: B14 GW
Project Number: 21010214

Lab Number: L2449492
Report Date: 09/09/24

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270E
Analytical Date: 09/06/24 12:24
Analyst: SMZ

Extraction Method: EPA 3510C
Extraction Date: 09/05/24 16:26

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 01 Batch: WG1968077-1					

Surrogate	%Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	49		21-120
Phenol-d6	36		10-120
Nitrobenzene-d5	70		23-120
2-Fluorobiphenyl	72		15-120
2,4,6-Tribromophenol	62		10-120
4-Terphenyl-d14	81		41-149

Project Name: B14 GW
Project Number: 21010214

Lab Number: L2449492
Report Date: 09/09/24

Method Blank Analysis Batch Quality Control

Analytical Method: 1,8270E-SIM
Analytical Date: 09/06/24 20:27
Analyst: JJW

Extraction Method: EPA 3510C
Extraction Date: 09/05/24 16:26

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS-SIM - Westborough Lab for sample(s): 01 Batch: WG1968078-1					
Naphthalene	ND		ug/l	0.10	0.02
2-Methylnaphthalene	ND		ug/l	0.10	0.03
Acenaphthylene	ND		ug/l	0.10	0.02
Acenaphthene	ND		ug/l	0.10	0.02
Fluorene	ND		ug/l	0.10	0.03
Phenanthrene	ND		ug/l	0.05	0.04
Anthracene	ND		ug/l	0.10	0.02
Fluoranthene	ND		ug/l	0.10	0.03
Pyrene	ND		ug/l	0.10	0.04
Benzo(a)anthracene	ND		ug/l	0.05	0.03
Chrysene	ND		ug/l	0.10	0.03
Benzo(b)fluoranthene	ND		ug/l	0.05	0.03
Benzo(k)fluoranthene	ND		ug/l	0.10	0.03
Benzo(a)pyrene	ND		ug/l	0.10	0.02
Indeno(1,2,3-cd)pyrene	ND		ug/l	0.10	0.02
Dibenzo(a,h)anthracene	ND		ug/l	0.05	0.02
Benzo(ghi)perylene	ND		ug/l	0.10	0.02

Surrogate	%Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	42		21-120
Phenol-d6	33		10-120
Nitrobenzene-d5	68		23-120
2-Fluorobiphenyl	73		15-120
2,4,6-Tribromophenol	73		10-120
4-Terphenyl-d14	68		41-149

Lab Control Sample Analysis

Batch Quality Control

Project Name: B14 GW
Project Number: 21010214

Lab Number: L2449492
Report Date: 09/09/24

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01 Batch: WG1968077-2 WG1968077-3								
Benzaldehyde	61		72		40-140	17		30
Phenol	44		48		12-110	9		30
Bis(2-chloroethyl)ether	69		84		40-140	20		30
2-Chlorophenol	70		80		27-123	13		30
2-Methylphenol	69		67		30-130	3		30
Bis(2-chloroisopropyl)ether	33	Q	42		40-140	24		30
Acetophenone	71		79		39-129	11		30
n-Nitrosodi-n-propylamine	68		83		29-132	20		30
3-Methylphenol/4-Methylphenol	61		73		30-130	18		30
Hexachloroethane	64		70		40-140	9		30
Nitrobenzene	72		87		40-140	19		30
Isophorone	69		86		40-140	22		30
2,4-Dimethylphenol	55		57		30-130	4		30
Bis(2-chloroethoxy)methane	72		81		40-140	12		30
2,4-Dichlorophenol	72		78		30-130	8		30
Naphthalene	66		73		40-140	10		30
4-Chloroaniline	56		70		40-140	22		30
Hexachlorobutadiene	68		67		40-140	1		30
Caprolactam	17		18		10-130	6		30
2-Methylnaphthalene	74		76		40-140	3		30
Hexachlorocyclopentadiene	54		56		40-140	4		30
1,2,4,5-Tetrachlorobenzene	68		69		2-134	1		30
2,4,6-Trichlorophenol	69		80		30-130	15		30

Lab Control Sample Analysis

Batch Quality Control

Project Name: B14 GW
Project Number: 21010214

Lab Number: L2449492
Report Date: 09/09/24

Parameter	LCS		LCSD		%Recovery Limits	RPD	Qual	RPD Limits
	%Recovery	Qual	%Recovery	Qual				
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01 Batch: WG1968077-2 WG1968077-3								
2,4,5-Trichlorophenol	75		88		30-130	16		30
Biphenyl	64		74		40-140	14		30
2-Chloronaphthalene	74		77		40-140	4		30
2-Nitroaniline	86		84		52-143	2		30
2,6-Dinitrotoluene	80		78		40-140	3		30
Acenaphthylene	70		79		45-123	12		30
Acenaphthene	70		77		37-111	10		30
2,4-Dinitrophenol	42		71		20-130	51	Q	30
2,4-Dinitrotoluene	80		84		48-143	5		30
2,3,4,6-Tetrachlorophenol	67		84		54-145	23		30
Diethyl phthalate	67		76		40-140	13		30
Fluorene	75		79		40-140	5		30
4-Nitroaniline	83		89		51-143	7		30
NDPA/DPA	73		79		40-140	8		30
Hexachlorobenzene	64		73		40-140	13		30
Pentachlorophenol	56		64		9-103	13		30
Phenanthrene	76		81		40-140	6		30
Anthracene	79		87		40-140	10		30
Carbazole	79		90		55-144	13		30
Di-n-butylphthalate	79		87		40-140	10		30
Fluoranthene	77		84		40-140	9		30
Pyrene	80		90		26-127	12		30
3,3'-Dichlorobenzidine	73		69		40-140	6		30

Lab Control Sample Analysis Batch Quality Control

Project Name: B14 GW
Project Number: 21010214

Lab Number: L2449492
Report Date: 09/09/24

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01 Batch: WG1968077-2 WG1968077-3								
Benzo(a)anthracene	75		82		40-140	9		30
Chrysene	73		81		40-140	10		30
Bis(2-ethylhexyl)phthalate	73		86		40-140	16		30
Di-n-octylphthalate	78		88		40-140	12		30
Benzo(b)fluoranthene	77		85		40-140	10		30
Benzo(k)fluoranthene	76		88		40-140	15		30
Benzo(a)pyrene	79		87		40-140	10		30
Indeno(1,2,3-cd)pyrene	75		93		40-140	21		30
Dibenzo(a,h)anthracene	82		88		40-140	7		30
Benzo(ghi)perylene	77		86		40-140	11		30

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
2-Fluorophenol	48		61		21-120
Phenol-d6	38		47		10-120
Nitrobenzene-d5	72		82		23-120
2-Fluorobiphenyl	70		79		15-120
2,4,6-Tribromophenol	64		75		10-120
4-Terphenyl-d14	75		87		41-149

Lab Control Sample Analysis

Batch Quality Control

Project Name: B14 GW
Project Number: 21010214

Lab Number: L2449492
Report Date: 09/09/24

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS-SIM - Westborough Lab Associated sample(s): 01 Batch: WG1968078-2 WG1968078-3								
Naphthalene	68		82		40-140	19		40
2-Methylnaphthalene	70		83		40-140	17		40
Acenaphthylene	67		81		40-140	19		40
Acenaphthene	74		89		37-111	18		40
Fluorene	72		87		40-140	19		40
Phenanthrene	76		92		40-140	19		40
Anthracene	78		95		40-140	20		40
Fluoranthene	70		84		40-140	18		40
Pyrene	68		82		26-127	19		40
Benzo(a)anthracene	80		98		40-140	20		40
Chrysene	74		89		40-140	18		40
Benzo(b)fluoranthene	74		89		40-140	18		40
Benzo(k)fluoranthene	73		87		40-140	18		40
Benzo(a)pyrene	71		86		40-140	19		40
Indeno(1,2,3-cd)pyrene	78		92		40-140	16		40
Dibenzo(a,h)anthracene	74		87		40-140	16		40
Benzo(ghi)perylene	74		87		40-140	16		40

Lab Control Sample Analysis

Batch Quality Control

Project Name: B14 GW
Project Number: 21010214

Lab Number: L2449492
Report Date: 09/09/24

Parameter	<i>LCS</i> %Recovery	<i>Qual</i>	<i>LCSD</i> %Recovery	<i>Qual</i>	<i>%Recovery</i> Limits	<i>RPD</i>	<i>Qual</i>	<i>RPD</i> Limits
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Semivolatile Organics by GC/MS-SIM - Westborough Lab Associated sample(s): 01 Batch: WG1968078-2 WG1968078-3

<i>Surrogate</i>	<i>LCS</i> %Recovery	<i>Qual</i>	<i>LCSD</i> %Recovery	<i>Qual</i>	<i>Acceptance</i> Criteria
2-Fluorophenol	48		58		21-120
Phenol-d6	38		46		10-120
Nitrobenzene-d5	71		86		23-120
2-Fluorobiphenyl	75		91		15-120
2,4,6-Tribromophenol	79		100		10-120
4-Terphenyl-d14	63		77		41-149

Project Name: B14 GW**Lab Number:** L2449492**Project Number:** 21010214**Report Date:** 09/09/24**Sample Receipt and Container Information**

Were project specific reporting limits specified?

YES

Cooler Information

Cooler	Custody Seal
A	Absent

Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L2449492-01A	Vial HCl preserved	A	NA		3.4	Y	Absent		PA-8260-SIM(14),PA-8260(14)
L2449492-01B	Vial HCl preserved	A	NA		3.4	Y	Absent		PA-8260-SIM(14),PA-8260(14)
L2449492-01C	Vial HCl preserved	A	NA		3.4	Y	Absent		PA-8260-SIM(14),PA-8260(14)
L2449492-01D	Amber 100ml unpreserved	A	7	7	3.4	Y	Absent		PA-8270SIM-RVT(7),PA-8270-RVT(7)
L2449492-01E	Amber 100ml unpreserved	A	7	7	3.4	Y	Absent		PA-8270SIM-RVT(7),PA-8270-RVT(7)
L2449492-02A	Vial HCl preserved	A	NA		3.4	Y	Absent		PA-8260-SIM(14),PA-8260(14)
L2449492-02B	Vial HCl preserved	A	NA		3.4	Y	Absent		PA-8260-SIM(14),PA-8260(14)
L2449492-02C	Vial HCl preserved	A	NA		3.4	Y	Absent		PA-8260-SIM(14),PA-8260(14)
L2449492-02D	Vial HCl preserved	A	NA		3.4	Y	Absent		PA-8260-SIM(14),PA-8260(14)

Project Name: B14 GW
Project Number: 21010214

Lab Number: L2449492
Report Date: 09/09/24

GLOSSARY

Acronyms

DL	- Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the limit of quantitation (LOQ). The DL includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
EDL	- Estimated Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The EDL includes any adjustments from dilutions, concentrations or moisture content, where applicable. The use of EDLs is specific to the analysis of PAHs using Solid-Phase Microextraction (SPME).
EMPC	- Estimated Maximum Possible Concentration: The concentration that results from the signal present at the retention time of an analyte when the ions meet all of the identification criteria except the ion abundance ratio criteria. An EMPC is a worst-case estimate of the concentration.
EPA	- Environmental Protection Agency.
LCS	- Laboratory Control Sample: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
LCSD	- Laboratory Control Sample Duplicate: Refer to LCS.
LFB	- Laboratory Fortified Blank: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
LOD	- Limit of Detection: This value represents the level to which a target analyte can reliably be detected for a specific analyte in a specific matrix by a specific method. The LOD includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
LOQ	- Limit of Quantitation: The value at which an instrument can accurately measure an analyte at a specific concentration. The LOQ includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.) Limit of Quantitation: The value at which an instrument can accurately measure an analyte at a specific concentration. The LOQ includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
MDL	- Method Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The MDL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
MS	- Matrix Spike Sample: A sample prepared by adding a known mass of target analyte to a specified amount of matrix sample for which an independent estimate of target analyte concentration is available. For Method 332.0, the spike recovery is calculated using the native concentration, including estimated values.
MSD	- Matrix Spike Sample Duplicate: Refer to MS.
NA	- Not Applicable.
NC	- Not Calculated: Term is utilized when one or more of the results utilized in the calculation are non-detect at the parameter's reporting unit.
NDPA/DPA	- N-Nitrosodiphenylamine/Diphenylamine.
NI	- Not Ignitable.
NP	- Non-Plastic: Term is utilized for the analysis of Atterberg Limits in soil.
NR	- No Results: Term is utilized when 'No Target Compounds Requested' is reported for the analysis of Volatile or Semivolatile Organic TIC only requests.
RL	- Reporting Limit: The value at which an instrument can accurately measure an analyte at a specific concentration. The RL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
RPD	- Relative Percent Difference: The results from matrix and/or matrix spike duplicates are primarily designed to assess the precision of analytical results in a given matrix and are expressed as relative percent difference (RPD). Values which are less than five times the reporting limit for any individual parameter are evaluated by utilizing the absolute difference between the values; although the RPD value will be provided in the report.
SRM	- Standard Reference Material: A reference sample of a known or certified value that is of the same or similar matrix as the associated field samples.
STLP	- Semi-dynamic Tank Leaching Procedure per EPA Method 1315.
TEF	- Toxic Equivalency Factors: The values assigned to each dioxin and furan to evaluate their toxicity relative to 2,3,7,8-TCDD.
TEQ	- Toxic Equivalent: The measure of a sample's toxicity derived by multiplying each dioxin and furan by its corresponding TEF and then summing the resulting values.
TIC	- Tentatively Identified Compound: A compound that has been identified to be present and is not part of the target compound list (TCL) for the method and/or program. All TICs are qualitatively identified and reported as estimated concentrations.

Report Format: DU Report with 'J' Qualifiers



Project Name: B14 GW
Project Number: 21010214

Lab Number: L2449492
Report Date: 09/09/24

Footnotes

- 1 - The reference for this analyte should be considered modified since this analyte is absent from the target analyte list of the original method.

Terms

Analytical Method: Both the document from which the method originates and the analytical reference method. (Example: EPA 8260B is shown as 1,8260B.) The codes for the reference method documents are provided in the References section of the Addendum.

Chlordane: The target compound Chlordane (CAS No. 57-74-9) is reported for GC ECD analyses. Per EPA, this compound "refers to a mixture of chlordane isomers, other chlorinated hydrocarbons and numerous other components." (Reference: USEPA Toxicological Review of Chlordane, In Support of Summary Information on the Integrated Risk Information System (IRIS), December 1997.)

Difference: With respect to Total Oxidizable Precursor (TOP) Assay analysis, the difference is defined as the Post-Treatment value minus the Pre-Treatment value.

Final pH: As it pertains to Sample Receipt & Container Information section of the report, Final pH reflects pH of container determined after adjustment at the laboratory, if applicable. If no adjustment required, value reflects Initial pH.

Frozen Date/Time: With respect to Volatile Organics in soil, Frozen Date/Time reflects the date/time at which associated Reagent Water-preserved vials were initially frozen. Note: If frozen date/time is beyond 48 hours from sample collection, value will be reflected in 'bold'.

Gasoline Range Organics (GRO): Gasoline Range Organics (GRO) results include all chromatographic peaks eluting from Methyl tert butyl ether through Naphthalene, with the exception of GRO analysis in support of State of Ohio programs, which includes all chromatographic peaks eluting from Hexane through Dodecane.

Initial pH: As it pertains to Sample Receipt & Container Information section of the report, Initial pH reflects pH of container determined upon receipt, if applicable.

PAH Total: With respect to Alkylated PAH analyses, the 'PAHs, Total' result is defined as the summation of results for all or a subset of the following compounds: Naphthalene, C1-C4 Naphthalenes, 2-Methylnaphthalene, 1-Methylnaphthalene, Biphenyl, Acenaphthylene, Acenaphthene, Fluorene, C1-C3 Fluorenes, Phenanthrene, C1-C4 Phenanthrenes/Anthracenes, Anthracene, Fluoranthene, Pyrene, C1-C4 Fluoranthenes/Pyrenes, Benz(a)anthracene, Chrysene, C1-C4 Chrysenes, Benzo(b)fluoranthene, Benzo(j)+(k)fluoranthene, Benzo(e)pyrene, Benzo(a)pyrene, Perylene, Indeno(1,2,3-cd)pyrene, Dibenz(ah)+(ac)anthracene, Benzo(g,h,i)perylene. If a 'Total' result is requested, the results of its individual components will also be reported.

PFAS Total: With respect to PFAS analyses, the 'PFAS, Total (5)' result is defined as the summation of results for: PFHpA, PFHxS, PFOA, PFNA and PFOS. In addition, the 'PFAS, Total (6)' result is defined as the summation of results for: PFHpA, PFHxS, PFOA, PFNA, PFDA and PFOS. For MassDEP DW compliance analysis only, the 'PFAS, Total (6)' result is defined as the summation of results at or above the RL. Note: If a 'Total' result is requested, the results of its individual components will also be reported.

Total: With respect to Organic analyses, a 'Total' result is defined as the summation of results for individual isomers or Aroclors. If a 'Total' result is requested, the results of its individual components will also be reported. This is applicable to 'Total' results for methods 8260, 8081 and 8082.

Data Qualifiers

- A** - Spectra identified as "Aldol Condensates" are byproducts of the extraction/concentration procedures when acetone is introduced in the process.
- B** - The analyte was detected above the reporting limit in the associated method blank. Flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For MCP-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For DOD-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank AND the analyte was detected above one-half the reporting limit (or above the reporting limit for common lab contaminants) in the associated method blank. For NJ-Air-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte above the reporting limit. For NJ-related projects (excluding Air), flag only applies to associated field samples that have detectable concentrations of the analyte, which was detected above the reporting limit in the associated method blank or above five times the reporting limit for common lab contaminants (Phthalates, Acetone, Methylene Chloride, 2-Butanone).
- C** - Co-elution: The target analyte co-elutes with a known lab standard (i.e. surrogate, internal standards, etc.) for co-extracted analyses.
- D** - Concentration of analyte was quantified from diluted analysis. Flag only applies to field samples that have detectable concentrations of the analyte.
- E** - Concentration of analyte exceeds the range of the calibration curve and/or linear range of the instrument.
- F** - The ratio of quantifier ion response to qualifier ion response falls outside of the laboratory criteria. Results are considered to be an estimated maximum concentration.
- G** - The concentration may be biased high due to matrix interferences (i.e. co-elution) with non-target compound(s). The result should be considered estimated.
- H** - The analysis of pH was performed beyond the regulatory-required holding time of 15 minutes from the time of sample collection.
- I** - The lower value for the two columns has been reported due to obvious interference.
- J** - Estimated value. The Target analyte concentration is below the quantitation limit (RL), but above the Method Detection Limit (MDL) or Estimated Detection Limit (EDL) for SPME-related analyses. This represents an estimated concentration for Tentatively

Report Format: DU Report with 'J' Qualifiers



Project Name: B14 GW
Project Number: 21010214

Lab Number: L2449492
Report Date: 09/09/24

Data Qualifiers

Identified Compounds (TICs). For calculated parameters, this represents that one or more values used in the calculation were estimated.

- M** - Reporting Limit (RL) exceeds the MCP CAM Reporting Limit for this analyte.
- ND** - Not detected at the method detection limit (MDL) for the sample, or estimated detection limit (EDL) for SPME-related analyses.
- NJ** - Presumptive evidence of compound. This represents an estimated concentration for Tentatively Identified Compounds (TICs), where the identification is based on a mass spectral library search.
- P** - The RPD between the results for the two columns exceeds the method-specified criteria.
- Q** - The quality control sample exceeds the associated acceptance criteria. For DOD-related projects, LCS and/or Continuing Calibration Standard exceedences are also qualified on all associated sample results. Note: This flag is not applicable for matrix spike recoveries when the sample concentration is greater than 4x the spike added or for batch duplicate RPD when the sample concentrations are less than 5x the RL. (Metals only.)
- R** - Analytical results are from sample re-analysis.
- RE** - Analytical results are from sample re-extraction.
- S** - Analytical results are from modified screening analysis.
- V** - The surrogate associated with this target analyte has a recovery outside the QC acceptance limits. (Applicable to MassDEP DW Compliance samples only.)
- Z** - The batch matrix spike and/or duplicate associated with this target analyte has a recovery/RPD outside the QC acceptance limits. (Applicable to MassDEP DW Compliance samples only.)

Project Name: B14 GW
Project Number: 21010214

Lab Number: L2449492
Report Date: 09/09/24

REFERENCES

- 1 Test Methods for Evaluating Solid Waste: Physical/Chemical Methods. EPA SW-846. Third Edition. Updates I - VI, 2018.

LIMITATION OF LIABILITIES

Alpha Analytical performs services with reasonable care and diligence normal to the analytical testing laboratory industry. In the event of an error, the sole and exclusive responsibility of Alpha Analytical shall be to re-perform the work at it's own expense. In no event shall Alpha Analytical be held liable for any incidental, consequential or special damages, including but not limited to, damages in any way connected with the use of, interpretation of, information or analysis provided by Alpha Analytical.

We strongly urge our clients to comply with EPA protocol regarding sample volume, preservation, cooling, containers, sampling procedures, holding time and splitting of samples in the field.



Certification Information

The following analytes are not included in our Primary NELAP Scope of Accreditation:

Westborough Facility

EPA 624.1: m/p-xylene, o-xylene, Naphthalene

EPA 625.1: alpha-Terpineol

EPA 8260D: NPW: 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene; SCM: Iodomethane (methyl iodide), 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene.

EPA 8270E: NPW: Dimethylnaphthalene,1,4-Diphenylhydrazine, alpha-Terpineol, Azobenzene; SCM: Dimethylnaphthalene,1,4-Diphenylhydrazine.

SM4500: NPW: Amenable Cyanide; SCM: Total Phosphorus, TKN, NO₂, NO₃.

Mansfield Facility

SM 2540D: TSS.

EPA TO-15: Halothane, 2,4,4-Trimethyl-2-pentene, 2,4,4-Trimethyl-1-pentene, Thiophene, 2-Methylthiophene,

3-Methylthiophene, 2-Ethylthiophene, 1,2,3-Trimethylbenzene, Indan, Indene, 1,2,4,5-Tetramethylbenzene, Benzothiophene, 1-Methylnaphthalene.

Nonpotable Water: EPA RSK-175 Dissolved Gases

Biological Tissue Matrix: EPA 3050B

The following analytes are included in our Massachusetts DEP Scope of Accreditation

Westborough Facility:

Drinking Water

EPA 300.0: Chloride, Nitrate-N, Fluoride, Sulfate; **EPA 353.2:** Nitrate-N, Nitrite-N; **SM4500NO3-F:** Nitrate-N, Nitrite-N; **SM4500F-C, SM4500CN-CE,**

EPA 180.1, SM2130B, SM4500Cl-D, SM2320B, SM2540C, SM4500H-B, SM4500NO2-B

EPA 524.2: THMs and VOCs; **EPA 504.1:** EDB, DBCP.

Microbiology: SM9215B; SM9223-P/A, SM9223B-Colilert-QT, SM9222D.

Non-Potable Water

SM4500H,B, EPA 120.1, SM2510B, SM2540C, SM2320B, SM4500CL-E, SM4500F-BC, SM4500NH3-BH: Ammonia-N and Kjeldahl-N, **EPA 350.1:**

Ammonia-N, **LACHAT 10-107-06-1-B:** Ammonia-N, **EPA 351.1, SM4500NO3-F, EPA 353.2:** Nitrate-N, **SM4500P-E, SM4500P-B, E, SM4500SO4-E,**

SM5220D, EPA 410.4, SM5210B, SM5310C, SM4500CL-D, EPA 1664, EPA 420.1, SM4500-CN-CE, SM2540D, EPA 300: Chloride, Sulfate, Nitrate.

EPA 624.1: Volatile Halocarbons & Aromatics,

EPA 608.3: Chlordane, Toxaphene, Aldrin, alpha-BHC, beta-BHC, gamma-BHC, delta-BHC, Dieldrin, DDD, DDE, DDT, Endosulfan I, Endosulfan II,

Endosulfan sulfate, Endrin, Endrin Aldehyde, Heptachlor, Heptachlor Epoxide, PCBs

EPA 625.1: SVOC (Acid/Base/Neutral Extractables).

Microbiology: SM9223B-Colilert-QT; Enterolert-QT, EPA 1600, EPA 1603, SM9222D.

Mansfield Facility:

Drinking Water

EPA 200.7: Al, Ba, Cd, Cr, Cu, Fe, Mn, Ni, Na, Ag, Ca, Zn. **EPA 200.8:** Al, Sb, As, Ba, Be, Cd, Cr, Cu, Pb, Mn, Ni, Se, Ag, TL, Zn. **EPA 245.1** Hg.

EPA 522, EPA 537.1.

Non-Potable Water

EPA 200.7: Al, Sb, As, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Mo, Ni, K, Se, Ag, Na, Sr, TL, Ti, V, Zn.

EPA 200.8: Al, Sb, As, Be, Cd, Cr, Cu, Fe, Pb, Mn, Ni, K, Se, Ag, Na, TL, Zn.

EPA 245.1 Hg.

SM2340B

For a complete listing of analytes and methods, please contact your Alpha Project Manager.



ANALYTICAL REPORT

Lab Number:	L2451170
Client:	Tradepoint Atlantic 1600 Sparrows Point Boulevard Baltimore, MD 21219
ATTN:	Robert Tworkowski
Phone:	(443) 649-5073
Project Name:	B14 GW
Project Number:	21010214
Report Date:	09/13/24

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Certifications & Approvals: MA (M-MA086), NH NELAP (2064), CT (PH-0826), IL (200077), IN (C-MA-03), KY (KY98045), ME (MA00086), MD (348), NJ (MA935), NY (11148), NC (25700/666), OR (MA-1316), PA (68-03671), RI (LAO00065), TX (T104704476), VT (VT-0935), VA (460195), USDA (Permit #525-23-122-91930A1).

Eight Walkup Drive, Westborough, MA 01581-1019
508-898-9220 (Fax) 508-898-9193 800-624-9220 - www.alphalab.com



Project Name: B14 GW
Project Number: 21010214

Lab Number: L2451170
Report Date: 09/13/24

Alpha Sample ID	Client ID	Matrix	Sample Location	Collection Date/Time	Receive Date
L2451170-01	HI17-MWS	WATER	B14	09/06/24 12:00	09/06/24
L2451170-02	HI12-MWS	WATER	B14	09/06/24 14:25	09/06/24
L2451170-03	TB-001-WT	WATER	B14	09/06/24 00:00	09/06/24

Project Name: B14 GW
Project Number: 21010214

Lab Number: L2451170
Report Date: 09/13/24

Case Narrative

The samples were received in accordance with the Chain of Custody and no significant deviations were encountered during the preparation or analysis unless otherwise noted. Sample Receipt, Container Information, and the Chain of Custody are located at the back of the report.

Results contained within this report relate only to the samples submitted under this Alpha Lab Number and meet NELAP requirements for all NELAP accredited parameters unless otherwise noted in the following narrative. The data presented in this report is organized by parameter (i.e. VOC, SVOC, etc.). Sample specific Quality Control data (i.e. Surrogate Spike Recovery) is reported at the end of the target analyte list for each individual sample, followed by the Laboratory Batch Quality Control at the end of each parameter. Tentatively Identified Compounds (TICs), if requested, are reported for compounds identified to be present and are not part of the method/program Target Compound List, even if only a subset of the TCL are being reported. If a sample was re-analyzed or re-extracted due to a required quality control corrective action and if both sets of data are reported, the Laboratory ID of the re-analysis or re-extraction is designated with an "R" or "RE", respectively.

When multiple Batch Quality Control elements are reported (e.g. more than one LCS), the associated samples for each element are noted in the grey shaded header line of each data table. Any Laboratory Batch, Sample Specific % recovery or RPD value that is outside the listed Acceptance Criteria is bolded in the report. In reference to questions H (CAM) or 4 (RCP) when "NO" is checked, the performance criteria for CAM and RCP methods allow for some quality control failures to occur and still be within method compliance. In these instances, the specific failure is not narrated but noted in the associated QC Outlier Summary Report, located directly after the Case Narrative. QC information is also incorporated in the Data Usability Assessment table (Format 11) of our Data Merger tool, where it can be reviewed in conjunction with the sample result, associated regulatory criteria and any associated data usability implications.

Soil/sediments and solids are reported on a dry weight basis unless otherwise noted. Tissues are reported "as received" or on a wet weight basis, unless otherwise noted. Definitions of all data qualifiers and acronyms used in this report are provided in the Glossary located at the back of the report.

HOLD POLICY - For samples submitted on hold, Alpha's policy is to hold samples (with the exception of Air canisters) free of charge for 21 calendar days from the date the project is completed. After 21 calendar days, we will dispose of all samples submitted including those put on hold unless you have contacted your Alpha Project Manager and made arrangements for Alpha to continue to hold the samples. Air canisters will be disposed after 3 business days from the date the project is completed.

Please contact Project Management at 800-624-9220 with any questions.

Project Name: B14 GW
Project Number: 21010214

Lab Number: L2451170
Report Date: 09/13/24

Case Narrative (continued)

Report Submission

All non-detect (ND) or estimated concentrations (J-qualified) have been quantitated to the limit noted in the MDL column.

I, the undersigned, attest under the pains and penalties of perjury that, to the best of my knowledge and belief and based upon my personal inquiry of those responsible for providing the information contained in this analytical report, such information is accurate and complete. This certificate of analysis is not complete unless this page accompanies any and all pages of this report.

Authorized Signature: *Tiffani Morrissey* - Tiffani Morrissey

Title: Technical Director/Representative

Date: 09/13/24

ORGANICS

VOLATILES

Project Name: B14 GW
Project Number: 21010214

Lab Number: L2451170
Report Date: 09/13/24

SAMPLE RESULTS

Lab ID: L2451170-01
 Client ID: HI17-MWS
 Sample Location: B14

Date Collected: 09/06/24 12:00
 Date Received: 09/06/24
 Field Prep: Not Specified

Sample Depth:

Matrix: Water
 Analytical Method: 1,8260D
 Analytical Date: 09/11/24 23:57
 Analyst: LAC

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Dichlorodifluoromethane	ND		ug/l	5.0	0.24	1
Chloromethane	ND		ug/l	2.5	0.20	1
Vinyl chloride	ND		ug/l	1.0	0.07	1
Bromomethane	ND		ug/l	1.0	0.26	1
Chloroethane	ND		ug/l	1.0	0.13	1
Trichlorofluoromethane	ND		ug/l	2.5	0.16	1
1,1-Dichloroethene	ND		ug/l	0.50	0.17	1
Carbon disulfide	ND		ug/l	5.0	0.30	1
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND		ug/l	2.5	0.15	1
Methylene chloride	ND		ug/l	2.5	0.68	1
Acetone	3.5	J	ug/l	5.0	1.5	1
trans-1,2-Dichloroethene	ND		ug/l	0.75	0.16	1
Methyl Acetate	ND		ug/l	2.0	0.23	1
Methyl tert butyl ether	ND		ug/l	1.0	0.17	1
1,1-Dichloroethane	ND		ug/l	0.75	0.21	1
cis-1,2-Dichloroethene	ND		ug/l	0.50	0.19	1
Cyclohexane	ND		ug/l	10	0.27	1
Chloroform	ND		ug/l	0.75	0.22	1
Carbon tetrachloride	ND		ug/l	0.50	0.13	1
1,1,1-Trichloroethane	ND		ug/l	0.50	0.16	1
2-Butanone	ND		ug/l	5.0	1.9	1
Benzene	ND		ug/l	0.50	0.16	1
1,2-Dichloroethane	ND		ug/l	0.50	0.13	1
Trichloroethene	ND		ug/l	0.50	0.18	1
1,2-Dichloropropane	ND		ug/l	1.0	0.14	1
Bromodichloromethane	ND		ug/l	0.50	0.19	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	0.14	1
Toluene	76		ug/l	0.75	0.20	1

Project Name: B14 GW
Project Number: 21010214

Lab Number: L2451170
Report Date: 09/13/24

SAMPLE RESULTS

Lab ID: L2451170-01
Client ID: HI17-MWS
Sample Location: B14

Date Collected: 09/06/24 12:00
Date Received: 09/06/24
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Tetrachloroethene	0.18	J	ug/l	0.50	0.18	1
4-Methyl-2-pentanone	ND		ug/l	5.0	0.42	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	0.16	1
1,3-Dichloropropene, Total	ND		ug/l	0.50	0.14	1
1,1,2-Trichloroethane	ND		ug/l	0.75	0.14	1
Dibromochloromethane	ND		ug/l	0.50	0.15	1
1,2-Dibromoethane	ND		ug/l	2.0	0.19	1
2-Hexanone	ND		ug/l	5.0	0.52	1
Chlorobenzene	ND		ug/l	0.50	0.18	1
Ethylbenzene	ND		ug/l	0.50	0.17	1
p/m-Xylene	ND		ug/l	1.0	0.33	1
o-Xylene	ND		ug/l	1.0	0.39	1
Xylenes, Total	ND		ug/l	1.0	0.33	1
Styrene	ND		ug/l	1.0	0.36	1
Bromoform	ND		ug/l	2.0	0.25	1
Isopropylbenzene	ND		ug/l	0.50	0.19	1
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	0.17	1
1,3-Dichlorobenzene	ND		ug/l	2.5	0.19	1
1,4-Dichlorobenzene	ND		ug/l	2.5	0.19	1
1,2-Dichlorobenzene	ND		ug/l	2.5	0.18	1
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	0.35	1
1,2,4-Trichlorobenzene	ND		ug/l	2.5	0.22	1
1,2,3-Trichlorobenzene	ND		ug/l	2.5	0.23	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	99		70-130
Toluene-d8	100		70-130
4-Bromofluorobenzene	98		70-130
Dibromofluoromethane	100		70-130

Project Name: B14 GW
Project Number: 21010214

Lab Number: L2451170
Report Date: 09/13/24

SAMPLE RESULTS

Lab ID: L2451170-01
 Client ID: HI17-MWS
 Sample Location: B14

Date Collected: 09/06/24 12:00
 Date Received: 09/06/24
 Field Prep: Not Specified

Sample Depth:

Matrix: Water
 Analytical Method: 1,8260D-SIM(M)
 Analytical Date: 09/11/24 23:57
 Analyst: MCM

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
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Volatile Organics by GC/MS-SIM - Westborough Lab						
1,1,2,2-Tetrachloroethane	ND		ug/l	0.050	0.006	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	99		70-130
4-Bromofluorobenzene	96		70-130

Project Name: B14 GW
Project Number: 21010214

Lab Number: L2451170
Report Date: 09/13/24

SAMPLE RESULTS

Lab ID: L2451170-02
 Client ID: HI12-MWS
 Sample Location: B14

Date Collected: 09/06/24 14:25
 Date Received: 09/06/24
 Field Prep: Not Specified

Sample Depth:

Matrix: Water
 Analytical Method: 1,8260D
 Analytical Date: 09/12/24 00:24
 Analyst: LAC

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Dichlorodifluoromethane	ND		ug/l	5.0	0.24	1
Chloromethane	ND		ug/l	2.5	0.20	1
Vinyl chloride	ND		ug/l	1.0	0.07	1
Bromomethane	ND		ug/l	1.0	0.26	1
Chloroethane	ND		ug/l	1.0	0.13	1
Trichlorofluoromethane	ND		ug/l	2.5	0.16	1
1,1-Dichloroethene	ND		ug/l	0.50	0.17	1
Carbon disulfide	ND		ug/l	5.0	0.30	1
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND		ug/l	2.5	0.15	1
Methylene chloride	ND		ug/l	2.5	0.68	1
Acetone	4.2	J	ug/l	5.0	1.5	1
trans-1,2-Dichloroethene	ND		ug/l	0.75	0.16	1
Methyl Acetate	ND		ug/l	2.0	0.23	1
Methyl tert butyl ether	ND		ug/l	1.0	0.17	1
1,1-Dichloroethane	ND		ug/l	0.75	0.21	1
cis-1,2-Dichloroethene	ND		ug/l	0.50	0.19	1
Cyclohexane	ND		ug/l	10	0.27	1
Chloroform	ND		ug/l	0.75	0.22	1
Carbon tetrachloride	ND		ug/l	0.50	0.13	1
1,1,1-Trichloroethane	ND		ug/l	0.50	0.16	1
2-Butanone	ND		ug/l	5.0	1.9	1
Benzene	1.0		ug/l	0.50	0.16	1
1,2-Dichloroethane	ND		ug/l	0.50	0.13	1
Trichloroethene	ND		ug/l	0.50	0.18	1
1,2-Dichloropropane	ND		ug/l	1.0	0.14	1
Bromodichloromethane	ND		ug/l	0.50	0.19	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	0.14	1
Toluene	ND		ug/l	0.75	0.20	1

Project Name: B14 GW
Project Number: 21010214

Lab Number: L2451170
Report Date: 09/13/24

SAMPLE RESULTS

Lab ID: L2451170-02
Client ID: HI12-MWS
Sample Location: B14

Date Collected: 09/06/24 14:25
Date Received: 09/06/24
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Tetrachloroethene	ND		ug/l	0.50	0.18	1
4-Methyl-2-pentanone	ND		ug/l	5.0	0.42	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	0.16	1
1,3-Dichloropropene, Total	ND		ug/l	0.50	0.14	1
1,1,2-Trichloroethane	ND		ug/l	0.75	0.14	1
Dibromochloromethane	ND		ug/l	0.50	0.15	1
1,2-Dibromoethane	ND		ug/l	2.0	0.19	1
2-Hexanone	ND		ug/l	5.0	0.52	1
Chlorobenzene	ND		ug/l	0.50	0.18	1
Ethylbenzene	0.50		ug/l	0.50	0.17	1
p/m-Xylene	ND		ug/l	1.0	0.33	1
o-Xylene	ND		ug/l	1.0	0.39	1
Xylenes, Total	ND		ug/l	1.0	0.33	1
Styrene	ND		ug/l	1.0	0.36	1
Bromoform	ND		ug/l	2.0	0.25	1
Isopropylbenzene	ND		ug/l	0.50	0.19	1
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	0.17	1
1,3-Dichlorobenzene	ND		ug/l	2.5	0.19	1
1,4-Dichlorobenzene	ND		ug/l	2.5	0.19	1
1,2-Dichlorobenzene	ND		ug/l	2.5	0.18	1
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	0.35	1
1,2,4-Trichlorobenzene	ND		ug/l	2.5	0.22	1
1,2,3-Trichlorobenzene	ND		ug/l	2.5	0.23	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	107		70-130
Toluene-d8	98		70-130
4-Bromofluorobenzene	98		70-130
Dibromofluoromethane	109		70-130

Project Name: B14 GW
Project Number: 21010214

Lab Number: L2451170
Report Date: 09/13/24

SAMPLE RESULTS

Lab ID: L2451170-02
 Client ID: HI12-MWS
 Sample Location: B14

Date Collected: 09/06/24 14:25
 Date Received: 09/06/24
 Field Prep: Not Specified

Sample Depth:

Matrix: Water
 Analytical Method: 1,8260D-SIM(M)
 Analytical Date: 09/12/24 00:24
 Analyst: MCM

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
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Volatile Organics by GC/MS-SIM - Westborough Lab						
1,1,2,2-Tetrachloroethane	ND		ug/l	0.050	0.006	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	109		70-130
4-Bromofluorobenzene	96		70-130

Project Name: B14 GW
Project Number: 21010214

Lab Number: L2451170
Report Date: 09/13/24

SAMPLE RESULTS

Lab ID: L2451170-03
 Client ID: TB-001-WT
 Sample Location: B14

Date Collected: 09/06/24 00:00
 Date Received: 09/06/24
 Field Prep: Not Specified

Sample Depth:

Matrix: Water
 Analytical Method: 1,8260D
 Analytical Date: 09/11/24 19:27
 Analyst: LAC

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Dichlorodifluoromethane	ND		ug/l	5.0	0.24	1
Chloromethane	ND		ug/l	2.5	0.20	1
Vinyl chloride	ND		ug/l	1.0	0.07	1
Bromomethane	ND		ug/l	1.0	0.26	1
Chloroethane	ND		ug/l	1.0	0.13	1
Trichlorofluoromethane	ND		ug/l	2.5	0.16	1
1,1-Dichloroethene	ND		ug/l	0.50	0.17	1
Carbon disulfide	ND		ug/l	5.0	0.30	1
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND		ug/l	2.5	0.15	1
Methylene chloride	ND		ug/l	2.5	0.68	1
Acetone	ND		ug/l	5.0	1.5	1
trans-1,2-Dichloroethene	ND		ug/l	0.75	0.16	1
Methyl Acetate	ND		ug/l	2.0	0.23	1
Methyl tert butyl ether	ND		ug/l	1.0	0.17	1
1,1-Dichloroethane	ND		ug/l	0.75	0.21	1
cis-1,2-Dichloroethene	ND		ug/l	0.50	0.19	1
Cyclohexane	ND		ug/l	10	0.27	1
Chloroform	ND		ug/l	0.75	0.22	1
Carbon tetrachloride	ND		ug/l	0.50	0.13	1
1,1,1-Trichloroethane	ND		ug/l	0.50	0.16	1
2-Butanone	ND		ug/l	5.0	1.9	1
Benzene	ND		ug/l	0.50	0.16	1
1,2-Dichloroethane	ND		ug/l	0.50	0.13	1
Trichloroethene	ND		ug/l	0.50	0.18	1
1,2-Dichloropropane	ND		ug/l	1.0	0.14	1
Bromodichloromethane	ND		ug/l	0.50	0.19	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	0.14	1
Toluene	ND		ug/l	0.75	0.20	1

Project Name: B14 GW
Project Number: 21010214

Lab Number: L2451170
Report Date: 09/13/24

SAMPLE RESULTS

Lab ID: L2451170-03
Client ID: TB-001-WT
Sample Location: B14

Date Collected: 09/06/24 00:00
Date Received: 09/06/24
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Tetrachloroethene	ND		ug/l	0.50	0.18	1
4-Methyl-2-pentanone	ND		ug/l	5.0	0.42	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	0.16	1
1,3-Dichloropropene, Total	ND		ug/l	0.50	0.14	1
1,1,2-Trichloroethane	ND		ug/l	0.75	0.14	1
Dibromochloromethane	ND		ug/l	0.50	0.15	1
1,2-Dibromoethane	ND		ug/l	2.0	0.19	1
2-Hexanone	ND		ug/l	5.0	0.52	1
Chlorobenzene	ND		ug/l	0.50	0.18	1
Ethylbenzene	ND		ug/l	0.50	0.17	1
p/m-Xylene	ND		ug/l	1.0	0.33	1
o-Xylene	ND		ug/l	1.0	0.39	1
Xylenes, Total	ND		ug/l	1.0	0.33	1
Styrene	ND		ug/l	1.0	0.36	1
Bromoform	ND		ug/l	2.0	0.25	1
Isopropylbenzene	ND		ug/l	0.50	0.19	1
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	0.17	1
1,3-Dichlorobenzene	ND		ug/l	2.5	0.19	1
1,4-Dichlorobenzene	ND		ug/l	2.5	0.19	1
1,2-Dichlorobenzene	ND		ug/l	2.5	0.18	1
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	0.35	1
1,2,4-Trichlorobenzene	ND		ug/l	2.5	0.22	1
1,2,3-Trichlorobenzene	ND		ug/l	2.5	0.23	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	108		70-130
Toluene-d8	100		70-130
4-Bromofluorobenzene	97		70-130
Dibromofluoromethane	107		70-130

Project Name: B14 GW
Project Number: 21010214

Lab Number: L2451170
Report Date: 09/13/24

SAMPLE RESULTS

Lab ID: L2451170-03
 Client ID: TB-001-WT
 Sample Location: B14

Date Collected: 09/06/24 00:00
 Date Received: 09/06/24
 Field Prep: Not Specified

Sample Depth:

Matrix: Water
 Analytical Method: 1,8260D-SIM(M)
 Analytical Date: 09/11/24 19:27
 Analyst: MCM

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
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Volatile Organics by GC/MS-SIM - Westborough Lab						
1,1,2,2-Tetrachloroethane	ND		ug/l	0.050	0.006	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	109		70-130
4-Bromofluorobenzene	97		70-130

Project Name: B14 GW
Project Number: 21010214

Lab Number: L2451170
Report Date: 09/13/24

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260D
Analytical Date: 09/11/24 18:33
Analyst: LAC

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 01-03 Batch: WG1970685-5					
Dichlorodifluoromethane	ND		ug/l	5.0	0.24
Chloromethane	ND		ug/l	2.5	0.20
Vinyl chloride	ND		ug/l	1.0	0.07
Bromomethane	ND		ug/l	1.0	0.26
Chloroethane	ND		ug/l	1.0	0.13
Trichlorofluoromethane	ND		ug/l	2.5	0.16
1,1-Dichloroethene	ND		ug/l	0.50	0.17
Carbon disulfide	ND		ug/l	5.0	0.30
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND		ug/l	2.5	0.15
Methylene chloride	ND		ug/l	2.5	0.68
Acetone	ND		ug/l	5.0	1.5
trans-1,2-Dichloroethene	ND		ug/l	0.75	0.16
Methyl Acetate	ND		ug/l	2.0	0.23
Methyl tert butyl ether	ND		ug/l	1.0	0.17
1,1-Dichloroethane	ND		ug/l	0.75	0.21
cis-1,2-Dichloroethene	ND		ug/l	0.50	0.19
Cyclohexane	ND		ug/l	10	0.27
Chloroform	ND		ug/l	0.75	0.22
Carbon tetrachloride	ND		ug/l	0.50	0.13
1,1,1-Trichloroethane	ND		ug/l	0.50	0.16
2-Butanone	ND		ug/l	5.0	1.9
Benzene	ND		ug/l	0.50	0.16
1,2-Dichloroethane	ND		ug/l	0.50	0.13
Trichloroethene	ND		ug/l	0.50	0.18
1,2-Dichloropropane	ND		ug/l	1.0	0.14
Bromodichloromethane	ND		ug/l	0.50	0.19
cis-1,3-Dichloropropene	ND		ug/l	0.50	0.14
Toluene	ND		ug/l	0.75	0.20
Tetrachloroethene	ND		ug/l	0.50	0.18

Project Name: B14 GW
Project Number: 21010214

Lab Number: L2451170
Report Date: 09/13/24

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260D
Analytical Date: 09/11/24 18:33
Analyst: LAC

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 01-03 Batch: WG1970685-5					
4-Methyl-2-pentanone	ND		ug/l	5.0	0.42
trans-1,3-Dichloropropene	ND		ug/l	0.50	0.16
1,3-Dichloropropene, Total	ND		ug/l	0.50	0.14
1,1,2-Trichloroethane	ND		ug/l	0.75	0.14
Dibromochloromethane	ND		ug/l	0.50	0.15
1,2-Dibromoethane	ND		ug/l	2.0	0.19
2-Hexanone	ND		ug/l	5.0	0.52
Chlorobenzene	ND		ug/l	0.50	0.18
Ethylbenzene	ND		ug/l	0.50	0.17
p/m-Xylene	ND		ug/l	1.0	0.33
o-Xylene	ND		ug/l	1.0	0.39
Xylenes, Total	ND		ug/l	1.0	0.33
Styrene	ND		ug/l	1.0	0.36
Bromoform	ND		ug/l	2.0	0.25
Isopropylbenzene	ND		ug/l	0.50	0.19
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	0.17
1,3-Dichlorobenzene	ND		ug/l	2.5	0.19
1,4-Dichlorobenzene	ND		ug/l	2.5	0.19
1,2-Dichlorobenzene	ND		ug/l	2.5	0.18
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	0.35
1,2,4-Trichlorobenzene	ND		ug/l	2.5	0.22
1,2,3-Trichlorobenzene	ND		ug/l	2.5	0.23

Project Name: B14 GW
Project Number: 21010214

Lab Number: L2451170
Report Date: 09/13/24

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260D
Analytical Date: 09/11/24 18:33
Analyst: LAC

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 01-03 Batch: WG1970685-5					

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	107		70-130
Toluene-d8	97		70-130
4-Bromofluorobenzene	100		70-130
Dibromofluoromethane	107		70-130

Project Name: B14 GW
Project Number: 21010214

Lab Number: L2451170
Report Date: 09/13/24

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260D-SIM(M)
Analytical Date: 09/11/24 18:33
Analyst: LAC

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS-SIM - Westborough Lab for sample(s): 01-03 Batch: WG1970687-5					
1,1,2,2-Tetrachloroethane	ND		ug/l	0.050	0.006

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	108		70-130
4-Bromofluorobenzene	97		70-130

Lab Control Sample Analysis

Batch Quality Control

Project Name: B14 GW
Project Number: 21010214

Lab Number: L2451170
Report Date: 09/13/24

Parameter	LCS		LCSD		%Recovery Limits	RPD	Qual	RPD Limits
	%Recovery	Qual	%Recovery	Qual				
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-03 Batch: WG1970685-3 WG1970685-4								
Dichlorodifluoromethane	91		96		36-147	5		20
Chloromethane	96		100		64-130	4		20
Vinyl chloride	77		83		55-140	8		20
Bromomethane	56		52		39-139	7		20
Chloroethane	74		71		55-138	4		20
Trichlorofluoromethane	100		100		62-150	0		20
1,1-Dichloroethene	97		100		61-145	3		20
Carbon disulfide	98		100		51-130	2		20
1,1,2-Trichloro-1,2,2-Trifluoroethane	100		100		70-130	0		20
Methylene chloride	97		100		70-130	3		20
Acetone	96		100		58-148	4		20
trans-1,2-Dichloroethene	100		100		70-130	0		20
Methyl Acetate	86		89		70-130	3		20
Methyl tert butyl ether	96		100		63-130	4		20
1,1-Dichloroethane	100		110		70-130	10		20
cis-1,2-Dichloroethene	100		100		70-130	0		20
Cyclohexane	100		100		70-130	0		20
Chloroform	100		100		70-130	0		20
Carbon tetrachloride	100		110		63-132	10		20
1,1,1-Trichloroethane	100		110		67-130	10		20
2-Butanone	90		100		63-138	11		20
Benzene	98		100		70-130	2		20
1,2-Dichloroethane	100		110		70-130	10		20

Lab Control Sample Analysis

Batch Quality Control

Project Name: B14 GW
Project Number: 21010214

Lab Number: L2451170
Report Date: 09/13/24

Parameter	LCS		LCSD		%Recovery Limits	RPD	RPD	
	%Recovery	Qual	%Recovery	Qual			Qual	Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-03 Batch: WG1970685-3 WG1970685-4								
Trichloroethene	100		110		70-130	10		20
1,2-Dichloropropane	98		100		70-130	2		20
Bromodichloromethane	100		100		67-130	0		20
cis-1,3-Dichloropropene	98		100		70-130	2		20
Toluene	100		100		70-130	0		20
Tetrachloroethene	100		100		70-130	0		20
4-Methyl-2-pentanone	88		87		59-130	1		20
trans-1,3-Dichloropropene	90		93		70-130	3		20
1,1,2-Trichloroethane	100		100		70-130	0		20
Dibromochloromethane	98		100		63-130	2		20
1,2-Dibromoethane	96		100		70-130	4		20
2-Hexanone	96		100		57-130	4		20
Chlorobenzene	100		100		75-130	0		20
Ethylbenzene	100		100		70-130	0		20
p/m-Xylene	100		105		70-130	5		20
o-Xylene	100		100		70-130	0		20
Styrene	100		100		70-130	0		20
Bromoform	94		97		54-136	3		20
Isopropylbenzene	97		100		70-130	3		20
1,1,1,2-Tetrachloroethane	90		92		67-130	2		20
1,3-Dichlorobenzene	100		100		70-130	0		20
1,4-Dichlorobenzene	100		100		70-130	0		20
1,2-Dichlorobenzene	98		100		70-130	2		20

Lab Control Sample Analysis

Batch Quality Control

Project Name: B14 GW
Project Number: 21010214

Lab Number: L2451170
Report Date: 09/13/24

Parameter	LCS		LCSD		%Recovery Limits	RPD	RPD	
	%Recovery	Qual	%Recovery	Qual			Qual	Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-03 Batch: WG1970685-3 WG1970685-4								
1,2-Dibromo-3-chloropropane	93		96		41-144	3		20
1,2,4-Trichlorobenzene	100		100		70-130	0		20
1,2,3-Trichlorobenzene	100		100		70-130	0		20

Surrogate	LCS		LCSD		Acceptance Criteria
	%Recovery	Qual	%Recovery	Qual	
1,2-Dichloroethane-d4	100		106		70-130
Toluene-d8	100		99		70-130
4-Bromofluorobenzene	100		99		70-130
Dibromofluoromethane	97		99		70-130

Lab Control Sample Analysis Batch Quality Control

Project Name: B14 GW
Project Number: 21010214

Lab Number: L2451170
Report Date: 09/13/24

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS-SIM - Westborough Lab Associated sample(s): 01-03 Batch: WG1970687-3 WG1970687-4								
1,1,2,2-Tetrachloroethane	88		86		70-130	2		25

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
1,2-Dichloroethane-d4	110		110		70-130
4-Bromofluorobenzene	98		97		70-130

SEMIVOLATILES

Project Name: B14 GW
Project Number: 21010214

Lab Number: L2451170
Report Date: 09/13/24

SAMPLE RESULTS

Lab ID: L2451170-01
 Client ID: HI17-MWS
 Sample Location: B14

Date Collected: 09/06/24 12:00
 Date Received: 09/06/24
 Field Prep: Not Specified

Sample Depth:

Matrix: Water
 Analytical Method: 1,8270E
 Analytical Date: 09/12/24 05:07
 Analyst: SLR

Extraction Method: EPA 3510C
 Extraction Date: 09/11/24 12:00

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Benzaldehyde	ND		ug/l	5.0	1.1	1
Phenol	ND		ug/l	5.0	0.35	1
Bis(2-chloroethyl)ether	ND		ug/l	2.0	0.39	1
2-Chlorophenol	ND		ug/l	2.0	0.65	1
2-Methylphenol	ND		ug/l	5.0	2.3	1
Bis(2-chloroisopropyl)ether	ND		ug/l	2.0	0.40	1
Acetophenone	ND		ug/l	5.0	0.92	1
n-Nitrosodi-n-propylamine	ND		ug/l	5.0	0.91	1
3-Methylphenol/4-Methylphenol	ND		ug/l	5.0	1.4	1
Hexachloroethane	ND		ug/l	2.0	0.20	1
Nitrobenzene	ND		ug/l	1.4	0.20	1
Isophorone	ND		ug/l	5.0	0.86	1
2,4-Dimethylphenol	2.4	J	ug/l	5.0	2.0	1
Bis(2-chloroethoxy)methane	ND		ug/l	5.0	0.84	1
2,4-Dichlorophenol	ND		ug/l	5.0	1.7	1
Naphthalene	ND		ug/l	2.0	0.54	1
4-Chloroaniline	ND		ug/l	3.7	0.47	1
Hexachlorobutadiene	ND		ug/l	2.0	0.36	1
Caprolactam	ND		ug/l	10	1.2	1
2-Methylnaphthalene	ND		ug/l	2.0	0.37	1
Hexachlorocyclopentadiene	ND		ug/l	20	1.2	1
1,2,4,5-Tetrachlorobenzene	ND		ug/l	1.7	0.24	1
2,4,6-Trichlorophenol	ND		ug/l	5.0	2.1	1
2,4,5-Trichlorophenol	ND		ug/l	5.0	2.1	1
Biphenyl	ND		ug/l	2.0	0.20	1
2-Chloronaphthalene	ND		ug/l	2.0	0.35	1
2-Nitroaniline	ND		ug/l	5.0	1.0	1
2,6-Dinitrotoluene	ND		ug/l	5.0	0.84	1

Project Name: B14 GW
Project Number: 21010214

Lab Number: L2451170
Report Date: 09/13/24

SAMPLE RESULTS

Lab ID: L2451170-01
Client ID: HI17-MWS
Sample Location: B14

Date Collected: 09/06/24 12:00
Date Received: 09/06/24
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Acenaphthylene	ND		ug/l	2.0	0.32	1
Acenaphthene	ND		ug/l	2.0	0.40	1
2,4-Dinitrophenol	ND		ug/l	20	5.4	1
2,4-Dinitrotoluene	ND		ug/l	5.0	0.54	1
2,3,4,6-Tetrachlorophenol	ND		ug/l	5.0	2.2	1
Diethyl phthalate	ND		ug/l	5.0	0.76	1
Fluorene	ND		ug/l	2.0	0.44	1
4-Nitroaniline	ND		ug/l	5.0	1.4	1
NDPA/DPA	ND		ug/l	2.0	0.92	1
Hexachlorobenzene	ND		ug/l	2.0	0.45	1
Pentachlorophenol	ND		ug/l	10	2.5	1
Phenanthrene	ND		ug/l	2.0	0.42	1
Anthracene	ND		ug/l	2.0	0.47	1
Carbazole	ND		ug/l	2.0	0.31	1
Di-n-butylphthalate	ND		ug/l	5.0	0.96	1
Fluoranthene	ND		ug/l	2.0	0.41	1
Pyrene	ND		ug/l	2.0	0.41	1
3,3'-Dichlorobenzidine	ND		ug/l	5.0	1.8	1
Benzo(a)anthracene	ND		ug/l	2.0	0.32	1
Chrysene	ND		ug/l	1.5	0.22	1
Bis(2-ethylhexyl)phthalate	ND		ug/l	3.0	1.4	1
Di-n-octylphthalate	ND		ug/l	5.0	2.3	1
Benzo(b)fluoranthene	ND		ug/l	2.0	0.53	1
Benzo(k)fluoranthene	ND		ug/l	2.0	0.62	1
Benzo(a)pyrene	ND		ug/l	2.0	0.37	1
Indeno(1,2,3-cd)pyrene	ND		ug/l	2.0	0.48	1
Dibenzo(a,h)anthracene	ND		ug/l	2.0	0.29	1
Benzo(ghi)perylene	ND		ug/l	2.0	0.37	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	24		21-120
Phenol-d6	22		10-120
Nitrobenzene-d5	72		23-120
2-Fluorobiphenyl	80		15-120
2,4,6-Tribromophenol	45		10-120
4-Terphenyl-d14	90		41-149

Project Name: B14 GW
Project Number: 21010214

Lab Number: L2451170
Report Date: 09/13/24

SAMPLE RESULTS

Lab ID: L2451170-01
 Client ID: HI17-MWS
 Sample Location: B14

Date Collected: 09/06/24 12:00
 Date Received: 09/06/24
 Field Prep: Not Specified

Sample Depth:
 Matrix: Water
 Analytical Method: 1,8270E-SIM
 Analytical Date: 09/12/24 15:42
 Analyst: RP

Extraction Method: EPA 3510C
 Extraction Date: 09/11/24 12:00

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS-SIM - Westborough Lab						
Naphthalene	0.40		ug/l	0.10	0.02	1
2-Methylnaphthalene	0.24		ug/l	0.10	0.03	1
Acenaphthylene	ND		ug/l	0.10	0.02	1
Acenaphthene	0.15		ug/l	0.10	0.02	1
Fluorene	0.11		ug/l	0.10	0.03	1
Phenanthrene	0.14		ug/l	0.05	0.04	1
Anthracene	0.31		ug/l	0.10	0.02	1
Fluoranthene	0.20		ug/l	0.10	0.03	1
Pyrene	0.10	J	ug/l	0.10	0.04	1
Benzo(a)anthracene	0.10		ug/l	0.05	0.03	1
Chrysene	0.05	J	ug/l	0.10	0.03	1
Benzo(b)fluoranthene	0.03	J	ug/l	0.05	0.03	1
Benzo(k)fluoranthene	ND		ug/l	0.10	0.03	1
Benzo(a)pyrene	ND		ug/l	0.10	0.02	1
Indeno(1,2,3-cd)pyrene	ND		ug/l	0.10	0.02	1
Dibenzo(a,h)anthracene	ND		ug/l	0.05	0.02	1
Benzo(ghi)perylene	ND		ug/l	0.10	0.02	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
Nitrobenzene-d5	91		23-120
2-Fluorobiphenyl	83		15-120
4-Terphenyl-d14	73		41-149

Project Name: B14 GW
Project Number: 21010214

Lab Number: L2451170
Report Date: 09/13/24

SAMPLE RESULTS

Lab ID: L2451170-02
 Client ID: HI12-MWS
 Sample Location: B14

Date Collected: 09/06/24 14:25
 Date Received: 09/06/24
 Field Prep: Not Specified

Sample Depth:
 Matrix: Water
 Analytical Method: 1,8270E
 Analytical Date: 09/12/24 05:32
 Analyst: SLR

Extraction Method: EPA 3510C
 Extraction Date: 09/11/24 12:00

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Benzaldehyde	ND		ug/l	5.0	1.1	1
Phenol	2.6	J	ug/l	5.0	0.35	1
Bis(2-chloroethyl)ether	ND		ug/l	2.0	0.39	1
2-Chlorophenol	ND		ug/l	2.0	0.65	1
2-Methylphenol	ND		ug/l	5.0	2.3	1
Bis(2-chloroisopropyl)ether	ND		ug/l	2.0	0.40	1
Acetophenone	ND		ug/l	5.0	0.92	1
n-Nitrosodi-n-propylamine	ND		ug/l	5.0	0.91	1
3-Methylphenol/4-Methylphenol	ND		ug/l	5.0	1.4	1
Hexachloroethane	ND		ug/l	2.0	0.20	1
Nitrobenzene	ND		ug/l	1.4	0.20	1
Isophorone	ND		ug/l	5.0	0.86	1
2,4-Dimethylphenol	ND		ug/l	5.0	2.0	1
Bis(2-chloroethoxy)methane	ND		ug/l	5.0	0.84	1
2,4-Dichlorophenol	ND		ug/l	5.0	1.7	1
Naphthalene	ND		ug/l	2.0	0.54	1
4-Chloroaniline	ND		ug/l	3.7	0.47	1
Hexachlorobutadiene	ND		ug/l	2.0	0.36	1
Caprolactam	ND		ug/l	10	1.2	1
2-Methylnaphthalene	ND		ug/l	2.0	0.37	1
Hexachlorocyclopentadiene	ND		ug/l	20	1.2	1
1,2,4,5-Tetrachlorobenzene	ND		ug/l	1.7	0.24	1
2,4,6-Trichlorophenol	ND		ug/l	5.0	2.1	1
2,4,5-Trichlorophenol	ND		ug/l	5.0	2.1	1
Biphenyl	ND		ug/l	2.0	0.20	1
2-Chloronaphthalene	ND		ug/l	2.0	0.35	1
2-Nitroaniline	ND		ug/l	5.0	1.0	1
2,6-Dinitrotoluene	ND		ug/l	5.0	0.84	1

Project Name: B14 GW
Project Number: 21010214

Lab Number: L2451170
Report Date: 09/13/24

SAMPLE RESULTS

Lab ID: L2451170-02
Client ID: HI12-MWS
Sample Location: B14

Date Collected: 09/06/24 14:25
Date Received: 09/06/24
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Acenaphthylene	ND		ug/l	2.0	0.32	1
Acenaphthene	ND		ug/l	2.0	0.40	1
2,4-Dinitrophenol	ND		ug/l	20	5.4	1
2,4-Dinitrotoluene	ND		ug/l	5.0	0.54	1
2,3,4,6-Tetrachlorophenol	ND		ug/l	5.0	2.2	1
Diethyl phthalate	ND		ug/l	5.0	0.76	1
Fluorene	ND		ug/l	2.0	0.44	1
4-Nitroaniline	ND		ug/l	5.0	1.4	1
NDPA/DPA	ND		ug/l	2.0	0.92	1
Hexachlorobenzene	ND		ug/l	2.0	0.45	1
Pentachlorophenol	ND		ug/l	10	2.5	1
Phenanthrene	ND		ug/l	2.0	0.42	1
Anthracene	ND		ug/l	2.0	0.47	1
Carbazole	ND		ug/l	2.0	0.31	1
Di-n-butylphthalate	ND		ug/l	5.0	0.96	1
Fluoranthene	ND		ug/l	2.0	0.41	1
Pyrene	ND		ug/l	2.0	0.41	1
3,3'-Dichlorobenzidine	ND		ug/l	5.0	1.8	1
Benzo(a)anthracene	ND		ug/l	2.0	0.32	1
Chrysene	ND		ug/l	1.5	0.22	1
Bis(2-ethylhexyl)phthalate	ND		ug/l	3.0	1.4	1
Di-n-octylphthalate	ND		ug/l	5.0	2.3	1
Benzo(b)fluoranthene	ND		ug/l	2.0	0.53	1
Benzo(k)fluoranthene	ND		ug/l	2.0	0.62	1
Benzo(a)pyrene	ND		ug/l	2.0	0.37	1
Indeno(1,2,3-cd)pyrene	ND		ug/l	2.0	0.48	1
Dibenzo(a,h)anthracene	ND		ug/l	2.0	0.29	1
Benzo(ghi)perylene	ND		ug/l	2.0	0.37	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	45		21-120
Phenol-d6	34		10-120
Nitrobenzene-d5	67		23-120
2-Fluorobiphenyl	84		15-120
2,4,6-Tribromophenol	85		10-120
4-Terphenyl-d14	86		41-149

Project Name: B14 GW
Project Number: 21010214

Lab Number: L2451170
Report Date: 09/13/24

SAMPLE RESULTS

Lab ID: L2451170-02
 Client ID: HI12-MWS
 Sample Location: B14

Date Collected: 09/06/24 14:25
 Date Received: 09/06/24
 Field Prep: Not Specified

Sample Depth:

Matrix: Water
 Analytical Method: 1,8270E-SIM
 Analytical Date: 09/12/24 15:58
 Analyst: RP

Extraction Method: EPA 3510C
 Extraction Date: 09/11/24 12:00

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS-SIM - Westborough Lab						
Naphthalene	0.09	J	ug/l	0.10	0.02	1
2-Methylnaphthalene	0.04	J	ug/l	0.10	0.03	1
Acenaphthylene	ND		ug/l	0.10	0.02	1
Acenaphthene	0.36		ug/l	0.10	0.02	1
Fluorene	0.16		ug/l	0.10	0.03	1
Phenanthrene	0.31		ug/l	0.05	0.04	1
Anthracene	0.14		ug/l	0.10	0.02	1
Fluoranthene	0.21		ug/l	0.10	0.03	1
Pyrene	0.18		ug/l	0.10	0.04	1
Benzo(a)anthracene	0.06		ug/l	0.05	0.03	1
Chrysene	0.04	J	ug/l	0.10	0.03	1
Benzo(b)fluoranthene	0.07		ug/l	0.05	0.03	1
Benzo(k)fluoranthene	ND		ug/l	0.10	0.03	1
Benzo(a)pyrene	0.05	J	ug/l	0.10	0.02	1
Indeno(1,2,3-cd)pyrene	0.05	J	ug/l	0.10	0.02	1
Dibenzo(a,h)anthracene	ND		ug/l	0.05	0.02	1
Benzo(ghi)perylene	0.05	J	ug/l	0.10	0.02	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
Nitrobenzene-d5	91		23-120
2-Fluorobiphenyl	84		15-120
4-Terphenyl-d14	80		41-149

Project Name: B14 GW
Project Number: 21010214

Lab Number: L2451170
Report Date: 09/13/24

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270E
Analytical Date: 09/12/24 02:09
Analyst: SLR

Extraction Method: EPA 3510C
Extraction Date: 09/11/24 12:00

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 01-02 Batch: WG1970153-1					
Benzaldehyde	ND		ug/l	5.0	1.1
Phenol	ND		ug/l	5.0	0.35
Bis(2-chloroethyl)ether	ND		ug/l	2.0	0.39
2-Chlorophenol	ND		ug/l	2.0	0.65
2-Methylphenol	ND		ug/l	5.0	2.3
Bis(2-chloroisopropyl)ether	ND		ug/l	2.0	0.40
Acetophenone	ND		ug/l	5.0	0.92
n-Nitrosodi-n-propylamine	ND		ug/l	5.0	0.91
3-Methylphenol/4-Methylphenol	ND		ug/l	5.0	1.4
Hexachloroethane	ND		ug/l	2.0	0.20
Nitrobenzene	ND		ug/l	1.4	0.20
Isophorone	ND		ug/l	5.0	0.86
2,4-Dimethylphenol	ND		ug/l	5.0	2.0
Bis(2-chloroethoxy)methane	ND		ug/l	5.0	0.84
2,4-Dichlorophenol	ND		ug/l	5.0	1.7
Naphthalene	ND		ug/l	2.0	0.54
4-Chloroaniline	ND		ug/l	3.7	0.47
Hexachlorobutadiene	ND		ug/l	2.0	0.36
Caprolactam	ND		ug/l	10	1.2
2-Methylnaphthalene	ND		ug/l	2.0	0.37
Hexachlorocyclopentadiene	ND		ug/l	20	1.2
1,2,4,5-Tetrachlorobenzene	ND		ug/l	1.7	0.24
2,4,6-Trichlorophenol	ND		ug/l	5.0	2.1
2,4,5-Trichlorophenol	ND		ug/l	5.0	2.1
Biphenyl	ND		ug/l	2.0	0.20
2-Chloronaphthalene	ND		ug/l	2.0	0.35
2-Nitroaniline	ND		ug/l	5.0	1.0
2,6-Dinitrotoluene	ND		ug/l	5.0	0.84
Acenaphthylene	ND		ug/l	2.0	0.32

Project Name: B14 GW
Project Number: 21010214

Lab Number: L2451170
Report Date: 09/13/24

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270E
Analytical Date: 09/12/24 02:09
Analyst: SLR

Extraction Method: EPA 3510C
Extraction Date: 09/11/24 12:00

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatle Organics by GC/MS - Westborough Lab for sample(s): 01-02 Batch: WG1970153-1					
Acenaphthene	ND		ug/l	2.0	0.40
2,4-Dinitrophenol	ND		ug/l	20	5.4
2,4-Dinitrotoluene	ND		ug/l	5.0	0.54
2,3,4,6-Tetrachlorophenol	ND		ug/l	5.0	2.2
Diethyl phthalate	ND		ug/l	5.0	0.76
Fluorene	ND		ug/l	2.0	0.44
4-Nitroaniline	ND		ug/l	5.0	1.4
NDPA/DPA	ND		ug/l	2.0	0.92
Hexachlorobenzene	ND		ug/l	2.0	0.45
Pentachlorophenol	ND		ug/l	10	2.5
Phenanthrene	ND		ug/l	2.0	0.42
Anthracene	ND		ug/l	2.0	0.47
Carbazole	ND		ug/l	2.0	0.31
Di-n-butylphthalate	ND		ug/l	5.0	0.96
Fluoranthene	ND		ug/l	2.0	0.41
Pyrene	ND		ug/l	2.0	0.41
3,3'-Dichlorobenzidine	ND		ug/l	5.0	1.8
Benzo(a)anthracene	ND		ug/l	2.0	0.32
Chrysene	ND		ug/l	1.5	0.22
Bis(2-ethylhexyl)phthalate	ND		ug/l	3.0	1.4
Di-n-octylphthalate	ND		ug/l	5.0	2.3
Benzo(b)fluoranthene	ND		ug/l	2.0	0.53
Benzo(k)fluoranthene	ND		ug/l	2.0	0.62
Benzo(a)pyrene	ND		ug/l	2.0	0.37
Indeno(1,2,3-cd)pyrene	ND		ug/l	2.0	0.48
Dibenzo(a,h)anthracene	ND		ug/l	2.0	0.29
Benzo(ghi)perylene	ND		ug/l	2.0	0.37

Project Name: B14 GW
Project Number: 21010214

Lab Number: L2451170
Report Date: 09/13/24

**Method Blank Analysis
Batch Quality Control**

Analytical Method: 1,8270E
Analytical Date: 09/12/24 02:09
Analyst: SLR

Extraction Method: EPA 3510C
Extraction Date: 09/11/24 12:00

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 01-02 Batch: WG1970153-1					

Surrogate	%Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	29		21-120
Phenol-d6	21		10-120
Nitrobenzene-d5	59		23-120
2-Fluorobiphenyl	73		15-120
2,4,6-Tribromophenol	43		10-120
4-Terphenyl-d14	82		41-149

Project Name: B14 GW
Project Number: 21010214

Lab Number: L2451170
Report Date: 09/13/24

**Method Blank Analysis
Batch Quality Control**

Analytical Method: 1,8270E-SIM
Analytical Date: 09/12/24 14:52
Analyst: RP

Extraction Method: EPA 3510C
Extraction Date: 09/11/24 12:00

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS-SIM - Westborough Lab for sample(s): 01-02 Batch: WG1970154-1					
Naphthalene	ND		ug/l	0.10	0.02
2-Methylnaphthalene	ND		ug/l	0.10	0.03
Acenaphthylene	ND		ug/l	0.10	0.02
Acenaphthene	ND		ug/l	0.10	0.02
Fluorene	ND		ug/l	0.10	0.03
Phenanthrene	ND		ug/l	0.05	0.04
Anthracene	ND		ug/l	0.10	0.02
Fluoranthene	ND		ug/l	0.10	0.03
Pyrene	ND		ug/l	0.10	0.04
Benzo(a)anthracene	ND		ug/l	0.05	0.03
Chrysene	ND		ug/l	0.10	0.03
Benzo(b)fluoranthene	ND		ug/l	0.05	0.03
Benzo(k)fluoranthene	ND		ug/l	0.10	0.03
Benzo(a)pyrene	ND		ug/l	0.10	0.02
Indeno(1,2,3-cd)pyrene	ND		ug/l	0.10	0.02
Dibenzo(a,h)anthracene	ND		ug/l	0.05	0.02
Benzo(ghi)perylene	ND		ug/l	0.10	0.02

Surrogate	%Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	34		21-120
Phenol-d6	28		10-120
Nitrobenzene-d5	79		23-120
2-Fluorobiphenyl	73		15-120
2,4,6-Tribromophenol	55		10-120
4-Terphenyl-d14	71		41-149

Lab Control Sample Analysis

Batch Quality Control

Project Name: B14 GW
Project Number: 21010214

Lab Number: L2451170
Report Date: 09/13/24

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-02 Batch: WG1970153-2 WG1970153-3								
Benzaldehyde	64		59		40-140	8		30
Phenol	40		36		12-110	11		30
Bis(2-chloroethyl)ether	69		63		40-140	9		30
2-Chlorophenol	79		68		27-123	15		30
2-Methylphenol	70		65		30-130	7		30
Bis(2-chloroisopropyl)ether	57		53		40-140	7		30
Acetophenone	82		75		39-129	9		30
n-Nitrosodi-n-propylamine	75		70		29-132	7		30
3-Methylphenol/4-Methylphenol	68		65		30-130	5		30
Hexachloroethane	75		75		40-140	0		30
Nitrobenzene	77		71		40-140	8		30
Isophorone	78		70		40-140	11		30
2,4-Dimethylphenol	68		62		30-130	9		30
Bis(2-chloroethoxy)methane	75		69		40-140	8		30
2,4-Dichlorophenol	92		70		30-130	27		30
Naphthalene	77		74		40-140	4		30
4-Chloroaniline	64		61		40-140	5		30
Hexachlorobutadiene	94		96		40-140	2		30
Caprolactam	46		46		10-130	0		30
2-Methylnaphthalene	88		83		40-140	6		30
Hexachlorocyclopentadiene	77		71		40-140	8		30
1,2,4,5-Tetrachlorobenzene	87		83		2-134	5		30
2,4,6-Trichlorophenol	102		78		30-130	27		30

Lab Control Sample Analysis

Batch Quality Control

Project Name: B14 GW
Project Number: 21010214

Lab Number: L2451170
Report Date: 09/13/24

Parameter	LCS		LCSD		%Recovery Limits	RPD	Qual	RPD Limits
	%Recovery	Qual	%Recovery	Qual				
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-02 Batch: WG1970153-2 WG1970153-3								
2,4,5-Trichlorophenol	112		85		30-130	27		30
Biphenyl	80		75		40-140	6		30
2-Chloronaphthalene	87		79		40-140	10		30
2-Nitroaniline	99		96		52-143	3		30
2,6-Dinitrotoluene	110		97		40-140	13		30
Acenaphthylene	88		84		45-123	5		30
Acenaphthene	89		81		37-111	9		30
2,4-Dinitrophenol	104		75		20-130	32	Q	30
2,4-Dinitrotoluene	104		92		48-143	12		30
2,3,4,6-Tetrachlorophenol	112		74		54-145	41	Q	30
Diethyl phthalate	110		102		40-140	8		30
Fluorene	94		90		40-140	4		30
4-Nitroaniline	92		87		51-143	6		30
NDPA/DPA	95		88		40-140	8		30
Hexachlorobenzene	99		90		40-140	10		30
Pentachlorophenol	105	Q	78		9-103	30		30
Phenanthrene	90		82		40-140	9		30
Anthracene	97		88		40-140	10		30
Carbazole	99		90		55-144	10		30
Di-n-butylphthalate	109		102		40-140	7		30
Fluoranthene	103		93		40-140	10		30
Pyrene	103		92		26-127	11		30
3,3'-Dichlorobenzidine	72		77		40-140	7		30

Lab Control Sample Analysis Batch Quality Control

Project Name: B14 GW
Project Number: 21010214

Lab Number: L2451170
Report Date: 09/13/24

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-02 Batch: WG1970153-2 WG1970153-3								
Benzo(a)anthracene	92		83		40-140	10		30
Chrysene	96		86		40-140	11		30
Bis(2-ethylhexyl)phthalate	111		105		40-140	6		30
Di-n-octylphthalate	116		110		40-140	5		30
Benzo(b)fluoranthene	107		102		40-140	5		30
Benzo(k)fluoranthene	102		90		40-140	13		30
Benzo(a)pyrene	106		98		40-140	8		30
Indeno(1,2,3-cd)pyrene	98		91		40-140	7		30
Dibenzo(a,h)anthracene	98		93		40-140	5		30
Benzo(ghi)perylene	106		98		40-140	8		30

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
2-Fluorophenol	58		45		21-120
Phenol-d6	38		34		10-120
Nitrobenzene-d5	68		65		23-120
2-Fluorobiphenyl	81		77		15-120
2,4,6-Tribromophenol	83		66		10-120
4-Terphenyl-d14	93		84		41-149

Lab Control Sample Analysis

Batch Quality Control

Project Name: B14 GW
Project Number: 21010214

Lab Number: L2451170
Report Date: 09/13/24

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS-SIM - Westborough Lab Associated sample(s): 01-02 Batch: WG1970154-2 WG1970154-3								
Naphthalene	74		84		40-140	13		40
2-Methylnaphthalene	76		84		40-140	10		40
Acenaphthylene	74		81		40-140	9		40
Acenaphthene	85		93		37-111	9		40
Fluorene	83		90		40-140	8		40
Phenanthrene	89		96		40-140	8		40
Anthracene	91		98		40-140	7		40
Fluoranthene	84		90		40-140	7		40
Pyrene	84		88		26-127	5		40
Benzo(a)anthracene	96		104		40-140	8		40
Chrysene	88		95		40-140	8		40
Benzo(b)fluoranthene	86		93		40-140	8		40
Benzo(k)fluoranthene	88		93		40-140	6		40
Benzo(a)pyrene	85		91		40-140	7		40
Indeno(1,2,3-cd)pyrene	96		105		40-140	9		40
Dibenzo(a,h)anthracene	90		97		40-140	7		40
Benzo(ghi)perylene	91		99		40-140	8		40

Lab Control Sample Analysis

Batch Quality Control

Project Name: B14 GW
Project Number: 21010214

Lab Number: L2451170
Report Date: 09/13/24

Parameter	<i>LCS</i> %Recovery	<i>Qual</i>	<i>LCSD</i> %Recovery	<i>Qual</i>	<i>%Recovery</i> Limits	<i>RPD</i>	<i>Qual</i>	<i>RPD</i> Limits
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Semivolatile Organics by GC/MS-SIM - Westborough Lab Associated sample(s): 01-02 Batch: WG1970154-2 WG1970154-3

<i>Surrogate</i>	<i>LCS</i> %Recovery	<i>Qual</i>	<i>LCSD</i> %Recovery	<i>Qual</i>	<i>Acceptance</i> Criteria
2-Fluorophenol	53		53		21-120
Phenol-d6	42		45		10-120
Nitrobenzene-d5	80		86		23-120
2-Fluorobiphenyl	74		79		15-120
2,4,6-Tribromophenol	81		73		10-120
4-Terphenyl-d14	71		73		41-149

Project Name: B14 GW
Project Number: 21010214

Serial_No:09132416:02
Lab Number: L2451170
Report Date: 09/13/24

Sample Receipt and Container Information

Were project specific reporting limits specified? YES

Cooler Information

Cooler **Custody Seal**
A Absent

Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L2451170-01A	Vial HCl preserved	A	NA		2.5	Y	Absent		PA-8260-SIM(14),PA-8260(14)
L2451170-01B	Vial HCl preserved	A	NA		2.5	Y	Absent		PA-8260-SIM(14),PA-8260(14)
L2451170-01C	Vial HCl preserved	A	NA		2.5	Y	Absent		PA-8260-SIM(14),PA-8260(14)
L2451170-01D	Amber 100ml unpreserved	A	7	7	2.5	Y	Absent		PA-8270SIM-RVT(7),PA-8270-RVT(7)
L2451170-01E	Amber 100ml unpreserved	A	7	7	2.5	Y	Absent		PA-8270SIM-RVT(7),PA-8270-RVT(7)
L2451170-02A	Vial HCl preserved	A	NA		2.5	Y	Absent		PA-8260-SIM(14),PA-8260(14)
L2451170-02B	Vial HCl preserved	A	NA		2.5	Y	Absent		PA-8260-SIM(14),PA-8260(14)
L2451170-02C	Vial HCl preserved	A	NA		2.5	Y	Absent		PA-8260-SIM(14),PA-8260(14)
L2451170-02D	Amber 100ml unpreserved	A	10	10	2.5	Y	Absent		PA-8270-RVT(7),PA-8270SIM-RVT(7)
L2451170-02E	Amber 100ml unpreserved	A	10	10	2.5	Y	Absent		PA-8270-RVT(7),PA-8270SIM-RVT(7)
L2451170-03A	Vial HCl preserved	A	NA		2.5	Y	Absent		PA-8260-SIM(14),PA-8260(14)
L2451170-03B	Vial HCl preserved	A	NA		2.5	Y	Absent		PA-8260-SIM(14),PA-8260(14)
L2451170-03C	Vial HCl preserved	A	NA		2.5	Y	Absent		PA-8260-SIM(14),PA-8260(14)
L2451170-03D	Vial HCl preserved	A	NA		2.5	Y	Absent		PA-8260-SIM(14),PA-8260(14)

*Values in parentheses indicate holding time in days



Project Name: B14 GW
Project Number: 21010214

Lab Number: L2451170
Report Date: 09/13/24

GLOSSARY

Acronyms

DL	- Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the limit of quantitation (LOQ). The DL includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
EDL	- Estimated Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The EDL includes any adjustments from dilutions, concentrations or moisture content, where applicable. The use of EDLs is specific to the analysis of PAHs using Solid-Phase Microextraction (SPME).
EMPC	- Estimated Maximum Possible Concentration: The concentration that results from the signal present at the retention time of an analyte when the ions meet all of the identification criteria except the ion abundance ratio criteria. An EMPC is a worst-case estimate of the concentration.
EPA	- Environmental Protection Agency.
LCS	- Laboratory Control Sample: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
LCSD	- Laboratory Control Sample Duplicate: Refer to LCS.
LFB	- Laboratory Fortified Blank: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
LOD	- Limit of Detection: This value represents the level to which a target analyte can reliably be detected for a specific analyte in a specific matrix by a specific method. The LOD includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
LOQ	- Limit of Quantitation: The value at which an instrument can accurately measure an analyte at a specific concentration. The LOQ includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.) Limit of Quantitation: The value at which an instrument can accurately measure an analyte at a specific concentration. The LOQ includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
MDL	- Method Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The MDL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
MS	- Matrix Spike Sample: A sample prepared by adding a known mass of target analyte to a specified amount of matrix sample for which an independent estimate of target analyte concentration is available. For Method 332.0, the spike recovery is calculated using the native concentration, including estimated values.
MSD	- Matrix Spike Sample Duplicate: Refer to MS.
NA	- Not Applicable.
NC	- Not Calculated: Term is utilized when one or more of the results utilized in the calculation are non-detect at the parameter's reporting unit.
NDPA/DPA	- N-Nitrosodiphenylamine/Diphenylamine.
NI	- Not Ignitable.
NP	- Non-Plastic: Term is utilized for the analysis of Atterberg Limits in soil.
NR	- No Results: Term is utilized when 'No Target Compounds Requested' is reported for the analysis of Volatile or Semivolatile Organic TIC only requests.
RL	- Reporting Limit: The value at which an instrument can accurately measure an analyte at a specific concentration. The RL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
RPD	- Relative Percent Difference: The results from matrix and/or matrix spike duplicates are primarily designed to assess the precision of analytical results in a given matrix and are expressed as relative percent difference (RPD). Values which are less than five times the reporting limit for any individual parameter are evaluated by utilizing the absolute difference between the values; although the RPD value will be provided in the report.
SRM	- Standard Reference Material: A reference sample of a known or certified value that is of the same or similar matrix as the associated field samples.
STLP	- Semi-dynamic Tank Leaching Procedure per EPA Method 1315.
TEF	- Toxic Equivalency Factors: The values assigned to each dioxin and furan to evaluate their toxicity relative to 2,3,7,8-TCDD.
TEQ	- Toxic Equivalent: The measure of a sample's toxicity derived by multiplying each dioxin and furan by its corresponding TEF and then summing the resulting values.
TIC	- Tentatively Identified Compound: A compound that has been identified to be present and is not part of the target compound list (TCL) for the method and/or program. All TICs are qualitatively identified and reported as estimated concentrations.

Report Format: DU Report with 'J' Qualifiers



Project Name: B14 GW
Project Number: 21010214

Lab Number: L2451170
Report Date: 09/13/24

Footnotes

- 1 - The reference for this analyte should be considered modified since this analyte is absent from the target analyte list of the original method.

Terms

Analytical Method: Both the document from which the method originates and the analytical reference method. (Example: EPA 8260B is shown as 1,8260B.) The codes for the reference method documents are provided in the References section of the Addendum.

Chlordane: The target compound Chlordane (CAS No. 57-74-9) is reported for GC ECD analyses. Per EPA, this compound "refers to a mixture of chlordane isomers, other chlorinated hydrocarbons and numerous other components." (Reference: USEPA Toxicological Review of Chlordane, In Support of Summary Information on the Integrated Risk Information System (IRIS), December 1997.)

Difference: With respect to Total Oxidizable Precursor (TOP) Assay analysis, the difference is defined as the Post-Treatment value minus the Pre-Treatment value.

Final pH: As it pertains to Sample Receipt & Container Information section of the report, Final pH reflects pH of container determined after adjustment at the laboratory, if applicable. If no adjustment required, value reflects Initial pH.

Frozen Date/Time: With respect to Volatile Organics in soil, Frozen Date/Time reflects the date/time at which associated Reagent Water-preserved vials were initially frozen. Note: If frozen date/time is beyond 48 hours from sample collection, value will be reflected in 'bold'.

Gasoline Range Organics (GRO): Gasoline Range Organics (GRO) results include all chromatographic peaks eluting from Methyl tert butyl ether through Naphthalene, with the exception of GRO analysis in support of State of Ohio programs, which includes all chromatographic peaks eluting from Hexane through Dodecane.

Initial pH: As it pertains to Sample Receipt & Container Information section of the report, Initial pH reflects pH of container determined upon receipt, if applicable.

PAH Total: With respect to Alkylated PAH analyses, the 'PAHs, Total' result is defined as the summation of results for all or a subset of the following compounds: Naphthalene, C1-C4 Naphthalenes, 2-Methylnaphthalene, 1-Methylnaphthalene, Biphenyl, Acenaphthylene, Acenaphthene, Fluorene, C1-C3 Fluorenes, Phenanthrene, C1-C4 Phenanthrenes/Anthracenes, Anthracene, Fluoranthene, Pyrene, C1-C4 Fluoranthenes/Pyrenes, Benz(a)anthracene, Chrysene, C1-C4 Chrysenes, Benzo(b)fluoranthene, Benzo(j)+(k)fluoranthene, Benzo(e)pyrene, Benzo(a)pyrene, Perylene, Indeno(1,2,3-cd)pyrene, Dibenz(ah)+(ac)anthracene, Benzo(g,h,i)perylene. If a 'Total' result is requested, the results of its individual components will also be reported.

PFAS Total: With respect to PFAS analyses, the 'PFAS, Total (5)' result is defined as the summation of results for: PFHpA, PFHxS, PFOA, PFNA and PFOS. In addition, the 'PFAS, Total (6)' result is defined as the summation of results for: PFHpA, PFHxS, PFOA, PFNA, PFDA and PFOS. For MassDEP DW compliance analysis only, the 'PFAS, Total (6)' result is defined as the summation of results at or above the RL. Note: If a 'Total' result is requested, the results of its individual components will also be reported.

Total: With respect to Organic analyses, a 'Total' result is defined as the summation of results for individual isomers or Aroclors. If a 'Total' result is requested, the results of its individual components will also be reported. This is applicable to 'Total' results for methods 8260, 8081 and 8082.

Data Qualifiers

- A** - Spectra identified as "Aldol Condensates" are byproducts of the extraction/concentration procedures when acetone is introduced in the process.
- B** - The analyte was detected above the reporting limit in the associated method blank. Flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For MCP-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For DOD-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank AND the analyte was detected above one-half the reporting limit (or above the reporting limit for common lab contaminants) in the associated method blank. For NJ-Air-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte above the reporting limit. For NJ-related projects (excluding Air), flag only applies to associated field samples that have detectable concentrations of the analyte, which was detected above the reporting limit in the associated method blank or above five times the reporting limit for common lab contaminants (Phthalates, Acetone, Methylene Chloride, 2-Butanone).
- C** - Co-elution: The target analyte co-elutes with a known lab standard (i.e. surrogate, internal standards, etc.) for co-extracted analyses.
- D** - Concentration of analyte was quantified from diluted analysis. Flag only applies to field samples that have detectable concentrations of the analyte.
- E** - Concentration of analyte exceeds the range of the calibration curve and/or linear range of the instrument.
- F** - The ratio of quantifier ion response to qualifier ion response falls outside of the laboratory criteria. Results are considered to be an estimated maximum concentration.
- G** - The concentration may be biased high due to matrix interferences (i.e. co-elution) with non-target compound(s). The result should be considered estimated.
- H** - The analysis of pH was performed beyond the regulatory-required holding time of 15 minutes from the time of sample collection.
- I** - The lower value for the two columns has been reported due to obvious interference.
- J** - Estimated value. The Target analyte concentration is below the quantitation limit (RL), but above the Method Detection Limit (MDL) or Estimated Detection Limit (EDL) for SPME-related analyses. This represents an estimated concentration for Tentatively

Report Format: DU Report with 'J' Qualifiers



Project Name: B14 GW
Project Number: 21010214

Lab Number: L2451170
Report Date: 09/13/24

Data Qualifiers

Identified Compounds (TICs). For calculated parameters, this represents that one or more values used in the calculation were estimated.

- M** - Reporting Limit (RL) exceeds the MCP CAM Reporting Limit for this analyte.
- ND** - Not detected at the method detection limit (MDL) for the sample, or estimated detection limit (EDL) for SPME-related analyses.
- NJ** - Presumptive evidence of compound. This represents an estimated concentration for Tentatively Identified Compounds (TICs), where the identification is based on a mass spectral library search.
- P** - The RPD between the results for the two columns exceeds the method-specified criteria.
- Q** - The quality control sample exceeds the associated acceptance criteria. For DOD-related projects, LCS and/or Continuing Calibration Standard exceedences are also qualified on all associated sample results. Note: This flag is not applicable for matrix spike recoveries when the sample concentration is greater than 4x the spike added or for batch duplicate RPD when the sample concentrations are less than 5x the RL. (Metals only.)
- R** - Analytical results are from sample re-analysis.
- RE** - Analytical results are from sample re-extraction.
- S** - Analytical results are from modified screening analysis.
- V** - The surrogate associated with this target analyte has a recovery outside the QC acceptance limits. (Applicable to MassDEP DW Compliance samples only.)
- Z** - The batch matrix spike and/or duplicate associated with this target analyte has a recovery/RPD outside the QC acceptance limits. (Applicable to MassDEP DW Compliance samples only.)

Project Name: B14 GW
Project Number: 21010214

Lab Number: L2451170
Report Date: 09/13/24

REFERENCES

- 1 Test Methods for Evaluating Solid Waste: Physical/Chemical Methods. EPA SW-846. Third Edition. Updates I - VI, 2018.

LIMITATION OF LIABILITIES

Alpha Analytical performs services with reasonable care and diligence normal to the analytical testing laboratory industry. In the event of an error, the sole and exclusive responsibility of Alpha Analytical shall be to re-perform the work at it's own expense. In no event shall Alpha Analytical be held liable for any incidental, consequential or special damages, including but not limited to, damages in any way connected with the use of, interpretation of, information or analysis provided by Alpha Analytical.

We strongly urge our clients to comply with EPA protocol regarding sample volume, preservation, cooling, containers, sampling procedures, holding time and splitting of samples in the field.



Certification Information

The following analytes are not included in our Primary NELAP Scope of Accreditation:

Westborough Facility

EPA 624.1: m/p-xylene, o-xylene, Naphthalene

EPA 625.1: alpha-Terpineol

EPA 8260D: NPW: 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene; SCM: Iodomethane (methyl iodide), 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene.

EPA 8270E: NPW: Dimethylnaphthalene,1,4-Diphenylhydrazine, alpha-Terpineol, Azobenzene; SCM: Dimethylnaphthalene,1,4-Diphenylhydrazine.

SM4500: NPW: Amenable Cyanide; SCM: Total Phosphorus, TKN, NO₂, NO₃.

Mansfield Facility

SM 2540D: TSS.

EPA TO-15: Halothane, 2,4,4-Trimethyl-2-pentene, 2,4,4-Trimethyl-1-pentene, Thiophene, 2-Methylthiophene,

3-Methylthiophene, 2-Ethylthiophene, 1,2,3-Trimethylbenzene, Indan, Indene, 1,2,4,5-Tetramethylbenzene, Benzothiophene, 1-Methylnaphthalene.

Nonpotable Water: EPA RSK-175 Dissolved Gases

Biological Tissue Matrix: EPA 3050B

The following analytes are included in our Massachusetts DEP Scope of Accreditation

Westborough Facility:

Drinking Water

EPA 300.0: Chloride, Nitrate-N, Fluoride, Sulfate; **EPA 353.2:** Nitrate-N, Nitrite-N; **SM4500NO3-F:** Nitrate-N, Nitrite-N; **SM4500F-C, SM4500CN-CE,**

EPA 180.1, SM2130B, SM4500Cl-D, SM2320B, SM2540C, SM4500H-B, SM4500NO2-B

EPA 524.2: THMs and VOCs; **EPA 504.1:** EDB, DBCP.

Microbiology: SM9215B; SM9223-P/A, SM9223B-Colilert-QT, SM9222D.

Non-Potable Water

SM4500H,B, EPA 120.1, SM2510B, SM2540C, SM2320B, SM4500CL-E, SM4500F-BC, SM4500NH3-BH: Ammonia-N and Kjeldahl-N, **EPA 350.1:**

Ammonia-N, **LACHAT 10-107-06-1-B:** Ammonia-N, **EPA 351.1, SM4500NO3-F, EPA 353.2:** Nitrate-N, **SM4500P-E, SM4500P-B, E, SM4500SO4-E,**

SM5220D, EPA 410.4, SM5210B, SM5310C, SM4500CL-D, EPA 1664, EPA 420.1, SM4500-CN-CE, SM2540D, EPA 300: Chloride, Sulfate, Nitrate.

EPA 624.1: Volatile Halocarbons & Aromatics,

EPA 608.3: Chlordane, Toxaphene, Aldrin, alpha-BHC, beta-BHC, gamma-BHC, delta-BHC, Dieldrin, DDD, DDE, DDT, Endosulfan I, Endosulfan II,

Endosulfan sulfate, Endrin, Endrin Aldehyde, Heptachlor, Heptachlor Epoxide, PCBs

EPA 625.1: SVOC (Acid/Base/Neutral Extractables).

Microbiology: SM9223B-Colilert-QT; Enterolert-QT, EPA 1600, EPA 1603, SM9222D.

Mansfield Facility:

Drinking Water

EPA 200.7: Al, Ba, Cd, Cr, Cu, Fe, Mn, Ni, Na, Ag, Ca, Zn. **EPA 200.8:** Al, Sb, As, Ba, Be, Cd, Cr, Cu, Pb, Mn, Ni, Se, Ag, TL, Zn. **EPA 245.1** Hg.

EPA 522, EPA 537.1.

Non-Potable Water

EPA 200.7: Al, Sb, As, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Mo, Ni, K, Se, Ag, Na, Sr, TL, Ti, V, Zn.

EPA 200.8: Al, Sb, As, Be, Cd, Cr, Cu, Fe, Pb, Mn, Ni, K, Se, Ag, Na, TL, Zn.

EPA 245.1 Hg.

SM2340B

For a complete listing of analytes and methods, please contact your Alpha Project Manager.



ANALYTICAL REPORT

Lab Number:	L2448654
Client:	Tradepoint Atlantic 1600 Sparrows Point Boulevard Baltimore, MD 21219
ATTN:	Robert Tworkowski
Phone:	(443) 649-5073
Project Name:	TMC SW SAMPLING
Project Number:	21010216
Report Date:	09/04/24

The original project report/data package is held by Alpha Analytical. This report/data package is paginated and should be reproduced only in its entirety. Alpha Analytical holds no responsibility for results and/or data that are not consistent with the original.

Certifications & Approvals: MA (M-MA086), NH NELAP (2064), CT (PH-0826), IL (200077), IN (C-MA-03), KY (KY98045), ME (MA00086), MD (348), NJ (MA935), NY (11148), NC (25700/666), OR (MA-1316), PA (68-03671), RI (LAO00065), TX (T104704476), VT (VT-0935), VA (460195), USDA (Permit #525-23-122-91930A1).

Eight Walkup Drive, Westborough, MA 01581-1019
508-898-9220 (Fax) 508-898-9193 800-624-9220 - www.alphalab.com



Project Name: TMC SW SAMPLING
Project Number: 21010216

Lab Number: L2448654
Report Date: 09/04/24

Alpha Sample ID	Client ID	Matrix	Sample Location	Collection Date/Time	Receive Date
L2448654-01	TMC-OUTLET	WATER	TMC	08/26/24 10:30	08/26/24
L2448654-02	TMC-TM04	WATER	TMC	08/26/24 11:00	08/26/24
L2448654-03	TMC-BEND	WATER	TMC	08/26/24 11:10	08/26/24
L2448654-04	TMC-RAIL-BRIDGE	WATER	TMC	08/26/24 11:20	08/26/24
L2448654-05	DUP	WATER	TMC	08/26/24 00:00	08/26/24
L2448654-06	TRIP BLANK	WATER	TMC	08/26/24 00:00	08/26/24

Project Name: TMC SW SAMPLING
Project Number: 21010216

Lab Number: L2448654
Report Date: 09/04/24

Case Narrative

The samples were received in accordance with the Chain of Custody and no significant deviations were encountered during the preparation or analysis unless otherwise noted. Sample Receipt, Container Information, and the Chain of Custody are located at the back of the report.

Results contained within this report relate only to the samples submitted under this Alpha Lab Number and meet NELAP requirements for all NELAP accredited parameters unless otherwise noted in the following narrative. The data presented in this report is organized by parameter (i.e. VOC, SVOC, etc.). Sample specific Quality Control data (i.e. Surrogate Spike Recovery) is reported at the end of the target analyte list for each individual sample, followed by the Laboratory Batch Quality Control at the end of each parameter. Tentatively Identified Compounds (TICs), if requested, are reported for compounds identified to be present and are not part of the method/program Target Compound List, even if only a subset of the TCL are being reported. If a sample was re-analyzed or re-extracted due to a required quality control corrective action and if both sets of data are reported, the Laboratory ID of the re-analysis or re-extraction is designated with an "R" or "RE", respectively.

When multiple Batch Quality Control elements are reported (e.g. more than one LCS), the associated samples for each element are noted in the grey shaded header line of each data table. Any Laboratory Batch, Sample Specific % recovery or RPD value that is outside the listed Acceptance Criteria is bolded in the report. In reference to questions H (CAM) or 4 (RCP) when "NO" is checked, the performance criteria for CAM and RCP methods allow for some quality control failures to occur and still be within method compliance. In these instances, the specific failure is not narrated but noted in the associated QC Outlier Summary Report, located directly after the Case Narrative. QC information is also incorporated in the Data Usability Assessment table (Format 11) of our Data Merger tool, where it can be reviewed in conjunction with the sample result, associated regulatory criteria and any associated data usability implications.

Soil/sediments and solids are reported on a dry weight basis unless otherwise noted. Tissues are reported "as received" or on a wet weight basis, unless otherwise noted. Definitions of all data qualifiers and acronyms used in this report are provided in the Glossary located at the back of the report.

HOLD POLICY - For samples submitted on hold, Alpha's policy is to hold samples (with the exception of Air canisters) free of charge for 21 calendar days from the date the project is completed. After 21 calendar days, we will dispose of all samples submitted including those put on hold unless you have contacted your Alpha Project Manager and made arrangements for Alpha to continue to hold the samples. Air canisters will be disposed after 3 business days from the date the project is completed.

Please contact Project Management at 800-624-9220 with any questions.

Project Name: TMC SW SAMPLING
Project Number: 21010216

Lab Number: L2448654
Report Date: 09/04/24

Case Narrative (continued)

Report Submission

All non-detect (ND) or estimated concentrations (J-qualified) have been quantitated to the limit noted in the MDL column.

I, the undersigned, attest under the pains and penalties of perjury that, to the best of my knowledge and belief and based upon my personal inquiry of those responsible for providing the information contained in this analytical report, such information is accurate and complete. This certificate of analysis is not complete unless this page accompanies any and all pages of this report.

Authorized Signature:

Tiffani Morrissey - Tiffani Morrissey

Title: Technical Director/Representative

Date: 09/04/24

ORGANICS

VOLATILES

Project Name: TMC SW SAMPLING
Project Number: 21010216

Lab Number: L2448654
Report Date: 09/04/24

SAMPLE RESULTS

Lab ID: L2448654-01
 Client ID: TMC-OUTLET
 Sample Location: TMC

Date Collected: 08/26/24 10:30
 Date Received: 08/26/24
 Field Prep: Not Specified

Sample Depth:

Matrix: Water
 Analytical Method: 1,8260D
 Analytical Date: 08/30/24 06:17
 Analyst: MCM

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Dichlorodifluoromethane	ND		ug/l	5.0	0.24	1
Chloromethane	ND		ug/l	2.5	0.20	1
Vinyl chloride	ND		ug/l	1.0	0.07	1
Bromomethane	ND		ug/l	1.0	0.26	1
Chloroethane	ND		ug/l	1.0	0.13	1
Trichlorofluoromethane	ND		ug/l	2.5	0.16	1
1,1-Dichloroethene	ND		ug/l	0.50	0.17	1
Carbon disulfide	17		ug/l	5.0	0.30	1
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND		ug/l	2.5	0.15	1
Methylene chloride	ND		ug/l	2.5	0.68	1
Acetone	5.4		ug/l	5.0	1.5	1
trans-1,2-Dichloroethene	ND		ug/l	0.75	0.16	1
Methyl Acetate	ND		ug/l	2.0	0.23	1
Methyl tert butyl ether	ND		ug/l	1.0	0.17	1
1,1-Dichloroethane	ND		ug/l	0.75	0.21	1
cis-1,2-Dichloroethene	ND		ug/l	0.50	0.19	1
Cyclohexane	ND		ug/l	10	0.27	1
Chloroform	1.3		ug/l	0.75	0.22	1
Carbon tetrachloride	ND		ug/l	0.50	0.13	1
1,1,1-Trichloroethane	ND		ug/l	0.50	0.16	1
2-Butanone	ND		ug/l	5.0	1.9	1
Benzene	ND		ug/l	0.50	0.16	1
1,2-Dichloroethane	ND		ug/l	0.50	0.13	1
Trichloroethene	ND		ug/l	0.50	0.18	1
1,2-Dichloropropane	ND		ug/l	1.0	0.14	1
Bromodichloromethane	0.19	J	ug/l	0.50	0.19	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	0.14	1
Toluene	ND		ug/l	0.75	0.20	1

Project Name: TMC SW SAMPLING
Project Number: 21010216

Lab Number: L2448654
Report Date: 09/04/24

SAMPLE RESULTS

Lab ID: L2448654-01
 Client ID: TMC-OUTLET
 Sample Location: TMC

Date Collected: 08/26/24 10:30
 Date Received: 08/26/24
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Tetrachloroethene	ND		ug/l	0.50	0.18	1
4-Methyl-2-pentanone	ND		ug/l	5.0	0.42	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	0.16	1
1,3-Dichloropropene, Total	ND		ug/l	0.50	0.14	1
1,1,2-Trichloroethane	ND		ug/l	0.75	0.14	1
Dibromochloromethane	ND		ug/l	0.50	0.15	1
1,2-Dibromoethane	ND		ug/l	2.0	0.19	1
2-Hexanone	ND		ug/l	5.0	0.52	1
Chlorobenzene	ND		ug/l	0.50	0.18	1
Ethylbenzene	ND		ug/l	0.50	0.17	1
p/m-Xylene	ND		ug/l	1.0	0.33	1
o-Xylene	ND		ug/l	1.0	0.39	1
Xylenes, Total	ND		ug/l	1.0	0.33	1
Styrene	ND		ug/l	1.0	0.36	1
Bromoform	ND		ug/l	2.0	0.25	1
Isopropylbenzene	ND		ug/l	0.50	0.19	1
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	0.17	1
1,3-Dichlorobenzene	ND		ug/l	2.5	0.19	1
1,4-Dichlorobenzene	ND		ug/l	2.5	0.19	1
1,2-Dichlorobenzene	ND		ug/l	2.5	0.18	1
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	0.35	1
1,2,4-Trichlorobenzene	ND		ug/l	2.5	0.22	1
1,2,3-Trichlorobenzene	ND		ug/l	2.5	0.23	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	106		70-130
Toluene-d8	101		70-130
4-Bromofluorobenzene	98		70-130
Dibromofluoromethane	105		70-130

Project Name: TMC SW SAMPLING
Project Number: 21010216

Lab Number: L2448654
Report Date: 09/04/24

SAMPLE RESULTS

Lab ID: L2448654-01
 Client ID: TMC-OUTLET
 Sample Location: TMC

Date Collected: 08/26/24 10:30
 Date Received: 08/26/24
 Field Prep: Not Specified

Sample Depth:

Matrix: Water
 Analytical Method: 1,8260D-SIM(M)
 Analytical Date: 08/30/24 06:17
 Analyst: TMS

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
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Volatile Organics by GC/MS-SIM - Westborough Lab						
1,1,2,2-Tetrachloroethane	ND		ug/l	0.050	0.006	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	107		70-130
4-Bromofluorobenzene	98		70-130

Project Name: TMC SW SAMPLING
Project Number: 21010216

Lab Number: L2448654
Report Date: 09/04/24

SAMPLE RESULTS

Lab ID: L2448654-02
 Client ID: TMC-TM04
 Sample Location: TMC

Date Collected: 08/26/24 11:00
 Date Received: 08/26/24
 Field Prep: Not Specified

Sample Depth:
 Matrix: Water
 Analytical Method: 1,8260D
 Analytical Date: 08/30/24 10:47
 Analyst: TMS

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Dichlorodifluoromethane	ND		ug/l	5.0	0.24	1
Chloromethane	ND		ug/l	2.5	0.20	1
Vinyl chloride	ND		ug/l	1.0	0.07	1
Bromomethane	ND		ug/l	1.0	0.26	1
Chloroethane	ND		ug/l	1.0	0.13	1
Trichlorofluoromethane	ND		ug/l	2.5	0.16	1
1,1-Dichloroethene	ND		ug/l	0.50	0.17	1
Carbon disulfide	0.80	J	ug/l	5.0	0.30	1
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND		ug/l	2.5	0.15	1
Methylene chloride	ND		ug/l	2.5	0.68	1
Acetone	4.7	J	ug/l	5.0	1.5	1
trans-1,2-Dichloroethene	ND		ug/l	0.75	0.16	1
Methyl Acetate	ND		ug/l	2.0	0.23	1
Methyl tert butyl ether	ND		ug/l	1.0	0.17	1
1,1-Dichloroethane	ND		ug/l	0.75	0.21	1
cis-1,2-Dichloroethene	ND		ug/l	0.50	0.19	1
Cyclohexane	ND		ug/l	10	0.27	1
Chloroform	0.45	J	ug/l	0.75	0.22	1
Carbon tetrachloride	ND		ug/l	0.50	0.13	1
1,1,1-Trichloroethane	ND		ug/l	0.50	0.16	1
2-Butanone	ND		ug/l	5.0	1.9	1
Benzene	ND		ug/l	0.50	0.16	1
1,2-Dichloroethane	ND		ug/l	0.50	0.13	1
Trichloroethene	ND		ug/l	0.50	0.18	1
1,2-Dichloropropane	ND		ug/l	1.0	0.14	1
Bromodichloromethane	ND		ug/l	0.50	0.19	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	0.14	1
Toluene	ND		ug/l	0.75	0.20	1

Project Name: TMC SW SAMPLING
Project Number: 21010216

Lab Number: L2448654
Report Date: 09/04/24

SAMPLE RESULTS

Lab ID: L2448654-02
 Client ID: TMC-TM04
 Sample Location: TMC

Date Collected: 08/26/24 11:00
 Date Received: 08/26/24
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Tetrachloroethene	ND		ug/l	0.50	0.18	1
4-Methyl-2-pentanone	ND		ug/l	5.0	0.42	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	0.16	1
1,3-Dichloropropene, Total	ND		ug/l	0.50	0.14	1
1,1,2-Trichloroethane	ND		ug/l	0.75	0.14	1
Dibromochloromethane	ND		ug/l	0.50	0.15	1
1,2-Dibromoethane	ND		ug/l	2.0	0.19	1
2-Hexanone	ND		ug/l	5.0	0.52	1
Chlorobenzene	ND		ug/l	0.50	0.18	1
Ethylbenzene	ND		ug/l	0.50	0.17	1
p/m-Xylene	ND		ug/l	1.0	0.33	1
o-Xylene	ND		ug/l	1.0	0.39	1
Xylenes, Total	ND		ug/l	1.0	0.33	1
Styrene	ND		ug/l	1.0	0.36	1
Bromoform	ND		ug/l	2.0	0.25	1
Isopropylbenzene	ND		ug/l	0.50	0.19	1
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	0.17	1
1,3-Dichlorobenzene	ND		ug/l	2.5	0.19	1
1,4-Dichlorobenzene	ND		ug/l	2.5	0.19	1
1,2-Dichlorobenzene	ND		ug/l	2.5	0.18	1
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	0.35	1
1,2,4-Trichlorobenzene	ND		ug/l	2.5	0.22	1
1,2,3-Trichlorobenzene	ND		ug/l	2.5	0.23	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	105		70-130
Toluene-d8	100		70-130
4-Bromofluorobenzene	100		70-130
Dibromofluoromethane	104		70-130

Project Name: TMC SW SAMPLING
Project Number: 21010216

Lab Number: L2448654
Report Date: 09/04/24

SAMPLE RESULTS

Lab ID: L2448654-02
 Client ID: TMC-TM04
 Sample Location: TMC

Date Collected: 08/26/24 11:00
 Date Received: 08/26/24
 Field Prep: Not Specified

Sample Depth:

Matrix: Water
 Analytical Method: 1,8260D-SIM(M)
 Analytical Date: 08/30/24 10:47
 Analyst: TMS

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
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Volatile Organics by GC/MS-SIM - Westborough Lab						
1,1,2,2-Tetrachloroethane	ND		ug/l	0.050	0.006	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	106		70-130
4-Bromofluorobenzene	97		70-130

Project Name: TMC SW SAMPLING
Project Number: 21010216

Lab Number: L2448654
Report Date: 09/04/24

SAMPLE RESULTS

Lab ID: L2448654-03
 Client ID: TMC-BEND
 Sample Location: TMC

Date Collected: 08/26/24 11:10
 Date Received: 08/26/24
 Field Prep: Not Specified

Sample Depth:
 Matrix: Water
 Analytical Method: 1,8260D
 Analytical Date: 08/30/24 11:14
 Analyst: TMS

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Dichlorodifluoromethane	ND		ug/l	5.0	0.24	1
Chloromethane	ND		ug/l	2.5	0.20	1
Vinyl chloride	ND		ug/l	1.0	0.07	1
Bromomethane	ND		ug/l	1.0	0.26	1
Chloroethane	ND		ug/l	1.0	0.13	1
Trichlorofluoromethane	ND		ug/l	2.5	0.16	1
1,1-Dichloroethene	ND		ug/l	0.50	0.17	1
Carbon disulfide	0.35	J	ug/l	5.0	0.30	1
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND		ug/l	2.5	0.15	1
Methylene chloride	ND		ug/l	2.5	0.68	1
Acetone	6.2		ug/l	5.0	1.5	1
trans-1,2-Dichloroethene	ND		ug/l	0.75	0.16	1
Methyl Acetate	ND		ug/l	2.0	0.23	1
Methyl tert butyl ether	ND		ug/l	1.0	0.17	1
1,1-Dichloroethane	ND		ug/l	0.75	0.21	1
cis-1,2-Dichloroethene	ND		ug/l	0.50	0.19	1
Cyclohexane	ND		ug/l	10	0.27	1
Chloroform	0.35	J	ug/l	0.75	0.22	1
Carbon tetrachloride	ND		ug/l	0.50	0.13	1
1,1,1-Trichloroethane	ND		ug/l	0.50	0.16	1
2-Butanone	ND		ug/l	5.0	1.9	1
Benzene	ND		ug/l	0.50	0.16	1
1,2-Dichloroethane	ND		ug/l	0.50	0.13	1
Trichloroethene	ND		ug/l	0.50	0.18	1
1,2-Dichloropropane	ND		ug/l	1.0	0.14	1
Bromodichloromethane	ND		ug/l	0.50	0.19	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	0.14	1
Toluene	ND		ug/l	0.75	0.20	1

Project Name: TMC SW SAMPLING
Project Number: 21010216

Lab Number: L2448654
Report Date: 09/04/24

SAMPLE RESULTS

Lab ID: L2448654-03
 Client ID: TMC-BEND
 Sample Location: TMC

Date Collected: 08/26/24 11:10
 Date Received: 08/26/24
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Tetrachloroethene	ND		ug/l	0.50	0.18	1
4-Methyl-2-pentanone	ND		ug/l	5.0	0.42	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	0.16	1
1,3-Dichloropropene, Total	ND		ug/l	0.50	0.14	1
1,1,2-Trichloroethane	ND		ug/l	0.75	0.14	1
Dibromochloromethane	ND		ug/l	0.50	0.15	1
1,2-Dibromoethane	ND		ug/l	2.0	0.19	1
2-Hexanone	ND		ug/l	5.0	0.52	1
Chlorobenzene	ND		ug/l	0.50	0.18	1
Ethylbenzene	ND		ug/l	0.50	0.17	1
p/m-Xylene	ND		ug/l	1.0	0.33	1
o-Xylene	ND		ug/l	1.0	0.39	1
Xylenes, Total	ND		ug/l	1.0	0.33	1
Styrene	ND		ug/l	1.0	0.36	1
Bromoform	ND		ug/l	2.0	0.25	1
Isopropylbenzene	ND		ug/l	0.50	0.19	1
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	0.17	1
1,3-Dichlorobenzene	ND		ug/l	2.5	0.19	1
1,4-Dichlorobenzene	ND		ug/l	2.5	0.19	1
1,2-Dichlorobenzene	ND		ug/l	2.5	0.18	1
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	0.35	1
1,2,4-Trichlorobenzene	ND		ug/l	2.5	0.22	1
1,2,3-Trichlorobenzene	ND		ug/l	2.5	0.23	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	109		70-130
Toluene-d8	100		70-130
4-Bromofluorobenzene	98		70-130
Dibromofluoromethane	106		70-130

Project Name: TMC SW SAMPLING
Project Number: 21010216

Lab Number: L2448654
Report Date: 09/04/24

SAMPLE RESULTS

Lab ID: L2448654-03
 Client ID: TMC-BEND
 Sample Location: TMC

Date Collected: 08/26/24 11:10
 Date Received: 08/26/24
 Field Prep: Not Specified

Sample Depth:

Matrix: Water
 Analytical Method: 1,8260D-SIM(M)
 Analytical Date: 08/30/24 11:14
 Analyst: TMS

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
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Volatile Organics by GC/MS-SIM - Westborough Lab						
1,1,2,2-Tetrachloroethane	ND		ug/l	0.050	0.006	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	107		70-130
4-Bromofluorobenzene	97		70-130

Project Name: TMC SW SAMPLING
Project Number: 21010216

Lab Number: L2448654
Report Date: 09/04/24

SAMPLE RESULTS

Lab ID: L2448654-04
 Client ID: TMC-RAIL-BRIDGE
 Sample Location: TMC

Date Collected: 08/26/24 11:20
 Date Received: 08/26/24
 Field Prep: Not Specified

Sample Depth:

Matrix: Water
 Analytical Method: 1,8260D
 Analytical Date: 08/30/24 11:41
 Analyst: TMS

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Dichlorodifluoromethane	ND		ug/l	5.0	0.24	1
Chloromethane	ND		ug/l	2.5	0.20	1
Vinyl chloride	ND		ug/l	1.0	0.07	1
Bromomethane	ND		ug/l	1.0	0.26	1
Chloroethane	ND		ug/l	1.0	0.13	1
Trichlorofluoromethane	ND		ug/l	2.5	0.16	1
1,1-Dichloroethene	ND		ug/l	0.50	0.17	1
Carbon disulfide	ND		ug/l	5.0	0.30	1
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND		ug/l	2.5	0.15	1
Methylene chloride	ND		ug/l	2.5	0.68	1
Acetone	8.9		ug/l	5.0	1.5	1
trans-1,2-Dichloroethene	ND		ug/l	0.75	0.16	1
Methyl Acetate	ND		ug/l	2.0	0.23	1
Methyl tert butyl ether	ND		ug/l	1.0	0.17	1
1,1-Dichloroethane	ND		ug/l	0.75	0.21	1
cis-1,2-Dichloroethene	ND		ug/l	0.50	0.19	1
Cyclohexane	ND		ug/l	10	0.27	1
Chloroform	ND		ug/l	0.75	0.22	1
Carbon tetrachloride	ND		ug/l	0.50	0.13	1
1,1,1-Trichloroethane	ND		ug/l	0.50	0.16	1
2-Butanone	ND		ug/l	5.0	1.9	1
Benzene	0.22	J	ug/l	0.50	0.16	1
1,2-Dichloroethane	ND		ug/l	0.50	0.13	1
Trichloroethene	ND		ug/l	0.50	0.18	1
1,2-Dichloropropane	ND		ug/l	1.0	0.14	1
Bromodichloromethane	ND		ug/l	0.50	0.19	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	0.14	1
Toluene	ND		ug/l	0.75	0.20	1

Project Name: TMC SW SAMPLING
Project Number: 21010216

Lab Number: L2448654
Report Date: 09/04/24

SAMPLE RESULTS

Lab ID: L2448654-04
 Client ID: TMC-RAIL-BRIDGE
 Sample Location: TMC

Date Collected: 08/26/24 11:20
 Date Received: 08/26/24
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Tetrachloroethene	ND		ug/l	0.50	0.18	1
4-Methyl-2-pentanone	ND		ug/l	5.0	0.42	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	0.16	1
1,3-Dichloropropene, Total	ND		ug/l	0.50	0.14	1
1,1,2-Trichloroethane	ND		ug/l	0.75	0.14	1
Dibromochloromethane	ND		ug/l	0.50	0.15	1
1,2-Dibromoethane	ND		ug/l	2.0	0.19	1
2-Hexanone	ND		ug/l	5.0	0.52	1
Chlorobenzene	ND		ug/l	0.50	0.18	1
Ethylbenzene	ND		ug/l	0.50	0.17	1
p/m-Xylene	ND		ug/l	1.0	0.33	1
o-Xylene	ND		ug/l	1.0	0.39	1
Xylenes, Total	ND		ug/l	1.0	0.33	1
Styrene	ND		ug/l	1.0	0.36	1
Bromoform	ND		ug/l	2.0	0.25	1
Isopropylbenzene	ND		ug/l	0.50	0.19	1
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	0.17	1
1,3-Dichlorobenzene	ND		ug/l	2.5	0.19	1
1,4-Dichlorobenzene	ND		ug/l	2.5	0.19	1
1,2-Dichlorobenzene	ND		ug/l	2.5	0.18	1
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	0.35	1
1,2,4-Trichlorobenzene	ND		ug/l	2.5	0.22	1
1,2,3-Trichlorobenzene	ND		ug/l	2.5	0.23	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	107		70-130
Toluene-d8	100		70-130
4-Bromofluorobenzene	99		70-130
Dibromofluoromethane	109		70-130

Project Name: TMC SW SAMPLING
Project Number: 21010216

Lab Number: L2448654
Report Date: 09/04/24

SAMPLE RESULTS

Lab ID: L2448654-04
 Client ID: TMC-RAIL-BRIDGE
 Sample Location: TMC

Date Collected: 08/26/24 11:20
 Date Received: 08/26/24
 Field Prep: Not Specified

Sample Depth:

Matrix: Water
 Analytical Method: 1,8260D-SIM(M)
 Analytical Date: 08/30/24 11:41
 Analyst: TMS

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
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Volatile Organics by GC/MS-SIM - Westborough Lab						
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1,1,2,2-Tetrachloroethane	ND		ug/l	0.050	0.006	1
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Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	108		70-130
4-Bromofluorobenzene	97		70-130

Project Name: TMC SW SAMPLING
Project Number: 21010216

Lab Number: L2448654
Report Date: 09/04/24

SAMPLE RESULTS

Lab ID: L2448654-05
 Client ID: DUP
 Sample Location: TMC

Date Collected: 08/26/24 00:00
 Date Received: 08/26/24
 Field Prep: Not Specified

Sample Depth:

Matrix: Water
 Analytical Method: 1,8260D
 Analytical Date: 08/30/24 12:08
 Analyst: TMS

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Dichlorodifluoromethane	ND		ug/l	5.0	0.24	1
Chloromethane	ND		ug/l	2.5	0.20	1
Vinyl chloride	ND		ug/l	1.0	0.07	1
Bromomethane	ND		ug/l	1.0	0.26	1
Chloroethane	ND		ug/l	1.0	0.13	1
Trichlorofluoromethane	ND		ug/l	2.5	0.16	1
1,1-Dichloroethene	ND		ug/l	0.50	0.17	1
Carbon disulfide	18		ug/l	5.0	0.30	1
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND		ug/l	2.5	0.15	1
Methylene chloride	ND		ug/l	2.5	0.68	1
Acetone	5.0		ug/l	5.0	1.5	1
trans-1,2-Dichloroethene	ND		ug/l	0.75	0.16	1
Methyl Acetate	ND		ug/l	2.0	0.23	1
Methyl tert butyl ether	ND		ug/l	1.0	0.17	1
1,1-Dichloroethane	ND		ug/l	0.75	0.21	1
cis-1,2-Dichloroethene	ND		ug/l	0.50	0.19	1
Cyclohexane	ND		ug/l	10	0.27	1
Chloroform	1.4		ug/l	0.75	0.22	1
Carbon tetrachloride	ND		ug/l	0.50	0.13	1
1,1,1-Trichloroethane	ND		ug/l	0.50	0.16	1
2-Butanone	ND		ug/l	5.0	1.9	1
Benzene	ND		ug/l	0.50	0.16	1
1,2-Dichloroethane	ND		ug/l	0.50	0.13	1
Trichloroethene	ND		ug/l	0.50	0.18	1
1,2-Dichloropropane	ND		ug/l	1.0	0.14	1
Bromodichloromethane	ND		ug/l	0.50	0.19	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	0.14	1
Toluene	ND		ug/l	0.75	0.20	1

Project Name: TMC SW SAMPLING
Project Number: 21010216

Lab Number: L2448654
Report Date: 09/04/24

SAMPLE RESULTS

Lab ID: L2448654-05
 Client ID: DUP
 Sample Location: TMC

Date Collected: 08/26/24 00:00
 Date Received: 08/26/24
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Tetrachloroethene	ND		ug/l	0.50	0.18	1
4-Methyl-2-pentanone	ND		ug/l	5.0	0.42	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	0.16	1
1,3-Dichloropropene, Total	ND		ug/l	0.50	0.14	1
1,1,2-Trichloroethane	ND		ug/l	0.75	0.14	1
Dibromochloromethane	ND		ug/l	0.50	0.15	1
1,2-Dibromoethane	ND		ug/l	2.0	0.19	1
2-Hexanone	ND		ug/l	5.0	0.52	1
Chlorobenzene	ND		ug/l	0.50	0.18	1
Ethylbenzene	ND		ug/l	0.50	0.17	1
p/m-Xylene	ND		ug/l	1.0	0.33	1
o-Xylene	ND		ug/l	1.0	0.39	1
Xylenes, Total	ND		ug/l	1.0	0.33	1
Styrene	ND		ug/l	1.0	0.36	1
Bromoform	ND		ug/l	2.0	0.25	1
Isopropylbenzene	ND		ug/l	0.50	0.19	1
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	0.17	1
1,3-Dichlorobenzene	ND		ug/l	2.5	0.19	1
1,4-Dichlorobenzene	ND		ug/l	2.5	0.19	1
1,2-Dichlorobenzene	ND		ug/l	2.5	0.18	1
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	0.35	1
1,2,4-Trichlorobenzene	ND		ug/l	2.5	0.22	1
1,2,3-Trichlorobenzene	ND		ug/l	2.5	0.23	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	107		70-130
Toluene-d8	98		70-130
4-Bromofluorobenzene	99		70-130
Dibromofluoromethane	107		70-130

Project Name: TMC SW SAMPLING
Project Number: 21010216

Lab Number: L2448654
Report Date: 09/04/24

SAMPLE RESULTS

Lab ID: L2448654-05
 Client ID: DUP
 Sample Location: TMC

Date Collected: 08/26/24 00:00
 Date Received: 08/26/24
 Field Prep: Not Specified

Sample Depth:

Matrix: Water
 Analytical Method: 1,8260D-SIM(M)
 Analytical Date: 08/30/24 12:08
 Analyst: TMS

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
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Volatile Organics by GC/MS-SIM - Westborough Lab						
1,1,2,2-Tetrachloroethane	ND		ug/l	0.050	0.006	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	108		70-130
4-Bromofluorobenzene	97		70-130

Project Name: TMC SW SAMPLING
Project Number: 21010216

Lab Number: L2448654
Report Date: 09/04/24

SAMPLE RESULTS

Lab ID: L2448654-06
 Client ID: TRIP BLANK
 Sample Location: TMC

Date Collected: 08/26/24 00:00
 Date Received: 08/26/24
 Field Prep: Not Specified

Sample Depth:
 Matrix: Water
 Analytical Method: 1,8260D
 Analytical Date: 08/30/24 10:20
 Analyst: TMS

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Dichlorodifluoromethane	ND		ug/l	5.0	0.24	1
Chloromethane	ND		ug/l	2.5	0.20	1
Vinyl chloride	ND		ug/l	1.0	0.07	1
Bromomethane	ND		ug/l	1.0	0.26	1
Chloroethane	ND		ug/l	1.0	0.13	1
Trichlorofluoromethane	ND		ug/l	2.5	0.16	1
1,1-Dichloroethene	ND		ug/l	0.50	0.17	1
Carbon disulfide	ND		ug/l	5.0	0.30	1
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND		ug/l	2.5	0.15	1
Methylene chloride	ND		ug/l	2.5	0.68	1
Acetone	ND		ug/l	5.0	1.5	1
trans-1,2-Dichloroethene	ND		ug/l	0.75	0.16	1
Methyl Acetate	ND		ug/l	2.0	0.23	1
Methyl tert butyl ether	ND		ug/l	1.0	0.17	1
1,1-Dichloroethane	ND		ug/l	0.75	0.21	1
cis-1,2-Dichloroethene	ND		ug/l	0.50	0.19	1
Cyclohexane	ND		ug/l	10	0.27	1
Chloroform	ND		ug/l	0.75	0.22	1
Carbon tetrachloride	ND		ug/l	0.50	0.13	1
1,1,1-Trichloroethane	ND		ug/l	0.50	0.16	1
2-Butanone	ND		ug/l	5.0	1.9	1
Benzene	ND		ug/l	0.50	0.16	1
1,2-Dichloroethane	ND		ug/l	0.50	0.13	1
Trichloroethene	ND		ug/l	0.50	0.18	1
1,2-Dichloropropane	ND		ug/l	1.0	0.14	1
Bromodichloromethane	ND		ug/l	0.50	0.19	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	0.14	1
Toluene	ND		ug/l	0.75	0.20	1

Project Name: TMC SW SAMPLING
Project Number: 21010216

Lab Number: L2448654
Report Date: 09/04/24

SAMPLE RESULTS

Lab ID: L2448654-06
 Client ID: TRIP BLANK
 Sample Location: TMC

Date Collected: 08/26/24 00:00
 Date Received: 08/26/24
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Tetrachloroethene	ND		ug/l	0.50	0.18	1
4-Methyl-2-pentanone	ND		ug/l	5.0	0.42	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	0.16	1
1,3-Dichloropropene, Total	ND		ug/l	0.50	0.14	1
1,1,2-Trichloroethane	ND		ug/l	0.75	0.14	1
Dibromochloromethane	ND		ug/l	0.50	0.15	1
1,2-Dibromoethane	ND		ug/l	2.0	0.19	1
2-Hexanone	ND		ug/l	5.0	0.52	1
Chlorobenzene	ND		ug/l	0.50	0.18	1
Ethylbenzene	ND		ug/l	0.50	0.17	1
p/m-Xylene	ND		ug/l	1.0	0.33	1
o-Xylene	ND		ug/l	1.0	0.39	1
Xylenes, Total	ND		ug/l	1.0	0.33	1
Styrene	ND		ug/l	1.0	0.36	1
Bromoform	ND		ug/l	2.0	0.25	1
Isopropylbenzene	ND		ug/l	0.50	0.19	1
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	0.17	1
1,3-Dichlorobenzene	ND		ug/l	2.5	0.19	1
1,4-Dichlorobenzene	ND		ug/l	2.5	0.19	1
1,2-Dichlorobenzene	ND		ug/l	2.5	0.18	1
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	0.35	1
1,2,4-Trichlorobenzene	ND		ug/l	2.5	0.22	1
1,2,3-Trichlorobenzene	ND		ug/l	2.5	0.23	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	104		70-130
Toluene-d8	100		70-130
4-Bromofluorobenzene	101		70-130
Dibromofluoromethane	103		70-130

Project Name: TMC SW SAMPLING
Project Number: 21010216

Lab Number: L2448654
Report Date: 09/04/24

SAMPLE RESULTS

Lab ID: L2448654-06
 Client ID: TRIP BLANK
 Sample Location: TMC

Date Collected: 08/26/24 00:00
 Date Received: 08/26/24
 Field Prep: Not Specified

Sample Depth:

Matrix: Water
 Analytical Method: 1,8260D-SIM(M)
 Analytical Date: 08/30/24 10:20
 Analyst: TMS

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
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Volatile Organics by GC/MS-SIM - Westborough Lab						
1,1,2,2-Tetrachloroethane	ND		ug/l	0.050	0.006	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	106		70-130
4-Bromofluorobenzene	97		70-130

Project Name: TMC SW SAMPLING
Project Number: 21010216

Lab Number: L2448654
Report Date: 09/04/24

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260D-SIM(M)
Analytical Date: 08/30/24 05:50
Analyst: MCM

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS-SIM - Westborough Lab for sample(s): 01-06 Batch: WG1966175-5					
1,1,2,2-Tetrachloroethane	ND		ug/l	0.050	0.006

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	106		70-130
4-Bromofluorobenzene	98		70-130

Project Name: TMC SW SAMPLING
Project Number: 21010216

Lab Number: L2448654
Report Date: 09/04/24

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260D
Analytical Date: 08/30/24 05:50
Analyst: MCM

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 01-06 Batch: WG1966199-5					
Dichlorodifluoromethane	ND		ug/l	5.0	0.24
Chloromethane	ND		ug/l	2.5	0.20
Vinyl chloride	ND		ug/l	1.0	0.07
Bromomethane	ND		ug/l	1.0	0.26
Chloroethane	ND		ug/l	1.0	0.13
Trichlorofluoromethane	ND		ug/l	2.5	0.16
1,1-Dichloroethene	ND		ug/l	0.50	0.17
Carbon disulfide	ND		ug/l	5.0	0.30
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND		ug/l	2.5	0.15
Methylene chloride	ND		ug/l	2.5	0.68
Acetone	ND		ug/l	5.0	1.5
trans-1,2-Dichloroethene	ND		ug/l	0.75	0.16
Methyl Acetate	ND		ug/l	2.0	0.23
Methyl tert butyl ether	ND		ug/l	1.0	0.17
1,1-Dichloroethane	ND		ug/l	0.75	0.21
cis-1,2-Dichloroethene	ND		ug/l	0.50	0.19
Cyclohexane	ND		ug/l	10	0.27
Chloroform	ND		ug/l	0.75	0.22
Carbon tetrachloride	ND		ug/l	0.50	0.13
1,1,1-Trichloroethane	ND		ug/l	0.50	0.16
2-Butanone	ND		ug/l	5.0	1.9
Benzene	ND		ug/l	0.50	0.16
1,2-Dichloroethane	ND		ug/l	0.50	0.13
Trichloroethene	ND		ug/l	0.50	0.18
1,2-Dichloropropane	ND		ug/l	1.0	0.14
Bromodichloromethane	ND		ug/l	0.50	0.19
cis-1,3-Dichloropropene	ND		ug/l	0.50	0.14
Toluene	ND		ug/l	0.75	0.20
Tetrachloroethene	ND		ug/l	0.50	0.18

Project Name: TMC SW SAMPLING
Project Number: 21010216

Lab Number: L2448654
Report Date: 09/04/24

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260D
Analytical Date: 08/30/24 05:50
Analyst: MCM

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 01-06 Batch: WG1966199-5					
4-Methyl-2-pentanone	ND		ug/l	5.0	0.42
trans-1,3-Dichloropropene	ND		ug/l	0.50	0.16
1,3-Dichloropropene, Total	ND		ug/l	0.50	0.14
1,1,2-Trichloroethane	ND		ug/l	0.75	0.14
Dibromochloromethane	ND		ug/l	0.50	0.15
1,2-Dibromoethane	ND		ug/l	2.0	0.19
2-Hexanone	ND		ug/l	5.0	0.52
Chlorobenzene	ND		ug/l	0.50	0.18
Ethylbenzene	ND		ug/l	0.50	0.17
p/m-Xylene	ND		ug/l	1.0	0.33
o-Xylene	ND		ug/l	1.0	0.39
Xylenes, Total	ND		ug/l	1.0	0.33
Styrene	ND		ug/l	1.0	0.36
Bromoform	ND		ug/l	2.0	0.25
Isopropylbenzene	ND		ug/l	0.50	0.19
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	0.17
1,3-Dichlorobenzene	ND		ug/l	2.5	0.19
1,4-Dichlorobenzene	ND		ug/l	2.5	0.19
1,2-Dichlorobenzene	ND		ug/l	2.5	0.18
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	0.35
1,2,4-Trichlorobenzene	ND		ug/l	2.5	0.22
1,2,3-Trichlorobenzene	ND		ug/l	2.5	0.23

Project Name: TMC SW SAMPLING
Project Number: 21010216

Lab Number: L2448654
Report Date: 09/04/24

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260D
Analytical Date: 08/30/24 05:50
Analyst: MCM

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 01-06 Batch: WG1966199-5					

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	107		70-130
Toluene-d8	99		70-130
4-Bromofluorobenzene	101		70-130
Dibromofluoromethane	104		70-130

Lab Control Sample Analysis

Batch Quality Control

Project Name: TMC SW SAMPLING

Lab Number: L2448654

Project Number: 21010216

Report Date: 09/04/24

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS-SIM - Westborough Lab Associated sample(s): 01-06 Batch: WG1966175-3 WG1966175-4								
1,1,2,2-Tetrachloroethane	93		92		70-130	1		25

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
1,2-Dichloroethane-d4	107		108		70-130
4-Bromofluorobenzene	98		98		70-130

Lab Control Sample Analysis

Batch Quality Control

Project Name: TMC SW SAMPLING

Lab Number: L2448654

Project Number: 21010216

Report Date: 09/04/24

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-06 Batch: WG1966199-3 WG1966199-4								
Dichlorodifluoromethane	86		89		36-147	3		20
Chloromethane	83		86		64-130	4		20
Vinyl chloride	84		86		55-140	2		20
Bromomethane	54		64		39-139	17		20
Chloroethane	81		84		55-138	4		20
Trichlorofluoromethane	100		100		62-150	0		20
1,1-Dichloroethene	100		100		61-145	0		20
Carbon disulfide	100		100		51-130	0		20
1,1,2-Trichloro-1,2,2-Trifluoroethane	100		110		70-130	10		20
Methylene chloride	98		99		70-130	1		20
Acetone	90		89		58-148	1		20
trans-1,2-Dichloroethene	100		100		70-130	0		20
Methyl Acetate	90		90		70-130	0		20
Methyl tert butyl ether	100		100		63-130	0		20
1,1-Dichloroethane	100		100		70-130	0		20
cis-1,2-Dichloroethene	100		100		70-130	0		20
Cyclohexane	100		100		70-130	0		20
Chloroform	100		100		70-130	0		20
Carbon tetrachloride	110		110		63-132	0		20
1,1,1-Trichloroethane	110		110		67-130	0		20
2-Butanone	99		94		63-138	5		20
Benzene	100		100		70-130	0		20
1,2-Dichloroethane	100		100		70-130	0		20

Lab Control Sample Analysis

Batch Quality Control

Project Name: TMC SW SAMPLING

Lab Number: L2448654

Project Number: 21010216

Report Date: 09/04/24

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-06 Batch: WG1966199-3 WG1966199-4								
Trichloroethene	110		110		70-130	0		20
1,2-Dichloropropane	100		100		70-130	0		20
Bromodichloromethane	100		100		67-130	0		20
cis-1,3-Dichloropropene	100		100		70-130	0		20
Toluene	100		100		70-130	0		20
Tetrachloroethene	110		100		70-130	10		20
4-Methyl-2-pentanone	97		93		59-130	4		20
trans-1,3-Dichloropropene	96		92		70-130	4		20
1,1,2-Trichloroethane	100		100		70-130	0		20
Dibromochloromethane	100		100		63-130	0		20
1,2-Dibromoethane	100		100		70-130	0		20
2-Hexanone	110		100		57-130	10		20
Chlorobenzene	100		100		75-130	0		20
Ethylbenzene	110		100		70-130	10		20
p/m-Xylene	105		105		70-130	0		20
o-Xylene	100		105		70-130	5		20
Styrene	105		100		70-130	5		20
Bromoform	97		95		54-136	2		20
Isopropylbenzene	100		100		70-130	0		20
1,1,2,2-Tetrachloroethane	95		92		67-130	3		20
1,3-Dichlorobenzene	100		100		70-130	0		20
1,4-Dichlorobenzene	100		110		70-130	10		20
1,2-Dichlorobenzene	100		100		70-130	0		20

Lab Control Sample Analysis

Batch Quality Control

Project Name: TMC SW SAMPLING

Project Number: 21010216

Lab Number: L2448654

Report Date: 09/04/24

Parameter	LCS		LCSD		%Recovery Limits	RPD	RPD	
	%Recovery	Qual	%Recovery	Qual			Qual	Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-06 Batch: WG1966199-3 WG1966199-4								
1,2-Dibromo-3-chloropropane	95		98		41-144	3		20
1,2,4-Trichlorobenzene	110		110		70-130	0		20
1,2,3-Trichlorobenzene	110		110		70-130	0		20

Surrogate	LCS		LCSD		Acceptance Criteria
	%Recovery	Qual	%Recovery	Qual	
1,2-Dichloroethane-d4	99		100		70-130
Toluene-d8	101		100		70-130
4-Bromofluorobenzene	100		100		70-130
Dibromofluoromethane	97		99		70-130

Matrix Spike Analysis

Batch Quality Control

Project Name: TMC SW SAMPLING

Lab Number: L2448654

Project Number: 21010216

Report Date: 09/04/24

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS-SIM - Westborough Lab Associated sample(s): 01-06 QC Batch ID: WG1966175-6 WG1966175-7 QC Sample: L2448654-01 Client ID: TMC-OUTLET												
1,1,1,2-Tetrachloroethane	ND	0.1	0.076	76		0.082	82		70-130	8		30

Surrogate	MS		MSD		Acceptance Criteria
	% Recovery	Qualifier	% Recovery	Qualifier	
1,2-Dichloroethane-d4	109		110		70-130
4-Bromofluorobenzene	97		96		70-130

Matrix Spike Analysis

Batch Quality Control

Project Name: TMC SW SAMPLING

Lab Number: L2448654

Project Number: 21010216

Report Date: 09/04/24

<i>Parameter</i>	<i>Native Sample</i>	<i>MS Added</i>	<i>MS Found</i>	<i>MS %Recovery</i>	<i>Qual</i>	<i>MSD Found</i>	<i>MSD %Recovery</i>	<i>Qual</i>	<i>Recovery Limits</i>	<i>RPD</i>	<i>Qual</i>	<i>RPD Limits</i>
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-06 QC Batch ID: WG1966199-6 WG1966199-7 QC Sample: L2448654-01 Client ID: TMC-OUTLET												
Dichlorodifluoromethane	ND	10	9.6	96		9.0	90		36-147	6		20
Chloromethane	ND	10	9.3	93		8.6	86		64-130	8		20
Vinyl chloride	ND	10	9.5	95		9.0	90		55-140	5		20
Bromomethane	ND	10	3.6	36	Q	3.7	37	Q	39-139	3		20
Chloroethane	ND	10	9.0	90		8.6	86		55-138	5		20
Trichlorofluoromethane	ND	10	11	110		10	100		62-150	10		20
1,1-Dichloroethene	ND	10	11	110		11	110		61-145	0		20
Carbon disulfide	17	10	27	100		30	130		51-130	11		20
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	10	11	110		10	100		70-130	10		20
Methylene chloride	ND	10	9.9	99		9.7	97		70-130	2		20
Acetone	5.4	10	15	96		14	86		58-148	7		20
trans-1,2-Dichloroethene	ND	10	11	110		11	110		70-130	0		20
Methyl Acetate	ND	10	8.0	80		7.6	76		70-130	5		20
Methyl tert butyl ether	ND	10	9.6	96		9.2	92		63-130	4		20
1,1-Dichloroethane	ND	10	11	110		10	100		70-130	10		20
cis-1,2-Dichloroethene	ND	10	11	110		10	100		70-130	10		20
Cyclohexane	ND	10	11	110		11	110		70-130	0		20
Chloroform	1.3	10	12	107		12	107		70-130	0		20
Carbon tetrachloride	ND	10	12	120		11	110		63-132	9		20
1,1,1-Trichloroethane	ND	10	12	120		11	110		67-130	9		20
2-Butanone	ND	10	9.0	90		8.5	85		63-138	6		20
Benzene	ND	10	10	100		9.8	98		70-130	2		20
1,2-Dichloroethane	ND	10	10	100		10	100		70-130	0		20

Matrix Spike Analysis

Batch Quality Control

Project Name: TMC SW SAMPLING

Lab Number: L2448654

Project Number: 21010216

Report Date: 09/04/24

<i>Parameter</i>	<i>Native Sample</i>	<i>MS Added</i>	<i>MS Found</i>	<i>MS %Recovery</i>	<i>Qual</i>	<i>MSD Found</i>	<i>MSD %Recovery</i>	<i>Qual</i>	<i>Recovery Limits</i>	<i>RPD</i>	<i>Qual</i>	<i>RPD Limits</i>
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-06 QC Batch ID: WG1966199-6 WG1966199-7 QC Sample: L2448654-01 Client ID: TMC-OUTLET												
Trichloroethene	ND	10	11	110		10	100		70-130	10		20
1,2-Dichloropropane	ND	10	10	100		9.7	97		70-130	3		20
Bromodichloromethane	0.19J	10	11	110		10	100		67-130	10		20
cis-1,3-Dichloropropene	ND	10	10	100		9.4	94		70-130	6		20
Toluene	ND	10	11	110		9.9	99		70-130	11		20
Tetrachloroethene	ND	10	11	110		10	100		70-130	10		20
4-Methyl-2-pentanone	ND	10	8.9	89		8.4	84		59-130	6		20
trans-1,3-Dichloropropene	ND	10	8.9	89		8.4	84		70-130	6		20
1,1,2-Trichloroethane	ND	10	9.8	98		9.4	94		70-130	4		20
Dibromochloromethane	ND	10	9.9	99		9.5	95		63-130	4		20
1,2-Dibromoethane	ND	10	9.8	98		9.2	92		70-130	6		20
2-Hexanone	ND	10	9.8	98		9.6	96		57-130	2		20
Chlorobenzene	ND	10	10	100		10	100		75-130	0		20
Ethylbenzene	ND	10	11	110		10	100		70-130	10		20
p/m-Xylene	ND	20	22	110		20	100		70-130	10		20
o-Xylene	ND	20	22	110		20	100		70-130	10		20
Styrene	ND	20	21	105		19	95		70-130	10		20
Bromoform	ND	10	9.7	97		9.2	92		54-136	5		20
Isopropylbenzene	ND	10	10	100		9.9	99		70-130	1		20
1,1,2,2-Tetrachloroethane	ND	10	9.1	91		8.8	88		67-130	3		20
1,3-Dichlorobenzene	ND	10	10	100		9.9	99		70-130	1		20
1,4-Dichlorobenzene	ND	10	10	100		9.9	99		70-130	1		20
1,2-Dichlorobenzene	ND	10	10	100		9.6	96		70-130	4		20

Matrix Spike Analysis

Batch Quality Control

Project Name: TMC SW SAMPLING

Lab Number: L2448654

Project Number: 21010216

Report Date: 09/04/24

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-06 QC Batch ID: WG1966199-6 WG1966199-7 QC Sample: L2448654-01 Client ID: TMC-OUTLET												
1,2-Dibromo-3-chloropropane	ND	10	9.6	96		9.0	90		41-144	6		20
1,2,4-Trichlorobenzene	ND	10	10	100		9.8	98		70-130	2		20
1,2,3-Trichlorobenzene	ND	10	10	100		10	100		70-130	0		20

Surrogate	MS % Recovery	Qualifier	MSD % Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	102		101		70-130
4-Bromofluorobenzene	99		98		70-130
Dibromofluoromethane	102		99		70-130
Toluene-d8	101		99		70-130

SEMIVOLATILES

Project Name: TMC SW SAMPLING
Project Number: 21010216

Lab Number: L2448654
Report Date: 09/04/24

SAMPLE RESULTS

Lab ID: L2448654-01
 Client ID: TMC-OUTLET
 Sample Location: TMC

Date Collected: 08/26/24 10:30
 Date Received: 08/26/24
 Field Prep: Not Specified

Sample Depth:

Matrix: Water
 Analytical Method: 1,8270E
 Analytical Date: 08/31/24 19:03
 Analyst: CMM

Extraction Method: EPA 3510C
 Extraction Date: 08/30/24 20:34

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Benzaldehyde	ND		ug/l	5.0	1.1	1
Phenol	3.5	J	ug/l	5.0	0.35	1
Bis(2-chloroethyl)ether	ND		ug/l	2.0	0.39	1
2-Chlorophenol	ND		ug/l	2.0	0.65	1
2-Methylphenol	ND		ug/l	5.0	2.3	1
Bis(2-chloroisopropyl)ether	ND		ug/l	2.0	0.40	1
Acetophenone	ND		ug/l	5.0	0.92	1
n-Nitrosodi-n-propylamine	ND		ug/l	5.0	0.91	1
3-Methylphenol/4-Methylphenol	ND		ug/l	5.0	1.4	1
Hexachloroethane	ND		ug/l	2.0	0.20	1
Nitrobenzene	ND		ug/l	1.4	0.20	1
Isophorone	ND		ug/l	5.0	0.86	1
2,4-Dimethylphenol	ND		ug/l	5.0	2.0	1
Bis(2-chloroethoxy)methane	ND		ug/l	5.0	0.84	1
2,4-Dichlorophenol	ND		ug/l	5.0	1.7	1
Naphthalene	ND		ug/l	2.0	0.54	1
4-Chloroaniline	ND		ug/l	3.7	0.47	1
Hexachlorobutadiene	ND		ug/l	2.0	0.36	1
Caprolactam	ND		ug/l	10	1.2	1
2-Methylnaphthalene	ND		ug/l	2.0	0.37	1
Hexachlorocyclopentadiene	ND		ug/l	20	1.2	1
1,2,4,5-Tetrachlorobenzene	ND		ug/l	1.7	0.24	1
2,4,6-Trichlorophenol	ND		ug/l	5.0	2.1	1
2,4,5-Trichlorophenol	ND		ug/l	5.0	2.1	1
Biphenyl	ND		ug/l	2.0	0.20	1
2-Chloronaphthalene	ND		ug/l	2.0	0.35	1
2-Nitroaniline	ND		ug/l	5.0	1.0	1
2,6-Dinitrotoluene	ND		ug/l	5.0	0.84	1

Project Name: TMC SW SAMPLING
Project Number: 21010216

Lab Number: L2448654
Report Date: 09/04/24

SAMPLE RESULTS

Lab ID: L2448654-01
 Client ID: TMC-OUTLET
 Sample Location: TMC

Date Collected: 08/26/24 10:30
 Date Received: 08/26/24
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Acenaphthylene	ND		ug/l	2.0	0.32	1
Acenaphthene	ND		ug/l	2.0	0.40	1
2,4-Dinitrophenol	ND		ug/l	20	5.4	1
2,4-Dinitrotoluene	ND		ug/l	5.0	0.54	1
2,3,4,6-Tetrachlorophenol	ND		ug/l	5.0	2.2	1
Diethyl phthalate	ND		ug/l	5.0	0.76	1
Fluorene	ND		ug/l	2.0	0.44	1
4-Nitroaniline	ND		ug/l	5.0	1.4	1
NDPA/DPA	ND		ug/l	2.0	0.92	1
Hexachlorobenzene	ND		ug/l	2.0	0.45	1
Pentachlorophenol	ND		ug/l	10	2.5	1
Phenanthrene	ND		ug/l	2.0	0.42	1
Anthracene	ND		ug/l	2.0	0.47	1
Carbazole	ND		ug/l	2.0	0.31	1
Di-n-butylphthalate	ND		ug/l	5.0	0.96	1
Fluoranthene	ND		ug/l	2.0	0.41	1
Pyrene	ND		ug/l	2.0	0.41	1
3,3'-Dichlorobenzidine	ND		ug/l	5.0	1.8	1
Benzo(a)anthracene	ND		ug/l	2.0	0.32	1
Chrysene	ND		ug/l	1.5	0.22	1
Bis(2-ethylhexyl)phthalate	ND		ug/l	3.0	1.4	1
Di-n-octylphthalate	ND		ug/l	5.0	2.3	1
Benzo(b)fluoranthene	ND		ug/l	2.0	0.53	1
Benzo(k)fluoranthene	ND		ug/l	2.0	0.62	1
Benzo(a)pyrene	ND		ug/l	2.0	0.37	1
Indeno(1,2,3-cd)pyrene	ND		ug/l	2.0	0.48	1
Dibenzo(a,h)anthracene	ND		ug/l	2.0	0.29	1
Benzo(ghi)perylene	ND		ug/l	2.0	0.37	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	44		21-120
Phenol-d6	31		10-120
Nitrobenzene-d5	76		23-120
2-Fluorobiphenyl	73		15-120
2,4,6-Tribromophenol	62		10-120
4-Terphenyl-d14	78		41-149

Project Name: TMC SW SAMPLING
Project Number: 21010216

Lab Number: L2448654
Report Date: 09/04/24

SAMPLE RESULTS

Lab ID: L2448654-01
 Client ID: TMC-OUTLET
 Sample Location: TMC

Date Collected: 08/26/24 10:30
 Date Received: 08/26/24
 Field Prep: Not Specified

Sample Depth:
 Matrix: Water
 Analytical Method: 1,8270E-SIM
 Analytical Date: 09/03/24 14:23
 Analyst: RP

Extraction Method: EPA 3510C
 Extraction Date: 08/30/24 20:34

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS-SIM - Westborough Lab						
Naphthalene	ND		ug/l	0.10	0.02	1
2-Methylnaphthalene	ND		ug/l	0.10	0.03	1
Acenaphthylene	ND		ug/l	0.10	0.02	1
Acenaphthene	0.08	J	ug/l	0.10	0.02	1
Fluorene	0.06	J	ug/l	0.10	0.03	1
Phenanthrene	0.07		ug/l	0.05	0.04	1
Anthracene	ND		ug/l	0.10	0.02	1
Fluoranthene	0.05	J	ug/l	0.10	0.03	1
Pyrene	ND		ug/l	0.10	0.04	1
Benzo(a)anthracene	ND		ug/l	0.05	0.03	1
Chrysene	ND		ug/l	0.10	0.03	1
Benzo(b)fluoranthene	ND		ug/l	0.05	0.03	1
Benzo(k)fluoranthene	ND		ug/l	0.10	0.03	1
Benzo(a)pyrene	ND		ug/l	0.10	0.02	1
Indeno(1,2,3-cd)pyrene	ND		ug/l	0.10	0.02	1
Dibenzo(a,h)anthracene	ND		ug/l	0.05	0.02	1
Benzo(ghi)perylene	ND		ug/l	0.10	0.02	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
Nitrobenzene-d5	78		23-120
2-Fluorobiphenyl	80		15-120
4-Terphenyl-d14	70		41-149

Project Name: TMC SW SAMPLING
Project Number: 21010216

Lab Number: L2448654
Report Date: 09/04/24

SAMPLE RESULTS

Lab ID: L2448654-02
 Client ID: TMC-TM04
 Sample Location: TMC

Date Collected: 08/26/24 11:00
 Date Received: 08/26/24
 Field Prep: Not Specified

Sample Depth:

Matrix: Water
 Analytical Method: 1,8270E
 Analytical Date: 08/31/24 20:11
 Analyst: EK

Extraction Method: EPA 3510C
 Extraction Date: 08/30/24 20:34

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Benzaldehyde	ND		ug/l	5.0	1.1	1
Phenol	5.1		ug/l	5.0	0.35	1
Bis(2-chloroethyl)ether	ND		ug/l	2.0	0.39	1
2-Chlorophenol	ND		ug/l	2.0	0.65	1
2-Methylphenol	ND		ug/l	5.0	2.3	1
Bis(2-chloroisopropyl)ether	ND		ug/l	2.0	0.40	1
Acetophenone	ND		ug/l	5.0	0.92	1
n-Nitrosodi-n-propylamine	ND		ug/l	5.0	0.91	1
3-Methylphenol/4-Methylphenol	ND		ug/l	5.0	1.4	1
Hexachloroethane	ND		ug/l	2.0	0.20	1
Nitrobenzene	ND		ug/l	1.4	0.20	1
Isophorone	ND		ug/l	5.0	0.86	1
2,4-Dimethylphenol	ND		ug/l	5.0	2.0	1
Bis(2-chloroethoxy)methane	ND		ug/l	5.0	0.84	1
2,4-Dichlorophenol	ND		ug/l	5.0	1.7	1
Naphthalene	ND		ug/l	2.0	0.54	1
4-Chloroaniline	ND		ug/l	3.7	0.47	1
Hexachlorobutadiene	ND		ug/l	2.0	0.36	1
Caprolactam	ND		ug/l	10	1.2	1
2-Methylnaphthalene	ND		ug/l	2.0	0.37	1
Hexachlorocyclopentadiene	ND		ug/l	20	1.2	1
1,2,4,5-Tetrachlorobenzene	ND		ug/l	1.7	0.24	1
2,4,6-Trichlorophenol	ND		ug/l	5.0	2.1	1
2,4,5-Trichlorophenol	ND		ug/l	5.0	2.1	1
Biphenyl	ND		ug/l	2.0	0.20	1
2-Chloronaphthalene	ND		ug/l	2.0	0.35	1
2-Nitroaniline	ND		ug/l	5.0	1.0	1
2,6-Dinitrotoluene	ND		ug/l	5.0	0.84	1

Project Name: TMC SW SAMPLING
Project Number: 21010216

Lab Number: L2448654
Report Date: 09/04/24

SAMPLE RESULTS

Lab ID: L2448654-02
 Client ID: TMC-TM04
 Sample Location: TMC

Date Collected: 08/26/24 11:00
 Date Received: 08/26/24
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Acenaphthylene	ND		ug/l	2.0	0.32	1
Acenaphthene	ND		ug/l	2.0	0.40	1
2,4-Dinitrophenol	ND		ug/l	20	5.4	1
2,4-Dinitrotoluene	ND		ug/l	5.0	0.54	1
2,3,4,6-Tetrachlorophenol	ND		ug/l	5.0	2.2	1
Diethyl phthalate	ND		ug/l	5.0	0.76	1
Fluorene	ND		ug/l	2.0	0.44	1
4-Nitroaniline	ND		ug/l	5.0	1.4	1
NDPA/DPA	ND		ug/l	2.0	0.92	1
Hexachlorobenzene	ND		ug/l	2.0	0.45	1
Pentachlorophenol	ND		ug/l	10	2.5	1
Phenanthrene	ND		ug/l	2.0	0.42	1
Anthracene	ND		ug/l	2.0	0.47	1
Carbazole	ND		ug/l	2.0	0.31	1
Di-n-butylphthalate	ND		ug/l	5.0	0.96	1
Fluoranthene	ND		ug/l	2.0	0.41	1
Pyrene	ND		ug/l	2.0	0.41	1
3,3'-Dichlorobenzidine	ND		ug/l	5.0	1.8	1
Benzo(a)anthracene	ND		ug/l	2.0	0.32	1
Chrysene	ND		ug/l	1.5	0.22	1
Bis(2-ethylhexyl)phthalate	ND		ug/l	3.0	1.4	1
Di-n-octylphthalate	ND		ug/l	5.0	2.3	1
Benzo(b)fluoranthene	ND		ug/l	2.0	0.53	1
Benzo(k)fluoranthene	ND		ug/l	2.0	0.62	1
Benzo(a)pyrene	ND		ug/l	2.0	0.37	1
Indeno(1,2,3-cd)pyrene	ND		ug/l	2.0	0.48	1
Dibenzo(a,h)anthracene	ND		ug/l	2.0	0.29	1
Benzo(ghi)perylene	ND		ug/l	2.0	0.37	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	44		21-120
Phenol-d6	31		10-120
Nitrobenzene-d5	74		23-120
2-Fluorobiphenyl	69		15-120
2,4,6-Tribromophenol	66		10-120
4-Terphenyl-d14	75		41-149

Project Name: TMC SW SAMPLING
Project Number: 21010216

Lab Number: L2448654
Report Date: 09/04/24

SAMPLE RESULTS

Lab ID: L2448654-02
 Client ID: TMC-TM04
 Sample Location: TMC

Date Collected: 08/26/24 11:00
 Date Received: 08/26/24
 Field Prep: Not Specified

Sample Depth:

Matrix: Water
 Analytical Method: 1,8270E-SIM
 Analytical Date: 09/03/24 14:40
 Analyst: RP

Extraction Method: EPA 3510C
 Extraction Date: 08/30/24 20:34

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS-SIM - Westborough Lab						
Naphthalene	ND		ug/l	0.10	0.02	1
2-Methylnaphthalene	ND		ug/l	0.10	0.03	1
Acenaphthylene	ND		ug/l	0.10	0.02	1
Acenaphthene	0.06	J	ug/l	0.10	0.02	1
Fluorene	0.05	J	ug/l	0.10	0.03	1
Phenanthrene	0.05		ug/l	0.05	0.04	1
Anthracene	ND		ug/l	0.10	0.02	1
Fluoranthene	ND		ug/l	0.10	0.03	1
Pyrene	ND		ug/l	0.10	0.04	1
Benzo(a)anthracene	ND		ug/l	0.05	0.03	1
Chrysene	ND		ug/l	0.10	0.03	1
Benzo(b)fluoranthene	ND		ug/l	0.05	0.03	1
Benzo(k)fluoranthene	ND		ug/l	0.10	0.03	1
Benzo(a)pyrene	ND		ug/l	0.10	0.02	1
Indeno(1,2,3-cd)pyrene	ND		ug/l	0.10	0.02	1
Dibenzo(a,h)anthracene	ND		ug/l	0.05	0.02	1
Benzo(ghi)perylene	ND		ug/l	0.10	0.02	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
Nitrobenzene-d5	72		23-120
2-Fluorobiphenyl	73		15-120
4-Terphenyl-d14	67		41-149

Project Name: TMC SW SAMPLING
Project Number: 21010216

Lab Number: L2448654
Report Date: 09/04/24

SAMPLE RESULTS

Lab ID: L2448654-03
 Client ID: TMC-BEND
 Sample Location: TMC

Date Collected: 08/26/24 11:10
 Date Received: 08/26/24
 Field Prep: Not Specified

Sample Depth:

Matrix: Water
 Analytical Method: 1,8270E
 Analytical Date: 08/31/24 20:34
 Analyst: EK

Extraction Method: EPA 3510C
 Extraction Date: 08/30/24 20:34

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Benzaldehyde	ND		ug/l	5.0	1.1	1
Phenol	ND		ug/l	5.0	0.35	1
Bis(2-chloroethyl)ether	ND		ug/l	2.0	0.39	1
2-Chlorophenol	ND		ug/l	2.0	0.65	1
2-Methylphenol	ND		ug/l	5.0	2.3	1
Bis(2-chloroisopropyl)ether	ND		ug/l	2.0	0.40	1
Acetophenone	ND		ug/l	5.0	0.92	1
n-Nitrosodi-n-propylamine	ND		ug/l	5.0	0.91	1
3-Methylphenol/4-Methylphenol	ND		ug/l	5.0	1.4	1
Hexachloroethane	ND		ug/l	2.0	0.20	1
Nitrobenzene	ND		ug/l	1.4	0.20	1
Isophorone	ND		ug/l	5.0	0.86	1
2,4-Dimethylphenol	ND		ug/l	5.0	2.0	1
Bis(2-chloroethoxy)methane	ND		ug/l	5.0	0.84	1
2,4-Dichlorophenol	ND		ug/l	5.0	1.7	1
Naphthalene	ND		ug/l	2.0	0.54	1
4-Chloroaniline	ND		ug/l	3.7	0.47	1
Hexachlorobutadiene	ND		ug/l	2.0	0.36	1
Caprolactam	ND		ug/l	10	1.2	1
2-Methylnaphthalene	ND		ug/l	2.0	0.37	1
Hexachlorocyclopentadiene	ND		ug/l	20	1.2	1
1,2,4,5-Tetrachlorobenzene	ND		ug/l	1.7	0.24	1
2,4,6-Trichlorophenol	ND		ug/l	5.0	2.1	1
2,4,5-Trichlorophenol	ND		ug/l	5.0	2.1	1
Biphenyl	ND		ug/l	2.0	0.20	1
2-Chloronaphthalene	ND		ug/l	2.0	0.35	1
2-Nitroaniline	ND		ug/l	5.0	1.0	1
2,6-Dinitrotoluene	ND		ug/l	5.0	0.84	1

Project Name: TMC SW SAMPLING
Project Number: 21010216

Lab Number: L2448654
Report Date: 09/04/24

SAMPLE RESULTS

Lab ID: L2448654-03
 Client ID: TMC-BEND
 Sample Location: TMC

Date Collected: 08/26/24 11:10
 Date Received: 08/26/24
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Acenaphthylene	ND		ug/l	2.0	0.32	1
Acenaphthene	ND		ug/l	2.0	0.40	1
2,4-Dinitrophenol	ND		ug/l	20	5.4	1
2,4-Dinitrotoluene	ND		ug/l	5.0	0.54	1
2,3,4,6-Tetrachlorophenol	ND		ug/l	5.0	2.2	1
Diethyl phthalate	ND		ug/l	5.0	0.76	1
Fluorene	ND		ug/l	2.0	0.44	1
4-Nitroaniline	ND		ug/l	5.0	1.4	1
NDPA/DPA	ND		ug/l	2.0	0.92	1
Hexachlorobenzene	ND		ug/l	2.0	0.45	1
Pentachlorophenol	ND		ug/l	10	2.5	1
Phenanthrene	ND		ug/l	2.0	0.42	1
Anthracene	ND		ug/l	2.0	0.47	1
Carbazole	ND		ug/l	2.0	0.31	1
Di-n-butylphthalate	ND		ug/l	5.0	0.96	1
Fluoranthene	ND		ug/l	2.0	0.41	1
Pyrene	ND		ug/l	2.0	0.41	1
3,3'-Dichlorobenzidine	ND		ug/l	5.0	1.8	1
Benzo(a)anthracene	ND		ug/l	2.0	0.32	1
Chrysene	ND		ug/l	1.5	0.22	1
Bis(2-ethylhexyl)phthalate	ND		ug/l	3.0	1.4	1
Di-n-octylphthalate	ND		ug/l	5.0	2.3	1
Benzo(b)fluoranthene	ND		ug/l	2.0	0.53	1
Benzo(k)fluoranthene	ND		ug/l	2.0	0.62	1
Benzo(a)pyrene	ND		ug/l	2.0	0.37	1
Indeno(1,2,3-cd)pyrene	ND		ug/l	2.0	0.48	1
Dibenzo(a,h)anthracene	ND		ug/l	2.0	0.29	1
Benzo(ghi)perylene	ND		ug/l	2.0	0.37	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	30		21-120
Phenol-d6	27		10-120
Nitrobenzene-d5	80		23-120
2-Fluorobiphenyl	71		15-120
2,4,6-Tribromophenol	47		10-120
4-Terphenyl-d14	76		41-149

Project Name: TMC SW SAMPLING
Project Number: 21010216

Lab Number: L2448654
Report Date: 09/04/24

SAMPLE RESULTS

Lab ID: L2448654-03
 Client ID: TMC-BEND
 Sample Location: TMC

Date Collected: 08/26/24 11:10
 Date Received: 08/26/24
 Field Prep: Not Specified

Sample Depth:
 Matrix: Water
 Analytical Method: 1,8270E-SIM
 Analytical Date: 09/03/24 14:56
 Analyst: RP

Extraction Method: EPA 3510C
 Extraction Date: 08/30/24 20:34

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS-SIM - Westborough Lab						
Naphthalene	0.32		ug/l	0.10	0.02	1
2-Methylnaphthalene	0.05	J	ug/l	0.10	0.03	1
Acenaphthylene	ND		ug/l	0.10	0.02	1
Acenaphthene	0.06	J	ug/l	0.10	0.02	1
Fluorene	0.06	J	ug/l	0.10	0.03	1
Phenanthrene	0.07		ug/l	0.05	0.04	1
Anthracene	ND		ug/l	0.10	0.02	1
Fluoranthene	ND		ug/l	0.10	0.03	1
Pyrene	ND		ug/l	0.10	0.04	1
Benzo(a)anthracene	ND		ug/l	0.05	0.03	1
Chrysene	ND		ug/l	0.10	0.03	1
Benzo(b)fluoranthene	ND		ug/l	0.05	0.03	1
Benzo(k)fluoranthene	ND		ug/l	0.10	0.03	1
Benzo(a)pyrene	ND		ug/l	0.10	0.02	1
Indeno(1,2,3-cd)pyrene	ND		ug/l	0.10	0.02	1
Dibenzo(a,h)anthracene	ND		ug/l	0.05	0.02	1
Benzo(ghi)perylene	ND		ug/l	0.10	0.02	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
Nitrobenzene-d5	77		23-120
2-Fluorobiphenyl	74		15-120
4-Terphenyl-d14	66		41-149

Project Name: TMC SW SAMPLING
Project Number: 21010216

Lab Number: L2448654
Report Date: 09/04/24

SAMPLE RESULTS

Lab ID: L2448654-04
 Client ID: TMC-RAIL-BRIDGE
 Sample Location: TMC

Date Collected: 08/26/24 11:20
 Date Received: 08/26/24
 Field Prep: Not Specified

Sample Depth:

Matrix: Water
 Analytical Method: 1,8270E
 Analytical Date: 08/31/24 20:56
 Analyst: EK

Extraction Method: EPA 3510C
 Extraction Date: 08/30/24 20:34

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Benzaldehyde	ND		ug/l	5.0	1.1	1
Phenol	ND		ug/l	5.0	0.35	1
Bis(2-chloroethyl)ether	ND		ug/l	2.0	0.39	1
2-Chlorophenol	ND		ug/l	2.0	0.65	1
2-Methylphenol	ND		ug/l	5.0	2.3	1
Bis(2-chloroisopropyl)ether	ND		ug/l	2.0	0.40	1
Acetophenone	ND		ug/l	5.0	0.92	1
n-Nitrosodi-n-propylamine	ND		ug/l	5.0	0.91	1
3-Methylphenol/4-Methylphenol	ND		ug/l	5.0	1.4	1
Hexachloroethane	ND		ug/l	2.0	0.20	1
Nitrobenzene	ND		ug/l	1.4	0.20	1
Isophorone	ND		ug/l	5.0	0.86	1
2,4-Dimethylphenol	ND		ug/l	5.0	2.0	1
Bis(2-chloroethoxy)methane	ND		ug/l	5.0	0.84	1
2,4-Dichlorophenol	ND		ug/l	5.0	1.7	1
Naphthalene	ND		ug/l	2.0	0.54	1
4-Chloroaniline	ND		ug/l	3.7	0.47	1
Hexachlorobutadiene	ND		ug/l	2.0	0.36	1
Caprolactam	ND		ug/l	10	1.2	1
2-Methylnaphthalene	ND		ug/l	2.0	0.37	1
Hexachlorocyclopentadiene	ND		ug/l	20	1.2	1
1,2,4,5-Tetrachlorobenzene	ND		ug/l	1.7	0.24	1
2,4,6-Trichlorophenol	ND		ug/l	5.0	2.1	1
2,4,5-Trichlorophenol	ND		ug/l	5.0	2.1	1
Biphenyl	ND		ug/l	2.0	0.20	1
2-Chloronaphthalene	ND		ug/l	2.0	0.35	1
2-Nitroaniline	ND		ug/l	5.0	1.0	1
2,6-Dinitrotoluene	ND		ug/l	5.0	0.84	1

Project Name: TMC SW SAMPLING
Project Number: 21010216

Lab Number: L2448654
Report Date: 09/04/24

SAMPLE RESULTS

Lab ID: L2448654-04
 Client ID: TMC-RAIL-BRIDGE
 Sample Location: TMC

Date Collected: 08/26/24 11:20
 Date Received: 08/26/24
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Acenaphthylene	ND		ug/l	2.0	0.32	1
Acenaphthene	ND		ug/l	2.0	0.40	1
2,4-Dinitrophenol	ND		ug/l	20	5.4	1
2,4-Dinitrotoluene	ND		ug/l	5.0	0.54	1
2,3,4,6-Tetrachlorophenol	ND		ug/l	5.0	2.2	1
Diethyl phthalate	ND		ug/l	5.0	0.76	1
Fluorene	ND		ug/l	2.0	0.44	1
4-Nitroaniline	ND		ug/l	5.0	1.4	1
NDPA/DPA	ND		ug/l	2.0	0.92	1
Hexachlorobenzene	ND		ug/l	2.0	0.45	1
Pentachlorophenol	ND		ug/l	10	2.5	1
Phenanthrene	ND		ug/l	2.0	0.42	1
Anthracene	ND		ug/l	2.0	0.47	1
Carbazole	ND		ug/l	2.0	0.31	1
Di-n-butylphthalate	ND		ug/l	5.0	0.96	1
Fluoranthene	ND		ug/l	2.0	0.41	1
Pyrene	ND		ug/l	2.0	0.41	1
3,3'-Dichlorobenzidine	ND		ug/l	5.0	1.8	1
Benzo(a)anthracene	ND		ug/l	2.0	0.32	1
Chrysene	ND		ug/l	1.5	0.22	1
Bis(2-ethylhexyl)phthalate	ND		ug/l	3.0	1.4	1
Di-n-octylphthalate	ND		ug/l	5.0	2.3	1
Benzo(b)fluoranthene	ND		ug/l	2.0	0.53	1
Benzo(k)fluoranthene	ND		ug/l	2.0	0.62	1
Benzo(a)pyrene	ND		ug/l	2.0	0.37	1
Indeno(1,2,3-cd)pyrene	ND		ug/l	2.0	0.48	1
Dibenzo(a,h)anthracene	ND		ug/l	2.0	0.29	1
Benzo(ghi)perylene	ND		ug/l	2.0	0.37	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	42		21-120
Phenol-d6	28		10-120
Nitrobenzene-d5	75		23-120
2-Fluorobiphenyl	68		15-120
2,4,6-Tribromophenol	64		10-120
4-Terphenyl-d14	73		41-149

Project Name: TMC SW SAMPLING
Project Number: 21010216

Lab Number: L2448654
Report Date: 09/04/24

SAMPLE RESULTS

Lab ID: L2448654-04
 Client ID: TMC-RAIL-BRIDGE
 Sample Location: TMC

Date Collected: 08/26/24 11:20
 Date Received: 08/26/24
 Field Prep: Not Specified

Sample Depth:

Matrix: Water
 Analytical Method: 1,8270E-SIM
 Analytical Date: 09/03/24 15:12
 Analyst: RP

Extraction Method: EPA 3510C
 Extraction Date: 08/30/24 20:34

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS-SIM - Westborough Lab						
Naphthalene	0.04	J	ug/l	0.10	0.02	1
2-Methylnaphthalene	ND		ug/l	0.10	0.03	1
Acenaphthylene	ND		ug/l	0.10	0.02	1
Acenaphthene	0.08	J	ug/l	0.10	0.02	1
Fluorene	0.07	J	ug/l	0.10	0.03	1
Phenanthrene	0.10		ug/l	0.05	0.04	1
Anthracene	ND		ug/l	0.10	0.02	1
Fluoranthene	0.04	J	ug/l	0.10	0.03	1
Pyrene	ND		ug/l	0.10	0.04	1
Benzo(a)anthracene	ND		ug/l	0.05	0.03	1
Chrysene	ND		ug/l	0.10	0.03	1
Benzo(b)fluoranthene	ND		ug/l	0.05	0.03	1
Benzo(k)fluoranthene	ND		ug/l	0.10	0.03	1
Benzo(a)pyrene	ND		ug/l	0.10	0.02	1
Indeno(1,2,3-cd)pyrene	ND		ug/l	0.10	0.02	1
Dibenzo(a,h)anthracene	ND		ug/l	0.05	0.02	1
Benzo(ghi)perylene	ND		ug/l	0.10	0.02	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
Nitrobenzene-d5	73		23-120
2-Fluorobiphenyl	72		15-120
4-Terphenyl-d14	61		41-149

Project Name: TMC SW SAMPLING
Project Number: 21010216

Lab Number: L2448654
Report Date: 09/04/24

SAMPLE RESULTS

Lab ID: L2448654-05
 Client ID: DUP
 Sample Location: TMC

Date Collected: 08/26/24 00:00
 Date Received: 08/26/24
 Field Prep: Not Specified

Sample Depth:

Matrix: Water
 Analytical Method: 1,8270E
 Analytical Date: 08/31/24 21:19
 Analyst: EK

Extraction Method: EPA 3510C
 Extraction Date: 08/30/24 20:34

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Benzaldehyde	ND		ug/l	5.0	1.1	1
Phenol	0.56	J	ug/l	5.0	0.35	1
Bis(2-chloroethyl)ether	ND		ug/l	2.0	0.39	1
2-Chlorophenol	ND		ug/l	2.0	0.65	1
2-Methylphenol	ND		ug/l	5.0	2.3	1
Bis(2-chloroisopropyl)ether	ND		ug/l	2.0	0.40	1
Acetophenone	ND		ug/l	5.0	0.92	1
n-Nitrosodi-n-propylamine	ND		ug/l	5.0	0.91	1
3-Methylphenol/4-Methylphenol	ND		ug/l	5.0	1.4	1
Hexachloroethane	ND		ug/l	2.0	0.20	1
Nitrobenzene	ND		ug/l	1.4	0.20	1
Isophorone	ND		ug/l	5.0	0.86	1
2,4-Dimethylphenol	ND		ug/l	5.0	2.0	1
Bis(2-chloroethoxy)methane	ND		ug/l	5.0	0.84	1
2,4-Dichlorophenol	ND		ug/l	5.0	1.7	1
Naphthalene	ND		ug/l	2.0	0.54	1
4-Chloroaniline	ND		ug/l	3.7	0.47	1
Hexachlorobutadiene	ND		ug/l	2.0	0.36	1
Caprolactam	ND		ug/l	10	1.2	1
2-Methylnaphthalene	ND		ug/l	2.0	0.37	1
Hexachlorocyclopentadiene	ND		ug/l	20	1.2	1
1,2,4,5-Tetrachlorobenzene	ND		ug/l	1.7	0.24	1
2,4,6-Trichlorophenol	ND		ug/l	5.0	2.1	1
2,4,5-Trichlorophenol	ND		ug/l	5.0	2.1	1
Biphenyl	ND		ug/l	2.0	0.20	1
2-Chloronaphthalene	ND		ug/l	2.0	0.35	1
2-Nitroaniline	ND		ug/l	5.0	1.0	1
2,6-Dinitrotoluene	ND		ug/l	5.0	0.84	1

Project Name: TMC SW SAMPLING
Project Number: 21010216

Lab Number: L2448654
Report Date: 09/04/24

SAMPLE RESULTS

Lab ID: L2448654-05
 Client ID: DUP
 Sample Location: TMC

Date Collected: 08/26/24 00:00
 Date Received: 08/26/24
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Acenaphthylene	ND		ug/l	2.0	0.32	1
Acenaphthene	ND		ug/l	2.0	0.40	1
2,4-Dinitrophenol	ND		ug/l	20	5.4	1
2,4-Dinitrotoluene	ND		ug/l	5.0	0.54	1
2,3,4,6-Tetrachlorophenol	ND		ug/l	5.0	2.2	1
Diethyl phthalate	ND		ug/l	5.0	0.76	1
Fluorene	ND		ug/l	2.0	0.44	1
4-Nitroaniline	ND		ug/l	5.0	1.4	1
NDPA/DPA	ND		ug/l	2.0	0.92	1
Hexachlorobenzene	ND		ug/l	2.0	0.45	1
Pentachlorophenol	ND		ug/l	10	2.5	1
Phenanthrene	ND		ug/l	2.0	0.42	1
Anthracene	ND		ug/l	2.0	0.47	1
Carbazole	ND		ug/l	2.0	0.31	1
Di-n-butylphthalate	ND		ug/l	5.0	0.96	1
Fluoranthene	ND		ug/l	2.0	0.41	1
Pyrene	ND		ug/l	2.0	0.41	1
3,3'-Dichlorobenzidine	ND		ug/l	5.0	1.8	1
Benzo(a)anthracene	ND		ug/l	2.0	0.32	1
Chrysene	ND		ug/l	1.5	0.22	1
Bis(2-ethylhexyl)phthalate	ND		ug/l	3.0	1.4	1
Di-n-octylphthalate	ND		ug/l	5.0	2.3	1
Benzo(b)fluoranthene	ND		ug/l	2.0	0.53	1
Benzo(k)fluoranthene	ND		ug/l	2.0	0.62	1
Benzo(a)pyrene	ND		ug/l	2.0	0.37	1
Indeno(1,2,3-cd)pyrene	ND		ug/l	2.0	0.48	1
Dibenzo(a,h)anthracene	ND		ug/l	2.0	0.29	1
Benzo(ghi)perylene	ND		ug/l	2.0	0.37	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	25		21-120
Phenol-d6	23		10-120
Nitrobenzene-d5	74		23-120
2-Fluorobiphenyl	68		15-120
2,4,6-Tribromophenol	42		10-120
4-Terphenyl-d14	75		41-149

Project Name: TMC SW SAMPLING
Project Number: 21010216

Lab Number: L2448654
Report Date: 09/04/24

SAMPLE RESULTS

Lab ID: L2448654-05
 Client ID: DUP
 Sample Location: TMC

Date Collected: 08/26/24 00:00
 Date Received: 08/26/24
 Field Prep: Not Specified

Sample Depth:
 Matrix: Water
 Analytical Method: 1,8270E-SIM
 Analytical Date: 09/03/24 15:29
 Analyst: RP

Extraction Method: EPA 3510C
 Extraction Date: 08/30/24 20:34

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS-SIM - Westborough Lab						
Naphthalene	ND		ug/l	0.10	0.02	1
2-Methylnaphthalene	ND		ug/l	0.10	0.03	1
Acenaphthylene	ND		ug/l	0.10	0.02	1
Acenaphthene	0.07	J	ug/l	0.10	0.02	1
Fluorene	0.06	J	ug/l	0.10	0.03	1
Phenanthrene	0.07		ug/l	0.05	0.04	1
Anthracene	ND		ug/l	0.10	0.02	1
Fluoranthene	0.04	J	ug/l	0.10	0.03	1
Pyrene	ND		ug/l	0.10	0.04	1
Benzo(a)anthracene	ND		ug/l	0.05	0.03	1
Chrysene	ND		ug/l	0.10	0.03	1
Benzo(b)fluoranthene	ND		ug/l	0.05	0.03	1
Benzo(k)fluoranthene	ND		ug/l	0.10	0.03	1
Benzo(a)pyrene	ND		ug/l	0.10	0.02	1
Indeno(1,2,3-cd)pyrene	ND		ug/l	0.10	0.02	1
Dibenzo(a,h)anthracene	ND		ug/l	0.05	0.02	1
Benzo(ghi)perylene	ND		ug/l	0.10	0.02	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
Nitrobenzene-d5	73		23-120
2-Fluorobiphenyl	74		15-120
4-Terphenyl-d14	66		41-149

Project Name: TMC SW SAMPLING
Project Number: 21010216

Lab Number: L2448654
Report Date: 09/04/24

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270E
Analytical Date: 08/31/24 13:24
Analyst: CMM

Extraction Method: EPA 3510C
Extraction Date: 08/30/24 20:34

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 01-05 Batch: WG1966246-1					
Benzaldehyde	ND		ug/l	5.0	1.1
Phenol	ND		ug/l	5.0	0.35
Bis(2-chloroethyl)ether	ND		ug/l	2.0	0.39
2-Chlorophenol	ND		ug/l	2.0	0.65
2-Methylphenol	ND		ug/l	5.0	2.3
Bis(2-chloroisopropyl)ether	ND		ug/l	2.0	0.40
Acetophenone	ND		ug/l	5.0	0.92
n-Nitrosodi-n-propylamine	ND		ug/l	5.0	0.91
3-Methylphenol/4-Methylphenol	ND		ug/l	5.0	1.4
Hexachloroethane	ND		ug/l	2.0	0.20
Nitrobenzene	ND		ug/l	1.4	0.20
Isophorone	ND		ug/l	5.0	0.86
2,4-Dimethylphenol	ND		ug/l	5.0	2.0
Bis(2-chloroethoxy)methane	ND		ug/l	5.0	0.84
2,4-Dichlorophenol	ND		ug/l	5.0	1.7
Naphthalene	ND		ug/l	2.0	0.54
4-Chloroaniline	ND		ug/l	3.7	0.47
Hexachlorobutadiene	ND		ug/l	2.0	0.36
Caprolactam	ND		ug/l	10	1.2
2-Methylnaphthalene	ND		ug/l	2.0	0.37
Hexachlorocyclopentadiene	ND		ug/l	20	1.2
1,2,4,5-Tetrachlorobenzene	ND		ug/l	1.7	0.24
2,4,6-Trichlorophenol	ND		ug/l	5.0	2.1
2,4,5-Trichlorophenol	ND		ug/l	5.0	2.1
Biphenyl	ND		ug/l	2.0	0.20
2-Chloronaphthalene	ND		ug/l	2.0	0.35
2-Nitroaniline	ND		ug/l	5.0	1.0
2,6-Dinitrotoluene	ND		ug/l	5.0	0.84
Acenaphthylene	ND		ug/l	2.0	0.32

Project Name: TMC SW SAMPLING
Project Number: 21010216

Lab Number: L2448654
Report Date: 09/04/24

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270E
Analytical Date: 08/31/24 13:24
Analyst: CMM

Extraction Method: EPA 3510C
Extraction Date: 08/30/24 20:34

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 01-05 Batch: WG1966246-1					
Acenaphthene	ND		ug/l	2.0	0.40
2,4-Dinitrophenol	ND		ug/l	20	5.4
2,4-Dinitrotoluene	ND		ug/l	5.0	0.54
2,3,4,6-Tetrachlorophenol	ND		ug/l	5.0	2.2
Diethyl phthalate	ND		ug/l	5.0	0.76
Fluorene	ND		ug/l	2.0	0.44
4-Nitroaniline	ND		ug/l	5.0	1.4
NDPA/DPA	ND		ug/l	2.0	0.92
Hexachlorobenzene	ND		ug/l	2.0	0.45
Pentachlorophenol	ND		ug/l	10	2.5
Phenanthrene	ND		ug/l	2.0	0.42
Anthracene	ND		ug/l	2.0	0.47
Carbazole	ND		ug/l	2.0	0.31
Di-n-butylphthalate	ND		ug/l	5.0	0.96
Fluoranthene	ND		ug/l	2.0	0.41
Pyrene	ND		ug/l	2.0	0.41
3,3'-Dichlorobenzidine	ND		ug/l	5.0	1.8
Benzo(a)anthracene	ND		ug/l	2.0	0.32
Chrysene	ND		ug/l	1.5	0.22
Bis(2-ethylhexyl)phthalate	ND		ug/l	3.0	1.4
Di-n-octylphthalate	ND		ug/l	5.0	2.3
Benzo(b)fluoranthene	ND		ug/l	2.0	0.53
Benzo(k)fluoranthene	ND		ug/l	2.0	0.62
Benzo(a)pyrene	ND		ug/l	2.0	0.37
Indeno(1,2,3-cd)pyrene	ND		ug/l	2.0	0.48
Dibenzo(a,h)anthracene	ND		ug/l	2.0	0.29
Benzo(ghi)perylene	ND		ug/l	2.0	0.37

Project Name: TMC SW SAMPLING
Project Number: 21010216

Lab Number: L2448654
Report Date: 09/04/24

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270E
Analytical Date: 08/31/24 13:24
Analyst: CMM

Extraction Method: EPA 3510C
Extraction Date: 08/30/24 20:34

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 01-05 Batch: WG1966246-1					

Surrogate	%Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	49		21-120
Phenol-d6	32		10-120
Nitrobenzene-d5	72		23-120
2-Fluorobiphenyl	68		15-120
2,4,6-Tribromophenol	73		10-120
4-Terphenyl-d14	77		41-149

Project Name: TMC SW SAMPLING
Project Number: 21010216

Lab Number: L2448654
Report Date: 09/04/24

**Method Blank Analysis
Batch Quality Control**

Analytical Method: 1,8270E-SIM
Analytical Date: 09/03/24 14:07
Analyst: RP

Extraction Method: EPA 3510C
Extraction Date: 08/30/24 20:34

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS-SIM - Westborough Lab for sample(s): 01-05 Batch: WG1966248-1					
Naphthalene	ND		ug/l	0.10	0.02
2-Methylnaphthalene	ND		ug/l	0.10	0.03
Acenaphthylene	ND		ug/l	0.10	0.02
Acenaphthene	ND		ug/l	0.10	0.02
Fluorene	ND		ug/l	0.10	0.03
Phenanthrene	ND		ug/l	0.05	0.04
Anthracene	ND		ug/l	0.10	0.02
Fluoranthene	ND		ug/l	0.10	0.03
Pyrene	ND		ug/l	0.10	0.04
Benzo(a)anthracene	ND		ug/l	0.05	0.03
Chrysene	ND		ug/l	0.10	0.03
Benzo(b)fluoranthene	ND		ug/l	0.05	0.03
Benzo(k)fluoranthene	ND		ug/l	0.10	0.03
Benzo(a)pyrene	ND		ug/l	0.10	0.02
Indeno(1,2,3-cd)pyrene	ND		ug/l	0.10	0.02
Dibenzo(a,h)anthracene	ND		ug/l	0.05	0.02
Benzo(ghi)perylene	ND		ug/l	0.10	0.02

Surrogate	%Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	45		21-120
Phenol-d6	34		10-120
Nitrobenzene-d5	76		23-120
2-Fluorobiphenyl	77		15-120
2,4,6-Tribromophenol	75		10-120
4-Terphenyl-d14	68		41-149

Lab Control Sample Analysis

Batch Quality Control

Project Name: TMC SW SAMPLING

Lab Number: L2448654

Project Number: 21010216

Report Date: 09/04/24

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-05 Batch: WG1966246-2 WG1966246-3								
Benzaldehyde	62		65		40-140	5		30
Phenol	34		39		12-110	14		30
Bis(2-chloroethyl)ether	76		78		40-140	3		30
2-Chlorophenol	72		76		27-123	5		30
2-Methylphenol	65		74		30-130	13		30
Bis(2-chloroisopropyl)ether	83		83		40-140	0		30
Acetophenone	71		75		39-129	5		30
n-Nitrosodi-n-propylamine	82		84		29-132	2		30
3-Methylphenol/4-Methylphenol	68		72		30-130	6		30
Hexachloroethane	61		64		40-140	5		30
Nitrobenzene	76		79		40-140	4		30
Isophorone	79		82		40-140	4		30
2,4-Dimethylphenol	64		68		30-130	6		30
Bis(2-chloroethoxy)methane	80		81		40-140	1		30
2,4-Dichlorophenol	78		83		30-130	6		30
Naphthalene	69		71		40-140	3		30
4-Chloroaniline	77		68		40-140	12		30
Hexachlorobutadiene	60		61		40-140	2		30
Caprolactam	43		46		10-130	7		30
2-Methylnaphthalene	71		72		40-140	1		30
Hexachlorocyclopentadiene	43		45		40-140	5		30
1,2,4,5-Tetrachlorobenzene	61		62		2-134	2		30
2,4,6-Trichlorophenol	82		84		30-130	2		30

Lab Control Sample Analysis

Batch Quality Control

Project Name: TMC SW SAMPLING

Lab Number: L2448654

Project Number: 21010216

Report Date: 09/04/24

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-05 Batch: WG1966246-2 WG1966246-3								
2,4,5-Trichlorophenol	88		93		30-130	6		30
Biphenyl	66		69		40-140	4		30
2-Chloronaphthalene	69		73		40-140	6		30
2-Nitroaniline	85		92		52-143	8		30
2,6-Dinitrotoluene	80		90		40-140	12		30
Acenaphthylene	75		80		45-123	6		30
Acenaphthene	75		75		37-111	0		30
2,4-Dinitrophenol	92		95		20-130	3		30
2,4-Dinitrotoluene	82		89		48-143	8		30
2,3,4,6-Tetrachlorophenol	96		96		54-145	0		30
Diethyl phthalate	84		85		40-140	1		30
Fluorene	77		80		40-140	4		30
4-Nitroaniline	78		85		51-143	9		30
NDPA/DPA	82		82		40-140	0		30
Hexachlorobenzene	77		77		40-140	0		30
Pentachlorophenol	87		93		9-103	7		30
Phenanthrene	82		81		40-140	1		30
Anthracene	84		86		40-140	2		30
Carbazole	85		88		55-144	3		30
Di-n-butylphthalate	99		98		40-140	1		30
Fluoranthene	87		88		40-140	1		30
Pyrene	88		90		26-127	2		30
3,3'-Dichlorobenzidine	88		83		40-140	6		30

Lab Control Sample Analysis

Batch Quality Control

Project Name: TMC SW SAMPLING

Lab Number: L2448654

Project Number: 21010216

Report Date: 09/04/24

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-05 Batch: WG1966246-2 WG1966246-3								
Benzo(a)anthracene	78		76		40-140	3		30
Chrysene	83		78		40-140	6		30
Bis(2-ethylhexyl)phthalate	99		92		40-140	7		30
Di-n-octylphthalate	102		96		40-140	6		30
Benzo(b)fluoranthene	77		73		40-140	5		30
Benzo(k)fluoranthene	91		84		40-140	8		30
Benzo(a)pyrene	85		80		40-140	6		30
Indeno(1,2,3-cd)pyrene	77		74		40-140	4		30
Dibenzo(a,h)anthracene	84		80		40-140	5		30
Benzo(ghi)perylene	82		76		40-140	8		30

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
2-Fluorophenol	50		56		21-120
Phenol-d6	34		39		10-120
Nitrobenzene-d5	76		77		23-120
2-Fluorobiphenyl	73		74		15-120
2,4,6-Tribromophenol	84		85		10-120
4-Terphenyl-d14	79		81		41-149

Lab Control Sample Analysis

Batch Quality Control

Project Name: TMC SW SAMPLING

Project Number: 21010216

Lab Number: L2448654

Report Date: 09/04/24

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS-SIM - Westborough Lab Associated sample(s): 01-05 Batch: WG1966248-2 WG1966248-3								
Naphthalene	69		70		40-140	1		40
2-Methylnaphthalene	70		71		40-140	1		40
Acenaphthylene	70		72		40-140	3		40
Acenaphthene	79		80		37-111	1		40
Fluorene	76		75		40-140	1		40
Phenanthrene	83		83		40-140	0		40
Anthracene	85		85		40-140	0		40
Fluoranthene	79		75		40-140	5		40
Pyrene	79		75		26-127	5		40
Benzo(a)anthracene	86		86		40-140	0		40
Chrysene	80		80		40-140	0		40
Benzo(b)fluoranthene	78		77		40-140	1		40
Benzo(k)fluoranthene	79		79		40-140	0		40
Benzo(a)pyrene	77		76		40-140	1		40
Indeno(1,2,3-cd)pyrene	81		79		40-140	3		40
Dibenzo(a,h)anthracene	77		75		40-140	3		40
Benzo(ghi)perylene	77		74		40-140	4		40

Lab Control Sample Analysis

Batch Quality Control

Project Name: TMC SW SAMPLING

Project Number: 21010216

Lab Number: L2448654

Report Date: 09/04/24

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS-SIM - Westborough Lab Associated sample(s): 01-05 Batch: WG1966248-2 WG1966248-3								

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
2-Fluorophenol	47		50		21-120
Phenol-d6	36		40		10-120
Nitrobenzene-d5	72		72		23-120
2-Fluorobiphenyl	74		76		15-120
2,4,6-Tribromophenol	83		81		10-120
4-Terphenyl-d14	68		65		41-149

Matrix Spike Analysis

Batch Quality Control

Project Name: TMC SW SAMPLING

Lab Number: L2448654

Project Number: 21010216

Report Date: 09/04/24

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-05 QC Batch ID: WG1966246-4 WG1966246-5 QC Sample: L2448654-01 Client ID: TMC-OUTLET												
Benzaldehyde	ND	20	12	60		13	65		40-140	8		30
Phenol	3.5J	20	7.6	38		8.3	42		12-110	9		30
Bis(2-chloroethyl)ether	ND	20	15	75		16	80		40-140	6		30
2-Chlorophenol	ND	20	13	65		13	65		27-123	0		30
2-Methylphenol	ND	20	13	65		14	70		30-130	7		30
Bis(2-chloroisopropyl)ether	ND	20	17	85		17	85		40-140	0		30
Acetophenone	ND	20	14	70		15	75		39-129	7		30
n-Nitrosodi-n-propylamine	ND	20	16	80		17	85		29-132	6		30
3-Methylphenol/4-Methylphenol	ND	20	13	65		14	70		30-130	7		30
Hexachloroethane	ND	20	12	60		12	60		40-140	0		30
Nitrobenzene	ND	20	17	85		17	85		40-140	0		30
Isophorone	ND	20	16	80		16	80		40-140	0		30
2,4-Dimethylphenol	ND	20	13	65		14	70		30-130	7		30
Bis(2-chloroethoxy)methane	ND	20	16	80		17	85		40-140	6		30
2,4-Dichlorophenol	ND	20	14	70		14	70		30-130	0		30
Naphthalene	ND	20	14	70		14	70		40-140	0		30
4-Chloroaniline	ND	20	14	70		15	75		40-140	7		30
Hexachlorobutadiene	ND	20	12	60		12	60		40-140	0		30
Caprolactam	ND	20	8.9J	45		9.4J	47		10-130	5		30
2-Methylnaphthalene	ND	20	14	70		14	70		40-140	0		30
Hexachlorocyclopentadiene	ND	20	8.9J	45		9.0J	45		40-140	1		30
1,2,4,5-Tetrachlorobenzene	ND	20	12	60		13	65		2-134	8		30
2,4,6-Trichlorophenol	ND	20	12	60		13	65		30-130	8		30

Matrix Spike Analysis

Batch Quality Control

Project Name: TMC SW SAMPLING

Lab Number: L2448654

Project Number: 21010216

Report Date: 09/04/24

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-05 QC Batch ID: WG1966246-4 WG1966246-5 QC Sample: L2448654-01 Client ID: TMC-OUTLET												
2,4,5-Trichlorophenol	ND	20	14	70		15	75		30-130	7		30
Biphenyl	ND	20	12	60		14	70		40-140	15		30
2-Chloronaphthalene	ND	20	14	70		14	70		40-140	0		30
2-Nitroaniline	ND	20	14	70		16	80		52-143	13		30
2,6-Dinitrotoluene	ND	20	16	80		17	85		40-140	6		30
Acenaphthylene	ND	20	14	70		15	75		45-123	7		30
Acenaphthene	ND	20	14	70		15	75		37-111	7		30
2,4-Dinitrophenol	ND	20	9.4J	47		9.4J	47		20-130	0		30
2,4-Dinitrotoluene	ND	20	16	80		17	85		48-143	6		30
2,3,4,6-Tetrachlorophenol	ND	20	11	55		11	55		54-145	0		30
Diethyl phthalate	ND	20	14	70		16	80		40-140	13		30
Fluorene	ND	20	14	70		15	75		40-140	7		30
4-Nitroaniline	ND	20	9.7	49	Q	12	60		51-143	21		30
NDPA/DPA	ND	20	14	70		16	80		40-140	13		30
Hexachlorobenzene	ND	20	13	65		14	70		40-140	7		30
Pentachlorophenol	ND	20	8.5J	43		8.7J	44		9-103	2		30
Phenanthrene	ND	20	15	75		16	80		40-140	6		30
Anthracene	ND	20	15	75		17	85		40-140	13		30
Carbazole	ND	20	16	80		18	90		55-144	12		30
Di-n-butylphthalate	ND	20	18	90		20	100		40-140	11		30
Fluoranthene	ND	20	15	75		17	85		40-140	13		30
Pyrene	ND	20	16	80		18	90		26-127	12		30
3,3'-Dichlorobenzidine	ND	20	11	55		12	60		40-140	9		30

Matrix Spike Analysis Batch Quality Control

Project Name: TMC SW SAMPLING
Project Number: 21010216

Lab Number: L2448654
Report Date: 09/04/24

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-05 QC Batch ID: WG1966246-4 WG1966246-5 QC Sample: L2448654-01 Client ID: TMC-OUTLET												
Benzo(a)anthracene	ND	20	15	75		16	80		40-140	6		30
Chrysene	ND	20	14	70		16	80		40-140	13		30
Bis(2-ethylhexyl)phthalate	ND	20	18	90		20	100		40-140	11		30
Di-n-octylphthalate	ND	20	20	100		22	110		40-140	10		30
Benzo(b)fluoranthene	ND	20	16	80		17	85		40-140	6		30
Benzo(k)fluoranthene	ND	20	15	75		16	80		40-140	6		30
Benzo(a)pyrene	ND	20	16	80		17	85		40-140	6		30
Indeno(1,2,3-cd)pyrene	ND	20	15	75		16	80		40-140	6		30
Dibenzo(a,h)anthracene	ND	20	16	80		17	85		40-140	6		30
Benzo(ghi)perylene	ND	20	15	75		16	80		40-140	6		30

Surrogate	MS		MSD		Acceptance Criteria
	% Recovery	Qualifier	% Recovery	Qualifier	
2,4,6-Tribromophenol	56		65		10-120
2-Fluorobiphenyl	68		73		15-120
2-Fluorophenol	41		42		21-120
4-Terphenyl-d14	72		81		41-149
Nitrobenzene-d5	74		78		23-120
Phenol-d6	31		34		10-120

Matrix Spike Analysis Batch Quality Control

Project Name: TMC SW SAMPLING
Project Number: 21010216

Lab Number: L2448654
Report Date: 09/04/24

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS-SIM - Westborough Lab Associated sample(s): 01-05 QC Batch ID: WG1966248-4 WG1966248-5 QC Sample: L2448654-01 Client ID: TMC-OUTLET												
Naphthalene	ND	20	14	70		14	70		40-140	0		40
2-Methylnaphthalene	ND	20	14	70		14	70		40-140	0		40
Acenaphthylene	ND	20	13	65		14	70		40-140	7		40
Acenaphthene	0.08J	20	15	75		16	80		37-111	6		40
Fluorene	0.06J	20	14	70		16	80		40-140	13		40
Phenanthrene	0.07	20	16	80		17	85		40-140	6		40
Anthracene	ND	20	16	80		17	85		40-140	6		40
Fluoranthene	0.05J	20	14	70		16	80		40-140	13		40
Pyrene	ND	20	14	70		16	80		26-127	13		40
Benzo(a)anthracene	ND	20	16	80		18	90		40-140	12		40
Chrysene	ND	20	15	75		16	80		40-140	6		40
Benzo(b)fluoranthene	ND	20	14	70		16	80		40-140	13		40
Benzo(k)fluoranthene	ND	20	15	75		16	80		40-140	6		40
Benzo(a)pyrene	ND	20	14	70		16	80		40-140	13		40
Indeno(1,2,3-cd)pyrene	ND	20	16	80		17	85		40-140	6		40
Dibenzo(a,h)anthracene	ND	20	15	75		16	80		40-140	6		40
Benzo(ghi)perylene	ND	20	15	75		16	80		40-140	6		40

Surrogate	MS		MSD		Acceptance Criteria
	% Recovery	Qualifier	% Recovery	Qualifier	
2,4,6-Tribromophenol	65		71		10-120
2-Fluorobiphenyl	71		76		15-120
2-Fluorophenol	39		40		21-120



Matrix Spike Analysis

Batch Quality Control

Project Name: TMC SW SAMPLING

Lab Number: L2448654

Project Number: 21010216

Report Date: 09/04/24

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits
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Semivolatile Organics by GC/MS-SIM - Westborough Lab Associated sample(s): 01-05 QC Batch ID: WG1966248-4 WG1966248-5 QC Sample: L2448654-01
Client ID: TMC-OUTLET

Surrogate	MS % Recovery	Qualifier	MSD % Recovery	Qualifier	Acceptance Criteria
4-Terphenyl-d14	59		68		41-149
Nitrobenzene-d5	72		76		23-120
Phenol-d6	33		35		10-120

Project Name: TMC SW SAMPLING**Lab Number:** L2448654**Project Number:** 21010216**Report Date:** 09/04/24**Sample Receipt and Container Information**

Were project specific reporting limits specified?

YES

Cooler Information

Cooler	Custody Seal
A	Absent
B	Absent

Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L2448654-01A	Vial HCl preserved	A	NA		3.3	Y	Absent		PA-8260-SIM(14),PA-8260(14)
L2448654-01A1	Vial HCl preserved	A	NA		3.3	Y	Absent		PA-8260-SIM(14),PA-8260(14)
L2448654-01A2	Vial HCl preserved	A	NA		3.3	Y	Absent		PA-8260-SIM(14),PA-8260(14)
L2448654-01B	Vial HCl preserved	A	NA		3.3	Y	Absent		PA-8260-SIM(14),PA-8260(14)
L2448654-01B1	Vial HCl preserved	A	NA		3.3	Y	Absent		PA-8260-SIM(14),PA-8260(14)
L2448654-01B2	Vial HCl preserved	A	NA		3.3	Y	Absent		PA-8260-SIM(14),PA-8260(14)
L2448654-01C	Vial HCl preserved	A	NA		3.3	Y	Absent		PA-8260-SIM(14),PA-8260(14)
L2448654-01C1	Vial HCl preserved	A	NA		3.3	Y	Absent		PA-8260-SIM(14),PA-8260(14)
L2448654-01D	Amber 100ml unpreserved	A	9	9	3.3	Y	Absent		PA-8270SIM-RVT(7),PA-8270-RVT(7)
L2448654-01D1	Amber 100ml unpreserved	A	9	9	3.3	Y	Absent		PA-8270SIM-RVT(7),PA-8270-RVT(7)
L2448654-01D2	Amber 100ml unpreserved	A	9	9	3.3	Y	Absent		PA-8270SIM-RVT(7),PA-8270-RVT(7)
L2448654-01E	Amber 100ml unpreserved	A	9	9	3.3	Y	Absent		PA-8270SIM-RVT(7),PA-8270-RVT(7)
L2448654-01E1	Amber 100ml unpreserved	A	9	9	3.3	Y	Absent		PA-8270SIM-RVT(7),PA-8270-RVT(7)
L2448654-01E2	Amber 100ml unpreserved	A	9	9	3.3	Y	Absent		PA-8270SIM-RVT(7),PA-8270-RVT(7)
L2448654-02A	Vial HCl preserved	A	NA		3.3	Y	Absent		PA-8260-SIM(14),PA-8260(14)
L2448654-02B	Vial HCl preserved	A	NA		3.3	Y	Absent		PA-8260-SIM(14),PA-8260(14)
L2448654-02C	Vial HCl preserved	A	NA		3.3	Y	Absent		PA-8260-SIM(14),PA-8260(14)
L2448654-02D	Amber 100ml unpreserved	A	9	9	3.3	Y	Absent		PA-8270-RVT(7),PA-8270SIM-RVT(7)
L2448654-02E	Amber 100ml unpreserved	A	9	9	3.3	Y	Absent		PA-8270-RVT(7),PA-8270SIM-RVT(7)
L2448654-03A	Vial HCl preserved	A	NA		3.3	Y	Absent		PA-8260-SIM(14),PA-8260(14)
L2448654-03B	Vial HCl preserved	A	NA		3.3	Y	Absent		PA-8260-SIM(14),PA-8260(14)
L2448654-03C	Vial HCl preserved	A	NA		3.3	Y	Absent		PA-8260-SIM(14),PA-8260(14)

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Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L2448654-03D	Amber 100ml unpreserved	A	9	9	3.3	Y	Absent		PA-8270-RVT(7),PA-8270SIM-RVT(7)
L2448654-03E	Amber 100ml unpreserved	A	9	9	3.3	Y	Absent		PA-8270-RVT(7),PA-8270SIM-RVT(7)
L2448654-04A	Vial HCl preserved	A	NA		3.3	Y	Absent		PA-8260-SIM(14),PA-8260(14)
L2448654-04B	Vial HCl preserved	A	NA		3.3	Y	Absent		PA-8260-SIM(14),PA-8260(14)
L2448654-04C	Vial HCl preserved	A	NA		3.3	Y	Absent		PA-8260-SIM(14),PA-8260(14)
L2448654-04D	Amber 100ml unpreserved	A	9	9	3.3	Y	Absent		PA-8270SIM-RVT(7),PA-8270-RVT(7)
L2448654-04E	Amber 100ml unpreserved	A	9	9	3.3	Y	Absent		PA-8270SIM-RVT(7),PA-8270-RVT(7)
L2448654-05A	Vial HCl preserved	A	NA		3.3	Y	Absent		PA-8260-SIM(14),PA-8260(14)
L2448654-05B	Vial HCl preserved	A	NA		3.3	Y	Absent		PA-8260-SIM(14),PA-8260(14)
L2448654-05C	Vial HCl preserved	A	NA		3.3	Y	Absent		PA-8260-SIM(14),PA-8260(14)
L2448654-05D	Amber 100ml unpreserved	A	9	9	3.3	Y	Absent		PA-8270-RVT(7),PA-8270SIM-RVT(7)
L2448654-05E	Amber 100ml unpreserved	A	9	9	3.3	Y	Absent		PA-8270-RVT(7),PA-8270SIM-RVT(7)
L2448654-06A	Vial HCl preserved	A	NA		3.3	Y	Absent		PA-8260-SIM(14),PA-8260(14)
L2448654-06B	Vial HCl preserved	A	NA		3.3	Y	Absent		PA-8260-SIM(14),PA-8260(14)
L2448654-06C	Vial HCl preserved	A	NA		3.3	Y	Absent		PA-8260-SIM(14),PA-8260(14)
L2448654-06D	Vial HCl preserved	A	NA		3.3	Y	Absent		PA-8260-SIM(14),PA-8260(14)

*Values in parentheses indicate holding time in days



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GLOSSARY

Acronyms

DL	- Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the limit of quantitation (LOQ). The DL includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
EDL	- Estimated Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The EDL includes any adjustments from dilutions, concentrations or moisture content, where applicable. The use of EDLs is specific to the analysis of PAHs using Solid-Phase Microextraction (SPME).
EMPC	- Estimated Maximum Possible Concentration: The concentration that results from the signal present at the retention time of an analyte when the ions meet all of the identification criteria except the ion abundance ratio criteria. An EMPC is a worst-case estimate of the concentration.
EPA	- Environmental Protection Agency.
LCS	- Laboratory Control Sample: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
LCSD	- Laboratory Control Sample Duplicate: Refer to LCS.
LFB	- Laboratory Fortified Blank: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
LOD	- Limit of Detection: This value represents the level to which a target analyte can reliably be detected for a specific analyte in a specific matrix by a specific method. The LOD includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
LOQ	- Limit of Quantitation: The value at which an instrument can accurately measure an analyte at a specific concentration. The LOQ includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.) Limit of Quantitation: The value at which an instrument can accurately measure an analyte at a specific concentration. The LOQ includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
MDL	- Method Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The MDL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
MS	- Matrix Spike Sample: A sample prepared by adding a known mass of target analyte to a specified amount of matrix sample for which an independent estimate of target analyte concentration is available. For Method 332.0, the spike recovery is calculated using the native concentration, including estimated values.
MSD	- Matrix Spike Sample Duplicate: Refer to MS.
NA	- Not Applicable.
NC	- Not Calculated: Term is utilized when one or more of the results utilized in the calculation are non-detect at the parameter's reporting unit.
NDPA/DPA	- N-Nitrosodiphenylamine/Diphenylamine.
NI	- Not Ignitable.
NP	- Non-Plastic: Term is utilized for the analysis of Atterberg Limits in soil.
NR	- No Results: Term is utilized when 'No Target Compounds Requested' is reported for the analysis of Volatile or Semivolatile Organic TIC only requests.
RL	- Reporting Limit: The value at which an instrument can accurately measure an analyte at a specific concentration. The RL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
RPD	- Relative Percent Difference: The results from matrix and/or matrix spike duplicates are primarily designed to assess the precision of analytical results in a given matrix and are expressed as relative percent difference (RPD). Values which are less than five times the reporting limit for any individual parameter are evaluated by utilizing the absolute difference between the values; although the RPD value will be provided in the report.
SRM	- Standard Reference Material: A reference sample of a known or certified value that is of the same or similar matrix as the associated field samples.
STLP	- Semi-dynamic Tank Leaching Procedure per EPA Method 1315.
TEF	- Toxic Equivalency Factors: The values assigned to each dioxin and furan to evaluate their toxicity relative to 2,3,7,8-TCDD.
TEQ	- Toxic Equivalent: The measure of a sample's toxicity derived by multiplying each dioxin and furan by its corresponding TEF and then summing the resulting values.
TIC	- Tentatively Identified Compound: A compound that has been identified to be present and is not part of the target compound list (TCL) for the method and/or program. All TICs are qualitatively identified and reported as estimated concentrations.

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Footnotes

- 1 - The reference for this analyte should be considered modified since this analyte is absent from the target analyte list of the original method.

Terms

Analytical Method: Both the document from which the method originates and the analytical reference method. (Example: EPA 8260B is shown as 1,8260B.) The codes for the reference method documents are provided in the References section of the Addendum.

Chlordane: The target compound Chlordane (CAS No. 57-74-9) is reported for GC ECD analyses. Per EPA, this compound "refers to a mixture of chlordane isomers, other chlorinated hydrocarbons and numerous other components." (Reference: USEPA Toxicological Review of Chlordane, In Support of Summary Information on the Integrated Risk Information System (IRIS), December 1997.)

Difference: With respect to Total Oxidizable Precursor (TOP) Assay analysis, the difference is defined as the Post-Treatment value minus the Pre-Treatment value.

Final pH: As it pertains to Sample Receipt & Container Information section of the report, Final pH reflects pH of container determined after adjustment at the laboratory, if applicable. If no adjustment required, value reflects Initial pH.

Frozen Date/Time: With respect to Volatile Organics in soil, Frozen Date/Time reflects the date/time at which associated Reagent Water-preserved vials were initially frozen. Note: If frozen date/time is beyond 48 hours from sample collection, value will be reflected in 'bold'.

Gasoline Range Organics (GRO): Gasoline Range Organics (GRO) results include all chromatographic peaks eluting from Methyl tert butyl ether through Naphthalene, with the exception of GRO analysis in support of State of Ohio programs, which includes all chromatographic peaks eluting from Hexane through Dodecane.

Initial pH: As it pertains to Sample Receipt & Container Information section of the report, Initial pH reflects pH of container determined upon receipt, if applicable.

PAH Total: With respect to Alkylated PAH analyses, the 'PAHs, Total' result is defined as the summation of results for all or a subset of the following compounds: Naphthalene, C1-C4 Naphthalenes, 2-Methylnaphthalene, 1-Methylnaphthalene, Biphenyl, Acenaphthylene, Acenaphthene, Fluorene, C1-C3 Fluorenes, Phenanthrene, C1-C4 Phenanthrenes/Anthracenes, Anthracene, Fluoranthene, Pyrene, C1-C4 Fluoranthenes/Pyrenes, Benz(a)anthracene, Chrysene, C1-C4 Chrysenes, Benzo(b)fluoranthene, Benzo(j)+(k)fluoranthene, Benzo(e)pyrene, Benzo(a)pyrene, Perylene, Indeno(1,2,3-cd)pyrene, Dibenz(ah)+(ac)anthracene, Benzo(g,h,i)perylene. If a 'Total' result is requested, the results of its individual components will also be reported.

PFAS Total: With respect to PFAS analyses, the 'PFAS, Total (5)' result is defined as the summation of results for: PFHpA, PFHxS, PFOA, PFNA and PFOS. In addition, the 'PFAS, Total (6)' result is defined as the summation of results for: PFHpA, PFHxS, PFOA, PFNA, PFDA and PFOS. For MassDEP DW compliance analysis only, the 'PFAS, Total (6)' result is defined as the summation of results at or above the RL. Note: If a 'Total' result is requested, the results of its individual components will also be reported.

Total: With respect to Organic analyses, a 'Total' result is defined as the summation of results for individual isomers or Aroclors. If a 'Total' result is requested, the results of its individual components will also be reported. This is applicable to 'Total' results for methods 8260, 8081 and 8082.

Data Qualifiers

- A** - Spectra identified as "Aldol Condensates" are byproducts of the extraction/concentration procedures when acetone is introduced in the process.
- B** - The analyte was detected above the reporting limit in the associated method blank. Flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For MCP-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For DOD-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank AND the analyte was detected above one-half the reporting limit (or above the reporting limit for common lab contaminants) in the associated method blank. For NJ-Air-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte above the reporting limit. For NJ-related projects (excluding Air), flag only applies to associated field samples that have detectable concentrations of the analyte, which was detected above the reporting limit in the associated method blank or above five times the reporting limit for common lab contaminants (Phthalates, Acetone, Methylene Chloride, 2-Butanone).
- C** - Co-elution: The target analyte co-elutes with a known lab standard (i.e. surrogate, internal standards, etc.) for co-extracted analyses.
- D** - Concentration of analyte was quantified from diluted analysis. Flag only applies to field samples that have detectable concentrations of the analyte.
- E** - Concentration of analyte exceeds the range of the calibration curve and/or linear range of the instrument.
- F** - The ratio of quantifier ion response to qualifier ion response falls outside of the laboratory criteria. Results are considered to be an estimated maximum concentration.
- G** - The concentration may be biased high due to matrix interferences (i.e. co-elution) with non-target compound(s). The result should be considered estimated.
- H** - The analysis of pH was performed beyond the regulatory-required holding time of 15 minutes from the time of sample collection.
- I** - The lower value for the two columns has been reported due to obvious interference.
- J** - Estimated value. The Target analyte concentration is below the quantitation limit (RL), but above the Method Detection Limit (MDL) or Estimated Detection Limit (EDL) for SPME-related analyses. This represents an estimated concentration for Tentatively

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Data Qualifiers

Identified Compounds (TICs). For calculated parameters, this represents that one or more values used in the calculation were estimated.

- M** - Reporting Limit (RL) exceeds the MCP CAM Reporting Limit for this analyte.
- ND** - Not detected at the method detection limit (MDL) for the sample, or estimated detection limit (EDL) for SPME-related analyses.
- NJ** - Presumptive evidence of compound. This represents an estimated concentration for Tentatively Identified Compounds (TICs), where the identification is based on a mass spectral library search.
- P** - The RPD between the results for the two columns exceeds the method-specified criteria.
- Q** - The quality control sample exceeds the associated acceptance criteria. For DOD-related projects, LCS and/or Continuing Calibration Standard exceedences are also qualified on all associated sample results. Note: This flag is not applicable for matrix spike recoveries when the sample concentration is greater than 4x the spike added or for batch duplicate RPD when the sample concentrations are less than 5x the RL. (Metals only.)
- R** - Analytical results are from sample re-analysis.
- RE** - Analytical results are from sample re-extraction.
- S** - Analytical results are from modified screening analysis.
- V** - The surrogate associated with this target analyte has a recovery outside the QC acceptance limits. (Applicable to MassDEP DW Compliance samples only.)
- Z** - The batch matrix spike and/or duplicate associated with this target analyte has a recovery/RPD outside the QC acceptance limits. (Applicable to MassDEP DW Compliance samples only.)

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REFERENCES

- 1 Test Methods for Evaluating Solid Waste: Physical/Chemical Methods. EPA SW-846. Third Edition. Updates I - VI, 2018.

LIMITATION OF LIABILITIES

Alpha Analytical performs services with reasonable care and diligence normal to the analytical testing laboratory industry. In the event of an error, the sole and exclusive responsibility of Alpha Analytical shall be to re-perform the work at it's own expense. In no event shall Alpha Analytical be held liable for any incidental, consequential or special damages, including but not limited to, damages in any way connected with the use of, interpretation of, information or analysis provided by Alpha Analytical.

We strongly urge our clients to comply with EPA protocol regarding sample volume, preservation, cooling, containers, sampling procedures, holding time and splitting of samples in the field.



Certification Information

The following analytes are not included in our Primary NELAP Scope of Accreditation:

Westborough Facility

EPA 624.1: m/p-xylene, o-xylene, Naphthalene

EPA 625.1: alpha-Terpineol

EPA 8260D: NPW: 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene; SCM: Iodomethane (methyl iodide), 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene.

EPA 8270E: NPW: Dimethylnaphthalene,1,4-Diphenylhydrazine, alpha-Terpineol, Azobenzene; SCM: Dimethylnaphthalene,1,4-Diphenylhydrazine.

SM4500: NPW: Amenable Cyanide; SCM: Total Phosphorus, TKN, NO₂, NO₃.

Mansfield Facility

SM 2540D: TSS.

EPA TO-15: Halothane, 2,4,4-Trimethyl-2-pentene, 2,4,4-Trimethyl-1-pentene, Thiophene, 2-Methylthiophene,

3-Methylthiophene, 2-Ethylthiophene, 1,2,3-Trimethylbenzene, Indan, Indene, 1,2,4,5-Tetramethylbenzene, Benzothiophene, 1-Methylnaphthalene.

Nonpotable Water: EPA RSK-175 Dissolved Gases

Biological Tissue Matrix: EPA 3050B

The following analytes are included in our Massachusetts DEP Scope of Accreditation

Westborough Facility:

Drinking Water

EPA 300.0: Chloride, Nitrate-N, Fluoride, Sulfate; **EPA 353.2:** Nitrate-N, Nitrite-N; **SM4500NO3-F:** Nitrate-N, Nitrite-N; **SM4500F-C, SM4500CN-CE,**

EPA 180.1, SM2130B, SM4500Cl-D, SM2320B, SM2540C, SM4500H-B, SM4500NO2-B

EPA 524.2: THMs and VOCs; **EPA 504.1:** EDB, DBCP.

Microbiology: SM9215B; SM9223-P/A, SM9223B-Colilert-QT, SM9222D.

Non-Potable Water

SM4500H,B, EPA 120.1, SM2510B, SM2540C, SM2320B, SM4500CL-E, SM4500F-BC, SM4500NH3-BH: Ammonia-N and Kjeldahl-N, **EPA 350.1:**

Ammonia-N, **LACHAT 10-107-06-1-B:** Ammonia-N, **EPA 351.1, SM4500NO3-F, EPA 353.2:** Nitrate-N, **SM4500P-E, SM4500P-B, E, SM4500SO4-E,**

SM5220D, EPA 410.4, SM5210B, SM5310C, SM4500CL-D, EPA 1664, EPA 420.1, SM4500-CN-CE, SM2540D, EPA 300: Chloride, Sulfate, Nitrate.

EPA 624.1: Volatile Halocarbons & Aromatics,

EPA 608.3: Chlordane, Toxaphene, Aldrin, alpha-BHC, beta-BHC, gamma-BHC, delta-BHC, Dieldrin, DDD, DDE, DDT, Endosulfan I, Endosulfan II,

Endosulfan sulfate, Endrin, Endrin Aldehyde, Heptachlor, Heptachlor Epoxide, PCBs

EPA 625.1: SVOC (Acid/Base/Neutral Extractables).

Microbiology: SM9223B-Colilert-QT; Enterolert-QT, EPA 1600, EPA 1603, SM9222D.

Mansfield Facility:

Drinking Water

EPA 200.7: Al, Ba, Cd, Cr, Cu, Fe, Mn, Ni, Na, Ag, Ca, Zn. **EPA 200.8:** Al, Sb, As, Ba, Be, Cd, Cr, Cu, Pb, Mn, Ni, Se, Ag, TL, Zn. **EPA 245.1** Hg.

EPA 522, EPA 537.1.

Non-Potable Water

EPA 200.7: Al, Sb, As, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Mo, Ni, K, Se, Ag, Na, Sr, TL, Ti, V, Zn.

EPA 200.8: Al, Sb, As, Be, Cd, Cr, Cu, Fe, Pb, Mn, Ni, K, Se, Ag, Na, TL, Zn.

EPA 245.1 Hg.

SM2340B

For a complete listing of analytes and methods, please contact your Alpha Project Manager.

APPENDIX B

Mann-Kendall Trend Analysis

Parameter: Benzene

Location: TM04-PZM006

Original Data (Not Transformed)

Non-Detects Replaced with 1/2 DL

95% Confidence Level

Xj	Xk	Xj - Xk	Positives	Negatives
610	1400	-790	0	1
653	1400	-747	0	2
355	1400	-1045	0	3
367	1400	-1033	0	4
390	1400	-1010	0	5
390	1400	-1010	0	6
380	1400	-1020	0	7
180	1400	-1220	0	8
500	1400	-900	0	9
500	1400	-900	0	10
460	1400	-940	0	11
400	1400	-1000	0	12
500	1400	-900	0	13
540	1400	-860	0	14
500	1400	-900	0	15
370	1400	-1030	0	16
340	1400	-1060	0	17
490	1400	-910	0	18
140	1400	-1260	0	19
400	1400	-1000	0	20
380	1400	-1020	0	21
653	610	43	1	21
355	610	-255	1	22
367	610	-243	1	23
390	610	-220	1	24
390	610	-220	1	25
380	610	-230	1	26
180	610	-430	1	27
500	610	-110	1	28
500	610	-110	1	29
460	610	-150	1	30
400	610	-210	1	31
500	610	-110	1	32
540	610	-70	1	33
500	610	-110	1	34
370	610	-240	1	35
340	610	-270	1	36
490	610	-120	1	37
140	610	-470	1	38
400	610	-210	1	39
380	610	-230	1	40
355	653	-298	1	41
367	653	-286	1	42
390	653	-263	1	43
390	653	-263	1	44

380	653	-273	1	45
180	653	-473	1	46
500	653	-153	1	47
500	653	-153	1	48
460	653	-193	1	49
400	653	-253	1	50
500	653	-153	1	51
540	653	-113	1	52
500	653	-153	1	53
370	653	-283	1	54
340	653	-313	1	55
490	653	-163	1	56
140	653	-513	1	57
400	653	-253	1	58
380	653	-273	1	59
367	355	12	2	59
390	355	35	3	59
390	355	35	4	59
380	355	25	5	59
180	355	-175	5	60
500	355	145	6	60
500	355	145	7	60
460	355	105	8	60
400	355	45	9	60
500	355	145	10	60
540	355	185	11	60
500	355	145	12	60
370	355	15	13	60
340	355	-15	13	61
490	355	135	14	61
140	355	-215	14	62
400	355	45	15	62
380	355	25	16	62
390	367	23	17	62
390	367	23	18	62
380	367	13	19	62
180	367	-187	19	63
500	367	133	20	63
500	367	133	21	63
460	367	93	22	63
400	367	33	23	63
500	367	133	24	63
540	367	173	25	63
500	367	133	26	63
370	367	3	27	63
340	367	-27	27	64
490	367	123	28	64
140	367	-227	28	65
400	367	33	29	65
380	367	13	30	65
390	390	0	30	65
380	390	-10	30	66
180	390	-210	30	67
500	390	110	31	67

500	390	110	32	67
460	390	70	33	67
400	390	10	34	67
500	390	110	35	67
540	390	150	36	67
500	390	110	37	67
370	390	-20	37	68
340	390	-50	37	69
490	390	100	38	69
140	390	-250	38	70
400	390	10	39	70
380	390	-10	39	71
380	390	-10	39	72
180	390	-210	39	73
500	390	110	40	73
500	390	110	41	73
460	390	70	42	73
400	390	10	43	73
500	390	110	44	73
540	390	150	45	73
500	390	110	46	73
370	390	-20	46	74
340	390	-50	46	75
490	390	100	47	75
140	390	-250	47	76
400	390	10	48	76
380	390	-10	48	77
180	380	-200	48	78
500	380	120	49	78
500	380	120	50	78
460	380	80	51	78
400	380	20	52	78
500	380	120	53	78
540	380	160	54	78
500	380	120	55	78
370	380	-10	55	79
340	380	-40	55	80
490	380	110	56	80
140	380	-240	56	81
400	380	20	57	81
380	380	0	57	81
500	180	320	58	81
500	180	320	59	81
460	180	280	60	81
400	180	220	61	81
500	180	320	62	81
540	180	360	63	81
500	180	320	64	81
370	180	190	65	81
340	180	160	66	81
490	180	310	67	81
140	180	-40	67	82
400	180	220	68	82
380	180	200	69	82

500	500	0	69	82
460	500	-40	69	83
400	500	-100	69	84
500	500	0	69	84
540	500	40	70	84
500	500	0	70	84
370	500	-130	70	85
340	500	-160	70	86
490	500	-10	70	87
140	500	-360	70	88
400	500	-100	70	89
380	500	-120	70	90
460	500	-40	70	91
400	500	-100	70	92
500	500	0	70	92
540	500	40	71	92
500	500	0	71	92
370	500	-130	71	93
340	500	-160	71	94
490	500	-10	71	95
140	500	-360	71	96
400	500	-100	71	97
380	500	-120	71	98
400	460	-60	71	99
500	460	40	72	99
540	460	80	73	99
500	460	40	74	99
370	460	-90	74	100
340	460	-120	74	101
490	460	30	75	101
140	460	-320	75	102
400	460	-60	75	103
380	460	-80	75	104
500	400	100	76	104
540	400	140	77	104
500	400	100	78	104
370	400	-30	78	105
340	400	-60	78	106
490	400	90	79	106
140	400	-260	79	107
400	400	0	79	107
380	400	-20	79	108
540	500	40	80	108
500	500	0	80	108
370	500	-130	80	109
340	500	-160	80	110
490	500	-10	80	111
140	500	-360	80	112
400	500	-100	80	113
380	500	-120	80	114
500	540	-40	80	115

370	540	-170	80	116
340	540	-200	80	117
490	540	-50	80	118
140	540	-400	80	119
400	540	-140	80	120
380	540	-160	80	121
370	500	-130	80	122
340	500	-160	80	123
490	500	-10	80	124
140	500	-360	80	125
400	500	-100	80	126
380	500	-120	80	127
340	370	-30	80	128
490	370	120	81	128
140	370	-230	81	129
400	370	30	82	129
380	370	10	83	129
490	340	150	84	129
140	340	-200	84	130
400	340	60	85	130
380	340	40	86	130
140	490	-350	86	131
400	490	-90	86	132
380	490	-110	86	133
400	140	260	87	133
380	140	240	88	133
380	400	-20	88	134

S Statistic = 88 - 134 = -46

Tied Group	Value	Members
1	390	2
2	380	2
3	500	4
4	400	2

Time Period	Observations
12/1/2001	1
7/1/2004	1
10/13/2017	1
10/21/2021	1
11/29/2021	1
1/12/2022	1
2/18/2022	1
3/15/2022	1
4/18/2022	1
5/19/2022	1
6/15/2022	1
7/27/2022	1
8/29/2022	1

9/21/2022	1
10/26/2022	1
1/12/2023	1
4/10/2023	1
7/19/2023	1
10/4/2023	1
2/8/2024	1
6/28/2024	1
8/27/2024	1

There are 0 time periods with multiple data

A = 210

B = 0

C = 24

D = 0

E = 18

F = 0

a = 22638

b = 83160

c = 924

Group Variance = 1246

Z-Score = -1.27483

Comparison Level at 95% confidence level = 1.65463 (upward trend)

-1.27483 <= 1.65463 indicating no evidence of an upward trend

Mann-Kendall Trend Analysis

Parameter: Benzene

Location: TM04-PZM006

Original Data (Not Transformed)

Non-Detects Replaced with 1/2 DL

95% Confidence Level

Xj	Xk	Xj - Xk	Positives	Negatives
610	1400	-790	0	1
653	1400	-747	0	2
355	1400	-1045	0	3
367	1400	-1033	0	4
390	1400	-1010	0	5
390	1400	-1010	0	6
380	1400	-1020	0	7
180	1400	-1220	0	8
500	1400	-900	0	9
500	1400	-900	0	10
460	1400	-940	0	11
400	1400	-1000	0	12
500	1400	-900	0	13
540	1400	-860	0	14
500	1400	-900	0	15
370	1400	-1030	0	16
340	1400	-1060	0	17
490	1400	-910	0	18
140	1400	-1260	0	19
400	1400	-1000	0	20
380	1400	-1020	0	21
653	610	43	1	21
355	610	-255	1	22
367	610	-243	1	23
390	610	-220	1	24
390	610	-220	1	25
380	610	-230	1	26
180	610	-430	1	27
500	610	-110	1	28
500	610	-110	1	29
460	610	-150	1	30
400	610	-210	1	31
500	610	-110	1	32
540	610	-70	1	33
500	610	-110	1	34
370	610	-240	1	35
340	610	-270	1	36
490	610	-120	1	37
140	610	-470	1	38
400	610	-210	1	39
380	610	-230	1	40
355	653	-298	1	41
367	653	-286	1	42
390	653	-263	1	43
390	653	-263	1	44

380	653	-273	1	45
180	653	-473	1	46
500	653	-153	1	47
500	653	-153	1	48
460	653	-193	1	49
400	653	-253	1	50
500	653	-153	1	51
540	653	-113	1	52
500	653	-153	1	53
370	653	-283	1	54
340	653	-313	1	55
490	653	-163	1	56
140	653	-513	1	57
400	653	-253	1	58
380	653	-273	1	59
367	355	12	2	59
390	355	35	3	59
390	355	35	4	59
380	355	25	5	59
180	355	-175	5	60
500	355	145	6	60
500	355	145	7	60
460	355	105	8	60
400	355	45	9	60
500	355	145	10	60
540	355	185	11	60
500	355	145	12	60
370	355	15	13	60
340	355	-15	13	61
490	355	135	14	61
140	355	-215	14	62
400	355	45	15	62
380	355	25	16	62
390	367	23	17	62
390	367	23	18	62
380	367	13	19	62
180	367	-187	19	63
500	367	133	20	63
500	367	133	21	63
460	367	93	22	63
400	367	33	23	63
500	367	133	24	63
540	367	173	25	63
500	367	133	26	63
370	367	3	27	63
340	367	-27	27	64
490	367	123	28	64
140	367	-227	28	65
400	367	33	29	65
380	367	13	30	65
390	390	0	30	65
380	390	-10	30	66
180	390	-210	30	67
500	390	110	31	67

500	390	110	32	67
460	390	70	33	67
400	390	10	34	67
500	390	110	35	67
540	390	150	36	67
500	390	110	37	67
370	390	-20	37	68
340	390	-50	37	69
490	390	100	38	69
140	390	-250	38	70
400	390	10	39	70
380	390	-10	39	71
380	390	-10	39	72
180	390	-210	39	73
500	390	110	40	73
500	390	110	41	73
460	390	70	42	73
400	390	10	43	73
500	390	110	44	73
540	390	150	45	73
500	390	110	46	73
370	390	-20	46	74
340	390	-50	46	75
490	390	100	47	75
140	390	-250	47	76
400	390	10	48	76
380	390	-10	48	77
180	380	-200	48	78
500	380	120	49	78
500	380	120	50	78
460	380	80	51	78
400	380	20	52	78
500	380	120	53	78
540	380	160	54	78
500	380	120	55	78
370	380	-10	55	79
340	380	-40	55	80
490	380	110	56	80
140	380	-240	56	81
400	380	20	57	81
380	380	0	57	81
500	180	320	58	81
500	180	320	59	81
460	180	280	60	81
400	180	220	61	81
500	180	320	62	81
540	180	360	63	81
500	180	320	64	81
370	180	190	65	81
340	180	160	66	81
490	180	310	67	81
140	180	-40	67	82
400	180	220	68	82
380	180	200	69	82

500	500	0	69	82
460	500	-40	69	83
400	500	-100	69	84
500	500	0	69	84
540	500	40	70	84
500	500	0	70	84
370	500	-130	70	85
340	500	-160	70	86
490	500	-10	70	87
140	500	-360	70	88
400	500	-100	70	89
380	500	-120	70	90
460	500	-40	70	91
400	500	-100	70	92
500	500	0	70	92
540	500	40	71	92
500	500	0	71	92
370	500	-130	71	93
340	500	-160	71	94
490	500	-10	71	95
140	500	-360	71	96
400	500	-100	71	97
380	500	-120	71	98
400	460	-60	71	99
500	460	40	72	99
540	460	80	73	99
500	460	40	74	99
370	460	-90	74	100
340	460	-120	74	101
490	460	30	75	101
140	460	-320	75	102
400	460	-60	75	103
380	460	-80	75	104
500	400	100	76	104
540	400	140	77	104
500	400	100	78	104
370	400	-30	78	105
340	400	-60	78	106
490	400	90	79	106
140	400	-260	79	107
400	400	0	79	107
380	400	-20	79	108
540	500	40	80	108
500	500	0	80	108
370	500	-130	80	109
340	500	-160	80	110
490	500	-10	80	111
140	500	-360	80	112
400	500	-100	80	113
380	500	-120	80	114
500	540	-40	80	115

370	540	-170	80	116
340	540	-200	80	117
490	540	-50	80	118
140	540	-400	80	119
400	540	-140	80	120
380	540	-160	80	121
370	500	-130	80	122
340	500	-160	80	123
490	500	-10	80	124
140	500	-360	80	125
400	500	-100	80	126
380	500	-120	80	127
340	370	-30	80	128
490	370	120	81	128
140	370	-230	81	129
400	370	30	82	129
380	370	10	83	129
490	340	150	84	129
140	340	-200	84	130
400	340	60	85	130
380	340	40	86	130
140	490	-350	86	131
400	490	-90	86	132
380	490	-110	86	133
400	140	260	87	133
380	140	240	88	133
380	400	-20	88	134

S Statistic = 88 - 134 = -46

Tied Group	Value	Members
1	390	2
2	380	2
3	500	4
4	400	2

Time Period	Observations
12/1/2001	1
7/1/2004	1
10/13/2017	1
10/21/2021	1
11/29/2021	1
1/12/2022	1
2/18/2022	1
3/15/2022	1
4/18/2022	1
5/19/2022	1
6/15/2022	1
7/27/2022	1
8/29/2022	1

9/21/2022	1
10/26/2022	1
1/12/2023	1
4/10/2023	1
7/19/2023	1
10/4/2023	1
2/8/2024	1
6/28/2024	1
8/27/2024	1

There are 0 time periods with multiple data

A = 210

B = 0

C = 24

D = 0

E = 18

F = 0

a = 22638

b = 83160

c = 924

Group Variance = 1246

Z-Score = -1.27483

Comparison Level at 95% confidence level = -1.65463 (downward trend)

-1.27483 >= -1.65463 indicating no evidence of a downward trend

Mann-Kendall Trend Analysis

Parameter: Naphthalene

Location: TM04-PZM006

Original Data (Not Transformed)

Non-Detects Replaced with 1/2 DL

95% Confidence Level

Xj	Xk	Xj - Xk	Positives	Negatives
51	200	-149	0	1
405	200	205	1	1
358	200	158	2	1
432 L1	200	232	3	1
140	200	-60	3	2
69	200	-131	3	3
240	200	40	4	3
54	200	-146	4	4
230	200	30	5	4
160	200	-40	5	5
180	200	-20	5	6
140	200	-60	5	7
210	200	10	6	7
160	200	-40	6	8
210	200	10	7	8
68	200	-132	7	9
ND<0.05 U	200	-199.95	7	10
170	200	-30	7	11
0.12	200	-199.88	7	12
13	200	-187	7	13
130	200	-70	7	14
405	51	354	8	14
358	51	307	9	14
432 L1	51	381	10	14
140	51	89	11	14
69	51	18	12	14
240	51	189	13	14
54	51	3	14	14
230	51	179	15	14
160	51	109	16	14
180	51	129	17	14
140	51	89	18	14
210	51	159	19	14
160	51	109	20	14
210	51	159	21	14
68	51	17	22	14
ND<0.05 U	51	-50.95	22	15
170	51	119	23	15
0.12	51	-50.88	23	16
13	51	-38	23	17
130	51	79	24	17
358	405	-47	24	18
432 L1	405	27	25	18
140	405	-265	25	19
69	405	-336	25	20

240	405	-165	25	21
54	405	-351	25	22
230	405	-175	25	23
160	405	-245	25	24
180	405	-225	25	25
140	405	-265	25	26
210	405	-195	25	27
160	405	-245	25	28
210	405	-195	25	29
68	405	-337	25	30
ND<0.05 U	405	-404.95	25	31
170	405	-235	25	32
0.12	405	-404.88	25	33
13	405	-392	25	34
130	405	-275	25	35
432 L1	358	74	26	35
140	358	-218	26	36
69	358	-289	26	37
240	358	-118	26	38
54	358	-304	26	39
230	358	-128	26	40
160	358	-198	26	41
180	358	-178	26	42
140	358	-218	26	43
210	358	-148	26	44
160	358	-198	26	45
210	358	-148	26	46
68	358	-290	26	47
ND<0.05 U	358	-357.95	26	48
170	358	-188	26	49
0.12	358	-357.88	26	50
13	358	-345	26	51
130	358	-228	26	52
140	432 L1	-292	26	53
69	432 L1	-363	26	54
240	432 L1	-192	26	55
54	432 L1	-378	26	56
230	432 L1	-202	26	57
160	432 L1	-272	26	58
180	432 L1	-252	26	59
140	432 L1	-292	26	60
210	432 L1	-222	26	61
160	432 L1	-272	26	62
210	432 L1	-222	26	63
68	432 L1	-364	26	64
ND<0.05 U	432 L1	-431.95	26	65
170	432 L1	-262	26	66
0.12	432 L1	-431.88	26	67
13	432 L1	-419	26	68
130	432 L1	-302	26	69
69	140	-71	26	70
240	140	100	27	70
54	140	-86	27	71
230	140	90	28	71

160	140	20	29	71
180	140	40	30	71
140	140	0	30	71
210	140	70	31	71
160	140	20	32	71
210	140	70	33	71
68	140	-72	33	72
ND<0.05 U	140	-139.95	33	73
170	140	30	34	73
0.12	140	-139.88	34	74
13	140	-127	34	75
130	140	-10	34	76
240	69	171	35	76
54	69	-15	35	77
230	69	161	36	77
160	69	91	37	77
180	69	111	38	77
140	69	71	39	77
210	69	141	40	77
160	69	91	41	77
210	69	141	42	77
68	69	-1	42	78
ND<0.05 U	69	-68.95	42	79
170	69	101	43	79
0.12	69	-68.88	43	80
13	69	-56	43	81
130	69	61	44	81
54	240	-186	44	82
230	240	-10	44	83
160	240	-80	44	84
180	240	-60	44	85
140	240	-100	44	86
210	240	-30	44	87
160	240	-80	44	88
210	240	-30	44	89
68	240	-172	44	90
ND<0.05 U	240	-239.95	44	91
170	240	-70	44	92
0.12	240	-239.88	44	93
13	240	-227	44	94
130	240	-110	44	95
230	54	176	45	95
160	54	106	46	95
180	54	126	47	95
140	54	86	48	95
210	54	156	49	95
160	54	106	50	95
210	54	156	51	95
68	54	14	52	95
ND<0.05 U	54	-53.95	52	96
170	54	116	53	96
0.12	54	-53.88	53	97
13	54	-41	53	98
130	54	76	54	98

160	230	-70	54	99
180	230	-50	54	100
140	230	-90	54	101
210	230	-20	54	102
160	230	-70	54	103
210	230	-20	54	104
68	230	-162	54	105
ND<0.05 U	230	-229.95	54	106
170	230	-60	54	107
0.12	230	-229.88	54	108
13	230	-217	54	109
130	230	-100	54	110
180	160	20	55	110
140	160	-20	55	111
210	160	50	56	111
160	160	0	56	111
210	160	50	57	111
68	160	-92	57	112
ND<0.05 U	160	-159.95	57	113
170	160	10	58	113
0.12	160	-159.88	58	114
13	160	-147	58	115
130	160	-30	58	116
140	180	-40	58	117
210	180	30	59	117
160	180	-20	59	118
210	180	30	60	118
68	180	-112	60	119
ND<0.05 U	180	-179.95	60	120
170	180	-10	60	121
0.12	180	-179.88	60	122
13	180	-167	60	123
130	180	-50	60	124
210	140	70	61	124
160	140	20	62	124
210	140	70	63	124
68	140	-72	63	125
ND<0.05 U	140	-139.95	63	126
170	140	30	64	126
0.12	140	-139.88	64	127
13	140	-127	64	128
130	140	-10	64	129
160	210	-50	64	130
210	210	0	64	130
68	210	-142	64	131
ND<0.05 U	210	-209.95	64	132
170	210	-40	64	133
0.12	210	-209.88	64	134
13	210	-197	64	135
130	210	-80	64	136
210	160	50	65	136

68	160	-92	65	137
ND<0.05 U	160	-159.95	65	138
170	160	10	66	138
0.12	160	-159.88	66	139
13	160	-147	66	140
130	160	-30	66	141
68	210	-142	66	142
ND<0.05 U	210	-209.95	66	143
170	210	-40	66	144
0.12	210	-209.88	66	145
13	210	-197	66	146
130	210	-80	66	147
ND<0.05 U	68	-67.95	66	148
170	68	102	67	148
0.12	68	-67.88	67	149
13	68	-55	67	150
130	68	62	68	150
170	ND<0.05 U	169.95	69	150
0.12	ND<0.05 U	0.07	70	150
13	ND<0.05 U	12.95	71	150
130	ND<0.05 U	129.95	72	150
0.12	170	-169.88	72	151
13	170	-157	72	152
130	170	-40	72	153
13	0.12	12.88	73	153
130	0.12	129.88	74	153
130	13	117	75	153

S Statistic = 75 - 153 = -78

Tied Group	Value	Members
1	140	2
2	160	2
3	210	2

Time Period	Observations
12/1/2001	1
7/1/2004	1
10/13/2017	1
10/21/2021	1
11/29/2021	1
1/12/2022	1
2/18/2022	1
3/15/2022	1
4/18/2022	1
5/19/2022	1
6/15/2022	1
7/27/2022	1
8/29/2022	1
9/21/2022	1

10/26/2022	1
1/12/2023	1
4/10/2023	1
7/19/2023	1
10/4/2023	1
2/8/2024	1
6/28/2024	1
8/27/2024	1

There are 0 time periods with multiple data

A = 54

B = 0

C = 0

D = 0

E = 6

F = 0

a = 22638

b = 83160

c = 924

Group Variance = 1254.67

Z-Score = -2.17383

Comparison Level at 95% confidence level = 1.65463 (upward trend)

-2.17383 <= 1.65463 indicating no evidence of an upward trend

Mann-Kendall Trend Analysis

Parameter: Naphthalene

Location: TM04-PZM006

Original Data (Not Transformed)

Non-Detects Replaced with 1/2 DL

95% Confidence Level

Xj	Xk	Xj - Xk	Positives	Negatives
51	200	-149	0	1
405	200	205	1	1
358	200	158	2	1
432 L1	200	232	3	1
140	200	-60	3	2
69	200	-131	3	3
240	200	40	4	3
54	200	-146	4	4
230	200	30	5	4
160	200	-40	5	5
180	200	-20	5	6
140	200	-60	5	7
210	200	10	6	7
160	200	-40	6	8
210	200	10	7	8
68	200	-132	7	9
ND<0.05 U	200	-199.95	7	10
170	200	-30	7	11
0.12	200	-199.88	7	12
13	200	-187	7	13
130	200	-70	7	14
405	51	354	8	14
358	51	307	9	14
432 L1	51	381	10	14
140	51	89	11	14
69	51	18	12	14
240	51	189	13	14
54	51	3	14	14
230	51	179	15	14
160	51	109	16	14
180	51	129	17	14
140	51	89	18	14
210	51	159	19	14
160	51	109	20	14
210	51	159	21	14
68	51	17	22	14
ND<0.05 U	51	-50.95	22	15
170	51	119	23	15
0.12	51	-50.88	23	16
13	51	-38	23	17
130	51	79	24	17
358	405	-47	24	18
432 L1	405	27	25	18
140	405	-265	25	19
69	405	-336	25	20

240	405	-165	25	21
54	405	-351	25	22
230	405	-175	25	23
160	405	-245	25	24
180	405	-225	25	25
140	405	-265	25	26
210	405	-195	25	27
160	405	-245	25	28
210	405	-195	25	29
68	405	-337	25	30
ND<0.05 U	405	-404.95	25	31
170	405	-235	25	32
0.12	405	-404.88	25	33
13	405	-392	25	34
130	405	-275	25	35
432 L1	358	74	26	35
140	358	-218	26	36
69	358	-289	26	37
240	358	-118	26	38
54	358	-304	26	39
230	358	-128	26	40
160	358	-198	26	41
180	358	-178	26	42
140	358	-218	26	43
210	358	-148	26	44
160	358	-198	26	45
210	358	-148	26	46
68	358	-290	26	47
ND<0.05 U	358	-357.95	26	48
170	358	-188	26	49
0.12	358	-357.88	26	50
13	358	-345	26	51
130	358	-228	26	52
140	432 L1	-292	26	53
69	432 L1	-363	26	54
240	432 L1	-192	26	55
54	432 L1	-378	26	56
230	432 L1	-202	26	57
160	432 L1	-272	26	58
180	432 L1	-252	26	59
140	432 L1	-292	26	60
210	432 L1	-222	26	61
160	432 L1	-272	26	62
210	432 L1	-222	26	63
68	432 L1	-364	26	64
ND<0.05 U	432 L1	-431.95	26	65
170	432 L1	-262	26	66
0.12	432 L1	-431.88	26	67
13	432 L1	-419	26	68
130	432 L1	-302	26	69
69	140	-71	26	70
240	140	100	27	70
54	140	-86	27	71
230	140	90	28	71

160	140	20	29	71
180	140	40	30	71
140	140	0	30	71
210	140	70	31	71
160	140	20	32	71
210	140	70	33	71
68	140	-72	33	72
ND<0.05 U	140	-139.95	33	73
170	140	30	34	73
0.12	140	-139.88	34	74
13	140	-127	34	75
130	140	-10	34	76
240	69	171	35	76
54	69	-15	35	77
230	69	161	36	77
160	69	91	37	77
180	69	111	38	77
140	69	71	39	77
210	69	141	40	77
160	69	91	41	77
210	69	141	42	77
68	69	-1	42	78
ND<0.05 U	69	-68.95	42	79
170	69	101	43	79
0.12	69	-68.88	43	80
13	69	-56	43	81
130	69	61	44	81
54	240	-186	44	82
230	240	-10	44	83
160	240	-80	44	84
180	240	-60	44	85
140	240	-100	44	86
210	240	-30	44	87
160	240	-80	44	88
210	240	-30	44	89
68	240	-172	44	90
ND<0.05 U	240	-239.95	44	91
170	240	-70	44	92
0.12	240	-239.88	44	93
13	240	-227	44	94
130	240	-110	44	95
230	54	176	45	95
160	54	106	46	95
180	54	126	47	95
140	54	86	48	95
210	54	156	49	95
160	54	106	50	95
210	54	156	51	95
68	54	14	52	95
ND<0.05 U	54	-53.95	52	96
170	54	116	53	96
0.12	54	-53.88	53	97
13	54	-41	53	98
130	54	76	54	98

160	230	-70	54	99
180	230	-50	54	100
140	230	-90	54	101
210	230	-20	54	102
160	230	-70	54	103
210	230	-20	54	104
68	230	-162	54	105
ND<0.05 U	230	-229.95	54	106
170	230	-60	54	107
0.12	230	-229.88	54	108
13	230	-217	54	109
130	230	-100	54	110
180	160	20	55	110
140	160	-20	55	111
210	160	50	56	111
160	160	0	56	111
210	160	50	57	111
68	160	-92	57	112
ND<0.05 U	160	-159.95	57	113
170	160	10	58	113
0.12	160	-159.88	58	114
13	160	-147	58	115
130	160	-30	58	116
140	180	-40	58	117
210	180	30	59	117
160	180	-20	59	118
210	180	30	60	118
68	180	-112	60	119
ND<0.05 U	180	-179.95	60	120
170	180	-10	60	121
0.12	180	-179.88	60	122
13	180	-167	60	123
130	180	-50	60	124
210	140	70	61	124
160	140	20	62	124
210	140	70	63	124
68	140	-72	63	125
ND<0.05 U	140	-139.95	63	126
170	140	30	64	126
0.12	140	-139.88	64	127
13	140	-127	64	128
130	140	-10	64	129
160	210	-50	64	130
210	210	0	64	130
68	210	-142	64	131
ND<0.05 U	210	-209.95	64	132
170	210	-40	64	133
0.12	210	-209.88	64	134
13	210	-197	64	135
130	210	-80	64	136
210	160	50	65	136

68	160	-92	65	137
ND<0.05 U	160	-159.95	65	138
170	160	10	66	138
0.12	160	-159.88	66	139
13	160	-147	66	140
130	160	-30	66	141
68	210	-142	66	142
ND<0.05 U	210	-209.95	66	143
170	210	-40	66	144
0.12	210	-209.88	66	145
13	210	-197	66	146
130	210	-80	66	147
ND<0.05 U	68	-67.95	66	148
170	68	102	67	148
0.12	68	-67.88	67	149
13	68	-55	67	150
130	68	62	68	150
170	ND<0.05 U	169.95	69	150
0.12	ND<0.05 U	0.07	70	150
13	ND<0.05 U	12.95	71	150
130	ND<0.05 U	129.95	72	150
0.12	170	-169.88	72	151
13	170	-157	72	152
130	170	-40	72	153
13	0.12	12.88	73	153
130	0.12	129.88	74	153
130	13	117	75	153

S Statistic = 75 - 153 = -78

Tied Group	Value	Members
1	140	2
2	160	2
3	210	2

Time Period	Observations
12/1/2001	1
7/1/2004	1
10/13/2017	1
10/21/2021	1
11/29/2021	1
1/12/2022	1
2/18/2022	1
3/15/2022	1
4/18/2022	1
5/19/2022	1
6/15/2022	1
7/27/2022	1
8/29/2022	1
9/21/2022	1

10/26/2022	1
1/12/2023	1
4/10/2023	1
7/19/2023	1
10/4/2023	1
2/8/2024	1
6/28/2024	1
8/27/2024	1

There are 0 time periods with multiple data

A = 54

B = 0

C = 0

D = 0

E = 6

F = 0

a = 22638

b = 83160

c = 924

Group Variance = 1254.67

Z-Score = -2.17383

Comparison Level at 95% confidence level = -1.65463 (downward trend)

-2.17383 < -1.65463 indicating a downward trend