HUMPHREY IMPOUNDMENT
SEMI-ANNUAL 2ND HALF 2023 INTERIM MEASURE REPORT

TRADEPOINT ATLANTIC
SPARROWS POINT, MARYLAND

Prepared for:

TRADEPOINT ATLANTIC
6995 Bethlehem Blvd
Sparrows Point, MD 21219

Prepared by:

ARM GROUP LLC
9175 Guilford Road
Suite 310
Columbia, Maryland 21046

ARM Project No. 21010214

January 24, 2024

Respectfully Submitted:

Ian Shull
Staff Geologist

Kaye Guille, P.E., PMP
Senior Engineer

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1.0 INTRODUCTION

ARM Group LLC (ARM), on behalf of Tradepoint Atlantic, has prepared this Semi-Annual 2nd Half 2023 Interim Measures (IM) Report for a portion of the Tradepoint Atlantic (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 *IM 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 2023 IM Report summarizes groundwater and surface water sampling and gauging results from July through December 2023. The approved IM proposed gauging and sampling of groundwater and surface water around the perimeter of the Humphrey Impoundment 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

Filling activities for the Humphrey Impoundment commenced in January 2022 and have continued throughout this year. The impoundment is being filled in quadrants. Filling of the impoundment is now approximately 80% complete. **Appendix A** shows the progress made on fill and surcharge placement as of January 2024. Future use for the impoundment will include a Stormwater Management Regional Pond and 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

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 sampling frequency from monthly to quarterly. On October 30, 2023, the Agencies approved a reduction in gauging frequency from monthly to quarterly.

As shown on **Figure 2**, groundwater samples were originally collected from 18 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, HI21-MWS, HI22-MWS, TM04-PZM006, TM08R-PZM007, HI02-PZM006, HI04-PZM006, and HI07-PZM005. However, several monitoring wells were not sampled for the 3rd and / or 4th Quarters 2023:

- HI04-PZM006 was not sampled in the 3rd or 4th Quarters 2023, as it was damaged during redevelopment / construction activities in April 2022.
- HI02-PZM006 and HI20-MWS were not sampled in the 3rd or 4th Quarters 2023. They were abandoned on March 21, 2023, due to development activities on Sub-Parcel B8-1.
- HI22-MWS was inaccessible due to development activities and was not sampled during the 3rd Quarter 2023.
- HI07-PZM005 was not sampled in the 4th Quarter 2023. It was abandoned on August 28, 2023, to accommodate grading activities for Sub-Parcel B14-1 at this location.

It is understood that these wells may need to be reinstalled following completion of development activities.

Beginning in April 2022, non-aqueous phase liquid (NAPL) was observed in monitoring well HI17-MWS. 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. NAPL observations during the 3rd and 4th quarters of 2023 are discussed further in Section 2.4.

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 July and October 2023 quarterly monitoring events. Groundwater analytical results for each monitoring round are included in **Table 1** and **Table 2**. Project Action Limit (PAL) exceedances for each of the sampling rounds are shown on **Figure 3** and **Figure 4**. 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 B**.

2.1.1. 3rd Quarter 2023 Groundwater Sampling

During the 3rd Quarter 2023 sampling event, 14 monitoring wells were sampled. Benzene exceedances of the groundwater PAL (5 micrograms per liter, or µg/L) were observed in three monitoring wells: HI07-PZM005 (8.7 µg/L), HI19-MWS (8.5 µg/L), and TM04-PZM006 (340 µg/L). Only one well (TM04-PZM006) of the 11 monitoring wells along the TMC had an exceedance of benzene. Measured benzene concentrations are consistent with historical values observed at these locations.

Naphthalene exceedances of the groundwater PAL (0.12 µg/L) were observed in five of the 14 monitoring wells sampled, with the maximum concentration observed in HI19-MWS (26 µg/L). Three of the five monitoring wells with naphthalene PAL exceedances are located along the TMC: HI10-MWS (2.2 B µg/L), HI14-MWS (0.48 µg/L) and HI17-MWS (0.52 µg/L). Naphthalene concentrations are consistent with historical values observed at these locations. Naphthalene was not detected at TM04-PZM006 in the 3rd quarter sampling event. Monitoring well TM04-PZM006 has had consistently shown naphthalene concentrations in the past. Data from the next sampling event will be reviewed to determine if this is an anomaly or indicative of a decrease in this location.

Benz[a]anthracene exceedances of the groundwater PAL (0.03 µg/L) were observed in five of the 14 monitoring wells sampled, with the maximum concentration observed in HI19-MWS (0.05 µg/L). Benz[a]anthracene concentrations are consistent with historical values observed at these locations.

Pentachlorophenol and dibenz[a,h]anthracene were the only other parameters to exceed their respective PAL during the third quarter of 2023. Dibenz[a,h]anthracene exceeded its PAL (0.025 µg/L) in one well (HI10-MWS) with a concentration of 0.07 µg/L. Pentachlorophenol exceeded its PAL (1 µg/L) in one well (HI07-PZM005) with a concentration of 2 µg/L.

2.1.2. 4th Quarter 2023 Groundwater Sampling

During the 4th Quarter 2023 sampling event, 14 monitoring wells were sampled. Benzene exceedances of the groundwater PAL (5 micrograms per liter, or µg/L) were observed in two monitoring wells: HI19-MWS (11 µg/L), and TM04-PZM006 (490 µg/L). Monitoring well TM04-PZM006 was the only location out of the 11 total monitoring wells along the TMC to exhibit a PAL exceedance for benzene. These values are consistent with historical benzene concentrations observed at these locations.

Naphthalene exceedances of the groundwater PAL (0.12 µg/L) were observed in 10 of 14 monitoring wells sampled, with the maximum concentration observed in TM04-PZM006 (170 µg/L). Eight of the 10 monitoring wells with naphthalene PAL exceedances are located along the TMC: HI10-MWS (33 µg/L), HI11-MWS (0.38 µg/L), HI12-MWS (10 µg/L), HI13-MWS (0.72 B µg/L), HI14-MWS (0.16 µg/L), HI17-MWS (0.55 µg/L), HI18-MWS (0.18 µg/L) and TM04-PZM006 (170 µg/L). Naphthalene concentrations are consistent with historical values observed at these locations. Monitoring well TM04-PZM006 did not exhibit an exceedance for naphthalene

during the third quarter sampling event, this has been determined to be an anomaly as the detected concentrations during the fourth quarter event are back within the historical range.

Benz[a]anthracene exceedances of the groundwater PAL (0.03 µg/L) were observed in six of the 14 monitoring wells sampled, with the maximum concentration observed in HI22-MWS (1.5 µg/L). Benz[a]anthracene concentrations are consistent with historical values observed at these locations. Benzo[a]pyrene(1.4 µg/L), benzo[b]fluoranthene(1.7 µg/L), dibenz[a,h]anthracene(0.22 µg/L), and indeno[1,2,3-c,d]pyrene (1.1 µg/L)all exceeded their PAL's (0.2 µg/L, 0.25 µg/L, 0.03 µg/L, and 0.25 µg/L, respectively) during the 4th Quarter 2023 in one well (HI22-MWS).

2.1.3. Groundwater Sampling Trends

Benzene and naphthalene historic groundwater sampling results are compiled in **Table 3**. Trend plots for benzene and naphthalene (for wells where PAL exceedances have been identified in one or more monitoring events) are included as **Figure 5** and **Figure 6,** respectively. Overall, benzene and naphthalene concentrations in the wells do not appear to be changing as the impoundment is filled.

As shown on **Figure 5**, monitoring well location TM04-PZM006 continues to be the main area of 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 – October 2023. Monitoring well TM04-PZM006 was evaluated with a 95% confidence factor and did not identify any statistically significant increasing or decreasing trends in the benzene and naphthalene concentrations. The analysis output file is included in **Appendix C**.

2.1.4. B24 Groundwater Sampling

During the 3rd and 4th Quarter 2023, ARM sampled the following 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 to identify potential impact migration towards Bear Creek. Sampling at these locations is conducted on a semi-annual basis.

The three monitoring wells were sampled for VOCs via USEPA Method 8260 and SVOCs by USEPA Method 8270 SIM. All results from the 3rd Quarter 2023 sampling event are included in **Table 4**. The laboratory reports are included in **Appendix B**. All groundwater PAL exceedances are included on **Figure 3**.

Benzene did not exceed the groundwater PAL (5 µg/L) in the three Parcel B24 monitoring wells for the third quarter of 2023. Well B24-002-MWS was the only monitoring well to exhibit VOC parameters exceeding the groundwater PALs: bromodichloromethane (0.33 J µg/L), chloroform (1.0 µg/L), and dibromochloromethane (0.37 J µg/L). For SVOCs, naphthalene exceeded the

groundwater PAL (0.12 µg/L) in two monitoring wells: B24-001-MWS (2.5 µg/L) and B24-002-MWS (0.34 µg/L). Monitoring well B24-002-MWS exceeded its groundwater PAL for the parameters benz[a]anthracene (0.03 J µg/L) and dibenz[a,h,]anthracene (0.025 µg/L) with concentrations of 0.04 J µg/L and 0.05 µg/L, respectively.

All results from the 4th Quarter 2023 sampling event are included in **Table 5**. The laboratory reports are included in **Appendix B**. All groundwater PAL exceedances are included on **Figure 4**.

Benzene did not exceed the groundwater PAL (5 µg/L) in the three Parcel B24 monitoring wells for the fourth quarter of 2023. Well B24-002-MWS was the only monitoring well to exhibit a VOC parameter with an exceedance of the groundwater PALs: Chloroform (1.0 µg/L). For SVOCs, naphthalene exceeded the groundwater PAL (0.12 µg/L) in all three monitoring wells: B24-001-MWS (0.9 µg/L), B24-002-MWS (0.28 J µg/L), and TS03-DDP002 (0.35 µg/L). Benz[a]anthracene also exceeded the groundwater PAL (0.03 J µg/L) in monitoring well B24-01-MWS (0.04 J µg/L).

Groundwater concentrations at the three Parcel B24 monitoring wells have remained stable since sampling began in May 2022 (following well installation in April 2022).

2.2. Surface Water Sampling

Surface water samples were collected in July and October 2023, 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 6** and **Table 7** for parameters with detections. The laboratory reports are included in **Appendix B**. Benzene and naphthalene did not exceed these freshwater screening levels. Benzene and naphthalene historic surface water sampling results are compiled in **Table 8**. Anthracene was the only parameter to exceed its surface water screening value (0.02 µg/L) during both the third and fourth quarter of 2023. This exceedance was observed within all four sample points, with a maximum observed value in TMC-TM04 (0.1 µg/L) in the 3rd Quarter 2023 and with estimated maximum observed values in TMC-TM04, TMC-Rail Bridge, and TMC-Bend (0.04 J µg/L) in the 4th Quarter 2023.

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. Gauging has been conducted via manual monthly groundwater gauging. On October 30, 2023, the Agencies approved a reduction in gauging frequency from monthly to quarterly. Gauging results are

summarized in **Table 9**. Monthly gauging results from July through October 2023 have been used to create groundwater elevation contour maps, included as **Figure 7, Figure 8, Figure 9, and Figure 10,** respectively. The following wells are not included in the monthly gauging: HI04-PZM006 (damaged), HI02-PZM006 and HI20-MWS (abandoned in March 2023), and HI11-MWS and HI22-MWS (PVC casings extended due to development activities and not re-surveyed). Monitoring well HI07-PZM005 is included in the July and August gauging only (abandoned in August 2023).

During groundwater monitoring events, each groundwater point was checked for the presence of NAPL using an oil-water interface probe. Apart from monitoring well HI17-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. HI17-MWS was initially gauged at least weekly following this detection, with NAPL thickness ranging from the initial detection of 0.02 ft to subsequent trace amounts (not measurable on the probe). Three Enhanced Fluid Recovery events were conducted at HI17-MWS in 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 so as to evaluate the amount of potential NAPL recharge into the well. A summary of NAPL observations during the 2nd Half of 2023 is provided in **Table 10**. NAPL thickness has not increased at this location, remaining at a trace level, so absorbent socks will continue to be used to remove NAPL from the well.

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 monthly groundwater and surface water gauging and sampling to monitor the site conditions as the Humphrey Impoundment is filled, in preparation for development. The monthly groundwater and surface water gauging was performed from January 2022 to October 2022 at which time the frequency was updated to monthly gauging and quarterly sampling (based on Agency email correspondence dated November 7, 2022). On October 30, 2023, the Agencies approved a reduction in gauging frequency from monthly to quarterly. Groundwater sampling of the three wells at Parcel B24 (TS03-DDP002, B24-001-MWS and B24-002-MWS) will continue to be conducted semi-annually.

Groundwater conditions around the perimeter of the Humphrey Impoundment have not significantly changed since filling commenced. As shown on **Figure 5** and **Figure 6**, benzene and naphthalene concentration trends have not increased since December 2021. NAPL was first observed at HI17-MWS in April 2022, with NAPL thicknesses ranging from trace to 0.25 inches during subsequent monitoring. Absorbent socks have been deployed in this well and have been effective in removing NAPL that accumulates in the well.

TMC surface water conditions have not changed since monitoring began. There have not been any benzene or naphthalene freshwater screening level exceedances at any of the TMC surface water sampling locations since IM sampling began. Additionally, TMC surface-water elevation, which is largely controlled at the HCWWTP intake, directly influences the proximal shallow groundwater elevations within the Humphrey Impoundment.

Filling of the impoundment is now 80% complete. No significant changes have been observed in groundwater concentrations, surface water concentrations, or groundwater elevations.

Quarterly Groundwater and Surface Water Sampling Updates will continue to be submitted to the Agencies to summarize ongoing groundwater and surface water sampling and gauging data. The next IM Report will be submitted following completion of groundwater and surface water activities for the first half of 2024.

FIGURES

Tradepoint Atlantic Property
Parcel B14 Site Location
February 20, 2023

Figure
1

ARM Group LLC
Engineers and Scientists

0 500 1,000 2,000
Feet

Tradepoint Atlantic
Sparrows Point
Baltimore County, MD
ARM Project No. 21010214

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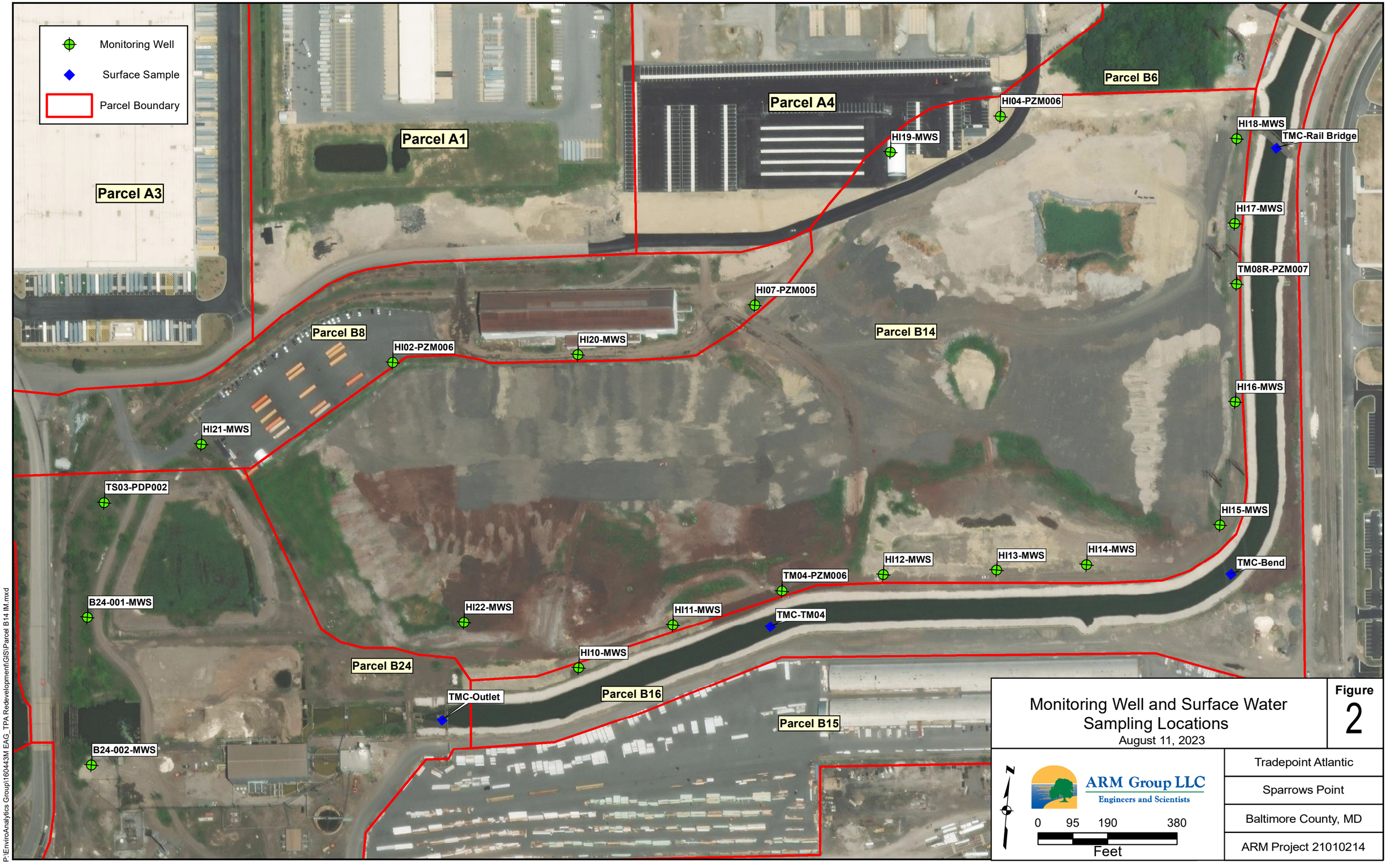

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Monitoring Well and Surface Water Sampling Locations

August 11, 2023

Figure 2

ARM Group LLC
Engineers and Scientists

0 95 190 380
Feet

Tradepoint Atlantic

Sparrows Point

Baltimore County, MD

ARM Project 21010214

LEGEND

- Surface Water Sample
- Monitoring Well
- Abandoned/Damaged Monitoring Well
- Parcel Boundary

Parcel A1

Parcel A4

Parcel B6

Parcel B8

Parcel B14

Parcel B24

Parcel B16

Parcel B15

HI04-PZM006

HI18-MWS
NE

Canal Bridge

HI19-MWS
VOC
Benzene: 8.5
SVOC
Benzo[a]anthracene: 0.05 J
Naphthalene: 26.0

HI07-PZM005
VOC
Benzene: 8.7
SVOC
Benzo[a]anthracene: 0.04 JB
Pentachlorophenol: 2.0
Naphthalene: 12

HI17-MWS
SVOC
Naphthalene: 0.52

TM08-PZM007
NE

HI02-PZM006

HI20-MWS

HI16-MWS
NE

HI21-MWS
NE

TS03-PDP002
SVOC
Dibenz[a,h]anthracence: 0.04 J

HI14-MWS
SVOC
Benzo[a]anthracene: 0.04 J
Naphthalene: 0.48

HI15-MWS
NE

TM04-PZM006
VOC
Benzene: 340

HI12-MWS
SVOC
Benzo[a]anthracene: 0.04 J

HI13-MWS
NE

HI Bend

B24-001-MWS
SVOC
Naphthalene: 2.5

HI22-MWS
NS

HI10-MWS
SVOC
Naphthalene: 2.2 B
Benzo[a]anthracene: 0.06 B
Dibenz[a,h]anthracene: 0.07

HI11-MWS
NE

TM04 Surface

B24-002-MWS
VOC
Dibromochloromethane: 0.37 J
Bromodichloromethane: 0.33 J
Chloroform: 1.0
SVOC
Dibenz[a,h]anthracene: 0.05
Naphthalene: 0.34
Benzo[a]anthracene: 0.04 J

Mixing Station

NOTES:
- "NE"= No Exceedances
- All results are in ug/L.
- Groundwarer samples taken October 2-20, 2023.

Groundwater PAL Exceedances - Q3 2023

December 12, 2023

Figure 3

ARM Group LLC
Engineers and Scientists

0 125 250 500
Feet

Tradepoint Atlantic
Sparrows Point
Baltimore County, MD
ARM Project 21010214

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LEGEND

- Surface Water Sample
- Monitoring Well
- Abandoned/Damaged Monitoring Well
- Parcel Boundary

Parcel A1

Parcel A4

Parcel B6

Parcel B8

Parcel B14

Parcel B24

Parcel B16

Parcel B15

HI04-PZM006

HI18-MWS
SVOC
Naphthalene: 0.18

Canal Bridge

HI19-MWS
VOC
Benzene: 11.0
SVOC
Naphthalene: 34.0
Benz[a]anthracene: 0.13

HI17-MWS
SVOC
Benz[a]anthracene: 0.03 J
Naphthalene: 0.55

HI07-PZM005

TM08-PZM007
NE

HI02-PZM006

HI20-MWS

HI16-MWS
SVOC
Benz[a]anthracene: 0.03 J

HI21-MWS
NE

TS03-PDP002
SVOC
Naphthalene: 0.35

HI22-MWS
SVOC
Benz[a]anthracene: 1.5
Benzo[a]pyrene: 1.4
Benzo[b]fluoranthene: 1.7
Dibenz[a,h]anthracene: 0.22
Indeno[1,2,3-c,d]pyrene: 1.1
Naphthalene: 0.16 J

TM04-PZM006
VOC
Benzene: 490
SVOC
Napthalene: 170

HI12-MWS
VOC
Benz[a]anthracene: 0.04 J
Naphthalene: 10.0

HI13-MWS
SVOC
Naphthalene: 0.72 B

HI14-MWS
SVOC
Naphthalene: 0.16

HI15-MWS
NE

HI Bend

B24-001-MWS
SVOC
Benz[a]anthracene: 0.04 J
Naphthalene: 0.9

HI10-MWS
SVOC
Benz[a]anthracene: 0.07
Naphthalene: 33.0

HI11-MWS
SVOC
Naphthalene: 0.38

TM04 Surface

Mixing Station

B24-002-MWS
VOC
Chloroform: 1.0
SVOC
Naphthalene: 0.28 J

NOTES:
- "NE"= No Exceedances
- All results are in ug/L.
- Groundwarer samples taken October 2-20, 2023.

Groundwater PAL Exceedances - Q4 2023

December 12, 2023

Figure 4

ARM Group LLC
Engineers and Scientists

0 125 250 500
Feet

Tradepoint Atlantic
Sparrows Point
Baltimore County, MD
ARM Project 21010214

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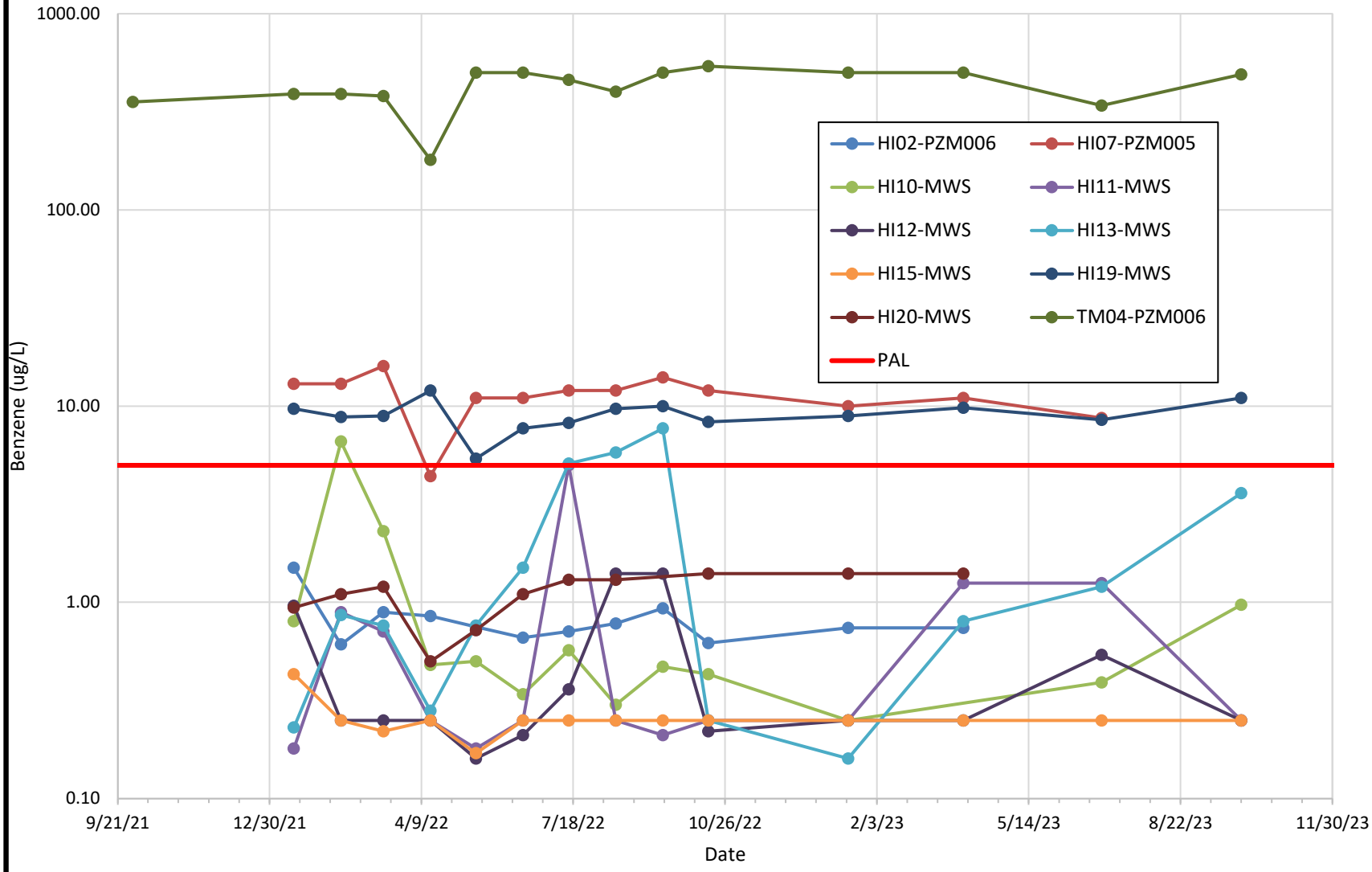

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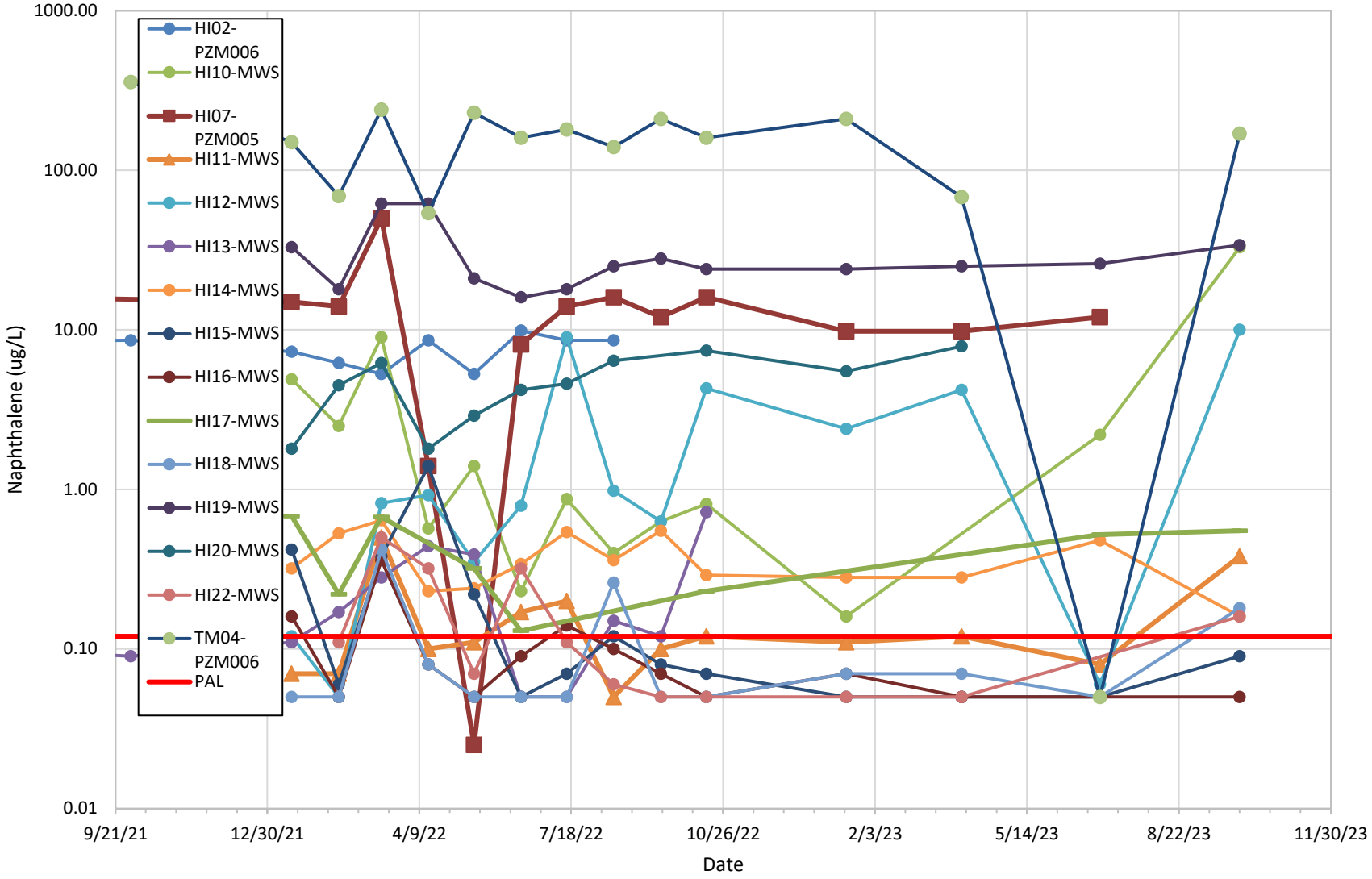
Parcel B14
Tradepoint Atlantic

Sparrows Point, Maryland

B14 Historic Groundwater Results for Benzene

December 7, 2023

Figure 5



ARM Group LLC
Engineers and Scientists

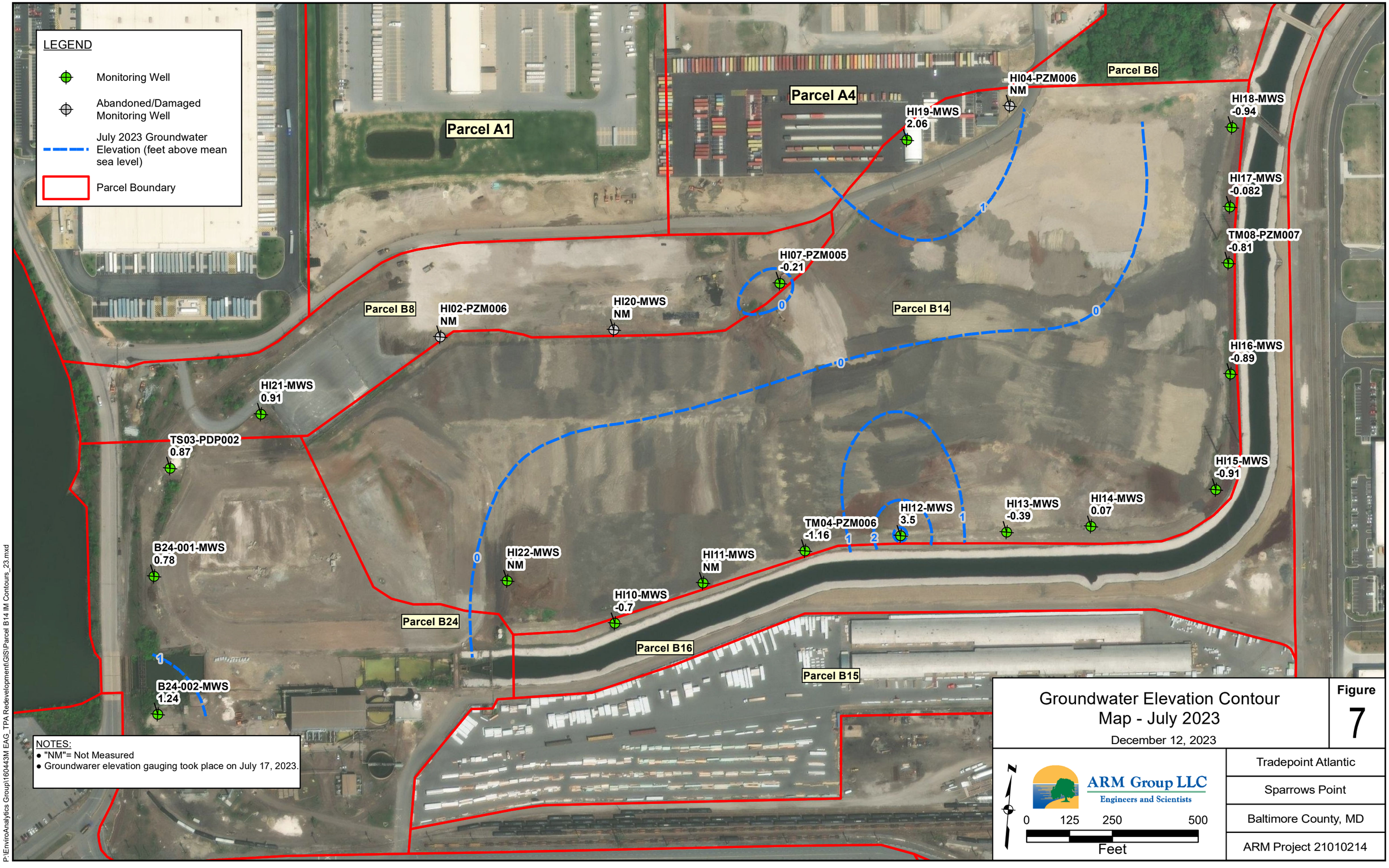
Parcel B14
Tradepoint Atlantic

Sparrows Point, Maryland

B14 Historic Groundwater Results for Naphthalene

December 7, 2023

Figure 6


LEGEND
Monitoring Well
Abandoned/Damaged Monitoring Well
July 2023 Groundwater Elevation (feet above mean sea level)
Parcel Boundary
Parcel A1
Parcel A4
Parcel B6
Parcel B8
Parcel B14
Parcel B24
Parcel B16
Parcel B15
HI04-PZM006 NM
HI19-MWS 2.06
HI18-MWS -0.94
HI17-MWS -0.082
TM08-PZM007 -0.81
HI07-PZM005 -0.21
HI20-MWS NM
HI02-PZM006 NM
HI16-MWS -0.89
HI21-MWS 0.91
TS03-PDP002 0.87
HI15-MWS -0.91
HI12-MWS 3.5
HI13-MWS -0.39
HI14-MWS 0.07
TM04-PZM006 -1.16
HI22-MWS NM
HI11-MWS NM
HI10-MWS -0.7
B24-001-MWS 0.78
B24-002-MWS 1.24
0
1
2
NOTES:
• "NM"= Not Measured
• Groundwarer elevation gauging took place on July 17, 2023.
Groundwater Elevation Contour Map - July 2023
December 12, 2023
Figure 7
ARM Group LLC
Engineers and Scientists
0 125 250 500
Feet
Tradepoint Atlantic
Sparrows Point
Baltimore County, MD
ARM Project 21010214
P:\EnviroAnalytics Group\160443M EAG_TPA Redevelopment\GIS\Parcel B14 IM Contours_23.mxd

LEGEND

- Monitoring Well
- Abandoned/Damaged Monitoring Well
- August 2023 Groundwater Elevation (feet above mean sea level)
- Parcel Boundary

Parcel A1
Parcel A4
Parcel B6
Parcel B8
Parcel B14
Parcel B24
Parcel B16
Parcel B15

HI04-PZM006 NM
HI19-MWS 2.51
HI18-MWS 0.09
HI17-MWS 0.15
TM08-PZM007 0.2
HI07-PZM005 0.17
HI02-PZM006 NM
HI20-MWS NM
HI16-MWS 0.13
HI21-MWS 1.01
TS03-PDP002 NM
HI15-MWS 0.11
HI12-MWS 4
HI13-MWS 0.13
HI14-MWS 0.58
TM04-PZM006 -0.85
B24-001-MWS 1.09
HI22-MWS NM
HI11-MWS NM
HI10-MWS 0.21
B24-002-MWS 1.44

2
1
1
1
0
2
3
1

NOTES:
- "NM"= Not Measured
- Groundwarer elevation gauging took place on August 18, 2023.

Groundwater Elevation Contour Map - August 2023

December 12, 2023

Figure 8

ARM Group LLC
Engineers and Scientists

0 125 250 500
Feet

Tradepoint Atlantic
Sparrows Point
Baltimore County, MD
ARM Project 21010214

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LEGEND

- Monitoring Well
- Abandoned/Damaged Monitoring Well
- September 2023 Groundwater Elevation (feet above mean sea level)
- Parcel Boundary

Parcel A1
Parcel A4
Parcel B6
Parcel B8
Parcel B14
Parcel B24
Parcel B16
Parcel B15

HI04-PZM006 NM
HI19-MWS 2.23
HI18-MWS -0.16
HI17-MWS -0.11
TM08-PZM007 -0.04
HI16-MWS -0.09
HI15-MWS -0.14
HI07-PZM005 NM
HI20-MWS NM
HI02-PZM006 NM
HI21-MWS 1.59
TS03-PDP002 1.37
B24-001-MWS 1.3
B24-002-MWS 1.42
HI22-MWS NM
HI11-MWS NM
HI10-MWS -0.02
TM04-PZM006 -1.07
HI12-MWS 3.3
HI13-MWS -0.2
HI14-MWS 0.28

2
1
0
1
2
1
0
1
0

NOTES:
- "NM"= Not Measured
- Groundwarer elevation gauging took place on September 25, 2023.

Groundwater Elevation Contour Map - September 2023

December 12, 2023

Figure 9

ARM Group LLC
Engineers and Scientists

0 125 250 500
Feet

Tradepoint Atlantic
Sparrows Point
Baltimore County, MD
ARM Project 21010214

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LEGEND

- Monitoring Well
- Abandoned/Damaged Monitoring Well
- October 2023 Groundwater Elevation (feet above mean sea level)
- Parcel Boundary

Parcel A1
Parcel A4
Parcel B6
Parcel B8
Parcel B14
Parcel B24
Parcel B16
Parcel B15

HI04-PZM006 NM
HI19-MWS 2.23
HI18-MWS -0.16
HI17-MWS -0.11
TM08-PZM007 -0.04
HI07-PZM005 NM
HI20-MWS NM
HI02-PZM006 NM
HI16-MWS -0.09
HI21-MWS 1.59
TS03-PDP002 1.37
HI15-MWS -0.14
HI12-MWS 3.3
HI13-MWS -0.2
HI14-MWS 0.28
TM04-PZM006 -1.07
B24-001-MWS 1.3
HI22-MWS NM
HI11-MWS NM
HI10-MWS -0.02
B24-002-MWS 1.42

1
2
3

NOTES:
- "NM"= Not Measured
- Groundwarer elevation gauging took place on October 2, 2023.

Groundwater Elevation Contour Map - October 2023

December 12, 2023

Figure 10

ARM Group LLC
Engineers and Scientists

0 125 250 500
Feet

Tradepoint Atlantic
Sparrows Point
Baltimore County, MD
ARM Project 21010214

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TABLES

Table 1 - Parcel B14 Groundwater Sampling (3rd Quarter 2023)
Summary of Organics Detected in Groundwater

Parameter	Units	PAL	HI07-PZM005 7/18/2023	HI10-MWS 7/19/2023	HI11-MWS 7/19/2023	HI12-MWS 7/19/2023	HI13-MWS 7/19/2023	HI14-MWS 7/20/2023	HI15-MWS 7/20/2023	HI16-MWS 7/20/2023	HI17-MWS 7/20/2023
SVOCs											
1,1-Biphenyl	µg/L	0.83	*2 U*	*2 U*	*2 U*	*2 U*	*2 U*	*2 U*	*2 U*	*2 U*	*2 U*
2,4-Dimethylphenol	µg/L	360	**3.7 J**	*5 U*	*5 U*	*5 U*	*5 U*	*5 U*	*5 U*	*5 U*	*5 U*
2-Methylnaphthalene	µg/L	36	0.65	0.3	**0.03 J**	*0.1 U*	*0.1 U*	**0.07 J**	*0.1 U*	*0.1 U*	**0.27**
2-Methylphenol	µg/L	930	*5 U*	*5 U*	*5 U*	*5 U*	*5 U*	*5 U*	*5 U*	*5 U*	*5 U*
3&4-Methylphenol(m&p Cresol)	µg/L	930	**3.2 J**	*5 U*	*5 U*	*5 U*	*5 U*	*5 U*	*5 U*	*5 U*	**3.5 J**
Acenaphthene	µg/L	530	**0.3**	**0.64**	**0.42**	**0.5**	*0.1 U*	**1.8**	*0.1 U*	*0.1 U*	**0.07 J**
Acenaphthylene	µg/L	530	**0.26**	**0.11**	**0.03 J**	**0.06 J**	**0.02 J**	**0.06 J**	**0.05 J**	*0.1 U*	*0.1 U*
Anthracene	µg/L	1,800	**0.16**	**0.21**	**0.12**	**0.14**	**0.07 J**	**0.32**	**0.24**	**0.04 J**	**0.39**
Benz[a]anthracene	µg/L	0.03	**0.04 JB**	**0.06 B**	*0.05 U*	**0.04 J**	*0.05 U*	**0.04 J**	**0.02 JB**	*0.05 U*	*0.05 U*
Benzo[a]pyrene	µg/L	0.2	*0.1 U*	**0.03 J**	*0.1 U*	*0.1 U*	*0.1 U*	*0.1 U*	*0.1 U*	*0.1 U*	*0.1 U*
Benzo[b]fluoranthene	µg/L	0.25	*0.05 U*	**0.02 J**	*0.05 U*	**0.02 J**	*0.05 U*	*0.05 U*	*0.05 U*	*0.05 U*	*0.05 U*
Benzo[g,h,i]perylene	µg/L	--	*0.1 U*	**0.03 J**	*0.1 U*	*0.1 U*	*0.1 U*	*0.1 U*	*0.1 U*	*0.1 U*	*0.1 U*
Benzo[k]fluoranthene	µg/L	2.5	*0.1 U*	**0.03 J**	*0.1 U*	**0.01 J**	*0.1 U*	*0.1 U*	*0.1 U*	*0.1 U*	*0.1 U*
Carbazole	µg/L	--	**0.83 J**	**0.6 J**	*2 U*	**0.57 J**	*2 U*	*2 U*	*2 U*	*2 U*	*2 U*
Chrysene	µg/L	25	**0.03 J**	**0.04 J**	*0.1 U*	**0.02 J**	*0.1 U*	**0.03 J**	*0.1 U*	*0.1 U*	*0.1 U*
Dibenz[a,h]anthracene	µg/L	0.025	*0.05 U*	**0.07**	*0.05 U*	*0.05 U*	*0.05 U*	*0.05 U*	*0.05 U*	*0.05 U*	*0.05 U*
Diethylphthalate	µg/L	15,000	*5 U*	*5 U*	*5 U*	*5 U*	*5 U*	*5 U*	*5 U*	*5 U*	*5 U*
Di-n-butylphthalate	µg/L	900	*5 U*	*5 U*	*5 U*	*5 U*	*5 U*	*5 U*	*5 U*	*5 U*	*5 U*
Fluoranthene	µg/L	800	**0.35**	**0.46**	**0.1**	**0.22**	**0.03 J**	**0.57**	**0.13**	**0.02 J**	**0.1**
Fluorene	µg/L	290	**0.45**	**0.53**	**0.14**	**0.25**	*0.1 U*	**0.79**	*0.1 U*	*0.1 U*	**0.09 J**
Indeno[1,2,3-c,d]pyrene	µg/L	0.25	*0.1 U*	**0.04 J**	*0.1 U*	*0.1 U*	*0.1 U*	*0.1 U*	*0.1 U*	*0.1 U*	*0.1 U*
Naphthalene	µg/L	0.12	**12**	**2.2 B**	**0.08 JB**	**0.06 J**	**0.12 B**	**0.48**	*0.1 U*	*0.1 U*	**0.52**
Pentachlorophenol	µg/L	1.0	**2.0**	**0.17**	*0.1 U*	**0.09 J**	*0.1 U*	**0.36**	*0.1 U*	*0.1 U*	**0.11**
Phenanthrene	µg/L	--	**0.74**	**0.87**	**0.25**	**0.33**	**0.04 J**	**0.18**	*0.05 U*	**0.02 J**	**0.1**
Phenol	µg/L	5,800	*5 U*	*5 U*	*5 U*	*5 U*	*5 U*	*5 U*	*5 U*	*5 U*	*5 U*
Pyrene	µg/L	120	**0.23**	**0.43**	*0.1 U*	**0.18**	*0.1 U*	**0.39**	**0.11**	**0.03 J**	**0.08 J**
VOCs											
2-Butanone (MEK)	µg/L	5,600	*5 U*	*5 U*	*25 U*	**2 J**	*5 U*	*5 U*	*5 U*	*5 U*	*5 U*
Acetone	µg/L	14,000	**2.4 J**	**3.6 J**	*25 U*	**2.1 J**	*5 U*	*5 U*	*5 U*	*5 U*	*5 U*
Benzene	µg/L	5.0	**8.7**	**0.39 J**	*2.5 U*	**0.54**	**1.2**	*0.5 U*	*0.5 U*	*0.5 U*	*0.5 U*
cis-1,2-Dichloroethene	µg/L	70	*0.5 U*	*0.5 U*	*2.5 U*	*0.5 U*	**0.21 J**	*0.5 U*	*0.5 U*	*0.5 U*	*0.5 U*
Cyclohexane	µg/L	13,000	*10 U*	*10 U*	*50 U*	*10 U*	*10 U*	*10 U*	*10 U*	*10 U*	*10 U*
Ethylbenzene	µg/L	700	**0.17 J**	*0.5 U*	*2.5 U*	*0.5 U*	*0.5 U*	*0.5 U*	*0.5 U*	*0.5 U*	*0.5 U*
m&p-Xylene	µg/L	--	**1.6**	*1 U*	*5 U*	*1 U*	*1 U*	*1 U*	*1 U*	*1 U*	*1 U*
o-Xylene	µg/L	--	**0.87 J**	*1 U*	*5 U*	*1 U*	*1 U*	*1 U*	*1 U*	*1 U*	*1 U*
Toluene	µg/L	1,000	**1.9**	*0.75 U*	*3.8 U*	*0.75 U*	*0.75 U*	*0.75 U*	*0.75 U*	*0.75 U*	**33**
Vinyl chloride	µg/L	2.0	*1 U*	*1 U*	*5 U*	*1 U*	**0.18 J**	*1 U*	*1 U*	*1 U*	*1 U*
Xylenes	µg/L	10,000	**2.5 J**	*1 U*	*5 U*	*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.
JB: The positive result reported for this analyte is a quantitative estimate and was detected above the reporting limits in the associated method blank.
B: The analyte was detected above the reporting limits in the associated method blank.
µg/L: micrograms per liter
PAL: Project Action Limit

Table 1 - Parcel B14 Groundwater Sampling (3rd Quarter 2023)
Summary of Organics Detected in Groundwater

Parameter	Units	PAL	HI18-MWS 7/18/2023	HI19-MWS 7/18/2023	HI21-MWS 7/18/2023	TM04-PZM006 7/19/2023	TM08-PZM007 7/20/2023
SVOCs							
1,1-Biphenyl	µg/L	0.83	*2 U*	**0.73 J**	*2 U*	*2 U*	*2 U*
2,4-Dimethylphenol	µg/L	360	*5 U*	**48**	*5 U*	*5 U*	*5 U*
2-Methylnaphthalene	µg/L	36	*0.1 U*	**1.8**	*0.1 U*	*0.1 U*	*0.1 U*
2-Methylphenol	µg/L	930	*5 U*	**1.4 J**	*5 U*	*5 U*	*5 U*
3&4-Methylphenol(m&p Cresol)	µg/L	930	*5 U*	**21**	*5 U*	*5 U*	*5 U*
Acenaphthene	µg/L	530	*0.1 U*	**0.64**	*0.1 U*	*0.1 U*	*0.1 U*
Acenaphthylene	µg/L	530	**0.03 J**	**0.34**	**0.02 J**	*0.1 U*	*0.1 U*
Anthracene	µg/L	1,800	**0.21**	**0.29**	**0.02 J**	*0.1 U*	**0.04 J**
Benz[a]anthracene	µg/L	0.03	*0.05 U*	**0.05 J**	*0.05 U*	**0.02 JB**	*0.05 U*
Benzo[a]pyrene	µg/L	0.2	*0.1 U*	*0.1 U*	*0.1 U*	*0.1 U*	*0.1 U*
Benzo[b]fluoranthene	µg/L	0.25	*0.05 U*	**0.01 J**	*0.05 U*	**0.02 J**	*0.05 U*
Benzo[g,h,i]perylene	µg/L	--	*0.1 U*	*0.1 U*	*0.1 U*	**0.01 J**	*0.1 U*
Benzo[k]fluoranthene	µg/L	2.5	*0.1 U*	*0.1 U*	*0.1 U*	**0.01 J**	*0.1 U*
Carbazole	µg/L	--	*2 U*	**1.5 J**	*2 U*	*2 U*	*2 U*
Chrysene	µg/L	25	*0.1 U*	**0.02 J**	*0.1 U*	**0.01 J**	*0.1 U*
Dibenz[a,h]anthracene	µg/L	0.025	*0.05 U*	*0.05 U*	*0.05 U*	**0.02 J**	*0.05 U*
Diethylphthalate	µg/L	15,000	*5 U*	*5 U*	*5 U*	**1.8 J**	*5 U*
Di-n-butylphthalate	µg/L	900	*5 U*	**0.94 J**	*5 U*	*5 U*	*5 U*
Fluoranthene	µg/L	800	**0.05 J**	**0.52**	**0.05 J**	**0.03 J**	*0.1 U*
Fluorene	µg/L	290	*0.1 U*	**0.92**	*0.1 U*	*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*	**0.02 J**	*0.1 U*
Naphthalene	µg/L	0.12	*0.1 U*	**26**	*0.1 U*	*0.1 U*	*0.1 U*
Pentachlorophenol	µg/L	1.0	*0.1 U*	**0.18**	*0.1 U*	*0.1 U*	*0.1 U*
Phenanthrene	µg/L	--	**0.03 JB**	**1.7**	**0.04 JB**	**0.03 J**	*0.05 U*
Phenol	µg/L	5,800	*5 U*	*5 U*	*5 U*	*5 U*	*5 U*
Pyrene	µg/L	120	**0.04 J**	**0.34**	**0.03 J**	**0.06 J**	*0.1 U*
VOCs							
2-Butanone (MEK)	µg/L	5,600	*5 U*	*5 U*	*5 U*	*10 U*	*5 U*
Acetone	µg/L	14,000	*5 U*	*5 U*	*5 U*	*10 U*	*5 U*
Benzene	µg/L	5.0	*0.5 U*	**8.5**	*0.5 U*	**340**	*0.5 U*
cis-1,2-Dichloroethene	µg/L	70	*0.5 U*	*0.5 U*	*0.5 U*	*1 U*	*0.5 U*
Cyclohexane	µg/L	13,000	*10 U*	*10 U*	*10 U*	**0.57 J**	*10 U*
Ethylbenzene	µg/L	700	*0.5 U*	**0.23 J**	*0.5 U*	**4.1**	*0.5 U*
m&p-Xylene	µg/L	--	*1 U*	**2.1**	*1 U*	**4.6**	*1 U*
o-Xylene	µg/L	--	*1 U*	**1.0**	*1 U*	**0.83 J**	*1 U*
Toluene	µg/L	1,000	*0.75 U*	**3.6**	*0.75 U*	**1.1 J**	*0.75 U*
Vinyl chloride	µg/L	2.0	*1 U*	*1 U*	*1 U*	**0.46 J**	*1 U*
Xylenes	µg/L	10,000	*1 U*	**3.1**	*1 U*	**5.4 J**	*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.
JB: The positive result reported for this analyte is a quantitative estimate and was detected above the reporting limits in the associated method blank.
B: The analyte was detected above the reporting limits in the associated method blank.
µg/L: micrograms per liter
PAL: Project Action Limit

Table 2 - Parcel B14 Groundwater Sampling (4th Quarter 2023)
Summary of Organics Detected in Groundwater

Parameter	Units	PAL	HI10-MWS 10/4/2023	HI11-MWS 10/4/2023	HI12-MWS 10/4/2023	HI13-MWS 10/5/2023	HI14-MWS 10/3/2023	HI15-MWS 10/3/2023	HI16-MWS 10/2/2023	HI17-MWS 10/2/2023
SVOCs										
1,1-Biphenyl	µg/L	0.83	*2 U*	*2 U*	*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*
2-Methylnaphthalene	µg/L	36	**2.2**	**0.09 J**	**0.83**	**0.06 J**	**0.03 J**	*0.1 U*	**0.02 J**	**0.38**
2-Methylphenol	µg/L	930	*5 U*	*5 U*	*5 U*	*5 U*	*5 U*	*5 U*	*5 U*	*5 U*
3&4-Methylphenol(m&p Cresol)	µg/L	930	**0.86 J**	*5 U*	*5 U*	*5 U*	*5 U*	*5 U*	*5 U*	**4.5 J**
Acenaphthene	µg/L	530	**2.1**	**0.08 J**	**0.58**	**0.08 J**	**0.59**	**0.03 J**	**0.12**	**0.19**
Acenaphthylene	µg/L	530	**0.7**	*0.1 U*	**0.05 J**	**0.04 J**	**0.04 J**	**0.03 J**	**0.1 J**	**0.1**
Anthracene	µg/L	1,800	**0.52**	**0.2**	**0.15**	**0.08 J**	**0.15**	**0.08 J**	**0.55**	**0.5**
Benz[a]anthracene	µg/L	0.03	**0.07**	*0.05 U*	**0.04 J**	**0.03 B**	*0.05 U*	*0.05 U*	**0.03 J**	**0.03 J**
Benzo[a]pyrene	µg/L	0.2	**0.04 J**	*0.1 U*	**0.03 J**	*0.1 U*	*0.1 U*	*0.1 U*	*0.1 U*	*0.1 U*
Benzo[b]fluoranthene	µg/L	0.25	**0.05**	*0.05 U*	**0.04 J**	*0.05 U*	*0.05 U*	*0.05 U*	*0.05 U*	*0.05 U*
Benzo[g,h,i]perylene	µg/L	--	**0.02 J**	*0.1 U*	**0.02 J**	*0.1 U*	*0.1 U*	*0.1 U*	*0.1 U*	*0.1 U*
Benzo[k]fluoranthene	µg/L	2.5	**0.02 J**	*0.1 U*	**0.02 J**	*0.1 U*	*0.1 U*	*0.1 U*	*0.1 U*	*0.1 U*
bis(2-Ethylhexyl)phthalate	µg/L	6.0	**1.5 J**	*3 U*	*3 U*	*3 U*	*3 U*	*3 U*	*3 U*	*3 U*
Carbazole	µg/L	--	**3.6**	*2 U*	*2 U*	*2 U*	*2 U*	*2 U*	*2 U*	*2 U*
Chrysene	µg/L	25	**0.06 J**	**0.01 J**	**0.03 J**	**0.06 J**	*0.1 U*	*0.1 U*	**0.02 J**	**0.05 J**
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*
Fluoranthene	µg/L	800	**0.95**	**0.1**	**0.08 J**	**0.05 J**	**0.26**	**0.03 J**	**0.21**	**0.1**
Fluorene	µg/L	290	**2**	**0.04 J**	**0.3**	**0.06 J**	**0.36**	**0.03 J**	*0.1 U*	**0.13**
Indeno[1,2,3-c,d]pyrene	µg/L	0.25	**0.02 J**	*0.1 U*	**0.02 J**	*0.1 U*	*0.1 U*	*0.1 U*	*0.1 U*	*0.1 U*
Naphthalene	µg/L	0.12	**33**	**0.38**	**10**	**0.72 B**	**0.16**	**0.09 J**	*0.1 U*	**0.55**
Pentachlorophenol	µg/L	1.0	**0.23**	**0.25**	**0.11**	*0.1 U*	*0.1 U*	*0.1 U*	*0.1 U*	*0.1 U*
Phenanthrene	µg/L	--	**2.9**	**0.08**	**0.19**	**0.11**	**0.49**	**0.04 J**	*0.05 U*	**0.16**
Phenol	µg/L	5,800	*5 U*	*5 U*	*5 U*	*5 U*	*5 U*	*5 U*	*5 U*	*5 U*
Pyrene	µg/L	120	**0.75**	**0.12**	**0.15**	**0.09 J**	**0.18**	**0.02 J**	**0.18**	**0.09 J**
VOCs										
Acetone	µg/L	14,000	*5 U*	**4.5 J**	**2.1 J**	*5 U*	*5 U*	**1.5 J**	*5 U*	*5 U*
Benzene	µg/L	5	**0.97**	*0.5 U*	*0.5 U*	**3.6**	*0.5 U*	*0.5 U*	*0.5 U*	*0.5 U*
Bromomethane	µg/L	7.5	*1 U*	**0.72 J**	*1 U*	*1 U*	*1 U*	*1 U*	*1 U*	*1 U*
Carbon disulfide	µg/L	810	*5 U*	*5 U*	*5 U*	*5 U*	*5 U*	*5 U*	*5 U*	*5 U*
Chloromethane	µg/L	190	*2.5 U*	*2.5 U*	*2.5 U*	*2.5 U*	*2.5 U*	*2.5 U*	*2.5 U*	*2.5 U*
cis-1,2-Dichloroethene	µg/L	70	*0.5 U*	*0.5 U*	*0.5 U*	**0.42 J**	*0.5 U*	*0.5 U*	*0.5 U*	*0.5 U*
Ethylbenzene	µg/L	700	**0.17 J**	*0.5 U*	*0.5 U*	*0.5 U*	*0.5 U*	*0.5 U*	*0.5 U*	*0.5 U*
m&p-Xylene	µg/L	--	**0.74 J**	*1 U*	*1 U*	*1 U*	*1 U*	*1 U*	*1 U*	*1 U*
o-Xylene	µg/L	--	*1 U*	*1 U*	*1 U*	*1 U*	*1 U*	*1 U*	*1 U*	*1 U*
Styrene	µg/L	100	*1 U*	*1 U*	*1 U*	*1 U*	*1 U*	*1 U*	*1 U*	*1 U*
Toluene	µg/L	1,000	**0.53 J**	*0.75 U*	*0.75 U*	*0.75 U*	*0.75 U*	**0.75 U**	*0.75 U*	**39**
Vinyl chloride	µg/L	2.0	*1 U*	*1 U*	*1 U*	**0.44 J**	*1 U*	*1 U*	*1 U*	*1 U*
Xylenes	µg/L	10,000	**0.74 J**	1 U	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.
B: The analyte was detected above the reporting limits in the associated method blank.
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 Groundwater Sampling (4th Quarter 2023)
Summary of Organics Detected in Groundwater

Parameter	Units	PAL	HI18-MWS 10/2/2023	HI19-MWS 10/5/2023	HI21-MWS 10/3/2023	HI22-MWS 10/20/2023	TM04-PZM006 10/4/2023	TM08R-PZM007 10/2/2023
SVOCs								
1,1-Biphenyl	µg/L	0.83	*2 U*	**0.8 J**	*2 U*	*4 U*	*2 U*	*2 U*
2,4-Dimethylphenol	µg/L	360	*5 U*	**38**	*5 U*	*10 U*	*5 U*	*5 U*
2-Methylnaphthalene	µg/L	36	**0.07 J**	**2.5**	*0.1 U*	**0.07 J**	**1.1**	*0.1 U*
2-Methylphenol	µg/L	930	*5 U*	**1.2 J**	*5 U*	*10 U*	*5 U*	*5 U*
3&4-Methylphenol(m&p Cresol)	µg/L	930	**0.67 J**	**16**	*5 U*	*10 U*	*5 U*	*5 U*
Acenaphthene	µg/L	530	**0.1**	**0.78**	**0.02 J**	**0.09 J**	**0.38**	**0.03 J**
Acenaphthylene	µg/L	530	**0.03 J**	**0.46**	**0.02 J**	**0.18 J**	**2.2**	**0.03 J**
Anthracene	µg/L	1,800	**0.09 J**	**0.34**	**0.04 J**	**0.37**	**0.17**	**0.14**
Benz[a]anthracene	µg/L	0.03	*0.05 U*	**0.13**	*0.05 U*	**1.5**	*0.05 U*	**0.02 J**
Benzo[a]pyrene	µg/L	0.2	*0.1 U*	**0.08 J**	*0.1 U*	**1.4**	*0.1 U*	*0.1 U*
Benzo[b]fluoranthene	µg/L	0.25	**0.02 J**	**0.13**	**0.01 J**	**1.7**	*0.05 U*	*0.05 U*
Benzo[g,h,i]perylene	µg/L	--	*0.1 U*	**0.05 J**	*0.1 U*	**0.84 J**	*0.1 U*	*0.1 U*
Benzo[k]fluoranthene	µg/L	2.5	**0.01 J**	**0.04 J**	*0.1 U*	**0.62**	*0.1 U*	*0.1 U*
bis(2-Ethylhexyl)phthalate	µg/L	6.0	*3 U*	*3 U*	*3 U*	*6 U*	*3 U*	*3 U*
Carbazole	µg/L	--	*2 U*	**1.7 J**	*2 U*	*4 U*	**0.71 J**	*2 U*
Chrysene	µg/L	25	**0.01 J**	**0.12**	*0.1 U*	**1.2**	*0.1 U*	**0.02 J**
Dibenz[a,h]anthracene	µg/L	0.025	*0.05 U*	*0.05 U*	*0.05 U*	**0.22**	*0.05 U*	*0.05 U*
Fluoranthene	µg/L	800	**0.08 J**	**0.68**	**0.03 J**	**2.2**	**0.07 J**	**0.04 J**
Fluorene	µg/L	290	**0.09 J**	**1.0**	**0.02 J**	**0.08 J**	**0.21**	**0.02 J**
Indeno[1,2,3-c,d]pyrene	µg/L	0.25	*0.1 U*	**0.06 J**	*0.1 U*	**1.1**	*0.1 U*	*0.1 U*
Naphthalene	µg/L	0.12	**0.18**	**34**	*0.1 U*	**0.16 J**	**170**	*0.1 U*
Pentachlorophenol	µg/L	1.0	**0.07 J**	**0.19**	**0.32**	*20 U*	*0.1 U*	*0.1 U*
Phenanthrene	µg/L	--	**0.11**	**2.0**	**0.03 J**	**0.88**	**0.37**	*0.05 U*
Phenol	µg/L	5,800	*5 U*	**0.98 J**	*5 U*	*10 U*	*5 U*	*5 U*
Pyrene	µg/L	120	**0.06 J**	**0.44**	**0.04 J**	**1.8**	**0.08 J**	**0.04 J**
VOCs								
Acetone	µg/L	14,000	**1.7 J**	*5 U*	*5 U*	**3.9 J**	*12 U*	*5 U*
Benzene	µg/L	5	*0.5 U*	**11**	*0.5 U*	**0.3 J**	**490**	*0.5 U*
Bromomethane	µg/L	7.5	*1 U*	*1 U*	*1 U*	*1 U*	*2.5 U*	*1 U*
Carbon disulfide	µg/L	810	*5 U*	*5 U*	*5 U*	*5 U*	*12 U*	*5 U*
Chloromethane	µg/L	190	*2.5 U*	*2.5 U*	*2.5 U*	**0.76 J**	*6.2 U*	*2.5 U*
cis-1,2-Dichloroethene	µg/L	70	*0.5 U*	*0.5 U*	*0.5 U*	*0.5 U*	*1.2 U*	*0.5 U*
Ethylbenzene	µg/L	700	*0.5 U*	**0.19 J**	*0.5 U*	*0.5 U*	**4.7**	*0.5 U*
m&p-Xylene	µg/L	--	*1 U*	**2.2**	*1 U*	*1 U*	**6.0**	*1 U*
o-Xylene	µg/L	--	*1 U*	**0.92 J**	*1 U*	*1 U*	*2.5 U*	*1 U*
Styrene	µg/L	100	*1 U*	*1 U*	*1 U*	*1 U*	**1.2 J**	*1 U*
Toluene	µg/L	1,000	*0.75 U*	**3.7**	*0.75 U*	**0.26 J**	**1.3 J**	*0.75 U*
Vinyl chloride	µg/L	2.0	*1 U*	*1 U*	*1 U*	*1 U*	**0.79 J**	*1 U*
Xylenes	µg/L	10,000	1 U	**3.1 J**	1 U	1 U	**6.0**	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.
B: The analyte was detected above the reporting limits in the associated method blank.
J: The positive result reported for this analyte is a quantitative estimate.
µg/L: micrograms per liter
PAL: Project Action Limit

Table 3 - Parcel B14 Groundwater Sampling
Historic Groundwater Sampling Results

Benzene (µg/L)																			
Well ID	PAL	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
HI02-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**		
HI04-PZM006	5	*1 U*		*1 U*	NS	*0.5 U*	*0.5 U*	*0.50 U*	*0.5 U*										
HI07-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**	
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**
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**
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*
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**
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**
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*
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*
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*	*0.5 U*	*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*
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**
HI20-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**	NS (c)	**NS (c)**
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*
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**
TM04-PZM006	5	**1400**	**610**	**653**	**355**	**390**	**390**	**380**	**180**	**500**	**500**	**460**	**400**	**500**	**540**	**500**	**500**	**340**	**490**
TM08R-PZM007	5	*1 U*		*1 U*	NS	*0.5 U*	*0.5 U*	*0.50 U*	*0.50 U*	*0.50 U*	*0.50 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*

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 demoltion area and could not be safely accessed.

Well not installed
Well damaged/abandoned

Table 3 - Parcel B14 Groundwater Sampling
Historic Groundwater Sampling Results

Naphthalene (µg/L)																			
Well ID	PAL	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
HI02-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**		
HI04-PZM006	0.12			**0.15**	NS	*0.1 U*	*0.1 U*	*1.0 U*	**0.06 J**										
HI07-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**	
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**
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**
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**
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**
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**
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**
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*
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**
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**
HI19-MWS	0.12					**33**	**18.0**	**62**	**62**	**21**	**16**	**18.0**	**25**	**28**	**24**	**24**	**25**	**26**	**34**
HI20-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**	NS (c)	NS (c)
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*
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**
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**
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*	*0.10 U*	*0.1 U*	*0.1 U*	*0.1 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.
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 demoltion area and could not be safely accessed.

Well not installed
Well damaged/abandoned

Table 4 - Parcel B24 Groundwater Sampling (3rd Quarter 2023)
Summary of Organics Detected in Groundwater

Parameter	Units	PAL	B24-001-MWS 7/17/2023	B24-002-MWS 7/17/2023	TS03-PDP002 7/18/2023
SVOCs					
2,4-Dimethylphenol	µg/L	360	*5 U*	**5.1**	*5 U*
2-Methylnaphthalene	µg/L	36	**0.26**	**0.06 J**	*0.1 U*
3&4-Methylphenol(m&p	µg/L	930	*5 U*	**1.3 J**	*5 U*
Acenaphthene	µg/L	530	**0.22**	**0.10**	*0.1 U*
Acenaphthylene	µg/L	530	*0.1 U*	**0.05 J**	*0.1 U*
Anthracene	µg/L	1,800	**0.03 J**	**0.03 J**	*0.1 U*
Benz[a]anthracene	µg/L	0.03	*0.05 U*	**0.04 J**	**0.02 JB**
Benzo[a]pyrene	µg/L	0.2	*0.1 U*	**0.04 J**	**0.02 J**
Benzo[b]fluoranthene	µg/L	0.25	*0.05 U*	**0.03 J**	**0.03 J**
Benzo[g,h,i]perylene	µg/L	--	*0.1 U*	**0.04 J**	**0.03 J**
Benzo[k]fluoranthene	µg/L	2.5	*0.1 U*	**0.05 J**	**0.03 J**
Chrysene	µg/L	25	*0.1 U*	**0.06 J**	**0.02 J**
Dibenz[a,h]anthracene	µg/L	0.025	*0.05 U*	**0.05**	**0.04 J**
Fluoranthene	µg/L	800	**0.13**	**0.14**	*0.1 U*
Fluorene	µg/L	290	**0.14**	**0.1**	*0.1 U*
Indeno[1,2,3-c,d]pyrene	µg/L	0.25	*0.1 U*	**0.03 J**	**0.03 J**
Naphthalene	µg/L	0.12	**2.5**	**0.34**	**0.07 JB**
Pentachlorophenol	µg/L	1.0	*0.1 U*	**0.22**	*0.1 U*
Phenanthrene	µg/L	--	**0.25**	**0.11**	**0.03 JB**
Phenol	µg/L	5,800	*5 U*	**2.3 J**	*5 U*
Pyrene	µg/L	120	**0.09 J**	**0.14**	*0.1 U*
VOCs					
Acetone	µg/L	14,000	*5 U*	**3.1 J**	*5 U*
Benzene	µg/L	5	**0.3 J**	*0.5 U*	*0.5 U*
Bromodichloromethane	µg/L	0.13	*0.5 U*	**0.33 J**	*0.5 U*
Chloroform	µg/L	0.22	*0.75 U*	**1.0**	*0.75 U*
Dibromochloromethane	µg/L	0.17	*0.5 U*	**0.37 J**	*0.5 U*
Toluene	µg/L	1,000	*0.75 U*	**0.21 J**	*0.75 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.
B: The analyte was detected above the reporting limit in the associated method blank.

JB: The positive result reported for this analyte is a quantitative estimate and was detected above the reporting limits in the associated method blank.
µg/L: micrograms per liter
PAL: Project Action Limit

Table 5 - Parcel B24 Groundwater Sampling (4th Quarter 2023)
Summary of Organics Detected in Groundwater

Parameter	Units	PAL	B24-001-MWS 10/5/2023	B24-002-MWS 10/3/2023	TS03-PDP002 10/5/2023
SVOCs					
2-Methylnaphthalene	µg/L	36	**0.11**	*0.5 U*	**0.05 J**
2-Methylphenol	µg/L	930	*5 U*	**0.54 J**	*5 U*
3&4-Methylphenol(m&p Cresol)	µg/L	930	*5 U*	**4.7 J**	*5 U*
Acenaphthene	µg/L	530	**0.09 J**	**0.1 J**	*0.1 U*
Anthracene	µg/L	1,800	**0.04 J**	*0.5 U*	**0.02 J**
Benz[a]anthracene	µg/L	0.03	**0.04 J**	*0.25 U*	**0.02 J**
Benzo[a]pyrene	µg/L	0.2	**0.02 J**	*0.5 U*	*0.1 U*
Benzo[b]fluoranthene	µg/L	0.25	**0.02 J**	*0.25 U*	*0.05 U*
Benzo[k]fluoranthene	µg/L	2.5	**0.01 J**	*0.5 U*	*0.1 U*
Chrysene	µg/L	25	**0.02 J**	*0.5 U*	*0.1 U*
Fluoranthene	µg/L	800	**0.13**	**0.1 J**	*0.1 U*
Fluorene	µg/L	290	**0.09 J**	**0.09 J**	*0.1 U*
Naphthalene	µg/L	0.12	**0.90**	**0.28 J**	**0.35**
Pentachlorophenol	µg/L	1.0	*0.1 U*	**0.35 J**	*0.1 U*
Phenanthrene	µg/L	--	**0.22**	**0.12 J**	**0.03 J**
Phenol	µg/L	5,800	*5 U*	**2 J**	*5 U*
Pyrene	µg/L	120	*0.1 U*	**0.12 J**	*0.1 U*
VOCs					
Acetone	µg/L	14,000	*5 U*	**4.1 J**	*5 U*
Carbon disulfide	µg/L	810	*5 U*	**0.68 J**	*5 U*
Chloroform	µg/L	0.22	*0.75 U*	**1.00**	*0.75 U*
Toluene	µg/L	1,000	*0.75 U*	**0.41 J**	*0.75 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.
B: The analyte was detected above the reporting limit in the associated method blank.
J: The positive result reported for this analyte is a quantitative estimate.
µg/L: micrograms per liter
PAL: Project Action Limit

Table 6 - Parcel B14 Surface Water Sampling (3rd Quarter 2023)
Summary of Organics Detected in Surface Water

Parameter		EPA Region 4 Surface Water (Freshwater, Chronic)	TMC-BEND 1/12/2023	TMC-OUTLET 1/12/2023	TMC-RAIL BRIDGE 1/12/2023	TMC-TM04 1/12/2023
SVOCs by EPA 8270D / PAHs by EPA 8270D SIM						
2,4-Dimethylphenol	µg/L	15	*5 U*	*5 U*	*5 U*	**1.9 J**
2-Methylnaphthalene	µg/L	4.7	**0.06 J**	*0.1 U*	**0.05 J**	**0.05 J**
3&4-Methylphenol (m&p Cresol)	µg/L	53	*5 U*	**1.2 J**	*5 U*	**1.4 J**
Acenaphthene	µg/L	15	**0.1**	**0.24**	**0.08 J**	**0.38**
Acenaphthylene	µg/L	13	**0.04 J**	**0.1**	**0.03 J**	**0.15**
Anthracene	µg/L	0.02	**0.08 J**	**0.07 J**	**0.06 J**	**0.1**
Benz[a]anthracene	µg/L	4.7	**0.03 J**	**0.02 J**	**0.05 J**	**0.04 J**
Benzo[b]fluoranthene	µg/L	2.6	**0.01 J**	*0.05 U*	*0.05 U*	*0.05 U*
Carbazole	µg/L	4.0	*2 U*	**0.63 J**	*2 U*	**0.74 J**
Fluoranthene	µg/L	0.8	**0.06 J**	**0.11**	**0.05 J**	**0.15**
Fluorene	µg/L	19	**0.14**	**0.27**	**0.12**	**0.42**
Naphthalene	µg/L	21	**0.15**	*0.1 U*	**0.27**	**0.34**
Phenanthrene	µg/L	2.3	**0.16**	**0.35**	**0.15**	**0.47**
Phenol	µg/L	160	*5 U*	*5 U*	*5 U*	**1.6 J**
Pyrene	µg/L	4.6	**0.05 J**	**0.08 J**	**0.09 J**	**0.11**
VOCs by EPA 8260C						
2-Butanone (MEK)	µg/L	22000	*5 U*	**5.7**	*5 U*	**4.7 J**
Acetone	µg/L	1700	**7.1**	**14.0**	**5.9**	**12**
Benzene	µg/L	160	**0.25 J**	**0.62**	**0.22 J**	**0.51**
Carbon disulfide	µg/L	15	*5 U*	**2.1 J**	*5 U*	**1.6 J**
Chloroform	µg/L	140	*0.75 U*	**0.76**	*0.75 U*	**0.68 J**
m&p-Xylene	µg/L	27	*1 U*	**0.50 J**	*1 U*	**0.47 J**
Toluene	µg/L	62	*0.75 U*	**0.44 J**	*0.75 U*	**0.37 J**
Xylenes	µg/L	27	*1 U*	**0.50 J**	*1 U*	**0.47 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
B: The analyte was detected above the reporting limit in the associated method blank.
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
PAL: Project Action Limit

Table 7 - Parcel B14 Surface Water Sampling (4th Quarter 2023)
Summary of Organics Detected in Surface Water

Parameter	Units	EPA Region 4 Surface Water (Freshwater, Chronic)	TMC-BEND 10/4/2023	TMC-OUTLET 10/4/2023	TMC-RAIL BRIDGE 10/4/2023	TMC-TM04 10/4/2023
SVOCs by EPA 8270D / PAHs by EPA 8270D SIM						
2-Methylnaphthalene	µg/L	4.7	**0.06 J**	*0.1 U*	*0.1 U*	*0.1 U*
Acenaphthene	µg/L	15	**0.06 J**	**0.04 J**	**0.05 J**	**0.07 J**
Acenaphthylene	µg/L	13	**0.02 J**	**0.02 J**	**0.02 J**	**0.02 J**
Anthracene	µg/L	0.02	**0.04 J**	**0.02 J**	**0.04 J**	**0.04 J**
Benz[a]anthracene	µg/L	4.7	**0.03 J**	**0.05 J**	**0.02 J**	**0.03 J**
Benzo[b]fluoranthene	µg/L	2.6	*0.05 U*	**0.02 J**	*0.05 U*	*0.05 U*
Benzo[k]fluoranthene	µg/L	0.06	*0.1 U*	**0.01 J**	*0.1 U*	*0.1 U*
Benzo(a)pyrene	µg/L	0.06	**0.06 J**	*0.1 U*	*0.1 U*	*0.1 U*
Chrysene	µg/L	4.7	**0.01 J**	**0.01 J**	*0.1 U*	*0.1 U*
Fluoranthene	µg/L	0.8	**0.04 J**	**0.04 J**	**0.03 J**	**0.05 J**
Fluorene	µg/L	19	**0.07 J**	**0.05 J**	**0.06 J**	**0.08 J**
Naphthalene	µg/L	21	**0.13**	*0.1 U*	**0.08 J**	*0.1 U*
Phenanthrene	µg/L	2.3	**0.09**	**0.08 B**	**0.08**	**0.1**
Pyrene	µg/L	4.6	**0.03 J**	*0.1 U*	**0.02 J**	**0.03 J**
VOCs by EPA 8260C						
Acetone	µg/L	1700	**2.8 J**	**3.8 J**	**2.8 J**	**3.4 J**
Chloroform	µg/L	140	*0.75 U*	*0.75 U*	*0.75 U*	**0.22 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

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

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

µg/L: micrograms per liter

PAL: Project Action Limit

Table 8 - Parcel B14
Historic Surface Water Sampling Results

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
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*
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*
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*
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*

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
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
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
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**
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

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 9 - Parcel B14
Groundwater Elevations

Well Designation	Top of Casing (ft, AMSL)	July 2023		August 2023		September 2023		October 2023	
		Depth to Water (ft)	Groundwater Elevation (ft, AMSL)	Depth to Water (ft)	Groundwater Elevation (ft, AMSL)	Depth to Water (ft)	Groundwater Elevation (ft, AMSL)	Depth to Water (ft)	Groundwater Elevation (ft, AMSL)
B24-001-MWS	11.30	10.52	0.78	10.21	1.09	10.00	1.30	10.05	1.25
B24-002-MWS	12.43	11.19	1.24	10.99	1.44	11.01	1.42	11.15	1.28
HI02-PZM006	10.05								
HI02-PZM032	10.04								
HI04-PZM006	12.26								
HI04-PZM034	13.52	12.04	1.48	11.83	1.69	9.06	4.46	NM	NA
HI07-PZM005	11.56	11.77	-0.21	11.39	0.17				
HI07-PZM032	11.54	10.66	0.88	10.29	1.25				
HI07-PZM094	11.54	11.10	0.44	10.92	0.62				
HI08-PZM060	NM	12.20	NA	11.97	NA	11.98	NA	NM	NA
HI10-MWS	12.50	13.20	-0.70	12.29	0.21	12.52	-0.02	11.69	0.81
HI11-MWS	7.79	16.72	NA	13.30	NA	12.61	NA	12.78	NA
HI12-MWS	11.91	8.41	3.50	7.91	4.00	8.61	3.30	8.6	3.31
HI13-MWS	11.29	11.68	-0.39	11.16	0.13	11.49	-0.20	11.55	-0.26
HI14-MWI	15.11	14.47	0.64	14.41	0.70	14.42	0.69	NM	NA
HI14-MWS	15.11	15.04	0.07	14.53	0.58	14.83	0.28	14.12	0.99
HI15-MWS	13.43	14.34	-0.91	13.32	0.11	13.57	-0.14	12.7	0.73
HI16-MWS	10.53	11.42	-0.89	10.40	0.13	10.62	-0.09	9.8	0.73
HI17-MWS*	10.11	10.93	-0.82	9.96	0.15	10.22	-0.11	9.41	0.70
HI18-MWS	9.35	10.29	-0.94	9.26	0.09	9.51	-0.16	8.68	0.67
HI19-MWS	12.03	9.97	2.06	9.52	2.51	9.80	2.23	9.7	2.33
HI20-MWS	12.08								
HI21-MWS	12.56	11.65	0.91	11.55	1.01	10.97	1.59	11.52	1.04
HI22-MWS	10.71	NM	NA	9.51	NA	8.57	NA	8.55	NA
TM04A-MWS	13.70	14.40	-0.70	13.55	0.15	NM	NA	NM	NA
TM04-PZM006	11.55	13.22	-1.67	12.40	-0.85	12.62	-1.07	11.65	-0.10
TM08R-PZM007	9.92	10.73	-0.81	9.72	0.20	9.96	-0.04	9.14	0.78
TS03-PDP002	13.53	12.66	0.87	12.36	NA	12.16	1.37	12.2	1.33

NM = Not Measured *NA = Not Applicable*

The PVC casings at HI11-MWS and HI22-MWS were extended prior to the October 2022 sampling. The new TOC elevations have not been surveyed; therefore groundwater elevations have not been calculated.

Well is damaged or abandoned.

*Note: This table includes intermediate and deep zone well data, although they are not the focus of this report.

*Note: Absorbent socks are utilized in HI17-MWS to address minor NAPL impacts. An absorbent sock was deployed on July 7, 2023, and removed on August 2, 2023; it was 1/4 saturated with NAPL. On September 1, 2023, a new absorbent sock was deployed. The absorbent sock was then removed on October 2, 2023; approximately 1/2 saturated with NAPL.

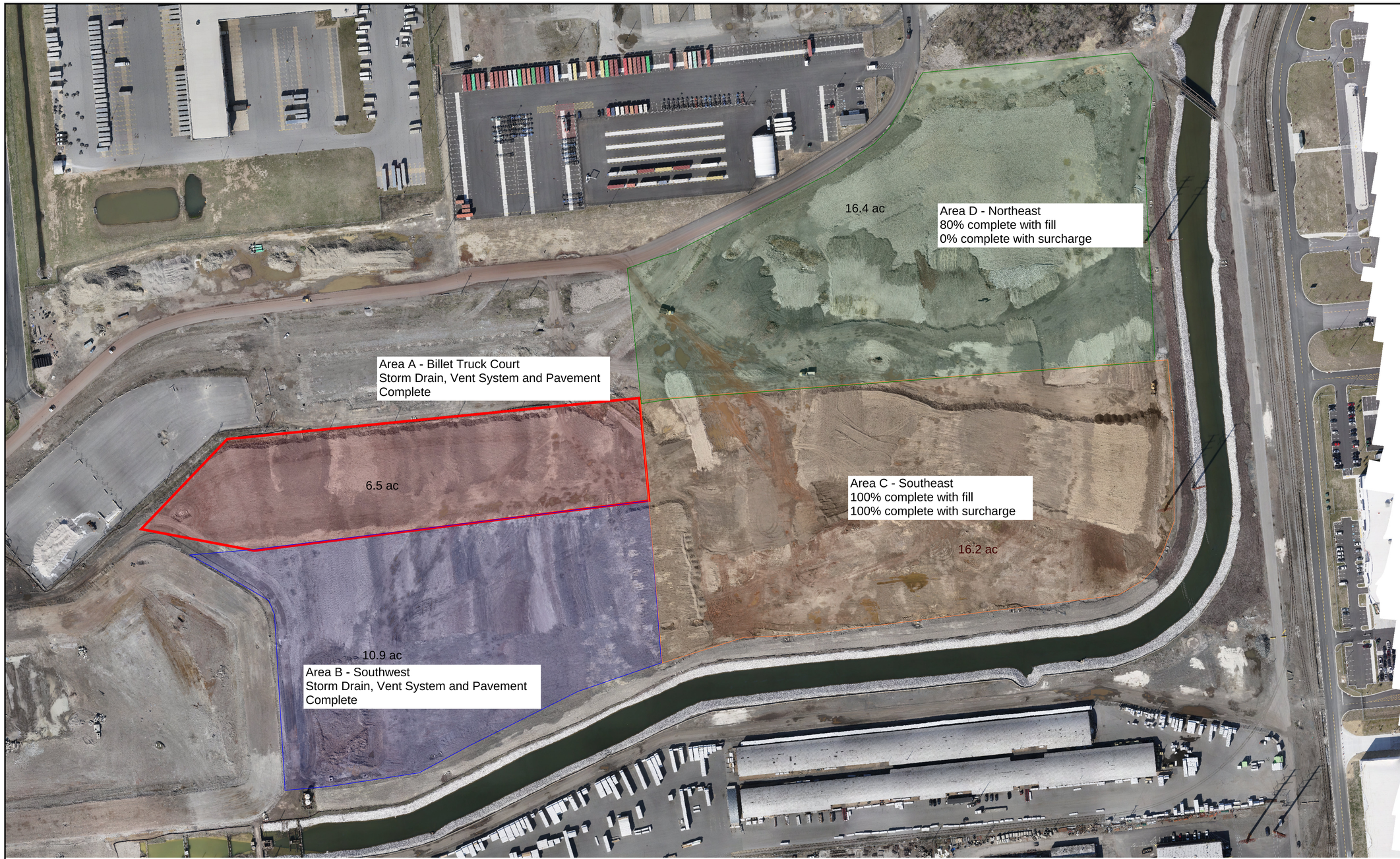
Table 10 - Parcel B14
NAPL Gauging Activities

Sample ID	Installation Date	Well Total Depth (Feet bgs)	Screen Interval (Feet bgs)	Riser Stick-Up (Feet)	7/17/2023			8/2/2023			9/1/2023		
					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**	**10.93**	**trace**	NM	NM	NM	**trace**	**9.44**	**trace**
					Absorbent Sock Deployed.			Absorbent Sock Removed; 1/4 Saturated.			Absorbent Sock Deployed.		

Sample ID	Installation Date	Well Total Depth (Feet bgs)	Screen Interval (Feet bgs)	Riser Stick-Up (Feet)	10/2/2023			11/2/2023			12/5/2023		
					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**	**9.82**	**trace**	**trace**	**10.03**	**trace**	NM	NM	NM
					Absorbent Sock Removed; 1/2 Saturated.			Absorbent sock deployed.			Absorbent sock removed ~1/2 saturated.		

NM = Not Measured
SHADED = NAPL Detection
bgs = below ground surface
TOC = Top of Casing

APPENDIX A



LEGEND

390 ft

Site:	TPA Quad 02-NW
Survey:	06 Mar 2023 TPA Quad 02
File Created:	Mar 14, 2023

APPENDIX B

ANALYTICAL REPORT

Lab Number:	L2340875
Client:	Tradepoint Atlantic 1600 Sparrows Point Boulevard Baltimore, MD 21219
ATTN:	Robert Tworkowski
Phone:	(443) 649-5073
Project Name:	B14 GW Q3
Project Number:	21010214
Report Date:	07/31/23

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), OH (CL108), OR (MA-1316), PA (68-03671), RI (LAO00065), TX (T104704476), VT (VT-0935), VA (460195), USDA (Permit #525-23-122-91930).

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

Project Name: B14 GW Q3
Project Number: 21010214

Lab Number: L2340875
Report Date: 07/31/23

Alpha Sample ID	Client ID	Matrix	Sample Location	Collection Date/Time	Receive Date
L2340875-01	B24-002-MWS	WATER	Not Specified	07/17/23 14:35	07/17/23
L2340875-02	B24-001-MWS	WATER	Not Specified	07/17/23 15:35	07/17/23
L2340875-03	TB-01	WATER	Not Specified	07/17/23 00:00	07/17/23

Project Name:	B14 GW Q3	**Lab Number:**	L2340875
Project Number:	21010214	**Report Date:**	07/31/23

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, solids and tissues are reported on a dry 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 Q3 **Lab Number:** L2340875
Project Number: 21010214 **Report Date:** 07/31/23

Case Narrative (continued)

Report Submission

July 31, 2023: This final report includes the results of all requested analyses.

July 23, 2023: This is a preliminary report.

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

Semivolatile Organics by SIM

The WG1806262-1 Method Blank, associated with L2340875-01, has a concentration above the reporting limit for Naphthalene. The sample was re-extracted with the method required holding time exceeded and the WG1809372-1 Method Blank was non-detect for this target compound. The results of both extractions are reported. The original sample result is reported with a "B" qualifier.

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: 07/31/23

ORGANICS

VOLATILES

Project Name: B14 GW Q3 **Lab Number:** L2340875

Project Number: 21010214 **Report Date:** 07/31/23

SAMPLE RESULTS

Lab ID: L2340875-01
Client ID: B24-002-MWS
Sample Location: Not Specified

Date Collected: 07/17/23 14:35
Date Received: 07/17/23
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8260D
Analytical Date: 07/19/23 07:45
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	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	3.1	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	1.0		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	0.33	J	ug/l	0.50	0.19	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	0.14	1
Toluene	0.21	J	ug/l	0.75	0.20	1

Project Name: B14 GW Q3 **Lab Number:** L2340875

Project Number: 21010214 **Report Date:** 07/31/23

SAMPLE RESULTS

Lab ID: L2340875-01 Date Collected: 07/17/23 14:35

Client ID: B24-002-MWS Date Received: 07/17/23

Sample Location: Not Specified 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	0.37	J	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	92		70-130
Toluene-d8	96		70-130
4-Bromofluorobenzene	95		70-130
Dibromofluoromethane	96		70-130

Project Name: B14 GW Q3 **Lab Number:** L2340875

Project Number: 21010214 **Report Date:** 07/31/23

SAMPLE RESULTS

Lab ID: L2340875-01
Client ID: B24-002-MWS
Sample Location: Not Specified

Date Collected: 07/17/23 14:35
Date Received: 07/17/23
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8260D-SIM(M)
Analytical Date: 07/19/23 07:45
Analyst: MCM

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
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	91		70-130
4-Bromofluorobenzene	91		70-130

Project Name: B14 GW Q3 **Lab Number:** L2340875

Project Number: 21010214 **Report Date:** 07/31/23

SAMPLE RESULTS

Lab ID: L2340875-02
Client ID: B24-001-MWS
Sample Location: Not Specified

Date Collected: 07/17/23 15:35
Date Received: 07/17/23
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8260D
Analytical Date: 07/19/23 10:59
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	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	0.30	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 GW Q3 **Lab Number:** L2340875

Project Number: 21010214 **Report Date:** 07/31/23

SAMPLE RESULTS

Lab ID: L2340875-02 Date Collected: 07/17/23 15:35

Client ID: B24-001-MWS Date Received: 07/17/23

Sample Location: Not Specified 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	90		70-130
Toluene-d8	97		70-130
4-Bromofluorobenzene	93		70-130
Dibromofluoromethane	97		70-130

Project Name: B14 GW Q3 **Lab Number:** L2340875

Project Number: 21010214 **Report Date:** 07/31/23

SAMPLE RESULTS

Lab ID: L2340875-02
Client ID: B24-001-MWS
Sample Location: Not Specified

Date Collected: 07/17/23 15:35
Date Received: 07/17/23
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8260D-SIM(M)
Analytical Date: 07/19/23 10:59
Analyst: MCM

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
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	91		70-130
4-Bromofluorobenzene	90		70-130

Project Name: B14 GW Q3 **Lab Number:** L2340875

Project Number: 21010214 **Report Date:** 07/31/23

SAMPLE RESULTS

Lab ID: L2340875-03 Date Collected: 07/17/23 00:00

Client ID: TB-01 Date Received: 07/17/23

Sample Location: Not Specified Field Prep: Not Specified

Sample Depth:

Matrix: Water

Analytical Method: 1,8260D

Analytical Date: 07/20/23 06:47

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	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 Q3 **Lab Number:** L2340875

Project Number: 21010214 **Report Date:** 07/31/23

SAMPLE RESULTS

Lab ID: L2340875-03 Date Collected: 07/17/23 00:00

Client ID: TB-01 Date Received: 07/17/23

Sample Location: Not Specified 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	93		70-130
Toluene-d8	96		70-130
4-Bromofluorobenzene	93		70-130
Dibromofluoromethane	95		70-130

Project Name: B14 GW Q3 **Lab Number:** L2340875

Project Number: 21010214 **Report Date:** 07/31/23

SAMPLE RESULTS

Lab ID: L2340875-03
Client ID: TB-01
Sample Location: Not Specified

Date Collected: 07/17/23 00:00
Date Received: 07/17/23
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8260D-SIM(M)
Analytical Date: 07/20/23 06:47
Analyst: MCM

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
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	90		70-130
4-Bromofluorobenzene	91		70-130

Project Name: B14 GW Q3 **Lab Number:** L2340875

Project Number: 21010214 **Report Date:** 07/31/23

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260D
Analytical Date: 07/19/23 06:22
Analyst: MCM

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 01-02 Batch: WG1805011-5					
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 Q3 **Lab Number:** L2340875

Project Number: 21010214 **Report Date:** 07/31/23

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260D
Analytical Date: 07/19/23 06:22
Analyst: MCM

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 01-02 Batch: WG1805011-5					
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 Q3 **Lab Number:** L2340875

Project Number: 21010214 **Report Date:** 07/31/23

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260D
Analytical Date: 07/19/23 06:22
Analyst: MCM

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 01-02 Batch: WG1805011-5					

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	93		70-130
Toluene-d8	96		70-130
4-Bromofluorobenzene	93		70-130
Dibromofluoromethane	96		70-130

Project Name: B14 GW Q3 **Lab Number:** L2340875

Project Number: 21010214 **Report Date:** 07/31/23

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260D-SIM(M)
Analytical Date: 07/19/23 06:22
Analyst: MCM

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS-SIM - Westborough Lab for sample(s): 01-02 Batch: WG1805013-5					
1,1,2,2-Tetrachloroethane	ND		ug/l	0.050	0.006

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	90		70-130
4-Bromofluorobenzene	90		70-130

Project Name: B14 GW Q3 **Lab Number:** L2340875

Project Number: 21010214 **Report Date:** 07/31/23

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260D
Analytical Date: 07/20/23 06:19
Analyst: MCM

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 03 Batch: WG1805849-5					
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 Q3 **Lab Number:** L2340875

Project Number: 21010214 **Report Date:** 07/31/23

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260D
Analytical Date: 07/20/23 06:19
Analyst: MCM

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 03 Batch: WG1805849-5					
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 Q3 **Lab Number:** L2340875

Project Number: 21010214 **Report Date:** 07/31/23

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260D
Analytical Date: 07/20/23 06:19
Analyst: MCM

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 03 Batch: WG1805849-5					

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	89		70-130
Toluene-d8	95		70-130
4-Bromofluorobenzene	93		70-130
Dibromofluoromethane	95		70-130

Project Name: B14 GW Q3 **Lab Number:** L2340875

Project Number: 21010214 **Report Date:** 07/31/23

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260D-SIM(M)
Analytical Date: 07/20/23 06:19
Analyst: MCM

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS-SIM - Westborough Lab for sample(s): 03 Batch: WG1805851-5					
1,1,2,2-Tetrachloroethane	ND		ug/l	0.050	0.006

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	91		70-130
4-Bromofluorobenzene	91		70-130

Lab Control Sample Analysis
Batch Quality Control

Project Name: B14 GW Q3
Project Number: 21010214

Lab Number: L2340875
Report Date: 07/31/23

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: WG1805011-3 WG1805011-4								
Dichlorodifluoromethane	88		83		36-147	6		20
Chloromethane	80		75		64-130	6		20
Vinyl chloride	89		84		55-140	6		20
Bromomethane	72		71		39-139	1		20
Chloroethane	77		74		55-138	4		20
Trichlorofluoromethane	81		84		62-150	4		20
1,1-Dichloroethene	86		87		61-145	1		20
Carbon disulfide	87		82		51-130	6		20
1,1,2-Trichloro-1,2,2-Trifluoroethane	94		91		70-130	3		20
Methylene chloride	88		83		70-130	6		20
Acetone	98		96		58-148	2		20
trans-1,2-Dichloroethene	92		89		70-130	3		20
Methyl Acetate	95		90		70-130	5		20
Methyl tert butyl ether	95		89		63-130	7		20
1,1-Dichloroethane	89		85		70-130	5		20
cis-1,2-Dichloroethene	90		86		70-130	5		20
Cyclohexane	90		85		70-130	6		20
Chloroform	89		83		70-130	7		20
Carbon tetrachloride	93		89		63-132	4		20
1,1,1-Trichloroethane	92		87		67-130	6		20
2-Butanone	82		82		63-138	0		20
Benzene	90		84		70-130	7		20
1,2-Dichloroethane	92		87		70-130	6		20

Lab Control Sample Analysis
Batch Quality Control

Project Name: B14 GW Q3
Project Number: 21010214

Lab Number: L2340875
Report Date: 07/31/23

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: WG1805011-3 WG1805011-4								
Trichloroethene	90		87		70-130	3		20
1,2-Dichloropropane	88		80		70-130	10		20
Bromodichloromethane	88		82		67-130	7		20
cis-1,3-Dichloropropene	88		81		70-130	8		20
Toluene	96		93		70-130	3		20
Tetrachloroethene	110		110		70-130	0		20
4-Methyl-2-pentanone	85		80		59-130	6		20
trans-1,3-Dichloropropene	96		91		70-130	5		20
1,1,2-Trichloroethane	98		90		70-130	9		20
Dibromochloromethane	95		92		63-130	3		20
1,2-Dibromoethane	99		93		70-130	6		20
2-Hexanone	87		82		57-130	6		20
Chlorobenzene	94		92		75-130	2		20
Ethylbenzene	96		93		70-130	3		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		91		54-136	2		20
Isopropylbenzene	96		94		70-130	2		20
1,1,2,2-Tetrachloroethane	94		89		67-130	5		20
1,3-Dichlorobenzene	100		97		70-130	3		20
1,4-Dichlorobenzene	98		96		70-130	2		20
1,2-Dichlorobenzene	99		95		70-130	4		20

Lab Control Sample Analysis

Batch Quality Control

Project Name: B14 GW Q3

Project Number: 21010214

Lab Number: L2340875

Report Date: 07/31/23

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: WG1805011-3 WG1805011-4								
1,2-Dibromo-3-chloropropane	93		93		41-144	0		20
1,2,4-Trichlorobenzene	110		110		70-130	0		20
1,2,3-Trichlorobenzene	110		100		70-130	10		20

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
1,2-Dichloroethane-d4	88		83		70-130
Toluene-d8	97		96		70-130
4-Bromofluorobenzene	94		95		70-130
Dibromofluoromethane	88		87		70-130

Lab Control Sample Analysis

Batch Quality Control

Project Name: B14 GW Q3

Project Number: 21010214

Lab Number: L2340875

Report Date: 07/31/23

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: WG1805013-3 WG1805013-4								
1,1,2,2-Tetrachloroethane	86		84		70-130	2		25

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
1,2-Dichloroethane-d4	90		89		70-130
4-Bromofluorobenzene	90		90		70-130

Lab Control Sample Analysis
Batch Quality Control

Project Name: B14 GW Q3
Project Number: 21010214

Lab Number: L2340875
Report Date: 07/31/23

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 03 Batch: WG1805849-3 WG1805849-4								
Dichlorodifluoromethane	110		110		36-147	0		20
Chloromethane	89		88		64-130	1		20
Vinyl chloride	100		100		55-140	0		20
Bromomethane	80		87		39-139	8		20
Chloroethane	85		81		55-138	5		20
Trichlorofluoromethane	90		92		62-150	2		20
1,1-Dichloroethene	98		97		61-145	1		20
Carbon disulfide	90		91		51-130	1		20
1,1,2-Trichloro-1,2,2-Trifluoroethane	98		99		70-130	1		20
Methylene chloride	90		93		70-130	3		20
Acetone	97		100		58-148	3		20
trans-1,2-Dichloroethene	97		96		70-130	1		20
Methyl Acetate	98		100		70-130	2		20
Methyl tert butyl ether	99		98		63-130	1		20
1,1-Dichloroethane	94		92		70-130	2		20
cis-1,2-Dichloroethene	92		93		70-130	1		20
Cyclohexane	95		94		70-130	1		20
Chloroform	92		91		70-130	1		20
Carbon tetrachloride	96		96		63-132	0		20
1,1,1-Trichloroethane	99		96		67-130	3		20
2-Butanone	85		88		63-138	3		20
Benzene	92		92		70-130	0		20
1,2-Dichloroethane	96		98		70-130	2		20

Lab Control Sample Analysis
Batch Quality Control

Project Name: B14 GW Q3
Project Number: 21010214

Lab Number: L2340875
Report Date: 07/31/23

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 03 Batch: WG1805849-3 WG1805849-4								
Trichloroethene	94		95		70-130	1		20
1,2-Dichloropropane	91		89		70-130	2		20
Bromodichloromethane	89		92		67-130	3		20
cis-1,3-Dichloropropene	88		90		70-130	2		20
Toluene	100		100		70-130	0		20
Tetrachloroethene	120		120		70-130	0		20
4-Methyl-2-pentanone	91		89		59-130	2		20
trans-1,3-Dichloropropene	97		100		70-130	3		20
1,1,2-Trichloroethane	100		100		70-130	0		20
Dibromochloromethane	99		100		63-130	1		20
1,2-Dibromoethane	100		100		70-130	0		20
2-Hexanone	90		91		57-130	1		20
Chlorobenzene	100		99		75-130	1		20
Ethylbenzene	100		100		70-130	0		20
p/m-Xylene	100		100		70-130	0		20
o-Xylene	100		100		70-130	0		20
Styrene	100		100		70-130	0		20
Bromoform	95		97		54-136	2		20
Isopropylbenzene	100		100		70-130	0		20
1,1,2,2-Tetrachloroethane	96		96		67-130	0		20
1,3-Dichlorobenzene	100		110		70-130	10		20
1,4-Dichlorobenzene	100		100		70-130	0		20
1,2-Dichlorobenzene	100		100		70-130	0		20

Lab Control Sample Analysis
Batch Quality Control

Project Name: B14 GW Q3
Project Number: 21010214

Lab Number: L2340875
Report Date: 07/31/23

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 03 Batch: WG1805849-3 WG1805849-4								
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 %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
1,2-Dichloroethane-d4	86		87		70-130
Toluene-d8	98		97		70-130
4-Bromofluorobenzene	94		96		70-130
Dibromofluoromethane	88		88		70-130

Lab Control Sample Analysis
Batch Quality Control

Project Name: B14 GW Q3
Project Number: 21010214

Lab Number: L2340875
Report Date: 07/31/23

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS-SIM - Westborough Lab Associated sample(s): 03 Batch: WG1805851-3 WG1805851-4								
1,1,2,2-Tetrachloroethane	92		86		70-130	7		25

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
1,2-Dichloroethane-d4	91		90		70-130
4-Bromofluorobenzene	91		90		70-130

SEMIVOLATILES

Project Name: B14 GW Q3 **Lab Number:** L2340875

Project Number: 21010214 **Report Date:** 07/31/23

SAMPLE RESULTS

Lab ID: L2340875-01
Client ID: B24-002-MWS
Sample Location: Not Specified

Date Collected: 07/17/23 14:35
Date Received: 07/17/23
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8270E
Analytical Date: 07/22/23 15:26
Analyst: CMM

Extraction Method: EPA 3510C
Extraction Date: 07/21/23 16:26

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Benzaldehyde	ND		ug/l	5.0	0.53	1
Phenol	2.3	J	ug/l	5.0	0.57	1
Bis(2-chloroethyl)ether	ND		ug/l	2.0	0.50	1
2-Chlorophenol	ND		ug/l	2.0	0.48	1
2-Methylphenol	ND		ug/l	5.0	0.49	1
Bis(2-chloroisopropyl)ether	ND		ug/l	2.0	0.53	1
Acetophenone	ND		ug/l	5.0	0.53	1
n-Nitrosodi-n-propylamine	ND		ug/l	5.0	0.64	1
3-Methylphenol/4-Methylphenol	1.3	J	ug/l	5.0	0.48	1
Hexachloroethane	ND		ug/l	2.0	0.58	1
Nitrobenzene	ND		ug/l	1.4	0.77	1
Isophorone	ND		ug/l	5.0	1.2	1
2,4-Dimethylphenol	5.1		ug/l	5.0	1.8	1
Bis(2-chloroethoxy)methane	ND		ug/l	5.0	0.50	1
2,4-Dichlorophenol	ND		ug/l	5.0	0.41	1
Naphthalene	ND		ug/l	2.0	0.46	1
4-Chloroaniline	ND		ug/l	3.7	1.1	1
Hexachlorobutadiene	ND		ug/l	2.0	0.66	1
Caprolactam	ND		ug/l	10	3.3	1
2-Methylnaphthalene	ND		ug/l	2.0	0.45	1
Hexachlorocyclopentadiene	ND		ug/l	20	0.69	1
1,2,4,5-Tetrachlorobenzene	ND		ug/l	1.7	0.44	1
2,4,6-Trichlorophenol	ND		ug/l	5.0	0.61	1
2,4,5-Trichlorophenol	ND		ug/l	5.0	0.77	1
Biphenyl	ND		ug/l	2.0	0.46	1
2-Chloronaphthalene	ND		ug/l	2.0	0.44	1
2-Nitroaniline	ND		ug/l	5.0	0.50	1
2,6-Dinitrotoluene	ND		ug/l	5.0	0.93	1

Project Name: B14 GW Q3 **Lab Number:** L2340875

Project Number: 21010214 **Report Date:** 07/31/23

SAMPLE RESULTS

Lab ID: L2340875-01 Date Collected: 07/17/23 14:35

Client ID: B24-002-MWS Date Received: 07/17/23

Sample Location: Not Specified 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	0.46	1
Acenaphthene	ND		ug/l	2.0	0.53	1
2,4-Dinitrophenol	ND		ug/l	20	6.6	1
2,4-Dinitrotoluene	ND		ug/l	5.0	1.2	1
2,3,4,6-Tetrachlorophenol	ND		ug/l	5.0	0.84	1
Diethyl phthalate	ND		ug/l	5.0	0.38	1
Fluorene	ND		ug/l	2.0	0.41	1
4-Nitroaniline	ND		ug/l	5.0	0.80	1
NDPA/DPA	ND		ug/l	2.0	0.42	1
Hexachlorobenzene	ND		ug/l	2.0	0.46	1
Pentachlorophenol	ND		ug/l	10	1.8	1
Phenanthrene	ND		ug/l	2.0	0.33	1
Anthracene	ND		ug/l	2.0	0.33	1
Carbazole	ND		ug/l	2.0	0.49	1
Di-n-butylphthalate	ND		ug/l	5.0	0.39	1
Fluoranthene	ND		ug/l	2.0	0.26	1
Pyrene	ND		ug/l	2.0	0.28	1
3,3'-Dichlorobenzidine	ND		ug/l	5.0	1.6	1
Benzo(a)anthracene	ND		ug/l	2.0	0.32	1
Chrysene	ND		ug/l	1.4	0.34	1
Bis(2-ethylhexyl)phthalate	ND		ug/l	3.0	1.5	1
Di-n-octylphthalate	ND		ug/l	5.0	1.3	1
Benzo(b)fluoranthene	ND		ug/l	2.0	0.35	1
Benzo(k)fluoranthene	ND		ug/l	2.0	0.37	1
Benzo(a)pyrene	ND		ug/l	2.0	0.41	1
Indeno(1,2,3-cd)pyrene	ND		ug/l	2.0	0.40	1
Dibenzo(a,h)anthracene	ND		ug/l	2.0	0.32	1
Benzo(ghi)perylene	ND		ug/l	2.0	0.30	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	44		21-120
Phenol-d6	37		10-120
Nitrobenzene-d5	53		23-120
2-Fluorobiphenyl	51		15-120
2,4,6-Tribromophenol	56		10-120
4-Terphenyl-d14	54		41-149

Project Name: B14 GW Q3 **Lab Number:** L2340875

Project Number: 21010214 **Report Date:** 07/31/23

SAMPLE RESULTS

Lab ID: L2340875-01
Client ID: B24-002-MWS
Sample Location: Not Specified

Date Collected: 07/17/23 14:35
Date Received: 07/17/23
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8270E-SIM
Analytical Date: 07/22/23 23:49
Analyst: CMM

Extraction Method: EPA 3510C
Extraction Date: 07/21/23 16:26

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS-SIM - Westborough Lab						
Naphthalene	0.16	B	ug/l	0.10	0.05	1
2-Methylnaphthalene	0.02	J	ug/l	0.10	0.02	1
Acenaphthylene	0.01	J	ug/l	0.10	0.01	1
Acenaphthene	0.05	J	ug/l	0.10	0.01	1
Fluorene	0.04	J	ug/l	0.10	0.01	1
Pentachlorophenol	ND		ug/l	0.10	0.01	1
Phenanthrene	0.05		ug/l	0.05	0.02	1
Anthracene	0.02	J	ug/l	0.10	0.01	1
Fluoranthene	0.05	J	ug/l	0.10	0.02	1
Pyrene	0.06	J	ug/l	0.10	0.02	1
Benzo(a)anthracene	0.02	J	ug/l	0.05	0.02	1
Chrysene	ND		ug/l	0.10	0.01	1
Benzo(b)fluoranthene	ND		ug/l	0.05	0.01	1
Benzo(k)fluoranthene	ND		ug/l	0.10	0.01	1
Benzo(a)pyrene	ND		ug/l	0.10	0.02	1
Indeno(1,2,3-cd)pyrene	ND		ug/l	0.10	0.01	1
Dibenzo(a,h)anthracene	ND		ug/l	0.05	0.01	1
Benzo(ghi)perylene	ND		ug/l	0.10	0.01	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	41		21-120
Phenol-d6	32		10-120
Nitrobenzene-d5	54		23-120
2-Fluorobiphenyl	36		15-120
2,4,6-Tribromophenol	72		10-120
4-Terphenyl-d14	53		41-149

Project Name: B14 GW Q3 **Lab Number:** L2340875

Project Number: 21010214 **Report Date:** 07/31/23

SAMPLE RESULTS

Lab ID: L2340875-01 RE
Client ID: B24-002-MWS
Sample Location: Not Specified

Date Collected: 07/17/23 14:35
Date Received: 07/17/23
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8270E-SIM
Analytical Date: 07/30/23 11:05
Analyst: AH

Extraction Method: EPA 3510C
Extraction Date: 07/29/23 11:43

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS-SIM - Westborough Lab						
Naphthalene	0.34		ug/l	0.10	0.05	1
2-Methylnaphthalene	0.06	J	ug/l	0.10	0.02	1
Acenaphthylene	0.05	J	ug/l	0.10	0.01	1
Acenaphthene	0.10		ug/l	0.10	0.01	1
Fluorene	0.10		ug/l	0.10	0.01	1
Pentachlorophenol	0.22		ug/l	0.10	0.01	1
Phenanthrene	0.11		ug/l	0.05	0.02	1
Anthracene	0.03	J	ug/l	0.10	0.01	1
Fluoranthene	0.14		ug/l	0.10	0.02	1
Pyrene	0.14		ug/l	0.10	0.02	1
Benzo(a)anthracene	0.04	J	ug/l	0.05	0.02	1
Chrysene	0.06	J	ug/l	0.10	0.01	1
Benzo(b)fluoranthene	0.03	J	ug/l	0.05	0.01	1
Benzo(k)fluoranthene	0.05	J	ug/l	0.10	0.01	1
Benzo(a)pyrene	0.04	J	ug/l	0.10	0.02	1
Indeno(1,2,3-cd)pyrene	0.03	J	ug/l	0.10	0.01	1
Dibenzo(a,h)anthracene	0.05		ug/l	0.05	0.01	1
Benzo(ghi)perylene	0.04	J	ug/l	0.10	0.01	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	75		21-120
Phenol-d6	76		10-120
Nitrobenzene-d5	**127**	Q	23-120
2-Fluorobiphenyl	82		15-120
2,4,6-Tribromophenol	**145**	Q	10-120
4-Terphenyl-d14	69		41-149

Project Name: B14 GW Q3 **Lab Number:** L2340875

Project Number: 21010214 **Report Date:** 07/31/23

SAMPLE RESULTS

Lab ID: L2340875-02
Client ID: B24-001-MWS
Sample Location: Not Specified

Date Collected: 07/17/23 15:35
Date Received: 07/17/23
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8270E
Analytical Date: 07/22/23 15:50
Analyst: CMM

Extraction Method: EPA 3510C
Extraction Date: 07/21/23 16:26

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Benzaldehyde	ND		ug/l	5.0	0.53	1
Phenol	ND		ug/l	5.0	0.57	1
Bis(2-chloroethyl)ether	ND		ug/l	2.0	0.50	1
2-Chlorophenol	ND		ug/l	2.0	0.48	1
2-Methylphenol	ND		ug/l	5.0	0.49	1
Bis(2-chloroisopropyl)ether	ND		ug/l	2.0	0.53	1
Acetophenone	ND		ug/l	5.0	0.53	1
n-Nitrosodi-n-propylamine	ND		ug/l	5.0	0.64	1
3-Methylphenol/4-Methylphenol	ND		ug/l	5.0	0.48	1
Hexachloroethane	ND		ug/l	2.0	0.58	1
Nitrobenzene	ND		ug/l	1.4	0.77	1
Isophorone	ND		ug/l	5.0	1.2	1
2,4-Dimethylphenol	ND		ug/l	5.0	1.8	1
Bis(2-chloroethoxy)methane	ND		ug/l	5.0	0.50	1
2,4-Dichlorophenol	ND		ug/l	5.0	0.41	1
Naphthalene	2.7		ug/l	2.0	0.46	1
4-Chloroaniline	ND		ug/l	3.7	1.1	1
Hexachlorobutadiene	ND		ug/l	2.0	0.66	1
Caprolactam	ND		ug/l	10	3.3	1
2-Methylnaphthalene	ND		ug/l	2.0	0.45	1
Hexachlorocyclopentadiene	ND		ug/l	20	0.69	1
1,2,4,5-Tetrachlorobenzene	ND		ug/l	1.7	0.44	1
2,4,6-Trichlorophenol	ND		ug/l	5.0	0.61	1
2,4,5-Trichlorophenol	ND		ug/l	5.0	0.77	1
Biphenyl	ND		ug/l	2.0	0.46	1
2-Chloronaphthalene	ND		ug/l	2.0	0.44	1
2-Nitroaniline	ND		ug/l	5.0	0.50	1
2,6-Dinitrotoluene	ND		ug/l	5.0	0.93	1

Project Name: B14 GW Q3 **Lab Number:** L2340875

Project Number: 21010214 **Report Date:** 07/31/23

SAMPLE RESULTS

Lab ID: L2340875-02 Date Collected: 07/17/23 15:35

Client ID: B24-001-MWS Date Received: 07/17/23

Sample Location: Not Specified 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	0.46	1
Acenaphthene	ND		ug/l	2.0	0.53	1
2,4-Dinitrophenol	ND		ug/l	20	6.6	1
2,4-Dinitrotoluene	ND		ug/l	5.0	1.2	1
2,3,4,6-Tetrachlorophenol	ND		ug/l	5.0	0.84	1
Diethyl phthalate	ND		ug/l	5.0	0.38	1
Fluorene	ND		ug/l	2.0	0.41	1
4-Nitroaniline	ND		ug/l	5.0	0.80	1
NDPA/DPA	ND		ug/l	2.0	0.42	1
Hexachlorobenzene	ND		ug/l	2.0	0.46	1
Pentachlorophenol	ND		ug/l	10	1.8	1
Phenanthrene	ND		ug/l	2.0	0.33	1
Anthracene	ND		ug/l	2.0	0.33	1
Carbazole	ND		ug/l	2.0	0.49	1
Di-n-butylphthalate	ND		ug/l	5.0	0.39	1
Fluoranthene	ND		ug/l	2.0	0.26	1
Pyrene	ND		ug/l	2.0	0.28	1
3,3'-Dichlorobenzidine	ND		ug/l	5.0	1.6	1
Benzo(a)anthracene	ND		ug/l	2.0	0.32	1
Chrysene	ND		ug/l	1.4	0.34	1
Bis(2-ethylhexyl)phthalate	ND		ug/l	3.0	1.5	1
Di-n-octylphthalate	ND		ug/l	5.0	1.3	1
Benzo(b)fluoranthene	ND		ug/l	2.0	0.35	1
Benzo(k)fluoranthene	ND		ug/l	2.0	0.37	1
Benzo(a)pyrene	ND		ug/l	2.0	0.41	1
Indeno(1,2,3-cd)pyrene	ND		ug/l	2.0	0.40	1
Dibenzo(a,h)anthracene	ND		ug/l	2.0	0.32	1
Benzo(ghi)perylene	ND		ug/l	2.0	0.30	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	44		21-120
Phenol-d6	38		10-120
Nitrobenzene-d5	50		23-120
2-Fluorobiphenyl	51		15-120
2,4,6-Tribromophenol	57		10-120
4-Terphenyl-d14	57		41-149

Project Name: B14 GW Q3 **Lab Number:** L2340875

Project Number: 21010214 **Report Date:** 07/31/23

SAMPLE RESULTS

Lab ID: L2340875-02
Client ID: B24-001-MWS
Sample Location: Not Specified

Date Collected: 07/17/23 15:35
Date Received: 07/17/23
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8270E-SIM
Analytical Date: 07/23/23 00:06
Analyst: CMM

Extraction Method: EPA 3510C
Extraction Date: 07/21/23 16:26

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS-SIM - Westborough Lab						
Naphthalene	2.5		ug/l	0.10	0.05	1
2-Methylnaphthalene	0.26		ug/l	0.10	0.02	1
Acenaphthylene	ND		ug/l	0.10	0.01	1
Acenaphthene	0.22		ug/l	0.10	0.01	1
Fluorene	0.14		ug/l	0.10	0.01	1
Pentachlorophenol	ND		ug/l	0.10	0.01	1
Phenanthrene	0.25		ug/l	0.05	0.02	1
Anthracene	0.03	J	ug/l	0.10	0.01	1
Fluoranthene	0.13		ug/l	0.10	0.02	1
Pyrene	0.09	J	ug/l	0.10	0.02	1
Benzo(a)anthracene	ND		ug/l	0.05	0.02	1
Chrysene	ND		ug/l	0.10	0.01	1
Benzo(b)fluoranthene	ND		ug/l	0.05	0.01	1
Benzo(k)fluoranthene	ND		ug/l	0.10	0.01	1
Benzo(a)pyrene	ND		ug/l	0.10	0.02	1
Indeno(1,2,3-cd)pyrene	ND		ug/l	0.10	0.01	1
Dibenzo(a,h)anthracene	ND		ug/l	0.05	0.01	1
Benzo(ghi)perylene	ND		ug/l	0.10	0.01	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	42		21-120
Phenol-d6	34		10-120
Nitrobenzene-d5	53		23-120
2-Fluorobiphenyl	53		15-120
2,4,6-Tribromophenol	77		10-120
4-Terphenyl-d14	57		41-149

Project Name: B14 GW Q3 **Lab Number:** L2340875

Project Number: 21010214 **Report Date:** 07/31/23

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270E
Analytical Date: 07/22/23 08:47
Analyst: CMM

Extraction Method: EPA 3510C
Extraction Date: 07/21/23 16:26

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 01-02 Batch: WG1806261-1					
Benzaldehyde	ND		ug/l	5.0	0.53
Phenol	ND		ug/l	5.0	0.57
Bis(2-chloroethyl)ether	ND		ug/l	2.0	0.50
2-Chlorophenol	ND		ug/l	2.0	0.48
2-Methylphenol	ND		ug/l	5.0	0.49
Bis(2-chloroisopropyl)ether	ND		ug/l	2.0	0.53
Acetophenone	ND		ug/l	5.0	0.53
n-Nitrosodi-n-propylamine	ND		ug/l	5.0	0.64
3-Methylphenol/4-Methylphenol	ND		ug/l	5.0	0.48
Hexachloroethane	ND		ug/l	2.0	0.58
Nitrobenzene	ND		ug/l	1.4	0.77
Isophorone	ND		ug/l	5.0	1.2
2,4-Dimethylphenol	ND		ug/l	5.0	1.8
Bis(2-chloroethoxy)methane	ND		ug/l	5.0	0.50
2,4-Dichlorophenol	ND		ug/l	5.0	0.41
Naphthalene	ND		ug/l	2.0	0.46
4-Chloroaniline	ND		ug/l	3.7	1.1
Hexachlorobutadiene	ND		ug/l	2.0	0.66
Caprolactam	ND		ug/l	10	3.3
2-Methylnaphthalene	ND		ug/l	2.0	0.45
Hexachlorocyclopentadiene	ND		ug/l	20	0.69
1,2,4,5-Tetrachlorobenzene	ND		ug/l	1.7	0.44
2,4,6-Trichlorophenol	ND		ug/l	5.0	0.61
2,4,5-Trichlorophenol	ND		ug/l	5.0	0.77
Biphenyl	ND		ug/l	2.0	0.46
2-Chloronaphthalene	ND		ug/l	2.0	0.44
2-Nitroaniline	ND		ug/l	5.0	0.50
2,6-Dinitrotoluene	ND		ug/l	5.0	0.93
Acenaphthylene	ND		ug/l	2.0	0.46

Project Name: B14 GW Q3 **Lab Number:** L2340875

Project Number: 21010214 **Report Date:** 07/31/23

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270E
Analytical Date: 07/22/23 08:47
Analyst: CMM

Extraction Method: EPA 3510C
Extraction Date: 07/21/23 16:26

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 01-02 Batch: WG1806261-1					
Acenaphthene	ND		ug/l	2.0	0.53
2,4-Dinitrophenol	ND		ug/l	20	6.6
2,4-Dinitrotoluene	ND		ug/l	5.0	1.2
2,3,4,6-Tetrachlorophenol	ND		ug/l	5.0	0.84
Diethyl phthalate	ND		ug/l	5.0	0.38
Fluorene	ND		ug/l	2.0	0.41
4-Nitroaniline	ND		ug/l	5.0	0.80
NDPA/DPA	ND		ug/l	2.0	0.42
Hexachlorobenzene	ND		ug/l	2.0	0.46
Pentachlorophenol	ND		ug/l	10	1.8
Phenanthrene	ND		ug/l	2.0	0.33
Anthracene	ND		ug/l	2.0	0.33
Carbazole	ND		ug/l	2.0	0.49
Di-n-butylphthalate	ND		ug/l	5.0	0.39
Fluoranthene	ND		ug/l	2.0	0.26
Pyrene	ND		ug/l	2.0	0.28
3,3'-Dichlorobenzidine	ND		ug/l	5.0	1.6
Benzo(a)anthracene	ND		ug/l	2.0	0.32
Chrysene	ND		ug/l	1.4	0.34
Bis(2-ethylhexyl)phthalate	ND		ug/l	3.0	1.5
Di-n-octylphthalate	ND		ug/l	5.0	1.3
Benzo(b)fluoranthene	ND		ug/l	2.0	0.35
Benzo(k)fluoranthene	ND		ug/l	2.0	0.37
Benzo(a)pyrene	ND		ug/l	2.0	0.41
Indeno(1,2,3-cd)pyrene	ND		ug/l	2.0	0.40
Dibenzo(a,h)anthracene	ND		ug/l	2.0	0.32
Benzo(ghi)perylene	ND		ug/l	2.0	0.30

Project Name: B14 GW Q3
Project Number: 21010214

Lab Number: L2340875
Report Date: 07/31/23

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270E
Analytical Date: 07/22/23 08:47
Analyst: CMM

Extraction Method: EPA 3510C
Extraction Date: 07/21/23 16:26

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 01-02 Batch: WG1806261-1					

Surrogate	%Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	38		21-120
Phenol-d6	33		10-120
Nitrobenzene-d5	48		23-120
2-Fluorobiphenyl	47		15-120
2,4,6-Tribromophenol	51		10-120
4-Terphenyl-d14	58		41-149

Project Name: B14 GW Q3 **Lab Number:** L2340875

Project Number: 21010214 **Report Date:** 07/31/23

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270E-SIM
Analytical Date: 07/22/23 23:32
Analyst: RP

Extraction Method: EPA 3510C
Extraction Date: 07/21/23 16:26

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS-SIM - Westborough Lab for sample(s): 01-02 Batch: WG1806262-1					
Naphthalene	0.18		ug/l	0.10	0.05
2-Methylnaphthalene	0.03	J	ug/l	0.10	0.02
Acenaphthylene	ND		ug/l	0.10	0.01
Acenaphthene	ND		ug/l	0.10	0.01
Fluorene	ND		ug/l	0.10	0.01
Pentachlorophenol	ND		ug/l	0.10	0.01
Phenanthrene	ND		ug/l	0.05	0.02
Anthracene	ND		ug/l	0.10	0.01
Fluoranthene	ND		ug/l	0.10	0.02
Pyrene	ND		ug/l	0.10	0.02
Benzo(a)anthracene	ND		ug/l	0.05	0.02
Chrysene	ND		ug/l	0.10	0.01
Benzo(b)fluoranthene	ND		ug/l	0.05	0.01
Benzo(k)fluoranthene	ND		ug/l	0.10	0.01
Benzo(a)pyrene	ND		ug/l	0.10	0.02
Indeno(1,2,3-cd)pyrene	ND		ug/l	0.10	0.01
Dibenzo(a,h)anthracene	ND		ug/l	0.05	0.01
Benzo(ghi)perylene	ND		ug/l	0.10	0.01

Surrogate	%Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	36		21-120
Phenol-d6	30		10-120
Nitrobenzene-d5	48		23-120
2-Fluorobiphenyl	52		15-120
2,4,6-Tribromophenol	69		10-120
4-Terphenyl-d14	57		41-149

Project Name: B14 GW Q3 **Lab Number:** L2340875

Project Number: 21010214 **Report Date:** 07/31/23

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270E-SIM
Analytical Date: 07/30/23 08:58
Analyst: AH

Extraction Method: EPA 3510C
Extraction Date: 07/29/23 11:43

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS-SIM - Westborough Lab for sample(s): 01 Batch: WG1809372-1					
Naphthalene	ND		ug/l	0.10	0.05
2-Methylnaphthalene	ND		ug/l	0.10	0.02
Acenaphthylene	ND		ug/l	0.10	0.01
Acenaphthene	ND		ug/l	0.10	0.01
Fluorene	ND		ug/l	0.10	0.01
Pentachlorophenol	ND		ug/l	0.10	0.01
Phenanthrene	ND		ug/l	0.05	0.02
Anthracene	ND		ug/l	0.10	0.01
Fluoranthene	ND		ug/l	0.10	0.02
Pyrene	ND		ug/l	0.10	0.02
Benzo(a)anthracene	ND		ug/l	0.05	0.02
Chrysene	ND		ug/l	0.10	0.01
Benzo(b)fluoranthene	ND		ug/l	0.05	0.01
Benzo(k)fluoranthene	ND		ug/l	0.10	0.01
Benzo(a)pyrene	ND		ug/l	0.10	0.02
Indeno(1,2,3-cd)pyrene	ND		ug/l	0.10	0.01
Dibenzo(a,h)anthracene	ND		ug/l	0.05	0.01
Benzo(ghi)perylene	ND		ug/l	0.10	0.01

Surrogate	%Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	51		21-120
Phenol-d6	43		10-120
Nitrobenzene-d5	63		23-120
2-Fluorobiphenyl	64		15-120
2,4,6-Tribromophenol	80		10-120
4-Terphenyl-d14	75		41-149

Lab Control Sample Analysis
Batch Quality Control

Project Name: B14 GW Q3
Project Number: 21010214

Lab Number: L2340875
Report Date: 07/31/23

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: WG1806261-2 WG1806261-3								
Benzaldehyde	79		71		40-140	11		30
Phenol	53		46		12-110	14		30
Bis(2-chloroethyl)ether	62		56		40-140	10		30
2-Chlorophenol	65		58		27-123	11		30
2-Methylphenol	65		57		30-130	13		30
Bis(2-chloroisopropyl)ether	64		58		40-140	10		30
Acetophenone	67		60		39-129	11		30
n-Nitrosodi-n-propylamine	64		58		29-132	10		30
3-Methylphenol/4-Methylphenol	68		60		30-130	13		30
Hexachloroethane	60		55		40-140	9		30
Nitrobenzene	65		59		40-140	10		30
Isophorone	62		55		40-140	12		30
2,4-Dimethylphenol	65		56		30-130	15		30
Bis(2-chloroethoxy)methane	63		57		40-140	10		30
2,4-Dichlorophenol	70		60		30-130	15		30
Naphthalene	64		57		40-140	12		30
4-Chloroaniline	64		49		40-140	27		30
Hexachlorobutadiene	63		56		40-140	12		30
Caprolactam	33		29		10-130	13		30
2-Methylnaphthalene	66		58		40-140	13		30
Hexachlorocyclopentadiene	56		50		40-140	11		30
1,2,4,5-Tetrachlorobenzene	65		57		2-134	13		30
2,4,6-Trichlorophenol	64		57		30-130	12		30

Lab Control Sample Analysis
Batch Quality Control

Project Name: B14 GW Q3
Project Number: 21010214

Lab Number: L2340875
Report Date: 07/31/23

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: WG1806261-2 WG1806261-3								
2,4,5-Trichlorophenol	66		57		30-130	15		30
Biphenyl	67		59		40-140	13		30
2-Chloronaphthalene	65		57		40-140	13		30
2-Nitroaniline	64		56		52-143	13		30
2,6-Dinitrotoluene	58		52		40-140	11		30
Acenaphthylene	64		55		45-123	15		30
Acenaphthene	64		57		37-111	12		30
2,4-Dinitrophenol	54		47		20-130	14		30
2,4-Dinitrotoluene	60		56		48-143	7		30
2,3,4,6-Tetrachlorophenol	65		60		54-145	8		30
Diethyl phthalate	65		60		40-140	8		30
Fluorene	66		60		40-140	10		30
4-Nitroaniline	61		55		51-143	10		30
NDPA/DPA	64		60		40-140	6		30
Hexachlorobenzene	58		52		40-140	11		30
Pentachlorophenol	60		54		9-103	11		30
Phenanthrene	67		60		40-140	11		30
Anthracene	67		61		40-140	9		30
Carbazole	66		61		55-144	8		30
Di-n-butylphthalate	67		61		40-140	9		30
Fluoranthene	65		58		40-140	11		30
Pyrene	64		58		26-127	10		30
3,3'-Dichlorobenzidine	54		46		40-140	16		30

Lab Control Sample Analysis
Batch Quality Control

Project Name: B14 GW Q3
Project Number: 21010214
Lab Number: L2340875
Report Date: 07/31/23

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: WG1806261-2 WG1806261-3								
Benzo(a)anthracene	67		60		40-140	11		30
Chrysene	68		61		40-140	11		30
Bis(2-ethylhexyl)phthalate	71		64		40-140	10		30
Di-n-octylphthalate	70		64		40-140	9		30
Benzo(b)fluoranthene	63		57		40-140	10		30
Benzo(k)fluoranthene	65		61		40-140	6		30
Benzo(a)pyrene	69		63		40-140	9		30
Indeno(1,2,3-cd)pyrene	66		59		40-140	11		30
Dibenzo(a,h)anthracene	68		61		40-140	11		30
Benzo(ghi)perylene	72		64		40-140	12		30

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
2-Fluorophenol	58		52		21-120
Phenol-d6	49		45		10-120
Nitrobenzene-d5	65		59		23-120
2-Fluorobiphenyl	63		55		15-120
2,4,6-Tribromophenol	60		55		10-120
4-Terphenyl-d14	61		55		41-149

Lab Control Sample Analysis
Batch Quality Control

Project Name: B14 GW Q3
Project Number: 21010214
Lab Number: L2340875
Report Date: 07/31/23

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: WG1806262-2 WG1806262-3								
Naphthalene	62		54		40-140	14		40
2-Methylnaphthalene	66		57		40-140	15		40
Acenaphthylene	67		57		40-140	16		40
Acenaphthene	62		54		37-111	14		40
Fluorene	65		55		40-140	17		40
Pentachlorophenol	76		65		9-103	16		40
Phenanthrene	61		51		40-140	18		40
Anthracene	65		55		40-140	17		40
Fluoranthene	62		54		40-140	14		40
Pyrene	62		55		26-127	12		40
Benzo(a)anthracene	68		58		40-140	16		40
Chrysene	61		56		40-140	9		40
Benzo(b)fluoranthene	67		60		40-140	11		40
Benzo(k)fluoranthene	70		63		40-140	11		40
Benzo(a)pyrene	69		61		40-140	12		40
Indeno(1,2,3-cd)pyrene	64		52		40-140	21		40
Dibenzo(a,h)anthracene	67		57		40-140	16		40
Benzo(ghi)perylene	65		56		40-140	15		40

Lab Control Sample Analysis

Batch Quality Control

Project Name: B14 GW Q3

Project Number: 21010214

Lab Number: L2340875

Report Date: 07/31/23

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: WG1806262-2 WG1806262-3

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
2-Fluorophenol	53		47		21-120
Phenol-d6	46		40		10-120
Nitrobenzene-d5	69		59		23-120
2-Fluorobiphenyl	68		58		15-120
2,4,6-Tribromophenol	91		78		10-120
4-Terphenyl-d14	64		55		41-149

Lab Control Sample Analysis
Batch Quality Control

Project Name: B14 GW Q3
Project Number: 21010214

Lab Number: L2340875
Report Date: 07/31/23

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: WG1809372-2 WG1809372-3								
Naphthalene	61		69		40-140	12		40
2-Methylnaphthalene	69		75		40-140	8		40
Acenaphthylene	74		80		40-140	8		40
Acenaphthene	66		71		37-111	7		40
Fluorene	72		75		40-140	4		40
Pentachlorophenol	73		80		9-103	9		40
Phenanthrene	68		72		40-140	6		40
Anthracene	73		77		40-140	5		40
Fluoranthene	75		80		40-140	6		40
Pyrene	72		81		26-127	12		40
Benzo(a)anthracene	83		81		40-140	2		40
Chrysene	72		76		40-140	5		40
Benzo(b)fluoranthene	84		83		40-140	1		40
Benzo(k)fluoranthene	75		82		40-140	9		40
Benzo(a)pyrene	79		85		40-140	7		40
Indeno(1,2,3-cd)pyrene	74		75		40-140	1		40
Dibenzo(a,h)anthracene	78		80		40-140	3		40
Benzo(ghi)perylene	76		80		40-140	5		40

Lab Control Sample Analysis

Batch Quality Control

Project Name: B14 GW Q3

Project Number: 21010214

Lab Number: L2340875

Report Date: 07/31/23

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: WG1809372-2 WG1809372-3

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
2-Fluorophenol	53		61		21-120
Phenol-d6	48		56		10-120
Nitrobenzene-d5	65		72		23-120
2-Fluorobiphenyl	68		73		15-120
2,4,6-Tribromophenol	92		97		10-120
4-Terphenyl-d14	68		72		41-149

Project Name: B14 GW Q3
Project Number: 21010214

Lab Number: L2340875
Report Date: 07/31/23

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(*)
L2340875-01A	Vial HCl preserved	A	NA		4.7	Y	Absent		PA-8260-SIM(14),PA-8260(14)
L2340875-01B	Vial HCl preserved	A	NA		4.7	Y	Absent		PA-8260-SIM(14),PA-8260(14)
L2340875-01C	Vial HCl preserved	A	NA		4.7	Y	Absent		PA-8260-SIM(14),PA-8260(14)
L2340875-01D	Amber 250ml unpreserved	A	11	11	4.7	Y	Absent		PA-8270SIM-LVI(7),PA-8270-LVI(7)
L2340875-01E	Amber 250ml unpreserved	A	11	11	4.7	Y	Absent		PA-8270SIM-LVI(7),PA-8270-LVI(7)
L2340875-02A	Vial HCl preserved	A	NA		4.7	Y	Absent		PA-8260-SIM(14),PA-8260(14)
L2340875-02B	Vial HCl preserved	A	NA		4.7	Y	Absent		PA-8260-SIM(14),PA-8260(14)
L2340875-02C	Vial HCl preserved	A	NA		4.7	Y	Absent		PA-8260-SIM(14),PA-8260(14)
L2340875-02D	Amber 250ml unpreserved	A	10	10	4.7	Y	Absent		PA-8270SIM-LVI(7),PA-8270-LVI(7)
L2340875-02E	Amber 250ml unpreserved	A	10	10	4.7	Y	Absent		PA-8270SIM-LVI(7),PA-8270-LVI(7)
L2340875-03A	Vial HCl preserved	A	NA		4.7	Y	Absent		PA-8260-SIM(14),PA-8260(14)
L2340875-03B	Vial HCl preserved	A	NA		4.7	Y	Absent		PA-8260-SIM(14),PA-8260(14)
L2340875-03C	Vial HCl preserved	A	NA		4.7	Y	Absent		PA-8260-SIM(14),PA-8260(14)
L2340875-03D	Vial HCl preserved	A	NA		4.7	Y	Absent		PA-8260-SIM(14),PA-8260(14)

*Values in parentheses indicate holding time in days

Project Name:	B14 GW Q3	**Lab Number:**	L2340875
Project Number:	21010214	**Report Date:**	07/31/23

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 Q3	**Lab Number:**	L2340875
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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

Project Name:	B14 GW Q3	**Lab Number:**	L2340875
Project Number:	21010214	**Report Date:**	07/31/23

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 Q3	**Lab Number:**	L2340875
Project Number:	21010214	**Report Date:**	07/31/23

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, Azobenzene; SCM: Iodomethane (methyl iodide), 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene.
EPA 8270E: NPW: Dimethylnaphthalene,1,4-Diphenylhydrazine, alpha-Terpineol; 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.
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, SM9221E, 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 1

Date Rec'd in Lab: 7/18/23

ALPHA Job #: L2340875

ALPHA ANALYTICAL
WESTBORO, MA TEL: 508-898-9220 FAX: 508-898-9193
MANSFIELD, MA TEL: 508-822-9300 FAX: 508-822-3288

Client Information

Client: TPA
Address:
Phone:
Fax:
Email:
☐ These samples have been previously analyzed by Alpha

Project Information

Project Name: B14 GW Q3
Project Location:
Project #: 21010214
Project Manager: Bob T
ALPHA Quote #:

Turn-Around Time

☒ Standard ☐ RUSH (only confirmed if pre-approved!)
Date Due: Time:

Report Information - Data Deliverables

☐ FAX ☐ EMAIL
☐ ADEx ☐ Add'l Deliverables

Billing Information

☐ Same as Client info PO #:

Regulatory Requirements/Report Limits

State /Fed Program	Criteria

Other Project Specific Requirements/Comments/Detection Limits:

ALPHA Lab ID (Lab Use Only)	Sample ID	Collection Date	Collection Time	Sample Matrix	Sampler's Initials	ANALYSIS: VOC 8260	SVOC 8270 SIM	Sample Specific Comments	TOTAL # BOTTLES
40875-01	B24-002-MWS	07/17/23	14:35	GW	LEP	X	X	pH >10	5
-02	B24-001-MWS	07/17/23	15:35	GW	LEP	X	X	pH >10	5
-03	TB-01	07/17/23	—	W	LEP	X			4

SAMPLE HANDLING
Filtration
☐ Done
☐ Not needed
☐ Lab to do
Preservation
☐ Lab to do
(Please specify below)

Container Type	V	A
Preservative	B	A

7/18/23 0145
7/18/23 0145

Relinquished By:	Date/Time	Received By:	Date/Time
	07/17/23 16:00		7.17.23 1600
	7.17.23 1800		7/17/23 1800
	7/17/23 2100		7/17 2100

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.

FORM NO. 01-01 (rev. OCT-07)

ANALYTICAL REPORT

Lab Number:	L2341125
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:	07/25/23

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), OH (CL108), OR (MA-1316), PA (68-03671), RI (LAO00065), TX (T104704476), VT (VT-0935), VA (460195), USDA (Permit #525-23-122-91930).

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: L2341125
Report Date: 07/25/23

Alpha Sample ID	Client ID	Matrix	Sample Location	Collection Date/Time	Receive Date
L2341125-01	TMC-OUTLET	WATER	TMC	07/18/23 08:00	07/18/23
L2341125-02	TMC-TM04	WATER	TMC	07/18/23 08:10	07/18/23
L2341125-03	TMC-BEND	WATER	TMC	07/18/23 08:20	07/18/23
L2341125-04	TMC-RAIL-BRIDGE	WATER	TMC	07/18/23 08:30	07/18/23
L2341125-05	DUP	WATER	TMC	07/18/23 00:00	07/18/23
L2341125-06	TRIP BLANK	WATER	TMC	07/18/23 00:00	07/18/23

Project Name:	TMC SW SAMPLING	**Lab Number:**	L2341125
Project Number:	21010216	**Report Date:**	07/25/23

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, solids and tissues are reported on a dry 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	**Lab Number:**	L2341125
Project Number:	21010216	**Report Date:**	07/25/23

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.

Semivolatile Organics

The WG1806558-4/-5 MS/MSD recoveries, performed on L2341125-01, are below the acceptance criteria for 3,3'-dichlorobenzidine (0%) due to the concentration of this compound in the MS/MSD falling below the reported detection limit.

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 O'Neill

Title: Technical Director/Representative Date: 07/25/23

ORGANICS

VOLATILES

Project Name: TMC SW SAMPLING
Project Number: 21010216
Lab Number: L2341125
Report Date: 07/25/23

SAMPLE RESULTS

Lab ID: L2341125-01
Client ID: TMC-OUTLET
Sample Location: TMC

Date Collected: 07/18/23 08:00
Date Received: 07/18/23
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8260D
Analytical Date: 07/25/23 07:00
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	2.1	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	14		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	0.76		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	5.7		ug/l	5.0	1.9	1
Benzene	0.62		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	0.44	J	ug/l	0.75	0.20	1

Project Name: TMC SW SAMPLING
Project Number: 21010216
Lab Number: L2341125
Report Date: 07/25/23

SAMPLE RESULTS

Lab ID: L2341125-01
Client ID: TMC-OUTLET
Sample Location: TMC
Date Collected: 07/18/23 08:00
Date Received: 07/18/23
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	0.50	J	ug/l	1.0	0.33	1
o-Xylene	ND		ug/l	1.0	0.39	1
Xylenes, Total	0.50	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	94		70-130
Toluene-d8	95		70-130
4-Bromofluorobenzene	94		70-130
Dibromofluoromethane	97		70-130

Project Name: TMC SW SAMPLING
Lab Number: L2341125
Project Number: 21010216
Report Date: 07/25/23

SAMPLE RESULTS

Lab ID: L2341125-01
Client ID: TMC-OUTLET
Sample Location: TMC
Date Collected: 07/18/23 08:00
Date Received: 07/18/23
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8260D-SIM(M)
Analytical Date: 07/25/23 07:00
Analyst: MCM

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
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	94		70-130
4-Bromofluorobenzene	90		70-130

Project Name: TMC SW SAMPLING
Project Number: 21010216
Lab Number: L2341125
Report Date: 07/25/23

SAMPLE RESULTS

Lab ID: L2341125-02
Client ID: TMC-TM04
Sample Location: TMC

Date Collected: 07/18/23 08:10
Date Received: 07/18/23
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8260D
Analytical Date: 07/21/23 09:55
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	1.6	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	12		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	0.68	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	4.7	J	ug/l	5.0	1.9	1
Benzene	0.51		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	0.37	J	ug/l	0.75	0.20	1

Project Name: TMC SW SAMPLING **Lab Number:** L2341125

Project Number: 21010216 **Report Date:** 07/25/23

SAMPLE RESULTS

Lab ID: L2341125-02 Date Collected: 07/18/23 08:10

Client ID: TMC-TM04 Date Received: 07/18/23

Sample Location: TMC 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	0.47	J	ug/l	1.0	0.33	1
o-Xylene	ND		ug/l	1.0	0.39	1
Xylenes, Total	0.47	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	93		70-130
Toluene-d8	97		70-130
4-Bromofluorobenzene	96		70-130
Dibromofluoromethane	96		70-130

Project Name: TMC SW SAMPLING
Lab Number: L2341125
Project Number: 21010216
Report Date: 07/25/23

SAMPLE RESULTS

Lab ID: L2341125-02
Client ID: TMC-TM04
Sample Location: TMC

Date Collected: 07/18/23 08:10
Date Received: 07/18/23
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8260D-SIM(M)
Analytical Date: 07/21/23 09:55
Analyst: MCM

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
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	91		70-130
4-Bromofluorobenzene	91		70-130

Project Name: TMC SW SAMPLING
Project Number: 21010216
Lab Number: L2341125
Report Date: 07/25/23

SAMPLE RESULTS

Lab ID: L2341125-03
Client ID: TMC-BEND
Sample Location: TMC

Date Collected: 07/18/23 08:20
Date Received: 07/18/23
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8260D
Analytical Date: 07/25/23 07:27
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	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	7.1		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	0.25	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 **Lab Number:** L2341125

Project Number: 21010216 **Report Date:** 07/25/23

SAMPLE RESULTS

Lab ID: L2341125-03 Date Collected: 07/18/23 08:20

Client ID: TMC-BEND Date Received: 07/18/23

Sample Location: TMC 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	94		70-130
Toluene-d8	95		70-130
4-Bromofluorobenzene	96		70-130
Dibromofluoromethane	97		70-130

Project Name: TMC SW SAMPLING
Lab Number: L2341125
Project Number: 21010216
Report Date: 07/25/23

SAMPLE RESULTS

Lab ID: L2341125-03
Client ID: TMC-BEND
Sample Location: TMC
Date Collected: 07/18/23 08:20
Date Received: 07/18/23
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8260D-SIM(M)
Analytical Date: 07/25/23 07:27
Analyst: MCM

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
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	94		70-130
4-Bromofluorobenzene	91		70-130

Project Name: TMC SW SAMPLING
Project Number: 21010216
Lab Number: L2341125
Report Date: 07/25/23

SAMPLE RESULTS

Lab ID: L2341125-04
Client ID: TMC-RAIL-BRIDGE
Sample Location: TMC

Date Collected: 07/18/23 08:30
Date Received: 07/18/23
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8260D
Analytical Date: 07/21/23 11:46
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	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	5.9		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: L2341125
Report Date: 07/25/23

SAMPLE RESULTS

Lab ID: L2341125-04
Client ID: TMC-RAIL-BRIDGE
Sample Location: TMC
Date Collected: 07/18/23 08:30
Date Received: 07/18/23
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	90		70-130
Toluene-d8	96		70-130
4-Bromofluorobenzene	96		70-130
Dibromofluoromethane	93		70-130

Project Name: TMC SW SAMPLING
Lab Number: L2341125
Project Number: 21010216
Report Date: 07/25/23

SAMPLE RESULTS

Lab ID: L2341125-04
Client ID: TMC-RAIL-BRIDGE
Sample Location: TMC
Date Collected: 07/18/23 08:30
Date Received: 07/18/23
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8260D-SIM(M)
Analytical Date: 07/21/23 11:46
Analyst: MCM

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
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	91		70-130
4-Bromofluorobenzene	91		70-130

Project Name: TMC SW SAMPLING
Project Number: 21010216
Lab Number: L2341125
Report Date: 07/25/23

SAMPLE RESULTS

Lab ID: L2341125-05
Client ID: DUP
Sample Location: TMC

Date Collected: 07/18/23 00:00
Date Received: 07/18/23
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8260D
Analytical Date: 07/21/23 12:14
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	1.8	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	12		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	0.71	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	0.56		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	0.36	J	ug/l	0.75	0.20	1

Project Name: TMC SW SAMPLING **Lab Number:** L2341125

Project Number: 21010216 **Report Date:** 07/25/23

SAMPLE RESULTS

Lab ID: L2341125-05 Date Collected: 07/18/23 00:00

Client ID: DUP Date Received: 07/18/23

Sample Location: TMC 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	0.48	J	ug/l	1.0	0.33	1
o-Xylene	ND		ug/l	1.0	0.39	1
Xylenes, Total	0.48	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	91		70-130
Toluene-d8	97		70-130
4-Bromofluorobenzene	93		70-130
Dibromofluoromethane	97		70-130

Project Name: TMC SW SAMPLING
Lab Number: L2341125
Project Number: 21010216
Report Date: 07/25/23

SAMPLE RESULTS

Lab ID: L2341125-05
Client ID: DUP
Sample Location: TMC
Date Collected: 07/18/23 00:00
Date Received: 07/18/23
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8260D-SIM(M)
Analytical Date: 07/21/23 12:14
Analyst: MCM

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
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	91		70-130
4-Bromofluorobenzene	90		70-130

Project Name: TMC SW SAMPLING
Project Number: 21010216
Lab Number: L2341125
Report Date: 07/25/23

SAMPLE RESULTS

Lab ID: L2341125-06
Client ID: TRIP BLANK
Sample Location: TMC

Date Collected: 07/18/23 00:00
Date Received: 07/18/23
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8260D
Analytical Date: 07/21/23 08:32
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	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 **Lab Number:** L2341125

Project Number: 21010216 **Report Date:** 07/25/23

SAMPLE RESULTS

Lab ID: L2341125-06 Date Collected: 07/18/23 00:00

Client ID: TRIP BLANK Date Received: 07/18/23

Sample Location: TMC 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	91		70-130
Toluene-d8	95		70-130
4-Bromofluorobenzene	96		70-130
Dibromofluoromethane	94		70-130

Project Name: TMC SW SAMPLING
Lab Number: L2341125
Project Number: 21010216
Report Date: 07/25/23

SAMPLE RESULTS

Lab ID: L2341125-06
Client ID: TRIP BLANK
Sample Location: TMC
Date Collected: 07/18/23 00:00
Date Received: 07/18/23
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8260D-SIM(M)
Analytical Date: 07/21/23 08:32
Analyst: MCM

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
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	89		70-130
4-Bromofluorobenzene	89		70-130

Project Name: TMC SW SAMPLING
Project Number: 21010216
Lab Number: L2341125
Report Date: 07/25/23

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260D
Analytical Date: 07/21/23 06:42
Analyst: MCM

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 02,04-06 Batch: WG1806389-5					
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: L2341125
Report Date: 07/25/23

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260D
Analytical Date: 07/21/23 06:42
Analyst: MCM

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 02,04-06 Batch: WG1806389-5					
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: L2341125
Report Date: 07/25/23

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260D
Analytical Date: 07/21/23 06:42
Analyst: MCM

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 02,04-06 Batch: WG1806389-5					

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	92		70-130
Toluene-d8	97		70-130
4-Bromofluorobenzene	95		70-130
Dibromofluoromethane	96		70-130

Project Name: TMC SW SAMPLING
Project Number: 21010216
Lab Number: L2341125
Report Date: 07/25/23

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260D-SIM(M)
Analytical Date: 07/21/23 06:42
Analyst: MCM

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS-SIM - Westborough Lab for sample(s): 02,04-06 Batch: WG1806390-5					
1,1,2,2-Tetrachloroethane	ND		ug/l	0.050	0.006

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	91		70-130
4-Bromofluorobenzene	92		70-130

Project Name: TMC SW SAMPLING
Project Number: 21010216
Lab Number: L2341125
Report Date: 07/25/23

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260D-SIM(M)
Analytical Date: 07/25/23 05:37
Analyst: MCM

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS-SIM - Westborough Lab for sample(s): 01,03 Batch: WG1807362-5					
1,1,2,2-Tetrachloroethane	ND		ug/l	0.050	0.006

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	94		70-130
4-Bromofluorobenzene	92		70-130

Project Name: TMC SW SAMPLING
Project Number: 21010216
Lab Number: L2341125
Report Date: 07/25/23

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260D
Analytical Date: 07/25/23 05:37
Analyst: MCM

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 01,03 Batch: WG1807380-5					
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: L2341125
Report Date: 07/25/23

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260D
Analytical Date: 07/25/23 05:37
Analyst: MCM

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 01,03 Batch: WG1807380-5					
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: L2341125
Report Date: 07/25/23

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260D
Analytical Date: 07/25/23 05:37
Analyst: MCM

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 01,03 Batch: WG1807380-5					

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

Lab Control Sample Analysis

Batch Quality Control

Project Name: TMC SW SAMPLING

Project Number: 21010216

Lab Number: L2341125

Report Date: 07/25/23

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 02,04-06 Batch: WG1806389-3 WG1806389-4								
Dichlorodifluoromethane	110		110		36-147	0		20
Chloromethane	86		88		64-130	2		20
Vinyl chloride	97		96		55-140	1		20
Bromomethane	80		77		39-139	4		20
Chloroethane	82		81		55-138	1		20
Trichlorofluoromethane	93		92		62-150	1		20
1,1-Dichloroethene	94		91		61-145	3		20
Carbon disulfide	91		88		51-130	3		20
1,1,2-Trichloro-1,2,2-Trifluoroethane	97		96		70-130	1		20
Methylene chloride	90		86		70-130	5		20
Acetone	100		90		58-148	11		20
trans-1,2-Dichloroethene	92		96		70-130	4		20
Methyl Acetate	98		97		70-130	1		20
Methyl tert butyl ether	96		95		63-130	1		20
1,1-Dichloroethane	90		90		70-130	0		20
cis-1,2-Dichloroethene	91		92		70-130	1		20
Cyclohexane	90		91		70-130	1		20
Chloroform	90		88		70-130	2		20
Carbon tetrachloride	95		96		63-132	1		20
1,1,1-Trichloroethane	93		95		67-130	2		20
2-Butanone	86		86		63-138	0		20
Benzene	90		89		70-130	1		20
1,2-Dichloroethane	94		94		70-130	0		20

Lab Control Sample Analysis
Batch Quality Control

Project Name: TMC SW SAMPLING
Project Number: 21010216
Lab Number: L2341125
Report Date: 07/25/23

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 02,04-06 Batch: WG1806389-3 WG1806389-4								
Trichloroethene	90		90		70-130	0		20
1,2-Dichloropropane	88		87		70-130	1		20
Bromodichloromethane	88		89		67-130	1		20
cis-1,3-Dichloropropene	88		85		70-130	3		20
Toluene	98		96		70-130	2		20
Tetrachloroethene	110		110		70-130	0		20
4-Methyl-2-pentanone	88		84		59-130	5		20
trans-1,3-Dichloropropene	97		94		70-130	3		20
1,1,2-Trichloroethane	97		97		70-130	0		20
Dibromochloromethane	97		96		63-130	1		20
1,2-Dibromoethane	100		97		70-130	3		20
2-Hexanone	87		85		57-130	2		20
Chlorobenzene	97		95		75-130	2		20
Ethylbenzene	100		97		70-130	3		20
p/m-Xylene	95		95		70-130	0		20
o-Xylene	100		95		70-130	5		20
Styrene	95		95		70-130	0		20
Bromoform	98		92		54-136	6		20
Isopropylbenzene	100		96		70-130	4		20
1,1,2,2-Tetrachloroethane	100		94		67-130	6		20
1,3-Dichlorobenzene	110		100		70-130	10		20
1,4-Dichlorobenzene	100		100		70-130	0		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: L2341125
Report Date: 07/25/23

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 02,04-06 Batch: WG1806389-3 WG1806389-4								
1,2-Dibromo-3-chloropropane	96		91		41-144	5		20
1,2,4-Trichlorobenzene	110		110		70-130	0		20
1,2,3-Trichlorobenzene	110		110		70-130	0		20

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
1,2-Dichloroethane-d4	86		87		70-130
Toluene-d8	98		97		70-130
4-Bromofluorobenzene	98		93		70-130
Dibromofluoromethane	89		90		70-130

Lab Control Sample Analysis

Batch Quality Control

Project Name: TMC SW SAMPLING
Project Number: 21010216

Lab Number: L2341125
Report Date: 07/25/23

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS-SIM - Westborough Lab Associated sample(s): 02,04-06 Batch: WG1806390-3 WG1806390-4								
1,1,2,2-Tetrachloroethane	89		89		70-130	0		25

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
1,2-Dichloroethane-d4	91		90		70-130
4-Bromofluorobenzene	91		90		70-130

Lab Control Sample Analysis
Batch Quality Control

Project Name: TMC SW SAMPLING
Project Number: 21010216

Lab Number: L2341125
Report Date: 07/25/23

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: WG1807362-3 WG1807362-4								
1,1,2,2-Tetrachloroethane	110		107		70-130	3		25

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
1,2-Dichloroethane-d4	96		94		70-130
4-Bromofluorobenzene	93		92		70-130

Lab Control Sample Analysis
Batch Quality Control

Project Name: TMC SW SAMPLING
Project Number: 21010216

Lab Number: L2341125
Report Date: 07/25/23

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01,03 Batch: WG1807380-3 WG1807380-4								
Dichlorodifluoromethane	140		140		36-147	0		20
Chloromethane	110		110		64-130	0		20
Vinyl chloride	120		120		55-140	0		20
Bromomethane	84		90		39-139	7		20
Chloroethane	98		100		55-138	2		20
Trichlorofluoromethane	110		110		62-150	0		20
1,1-Dichloroethene	110		110		61-145	0		20
Carbon disulfide	110		110		51-130	0		20
1,1,2-Trichloro-1,2,2-Trifluoroethane	120		120		70-130	0		20
Methylene chloride	100		110		70-130	10		20
Acetone	100		110		58-148	10		20
trans-1,2-Dichloroethene	100		110		70-130	10		20
Methyl Acetate	110		110		70-130	0		20
Methyl tert butyl ether	100		110		63-130	10		20
1,1-Dichloroethane	110		110		70-130	0		20
cis-1,2-Dichloroethene	110		110		70-130	0		20
Cyclohexane	110		110		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		98		63-138	1		20
Benzene	100		100		70-130	0		20
1,2-Dichloroethane	110		110		70-130	0		20

Lab Control Sample Analysis
Batch Quality Control

Project Name: TMC SW SAMPLING
Project Number: 21010216

Lab Number: L2341125
Report Date: 07/25/23

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01,03 Batch: WG1807380-3 WG1807380-4								
Trichloroethene	100		110		70-130	10		20
1,2-Dichloropropane	100		100		70-130	0		20
Bromodichloromethane	100		100		67-130	0		20
cis-1,3-Dichloropropene	97		99		70-130	2		20
Toluene	110		110		70-130	0		20
Tetrachloroethene	120		120		70-130	0		20
4-Methyl-2-pentanone	87		96		59-130	10		20
trans-1,3-Dichloropropene	110		110		70-130	0		20
1,1,2-Trichloroethane	110		110		70-130	0		20
Dibromochloromethane	100		110		63-130	10		20
1,2-Dibromoethane	110		110		70-130	0		20
2-Hexanone	92		94		57-130	2		20
Chlorobenzene	110		110		75-130	0		20
Ethylbenzene	110		110		70-130	0		20
p/m-Xylene	110		110		70-130	0		20
o-Xylene	110		110		70-130	0		20
Styrene	110		105		70-130	5		20
Bromoform	98		100		54-136	2		20
Isopropylbenzene	110		110		70-130	0		20
1,1,2,2-Tetrachloroethane	110		110		67-130	0		20
1,3-Dichlorobenzene	120		110		70-130	9		20
1,4-Dichlorobenzene	110		110		70-130	0		20
1,2-Dichlorobenzene	110		110		70-130	0		20

Lab Control Sample Analysis

Batch Quality Control

Project Name: TMC SW SAMPLING
Project Number: 21010216

Lab Number: L2341125
Report Date: 07/25/23

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01,03 Batch: WG1807380-3 WG1807380-4								
1,2-Dibromo-3-chloropropane	98		100		41-144	2		20
1,2,4-Trichlorobenzene	120		120		70-130	0		20
1,2,3-Trichlorobenzene	120		120		70-130	0		20

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
1,2-Dichloroethane-d4	91		91		70-130
Toluene-d8	99		99		70-130
4-Bromofluorobenzene	93		92		70-130
Dibromofluoromethane	91		92		70-130

Matrix Spike Analysis

Batch Quality Control

Project Name: TMC SW SAMPLING
Project Number: 21010216
Lab Number: L2341125
Report Date: 07/25/23

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): 01,03 QC Batch ID: WG1807362-6 WG1807362-7 QC Sample: L2341125-01 Client ID: TMC-OUTLET												
1,1,2,2-Tetrachloroethane	ND	0.1	0.114	114		0.111	111		70-130	3		30

Surrogate	MS % Recovery	MS Qualifier	MSD % Recovery	MSD Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	94		93		70-130
4-Bromofluorobenzene	92		91		70-130

Matrix Spike Analysis
Batch Quality Control

Project Name: TMC SW SAMPLING
Project Number: 21010216
Lab Number: L2341125
Report Date: 07/25/23

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): 01,03 QC Batch ID: WG1807380-6 WG1807380-7 QC Sample: L2341125-01 Client ID: TMC-OUTLET												
Dichlorodifluoromethane	ND	10	15	**150**	Q	15	**150**	Q	36-147	0		20
Chloromethane	ND	10	12	120		12	120		64-130	0		20
Vinyl chloride	ND	10	13	130		13	130		55-140	0		20
Bromomethane	ND	10	8.9	89		9.5	95		39-139	7		20
Chloroethane	ND	10	10	100		10	100		55-138	0		20
Trichlorofluoromethane	ND	10	12	120		12	120		62-150	0		20
1,1-Dichloroethene	ND	10	12	120		12	120		61-145	0		20
Carbon disulfide	2.1J	10	14	**140**	Q	13	130		51-130	7		20
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	10	13	130		12	120		70-130	8		20
Methylene chloride	ND	10	10	100		10	100		70-130	0		20
Acetone	14	10	24	100		25	110		58-148	4		20
trans-1,2-Dichloroethene	ND	10	12	120		11	110		70-130	9		20
Methyl Acetate	ND	10	11	110		11	110		70-130	0		20
Methyl tert butyl ether	ND	10	11	110		11	110		63-130	0		20
1,1-Dichloroethane	ND	10	11	110		11	110		70-130	0		20
cis-1,2-Dichloroethene	ND	10	11	110		11	110		70-130	0		20
Cyclohexane	ND	10	12	120		12	120		70-130	0		20
Chloroform	0.76	10	11	102		11	102		70-130	0		20
Carbon tetrachloride	ND	10	12	120		12	120		63-132	0		20
1,1,1-Trichloroethane	ND	10	12	120		12	120		67-130	0		20
2-Butanone	5.7	10	16	103		16	103		63-138	0		20
Benzene	0.62	10	12	114		11	104		70-130	9		20
1,2-Dichloroethane	ND	10	11	110		11	110		70-130	0		20

Matrix Spike Analysis
Batch Quality Control

Project Name: TMC SW SAMPLING
Project Number: 21010216
Lab Number: L2341125
Report Date: 07/25/23

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): 01,03 QC Batch ID: WG1807380-6 WG1807380-7 QC Sample: L2341125-01 Client ID: TMC-OUTLET												
Trichloroethene	ND	10	11	110		11	110		70-130	0		20
1,2-Dichloropropane	ND	10	11	110		10	100		70-130	10		20
Bromodichloromethane	ND	10	10	100		10	100		67-130	0		20
cis-1,3-Dichloropropene	ND	10	9.7	97		9.4	94		70-130	3		20
Toluene	0.44J	10	12	120		12	120		70-130	0		20
Tetrachloroethene	ND	10	13	130		13	130		70-130	0		20
4-Methyl-2-pentanone	ND	10	9.5	95		10	100		59-130	5		20
trans-1,3-Dichloropropene	ND	10	11	110		11	110		70-130	0		20
1,1,2-Trichloroethane	ND	10	11	110		11	110		70-130	0		20
Dibromochloromethane	ND	10	11	110		11	110		63-130	0		20
1,2-Dibromoethane	ND	10	11	110		11	110		70-130	0		20
2-Hexanone	ND	10	9.3	93		9.3	93		57-130	0		20
Chlorobenzene	ND	10	11	110		11	110		75-130	0		20
Ethylbenzene	ND	10	12	120		12	120		70-130	0		20
p/m-Xylene	0.50J	20	23	115		23	115		70-130	0		20
o-Xylene	ND	20	22	110		22	110		70-130	0		20
Styrene	ND	20	22	110		22	110		70-130	0		20
Bromoform	ND	10	10	100		10	100		54-136	0		20
Isopropylbenzene	ND	10	12	120		11	110		70-130	9		20
1,1,2,2-Tetrachloroethane	ND	10	11	110		11	110		67-130	0		20
1,3-Dichlorobenzene	ND	10	12	120		11	110		70-130	9		20
1,4-Dichlorobenzene	ND	10	11	110		11	110		70-130	0		20
1,2-Dichlorobenzene	ND	10	11	110		11	110		70-130	0		20

Matrix Spike Analysis

Batch Quality Control

Project Name: TMC SW SAMPLING
Project Number: 21010216
Lab Number: L2341125
Report Date: 07/25/23

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): 01,03 QC Batch ID: WG1807380-6 WG1807380-7 QC Sample: L2341125-01 Client ID: TMC-OUTLET												
1,2-Dibromo-3-chloropropane	ND	10	10	100		9.7	97		41-144	3		20
1,2,4-Trichlorobenzene	ND	10	12	120		12	120		70-130	0		20
1,2,3-Trichlorobenzene	ND	10	12	120		12	120		70-130	0		20

Surrogate	MS % Recovery	MS Qualifier	MSD % Recovery	MSD Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	92		88		70-130
4-Bromofluorobenzene	95		90		70-130
Dibromofluoromethane	91		90		70-130
Toluene-d8	100		97		70-130

SEMIVOLATILES

Project Name: TMC SW SAMPLING
Project Number: 21010216
Lab Number: L2341125
Report Date: 07/25/23

SAMPLE RESULTS

Lab ID: L2341125-01
Client ID: TMC-OUTLET
Sample Location: TMC

Date Collected: 07/18/23 08:00
Date Received: 07/18/23
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8270E
Analytical Date: 07/23/23 20:09
Analyst: SZ

Extraction Method: EPA 3510C
Extraction Date: 07/22/23 23:45

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Benzaldehyde	ND		ug/l	5.0	0.53	1
Phenol	ND		ug/l	5.0	0.57	1
Bis(2-chloroethyl)ether	ND		ug/l	2.0	0.50	1
2-Chlorophenol	ND		ug/l	2.0	0.48	1
2-Methylphenol	ND		ug/l	5.0	0.49	1
Bis(2-chloroisopropyl)ether	ND		ug/l	2.0	0.53	1
Acetophenone	ND		ug/l	5.0	0.53	1
n-Nitrosodi-n-propylamine	ND		ug/l	5.0	0.64	1
3-Methylphenol/4-Methylphenol	1.2	J	ug/l	5.0	0.48	1
Hexachloroethane	ND		ug/l	2.0	0.58	1
Nitrobenzene	ND		ug/l	1.4	0.77	1
Isophorone	ND		ug/l	5.0	1.2	1
2,4-Dimethylphenol	ND		ug/l	5.0	1.8	1
Bis(2-chloroethoxy)methane	ND		ug/l	5.0	0.50	1
2,4-Dichlorophenol	ND		ug/l	5.0	0.41	1
Naphthalene	ND		ug/l	2.0	0.46	1
4-Chloroaniline	ND		ug/l	3.7	1.1	1
Hexachlorobutadiene	ND		ug/l	2.0	0.66	1
Caprolactam	ND		ug/l	10	3.3	1
2-Methylnaphthalene	ND		ug/l	2.0	0.45	1
Hexachlorocyclopentadiene	ND		ug/l	20	0.69	1
1,2,4,5-Tetrachlorobenzene	ND		ug/l	1.7	0.44	1
2,4,6-Trichlorophenol	ND		ug/l	5.0	0.61	1
2,4,5-Trichlorophenol	ND		ug/l	5.0	0.77	1
Biphenyl	ND		ug/l	2.0	0.46	1
2-Chloronaphthalene	ND		ug/l	2.0	0.44	1
2-Nitroaniline	ND		ug/l	5.0	0.50	1
2,6-Dinitrotoluene	ND		ug/l	5.0	0.93	1

Project Name: TMC SW SAMPLING **Lab Number:** L2341125

Project Number: 21010216 **Report Date:** 07/25/23

SAMPLE RESULTS

Lab ID: L2341125-01 Date Collected: 07/18/23 08:00

Client ID: TMC-OUTLET Date Received: 07/18/23

Sample Location: TMC 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	0.46	1
Acenaphthene	ND		ug/l	2.0	0.53	1
2,4-Dinitrophenol	ND		ug/l	20	6.6	1
2,4-Dinitrotoluene	ND		ug/l	5.0	1.2	1
2,3,4,6-Tetrachlorophenol	ND		ug/l	5.0	0.84	1
Diethyl phthalate	ND		ug/l	5.0	0.38	1
Fluorene	0.42	J	ug/l	2.0	0.41	1
4-Nitroaniline	ND		ug/l	5.0	0.80	1
NDPA/DPA	ND		ug/l	2.0	0.42	1
Hexachlorobenzene	ND		ug/l	2.0	0.46	1
Pentachlorophenol	ND		ug/l	10	1.8	1
Phenanthrene	0.56	J	ug/l	2.0	0.33	1
Anthracene	ND		ug/l	2.0	0.33	1
Carbazole	0.63	J	ug/l	2.0	0.49	1
Di-n-butylphthalate	ND		ug/l	5.0	0.39	1
Fluoranthene	ND		ug/l	2.0	0.26	1
Pyrene	ND		ug/l	2.0	0.28	1
3,3'-Dichlorobenzidine	ND		ug/l	5.0	1.6	1
Benzo(a)anthracene	ND		ug/l	2.0	0.32	1
Chrysene	ND		ug/l	1.4	0.34	1
Bis(2-ethylhexyl)phthalate	ND		ug/l	3.0	1.5	1
Di-n-octylphthalate	ND		ug/l	5.0	1.3	1
Benzo(b)fluoranthene	ND		ug/l	2.0	0.35	1
Benzo(k)fluoranthene	ND		ug/l	2.0	0.37	1
Benzo(a)pyrene	ND		ug/l	2.0	0.41	1
Indeno(1,2,3-cd)pyrene	ND		ug/l	2.0	0.40	1
Dibenzo(a,h)anthracene	ND		ug/l	2.0	0.32	1
Benzo(ghi)perylene	ND		ug/l	2.0	0.30	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	69		21-120
Phenol-d6	56		10-120
Nitrobenzene-d5	93		23-120
2-Fluorobiphenyl	82		15-120
2,4,6-Tribromophenol	111		10-120
4-Terphenyl-d14	72		41-149

Project Name: TMC SW SAMPLING
Project Number: 21010216

Lab Number: L2341125
Report Date: 07/25/23

SAMPLE RESULTS

Lab ID: L2341125-01
Client ID: TMC-OUTLET
Sample Location: TMC

Date Collected: 07/18/23 08:00
Date Received: 07/18/23
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8270E-SIM
Analytical Date: 07/25/23 12:12
Analyst: RP

Extraction Method: EPA 3510C
Extraction Date: 07/24/23 20:37

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS-SIM - Westborough Lab						
Naphthalene	ND		ug/l	0.10	0.05	1
2-Methylnaphthalene	ND		ug/l	0.10	0.02	1
Acenaphthylene	0.10		ug/l	0.10	0.01	1
Acenaphthene	0.24		ug/l	0.10	0.01	1
Fluorene	0.27		ug/l	0.10	0.01	1
Phenanthrene	0.35		ug/l	0.05	0.02	1
Anthracene	0.07	J	ug/l	0.10	0.01	1
Fluoranthene	0.11		ug/l	0.10	0.02	1
Pyrene	0.08	J	ug/l	0.10	0.02	1
Benzo(a)anthracene	0.02	J	ug/l	0.05	0.02	1
Chrysene	ND		ug/l	0.10	0.01	1
Benzo(b)fluoranthene	ND		ug/l	0.05	0.01	1
Benzo(k)fluoranthene	ND		ug/l	0.10	0.01	1
Benzo(a)pyrene	ND		ug/l	0.10	0.02	1
Indeno(1,2,3-cd)pyrene	ND		ug/l	0.10	0.01	1
Dibenzo(a,h)anthracene	ND		ug/l	0.05	0.01	1
Benzo(ghi)perylene	ND		ug/l	0.10	0.01	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
Nitrobenzene-d5	65		23-120
2-Fluorobiphenyl	65		15-120
4-Terphenyl-d14	69		41-149

Project Name: TMC SW SAMPLING
Project Number: 21010216
Lab Number: L2341125
Report Date: 07/25/23

SAMPLE RESULTS

Lab ID: L2341125-02
Client ID: TMC-TM04
Sample Location: TMC

Date Collected: 07/18/23 08:10
Date Received: 07/18/23
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8270E
Analytical Date: 07/23/23 21:17
Analyst: SZ

Extraction Method: EPA 3510C
Extraction Date: 07/22/23 23:45

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Benzaldehyde	ND		ug/l	5.0	0.53	1
Phenol	1.6	J	ug/l	5.0	0.57	1
Bis(2-chloroethyl)ether	ND		ug/l	2.0	0.50	1
2-Chlorophenol	ND		ug/l	2.0	0.48	1
2-Methylphenol	ND		ug/l	5.0	0.49	1
Bis(2-chloroisopropyl)ether	ND		ug/l	2.0	0.53	1
Acetophenone	ND		ug/l	5.0	0.53	1
n-Nitrosodi-n-propylamine	ND		ug/l	5.0	0.64	1
3-Methylphenol/4-Methylphenol	1.4	J	ug/l	5.0	0.48	1
Hexachloroethane	ND		ug/l	2.0	0.58	1
Nitrobenzene	ND		ug/l	1.4	0.77	1
Isophorone	ND		ug/l	5.0	1.2	1
2,4-Dimethylphenol	1.9	J	ug/l	5.0	1.8	1
Bis(2-chloroethoxy)methane	ND		ug/l	5.0	0.50	1
2,4-Dichlorophenol	ND		ug/l	5.0	0.41	1
Naphthalene	ND		ug/l	2.0	0.46	1
4-Chloroaniline	ND		ug/l	3.7	1.1	1
Hexachlorobutadiene	ND		ug/l	2.0	0.66	1
Caprolactam	ND		ug/l	10	3.3	1
2-Methylnaphthalene	ND		ug/l	2.0	0.45	1
Hexachlorocyclopentadiene	ND		ug/l	20	0.69	1
1,2,4,5-Tetrachlorobenzene	ND		ug/l	1.7	0.44	1
2,4,6-Trichlorophenol	ND		ug/l	5.0	0.61	1
2,4,5-Trichlorophenol	ND		ug/l	5.0	0.77	1
Biphenyl	ND		ug/l	2.0	0.46	1
2-Chloronaphthalene	ND		ug/l	2.0	0.44	1
2-Nitroaniline	ND		ug/l	5.0	0.50	1
2,6-Dinitrotoluene	ND		ug/l	5.0	0.93	1

Project Name: TMC SW SAMPLING **Lab Number:** L2341125

Project Number: 21010216 **Report Date:** 07/25/23

SAMPLE RESULTS

Lab ID: L2341125-02 Date Collected: 07/18/23 08:10

Client ID: TMC-TM04 Date Received: 07/18/23

Sample Location: TMC 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	0.46	1
Acenaphthene	ND		ug/l	2.0	0.53	1
2,4-Dinitrophenol	ND		ug/l	20	6.6	1
2,4-Dinitrotoluene	ND		ug/l	5.0	1.2	1
2,3,4,6-Tetrachlorophenol	ND		ug/l	5.0	0.84	1
Diethyl phthalate	ND		ug/l	5.0	0.38	1
Fluorene	0.46	J	ug/l	2.0	0.41	1
4-Nitroaniline	ND		ug/l	5.0	0.80	1
NDPA/DPA	ND		ug/l	2.0	0.42	1
Hexachlorobenzene	ND		ug/l	2.0	0.46	1
Pentachlorophenol	ND		ug/l	10	1.8	1
Phenanthrene	0.58	J	ug/l	2.0	0.33	1
Anthracene	ND		ug/l	2.0	0.33	1
Carbazole	0.74	J	ug/l	2.0	0.49	1
Di-n-butylphthalate	ND		ug/l	5.0	0.39	1
Fluoranthene	ND		ug/l	2.0	0.26	1
Pyrene	ND		ug/l	2.0	0.28	1
3,3'-Dichlorobenzidine	ND		ug/l	5.0	1.6	1
Benzo(a)anthracene	ND		ug/l	2.0	0.32	1
Chrysene	ND		ug/l	1.4	0.34	1
Bis(2-ethylhexyl)phthalate	ND		ug/l	3.0	1.5	1
Di-n-octylphthalate	ND		ug/l	5.0	1.3	1
Benzo(b)fluoranthene	ND		ug/l	2.0	0.35	1
Benzo(k)fluoranthene	ND		ug/l	2.0	0.37	1
Benzo(a)pyrene	ND		ug/l	2.0	0.41	1
Indeno(1,2,3-cd)pyrene	ND		ug/l	2.0	0.40	1
Dibenzo(a,h)anthracene	ND		ug/l	2.0	0.32	1
Benzo(ghi)perylene	ND		ug/l	2.0	0.30	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	79		21-120
Phenol-d6	65		10-120
Nitrobenzene-d5	95		23-120
2-Fluorobiphenyl	89		15-120
2,4,6-Tribromophenol	117		10-120
4-Terphenyl-d14	80		41-149

Project Name: TMC SW SAMPLING
Project Number: 21010216
Lab Number: L2341125
Report Date: 07/25/23

SAMPLE RESULTS

Lab ID: L2341125-02
Client ID: TMC-TM04
Sample Location: TMC

Date Collected: 07/18/23 08:10
Date Received: 07/18/23
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8270E-SIM
Analytical Date: 07/25/23 13:03
Analyst: RP

Extraction Method: EPA 3510C
Extraction Date: 07/24/23 20:37

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS-SIM - Westborough Lab						
Naphthalene	0.34		ug/l	0.10	0.05	1
2-Methylnaphthalene	0.05	J	ug/l	0.10	0.02	1
Acenaphthylene	0.15		ug/l	0.10	0.01	1
Acenaphthene	0.38		ug/l	0.10	0.01	1
Fluorene	0.42		ug/l	0.10	0.01	1
Phenanthrene	0.47		ug/l	0.05	0.02	1
Anthracene	0.10		ug/l	0.10	0.01	1
Fluoranthene	0.15		ug/l	0.10	0.02	1
Pyrene	0.11		ug/l	0.10	0.02	1
Benzo(a)anthracene	0.04	J	ug/l	0.05	0.02	1
Chrysene	ND		ug/l	0.10	0.01	1
Benzo(b)fluoranthene	ND		ug/l	0.05	0.01	1
Benzo(k)fluoranthene	ND		ug/l	0.10	0.01	1
Benzo(a)pyrene	ND		ug/l	0.10	0.02	1
Indeno(1,2,3-cd)pyrene	ND		ug/l	0.10	0.01	1
Dibenzo(a,h)anthracene	ND		ug/l	0.05	0.01	1
Benzo(ghi)perylene	ND		ug/l	0.10	0.01	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
Nitrobenzene-d5	76		23-120
2-Fluorobiphenyl	75		15-120
4-Terphenyl-d14	82		41-149

Project Name: TMC SW SAMPLING
Project Number: 21010216
Lab Number: L2341125
Report Date: 07/25/23

SAMPLE RESULTS

Lab ID: L2341125-03
Client ID: TMC-BEND
Sample Location: TMC

Date Collected: 07/18/23 08:20
Date Received: 07/18/23
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8270E
Analytical Date: 07/23/23 21:39
Analyst: SZ

Extraction Method: EPA 3510C
Extraction Date: 07/22/23 23:45

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Benzaldehyde	ND		ug/l	5.0	0.53	1
Phenol	ND		ug/l	5.0	0.57	1
Bis(2-chloroethyl)ether	ND		ug/l	2.0	0.50	1
2-Chlorophenol	ND		ug/l	2.0	0.48	1
2-Methylphenol	ND		ug/l	5.0	0.49	1
Bis(2-chloroisopropyl)ether	ND		ug/l	2.0	0.53	1
Acetophenone	ND		ug/l	5.0	0.53	1
n-Nitrosodi-n-propylamine	ND		ug/l	5.0	0.64	1
3-Methylphenol/4-Methylphenol	ND		ug/l	5.0	0.48	1
Hexachloroethane	ND		ug/l	2.0	0.58	1
Nitrobenzene	ND		ug/l	1.4	0.77	1
Isophorone	ND		ug/l	5.0	1.2	1
2,4-Dimethylphenol	ND		ug/l	5.0	1.8	1
Bis(2-chloroethoxy)methane	ND		ug/l	5.0	0.50	1
2,4-Dichlorophenol	ND		ug/l	5.0	0.41	1
Naphthalene	1.3	J	ug/l	2.0	0.46	1
4-Chloroaniline	ND		ug/l	3.7	1.1	1
Hexachlorobutadiene	ND		ug/l	2.0	0.66	1
Caprolactam	ND		ug/l	10	3.3	1
2-Methylnaphthalene	ND		ug/l	2.0	0.45	1
Hexachlorocyclopentadiene	ND		ug/l	20	0.69	1
1,2,4,5-Tetrachlorobenzene	ND		ug/l	1.7	0.44	1
2,4,6-Trichlorophenol	ND		ug/l	5.0	0.61	1
2,4,5-Trichlorophenol	ND		ug/l	5.0	0.77	1
Biphenyl	ND		ug/l	2.0	0.46	1
2-Chloronaphthalene	ND		ug/l	2.0	0.44	1
2-Nitroaniline	ND		ug/l	5.0	0.50	1
2,6-Dinitrotoluene	ND		ug/l	5.0	0.93	1

Project Name: TMC SW SAMPLING **Lab Number:** L2341125

Project Number: 21010216 **Report Date:** 07/25/23

SAMPLE RESULTS

Lab ID: L2341125-03 Date Collected: 07/18/23 08:20

Client ID: TMC-BEND Date Received: 07/18/23

Sample Location: TMC 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	0.46	1
Acenaphthene	ND		ug/l	2.0	0.53	1
2,4-Dinitrophenol	ND		ug/l	20	6.6	1
2,4-Dinitrotoluene	ND		ug/l	5.0	1.2	1
2,3,4,6-Tetrachlorophenol	ND		ug/l	5.0	0.84	1
Diethyl phthalate	ND		ug/l	5.0	0.38	1
Fluorene	ND		ug/l	2.0	0.41	1
4-Nitroaniline	ND		ug/l	5.0	0.80	1
NDPA/DPA	ND		ug/l	2.0	0.42	1
Hexachlorobenzene	ND		ug/l	2.0	0.46	1
Pentachlorophenol	ND		ug/l	10	1.8	1
Phenanthrene	ND		ug/l	2.0	0.33	1
Anthracene	ND		ug/l	2.0	0.33	1
Carbazole	ND		ug/l	2.0	0.49	1
Di-n-butylphthalate	ND		ug/l	5.0	0.39	1
Fluoranthene	ND		ug/l	2.0	0.26	1
Pyrene	ND		ug/l	2.0	0.28	1
3,3'-Dichlorobenzidine	ND		ug/l	5.0	1.6	1
Benzo(a)anthracene	ND		ug/l	2.0	0.32	1
Chrysene	ND		ug/l	1.4	0.34	1
Bis(2-ethylhexyl)phthalate	ND		ug/l	3.0	1.5	1
Di-n-octylphthalate	ND		ug/l	5.0	1.3	1
Benzo(b)fluoranthene	ND		ug/l	2.0	0.35	1
Benzo(k)fluoranthene	ND		ug/l	2.0	0.37	1
Benzo(a)pyrene	ND		ug/l	2.0	0.41	1
Indeno(1,2,3-cd)pyrene	ND		ug/l	2.0	0.40	1
Dibenzo(a,h)anthracene	ND		ug/l	2.0	0.32	1
Benzo(ghi)perylene	ND		ug/l	2.0	0.30	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	70		21-120
Phenol-d6	57		10-120
Nitrobenzene-d5	86		23-120
2-Fluorobiphenyl	78		15-120
2,4,6-Tribromophenol	95		10-120
4-Terphenyl-d14	71		41-149

Project Name: TMC SW SAMPLING
Project Number: 21010216
Lab Number: L2341125
Report Date: 07/25/23

SAMPLE RESULTS

Lab ID: L2341125-03
Client ID: TMC-BEND
Sample Location: TMC

Date Collected: 07/18/23 08:20
Date Received: 07/18/23
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8270E-SIM
Analytical Date: 07/25/23 13:20
Analyst: RP

Extraction Method: EPA 3510C
Extraction Date: 07/24/23 20:37

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS-SIM - Westborough Lab						
Naphthalene	0.15		ug/l	0.10	0.05	1
2-Methylnaphthalene	0.06	J	ug/l	0.10	0.02	1
Acenaphthylene	0.04	J	ug/l	0.10	0.01	1
Acenaphthene	0.10		ug/l	0.10	0.01	1
Fluorene	0.14		ug/l	0.10	0.01	1
Phenanthrene	0.16		ug/l	0.05	0.02	1
Anthracene	0.08	J	ug/l	0.10	0.01	1
Fluoranthene	0.06	J	ug/l	0.10	0.02	1
Pyrene	0.05	J	ug/l	0.10	0.02	1
Benzo(a)anthracene	0.03	J	ug/l	0.05	0.02	1
Chrysene	ND		ug/l	0.10	0.01	1
Benzo(b)fluoranthene	0.01	J	ug/l	0.05	0.01	1
Benzo(k)fluoranthene	ND		ug/l	0.10	0.01	1
Benzo(a)pyrene	ND		ug/l	0.10	0.02	1
Indeno(1,2,3-cd)pyrene	ND		ug/l	0.10	0.01	1
Dibenzo(a,h)anthracene	ND		ug/l	0.05	0.01	1
Benzo(ghi)perylene	ND		ug/l	0.10	0.01	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
Nitrobenzene-d5	82		23-120
2-Fluorobiphenyl	81		15-120
4-Terphenyl-d14	74		41-149

Project Name: TMC SW SAMPLING
Project Number: 21010216
Lab Number: L2341125
Report Date: 07/25/23

SAMPLE RESULTS

Lab ID: L2341125-04
Client ID: TMC-RAIL-BRIDGE
Sample Location: TMC

Date Collected: 07/18/23 08:30
Date Received: 07/18/23
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8270E
Analytical Date: 07/23/23 22:02
Analyst: SZ

Extraction Method: EPA 3510C
Extraction Date: 07/22/23 23:45

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Benzaldehyde	ND		ug/l	5.0	0.53	1
Phenol	ND		ug/l	5.0	0.57	1
Bis(2-chloroethyl)ether	ND		ug/l	2.0	0.50	1
2-Chlorophenol	ND		ug/l	2.0	0.48	1
2-Methylphenol	ND		ug/l	5.0	0.49	1
Bis(2-chloroisopropyl)ether	ND		ug/l	2.0	0.53	1
Acetophenone	ND		ug/l	5.0	0.53	1
n-Nitrosodi-n-propylamine	ND		ug/l	5.0	0.64	1
3-Methylphenol/4-Methylphenol	ND		ug/l	5.0	0.48	1
Hexachloroethane	ND		ug/l	2.0	0.58	1
Nitrobenzene	ND		ug/l	1.4	0.77	1
Isophorone	ND		ug/l	5.0	1.2	1
2,4-Dimethylphenol	ND		ug/l	5.0	1.8	1
Bis(2-chloroethoxy)methane	ND		ug/l	5.0	0.50	1
2,4-Dichlorophenol	ND		ug/l	5.0	0.41	1
Naphthalene	ND		ug/l	2.0	0.46	1
4-Chloroaniline	ND		ug/l	3.7	1.1	1
Hexachlorobutadiene	ND		ug/l	2.0	0.66	1
Caprolactam	ND		ug/l	10	3.3	1
2-Methylnaphthalene	ND		ug/l	2.0	0.45	1
Hexachlorocyclopentadiene	ND		ug/l	20	0.69	1
1,2,4,5-Tetrachlorobenzene	ND		ug/l	1.7	0.44	1
2,4,6-Trichlorophenol	ND		ug/l	5.0	0.61	1
2,4,5-Trichlorophenol	ND		ug/l	5.0	0.77	1
Biphenyl	ND		ug/l	2.0	0.46	1
2-Chloronaphthalene	ND		ug/l	2.0	0.44	1
2-Nitroaniline	ND		ug/l	5.0	0.50	1
2,6-Dinitrotoluene	ND		ug/l	5.0	0.93	1

Project Name: TMC SW SAMPLING **Lab Number:** L2341125

Project Number: 21010216 **Report Date:** 07/25/23

SAMPLE RESULTS

Lab ID: L2341125-04 Date Collected: 07/18/23 08:30

Client ID: TMC-RAIL-BRIDGE Date Received: 07/18/23

Sample Location: TMC 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	0.46	1
Acenaphthene	ND		ug/l	2.0	0.53	1
2,4-Dinitrophenol	ND		ug/l	20	6.6	1
2,4-Dinitrotoluene	ND		ug/l	5.0	1.2	1
2,3,4,6-Tetrachlorophenol	ND		ug/l	5.0	0.84	1
Diethyl phthalate	ND		ug/l	5.0	0.38	1
Fluorene	ND		ug/l	2.0	0.41	1
4-Nitroaniline	ND		ug/l	5.0	0.80	1
NDPA/DPA	ND		ug/l	2.0	0.42	1
Hexachlorobenzene	ND		ug/l	2.0	0.46	1
Pentachlorophenol	ND		ug/l	10	1.8	1
Phenanthrene	ND		ug/l	2.0	0.33	1
Anthracene	ND		ug/l	2.0	0.33	1
Carbazole	ND		ug/l	2.0	0.49	1
Di-n-butylphthalate	ND		ug/l	5.0	0.39	1
Fluoranthene	ND		ug/l	2.0	0.26	1
Pyrene	ND		ug/l	2.0	0.28	1
3,3'-Dichlorobenzidine	ND		ug/l	5.0	1.6	1
Benzo(a)anthracene	ND		ug/l	2.0	0.32	1
Chrysene	ND		ug/l	1.4	0.34	1
Bis(2-ethylhexyl)phthalate	ND		ug/l	3.0	1.5	1
Di-n-octylphthalate	ND		ug/l	5.0	1.3	1
Benzo(b)fluoranthene	ND		ug/l	2.0	0.35	1
Benzo(k)fluoranthene	ND		ug/l	2.0	0.37	1
Benzo(a)pyrene	ND		ug/l	2.0	0.41	1
Indeno(1,2,3-cd)pyrene	ND		ug/l	2.0	0.40	1
Dibenzo(a,h)anthracene	ND		ug/l	2.0	0.32	1
Benzo(ghi)perylene	ND		ug/l	2.0	0.30	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	69		21-120
Phenol-d6	60		10-120
Nitrobenzene-d5	84		23-120
2-Fluorobiphenyl	78		15-120
2,4,6-Tribromophenol	99		10-120
4-Terphenyl-d14	72		41-149

Project Name: TMC SW SAMPLING
Project Number: 21010216
Lab Number: L2341125
Report Date: 07/25/23

SAMPLE RESULTS

Lab ID: L2341125-04
Client ID: TMC-RAIL-BRIDGE
Sample Location: TMC

Date Collected: 07/18/23 08:30
Date Received: 07/18/23
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8270E-SIM
Analytical Date: 07/25/23 15:00
Analyst: RP

Extraction Method: EPA 3510C
Extraction Date: 07/24/23 20:37

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS-SIM - Westborough Lab						
Naphthalene	0.27		ug/l	0.10	0.05	1
2-Methylnaphthalene	0.05	J	ug/l	0.10	0.02	1
Acenaphthylene	0.03	J	ug/l	0.10	0.01	1
Acenaphthene	0.08	J	ug/l	0.10	0.01	1
Fluorene	0.12		ug/l	0.10	0.01	1
Phenanthrene	0.15		ug/l	0.05	0.02	1
Anthracene	0.06	J	ug/l	0.10	0.01	1
Fluoranthene	0.05	J	ug/l	0.10	0.02	1
Pyrene	0.09	J	ug/l	0.10	0.02	1
Benzo(a)anthracene	0.05	J	ug/l	0.05	0.02	1
Chrysene	ND		ug/l	0.10	0.01	1
Benzo(b)fluoranthene	ND		ug/l	0.05	0.01	1
Benzo(k)fluoranthene	ND		ug/l	0.10	0.01	1
Benzo(a)pyrene	ND		ug/l	0.10	0.02	1
Indeno(1,2,3-cd)pyrene	ND		ug/l	0.10	0.01	1
Dibenzo(a,h)anthracene	ND		ug/l	0.05	0.01	1
Benzo(ghi)perylene	ND		ug/l	0.10	0.01	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
Nitrobenzene-d5	63		23-120
2-Fluorobiphenyl	64		15-120
4-Terphenyl-d14	53		41-149

Project Name: TMC SW SAMPLING
Project Number: 21010216
Lab Number: L2341125
Report Date: 07/25/23

SAMPLE RESULTS

Lab ID: L2341125-05
Client ID: DUP
Sample Location: TMC

Date Collected: 07/18/23 00:00
Date Received: 07/18/23
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8270E
Analytical Date: 07/23/23 22:24
Analyst: SZ

Extraction Method: EPA 3510C
Extraction Date: 07/22/23 23:45

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Benzaldehyde	ND		ug/l	5.0	0.53	1
Phenol	ND		ug/l	5.0	0.57	1
Bis(2-chloroethyl)ether	ND		ug/l	2.0	0.50	1
2-Chlorophenol	ND		ug/l	2.0	0.48	1
2-Methylphenol	ND		ug/l	5.0	0.49	1
Bis(2-chloroisopropyl)ether	ND		ug/l	2.0	0.53	1
Acetophenone	ND		ug/l	5.0	0.53	1
n-Nitrosodi-n-propylamine	ND		ug/l	5.0	0.64	1
3-Methylphenol/4-Methylphenol	0.78	J	ug/l	5.0	0.48	1
Hexachloroethane	ND		ug/l	2.0	0.58	1
Nitrobenzene	ND		ug/l	1.4	0.77	1
Isophorone	ND		ug/l	5.0	1.2	1
2,4-Dimethylphenol	ND		ug/l	5.0	1.8	1
Bis(2-chloroethoxy)methane	ND		ug/l	5.0	0.50	1
2,4-Dichlorophenol	ND		ug/l	5.0	0.41	1
Naphthalene	ND		ug/l	2.0	0.46	1
4-Chloroaniline	ND		ug/l	3.7	1.1	1
Hexachlorobutadiene	ND		ug/l	2.0	0.66	1
Caprolactam	ND		ug/l	10	3.3	1
2-Methylnaphthalene	ND		ug/l	2.0	0.45	1
Hexachlorocyclopentadiene	ND		ug/l	20	0.69	1
1,2,4,5-Tetrachlorobenzene	ND		ug/l	1.7	0.44	1
2,4,6-Trichlorophenol	ND		ug/l	5.0	0.61	1
2,4,5-Trichlorophenol	ND		ug/l	5.0	0.77	1
Biphenyl	ND		ug/l	2.0	0.46	1
2-Chloronaphthalene	ND		ug/l	2.0	0.44	1
2-Nitroaniline	ND		ug/l	5.0	0.50	1
2,6-Dinitrotoluene	ND		ug/l	5.0	0.93	1

Project Name: TMC SW SAMPLING **Lab Number:** L2341125

Project Number: 21010216 **Report Date:** 07/25/23

SAMPLE RESULTS

Lab ID: L2341125-05 Date Collected: 07/18/23 00:00

Client ID: DUP Date Received: 07/18/23

Sample Location: TMC 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	0.46	1
Acenaphthene	ND		ug/l	2.0	0.53	1
2,4-Dinitrophenol	ND		ug/l	20	6.6	1
2,4-Dinitrotoluene	ND		ug/l	5.0	1.2	1
2,3,4,6-Tetrachlorophenol	ND		ug/l	5.0	0.84	1
Diethyl phthalate	ND		ug/l	5.0	0.38	1
Fluorene	0.43	J	ug/l	2.0	0.41	1
4-Nitroaniline	ND		ug/l	5.0	0.80	1
NDPA/DPA	ND		ug/l	2.0	0.42	1
Hexachlorobenzene	ND		ug/l	2.0	0.46	1
Pentachlorophenol	ND		ug/l	10	1.8	1
Phenanthrene	0.44	J	ug/l	2.0	0.33	1
Anthracene	ND		ug/l	2.0	0.33	1
Carbazole	ND		ug/l	2.0	0.49	1
Di-n-butylphthalate	ND		ug/l	5.0	0.39	1
Fluoranthene	ND		ug/l	2.0	0.26	1
Pyrene	ND		ug/l	2.0	0.28	1
3,3'-Dichlorobenzidine	ND		ug/l	5.0	1.6	1
Benzo(a)anthracene	ND		ug/l	2.0	0.32	1
Chrysene	ND		ug/l	1.4	0.34	1
Bis(2-ethylhexyl)phthalate	ND		ug/l	3.0	1.5	1
Di-n-octylphthalate	ND		ug/l	5.0	1.3	1
Benzo(b)fluoranthene	ND		ug/l	2.0	0.35	1
Benzo(k)fluoranthene	ND		ug/l	2.0	0.37	1
Benzo(a)pyrene	ND		ug/l	2.0	0.41	1
Indeno(1,2,3-cd)pyrene	ND		ug/l	2.0	0.40	1
Dibenzo(a,h)anthracene	ND		ug/l	2.0	0.32	1
Benzo(ghi)perylene	ND		ug/l	2.0	0.30	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	75		21-120
Phenol-d6	62		10-120
Nitrobenzene-d5	85		23-120
2-Fluorobiphenyl	73		15-120
2,4,6-Tribromophenol	97		10-120
4-Terphenyl-d14	68		41-149

Project Name: TMC SW SAMPLING
Project Number: 21010216
Lab Number: L2341125
Report Date: 07/25/23

SAMPLE RESULTS

Lab ID: L2341125-05
Client ID: DUP
Sample Location: TMC

Date Collected: 07/18/23 00:00
Date Received: 07/18/23
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8270E-SIM
Analytical Date: 07/25/23 13:53
Analyst: RP

Extraction Method: EPA 3510C
Extraction Date: 07/24/23 20:37

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS-SIM - Westborough Lab						
Naphthalene	0.06	J	ug/l	0.10	0.05	1
2-Methylnaphthalene	0.03	J	ug/l	0.10	0.02	1
Acenaphthylene	0.10		ug/l	0.10	0.01	1
Acenaphthene	0.24		ug/l	0.10	0.01	1
Fluorene	0.27		ug/l	0.10	0.01	1
Phenanthrene	0.35		ug/l	0.05	0.02	1
Anthracene	0.07	J	ug/l	0.10	0.01	1
Fluoranthene	0.10	J	ug/l	0.10	0.02	1
Pyrene	0.06	J	ug/l	0.10	0.02	1
Benzo(a)anthracene	ND		ug/l	0.05	0.02	1
Chrysene	ND		ug/l	0.10	0.01	1
Benzo(b)fluoranthene	ND		ug/l	0.05	0.01	1
Benzo(k)fluoranthene	ND		ug/l	0.10	0.01	1
Benzo(a)pyrene	ND		ug/l	0.10	0.02	1
Indeno(1,2,3-cd)pyrene	ND		ug/l	0.10	0.01	1
Dibenzo(a,h)anthracene	ND		ug/l	0.05	0.01	1
Benzo(ghi)perylene	ND		ug/l	0.10	0.01	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
Nitrobenzene-d5	84		23-120
2-Fluorobiphenyl	85		15-120
4-Terphenyl-d14	82		41-149

Project Name: TMC SW SAMPLING
Project Number: 21010216
Lab Number: L2341125
Report Date: 07/25/23

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270E
Analytical Date: 07/23/23 16:24
Analyst: SZ

Extraction Method: EPA 3510C
Extraction Date: 07/22/23 23:45

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 01-05 Batch: WG1806558-1					
Benzaldehyde	ND		ug/l	5.0	0.53
Phenol	ND		ug/l	5.0	0.57
Bis(2-chloroethyl)ether	ND		ug/l	2.0	0.50
2-Chlorophenol	ND		ug/l	2.0	0.48
2-Methylphenol	ND		ug/l	5.0	0.49
Bis(2-chloroisopropyl)ether	ND		ug/l	2.0	0.53
Acetophenone	ND		ug/l	5.0	0.53
n-Nitrosodi-n-propylamine	ND		ug/l	5.0	0.64
3-Methylphenol/4-Methylphenol	ND		ug/l	5.0	0.48
Hexachloroethane	ND		ug/l	2.0	0.58
Nitrobenzene	ND		ug/l	1.4	0.77
Isophorone	ND		ug/l	5.0	1.2
2,4-Dimethylphenol	ND		ug/l	5.0	1.8
Bis(2-chloroethoxy)methane	ND		ug/l	5.0	0.50
2,4-Dichlorophenol	ND		ug/l	5.0	0.41
Naphthalene	ND		ug/l	2.0	0.46
4-Chloroaniline	ND		ug/l	3.7	1.1
Hexachlorobutadiene	ND		ug/l	2.0	0.66
Caprolactam	ND		ug/l	10	3.3
2-Methylnaphthalene	ND		ug/l	2.0	0.45
Hexachlorocyclopentadiene	ND		ug/l	20	0.69
1,2,4,5-Tetrachlorobenzene	ND		ug/l	1.7	0.44
2,4,6-Trichlorophenol	ND		ug/l	5.0	0.61
2,4,5-Trichlorophenol	ND		ug/l	5.0	0.77
Biphenyl	ND		ug/l	2.0	0.46
2-Chloronaphthalene	ND		ug/l	2.0	0.44
2-Nitroaniline	ND		ug/l	5.0	0.50
2,6-Dinitrotoluene	ND		ug/l	5.0	0.93
Acenaphthylene	ND		ug/l	2.0	0.46

Project Name: TMC SW SAMPLING
Project Number: 21010216
Lab Number: L2341125
Report Date: 07/25/23

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270E
Analytical Date: 07/23/23 16:24
Analyst: SZ

Extraction Method: EPA 3510C
Extraction Date: 07/22/23 23:45

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 01-05 Batch: WG1806558-1					
Acenaphthene	ND		ug/l	2.0	0.53
2,4-Dinitrophenol	ND		ug/l	20	6.6
2,4-Dinitrotoluene	ND		ug/l	5.0	1.2
2,3,4,6-Tetrachlorophenol	ND		ug/l	5.0	0.84
Diethyl phthalate	ND		ug/l	5.0	0.38
Fluorene	ND		ug/l	2.0	0.41
4-Nitroaniline	ND		ug/l	5.0	0.80
NDPA/DPA	ND		ug/l	2.0	0.42
Hexachlorobenzene	ND		ug/l	2.0	0.46
Pentachlorophenol	ND		ug/l	10	1.8
Phenanthrene	ND		ug/l	2.0	0.33
Anthracene	ND		ug/l	2.0	0.33
Carbazole	ND		ug/l	2.0	0.49
Di-n-butylphthalate	ND		ug/l	5.0	0.39
Fluoranthene	ND		ug/l	2.0	0.26
Pyrene	ND		ug/l	2.0	0.28
3,3'-Dichlorobenzidine	ND		ug/l	5.0	1.6
Benzo(a)anthracene	ND		ug/l	2.0	0.32
Chrysene	ND		ug/l	1.4	0.34
Bis(2-ethylhexyl)phthalate	ND		ug/l	3.0	1.5
Di-n-octylphthalate	ND		ug/l	5.0	1.3
Benzo(b)fluoranthene	ND		ug/l	2.0	0.35
Benzo(k)fluoranthene	ND		ug/l	2.0	0.37
Benzo(a)pyrene	ND		ug/l	2.0	0.41
Indeno(1,2,3-cd)pyrene	ND		ug/l	2.0	0.40
Dibenzo(a,h)anthracene	ND		ug/l	2.0	0.32
Benzo(ghi)perylene	ND		ug/l	2.0	0.30

Project Name: TMC SW SAMPLING
Project Number: 21010216
Lab Number: L2341125
Report Date: 07/25/23

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270E
Analytical Date: 07/23/23 16:24
Analyst: SZ

Extraction Method: EPA 3510C
Extraction Date: 07/22/23 23:45

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 01-05 Batch: WG1806558-1					

Surrogate	%Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	60		21-120
Phenol-d6	44		10-120
Nitrobenzene-d5	64		23-120
2-Fluorobiphenyl	61		15-120
2,4,6-Tribromophenol	79		10-120
4-Terphenyl-d14	58		41-149

Project Name: TMC SW SAMPLING
Project Number: 21010216
Lab Number: L2341125
Report Date: 07/25/23

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270E-SIM
Analytical Date: 07/25/23 14:43
Analyst: RP

Extraction Method: EPA 3510C
Extraction Date: 07/24/23 20:37

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS-SIM - Westborough Lab for sample(s): 01-05 Batch: WG1807121-1					
Naphthalene	ND		ug/l	0.10	0.05
2-Methylnaphthalene	ND		ug/l	0.10	0.02
Acenaphthylene	ND		ug/l	0.10	0.01
Acenaphthene	ND		ug/l	0.10	0.01
Fluorene	ND		ug/l	0.10	0.01
Phenanthrene	0.03	J	ug/l	0.05	0.02
Anthracene	ND		ug/l	0.10	0.01
Fluoranthene	0.03	J	ug/l	0.10	0.02
Pyrene	0.05	J	ug/l	0.10	0.02
Benzo(a)anthracene	0.02	J	ug/l	0.05	0.02
Chrysene	ND		ug/l	0.10	0.01
Benzo(b)fluoranthene	ND		ug/l	0.05	0.01
Benzo(k)fluoranthene	ND		ug/l	0.10	0.01
Benzo(a)pyrene	ND		ug/l	0.10	0.02
Indeno(1,2,3-cd)pyrene	ND		ug/l	0.10	0.01
Dibenzo(a,h)anthracene	ND		ug/l	0.05	0.01
Benzo(ghi)perylene	ND		ug/l	0.10	0.01

Surrogate	%Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	25		21-120
Phenol-d6	23		10-120
Nitrobenzene-d5	49		23-120
2-Fluorobiphenyl	51		15-120
2,4,6-Tribromophenol	55		10-120
4-Terphenyl-d14	47		41-149

Lab Control Sample Analysis

Batch Quality Control

Project Name: TMC SW SAMPLING

Project Number: 21010216

Lab Number: L2341125

Report Date: 07/25/23

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: WG1806558-2 WG1806558-3								
Benzaldehyde	99		97		40-140	2		30
Phenol	82		78		12-110	5		30
Bis(2-chloroethyl)ether	105		100		40-140	5		30
2-Chlorophenol	106		106		27-123	0		30
2-Methylphenol	108		104		30-130	4		30
Bis(2-chloroisopropyl)ether	95		94		40-140	1		30
Acetophenone	95		96		39-129	1		30
n-Nitrosodi-n-propylamine	125		116		29-132	7		30
3-Methylphenol/4-Methylphenol	123		116		30-130	6		30
Hexachloroethane	108		108		40-140	0		30
Nitrobenzene	116		114		40-140	2		30
Isophorone	108		103		40-140	5		30
2,4-Dimethylphenol	107		108		30-130	1		30
Bis(2-chloroethoxy)methane	112		105		40-140	6		30
2,4-Dichlorophenol	118		107		30-130	10		30
Naphthalene	100		89		40-140	12		30
4-Chloroaniline	114		107		40-140	6		30
Hexachlorobutadiene	95		83		40-140	13		30
Caprolactam	51		47		10-130	8		30
2-Methylnaphthalene	108		96		40-140	12		30
Hexachlorocyclopentadiene	82		74		40-140	10		30
1,2,4,5-Tetrachlorobenzene	87		80		2-134	8		30
2,4,6-Trichlorophenol	110		96		30-130	14		30

Lab Control Sample Analysis
Batch Quality Control

Project Name: TMC SW SAMPLING
Project Number: 21010216

Lab Number: L2341125
Report Date: 07/25/23

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: WG1806558-2 WG1806558-3								
2,4,5-Trichlorophenol	130		108		30-130	18		30
Biphenyl	95		82		40-140	15		30
2-Chloronaphthalene	102		88		40-140	15		30
2-Nitroaniline	128		104		52-143	21		30
2,6-Dinitrotoluene	109		96		40-140	13		30
Acenaphthylene	114		101		45-123	12		30
Acenaphthene	101		90		37-111	12		30
2,4-Dinitrophenol	119		96		20-130	21		30
2,4-Dinitrotoluene	109		93		48-143	16		30
2,3,4,6-Tetrachlorophenol	116		101		54-145	14		30
Diethyl phthalate	117		106		40-140	10		30
Fluorene	103		92		40-140	11		30
4-Nitroaniline	108		102		51-143	6		30
NDPA/DPA	90		86		40-140	5		30
Hexachlorobenzene	108		93		40-140	15		30
Pentachlorophenol	**124**	Q	102		9-103	19		30
Phenanthrene	104		89		40-140	16		30
Anthracene	107		93		40-140	14		30
Carbazole	112		98		55-144	13		30
Di-n-butylphthalate	122		108		40-140	12		30
Fluoranthene	104		92		40-140	12		30
Pyrene	103		91		26-127	12		30
3,3'-Dichlorobenzidine	91		84		40-140	8		30

Lab Control Sample Analysis
Batch Quality Control

Project Name: TMC SW SAMPLING
Project Number: 21010216
Lab Number: L2341125
Report Date: 07/25/23

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: WG1806558-2 WG1806558-3								
Benzo(a)anthracene	107		95		40-140	12		30
Chrysene	107		97		40-140	10		30
Bis(2-ethylhexyl)phthalate	**146**	Q	132		40-140	10		30
Di-n-octylphthalate	135		121		40-140	11		30
Benzo(b)fluoranthene	112		98		40-140	13		30
Benzo(k)fluoranthene	100		93		40-140	7		30
Benzo(a)pyrene	110		102		40-140	8		30
Indeno(1,2,3-cd)pyrene	102		94		40-140	8		30
Dibenzo(a,h)anthracene	106		92		40-140	14		30
Benzo(ghi)perylene	108		96		40-140	12		30

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
2-Fluorophenol	77		88		21-120
Phenol-d6	66		76		10-120
Nitrobenzene-d5	93		100		23-120
2-Fluorobiphenyl	84		85		15-120
2,4,6-Tribromophenol	101		119		10-120
4-Terphenyl-d14	78		82		41-149

Lab Control Sample Analysis
Batch Quality Control

Project Name: TMC SW SAMPLING
Project Number: 21010216
Lab Number: L2341125
Report Date: 07/25/23

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: WG1807121-2 WG1807121-3								
Naphthalene	69		66		40-140	4		40
2-Methylnaphthalene	76		73		40-140	4		40
Acenaphthylene	84		79		40-140	6		40
Acenaphthene	74		70		37-111	6		40
Fluorene	79		75		40-140	5		40
Phenanthrene	77		72		40-140	7		40
Anthracene	86		80		40-140	7		40
Fluoranthene	82		77		40-140	6		40
Pyrene	79		74		26-127	7		40
Benzo(a)anthracene	101		93		40-140	8		40
Chrysene	90		84		40-140	7		40
Benzo(b)fluoranthene	93		87		40-140	7		40
Benzo(k)fluoranthene	95		90		40-140	5		40
Benzo(a)pyrene	100		93		40-140	7		40
Indeno(1,2,3-cd)pyrene	92		83		40-140	10		40
Dibenzo(a,h)anthracene	86		79		40-140	8		40
Benzo(ghi)perylene	90		82		40-140	9		40

Lab Control Sample Analysis
Batch Quality Control

Project Name: TMC SW SAMPLING
Project Number: 21010216

Lab Number: L2341125
Report Date: 07/25/23

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: WG1807121-2 WG1807121-3								

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
2-Fluorophenol	62		64		21-120
Phenol-d6	59		63		10-120
Nitrobenzene-d5	100		98		23-120
2-Fluorobiphenyl	78		74		15-120
2,4,6-Tribromophenol	**139**	Q	**136**	Q	10-120
4-Terphenyl-d14	66		62		41-149

Matrix Spike Analysis
Batch Quality Control

Project Name: TMC SW SAMPLING
Project Number: 21010216
Lab Number: L2341125
Report Date: 07/25/23

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: WG1806558-4 WG1806558-5 QC Sample: L2341125-01 Client ID: TMC-OUTLET												
Benzaldehyde	ND	18.2	14	77		16	88		40-140	13		30
Phenol	ND	18.2	13	72		14	77		12-110	7		30
Bis(2-chloroethyl)ether	ND	18.2	14	77		16	88		40-140	13		30
2-Chlorophenol	ND	18.2	15	83		16	88		27-123	6		30
2-Methylphenol	ND	18.2	16	88		18	99		30-130	12		30
Bis(2-chloroisopropyl)ether	ND	18.2	13	72		15	83		40-140	14		30
Acetophenone	ND	18.2	14	77		16	88		39-129	13		30
n-Nitrosodi-n-propylamine	ND	18.2	17	94		18	99		29-132	6		30
3-Methylphenol/4-Methylphenol	1.2J	18.2	18	99		19	100		30-130	5		30
Hexachloroethane	ND	18.2	15	83		17	94		40-140	13		30
Nitrobenzene	ND	18.2	17	94		20	110		40-140	16		30
Isophorone	ND	18.2	16	88		17	94		40-140	6		30
2,4-Dimethylphenol	ND	18.2	19	100		19	100		30-130	0		30
Bis(2-chloroethoxy)methane	ND	18.2	15	83		17	94		40-140	13		30
2,4-Dichlorophenol	ND	18.2	16	88		18	99		30-130	12		30
Naphthalene	ND	18.2	14	77		15	83		40-140	7		30
4-Chloroaniline	ND	18.2	16	88		16	88		40-140	0		30
Hexachlorobutadiene	ND	18.2	13	72		14	77		40-140	7		30
Caprolactam	ND	18.2	8.9J	49		9.0J	50		10-130	1		30
2-Methylnaphthalene	ND	18.2	15	83		16	88		40-140	6		30
Hexachlorocyclopentadiene	ND	18.2	14J	77		15J	83		40-140	7		30
1,2,4,5-Tetrachlorobenzene	ND	18.2	12	66		14	77		2-134	15		30
2,4,6-Trichlorophenol	ND	18.2	16	88		17	94		30-130	6		30

Matrix Spike Analysis
Batch Quality Control

Project Name: TMC SW SAMPLING
Project Number: 21010216
Lab Number: L2341125
Report Date: 07/25/23

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: WG1806558-4 WG1806558-5 QC Sample: L2341125-01 Client ID: TMC-OUTLET												
2,4,5-Trichlorophenol	ND	18.2	17	94		18	99		30-130	6		30
Biphenyl	ND	18.2	14	77		15	83		40-140	7		30
2-Chloronaphthalene	ND	18.2	14	77		15	83		40-140	7		30
2-Nitroaniline	ND	18.2	15	83		14	77		52-143	7		30
2,6-Dinitrotoluene	ND	18.2	14	77		16	88		40-140	13		30
Acenaphthylene	ND	18.2	16	88		17	94		45-123	6		30
Acenaphthene	ND	18.2	15	83		15	83		37-111	0		30
2,4-Dinitrophenol	ND	18.2	19J	100		20	110		20-130	5		30
2,4-Dinitrotoluene	ND	18.2	16	88		16	88		48-143	0		30
2,3,4,6-Tetrachlorophenol	ND	18.2	16	88		17	94		54-145	6		30
Diethyl phthalate	ND	18.2	16	88		16	88		40-140	0		30
Fluorene	0.42J	18.2	15	83		15	83		40-140	0		30
4-Nitroaniline	ND	18.2	11	61		8.3	**46**	Q	51-143	28		30
NDPA/DPA	ND	18.2	14	77		14	77		40-140	0		30
Hexachlorobenzene	ND	18.2	15	83		16	88		40-140	6		30
Pentachlorophenol	ND	18.2	20	**110**	Q	19	100		9-103	5		30
Phenanthrene	0.56J	18.2	14	77		15	83		40-140	7		30
Anthracene	ND	18.2	14	77		15	83		40-140	7		30
Carbazole	0.63J	18.2	16	88		16	88		55-144	0		30
Di-n-butylphthalate	ND	18.2	17	94		19	100		40-140	11		30
Fluoranthene	ND	18.2	14	77		15	83		40-140	7		30
Pyrene	ND	18.2	14	77		15	83		26-127	7		30
3,3'-Dichlorobenzidine	ND	18.2	ND	**0**	Q	ND	**0**	Q	40-140	NC		30

Matrix Spike Analysis

Batch Quality Control

Project Name: TMC SW SAMPLING
Project Number: 21010216
Lab Number: L2341125
Report Date: 07/25/23

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: WG1806558-4 WG1806558-5 QC Sample: L2341125-01 Client ID: TMC-OUTLET												
Benzo(a)anthracene	ND	18.2	15	83		15	83		40-140	0		30
Chrysene	ND	18.2	14	77		15	83		40-140	7		30
Bis(2-ethylhexyl)phthalate	ND	18.2	24	130		22	120		40-140	9		30
Di-n-octylphthalate	ND	18.2	21	120		21	120		40-140	0		30
Benzo(b)fluoranthene	ND	18.2	15	83		15	83		40-140	0		30
Benzo(k)fluoranthene	ND	18.2	13	72		15	83		40-140	14		30
Benzo(a)pyrene	ND	18.2	15	83		16	88		40-140	6		30
Indeno(1,2,3-cd)pyrene	ND	18.2	13	72		14	77		40-140	7		30
Dibenzo(a,h)anthracene	ND	18.2	13	72		14	77		40-140	7		30
Benzo(ghi)perylene	ND	18.2	14	77		15	83		40-140	7		30

Surrogate	MS % Recovery	MS Qualifier	MSD % Recovery	MSD Qualifier	Acceptance Criteria
2,4,6-Tribromophenol	101		100		10-120
2-Fluorobiphenyl	76		78		15-120
2-Fluorophenol	74		76		21-120
4-Terphenyl-d14	69		70		41-149
Nitrobenzene-d5	84		92		23-120
Phenol-d6	64		69		10-120

Matrix Spike Analysis
Batch Quality Control

Project Name: TMC SW SAMPLING
Project Number: 21010216
Lab Number: L2341125
Report Date: 07/25/23

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: WG1807121-4 WG1807121-5 QC Sample: L2341125-01 Client ID: TMC-OUTLET												
Naphthalene	ND	18.2	12	66		11	61		40-140	9		40
2-Methylnaphthalene	ND	18.2	13	72		12	66		40-140	8		40
Acenaphthylene	0.10	18.2	13	72		12	66		40-140	8		40
Acenaphthene	0.24	18.2	13	70		11	59		37-111	17		40
Fluorene	0.27	18.2	13	70		12	65		40-140	8		40
Phenanthrene	0.35	18.2	13	70		12	64		40-140	8		40
Anthracene	0.07J	18.2	13	72		12	66		40-140	8		40
Fluoranthene	0.11	18.2	13	71		11	60		40-140	17		40
Pyrene	0.08J	18.2	13	72		11	61		26-127	17		40
Benzo(a)anthracene	0.02J	18.2	14	77		12	66		40-140	15		40
Chrysene	ND	18.2	13	72		12	66		40-140	8		40
Benzo(b)fluoranthene	ND	18.2	15	83		13	72		40-140	14		40
Benzo(k)fluoranthene	ND	18.2	15	83		14	77		40-140	7		40
Benzo(a)pyrene	ND	18.2	15	83		13	72		40-140	14		40
Indeno(1,2,3-cd)pyrene	ND	18.2	13	72		12	66		40-140	8		40
Dibenzo(a,h)anthracene	ND	18.2	14	77		12	66		40-140	15		40
Benzo(ghi)perylene	ND	18.2	13	72		12	66		40-140	8		40

Surrogate	MS % Recovery	MS Qualifier	MSD % Recovery	MSD Qualifier	Acceptance Criteria
2-Fluorobiphenyl	70		67		15-120
4-Terphenyl-d14	69		62		41-149
Nitrobenzene-d5	72		69		23-120

Project Name: TMC SW SAMPLING
Project Number: 21010216

Lab Number: L2341125
Report Date: 07/25/23

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(*)
L2341125-01A	Vial HCl preserved	A	NA		3.1	Y	Absent		PA-8260-SIM(14),PA-8260(14)
L2341125-01A1	Vial HCl preserved	A	NA		3.1	Y	Absent		PA-8260-SIM(14),PA-8260(14)
L2341125-01A2	Vial HCl preserved	A	NA		3.1	Y	Absent		PA-8260-SIM(14),PA-8260(14)
L2341125-01B	Vial HCl preserved	A	NA		3.1	Y	Absent		PA-8260-SIM(14),PA-8260(14)
L2341125-01B1	Vial HCl preserved	A	NA		3.1	Y	Absent		PA-8260-SIM(14),PA-8260(14)
L2341125-01B2	Vial HCl preserved	A	NA		3.1	Y	Absent		PA-8260-SIM(14),PA-8260(14)
L2341125-01C	Vial HCl preserved	A	NA		3.1	Y	Absent		PA-8260-SIM(14),PA-8260(14)
L2341125-01C1	Vial HCl preserved	A	NA		3.1	Y	Absent		PA-8260-SIM(14),PA-8260(14)
L2341125-01C2	Vial HCl preserved	A	NA		3.1	Y	Absent		PA-8260-SIM(14),PA-8260(14)
L2341125-01D	Amber 250ml unpreserved	A	11	11	3.1	Y	Absent		PA-8270SIM-LVI(7),PA-8270-LVI(7)
L2341125-01D1	Amber 250ml unpreserved	A	11	11	3.1	Y	Absent		PA-8270SIM-LVI(7),PA-8270-LVI(7)
L2341125-01D2	Amber 250ml unpreserved	A	11	11	3.1	Y	Absent		PA-8270SIM-LVI(7),PA-8270-LVI(7)
L2341125-01E	Amber 250ml unpreserved	A	11	11	3.1	Y	Absent		PA-8270SIM-LVI(7),PA-8270-LVI(7)
L2341125-01E1	Amber 250ml unpreserved	A	11	11	3.1	Y	Absent		PA-8270SIM-LVI(7),PA-8270-LVI(7)
L2341125-01E2	Amber 250ml unpreserved	A	11	11	3.1	Y	Absent		PA-8270SIM-LVI(7),PA-8270-LVI(7)
L2341125-02A	Vial HCl preserved	A	NA		3.1	Y	Absent		PA-8260-SIM(14),PA-8260(14)
L2341125-02B	Vial HCl preserved	A	NA		3.1	Y	Absent		PA-8260-SIM(14),PA-8260(14)
L2341125-02C	Vial HCl preserved	A	NA		3.1	Y	Absent		PA-8260-SIM(14),PA-8260(14)
L2341125-02D	Amber 250ml unpreserved	A	11	11	3.1	Y	Absent		PA-8270SIM-LVI(7),PA-8270-LVI(7)
L2341125-02E	Amber 250ml unpreserved	A	11	11	3.1	Y	Absent		PA-8270SIM-LVI(7),PA-8270-LVI(7)
L2341125-03A	Vial HCl preserved	A	NA		3.1	Y	Absent		PA-8260-SIM(14),PA-8260(14)
L2341125-03B	Vial HCl preserved	A	NA		3.1	Y	Absent		PA-8260-SIM(14),PA-8260(14)
L2341125-03C	Vial HCl preserved	A	NA		3.1	Y	Absent		PA-8260-SIM(14),PA-8260(14)

*Values in parentheses indicate holding time in days

Project Name: TMC SW SAMPLING
Project Number: 21010216

Lab Number: L2341125
Report Date: 07/25/23

Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L2341125-03D	Amber 250ml unpreserved	A	10	10	3.1	Y	Absent		PA-8270SIM-LVI(7),PA-8270-LVI(7)
L2341125-03E	Amber 250ml unpreserved	A	10	10	3.1	Y	Absent		PA-8270SIM-LVI(7),PA-8270-LVI(7)
L2341125-04A	Vial HCl preserved	A	NA		3.1	Y	Absent		PA-8260-SIM(14),PA-8260(14)
L2341125-04B	Vial HCl preserved	A	NA		3.1	Y	Absent		PA-8260-SIM(14),PA-8260(14)
L2341125-04C	Vial HCl preserved	A	NA		3.1	Y	Absent		PA-8260-SIM(14),PA-8260(14)
L2341125-04D	Amber 250ml unpreserved	A	10	10	3.1	Y	Absent		PA-8270SIM-LVI(7),PA-8270-LVI(7)
L2341125-04E	Amber 250ml unpreserved	A	10	10	3.1	Y	Absent		PA-8270SIM-LVI(7),PA-8270-LVI(7)
L2341125-05A	Vial HCl preserved	A	NA		3.1	Y	Absent		PA-8260-SIM(14),PA-8260(14)
L2341125-05B	Vial HCl preserved	A	NA		3.1	Y	Absent		PA-8260-SIM(14),PA-8260(14)
L2341125-05C	Vial HCl preserved	A	NA		3.1	Y	Absent		PA-8260-SIM(14),PA-8260(14)
L2341125-05D	Amber 250ml unpreserved	A	11	11	3.1	Y	Absent		PA-8270SIM-LVI(7),PA-8270-LVI(7)
L2341125-05E	Amber 250ml unpreserved	A	11	11	3.1	Y	Absent		PA-8270SIM-LVI(7),PA-8270-LVI(7)
L2341125-06A	Vial HCl preserved	A	NA		3.1	Y	Absent		PA-8260-SIM(14),PA-8260(14)
L2341125-06B	Vial HCl preserved	A	NA		3.1	Y	Absent		PA-8260-SIM(14),PA-8260(14)
L2341125-06C	Vial HCl preserved	A	NA		3.1	Y	Absent		PA-8260-SIM(14),PA-8260(14)
L2341125-06D	Vial HCl preserved	A	NA		3.1	Y	Absent		PA-8260-SIM(14),PA-8260(14)

Container Comments

L2341125-01D	High PH
L2341125-01D1	High PH
L2341125-01D2	High PH
L2341125-01E	High PH
L2341125-01E1	High PH
L2341125-01E2	High PH
L2341125-02D	High PH
L2341125-02E	High PH

*Values in parentheses indicate holding time in days

Project Name: TMC SW SAMPLING
Project Number: 21010216

Lab Number: L2341125
Report Date: 07/25/23

Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)

Container Comments

L2341125-03D	High PH
L2341125-03E	High PH
L2341125-04D	High PH
L2341125-04E	High PH
L2341125-05D	High PH
L2341125-05E	High PH

*Values in parentheses indicate holding time in days

Project Name:	TMC SW SAMPLING	**Lab Number:**	L2341125
Project Number:	21010216	**Report Date:**	07/25/23

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:	TMC SW SAMPLING	**Lab Number:**	L2341125
Project Number:	21010216	**Report Date:**	07/25/23

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:	TMC SW SAMPLING	**Lab Number:**	L2341125
Project Number:	21010216	**Report Date:**	07/25/23

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:	TMC SW SAMPLING	**Lab Number:**	L2341125
Project Number:	21010216	**Report Date:**	07/25/23

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, Azobenzene; SCM: Iodomethane (methyl iodide), 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene.
EPA 8270E: NPW: Dimethylnaphthalene,1,4-Diphenylhydrazine, alpha-Terpineol; 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.
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, SM9221E, 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 1

Date Rec'd in Lab: 7/19/23

ALPHA Job #: L2341125

ALPHA ANALYTICAL
WESTBORO, MA TEL: 508-898-9220 FAX: 508-898-9193
MANSFIELD, MA TEL: 508-822-9300 FAX: 508-822-3288

Client Information

Client: Tradepoint Atlantic
Address: 6995 Bethlehem blvd
Sparrows Point MD
Phone:
Fax:
Email: skabir@armgroup.net; kguiller@armgroup.net
☐ These samples have been previously analyzed by Alpha

Project Information

Project Name: TMC SW sampling
Project Location: TMC
Project #: 21010216
Project Manager:
ALPHA Quote #:

Turn-Around Time

☒ Standard ☐ RUSH (only confirmed if pre-approved)
Date Due: Time:

Report Information - Data Deliverables

☐ FAX ☐ EMAIL
☐ ADEx ☐ Add'l Deliverables

Billing Information

☐ Same as Client info PO #:

Regulatory Requirements/Report Limits

State /Fed Program	Criteria

Other Project Specific Requirements/Comments/Detection Limits:

ALPHA Lab ID (Lab Use Only)	Sample ID	Collection Date	Collection Time	Sample Matrix	Sampler's Initials	ANALYSIS: VOCs 8260	SVOCs 8270 SIM PAHs											Sample Specific Comments	TOTAL # BOTTLES
L2341125-01	TMC-Outlet	7/18/23	0800	WT	JMB	X	X	X										MS/MSD	15
-02	TMC-TM04	7/18/23	0810	WT	JMB	X	X	X											5
-03	TMC-Bend	7/18/23	0820	WT	JMB	X	X	X											5
-04	TMC-Rail-Bridge	7/18/23	0830	WT	JMB	X	X	X											5
-05	dup	7/18/23	-	WT	JMB	X	X	X											5
-06	trip blank	7/18/23	-	WT	-	X													4

SAMPLE HANDLING

Filtration
☐ Done
☐ Not needed
☐ Lab to do
Preservation
☐ Lab to do
(Please specify below)

Container Type	VOA	amb	amb											
Preservative	HCl	NA	NA											

Relinquished By:	Date/Time	Received By:	Date/Time
JMB ARM	7/18/23 1300		7-18 1545
TOM CLAUSEN ARM	7-18 1800		7/18/23 1800
	7/18/23 2100		7/18 2100
	7/19 0040		7/19 0040

7/19/23 0240
7/19/23 0240

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.

ANALYTICAL REPORT

Lab Number:	L2341137
Client:	Tradepoint Atlantic 1600 Sparrows Point Boulevard Baltimore, MD 21219
ATTN:	Robert Tworkowski
Phone:	(443) 649-5073
Project Name:	B14 GW Q3
Project Number:	21010214
Report Date:	07/26/23

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), OH (CL108), OR (MA-1316), PA (68-03671), RI (LAO00065), TX (T104704476), VT (VT-0935), VA (460195), USDA (Permit #525-23-122-91930).

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

Project Name: B14 GW Q3
Project Number: 21010214

Lab Number: L2341137
Report Date: 07/26/23

Alpha Sample ID	Client ID	Matrix	Sample Location	Collection Date/Time	Receive Date
L2341137-01	TS03-DDP002	WATER	Not Specified	07/18/23 10:35	07/18/23
L2341137-02	HI21-MWS	WATER	Not Specified	07/18/23 11:40	07/18/23
L2341137-03	HI07-PZM005	WATER	Not Specified	07/18/23 12:40	07/18/23
L2341137-04	FIELD BLANK	WATER	Not Specified	07/18/23 12:20	07/18/23
L2341137-05	HI19-MWS	WATER	Not Specified	07/18/23 14:10	07/18/23
L2341137-06	HI18-MWS	WATER	Not Specified	07/18/23 15:25	07/18/23
L2341137-07	TB-02	WATER	Not Specified	07/18/23 00:00	07/18/23

Project Name:	B14 GW Q3	**Lab Number:**	L2341137
Project Number:	21010214	**Report Date:**	07/26/23

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, solids and tissues are reported on a dry 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 Q3	**Lab Number:**	L2341137
Project Number:	21010214	**Report Date:**	07/26/23

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.

Semivolatile Organics by SIM

The WG1806559-1 Method Blank, associated with L2341137-01, -02, -03, and -06, has a concentration above the reporting limit for Naphthalene, Phenanthrene, and Benzo(a)anthracene. Since the associated sample concentrations are either greater than 10x the blank concentration or non-detect to the RL for these target analytes, no corrective action is required. Any results detected below the reporting limit are qualified with a "B".

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: Michelle M. Morris

Title: Technical Director/Representative Date: 07/26/23

ORGANICS

VOLATILES

Project Name: B14 GW Q3 **Lab Number:** L2341137

Project Number: 21010214 **Report Date:** 07/26/23

SAMPLE RESULTS

Lab ID: L2341137-01 Date Collected: 07/18/23 10:35
Client ID: TS03-DDP002 Date Received: 07/18/23
Sample Location: Not Specified Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8260D
Analytical Date: 07/20/23 12:18
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	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 Q3 **Lab Number:** L2341137

Project Number: 21010214 **Report Date:** 07/26/23

SAMPLE RESULTS

Lab ID: L2341137-01 Date Collected: 07/18/23 10:35

Client ID: TS03-DDP002 Date Received: 07/18/23

Sample Location: Not Specified 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	92		70-130
Toluene-d8	98		70-130
4-Bromofluorobenzene	93		70-130
Dibromofluoromethane	96		70-130

Project Name: B14 GW Q3 **Lab Number:** L2341137

Project Number: 21010214 **Report Date:** 07/26/23

SAMPLE RESULTS

Lab ID: L2341137-01
Client ID: TS03-DDP002
Sample Location: Not Specified

Date Collected: 07/18/23 10:35
Date Received: 07/18/23
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8260D-SIM(M)
Analytical Date: 07/20/23 12:18
Analyst: MCM

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
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	92		70-130
4-Bromofluorobenzene	90		70-130

Project Name: B14 GW Q3 **Lab Number:** L2341137

Project Number: 21010214 **Report Date:** 07/26/23

SAMPLE RESULTS

Lab ID: L2341137-02 Date Collected: 07/18/23 11:40
Client ID: HI21-MWS Date Received: 07/18/23
Sample Location: Not Specified Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8260D
Analytical Date: 07/20/23 12:46
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	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 Q3 **Lab Number:** L2341137

Project Number: 21010214 **Report Date:** 07/26/23

SAMPLE RESULTS

Lab ID: L2341137-02 Date Collected: 07/18/23 11:40

Client ID: HI21-MWS Date Received: 07/18/23

Sample Location: Not Specified 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	90		70-130
Toluene-d8	98		70-130
4-Bromofluorobenzene	93		70-130
Dibromofluoromethane	95		70-130

Project Name: B14 GW Q3 **Lab Number:** L2341137

Project Number: 21010214 **Report Date:** 07/26/23

SAMPLE RESULTS

Lab ID: L2341137-02
Client ID: HI21-MWS
Sample Location: Not Specified

Date Collected: 07/18/23 11:40
Date Received: 07/18/23
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8260D-SIM(M)
Analytical Date: 07/20/23 12:46
Analyst: MCM

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
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	91		70-130
4-Bromofluorobenzene	90		70-130

Project Name: B14 GW Q3 **Lab Number:** L2341137

Project Number: 21010214 **Report Date:** 07/26/23

SAMPLE RESULTS

Lab ID: L2341137-03 Date Collected: 07/18/23 12:40
Client ID: HI07-PZM005 Date Received: 07/18/23
Sample Location: Not Specified Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8260D
Analytical Date: 07/21/23 10:51
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	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	2.4	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	8.7		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	1.9		ug/l	0.75	0.20	1

Project Name: B14 GW Q3 **Lab Number:** L2341137

Project Number: 21010214 **Report Date:** 07/26/23

SAMPLE RESULTS

Lab ID: L2341137-03 Date Collected: 07/18/23 12:40

Client ID: HI07-PZM005 Date Received: 07/18/23

Sample Location: Not Specified 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	0.17	J	ug/l	0.50	0.17	1
p/m-Xylene	1.6		ug/l	1.0	0.33	1
o-Xylene	0.87	J	ug/l	1.0	0.39	1
Xylenes, Total	2.5	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	91		70-130
Toluene-d8	98		70-130
4-Bromofluorobenzene	94		70-130
Dibromofluoromethane	95		70-130

Project Name: B14 GW Q3 **Lab Number:** L2341137

Project Number: 21010214 **Report Date:** 07/26/23

SAMPLE RESULTS

Lab ID: L2341137-03
Client ID: HI07-PZM005
Sample Location: Not Specified

Date Collected: 07/18/23 12:40
Date Received: 07/18/23
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8260D-SIM(M)
Analytical Date: 07/21/23 10:51
Analyst: MCM

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
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	92		70-130
4-Bromofluorobenzene	92		70-130

Project Name: B14 GW Q3 **Lab Number:** L2341137

Project Number: 21010214 **Report Date:** 07/26/23

SAMPLE RESULTS

Lab ID: L2341137-04 Date Collected: 07/18/23 12:20
Client ID: FIELD BLANK Date Received: 07/18/23
Sample Location: Not Specified Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8260D
Analytical Date: 07/21/23 09:28
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	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	0.38	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: B14 GW Q3 **Lab Number:** L2341137

Project Number: 21010214 **Report Date:** 07/26/23

SAMPLE RESULTS

Lab ID: L2341137-04 Date Collected: 07/18/23 12:20

Client ID: FIELD BLANK Date Received: 07/18/23

Sample Location: Not Specified 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	90		70-130
Toluene-d8	97		70-130
4-Bromofluorobenzene	93		70-130
Dibromofluoromethane	96		70-130

Project Name: B14 GW Q3 **Lab Number:** L2341137

Project Number: 21010214 **Report Date:** 07/26/23

SAMPLE RESULTS

Lab ID: L2341137-04
Client ID: FIELD BLANK
Sample Location: Not Specified

Date Collected: 07/18/23 12:20
Date Received: 07/18/23
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8260D-SIM(M)
Analytical Date: 07/21/23 09:28
Analyst: MCM

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
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	91		70-130
4-Bromofluorobenzene	91		70-130

Project Name: B14 GW Q3 **Lab Number:** L2341137

Project Number: 21010214 **Report Date:** 07/26/23

SAMPLE RESULTS

Lab ID: L2341137-05 Date Collected: 07/18/23 14:10
Client ID: HI19-MWS Date Received: 07/18/23
Sample Location: Not Specified Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8260D
Analytical Date: 07/21/23 11:18
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	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	8.5		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	3.6		ug/l	0.75	0.20	1

Project Name: B14 GW Q3 **Lab Number:** L2341137

Project Number: 21010214 **Report Date:** 07/26/23

SAMPLE RESULTS

Lab ID: L2341137-05 Date Collected: 07/18/23 14:10

Client ID: HI19-MWS Date Received: 07/18/23

Sample Location: Not Specified 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	0.23	J	ug/l	0.50	0.17	1
p/m-Xylene	2.1		ug/l	1.0	0.33	1
o-Xylene	1.0		ug/l	1.0	0.39	1
Xylenes, Total	3.1		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	93		70-130
Toluene-d8	97		70-130
4-Bromofluorobenzene	95		70-130
Dibromofluoromethane	96		70-130

Project Name: B14 GW Q3 **Lab Number:** L2341137

Project Number: 21010214 **Report Date:** 07/26/23

SAMPLE RESULTS

Lab ID: L2341137-05
Client ID: HI19-MWS
Sample Location: Not Specified

Date Collected: 07/18/23 14:10
Date Received: 07/18/23
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8260D-SIM(M)
Analytical Date: 07/21/23 11:18
Analyst: MCM

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
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	90		70-130
4-Bromofluorobenzene	91		70-130

Project Name: B14 GW Q3 **Lab Number:** L2341137

Project Number: 21010214 **Report Date:** 07/26/23

SAMPLE RESULTS

Lab ID: L2341137-06 Date Collected: 07/18/23 15:25
Client ID: HI18-MWS Date Received: 07/18/23
Sample Location: Not Specified Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8260D
Analytical Date: 07/21/23 10:23
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	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 Q3 **Lab Number:** L2341137

Project Number: 21010214 **Report Date:** 07/26/23

SAMPLE RESULTS

Lab ID: L2341137-06 Date Collected: 07/18/23 15:25

Client ID: HI18-MWS Date Received: 07/18/23

Sample Location: Not Specified 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	93		70-130
Toluene-d8	97		70-130
4-Bromofluorobenzene	94		70-130
Dibromofluoromethane	92		70-130

Project Name: B14 GW Q3 **Lab Number:** L2341137

Project Number: 21010214 **Report Date:** 07/26/23

SAMPLE RESULTS

Lab ID: L2341137-06
Client ID: HI18-MWS
Sample Location: Not Specified

Date Collected: 07/18/23 15:25
Date Received: 07/18/23
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8260D-SIM(M)
Analytical Date: 07/21/23 10:23
Analyst: MCM

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
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	92		70-130
4-Bromofluorobenzene	92		70-130

Project Name: B14 GW Q3 **Lab Number:** L2341137

Project Number: 21010214 **Report Date:** 07/26/23

SAMPLE RESULTS

Lab ID: L2341137-07 Date Collected: 07/18/23 00:00
Client ID: TB-02 Date Received: 07/18/23
Sample Location: Not Specified Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8260D
Analytical Date: 07/21/23 09:00
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	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 Q3 **Lab Number:** L2341137

Project Number: 21010214 **Report Date:** 07/26/23

SAMPLE RESULTS

Lab ID: L2341137-07 Date Collected: 07/18/23 00:00

Client ID: TB-02 Date Received: 07/18/23

Sample Location: Not Specified 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	92		70-130
Toluene-d8	97		70-130
4-Bromofluorobenzene	95		70-130
Dibromofluoromethane	94		70-130

Project Name: B14 GW Q3 **Lab Number:** L2341137

Project Number: 21010214 **Report Date:** 07/26/23

SAMPLE RESULTS

Lab ID: L2341137-07
Client ID: TB-02
Sample Location: Not Specified

Date Collected: 07/18/23 00:00
Date Received: 07/18/23
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8260D-SIM(M)
Analytical Date: 07/21/23 09:00
Analyst: MCM

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
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	91		70-130
4-Bromofluorobenzene	90		70-130

Project Name: B14 GW Q3 **Lab Number:** L2341137

Project Number: 21010214 **Report Date:** 07/26/23

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260D
Analytical Date: 07/20/23 06:19
Analyst: MCM

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 01-02 Batch: WG1805849-5					
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 Q3 **Lab Number:** L2341137

Project Number: 21010214 **Report Date:** 07/26/23

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260D
Analytical Date: 07/20/23 06:19
Analyst: MCM

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 01-02 Batch: WG1805849-5					
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 Q3 **Lab Number:** L2341137

Project Number: 21010214 **Report Date:** 07/26/23

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260D
Analytical Date: 07/20/23 06:19
Analyst: MCM

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 01-02 Batch: WG1805849-5					

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	89		70-130
Toluene-d8	95		70-130
4-Bromofluorobenzene	93		70-130
Dibromofluoromethane	95		70-130

Project Name: B14 GW Q3 **Lab Number:** L2341137

Project Number: 21010214 **Report Date:** 07/26/23

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260D-SIM(M)
Analytical Date: 07/20/23 06:19
Analyst: MCM

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS-SIM - Westborough Lab for sample(s): 01-02 Batch: WG1805851-5					
1,1,2,2-Tetrachloroethane	ND		ug/l	0.050	0.006

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	91		70-130
4-Bromofluorobenzene	91		70-130

Project Name: B14 GW Q3 **Lab Number:** L2341137

Project Number: 21010214 **Report Date:** 07/26/23

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260D
Analytical Date: 07/21/23 06:42
Analyst: MCM

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 03-07 Batch: WG1806389-5					
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 Q3 **Lab Number:** L2341137

Project Number: 21010214 **Report Date:** 07/26/23

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260D
Analytical Date: 07/21/23 06:42
Analyst: MCM

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 03-07 Batch: WG1806389-5					
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 Q3 **Lab Number:** L2341137

Project Number: 21010214 **Report Date:** 07/26/23

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260D
Analytical Date: 07/21/23 06:42
Analyst: MCM

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 03-07 Batch: WG1806389-5					

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	92		70-130
Toluene-d8	97		70-130
4-Bromofluorobenzene	95		70-130
Dibromofluoromethane	96		70-130

Project Name: B14 GW Q3 **Lab Number:** L2341137

Project Number: 21010214 **Report Date:** 07/26/23

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260D-SIM(M)
Analytical Date: 07/21/23 06:42
Analyst: MCM

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS-SIM - Westborough Lab for sample(s): 03-07 Batch: WG1806390-5					
1,1,2,2-Tetrachloroethane	ND		ug/l	0.050	0.006

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	91		70-130
4-Bromofluorobenzene	92		70-130

Lab Control Sample Analysis
Batch Quality Control

Project Name: B14 GW Q3
Project Number: 21010214

Lab Number: L2341137
Report Date: 07/26/23

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: WG1805849-3 WG1805849-4								
Dichlorodifluoromethane	110		110		36-147	0		20
Chloromethane	89		88		64-130	1		20
Vinyl chloride	100		100		55-140	0		20
Bromomethane	80		87		39-139	8		20
Chloroethane	85		81		55-138	5		20
Trichlorofluoromethane	90		92		62-150	2		20
1,1-Dichloroethene	98		97		61-145	1		20
Carbon disulfide	90		91		51-130	1		20
1,1,2-Trichloro-1,2,2-Trifluoroethane	98		99		70-130	1		20
Methylene chloride	90		93		70-130	3		20
Acetone	97		100		58-148	3		20
trans-1,2-Dichloroethene	97		96		70-130	1		20
Methyl Acetate	98		100		70-130	2		20
Methyl tert butyl ether	99		98		63-130	1		20
1,1-Dichloroethane	94		92		70-130	2		20
cis-1,2-Dichloroethene	92		93		70-130	1		20
Cyclohexane	95		94		70-130	1		20
Chloroform	92		91		70-130	1		20
Carbon tetrachloride	96		96		63-132	0		20
1,1,1-Trichloroethane	99		96		67-130	3		20
2-Butanone	85		88		63-138	3		20
Benzene	92		92		70-130	0		20
1,2-Dichloroethane	96		98		70-130	2		20

Lab Control Sample Analysis
Batch Quality Control

Project Name: B14 GW Q3
Project Number: 21010214

Lab Number: L2341137
Report Date: 07/26/23

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: WG1805849-3 WG1805849-4								
Trichloroethene	94		95		70-130	1		20
1,2-Dichloropropane	91		89		70-130	2		20
Bromodichloromethane	89		92		67-130	3		20
cis-1,3-Dichloropropene	88		90		70-130	2		20
Toluene	100		100		70-130	0		20
Tetrachloroethene	120		120		70-130	0		20
4-Methyl-2-pentanone	91		89		59-130	2		20
trans-1,3-Dichloropropene	97		100		70-130	3		20
1,1,2-Trichloroethane	100		100		70-130	0		20
Dibromochloromethane	99		100		63-130	1		20
1,2-Dibromoethane	100		100		70-130	0		20
2-Hexanone	90		91		57-130	1		20
Chlorobenzene	100		99		75-130	1		20
Ethylbenzene	100		100		70-130	0		20
p/m-Xylene	100		100		70-130	0		20
o-Xylene	100		100		70-130	0		20
Styrene	100		100		70-130	0		20
Bromoform	95		97		54-136	2		20
Isopropylbenzene	100		100		70-130	0		20
1,1,2,2-Tetrachloroethane	96		96		67-130	0		20
1,3-Dichlorobenzene	100		110		70-130	10		20
1,4-Dichlorobenzene	100		100		70-130	0		20
1,2-Dichlorobenzene	100		100		70-130	0		20

Lab Control Sample Analysis

Batch Quality Control

Project Name: B14 GW Q3

Project Number: 21010214

Lab Number: L2341137

Report Date: 07/26/23

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: WG1805849-3 WG1805849-4								
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 %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
1,2-Dichloroethane-d4	86		87		70-130
Toluene-d8	98		97		70-130
4-Bromofluorobenzene	94		96		70-130
Dibromofluoromethane	88		88		70-130

Lab Control Sample Analysis

Batch Quality Control

Project Name: B14 GW Q3

Project Number: 21010214

Lab Number: L2341137

Report Date: 07/26/23

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: WG1805851-3 WG1805851-4								
1,1,2,2-Tetrachloroethane	92		86		70-130	7		25

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
1,2-Dichloroethane-d4	91		90		70-130
4-Bromofluorobenzene	91		90		70-130

Lab Control Sample Analysis
Batch Quality Control

Project Name: B14 GW Q3
Project Number: 21010214

Lab Number: L2341137
Report Date: 07/26/23

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 03-07 Batch: WG1806389-3 WG1806389-4								
Dichlorodifluoromethane	110		110		36-147	0		20
Chloromethane	86		88		64-130	2		20
Vinyl chloride	97		96		55-140	1		20
Bromomethane	80		77		39-139	4		20
Chloroethane	82		81		55-138	1		20
Trichlorofluoromethane	93		92		62-150	1		20
1,1-Dichloroethene	94		91		61-145	3		20
Carbon disulfide	91		88		51-130	3		20
1,1,2-Trichloro-1,2,2-Trifluoroethane	97		96		70-130	1		20
Methylene chloride	90		86		70-130	5		20
Acetone	100		90		58-148	11		20
trans-1,2-Dichloroethene	92		96		70-130	4		20
Methyl Acetate	98		97		70-130	1		20
Methyl tert butyl ether	96		95		63-130	1		20
1,1-Dichloroethane	90		90		70-130	0		20
cis-1,2-Dichloroethene	91		92		70-130	1		20
Cyclohexane	90		91		70-130	1		20
Chloroform	90		88		70-130	2		20
Carbon tetrachloride	95		96		63-132	1		20
1,1,1-Trichloroethane	93		95		67-130	2		20
2-Butanone	86		86		63-138	0		20
Benzene	90		89		70-130	1		20
1,2-Dichloroethane	94		94		70-130	0		20

Lab Control Sample Analysis

Batch Quality Control

Project Name: B14 GW Q3

Project Number: 21010214

Lab Number: L2341137

Report Date: 07/26/23

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 03-07 Batch: WG1806389-3 WG1806389-4								
Trichloroethene	90		90		70-130	0		20
1,2-Dichloropropane	88		87		70-130	1		20
Bromodichloromethane	88		89		67-130	1		20
cis-1,3-Dichloropropene	88		85		70-130	3		20
Toluene	98		96		70-130	2		20
Tetrachloroethene	110		110		70-130	0		20
4-Methyl-2-pentanone	88		84		59-130	5		20
trans-1,3-Dichloropropene	97		94		70-130	3		20
1,1,2-Trichloroethane	97		97		70-130	0		20
Dibromochloromethane	97		96		63-130	1		20
1,2-Dibromoethane	100		97		70-130	3		20
2-Hexanone	87		85		57-130	2		20
Chlorobenzene	97		95		75-130	2		20
Ethylbenzene	100		97		70-130	3		20
p/m-Xylene	95		95		70-130	0		20
o-Xylene	100		95		70-130	5		20
Styrene	95		95		70-130	0		20
Bromoform	98		92		54-136	6		20
Isopropylbenzene	100		96		70-130	4		20
1,1,2,2-Tetrachloroethane	100		94		67-130	6		20
1,3-Dichlorobenzene	110		100		70-130	10		20
1,4-Dichlorobenzene	100		100		70-130	0		20
1,2-Dichlorobenzene	100		100		70-130	0		20

Lab Control Sample Analysis
Batch Quality Control

Project Name: B14 GW Q3
Project Number: 21010214

Lab Number: L2341137
Report Date: 07/26/23

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 03-07 Batch: WG1806389-3 WG1806389-4								
1,2-Dibromo-3-chloropropane	96		91		41-144	5		20
1,2,4-Trichlorobenzene	110		110		70-130	0		20
1,2,3-Trichlorobenzene	110		110		70-130	0		20

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
1,2-Dichloroethane-d4	86		87		70-130
Toluene-d8	98		97		70-130
4-Bromofluorobenzene	98		93		70-130
Dibromofluoromethane	89		90		70-130

Lab Control Sample Analysis

Batch Quality Control

Project Name: B14 GW Q3

Project Number: 21010214

Lab Number: L2341137

Report Date: 07/26/23

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS-SIM - Westborough Lab Associated sample(s): 03-07 Batch: WG1806390-3 WG1806390-4								
1,1,2,2-Tetrachloroethane	89		89		70-130	0		25

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
1,2-Dichloroethane-d4	91		90		70-130
4-Bromofluorobenzene	91		90		70-130

SEMIVOLATILES

Project Name: B14 GW Q3 **Lab Number:** L2341137

Project Number: 21010214 **Report Date:** 07/26/23

SAMPLE RESULTS

Lab ID: L2341137-01
Client ID: TS03-DDP002
Sample Location: Not Specified

Date Collected: 07/18/23 10:35
Date Received: 07/18/23
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8270E
Analytical Date: 07/23/23 22:47
Analyst: SZ

Extraction Method: EPA 3510C
Extraction Date: 07/22/23 23:45

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Benzaldehyde	ND		ug/l	5.0	0.53	1
Phenol	ND		ug/l	5.0	0.57	1
Bis(2-chloroethyl)ether	ND		ug/l	2.0	0.50	1
2-Chlorophenol	ND		ug/l	2.0	0.48	1
2-Methylphenol	ND		ug/l	5.0	0.49	1
Bis(2-chloroisopropyl)ether	ND		ug/l	2.0	0.53	1
Acetophenone	ND		ug/l	5.0	0.53	1
n-Nitrosodi-n-propylamine	ND		ug/l	5.0	0.64	1
3-Methylphenol/4-Methylphenol	ND		ug/l	5.0	0.48	1
Hexachloroethane	ND		ug/l	2.0	0.58	1
Nitrobenzene	ND		ug/l	1.4	0.77	1
Isophorone	ND		ug/l	5.0	1.2	1
2,4-Dimethylphenol	ND		ug/l	5.0	1.8	1
Bis(2-chloroethoxy)methane	ND		ug/l	5.0	0.50	1
2,4-Dichlorophenol	ND		ug/l	5.0	0.41	1
Naphthalene	ND		ug/l	2.0	0.46	1
4-Chloroaniline	ND		ug/l	3.7	1.1	1
Hexachlorobutadiene	ND		ug/l	2.0	0.66	1
Caprolactam	ND		ug/l	10	3.3	1
2-Methylnaphthalene	ND		ug/l	2.0	0.45	1
Hexachlorocyclopentadiene	ND		ug/l	20	0.69	1
1,2,4,5-Tetrachlorobenzene	ND		ug/l	1.7	0.44	1
2,4,6-Trichlorophenol	ND		ug/l	5.0	0.61	1
2,4,5-Trichlorophenol	ND		ug/l	5.0	0.77	1
Biphenyl	ND		ug/l	2.0	0.46	1
2-Chloronaphthalene	ND		ug/l	2.0	0.44	1
2-Nitroaniline	ND		ug/l	5.0	0.50	1
2,6-Dinitrotoluene	ND		ug/l	5.0	0.93	1

Project Name: B14 GW Q3 **Lab Number:** L2341137

Project Number: 21010214 **Report Date:** 07/26/23

SAMPLE RESULTS

Lab ID: L2341137-01 Date Collected: 07/18/23 10:35

Client ID: TS03-DDP002 Date Received: 07/18/23

Sample Location: Not Specified 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	0.46	1
Acenaphthene	ND		ug/l	2.0	0.53	1
2,4-Dinitrophenol	ND		ug/l	20	6.6	1
2,4-Dinitrotoluene	ND		ug/l	5.0	1.2	1
2,3,4,6-Tetrachlorophenol	ND		ug/l	5.0	0.84	1
Diethyl phthalate	ND		ug/l	5.0	0.38	1
Fluorene	ND		ug/l	2.0	0.41	1
4-Nitroaniline	ND		ug/l	5.0	0.80	1
NDPA/DPA	ND		ug/l	2.0	0.42	1
Hexachlorobenzene	ND		ug/l	2.0	0.46	1
Pentachlorophenol	ND		ug/l	10	1.8	1
Phenanthrene	ND		ug/l	2.0	0.33	1
Anthracene	ND		ug/l	2.0	0.33	1
Carbazole	ND		ug/l	2.0	0.49	1
Di-n-butylphthalate	ND		ug/l	5.0	0.39	1
Fluoranthene	ND		ug/l	2.0	0.26	1
Pyrene	ND		ug/l	2.0	0.28	1
3,3'-Dichlorobenzidine	ND		ug/l	5.0	1.6	1
Benzo(a)anthracene	ND		ug/l	2.0	0.32	1
Chrysene	ND		ug/l	1.4	0.34	1
Bis(2-ethylhexyl)phthalate	ND		ug/l	3.0	1.5	1
Di-n-octylphthalate	ND		ug/l	5.0	1.3	1
Benzo(b)fluoranthene	ND		ug/l	2.0	0.35	1
Benzo(k)fluoranthene	ND		ug/l	2.0	0.37	1
Benzo(a)pyrene	ND		ug/l	2.0	0.41	1
Indeno(1,2,3-cd)pyrene	ND		ug/l	2.0	0.40	1
Dibenzo(a,h)anthracene	ND		ug/l	2.0	0.32	1
Benzo(ghi)perylene	ND		ug/l	2.0	0.30	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	59		21-120
Phenol-d6	46		10-120
Nitrobenzene-d5	65		23-120
2-Fluorobiphenyl	57		15-120
2,4,6-Tribromophenol	66		10-120
4-Terphenyl-d14	50		41-149

Project Name: B14 GW Q3
Project Number: 21010214
Lab Number: L2341137
Report Date: 07/26/23

SAMPLE RESULTS

Lab ID: L2341137-01
Client ID: TS03-DDP002
Sample Location: Not Specified

Date Collected: 07/18/23 10:35
Date Received: 07/18/23
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8270E-SIM
Analytical Date: 07/23/23 14:26
Analyst: DV

Extraction Method: EPA 3510C
Extraction Date: 07/22/23 23:55

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS-SIM - Westborough Lab						
Naphthalene	0.07	JB	ug/l	0.10	0.05	1
2-Methylnaphthalene	ND		ug/l	0.10	0.02	1
Acenaphthylene	ND		ug/l	0.10	0.01	1
Acenaphthene	ND		ug/l	0.10	0.01	1
Fluorene	ND		ug/l	0.10	0.01	1
Pentachlorophenol	ND		ug/l	0.10	0.01	1
Phenanthrene	0.03	JB	ug/l	0.05	0.02	1
Anthracene	ND		ug/l	0.10	0.01	1
Fluoranthene	ND		ug/l	0.10	0.02	1
Pyrene	ND		ug/l	0.10	0.02	1
Benzo(a)anthracene	0.02	JB	ug/l	0.05	0.02	1
Chrysene	0.02	J	ug/l	0.10	0.01	1
Benzo(b)fluoranthene	0.03	J	ug/l	0.05	0.01	1
Benzo(k)fluoranthene	0.03	J	ug/l	0.10	0.01	1
Benzo(a)pyrene	0.02	J	ug/l	0.10	0.02	1
Indeno(1,2,3-cd)pyrene	0.03	J	ug/l	0.10	0.01	1
Dibenzo(a,h)anthracene	0.04	J	ug/l	0.05	0.01	1
Benzo(ghi)perylene	0.03	J	ug/l	0.10	0.01	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	43		21-120
Phenol-d6	36		10-120
Nitrobenzene-d5	54		23-120
2-Fluorobiphenyl	52		15-120
2,4,6-Tribromophenol	64		10-120
4-Terphenyl-d14	46		41-149

Project Name: B14 GW Q3 **Lab Number:** L2341137

Project Number: 21010214 **Report Date:** 07/26/23

SAMPLE RESULTS

Lab ID: L2341137-02
Client ID: HI21-MWS
Sample Location: Not Specified

Date Collected: 07/18/23 11:40
Date Received: 07/18/23
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8270E
Analytical Date: 07/23/23 23:09
Analyst: SZ

Extraction Method: EPA 3510C
Extraction Date: 07/22/23 23:45

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Benzaldehyde	ND		ug/l	5.0	0.53	1
Phenol	ND		ug/l	5.0	0.57	1
Bis(2-chloroethyl)ether	ND		ug/l	2.0	0.50	1
2-Chlorophenol	ND		ug/l	2.0	0.48	1
2-Methylphenol	ND		ug/l	5.0	0.49	1
Bis(2-chloroisopropyl)ether	ND		ug/l	2.0	0.53	1
Acetophenone	ND		ug/l	5.0	0.53	1
n-Nitrosodi-n-propylamine	ND		ug/l	5.0	0.64	1
3-Methylphenol/4-Methylphenol	ND		ug/l	5.0	0.48	1
Hexachloroethane	ND		ug/l	2.0	0.58	1
Nitrobenzene	ND		ug/l	1.4	0.77	1
Isophorone	ND		ug/l	5.0	1.2	1
2,4-Dimethylphenol	ND		ug/l	5.0	1.8	1
Bis(2-chloroethoxy)methane	ND		ug/l	5.0	0.50	1
2,4-Dichlorophenol	ND		ug/l	5.0	0.41	1
Naphthalene	ND		ug/l	2.0	0.46	1
4-Chloroaniline	ND		ug/l	3.7	1.1	1
Hexachlorobutadiene	ND		ug/l	2.0	0.66	1
Caprolactam	ND		ug/l	10	3.3	1
2-Methylnaphthalene	ND		ug/l	2.0	0.45	1
Hexachlorocyclopentadiene	ND		ug/l	20	0.69	1
1,2,4,5-Tetrachlorobenzene	ND		ug/l	1.7	0.44	1
2,4,6-Trichlorophenol	ND		ug/l	5.0	0.61	1
2,4,5-Trichlorophenol	ND		ug/l	5.0	0.77	1
Biphenyl	ND		ug/l	2.0	0.46	1
2-Chloronaphthalene	ND		ug/l	2.0	0.44	1
2-Nitroaniline	ND		ug/l	5.0	0.50	1
2,6-Dinitrotoluene	ND		ug/l	5.0	0.93	1

Project Name: B14 GW Q3 **Lab Number:** L2341137

Project Number: 21010214 **Report Date:** 07/26/23

SAMPLE RESULTS

Lab ID: L2341137-02 Date Collected: 07/18/23 11:40

Client ID: HI21-MWS Date Received: 07/18/23

Sample Location: Not Specified 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	0.46	1
Acenaphthene	ND		ug/l	2.0	0.53	1
2,4-Dinitrophenol	ND		ug/l	20	6.6	1
2,4-Dinitrotoluene	ND		ug/l	5.0	1.2	1
2,3,4,6-Tetrachlorophenol	ND		ug/l	5.0	0.84	1
Diethyl phthalate	ND		ug/l	5.0	0.38	1
Fluorene	ND		ug/l	2.0	0.41	1
4-Nitroaniline	ND		ug/l	5.0	0.80	1
NDPA/DPA	ND		ug/l	2.0	0.42	1
Hexachlorobenzene	ND		ug/l	2.0	0.46	1
Pentachlorophenol	ND		ug/l	10	1.8	1
Phenanthrene	ND		ug/l	2.0	0.33	1
Anthracene	ND		ug/l	2.0	0.33	1
Carbazole	ND		ug/l	2.0	0.49	1
Di-n-butylphthalate	ND		ug/l	5.0	0.39	1
Fluoranthene	ND		ug/l	2.0	0.26	1
Pyrene	ND		ug/l	2.0	0.28	1
3,3'-Dichlorobenzidine	ND		ug/l	5.0	1.6	1
Benzo(a)anthracene	ND		ug/l	2.0	0.32	1
Chrysene	ND		ug/l	1.4	0.34	1
Bis(2-ethylhexyl)phthalate	ND		ug/l	3.0	1.5	1
Di-n-octylphthalate	ND		ug/l	5.0	1.3	1
Benzo(b)fluoranthene	ND		ug/l	2.0	0.35	1
Benzo(k)fluoranthene	ND		ug/l	2.0	0.37	1
Benzo(a)pyrene	ND		ug/l	2.0	0.41	1
Indeno(1,2,3-cd)pyrene	ND		ug/l	2.0	0.40	1
Dibenzo(a,h)anthracene	ND		ug/l	2.0	0.32	1
Benzo(ghi)perylene	ND		ug/l	2.0	0.30	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	54		21-120
Phenol-d6	44		10-120
Nitrobenzene-d5	59		23-120
2-Fluorobiphenyl	49		15-120
2,4,6-Tribromophenol	65		10-120
4-Terphenyl-d14	44		41-149

Project Name: B14 GW Q3 **Lab Number:** L2341137

Project Number: 21010214 **Report Date:** 07/26/23

SAMPLE RESULTS

Lab ID: L2341137-02
Client ID: HI21-MWS
Sample Location: Not Specified

Date Collected: 07/18/23 11:40
Date Received: 07/18/23
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8270E-SIM
Analytical Date: 07/23/23 14:42
Analyst: DV

Extraction Method: EPA 3510C
Extraction Date: 07/22/23 23:55

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS-SIM - Westborough Lab						
Naphthalene	ND		ug/l	0.10	0.05	1
2-Methylnaphthalene	ND		ug/l	0.10	0.02	1
Acenaphthylene	0.02	J	ug/l	0.10	0.01	1
Acenaphthene	ND		ug/l	0.10	0.01	1
Fluorene	ND		ug/l	0.10	0.01	1
Pentachlorophenol	ND		ug/l	0.10	0.01	1
Phenanthrene	0.04	JB	ug/l	0.05	0.02	1
Anthracene	0.02	J	ug/l	0.10	0.01	1
Fluoranthene	0.05	J	ug/l	0.10	0.02	1
Pyrene	0.03	J	ug/l	0.10	0.02	1
Benzo(a)anthracene	ND		ug/l	0.05	0.02	1
Chrysene	ND		ug/l	0.10	0.01	1
Benzo(b)fluoranthene	ND		ug/l	0.05	0.01	1
Benzo(k)fluoranthene	ND		ug/l	0.10	0.01	1
Benzo(a)pyrene	ND		ug/l	0.10	0.02	1
Indeno(1,2,3-cd)pyrene	ND		ug/l	0.10	0.01	1
Dibenzo(a,h)anthracene	ND		ug/l	0.05	0.01	1
Benzo(ghi)perylene	ND		ug/l	0.10	0.01	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	38		21-120
Phenol-d6	32		10-120
Nitrobenzene-d5	48		23-120
2-Fluorobiphenyl	46		15-120
2,4,6-Tribromophenol	59		10-120
4-Terphenyl-d14	43		41-149

Project Name: B14 GW Q3 **Lab Number:** L2341137

Project Number: 21010214 **Report Date:** 07/26/23

SAMPLE RESULTS

Lab ID: L2341137-03
Client ID: HI07-PZM005
Sample Location: Not Specified

Date Collected: 07/18/23 12:40
Date Received: 07/18/23
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8270E
Analytical Date: 07/23/23 23:32
Analyst: SZ

Extraction Method: EPA 3510C
Extraction Date: 07/22/23 23:45

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Benzaldehyde	ND		ug/l	5.0	0.53	1
Phenol	ND		ug/l	5.0	0.57	1
Bis(2-chloroethyl)ether	ND		ug/l	2.0	0.50	1
2-Chlorophenol	ND		ug/l	2.0	0.48	1
2-Methylphenol	ND		ug/l	5.0	0.49	1
Bis(2-chloroisopropyl)ether	ND		ug/l	2.0	0.53	1
Acetophenone	ND		ug/l	5.0	0.53	1
n-Nitrosodi-n-propylamine	ND		ug/l	5.0	0.64	1
3-Methylphenol/4-Methylphenol	3.2	J	ug/l	5.0	0.48	1
Hexachloroethane	ND		ug/l	2.0	0.58	1
Nitrobenzene	ND		ug/l	1.4	0.77	1
Isophorone	ND		ug/l	5.0	1.2	1
2,4-Dimethylphenol	3.7	J	ug/l	5.0	1.8	1
Bis(2-chloroethoxy)methane	ND		ug/l	5.0	0.50	1
2,4-Dichlorophenol	ND		ug/l	5.0	0.41	1
Naphthalene	12		ug/l	2.0	0.46	1
4-Chloroaniline	ND		ug/l	3.7	1.1	1
Hexachlorobutadiene	ND		ug/l	2.0	0.66	1
Caprolactam	ND		ug/l	10	3.3	1
2-Methylnaphthalene	0.59	J	ug/l	2.0	0.45	1
Hexachlorocyclopentadiene	ND		ug/l	20	0.69	1
1,2,4,5-Tetrachlorobenzene	ND		ug/l	1.7	0.44	1
2,4,6-Trichlorophenol	ND		ug/l	5.0	0.61	1
2,4,5-Trichlorophenol	ND		ug/l	5.0	0.77	1
Biphenyl	ND		ug/l	2.0	0.46	1
2-Chloronaphthalene	ND		ug/l	2.0	0.44	1
2-Nitroaniline	ND		ug/l	5.0	0.50	1
2,6-Dinitrotoluene	ND		ug/l	5.0	0.93	1

Project Name: B14 GW Q3 **Lab Number:** L2341137

Project Number: 21010214 **Report Date:** 07/26/23

SAMPLE RESULTS

Lab ID: L2341137-03 Date Collected: 07/18/23 12:40

Client ID: HI07-PZM005 Date Received: 07/18/23

Sample Location: Not Specified 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	0.46	1
Acenaphthene	ND		ug/l	2.0	0.53	1
2,4-Dinitrophenol	ND		ug/l	20	6.6	1
2,4-Dinitrotoluene	ND		ug/l	5.0	1.2	1
2,3,4,6-Tetrachlorophenol	ND		ug/l	5.0	0.84	1
Diethyl phthalate	ND		ug/l	5.0	0.38	1
Fluorene	ND		ug/l	2.0	0.41	1
4-Nitroaniline	ND		ug/l	5.0	0.80	1
NDPA/DPA	ND		ug/l	2.0	0.42	1
Hexachlorobenzene	ND		ug/l	2.0	0.46	1
Pentachlorophenol	4.4	J	ug/l	10	1.8	1
Phenanthrene	0.75	J	ug/l	2.0	0.33	1
Anthracene	ND		ug/l	2.0	0.33	1
Carbazole	0.83	J	ug/l	2.0	0.49	1
Di-n-butylphthalate	ND		ug/l	5.0	0.39	1
Fluoranthene	0.41	J	ug/l	2.0	0.26	1
Pyrene	0.33	J	ug/l	2.0	0.28	1
3,3'-Dichlorobenzidine	ND		ug/l	5.0	1.6	1
Benzo(a)anthracene	ND		ug/l	2.0	0.32	1
Chrysene	ND		ug/l	1.4	0.34	1
Bis(2-ethylhexyl)phthalate	ND		ug/l	3.0	1.5	1
Di-n-octylphthalate	ND		ug/l	5.0	1.3	1
Benzo(b)fluoranthene	ND		ug/l	2.0	0.35	1
Benzo(k)fluoranthene	ND		ug/l	2.0	0.37	1
Benzo(a)pyrene	ND		ug/l	2.0	0.41	1
Indeno(1,2,3-cd)pyrene	ND		ug/l	2.0	0.40	1
Dibenzo(a,h)anthracene	ND		ug/l	2.0	0.32	1
Benzo(ghi)perylene	ND		ug/l	2.0	0.30	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	54		21-120
Phenol-d6	43		10-120
Nitrobenzene-d5	60		23-120
2-Fluorobiphenyl	56		15-120
2,4,6-Tribromophenol	72		10-120
4-Terphenyl-d14	52		41-149

Project Name: B14 GW Q3 **Lab Number:** L2341137

Project Number: 21010214 **Report Date:** 07/26/23

SAMPLE RESULTS

Lab ID: L2341137-03
Client ID: HI07-PZM005
Sample Location: Not Specified

Date Collected: 07/18/23 12:40
Date Received: 07/18/23
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8270E-SIM
Analytical Date: 07/23/23 18:51
Analyst: DV

Extraction Method: EPA 3510C
Extraction Date: 07/22/23 23:55

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS-SIM - Westborough Lab						
Naphthalene	12		ug/l	0.10	0.05	1
2-Methylnaphthalene	0.65		ug/l	0.10	0.02	1
Acenaphthylene	0.26		ug/l	0.10	0.01	1
Acenaphthene	0.30		ug/l	0.10	0.01	1
Fluorene	0.45		ug/l	0.10	0.01	1
Pentachlorophenol	2.0		ug/l	0.10	0.01	1
Phenanthrene	0.74		ug/l	0.05	0.02	1
Anthracene	0.16		ug/l	0.10	0.01	1
Fluoranthene	0.35		ug/l	0.10	0.02	1
Pyrene	0.23		ug/l	0.10	0.02	1
Benzo(a)anthracene	0.04	JB	ug/l	0.05	0.02	1
Chrysene	0.03	J	ug/l	0.10	0.01	1
Benzo(b)fluoranthene	ND		ug/l	0.05	0.01	1
Benzo(k)fluoranthene	ND		ug/l	0.10	0.01	1
Benzo(a)pyrene	ND		ug/l	0.10	0.02	1
Indeno(1,2,3-cd)pyrene	ND		ug/l	0.10	0.01	1
Dibenzo(a,h)anthracene	ND		ug/l	0.05	0.01	1
Benzo(ghi)perylene	ND		ug/l	0.10	0.01	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	42		21-120
Phenol-d6	33		10-120
Nitrobenzene-d5	57		23-120
2-Fluorobiphenyl	56		15-120
2,4,6-Tribromophenol	71		10-120
4-Terphenyl-d14	51		41-149

Project Name: B14 GW Q3 **Lab Number:** L2341137

Project Number: 21010214 **Report Date:** 07/26/23

SAMPLE RESULTS

Lab ID: L2341137-04
Client ID: FIELD BLANK
Sample Location: Not Specified

Date Collected: 07/18/23 12:20
Date Received: 07/18/23
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8270E
Analytical Date: 07/23/23 23:54
Analyst: SZ

Extraction Method: EPA 3510C
Extraction Date: 07/22/23 23:45

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Benzaldehyde	ND		ug/l	5.0	0.53	1
Phenol	ND		ug/l	5.0	0.57	1
Bis(2-chloroethyl)ether	ND		ug/l	2.0	0.50	1
2-Chlorophenol	ND		ug/l	2.0	0.48	1
2-Methylphenol	ND		ug/l	5.0	0.49	1
Bis(2-chloroisopropyl)ether	ND		ug/l	2.0	0.53	1
Acetophenone	ND		ug/l	5.0	0.53	1
n-Nitrosodi-n-propylamine	ND		ug/l	5.0	0.64	1
3-Methylphenol/4-Methylphenol	ND		ug/l	5.0	0.48	1
Hexachloroethane	ND		ug/l	2.0	0.58	1
Nitrobenzene	ND		ug/l	1.4	0.77	1
Isophorone	ND		ug/l	5.0	1.2	1
2,4-Dimethylphenol	ND		ug/l	5.0	1.8	1
Bis(2-chloroethoxy)methane	ND		ug/l	5.0	0.50	1
2,4-Dichlorophenol	ND		ug/l	5.0	0.41	1
Naphthalene	1.2	J	ug/l	2.0	0.46	1
4-Chloroaniline	ND		ug/l	3.7	1.1	1
Hexachlorobutadiene	ND		ug/l	2.0	0.66	1
Caprolactam	ND		ug/l	10	3.3	1
2-Methylnaphthalene	ND		ug/l	2.0	0.45	1
Hexachlorocyclopentadiene	ND		ug/l	20	0.69	1
1,2,4,5-Tetrachlorobenzene	ND		ug/l	1.7	0.44	1
2,4,6-Trichlorophenol	ND		ug/l	5.0	0.61	1
2,4,5-Trichlorophenol	ND		ug/l	5.0	0.77	1
Biphenyl	ND		ug/l	2.0	0.46	1
2-Chloronaphthalene	ND		ug/l	2.0	0.44	1
2-Nitroaniline	ND		ug/l	5.0	0.50	1
2,6-Dinitrotoluene	ND		ug/l	5.0	0.93	1

Project Name: B14 GW Q3 **Lab Number:** L2341137

Project Number: 21010214 **Report Date:** 07/26/23

SAMPLE RESULTS

Lab ID: L2341137-04 Date Collected: 07/18/23 12:20

Client ID: FIELD BLANK Date Received: 07/18/23

Sample Location: Not Specified 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	0.46	1
Acenaphthene	ND		ug/l	2.0	0.53	1
2,4-Dinitrophenol	ND		ug/l	20	6.6	1
2,4-Dinitrotoluene	ND		ug/l	5.0	1.2	1
2,3,4,6-Tetrachlorophenol	ND		ug/l	5.0	0.84	1
Diethyl phthalate	ND		ug/l	5.0	0.38	1
Fluorene	ND		ug/l	2.0	0.41	1
4-Nitroaniline	ND		ug/l	5.0	0.80	1
NDPA/DPA	ND		ug/l	2.0	0.42	1
Hexachlorobenzene	ND		ug/l	2.0	0.46	1
Pentachlorophenol	ND		ug/l	10	1.8	1
Phenanthrene	ND		ug/l	2.0	0.33	1
Anthracene	ND		ug/l	2.0	0.33	1
Carbazole	ND		ug/l	2.0	0.49	1
Di-n-butylphthalate	ND		ug/l	5.0	0.39	1
Fluoranthene	ND		ug/l	2.0	0.26	1
Pyrene	ND		ug/l	2.0	0.28	1
3,3'-Dichlorobenzidine	ND		ug/l	5.0	1.6	1
Benzo(a)anthracene	ND		ug/l	2.0	0.32	1
Chrysene	ND		ug/l	1.4	0.34	1
Bis(2-ethylhexyl)phthalate	ND		ug/l	3.0	1.5	1
Di-n-octylphthalate	ND		ug/l	5.0	1.3	1
Benzo(b)fluoranthene	ND		ug/l	2.0	0.35	1
Benzo(k)fluoranthene	ND		ug/l	2.0	0.37	1
Benzo(a)pyrene	ND		ug/l	2.0	0.41	1
Indeno(1,2,3-cd)pyrene	ND		ug/l	2.0	0.40	1
Dibenzo(a,h)anthracene	ND		ug/l	2.0	0.32	1
Benzo(ghi)perylene	ND		ug/l	2.0	0.30	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	48		21-120
Phenol-d6	40		10-120
Nitrobenzene-d5	58		23-120
2-Fluorobiphenyl	57		15-120
2,4,6-Tribromophenol	58		10-120
4-Terphenyl-d14	52		41-149

Project Name: B14 GW Q3 **Lab Number:** L2341137

Project Number: 21010214 **Report Date:** 07/26/23

SAMPLE RESULTS

Lab ID: L2341137-04
Client ID: FIELD BLANK
Sample Location: Not Specified

Date Collected: 07/18/23 12:20
Date Received: 07/18/23
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8270E-SIM
Analytical Date: 07/25/23 14:10
Analyst: RP

Extraction Method: EPA 3510C
Extraction Date: 07/24/23 20:41

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS-SIM - Westborough Lab						
Naphthalene	ND		ug/l	0.10	0.05	1
2-Methylnaphthalene	ND		ug/l	0.10	0.02	1
Acenaphthylene	ND		ug/l	0.10	0.01	1
Acenaphthene	ND		ug/l	0.10	0.01	1
Fluorene	ND		ug/l	0.10	0.01	1
Pentachlorophenol	ND		ug/l	0.10	0.01	1
Phenanthrene	ND		ug/l	0.05	0.02	1
Anthracene	ND		ug/l	0.10	0.01	1
Fluoranthene	ND		ug/l	0.10	0.02	1
Pyrene	ND		ug/l	0.10	0.02	1
Benzo(a)anthracene	ND		ug/l	0.05	0.02	1
Chrysene	ND		ug/l	0.10	0.01	1
Benzo(b)fluoranthene	ND		ug/l	0.05	0.01	1
Benzo(k)fluoranthene	ND		ug/l	0.10	0.01	1
Benzo(a)pyrene	ND		ug/l	0.10	0.02	1
Indeno(1,2,3-cd)pyrene	ND		ug/l	0.10	0.01	1
Dibenzo(a,h)anthracene	ND		ug/l	0.05	0.01	1
Benzo(ghi)perylene	ND		ug/l	0.10	0.01	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	50		21-120
Phenol-d6	41		10-120
Nitrobenzene-d5	69		23-120
2-Fluorobiphenyl	71		15-120
2,4,6-Tribromophenol	95		10-120
4-Terphenyl-d14	73		41-149

Project Name: B14 GW Q3 **Lab Number:** L2341137

Project Number: 21010214 **Report Date:** 07/26/23

SAMPLE RESULTS

Lab ID: L2341137-05
Client ID: HI19-MWS
Sample Location: Not Specified

Date Collected: 07/18/23 14:10
Date Received: 07/18/23
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8270E
Analytical Date: 07/24/23 00:17
Analyst: SZ

Extraction Method: EPA 3510C
Extraction Date: 07/22/23 23:45

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Benzaldehyde	ND		ug/l	5.0	0.53	1
Phenol	ND		ug/l	5.0	0.57	1
Bis(2-chloroethyl)ether	ND		ug/l	2.0	0.50	1
2-Chlorophenol	ND		ug/l	2.0	0.48	1
2-Methylphenol	1.4	J	ug/l	5.0	0.49	1
Bis(2-chloroisopropyl)ether	ND		ug/l	2.0	0.53	1
Acetophenone	ND		ug/l	5.0	0.53	1
n-Nitrosodi-n-propylamine	ND		ug/l	5.0	0.64	1
3-Methylphenol/4-Methylphenol	21		ug/l	5.0	0.48	1
Hexachloroethane	ND		ug/l	2.0	0.58	1
Nitrobenzene	ND		ug/l	1.4	0.77	1
Isophorone	ND		ug/l	5.0	1.2	1
2,4-Dimethylphenol	48		ug/l	5.0	1.8	1
Bis(2-chloroethoxy)methane	ND		ug/l	5.0	0.50	1
2,4-Dichlorophenol	ND		ug/l	5.0	0.41	1
Naphthalene	32		ug/l	2.0	0.46	1
4-Chloroaniline	ND		ug/l	3.7	1.1	1
Hexachlorobutadiene	ND		ug/l	2.0	0.66	1
Caprolactam	ND		ug/l	10	3.3	1
2-Methylnaphthalene	2.0		ug/l	2.0	0.45	1
Hexachlorocyclopentadiene	ND		ug/l	20	0.69	1
1,2,4,5-Tetrachlorobenzene	ND		ug/l	1.7	0.44	1
2,4,6-Trichlorophenol	ND		ug/l	5.0	0.61	1
2,4,5-Trichlorophenol	ND		ug/l	5.0	0.77	1
Biphenyl	0.73	J	ug/l	2.0	0.46	1
2-Chloronaphthalene	ND		ug/l	2.0	0.44	1
2-Nitroaniline	ND		ug/l	5.0	0.50	1
2,6-Dinitrotoluene	ND		ug/l	5.0	0.93	1

Project Name: B14 GW Q3 **Lab Number:** L2341137

Project Number: 21010214 **Report Date:** 07/26/23

SAMPLE RESULTS

Lab ID: L2341137-05 Date Collected: 07/18/23 14:10

Client ID: HI19-MWS Date Received: 07/18/23

Sample Location: Not Specified 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	0.46	1
Acenaphthene	0.77	J	ug/l	2.0	0.53	1
2,4-Dinitrophenol	ND		ug/l	20	6.6	1
2,4-Dinitrotoluene	ND		ug/l	5.0	1.2	1
2,3,4,6-Tetrachlorophenol	ND		ug/l	5.0	0.84	1
Diethyl phthalate	ND		ug/l	5.0	0.38	1
Fluorene	0.89	J	ug/l	2.0	0.41	1
4-Nitroaniline	ND		ug/l	5.0	0.80	1
NDPA/DPA	ND		ug/l	2.0	0.42	1
Hexachlorobenzene	ND		ug/l	2.0	0.46	1
Pentachlorophenol	ND		ug/l	10	1.8	1
Phenanthrene	2.0		ug/l	2.0	0.33	1
Anthracene	ND		ug/l	2.0	0.33	1
Carbazole	1.5	J	ug/l	2.0	0.49	1
Di-n-butylphthalate	0.94	J	ug/l	5.0	0.39	1
Fluoranthene	0.62	J	ug/l	2.0	0.26	1
Pyrene	0.43	J	ug/l	2.0	0.28	1
3,3'-Dichlorobenzidine	ND		ug/l	5.0	1.6	1
Benzo(a)anthracene	ND		ug/l	2.0	0.32	1
Chrysene	ND		ug/l	1.4	0.34	1
Bis(2-ethylhexyl)phthalate	ND		ug/l	3.0	1.5	1
Di-n-octylphthalate	ND		ug/l	5.0	1.3	1
Benzo(b)fluoranthene	ND		ug/l	2.0	0.35	1
Benzo(k)fluoranthene	ND		ug/l	2.0	0.37	1
Benzo(a)pyrene	ND		ug/l	2.0	0.41	1
Indeno(1,2,3-cd)pyrene	ND		ug/l	2.0	0.40	1
Dibenzo(a,h)anthracene	ND		ug/l	2.0	0.32	1
Benzo(ghi)perylene	ND		ug/l	2.0	0.30	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	67		21-120
Phenol-d6	49		10-120
Nitrobenzene-d5	69		23-120
2-Fluorobiphenyl	62		15-120
2,4,6-Tribromophenol	89		10-120
4-Terphenyl-d14	56		41-149

Project Name: B14 GW Q3 **Lab Number:** L2341137

Project Number: 21010214 **Report Date:** 07/26/23

SAMPLE RESULTS

Lab ID: L2341137-05
Client ID: HI19-MWS
Sample Location: Not Specified

Date Collected: 07/18/23 14:10
Date Received: 07/18/23
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8270E-SIM
Analytical Date: 07/25/23 14:27
Analyst: RP

Extraction Method: EPA 3510C
Extraction Date: 07/24/23 20:41

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS-SIM - Westborough Lab						
Naphthalene	26		ug/l	0.10	0.05	1
2-Methylnaphthalene	1.8		ug/l	0.10	0.02	1
Acenaphthylene	0.34		ug/l	0.10	0.01	1
Acenaphthene	0.64		ug/l	0.10	0.01	1
Fluorene	0.92		ug/l	0.10	0.01	1
Pentachlorophenol	0.18		ug/l	0.10	0.01	1
Phenanthrene	1.7		ug/l	0.05	0.02	1
Anthracene	0.29		ug/l	0.10	0.01	1
Fluoranthene	0.52		ug/l	0.10	0.02	1
Pyrene	0.34		ug/l	0.10	0.02	1
Benzo(a)anthracene	0.05	J	ug/l	0.05	0.02	1
Chrysene	0.02	J	ug/l	0.10	0.01	1
Benzo(b)fluoranthene	0.01	J	ug/l	0.05	0.01	1
Benzo(k)fluoranthene	ND		ug/l	0.10	0.01	1
Benzo(a)pyrene	ND		ug/l	0.10	0.02	1
Indeno(1,2,3-cd)pyrene	ND		ug/l	0.10	0.01	1
Dibenzo(a,h)anthracene	ND		ug/l	0.05	0.01	1
Benzo(ghi)perylene	ND		ug/l	0.10	0.01	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	44		21-120
Phenol-d6	38		10-120
Nitrobenzene-d5	60		23-120
2-Fluorobiphenyl	61		15-120
2,4,6-Tribromophenol	86		10-120
4-Terphenyl-d14	61		41-149

Project Name: B14 GW Q3 **Lab Number:** L2341137

Project Number: 21010214 **Report Date:** 07/26/23

SAMPLE RESULTS

Lab ID: L2341137-06
Client ID: HI18-MWS
Sample Location: Not Specified

Date Collected: 07/18/23 15:25
Date Received: 07/18/23
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8270E
Analytical Date: 07/24/23 00:39
Analyst: SZ

Extraction Method: EPA 3510C
Extraction Date: 07/22/23 23:45

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Benzaldehyde	ND		ug/l	5.0	0.53	1
Phenol	ND		ug/l	5.0	0.57	1
Bis(2-chloroethyl)ether	ND		ug/l	2.0	0.50	1
2-Chlorophenol	ND		ug/l	2.0	0.48	1
2-Methylphenol	ND		ug/l	5.0	0.49	1
Bis(2-chloroisopropyl)ether	ND		ug/l	2.0	0.53	1
Acetophenone	ND		ug/l	5.0	0.53	1
n-Nitrosodi-n-propylamine	ND		ug/l	5.0	0.64	1
3-Methylphenol/4-Methylphenol	ND		ug/l	5.0	0.48	1
Hexachloroethane	ND		ug/l	2.0	0.58	1
Nitrobenzene	ND		ug/l	1.4	0.77	1
Isophorone	ND		ug/l	5.0	1.2	1
2,4-Dimethylphenol	ND		ug/l	5.0	1.8	1
Bis(2-chloroethoxy)methane	ND		ug/l	5.0	0.50	1
2,4-Dichlorophenol	ND		ug/l	5.0	0.41	1
Naphthalene	ND		ug/l	2.0	0.46	1
4-Chloroaniline	ND		ug/l	3.7	1.1	1
Hexachlorobutadiene	ND		ug/l	2.0	0.66	1
Caprolactam	ND		ug/l	10	3.3	1
2-Methylnaphthalene	ND		ug/l	2.0	0.45	1
Hexachlorocyclopentadiene	ND		ug/l	20	0.69	1
1,2,4,5-Tetrachlorobenzene	ND		ug/l	1.7	0.44	1
2,4,6-Trichlorophenol	ND		ug/l	5.0	0.61	1
2,4,5-Trichlorophenol	ND		ug/l	5.0	0.77	1
Biphenyl	ND		ug/l	2.0	0.46	1
2-Chloronaphthalene	ND		ug/l	2.0	0.44	1
2-Nitroaniline	ND		ug/l	5.0	0.50	1
2,6-Dinitrotoluene	ND		ug/l	5.0	0.93	1

Project Name: B14 GW Q3 **Lab Number:** L2341137

Project Number: 21010214 **Report Date:** 07/26/23

SAMPLE RESULTS

Lab ID: L2341137-06 Date Collected: 07/18/23 15:25

Client ID: HI18-MWS Date Received: 07/18/23

Sample Location: Not Specified 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	0.46	1
Acenaphthene	ND		ug/l	2.0	0.53	1
2,4-Dinitrophenol	ND		ug/l	20	6.6	1
2,4-Dinitrotoluene	ND		ug/l	5.0	1.2	1
2,3,4,6-Tetrachlorophenol	ND		ug/l	5.0	0.84	1
Diethyl phthalate	ND		ug/l	5.0	0.38	1
Fluorene	ND		ug/l	2.0	0.41	1
4-Nitroaniline	ND		ug/l	5.0	0.80	1
NDPA/DPA	ND		ug/l	2.0	0.42	1
Hexachlorobenzene	ND		ug/l	2.0	0.46	1
Pentachlorophenol	ND		ug/l	10	1.8	1
Phenanthrene	ND		ug/l	2.0	0.33	1
Anthracene	ND		ug/l	2.0	0.33	1
Carbazole	ND		ug/l	2.0	0.49	1
Di-n-butylphthalate	ND		ug/l	5.0	0.39	1
Fluoranthene	ND		ug/l	2.0	0.26	1
Pyrene	ND		ug/l	2.0	0.28	1
3,3'-Dichlorobenzidine	ND		ug/l	5.0	1.6	1
Benzo(a)anthracene	ND		ug/l	2.0	0.32	1
Chrysene	ND		ug/l	1.4	0.34	1
Bis(2-ethylhexyl)phthalate	ND		ug/l	3.0	1.5	1
Di-n-octylphthalate	ND		ug/l	5.0	1.3	1
Benzo(b)fluoranthene	ND		ug/l	2.0	0.35	1
Benzo(k)fluoranthene	ND		ug/l	2.0	0.37	1
Benzo(a)pyrene	ND		ug/l	2.0	0.41	1
Indeno(1,2,3-cd)pyrene	ND		ug/l	2.0	0.40	1
Dibenzo(a,h)anthracene	ND		ug/l	2.0	0.32	1
Benzo(ghi)perylene	ND		ug/l	2.0	0.30	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	56		21-120
Phenol-d6	46		10-120
Nitrobenzene-d5	60		23-120
2-Fluorobiphenyl	55		15-120
2,4,6-Tribromophenol	72		10-120
4-Terphenyl-d14	52		41-149

Project Name: B14 GW Q3 **Lab Number:** L2341137

Project Number: 21010214 **Report Date:** 07/26/23

SAMPLE RESULTS

Lab ID: L2341137-06
Client ID: HI18-MWS
Sample Location: Not Specified

Date Collected: 07/18/23 15:25
Date Received: 07/18/23
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8270E-SIM
Analytical Date: 07/23/23 19:41
Analyst: DV

Extraction Method: EPA 3510C
Extraction Date: 07/22/23 23:55

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS-SIM - Westborough Lab						
Naphthalene	ND		ug/l	0.10	0.05	1
2-Methylnaphthalene	ND		ug/l	0.10	0.02	1
Acenaphthylene	0.03	J	ug/l	0.10	0.01	1
Acenaphthene	ND		ug/l	0.10	0.01	1
Fluorene	ND		ug/l	0.10	0.01	1
Pentachlorophenol	ND		ug/l	0.10	0.01	1
Phenanthrene	0.03	JB	ug/l	0.05	0.02	1
Anthracene	0.21		ug/l	0.10	0.01	1
Fluoranthene	0.05	J	ug/l	0.10	0.02	1
Pyrene	0.04	J	ug/l	0.10	0.02	1
Benzo(a)anthracene	ND		ug/l	0.05	0.02	1
Chrysene	ND		ug/l	0.10	0.01	1
Benzo(b)fluoranthene	ND		ug/l	0.05	0.01	1
Benzo(k)fluoranthene	ND		ug/l	0.10	0.01	1
Benzo(a)pyrene	ND		ug/l	0.10	0.02	1
Indeno(1,2,3-cd)pyrene	ND		ug/l	0.10	0.01	1
Dibenzo(a,h)anthracene	ND		ug/l	0.05	0.01	1
Benzo(ghi)perylene	ND		ug/l	0.10	0.01	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	44		21-120
Phenol-d6	35		10-120
Nitrobenzene-d5	58		23-120
2-Fluorobiphenyl	57		15-120
2,4,6-Tribromophenol	74		10-120
4-Terphenyl-d14	49		41-149

Project Name: B14 GW Q3 **Lab Number:** L2341137

Project Number: 21010214 **Report Date:** 07/26/23

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270E
Analytical Date: 07/23/23 16:24
Analyst: SZ

Extraction Method: EPA 3510C
Extraction Date: 07/22/23 23:45

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 01-06 Batch: WG1806558-1					
Benzaldehyde	ND		ug/l	5.0	0.53
Phenol	ND		ug/l	5.0	0.57
Bis(2-chloroethyl)ether	ND		ug/l	2.0	0.50
2-Chlorophenol	ND		ug/l	2.0	0.48
2-Methylphenol	ND		ug/l	5.0	0.49
Bis(2-chloroisopropyl)ether	ND		ug/l	2.0	0.53
Acetophenone	ND		ug/l	5.0	0.53
n-Nitrosodi-n-propylamine	ND		ug/l	5.0	0.64
3-Methylphenol/4-Methylphenol	ND		ug/l	5.0	0.48
Hexachloroethane	ND		ug/l	2.0	0.58
Nitrobenzene	ND		ug/l	1.4	0.77
Isophorone	ND		ug/l	5.0	1.2
2,4-Dimethylphenol	ND		ug/l	5.0	1.8
Bis(2-chloroethoxy)methane	ND		ug/l	5.0	0.50
2,4-Dichlorophenol	ND		ug/l	5.0	0.41
Naphthalene	ND		ug/l	2.0	0.46
4-Chloroaniline	ND		ug/l	3.7	1.1
Hexachlorobutadiene	ND		ug/l	2.0	0.66
Caprolactam	ND		ug/l	10	3.3
2-Methylnaphthalene	ND		ug/l	2.0	0.45
Hexachlorocyclopentadiene	ND		ug/l	20	0.69
1,2,4,5-Tetrachlorobenzene	ND		ug/l	1.7	0.44
2,4,6-Trichlorophenol	ND		ug/l	5.0	0.61
2,4,5-Trichlorophenol	ND		ug/l	5.0	0.77
Biphenyl	ND		ug/l	2.0	0.46
2-Chloronaphthalene	ND		ug/l	2.0	0.44
2-Nitroaniline	ND		ug/l	5.0	0.50
2,6-Dinitrotoluene	ND		ug/l	5.0	0.93
Acenaphthylene	ND		ug/l	2.0	0.46

Project Name: B14 GW Q3 **Lab Number:** L2341137

Project Number: 21010214 **Report Date:** 07/26/23

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270E
Analytical Date: 07/23/23 16:24
Analyst: SZ

Extraction Method: EPA 3510C
Extraction Date: 07/22/23 23:45

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 01-06 Batch: WG1806558-1					
Acenaphthene	ND		ug/l	2.0	0.53
2,4-Dinitrophenol	ND		ug/l	20	6.6
2,4-Dinitrotoluene	ND		ug/l	5.0	1.2
2,3,4,6-Tetrachlorophenol	ND		ug/l	5.0	0.84
Diethyl phthalate	ND		ug/l	5.0	0.38
Fluorene	ND		ug/l	2.0	0.41
4-Nitroaniline	ND		ug/l	5.0	0.80
NDPA/DPA	ND		ug/l	2.0	0.42
Hexachlorobenzene	ND		ug/l	2.0	0.46
Pentachlorophenol	ND		ug/l	10	1.8
Phenanthrene	ND		ug/l	2.0	0.33
Anthracene	ND		ug/l	2.0	0.33
Carbazole	ND		ug/l	2.0	0.49
Di-n-butylphthalate	ND		ug/l	5.0	0.39
Fluoranthene	ND		ug/l	2.0	0.26
Pyrene	ND		ug/l	2.0	0.28
3,3'-Dichlorobenzidine	ND		ug/l	5.0	1.6
Benzo(a)anthracene	ND		ug/l	2.0	0.32
Chrysene	ND		ug/l	1.4	0.34
Bis(2-ethylhexyl)phthalate	ND		ug/l	3.0	1.5
Di-n-octylphthalate	ND		ug/l	5.0	1.3
Benzo(b)fluoranthene	ND		ug/l	2.0	0.35
Benzo(k)fluoranthene	ND		ug/l	2.0	0.37
Benzo(a)pyrene	ND		ug/l	2.0	0.41
Indeno(1,2,3-cd)pyrene	ND		ug/l	2.0	0.40
Dibenzo(a,h)anthracene	ND		ug/l	2.0	0.32
Benzo(ghi)perylene	ND		ug/l	2.0	0.30

Project Name: B14 GW Q3
Project Number: 21010214

Lab Number: L2341137
Report Date: 07/26/23

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270E
Analytical Date: 07/23/23 16:24
Analyst: SZ

Extraction Method: EPA 3510C
Extraction Date: 07/22/23 23:45

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 01-06 Batch: WG1806558-1					

Surrogate	%Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	60		21-120
Phenol-d6	44		10-120
Nitrobenzene-d5	64		23-120
2-Fluorobiphenyl	61		15-120
2,4,6-Tribromophenol	79		10-120
4-Terphenyl-d14	58		41-149

Project Name: B14 GW Q3 **Lab Number:** L2341137

Project Number: 21010214 **Report Date:** 07/26/23

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270E-SIM
Analytical Date: 07/23/23 11:41
Analyst: DV

Extraction Method: EPA 3510C
Extraction Date: 07/22/23 23:55

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS-SIM - Westborough Lab for sample(s): 01-03,06 Batch: WG1806559-1					
Naphthalene	0.18		ug/l	0.10	0.05
2-Methylnaphthalene	0.06	J	ug/l	0.10	0.02
Acenaphthylene	0.04	J	ug/l	0.10	0.01
Acenaphthene	ND		ug/l	0.10	0.01
Fluorene	0.06	J	ug/l	0.10	0.01
Pentachlorophenol	ND		ug/l	0.10	0.01
Phenanthrene	0.07		ug/l	0.05	0.02
Anthracene	0.05	J	ug/l	0.10	0.01
Fluoranthene	0.07	J	ug/l	0.10	0.02
Pyrene	0.06	J	ug/l	0.10	0.02
Benzo(a)anthracene	0.05		ug/l	0.05	0.02
Chrysene	0.05	J	ug/l	0.10	0.01
Benzo(b)fluoranthene	0.04	J	ug/l	0.05	0.01
Benzo(k)fluoranthene	0.05	J	ug/l	0.10	0.01
Benzo(a)pyrene	0.03	J	ug/l	0.10	0.02
Indeno(1,2,3-cd)pyrene	ND		ug/l	0.10	0.01
Dibenzo(a,h)anthracene	ND		ug/l	0.05	0.01
Benzo(ghi)perylene	ND		ug/l	0.10	0.01

Surrogate	%Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	50		21-120
Phenol-d6	40		10-120
Nitrobenzene-d5	62		23-120
2-Fluorobiphenyl	65		15-120
2,4,6-Tribromophenol	87		10-120
4-Terphenyl-d14	66		41-149

Project Name: B14 GW Q3 **Lab Number:** L2341137

Project Number: 21010214 **Report Date:** 07/26/23

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270E-SIM
Analytical Date: 07/25/23 11:20
Analyst: DV

Extraction Method: EPA 3510C
Extraction Date: 07/24/23 13:07

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS-SIM - Westborough Lab for sample(s): 04-05 Batch: WG1807052-1					
Naphthalene	0.05	J	ug/l	0.10	0.05
2-Methylnaphthalene	ND		ug/l	0.10	0.02
Acenaphthylene	ND		ug/l	0.10	0.01
Acenaphthene	ND		ug/l	0.10	0.01
Fluorene	ND		ug/l	0.10	0.01
Pentachlorophenol	ND		ug/l	0.10	0.01
Phenanthrene	ND		ug/l	0.05	0.02
Anthracene	ND		ug/l	0.10	0.01
Fluoranthene	ND		ug/l	0.10	0.02
Pyrene	ND		ug/l	0.10	0.02
Benzo(a)anthracene	ND		ug/l	0.05	0.02
Chrysene	ND		ug/l	0.10	0.01
Benzo(b)fluoranthene	ND		ug/l	0.05	0.01
Benzo(k)fluoranthene	ND		ug/l	0.10	0.01
Benzo(a)pyrene	ND		ug/l	0.10	0.02
Indeno(1,2,3-cd)pyrene	ND		ug/l	0.10	0.01
Dibenzo(a,h)anthracene	ND		ug/l	0.05	0.01
Benzo(ghi)perylene	ND		ug/l	0.10	0.01

Surrogate	%Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	52		21-120
Phenol-d6	46		10-120
Nitrobenzene-d5	89		23-120
2-Fluorobiphenyl	71		15-120
2,4,6-Tribromophenol	110		10-120
4-Terphenyl-d14	58		41-149

Lab Control Sample Analysis
Batch Quality Control

Project Name: B14 GW Q3
Project Number: 21010214

Lab Number: L2341137
Report Date: 07/26/23

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-06 Batch: WG1806558-2 WG1806558-3								
Benzaldehyde	99		97		40-140	2		30
Phenol	82		78		12-110	5		30
Bis(2-chloroethyl)ether	105		100		40-140	5		30
2-Chlorophenol	106		106		27-123	0		30
2-Methylphenol	108		104		30-130	4		30
Bis(2-chloroisopropyl)ether	95		94		40-140	1		30
Acetophenone	95		96		39-129	1		30
n-Nitrosodi-n-propylamine	125		116		29-132	7		30
3-Methylphenol/4-Methylphenol	123		116		30-130	6		30
Hexachloroethane	108		108		40-140	0		30
Nitrobenzene	116		114		40-140	2		30
Isophorone	108		103		40-140	5		30
2,4-Dimethylphenol	107		108		30-130	1		30
Bis(2-chloroethoxy)methane	112		105		40-140	6		30
2,4-Dichlorophenol	118		107		30-130	10		30
Naphthalene	100		89		40-140	12		30
4-Chloroaniline	114		107		40-140	6		30
Hexachlorobutadiene	95		83		40-140	13		30
Caprolactam	51		47		10-130	8		30
2-Methylnaphthalene	108		96		40-140	12		30
Hexachlorocyclopentadiene	82		74		40-140	10		30
1,2,4,5-Tetrachlorobenzene	87		80		2-134	8		30
2,4,6-Trichlorophenol	110		96		30-130	14		30

Lab Control Sample Analysis
Batch Quality Control

Project Name: B14 GW Q3
Project Number: 21010214

Lab Number: L2341137
Report Date: 07/26/23

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-06 Batch: WG1806558-2 WG1806558-3								
2,4,5-Trichlorophenol	130		108		30-130	18		30
Biphenyl	95		82		40-140	15		30
2-Chloronaphthalene	102		88		40-140	15		30
2-Nitroaniline	128		104		52-143	21		30
2,6-Dinitrotoluene	109		96		40-140	13		30
Acenaphthylene	114		101		45-123	12		30
Acenaphthene	101		90		37-111	12		30
2,4-Dinitrophenol	119		96		20-130	21		30
2,4-Dinitrotoluene	109		93		48-143	16		30
2,3,4,6-Tetrachlorophenol	116		101		54-145	14		30
Diethyl phthalate	117		106		40-140	10		30
Fluorene	103		92		40-140	11		30
4-Nitroaniline	108		102		51-143	6		30
NDPA/DPA	90		86		40-140	5		30
Hexachlorobenzene	108		93		40-140	15		30
Pentachlorophenol	**124**	Q	102		9-103	19		30
Phenanthrene	104		89		40-140	16		30
Anthracene	107		93		40-140	14		30
Carbazole	112		98		55-144	13		30
Di-n-butylphthalate	122		108		40-140	12		30
Fluoranthene	104		92		40-140	12		30
Pyrene	103		91		26-127	12		30
3,3'-Dichlorobenzidine	91		84		40-140	8		30

Lab Control Sample Analysis

Batch Quality Control

Project Name: B14 GW Q3

Project Number: 21010214

Lab Number: L2341137

Report Date: 07/26/23

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-06 Batch: WG1806558-2 WG1806558-3								
Benzo(a)anthracene	107		95		40-140	12		30
Chrysene	107		97		40-140	10		30
Bis(2-ethylhexyl)phthalate	**146**	Q	132		40-140	10		30
Di-n-octylphthalate	135		121		40-140	11		30
Benzo(b)fluoranthene	112		98		40-140	13		30
Benzo(k)fluoranthene	100		93		40-140	7		30
Benzo(a)pyrene	110		102		40-140	8		30
Indeno(1,2,3-cd)pyrene	102		94		40-140	8		30
Dibenzo(a,h)anthracene	106		92		40-140	14		30
Benzo(ghi)perylene	108		96		40-140	12		30

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
2-Fluorophenol	77		88		21-120
Phenol-d6	66		76		10-120
Nitrobenzene-d5	93		100		23-120
2-Fluorobiphenyl	84		85		15-120
2,4,6-Tribromophenol	101		119		10-120
4-Terphenyl-d14	78		82		41-149

Lab Control Sample Analysis
Batch Quality Control

Project Name: B14 GW Q3
Project Number: 21010214

Lab Number: L2341137
Report Date: 07/26/23

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS-SIM - Westborough Lab Associated sample(s): 01-03,06 Batch: WG1806559-2 WG1806559-3								
Naphthalene	95		98		40-140	3		40
2-Methylnaphthalene	104		106		40-140	2		40
Acenaphthylene	115		115		40-140	0		40
Acenaphthene	101		101		37-111	0		40
Fluorene	104		105		40-140	1		40
Pentachlorophenol	**137**	Q	**130**	Q	9-103	5		40
Phenanthrene	99		99		40-140	0		40
Anthracene	104		103		40-140	1		40
Fluoranthene	106		110		40-140	4		40
Pyrene	106		107		26-127	1		40
Benzo(a)anthracene	110		107		40-140	3		40
Chrysene	102		103		40-140	1		40
Benzo(b)fluoranthene	112		111		40-140	1		40
Benzo(k)fluoranthene	107		110		40-140	3		40
Benzo(a)pyrene	113		114		40-140	1		40
Indeno(1,2,3-cd)pyrene	110		106		40-140	4		40
Dibenzo(a,h)anthracene	111		111		40-140	0		40
Benzo(ghi)perylene	111		111		40-140	0		40

Lab Control Sample Analysis
Batch Quality Control

Project Name: B14 GW Q3
Project Number: 21010214
Lab Number: L2341137
Report Date: 07/26/23

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS-SIM - Westborough Lab Associated sample(s): 01-03,06 Batch: WG1806559-2 WG1806559-3								

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
2-Fluorophenol	65		83		21-120
Phenol-d6	57		72		10-120
Nitrobenzene-d5	87		107		23-120
2-Fluorobiphenyl	90		106		15-120
2,4,6-Tribromophenol	**128**	Q	**150**	Q	10-120
4-Terphenyl-d14	89		105		41-149

Lab Control Sample Analysis
Batch Quality Control

Project Name: B14 GW Q3
Project Number: 21010214
Lab Number: L2341137
Report Date: 07/26/23

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS-SIM - Westborough Lab Associated sample(s): 04-05 Batch: WG1807052-2 WG1807052-3								
Naphthalene	64		57		40-140	12		40
2-Methylnaphthalene	68		63		40-140	8		40
Acenaphthylene	74		70		40-140	6		40
Acenaphthene	64		58		37-111	10		40
Fluorene	68		62		40-140	9		40
Pentachlorophenol	93		86		9-103	8		40
Phenanthrene	64		58		40-140	10		40
Anthracene	71		65		40-140	9		40
Fluoranthene	68		63		40-140	8		40
Pyrene	65		60		26-127	8		40
Benzo(a)anthracene	81		73		40-140	10		40
Chrysene	71		66		40-140	7		40
Benzo(b)fluoranthene	72		69		40-140	4		40
Benzo(k)fluoranthene	75		70		40-140	7		40
Benzo(a)pyrene	80		74		40-140	8		40
Indeno(1,2,3-cd)pyrene	76		68		40-140	11		40
Dibenzo(a,h)anthracene	72		64		40-140	12		40
Benzo(ghi)perylene	74		66		40-140	11		40

Lab Control Sample Analysis

Batch Quality Control

Project Name: B14 GW Q3

Project Number: 21010214

Lab Number: L2341137

Report Date: 07/26/23

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS-SIM - Westborough Lab Associated sample(s): 04-05 Batch: WG1807052-2 WG1807052-3								

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
2-Fluorophenol	57		51		21-120
Phenol-d6	55		48		10-120
Nitrobenzene-d5	87		81		23-120
2-Fluorobiphenyl	68		63		15-120
2,4,6-Tribromophenol	116		106		10-120
4-Terphenyl-d14	52		49		41-149

Project Name: B14 GW Q3
Project Number: 21010214

Lab Number: L2341137
Report Date: 07/26/23

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(*)
L2341137-01A	Vial HCl preserved	A	NA		4.3	Y	Absent		PA-8260-SIM(14),PA-8260(14)
L2341137-01B	Vial HCl preserved	A	NA		4.3	Y	Absent		PA-8260-SIM(14),PA-8260(14)
L2341137-01C	Vial HCl preserved	A	NA		4.3	Y	Absent		PA-8260-SIM(14),PA-8260(14)
L2341137-01D	Amber 250ml unpreserved	A	7	7	4.3	Y	Absent		PA-8270SIM-LVI(7),PA-8270-LVI(7)
L2341137-01E	Amber 250ml unpreserved	A	7	7	4.3	Y	Absent		PA-8270SIM-LVI(7),PA-8270-LVI(7)
L2341137-02A	Vial HCl preserved	A	NA		4.3	Y	Absent		PA-8260-SIM(14),PA-8260(14)
L2341137-02B	Vial HCl preserved	A	NA		4.3	Y	Absent		PA-8260-SIM(14),PA-8260(14)
L2341137-02C	Vial HCl preserved	A	NA		4.3	Y	Absent		PA-8260-SIM(14),PA-8260(14)
L2341137-02D	Amber 250ml unpreserved	A	7	7	4.3	Y	Absent		PA-8270SIM-LVI(7),PA-8270-LVI(7)
L2341137-02E	Amber 250ml unpreserved	A	7	7	4.3	Y	Absent		PA-8270SIM-LVI(7),PA-8270-LVI(7)
L2341137-03A	Vial HCl preserved	A	NA		4.3	Y	Absent		PA-8260-SIM(14),PA-8260(14)
L2341137-03B	Vial HCl preserved	A	NA		4.3	Y	Absent		PA-8260-SIM(14),PA-8260(14)
L2341137-03C	Vial HCl preserved	A	NA		4.3	Y	Absent		PA-8260-SIM(14),PA-8260(14)
L2341137-03D	Amber 250ml unpreserved	A	12	12	4.3	Y	Absent		PA-8270SIM-LVI(7),PA-8270-LVI(7)
L2341137-03E	Amber 250ml unpreserved	A	12	12	4.3	Y	Absent		PA-8270SIM-LVI(7),PA-8270-LVI(7)
L2341137-04A	Vial HCl preserved	A	NA		4.3	Y	Absent		PA-8260-SIM(14),PA-8260(14)
L2341137-04B	Vial HCl preserved	A	NA		4.3	Y	Absent		PA-8260-SIM(14),PA-8260(14)
L2341137-04C	Vial HCl preserved	A	NA		4.3	Y	Absent		PA-8260-SIM(14),PA-8260(14)
L2341137-04D	Amber 250ml unpreserved	A	7	7	4.3	Y	Absent		PA-8270SIM-LVI(7),PA-8270-LVI(7)
L2341137-04E	Amber 250ml unpreserved	A	7	7	4.3	Y	Absent		PA-8270SIM-LVI(7),PA-8270-LVI(7)
L2341137-05A	Vial HCl preserved	A	NA		4.3	Y	Absent		PA-8260-SIM(14),PA-8260(14)
L2341137-05B	Vial HCl preserved	A	NA		4.3	Y	Absent		PA-8260-SIM(14),PA-8260(14)
L2341137-05C	Vial HCl preserved	A	NA		4.3	Y	Absent		PA-8260-SIM(14),PA-8260(14)

*Values in parentheses indicate holding time in days

Project Name: B14 GW Q3
Project Number: 21010214

Lab Number: L2341137
Report Date: 07/26/23

Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L2341137-05D	Amber 250ml unpreserved	A	12	12	4.3	Y	Absent		PA-8270SIM-LVI(7),PA-8270-LVI(7)
L2341137-05E	Amber 250ml unpreserved	A	12	12	4.3	Y	Absent		PA-8270SIM-LVI(7),PA-8270-LVI(7)
L2341137-06A	Vial HCl preserved	A	NA		4.3	Y	Absent		PA-8260-SIM(14),PA-8260(14)
L2341137-06B	Vial HCl preserved	A	NA		4.3	Y	Absent		PA-8260-SIM(14),PA-8260(14)
L2341137-06C	Vial HCl preserved	A	NA		4.3	Y	Absent		PA-8260-SIM(14),PA-8260(14)
L2341137-06D	Amber 250ml unpreserved	A	7	7	4.3	Y	Absent		PA-8270SIM-LVI(7),PA-8270-LVI(7)
L2341137-06E	Amber 250ml unpreserved	A	7	7	4.3	Y	Absent		PA-8270SIM-LVI(7),PA-8270-LVI(7)
L2341137-07A	Vial HCl preserved	A	NA		4.3	Y	Absent		PA-8260-SIM(14),PA-8260(14)
L2341137-07B	Vial HCl preserved	A	NA		4.3	Y	Absent		PA-8260-SIM(14),PA-8260(14)
L2341137-07C	Vial HCl preserved	A	NA		4.3	Y	Absent		PA-8260-SIM(14),PA-8260(14)
L2341137-07D	Vial HCl preserved	A	NA		4.3	Y	Absent		PA-8260-SIM(14),PA-8260(14)

Container Comments

L2341137-03D	High pH
L2341137-03E	High pH
L2341137-05D	High pH
L2341137-05E	High pH

*Values in parentheses indicate holding time in days

Project Name:	B14 GW Q3	**Lab Number:**	L2341137
Project Number:	21010214	**Report Date:**	07/26/23

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 Q3	**Lab Number:**	L2341137
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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

Project Name:	B14 GW Q3	**Lab Number:**	L2341137
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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.)

Project Name:	B14 GW Q3	**Lab Number:**	L2341137
Project Number:	21010214	**Report Date:**	07/26/23

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, Azobenzene; SCM: Iodomethane (methyl iodide), 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene.
EPA 8270E: NPW: Dimethylnaphthalene,1,4-Diphenylhydrazine, alpha-Terpineol; 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.
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, SM9221E, 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 1

Date Rec'd in Lab: 07/19/23

ALPHA Job #: L2341137

ALPHA ANALYTICAL
WESTBORO, MA TEL: 508-898-9220 FAX: 508-898-9193
MANSFIELD, MA TEL: 508-822-9300 FAX: 508-822-3288

Client Information

Client: TPA
Address:
Phone:
Fax:
Email:
☐ These samples have been previously analyzed by Alpha

Project Information

Project Name: B14 GW Q3
Project Location:
Project #: 210 10214
Project Manager: Bob T
ALPHA Quote #:

Turn-Around Time

☑ Standard ☐ RUSH (only confirmed if pre-approved!)
Date Due: Time:

Report Information - Data Deliverables

☐ FAX ☑ EMAIL
☐ ADEx ☐ Add'l Deliverables

Billing Information

☐ Same as Client info PO #:

Regulatory Requirements/Report Limits

State /Fed Program	Criteria

Other Project Specific Requirements/Comments/Detection Limits:

ALPHA Lab ID (Lab Use Only)	Sample ID	Collection Date	Collection Time	Sample Matrix	Sampler's Initials	ANALYSIS VOC 8260	ANALYSIS SVOC 8270 SIM	Sample Specific Comments	TOTAL # BOTTLES
41137-01	TS03-PDP002	07/18/23	1035	GW	LEP	X	X		5
-02	HI21-MW5	07/18/23	1140	GW	LEP	X	X		5
-03	HI07-PZM005	07/18/23	1240	GW	LEP	X	X	pH > 11	5
-04	Field Blank	07/18/23	1220	W	LEP	X	X		5
-05	HI19-MW5	07/18/23	1410	GW	LEP	X	X	pH > 11	5
-06	HI18-MW5	07/18/23	1525	GW	LEP	X	X		5
-07	TB-02	07/18/23	—	W	LEP	X			4

SAMPLE HANDLING
Filtration
☐ Done
☑ Not needed
☐ Lab to do
Preservation
☐ Lab to do
(Please specify below)

Container Type	V	A
Preservative	B	A

7/19 0220
7/19/23 0240

Relinquished By:	Date/Time	Received By:	Date/Time
[illegible]	07/19/23 1548	[illegible]	7-18 1540
[illegible]	7/18/23 1800	[illegible]	7/18/23 1800
[illegible]	7/18/23 2100	[illegible]	7/18 2100

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.

FORM NO: 01-01 (rev. 14-OCT-07)

ANALYTICAL REPORT

Lab Number:	L2341509
Client:	Tradepoint Atlantic 1600 Sparrows Point Boulevard Baltimore, MD 21219
ATTN:	Robert Tworkowski
Phone:	(443) 649-5073
Project Name:	B14 GW Q3 SAMPLING
Project Number:	21010214
Report Date:	07/28/23

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), OH (CL108), OR (MA-1316), PA (68-03671), RI (LAO00065), TX (T104704476), VT (VT-0935), VA (460195), USDA (Permit #525-23-122-91930).

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

Project Name: B14 GW Q3 SAMPLING
Project Number: 21010214

Lab Number: L2341509
Report Date: 07/28/23

Alpha Sample ID	Client ID	Matrix	Sample Location	Collection Date/Time	Receive Date
L2341509-01	HI10-MWS	WATER	Not Specified	07/19/23 10:30	07/19/23
L2341509-02	HI11-MWS	WATER	Not Specified	07/19/23 12:15	07/19/23
L2341509-03	TM04-PZM006	WATER	Not Specified	07/19/23 13:05	07/19/23
L2341509-04	HI13-MWS	WATER	Not Specified	07/19/23 15:40	07/19/23
L2341509-05	TB-03	WATER	Not Specified	07/19/23 00:00	07/19/23

Project Name:	B14 GW Q3 SAMPLING	**Lab Number:**	L2341509
Project Number:	21010214	**Report Date:**	07/28/23

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, solids and tissues are reported on a dry 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 Q3 SAMPLING **Lab Number:** L2341509
Project Number: 21010214 **Report Date:** 07/28/23

Case Narrative (continued)

Report Submission

July 28, 2023: This final report includes the results of all requested analyses.

July 26, 2023: This is a preliminary report.

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

Volatile Organics

L2341509-02D: The sample has elevated detection limits due to the dilution required by the sample matrix (foam).

Volatile Organics by SIM

L2341509-02D: The sample has elevated detection limits due to the dilution required by the sample matrix (foam).

L2341509-03D: The sample has elevated detection limits due to the dilution required by the elevated concentrations of non-target compounds in the sample.

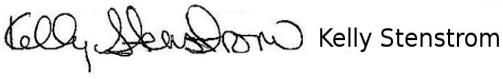
Semivolatile Organics

The WG1807627-4/-5 MS/MSD recoveries, performed on L2341509-01, are below the acceptance criteria for 3,3'-dichlorobenzidine (0%/0%) due to the concentration of this compound in the MS/MSD falling below the reported detection limit.

Semivolatile Organics by SIM

The WG1807629-1 Method Blank, associated with L2341509-01 through -04, has concentrations above the reporting limits for naphthalene and benzo(a)anthracene. The results of the original analyses are reported and are qualified with a "B" for any associated sample concentrations that are less than 10x the blank concentrations for these analytes.

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: 07/28/23

ORGANICS

VOLATILES

Project Name: B14 GW Q3 SAMPLING
Project Number: 21010214
Lab Number: L2341509
Report Date: 07/28/23

SAMPLE RESULTS

Lab ID: L2341509-01
Client ID: HI10-MWS
Sample Location: Not Specified

Date Collected: 07/19/23 10:30
Date Received: 07/19/23
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8260D
Analytical Date: 07/25/23 06:32
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	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	3.6	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	0.39	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 GW Q3 SAMPLING **Lab Number:** L2341509

Project Number: 21010214 **Report Date:** 07/28/23

SAMPLE RESULTS

Lab ID: L2341509-01 Date Collected: 07/19/23 10:30

Client ID: HI10-MWS Date Received: 07/19/23

Sample Location: Not Specified 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	95		70-130
Toluene-d8	98		70-130
4-Bromofluorobenzene	93		70-130
Dibromofluoromethane	96		70-130

Project Name: B14 GW Q3 SAMPLING
Lab Number: L2341509
Project Number: 21010214
Report Date: 07/28/23

SAMPLE RESULTS

Lab ID: L2341509-01
Client ID: HI10-MWS
Sample Location: Not Specified
Date Collected: 07/19/23 10:30
Date Received: 07/19/23
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8260D-SIM(M)
Analytical Date: 07/25/23 06:32
Analyst: MCM

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
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	94		70-130
4-Bromofluorobenzene	91		70-130

Project Name: B14 GW Q3 SAMPLING **Lab Number:** L2341509

Project Number: 21010214 **Report Date:** 07/28/23

SAMPLE RESULTS

Lab ID: L2341509-02 D
Client ID: HI11-MWS
Sample Location: Not Specified

Date Collected: 07/19/23 12:15
Date Received: 07/19/23
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8260D
Analytical Date: 07/25/23 11:08
Analyst: MCM

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Dichlorodifluoromethane	ND		ug/l	25	1.2	5
Chloromethane	ND		ug/l	12	1.0	5
Vinyl chloride	ND		ug/l	5.0	0.36	5
Bromomethane	ND		ug/l	5.0	1.3	5
Chloroethane	ND		ug/l	5.0	0.67	5
Trichlorofluoromethane	ND		ug/l	12	0.80	5
1,1-Dichloroethene	ND		ug/l	2.5	0.84	5
Carbon disulfide	ND		ug/l	25	1.5	5
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND		ug/l	12	0.74	5
Methylene chloride	ND		ug/l	12	3.4	5
Acetone	ND		ug/l	25	7.3	5
trans-1,2-Dichloroethene	ND		ug/l	3.8	0.82	5
Methyl Acetate	ND		ug/l	10	1.2	5
Methyl tert butyl ether	ND		ug/l	5.0	0.83	5
1,1-Dichloroethane	ND		ug/l	3.8	1.0	5
cis-1,2-Dichloroethene	ND		ug/l	2.5	0.94	5
Cyclohexane	ND		ug/l	50	1.4	5
Chloroform	ND		ug/l	3.8	1.1	5
Carbon tetrachloride	ND		ug/l	2.5	0.67	5
1,1,1-Trichloroethane	ND		ug/l	2.5	0.79	5
2-Butanone	ND		ug/l	25	9.7	5
Benzene	ND		ug/l	2.5	0.80	5
1,2-Dichloroethane	ND		ug/l	2.5	0.66	5
Trichloroethene	ND		ug/l	2.5	0.88	5
1,2-Dichloropropane	ND		ug/l	5.0	0.68	5
Bromodichloromethane	ND		ug/l	2.5	0.96	5
cis-1,3-Dichloropropene	ND		ug/l	2.5	0.72	5
Toluene	ND		ug/l	3.8	1.0	5

Project Name: B14 GW Q3 SAMPLING **Lab Number:** L2341509

Project Number: 21010214 **Report Date:** 07/28/23

SAMPLE RESULTS

Lab ID: L2341509-02 D Date Collected: 07/19/23 12:15

Client ID: HI11-MWS Date Received: 07/19/23

Sample Location: Not Specified 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	2.5	0.90	5
4-Methyl-2-pentanone	ND		ug/l	25	2.1	5
trans-1,3-Dichloropropene	ND		ug/l	2.5	0.82	5
1,3-Dichloropropene, Total	ND		ug/l	2.5	0.72	5
1,1,2-Trichloroethane	ND		ug/l	3.8	0.72	5
Dibromochloromethane	ND		ug/l	2.5	0.74	5
1,2-Dibromoethane	ND		ug/l	10	0.96	5
2-Hexanone	ND		ug/l	25	2.6	5
Chlorobenzene	ND		ug/l	2.5	0.89	5
Ethylbenzene	ND		ug/l	2.5	0.84	5
p/m-Xylene	ND		ug/l	5.0	1.7	5
o-Xylene	ND		ug/l	5.0	2.0	5
Xylenes, Total	ND		ug/l	5.0	1.7	5
Styrene	ND		ug/l	5.0	1.8	5
Bromoform	ND		ug/l	10	1.2	5
Isopropylbenzene	ND		ug/l	2.5	0.94	5
1,1,2,2-Tetrachloroethane	ND		ug/l	2.5	0.84	5
1,3-Dichlorobenzene	ND		ug/l	12	0.93	5
1,4-Dichlorobenzene	ND		ug/l	12	0.94	5
1,2-Dichlorobenzene	ND		ug/l	12	0.92	5
1,2-Dibromo-3-chloropropane	ND		ug/l	12	1.8	5
1,2,4-Trichlorobenzene	ND		ug/l	12	1.1	5
1,2,3-Trichlorobenzene	ND		ug/l	12	1.2	5

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	95		70-130
Toluene-d8	98		70-130
4-Bromofluorobenzene	96		70-130
Dibromofluoromethane	92		70-130

Project Name: B14 GW Q3 SAMPLING
Lab Number: L2341509
Project Number: 21010214
Report Date: 07/28/23

SAMPLE RESULTS

Lab ID: L2341509-02 D
Client ID: HI11-MWS
Sample Location: Not Specified

Date Collected: 07/19/23 12:15
Date Received: 07/19/23
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8260D-SIM(M)
Analytical Date: 07/25/23 11:08
Analyst: MCM

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS-SIM - Westborough Lab						
1,1,2,2-Tetrachloroethane	ND		ug/l	0.250	0.029	5

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	94		70-130
4-Bromofluorobenzene	93		70-130

Project Name: B14 GW Q3 SAMPLING **Lab Number:** L2341509

Project Number: 21010214 **Report Date:** 07/28/23

SAMPLE RESULTS

Lab ID: L2341509-03 D
Client ID: TM04-PZM006
Sample Location: Not Specified

Date Collected: 07/19/23 13:05
Date Received: 07/19/23
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8260D
Analytical Date: 07/25/23 11:35
Analyst: MCM

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Dichlorodifluoromethane	ND		ug/l	10	0.49	2
Chloromethane	ND		ug/l	5.0	0.40	2
Vinyl chloride	0.46	J	ug/l	2.0	0.14	2
Bromomethane	ND		ug/l	2.0	0.51	2
Chloroethane	ND		ug/l	2.0	0.27	2
Trichlorofluoromethane	ND		ug/l	5.0	0.32	2
1,1-Dichloroethene	ND		ug/l	1.0	0.34	2
Carbon disulfide	ND		ug/l	10	0.60	2
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND		ug/l	5.0	0.30	2
Methylene chloride	ND		ug/l	5.0	1.4	2
Acetone	ND		ug/l	10	2.9	2
trans-1,2-Dichloroethene	ND		ug/l	1.5	0.33	2
Methyl Acetate	ND		ug/l	4.0	0.47	2
Methyl tert butyl ether	ND		ug/l	2.0	0.33	2
1,1-Dichloroethane	ND		ug/l	1.5	0.42	2
cis-1,2-Dichloroethene	ND		ug/l	1.0	0.37	2
Cyclohexane	0.57	J	ug/l	20	0.54	2
Chloroform	ND		ug/l	1.5	0.44	2
Carbon tetrachloride	ND		ug/l	1.0	0.27	2
1,1,1-Trichloroethane	ND		ug/l	1.0	0.32	2
2-Butanone	ND		ug/l	10	3.9	2
Benzene	340		ug/l	1.0	0.32	2
1,2-Dichloroethane	ND		ug/l	1.0	0.26	2
Trichloroethene	ND		ug/l	1.0	0.35	2
1,2-Dichloropropane	ND		ug/l	2.0	0.27	2
Bromodichloromethane	ND		ug/l	1.0	0.38	2
cis-1,3-Dichloropropene	ND		ug/l	1.0	0.29	2
Toluene	1.1	J	ug/l	1.5	0.41	2

Project Name: B14 GW Q3 SAMPLING **Lab Number:** L2341509

Project Number: 21010214 **Report Date:** 07/28/23

SAMPLE RESULTS

Lab ID: L2341509-03 D Date Collected: 07/19/23 13:05

Client ID: TM04-PZM006 Date Received: 07/19/23

Sample Location: Not Specified 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	1.0	0.36	2
4-Methyl-2-pentanone	ND		ug/l	10	0.83	2
trans-1,3-Dichloropropene	ND		ug/l	1.0	0.33	2
1,3-Dichloropropene, Total	ND		ug/l	1.0	0.29	2
1,1,2-Trichloroethane	ND		ug/l	1.5	0.29	2
Dibromochloromethane	ND		ug/l	1.0	0.30	2
1,2-Dibromoethane	ND		ug/l	4.0	0.39	2
2-Hexanone	ND		ug/l	10	1.0	2
Chlorobenzene	ND		ug/l	1.0	0.36	2
Ethylbenzene	4.1		ug/l	1.0	0.33	2
p/m-Xylene	4.6		ug/l	2.0	0.66	2
o-Xylene	0.83	J	ug/l	2.0	0.78	2
Xylenes, Total	5.4	J	ug/l	2.0	0.66	2
Styrene	ND		ug/l	2.0	0.72	2
Bromoform	ND		ug/l	4.0	0.50	2
Isopropylbenzene	ND		ug/l	1.0	0.37	2
1,1,2,2-Tetrachloroethane	ND		ug/l	1.0	0.33	2
1,3-Dichlorobenzene	ND		ug/l	5.0	0.37	2
1,4-Dichlorobenzene	ND		ug/l	5.0	0.37	2
1,2-Dichlorobenzene	ND		ug/l	5.0	0.37	2
1,2-Dibromo-3-chloropropane	ND		ug/l	5.0	0.71	2
1,2,4-Trichlorobenzene	ND		ug/l	5.0	0.44	2
1,2,3-Trichlorobenzene	ND		ug/l	5.0	0.47	2

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	89		70-130
Toluene-d8	100		70-130
4-Bromofluorobenzene	95		70-130
Dibromofluoromethane	90		70-130

Project Name: B14 GW Q3 SAMPLING
Project Number: 21010214
Lab Number: L2341509
Report Date: 07/28/23

SAMPLE RESULTS

Lab ID: L2341509-03 D
Client ID: TM04-PZM006
Sample Location: Not Specified

Date Collected: 07/19/23 13:05
Date Received: 07/19/23
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8260D-SIM(M)
Analytical Date: 07/25/23 11:35
Analyst: MCM

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS-SIM - Westborough Lab						
1,1,2,2-Tetrachloroethane	ND		ug/l	0.100	0.011	2

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	90		70-130
4-Bromofluorobenzene	92		70-130

Project Name: B14 GW Q3 SAMPLING **Lab Number:** L2341509

Project Number: 21010214 **Report Date:** 07/28/23

SAMPLE RESULTS

Lab ID: L2341509-04 Date Collected: 07/19/23 15:40
Client ID: HI13-MWS Date Received: 07/19/23
Sample Location: Not Specified Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8260D
Analytical Date: 07/25/23 10:40
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	0.18	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	0.21	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	1.2		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	ND		ug/l	0.75	0.20	1

Project Name: B14 GW Q3 SAMPLING **Lab Number:** L2341509

Project Number: 21010214 **Report Date:** 07/28/23

SAMPLE RESULTS

Lab ID: L2341509-04 Date Collected: 07/19/23 15:40

Client ID: HI13-MWS Date Received: 07/19/23

Sample Location: Not Specified 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	96		70-130
Toluene-d8	98		70-130
4-Bromofluorobenzene	95		70-130
Dibromofluoromethane	95		70-130

Project Name: B14 GW Q3 SAMPLING
Project Number: 21010214
Lab Number: L2341509
Report Date: 07/28/23

SAMPLE RESULTS

Lab ID: L2341509-04
Client ID: HI13-MWS
Sample Location: Not Specified

Date Collected: 07/19/23 15:40
Date Received: 07/19/23
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8260D-SIM(M)
Analytical Date: 07/25/23 10:40
Analyst: MCM

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
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	93		70-130
4-Bromofluorobenzene	92		70-130

Project Name: B14 GW Q3 SAMPLING
Project Number: 21010214
Lab Number: L2341509
Report Date: 07/28/23

SAMPLE RESULTS

Lab ID: L2341509-05
Client ID: TB-03
Sample Location: Not Specified

Date Collected: 07/19/23 00:00
Date Received: 07/19/23
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8260D
Analytical Date: 07/25/23 10:12
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	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 Q3 SAMPLING **Lab Number:** L2341509

Project Number: 21010214 **Report Date:** 07/28/23

SAMPLE RESULTS

Lab ID: L2341509-05 Date Collected: 07/19/23 00:00

Client ID: TB-03 Date Received: 07/19/23

Sample Location: Not Specified 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	93		70-130
Toluene-d8	97		70-130
4-Bromofluorobenzene	94		70-130
Dibromofluoromethane	93		70-130

Project Name: B14 GW Q3 SAMPLING
Lab Number: L2341509
Project Number: 21010214
Report Date: 07/28/23

SAMPLE RESULTS

Lab ID: L2341509-05
Client ID: TB-03
Sample Location: Not Specified
Date Collected: 07/19/23 00:00
Date Received: 07/19/23
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8260D-SIM(M)
Analytical Date: 07/25/23 10:12
Analyst: MCM

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
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	93		70-130
4-Bromofluorobenzene	92		70-130

Project Name: B14 GW Q3 SAMPLING **Lab Number:** L2341509

Project Number: 21010214 **Report Date:** 07/28/23

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260D
Analytical Date: 07/25/23 05:37
Analyst: MCM

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 01-05 Batch: WG1807719-5					
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 Q3 SAMPLING **Lab Number:** L2341509

Project Number: 21010214 **Report Date:** 07/28/23

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260D
Analytical Date: 07/25/23 05:37
Analyst: MCM

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 01-05 Batch: WG1807719-5					
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 Q3 SAMPLING
Project Number: 21010214
Lab Number: L2341509
Report Date: 07/28/23

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260D
Analytical Date: 07/25/23 05:37
Analyst: MCM

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 01-05 Batch: WG1807719-5					

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

Project Name: B14 GW Q3 SAMPLING
Project Number: 21010214
Lab Number: L2341509
Report Date: 07/28/23

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260D-SIM(M)
Analytical Date: 07/25/23 05:37
Analyst: MCM

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS-SIM - Westborough Lab for sample(s): 01-05 Batch: WG1807720-5					
1,1,2,2-Tetrachloroethane	ND		ug/l	0.050	0.006

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	94		70-130
4-Bromofluorobenzene	92		70-130

Lab Control Sample Analysis
Batch Quality Control

Project Name: B14 GW Q3 SAMPLING
Project Number: 21010214
Lab Number: L2341509
Report Date: 07/28/23

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: WG1807719-3 WG1807719-4								
Dichlorodifluoromethane	140		140		36-147	0		20
Chloromethane	110		110		64-130	0		20
Vinyl chloride	120		120		55-140	0		20
Bromomethane	84		90		39-139	7		20
Chloroethane	98		100		55-138	2		20
Trichlorofluoromethane	110		110		62-150	0		20
1,1-Dichloroethene	110		110		61-145	0		20
Carbon disulfide	110		110		51-130	0		20
1,1,2-Trichloro-1,2,2-Trifluoroethane	120		120		70-130	0		20
Methylene chloride	100		110		70-130	10		20
Acetone	100		110		58-148	10		20
trans-1,2-Dichloroethene	100		110		70-130	10		20
Methyl Acetate	110		110		70-130	0		20
Methyl tert butyl ether	100		110		63-130	10		20
1,1-Dichloroethane	110		110		70-130	0		20
cis-1,2-Dichloroethene	110		110		70-130	0		20
Cyclohexane	110		110		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		98		63-138	1		20
Benzene	100		100		70-130	0		20
1,2-Dichloroethane	110		110		70-130	0		20

Lab Control Sample Analysis
Batch Quality Control

Project Name: B14 GW Q3 SAMPLING
Project Number: 21010214
Lab Number: L2341509
Report Date: 07/28/23

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: WG1807719-3 WG1807719-4								
Trichloroethene	100		110		70-130	10		20
1,2-Dichloropropane	100		100		70-130	0		20
Bromodichloromethane	100		100		67-130	0		20
cis-1,3-Dichloropropene	97		99		70-130	2		20
Toluene	110		110		70-130	0		20
Tetrachloroethene	120		120		70-130	0		20
4-Methyl-2-pentanone	87		96		59-130	10		20
trans-1,3-Dichloropropene	110		110		70-130	0		20
1,1,2-Trichloroethane	110		110		70-130	0		20
Dibromochloromethane	100		110		63-130	10		20
1,2-Dibromoethane	110		110		70-130	0		20
2-Hexanone	92		94		57-130	2		20
Chlorobenzene	110		110		75-130	0		20
Ethylbenzene	110		110		70-130	0		20
p/m-Xylene	110		110		70-130	0		20
o-Xylene	110		110		70-130	0		20
Styrene	110		105		70-130	5		20
Bromoform	98		100		54-136	2		20
Isopropylbenzene	110		110		70-130	0		20
1,1,2,2-Tetrachloroethane	110		110		67-130	0		20
1,3-Dichlorobenzene	120		110		70-130	9		20
1,4-Dichlorobenzene	110		110		70-130	0		20
1,2-Dichlorobenzene	110		110		70-130	0		20

Lab Control Sample Analysis

Batch Quality Control

Project Name: B14 GW Q3 SAMPLING

Project Number: 21010214

Lab Number: L2341509

Report Date: 07/28/23

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: WG1807719-3 WG1807719-4								
1,2-Dibromo-3-chloropropane	98		100		41-144	2		20
1,2,4-Trichlorobenzene	120		120		70-130	0		20
1,2,3-Trichlorobenzene	120		120		70-130	0		20

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
1,2-Dichloroethane-d4	91		91		70-130
Toluene-d8	99		99		70-130
4-Bromofluorobenzene	93		92		70-130
Dibromofluoromethane	91		92		70-130

Lab Control Sample Analysis
Batch Quality Control

Project Name: B14 GW Q3 SAMPLING
Project Number: 21010214
Lab Number: L2341509
Report Date: 07/28/23

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: WG1807720-3 WG1807720-4								
1,1,2,2-Tetrachloroethane	110		107		70-130	3		25

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
1,2-Dichloroethane-d4	96		94		70-130
4-Bromofluorobenzene	93		92		70-130

Matrix Spike Analysis
Batch Quality Control

Project Name: B14 GW Q3 SAMPLING
Project Number: 21010214
Lab Number: L2341509
Report Date: 07/28/23

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): 01-05 QC Batch ID: WG1807719-6 WG1807719-7 QC Sample: L2341509-01 Client ID: HI10-MWS												
Dichlorodifluoromethane	ND	10	13	130		13	130		36-147	0		20
Chloromethane	ND	10	11	110		11	110		64-130	0		20
Vinyl chloride	ND	10	12	120		12	120		55-140	0		20
Bromomethane	ND	10	9.2	92		9.7	97		39-139	5		20
Chloroethane	ND	10	9.9	99		9.5	95		55-138	4		20
Trichlorofluoromethane	ND	10	11	110		10	100		62-150	10		20
1,1-Dichloroethene	ND	10	11	110		10	100		61-145	10		20
Carbon disulfide	ND	10	10	100		10	100		51-130	0		20
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	10	12	120		12	120		70-130	0		20
Methylene chloride	ND	10	9.9	99		9.6	96		70-130	3		20
Acetone	3.6J	10	14	140		14	140		58-148	0		20
trans-1,2-Dichloroethene	ND	10	10	100		10	100		70-130	0		20
Methyl Acetate	ND	10	9.8	98		10	100		70-130	2		20
Methyl tert butyl ether	ND	10	10	100		10	100		63-130	0		20
1,1-Dichloroethane	ND	10	10	100		10	100		70-130	0		20
cis-1,2-Dichloroethene	ND	10	9.8	98		10	100		70-130	2		20
Cyclohexane	ND	10	11	110		11	110		70-130	0		20
Chloroform	ND	10	10	100		9.7	97		70-130	3		20
Carbon tetrachloride	ND	10	11	110		11	110		63-132	0		20
1,1,1-Trichloroethane	ND	10	11	110		11	110		67-130	0		20
2-Butanone	ND	10	10	100		12	120		63-138	18		20
Benzene	0.39J	10	11	110		10	100		70-130	10		20
1,2-Dichloroethane	ND	10	10	100		10	100		70-130	0		20

Matrix Spike Analysis

Batch Quality Control

Project Name: B14 GW Q3 SAMPLING

Project Number: 21010214

Lab Number: L2341509

Report Date: 07/28/23

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): 01-05 QC Batch ID: WG1807719-6 WG1807719-7 QC Sample: L2341509-01 Client ID: HI10-MWS												
Trichloroethene	ND	10	10	100		10	100		70-130	0		20
1,2-Dichloropropane	ND	10	9.7	97		9.7	97		70-130	0		20
Bromodichloromethane	ND	10	9.8	98		9.8	98		67-130	0		20
cis-1,3-Dichloropropene	ND	10	8.9	89		8.3	83		70-130	7		20
Toluene	ND	10	11	110		11	110		70-130	0		20
Tetrachloroethene	ND	10	12	120		12	120		70-130	0		20
4-Methyl-2-pentanone	ND	10	8.8	88		8.9	89		59-130	1		20
trans-1,3-Dichloropropene	ND	10	10	100		9.7	97		70-130	3		20
1,1,2-Trichloroethane	ND	10	11	110		10	100		70-130	10		20
Dibromochloromethane	ND	10	10	100		9.8	98		63-130	2		20
1,2-Dibromoethane	ND	10	10	100		9.9	99		70-130	1		20
2-Hexanone	ND	10	8.9	89		8.8	88		57-130	1		20
Chlorobenzene	ND	10	11	110		10	100		75-130	10		20
Ethylbenzene	ND	10	11	110		11	110		70-130	0		20
p/m-Xylene	ND	20	21	105		20	100		70-130	5		20
o-Xylene	ND	20	21	105		20	100		70-130	5		20
Styrene	ND	20	20	100		19	95		70-130	5		20
Bromoform	ND	10	9.5	95		9.0	90		54-136	5		20
Isopropylbenzene	ND	10	10	100		10	100		70-130	0		20
1,1,2,2-Tetrachloroethane	ND	10	10	100		9.9	99		67-130	1		20
1,3-Dichlorobenzene	ND	10	11	110		10	100		70-130	10		20
1,4-Dichlorobenzene	ND	10	10	100		10	100		70-130	0		20
1,2-Dichlorobenzene	ND	10	10	100		10	100		70-130	0		20

Matrix Spike Analysis

Batch Quality Control

Project Name: B14 GW Q3 SAMPLING

Project Number: 21010214

Lab Number: L2341509

Report Date: 07/28/23

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): 01-05 QC Batch ID: WG1807719-6 WG1807719-7 QC Sample: L2341509-01 Client ID: HI10-MWS												
1,2-Dibromo-3-chloropropane	ND	10	9.1	91		8.9	89		41-144	2		20
1,2,4-Trichlorobenzene	ND	10	11	110		11	110		70-130	0		20
1,2,3-Trichlorobenzene	ND	10	11	110		11	110		70-130	0		20

Surrogate	MS % Recovery	MS Qualifier	MSD % Recovery	MSD Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	91		91		70-130
4-Bromofluorobenzene	92		94		70-130
Dibromofluoromethane	89		91		70-130
Toluene-d8	100		99		70-130

Matrix Spike Analysis

Batch Quality Control

Project Name: B14 GW Q3 SAMPLING

Project Number: 21010214

Lab Number: L2341509

Report Date: 07/28/23

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): 01-05 QC Batch ID: WG1807720-6 WG1807720-7 QC Sample: L2341509-01 Client ID: HI10-MWS												
1,1,2,2-Tetrachloroethane	ND	0.1	0.112	112		0.118	118		70-130	5		30

Surrogate	*MS % Recovery*	*MS Qualifier*	*MSD % Recovery*	*MSD Qualifier*	*Acceptance Criteria*
1,2-Dichloroethane-d4	96		94		70-130
4-Bromofluorobenzene	93		91		70-130

SEMIVOLATILES

Project Name: B14 GW Q3 SAMPLING
Project Number: 21010214
Lab Number: L2341509
Report Date: 07/28/23

SAMPLE RESULTS

Lab ID: L2341509-01
Client ID: HI10-MWS
Sample Location: Not Specified

Date Collected: 07/19/23 10:30
Date Received: 07/19/23
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8270E
Analytical Date: 07/27/23 01:10
Analyst: SZ

Extraction Method: EPA 3510C
Extraction Date: 07/26/23 00:33

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Benzaldehyde	ND		ug/l	5.0	0.53	1
Phenol	ND		ug/l	5.0	0.57	1
Bis(2-chloroethyl)ether	ND		ug/l	2.0	0.50	1
2-Chlorophenol	ND		ug/l	2.0	0.48	1
2-Methylphenol	ND		ug/l	5.0	0.49	1
Bis(2-chloroisopropyl)ether	ND		ug/l	2.0	0.53	1
Acetophenone	ND		ug/l	5.0	0.53	1
n-Nitrosodi-n-propylamine	ND		ug/l	5.0	0.64	1
3-Methylphenol/4-Methylphenol	ND		ug/l	5.0	0.48	1
Hexachloroethane	ND		ug/l	2.0	0.58	1
Nitrobenzene	ND		ug/l	1.4	0.77	1
Isophorone	ND		ug/l	5.0	1.2	1
2,4-Dimethylphenol	ND		ug/l	5.0	1.8	1
Bis(2-chloroethoxy)methane	ND		ug/l	5.0	0.50	1
2,4-Dichlorophenol	ND		ug/l	5.0	0.41	1
Naphthalene	2.3		ug/l	2.0	0.46	1
4-Chloroaniline	ND		ug/l	3.7	1.1	1
Hexachlorobutadiene	ND		ug/l	2.0	0.66	1
Caprolactam	ND		ug/l	10	3.3	1
2-Methylnaphthalene	ND		ug/l	2.0	0.45	1
Hexachlorocyclopentadiene	ND		ug/l	20	0.69	1
1,2,4,5-Tetrachlorobenzene	ND		ug/l	1.7	0.44	1
2,4,6-Trichlorophenol	ND		ug/l	5.0	0.61	1
2,4,5-Trichlorophenol	ND		ug/l	5.0	0.77	1
Biphenyl	ND		ug/l	2.0	0.46	1
2-Chloronaphthalene	ND		ug/l	2.0	0.44	1
2-Nitroaniline	ND		ug/l	5.0	0.50	1
2,6-Dinitrotoluene	ND		ug/l	5.0	0.93	1

Project Name: B14 GW Q3 SAMPLING **Lab Number:** L2341509

Project Number: 21010214 **Report Date:** 07/28/23

SAMPLE RESULTS

Lab ID: L2341509-01 Date Collected: 07/19/23 10:30

Client ID: HI10-MWS Date Received: 07/19/23

Sample Location: Not Specified 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	0.46	1
Acenaphthene	0.81	J	ug/l	2.0	0.53	1
2,4-Dinitrophenol	ND		ug/l	20	6.6	1
2,4-Dinitrotoluene	ND		ug/l	5.0	1.2	1
2,3,4,6-Tetrachlorophenol	ND		ug/l	5.0	0.84	1
Diethyl phthalate	ND		ug/l	5.0	0.38	1
Fluorene	0.56	J	ug/l	2.0	0.41	1
4-Nitroaniline	ND		ug/l	5.0	0.80	1
NDPA/DPA	ND		ug/l	2.0	0.42	1
Hexachlorobenzene	ND		ug/l	2.0	0.46	1
Pentachlorophenol	ND		ug/l	10	1.8	1
Phenanthrene	0.94	J	ug/l	2.0	0.33	1
Anthracene	ND		ug/l	2.0	0.33	1
Carbazole	0.60	J	ug/l	2.0	0.49	1
Di-n-butylphthalate	ND		ug/l	5.0	0.39	1
Fluoranthene	0.52	J	ug/l	2.0	0.26	1
Pyrene	0.41	J	ug/l	2.0	0.28	1
3,3'-Dichlorobenzidine	ND		ug/l	5.0	1.6	1
Benzo(a)anthracene	ND		ug/l	2.0	0.32	1
Chrysene	ND		ug/l	1.4	0.34	1
Bis(2-ethylhexyl)phthalate	ND		ug/l	3.0	1.5	1
Di-n-octylphthalate	ND		ug/l	5.0	1.3	1
Benzo(b)fluoranthene	ND		ug/l	2.0	0.35	1
Benzo(k)fluoranthene	ND		ug/l	2.0	0.37	1
Benzo(a)pyrene	ND		ug/l	2.0	0.41	1
Indeno(1,2,3-cd)pyrene	ND		ug/l	2.0	0.40	1
Dibenzo(a,h)anthracene	ND		ug/l	2.0	0.32	1
Benzo(ghi)perylene	ND		ug/l	2.0	0.30	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	64		21-120
Phenol-d6	56		10-120
Nitrobenzene-d5	72		23-120
2-Fluorobiphenyl	70		15-120
2,4,6-Tribromophenol	93		10-120
4-Terphenyl-d14	64		41-149

Project Name: B14 GW Q3 SAMPLING
Project Number: 21010214
Lab Number: L2341509
Report Date: 07/28/23

SAMPLE RESULTS

Lab ID: L2341509-01
Client ID: HI10-MWS
Sample Location: Not Specified

Date Collected: 07/19/23 10:30
Date Received: 07/19/23
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8270E-SIM
Analytical Date: 07/26/23 16:48
Analyst: JJW

Extraction Method: EPA 3510C
Extraction Date: 07/26/23 00:33

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS-SIM - Westborough Lab						
Naphthalene	2.2	B	ug/l	0.10	0.05	1
2-Methylnaphthalene	0.30		ug/l	0.10	0.02	1
Acenaphthylene	0.11		ug/l	0.10	0.01	1
Acenaphthene	0.64		ug/l	0.10	0.01	1
Fluorene	0.53		ug/l	0.10	0.01	1
Pentachlorophenol	0.17		ug/l	0.10	0.01	1
Phenanthrene	0.87		ug/l	0.05	0.02	1
Anthracene	0.21		ug/l	0.10	0.01	1
Fluoranthene	0.46		ug/l	0.10	0.02	1
Pyrene	0.43		ug/l	0.10	0.02	1
Benzo(a)anthracene	0.06	B	ug/l	0.05	0.02	1
Chrysene	0.04	J	ug/l	0.10	0.01	1
Benzo(b)fluoranthene	0.02	J	ug/l	0.05	0.01	1
Benzo(k)fluoranthene	0.03	J	ug/l	0.10	0.01	1
Benzo(a)pyrene	0.03	J	ug/l	0.10	0.02	1
Indeno(1,2,3-cd)pyrene	0.04	J	ug/l	0.10	0.01	1
Dibenzo(a,h)anthracene	0.07		ug/l	0.05	0.01	1
Benzo(ghi)perylene	0.03	J	ug/l	0.10	0.01	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	57		21-120
Phenol-d6	47		10-120
Nitrobenzene-d5	70		23-120
2-Fluorobiphenyl	67		15-120
2,4,6-Tribromophenol	88		10-120
4-Terphenyl-d14	71		41-149

Project Name: B14 GW Q3 SAMPLING
Project Number: 21010214
Lab Number: L2341509
Report Date: 07/28/23

SAMPLE RESULTS

Lab ID: L2341509-02
Client ID: HI11-MWS
Sample Location: Not Specified

Date Collected: 07/19/23 12:15
Date Received: 07/19/23
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8270E
Analytical Date: 07/27/23 03:48
Analyst: SZ

Extraction Method: EPA 3510C
Extraction Date: 07/26/23 00:33

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Benzaldehyde	ND		ug/l	5.0	0.53	1
Phenol	ND		ug/l	5.0	0.57	1
Bis(2-chloroethyl)ether	ND		ug/l	2.0	0.50	1
2-Chlorophenol	ND		ug/l	2.0	0.48	1
2-Methylphenol	ND		ug/l	5.0	0.49	1
Bis(2-chloroisopropyl)ether	ND		ug/l	2.0	0.53	1
Acetophenone	ND		ug/l	5.0	0.53	1
n-Nitrosodi-n-propylamine	ND		ug/l	5.0	0.64	1
3-Methylphenol/4-Methylphenol	ND		ug/l	5.0	0.48	1
Hexachloroethane	ND		ug/l	2.0	0.58	1
Nitrobenzene	ND		ug/l	1.4	0.77	1
Isophorone	ND		ug/l	5.0	1.2	1
2,4-Dimethylphenol	ND		ug/l	5.0	1.8	1
Bis(2-chloroethoxy)methane	ND		ug/l	5.0	0.50	1
2,4-Dichlorophenol	ND		ug/l	5.0	0.41	1
Naphthalene	ND		ug/l	2.0	0.46	1
4-Chloroaniline	ND		ug/l	3.7	1.1	1
Hexachlorobutadiene	ND		ug/l	2.0	0.66	1
Caprolactam	ND		ug/l	10	3.3	1
2-Methylnaphthalene	ND		ug/l	2.0	0.45	1
Hexachlorocyclopentadiene	ND		ug/l	20	0.69	1
1,2,4,5-Tetrachlorobenzene	ND		ug/l	1.7	0.44	1
2,4,6-Trichlorophenol	ND		ug/l	5.0	0.61	1
2,4,5-Trichlorophenol	ND		ug/l	5.0	0.77	1
Biphenyl	ND		ug/l	2.0	0.46	1
2-Chloronaphthalene	ND		ug/l	2.0	0.44	1
2-Nitroaniline	ND		ug/l	5.0	0.50	1
2,6-Dinitrotoluene	ND		ug/l	5.0	0.93	1

Project Name: B14 GW Q3 SAMPLING **Lab Number:** L2341509

Project Number: 21010214 **Report Date:** 07/28/23

SAMPLE RESULTS

Lab ID: L2341509-02 Date Collected: 07/19/23 12:15

Client ID: HI11-MWS Date Received: 07/19/23

Sample Location: Not Specified 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	0.46	1
Acenaphthene	ND		ug/l	2.0	0.53	1
2,4-Dinitrophenol	ND		ug/l	20	6.6	1
2,4-Dinitrotoluene	ND		ug/l	5.0	1.2	1
2,3,4,6-Tetrachlorophenol	ND		ug/l	5.0	0.84	1
Diethyl phthalate	ND		ug/l	5.0	0.38	1
Fluorene	ND		ug/l	2.0	0.41	1
4-Nitroaniline	ND		ug/l	5.0	0.80	1
NDPA/DPA	ND		ug/l	2.0	0.42	1
Hexachlorobenzene	ND		ug/l	2.0	0.46	1
Pentachlorophenol	ND		ug/l	10	1.8	1
Phenanthrene	ND		ug/l	2.0	0.33	1
Anthracene	ND		ug/l	2.0	0.33	1
Carbazole	ND		ug/l	2.0	0.49	1
Di-n-butylphthalate	ND		ug/l	5.0	0.39	1
Fluoranthene	ND		ug/l	2.0	0.26	1
Pyrene	ND		ug/l	2.0	0.28	1
3,3'-Dichlorobenzidine	ND		ug/l	5.0	1.6	1
Benzo(a)anthracene	ND		ug/l	2.0	0.32	1
Chrysene	ND		ug/l	1.4	0.34	1
Bis(2-ethylhexyl)phthalate	ND		ug/l	3.0	1.5	1
Di-n-octylphthalate	ND		ug/l	5.0	1.3	1
Benzo(b)fluoranthene	ND		ug/l	2.0	0.35	1
Benzo(k)fluoranthene	ND		ug/l	2.0	0.37	1
Benzo(a)pyrene	ND		ug/l	2.0	0.41	1
Indeno(1,2,3-cd)pyrene	ND		ug/l	2.0	0.40	1
Dibenzo(a,h)anthracene	ND		ug/l	2.0	0.32	1
Benzo(ghi)perylene	ND		ug/l	2.0	0.30	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	63		21-120
Phenol-d6	50		10-120
Nitrobenzene-d5	69		23-120
2-Fluorobiphenyl	69		15-120
2,4,6-Tribromophenol	97		10-120
4-Terphenyl-d14	57		41-149

Project Name: B14 GW Q3 SAMPLING
Project Number: 21010214
Lab Number: L2341509
Report Date: 07/28/23

SAMPLE RESULTS

Lab ID: L2341509-02
Client ID: HI11-MWS
Sample Location: Not Specified

Date Collected: 07/19/23 12:15
Date Received: 07/19/23
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8270E-SIM
Analytical Date: 07/27/23 15:41
Analyst: JJW

Extraction Method: EPA 3510C
Extraction Date: 07/26/23 00:33

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS-SIM - Westborough Lab						
Naphthalene	0.08	JB	ug/l	0.10	0.05	1
2-Methylnaphthalene	0.03	J	ug/l	0.10	0.02	1
Acenaphthylene	0.03	J	ug/l	0.10	0.01	1
Acenaphthene	0.42		ug/l	0.10	0.01	1
Fluorene	0.14		ug/l	0.10	0.01	1
Pentachlorophenol	ND		ug/l	0.10	0.01	1
Phenanthrene	0.25		ug/l	0.05	0.02	1
Anthracene	0.12		ug/l	0.10	0.01	1
Fluoranthene	0.10		ug/l	0.10	0.02	1
Pyrene	ND		ug/l	0.10	0.02	1
Benzo(a)anthracene	ND		ug/l	0.05	0.02	1
Chrysene	ND		ug/l	0.10	0.01	1
Benzo(b)fluoranthene	ND		ug/l	0.05	0.01	1
Benzo(k)fluoranthene	ND		ug/l	0.10	0.01	1
Benzo(a)pyrene	ND		ug/l	0.10	0.02	1
Indeno(1,2,3-cd)pyrene	ND		ug/l	0.10	0.01	1
Dibenzo(a,h)anthracene	ND		ug/l	0.05	0.01	1
Benzo(ghi)perylene	ND		ug/l	0.10	0.01	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	63		21-120
Phenol-d6	58		10-120
Nitrobenzene-d5	88		23-120
2-Fluorobiphenyl	86		15-120
2,4,6-Tribromophenol	115		10-120
4-Terphenyl-d14	82		41-149

Project Name: B14 GW Q3 SAMPLING
Project Number: 21010214
Lab Number: L2341509
Report Date: 07/28/23

SAMPLE RESULTS

Lab ID: L2341509-03
Client ID: TM04-PZM006
Sample Location: Not Specified

Date Collected: 07/19/23 13:05
Date Received: 07/19/23
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8270E
Analytical Date: 07/27/23 02:18
Analyst: SZ

Extraction Method: EPA 3510C
Extraction Date: 07/26/23 00:33

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Benzaldehyde	ND		ug/l	5.0	0.53	1
Phenol	ND		ug/l	5.0	0.57	1
Bis(2-chloroethyl)ether	ND		ug/l	2.0	0.50	1
2-Chlorophenol	ND		ug/l	2.0	0.48	1
2-Methylphenol	ND		ug/l	5.0	0.49	1
Bis(2-chloroisopropyl)ether	ND		ug/l	2.0	0.53	1
Acetophenone	ND		ug/l	5.0	0.53	1
n-Nitrosodi-n-propylamine	ND		ug/l	5.0	0.64	1
3-Methylphenol/4-Methylphenol	ND		ug/l	5.0	0.48	1
Hexachloroethane	ND		ug/l	2.0	0.58	1
Nitrobenzene	ND		ug/l	1.4	0.77	1
Isophorone	ND		ug/l	5.0	1.2	1
2,4-Dimethylphenol	ND		ug/l	5.0	1.8	1
Bis(2-chloroethoxy)methane	ND		ug/l	5.0	0.50	1
2,4-Dichlorophenol	ND		ug/l	5.0	0.41	1
Naphthalene	ND		ug/l	2.0	0.46	1
4-Chloroaniline	ND		ug/l	3.7	1.1	1
Hexachlorobutadiene	ND		ug/l	2.0	0.66	1
Caprolactam	ND		ug/l	10	3.3	1
2-Methylnaphthalene	ND		ug/l	2.0	0.45	1
Hexachlorocyclopentadiene	ND		ug/l	20	0.69	1
1,2,4,5-Tetrachlorobenzene	ND		ug/l	1.7	0.44	1
2,4,6-Trichlorophenol	ND		ug/l	5.0	0.61	1
2,4,5-Trichlorophenol	ND		ug/l	5.0	0.77	1
Biphenyl	ND		ug/l	2.0	0.46	1
2-Chloronaphthalene	ND		ug/l	2.0	0.44	1
2-Nitroaniline	ND		ug/l	5.0	0.50	1
2,6-Dinitrotoluene	ND		ug/l	5.0	0.93	1

Project Name: B14 GW Q3 SAMPLING **Lab Number:** L2341509

Project Number: 21010214 **Report Date:** 07/28/23

SAMPLE RESULTS

Lab ID: L2341509-03 Date Collected: 07/19/23 13:05

Client ID: TM04-PZM006 Date Received: 07/19/23

Sample Location: Not Specified 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	0.46	1
Acenaphthene	ND		ug/l	2.0	0.53	1
2,4-Dinitrophenol	ND		ug/l	20	6.6	1
2,4-Dinitrotoluene	ND		ug/l	5.0	1.2	1
2,3,4,6-Tetrachlorophenol	ND		ug/l	5.0	0.84	1
Diethyl phthalate	1.8	J	ug/l	5.0	0.38	1
Fluorene	ND		ug/l	2.0	0.41	1
4-Nitroaniline	ND		ug/l	5.0	0.80	1
NDPA/DPA	ND		ug/l	2.0	0.42	1
Hexachlorobenzene	ND		ug/l	2.0	0.46	1
Pentachlorophenol	ND		ug/l	10	1.8	1
Phenanthrene	ND		ug/l	2.0	0.33	1
Anthracene	ND		ug/l	2.0	0.33	1
Carbazole	ND		ug/l	2.0	0.49	1
Di-n-butylphthalate	ND		ug/l	5.0	0.39	1
Fluoranthene	ND		ug/l	2.0	0.26	1
Pyrene	ND		ug/l	2.0	0.28	1
3,3'-Dichlorobenzidine	ND		ug/l	5.0	1.6	1
Benzo(a)anthracene	ND		ug/l	2.0	0.32	1
Chrysene	ND		ug/l	1.4	0.34	1
Bis(2-ethylhexyl)phthalate	ND		ug/l	3.0	1.5	1
Di-n-octylphthalate	ND		ug/l	5.0	1.3	1
Benzo(b)fluoranthene	ND		ug/l	2.0	0.35	1
Benzo(k)fluoranthene	ND		ug/l	2.0	0.37	1
Benzo(a)pyrene	ND		ug/l	2.0	0.41	1
Indeno(1,2,3-cd)pyrene	ND		ug/l	2.0	0.40	1
Dibenzo(a,h)anthracene	ND		ug/l	2.0	0.32	1
Benzo(ghi)perylene	ND		ug/l	2.0	0.30	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	55		21-120
Phenol-d6	11		10-120
Nitrobenzene-d5	67		23-120
2-Fluorobiphenyl	61		15-120
2,4,6-Tribromophenol	92		10-120
4-Terphenyl-d14	61		41-149

Project Name: B14 GW Q3 SAMPLING
Project Number: 21010214
Lab Number: L2341509
Report Date: 07/28/23

SAMPLE RESULTS

Lab ID: L2341509-03
Client ID: TM04-PZM006
Sample Location: Not Specified

Date Collected: 07/19/23 13:05
Date Received: 07/19/23
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8270E-SIM
Analytical Date: 07/26/23 17:22
Analyst: JJW

Extraction Method: EPA 3510C
Extraction Date: 07/26/23 00:33

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS-SIM - Westborough Lab						
Naphthalene	ND		ug/l	0.10	0.05	1
2-Methylnaphthalene	ND		ug/l	0.10	0.02	1
Acenaphthylene	ND		ug/l	0.10	0.01	1
Acenaphthene	ND		ug/l	0.10	0.01	1
Fluorene	ND		ug/l	0.10	0.01	1
Pentachlorophenol	ND		ug/l	0.10	0.01	1
Phenanthrene	0.03	J	ug/l	0.05	0.02	1
Anthracene	ND		ug/l	0.10	0.01	1
Fluoranthene	0.03	J	ug/l	0.10	0.02	1
Pyrene	0.06	J	ug/l	0.10	0.02	1
Benzo(a)anthracene	0.02	JB	ug/l	0.05	0.02	1
Chrysene	0.01	J	ug/l	0.10	0.01	1
Benzo(b)fluoranthene	0.02	J	ug/l	0.05	0.01	1
Benzo(k)fluoranthene	0.01	J	ug/l	0.10	0.01	1
Benzo(a)pyrene	ND		ug/l	0.10	0.02	1
Indeno(1,2,3-cd)pyrene	0.02	J	ug/l	0.10	0.01	1
Dibenzo(a,h)anthracene	0.02	J	ug/l	0.05	0.01	1
Benzo(ghi)perylene	0.01	J	ug/l	0.10	0.01	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	47		21-120
Phenol-d6	15		10-120
Nitrobenzene-d5	59		23-120
2-Fluorobiphenyl	58		15-120
2,4,6-Tribromophenol	80		10-120
4-Terphenyl-d14	64		41-149

Project Name: B14 GW Q3 SAMPLING
Project Number: 21010214
Lab Number: L2341509
Report Date: 07/28/23

SAMPLE RESULTS

Lab ID: L2341509-04
Client ID: HI13-MWS
Sample Location: Not Specified

Date Collected: 07/19/23 15:40
Date Received: 07/19/23
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8270E
Analytical Date: 07/27/23 02:40
Analyst: SZ

Extraction Method: EPA 3510C
Extraction Date: 07/26/23 00:33

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Benzaldehyde	ND		ug/l	5.0	0.53	1
Phenol	ND		ug/l	5.0	0.57	1
Bis(2-chloroethyl)ether	ND		ug/l	2.0	0.50	1
2-Chlorophenol	ND		ug/l	2.0	0.48	1
2-Methylphenol	ND		ug/l	5.0	0.49	1
Bis(2-chloroisopropyl)ether	ND		ug/l	2.0	0.53	1
Acetophenone	ND		ug/l	5.0	0.53	1
n-Nitrosodi-n-propylamine	ND		ug/l	5.0	0.64	1
3-Methylphenol/4-Methylphenol	ND		ug/l	5.0	0.48	1
Hexachloroethane	ND		ug/l	2.0	0.58	1
Nitrobenzene	ND		ug/l	1.4	0.77	1
Isophorone	ND		ug/l	5.0	1.2	1
2,4-Dimethylphenol	ND		ug/l	5.0	1.8	1
Bis(2-chloroethoxy)methane	ND		ug/l	5.0	0.50	1
2,4-Dichlorophenol	ND		ug/l	5.0	0.41	1
Naphthalene	ND		ug/l	2.0	0.46	1
4-Chloroaniline	ND		ug/l	3.7	1.1	1
Hexachlorobutadiene	ND		ug/l	2.0	0.66	1
Caprolactam	ND		ug/l	10	3.3	1
2-Methylnaphthalene	ND		ug/l	2.0	0.45	1
Hexachlorocyclopentadiene	ND		ug/l	20	0.69	1
1,2,4,5-Tetrachlorobenzene	ND		ug/l	1.7	0.44	1
2,4,6-Trichlorophenol	ND		ug/l	5.0	0.61	1
2,4,5-Trichlorophenol	ND		ug/l	5.0	0.77	1
Biphenyl	ND		ug/l	2.0	0.46	1
2-Chloronaphthalene	ND		ug/l	2.0	0.44	1
2-Nitroaniline	ND		ug/l	5.0	0.50	1
2,6-Dinitrotoluene	ND		ug/l	5.0	0.93	1

Project Name: B14 GW Q3 SAMPLING **Lab Number:** L2341509

Project Number: 21010214 **Report Date:** 07/28/23

SAMPLE RESULTS

Lab ID: L2341509-04 Date Collected: 07/19/23 15:40

Client ID: HI13-MWS Date Received: 07/19/23

Sample Location: Not Specified 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	0.46	1
Acenaphthene	ND		ug/l	2.0	0.53	1
2,4-Dinitrophenol	ND		ug/l	20	6.6	1
2,4-Dinitrotoluene	ND		ug/l	5.0	1.2	1
2,3,4,6-Tetrachlorophenol	ND		ug/l	5.0	0.84	1
Diethyl phthalate	ND		ug/l	5.0	0.38	1
Fluorene	ND		ug/l	2.0	0.41	1
4-Nitroaniline	ND		ug/l	5.0	0.80	1
NDPA/DPA	ND		ug/l	2.0	0.42	1
Hexachlorobenzene	ND		ug/l	2.0	0.46	1
Pentachlorophenol	ND		ug/l	10	1.8	1
Phenanthrene	ND		ug/l	2.0	0.33	1
Anthracene	ND		ug/l	2.0	0.33	1
Carbazole	ND		ug/l	2.0	0.49	1
Di-n-butylphthalate	ND		ug/l	5.0	0.39	1
Fluoranthene	ND		ug/l	2.0	0.26	1
Pyrene	ND		ug/l	2.0	0.28	1
3,3'-Dichlorobenzidine	ND		ug/l	5.0	1.6	1
Benzo(a)anthracene	ND		ug/l	2.0	0.32	1
Chrysene	ND		ug/l	1.4	0.34	1
Bis(2-ethylhexyl)phthalate	ND		ug/l	3.0	1.5	1
Di-n-octylphthalate	ND		ug/l	5.0	1.3	1
Benzo(b)fluoranthene	ND		ug/l	2.0	0.35	1
Benzo(k)fluoranthene	ND		ug/l	2.0	0.37	1
Benzo(a)pyrene	ND		ug/l	2.0	0.41	1
Indeno(1,2,3-cd)pyrene	ND		ug/l	2.0	0.40	1
Dibenzo(a,h)anthracene	ND		ug/l	2.0	0.32	1
Benzo(ghi)perylene	ND		ug/l	2.0	0.30	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	55		21-120
Phenol-d6	47		10-120
Nitrobenzene-d5	59		23-120
2-Fluorobiphenyl	60		15-120
2,4,6-Tribromophenol	87		10-120
4-Terphenyl-d14	53		41-149

Project Name: B14 GW Q3 SAMPLING
Project Number: 21010214
Lab Number: L2341509
Report Date: 07/28/23

SAMPLE RESULTS

Lab ID: L2341509-04
Client ID: HI13-MWS
Sample Location: Not Specified

Date Collected: 07/19/23 15:40
Date Received: 07/19/23
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8270E-SIM
Analytical Date: 07/26/23 17:38
Analyst: JJW

Extraction Method: EPA 3510C
Extraction Date: 07/26/23 00:33

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS-SIM - Westborough Lab						
Naphthalene	0.12	B	ug/l	0.10	0.05	1
2-Methylnaphthalene	ND		ug/l	0.10	0.02	1
Acenaphthylene	0.02	J	ug/l	0.10	0.01	1
Acenaphthene	ND		ug/l	0.10	0.01	1
Fluorene	ND		ug/l	0.10	0.01	1
Pentachlorophenol	ND		ug/l	0.10	0.01	1
Phenanthrene	0.04	J	ug/l	0.05	0.02	1
Anthracene	0.07	J	ug/l	0.10	0.01	1
Fluoranthene	0.03	J	ug/l	0.10	0.02	1
Pyrene	ND		ug/l	0.10	0.02	1
Benzo(a)anthracene	ND		ug/l	0.05	0.02	1
Chrysene	ND		ug/l	0.10	0.01	1
Benzo(b)fluoranthene	ND		ug/l	0.05	0.01	1
Benzo(k)fluoranthene	ND		ug/l	0.10	0.01	1
Benzo(a)pyrene	ND		ug/l	0.10	0.02	1
Indeno(1,2,3-cd)pyrene	ND		ug/l	0.10	0.01	1
Dibenzo(a,h)anthracene	ND		ug/l	0.05	0.01	1
Benzo(ghi)perylene	ND		ug/l	0.10	0.01	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	46		21-120
Phenol-d6	39		10-120
Nitrobenzene-d5	57		23-120
2-Fluorobiphenyl	58		15-120
2,4,6-Tribromophenol	80		10-120
4-Terphenyl-d14	64		41-149

Project Name: B14 GW Q3 SAMPLING
Project Number: 21010214
Lab Number: L2341509
Report Date: 07/28/23

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270E
Analytical Date: 07/26/23 23:17
Analyst: SZ

Extraction Method: EPA 3510C
Extraction Date: 07/26/23 00:33

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 01-04 Batch: WG1807627-1					
Benzaldehyde	ND		ug/l	5.0	0.53
Phenol	ND		ug/l	5.0	0.57
Bis(2-chloroethyl)ether	ND		ug/l	2.0	0.50
2-Chlorophenol	ND		ug/l	2.0	0.48
2-Methylphenol	ND		ug/l	5.0	0.49
Bis(2-chloroisopropyl)ether	ND		ug/l	2.0	0.53
Acetophenone	ND		ug/l	5.0	0.53
n-Nitrosodi-n-propylamine	ND		ug/l	5.0	0.64
3-Methylphenol/4-Methylphenol	ND		ug/l	5.0	0.48
Hexachloroethane	ND		ug/l	2.0	0.58
Nitrobenzene	ND		ug/l	1.4	0.77
Isophorone	ND		ug/l	5.0	1.2
2,4-Dimethylphenol	ND		ug/l	5.0	1.8
Bis(2-chloroethoxy)methane	ND		ug/l	5.0	0.50
2,4-Dichlorophenol	ND		ug/l	5.0	0.41
Naphthalene	0.53	J	ug/l	2.0	0.46
4-Chloroaniline	ND		ug/l	3.7	1.1
Hexachlorobutadiene	ND		ug/l	2.0	0.66
Caprolactam	ND		ug/l	10	3.3
2-Methylnaphthalene	ND		ug/l	2.0	0.45
Hexachlorocyclopentadiene	ND		ug/l	20	0.69
1,2,4,5-Tetrachlorobenzene	ND		ug/l	1.7	0.44
2,4,6-Trichlorophenol	ND		ug/l	5.0	0.61
2,4,5-Trichlorophenol	ND		ug/l	5.0	0.77
Biphenyl	ND		ug/l	2.0	0.46
2-Chloronaphthalene	ND		ug/l	2.0	0.44
2-Nitroaniline	ND		ug/l	5.0	0.50
2,6-Dinitrotoluene	ND		ug/l	5.0	0.93
Acenaphthylene	ND		ug/l	2.0	0.46

Project Name: B14 GW Q3 SAMPLING
Project Number: 21010214
Lab Number: L2341509
Report Date: 07/28/23

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270E
Analytical Date: 07/26/23 23:17
Analyst: SZ

Extraction Method: EPA 3510C
Extraction Date: 07/26/23 00:33

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 01-04 Batch: WG1807627-1					
Acenaphthene	ND		ug/l	2.0	0.53
2,4-Dinitrophenol	ND		ug/l	20	6.6
2,4-Dinitrotoluene	ND		ug/l	5.0	1.2
2,3,4,6-Tetrachlorophenol	ND		ug/l	5.0	0.84
Diethyl phthalate	ND		ug/l	5.0	0.38
Fluorene	ND		ug/l	2.0	0.41
4-Nitroaniline	ND		ug/l	5.0	0.80
NDPA/DPA	ND		ug/l	2.0	0.42
Hexachlorobenzene	ND		ug/l	2.0	0.46
Pentachlorophenol	ND		ug/l	10	1.8
Phenanthrene	ND		ug/l	2.0	0.33
Anthracene	ND		ug/l	2.0	0.33
Carbazole	ND		ug/l	2.0	0.49
Di-n-butylphthalate	ND		ug/l	5.0	0.39
Fluoranthene	ND		ug/l	2.0	0.26
Pyrene	ND		ug/l	2.0	0.28
3,3'-Dichlorobenzidine	ND		ug/l	5.0	1.6
Benzo(a)anthracene	ND		ug/l	2.0	0.32
Chrysene	ND		ug/l	1.4	0.34
Bis(2-ethylhexyl)phthalate	ND		ug/l	3.0	1.5
Di-n-octylphthalate	ND		ug/l	5.0	1.3
Benzo(b)fluoranthene	ND		ug/l	2.0	0.35
Benzo(k)fluoranthene	ND		ug/l	2.0	0.37
Benzo(a)pyrene	ND		ug/l	2.0	0.41
Indeno(1,2,3-cd)pyrene	ND		ug/l	2.0	0.40
Dibenzo(a,h)anthracene	ND		ug/l	2.0	0.32
Benzo(ghi)perylene	ND		ug/l	2.0	0.30

Project Name: B14 GW Q3 SAMPLING
Project Number: 21010214
Lab Number: L2341509
Report Date: 07/28/23

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270E
Analytical Date: 07/26/23 23:17
Analyst: SZ

Extraction Method: EPA 3510C
Extraction Date: 07/26/23 00:33

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 01-04 Batch: WG1807627-1					

Surrogate	%Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	62		21-120
Phenol-d6	48		10-120
Nitrobenzene-d5	66		23-120
2-Fluorobiphenyl	67		15-120
2,4,6-Tribromophenol	87		10-120
4-Terphenyl-d14	60		41-149

Project Name: B14 GW Q3 SAMPLING
Project Number: 21010214
Lab Number: L2341509
Report Date: 07/28/23

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270E-SIM
Analytical Date: 07/27/23 13:08
Analyst: DV

Extraction Method: EPA 3510C
Extraction Date: 07/26/23 00:33

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS-SIM - Westborough Lab for sample(s): 01-04 Batch: WG1807629-1					
Naphthalene	0.55		ug/l	0.10	0.05
2-Methylnaphthalene	0.06	J	ug/l	0.10	0.02
Acenaphthylene	ND		ug/l	0.10	0.01
Acenaphthene	ND		ug/l	0.10	0.01
Fluorene	ND		ug/l	0.10	0.01
Pentachlorophenol	ND		ug/l	0.10	0.01
Phenanthrene	0.04	J	ug/l	0.05	0.02
Anthracene	ND		ug/l	0.10	0.01
Fluoranthene	0.02	J	ug/l	0.10	0.02
Pyrene	0.05	J	ug/l	0.10	0.02
Benzo(a)anthracene	0.07		ug/l	0.05	0.02
Chrysene	ND		ug/l	0.10	0.01
Benzo(b)fluoranthene	ND		ug/l	0.05	0.01
Benzo(k)fluoranthene	ND		ug/l	0.10	0.01
Benzo(a)pyrene	ND		ug/l	0.10	0.02
Indeno(1,2,3-cd)pyrene	ND		ug/l	0.10	0.01
Dibenzo(a,h)anthracene	ND		ug/l	0.05	0.01
Benzo(ghi)perylene	ND		ug/l	0.10	0.01

Surrogate	%Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	50		21-120
Phenol-d6	42		10-120
Nitrobenzene-d5	67		23-120
2-Fluorobiphenyl	64		15-120
2,4,6-Tribromophenol	78		10-120
4-Terphenyl-d14	62		41-149

Lab Control Sample Analysis
Batch Quality Control

Project Name: B14 GW Q3 SAMPLING
Project Number: 21010214
Lab Number: L2341509
Report Date: 07/28/23

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-04 Batch: WG1807627-2 WG1807627-3								
Benzaldehyde	51		49		40-140	4		30
Phenol	44		36		12-110	20		30
Bis(2-chloroethyl)ether	53		46		40-140	14		30
2-Chlorophenol	54		51		27-123	6		30
2-Methylphenol	50		50		30-130	0		30
Bis(2-chloroisopropyl)ether	45		40		40-140	12		30
Acetophenone	50		45		39-129	11		30
n-Nitrosodi-n-propylamine	57		50		29-132	13		30
3-Methylphenol/4-Methylphenol	60		59		30-130	2		30
Hexachloroethane	62		46		40-140	30		30
Nitrobenzene	60		51		40-140	16		30
Isophorone	52		47		40-140	10		30
2,4-Dimethylphenol	53		52		30-130	2		30
Bis(2-chloroethoxy)methane	55		48		40-140	14		30
2,4-Dichlorophenol	62		58		30-130	7		30
Naphthalene	52		44		40-140	17		30
4-Chloroaniline	75		55		40-140	**31**	Q	30
Hexachlorobutadiene	55		47		40-140	16		30
Caprolactam	30		30		10-130	0		30
2-Methylnaphthalene	51		50		40-140	2		30
Hexachlorocyclopentadiene	51		**39**	Q	40-140	27		30
1,2,4,5-Tetrachlorobenzene	51		43		2-134	17		30
2,4,6-Trichlorophenol	62		54		30-130	14		30

Lab Control Sample Analysis
Batch Quality Control

Project Name: B14 GW Q3 SAMPLING
Project Number: 21010214
Lab Number: L2341509
Report Date: 07/28/23

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-04 Batch: WG1807627-2 WG1807627-3								
2,4,5-Trichlorophenol	67		60		30-130	11		30
Biphenyl	49		44		40-140	11		30
2-Chloronaphthalene	52		46		40-140	12		30
2-Nitroaniline	61		59		52-143	3		30
2,6-Dinitrotoluene	54		55		40-140	2		30
Acenaphthylene	56		53		45-123	6		30
Acenaphthene	48		46		37-111	4		30
2,4-Dinitrophenol	68		56		20-130	19		30
2,4-Dinitrotoluene	50		50		48-143	0		30
2,3,4,6-Tetrachlorophenol	57		64		54-145	12		30
Diethyl phthalate	55		57		40-140	4		30
Fluorene	47		48		40-140	2		30
4-Nitroaniline	51		65		51-143	24		30
NDPA/DPA	48		52		40-140	8		30
Hexachlorobenzene	55		55		40-140	0		30
Pentachlorophenol	68		69		9-103	1		30
Phenanthrene	50		46		40-140	8		30
Anthracene	54		48		40-140	12		30
Carbazole	56		**51**	Q	55-144	9		30
Di-n-butylphthalate	62		54		40-140	14		30
Fluoranthene	54		48		40-140	12		30
Pyrene	53		50		26-127	6		30
3,3'-Dichlorobenzidine	47		42		40-140	11		30

Lab Control Sample Analysis

Batch Quality Control

Project Name: B14 GW Q3 SAMPLING

Project Number: 21010214

Lab Number: L2341509

Report Date: 07/28/23

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-04 Batch: WG1807627-2 WG1807627-3								
Benzo(a)anthracene	55		51		40-140	8		30
Chrysene	52		48		40-140	8		30
Bis(2-ethylhexyl)phthalate	77		67		40-140	14		30
Di-n-octylphthalate	72		62		40-140	15		30
Benzo(b)fluoranthene	56		52		40-140	7		30
Benzo(k)fluoranthene	51		50		40-140	2		30
Benzo(a)pyrene	58		54		40-140	7		30
Indeno(1,2,3-cd)pyrene	50		45		40-140	11		30
Dibenzo(a,h)anthracene	49		46		40-140	6		30
Benzo(ghi)perylene	52		48		40-140	8		30

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
2-Fluorophenol	51		45		21-120
Phenol-d6	42		39		10-120
Nitrobenzene-d5	58		52		23-120
2-Fluorobiphenyl	52		48		15-120
2,4,6-Tribromophenol	70		74		10-120
4-Terphenyl-d14	47		45		41-149

Lab Control Sample Analysis
Batch Quality Control

Project Name: B14 GW Q3 SAMPLING
Project Number: 21010214
Lab Number: L2341509
Report Date: 07/28/23

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS-SIM - Westborough Lab Associated sample(s): 01-04 Batch: WG1807629-2 WG1807629-3								
Naphthalene	51		41		40-140	22		40
2-Methylnaphthalene	54		44		40-140	20		40
Acenaphthylene	55		46		40-140	18		40
Acenaphthene	51		43		37-111	17		40
Fluorene	52		46		40-140	12		40
Pentachlorophenol	80		68		9-103	16		40
Phenanthrene	49		42		40-140	15		40
Anthracene	54		46		40-140	16		40
Fluoranthene	54		46		40-140	16		40
Pyrene	54		47		26-127	14		40
Benzo(a)anthracene	55		48		40-140	14		40
Chrysene	54		46		40-140	16		40
Benzo(b)fluoranthene	57		48		40-140	17		40
Benzo(k)fluoranthene	58		52		40-140	11		40
Benzo(a)pyrene	60		51		40-140	16		40
Indeno(1,2,3-cd)pyrene	53		46		40-140	14		40
Dibenzo(a,h)anthracene	57		51		40-140	11		40
Benzo(ghi)perylene	55		49		40-140	12		40

Lab Control Sample Analysis
Batch Quality Control

Project Name: B14 GW Q3 SAMPLING
Project Number: 21010214
Lab Number: L2341509
Report Date: 07/28/23

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits

Semivolatile Organics by GC/MS-SIM - Westborough Lab Associated sample(s): 01-04 Batch: WG1807629-2 WG1807629-3

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
2-Fluorophenol	46		38		21-120
Phenol-d6	40		34		10-120
Nitrobenzene-d5	56		46		23-120
2-Fluorobiphenyl	54		44		15-120
2,4,6-Tribromophenol	68		60		10-120
4-Terphenyl-d14	54		46		41-149

Matrix Spike Analysis
Batch Quality Control

Project Name: B14 GW Q3 SAMPLING
Project Number: 21010214
Lab Number: L2341509
Report Date: 07/28/23

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): 01-04 QC Batch ID: WG1807627-4 WG1807627-5 QC Sample: L2341509-01 Client ID: HI10-MWS												
Benzaldehyde	ND	18.2	9.2	51		9.5	52		40-140	3		30
Phenol	ND	18.2	7.6	42		8.2	45		12-110	8		30
Bis(2-chloroethyl)ether	ND	18.2	8.6	47		9.4	52		40-140	9		30
2-Chlorophenol	ND	18.2	9.5	52		10	55		27-123	5		30
2-Methylphenol	ND	18.2	9.8	54		11	61		30-130	12		30
Bis(2-chloroisopropyl)ether	ND	18.2	7.4	41		8.2	45		40-140	10		30
Acetophenone	ND	18.2	8.8	48		9.7	53		39-129	10		30
n-Nitrosodi-n-propylamine	ND	18.2	11	61		12	66		29-132	9		30
3-Methylphenol/4-Methylphenol	ND	18.2	11	61		12	66		30-130	9		30
Hexachloroethane	ND	18.2	10	55		11	61		40-140	10		30
Nitrobenzene	ND	18.2	11	61		12	66		40-140	9		30
Isophorone	ND	18.2	9.8	54		10	55		40-140	2		30
2,4-Dimethylphenol	ND	18.2	9.6	53		12	66		30-130	22		30
Bis(2-chloroethoxy)methane	ND	18.2	9.8	54		10	55		40-140	2		30
2,4-Dichlorophenol	ND	18.2	12	66		12	66		30-130	0		30
Naphthalene	2.3	18.2	11	48		11	48		40-140	0		30
4-Chloroaniline	ND	18.2	9.9	54		9.6	53		40-140	3		30
Hexachlorobutadiene	ND	18.2	9.6	53		11	61		40-140	14		30
Caprolactam	ND	18.2	6.6J	36		6.2J	34		10-130	6		30
2-Methylnaphthalene	ND	18.2	10	55		11	61		40-140	10		30
Hexachlorocyclopentadiene	ND	18.2	10J	55		11J	61		40-140	10		30
1,2,4,5-Tetrachlorobenzene	ND	18.2	8.8	48		9.8	54		2-134	11		30
2,4,6-Trichlorophenol	ND	18.2	12	66		12	66		30-130	0		30

Matrix Spike Analysis
Batch Quality Control

Project Name: B14 GW Q3 SAMPLING
Project Number: 21010214
Lab Number: L2341509
Report Date: 07/28/23

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): 01-04 QC Batch ID: WG1807627-4 WG1807627-5 QC Sample: L2341509-01 Client ID: HI10-MWS												
2,4,5-Trichlorophenol	ND	18.2	13	72		13	72		30-130	0		30
Biphenyl	ND	18.2	8.9	49		9.4	52		40-140	5		30
2-Chloronaphthalene	ND	18.2	9.5	52		10	55		40-140	5		30
2-Nitroaniline	ND	18.2	10	55		10	55		52-143	0		30
2,6-Dinitrotoluene	ND	18.2	10	55		11	61		40-140	10		30
Acenaphthylene	ND	18.2	11	61		11	61		45-123	0		30
Acenaphthene	0.81J	18.2	9.5	52		10	55		37-111	5		30
2,4-Dinitrophenol	ND	18.2	15J	83		15J	83		20-130	0		30
2,4-Dinitrotoluene	ND	18.2	10	55		12	66		48-143	18		30
2,3,4,6-Tetrachlorophenol	ND	18.2	12	66		12	66		54-145	0		30
Diethyl phthalate	ND	18.2	10	55		11	61		40-140	10		30
Fluorene	0.56J	18.2	9.7	53		10	55		40-140	3		30
4-Nitroaniline	ND	18.2	6.3	**35**	Q	8.1	**45**	Q	51-143	25		30
NDPA/DPA	ND	18.2	9.3	51		10	55		40-140	7		30
Hexachlorobenzene	ND	18.2	11	61		11	61		40-140	0		30
Pentachlorophenol	ND	18.2	15	83		16	88		9-103	6		30
Phenanthrene	0.94J	18.2	10	55		11	61		40-140	10		30
Anthracene	ND	18.2	9.8	54		10	55		40-140	2		30
Carbazole	0.60J	18.2	11	61		11	61		55-144	0		30
Di-n-butylphthalate	ND	18.2	12	66		13	72		40-140	8		30
Fluoranthene	0.52J	18.2	10	55		11	61		40-140	10		30
Pyrene	0.41J	18.2	10	55		11	61		26-127	10		30
3,3'-Dichlorobenzidine	ND	18.2	ND	**0**	Q	ND	**0**	Q	40-140	NC		30

Matrix Spike Analysis

Batch Quality Control

Project Name: B14 GW Q3 SAMPLING

Project Number: 21010214

Lab Number: L2341509

Report Date: 07/28/23

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): 01-04 QC Batch ID: WG1807627-4 WG1807627-5 QC Sample: L2341509-01 Client ID: HI10-MWS												
Benzo(a)anthracene	ND	18.2	10	55		11	61		40-140	10		30
Chrysene	ND	18.2	10	55		11	61		40-140	10		30
Bis(2-ethylhexyl)phthalate	ND	18.2	14	77		16	88		40-140	13		30
Di-n-octylphthalate	ND	18.2	14	77		15	83		40-140	7		30
Benzo(b)fluoranthene	ND	18.2	10	55		10	55		40-140	0		30
Benzo(k)fluoranthene	ND	18.2	10	55		11	61		40-140	10		30
Benzo(a)pyrene	ND	18.2	11	61		12	66		40-140	9		30
Indeno(1,2,3-cd)pyrene	ND	18.2	9.3	51		10	55		40-140	7		30
Dibenzo(a,h)anthracene	ND	18.2	9.5	52		10	55		40-140	5		30
Benzo(ghi)perylene	ND	18.2	9.8	54		11	61		40-140	12		30

Surrogate	MS % Recovery	MS Qualifier	MSD % Recovery	MSD Qualifier	Acceptance Criteria
2,4,6-Tribromophenol	74		81		10-120
2-Fluorobiphenyl	52		56		15-120
2-Fluorophenol	46		57		21-120
4-Terphenyl-d14	51		53		41-149
Nitrobenzene-d5	52		58		23-120
Phenol-d6	44		47		10-120

Matrix Spike Analysis
Batch Quality Control

Project Name: B14 GW Q3 SAMPLING
Project Number: 21010214
Lab Number: L2341509
Report Date: 07/28/23

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): 01-04 QC Batch ID: WG1807629-4 WG1807629-5 QC Sample: L2341509-01 Client ID: HI10-MWS												
Naphthalene	2.2B	18.2	11	48		11	48		40-140	0		40
2-Methylnaphthalene	0.30	18.2	11	59		11	59		40-140	0		40
Acenaphthylene	0.11	18.2	11	60		11	60		40-140	0		40
Acenaphthene	0.64	18.2	10	51		10	51		37-111	0		40
Fluorene	0.53	18.2	11	58		11	58		40-140	0		40
Pentachlorophenol	0.17	18.2	16	87		16	87		9-103	0		40
Phenanthrene	0.87	18.2	10	50		10	50		40-140	0		40
Anthracene	0.21	18.2	11	59		10	54		40-140	10		40
Fluoranthene	0.46	18.2	11	58		11	58		40-140	0		40
Pyrene	0.43	18.2	11	58		10	53		26-127	10		40
Benzo(a)anthracene	0.06B	18.2	11	60		11	60		40-140	0		40
Chrysene	0.04J	18.2	10	55		10	55		40-140	0		40
Benzo(b)fluoranthene	0.02J	18.2	11	61		13	72		40-140	17		40
Benzo(k)fluoranthene	0.03J	18.2	11	61		12	66		40-140	9		40
Benzo(a)pyrene	0.03J	18.2	11	61		12	66		40-140	9		40
Indeno(1,2,3-cd)pyrene	0.04J	18.2	9.8	54		11	61		40-140	12		40
Dibenzo(a,h)anthracene	0.07	18.2	10	55		11	60		40-140	10		40
Benzo(ghi)perylene	0.03J	18.2	10	55		11	61		40-140	10		40

Surrogate	MS % Recovery	MS Qualifier	MSD % Recovery	MSD Qualifier	Acceptance Criteria
2,4,6-Tribromophenol	77		75		10-120
2-Fluorobiphenyl	59		60		15-120

Matrix Spike Analysis

Batch Quality Control

Project Name: B14 GW Q3 SAMPLING

Project Number: 21010214

Lab Number: L2341509

Report Date: 07/28/23

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): 01-04 QC Batch ID: WG1807629-4 WG1807629-5 QC Sample: L2341509-01
Client ID: HI10-MWS

Surrogate	MS % Recovery	MS Qualifier	MSD % Recovery	MSD Qualifier	Acceptance Criteria
2-Fluorophenol	46		47		21-120
4-Terphenyl-d14	58		58		41-149
Nitrobenzene-d5	60		60		23-120
Phenol-d6	42		43		10-120

Project Name: B14 GW Q3 SAMPLING
Project Number: 21010214

Lab Number: L2341509
Report Date: 07/28/23

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(*)
L2341509-01A	Vial HCl preserved	A	NA		2.8	Y	Absent		PA-8260-SIM(14),PA-8260(14)
L2341509-01A1	Vial HCl preserved	A	NA		2.8	Y	Absent		PA-8260-SIM(14),PA-8260(14)
L2341509-01A2	Vial HCl preserved	A	NA		2.8	Y	Absent		PA-8260-SIM(14),PA-8260(14)
L2341509-01B	Vial HCl preserved	A	NA		2.8	Y	Absent		PA-8260-SIM(14),PA-8260(14)
L2341509-01B1	Vial HCl preserved	A	NA		2.8	Y	Absent		PA-8260-SIM(14),PA-8260(14)
L2341509-01B2	Vial HCl preserved	A	NA		2.8	Y	Absent		PA-8260-SIM(14),PA-8260(14)
L2341509-01C	Vial HCl preserved	A	NA		2.8	Y	Absent		PA-8260-SIM(14),PA-8260(14)
L2341509-01C1	Vial HCl preserved	A	NA		2.8	Y	Absent		PA-8260-SIM(14),PA-8260(14)
L2341509-01C2	Vial HCl preserved	A	NA		2.8	Y	Absent		PA-8260-SIM(14),PA-8260(14)
L2341509-01D	Amber 250ml unpreserved	A	12	12	2.8	Y	Absent		PA-8270SIM-LVI(7),PA-8270-LVI(7)
L2341509-01D1	Amber 250ml unpreserved	A	12	12	2.8	Y	Absent		PA-8270SIM-LVI(7),PA-8270-LVI(7)
L2341509-01D2	Amber 250ml unpreserved	A	12	12	2.8	Y	Absent		PA-8270SIM-LVI(7),PA-8270-LVI(7)
L2341509-01E	Amber 250ml unpreserved	A	12	12	2.8	Y	Absent		PA-8270SIM-LVI(7),PA-8270-LVI(7)
L2341509-01E1	Amber 250ml unpreserved	A	12	12	2.8	Y	Absent		PA-8270SIM-LVI(7),PA-8270-LVI(7)
L2341509-01E2	Amber 250ml unpreserved	A	12	12	2.8	Y	Absent		PA-8270SIM-LVI(7),PA-8270-LVI(7)
L2341509-02A	Vial HCl preserved	A	NA		2.8	Y	Absent		PA-8260-SIM(14),PA-8260(14)
L2341509-02B	Vial HCl preserved	A	NA		2.8	Y	Absent		PA-8260-SIM(14),PA-8260(14)
L2341509-02C	Vial HCl preserved	A	NA		2.8	Y	Absent		PA-8260-SIM(14),PA-8260(14)
L2341509-02D	Amber 250ml unpreserved	A	7	7	2.8	Y	Absent		PA-8270SIM-LVI(7),PA-8270-LVI(7)
L2341509-02E	Amber 250ml unpreserved	A	7	7	2.8	Y	Absent		PA-8270SIM-LVI(7),PA-8270-LVI(7)
L2341509-03A	Vial HCl preserved	A	NA		2.8	Y	Absent		PA-8260-SIM(14),PA-8260(14)
L2341509-03B	Vial HCl preserved	A	NA		2.8	Y	Absent		PA-8260-SIM(14),PA-8260(14)
L2341509-03C	Vial HCl preserved	A	NA		2.8	Y	Absent		PA-8260-SIM(14),PA-8260(14)

*Values in parentheses indicate holding time in days

Project Name: B14 GW Q3 SAMPLING
Project Number: 21010214

Lab Number: L2341509
Report Date: 07/28/23

Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L2341509-03D	Amber 250ml unpreserved	A	9	9	2.8	Y	Absent		PA-8270SIM-LVI(7),PA-8270-LVI(7)
L2341509-03E	Amber 250ml unpreserved	A	9	9	2.8	Y	Absent		PA-8270SIM-LVI(7),PA-8270-LVI(7)
L2341509-04A	Vial HCl preserved	A	NA		2.8	Y	Absent		PA-8260-SIM(14),PA-8260(14)
L2341509-04B	Vial HCl preserved	A	NA		2.8	Y	Absent		PA-8260-SIM(14),PA-8260(14)
L2341509-04C	Vial HCl preserved	A	NA		2.8	Y	Absent		PA-8260-SIM(14),PA-8260(14)
L2341509-04D	Amber 250ml unpreserved	A	10	10	2.8	Y	Absent		PA-8270SIM-LVI(7),PA-8270-LVI(7)
L2341509-04E	Amber 250ml unpreserved	A	10	10	2.8	Y	Absent		PA-8270SIM-LVI(7),PA-8270-LVI(7)
L2341509-05A	Vial HCl preserved	A	NA		2.8	Y	Absent		PA-8260-SIM(14),PA-8260(14)
L2341509-05B	Vial HCl preserved	A	NA		2.8	Y	Absent		PA-8260-SIM(14),PA-8260(14)
L2341509-05C	Vial HCl preserved	A	NA		2.8	Y	Absent		PA-8260-SIM(14),PA-8260(14)
L2341509-05D	Vial HCl preserved	A	NA		2.8	Y	Absent		PA-8260-SIM(14),PA-8260(14)

*Values in parentheses indicate holding time in days

Project Name:	B14 GW Q3 SAMPLING	**Lab Number:**	L2341509
Project Number:	21010214	**Report Date:**	07/28/23

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 Q3 SAMPLING	**Lab Number:**	L2341509
Project Number:	21010214	**Report Date:**	07/28/23

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 Q3 SAMPLING	**Lab Number:**	L2341509
Project Number:	21010214	**Report Date:**	07/28/23

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 Q3 SAMPLING	**Lab Number:**	L2341509
Project Number:	21010214	**Report Date:**	07/28/23

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, Azobenzene; SCM: Iodomethane (methyl iodide), 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene.
EPA 8270E: NPW: Dimethylnaphthalene,1,4-Diphenylhydrazine, alpha-Terpineol; 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.
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, SM9221E, 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 1

Date Rec'd in Lab: 7/20/23

ALPHA Job #: L2341509

ALPHA ANALYTICAL
WESTBORO, MA TEL: 508-898-9220 FAX: 508-898-9193
MANSFIELD, MA TEL: 508-822-9300 FAX: 508-822-3288

Client Information

Client: TPA
Address:
Phone:
Fax:
Email:
☐ These samples have been previously analyzed by Alpha

Project Information

Project Name: B14 GW Q3 sampling
Project Location:
Project #: 21010214
Project Manager: Bob T
ALPHA Quote #:

Turn-Around Time

☒ Standard ☐ RUSH (only confirmed if pre-approved)
Date Due: Time:

Report Information - Data Deliverables

☐ FAX ☒ EMAIL
☐ ADEx ☐ Add'l Deliverables

Billing Information

☐ Same as Client info PO #:

Regulatory Requirements/Report Limits

State /Fed Program	Criteria

Other Project Specific Requirements/Comments/Detection Limits:

ALPHA Lab ID (Lab Use Only)	Sample ID	Collection Date	Collection Time	Sample Matrix	Sampler's Initials	ANALYSIS: VOC 8260	ANALYSIS: SVOC 8270 SIM	Sample Specific Comments	TOTAL # BOTTLES
41509-01	HI10-MWS	07/19/23	1030	GW	LEP	X	X	MS/MSD, pH>11	15
-02	HI11-MWS	07/19/23	1215	GW	LEP	X	X		5
-03	TM04-PZM006	07/19/23	1305	GW	LEP	X	X	pH ≈ 9.24	5
-04	HI12-MWS	07/19/23	1510	GW	LEP	X	X	last pH reading = 9.72	5
-05	TB-03	07/19/23	—	W	LEP	X			4

SAMPLE HANDLING
Filtration
☐ Done ☐ Not needed ☐ Lab to do
Preservation
☐ Lab to do (Please specify below)

Container Type	V	A
Preservative	B	A

7/20/23 0220
7/20/23 0220

Relinquished By:	Date/Time	Received By:	Date/Time
ARM	07/19/23 1605		7/19/23 1605
	7/19/23 1800		7/19/23 1800
NAL	7/19/23 2100	UPS	7/19 2100

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.

FORM NO. 01-01 (rev. 12-OCT-07)

ANALYTICAL REPORT

Lab Number:	L2341853
Client:	Tradepoint Atlantic 1600 Sparrows Point Boulevard Baltimore, MD 21219
ATTN:	Robert Tworkowski
Phone:	(443) 649-5073
Project Name:	B14 Q3 SAMPLING
Project Number:	21010214
Report Date:	08/03/23

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), OH (CL108), OR (MA-1316), PA (68-03671), RI (LAO00065), TX (T104704476), VT (VT-0935), VA (460195), USDA (Permit #525-23-122-91930).

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

Project Name: B14 Q3 SAMPLING
Project Number: 21010214

Lab Number: L2341853
Report Date: 08/03/23

Alpha Sample ID	Client ID	Matrix	Sample Location	Collection Date/Time	Receive Date
L2341853-01	TM08-PZM007	WATER	Not Specified	07/20/23 10:05	07/20/23
L2341853-02	HI16-MWS	WATER	Not Specified	07/20/23 11:00	07/20/23
L2341853-03	HI15-MWS	WATER	Not Specified	07/20/23 12:15	07/20/23
L2341853-04	HI14-MWS	WATER	Not Specified	07/20/23 13:20	07/20/23
L2341853-05	HI12-MWS	WATER	Not Specified	07/20/23 13:50	07/20/23
L2341853-06	HI17-MWS	WATER	Not Specified	07/20/23 15:10	07/20/23
L2341853-07	DUPLICATE	WATER	Not Specified	07/20/23 00:00	07/20/23
L2341853-08	TB-04	WATER	Not Specified	07/20/23 00:00	07/20/23

Project Name:	B14 Q3 SAMPLING	**Lab Number:**	L2341853
Project Number:	21010214	**Report Date:**	08/03/23

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, solids and tissues are reported on a dry 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 Q3 SAMPLING **Lab Number:** L2341853
Project Number: 21010214 **Report Date:** 08/03/23

Case Narrative (continued)

Report Submission

August 03, 2023: This final report includes the results of all requested analyses.

July 27, 2023: This is a preliminary report.

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

Semivolatile Organics by SIM

The WG1807629-1 Method Blank, associated with L2341853-01, -02, -03, and -07, has concentrations above the reporting limits for Naphthalene and Benzo(a)anthracene. Since the associated sample concentrations are either greater than 10x the blank concentration or non-detect to the RL for these target analytes, no corrective action is required. Any results detected below the reporting limit are qualified with a "B".

The WG1807629-1 Method Blank, associated with L2341853-04, -05, and -06, has concentrations above the reporting limits for Naphthalene and Benzo(a)anthracene. The samples were re-extracted with the method required holding time exceeded and the method blank was non-detect for those target compounds. The results of both extractions are reported. The original sample result is reported with a "B" qualifier.

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: Michelle M. Morris

Title: Technical Director/Representative Date: 08/03/23

ORGANICS

VOLATILES

Project Name: B14 Q3 SAMPLING
Project Number: 21010214
Lab Number: L2341853
Report Date: 08/03/23

SAMPLE RESULTS

Lab ID: L2341853-01
Client ID: TM08-PZM007
Sample Location: Not Specified

Date Collected: 07/20/23 10:05
Date Received: 07/20/23
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8260D
Analytical Date: 07/28/23 11:12
Analyst: MKS

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 Q3 SAMPLING
Project Number: 21010214
Lab Number: L2341853
Report Date: 08/03/23

SAMPLE RESULTS

Lab ID: L2341853-01
Client ID: TM08-PZM007
Sample Location: Not Specified
Date Collected: 07/20/23 10:05
Date Received: 07/20/23
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	96		70-130
Toluene-d8	97		70-130
4-Bromofluorobenzene	95		70-130
Dibromofluoromethane	99		70-130

Project Name: B14 Q3 SAMPLING
Project Number: 21010214
Lab Number: L2341853
Report Date: 08/03/23

SAMPLE RESULTS

Lab ID: L2341853-01
Client ID: TM08-PZM007
Sample Location: Not Specified

Date Collected: 07/20/23 10:05
Date Received: 07/20/23
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8260D-SIM(M)
Analytical Date: 07/28/23 11:12
Analyst: MKS

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
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	95		70-130
4-Bromofluorobenzene	92		70-130

Project Name: B14 Q3 SAMPLING
Project Number: 21010214
Lab Number: L2341853
Report Date: 08/03/23

SAMPLE RESULTS

Lab ID: L2341853-02
Client ID: HI16-MWS
Sample Location: Not Specified

Date Collected: 07/20/23 11:00
Date Received: 07/20/23
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8260D
Analytical Date: 07/28/23 11:54
Analyst: MKS

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 Q3 SAMPLING
Project Number: 21010214
Lab Number: L2341853
Report Date: 08/03/23

SAMPLE RESULTS

Lab ID: L2341853-02
Client ID: HI16-MWS
Sample Location: Not Specified
Date Collected: 07/20/23 11:00
Date Received: 07/20/23
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	98		70-130
Toluene-d8	96		70-130
4-Bromofluorobenzene	94		70-130
Dibromofluoromethane	102		70-130

Project Name: B14 Q3 SAMPLING
Project Number: 21010214
Lab Number: L2341853
Report Date: 08/03/23

SAMPLE RESULTS

Lab ID: L2341853-02
Client ID: HI16-MWS
Sample Location: Not Specified

Date Collected: 07/20/23 11:00
Date Received: 07/20/23
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8260D-SIM(M)
Analytical Date: 07/28/23 11:54
Analyst: MKS

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
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	95		70-130
4-Bromofluorobenzene	92		70-130

Project Name: B14 Q3 SAMPLING
Project Number: 21010214
Lab Number: L2341853
Report Date: 08/03/23

SAMPLE RESULTS

Lab ID: L2341853-03
Client ID: HI15-MWS
Sample Location: Not Specified

Date Collected: 07/20/23 12:15
Date Received: 07/20/23
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8260D
Analytical Date: 07/28/23 12:37
Analyst: MKS

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 Q3 SAMPLING
Project Number: 21010214
Lab Number: L2341853
Report Date: 08/03/23

SAMPLE RESULTS

Lab ID: L2341853-03
Client ID: HI15-MWS
Sample Location: Not Specified
Date Collected: 07/20/23 12:15
Date Received: 07/20/23
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	96		70-130
Toluene-d8	96		70-130
4-Bromofluorobenzene	93		70-130
Dibromofluoromethane	98		70-130

Project Name: B14 Q3 SAMPLING
Project Number: 21010214
Lab Number: L2341853
Report Date: 08/03/23

SAMPLE RESULTS

Lab ID: L2341853-03
Client ID: HI15-MWS
Sample Location: Not Specified

Date Collected: 07/20/23 12:15
Date Received: 07/20/23
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8260D-SIM(M)
Analytical Date: 07/28/23 12:37
Analyst: MKS

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
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	93		70-130
4-Bromofluorobenzene	91		70-130

Project Name: B14 Q3 SAMPLING
Project Number: 21010214
Lab Number: L2341853
Report Date: 08/03/23

SAMPLE RESULTS

Lab ID: L2341853-04
Client ID: HI14-MWS
Sample Location: Not Specified

Date Collected: 07/20/23 13:20
Date Received: 07/20/23
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8260D
Analytical Date: 07/28/23 13:19
Analyst: MKS

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 Q3 SAMPLING
Project Number: 21010214
Lab Number: L2341853
Report Date: 08/03/23

SAMPLE RESULTS

Lab ID: L2341853-04
Client ID: HI14-MWS
Sample Location: Not Specified
Date Collected: 07/20/23 13:20
Date Received: 07/20/23
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	95		70-130
Toluene-d8	95		70-130
4-Bromofluorobenzene	95		70-130
Dibromofluoromethane	97		70-130

Project Name: B14 Q3 SAMPLING
Project Number: 21010214
Lab Number: L2341853
Report Date: 08/03/23

SAMPLE RESULTS

Lab ID: L2341853-04
Client ID: HI14-MWS
Sample Location: Not Specified

Date Collected: 07/20/23 13:20
Date Received: 07/20/23
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8260D-SIM(M)
Analytical Date: 07/28/23 13:19
Analyst: MKS

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
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	95		70-130
4-Bromofluorobenzene	92		70-130

Project Name: B14 Q3 SAMPLING
Project Number: 21010214
Lab Number: L2341853
Report Date: 08/03/23

SAMPLE RESULTS

Lab ID: L2341853-05
Client ID: HI12-MWS
Sample Location: Not Specified

Date Collected: 07/20/23 13:50
Date Received: 07/20/23
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8260D
Analytical Date: 07/26/23 08:03
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	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	2.0	J	ug/l	5.0	1.9	1
Benzene	0.54		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 Q3 SAMPLING
Project Number: 21010214
Lab Number: L2341853
Report Date: 08/03/23

SAMPLE RESULTS

Lab ID: L2341853-05
Client ID: HI12-MWS
Sample Location: Not Specified
Date Collected: 07/20/23 13:50
Date Received: 07/20/23
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	96		70-130
Toluene-d8	97		70-130
4-Bromofluorobenzene	92		70-130
Dibromofluoromethane	101		70-130

Project Name: B14 Q3 SAMPLING
Project Number: 21010214
Lab Number: L2341853
Report Date: 08/03/23

SAMPLE RESULTS

Lab ID: L2341853-05
Client ID: HI12-MWS
Sample Location: Not Specified

Date Collected: 07/20/23 13:50
Date Received: 07/20/23
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8260D-SIM(M)
Analytical Date: 07/26/23 08:03
Analyst: MCM

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
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	94		70-130
4-Bromofluorobenzene	90		70-130

Project Name: B14 Q3 SAMPLING
Project Number: 21010214
Lab Number: L2341853
Report Date: 08/03/23

SAMPLE RESULTS

Lab ID: L2341853-06
Client ID: HI17-MWS
Sample Location: Not Specified
Date Collected: 07/20/23 15:10
Date Received: 07/20/23
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8260D
Analytical Date: 07/28/23 14:01
Analyst: MKS

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	33		ug/l	0.75	0.20	1

Project Name: B14 Q3 SAMPLING **Lab Number:** L2341853

Project Number: 21010214 **Report Date:** 08/03/23

SAMPLE RESULTS

Lab ID: L2341853-06 Date Collected: 07/20/23 15:10

Client ID: HI17-MWS Date Received: 07/20/23

Sample Location: Not Specified 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	98		70-130
Toluene-d8	98		70-130
4-Bromofluorobenzene	96		70-130
Dibromofluoromethane	97		70-130

Project Name: B14 Q3 SAMPLING
Project Number: 21010214
Lab Number: L2341853
Report Date: 08/03/23

SAMPLE RESULTS

Lab ID: L2341853-06
Client ID: HI17-MWS
Sample Location: Not Specified

Date Collected: 07/20/23 15:10
Date Received: 07/20/23
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8260D-SIM(M)
Analytical Date: 07/28/23 14:01
Analyst: MKS

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
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	95		70-130
4-Bromofluorobenzene	93		70-130

Project Name: B14 Q3 SAMPLING
Project Number: 21010214
Lab Number: L2341853
Report Date: 08/03/23

SAMPLE RESULTS

Lab ID: L2341853-07
Client ID: DUPLICATE
Sample Location: Not Specified

Date Collected: 07/20/23 00:00
Date Received: 07/20/23
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8260D
Analytical Date: 07/28/23 14:44
Analyst: MKS

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 Q3 SAMPLING **Lab Number:** L2341853

Project Number: 21010214 **Report Date:** 08/03/23

SAMPLE RESULTS

Lab ID: L2341853-07 Date Collected: 07/20/23 00:00

Client ID: DUPLICATE Date Received: 07/20/23

Sample Location: Not Specified 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	101		70-130
Toluene-d8	96		70-130
4-Bromofluorobenzene	93		70-130
Dibromofluoromethane	101		70-130

Project Name: B14 Q3 SAMPLING
Project Number: 21010214
Lab Number: L2341853
Report Date: 08/03/23

SAMPLE RESULTS

Lab ID: L2341853-07
Client ID: DUPLICATE
Sample Location: Not Specified
Date Collected: 07/20/23 00:00
Date Received: 07/20/23
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8260D-SIM(M)
Analytical Date: 07/28/23 14:44
Analyst: MKS

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
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	97		70-130
4-Bromofluorobenzene	93		70-130

Project Name: B14 Q3 SAMPLING
Project Number: 21010214
Lab Number: L2341853
Report Date: 08/03/23

SAMPLE RESULTS

Lab ID: L2341853-08
Client ID: TB-04
Sample Location: Not Specified

Date Collected: 07/20/23 00:00
Date Received: 07/20/23
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8260D
Analytical Date: 07/28/23 10:30
Analyst: MKS

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 Q3 SAMPLING **Lab Number:** L2341853

Project Number: 21010214 **Report Date:** 08/03/23

SAMPLE RESULTS

Lab ID: L2341853-08 Date Collected: 07/20/23 00:00

Client ID: TB-04 Date Received: 07/20/23

Sample Location: Not Specified 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	97		70-130
4-Bromofluorobenzene	96		70-130
Dibromofluoromethane	104		70-130

Project Name: B14 Q3 SAMPLING
Project Number: 21010214
Lab Number: L2341853
Report Date: 08/03/23

SAMPLE RESULTS

Lab ID: L2341853-08
Client ID: TB-04
Sample Location: Not Specified

Date Collected: 07/20/23 00:00
Date Received: 07/20/23
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8260D-SIM(M)
Analytical Date: 07/28/23 10:30
Analyst: MKS

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
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	98		70-130
4-Bromofluorobenzene	94		70-130

Project Name: B14 Q3 SAMPLING **Lab Number:** L2341853

Project Number: 21010214 **Report Date:** 08/03/23

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260D
Analytical Date: 07/26/23 05:45
Analyst: MCM

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 05 Batch: WG1808273-5					
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 Q3 SAMPLING
Project Number: 21010214
Lab Number: L2341853
Report Date: 08/03/23

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260D
Analytical Date: 07/26/23 05:45
Analyst: MCM

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 05 Batch: WG1808273-5					
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 Q3 SAMPLING
Project Number: 21010214
Lab Number: L2341853
Report Date: 08/03/23

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260D
Analytical Date: 07/26/23 05:45
Analyst: MCM

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 05 Batch: WG1808273-5					

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	93		70-130
Toluene-d8	96		70-130
4-Bromofluorobenzene	93		70-130
Dibromofluoromethane	98		70-130

Project Name: B14 Q3 SAMPLING
Project Number: 21010214
Lab Number: L2341853
Report Date: 08/03/23

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260D-SIM(M)
Analytical Date: 07/26/23 05:45
Analyst: MCM

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS-SIM - Westborough Lab for sample(s): 05 Batch: WG1808274-5					
1,1,2,2-Tetrachloroethane	ND		ug/l	0.050	0.006

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	93		70-130
4-Bromofluorobenzene	91		70-130

Project Name: B14 Q3 SAMPLING **Lab Number:** L2341853

Project Number: 21010214 **Report Date:** 08/03/23

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260D
Analytical Date: 07/28/23 09:05
Analyst: MCM

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 01-04,06-08 Batch: WG1809922-5					
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 Q3 SAMPLING
Project Number: 21010214
Lab Number: L2341853
Report Date: 08/03/23

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260D
Analytical Date: 07/28/23 09:05
Analyst: MCM

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 01-04,06-08 Batch: WG1809922-5					
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 Q3 SAMPLING
Project Number: 21010214
Lab Number: L2341853
Report Date: 08/03/23

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260D
Analytical Date: 07/28/23 09:05
Analyst: MCM

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 01-04,06-08 Batch: WG1809922-5					

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	104		70-130
Toluene-d8	96		70-130
4-Bromofluorobenzene	100		70-130
Dibromofluoromethane	104		70-130

Project Name: B14 Q3 SAMPLING
Project Number: 21010214
Lab Number: L2341853
Report Date: 08/03/23

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260D-SIM(M)
Analytical Date: 07/28/23 09:05
Analyst: MCM

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS-SIM - Westborough Lab for sample(s): 01-04,06-08 Batch: WG1809929-5					
1,1,2,2-Tetrachloroethane	ND		ug/l	0.050	0.006

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	98		70-130
4-Bromofluorobenzene	94		70-130

Lab Control Sample Analysis

Batch Quality Control

Project Name: B14 Q3 SAMPLING

Project Number: 21010214

Lab Number: L2341853

Report Date: 08/03/23

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 05 Batch: WG1808273-3 WG1808273-4								
Dichlorodifluoromethane	130		130		36-147	0		20
Chloromethane	110		110		64-130	0		20
Vinyl chloride	120		120		55-140	0		20
Bromomethane	91		100		39-139	9		20
Chloroethane	96		100		55-138	4		20
Trichlorofluoromethane	100		100		62-150	0		20
1,1-Dichloroethene	110		110		61-145	0		20
Carbon disulfide	100		100		51-130	0		20
1,1,2-Trichloro-1,2,2-Trifluoroethane	120		120		70-130	0		20
Methylene chloride	100		100		70-130	0		20
Acetone	120		110		58-148	9		20
trans-1,2-Dichloroethene	110		110		70-130	0		20
Methyl Acetate	110		120		70-130	9		20
Methyl tert butyl ether	110		100		63-130	10		20
1,1-Dichloroethane	110		110		70-130	0		20
cis-1,2-Dichloroethene	100		100		70-130	0		20
Cyclohexane	110		110		70-130	0		20
Chloroform	100		110		70-130	10		20
Carbon tetrachloride	110		110		63-132	0		20
1,1,1-Trichloroethane	110		110		67-130	0		20
2-Butanone	100		100		63-138	0		20
Benzene	100		100		70-130	0		20
1,2-Dichloroethane	110		110		70-130	0		20

Lab Control Sample Analysis
Batch Quality Control

Project Name: B14 Q3 SAMPLING
Project Number: 21010214
Lab Number: L2341853
Report Date: 08/03/23

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 05 Batch: WG1808273-3 WG1808273-4								
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	96		98		70-130	2		20
Toluene	110		110		70-130	0		20
Tetrachloroethene	120		120		70-130	0		20
4-Methyl-2-pentanone	92		88		59-130	4		20
trans-1,3-Dichloropropene	100		100		70-130	0		20
1,1,2-Trichloroethane	110		110		70-130	0		20
Dibromochloromethane	100		100		63-130	0		20
1,2-Dibromoethane	100		110		70-130	10		20
2-Hexanone	92		95		57-130	3		20
Chlorobenzene	110		100		75-130	10		20
Ethylbenzene	110		110		70-130	0		20
p/m-Xylene	105		105		70-130	0		20
o-Xylene	105		105		70-130	0		20
Styrene	105		105		70-130	0		20
Bromoform	100		95		54-136	5		20
Isopropylbenzene	110		110		70-130	0		20
1,1,2,2-Tetrachloroethane	110		110		67-130	0		20
1,3-Dichlorobenzene	110		110		70-130	0		20
1,4-Dichlorobenzene	110		110		70-130	0		20
1,2-Dichlorobenzene	110		110		70-130	0		20

Lab Control Sample Analysis

Batch Quality Control

Project Name: B14 Q3 SAMPLING

Project Number: 21010214

Lab Number: L2341853

Report Date: 08/03/23

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 05 Batch: WG1808273-3 WG1808273-4								
1,2-Dibromo-3-chloropropane	99		100		41-144	1		20
1,2,4-Trichlorobenzene	120		110		70-130	9		20
1,2,3-Trichlorobenzene	120		120		70-130	0		20

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
1,2-Dichloroethane-d4	88		94		70-130
Toluene-d8	97		97		70-130
4-Bromofluorobenzene	95		96		70-130
Dibromofluoromethane	92		91		70-130

Lab Control Sample Analysis

Batch Quality Control

Project Name: B14 Q3 SAMPLING

Project Number: 21010214

Lab Number: L2341853

Report Date: 08/03/23

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS-SIM - Westborough Lab Associated sample(s): 05 Batch: WG1808274-3 WG1808274-4								
1,1,2,2-Tetrachloroethane	112		105		70-130	6		25

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
1,2-Dichloroethane-d4	94		94		70-130
4-Bromofluorobenzene	91		91		70-130

Lab Control Sample Analysis
Batch Quality Control

Project Name: B14 Q3 SAMPLING
Project Number: 21010214
Lab Number: L2341853
Report Date: 08/03/23

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-04,06-08 Batch: WG1809922-3 WG1809922-4								
Dichlorodifluoromethane	130		130		36-147	0		20
Chloromethane	110		110		64-130	0		20
Vinyl chloride	120		120		55-140	0		20
Bromomethane	83		88		39-139	6		20
Chloroethane	96		100		55-138	4		20
Trichlorofluoromethane	110		100		62-150	10		20
1,1-Dichloroethene	110		110		61-145	0		20
Carbon disulfide	100		110		51-130	10		20
1,1,2-Trichloro-1,2,2-Trifluoroethane	120		110		70-130	9		20
Methylene chloride	100		100		70-130	0		20
Acetone	130		120		58-148	8		20
trans-1,2-Dichloroethene	110		110		70-130	0		20
Methyl Acetate	120		120		70-130	0		20
Methyl tert butyl ether	100		100		63-130	0		20
1,1-Dichloroethane	110		110		70-130	0		20
cis-1,2-Dichloroethene	100		100		70-130	0		20
Cyclohexane	110		110		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	98		110		63-138	12		20
Benzene	99		100		70-130	1		20
1,2-Dichloroethane	110		110		70-130	0		20

Lab Control Sample Analysis

Batch Quality Control

Project Name: B14 Q3 SAMPLING

Project Number: 21010214

Lab Number: L2341853

Report Date: 08/03/23

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-04,06-08 Batch: WG1809922-3 WG1809922-4								
Trichloroethene	100		110		70-130	10		20
1,2-Dichloropropane	96		98		70-130	2		20
Bromodichloromethane	100		100		67-130	0		20
cis-1,3-Dichloropropene	93		93		70-130	0		20
Toluene	100		100		70-130	0		20
Tetrachloroethene	110		120		70-130	9		20
4-Methyl-2-pentanone	91		97		59-130	6		20
trans-1,3-Dichloropropene	97		97		70-130	0		20
1,1,2-Trichloroethane	100		100		70-130	0		20
Dibromochloromethane	95		98		63-130	3		20
1,2-Dibromoethane	97		100		70-130	3		20
2-Hexanone	99		97		57-130	2		20
Chlorobenzene	100		100		75-130	0		20
Ethylbenzene	100		110		70-130	10		20
p/m-Xylene	105		105		70-130	0		20
o-Xylene	105		105		70-130	0		20
Styrene	100		105		70-130	5		20
Bromoform	88		91		54-136	3		20
Isopropylbenzene	100		100		70-130	0		20
1,1,2,2-Tetrachloroethane	99		99		67-130	0		20
1,3-Dichlorobenzene	110		110		70-130	0		20
1,4-Dichlorobenzene	100		110		70-130	10		20
1,2-Dichlorobenzene	100		110		70-130	10		20

Lab Control Sample Analysis

Batch Quality Control

Project Name: B14 Q3 SAMPLING

Project Number: 21010214

Lab Number: L2341853

Report Date: 08/03/23

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-04,06-08 Batch: WG1809922-3 WG1809922-4								
1,2-Dibromo-3-chloropropane	93		95		41-144	2		20
1,2,4-Trichlorobenzene	110		110		70-130	0		20
1,2,3-Trichlorobenzene	110		110		70-130	0		20

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
1,2-Dichloroethane-d4	93		93		70-130
Toluene-d8	97		97		70-130
4-Bromofluorobenzene	93		96		70-130
Dibromofluoromethane	95		97		70-130

Lab Control Sample Analysis

Batch Quality Control

Project Name: B14 Q3 SAMPLING

Project Number: 21010214

Lab Number: L2341853

Report Date: 08/03/23

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS-SIM - Westborough Lab Associated sample(s): 01-04,06-08 Batch: WG1809929-3 WG1809929-4								
1,1,2,2-Tetrachloroethane	104		112		70-130	7		25

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
1,2-Dichloroethane-d4	96		96		70-130
4-Bromofluorobenzene	92		92		70-130

SEMIVOLATILES

Project Name: B14 Q3 SAMPLING
Project Number: 21010214
Lab Number: L2341853
Report Date: 08/03/23

SAMPLE RESULTS

Lab ID: L2341853-01
Client ID: TM08-PZM007
Sample Location: Not Specified

Date Collected: 07/20/23 10:05
Date Received: 07/20/23
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8270E
Analytical Date: 07/27/23 12:52
Analyst: EK

Extraction Method: EPA 3510C
Extraction Date: 07/26/23 16:03

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Benzaldehyde	ND		ug/l	5.0	0.53	1
Phenol	ND		ug/l	5.0	0.57	1
Bis(2-chloroethyl)ether	ND		ug/l	2.0	0.50	1
2-Chlorophenol	ND		ug/l	2.0	0.48	1
2-Methylphenol	ND		ug/l	5.0	0.49	1
Bis(2-chloroisopropyl)ether	ND		ug/l	2.0	0.53	1
Acetophenone	ND		ug/l	5.0	0.53	1
n-Nitrosodi-n-propylamine	ND		ug/l	5.0	0.64	1
3-Methylphenol/4-Methylphenol	ND		ug/l	5.0	0.48	1
Hexachloroethane	ND		ug/l	2.0	0.58	1
Nitrobenzene	ND		ug/l	1.4	0.77	1
Isophorone	ND		ug/l	5.0	1.2	1
2,4-Dimethylphenol	ND		ug/l	5.0	1.8	1
Bis(2-chloroethoxy)methane	ND		ug/l	5.0	0.50	1
2,4-Dichlorophenol	ND		ug/l	5.0	0.41	1
Naphthalene	ND		ug/l	2.0	0.46	1
4-Chloroaniline	ND		ug/l	3.7	1.1	1
Hexachlorobutadiene	ND		ug/l	2.0	0.66	1
Caprolactam	ND		ug/l	10	3.3	1
2-Methylnaphthalene	ND		ug/l	2.0	0.45	1
Hexachlorocyclopentadiene	ND		ug/l	20	0.69	1
1,2,4,5-Tetrachlorobenzene	ND		ug/l	1.7	0.44	1
2,4,6-Trichlorophenol	ND		ug/l	5.0	0.61	1
2,4,5-Trichlorophenol	ND		ug/l	5.0	0.77	1
Biphenyl	ND		ug/l	2.0	0.46	1
2-Chloronaphthalene	ND		ug/l	2.0	0.44	1
2-Nitroaniline	ND		ug/l	5.0	0.50	1
2,6-Dinitrotoluene	ND		ug/l	5.0	0.93	1

Project Name: B14 Q3 SAMPLING **Lab Number:** L2341853

Project Number: 21010214 **Report Date:** 08/03/23

SAMPLE RESULTS

Lab ID: L2341853-01 Date Collected: 07/20/23 10:05

Client ID: TM08-PZM007 Date Received: 07/20/23

Sample Location: Not Specified 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	0.46	1
Acenaphthene	ND		ug/l	2.0	0.53	1
2,4-Dinitrophenol	ND		ug/l	20	6.6	1
2,4-Dinitrotoluene	ND		ug/l	5.0	1.2	1
2,3,4,6-Tetrachlorophenol	ND		ug/l	5.0	0.84	1
Diethyl phthalate	ND		ug/l	5.0	0.38	1
Fluorene	ND		ug/l	2.0	0.41	1
4-Nitroaniline	ND		ug/l	5.0	0.80	1
NDPA/DPA	ND		ug/l	2.0	0.42	1
Hexachlorobenzene	ND		ug/l	2.0	0.46	1
Pentachlorophenol	ND		ug/l	10	1.8	1
Phenanthrene	ND		ug/l	2.0	0.33	1
Anthracene	ND		ug/l	2.0	0.33	1
Carbazole	ND		ug/l	2.0	0.49	1
Di-n-butylphthalate	ND		ug/l	5.0	0.39	1
Fluoranthene	ND		ug/l	2.0	0.26	1
Pyrene	ND		ug/l	2.0	0.28	1
3,3'-Dichlorobenzidine	ND		ug/l	5.0	1.6	1
Benzo(a)anthracene	ND		ug/l	2.0	0.32	1
Chrysene	ND		ug/l	1.4	0.34	1
Bis(2-ethylhexyl)phthalate	ND		ug/l	3.0	1.5	1
Di-n-octylphthalate	ND		ug/l	5.0	1.3	1
Benzo(b)fluoranthene	ND		ug/l	2.0	0.35	1
Benzo(k)fluoranthene	ND		ug/l	2.0	0.37	1
Benzo(a)pyrene	ND		ug/l	2.0	0.41	1
Indeno(1,2,3-cd)pyrene	ND		ug/l	2.0	0.40	1
Dibenzo(a,h)anthracene	ND		ug/l	2.0	0.32	1
Benzo(ghi)perylene	ND		ug/l	2.0	0.30	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	63		21-120
Phenol-d6	51		10-120
Nitrobenzene-d5	71		23-120
2-Fluorobiphenyl	70		15-120
2,4,6-Tribromophenol	75		10-120
4-Terphenyl-d14	74		41-149

Project Name: B14 Q3 SAMPLING
Project Number: 21010214
Lab Number: L2341853
Report Date: 08/03/23

SAMPLE RESULTS

Lab ID: L2341853-01
Client ID: TM08-PZM007
Sample Location: Not Specified

Date Collected: 07/20/23 10:05
Date Received: 07/20/23
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8270E-SIM
Analytical Date: 07/27/23 16:32
Analyst: DV

Extraction Method: EPA 3510C
Extraction Date: 07/26/23 15:47

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS-SIM - Westborough Lab						
Naphthalene	ND		ug/l	0.10	0.05	1
2-Methylnaphthalene	ND		ug/l	0.10	0.02	1
Acenaphthylene	ND		ug/l	0.10	0.01	1
Acenaphthene	ND		ug/l	0.10	0.01	1
Fluorene	ND		ug/l	0.10	0.01	1
Pentachlorophenol	ND		ug/l	0.10	0.01	1
Phenanthrene	ND		ug/l	0.05	0.02	1
Anthracene	0.04	J	ug/l	0.10	0.01	1
Fluoranthene	ND		ug/l	0.10	0.02	1
Pyrene	ND		ug/l	0.10	0.02	1
Benzo(a)anthracene	ND		ug/l	0.05	0.02	1
Chrysene	ND		ug/l	0.10	0.01	1
Benzo(b)fluoranthene	ND		ug/l	0.05	0.01	1
Benzo(k)fluoranthene	ND		ug/l	0.10	0.01	1
Benzo(a)pyrene	ND		ug/l	0.10	0.02	1
Indeno(1,2,3-cd)pyrene	ND		ug/l	0.10	0.01	1
Dibenzo(a,h)anthracene	ND		ug/l	0.05	0.01	1
Benzo(ghi)perylene	ND		ug/l	0.10	0.01	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	63		21-120
Phenol-d6	54		10-120
Nitrobenzene-d5	87		23-120
2-Fluorobiphenyl	85		15-120
2,4,6-Tribromophenol	110		10-120
4-Terphenyl-d14	85		41-149

Project Name: B14 Q3 SAMPLING
Project Number: 21010214
Lab Number: L2341853
Report Date: 08/03/23

SAMPLE RESULTS

Lab ID: L2341853-02
Client ID: HI16-MWS
Sample Location: Not Specified

Date Collected: 07/20/23 11:00
Date Received: 07/20/23
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8270E
Analytical Date: 07/27/23 12:29
Analyst: EK

Extraction Method: EPA 3510C
Extraction Date: 07/26/23 16:03

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Benzaldehyde	ND		ug/l	5.0	0.53	1
Phenol	ND		ug/l	5.0	0.57	1
Bis(2-chloroethyl)ether	ND		ug/l	2.0	0.50	1
2-Chlorophenol	ND		ug/l	2.0	0.48	1
2-Methylphenol	ND		ug/l	5.0	0.49	1
Bis(2-chloroisopropyl)ether	ND		ug/l	2.0	0.53	1
Acetophenone	ND		ug/l	5.0	0.53	1
n-Nitrosodi-n-propylamine	ND		ug/l	5.0	0.64	1
3-Methylphenol/4-Methylphenol	ND		ug/l	5.0	0.48	1
Hexachloroethane	ND		ug/l	2.0	0.58	1
Nitrobenzene	ND		ug/l	1.4	0.77	1
Isophorone	ND		ug/l	5.0	1.2	1
2,4-Dimethylphenol	ND		ug/l	5.0	1.8	1
Bis(2-chloroethoxy)methane	ND		ug/l	5.0	0.50	1
2,4-Dichlorophenol	ND		ug/l	5.0	0.41	1
Naphthalene	ND		ug/l	2.0	0.46	1
4-Chloroaniline	ND		ug/l	3.7	1.1	1
Hexachlorobutadiene	ND		ug/l	2.0	0.66	1
Caprolactam	ND		ug/l	10	3.3	1
2-Methylnaphthalene	ND		ug/l	2.0	0.45	1
Hexachlorocyclopentadiene	ND		ug/l	20	0.69	1
1,2,4,5-Tetrachlorobenzene	ND		ug/l	1.7	0.44	1
2,4,6-Trichlorophenol	ND		ug/l	5.0	0.61	1
2,4,5-Trichlorophenol	ND		ug/l	5.0	0.77	1
Biphenyl	ND		ug/l	2.0	0.46	1
2-Chloronaphthalene	ND		ug/l	2.0	0.44	1
2-Nitroaniline	ND		ug/l	5.0	0.50	1
2,6-Dinitrotoluene	ND		ug/l	5.0	0.93	1

Project Name: B14 Q3 SAMPLING **Lab Number:** L2341853

Project Number: 21010214 **Report Date:** 08/03/23

SAMPLE RESULTS

Lab ID: L2341853-02 Date Collected: 07/20/23 11:00

Client ID: HI16-MWS Date Received: 07/20/23

Sample Location: Not Specified 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	0.46	1
Acenaphthene	ND		ug/l	2.0	0.53	1
2,4-Dinitrophenol	ND		ug/l	20	6.6	1
2,4-Dinitrotoluene	ND		ug/l	5.0	1.2	1
2,3,4,6-Tetrachlorophenol	ND		ug/l	5.0	0.84	1
Diethyl phthalate	ND		ug/l	5.0	0.38	1
Fluorene	ND		ug/l	2.0	0.41	1
4-Nitroaniline	ND		ug/l	5.0	0.80	1
NDPA/DPA	ND		ug/l	2.0	0.42	1
Hexachlorobenzene	ND		ug/l	2.0	0.46	1
Pentachlorophenol	ND		ug/l	10	1.8	1
Phenanthrene	ND		ug/l	2.0	0.33	1
Anthracene	ND		ug/l	2.0	0.33	1
Carbazole	ND		ug/l	2.0	0.49	1
Di-n-butylphthalate	ND		ug/l	5.0	0.39	1
Fluoranthene	ND		ug/l	2.0	0.26	1
Pyrene	ND		ug/l	2.0	0.28	1
3,3'-Dichlorobenzidine	ND		ug/l	5.0	1.6	1
Benzo(a)anthracene	ND		ug/l	2.0	0.32	1
Chrysene	ND		ug/l	1.4	0.34	1
Bis(2-ethylhexyl)phthalate	ND		ug/l	3.0	1.5	1
Di-n-octylphthalate	ND		ug/l	5.0	1.3	1
Benzo(b)fluoranthene	ND		ug/l	2.0	0.35	1
Benzo(k)fluoranthene	ND		ug/l	2.0	0.37	1
Benzo(a)pyrene	ND		ug/l	2.0	0.41	1
Indeno(1,2,3-cd)pyrene	ND		ug/l	2.0	0.40	1
Dibenzo(a,h)anthracene	ND		ug/l	2.0	0.32	1
Benzo(ghi)perylene	ND		ug/l	2.0	0.30	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	58		21-120
Phenol-d6	46		10-120
Nitrobenzene-d5	67		23-120
2-Fluorobiphenyl	64		15-120
2,4,6-Tribromophenol	70		10-120
4-Terphenyl-d14	69		41-149

Project Name: B14 Q3 SAMPLING
Project Number: 21010214
Lab Number: L2341853
Report Date: 08/03/23

SAMPLE RESULTS

Lab ID: L2341853-02
Client ID: HI16-MWS
Sample Location: Not Specified

Date Collected: 07/20/23 11:00
Date Received: 07/20/23
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8270E-SIM
Analytical Date: 07/27/23 16:49
Analyst: DV

Extraction Method: EPA 3510C
Extraction Date: 07/26/23 15:47

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS-SIM - Westborough Lab						
Naphthalene	ND		ug/l	0.10	0.05	1
2-Methylnaphthalene	ND		ug/l	0.10	0.02	1
Acenaphthylene	ND		ug/l	0.10	0.01	1
Acenaphthene	ND		ug/l	0.10	0.01	1
Fluorene	ND		ug/l	0.10	0.01	1
Pentachlorophenol	ND		ug/l	0.10	0.01	1
Phenanthrene	0.02	J	ug/l	0.05	0.02	1
Anthracene	0.04	J	ug/l	0.10	0.01	1
Fluoranthene	0.02	J	ug/l	0.10	0.02	1
Pyrene	0.03	J	ug/l	0.10	0.02	1
Benzo(a)anthracene	ND		ug/l	0.05	0.02	1
Chrysene	ND		ug/l	0.10	0.01	1
Benzo(b)fluoranthene	ND		ug/l	0.05	0.01	1
Benzo(k)fluoranthene	ND		ug/l	0.10	0.01	1
Benzo(a)pyrene	ND		ug/l	0.10	0.02	1
Indeno(1,2,3-cd)pyrene	ND		ug/l	0.10	0.01	1
Dibenzo(a,h)anthracene	ND		ug/l	0.05	0.01	1
Benzo(ghi)perylene	ND		ug/l	0.10	0.01	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	57		21-120
Phenol-d6	49		10-120
Nitrobenzene-d5	79		23-120
2-Fluorobiphenyl	78		15-120
2,4,6-Tribromophenol	101		10-120
4-Terphenyl-d14	81		41-149

Project Name: B14 Q3 SAMPLING
Project Number: 21010214
Lab Number: L2341853
Report Date: 08/03/23

SAMPLE RESULTS

Lab ID: L2341853-03
Client ID: HI15-MWS
Sample Location: Not Specified

Date Collected: 07/20/23 12:15
Date Received: 07/20/23
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8270E
Analytical Date: 07/27/23 12:05
Analyst: EK

Extraction Method: EPA 3510C
Extraction Date: 07/26/23 16:03

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Benzaldehyde	ND		ug/l	5.0	0.53	1
Phenol	ND		ug/l	5.0	0.57	1
Bis(2-chloroethyl)ether	ND		ug/l	2.0	0.50	1
2-Chlorophenol	ND		ug/l	2.0	0.48	1
2-Methylphenol	ND		ug/l	5.0	0.49	1
Bis(2-chloroisopropyl)ether	ND		ug/l	2.0	0.53	1
Acetophenone	ND		ug/l	5.0	0.53	1
n-Nitrosodi-n-propylamine	ND		ug/l	5.0	0.64	1
3-Methylphenol/4-Methylphenol	ND		ug/l	5.0	0.48	1
Hexachloroethane	ND		ug/l	2.0	0.58	1
Nitrobenzene	ND		ug/l	1.4	0.77	1
Isophorone	ND		ug/l	5.0	1.2	1
2,4-Dimethylphenol	ND		ug/l	5.0	1.8	1
Bis(2-chloroethoxy)methane	ND		ug/l	5.0	0.50	1
2,4-Dichlorophenol	ND		ug/l	5.0	0.41	1
Naphthalene	ND		ug/l	2.0	0.46	1
4-Chloroaniline	ND		ug/l	3.7	1.1	1
Hexachlorobutadiene	ND		ug/l	2.0	0.66	1
Caprolactam	ND		ug/l	10	3.3	1
2-Methylnaphthalene	ND		ug/l	2.0	0.45	1
Hexachlorocyclopentadiene	ND		ug/l	20	0.69	1
1,2,4,5-Tetrachlorobenzene	ND		ug/l	1.7	0.44	1
2,4,6-Trichlorophenol	ND		ug/l	5.0	0.61	1
2,4,5-Trichlorophenol	ND		ug/l	5.0	0.77	1
Biphenyl	ND		ug/l	2.0	0.46	1
2-Chloronaphthalene	ND		ug/l	2.0	0.44	1
2-Nitroaniline	ND		ug/l	5.0	0.50	1
2,6-Dinitrotoluene	ND		ug/l	5.0	0.93	1

Project Name: B14 Q3 SAMPLING **Lab Number:** L2341853

Project Number: 21010214 **Report Date:** 08/03/23

SAMPLE RESULTS

Lab ID: L2341853-03 Date Collected: 07/20/23 12:15

Client ID: HI15-MWS Date Received: 07/20/23

Sample Location: Not Specified 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	0.46	1
Acenaphthene	ND		ug/l	2.0	0.53	1
2,4-Dinitrophenol	ND		ug/l	20	6.6	1
2,4-Dinitrotoluene	ND		ug/l	5.0	1.2	1
2,3,4,6-Tetrachlorophenol	ND		ug/l	5.0	0.84	1
Diethyl phthalate	ND		ug/l	5.0	0.38	1
Fluorene	ND		ug/l	2.0	0.41	1
4-Nitroaniline	ND		ug/l	5.0	0.80	1
NDPA/DPA	ND		ug/l	2.0	0.42	1
Hexachlorobenzene	ND		ug/l	2.0	0.46	1
Pentachlorophenol	ND		ug/l	10	1.8	1
Phenanthrene	ND		ug/l	2.0	0.33	1
Anthracene	ND		ug/l	2.0	0.33	1
Carbazole	ND		ug/l	2.0	0.49	1
Di-n-butylphthalate	ND		ug/l	5.0	0.39	1
Fluoranthene	ND		ug/l	2.0	0.26	1
Pyrene	ND		ug/l	2.0	0.28	1
3,3'-Dichlorobenzidine	ND		ug/l	5.0	1.6	1
Benzo(a)anthracene	ND		ug/l	2.0	0.32	1
Chrysene	ND		ug/l	1.4	0.34	1
Bis(2-ethylhexyl)phthalate	ND		ug/l	3.0	1.5	1
Di-n-octylphthalate	ND		ug/l	5.0	1.3	1
Benzo(b)fluoranthene	ND		ug/l	2.0	0.35	1
Benzo(k)fluoranthene	ND		ug/l	2.0	0.37	1
Benzo(a)pyrene	ND		ug/l	2.0	0.41	1
Indeno(1,2,3-cd)pyrene	ND		ug/l	2.0	0.40	1
Dibenzo(a,h)anthracene	ND		ug/l	2.0	0.32	1
Benzo(ghi)perylene	ND		ug/l	2.0	0.30	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	63		21-120
Phenol-d6	49		10-120
Nitrobenzene-d5	73		23-120
2-Fluorobiphenyl	68		15-120
2,4,6-Tribromophenol	74		10-120
4-Terphenyl-d14	73		41-149

Project Name: B14 Q3 SAMPLING
Project Number: 21010214
Lab Number: L2341853
Report Date: 08/03/23

SAMPLE RESULTS

Lab ID: L2341853-03
Client ID: HI15-MWS
Sample Location: Not Specified

Date Collected: 07/20/23 12:15
Date Received: 07/20/23
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8270E-SIM
Analytical Date: 07/27/23 17:06
Analyst: DV

Extraction Method: EPA 3510C
Extraction Date: 07/26/23 15:47

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS-SIM - Westborough Lab						
Naphthalene	ND		ug/l	0.10	0.05	1
2-Methylnaphthalene	ND		ug/l	0.10	0.02	1
Acenaphthylene	0.05	J	ug/l	0.10	0.01	1
Acenaphthene	ND		ug/l	0.10	0.01	1
Fluorene	ND		ug/l	0.10	0.01	1
Pentachlorophenol	ND		ug/l	0.10	0.01	1
Phenanthrene	ND		ug/l	0.05	0.02	1
Anthracene	0.24		ug/l	0.10	0.01	1
Fluoranthene	0.13		ug/l	0.10	0.02	1
Pyrene	0.11		ug/l	0.10	0.02	1
Benzo(a)anthracene	0.02	JB	ug/l	0.05	0.02	1
Chrysene	ND		ug/l	0.10	0.01	1
Benzo(b)fluoranthene	ND		ug/l	0.05	0.01	1
Benzo(k)fluoranthene	ND		ug/l	0.10	0.01	1
Benzo(a)pyrene	ND		ug/l	0.10	0.02	1
Indeno(1,2,3-cd)pyrene	ND		ug/l	0.10	0.01	1
Dibenzo(a,h)anthracene	ND		ug/l	0.05	0.01	1
Benzo(ghi)perylene	ND		ug/l	0.10	0.01	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	61		21-120
Phenol-d6	55		10-120
Nitrobenzene-d5	84		23-120
2-Fluorobiphenyl	82		15-120
2,4,6-Tribromophenol	108		10-120
4-Terphenyl-d14	81		41-149

Project Name: B14 Q3 SAMPLING
Project Number: 21010214
Lab Number: L2341853
Report Date: 08/03/23

SAMPLE RESULTS

Lab ID: L2341853-04
Client ID: HI14-MWS
Sample Location: Not Specified

Date Collected: 07/20/23 13:20
Date Received: 07/20/23
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8270E
Analytical Date: 07/27/23 11:41
Analyst: EK

Extraction Method: EPA 3510C
Extraction Date: 07/26/23 16:03

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Benzaldehyde	ND		ug/l	5.0	0.53	1
Phenol	ND		ug/l	5.0	0.57	1
Bis(2-chloroethyl)ether	ND		ug/l	2.0	0.50	1
2-Chlorophenol	ND		ug/l	2.0	0.48	1
2-Methylphenol	ND		ug/l	5.0	0.49	1
Bis(2-chloroisopropyl)ether	ND		ug/l	2.0	0.53	1
Acetophenone	ND		ug/l	5.0	0.53	1
n-Nitrosodi-n-propylamine	ND		ug/l	5.0	0.64	1
3-Methylphenol/4-Methylphenol	ND		ug/l	5.0	0.48	1
Hexachloroethane	ND		ug/l	2.0	0.58	1
Nitrobenzene	ND		ug/l	1.4	0.77	1
Isophorone	ND		ug/l	5.0	1.2	1
2,4-Dimethylphenol	ND		ug/l	5.0	1.8	1
Bis(2-chloroethoxy)methane	ND		ug/l	5.0	0.50	1
2,4-Dichlorophenol	ND		ug/l	5.0	0.41	1
Naphthalene	ND		ug/l	2.0	0.46	1
4-Chloroaniline	ND		ug/l	3.7	1.1	1
Hexachlorobutadiene	ND		ug/l	2.0	0.66	1
Caprolactam	ND		ug/l	10	3.3	1
2-Methylnaphthalene	ND		ug/l	2.0	0.45	1
Hexachlorocyclopentadiene	ND		ug/l	20	0.69	1
1,2,4,5-Tetrachlorobenzene	ND		ug/l	1.7	0.44	1
2,4,6-Trichlorophenol	ND		ug/l	5.0	0.61	1
2,4,5-Trichlorophenol	ND		ug/l	5.0	0.77	1
Biphenyl	ND		ug/l	2.0	0.46	1
2-Chloronaphthalene	ND		ug/l	2.0	0.44	1
2-Nitroaniline	ND		ug/l	5.0	0.50	1
2,6-Dinitrotoluene	ND		ug/l	5.0	0.93	1

Project Name: B14 Q3 SAMPLING **Lab Number:** L2341853

Project Number: 21010214 **Report Date:** 08/03/23

SAMPLE RESULTS

Lab ID: L2341853-04 Date Collected: 07/20/23 13:20

Client ID: HI14-MWS Date Received: 07/20/23

Sample Location: Not Specified 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	0.46	1
Acenaphthene	1.2	J	ug/l	2.0	0.53	1
2,4-Dinitrophenol	ND		ug/l	20	6.6	1
2,4-Dinitrotoluene	ND		ug/l	5.0	1.2	1
2,3,4,6-Tetrachlorophenol	ND		ug/l	5.0	0.84	1
Diethyl phthalate	ND		ug/l	5.0	0.38	1
Fluorene	0.57	J	ug/l	2.0	0.41	1
4-Nitroaniline	ND		ug/l	5.0	0.80	1
NDPA/DPA	ND		ug/l	2.0	0.42	1
Hexachlorobenzene	ND		ug/l	2.0	0.46	1
Pentachlorophenol	ND		ug/l	10	1.8	1
Phenanthrene	ND		ug/l	2.0	0.33	1
Anthracene	ND		ug/l	2.0	0.33	1
Carbazole	ND		ug/l	2.0	0.49	1
Di-n-butylphthalate	ND		ug/l	5.0	0.39	1
Fluoranthene	0.41	J	ug/l	2.0	0.26	1
Pyrene	0.37	J	ug/l	2.0	0.28	1
3,3'-Dichlorobenzidine	ND		ug/l	5.0	1.6	1
Benzo(a)anthracene	ND		ug/l	2.0	0.32	1
Chrysene	ND		ug/l	1.4	0.34	1
Bis(2-ethylhexyl)phthalate	ND		ug/l	3.0	1.5	1
Di-n-octylphthalate	ND		ug/l	5.0	1.3	1
Benzo(b)fluoranthene	ND		ug/l	2.0	0.35	1
Benzo(k)fluoranthene	ND		ug/l	2.0	0.37	1
Benzo(a)pyrene	ND		ug/l	2.0	0.41	1
Indeno(1,2,3-cd)pyrene	ND		ug/l	2.0	0.40	1
Dibenzo(a,h)anthracene	ND		ug/l	2.0	0.32	1
Benzo(ghi)perylene	ND		ug/l	2.0	0.30	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	50		21-120
Phenol-d6	40		10-120
Nitrobenzene-d5	58		23-120
2-Fluorobiphenyl	54		15-120
2,4,6-Tribromophenol	58		10-120
4-Terphenyl-d14	60		41-149

Project Name: B14 Q3 SAMPLING
Project Number: 21010214
Lab Number: L2341853
Report Date: 08/03/23

SAMPLE RESULTS

Lab ID: L2341853-04
Client ID: HI14-MWS
Sample Location: Not Specified

Date Collected: 07/20/23 13:20
Date Received: 07/20/23
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8270E-SIM
Analytical Date: 07/27/23 17:23
Analyst: DV

Extraction Method: EPA 3510C
Extraction Date: 07/26/23 15:47

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS-SIM - Westborough Lab						
Naphthalene	0.33	B	ug/l	0.10	0.05	1
2-Methylnaphthalene	0.05	J	ug/l	0.10	0.02	1
Acenaphthylene	0.04	J	ug/l	0.10	0.01	1
Acenaphthene	1.1		ug/l	0.10	0.01	1
Fluorene	0.53		ug/l	0.10	0.01	1
Pentachlorophenol	ND		ug/l	0.10	0.01	1
Phenanthrene	0.23		ug/l	0.05	0.02	1
Anthracene	0.21		ug/l	0.10	0.01	1
Fluoranthene	0.38		ug/l	0.10	0.02	1
Pyrene	0.34		ug/l	0.10	0.02	1
Benzo(a)anthracene	0.03	JB	ug/l	0.05	0.02	1
Chrysene	0.03	J	ug/l	0.10	0.01	1
Benzo(b)fluoranthene	ND		ug/l	0.05	0.01	1
Benzo(k)fluoranthene	ND		ug/l	0.10	0.01	1
Benzo(a)pyrene	ND		ug/l	0.10	0.02	1
Indeno(1,2,3-cd)pyrene	ND		ug/l	0.10	0.01	1
Dibenzo(a,h)anthracene	ND		ug/l	0.05	0.01	1
Benzo(ghi)perylene	ND		ug/l	0.10	0.01	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	51		21-120
Phenol-d6	44		10-120
Nitrobenzene-d5	70		23-120
2-Fluorobiphenyl	68		15-120
2,4,6-Tribromophenol	85		10-120
4-Terphenyl-d14	65		41-149

Project Name: B14 Q3 SAMPLING
Project Number: 21010214
Lab Number: L2341853
Report Date: 08/03/23

SAMPLE RESULTS

Lab ID: L2341853-04 RE
Client ID: HI14-MWS
Sample Location: Not Specified

Date Collected: 07/20/23 13:20
Date Received: 07/20/23
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8270E-SIM
Analytical Date: 08/03/23 11:40
Analyst: RP

Extraction Method: EPA 3510C
Extraction Date: 08/02/23 11:28

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS-SIM - Westborough Lab						
Naphthalene	0.48		ug/l	0.10	0.05	1
2-Methylnaphthalene	0.07	J	ug/l	0.10	0.02	1
Acenaphthylene	0.06	J	ug/l	0.10	0.01	1
Acenaphthene	1.8		ug/l	0.10	0.01	1
Fluorene	0.79		ug/l	0.10	0.01	1
Pentachlorophenol	0.36		ug/l	0.10	0.01	1
Phenanthrene	0.18		ug/l	0.05	0.02	1
Anthracene	0.32		ug/l	0.10	0.01	1
Fluoranthene	0.57		ug/l	0.10	0.02	1
Pyrene	0.39		ug/l	0.10	0.02	1
Benzo(a)anthracene	0.04	J	ug/l	0.05	0.02	1
Chrysene	0.03	J	ug/l	0.10	0.01	1
Benzo(b)fluoranthene	ND		ug/l	0.05	0.01	1
Benzo(k)fluoranthene	ND		ug/l	0.10	0.01	1
Benzo(a)pyrene	ND		ug/l	0.10	0.02	1
Indeno(1,2,3-cd)pyrene	ND		ug/l	0.10	0.01	1
Dibenzo(a,h)anthracene	ND		ug/l	0.05	0.01	1
Benzo(ghi)perylene	ND		ug/l	0.10	0.01	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	70		21-120
Phenol-d6	64		10-120
Nitrobenzene-d5	106		23-120
2-Fluorobiphenyl	77		15-120
2,4,6-Tribromophenol	115		10-120
4-Terphenyl-d14	64		41-149

Project Name: B14 Q3 SAMPLING
Project Number: 21010214
Lab Number: L2341853
Report Date: 08/03/23

SAMPLE RESULTS

Lab ID: L2341853-05
Client ID: HI12-MWS
Sample Location: Not Specified

Date Collected: 07/20/23 13:50
Date Received: 07/20/23
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8270E
Analytical Date: 07/27/23 11:17
Analyst: EK

Extraction Method: EPA 3510C
Extraction Date: 07/26/23 16:03

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Benzaldehyde	ND		ug/l	5.0	0.53	1
Phenol	ND		ug/l	5.0	0.57	1
Bis(2-chloroethyl)ether	ND		ug/l	2.0	0.50	1
2-Chlorophenol	ND		ug/l	2.0	0.48	1
2-Methylphenol	ND		ug/l	5.0	0.49	1
Bis(2-chloroisopropyl)ether	ND		ug/l	2.0	0.53	1
Acetophenone	ND		ug/l	5.0	0.53	1
n-Nitrosodi-n-propylamine	ND		ug/l	5.0	0.64	1
3-Methylphenol/4-Methylphenol	ND		ug/l	5.0	0.48	1
Hexachloroethane	ND		ug/l	2.0	0.58	1
Nitrobenzene	ND		ug/l	1.4	0.77	1
Isophorone	ND		ug/l	5.0	1.2	1
2,4-Dimethylphenol	ND		ug/l	5.0	1.8	1
Bis(2-chloroethoxy)methane	ND		ug/l	5.0	0.50	1
2,4-Dichlorophenol	ND		ug/l	5.0	0.41	1
Naphthalene	2.4		ug/l	2.0	0.46	1
4-Chloroaniline	ND		ug/l	3.7	1.1	1
Hexachlorobutadiene	ND		ug/l	2.0	0.66	1
Caprolactam	ND		ug/l	10	3.3	1
2-Methylnaphthalene	ND		ug/l	2.0	0.45	1
Hexachlorocyclopentadiene	ND		ug/l	20	0.69	1
1,2,4,5-Tetrachlorobenzene	ND		ug/l	1.7	0.44	1
2,4,6-Trichlorophenol	ND		ug/l	5.0	0.61	1
2,4,5-Trichlorophenol	ND		ug/l	5.0	0.77	1
Biphenyl	ND		ug/l	2.0	0.46	1
2-Chloronaphthalene	ND		ug/l	2.0	0.44	1
2-Nitroaniline	ND		ug/l	5.0	0.50	1
2,6-Dinitrotoluene	ND		ug/l	5.0	0.93	1

Project Name: B14 Q3 SAMPLING **Lab Number:** L2341853

Project Number: 21010214 **Report Date:** 08/03/23

SAMPLE RESULTS

Lab ID: L2341853-05 Date Collected: 07/20/23 13:50

Client ID: HI12-MWS Date Received: 07/20/23

Sample Location: Not Specified 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	0.46	1
Acenaphthene	ND		ug/l	2.0	0.53	1
2,4-Dinitrophenol	ND		ug/l	20	6.6	1
2,4-Dinitrotoluene	ND		ug/l	5.0	1.2	1
2,3,4,6-Tetrachlorophenol	ND		ug/l	5.0	0.84	1
Diethyl phthalate	ND		ug/l	5.0	0.38	1
Fluorene	ND		ug/l	2.0	0.41	1
4-Nitroaniline	ND		ug/l	5.0	0.80	1
NDPA/DPA	ND		ug/l	2.0	0.42	1
Hexachlorobenzene	ND		ug/l	2.0	0.46	1
Pentachlorophenol	ND		ug/l	10	1.8	1
Phenanthrene	0.60	J	ug/l	2.0	0.33	1
Anthracene	ND		ug/l	2.0	0.33	1
Carbazole	0.57	J	ug/l	2.0	0.49	1
Di-n-butylphthalate	ND		ug/l	5.0	0.39	1
Fluoranthene	0.31	J	ug/l	2.0	0.26	1
Pyrene	ND		ug/l	2.0	0.28	1
3,3'-Dichlorobenzidine	ND		ug/l	5.0	1.6	1
Benzo(a)anthracene	ND		ug/l	2.0	0.32	1
Chrysene	ND		ug/l	1.4	0.34	1
Bis(2-ethylhexyl)phthalate	ND		ug/l	3.0	1.5	1
Di-n-octylphthalate	ND		ug/l	5.0	1.3	1
Benzo(b)fluoranthene	ND		ug/l	2.0	0.35	1
Benzo(k)fluoranthene	ND		ug/l	2.0	0.37	1
Benzo(a)pyrene	ND		ug/l	2.0	0.41	1
Indeno(1,2,3-cd)pyrene	ND		ug/l	2.0	0.40	1
Dibenzo(a,h)anthracene	ND		ug/l	2.0	0.32	1
Benzo(ghi)perylene	ND		ug/l	2.0	0.30	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	63		21-120
Phenol-d6	52		10-120
Nitrobenzene-d5	71		23-120
2-Fluorobiphenyl	68		15-120
2,4,6-Tribromophenol	77		10-120
4-Terphenyl-d14	75		41-149

Project Name: B14 Q3 SAMPLING
Project Number: 21010214
Lab Number: L2341853
Report Date: 08/03/23

SAMPLE RESULTS

Lab ID: L2341853-05
Client ID: HI12-MWS
Sample Location: Not Specified

Date Collected: 07/20/23 13:50
Date Received: 07/20/23
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8270E-SIM
Analytical Date: 07/27/23 17:40
Analyst: DV

Extraction Method: EPA 3510C
Extraction Date: 07/26/23 15:47

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS-SIM - Westborough Lab						
Naphthalene	2.2	B	ug/l	0.10	0.05	1
2-Methylnaphthalene	0.21		ug/l	0.10	0.02	1
Acenaphthylene	0.08	J	ug/l	0.10	0.01	1
Acenaphthene	0.38		ug/l	0.10	0.01	1
Fluorene	0.24		ug/l	0.10	0.01	1
Pentachlorophenol	ND		ug/l	0.10	0.01	1
Phenanthrene	0.43		ug/l	0.05	0.02	1
Anthracene	0.18		ug/l	0.10	0.01	1
Fluoranthene	0.26		ug/l	0.10	0.02	1
Pyrene	0.19		ug/l	0.10	0.02	1
Benzo(a)anthracene	0.05	JB	ug/l	0.05	0.02	1
Chrysene	0.02	J	ug/l	0.10	0.01	1
Benzo(b)fluoranthene	ND		ug/l	0.05	0.01	1
Benzo(k)fluoranthene	ND		ug/l	0.10	0.01	1
Benzo(a)pyrene	ND		ug/l	0.10	0.02	1
Indeno(1,2,3-cd)pyrene	ND		ug/l	0.10	0.01	1
Dibenzo(a,h)anthracene	ND		ug/l	0.05	0.01	1
Benzo(ghi)perylene	ND		ug/l	0.10	0.01	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	57		21-120
Phenol-d6	50		10-120
Nitrobenzene-d5	79		23-120
2-Fluorobiphenyl	75		15-120
2,4,6-Tribromophenol	100		10-120
4-Terphenyl-d14	75		41-149

Project Name: B14 Q3 SAMPLING
Project Number: 21010214
Lab Number: L2341853
Report Date: 08/03/23

SAMPLE RESULTS

Lab ID: L2341853-05 RE
Client ID: HI12-MWS
Sample Location: Not Specified

Date Collected: 07/20/23 13:50
Date Received: 07/20/23
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8270E-SIM
Analytical Date: 08/03/23 11:57
Analyst: RP

Extraction Method: EPA 3510C
Extraction Date: 08/02/23 11:28

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS-SIM - Westborough Lab						
Naphthalene	0.06	J	ug/l	0.10	0.05	1
2-Methylnaphthalene	ND		ug/l	0.10	0.02	1
Acenaphthylene	0.06	J	ug/l	0.10	0.01	1
Acenaphthene	0.50		ug/l	0.10	0.01	1
Fluorene	0.25		ug/l	0.10	0.01	1
Pentachlorophenol	0.09	J	ug/l	0.10	0.01	1
Phenanthrene	0.33		ug/l	0.05	0.02	1
Anthracene	0.14		ug/l	0.10	0.01	1
Fluoranthene	0.22		ug/l	0.10	0.02	1
Pyrene	0.18		ug/l	0.10	0.02	1
Benzo(a)anthracene	0.04	J	ug/l	0.05	0.02	1
Chrysene	0.02	J	ug/l	0.10	0.01	1
Benzo(b)fluoranthene	0.02	J	ug/l	0.05	0.01	1
Benzo(k)fluoranthene	0.01	J	ug/l	0.10	0.01	1
Benzo(a)pyrene	ND		ug/l	0.10	0.02	1
Indeno(1,2,3-cd)pyrene	ND		ug/l	0.10	0.01	1
Dibenzo(a,h)anthracene	ND		ug/l	0.05	0.01	1
Benzo(ghi)perylene	ND		ug/l	0.10	0.01	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	66		21-120
Phenol-d6	59		10-120
Nitrobenzene-d5	108		23-120
2-Fluorobiphenyl	73		15-120
2,4,6-Tribromophenol	106		10-120
4-Terphenyl-d14	65		41-149

Project Name: B14 Q3 SAMPLING
Project Number: 21010214
Lab Number: L2341853
Report Date: 08/03/23

SAMPLE RESULTS

Lab ID: L2341853-06
Client ID: HI17-MWS
Sample Location: Not Specified

Date Collected: 07/20/23 15:10
Date Received: 07/20/23
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8270E
Analytical Date: 07/27/23 10:53
Analyst: EK

Extraction Method: EPA 3510C
Extraction Date: 07/26/23 16:03

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Benzaldehyde	ND		ug/l	5.0	0.53	1
Phenol	ND		ug/l	5.0	0.57	1
Bis(2-chloroethyl)ether	ND		ug/l	2.0	0.50	1
2-Chlorophenol	ND		ug/l	2.0	0.48	1
2-Methylphenol	ND		ug/l	5.0	0.49	1
Bis(2-chloroisopropyl)ether	ND		ug/l	2.0	0.53	1
Acetophenone	ND		ug/l	5.0	0.53	1
n-Nitrosodi-n-propylamine	ND		ug/l	5.0	0.64	1
3-Methylphenol/4-Methylphenol	3.5	J	ug/l	5.0	0.48	1
Hexachloroethane	ND		ug/l	2.0	0.58	1
Nitrobenzene	ND		ug/l	1.4	0.77	1
Isophorone	ND		ug/l	5.0	1.2	1
2,4-Dimethylphenol	ND		ug/l	5.0	1.8	1
Bis(2-chloroethoxy)methane	ND		ug/l	5.0	0.50	1
2,4-Dichlorophenol	ND		ug/l	5.0	0.41	1
Naphthalene	ND		ug/l	2.0	0.46	1
4-Chloroaniline	ND		ug/l	3.7	1.1	1
Hexachlorobutadiene	ND		ug/l	2.0	0.66	1
Caprolactam	ND		ug/l	10	3.3	1
2-Methylnaphthalene	ND		ug/l	2.0	0.45	1
Hexachlorocyclopentadiene	ND		ug/l	20	0.69	1
1,2,4,5-Tetrachlorobenzene	ND		ug/l	1.7	0.44	1
2,4,6-Trichlorophenol	ND		ug/l	5.0	0.61	1
2,4,5-Trichlorophenol	ND		ug/l	5.0	0.77	1
Biphenyl	ND		ug/l	2.0	0.46	1
2-Chloronaphthalene	ND		ug/l	2.0	0.44	1
2-Nitroaniline	ND		ug/l	5.0	0.50	1
2,6-Dinitrotoluene	ND		ug/l	5.0	0.93	1

Project Name: B14 Q3 SAMPLING **Lab Number:** L2341853

Project Number: 21010214 **Report Date:** 08/03/23

SAMPLE RESULTS

Lab ID: L2341853-06 Date Collected: 07/20/23 15:10

Client ID: HI17-MWS Date Received: 07/20/23

Sample Location: Not Specified 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	0.46	1
Acenaphthene	ND		ug/l	2.0	0.53	1
2,4-Dinitrophenol	ND		ug/l	20	6.6	1
2,4-Dinitrotoluene	ND		ug/l	5.0	1.2	1
2,3,4,6-Tetrachlorophenol	ND		ug/l	5.0	0.84	1
Diethyl phthalate	ND		ug/l	5.0	0.38	1
Fluorene	ND		ug/l	2.0	0.41	1
4-Nitroaniline	ND		ug/l	5.0	0.80	1
NDPA/DPA	ND		ug/l	2.0	0.42	1
Hexachlorobenzene	ND		ug/l	2.0	0.46	1
Pentachlorophenol	ND		ug/l	10	1.8	1
Phenanthrene	ND		ug/l	2.0	0.33	1
Anthracene	ND		ug/l	2.0	0.33	1
Carbazole	ND		ug/l	2.0	0.49	1
Di-n-butylphthalate	ND		ug/l	5.0	0.39	1
Fluoranthene	ND		ug/l	2.0	0.26	1
Pyrene	ND		ug/l	2.0	0.28	1
3,3'-Dichlorobenzidine	ND		ug/l	5.0	1.6	1
Benzo(a)anthracene	ND		ug/l	2.0	0.32	1
Chrysene	ND		ug/l	1.4	0.34	1
Bis(2-ethylhexyl)phthalate	ND		ug/l	3.0	1.5	1
Di-n-octylphthalate	ND		ug/l	5.0	1.3	1
Benzo(b)fluoranthene	ND		ug/l	2.0	0.35	1
Benzo(k)fluoranthene	ND		ug/l	2.0	0.37	1
Benzo(a)pyrene	ND		ug/l	2.0	0.41	1
Indeno(1,2,3-cd)pyrene	ND		ug/l	2.0	0.40	1
Dibenzo(a,h)anthracene	ND		ug/l	2.0	0.32	1
Benzo(ghi)perylene	ND		ug/l	2.0	0.30	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	60		21-120
Phenol-d6	51		10-120
Nitrobenzene-d5	66		23-120
2-Fluorobiphenyl	66		15-120
2,4,6-Tribromophenol	69		10-120
4-Terphenyl-d14	70		41-149

Project Name: B14 Q3 SAMPLING
Project Number: 21010214
Lab Number: L2341853
Report Date: 08/03/23

SAMPLE RESULTS

Lab ID: L2341853-06
Client ID: HI17-MWS
Sample Location: Not Specified

Date Collected: 07/20/23 15:10
Date Received: 07/20/23
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8270E-SIM
Analytical Date: 07/27/23 17:57
Analyst: DV

Extraction Method: EPA 3510C
Extraction Date: 07/26/23 15:49

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS-SIM - Westborough Lab						
Naphthalene	0.32	B	ug/l	0.10	0.05	1
2-Methylnaphthalene	0.21		ug/l	0.10	0.02	1
Acenaphthylene	0.04	J	ug/l	0.10	0.01	1
Acenaphthene	0.04	J	ug/l	0.10	0.01	1
Fluorene	0.08	J	ug/l	0.10	0.01	1
Pentachlorophenol	ND		ug/l	0.10	0.01	1
Phenanthrene	0.08		ug/l	0.05	0.02	1
Anthracene	0.34		ug/l	0.10	0.01	1
Fluoranthene	0.08	J	ug/l	0.10	0.02	1
Pyrene	0.06	J	ug/l	0.10	0.02	1
Benzo(a)anthracene	ND		ug/l	0.05	0.02	1
Chrysene	ND		ug/l	0.10	0.01	1
Benzo(b)fluoranthene	ND		ug/l	0.05	0.01	1
Benzo(k)fluoranthene	ND		ug/l	0.10	0.01	1
Benzo(a)pyrene	ND		ug/l	0.10	0.02	1
Indeno(1,2,3-cd)pyrene	ND		ug/l	0.10	0.01	1
Dibenzo(a,h)anthracene	ND		ug/l	0.05	0.01	1
Benzo(ghi)perylene	ND		ug/l	0.10	0.01	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	54		21-120
Phenol-d6	48		10-120
Nitrobenzene-d5	73		23-120
2-Fluorobiphenyl	71		15-120
2,4,6-Tribromophenol	98		10-120
4-Terphenyl-d14	68		41-149

Project Name: B14 Q3 SAMPLING
Project Number: 21010214
Lab Number: L2341853
Report Date: 08/03/23

SAMPLE RESULTS

Lab ID: L2341853-06 RE
Client ID: HI17-MWS
Sample Location: Not Specified

Date Collected: 07/20/23 15:10
Date Received: 07/20/23
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8270E-SIM
Analytical Date: 08/03/23 12:14
Analyst: RP

Extraction Method: EPA 3510C
Extraction Date: 08/02/23 11:28

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS-SIM - Westborough Lab						
Naphthalene	0.52		ug/l	0.10	0.05	1
2-Methylnaphthalene	0.27		ug/l	0.10	0.02	1
Acenaphthylene	ND		ug/l	0.10	0.01	1
Acenaphthene	0.07	J	ug/l	0.10	0.01	1
Fluorene	0.09	J	ug/l	0.10	0.01	1
Pentachlorophenol	0.11		ug/l	0.10	0.01	1
Phenanthrene	0.10		ug/l	0.05	0.02	1
Anthracene	0.39		ug/l	0.10	0.01	1
Fluoranthene	0.10		ug/l	0.10	0.02	1
Pyrene	0.08	J	ug/l	0.10	0.02	1
Benzo(a)anthracene	ND		ug/l	0.05	0.02	1
Chrysene	ND		ug/l	0.10	0.01	1
Benzo(b)fluoranthene	ND		ug/l	0.05	0.01	1
Benzo(k)fluoranthene	ND		ug/l	0.10	0.01	1
Benzo(a)pyrene	ND		ug/l	0.10	0.02	1
Indeno(1,2,3-cd)pyrene	ND		ug/l	0.10	0.01	1
Dibenzo(a,h)anthracene	ND		ug/l	0.05	0.01	1
Benzo(ghi)perylene	ND		ug/l	0.10	0.01	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	80		21-120
Phenol-d6	75		10-120
Nitrobenzene-d5	**129**	Q	23-120
2-Fluorobiphenyl	85		15-120
2,4,6-Tribromophenol	**123**	Q	10-120
4-Terphenyl-d14	71		41-149

Project Name: B14 Q3 SAMPLING
Project Number: 21010214
Lab Number: L2341853
Report Date: 08/03/23

SAMPLE RESULTS

Lab ID: L2341853-07
Client ID: DUPLICATE
Sample Location: Not Specified

Date Collected: 07/20/23 00:00
Date Received: 07/20/23
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8270E
Analytical Date: 07/27/23 10:06
Analyst: EK

Extraction Method: EPA 3510C
Extraction Date: 07/26/23 16:03

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Benzaldehyde	ND		ug/l	5.0	0.53	1
Phenol	ND		ug/l	5.0	0.57	1
Bis(2-chloroethyl)ether	ND		ug/l	2.0	0.50	1
2-Chlorophenol	ND		ug/l	2.0	0.48	1
2-Methylphenol	ND		ug/l	5.0	0.49	1
Bis(2-chloroisopropyl)ether	ND		ug/l	2.0	0.53	1
Acetophenone	ND		ug/l	5.0	0.53	1
n-Nitrosodi-n-propylamine	ND		ug/l	5.0	0.64	1
3-Methylphenol/4-Methylphenol	ND		ug/l	5.0	0.48	1
Hexachloroethane	ND		ug/l	2.0	0.58	1
Nitrobenzene	ND		ug/l	1.4	0.77	1
Isophorone	ND		ug/l	5.0	1.2	1
2,4-Dimethylphenol	ND		ug/l	5.0	1.8	1
Bis(2-chloroethoxy)methane	ND		ug/l	5.0	0.50	1
2,4-Dichlorophenol	ND		ug/l	5.0	0.41	1
Naphthalene	ND		ug/l	2.0	0.46	1
4-Chloroaniline	ND		ug/l	3.7	1.1	1
Hexachlorobutadiene	ND		ug/l	2.0	0.66	1
Caprolactam	ND		ug/l	10	3.3	1
2-Methylnaphthalene	ND		ug/l	2.0	0.45	1
Hexachlorocyclopentadiene	ND		ug/l	20	0.69	1
1,2,4,5-Tetrachlorobenzene	ND		ug/l	1.7	0.44	1
2,4,6-Trichlorophenol	ND		ug/l	5.0	0.61	1
2,4,5-Trichlorophenol	ND		ug/l	5.0	0.77	1
Biphenyl	ND		ug/l	2.0	0.46	1
2-Chloronaphthalene	ND		ug/l	2.0	0.44	1
2-Nitroaniline	ND		ug/l	5.0	0.50	1
2,6-Dinitrotoluene	ND		ug/l	5.0	0.93	1

Project Name: B14 Q3 SAMPLING **Lab Number:** L2341853

Project Number: 21010214 **Report Date:** 08/03/23

SAMPLE RESULTS

Lab ID: L2341853-07 Date Collected: 07/20/23 00:00

Client ID: DUPLICATE Date Received: 07/20/23

Sample Location: Not Specified 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	0.46	1
Acenaphthene	ND		ug/l	2.0	0.53	1
2,4-Dinitrophenol	ND		ug/l	20	6.6	1
2,4-Dinitrotoluene	ND		ug/l	5.0	1.2	1
2,3,4,6-Tetrachlorophenol	ND		ug/l	5.0	0.84	1
Diethyl phthalate	ND		ug/l	5.0	0.38	1
Fluorene	ND		ug/l	2.0	0.41	1
4-Nitroaniline	ND		ug/l	5.0	0.80	1
NDPA/DPA	ND		ug/l	2.0	0.42	1
Hexachlorobenzene	ND		ug/l	2.0	0.46	1
Pentachlorophenol	ND		ug/l	10	1.8	1
Phenanthrene	ND		ug/l	2.0	0.33	1
Anthracene	ND		ug/l	2.0	0.33	1
Carbazole	ND		ug/l	2.0	0.49	1
Di-n-butylphthalate	ND		ug/l	5.0	0.39	1
Fluoranthene	ND		ug/l	2.0	0.26	1
Pyrene	ND		ug/l	2.0	0.28	1
3,3'-Dichlorobenzidine	ND		ug/l	5.0	1.6	1
Benzo(a)anthracene	ND		ug/l	2.0	0.32	1
Chrysene	ND		ug/l	1.4	0.34	1
Bis(2-ethylhexyl)phthalate	ND		ug/l	3.0	1.5	1
Di-n-octylphthalate	ND		ug/l	5.0	1.3	1
Benzo(b)fluoranthene	ND		ug/l	2.0	0.35	1
Benzo(k)fluoranthene	ND		ug/l	2.0	0.37	1
Benzo(a)pyrene	ND		ug/l	2.0	0.41	1
Indeno(1,2,3-cd)pyrene	ND		ug/l	2.0	0.40	1
Dibenzo(a,h)anthracene	ND		ug/l	2.0	0.32	1
Benzo(ghi)perylene	ND		ug/l	2.0	0.30	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	60		21-120
Phenol-d6	49		10-120
Nitrobenzene-d5	66		23-120
2-Fluorobiphenyl	63		15-120
2,4,6-Tribromophenol	67		10-120
4-Terphenyl-d14	71		41-149

Project Name: B14 Q3 SAMPLING
Project Number: 21010214
Lab Number: L2341853
Report Date: 08/03/23

SAMPLE RESULTS

Lab ID: L2341853-07
Client ID: DUPLICATE
Sample Location: Not Specified

Date Collected: 07/20/23 00:00
Date Received: 07/20/23
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8270E-SIM
Analytical Date: 07/27/23 18:14
Analyst: DV

Extraction Method: EPA 3510C
Extraction Date: 07/26/23 15:49

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS-SIM - Westborough Lab						
Naphthalene	ND		ug/l	0.10	0.05	1
2-Methylnaphthalene	ND		ug/l	0.10	0.02	1
Acenaphthylene	ND		ug/l	0.10	0.01	1
Acenaphthene	ND		ug/l	0.10	0.01	1
Fluorene	ND		ug/l	0.10	0.01	1
Pentachlorophenol	ND		ug/l	0.10	0.01	1
Phenanthrene	ND		ug/l	0.05	0.02	1
Anthracene	0.05	J	ug/l	0.10	0.01	1
Fluoranthene	ND		ug/l	0.10	0.02	1
Pyrene	ND		ug/l	0.10	0.02	1
Benzo(a)anthracene	ND		ug/l	0.05	0.02	1
Chrysene	ND		ug/l	0.10	0.01	1
Benzo(b)fluoranthene	ND		ug/l	0.05	0.01	1
Benzo(k)fluoranthene	ND		ug/l	0.10	0.01	1
Benzo(a)pyrene	ND		ug/l	0.10	0.02	1
Indeno(1,2,3-cd)pyrene	ND		ug/l	0.10	0.01	1
Dibenzo(a,h)anthracene	ND		ug/l	0.05	0.01	1
Benzo(ghi)perylene	ND		ug/l	0.10	0.01	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	53		21-120
Phenol-d6	46		10-120
Nitrobenzene-d5	73		23-120
2-Fluorobiphenyl	70		15-120
2,4,6-Tribromophenol	92		10-120
4-Terphenyl-d14	68		41-149

Project Name: B14 Q3 SAMPLING
Project Number: 21010214
Lab Number: L2341853
Report Date: 08/03/23

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270E
Analytical Date: 07/26/23 23:17
Analyst: SZ

Extraction Method: EPA 3510C
Extraction Date: 07/26/23 00:33

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 01-07 Batch: WG1807627-1					
Benzaldehyde	ND		ug/l	5.0	0.53
Phenol	ND		ug/l	5.0	0.57
Bis(2-chloroethyl)ether	ND		ug/l	2.0	0.50
2-Chlorophenol	ND		ug/l	2.0	0.48
2-Methylphenol	ND		ug/l	5.0	0.49
Bis(2-chloroisopropyl)ether	ND		ug/l	2.0	0.53
Acetophenone	ND		ug/l	5.0	0.53
n-Nitrosodi-n-propylamine	ND		ug/l	5.0	0.64
3-Methylphenol/4-Methylphenol	ND		ug/l	5.0	0.48
Hexachloroethane	ND		ug/l	2.0	0.58
Nitrobenzene	ND		ug/l	1.4	0.77
Isophorone	ND		ug/l	5.0	1.2
2,4-Dimethylphenol	ND		ug/l	5.0	1.8
Bis(2-chloroethoxy)methane	ND		ug/l	5.0	0.50
2,4-Dichlorophenol	ND		ug/l	5.0	0.41
Naphthalene	0.53	J	ug/l	2.0	0.46
4-Chloroaniline	ND		ug/l	3.7	1.1
Hexachlorobutadiene	ND		ug/l	2.0	0.66
Caprolactam	ND		ug/l	10	3.3
2-Methylnaphthalene	ND		ug/l	2.0	0.45
Hexachlorocyclopentadiene	ND		ug/l	20	0.69
1,2,4,5-Tetrachlorobenzene	ND		ug/l	1.7	0.44
2,4,6-Trichlorophenol	ND		ug/l	5.0	0.61
2,4,5-Trichlorophenol	ND		ug/l	5.0	0.77
Biphenyl	ND		ug/l	2.0	0.46
2-Chloronaphthalene	ND		ug/l	2.0	0.44
2-Nitroaniline	ND		ug/l	5.0	0.50
2,6-Dinitrotoluene	ND		ug/l	5.0	0.93
Acenaphthylene	ND		ug/l	2.0	0.46

Project Name: B14 Q3 SAMPLING
Project Number: 21010214
Lab Number: L2341853
Report Date: 08/03/23

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270E
Analytical Date: 07/26/23 23:17
Analyst: SZ

Extraction Method: EPA 3510C
Extraction Date: 07/26/23 00:33

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 01-07 Batch: WG1807627-1					
Acenaphthene	ND		ug/l	2.0	0.53
2,4-Dinitrophenol	ND		ug/l	20	6.6
2,4-Dinitrotoluene	ND		ug/l	5.0	1.2
2,3,4,6-Tetrachlorophenol	ND		ug/l	5.0	0.84
Diethyl phthalate	ND		ug/l	5.0	0.38
Fluorene	ND		ug/l	2.0	0.41
4-Nitroaniline	ND		ug/l	5.0	0.80
NDPA/DPA	ND		ug/l	2.0	0.42
Hexachlorobenzene	ND		ug/l	2.0	0.46
Pentachlorophenol	ND		ug/l	10	1.8
Phenanthrene	ND		ug/l	2.0	0.33
Anthracene	ND		ug/l	2.0	0.33
Carbazole	ND		ug/l	2.0	0.49
Di-n-butylphthalate	ND		ug/l	5.0	0.39
Fluoranthene	ND		ug/l	2.0	0.26
Pyrene	ND		ug/l	2.0	0.28
3,3'-Dichlorobenzidine	ND		ug/l	5.0	1.6
Benzo(a)anthracene	ND		ug/l	2.0	0.32
Chrysene	ND		ug/l	1.4	0.34
Bis(2-ethylhexyl)phthalate	ND		ug/l	3.0	1.5
Di-n-octylphthalate	ND		ug/l	5.0	1.3
Benzo(b)fluoranthene	ND		ug/l	2.0	0.35
Benzo(k)fluoranthene	ND		ug/l	2.0	0.37
Benzo(a)pyrene	ND		ug/l	2.0	0.41
Indeno(1,2,3-cd)pyrene	ND		ug/l	2.0	0.40
Dibenzo(a,h)anthracene	ND		ug/l	2.0	0.32
Benzo(ghi)perylene	ND		ug/l	2.0	0.30

Project Name: B14 Q3 SAMPLING
Project Number: 21010214
Lab Number: L2341853
Report Date: 08/03/23

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270E
Analytical Date: 07/26/23 23:17
Analyst: SZ

Extraction Method: EPA 3510C
Extraction Date: 07/26/23 00:33

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 01-07 Batch: WG1807627-1					

Surrogate	%Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	62		21-120
Phenol-d6	48		10-120
Nitrobenzene-d5	66		23-120
2-Fluorobiphenyl	67		15-120
2,4,6-Tribromophenol	87		10-120
4-Terphenyl-d14	60		41-149

Project Name: B14 Q3 SAMPLING
Project Number: 21010214
Lab Number: L2341853
Report Date: 08/03/23

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270E-SIM
Analytical Date: 07/27/23 13:08
Analyst: DV

Extraction Method: EPA 3510C
Extraction Date: 07/26/23 00:33

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS-SIM - Westborough Lab for sample(s): 01-07 Batch: WG1807629-1					
Naphthalene	0.55		ug/l	0.10	0.05
2-Methylnaphthalene	0.06	J	ug/l	0.10	0.02
Acenaphthylene	ND		ug/l	0.10	0.01
Acenaphthene	ND		ug/l	0.10	0.01
Fluorene	ND		ug/l	0.10	0.01
Pentachlorophenol	ND		ug/l	0.10	0.01
Phenanthrene	0.04	J	ug/l	0.05	0.02
Anthracene	ND		ug/l	0.10	0.01
Fluoranthene	0.02	J	ug/l	0.10	0.02
Pyrene	0.05	J	ug/l	0.10	0.02
Benzo(a)anthracene	0.07		ug/l	0.05	0.02
Chrysene	ND		ug/l	0.10	0.01
Benzo(b)fluoranthene	ND		ug/l	0.05	0.01
Benzo(k)fluoranthene	ND		ug/l	0.10	0.01
Benzo(a)pyrene	ND		ug/l	0.10	0.02
Indeno(1,2,3-cd)pyrene	ND		ug/l	0.10	0.01
Dibenzo(a,h)anthracene	ND		ug/l	0.05	0.01
Benzo(ghi)perylene	ND		ug/l	0.10	0.01

Surrogate	%Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	50		21-120
Phenol-d6	42		10-120
Nitrobenzene-d5	67		23-120
2-Fluorobiphenyl	64		15-120
2,4,6-Tribromophenol	78		10-120
4-Terphenyl-d14	62		41-149

Project Name: B14 Q3 SAMPLING
Project Number: 21010214
Lab Number: L2341853
Report Date: 08/03/23

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270E-SIM
Analytical Date: 08/03/23 10:51
Analyst: RP

Extraction Method: EPA 3510C
Extraction Date: 08/02/23 11:28

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS-SIM - Westborough Lab for sample(s): 04-06 Batch: WG1810891-1					
Naphthalene	0.06	J	ug/l	0.10	0.05
2-Methylnaphthalene	ND		ug/l	0.10	0.02
Acenaphthylene	ND		ug/l	0.10	0.01
Acenaphthene	ND		ug/l	0.10	0.01
Fluorene	ND		ug/l	0.10	0.01
Pentachlorophenol	ND		ug/l	0.10	0.01
Phenanthrene	ND		ug/l	0.05	0.02
Anthracene	ND		ug/l	0.10	0.01
Fluoranthene	ND		ug/l	0.10	0.02
Pyrene	ND		ug/l	0.10	0.02
Benzo(a)anthracene	ND		ug/l	0.05	0.02
Chrysene	ND		ug/l	0.10	0.01
Benzo(b)fluoranthene	ND		ug/l	0.05	0.01
Benzo(k)fluoranthene	ND		ug/l	0.10	0.01
Benzo(a)pyrene	ND		ug/l	0.10	0.02
Indeno(1,2,3-cd)pyrene	ND		ug/l	0.10	0.01
Dibenzo(a,h)anthracene	ND		ug/l	0.05	0.01
Benzo(ghi)perylene	ND		ug/l	0.10	0.01

Surrogate	%Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	67		21-120
Phenol-d6	60		10-120
Nitrobenzene-d5	100		23-120
2-Fluorobiphenyl	76		15-120
2,4,6-Tribromophenol	96		10-120
4-Terphenyl-d14	71		41-149

Lab Control Sample Analysis
Batch Quality Control

Project Name: B14 Q3 SAMPLING
Project Number: 21010214
Lab Number: L2341853
Report Date: 08/03/23

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: WG1807627-2 WG1807627-3								
Benzaldehyde	51		49		40-140	4		30
Phenol	44		36		12-110	20		30
Bis(2-chloroethyl)ether	53		46		40-140	14		30
2-Chlorophenol	54		51		27-123	6		30
2-Methylphenol	50		50		30-130	0		30
Bis(2-chloroisopropyl)ether	45		40		40-140	12		30
Acetophenone	50		45		39-129	11		30
n-Nitrosodi-n-propylamine	57		50		29-132	13		30
3-Methylphenol/4-Methylphenol	60		59		30-130	2		30
Hexachloroethane	62		46		40-140	30		30
Nitrobenzene	60		51		40-140	16		30
Isophorone	52		47		40-140	10		30
2,4-Dimethylphenol	53		52		30-130	2		30
Bis(2-chloroethoxy)methane	55		48		40-140	14		30
2,4-Dichlorophenol	62		58		30-130	7		30
Naphthalene	52		44		40-140	17		30
4-Chloroaniline	75		55		40-140	**31**	Q	30
Hexachlorobutadiene	55		47		40-140	16		30
Caprolactam	30		30		10-130	0		30
2-Methylnaphthalene	51		50		40-140	2		30
Hexachlorocyclopentadiene	51		**39**	Q	40-140	27		30
1,2,4,5-Tetrachlorobenzene	51		43		2-134	17		30
2,4,6-Trichlorophenol	62		54		30-130	14		30

Lab Control Sample Analysis
Batch Quality Control

Project Name: B14 Q3 SAMPLING
Project Number: 21010214
Lab Number: L2341853
Report Date: 08/03/23

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: WG1807627-2 WG1807627-3								
2,4,5-Trichlorophenol	67		60		30-130	11		30
Biphenyl	49		44		40-140	11		30
2-Chloronaphthalene	52		46		40-140	12		30
2-Nitroaniline	61		59		52-143	3		30
2,6-Dinitrotoluene	54		55		40-140	2		30
Acenaphthylene	56		53		45-123	6		30
Acenaphthene	48		46		37-111	4		30
2,4-Dinitrophenol	68		56		20-130	19		30
2,4-Dinitrotoluene	50		50		48-143	0		30
2,3,4,6-Tetrachlorophenol	57		64		54-145	12		30
Diethyl phthalate	55		57		40-140	4		30
Fluorene	47		48		40-140	2		30
4-Nitroaniline	51		65		51-143	24		30
NDPA/DPA	48		52		40-140	8		30
Hexachlorobenzene	55		55		40-140	0		30
Pentachlorophenol	68		69		9-103	1		30
Phenanthrene	50		46		40-140	8		30
Anthracene	54		48		40-140	12		30
Carbazole	56		**51**	Q	55-144	9		30
Di-n-butylphthalate	62		54		40-140	14		30
Fluoranthene	54		48		40-140	12		30
Pyrene	53		50		26-127	6		30
3,3'-Dichlorobenzidine	47		42		40-140	11		30

Lab Control Sample Analysis

Batch Quality Control

Project Name: B14 Q3 SAMPLING

Project Number: 21010214

Lab Number: L2341853

Report Date: 08/03/23

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: WG1807627-2 WG1807627-3								
Benzo(a)anthracene	55		51		40-140	8		30
Chrysene	52		48		40-140	8		30
Bis(2-ethylhexyl)phthalate	77		67		40-140	14		30
Di-n-octylphthalate	72		62		40-140	15		30
Benzo(b)fluoranthene	56		52		40-140	7		30
Benzo(k)fluoranthene	51		50		40-140	2		30
Benzo(a)pyrene	58		54		40-140	7		30
Indeno(1,2,3-cd)pyrene	50		45		40-140	11		30
Dibenzo(a,h)anthracene	49		46		40-140	6		30
Benzo(ghi)perylene	52		48		40-140	8		30

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
2-Fluorophenol	51		45		21-120
Phenol-d6	42		39		10-120
Nitrobenzene-d5	58		52		23-120
2-Fluorobiphenyl	52		48		15-120
2,4,6-Tribromophenol	70		74		10-120
4-Terphenyl-d14	47		45		41-149

Lab Control Sample Analysis
Batch Quality Control

Project Name: B14 Q3 SAMPLING
Project Number: 21010214

Lab Number: L2341853
Report Date: 08/03/23

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: WG1807629-2 WG1807629-3								
Naphthalene	51		41		40-140	22		40
2-Methylnaphthalene	54		44		40-140	20		40
Acenaphthylene	55		46		40-140	18		40
Acenaphthene	51		43		37-111	17		40
Fluorene	52		46		40-140	12		40
Pentachlorophenol	80		68		9-103	16		40
Phenanthrene	49		42		40-140	15		40
Anthracene	54		46		40-140	16		40
Fluoranthene	54		46		40-140	16		40
Pyrene	54		47		26-127	14		40
Benzo(a)anthracene	55		48		40-140	14		40
Chrysene	54		46		40-140	16		40
Benzo(b)fluoranthene	57		48		40-140	17		40
Benzo(k)fluoranthene	58		52		40-140	11		40
Benzo(a)pyrene	60		51		40-140	16		40
Indeno(1,2,3-cd)pyrene	53		46		40-140	14		40
Dibenzo(a,h)anthracene	57		51		40-140	11		40
Benzo(ghi)perylene	55		49		40-140	12		40

Lab Control Sample Analysis
Batch Quality Control

Project Name: B14 Q3 SAMPLING
Project Number: 21010214
Lab Number: L2341853
Report Date: 08/03/23

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: WG1807629-2 WG1807629-3

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
2-Fluorophenol	46		38		21-120
Phenol-d6	40		34		10-120
Nitrobenzene-d5	56		46		23-120
2-Fluorobiphenyl	54		44		15-120
2,4,6-Tribromophenol	68		60		10-120
4-Terphenyl-d14	54		46		41-149

Lab Control Sample Analysis
Batch Quality Control

Project Name: B14 Q3 SAMPLING
Project Number: 21010214

Lab Number: L2341853
Report Date: 08/03/23

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS-SIM - Westborough Lab Associated sample(s): 04-06 Batch: WG1810891-2 WG1810891-3								
Naphthalene	84		88		40-140	5		40
2-Methylnaphthalene	93		98		40-140	5		40
Acenaphthylene	97		104		40-140	7		40
Acenaphthene	87		93		37-111	7		40
Fluorene	92		98		40-140	6		40
Pentachlorophenol	**122**	Q	**137**	Q	9-103	12		40
Phenanthrene	86		93		40-140	8		40
Anthracene	96		104		40-140	8		40
Fluoranthene	97		103		40-140	6		40
Pyrene	95		100		26-127	5		40
Benzo(a)anthracene	111		116		40-140	4		40
Chrysene	96		101		40-140	5		40
Benzo(b)fluoranthene	97		116		40-140	18		40
Benzo(k)fluoranthene	100		112		40-140	11		40
Benzo(a)pyrene	117		123		40-140	5		40
Indeno(1,2,3-cd)pyrene	110		116		40-140	5		40
Dibenzo(a,h)anthracene	106		112		40-140	6		40
Benzo(ghi)perylene	109		114		40-140	4		40

Lab Control Sample Analysis
Batch Quality Control

Project Name: B14 Q3 SAMPLING
Project Number: 21010214

Lab Number: L2341853
Report Date: 08/03/23

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits

Semivolatile Organics by GC/MS-SIM - Westborough Lab Associated sample(s): 04-06 Batch: WG1810891-2 WG1810891-3

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
2-Fluorophenol	90		95		21-120
Phenol-d6	81		87		10-120
Nitrobenzene-d5	**121**	Q	**124**	Q	23-120
2-Fluorobiphenyl	84		88		15-120
2,4,6-Tribromophenol	119		**128**	Q	10-120
4-Terphenyl-d14	75		78		41-149

Project Name: B14 Q3 SAMPLING
Project Number: 21010214

Lab Number: L2341853
Report Date: 08/03/23

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(*)
L2341853-01A	Vial HCl preserved	A	NA		3.8	Y	Absent		PA-8260-SIM(14),PA-8260(14)
L2341853-01B	Vial HCl preserved	A	NA		3.8	Y	Absent		PA-8260-SIM(14),PA-8260(14)
L2341853-01C	Vial HCl preserved	A	NA		3.8	Y	Absent		PA-8260-SIM(14),PA-8260(14)
L2341853-01D	Amber 250ml unpreserved	A	7	7	3.8	Y	Absent		PA-8270SIM-LVI(7),PA-8270-LVI(7)
L2341853-01E	Amber 250ml unpreserved	A	7	7	3.8	Y	Absent		PA-8270SIM-LVI(7),PA-8270-LVI(7)
L2341853-02A	Vial HCl preserved	A	NA		3.8	Y	Absent		PA-8260-SIM(14),PA-8260(14)
L2341853-02B	Vial HCl preserved	A	NA		3.8	Y	Absent		PA-8260-SIM(14),PA-8260(14)
L2341853-02C	Vial HCl preserved	A	NA		3.8	Y	Absent		PA-8260-SIM(14),PA-8260(14)
L2341853-02D	Amber 250ml unpreserved	A	7	7	3.8	Y	Absent		PA-8270SIM-LVI(7),PA-8270-LVI(7)
L2341853-02E	Amber 250ml unpreserved	A	7	7	3.8	Y	Absent		PA-8270SIM-LVI(7),PA-8270-LVI(7)
L2341853-03A	Vial HCl preserved	A	NA		3.8	Y	Absent		PA-8260-SIM(14),PA-8260(14)
L2341853-03B	Vial HCl preserved	A	NA		3.8	Y	Absent		PA-8260-SIM(14),PA-8260(14)
L2341853-03C	Vial HCl preserved	A	NA		3.8	Y	Absent		PA-8260-SIM(14),PA-8260(14)
L2341853-03D	Amber 250ml unpreserved	A	7	7	3.8	Y	Absent		PA-8270SIM-LVI(7),PA-8270-LVI(7)
L2341853-03E	Amber 250ml unpreserved	A	7	7	3.8	Y	Absent		PA-8270SIM-LVI(7),PA-8270-LVI(7)
L2341853-04A	Vial HCl preserved	A	NA		3.8	Y	Absent		PA-8260-SIM(14),PA-8260(14)
L2341853-04B	Vial HCl preserved	A	NA		3.8	Y	Absent		PA-8260-SIM(14),PA-8260(14)
L2341853-04C	Vial HCl preserved	A	NA		3.8	Y	Absent		PA-8260-SIM(14),PA-8260(14)
L2341853-04D	Amber 250ml unpreserved	A	7	7	3.8	Y	Absent		PA-8270SIM-LVI(7),PA-8270-LVI(7)
L2341853-04E	Amber 250ml unpreserved	A	7	7	3.8	Y	Absent		PA-8270SIM-LVI(7),PA-8270-LVI(7)
L2341853-05A	Vial HCl preserved	A	NA		3.8	Y	Absent		PA-8260-SIM(14),PA-8260(14)
L2341853-05B	Vial HCl preserved	A	NA		3.8	Y	Absent		PA-8260-SIM(14),PA-8260(14)
L2341853-05C	Vial HCl preserved	A	NA		3.8	Y	Absent		PA-8260-SIM(14),PA-8260(14)

*Values in parentheses indicate holding time in days

Project Name: B14 Q3 SAMPLING
Project Number: 21010214

Lab Number: L2341853
Report Date: 08/03/23

Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L2341853-05D	Amber 250ml unpreserved	A	9	9	3.8	Y	Absent		PA-8270SIM-LVI(7),PA-8270-LVI(7)
L2341853-05E	Amber 250ml unpreserved	A	9	9	3.8	Y	Absent		PA-8270SIM-LVI(7),PA-8270-LVI(7)
L2341853-06A	Vial HCl preserved	A	NA		3.8	Y	Absent		PA-8260-SIM(14),PA-8260(14)
L2341853-06B	Vial HCl preserved	A	NA		3.8	Y	Absent		PA-8260-SIM(14),PA-8260(14)
L2341853-06C	Vial HCl preserved	A	NA		3.8	Y	Absent		PA-8260-SIM(14),PA-8260(14)
L2341853-06D	Amber 250ml unpreserved	A	7	7	3.8	Y	Absent		PA-8270SIM-LVI(7),PA-8270-LVI(7)
L2341853-06E	Amber 250ml unpreserved	A	7	7	3.8	Y	Absent		PA-8270SIM-LVI(7),PA-8270-LVI(7)
L2341853-07A	Vial HCl preserved	A	NA		3.8	Y	Absent		PA-8260-SIM(14),PA-8260(14)
L2341853-07B	Vial HCl preserved	A	NA		3.8	Y	Absent		PA-8260-SIM(14),PA-8260(14)
L2341853-07C	Vial HCl preserved	A	NA		3.8	Y	Absent		PA-8260-SIM(14),PA-8260(14)
L2341853-07D	Amber 250ml unpreserved	A	7	7	3.8	Y	Absent		PA-8270SIM-LVI(7),PA-8270-LVI(7)
L2341853-07E	Amber 250ml unpreserved	A	7	7	3.8	Y	Absent		PA-8270SIM-LVI(7),PA-8270-LVI(7)
L2341853-08A	Vial HCl preserved	A	NA		3.8	Y	Absent		PA-8260-SIM(14),PA-8260(14)
L2341853-08B	Vial HCl preserved	A	NA		3.8	Y	Absent		PA-8260-SIM(14),PA-8260(14)
L2341853-08C	Vial HCl preserved	A	NA		3.8	Y	Absent		PA-8260-SIM(14),PA-8260(14)
L2341853-08D	Vial HCl preserved	A	NA		3.8	Y	Absent		PA-8260-SIM(14),PA-8260(14)

*Values in parentheses indicate holding time in days

Project Name:	B14 Q3 SAMPLING	**Lab Number:**	L2341853
Project Number:	21010214	**Report Date:**	08/03/23

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 Q3 SAMPLING	**Lab Number:**	L2341853
Project Number:	21010214	**Report Date:**	08/03/23

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 Q3 SAMPLING	**Lab Number:**	L2341853
Project Number:	21010214	**Report Date:**	08/03/23

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 Q3 SAMPLING	**Lab Number:**	L2341853
Project Number:	21010214	**Report Date:**	08/03/23

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, Azobenzene; SCM: Iodomethane (methyl iodide), 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene.
EPA 8270E: NPW: Dimethylnaphthalene,1,4-Diphenylhydrazine, alpha-Terpineol; 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.
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, SM9221E, 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 1

ALPHA ANALYTICAL
WESTBORO, MA TEL: 508-898-9220 FAX: 508-898-9193
MANSFIELD, MA TEL: 508-822-9300 FAX: 508-822-3288

Date Rec'd in Lab: 7/21/23

ALPHA Job #: L2341853

Client Information

Client: TPA
Address:
Phone:
Fax:
Email:
☐ These samples have been previously analyzed by Alpha

Project Information

Project Name: B14 Q3 GW sampling
Project Location:
Project #: 21010214
Project Manager: Bob T
ALPHA Quote #:

Turn-Around Time

☑ Standard ☐ RUSH (only confirmed if pre-approved!)
Date Due: Time:

Report Information - Data Deliverables

☐ FAX ☒ EMAIL
☐ ADEx ☐ Add'l Deliverables

Billing Information

☐ Same as Client info PO #:

Regulatory Requirements/Report Limits

State /Fed Program | Criteria

Other Project Specific Requirements/Comments/Detection Limits:

SAMPLE HANDLING

Filtration
☐ Done
☑ Not needed
☐ Lab to do
Preservation
☐ Lab to do
(Please specify below)

ALPHA Lab ID (Lab Use Only)	Sample ID	Collection Date	Collection Time	Sample Matrix	Sampler's Initials	ANALYSIS: VOC 8260	SVOC 8270 SIM	Sample Specific Comments	TOTAL # BOTTLES
41853-01	TM08-PZM007	07/20/23	1005	GW	LEP	X	X		5
02	HI16-MWS	07/20/23	1100	GW	LEP	X	X		5
03	HI15-MWS	07/20/23	1215	GW	LEP	X	X		5
04	HI14-MWS	07/20/23	1320	GW	LEP	X	X		5
05	HI12-MWS	07/20/23	1350	GW	LEP	X	X	pH unknown, likely >9	5
06	HI17-MWS	07/20/23	1510	GW	LEP	X	X		5
07	duplicate	07/20/23	—	GW	LEP	X	X		5
08	TB-04	07/20/23	—	W	LEP	X			4

Container Type	V	A
Preservative	B	A

Relinquished By:	Date/Time	Received By:	Date/Time
ARM	07/20/23 1542	STR AAL	07/20/23 1542
STR AAL	07/20/23 1800		7/20/23 1800
	7/21/23 0430	UPS	7/20 2400

7/21 0430
7/21/23 0430

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.

FORM NO. 01-01 (rev. 14-OCT-07)

ANALYTICAL REPORT

Lab Number:	L2357923
Client:	Tradepoint Atlantic 1600 Sparrows Point Boulevard Baltimore, MD 21219
ATTN:	Robert Tworkowski
Phone:	(443) 649-5073
Project Name:	B14-Q4
Project Number:	21010214
Report Date:	10/11/23

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), OH (CL108), OR (MA-1316), PA (68-03671), RI (LAO00065), TX (T104704476), VT (VT-0935), VA (460195), USDA (Permit #525-23-122-91930).

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

Project Name: B14-Q4
Project Number: 21010214

Lab Number: L2357923
Report Date: 10/11/23

Alpha Sample ID	Client ID	Matrix	Sample Location	Collection Date/Time	Receive Date
L2357923-01	HI18-MWS	WATER	B14	10/02/23 13:25	10/02/23
L2357923-02	HI17-MWS	WATER	B14	10/02/23 14:25	10/02/23
L2357923-03	TM08R-PZM007	WATER	B14	10/02/23 15:10	10/02/23
L2357923-04	HI16-MWS	WATER	B14	10/02/23 15:45	10/02/23
L2357923-05	TB-WT-01	WATER	B14	10/02/23 00:00	10/02/23

Project Name:	B14-Q4	**Lab Number:**	L2357923
Project Number:	21010214	**Report Date:**	10/11/23

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, solids and tissues are reported on a dry 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-Q4	**Lab Number:**	L2357923
Project Number:	21010214	**Report Date:**	10/11/23

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: Melissa Sturgis Melissa Sturgis

Title: Technical Director/Representative Date: 10/11/23

ORGANICS

VOLATILES

Project Name: B14-Q4 **Lab Number:** L2357923

Project Number: 21010214 **Report Date:** 10/11/23

SAMPLE RESULTS

Lab ID: L2357923-01 Date Collected: 10/02/23 13:25
Client ID: HI18-MWS Date Received: 10/02/23
Sample Location: B14 Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8260D
Analytical Date: 10/09/23 08:51
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	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	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-Q4 **Lab Number:** L2357923

Project Number: 21010214 **Report Date:** 10/11/23

SAMPLE RESULTS

Lab ID: L2357923-01 Date Collected: 10/02/23 13:25

Client ID: HI18-MWS Date Received: 10/02/23

Sample Location: B14 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	91		70-130
Toluene-d8	97		70-130
4-Bromofluorobenzene	92		70-130
Dibromofluoromethane	99		70-130

Project Name: B14-Q4 **Lab Number:** L2357923

Project Number: 21010214 **Report Date:** 10/11/23

SAMPLE RESULTS

Lab ID: L2357923-01 Date Collected: 10/02/23 13:25
Client ID: HI18-MWS Date Received: 10/02/23
Sample Location: B14 Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8260D-SIM(M)
Analytical Date: 10/09/23 08:51
Analyst: MCM

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
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	101		70-130
4-Bromofluorobenzene	88		70-130

Project Name: B14-Q4 **Lab Number:** L2357923

Project Number: 21010214 **Report Date:** 10/11/23

SAMPLE RESULTS

Lab ID: L2357923-02 Date Collected: 10/02/23 14:25
Client ID: HI17-MWS Date Received: 10/02/23
Sample Location: B14 Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8260D
Analytical Date: 10/09/23 08:27
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	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	39		ug/l	0.75	0.20	1

Project Name: B14-Q4 **Lab Number:** L2357923

Project Number: 21010214 **Report Date:** 10/11/23

SAMPLE RESULTS

Lab ID: L2357923-02 Date Collected: 10/02/23 14:25

Client ID: HI17-MWS Date Received: 10/02/23

Sample Location: B14 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	99		70-130
Toluene-d8	100		70-130
4-Bromofluorobenzene	93		70-130
Dibromofluoromethane	97		70-130

Project Name: B14-Q4 **Lab Number:** L2357923

Project Number: 21010214 **Report Date:** 10/11/23

SAMPLE RESULTS

Lab ID: L2357923-02 Date Collected: 10/02/23 14:25
Client ID: HI17-MWS Date Received: 10/02/23
Sample Location: B14 Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8260D-SIM(M)
Analytical Date: 10/09/23 08:27
Analyst: MCM

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
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	97		70-130
4-Bromofluorobenzene	88		70-130

Project Name: B14-Q4 **Lab Number:** L2357923

Project Number: 21010214 **Report Date:** 10/11/23

SAMPLE RESULTS

Lab ID: L2357923-03 Date Collected: 10/02/23 15:10
Client ID: TM08R-PZM007 Date Received: 10/02/23
Sample Location: B14 Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8260D
Analytical Date: 10/09/23 09:15
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	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-Q4 **Lab Number:** L2357923

Project Number: 21010214 **Report Date:** 10/11/23

SAMPLE RESULTS

Lab ID: L2357923-03 Date Collected: 10/02/23 15:10

Client ID: TM08R-PZM007 Date Received: 10/02/23

Sample Location: B14 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	94		70-130
Toluene-d8	99		70-130
4-Bromofluorobenzene	97		70-130
Dibromofluoromethane	98		70-130

Project Name: B14-Q4 **Lab Number:** L2357923

Project Number: 21010214 **Report Date:** 10/11/23

SAMPLE RESULTS

Lab ID: L2357923-03 Date Collected: 10/02/23 15:10
Client ID: TM08R-PZM007 Date Received: 10/02/23
Sample Location: B14 Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8260D-SIM(M)
Analytical Date: 10/09/23 09:15
Analyst: MCM

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
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	100		70-130
4-Bromofluorobenzene	88		70-130

Project Name: B14-Q4 **Lab Number:** L2357923

Project Number: 21010214 **Report Date:** 10/11/23

SAMPLE RESULTS

Lab ID: L2357923-04 Date Collected: 10/02/23 15:45
Client ID: HI16-MWS Date Received: 10/02/23
Sample Location: B14 Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8260D
Analytical Date: 10/09/23 09:39
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	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-Q4 **Lab Number:** L2357923

Project Number: 21010214 **Report Date:** 10/11/23

SAMPLE RESULTS

Lab ID: L2357923-04 Date Collected: 10/02/23 15:45

Client ID: HI16-MWS Date Received: 10/02/23

Sample Location: B14 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	93		70-130
Toluene-d8	97		70-130
4-Bromofluorobenzene	93		70-130
Dibromofluoromethane	104		70-130

Project Name: B14-Q4 **Lab Number:** L2357923

Project Number: 21010214 **Report Date:** 10/11/23

SAMPLE RESULTS

Lab ID: L2357923-04 Date Collected: 10/02/23 15:45
Client ID: HI16-MWS Date Received: 10/02/23
Sample Location: B14 Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8260D-SIM(M)
Analytical Date: 10/09/23 09:39
Analyst: MCM

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
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	88		70-130

Project Name: B14-Q4 **Lab Number:** L2357923

Project Number: 21010214 **Report Date:** 10/11/23

SAMPLE RESULTS

Lab ID: L2357923-05 Date Collected: 10/02/23 00:00
Client ID: TB-WT-01 Date Received: 10/02/23
Sample Location: B14 Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8260D
Analytical Date: 10/09/23 08:03
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	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-Q4 **Lab Number:** L2357923

Project Number: 21010214 **Report Date:** 10/11/23

SAMPLE RESULTS

Lab ID: L2357923-05 Date Collected: 10/02/23 00:00

Client ID: TB-WT-01 Date Received: 10/02/23

Sample Location: B14 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	92		70-130
Toluene-d8	99		70-130
4-Bromofluorobenzene	93		70-130
Dibromofluoromethane	97		70-130

Project Name: B14-Q4 **Lab Number:** L2357923

Project Number: 21010214 **Report Date:** 10/11/23

SAMPLE RESULTS

Lab ID: L2357923-05 Date Collected: 10/02/23 00:00

Client ID: TB-WT-01 Date Received: 10/02/23

Sample Location: B14 Field Prep: Not Specified

Sample Depth:

Matrix: Water

Analytical Method: 1,8260D-SIM(M)

Analytical Date: 10/09/23 08:03

Analyst: MCM

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
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	88		70-130

Project Name: B14-Q4 **Lab Number:** L2357923

Project Number: 21010214 **Report Date:** 10/11/23

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260D
Analytical Date: 10/09/23 06:03
Analyst: MCM

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 01-05 Batch: WG1837620-5					
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-Q4 **Lab Number:** L2357923

Project Number: 21010214 **Report Date:** 10/11/23

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260D
Analytical Date: 10/09/23 06:03
Analyst: MCM

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 01-05 Batch: WG1837620-5					
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-Q4 **Lab Number:** L2357923

Project Number: 21010214 **Report Date:** 10/11/23

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260D
Analytical Date: 10/09/23 06:03
Analyst: MCM

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 01-05 Batch: WG1837620-5					

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	100		70-130
Toluene-d8	100		70-130
4-Bromofluorobenzene	93		70-130
Dibromofluoromethane	98		70-130

Project Name: B14-Q4 **Lab Number:** L2357923

Project Number: 21010214 **Report Date:** 10/11/23

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260D-SIM(M)
Analytical Date: 10/09/23 06:03
Analyst: MCM

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS-SIM - Westborough Lab for sample(s): 01-05 Batch: WG1837624-5					
1,1,2,2-Tetrachloroethane	ND		ug/l	0.050	0.006

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	99		70-130
4-Bromofluorobenzene	89		70-130

Lab Control Sample Analysis
Batch Quality Control

Project Name: B14-Q4
Project Number: 21010214

Lab Number: L2357923
Report Date: 10/11/23

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: WG1837620-3 WG1837620-4								
Dichlorodifluoromethane	94		90		36-147	4		20
Chloromethane	96		97		64-130	1		20
Vinyl chloride	130		120		55-140	8		20
Bromomethane	120		120		39-139	0		20
Chloroethane	130		130		55-138	0		20
Trichlorofluoromethane	100		100		62-150	0		20
1,1-Dichloroethene	100		94		61-145	6		20
Carbon disulfide	94		91		51-130	3		20
1,1,2-Trichloro-1,2,2-Trifluoroethane	96		97		70-130	1		20
Methylene chloride	93		95		70-130	2		20
Acetone	95		98		58-148	3		20
trans-1,2-Dichloroethene	95		93		70-130	2		20
Methyl Acetate	98		97		70-130	1		20
Methyl tert butyl ether	92		89		63-130	3		20
1,1-Dichloroethane	95		94		70-130	1		20
cis-1,2-Dichloroethene	95		95		70-130	0		20
Cyclohexane	93		90		70-130	3		20
Chloroform	92		91		70-130	1		20
Carbon tetrachloride	110		100		63-132	10		20
1,1,1-Trichloroethane	98		97		67-130	1		20
2-Butanone	100		99		63-138	1		20
Benzene	100		95		70-130	5		20
1,2-Dichloroethane	98		98		70-130	0		20

Lab Control Sample Analysis
Batch Quality Control

Project Name: B14-Q4
Project Number: 21010214

Lab Number: L2357923
Report Date: 10/11/23

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: WG1837620-3 WG1837620-4								
Trichloroethene	92		92		70-130	0		20
1,2-Dichloropropane	94		91		70-130	3		20
Bromodichloromethane	94		91		67-130	3		20
cis-1,3-Dichloropropene	84		84		70-130	0		20
Toluene	94		91		70-130	3		20
Tetrachloroethene	97		98		70-130	1		20
4-Methyl-2-pentanone	84		81		59-130	4		20
trans-1,3-Dichloropropene	84		85		70-130	1		20
1,1,2-Trichloroethane	85		85		70-130	0		20
Dibromochloromethane	86		87		63-130	1		20
1,2-Dibromoethane	88		92		70-130	4		20
2-Hexanone	77		80		57-130	4		20
Chlorobenzene	92		93		75-130	1		20
Ethylbenzene	89		88		70-130	1		20
p/m-Xylene	95		95		70-130	0		20
o-Xylene	85		85		70-130	0		20
Styrene	90		90		70-130	0		20
Bromoform	74		75		54-136	1		20
Isopropylbenzene	87		87		70-130	0		20
1,1,2,2-Tetrachloroethane	79		81		67-130	3		20
1,3-Dichlorobenzene	88		90		70-130	2		20
1,4-Dichlorobenzene	89		90		70-130	1		20
1,2-Dichlorobenzene	90		90		70-130	0		20

Lab Control Sample Analysis

Batch Quality Control

Project Name: B14-Q4

Project Number: 21010214

Lab Number: L2357923

Report Date: 10/11/23

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: WG1837620-3 WG1837620-4								
1,2-Dibromo-3-chloropropane	83		86		41-144	4		20
1,2,4-Trichlorobenzene	87		86		70-130	1		20
1,2,3-Trichlorobenzene	89		92		70-130	3		20

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
1,2-Dichloroethane-d4	91		91		70-130
Toluene-d8	98		97		70-130
4-Bromofluorobenzene	92		93		70-130
Dibromofluoromethane	100		99		70-130

Lab Control Sample Analysis
Batch Quality Control

Project Name: B14-Q4
Project Number: 21010214

Lab Number: L2357923
Report Date: 10/11/23

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: WG1837624-3 WG1837624-4								
1,1,2,2-Tetrachloroethane	82		80		70-130	2		25

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
1,2-Dichloroethane-d4	98		98		70-130
4-Bromofluorobenzene	91		90		70-130

SEMIVOLATILES

Project Name: B14-Q4 **Lab Number:** L2357923

Project Number: 21010214 **Report Date:** 10/11/23

SAMPLE RESULTS

Lab ID: L2357923-01
Client ID: HI18-MWS
Sample Location: B14

Date Collected: 10/02/23 13:25
Date Received: 10/02/23
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8270E
Analytical Date: 10/08/23 21:15
Analyst: EK

Extraction Method: EPA 3510C
Extraction Date: 10/07/23 08:49

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Benzaldehyde	ND		ug/l	5.0	0.53	1
Phenol	ND		ug/l	5.0	0.57	1
Bis(2-chloroethyl)ether	ND		ug/l	2.0	0.50	1
2-Chlorophenol	ND		ug/l	2.0	0.48	1
2-Methylphenol	ND		ug/l	5.0	0.49	1
Bis(2-chloroisopropyl)ether	ND		ug/l	2.0	0.53	1
Acetophenone	ND		ug/l	5.0	0.53	1
n-Nitrosodi-n-propylamine	ND		ug/l	5.0	0.64	1
3-Methylphenol/4-Methylphenol	0.67	J	ug/l	5.0	0.48	1
Hexachloroethane	ND		ug/l	2.0	0.58	1
Nitrobenzene	ND		ug/l	1.4	0.77	1
Isophorone	ND		ug/l	5.0	1.2	1
2,4-Dimethylphenol	ND		ug/l	5.0	1.8	1
Bis(2-chloroethoxy)methane	ND		ug/l	5.0	0.50	1
2,4-Dichlorophenol	ND		ug/l	5.0	0.41	1
Naphthalene	ND		ug/l	2.0	0.46	1
4-Chloroaniline	ND		ug/l	3.7	1.1	1
Hexachlorobutadiene	ND		ug/l	2.0	0.66	1
Caprolactam	ND		ug/l	10	3.3	1
2-Methylnaphthalene	ND		ug/l	2.0	0.45	1
Hexachlorocyclopentadiene	ND		ug/l	20	0.69	1
1,2,4,5-Tetrachlorobenzene	ND		ug/l	1.7	0.44	1
2,4,6-Trichlorophenol	ND		ug/l	5.0	0.61	1
2,4,5-Trichlorophenol	ND		ug/l	5.0	0.77	1
Biphenyl	ND		ug/l	2.0	0.46	1
2-Chloronaphthalene	ND		ug/l	2.0	0.44	1
2-Nitroaniline	ND		ug/l	5.0	0.50	1
2,6-Dinitrotoluene	ND		ug/l	5.0	0.93	1

Project Name: B14-Q4 **Lab Number:** L2357923

Project Number: 21010214 **Report Date:** 10/11/23

SAMPLE RESULTS

Lab ID: L2357923-01 Date Collected: 10/02/23 13:25

Client ID: HI18-MWS Date Received: 10/02/23

Sample Location: B14 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	0.46	1
Acenaphthene	ND		ug/l	2.0	0.53	1
2,4-Dinitrophenol	ND		ug/l	20	6.6	1
2,4-Dinitrotoluene	ND		ug/l	5.0	1.2	1
2,3,4,6-Tetrachlorophenol	ND		ug/l	5.0	0.84	1
Diethyl phthalate	ND		ug/l	5.0	0.38	1
Fluorene	ND		ug/l	2.0	0.41	1
4-Nitroaniline	ND		ug/l	5.0	0.80	1
NDPA/DPA	ND		ug/l	2.0	0.42	1
Hexachlorobenzene	ND		ug/l	2.0	0.46	1
Pentachlorophenol	ND		ug/l	10	1.8	1
Phenanthrene	ND		ug/l	2.0	0.33	1
Anthracene	ND		ug/l	2.0	0.33	1
Carbazole	ND		ug/l	2.0	0.49	1
Di-n-butylphthalate	ND		ug/l	5.0	0.39	1
Fluoranthene	ND		ug/l	2.0	0.26	1
Pyrene	ND		ug/l	2.0	0.28	1
3,3'-Dichlorobenzidine	ND		ug/l	5.0	1.6	1
Benzo(a)anthracene	ND		ug/l	2.0	0.32	1
Chrysene	ND		ug/l	1.4	0.34	1
Bis(2-ethylhexyl)phthalate	ND		ug/l	3.0	1.5	1
Di-n-octylphthalate	ND		ug/l	5.0	1.3	1
Benzo(b)fluoranthene	ND		ug/l	2.0	0.35	1
Benzo(k)fluoranthene	ND		ug/l	2.0	0.37	1
Benzo(a)pyrene	ND		ug/l	2.0	0.41	1
Indeno(1,2,3-cd)pyrene	ND		ug/l	2.0	0.40	1
Dibenzo(a,h)anthracene	ND		ug/l	2.0	0.32	1
Benzo(ghi)perylene	ND		ug/l	2.0	0.30	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	68		21-120
Phenol-d6	56		10-120
Nitrobenzene-d5	84		23-120
2-Fluorobiphenyl	85		15-120
2,4,6-Tribromophenol	106		10-120
4-Terphenyl-d14	91		41-149

Project Name: B14-Q4 **Lab Number:** L2357923

Project Number: 21010214 **Report Date:** 10/11/23

SAMPLE RESULTS

Lab ID: L2357923-01
Client ID: HI18-MWS
Sample Location: B14

Date Collected: 10/02/23 13:25
Date Received: 10/02/23
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8270E-SIM
Analytical Date: 10/08/23 19:11
Analyst: AH

Extraction Method: EPA 3510C
Extraction Date: 10/07/23 08:50

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS-SIM - Westborough Lab						
Naphthalene	0.18		ug/l	0.10	0.05	1
2-Methylnaphthalene	0.07	J	ug/l	0.10	0.02	1
Acenaphthylene	0.03	J	ug/l	0.10	0.01	1
Acenaphthene	0.10		ug/l	0.10	0.01	1
Fluorene	0.09	J	ug/l	0.10	0.01	1
Pentachlorophenol	0.07	J	ug/l	0.10	0.01	1
Phenanthrene	0.11		ug/l	0.05	0.02	1
Anthracene	0.09	J	ug/l	0.10	0.01	1
Fluoranthene	0.08	J	ug/l	0.10	0.02	1
Pyrene	0.06	J	ug/l	0.10	0.02	1
Benzo(a)anthracene	ND		ug/l	0.05	0.02	1
Chrysene	0.01	J	ug/l	0.10	0.01	1
Benzo(b)fluoranthene	0.02	J	ug/l	0.05	0.01	1
Benzo(k)fluoranthene	0.01	J	ug/l	0.10	0.01	1
Benzo(a)pyrene	ND		ug/l	0.10	0.02	1
Indeno(1,2,3-cd)pyrene	ND		ug/l	0.10	0.01	1
Dibenzo(a,h)anthracene	ND		ug/l	0.05	0.01	1
Benzo(ghi)perylene	ND		ug/l	0.10	0.01	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	81		21-120
Phenol-d6	73		10-120
Nitrobenzene-d5	**124**	Q	23-120
2-Fluorobiphenyl	69		15-120
2,4,6-Tribromophenol	**135**	Q	10-120
4-Terphenyl-d14	106		41-149

Project Name: B14-Q4 **Lab Number:** L2357923

Project Number: 21010214 **Report Date:** 10/11/23

SAMPLE RESULTS

Lab ID: L2357923-02
Client ID: HI17-MWS
Sample Location: B14

Date Collected: 10/02/23 14:25
Date Received: 10/02/23
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8270E
Analytical Date: 10/08/23 21:38
Analyst: EK

Extraction Method: EPA 3510C
Extraction Date: 10/07/23 08:49

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Benzaldehyde	ND		ug/l	5.0	0.53	1
Phenol	ND		ug/l	5.0	0.57	1
Bis(2-chloroethyl)ether	ND		ug/l	2.0	0.50	1
2-Chlorophenol	ND		ug/l	2.0	0.48	1
2-Methylphenol	ND		ug/l	5.0	0.49	1
Bis(2-chloroisopropyl)ether	ND		ug/l	2.0	0.53	1
Acetophenone	ND		ug/l	5.0	0.53	1
n-Nitrosodi-n-propylamine	ND		ug/l	5.0	0.64	1
3-Methylphenol/4-Methylphenol	4.5	J	ug/l	5.0	0.48	1
Hexachloroethane	ND		ug/l	2.0	0.58	1
Nitrobenzene	ND		ug/l	1.4	0.77	1
Isophorone	ND		ug/l	5.0	1.2	1
2,4-Dimethylphenol	ND		ug/l	5.0	1.8	1
Bis(2-chloroethoxy)methane	ND		ug/l	5.0	0.50	1
2,4-Dichlorophenol	ND		ug/l	5.0	0.41	1
Naphthalene	0.56	J	ug/l	2.0	0.46	1
4-Chloroaniline	ND		ug/l	3.7	1.1	1
Hexachlorobutadiene	ND		ug/l	2.0	0.66	1
Caprolactam	ND		ug/l	10	3.3	1
2-Methylnaphthalene	ND		ug/l	2.0	0.45	1
Hexachlorocyclopentadiene	ND		ug/l	20	0.69	1
1,2,4,5-Tetrachlorobenzene	ND		ug/l	1.7	0.44	1
2,4,6-Trichlorophenol	ND		ug/l	5.0	0.61	1
2,4,5-Trichlorophenol	ND		ug/l	5.0	0.77	1
Biphenyl	ND		ug/l	2.0	0.46	1
2-Chloronaphthalene	ND		ug/l	2.0	0.44	1
2-Nitroaniline	ND		ug/l	5.0	0.50	1
2,6-Dinitrotoluene	ND		ug/l	5.0	0.93	1

Project Name: B14-Q4 **Lab Number:** L2357923

Project Number: 21010214 **Report Date:** 10/11/23

SAMPLE RESULTS

Lab ID: L2357923-02 Date Collected: 10/02/23 14:25

Client ID: HI17-MWS Date Received: 10/02/23

Sample Location: B14 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	0.46	1
Acenaphthene	ND		ug/l	2.0	0.53	1
2,4-Dinitrophenol	ND		ug/l	20	6.6	1
2,4-Dinitrotoluene	ND		ug/l	5.0	1.2	1
2,3,4,6-Tetrachlorophenol	ND		ug/l	5.0	0.84	1
Diethyl phthalate	ND		ug/l	5.0	0.38	1
Fluorene	ND		ug/l	2.0	0.41	1
4-Nitroaniline	ND		ug/l	5.0	0.80	1
NDPA/DPA	ND		ug/l	2.0	0.42	1
Hexachlorobenzene	ND		ug/l	2.0	0.46	1
Pentachlorophenol	ND		ug/l	10	1.8	1
Phenanthrene	ND		ug/l	2.0	0.33	1
Anthracene	ND		ug/l	2.0	0.33	1
Carbazole	ND		ug/l	2.0	0.49	1
Di-n-butylphthalate	ND		ug/l	5.0	0.39	1
Fluoranthene	ND		ug/l	2.0	0.26	1
Pyrene	ND		ug/l	2.0	0.28	1
3,3'-Dichlorobenzidine	ND		ug/l	5.0	1.6	1
Benzo(a)anthracene	ND		ug/l	2.0	0.32	1
Chrysene	ND		ug/l	1.4	0.34	1
Bis(2-ethylhexyl)phthalate	ND		ug/l	3.0	1.5	1
Di-n-octylphthalate	ND		ug/l	5.0	1.3	1
Benzo(b)fluoranthene	ND		ug/l	2.0	0.35	1
Benzo(k)fluoranthene	ND		ug/l	2.0	0.37	1
Benzo(a)pyrene	ND		ug/l	2.0	0.41	1
Indeno(1,2,3-cd)pyrene	ND		ug/l	2.0	0.40	1
Dibenzo(a,h)anthracene	ND		ug/l	2.0	0.32	1
Benzo(ghi)perylene	ND		ug/l	2.0	0.30	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	52		21-120
Phenol-d6	43		10-120
Nitrobenzene-d5	62		23-120
2-Fluorobiphenyl	66		15-120
2,4,6-Tribromophenol	84		10-120
4-Terphenyl-d14	74		41-149

Project Name: B14-Q4 **Lab Number:** L2357923

Project Number: 21010214 **Report Date:** 10/11/23

SAMPLE RESULTS

Lab ID: L2357923-02
Client ID: HI17-MWS
Sample Location: B14

Date Collected: 10/02/23 14:25
Date Received: 10/02/23
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8270E-SIM
Analytical Date: 10/08/23 19:28
Analyst: AH

Extraction Method: EPA 3510C
Extraction Date: 10/07/23 08:50

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS-SIM - Westborough Lab						
Naphthalene	0.55		ug/l	0.10	0.05	1
2-Methylnaphthalene	0.38		ug/l	0.10	0.02	1
Acenaphthylene	0.10		ug/l	0.10	0.01	1
Acenaphthene	0.19		ug/l	0.10	0.01	1
Fluorene	0.13		ug/l	0.10	0.01	1
Pentachlorophenol	ND		ug/l	0.10	0.01	1
Phenanthrene	0.16		ug/l	0.05	0.02	1
Anthracene	0.50		ug/l	0.10	0.01	1
Fluoranthene	0.10		ug/l	0.10	0.02	1
Pyrene	0.09	J	ug/l	0.10	0.02	1
Benzo(a)anthracene	0.03	J	ug/l	0.05	0.02	1
Chrysene	0.05	J	ug/l	0.10	0.01	1
Benzo(b)fluoranthene	ND		ug/l	0.05	0.01	1
Benzo(k)fluoranthene	ND		ug/l	0.10	0.01	1
Benzo(a)pyrene	ND		ug/l	0.10	0.02	1
Indeno(1,2,3-cd)pyrene	ND		ug/l	0.10	0.01	1
Dibenzo(a,h)anthracene	ND		ug/l	0.05	0.01	1
Benzo(ghi)perylene	ND		ug/l	0.10	0.01	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	62		21-120
Phenol-d6	61		10-120
Nitrobenzene-d5	96		23-120
2-Fluorobiphenyl	66		15-120
2,4,6-Tribromophenol	116		10-120
4-Terphenyl-d14	77		41-149

Project Name: B14-Q4 **Lab Number:** L2357923

Project Number: 21010214 **Report Date:** 10/11/23

SAMPLE RESULTS

Lab ID: L2357923-03
Client ID: TM08R-PZM007
Sample Location: B14

Date Collected: 10/02/23 15:10
Date Received: 10/02/23
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8270E
Analytical Date: 10/08/23 22:02
Analyst: EK

Extraction Method: EPA 3510C
Extraction Date: 10/07/23 08:49

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Benzaldehyde	ND		ug/l	5.0	0.53	1
Phenol	ND		ug/l	5.0	0.57	1
Bis(2-chloroethyl)ether	ND		ug/l	2.0	0.50	1
2-Chlorophenol	ND		ug/l	2.0	0.48	1
2-Methylphenol	ND		ug/l	5.0	0.49	1
Bis(2-chloroisopropyl)ether	ND		ug/l	2.0	0.53	1
Acetophenone	ND		ug/l	5.0	0.53	1
n-Nitrosodi-n-propylamine	ND		ug/l	5.0	0.64	1
3-Methylphenol/4-Methylphenol	ND		ug/l	5.0	0.48	1
Hexachloroethane	ND		ug/l	2.0	0.58	1
Nitrobenzene	ND		ug/l	1.4	0.77	1
Isophorone	ND		ug/l	5.0	1.2	1
2,4-Dimethylphenol	ND		ug/l	5.0	1.8	1
Bis(2-chloroethoxy)methane	ND		ug/l	5.0	0.50	1
2,4-Dichlorophenol	ND		ug/l	5.0	0.41	1
Naphthalene	ND		ug/l	2.0	0.46	1
4-Chloroaniline	ND		ug/l	3.7	1.1	1
Hexachlorobutadiene	ND		ug/l	2.0	0.66	1
Caprolactam	ND		ug/l	10	3.3	1
2-Methylnaphthalene	ND		ug/l	2.0	0.45	1
Hexachlorocyclopentadiene	ND		ug/l	20	0.69	1
1,2,4,5-Tetrachlorobenzene	ND		ug/l	1.7	0.44	1
2,4,6-Trichlorophenol	ND		ug/l	5.0	0.61	1
2,4,5-Trichlorophenol	ND		ug/l	5.0	0.77	1
Biphenyl	ND		ug/l	2.0	0.46	1
2-Chloronaphthalene	ND		ug/l	2.0	0.44	1
2-Nitroaniline	ND		ug/l	5.0	0.50	1
2,6-Dinitrotoluene	ND		ug/l	5.0	0.93	1

Project Name: B14-Q4 **Lab Number:** L2357923

Project Number: 21010214 **Report Date:** 10/11/23

SAMPLE RESULTS

Lab ID: L2357923-03 Date Collected: 10/02/23 15:10

Client ID: TM08R-PZM007 Date Received: 10/02/23

Sample Location: B14 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	0.46	1
Acenaphthene	ND		ug/l	2.0	0.53	1
2,4-Dinitrophenol	ND		ug/l	20	6.6	1
2,4-Dinitrotoluene	ND		ug/l	5.0	1.2	1
2,3,4,6-Tetrachlorophenol	ND		ug/l	5.0	0.84	1
Diethyl phthalate	ND		ug/l	5.0	0.38	1
Fluorene	ND		ug/l	2.0	0.41	1
4-Nitroaniline	ND		ug/l	5.0	0.80	1
NDPA/DPA	ND		ug/l	2.0	0.42	1
Hexachlorobenzene	ND		ug/l	2.0	0.46	1
Pentachlorophenol	ND		ug/l	10	1.8	1
Phenanthrene	ND		ug/l	2.0	0.33	1
Anthracene	ND		ug/l	2.0	0.33	1
Carbazole	ND		ug/l	2.0	0.49	1
Di-n-butylphthalate	ND		ug/l	5.0	0.39	1
Fluoranthene	ND		ug/l	2.0	0.26	1
Pyrene	ND		ug/l	2.0	0.28	1
3,3'-Dichlorobenzidine	ND		ug/l	5.0	1.6	1
Benzo(a)anthracene	ND		ug/l	2.0	0.32	1
Chrysene	ND		ug/l	1.4	0.34	1
Bis(2-ethylhexyl)phthalate	ND		ug/l	3.0	1.5	1
Di-n-octylphthalate	ND		ug/l	5.0	1.3	1
Benzo(b)fluoranthene	ND		ug/l	2.0	0.35	1
Benzo(k)fluoranthene	ND		ug/l	2.0	0.37	1
Benzo(a)pyrene	ND		ug/l	2.0	0.41	1
Indeno(1,2,3-cd)pyrene	ND		ug/l	2.0	0.40	1
Dibenzo(a,h)anthracene	ND		ug/l	2.0	0.32	1
Benzo(ghi)perylene	ND		ug/l	2.0	0.30	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	62		21-120
Phenol-d6	49		10-120
Nitrobenzene-d5	73		23-120
2-Fluorobiphenyl	77		15-120
2,4,6-Tribromophenol	94		10-120
4-Terphenyl-d14	85		41-149

Project Name: B14-Q4 **Lab Number:** L2357923

Project Number: 21010214 **Report Date:** 10/11/23

SAMPLE RESULTS

Lab ID: L2357923-03
Client ID: TM08R-PZM007
Sample Location: B14

Date Collected: 10/02/23 15:10
Date Received: 10/02/23
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8270E-SIM
Analytical Date: 10/08/23 19:45
Analyst: AH

Extraction Method: EPA 3510C
Extraction Date: 10/07/23 08:50

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS-SIM - Westborough Lab						
Naphthalene	ND		ug/l	0.10	0.05	1
2-Methylnaphthalene	ND		ug/l	0.10	0.02	1
Acenaphthylene	0.03	J	ug/l	0.10	0.01	1
Acenaphthene	0.03	J	ug/l	0.10	0.01	1
Fluorene	0.02	J	ug/l	0.10	0.01	1
Pentachlorophenol	ND		ug/l	0.10	0.01	1
Phenanthrene	ND		ug/l	0.05	0.02	1
Anthracene	0.14		ug/l	0.10	0.01	1
Fluoranthene	0.04	J	ug/l	0.10	0.02	1
Pyrene	0.04	J	ug/l	0.10	0.02	1
Benzo(a)anthracene	0.02	J	ug/l	0.05	0.02	1
Chrysene	0.02	J	ug/l	0.10	0.01	1
Benzo(b)fluoranthene	ND		ug/l	0.05	0.01	1
Benzo(k)fluoranthene	ND		ug/l	0.10	0.01	1
Benzo(a)pyrene	ND		ug/l	0.10	0.02	1
Indeno(1,2,3-cd)pyrene	ND		ug/l	0.10	0.01	1
Dibenzo(a,h)anthracene	ND		ug/l	0.05	0.01	1
Benzo(ghi)perylene	ND		ug/l	0.10	0.01	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	75		21-120
Phenol-d6	67		10-120
Nitrobenzene-d5	113		23-120
2-Fluorobiphenyl	78		15-120
2,4,6-Tribromophenol	118		10-120
4-Terphenyl-d14	95		41-149

Project Name: B14-Q4 **Lab Number:** L2357923

Project Number: 21010214 **Report Date:** 10/11/23

SAMPLE RESULTS

Lab ID: L2357923-04
Client ID: HI16-MWS
Sample Location: B14

Date Collected: 10/02/23 15:45
Date Received: 10/02/23
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8270E
Analytical Date: 10/08/23 20:51
Analyst: EK

Extraction Method: EPA 3510C
Extraction Date: 10/07/23 08:49

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Benzaldehyde	ND		ug/l	5.0	0.53	1
Phenol	ND		ug/l	5.0	0.57	1
Bis(2-chloroethyl)ether	ND		ug/l	2.0	0.50	1
2-Chlorophenol	ND		ug/l	2.0	0.48	1
2-Methylphenol	ND		ug/l	5.0	0.49	1
Bis(2-chloroisopropyl)ether	ND		ug/l	2.0	0.53	1
Acetophenone	ND		ug/l	5.0	0.53	1
n-Nitrosodi-n-propylamine	ND		ug/l	5.0	0.64	1
3-Methylphenol/4-Methylphenol	ND		ug/l	5.0	0.48	1
Hexachloroethane	ND		ug/l	2.0	0.58	1
Nitrobenzene	ND		ug/l	1.4	0.77	1
Isophorone	ND		ug/l	5.0	1.2	1
2,4-Dimethylphenol	ND		ug/l	5.0	1.8	1
Bis(2-chloroethoxy)methane	ND		ug/l	5.0	0.50	1
2,4-Dichlorophenol	ND		ug/l	5.0	0.41	1
Naphthalene	ND		ug/l	2.0	0.46	1
4-Chloroaniline	ND		ug/l	3.7	1.1	1
Hexachlorobutadiene	ND		ug/l	2.0	0.66	1
Caprolactam	ND		ug/l	10	3.3	1
2-Methylnaphthalene	ND		ug/l	2.0	0.45	1
Hexachlorocyclopentadiene	ND		ug/l	20	0.69	1
1,2,4,5-Tetrachlorobenzene	ND		ug/l	1.7	0.44	1
2,4,6-Trichlorophenol	ND		ug/l	5.0	0.61	1
2,4,5-Trichlorophenol	ND		ug/l	5.0	0.77	1
Biphenyl	ND		ug/l	2.0	0.46	1
2-Chloronaphthalene	ND		ug/l	2.0	0.44	1
2-Nitroaniline	ND		ug/l	5.0	0.50	1
2,6-Dinitrotoluene	ND		ug/l	5.0	0.93	1

Project Name: B14-Q4 **Lab Number:** L2357923

Project Number: 21010214 **Report Date:** 10/11/23

SAMPLE RESULTS

Lab ID: L2357923-04 Date Collected: 10/02/23 15:45

Client ID: HI16-MWS Date Received: 10/02/23

Sample Location: B14 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	0.46	1
Acenaphthene	ND		ug/l	2.0	0.53	1
2,4-Dinitrophenol	ND		ug/l	20	6.6	1
2,4-Dinitrotoluene	ND		ug/l	5.0	1.2	1
2,3,4,6-Tetrachlorophenol	ND		ug/l	5.0	0.84	1
Diethyl phthalate	ND		ug/l	5.0	0.38	1
Fluorene	ND		ug/l	2.0	0.41	1
4-Nitroaniline	ND		ug/l	5.0	0.80	1
NDPA/DPA	ND		ug/l	2.0	0.42	1
Hexachlorobenzene	ND		ug/l	2.0	0.46	1
Pentachlorophenol	ND		ug/l	10	1.8	1
Phenanthrene	ND		ug/l	2.0	0.33	1
Anthracene	ND		ug/l	2.0	0.33	1
Carbazole	ND		ug/l	2.0	0.49	1
Di-n-butylphthalate	ND		ug/l	5.0	0.39	1
Fluoranthene	ND		ug/l	2.0	0.26	1
Pyrene	ND		ug/l	2.0	0.28	1
3,3'-Dichlorobenzidine	ND		ug/l	5.0	1.6	1
Benzo(a)anthracene	ND		ug/l	2.0	0.32	1
Chrysene	ND		ug/l	1.4	0.34	1
Bis(2-ethylhexyl)phthalate	ND		ug/l	3.0	1.5	1
Di-n-octylphthalate	ND		ug/l	5.0	1.3	1
Benzo(b)fluoranthene	ND		ug/l	2.0	0.35	1
Benzo(k)fluoranthene	ND		ug/l	2.0	0.37	1
Benzo(a)pyrene	ND		ug/l	2.0	0.41	1
Indeno(1,2,3-cd)pyrene	ND		ug/l	2.0	0.40	1
Dibenzo(a,h)anthracene	ND		ug/l	2.0	0.32	1
Benzo(ghi)perylene	ND		ug/l	2.0	0.30	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	66		21-120
Phenol-d6	53		10-120
Nitrobenzene-d5	79		23-120
2-Fluorobiphenyl	77		15-120
2,4,6-Tribromophenol	94		10-120
4-Terphenyl-d14	85		41-149

Project Name: B14-Q4 **Lab Number:** L2357923

Project Number: 21010214 **Report Date:** 10/11/23

SAMPLE RESULTS

Lab ID: L2357923-04
Client ID: HI16-MWS
Sample Location: B14

Date Collected: 10/02/23 15:45
Date Received: 10/02/23
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8270E-SIM
Analytical Date: 10/08/23 20:01
Analyst: AH

Extraction Method: EPA 3510C
Extraction Date: 10/07/23 08:50

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS-SIM - Westborough Lab						
Naphthalene	ND		ug/l	0.10	0.05	1
2-Methylnaphthalene	0.02	J	ug/l	0.10	0.02	1
Acenaphthylene	0.10	J	ug/l	0.10	0.01	1
Acenaphthene	0.12		ug/l	0.10	0.01	1
Fluorene	ND		ug/l	0.10	0.01	1
Pentachlorophenol	ND		ug/l	0.10	0.01	1
Phenanthrene	ND		ug/l	0.05	0.02	1
Anthracene	0.55		ug/l	0.10	0.01	1
Fluoranthene	0.21		ug/l	0.10	0.02	1
Pyrene	0.18		ug/l	0.10	0.02	1
Benzo(a)anthracene	0.03	J	ug/l	0.05	0.02	1
Chrysene	0.02	J	ug/l	0.10	0.01	1
Benzo(b)fluoranthene	ND		ug/l	0.05	0.01	1
Benzo(k)fluoranthene	ND		ug/l	0.10	0.01	1
Benzo(a)pyrene	ND		ug/l	0.10	0.02	1
Indeno(1,2,3-cd)pyrene	ND		ug/l	0.10	0.01	1
Dibenzo(a,h)anthracene	ND		ug/l	0.05	0.01	1
Benzo(ghi)perylene	ND		ug/l	0.10	0.01	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	79		21-120
Phenol-d6	74		10-120
Nitrobenzene-d5	**123**	Q	23-120
2-Fluorobiphenyl	81		15-120
2,4,6-Tribromophenol	**128**	Q	10-120
4-Terphenyl-d14	89		41-149

Project Name: B14-Q4 **Lab Number:** L2357923

Project Number: 21010214 **Report Date:** 10/11/23

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270E
Analytical Date: 10/08/23 18:29
Analyst: EK

Extraction Method: EPA 3510C
Extraction Date: 10/07/23 08:49

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 01-04 Batch: WG1836804-1					
Benzaldehyde	ND		ug/l	5.0	0.53
Phenol	ND		ug/l	5.0	0.57
Bis(2-chloroethyl)ether	ND		ug/l	2.0	0.50
2-Chlorophenol	ND		ug/l	2.0	0.48
2-Methylphenol	ND		ug/l	5.0	0.49
Bis(2-chloroisopropyl)ether	ND		ug/l	2.0	0.53
Acetophenone	ND		ug/l	5.0	0.53
n-Nitrosodi-n-propylamine	ND		ug/l	5.0	0.64
3-Methylphenol/4-Methylphenol	ND		ug/l	5.0	0.48
Hexachloroethane	ND		ug/l	2.0	0.58
Nitrobenzene	ND		ug/l	1.4	0.77
Isophorone	ND		ug/l	5.0	1.2
2,4-Dimethylphenol	ND		ug/l	5.0	1.8
Bis(2-chloroethoxy)methane	ND		ug/l	5.0	0.50
2,4-Dichlorophenol	ND		ug/l	5.0	0.41
Naphthalene	ND		ug/l	2.0	0.46
4-Chloroaniline	ND		ug/l	3.7	1.1
Hexachlorobutadiene	ND		ug/l	2.0	0.66
Caprolactam	ND		ug/l	10	3.3
2-Methylnaphthalene	ND		ug/l	2.0	0.45
Hexachlorocyclopentadiene	ND		ug/l	20	0.69
1,2,4,5-Tetrachlorobenzene	ND		ug/l	1.7	0.44
2,4,6-Trichlorophenol	ND		ug/l	5.0	0.61
2,4,5-Trichlorophenol	ND		ug/l	5.0	0.77
Biphenyl	ND		ug/l	2.0	0.46
2-Chloronaphthalene	ND		ug/l	2.0	0.44
2-Nitroaniline	ND		ug/l	5.0	0.50
2,6-Dinitrotoluene	ND		ug/l	5.0	0.93
Acenaphthylene	ND		ug/l	2.0	0.46

Project Name: B14-Q4 **Lab Number:** L2357923

Project Number: 21010214 **Report Date:** 10/11/23

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270E
Analytical Date: 10/08/23 18:29
Analyst: EK

Extraction Method: EPA 3510C
Extraction Date: 10/07/23 08:49

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 01-04 Batch: WG1836804-1					
Acenaphthene	ND		ug/l	2.0	0.53
2,4-Dinitrophenol	ND		ug/l	20	6.6
2,4-Dinitrotoluene	ND		ug/l	5.0	1.2
2,3,4,6-Tetrachlorophenol	ND		ug/l	5.0	0.84
Diethyl phthalate	ND		ug/l	5.0	0.38
Fluorene	ND		ug/l	2.0	0.41
4-Nitroaniline	ND		ug/l	5.0	0.80
NDPA/DPA	ND		ug/l	2.0	0.42
Hexachlorobenzene	ND		ug/l	2.0	0.46
Pentachlorophenol	ND		ug/l	10	1.8
Phenanthrene	ND		ug/l	2.0	0.33
Anthracene	ND		ug/l	2.0	0.33
Carbazole	ND		ug/l	2.0	0.49
Di-n-butylphthalate	ND		ug/l	5.0	0.39
Fluoranthene	ND		ug/l	2.0	0.26
Pyrene	ND		ug/l	2.0	0.28
3,3'-Dichlorobenzidine	ND		ug/l	5.0	1.6
Benzo(a)anthracene	ND		ug/l	2.0	0.32
Chrysene	ND		ug/l	1.4	0.34
Bis(2-ethylhexyl)phthalate	ND		ug/l	3.0	1.5
Di-n-octylphthalate	ND		ug/l	5.0	1.3
Benzo(b)fluoranthene	ND		ug/l	2.0	0.35
Benzo(k)fluoranthene	ND		ug/l	2.0	0.37
Benzo(a)pyrene	ND		ug/l	2.0	0.41
Indeno(1,2,3-cd)pyrene	ND		ug/l	2.0	0.40
Dibenzo(a,h)anthracene	ND		ug/l	2.0	0.32
Benzo(ghi)perylene	ND		ug/l	2.0	0.30

Project Name: B14-Q4 **Lab Number:** L2357923

Project Number: 21010214 **Report Date:** 10/11/23

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270E
Analytical Date: 10/08/23 18:29
Analyst: EK

Extraction Method: EPA 3510C
Extraction Date: 10/07/23 08:49

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 01-04 Batch: WG1836804-1					

Surrogate	%Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	60		21-120
Phenol-d6	48		10-120
Nitrobenzene-d5	74		23-120
2-Fluorobiphenyl	76		15-120
2,4,6-Tribromophenol	79		10-120
4-Terphenyl-d14	85		41-149

Project Name: B14-Q4 **Lab Number:** L2357923

Project Number: 21010214 **Report Date:** 10/11/23

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270E-SIM
Analytical Date: 10/10/23 13:29
Analyst: JJW

Extraction Method: EPA 3510C
Extraction Date: 10/07/23 08:50

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS-SIM - Westborough Lab for sample(s): 01-04 Batch: WG1836805-1					
Naphthalene	ND		ug/l	0.10	0.05
2-Methylnaphthalene	ND		ug/l	0.10	0.02
Acenaphthylene	ND		ug/l	0.10	0.01
Acenaphthene	ND		ug/l	0.10	0.01
Fluorene	ND		ug/l	0.10	0.01
Pentachlorophenol	ND		ug/l	0.10	0.01
Phenanthrene	ND		ug/l	0.05	0.02
Anthracene	ND		ug/l	0.10	0.01
Fluoranthene	ND		ug/l	0.10	0.02
Pyrene	ND		ug/l	0.10	0.02
Benzo(a)anthracene	ND		ug/l	0.05	0.02
Chrysene	ND		ug/l	0.10	0.01
Benzo(b)fluoranthene	0.02	J	ug/l	0.05	0.01
Benzo(k)fluoranthene	0.01	J	ug/l	0.10	0.01
Benzo(a)pyrene	ND		ug/l	0.10	0.02
Indeno(1,2,3-cd)pyrene	ND		ug/l	0.10	0.01
Dibenzo(a,h)anthracene	ND		ug/l	0.05	0.01
Benzo(ghi)perylene	ND		ug/l	0.10	0.01

Surrogate	%Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	69		21-120
Phenol-d6	61		10-120
Nitrobenzene-d5	105		23-120
2-Fluorobiphenyl	75		15-120
2,4,6-Tribromophenol	112		10-120
4-Terphenyl-d14	84		41-149

Lab Control Sample Analysis
Batch Quality Control

Project Name: B14-Q4
Project Number: 21010214

Lab Number: L2357923
Report Date: 10/11/23

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-04 Batch: WG1836804-2 WG1836804-3								
Benzaldehyde	84		66		40-140	24		30
Phenol	54		46		12-110	16		30
Bis(2-chloroethyl)ether	69		54		40-140	24		30
2-Chlorophenol	72		59		27-123	20		30
2-Methylphenol	69		59		30-130	16		30
Bis(2-chloroisopropyl)ether	61		48		40-140	24		30
Acetophenone	70		55		39-129	24		30
n-Nitrosodi-n-propylamine	68		56		29-132	19		30
3-Methylphenol/4-Methylphenol	73		60		30-130	20		30
Hexachloroethane	64		55		40-140	15		30
Nitrobenzene	76		60		40-140	24		30
Isophorone	71		57		40-140	22		30
2,4-Dimethylphenol	65		59		30-130	10		30
Bis(2-chloroethoxy)methane	69		57		40-140	19		30
2,4-Dichlorophenol	78		65		30-130	18		30
Naphthalene	72		57		40-140	23		30
4-Chloroaniline	48		51		40-140	6		30
Hexachlorobutadiene	72		57		40-140	23		30
Caprolactam	35		29		10-130	19		30
2-Methylnaphthalene	75		60		40-140	22		30
Hexachlorocyclopentadiene	73		58		40-140	23		30
1,2,4,5-Tetrachlorobenzene	70		58		2-134	19		30
2,4,6-Trichlorophenol	82		70		30-130	16		30

Lab Control Sample Analysis
Batch Quality Control

Project Name: B14-Q4
Project Number: 21010214

Lab Number: L2357923
Report Date: 10/11/23

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-04 Batch: WG1836804-2 WG1836804-3								
2,4,5-Trichlorophenol	78		70		30-130	11		30
Biphenyl	71		59		40-140	18		30
2-Chloronaphthalene	73		62		40-140	16		30
2-Nitroaniline	89		76		52-143	16		30
2,6-Dinitrotoluene	86		70		40-140	21		30
Acenaphthylene	74		61		45-123	19		30
Acenaphthene	68		57		37-111	18		30
2,4-Dinitrophenol	93		87		20-130	7		30
2,4-Dinitrotoluene	89		77		48-143	14		30
2,3,4,6-Tetrachlorophenol	74		68		54-145	8		30
Diethyl phthalate	77		69		40-140	11		30
Fluorene	73		65		40-140	12		30
4-Nitroaniline	78		67		51-143	15		30
NDPA/DPA	74		65		40-140	13		30
Hexachlorobenzene	71		65		40-140	9		30
Pentachlorophenol	68		69		9-103	1		30
Phenanthrene	74		68		40-140	8		30
Anthracene	77		68		40-140	12		30
Carbazole	76		66		55-144	14		30
Di-n-butylphthalate	81		71		40-140	13		30
Fluoranthene	76		67		40-140	13		30
Pyrene	77		65		26-127	17		30
3,3'-Dichlorobenzidine	69		64		40-140	8		30

Lab Control Sample Analysis

Batch Quality Control

Project Name: B14-Q4

Project Number: 21010214

Lab Number: L2357923

Report Date: 10/11/23

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-04 Batch: WG1836804-2 WG1836804-3								
Benzo(a)anthracene	80		72		40-140	11		30
Chrysene	82		74		40-140	10		30
Bis(2-ethylhexyl)phthalate	92		84		40-140	9		30
Di-n-octylphthalate	95		86		40-140	10		30
Benzo(b)fluoranthene	84		75		40-140	11		30
Benzo(k)fluoranthene	80		73		40-140	9		30
Benzo(a)pyrene	88		81		40-140	8		30
Indeno(1,2,3-cd)pyrene	89		79		40-140	12		30
Dibenzo(a,h)anthracene	86		76		40-140	12		30
Benzo(ghi)perylene	86		78		40-140	10		30

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
2-Fluorophenol	64		53		21-120
Phenol-d6	54		44		10-120
Nitrobenzene-d5	74		61		23-120
2-Fluorobiphenyl	74		59		15-120
2,4,6-Tribromophenol	81		73		10-120
4-Terphenyl-d14	79		68		41-149

Lab Control Sample Analysis
Batch Quality Control

Project Name: B14-Q4
Project Number: 21010214

Lab Number: L2357923
Report Date: 10/11/23

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS-SIM - Westborough Lab Associated sample(s): 01-04 Batch: WG1836805-2 WG1836805-3								
Naphthalene	73		63		40-140	15		40
2-Methylnaphthalene	78		65		40-140	18		40
Acenaphthylene	86		72		40-140	18		40
Acenaphthene	76		66		37-111	14		40
Fluorene	81		72		40-140	12		40
Pentachlorophenol	**117**	Q	**106**	Q	9-103	10		40
Phenanthrene	80		72		40-140	11		40
Anthracene	87		78		40-140	11		40
Fluoranthene	93		86		40-140	8		40
Pyrene	92		84		26-127	9		40
Benzo(a)anthracene	97		89		40-140	9		40
Chrysene	87		80		40-140	8		40
Benzo(b)fluoranthene	91		80		40-140	13		40
Benzo(k)fluoranthene	91		80		40-140	13		40
Benzo(a)pyrene	99		89		40-140	11		40
Indeno(1,2,3-cd)pyrene	96		88		40-140	9		40
Dibenzo(a,h)anthracene	91		83		40-140	9		40
Benzo(ghi)perylene	95		86		40-140	10		40

Lab Control Sample Analysis

Batch Quality Control

Project Name: B14-Q4

Project Number: 21010214

Lab Number: L2357923

Report Date: 10/11/23

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS-SIM - Westborough Lab Associated sample(s): 01-04 Batch: WG1836805-2 WG1836805-3								

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
2-Fluorophenol	78		69		21-120
Phenol-d6	75		67		10-120
Nitrobenzene-d5	106		92		23-120
2-Fluorobiphenyl	71		59		15-120
2,4,6-Tribromophenol	**125**	Q	113		10-120
4-Terphenyl-d14	77		81		41-149

Project Name: B14-Q4
Project Number: 21010214

Lab Number: L2357923
Report Date: 10/11/23

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(*)
L2357923-01A	Vial HCl preserved	A	NA		5.0	Y	Absent		PA-8260-SIM(14),PA-8260(14)
L2357923-01B	Vial HCl preserved	A	NA		5.0	Y	Absent		PA-8260-SIM(14),PA-8260(14)
L2357923-01C	Vial HCl preserved	A	NA		5.0	Y	Absent		PA-8260-SIM(14),PA-8260(14)
L2357923-01D	Amber 250ml unpreserved	A	11	11	5.0	Y	Absent		PA-8270SIM-LVI(7),PA-8270-LVI(7)
L2357923-01E	Amber 250ml unpreserved	A	11	11	5.0	Y	Absent		PA-8270SIM-LVI(7),PA-8270-LVI(7)
L2357923-02A	Vial HCl preserved	A	NA		5.0	Y	Absent		PA-8260-SIM(14),PA-8260(14)
L2357923-02B	Vial HCl preserved	A	NA		5.0	Y	Absent		PA-8260-SIM(14),PA-8260(14)
L2357923-02C	Vial HCl preserved	A	NA		5.0	Y	Absent		PA-8260-SIM(14),PA-8260(14)
L2357923-02D	Amber 250ml unpreserved	A	7	7	5.0	Y	Absent		PA-8270SIM-LVI(7),PA-8270-LVI(7)
L2357923-02E	Amber 250ml unpreserved	A	7	7	5.0	Y	Absent		PA-8270SIM-LVI(7),PA-8270-LVI(7)
L2357923-03A	Vial HCl preserved	A	NA		5.0	Y	Absent		PA-8260-SIM(14),PA-8260(14)
L2357923-03B	Vial HCl preserved	A	NA		5.0	Y	Absent		PA-8260-SIM(14),PA-8260(14)
L2357923-03C	Vial HCl preserved	A	NA		5.0	Y	Absent		PA-8260-SIM(14),PA-8260(14)
L2357923-03D	Amber 250ml unpreserved	A	7	7	5.0	Y	Absent		PA-8270SIM-LVI(7),PA-8270-LVI(7)
L2357923-03E	Amber 250ml unpreserved	A	7	7	5.0	Y	Absent		PA-8270SIM-LVI(7),PA-8270-LVI(7)
L2357923-04A	Vial HCl preserved	A	NA		5.0	Y	Absent		PA-8260-SIM(14),PA-8260(14)
L2357923-04B	Vial HCl preserved	A	NA		5.0	Y	Absent		PA-8260-SIM(14),PA-8260(14)
L2357923-04C	Vial HCl preserved	A	NA		5.0	Y	Absent		PA-8260-SIM(14),PA-8260(14)
L2357923-04D	Amber 250ml unpreserved	A	7	7	5.0	Y	Absent		PA-8270SIM-LVI(7),PA-8270-LVI(7)
L2357923-04E	Amber 250ml unpreserved	A	7	7	5.0	Y	Absent		PA-8270SIM-LVI(7),PA-8270-LVI(7)
L2357923-05A	Vial HCl preserved	A	NA		5.0	Y	Absent		PA-8260-SIM(14),PA-8260(14)
L2357923-05B	Vial HCl preserved	A	NA		5.0	Y	Absent		PA-8260-SIM(14),PA-8260(14)
L2357923-05C	Vial HCl preserved	A	NA		5.0	Y	Absent		PA-8260-SIM(14),PA-8260(14)

*Values in parentheses indicate holding time in days

Project Name: B14-Q4
Project Number: 21010214

Lab Number: L2357923
Report Date: 10/11/23

Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L2357923-05D	Vial HCl preserved	A	NA		5.0	Y	Absent		PA-8260-SIM(14),PA-8260(14)

*Values in parentheses indicate holding time in days

Project Name:	B14-Q4	**Lab Number:**	L2357923
Project Number:	21010214	**Report Date:**	10/11/23

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-Q4	**Lab Number:**	L2357923
Project Number:	21010214	**Report Date:**	10/11/23

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-Q4	**Lab Number:**	L2357923
Project Number:	21010214	**Report Date:**	10/11/23

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-Q4	**Lab Number:**	L2357923
Project Number:	21010214	**Report Date:**	10/11/23

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, Azobenzene; SCM: Iodomethane (methyl iodide), 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene.
EPA 8270E: NPW: Dimethylnaphthalene,1,4-Diphenylhydrazine, alpha-Terpineol; 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.
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, SM9221E, 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 1

Date Rec'd in Lab: 10/3/23

ALPHA Job #: L2357923

ALPHA ANALYTICAL
WESTBORO, MA TEL: 508-898-9220 FAX: 508-898-9193
MANSFIELD, MA TEL: 508-822-9300 FAX: 508-822-3288

Client Information

Client: TYA

Address:

Phone:

Fax:

Email:

☐ These samples have been previously analyzed by Alpha

Project Information

Project Name: B14 - Q4

Project Location: B14

Project #: 210214

Project Manager: Bob T.

ALPHA Quote #:

Turn-Around Time

☒ Standard ☐ RUSH (only confirmed if pre-approved!)

Date Due: Time:

Report Information - Data Deliverables

☐ FAX ☐ EMAIL

☐ ADEx ☐ Add'l Deliverables

Billing Information

☐ Same as Client info PO #:

Regulatory Requirements/Report Limits

State /Fed Program	Criteria

Other Project Specific Requirements/Comments/Detection Limits:

ALPHA Lab ID (Lab Use Only)	Sample ID	Collection Date	Collection Time	Sample Matrix	Sampler's Initials	ANALYSIS: VOC 8260	ANALYSIS: SVOC 8270 SIM	Sample Specific Comments	TOTAL # BOTTLES
L7923-01	HI 18-MWS	10/2/23	1325	GW	TP	X	X		5
-02	HI 17-MWS	↓	1425	↓	↓	X	X		5
-03	TM08R-PZM007		1510			X	X		5
-04	HI 16-MWS		1545			X	X		5
-05	TB-WT-01	—	—	—	—	X			4

SAMPLE HANDLING

Filtration
☐ Done
☐ Not needed
☐ Lab to do
Preservation
☐ Lab to do
(Please specify below)

Container Type	V	A
Preservative	B	A

Relinquished By:	Date/Time	Received By:	Date/Time
[illegible] AAL	10/2/23 1600	[illegible] AAL	10.2.23 1600
[illegible]	10.2.23 1800	[illegible]	10/2/23 1800
[illegible]	10/2/23 2100	Anthony Green	OCT 02 2023 2100

10/3/23 0220

10/3/23 0220

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.

ANALYTICAL REPORT

Lab Number:	L2358229
Client:	Tradepoint Atlantic 1600 Sparrows Point Boulevard Baltimore, MD 21219
ATTN:	Robert Tworkowski
Phone:	(443) 649-5073
Project Name:	B14-Q4
Project Number:	21010214
Report Date:	10/12/23

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), OH (CL108), OR (MA-1316), PA (68-03671), RI (LAO00065), TX (T104704476), VT (VT-0935), VA (460195), USDA (Permit #525-23-122-91930).

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

Project Name: B14-Q4
Project Number: 21010214

Lab Number: L2358229
Report Date: 10/12/23

Alpha Sample ID	Client ID	Matrix	Sample Location	Collection Date/Time	Receive Date
L2358229-01	B24-002-MWS	WATER	B14	10/03/23 09:10	10/03/23
L2358229-02	HI21-MWS	WATER	B14	10/03/23 10:00	10/03/23
L2358229-03	HI15-MWS	WATER	B14	10/03/23 13:40	10/03/23
L2358229-04	HI14-MWS	WATER	B14	10/03/23 14:25	10/03/23
L2358229-05	TB-WT-01	WATER	B14	10/03/23 00:00	10/03/23

Project Name:	B14-Q4	**Lab Number:**	L2358229
Project Number:	21010214	**Report Date:**	10/12/23

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, solids and tissues are reported on a dry 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-Q4	**Lab Number:**	L2358229
Project Number:	21010214	**Report Date:**	10/12/23

Case Narrative (continued)

Report Submission

October 12, 2023: This final report includes the results of all requested analyses.

October 10, 2023: This is a preliminary report.

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

Semivolatile Organics by SIM

L2358229-01D: The sample has elevated detection limits due to the dilution required by the sample matrix.

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: Cristin Walker

Title: Technical Director/Representative Date: 10/12/23

ORGANICS

VOLATILES

Project Name: B14-Q4 **Lab Number:** L2358229

Project Number: 21010214 **Report Date:** 10/12/23

SAMPLE RESULTS

Lab ID: L2358229-01 Date Collected: 10/03/23 09:10
Client ID: B24-002-MWS Date Received: 10/03/23
Sample Location: B14 Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8260D
Analytical Date: 10/09/23 11:39
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	0.68	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	4.1	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	1.0		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	0.41	J	ug/l	0.75	0.20	1

Project Name: B14-Q4 **Lab Number:** L2358229

Project Number: 21010214 **Report Date:** 10/12/23

SAMPLE RESULTS

Lab ID: L2358229-01 Date Collected: 10/03/23 09:10

Client ID: B24-002-MWS Date Received: 10/03/23

Sample Location: B14 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	94		70-130
Toluene-d8	100		70-130
4-Bromofluorobenzene	93		70-130
Dibromofluoromethane	99		70-130

Project Name: B14-Q4 **Lab Number:** L2358229

Project Number: 21010214 **Report Date:** 10/12/23

SAMPLE RESULTS

Lab ID: L2358229-01
Client ID: B24-002-MWS
Sample Location: B14

Date Collected: 10/03/23 09:10
Date Received: 10/03/23
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8260D-SIM(M)
Analytical Date: 10/09/23 11:39
Analyst: MCM

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
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	101		70-130
4-Bromofluorobenzene	88		70-130

Project Name: B14-Q4 **Lab Number:** L2358229

Project Number: 21010214 **Report Date:** 10/12/23

SAMPLE RESULTS

Lab ID: L2358229-02 Date Collected: 10/03/23 10:00
Client ID: HI21-MWS Date Received: 10/03/23
Sample Location: B14 Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8260D
Analytical Date: 10/09/23 12:03
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	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-Q4 **Lab Number:** L2358229

Project Number: 21010214 **Report Date:** 10/12/23

SAMPLE RESULTS

Lab ID: L2358229-02 Date Collected: 10/03/23 10:00

Client ID: HI21-MWS Date Received: 10/03/23

Sample Location: B14 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	101		70-130
Toluene-d8	98		70-130
4-Bromofluorobenzene	90		70-130
Dibromofluoromethane	98		70-130

Project Name: B14-Q4 **Lab Number:** L2358229

Project Number: 21010214 **Report Date:** 10/12/23

SAMPLE RESULTS

Lab ID: L2358229-02
Client ID: HI21-MWS
Sample Location: B14

Date Collected: 10/03/23 10:00
Date Received: 10/03/23
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8260D-SIM(M)
Analytical Date: 10/09/23 12:03
Analyst: MCM

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
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	101		70-130
4-Bromofluorobenzene	88		70-130

Project Name: B14-Q4 **Lab Number:** L2358229

Project Number: 21010214 **Report Date:** 10/12/23

SAMPLE RESULTS

Lab ID: L2358229-03 Date Collected: 10/03/23 13:40
Client ID: HI15-MWS Date Received: 10/03/23
Sample Location: B14 Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8260D
Analytical Date: 10/10/23 14:05
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	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-Q4 **Lab Number:** L2358229

Project Number: 21010214 **Report Date:** 10/12/23

SAMPLE RESULTS

Lab ID: L2358229-03 Date Collected: 10/03/23 13:40

Client ID: HI15-MWS Date Received: 10/03/23

Sample Location: B14 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	92		70-130
Toluene-d8	97		70-130
4-Bromofluorobenzene	94		70-130
Dibromofluoromethane	99		70-130

Project Name: B14-Q4 **Lab Number:** L2358229

Project Number: 21010214 **Report Date:** 10/12/23

SAMPLE RESULTS

Lab ID: L2358229-03 Date Collected: 10/03/23 13:40
Client ID: HI15-MWS Date Received: 10/03/23
Sample Location: B14 Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8260D-SIM(M)
Analytical Date: 10/10/23 14:05
Analyst: MCM

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
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	100		70-130
4-Bromofluorobenzene	87		70-130

Project Name: B14-Q4 **Lab Number:** L2358229

Project Number: 21010214 **Report Date:** 10/12/23

SAMPLE RESULTS

Lab ID: L2358229-04 Date Collected: 10/03/23 14:25
Client ID: HI14-MWS Date Received: 10/03/23
Sample Location: B14 Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8260D
Analytical Date: 10/09/23 12:27
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	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-Q4 **Lab Number:** L2358229

Project Number: 21010214 **Report Date:** 10/12/23

SAMPLE RESULTS

Lab ID: L2358229-04 Date Collected: 10/03/23 14:25

Client ID: HI14-MWS Date Received: 10/03/23

Sample Location: B14 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	88		70-130
Toluene-d8	98		70-130
4-Bromofluorobenzene	91		70-130
Dibromofluoromethane	99		70-130

Project Name: B14-Q4 **Lab Number:** L2358229

Project Number: 21010214 **Report Date:** 10/12/23

SAMPLE RESULTS

Lab ID: L2358229-04
Client ID: HI14-MWS
Sample Location: B14

Date Collected: 10/03/23 14:25
Date Received: 10/03/23
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8260D-SIM(M)
Analytical Date: 10/09/23 12:27
Analyst: MCM

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
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	100		70-130
4-Bromofluorobenzene	88		70-130

Project Name: B14-Q4 **Lab Number:** L2358229

Project Number: 21010214 **Report Date:** 10/12/23

SAMPLE RESULTS

Lab ID: L2358229-05 Date Collected: 10/03/23 00:00
Client ID: TB-WT-01 Date Received: 10/03/23
Sample Location: B14 Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8260D
Analytical Date: 10/09/23 06:51
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	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-Q4 **Lab Number:** L2358229

Project Number: 21010214 **Report Date:** 10/12/23

SAMPLE RESULTS

Lab ID: L2358229-05 Date Collected: 10/03/23 00:00

Client ID: TB-WT-01 Date Received: 10/03/23

Sample Location: B14 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	92		70-130
Toluene-d8	101		70-130
4-Bromofluorobenzene	93		70-130
Dibromofluoromethane	102		70-130

Project Name: B14-Q4 **Lab Number:** L2358229

Project Number: 21010214 **Report Date:** 10/12/23

SAMPLE RESULTS

Lab ID: L2358229-05
Client ID: TB-WT-01
Sample Location: B14

Date Collected: 10/03/23 00:00
Date Received: 10/03/23
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8260D-SIM(M)
Analytical Date: 10/09/23 06:51
Analyst: MCM

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
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	89		70-130

Project Name: B14-Q4 **Lab Number:** L2358229

Project Number: 21010214 **Report Date:** 10/12/23

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260D
Analytical Date: 10/09/23 06:03
Analyst: MCM

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 01-02,04-05 Batch: WG1837620-5					
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-Q4 **Lab Number:** L2358229

Project Number: 21010214 **Report Date:** 10/12/23

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260D
Analytical Date: 10/09/23 06:03
Analyst: MCM

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 01-02,04-05 Batch: WG1837620-5					
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-Q4 **Lab Number:** L2358229

Project Number: 21010214 **Report Date:** 10/12/23

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260D
Analytical Date: 10/09/23 06:03
Analyst: MCM

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 01-02,04-05 Batch: WG1837620-5					

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	100		70-130
Toluene-d8	100		70-130
4-Bromofluorobenzene	93		70-130
Dibromofluoromethane	98		70-130

Project Name: B14-Q4 **Lab Number:** L2358229

Project Number: 21010214 **Report Date:** 10/12/23

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260D-SIM(M)
Analytical Date: 10/09/23 06:03
Analyst: MCM

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS-SIM - Westborough Lab for sample(s): 01-02,04-05 Batch: WG1837624-5					
1,1,2,2-Tetrachloroethane	ND		ug/l	0.050	0.006

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	99		70-130
4-Bromofluorobenzene	89		70-130

Project Name: B14-Q4 **Lab Number:** L2358229

Project Number: 21010214 **Report Date:** 10/12/23

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260D-SIM(M)
Analytical Date: 10/10/23 06:16
Analyst: MCM

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS-SIM - Westborough Lab for sample(s): 03 Batch: WG1838223-5					
1,1,2,2-Tetrachloroethane	ND		ug/l	0.050	0.006

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	99		70-130
4-Bromofluorobenzene	88		70-130

Project Name: B14-Q4 **Lab Number:** L2358229

Project Number: 21010214 **Report Date:** 10/12/23

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260D
Analytical Date: 10/10/23 06:16
Analyst: MCM

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 03 Batch: WG1838224-5					
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-Q4 **Lab Number:** L2358229

Project Number: 21010214 **Report Date:** 10/12/23

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260D
Analytical Date: 10/10/23 06:16
Analyst: MCM

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 03 Batch: WG1838224-5					
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-Q4 **Lab Number:** L2358229

Project Number: 21010214 **Report Date:** 10/12/23

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260D
Analytical Date: 10/10/23 06:16
Analyst: MCM

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 03 Batch: WG1838224-5					

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	91		70-130
Toluene-d8	98		70-130
4-Bromofluorobenzene	94		70-130
Dibromofluoromethane	96		70-130

Lab Control Sample Analysis

Batch Quality Control

Project Name: B14-Q4

Project Number: 21010214

Lab Number: L2358229

Report Date: 10/12/23

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-02,04-05 Batch: WG1837620-3 WG1837620-4								
Dichlorodifluoromethane	94		90		36-147	4		20
Chloromethane	96		97		64-130	1		20
Vinyl chloride	130		120		55-140	8		20
Bromomethane	120		120		39-139	0		20
Chloroethane	130		130		55-138	0		20
Trichlorofluoromethane	100		100		62-150	0		20
1,1-Dichloroethene	100		94		61-145	6		20
Carbon disulfide	94		91		51-130	3		20
1,1,2-Trichloro-1,2,2-Trifluoroethane	96		97		70-130	1		20
Methylene chloride	93		95		70-130	2		20
Acetone	95		98		58-148	3		20
trans-1,2-Dichloroethene	95		93		70-130	2		20
Methyl Acetate	98		97		70-130	1		20
Methyl tert butyl ether	92		89		63-130	3		20
1,1-Dichloroethane	95		94		70-130	1		20
cis-1,2-Dichloroethene	95		95		70-130	0		20
Cyclohexane	93		90		70-130	3		20
Chloroform	92		91		70-130	1		20
Carbon tetrachloride	110		100		63-132	10		20
1,1,1-Trichloroethane	98		97		67-130	1		20
2-Butanone	100		99		63-138	1		20
Benzene	100		95		70-130	5		20
1,2-Dichloroethane	98		98		70-130	0		20

Lab Control Sample Analysis
Batch Quality Control

Project Name: B14-Q4
Project Number: 21010214

Lab Number: L2358229
Report Date: 10/12/23

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-02,04-05 Batch: WG1837620-3 WG1837620-4								
Trichloroethene	92		92		70-130	0		20
1,2-Dichloropropane	94		91		70-130	3		20
Bromodichloromethane	94		91		67-130	3		20
cis-1,3-Dichloropropene	84		84		70-130	0		20
Toluene	94		91		70-130	3		20
Tetrachloroethene	97		98		70-130	1		20
4-Methyl-2-pentanone	84		81		59-130	4		20
trans-1,3-Dichloropropene	84		85		70-130	1		20
1,1,2-Trichloroethane	85		85		70-130	0		20
Dibromochloromethane	86		87		63-130	1		20
1,2-Dibromoethane	88		92		70-130	4		20
2-Hexanone	77		80		57-130	4		20
Chlorobenzene	92		93		75-130	1		20
Ethylbenzene	89		88		70-130	1		20
p/m-Xylene	95		95		70-130	0		20
o-Xylene	85		85		70-130	0		20
Styrene	90		90		70-130	0		20
Bromoform	74		75		54-136	1		20
Isopropylbenzene	87		87		70-130	0		20
1,1,2,2-Tetrachloroethane	79		81		67-130	3		20
1,3-Dichlorobenzene	88		90		70-130	2		20
1,4-Dichlorobenzene	89		90		70-130	1		20
1,2-Dichlorobenzene	90		90		70-130	0		20

Lab Control Sample Analysis

Batch Quality Control

Project Name: B14-Q4

Project Number: 21010214

Lab Number: L2358229

Report Date: 10/12/23

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-02,04-05 Batch: WG1837620-3 WG1837620-4								
1,2-Dibromo-3-chloropropane	83		86		41-144	4		20
1,2,4-Trichlorobenzene	87		86		70-130	1		20
1,2,3-Trichlorobenzene	89		92		70-130	3		20

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
1,2-Dichloroethane-d4	91		91		70-130
Toluene-d8	98		97		70-130
4-Bromofluorobenzene	92		93		70-130
Dibromofluoromethane	100		99		70-130

Lab Control Sample Analysis

Batch Quality Control

Project Name: B14-Q4
Project Number: 21010214

Lab Number: L2358229
Report Date: 10/12/23

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS-SIM - Westborough Lab Associated sample(s): 01-02,04-05 Batch: WG1837624-3 WG1837624-4								
1,1,2,2-Tetrachloroethane	82		80		70-130	2		25

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
1,2-Dichloroethane-d4	98		98		70-130
4-Bromofluorobenzene	91		90		70-130

Lab Control Sample Analysis

Batch Quality Control

Project Name: B14-Q4
Project Number: 21010214

Lab Number: L2358229
Report Date: 10/12/23

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS-SIM - Westborough Lab Associated sample(s): 03 Batch: WG1838223-3 WG1838223-4								
1,1,2,2-Tetrachloroethane	83		81		70-130	2		25

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
1,2-Dichloroethane-d4	99		99		70-130
4-Bromofluorobenzene	91		90		70-130

Lab Control Sample Analysis
Batch Quality Control

Project Name: B14-Q4
Project Number: 21010214

Lab Number: L2358229
Report Date: 10/12/23

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 03 Batch: WG1838224-3 WG1838224-4								
Dichlorodifluoromethane	94		93		36-147	1		20
Chloromethane	92		94		64-130	2		20
Vinyl chloride	120		120		55-140	0		20
Bromomethane	84		95		39-139	12		20
Chloroethane	130		**140**	Q	55-138	7		20
Trichlorofluoromethane	100		100		62-150	0		20
1,1-Dichloroethene	94		98		61-145	4		20
Carbon disulfide	93		95		51-130	2		20
1,1,2-Trichloro-1,2,2-Trifluoroethane	90		97		70-130	7		20
Methylene chloride	96		96		70-130	0		20
Acetone	99		110		58-148	11		20
trans-1,2-Dichloroethene	96		97		70-130	1		20
Methyl Acetate	100		100		70-130	0		20
Methyl tert butyl ether	94		95		63-130	1		20
1,1-Dichloroethane	97		97		70-130	0		20
cis-1,2-Dichloroethene	99		99		70-130	0		20
Cyclohexane	92		93		70-130	1		20
Chloroform	93		92		70-130	1		20
Carbon tetrachloride	100		100		63-132	0		20
1,1,1-Trichloroethane	98		99		67-130	1		20
2-Butanone	100		100		63-138	0		20
Benzene	98		97		70-130	1		20
1,2-Dichloroethane	100		100		70-130	0		20

Lab Control Sample Analysis
Batch Quality Control

Project Name: B14-Q4
Project Number: 21010214

Lab Number: L2358229
Report Date: 10/12/23

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 03 Batch: WG1838224-3 WG1838224-4								
Trichloroethene	94		93		70-130	1		20
1,2-Dichloropropane	97		96		70-130	1		20
Bromodichloromethane	92		92		67-130	0		20
cis-1,3-Dichloropropene	89		91		70-130	2		20
Toluene	93		95		70-130	2		20
Tetrachloroethene	99		99		70-130	0		20
4-Methyl-2-pentanone	85		84		59-130	1		20
trans-1,3-Dichloropropene	86		86		70-130	0		20
1,1,2-Trichloroethane	88		89		70-130	1		20
Dibromochloromethane	92		89		63-130	3		20
1,2-Dibromoethane	95		94		70-130	1		20
2-Hexanone	84		83		57-130	1		20
Chlorobenzene	95		94		75-130	1		20
Ethylbenzene	90		90		70-130	0		20
p/m-Xylene	95		95		70-130	0		20
o-Xylene	90		85		70-130	6		20
Styrene	90		90		70-130	0		20
Bromoform	76		76		54-136	0		20
Isopropylbenzene	89		88		70-130	1		20
1,1,2,2-Tetrachloroethane	82		83		67-130	1		20
1,3-Dichlorobenzene	93		89		70-130	4		20
1,4-Dichlorobenzene	91		91		70-130	0		20
1,2-Dichlorobenzene	92		92		70-130	0		20

Lab Control Sample Analysis

Batch Quality Control

Project Name: B14-Q4

Project Number: 21010214

Lab Number: L2358229

Report Date: 10/12/23

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 03 Batch: WG1838224-3 WG1838224-4								
1,2-Dibromo-3-chloropropane	85		84		41-144	1		20
1,2,4-Trichlorobenzene	89		88		70-130	1		20
1,2,3-Trichlorobenzene	94		92		70-130	2		20

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
1,2-Dichloroethane-d4	91		92		70-130
Toluene-d8	98		98		70-130
4-Bromofluorobenzene	93		94		70-130
Dibromofluoromethane	100		100		70-130

SEMIVOLATILES

Project Name: B14-Q4 **Lab Number:** L2358229

Project Number: 21010214 **Report Date:** 10/12/23

SAMPLE RESULTS

Lab ID: L2358229-01
Client ID: B24-002-MWS
Sample Location: B14

Date Collected: 10/03/23 09:10
Date Received: 10/03/23
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8270E
Analytical Date: 10/09/23 02:47
Analyst: SZ

Extraction Method: EPA 3510C
Extraction Date: 10/07/23 08:49

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Benzaldehyde	ND		ug/l	5.0	0.53	1
Phenol	2.0	J	ug/l	5.0	0.57	1
Bis(2-chloroethyl)ether	ND		ug/l	2.0	0.50	1
2-Chlorophenol	ND		ug/l	2.0	0.48	1
2-Methylphenol	0.54	J	ug/l	5.0	0.49	1
Bis(2-chloroisopropyl)ether	ND		ug/l	2.0	0.53	1
Acetophenone	ND		ug/l	5.0	0.53	1
n-Nitrosodi-n-propylamine	ND		ug/l	5.0	0.64	1
3-Methylphenol/4-Methylphenol	4.7	J	ug/l	5.0	0.48	1
Hexachloroethane	ND		ug/l	2.0	0.58	1
Nitrobenzene	ND		ug/l	1.4	0.77	1
Isophorone	ND		ug/l	5.0	1.2	1
2,4-Dimethylphenol	ND		ug/l	5.0	1.8	1
Bis(2-chloroethoxy)methane	ND		ug/l	5.0	0.50	1
2,4-Dichlorophenol	ND		ug/l	5.0	0.41	1
Naphthalene	ND		ug/l	2.0	0.46	1
4-Chloroaniline	ND		ug/l	3.7	1.1	1
Hexachlorobutadiene	ND		ug/l	2.0	0.66	1
Caprolactam	ND		ug/l	10	3.3	1
2-Methylnaphthalene	ND		ug/l	2.0	0.45	1
Hexachlorocyclopentadiene	ND		ug/l	20	0.69	1
1,2,4,5-Tetrachlorobenzene	ND		ug/l	1.7	0.44	1
2,4,6-Trichlorophenol	ND		ug/l	5.0	0.61	1
2,4,5-Trichlorophenol	ND		ug/l	5.0	0.77	1
Biphenyl	ND		ug/l	2.0	0.46	1
2-Chloronaphthalene	ND		ug/l	2.0	0.44	1
2-Nitroaniline	ND		ug/l	5.0	0.50	1
2,6-Dinitrotoluene	ND		ug/l	5.0	0.93	1

Project Name: B14-Q4 **Lab Number:** L2358229

Project Number: 21010214 **Report Date:** 10/12/23

SAMPLE RESULTS

Lab ID: L2358229-01 Date Collected: 10/03/23 09:10

Client ID: B24-002-MWS Date Received: 10/03/23

Sample Location: B14 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	0.46	1
Acenaphthene	ND		ug/l	2.0	0.53	1
2,4-Dinitrophenol	ND		ug/l	20	6.6	1
2,4-Dinitrotoluene	ND		ug/l	5.0	1.2	1
2,3,4,6-Tetrachlorophenol	ND		ug/l	5.0	0.84	1
Diethyl phthalate	ND		ug/l	5.0	0.38	1
Fluorene	ND		ug/l	2.0	0.41	1
4-Nitroaniline	ND		ug/l	5.0	0.80	1
NDPA/DPA	ND		ug/l	2.0	0.42	1
Hexachlorobenzene	ND		ug/l	2.0	0.46	1
Pentachlorophenol	ND		ug/l	10	1.8	1
Phenanthrene	ND		ug/l	2.0	0.33	1
Anthracene	ND		ug/l	2.0	0.33	1
Carbazole	ND		ug/l	2.0	0.49	1
Di-n-butylphthalate	ND		ug/l	5.0	0.39	1
Fluoranthene	ND		ug/l	2.0	0.26	1
Pyrene	ND		ug/l	2.0	0.28	1
3,3'-Dichlorobenzidine	ND		ug/l	5.0	1.6	1
Benzo(a)anthracene	ND		ug/l	2.0	0.32	1
Chrysene	ND		ug/l	1.4	0.34	1
Bis(2-ethylhexyl)phthalate	ND		ug/l	3.0	1.5	1
Di-n-octylphthalate	ND		ug/l	5.0	1.3	1
Benzo(b)fluoranthene	ND		ug/l	2.0	0.35	1
Benzo(k)fluoranthene	ND		ug/l	2.0	0.37	1
Benzo(a)pyrene	ND		ug/l	2.0	0.41	1
Indeno(1,2,3-cd)pyrene	ND		ug/l	2.0	0.40	1
Dibenzo(a,h)anthracene	ND		ug/l	2.0	0.32	1
Benzo(ghi)perylene	ND		ug/l	2.0	0.30	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	57		21-120
Phenol-d6	45		10-120
Nitrobenzene-d5	69		23-120
2-Fluorobiphenyl	71		15-120
2,4,6-Tribromophenol	80		10-120
4-Terphenyl-d14	79		41-149

Project Name: B14-Q4 **Lab Number:** L2358229

Project Number: 21010214 **Report Date:** 10/12/23

SAMPLE RESULTS

Lab ID: L2358229-01 D
Client ID: B24-002-MWS
Sample Location: B14

Date Collected: 10/03/23 09:10
Date Received: 10/03/23
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8270E-SIM
Analytical Date: 10/12/23 13:21
Analyst: AH

Extraction Method: EPA 3510C
Extraction Date: 10/07/23 08:50

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS-SIM - Westborough Lab						
Naphthalene	0.28	J	ug/l	0.50	0.24	5
2-Methylnaphthalene	ND		ug/l	0.50	0.11	5
Acenaphthylene	ND		ug/l	0.50	0.06	5
Acenaphthene	0.10	J	ug/l	0.50	0.07	5
Fluorene	0.09	J	ug/l	0.50	0.07	5
Pentachlorophenol	0.35	J	ug/l	0.50	0.07	5
Phenanthrene	0.12	J	ug/l	0.25	0.12	5
Anthracene	ND		ug/l	0.50	0.07	5
Fluoranthene	0.10	J	ug/l	0.50	0.10	5
Pyrene	0.12	J	ug/l	0.50	0.10	5
Benzo(a)anthracene	ND		ug/l	0.25	0.10	5
Chrysene	ND		ug/l	0.50	0.06	5
Benzo(b)fluoranthene	ND		ug/l	0.25	0.06	5
Benzo(k)fluoranthene	ND		ug/l	0.50	0.04	5
Benzo(a)pyrene	ND		ug/l	0.50	0.08	5
Indeno(1,2,3-cd)pyrene	ND		ug/l	0.50	0.06	5
Dibenzo(a,h)anthracene	ND		ug/l	0.25	0.06	5
Benzo(ghi)perylene	ND		ug/l	0.50	0.07	5

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	66		21-120
Phenol-d6	54		10-120
Nitrobenzene-d5	93		23-120
2-Fluorobiphenyl	54		15-120
2,4,6-Tribromophenol	81		10-120
4-Terphenyl-d14	58		41-149

Project Name: B14-Q4 **Lab Number:** L2358229

Project Number: 21010214 **Report Date:** 10/12/23

SAMPLE RESULTS

Lab ID: L2358229-02
Client ID: HI21-MWS
Sample Location: B14

Date Collected: 10/03/23 10:00
Date Received: 10/03/23
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8270E
Analytical Date: 10/08/23 22:26
Analyst: SZ

Extraction Method: EPA 3510C
Extraction Date: 10/07/23 08:49

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Benzaldehyde	ND		ug/l	5.0	0.53	1
Phenol	ND		ug/l	5.0	0.57	1
Bis(2-chloroethyl)ether	ND		ug/l	2.0	0.50	1
2-Chlorophenol	ND		ug/l	2.0	0.48	1
2-Methylphenol	ND		ug/l	5.0	0.49	1
Bis(2-chloroisopropyl)ether	ND		ug/l	2.0	0.53	1
Acetophenone	ND		ug/l	5.0	0.53	1
n-Nitrosodi-n-propylamine	ND		ug/l	5.0	0.64	1
3-Methylphenol/4-Methylphenol	ND		ug/l	5.0	0.48	1
Hexachloroethane	ND		ug/l	2.0	0.58	1
Nitrobenzene	ND		ug/l	1.4	0.77	1
Isophorone	ND		ug/l	5.0	1.2	1
2,4-Dimethylphenol	ND		ug/l	5.0	1.8	1
Bis(2-chloroethoxy)methane	ND		ug/l	5.0	0.50	1
2,4-Dichlorophenol	ND		ug/l	5.0	0.41	1
Naphthalene	ND		ug/l	2.0	0.46	1
4-Chloroaniline	ND		ug/l	3.7	1.1	1
Hexachlorobutadiene	ND		ug/l	2.0	0.66	1
Caprolactam	ND		ug/l	10	3.3	1
2-Methylnaphthalene	ND		ug/l	2.0	0.45	1
Hexachlorocyclopentadiene	ND		ug/l	20	0.69	1
1,2,4,5-Tetrachlorobenzene	ND		ug/l	1.7	0.44	1
2,4,6-Trichlorophenol	ND		ug/l	5.0	0.61	1
2,4,5-Trichlorophenol	ND		ug/l	5.0	0.77	1
Biphenyl	ND		ug/l	2.0	0.46	1
2-Chloronaphthalene	ND		ug/l	2.0	0.44	1
2-Nitroaniline	ND		ug/l	5.0	0.50	1
2,6-Dinitrotoluene	ND		ug/l	5.0	0.93	1

Project Name: B14-Q4 **Lab Number:** L2358229

Project Number: 21010214 **Report Date:** 10/12/23

SAMPLE RESULTS

Lab ID: L2358229-02 Date Collected: 10/03/23 10:00

Client ID: HI21-MWS Date Received: 10/03/23

Sample Location: B14 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	0.46	1
Acenaphthene	ND		ug/l	2.0	0.53	1
2,4-Dinitrophenol	ND		ug/l	20	6.6	1
2,4-Dinitrotoluene	ND		ug/l	5.0	1.2	1
2,3,4,6-Tetrachlorophenol	ND		ug/l	5.0	0.84	1
Diethyl phthalate	ND		ug/l	5.0	0.38	1
Fluorene	ND		ug/l	2.0	0.41	1
4-Nitroaniline	ND		ug/l	5.0	0.80	1
NDPA/DPA	ND		ug/l	2.0	0.42	1
Hexachlorobenzene	ND		ug/l	2.0	0.46	1
Pentachlorophenol	ND		ug/l	10	1.8	1
Phenanthrene	ND		ug/l	2.0	0.33	1
Anthracene	ND		ug/l	2.0	0.33	1
Carbazole	ND		ug/l	2.0	0.49	1
Di-n-butylphthalate	ND		ug/l	5.0	0.39	1
Fluoranthene	ND		ug/l	2.0	0.26	1
Pyrene	ND		ug/l	2.0	0.28	1
3,3'-Dichlorobenzidine	ND		ug/l	5.0	1.6	1
Benzo(a)anthracene	ND		ug/l	2.0	0.32	1
Chrysene	ND		ug/l	1.4	0.34	1
Bis(2-ethylhexyl)phthalate	ND		ug/l	3.0	1.5	1
Di-n-octylphthalate	ND		ug/l	5.0	1.3	1
Benzo(b)fluoranthene	ND		ug/l	2.0	0.35	1
Benzo(k)fluoranthene	ND		ug/l	2.0	0.37	1
Benzo(a)pyrene	ND		ug/l	2.0	0.41	1
Indeno(1,2,3-cd)pyrene	ND		ug/l	2.0	0.40	1
Dibenzo(a,h)anthracene	ND		ug/l	2.0	0.32	1
Benzo(ghi)perylene	ND		ug/l	2.0	0.30	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	61		21-120
Phenol-d6	48		10-120
Nitrobenzene-d5	77		23-120
2-Fluorobiphenyl	75		15-120
2,4,6-Tribromophenol	81		10-120
4-Terphenyl-d14	79		41-149

Project Name: B14-Q4 **Lab Number:** L2358229

Project Number: 21010214 **Report Date:** 10/12/23

SAMPLE RESULTS

Lab ID: L2358229-02
Client ID: HI21-MWS
Sample Location: B14

Date Collected: 10/03/23 10:00
Date Received: 10/03/23
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8270E-SIM
Analytical Date: 10/08/23 21:07
Analyst: ALS

Extraction Method: EPA 3510C
Extraction Date: 10/07/23 08:50

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS-SIM - Westborough Lab						
Naphthalene	ND		ug/l	0.10	0.05	1
2-Methylnaphthalene	ND		ug/l	0.10	0.02	1
Acenaphthylene	0.02	J	ug/l	0.10	0.01	1
Acenaphthene	0.02	J	ug/l	0.10	0.01	1
Fluorene	0.02	J	ug/l	0.10	0.01	1
Pentachlorophenol	0.32		ug/l	0.10	0.01	1
Phenanthrene	0.03	J	ug/l	0.05	0.02	1
Anthracene	0.04	J	ug/l	0.10	0.01	1
Fluoranthene	0.03	J	ug/l	0.10	0.02	1
Pyrene	0.04	J	ug/l	0.10	0.02	1
Benzo(a)anthracene	ND		ug/l	0.05	0.02	1
Chrysene	ND		ug/l	0.10	0.01	1
Benzo(b)fluoranthene	0.01	J	ug/l	0.05	0.01	1
Benzo(k)fluoranthene	ND		ug/l	0.10	0.01	1
Benzo(a)pyrene	ND		ug/l	0.10	0.02	1
Indeno(1,2,3-cd)pyrene	ND		ug/l	0.10	0.01	1
Dibenzo(a,h)anthracene	ND		ug/l	0.05	0.01	1
Benzo(ghi)perylene	ND		ug/l	0.10	0.01	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	72		21-120
Phenol-d6	65		10-120
Nitrobenzene-d5	110		23-120
2-Fluorobiphenyl	74		15-120
2,4,6-Tribromophenol	114		10-120
4-Terphenyl-d14	83		41-149

Project Name: B14-Q4 **Lab Number:** L2358229

Project Number: 21010214 **Report Date:** 10/12/23

SAMPLE RESULTS

Lab ID: L2358229-03
Client ID: HI15-MWS
Sample Location: B14

Date Collected: 10/03/23 13:40
Date Received: 10/03/23
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8270E
Analytical Date: 10/08/23 22:49
Analyst: SZ

Extraction Method: EPA 3510C
Extraction Date: 10/07/23 08:49

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Benzaldehyde	ND		ug/l	5.0	0.53	1
Phenol	ND		ug/l	5.0	0.57	1
Bis(2-chloroethyl)ether	ND		ug/l	2.0	0.50	1
2-Chlorophenol	ND		ug/l	2.0	0.48	1
2-Methylphenol	ND		ug/l	5.0	0.49	1
Bis(2-chloroisopropyl)ether	ND		ug/l	2.0	0.53	1
Acetophenone	ND		ug/l	5.0	0.53	1
n-Nitrosodi-n-propylamine	ND		ug/l	5.0	0.64	1
3-Methylphenol/4-Methylphenol	ND		ug/l	5.0	0.48	1
Hexachloroethane	ND		ug/l	2.0	0.58	1
Nitrobenzene	ND		ug/l	1.4	0.77	1
Isophorone	ND		ug/l	5.0	1.2	1
2,4-Dimethylphenol	ND		ug/l	5.0	1.8	1
Bis(2-chloroethoxy)methane	ND		ug/l	5.0	0.50	1
2,4-Dichlorophenol	ND		ug/l	5.0	0.41	1
Naphthalene	ND		ug/l	2.0	0.46	1
4-Chloroaniline	ND		ug/l	3.7	1.1	1
Hexachlorobutadiene	ND		ug/l	2.0	0.66	1
Caprolactam	ND		ug/l	10	3.3	1
2-Methylnaphthalene	ND		ug/l	2.0	0.45	1
Hexachlorocyclopentadiene	ND		ug/l	20	0.69	1
1,2,4,5-Tetrachlorobenzene	ND		ug/l	1.7	0.44	1
2,4,6-Trichlorophenol	ND		ug/l	5.0	0.61	1
2,4,5-Trichlorophenol	ND		ug/l	5.0	0.77	1
Biphenyl	ND		ug/l	2.0	0.46	1
2-Chloronaphthalene	ND		ug/l	2.0	0.44	1
2-Nitroaniline	ND		ug/l	5.0	0.50	1
2,6-Dinitrotoluene	ND		ug/l	5.0	0.93	1

Project Name: B14-Q4 **Lab Number:** L2358229

Project Number: 21010214 **Report Date:** 10/12/23

SAMPLE RESULTS

Lab ID: L2358229-03 Date Collected: 10/03/23 13:40

Client ID: HI15-MWS Date Received: 10/03/23

Sample Location: B14 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	0.46	1
Acenaphthene	ND		ug/l	2.0	0.53	1
2,4-Dinitrophenol	ND		ug/l	20	6.6	1
2,4-Dinitrotoluene	ND		ug/l	5.0	1.2	1
2,3,4,6-Tetrachlorophenol	ND		ug/l	5.0	0.84	1
Diethyl phthalate	ND		ug/l	5.0	0.38	1
Fluorene	ND		ug/l	2.0	0.41	1
4-Nitroaniline	ND		ug/l	5.0	0.80	1
NDPA/DPA	ND		ug/l	2.0	0.42	1
Hexachlorobenzene	ND		ug/l	2.0	0.46	1
Pentachlorophenol	ND		ug/l	10	1.8	1
Phenanthrene	ND		ug/l	2.0	0.33	1
Anthracene	ND		ug/l	2.0	0.33	1
Carbazole	ND		ug/l	2.0	0.49	1
Di-n-butylphthalate	ND		ug/l	5.0	0.39	1
Fluoranthene	ND		ug/l	2.0	0.26	1
Pyrene	ND		ug/l	2.0	0.28	1
3,3'-Dichlorobenzidine	ND		ug/l	5.0	1.6	1
Benzo(a)anthracene	ND		ug/l	2.0	0.32	1
Chrysene	ND		ug/l	1.4	0.34	1
Bis(2-ethylhexyl)phthalate	ND		ug/l	3.0	1.5	1
Di-n-octylphthalate	ND		ug/l	5.0	1.3	1
Benzo(b)fluoranthene	ND		ug/l	2.0	0.35	1
Benzo(k)fluoranthene	ND		ug/l	2.0	0.37	1
Benzo(a)pyrene	ND		ug/l	2.0	0.41	1
Indeno(1,2,3-cd)pyrene	ND		ug/l	2.0	0.40	1
Dibenzo(a,h)anthracene	ND		ug/l	2.0	0.32	1
Benzo(ghi)perylene	ND		ug/l	2.0	0.30	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	67		21-120
Phenol-d6	55		10-120
Nitrobenzene-d5	84		23-120
2-Fluorobiphenyl	87		15-120
2,4,6-Tribromophenol	97		10-120
4-Terphenyl-d14	95		41-149

Project Name: B14-Q4 **Lab Number:** L2358229

Project Number: 21010214 **Report Date:** 10/12/23

SAMPLE RESULTS

Lab ID: L2358229-03
Client ID: HI15-MWS
Sample Location: B14

Date Collected: 10/03/23 13:40
Date Received: 10/03/23
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8270E-SIM
Analytical Date: 10/08/23 21:23
Analyst: ALS

Extraction Method: EPA 3510C
Extraction Date: 10/07/23 08:50

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS-SIM - Westborough Lab						
Naphthalene	0.09	J	ug/l	0.10	0.05	1
2-Methylnaphthalene	ND		ug/l	0.10	0.02	1
Acenaphthylene	0.03	J	ug/l	0.10	0.01	1
Acenaphthene	0.03	J	ug/l	0.10	0.01	1
Fluorene	0.03	J	ug/l	0.10	0.01	1
Pentachlorophenol	ND		ug/l	0.10	0.01	1
Phenanthrene	0.04	J	ug/l	0.05	0.02	1
Anthracene	0.08	J	ug/l	0.10	0.01	1
Fluoranthene	0.03	J	ug/l	0.10	0.02	1
Pyrene	0.02	J	ug/l	0.10	0.02	1
Benzo(a)anthracene	ND		ug/l	0.05	0.02	1
Chrysene	ND		ug/l	0.10	0.01	1
Benzo(b)fluoranthene	ND		ug/l	0.05	0.01	1
Benzo(k)fluoranthene	ND		ug/l	0.10	0.01	1
Benzo(a)pyrene	ND		ug/l	0.10	0.02	1
Indeno(1,2,3-cd)pyrene	ND		ug/l	0.10	0.01	1
Dibenzo(a,h)anthracene	ND		ug/l	0.05	0.01	1
Benzo(ghi)perylene	ND		ug/l	0.10	0.01	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	84		21-120
Phenol-d6	79		10-120
Nitrobenzene-d5	**131**	Q	23-120
2-Fluorobiphenyl	86		15-120
2,4,6-Tribromophenol	**141**	Q	10-120
4-Terphenyl-d14	93		41-149

Project Name: B14-Q4 **Lab Number:** L2358229

Project Number: 21010214 **Report Date:** 10/12/23

SAMPLE RESULTS

Lab ID: L2358229-04
Client ID: HI14-MWS
Sample Location: B14

Date Collected: 10/03/23 14:25
Date Received: 10/03/23
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8270E
Analytical Date: 10/08/23 22:10
Analyst: IM

Extraction Method: EPA 3510C
Extraction Date: 10/07/23 08:49

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Benzaldehyde	ND		ug/l	5.0	0.53	1
Phenol	ND		ug/l	5.0	0.57	1
Bis(2-chloroethyl)ether	ND		ug/l	2.0	0.50	1
2-Chlorophenol	ND		ug/l	2.0	0.48	1
2-Methylphenol	ND		ug/l	5.0	0.49	1
Bis(2-chloroisopropyl)ether	ND		ug/l	2.0	0.53	1
Acetophenone	ND		ug/l	5.0	0.53	1
n-Nitrosodi-n-propylamine	ND		ug/l	5.0	0.64	1
3-Methylphenol/4-Methylphenol	ND		ug/l	5.0	0.48	1
Hexachloroethane	ND		ug/l	2.0	0.58	1
Nitrobenzene	ND		ug/l	1.4	0.77	1
Isophorone	ND		ug/l	5.0	1.2	1
2,4-Dimethylphenol	ND		ug/l	5.0	1.8	1
Bis(2-chloroethoxy)methane	ND		ug/l	5.0	0.50	1
2,4-Dichlorophenol	ND		ug/l	5.0	0.41	1
Naphthalene	ND		ug/l	2.0	0.46	1
4-Chloroaniline	ND		ug/l	3.7	1.1	1
Hexachlorobutadiene	ND		ug/l	2.0	0.66	1
Caprolactam	ND		ug/l	10	3.3	1
2-Methylnaphthalene	ND		ug/l	2.0	0.45	1
Hexachlorocyclopentadiene	ND		ug/l	20	0.69	1
1,2,4,5-Tetrachlorobenzene	ND		ug/l	1.7	0.44	1
2,4,6-Trichlorophenol	ND		ug/l	5.0	0.61	1
2,4,5-Trichlorophenol	ND		ug/l	5.0	0.77	1
Biphenyl	ND		ug/l	2.0	0.46	1
2-Chloronaphthalene	ND		ug/l	2.0	0.44	1
2-Nitroaniline	ND		ug/l	5.0	0.50	1
2,6-Dinitrotoluene	ND		ug/l	5.0	0.93	1

Project Name: B14-Q4 **Lab Number:** L2358229

Project Number: 21010214 **Report Date:** 10/12/23

SAMPLE RESULTS

Lab ID: L2358229-04 Date Collected: 10/03/23 14:25

Client ID: HI14-MWS Date Received: 10/03/23

Sample Location: B14 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	0.46	1
Acenaphthene	ND		ug/l	2.0	0.53	1
2,4-Dinitrophenol	ND		ug/l	20	6.6	1
2,4-Dinitrotoluene	ND		ug/l	5.0	1.2	1
2,3,4,6-Tetrachlorophenol	ND		ug/l	5.0	0.84	1
Diethyl phthalate	ND		ug/l	5.0	0.38	1
Fluorene	ND		ug/l	2.0	0.41	1
4-Nitroaniline	ND		ug/l	5.0	0.80	1
NDPA/DPA	ND		ug/l	2.0	0.42	1
Hexachlorobenzene	ND		ug/l	2.0	0.46	1
Pentachlorophenol	ND		ug/l	10	1.8	1
Phenanthrene	0.45	J	ug/l	2.0	0.33	1
Anthracene	ND		ug/l	2.0	0.33	1
Carbazole	ND		ug/l	2.0	0.49	1
Di-n-butylphthalate	ND		ug/l	5.0	0.39	1
Fluoranthene	ND		ug/l	2.0	0.26	1
Pyrene	ND		ug/l	2.0	0.28	1
3,3'-Dichlorobenzidine	ND		ug/l	5.0	1.6	1
Benzo(a)anthracene	ND		ug/l	2.0	0.32	1
Chrysene	ND		ug/l	1.4	0.34	1
Bis(2-ethylhexyl)phthalate	ND		ug/l	3.0	1.5	1
Di-n-octylphthalate	ND		ug/l	5.0	1.3	1
Benzo(b)fluoranthene	ND		ug/l	2.0	0.35	1
Benzo(k)fluoranthene	ND		ug/l	2.0	0.37	1
Benzo(a)pyrene	ND		ug/l	2.0	0.41	1
Indeno(1,2,3-cd)pyrene	ND		ug/l	2.0	0.40	1
Dibenzo(a,h)anthracene	ND		ug/l	2.0	0.32	1
Benzo(ghi)perylene	ND		ug/l	2.0	0.30	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	32		21-120
Phenol-d6	27		10-120
Nitrobenzene-d5	38		23-120
2-Fluorobiphenyl	39		15-120
2,4,6-Tribromophenol	45		10-120
4-Terphenyl-d14	**39**	Q	41-149

Project Name: B14-Q4 **Lab Number:** L2358229

Project Number: 21010214 **Report Date:** 10/12/23

SAMPLE RESULTS

Lab ID: L2358229-04
Client ID: HI14-MWS
Sample Location: B14

Date Collected: 10/03/23 14:25
Date Received: 10/03/23
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8270E-SIM
Analytical Date: 10/08/23 21:40
Analyst: ALS

Extraction Method: EPA 3510C
Extraction Date: 10/07/23 08:50

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS-SIM - Westborough Lab						
Naphthalene	0.16		ug/l	0.10	0.05	1
2-Methylnaphthalene	0.03	J	ug/l	0.10	0.02	1
Acenaphthylene	0.04	J	ug/l	0.10	0.01	1
Acenaphthene	0.59		ug/l	0.10	0.01	1
Fluorene	0.36		ug/l	0.10	0.01	1
Pentachlorophenol	ND		ug/l	0.10	0.01	1
Phenanthrene	0.49		ug/l	0.05	0.02	1
Anthracene	0.15		ug/l	0.10	0.01	1
Fluoranthene	0.26		ug/l	0.10	0.02	1
Pyrene	0.18		ug/l	0.10	0.02	1
Benzo(a)anthracene	ND		ug/l	0.05	0.02	1
Chrysene	ND		ug/l	0.10	0.01	1
Benzo(b)fluoranthene	ND		ug/l	0.05	0.01	1
Benzo(k)fluoranthene	ND		ug/l	0.10	0.01	1
Benzo(a)pyrene	ND		ug/l	0.10	0.02	1
Indeno(1,2,3-cd)pyrene	ND		ug/l	0.10	0.01	1
Dibenzo(a,h)anthracene	ND		ug/l	0.05	0.01	1
Benzo(ghi)perylene	ND		ug/l	0.10	0.01	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	42		21-120
Phenol-d6	37		10-120
Nitrobenzene-d5	60		23-120
2-Fluorobiphenyl	44		15-120
2,4,6-Tribromophenol	71		10-120
4-Terphenyl-d14	53		41-149

Project Name: B14-Q4 **Lab Number:** L2358229

Project Number: 21010214 **Report Date:** 10/12/23

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270E
Analytical Date: 10/08/23 18:29
Analyst: EK

Extraction Method: EPA 3510C
Extraction Date: 10/07/23 08:49

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 01-04 Batch: WG1836804-1					
Benzaldehyde	ND		ug/l	5.0	0.53
Phenol	ND		ug/l	5.0	0.57
Bis(2-chloroethyl)ether	ND		ug/l	2.0	0.50
2-Chlorophenol	ND		ug/l	2.0	0.48
2-Methylphenol	ND		ug/l	5.0	0.49
Bis(2-chloroisopropyl)ether	ND		ug/l	2.0	0.53
Acetophenone	ND		ug/l	5.0	0.53
n-Nitrosodi-n-propylamine	ND		ug/l	5.0	0.64
3-Methylphenol/4-Methylphenol	ND		ug/l	5.0	0.48
Hexachloroethane	ND		ug/l	2.0	0.58
Nitrobenzene	ND		ug/l	1.4	0.77
Isophorone	ND		ug/l	5.0	1.2
2,4-Dimethylphenol	ND		ug/l	5.0	1.8
Bis(2-chloroethoxy)methane	ND		ug/l	5.0	0.50
2,4-Dichlorophenol	ND		ug/l	5.0	0.41
Naphthalene	ND		ug/l	2.0	0.46
4-Chloroaniline	ND		ug/l	3.7	1.1
Hexachlorobutadiene	ND		ug/l	2.0	0.66
Caprolactam	ND		ug/l	10	3.3
2-Methylnaphthalene	ND		ug/l	2.0	0.45
Hexachlorocyclopentadiene	ND		ug/l	20	0.69
1,2,4,5-Tetrachlorobenzene	ND		ug/l	1.7	0.44
2,4,6-Trichlorophenol	ND		ug/l	5.0	0.61
2,4,5-Trichlorophenol	ND		ug/l	5.0	0.77
Biphenyl	ND		ug/l	2.0	0.46
2-Chloronaphthalene	ND		ug/l	2.0	0.44
2-Nitroaniline	ND		ug/l	5.0	0.50
2,6-Dinitrotoluene	ND		ug/l	5.0	0.93
Acenaphthylene	ND		ug/l	2.0	0.46

Project Name: B14-Q4 **Lab Number:** L2358229

Project Number: 21010214 **Report Date:** 10/12/23

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270E
Analytical Date: 10/08/23 18:29
Analyst: EK

Extraction Method: EPA 3510C
Extraction Date: 10/07/23 08:49

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 01-04 Batch: WG1836804-1					
Acenaphthene	ND		ug/l	2.0	0.53
2,4-Dinitrophenol	ND		ug/l	20	6.6
2,4-Dinitrotoluene	ND		ug/l	5.0	1.2
2,3,4,6-Tetrachlorophenol	ND		ug/l	5.0	0.84
Diethyl phthalate	ND		ug/l	5.0	0.38
Fluorene	ND		ug/l	2.0	0.41
4-Nitroaniline	ND		ug/l	5.0	0.80
NDPA/DPA	ND		ug/l	2.0	0.42
Hexachlorobenzene	ND		ug/l	2.0	0.46
Pentachlorophenol	ND		ug/l	10	1.8
Phenanthrene	ND		ug/l	2.0	0.33
Anthracene	ND		ug/l	2.0	0.33
Carbazole	ND		ug/l	2.0	0.49
Di-n-butylphthalate	ND		ug/l	5.0	0.39
Fluoranthene	ND		ug/l	2.0	0.26
Pyrene	ND		ug/l	2.0	0.28
3,3'-Dichlorobenzidine	ND		ug/l	5.0	1.6
Benzo(a)anthracene	ND		ug/l	2.0	0.32
Chrysene	ND		ug/l	1.4	0.34
Bis(2-ethylhexyl)phthalate	ND		ug/l	3.0	1.5
Di-n-octylphthalate	ND		ug/l	5.0	1.3
Benzo(b)fluoranthene	ND		ug/l	2.0	0.35
Benzo(k)fluoranthene	ND		ug/l	2.0	0.37
Benzo(a)pyrene	ND		ug/l	2.0	0.41
Indeno(1,2,3-cd)pyrene	ND		ug/l	2.0	0.40
Dibenzo(a,h)anthracene	ND		ug/l	2.0	0.32
Benzo(ghi)perylene	ND		ug/l	2.0	0.30

Project Name: B14-Q4 **Lab Number:** L2358229

Project Number: 21010214 **Report Date:** 10/12/23

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270E
Analytical Date: 10/08/23 18:29
Analyst: EK

Extraction Method: EPA 3510C
Extraction Date: 10/07/23 08:49

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 01-04 Batch: WG1836804-1					

Surrogate	%Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	60		21-120
Phenol-d6	48		10-120
Nitrobenzene-d5	74		23-120
2-Fluorobiphenyl	76		15-120
2,4,6-Tribromophenol	79		10-120
4-Terphenyl-d14	85		41-149

Project Name: B14-Q4 **Lab Number:** L2358229

Project Number: 21010214 **Report Date:** 10/12/23

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270E-SIM
Analytical Date: 10/10/23 13:29
Analyst: JJW

Extraction Method: EPA 3510C
Extraction Date: 10/07/23 08:50

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS-SIM - Westborough Lab for sample(s): 01-04 Batch: WG1836805-1					
Naphthalene	ND		ug/l	0.10	0.05
2-Methylnaphthalene	ND		ug/l	0.10	0.02
Acenaphthylene	ND		ug/l	0.10	0.01
Acenaphthene	ND		ug/l	0.10	0.01
Fluorene	ND		ug/l	0.10	0.01
Pentachlorophenol	ND		ug/l	0.10	0.01
Phenanthrene	ND		ug/l	0.05	0.02
Anthracene	ND		ug/l	0.10	0.01
Fluoranthene	ND		ug/l	0.10	0.02
Pyrene	ND		ug/l	0.10	0.02
Benzo(a)anthracene	ND		ug/l	0.05	0.02
Chrysene	ND		ug/l	0.10	0.01
Benzo(b)fluoranthene	0.02	J	ug/l	0.05	0.01
Benzo(k)fluoranthene	0.01	J	ug/l	0.10	0.01
Benzo(a)pyrene	ND		ug/l	0.10	0.02
Indeno(1,2,3-cd)pyrene	ND		ug/l	0.10	0.01
Dibenzo(a,h)anthracene	ND		ug/l	0.05	0.01
Benzo(ghi)perylene	ND		ug/l	0.10	0.01

Surrogate	%Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	69		21-120
Phenol-d6	61		10-120
Nitrobenzene-d5	105		23-120
2-Fluorobiphenyl	75		15-120
2,4,6-Tribromophenol	112		10-120
4-Terphenyl-d14	84		41-149

Lab Control Sample Analysis

Batch Quality Control

Project Name: B14-Q4

Project Number: 21010214

Lab Number: L2358229

Report Date: 10/12/23

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-04 Batch: WG1836804-2 WG1836804-3								
Benzaldehyde	84		66		40-140	24		30
Phenol	54		46		12-110	16		30
Bis(2-chloroethyl)ether	69		54		40-140	24		30
2-Chlorophenol	72		59		27-123	20		30
2-Methylphenol	69		59		30-130	16		30
Bis(2-chloroisopropyl)ether	61		48		40-140	24		30
Acetophenone	70		55		39-129	24		30
n-Nitrosodi-n-propylamine	68		56		29-132	19		30
3-Methylphenol/4-Methylphenol	73		60		30-130	20		30
Hexachloroethane	64		55		40-140	15		30
Nitrobenzene	76		60		40-140	24		30
Isophorone	71		57		40-140	22		30
2,4-Dimethylphenol	65		59		30-130	10		30
Bis(2-chloroethoxy)methane	69		57		40-140	19		30
2,4-Dichlorophenol	78		65		30-130	18		30
Naphthalene	72		57		40-140	23		30
4-Chloroaniline	48		51		40-140	6		30
Hexachlorobutadiene	72		57		40-140	23		30
Caprolactam	35		29		10-130	19		30
2-Methylnaphthalene	75		60		40-140	22		30
Hexachlorocyclopentadiene	73		58		40-140	23		30
1,2,4,5-Tetrachlorobenzene	70		58		2-134	19		30
2,4,6-Trichlorophenol	82		70		30-130	16		30

Lab Control Sample Analysis

Batch Quality Control

Project Name: B14-Q4

Project Number: 21010214

Lab Number: L2358229

Report Date: 10/12/23

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-04 Batch: WG1836804-2 WG1836804-3								
2,4,5-Trichlorophenol	78		70		30-130	11		30
Biphenyl	71		59		40-140	18		30
2-Chloronaphthalene	73		62		40-140	16		30
2-Nitroaniline	89		76		52-143	16		30
2,6-Dinitrotoluene	86		70		40-140	21		30
Acenaphthylene	74		61		45-123	19		30
Acenaphthene	68		57		37-111	18		30
2,4-Dinitrophenol	93		87		20-130	7		30
2,4-Dinitrotoluene	89		77		48-143	14		30
2,3,4,6-Tetrachlorophenol	74		68		54-145	8		30
Diethyl phthalate	77		69		40-140	11		30
Fluorene	73		65		40-140	12		30
4-Nitroaniline	78		67		51-143	15		30
NDPA/DPA	74		65		40-140	13		30
Hexachlorobenzene	71		65		40-140	9		30
Pentachlorophenol	68		69		9-103	1		30
Phenanthrene	74		68		40-140	8		30
Anthracene	77		68		40-140	12		30
Carbazole	76		66		55-144	14		30
Di-n-butylphthalate	81		71		40-140	13		30
Fluoranthene	76		67		40-140	13		30
Pyrene	77		65		26-127	17		30
3,3'-Dichlorobenzidine	69		64		40-140	8		30

Lab Control Sample Analysis
Batch Quality Control

Project Name: B14-Q4
Project Number: 21010214

Lab Number: L2358229
Report Date: 10/12/23

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-04 Batch: WG1836804-2 WG1836804-3								
Benzo(a)anthracene	80		72		40-140	11		30
Chrysene	82		74		40-140	10		30
Bis(2-ethylhexyl)phthalate	92		84		40-140	9		30
Di-n-octylphthalate	95		86		40-140	10		30
Benzo(b)fluoranthene	84		75		40-140	11		30
Benzo(k)fluoranthene	80		73		40-140	9		30
Benzo(a)pyrene	88		81		40-140	8		30
Indeno(1,2,3-cd)pyrene	89		79		40-140	12		30
Dibenzo(a,h)anthracene	86		76		40-140	12		30
Benzo(ghi)perylene	86		78		40-140	10		30

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
2-Fluorophenol	64		53		21-120
Phenol-d6	54		44		10-120
Nitrobenzene-d5	74		61		23-120
2-Fluorobiphenyl	74		59		15-120
2,4,6-Tribromophenol	81		73		10-120
4-Terphenyl-d14	79		68		41-149

Lab Control Sample Analysis
Batch Quality Control

Project Name: B14-Q4
Project Number: 21010214

Lab Number: L2358229
Report Date: 10/12/23

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS-SIM - Westborough Lab Associated sample(s): 01-04 Batch: WG1836805-2 WG1836805-3								
Naphthalene	73		63		40-140	15		40
2-Methylnaphthalene	78		65		40-140	18		40
Acenaphthylene	86		72		40-140	18		40
Acenaphthene	76		66		37-111	14		40
Fluorene	81		72		40-140	12		40
Pentachlorophenol	**117**	Q	**106**	Q	9-103	10		40
Phenanthrene	80		72		40-140	11		40
Anthracene	87		78		40-140	11		40
Fluoranthene	93		86		40-140	8		40
Pyrene	92		84		26-127	9		40
Benzo(a)anthracene	97		89		40-140	9		40
Chrysene	87		80		40-140	8		40
Benzo(b)fluoranthene	91		80		40-140	13		40
Benzo(k)fluoranthene	91		80		40-140	13		40
Benzo(a)pyrene	99		89		40-140	11		40
Indeno(1,2,3-cd)pyrene	96		88		40-140	9		40
Dibenzo(a,h)anthracene	91		83		40-140	9		40
Benzo(ghi)perylene	95		86		40-140	10		40

Lab Control Sample Analysis

Batch Quality Control

Project Name: B14-Q4

Project Number: 21010214

Lab Number: L2358229

Report Date: 10/12/23

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits

Semivolatile Organics by GC/MS-SIM - Westborough Lab Associated sample(s): 01-04 Batch: WG1836805-2 WG1836805-3

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
2-Fluorophenol	78		69		21-120
Phenol-d6	75		67		10-120
Nitrobenzene-d5	106		92		23-120
2-Fluorobiphenyl	71		59		15-120
2,4,6-Tribromophenol	**125**	Q	113		10-120
4-Terphenyl-d14	77		81		41-149

Project Name: B14-Q4
Project Number: 21010214

Lab Number: L2358229
Report Date: 10/12/23

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(*)
L2358229-01A	Vial HCl preserved	A	NA		5.2	Y	Absent		PA-8260-SIM(14),PA-8260(14)
L2358229-01B	Vial HCl preserved	A	NA		5.2	Y	Absent		PA-8260-SIM(14),PA-8260(14)
L2358229-01C	Vial HCl preserved	A	NA		5.2	Y	Absent		PA-8260-SIM(14),PA-8260(14)
L2358229-01D	Amber 250ml unpreserved	A	12	12	5.2	Y	Absent		PA-8270SIM-LVI(7),PA-8270-LVI(7)
L2358229-01E	Amber 250ml unpreserved	A	12	12	5.2	Y	Absent		PA-8270SIM-LVI(7),PA-8270-LVI(7)
L2358229-02A	Vial HCl preserved	A	NA		5.2	Y	Absent		PA-8260-SIM(14),PA-8260(14)
L2358229-02B	Vial HCl preserved	A	NA		5.2	Y	Absent		PA-8260-SIM(14),PA-8260(14)
L2358229-02C	Vial HCl preserved	A	NA		5.2	Y	Absent		PA-8260-SIM(14),PA-8260(14)
L2358229-02D	Amber 250ml unpreserved	A	7	7	5.2	Y	Absent		PA-8270SIM-LVI(7),PA-8270-LVI(7)
L2358229-02E	Amber 250ml unpreserved	A	7	7	5.2	Y	Absent		PA-8270SIM-LVI(7),PA-8270-LVI(7)
L2358229-03A	Vial HCl preserved	A	NA		5.2	Y	Absent		PA-8260-SIM(14),PA-8260(14)
L2358229-03B	Vial HCl preserved	A	NA		5.2	Y	Absent		PA-8260-SIM(14),PA-8260(14)
L2358229-03C	Vial HCl preserved	A	NA		5.2	Y	Absent		PA-8260-SIM(14),PA-8260(14)
L2358229-03D	Amber 250ml unpreserved	A	7	7	5.2	Y	Absent		PA-8270SIM-LVI(7),PA-8270-LVI(7)
L2358229-03E	Amber 250ml unpreserved	A	7	7	5.2	Y	Absent		PA-8270SIM-LVI(7),PA-8270-LVI(7)
L2358229-04A	Vial HCl preserved	A	NA		5.2	Y	Absent		PA-8260-SIM(14),PA-8260(14)
L2358229-04B	Vial HCl preserved	A	NA		5.2	Y	Absent		PA-8260-SIM(14),PA-8260(14)
L2358229-04C	Vial HCl preserved	A	NA		5.2	Y	Absent		PA-8260-SIM(14),PA-8260(14)
L2358229-04D	Amber 250ml unpreserved	A	7	7	5.2	Y	Absent		PA-8270SIM-LVI(7),PA-8270-LVI(7)
L2358229-04E	Amber 250ml unpreserved	A	7	7	5.2	Y	Absent		PA-8270SIM-LVI(7),PA-8270-LVI(7)
L2358229-05A	Vial HCl preserved	A	NA		5.2	Y	Absent		PA-8260-SIM(14),PA-8260(14)
L2358229-05B	Vial HCl preserved	A	NA		5.2	Y	Absent		PA-8260-SIM(14),PA-8260(14)
L2358229-05C	Vial HCl preserved	A	NA		5.2	Y	Absent		PA-8260-SIM(14),PA-8260(14)

*Values in parentheses indicate holding time in days

Project Name: B14-Q4
Project Number: 21010214

Lab Number: L2358229
Report Date: 10/12/23

Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L2358229-05D	Vial HCl preserved	A	NA		5.2	Y	Absent		PA-8260-SIM(14),PA-8260(14)

*Values in parentheses indicate holding time in days

Project Name:	B14-Q4	**Lab Number:**	L2358229
Project Number:	21010214	**Report Date:**	10/12/23

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-Q4	**Lab Number:**	L2358229
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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

Project Name:	B14-Q4	**Lab Number:**	L2358229
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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.)

Project Name:	B14-Q4	**Lab Number:**	L2358229
Project Number:	21010214	**Report Date:**	10/12/23

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, Azobenzene; SCM: Iodomethane (methyl iodide), 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene.
EPA 8270E: NPW: Dimethylnaphthalene,1,4-Diphenylhydrazine, alpha-Terpineol; 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.
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, SM9221E, 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 1

ALPHA ANALYTICAL
WESTBORO, MA TEL: 508-898-9220 FAX: 508-898-9193
MANSFIELD, MA TEL: 508-822-9300 FAX: 508-822-3288

Date Rec'd in Lab: 10/4/23

ALPHA Job #: L2358229

Client Information

Client: TPA
Address:
Phone:
Fax:
Email:
☐ These samples have been previously analyzed by Alpha

Project Information

Project Name: B14-Q4
Project Location: B14
Project #: 21010214
Project Manager: Bob T.
ALPHA Quote #:

Turn-Around Time

☑ Standard ☐ RUSH (only confirmed if pre-approved!)
Date Due: Time:

Report Information - Data Deliverables

☐ FAX ☐ EMAIL
☐ ADEx ☐ Add'l Deliverables

Billing Information

☐ Same as Client info PO #:

Regulatory Requirements/Report Limits

State /Fed Program	Criteria

Other Project Specific Requirements/Comments/Detection Limits:

ALPHA Lab ID (Lab Use Only)	Sample ID	Collection Date	Collection Time	Sample Matrix	Sampler's Initials	ANALYSIS: VOC 8260	ANALYSIS: SVOC 8270 SIM	Sample Specific Comments	TOTAL # BOTTLES
S8229-01	B24-002-MWS	10/3/23	0910	GW	TP	X	X	pH > 10	5
-02	HI 21-MWS		1000			X	X		5
-03	HI 15-MWS		1340			X	X		5
-04	HI 14-MWS		1425			X	X		5
-05	TB-WT-01	—	—	—	—	X			4

SAMPLE HANDLING
Filtration
☐ Done
☐ Not needed
☐ Lab to do
Preservation
☐ Lab to do
(Please specify below)

Container Type	V	A																					
Preservative	B	A																					

SQ 10/4/23 0300
10/4/23 0300

Relinquished By:	Date/Time	Received By:	Date/Time
HMF	10/3/23 1515	HMF AAL	10/03/2023 16:11
	10/03/23 1800		10/3/23 1800
	10/3/23 2100	Anthony Green	OCT 03 2023 2100

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.

ANALYTICAL REPORT

Lab Number:	L2358722
Client:	Tradepoint Atlantic 1600 Sparrows Point Boulevard Baltimore, MD 21219
ATTN:	Robert Tworkowski
Phone:	(443) 649-5073
Project Name:	B14-Q4
Project Number:	21010214
Report Date:	10/13/23

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), OH (CL108), OR (MA-1316), PA (68-03671), RI (LAO00065), TX (T104704476), VT (VT-0935), VA (460195), USDA (Permit #525-23-122-91930).

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

Project Name: B14-Q4
Project Number: 21010214

Lab Number: L2358722
Report Date: 10/13/23

Alpha Sample ID	Client ID	Matrix	Sample Location	Collection Date/Time	Receive Date
L2358722-01	HI10-MWS	WATER	B14	10/04/23 11:30	10/04/23
L2358722-02	HI11-MWS	WATER	B14	10/04/23 13:00	10/04/23
L2358722-03	HI12-MWS	WATER	B14	10/04/23 15:15	10/04/23
L2358722-04	TM04-PZM006	WATER	B14	10/04/23 14:30	10/04/23
L2358722-05	FIELD BLANK	WATER	B14	10/04/23 14:04	10/04/23
L2358722-06	DUP	WATER	B14	10/04/23 00:00	10/04/23
L2358722-07	TB-WT-01	WATER	B14	09/29/23 00:00	10/04/23

Project Name:	B14-Q4	**Lab Number:**	L2358722
Project Number:	21010214	**Report Date:**	10/13/23

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, solids and tissues are reported on a dry 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-Q4	**Lab Number:**	L2358722
Project Number:	21010214	**Report Date:**	10/13/23

Case Narrative (continued)

Report Submission

October 13, 2023: This final report includes the results of all requested analyses.

October 10, 2023: This is a preliminary report.

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

Volatile Organics by SIM

L2358722-04D: The sample has elevated detection limits due to the dilution required by the elevated concentrations of non-target compounds in the sample.

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: Cristin Walker

Title: Technical Director/Representative Date: 10/13/23

ORGANICS

VOLATILES

Project Name: B14-Q4 **Lab Number:** L2358722

Project Number: 21010214 **Report Date:** 10/13/23

SAMPLE RESULTS

Lab ID: L2358722-01
Client ID: HI10-MWS
Sample Location: B14

Date Collected: 10/04/23 11:30
Date Received: 10/04/23
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8260D
Analytical Date: 10/09/23 06:27
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	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	0.97		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	0.53	J	ug/l	0.75	0.20	1

Project Name: B14-Q4 **Lab Number:** L2358722

Project Number: 21010214 **Report Date:** 10/13/23

SAMPLE RESULTS

Lab ID: L2358722-01 Date Collected: 10/04/23 11:30

Client ID: HI10-MWS Date Received: 10/04/23

Sample Location: B14 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	0.17	J	ug/l	0.50	0.17	1
p/m-Xylene	0.74	J	ug/l	1.0	0.33	1
o-Xylene	ND		ug/l	1.0	0.39	1
Xylenes, Total	0.74	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	90		70-130
Toluene-d8	99		70-130
4-Bromofluorobenzene	91		70-130
Dibromofluoromethane	101		70-130

Project Name: B14-Q4 **Lab Number:** L2358722

Project Number: 21010214 **Report Date:** 10/13/23

SAMPLE RESULTS

Lab ID: L2358722-01
Client ID: HI10-MWS
Sample Location: B14

Date Collected: 10/04/23 11:30
Date Received: 10/04/23
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8260D-SIM(M)
Analytical Date: 10/09/23 06:27
Analyst: MCM

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
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	89		70-130

Project Name: B14-Q4 **Lab Number:** L2358722

Project Number: 21010214 **Report Date:** 10/13/23

SAMPLE RESULTS

Lab ID: L2358722-02 Date Collected: 10/04/23 13:00
Client ID: HI11-MWS Date Received: 10/04/23
Sample Location: B14 Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8260D
Analytical Date: 10/09/23 10:03
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	0.72	J	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	4.5	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-Q4 **Lab Number:** L2358722

Project Number: 21010214 **Report Date:** 10/13/23

SAMPLE RESULTS

Lab ID: L2358722-02 Date Collected: 10/04/23 13:00

Client ID: HI11-MWS Date Received: 10/04/23

Sample Location: B14 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	89		70-130
Toluene-d8	100		70-130
4-Bromofluorobenzene	91		70-130
Dibromofluoromethane	99		70-130

Project Name: B14-Q4 **Lab Number:** L2358722

Project Number: 21010214 **Report Date:** 10/13/23

SAMPLE RESULTS

Lab ID: L2358722-02
Client ID: HI11-MWS
Sample Location: B14

Date Collected: 10/04/23 13:00
Date Received: 10/04/23
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8260D-SIM(M)
Analytical Date: 10/09/23 10:03
Analyst: MCM

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
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	88		70-130

Project Name: B14-Q4 **Lab Number:** L2358722

Project Number: 21010214 **Report Date:** 10/13/23

SAMPLE RESULTS

Lab ID: L2358722-03 Date Collected: 10/04/23 15:15
Client ID: HI12-MWS Date Received: 10/04/23
Sample Location: B14 Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8260D
Analytical Date: 10/09/23 10:27
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	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	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-Q4 **Lab Number:** L2358722

Project Number: 21010214 **Report Date:** 10/13/23

SAMPLE RESULTS

Lab ID: L2358722-03 Date Collected: 10/04/23 15:15

Client ID: HI12-MWS Date Received: 10/04/23

Sample Location: B14 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	93		70-130
Toluene-d8	98		70-130
4-Bromofluorobenzene	94		70-130
Dibromofluoromethane	101		70-130

Project Name: B14-Q4 **Lab Number:** L2358722

Project Number: 21010214 **Report Date:** 10/13/23

SAMPLE RESULTS

Lab ID: L2358722-03
Client ID: HI12-MWS
Sample Location: B14

Date Collected: 10/04/23 15:15
Date Received: 10/04/23
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8260D-SIM(M)
Analytical Date: 10/09/23 10:27
Analyst: MCM

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
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	101		70-130
4-Bromofluorobenzene	88		70-130

Project Name: B14-Q4 **Lab Number:** L2358722

Project Number: 21010214 **Report Date:** 10/13/23

SAMPLE RESULTS

Lab ID: L2358722-04 D
Client ID: TM04-PZM006
Sample Location: B14

Date Collected: 10/04/23 14:30
Date Received: 10/04/23
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8260D
Analytical Date: 10/09/23 11:15
Analyst: MCM

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Dichlorodifluoromethane	ND		ug/l	12	0.61	2.5
Chloromethane	ND		ug/l	6.2	0.50	2.5
Vinyl chloride	0.79	J	ug/l	2.5	0.18	2.5
Bromomethane	ND		ug/l	2.5	0.64	2.5
Chloroethane	ND		ug/l	2.5	0.34	2.5
Trichlorofluoromethane	ND		ug/l	6.2	0.40	2.5
1,1-Dichloroethene	ND		ug/l	1.2	0.42	2.5
Carbon disulfide	ND		ug/l	12	0.75	2.5
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND		ug/l	6.2	0.37	2.5
Methylene chloride	ND		ug/l	6.2	1.7	2.5
Acetone	ND		ug/l	12	3.6	2.5
trans-1,2-Dichloroethene	ND		ug/l	1.9	0.41	2.5
Methyl Acetate	ND		ug/l	5.0	0.58	2.5
Methyl tert butyl ether	ND		ug/l	2.5	0.42	2.5
1,1-Dichloroethane	ND		ug/l	1.9	0.52	2.5
cis-1,2-Dichloroethene	ND		ug/l	1.2	0.47	2.5
Cyclohexane	ND		ug/l	25	0.68	2.5
Chloroform	ND		ug/l	1.9	0.56	2.5
Carbon tetrachloride	ND		ug/l	1.2	0.34	2.5
1,1,1-Trichloroethane	ND		ug/l	1.2	0.40	2.5
2-Butanone	ND		ug/l	12	4.8	2.5
Benzene	490		ug/l	1.2	0.40	2.5
1,2-Dichloroethane	ND		ug/l	1.2	0.33	2.5
Trichloroethene	ND		ug/l	1.2	0.44	2.5
1,2-Dichloropropane	ND		ug/l	2.5	0.34	2.5
Bromodichloromethane	ND		ug/l	1.2	0.48	2.5
cis-1,3-Dichloropropene	ND		ug/l	1.2	0.36	2.5
Toluene	1.3	J	ug/l	1.9	0.51	2.5

Project Name: B14-Q4 **Lab Number:** L2358722

Project Number: 21010214 **Report Date:** 10/13/23

SAMPLE RESULTS

Lab ID: L2358722-04 D Date Collected: 10/04/23 14:30

Client ID: TM04-PZM006 Date Received: 10/04/23

Sample Location: B14 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	1.2	0.45	2.5
4-Methyl-2-pentanone	ND		ug/l	12	1.0	2.5
trans-1,3-Dichloropropene	ND		ug/l	1.2	0.41	2.5
1,3-Dichloropropene, Total	ND		ug/l	1.2	0.36	2.5
1,1,2-Trichloroethane	ND		ug/l	1.9	0.36	2.5
Dibromochloromethane	ND		ug/l	1.2	0.37	2.5
1,2-Dibromoethane	ND		ug/l	5.0	0.48	2.5
2-Hexanone	ND		ug/l	12	1.3	2.5
Chlorobenzene	ND		ug/l	1.2	0.44	2.5
Ethylbenzene	4.7		ug/l	1.2	0.42	2.5
p/m-Xylene	6.0		ug/l	2.5	0.83	2.5
o-Xylene	ND		ug/l	2.5	0.98	2.5
Xylenes, Total	6.0		ug/l	2.5	0.83	2.5
Styrene	1.2	J	ug/l	2.5	0.90	2.5
Bromoform	ND		ug/l	5.0	0.62	2.5
Isopropylbenzene	ND		ug/l	1.2	0.47	2.5
1,1,2,2-Tetrachloroethane	ND		ug/l	1.2	0.42	2.5
1,3-Dichlorobenzene	ND		ug/l	6.2	0.46	2.5
1,4-Dichlorobenzene	ND		ug/l	6.2	0.47	2.5
1,2-Dichlorobenzene	ND		ug/l	6.2	0.46	2.5
1,2-Dibromo-3-chloropropane	ND		ug/l	6.2	0.88	2.5
1,2,4-Trichlorobenzene	ND		ug/l	6.2	0.55	2.5
1,2,3-Trichlorobenzene	ND		ug/l	6.2	0.58	2.5

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	91		70-130
Toluene-d8	99		70-130
4-Bromofluorobenzene	94		70-130
Dibromofluoromethane	95		70-130

Project Name: B14-Q4 **Lab Number:** L2358722

Project Number: 21010214 **Report Date:** 10/13/23

SAMPLE RESULTS

Lab ID: L2358722-04 D
Client ID: TM04-PZM006
Sample Location: B14

Date Collected: 10/04/23 14:30
Date Received: 10/04/23
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8260D-SIM(M)
Analytical Date: 10/09/23 11:15
Analyst: MCM

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS-SIM - Westborough Lab						
1,1,2,2-Tetrachloroethane	ND		ug/l	0.125	0.014	2.5

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	100		70-130
4-Bromofluorobenzene	88		70-130

Project Name: B14-Q4 **Lab Number:** L2358722

Project Number: 21010214 **Report Date:** 10/13/23

SAMPLE RESULTS

Lab ID: L2358722-05
Client ID: FIELD BLANK
Sample Location: B14

Date Collected: 10/04/23 14:04
Date Received: 10/04/23
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8260D
Analytical Date: 10/09/23 07:39
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	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-Q4 **Lab Number:** L2358722

Project Number: 21010214 **Report Date:** 10/13/23

SAMPLE RESULTS

Lab ID: L2358722-05 Date Collected: 10/04/23 14:04

Client ID: FIELD BLANK Date Received: 10/04/23

Sample Location: B14 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	89		70-130
Toluene-d8	98		70-130
4-Bromofluorobenzene	92		70-130
Dibromofluoromethane	99		70-130

Project Name: B14-Q4 **Lab Number:** L2358722

Project Number: 21010214 **Report Date:** 10/13/23

SAMPLE RESULTS

Lab ID: L2358722-05
Client ID: FIELD BLANK
Sample Location: B14

Date Collected: 10/04/23 14:04
Date Received: 10/04/23
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8260D-SIM(M)
Analytical Date: 10/09/23 07:39
Analyst: MCM

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
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	88		70-130

Project Name: B14-Q4 **Lab Number:** L2358722

Project Number: 21010214 **Report Date:** 10/13/23

SAMPLE RESULTS

Lab ID: L2358722-06 Date Collected: 10/04/23 00:00

Client ID: DUP Date Received: 10/04/23

Sample Location: B14 Field Prep: Not Specified

Sample Depth:

Matrix: Water

Analytical Method: 1,8260D

Analytical Date: 10/09/23 10:51

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	0.79	J	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	4.8	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	ND		ug/l	0.75	0.20	1

Project Name: B14-Q4 **Lab Number:** L2358722

Project Number: 21010214 **Report Date:** 10/13/23

SAMPLE RESULTS

Lab ID: L2358722-06 Date Collected: 10/04/23 00:00

Client ID: DUP Date Received: 10/04/23

Sample Location: B14 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	95		70-130
Toluene-d8	99		70-130
4-Bromofluorobenzene	93		70-130
Dibromofluoromethane	99		70-130

Project Name: B14-Q4 **Lab Number:** L2358722

Project Number: 21010214 **Report Date:** 10/13/23

SAMPLE RESULTS

Lab ID: L2358722-06
Client ID: DUP
Sample Location: B14

Date Collected: 10/04/23 00:00
Date Received: 10/04/23
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8260D-SIM(M)
Analytical Date: 10/09/23 10:51
Analyst: MCM

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
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	100		70-130
4-Bromofluorobenzene	89		70-130

Project Name: B14-Q4 **Lab Number:** L2358722

Project Number: 21010214 **Report Date:** 10/13/23

SAMPLE RESULTS

Lab ID: L2358722-07 Date Collected: 09/29/23 00:00
Client ID: TB-WT-01 Date Received: 10/04/23
Sample Location: B14 Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8260D
Analytical Date: 10/09/23 07:15
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	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-Q4 **Lab Number:** L2358722

Project Number: 21010214 **Report Date:** 10/13/23

SAMPLE RESULTS

Lab ID: L2358722-07 Date Collected: 09/29/23 00:00

Client ID: TB-WT-01 Date Received: 10/04/23

Sample Location: B14 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	92		70-130
Toluene-d8	99		70-130
4-Bromofluorobenzene	95		70-130
Dibromofluoromethane	99		70-130

Project Name: B14-Q4 **Lab Number:** L2358722

Project Number: 21010214 **Report Date:** 10/13/23

SAMPLE RESULTS

Lab ID: L2358722-07
Client ID: TB-WT-01
Sample Location: B14

Date Collected: 09/29/23 00:00
Date Received: 10/04/23
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8260D-SIM(M)
Analytical Date: 10/09/23 07:15
Analyst: MCM

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
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	89		70-130

Project Name: B14-Q4 **Lab Number:** L2358722

Project Number: 21010214 **Report Date:** 10/13/23

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260D
Analytical Date: 10/09/23 06:03
Analyst: MCM

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 01-07 Batch: WG1837620-5					
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-Q4 **Lab Number:** L2358722

Project Number: 21010214 **Report Date:** 10/13/23

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260D
Analytical Date: 10/09/23 06:03
Analyst: MCM

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 01-07 Batch: WG1837620-5					
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-Q4 **Lab Number:** L2358722

Project Number: 21010214 **Report Date:** 10/13/23

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260D
Analytical Date: 10/09/23 06:03
Analyst: MCM

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 01-07 Batch: WG1837620-5					

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	100		70-130
Toluene-d8	100		70-130
4-Bromofluorobenzene	93		70-130
Dibromofluoromethane	98		70-130

Project Name: B14-Q4 **Lab Number:** L2358722

Project Number: 21010214 **Report Date:** 10/13/23

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260D-SIM(M)
Analytical Date: 10/09/23 06:03
Analyst: MCM

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS-SIM - Westborough Lab for sample(s): 01-07 Batch: WG1837624-5					
1,1,2,2-Tetrachloroethane	ND		ug/l	0.050	0.006

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	99		70-130
4-Bromofluorobenzene	89		70-130

Lab Control Sample Analysis

Batch Quality Control

Project Name: B14-Q4

Project Number: 21010214

Lab Number: L2358722

Report Date: 10/13/23

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-07 Batch: WG1837620-3 WG1837620-4								
Dichlorodifluoromethane	94		90		36-147	4		20
Chloromethane	96		97		64-130	1		20
Vinyl chloride	130		120		55-140	8		20
Bromomethane	120		120		39-139	0		20
Chloroethane	130		130		55-138	0		20
Trichlorofluoromethane	100		100		62-150	0		20
1,1-Dichloroethene	100		94		61-145	6		20
Carbon disulfide	94		91		51-130	3		20
1,1,2-Trichloro-1,2,2-Trifluoroethane	96		97		70-130	1		20
Methylene chloride	93		95		70-130	2		20
Acetone	95		98		58-148	3		20
trans-1,2-Dichloroethene	95		93		70-130	2		20
Methyl Acetate	98		97		70-130	1		20
Methyl tert butyl ether	92		89		63-130	3		20
1,1-Dichloroethane	95		94		70-130	1		20
cis-1,2-Dichloroethene	95		95		70-130	0		20
Cyclohexane	93		90		70-130	3		20
Chloroform	92		91		70-130	1		20
Carbon tetrachloride	110		100		63-132	10		20
1,1,1-Trichloroethane	98		97		67-130	1		20
2-Butanone	100		99		63-138	1		20
Benzene	100		95		70-130	5		20
1,2-Dichloroethane	98		98		70-130	0		20

Lab Control Sample Analysis
Batch Quality Control

Project Name: B14-Q4
Project Number: 21010214

Lab Number: L2358722
Report Date: 10/13/23

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-07 Batch: WG1837620-3 WG1837620-4								
Trichloroethene	92		92		70-130	0		20
1,2-Dichloropropane	94		91		70-130	3		20
Bromodichloromethane	94		91		67-130	3		20
cis-1,3-Dichloropropene	84		84		70-130	0		20
Toluene	94		91		70-130	3		20
Tetrachloroethene	97		98		70-130	1		20
4-Methyl-2-pentanone	84		81		59-130	4		20
trans-1,3-Dichloropropene	84		85		70-130	1		20
1,1,2-Trichloroethane	85		85		70-130	0		20
Dibromochloromethane	86		87		63-130	1		20
1,2-Dibromoethane	88		92		70-130	4		20
2-Hexanone	77		80		57-130	4		20
Chlorobenzene	92		93		75-130	1		20
Ethylbenzene	89		88		70-130	1		20
p/m-Xylene	95		95		70-130	0		20
o-Xylene	85		85		70-130	0		20
Styrene	90		90		70-130	0		20
Bromoform	74		75		54-136	1		20
Isopropylbenzene	87		87		70-130	0		20
1,1,2,2-Tetrachloroethane	79		81		67-130	3		20
1,3-Dichlorobenzene	88		90		70-130	2		20
1,4-Dichlorobenzene	89		90		70-130	1		20
1,2-Dichlorobenzene	90		90		70-130	0		20

Lab Control Sample Analysis

Batch Quality Control

Project Name: B14-Q4

Project Number: 21010214

Lab Number: L2358722

Report Date: 10/13/23

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-07 Batch: WG1837620-3 WG1837620-4								
1,2-Dibromo-3-chloropropane	83		86		41-144	4		20
1,2,4-Trichlorobenzene	87		86		70-130	1		20
1,2,3-Trichlorobenzene	89		92		70-130	3		20

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
1,2-Dichloroethane-d4	91		91		70-130
Toluene-d8	98		97		70-130
4-Bromofluorobenzene	92		93		70-130
Dibromofluoromethane	100		99		70-130

Lab Control Sample Analysis

Batch Quality Control

Project Name: B14-Q4

Project Number: 21010214

Lab Number: L2358722

Report Date: 10/13/23

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS-SIM - Westborough Lab Associated sample(s): 01-07 Batch: WG1837624-3 WG1837624-4								
1,1,2,2-Tetrachloroethane	82		80		70-130	2		25

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
1,2-Dichloroethane-d4	98		98		70-130
4-Bromofluorobenzene	91		90		70-130

Matrix Spike Analysis

Batch Quality Control

Project Name: B14-Q4
Project Number: 21010214

Lab Number: L2358722
Report Date: 10/13/23

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): 01-07 QC Batch ID: WG1837620-6 WG1837620-7 QC Sample: L2358722-01 Client ID: HI10-MWS												
Dichlorodifluoromethane	ND	10	9.3	93		9.4	94		36-147	1		20
Chloromethane	ND	10	9.4	94		10	100		64-130	6		20
Vinyl chloride	ND	10	14	140		14	140		55-140	0		20
Bromomethane	ND	10	8.4	84		9.4	94		39-139	11		20
Chloroethane	ND	10	15	**150**	Q	15	**150**	Q	55-138	0		20
Trichlorofluoromethane	ND	10	10	100		10	100		62-150	0		20
1,1-Dichloroethene	ND	10	9.7	97		10	100		61-145	3		20
Carbon disulfide	ND	10	9.3	93		9.6	96		51-130	3		20
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	10	9.3	93		9.8	98		70-130	5		20
Methylene chloride	ND	10	8.9	89		9.3	93		70-130	4		20
Acetone	ND	10	11	110		12	120		58-148	9		20
trans-1,2-Dichloroethene	ND	10	9.3	93		9.4	94		70-130	1		20
Methyl Acetate	ND	10	8.4	84		9.0	90		70-130	7		20
Methyl tert butyl ether	ND	10	8.5	85		9.0	90		63-130	6		20
1,1-Dichloroethane	ND	10	9.4	94		9.8	98		70-130	4		20
cis-1,2-Dichloroethene	ND	10	9.5	95		9.8	98		70-130	3		20
Cyclohexane	ND	10	9.4J	94		9.5J	95		70-130	1		20
Chloroform	ND	10	9.3	93		8.9	89		70-130	4		20
Carbon tetrachloride	ND	10	10	100		11	110		63-132	10		20
1,1,1-Trichloroethane	ND	10	9.7	97		9.8	98		67-130	1		20
2-Butanone	ND	10	9.8	98		9.6	96		63-138	2		20
Benzene	0.97	10	10	90		11	100		70-130	10		20
1,2-Dichloroethane	ND	10	9.4	94		9.6	96		70-130	2		20

Matrix Spike Analysis

Batch Quality Control

Project Name: B14-Q4

Project Number: 21010214

Lab Number: L2358722

Report Date: 10/13/23

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): 01-07 QC Batch ID: WG1837620-6 WG1837620-7 QC Sample: L2358722-01 Client ID: HI10-MWS												
Trichloroethene	ND	10	8.7	87		8.9	89		70-130	2		20
1,2-Dichloropropane	ND	10	9.0	90		8.9	89		70-130	1		20
Bromodichloromethane	ND	10	8.9	89		8.9	89		67-130	0		20
cis-1,3-Dichloropropene	ND	10	7.7	77		8.1	81		70-130	5		20
Toluene	0.53J	10	9.2	92		9.5	95		70-130	3		20
Tetrachloroethene	ND	10	9.2	92		9.7	97		70-130	5		20
4-Methyl-2-pentanone	ND	10	7.7	77		7.6	76		59-130	1		20
trans-1,3-Dichloropropene	ND	10	7.0	70		7.4	74		70-130	6		20
1,1,2-Trichloroethane	ND	10	7.7	77		8.2	82		70-130	6		20
Dibromochloromethane	ND	10	8.1	81		8.1	81		63-130	0		20
1,2-Dibromoethane	ND	10	8.1	81		8.5	85		70-130	5		20
2-Hexanone	ND	10	6.3	63		7.3	73		57-130	15		20
Chlorobenzene	ND	10	8.6	86		9.0	90		75-130	5		20
Ethylbenzene	0.17J	10	8.3	83		8.5	85		70-130	2		20
p/m-Xylene	0.74J	20	18	90		18	90		70-130	0		20
o-Xylene	ND	20	16	80		17	85		70-130	6		20
Styrene	ND	20	16	80		17	85		70-130	6		20
Bromoform	ND	10	6.4	64		7.0	70		54-136	9		20
Isopropylbenzene	ND	10	8.1	81		8.6	86		70-130	6		20
1,1,2,2-Tetrachloroethane	ND	10	7.4	74		8.1	81		67-130	9		20
1,3-Dichlorobenzene	ND	10	8.0	80		8.7	87		70-130	8		20
1,4-Dichlorobenzene	ND	10	8.3	83		8.8	88		70-130	6		20
1,2-Dichlorobenzene	ND	10	8.4	84		8.9	89		70-130	6		20

Matrix Spike Analysis

Batch Quality Control

Project Name: B14-Q4

Project Number: 21010214

Lab Number: L2358722

Report Date: 10/13/23

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): 01-07 QC Batch ID: WG1837620-6 WG1837620-7 QC Sample: L2358722-01 Client ID: HI10-MWS												
1,2-Dibromo-3-chloropropane	ND	10	7.0	70		8.3	83		41-144	17		20
1,2,4-Trichlorobenzene	ND	10	7.7	77		8.5	85		70-130	10		20
1,2,3-Trichlorobenzene	ND	10	8.4	84		8.9	89		70-130	6		20

Surrogate	MS % Recovery	MS Qualifier	MSD % Recovery	MSD Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	90		92		70-130
4-Bromofluorobenzene	92		93		70-130
Dibromofluoromethane	102		103		70-130
Toluene-d8	96		96		70-130

Matrix Spike Analysis

Batch Quality Control

Project Name: B14-Q4 ***Lab Number:*** L2358722

Project Number: 21010214 ***Report Date:*** 10/13/23

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): 01-07 QC Batch ID: WG1837624-6 WG1837624-7 QC Sample: L2358722-01 Client ID: HI10-MWS												
1,1,2,2-Tetrachloroethane	ND	0.1	0.077	77		0.078	78		70-130	1		30

Surrogate	MS % Recovery	MS Qualifier	MSD % Recovery	MSD Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	102		101		70-130
4-Bromofluorobenzene	88		88		70-130

SEMIVOLATILES

Project Name: B14-Q4 **Lab Number:** L2358722

Project Number: 21010214 **Report Date:** 10/13/23

SAMPLE RESULTS

Lab ID: L2358722-01
Client ID: HI10-MWS
Sample Location: B14

Date Collected: 10/04/23 11:30
Date Received: 10/04/23
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8270E
Analytical Date: 10/08/23 23:13
Analyst: EK

Extraction Method: EPA 3510C
Extraction Date: 10/07/23 18:02

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Benzaldehyde	ND		ug/l	5.0	0.53	1
Phenol	ND		ug/l	5.0	0.57	1
Bis(2-chloroethyl)ether	ND		ug/l	2.0	0.50	1
2-Chlorophenol	ND		ug/l	2.0	0.48	1
2-Methylphenol	ND		ug/l	5.0	0.49	1
Bis(2-chloroisopropyl)ether	ND		ug/l	2.0	0.53	1
Acetophenone	ND		ug/l	5.0	0.53	1
n-Nitrosodi-n-propylamine	ND		ug/l	5.0	0.64	1
3-Methylphenol/4-Methylphenol	0.86	J	ug/l	5.0	0.48	1
Hexachloroethane	ND		ug/l	2.0	0.58	1
Nitrobenzene	ND		ug/l	1.4	0.77	1
Isophorone	ND		ug/l	5.0	1.2	1
2,4-Dimethylphenol	ND		ug/l	5.0	1.8	1
Bis(2-chloroethoxy)methane	ND		ug/l	5.0	0.50	1
2,4-Dichlorophenol	ND		ug/l	5.0	0.41	1
Naphthalene	40		ug/l	2.0	0.46	1
4-Chloroaniline	ND		ug/l	3.7	1.1	1
Hexachlorobutadiene	ND		ug/l	2.0	0.66	1
Caprolactam	ND		ug/l	10	3.3	1
2-Methylnaphthalene	2.2		ug/l	2.0	0.45	1
Hexachlorocyclopentadiene	ND		ug/l	20	0.69	1
1,2,4,5-Tetrachlorobenzene	ND		ug/l	1.7	0.44	1
2,4,6-Trichlorophenol	ND		ug/l	5.0	0.61	1
2,4,5-Trichlorophenol	ND		ug/l	5.0	0.77	1
Biphenyl	ND		ug/l	2.0	0.46	1
2-Chloronaphthalene	ND		ug/l	2.0	0.44	1
2-Nitroaniline	ND		ug/l	5.0	0.50	1
2,6-Dinitrotoluene	ND		ug/l	5.0	0.93	1

Project Name: B14-Q4 **Lab Number:** L2358722

Project Number: 21010214 **Report Date:** 10/13/23

SAMPLE RESULTS

Lab ID: L2358722-01 Date Collected: 10/04/23 11:30

Client ID: HI10-MWS Date Received: 10/04/23

Sample Location: B14 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Acenaphthylene	0.62	J	ug/l	2.0	0.46	1
Acenaphthene	2.0		ug/l	2.0	0.53	1
2,4-Dinitrophenol	ND		ug/l	20	6.6	1
2,4-Dinitrotoluene	ND		ug/l	5.0	1.2	1
2,3,4,6-Tetrachlorophenol	ND		ug/l	5.0	0.84	1
Diethyl phthalate	ND		ug/l	5.0	0.38	1
Fluorene	1.8	J	ug/l	2.0	0.41	1
4-Nitroaniline	ND		ug/l	5.0	0.80	1
NDPA/DPA	ND		ug/l	2.0	0.42	1
Hexachlorobenzene	ND		ug/l	2.0	0.46	1
Pentachlorophenol	ND		ug/l	10	1.8	1
Phenanthrene	2.9		ug/l	2.0	0.33	1
Anthracene	0.46	J	ug/l	2.0	0.33	1
Carbazole	3.6		ug/l	2.0	0.49	1
Di-n-butylphthalate	ND		ug/l	5.0	0.39	1
Fluoranthene	0.72	J	ug/l	2.0	0.26	1
Pyrene	0.62	J	ug/l	2.0	0.28	1
3,3'-Dichlorobenzidine	ND		ug/l	5.0	1.6	1
Benzo(a)anthracene	ND		ug/l	2.0	0.32	1
Chrysene	ND		ug/l	1.4	0.34	1
Bis(2-ethylhexyl)phthalate	1.5	J	ug/l	3.0	1.5	1
Di-n-octylphthalate	ND		ug/l	5.0	1.3	1
Benzo(b)fluoranthene	ND		ug/l	2.0	0.35	1
Benzo(k)fluoranthene	ND		ug/l	2.0	0.37	1
Benzo(a)pyrene	ND		ug/l	2.0	0.41	1
Indeno(1,2,3-cd)pyrene	ND		ug/l	2.0	0.40	1
Dibenzo(a,h)anthracene	ND		ug/l	2.0	0.32	1
Benzo(ghi)perylene	ND		ug/l	2.0	0.30	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	52		21-120
Phenol-d6	41		10-120
Nitrobenzene-d5	63		23-120
2-Fluorobiphenyl	65		15-120
2,4,6-Tribromophenol	75		10-120
4-Terphenyl-d14	68		41-149

Project Name: B14-Q4 **Lab Number:** L2358722

Project Number: 21010214 **Report Date:** 10/13/23

SAMPLE RESULTS

Lab ID: L2358722-01
Client ID: HI10-MWS
Sample Location: B14

Date Collected: 10/04/23 11:30
Date Received: 10/04/23
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8270E-SIM
Analytical Date: 10/10/23 13:13
Analyst: CMM

Extraction Method: EPA 3510C
Extraction Date: 10/07/23 18:03

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS-SIM - Westborough Lab						
Naphthalene	33		ug/l	0.10	0.05	1
2-Methylnaphthalene	2.2		ug/l	0.10	0.02	1
Acenaphthylene	0.70		ug/l	0.10	0.01	1
Acenaphthene	2.1		ug/l	0.10	0.01	1
Fluorene	2.0		ug/l	0.10	0.01	1
Pentachlorophenol	0.23		ug/l	0.10	0.01	1
Phenanthrene	2.9		ug/l	0.05	0.02	1
Anthracene	0.52		ug/l	0.10	0.01	1
Fluoranthene	0.95		ug/l	0.10	0.02	1
Pyrene	0.75		ug/l	0.10	0.02	1
Benzo(a)anthracene	0.07		ug/l	0.05	0.02	1
Chrysene	0.06	J	ug/l	0.10	0.01	1
Benzo(b)fluoranthene	0.05		ug/l	0.05	0.01	1
Benzo(k)fluoranthene	0.02	J	ug/l	0.10	0.01	1
Benzo(a)pyrene	0.04	J	ug/l	0.10	0.02	1
Indeno(1,2,3-cd)pyrene	0.02	J	ug/l	0.10	0.01	1
Dibenzo(a,h)anthracene	ND		ug/l	0.05	0.01	1
Benzo(ghi)perylene	0.02	J	ug/l	0.10	0.01	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	59		21-120
Phenol-d6	52		10-120
Nitrobenzene-d5	89		23-120
2-Fluorobiphenyl	61		15-120
2,4,6-Tribromophenol	99		10-120
4-Terphenyl-d14	67		41-149

Project Name: B14-Q4 **Lab Number:** L2358722

Project Number: 21010214 **Report Date:** 10/13/23

SAMPLE RESULTS

Lab ID: L2358722-02
Client ID: HI11-MWS
Sample Location: B14

Date Collected: 10/04/23 13:00
Date Received: 10/04/23
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8270E
Analytical Date: 10/09/23 00:48
Analyst: EK

Extraction Method: EPA 3510C
Extraction Date: 10/07/23 18:02

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Benzaldehyde	ND		ug/l	5.0	0.53	1
Phenol	ND		ug/l	5.0	0.57	1
Bis(2-chloroethyl)ether	ND		ug/l	2.0	0.50	1
2-Chlorophenol	ND		ug/l	2.0	0.48	1
2-Methylphenol	ND		ug/l	5.0	0.49	1
Bis(2-chloroisopropyl)ether	ND		ug/l	2.0	0.53	1
Acetophenone	ND		ug/l	5.0	0.53	1
n-Nitrosodi-n-propylamine	ND		ug/l	5.0	0.64	1
3-Methylphenol/4-Methylphenol	ND		ug/l	5.0	0.48	1
Hexachloroethane	ND		ug/l	2.0	0.58	1
Nitrobenzene	ND		ug/l	1.4	0.77	1
Isophorone	ND		ug/l	5.0	1.2	1
2,4-Dimethylphenol	ND		ug/l	5.0	1.8	1
Bis(2-chloroethoxy)methane	ND		ug/l	5.0	0.50	1
2,4-Dichlorophenol	ND		ug/l	5.0	0.41	1
Naphthalene	ND		ug/l	2.0	0.46	1
4-Chloroaniline	ND		ug/l	3.7	1.1	1
Hexachlorobutadiene	ND		ug/l	2.0	0.66	1
Caprolactam	ND		ug/l	10	3.3	1
2-Methylnaphthalene	ND		ug/l	2.0	0.45	1
Hexachlorocyclopentadiene	ND		ug/l	20	0.69	1
1,2,4,5-Tetrachlorobenzene	ND		ug/l	1.7	0.44	1
2,4,6-Trichlorophenol	ND		ug/l	5.0	0.61	1
2,4,5-Trichlorophenol	ND		ug/l	5.0	0.77	1
Biphenyl	ND		ug/l	2.0	0.46	1
2-Chloronaphthalene	ND		ug/l	2.0	0.44	1
2-Nitroaniline	ND		ug/l	5.0	0.50	1
2,6-Dinitrotoluene	ND		ug/l	5.0	0.93	1

Project Name: B14-Q4 **Lab Number:** L2358722

Project Number: 21010214 **Report Date:** 10/13/23

SAMPLE RESULTS

Lab ID: L2358722-02 Date Collected: 10/04/23 13:00

Client ID: HI11-MWS Date Received: 10/04/23

Sample Location: B14 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	0.46	1
Acenaphthene	ND		ug/l	2.0	0.53	1
2,4-Dinitrophenol	ND		ug/l	20	6.6	1
2,4-Dinitrotoluene	ND		ug/l	5.0	1.2	1
2,3,4,6-Tetrachlorophenol	ND		ug/l	5.0	0.84	1
Diethyl phthalate	ND		ug/l	5.0	0.38	1
Fluorene	ND		ug/l	2.0	0.41	1
4-Nitroaniline	ND		ug/l	5.0	0.80	1
NDPA/DPA	ND		ug/l	2.0	0.42	1
Hexachlorobenzene	ND		ug/l	2.0	0.46	1
Pentachlorophenol	ND		ug/l	10	1.8	1
Phenanthrene	ND		ug/l	2.0	0.33	1
Anthracene	ND		ug/l	2.0	0.33	1
Carbazole	ND		ug/l	2.0	0.49	1
Di-n-butylphthalate	ND		ug/l	5.0	0.39	1
Fluoranthene	ND		ug/l	2.0	0.26	1
Pyrene	ND		ug/l	2.0	0.28	1
3,3'-Dichlorobenzidine	ND		ug/l	5.0	1.6	1
Benzo(a)anthracene	ND		ug/l	2.0	0.32	1
Chrysene	ND		ug/l	1.4	0.34	1
Bis(2-ethylhexyl)phthalate	ND		ug/l	3.0	1.5	1
Di-n-octylphthalate	ND		ug/l	5.0	1.3	1
Benzo(b)fluoranthene	ND		ug/l	2.0	0.35	1
Benzo(k)fluoranthene	ND		ug/l	2.0	0.37	1
Benzo(a)pyrene	ND		ug/l	2.0	0.41	1
Indeno(1,2,3-cd)pyrene	ND		ug/l	2.0	0.40	1
Dibenzo(a,h)anthracene	ND		ug/l	2.0	0.32	1
Benzo(ghi)perylene	ND		ug/l	2.0	0.30	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	50		21-120
Phenol-d6	38		10-120
Nitrobenzene-d5	67		23-120
2-Fluorobiphenyl	66		15-120
2,4,6-Tribromophenol	77		10-120
4-Terphenyl-d14	70		41-149

Project Name: B14-Q4 **Lab Number:** L2358722

Project Number: 21010214 **Report Date:** 10/13/23

SAMPLE RESULTS

Lab ID: L2358722-02
Client ID: HI11-MWS
Sample Location: B14

Date Collected: 10/04/23 13:00
Date Received: 10/04/23
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8270E-SIM
Analytical Date: 10/10/23 14:35
Analyst: CMM

Extraction Method: EPA 3510C
Extraction Date: 10/07/23 18:03

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS-SIM - Westborough Lab						
Naphthalene	0.38		ug/l	0.10	0.05	1
2-Methylnaphthalene	0.09	J	ug/l	0.10	0.02	1
Acenaphthylene	ND		ug/l	0.10	0.01	1
Acenaphthene	0.08	J	ug/l	0.10	0.01	1
Fluorene	0.04	J	ug/l	0.10	0.01	1
Pentachlorophenol	0.25		ug/l	0.10	0.01	1
Phenanthrene	0.08		ug/l	0.05	0.02	1
Anthracene	0.20		ug/l	0.10	0.01	1
Fluoranthene	0.10		ug/l	0.10	0.02	1
Pyrene	0.12		ug/l	0.10	0.02	1
Benzo(a)anthracene	ND		ug/l	0.05	0.02	1
Chrysene	0.01	J	ug/l	0.10	0.01	1
Benzo(b)fluoranthene	ND		ug/l	0.05	0.01	1
Benzo(k)fluoranthene	ND		ug/l	0.10	0.01	1
Benzo(a)pyrene	ND		ug/l	0.10	0.02	1
Indeno(1,2,3-cd)pyrene	ND		ug/l	0.10	0.01	1
Dibenzo(a,h)anthracene	ND		ug/l	0.05	0.01	1
Benzo(ghi)perylene	ND		ug/l	0.10	0.01	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	62		21-120
Phenol-d6	54		10-120
Nitrobenzene-d5	101		23-120
2-Fluorobiphenyl	70		15-120
2,4,6-Tribromophenol	111		10-120
4-Terphenyl-d14	73		41-149

Project Name: B14-Q4 **Lab Number:** L2358722

Project Number: 21010214 **Report Date:** 10/13/23

SAMPLE RESULTS

Lab ID: L2358722-03
Client ID: HI12-MWS
Sample Location: B14

Date Collected: 10/04/23 15:15
Date Received: 10/04/23
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8270E
Analytical Date: 10/09/23 01:12
Analyst: EK

Extraction Method: EPA 3510C
Extraction Date: 10/07/23 18:02

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Benzaldehyde	ND		ug/l	5.0	0.53	1
Phenol	ND		ug/l	5.0	0.57	1
Bis(2-chloroethyl)ether	ND		ug/l	2.0	0.50	1
2-Chlorophenol	ND		ug/l	2.0	0.48	1
2-Methylphenol	ND		ug/l	5.0	0.49	1
Bis(2-chloroisopropyl)ether	ND		ug/l	2.0	0.53	1
Acetophenone	ND		ug/l	5.0	0.53	1
n-Nitrosodi-n-propylamine	ND		ug/l	5.0	0.64	1
3-Methylphenol/4-Methylphenol	ND		ug/l	5.0	0.48	1
Hexachloroethane	ND		ug/l	2.0	0.58	1
Nitrobenzene	ND		ug/l	1.4	0.77	1
Isophorone	ND		ug/l	5.0	1.2	1
2,4-Dimethylphenol	ND		ug/l	5.0	1.8	1
Bis(2-chloroethoxy)methane	ND		ug/l	5.0	0.50	1
2,4-Dichlorophenol	ND		ug/l	5.0	0.41	1
Naphthalene	11		ug/l	2.0	0.46	1
4-Chloroaniline	ND		ug/l	3.7	1.1	1
Hexachlorobutadiene	ND		ug/l	2.0	0.66	1
Caprolactam	ND		ug/l	10	3.3	1
2-Methylnaphthalene	0.73	J	ug/l	2.0	0.45	1
Hexachlorocyclopentadiene	ND		ug/l	20	0.69	1
1,2,4,5-Tetrachlorobenzene	ND		ug/l	1.7	0.44	1
2,4,6-Trichlorophenol	ND		ug/l	5.0	0.61	1
2,4,5-Trichlorophenol	ND		ug/l	5.0	0.77	1
Biphenyl	ND		ug/l	2.0	0.46	1
2-Chloronaphthalene	ND		ug/l	2.0	0.44	1
2-Nitroaniline	ND		ug/l	5.0	0.50	1
2,6-Dinitrotoluene	ND		ug/l	5.0	0.93	1

Project Name: B14-Q4 **Lab Number:** L2358722

Project Number: 21010214 **Report Date:** 10/13/23

SAMPLE RESULTS

Lab ID: L2358722-03 Date Collected: 10/04/23 15:15

Client ID: HI12-MWS Date Received: 10/04/23

Sample Location: B14 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	0.46	1
Acenaphthene	0.56	J	ug/l	2.0	0.53	1
2,4-Dinitrophenol	ND		ug/l	20	6.6	1
2,4-Dinitrotoluene	ND		ug/l	5.0	1.2	1
2,3,4,6-Tetrachlorophenol	ND		ug/l	5.0	0.84	1
Diethyl phthalate	ND		ug/l	5.0	0.38	1
Fluorene	ND		ug/l	2.0	0.41	1
4-Nitroaniline	ND		ug/l	5.0	0.80	1
NDPA/DPA	ND		ug/l	2.0	0.42	1
Hexachlorobenzene	ND		ug/l	2.0	0.46	1
Pentachlorophenol	ND		ug/l	10	1.8	1
Phenanthrene	ND		ug/l	2.0	0.33	1
Anthracene	ND		ug/l	2.0	0.33	1
Carbazole	ND		ug/l	2.0	0.49	1
Di-n-butylphthalate	ND		ug/l	5.0	0.39	1
Fluoranthene	ND		ug/l	2.0	0.26	1
Pyrene	ND		ug/l	2.0	0.28	1
3,3'-Dichlorobenzidine	ND		ug/l	5.0	1.6	1
Benzo(a)anthracene	ND		ug/l	2.0	0.32	1
Chrysene	ND		ug/l	1.4	0.34	1
Bis(2-ethylhexyl)phthalate	ND		ug/l	3.0	1.5	1
Di-n-octylphthalate	ND		ug/l	5.0	1.3	1
Benzo(b)fluoranthene	ND		ug/l	2.0	0.35	1
Benzo(k)fluoranthene	ND		ug/l	2.0	0.37	1
Benzo(a)pyrene	ND		ug/l	2.0	0.41	1
Indeno(1,2,3-cd)pyrene	ND		ug/l	2.0	0.40	1
Dibenzo(a,h)anthracene	ND		ug/l	2.0	0.32	1
Benzo(ghi)perylene	ND		ug/l	2.0	0.30	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	62		21-120
Phenol-d6	49		10-120
Nitrobenzene-d5	77		23-120
2-Fluorobiphenyl	75		15-120
2,4,6-Tribromophenol	95		10-120
4-Terphenyl-d14	79		41-149

Project Name: B14-Q4 **Lab Number:** L2358722

Project Number: 21010214 **Report Date:** 10/13/23

SAMPLE RESULTS

Lab ID: L2358722-03
Client ID: HI12-MWS
Sample Location: B14

Date Collected: 10/04/23 15:15
Date Received: 10/04/23
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8270E-SIM
Analytical Date: 10/10/23 14:51
Analyst: CMM

Extraction Method: EPA 3510C
Extraction Date: 10/07/23 18:03

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS-SIM - Westborough Lab						
Naphthalene	10		ug/l	0.10	0.05	1
2-Methylnaphthalene	0.83		ug/l	0.10	0.02	1
Acenaphthylene	0.05	J	ug/l	0.10	0.01	1
Acenaphthene	0.58		ug/l	0.10	0.01	1
Fluorene	0.30		ug/l	0.10	0.01	1
Pentachlorophenol	0.11		ug/l	0.10	0.01	1
Phenanthrene	0.19		ug/l	0.05	0.02	1
Anthracene	0.15		ug/l	0.10	0.01	1
Fluoranthene	0.08	J	ug/l	0.10	0.02	1
Pyrene	0.15		ug/l	0.10	0.02	1
Benzo(a)anthracene	0.04	J	ug/l	0.05	0.02	1
Chrysene	0.03	J	ug/l	0.10	0.01	1
Benzo(b)fluoranthene	0.04	J	ug/l	0.05	0.01	1
Benzo(k)fluoranthene	0.02	J	ug/l	0.10	0.01	1
Benzo(a)pyrene	0.03	J	ug/l	0.10	0.02	1
Indeno(1,2,3-cd)pyrene	0.02	J	ug/l	0.10	0.01	1
Dibenzo(a,h)anthracene	ND		ug/l	0.05	0.01	1
Benzo(ghi)perylene	0.02	J	ug/l	0.10	0.01	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	70		21-120
Phenol-d6	64		10-120
Nitrobenzene-d5	112		23-120
2-Fluorobiphenyl	76		15-120
2,4,6-Tribromophenol	**121**	Q	10-120
4-Terphenyl-d14	70		41-149

Project Name: B14-Q4 **Lab Number:** L2358722

Project Number: 21010214 **Report Date:** 10/13/23

SAMPLE RESULTS

Lab ID: L2358722-04
Client ID: TM04-PZM006
Sample Location: B14

Date Collected: 10/04/23 14:30
Date Received: 10/04/23
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8270E
Analytical Date: 10/09/23 01:36
Analyst: SZ

Extraction Method: EPA 3510C
Extraction Date: 10/07/23 18:02

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Benzaldehyde	ND		ug/l	5.0	0.53	1
Phenol	ND		ug/l	5.0	0.57	1
Bis(2-chloroethyl)ether	ND		ug/l	2.0	0.50	1
2-Chlorophenol	ND		ug/l	2.0	0.48	1
2-Methylphenol	ND		ug/l	5.0	0.49	1
Bis(2-chloroisopropyl)ether	ND		ug/l	2.0	0.53	1
Acetophenone	ND		ug/l	5.0	0.53	1
n-Nitrosodi-n-propylamine	ND		ug/l	5.0	0.64	1
3-Methylphenol/4-Methylphenol	ND		ug/l	5.0	0.48	1
Hexachloroethane	ND		ug/l	2.0	0.58	1
Nitrobenzene	ND		ug/l	1.4	0.77	1
Isophorone	ND		ug/l	5.0	1.2	1
2,4-Dimethylphenol	ND		ug/l	5.0	1.8	1
Bis(2-chloroethoxy)methane	ND		ug/l	5.0	0.50	1
2,4-Dichlorophenol	ND		ug/l	5.0	0.41	1
Naphthalene	150		ug/l	2.0	0.46	1
4-Chloroaniline	ND		ug/l	3.7	1.1	1
Hexachlorobutadiene	ND		ug/l	2.0	0.66	1
Caprolactam	ND		ug/l	10	3.3	1
2-Methylnaphthalene	1.4	J	ug/l	2.0	0.45	1
Hexachlorocyclopentadiene	ND		ug/l	20	0.69	1
1,2,4,5-Tetrachlorobenzene	ND		ug/l	1.7	0.44	1
2,4,6-Trichlorophenol	ND		ug/l	5.0	0.61	1
2,4,5-Trichlorophenol	ND		ug/l	5.0	0.77	1
Biphenyl	ND		ug/l	2.0	0.46	1
2-Chloronaphthalene	ND		ug/l	2.0	0.44	1
2-Nitroaniline	ND		ug/l	5.0	0.50	1
2,6-Dinitrotoluene	ND		ug/l	5.0	0.93	1

Project Name: B14-Q4 **Lab Number:** L2358722

Project Number: 21010214 **Report Date:** 10/13/23

SAMPLE RESULTS

Lab ID: L2358722-04 Date Collected: 10/04/23 14:30

Client ID: TM04-PZM006 Date Received: 10/04/23

Sample Location: B14 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Acenaphthylene	2.7		ug/l	2.0	0.46	1
Acenaphthene	ND		ug/l	2.0	0.53	1
2,4-Dinitrophenol	ND		ug/l	20	6.6	1
2,4-Dinitrotoluene	ND		ug/l	5.0	1.2	1
2,3,4,6-Tetrachlorophenol	ND		ug/l	5.0	0.84	1
Diethyl phthalate	ND		ug/l	5.0	0.38	1
Fluorene	ND		ug/l	2.0	0.41	1
4-Nitroaniline	ND		ug/l	5.0	0.80	1
NDPA/DPA	ND		ug/l	2.0	0.42	1
Hexachlorobenzene	ND		ug/l	2.0	0.46	1
Pentachlorophenol	ND		ug/l	10	1.8	1
Phenanthrene	0.38	J	ug/l	2.0	0.33	1
Anthracene	ND		ug/l	2.0	0.33	1
Carbazole	0.71	J	ug/l	2.0	0.49	1
Di-n-butylphthalate	ND		ug/l	5.0	0.39	1
Fluoranthene	ND		ug/l	2.0	0.26	1
Pyrene	ND		ug/l	2.0	0.28	1
3,3'-Dichlorobenzidine	ND		ug/l	5.0	1.6	1
Benzo(a)anthracene	ND		ug/l	2.0	0.32	1
Chrysene	ND		ug/l	1.4	0.34	1
Bis(2-ethylhexyl)phthalate	ND		ug/l	3.0	1.5	1
Di-n-octylphthalate	ND		ug/l	5.0	1.3	1
Benzo(b)fluoranthene	ND		ug/l	2.0	0.35	1
Benzo(k)fluoranthene	ND		ug/l	2.0	0.37	1
Benzo(a)pyrene	ND		ug/l	2.0	0.41	1
Indeno(1,2,3-cd)pyrene	ND		ug/l	2.0	0.40	1
Dibenzo(a,h)anthracene	ND		ug/l	2.0	0.32	1
Benzo(ghi)perylene	ND		ug/l	2.0	0.30	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	54		21-120
Phenol-d6	40		10-120
Nitrobenzene-d5	63		23-120
2-Fluorobiphenyl	62		15-120
2,4,6-Tribromophenol	81		10-120
4-Terphenyl-d14	68		41-149

Project Name: B14-Q4 **Lab Number:** L2358722

Project Number: 21010214 **Report Date:** 10/13/23

SAMPLE RESULTS

Lab ID: L2358722-04
Client ID: TM04-PZM006
Sample Location: B14

Date Collected: 10/04/23 14:30
Date Received: 10/04/23
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8270E-SIM
Analytical Date: 10/09/23 15:56
Analyst: CMM

Extraction Method: EPA 3510C
Extraction Date: 10/07/23 18:03

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS-SIM - Westborough Lab						
Naphthalene	120	E	ug/l	0.10	0.05	1
2-Methylnaphthalene	1.1		ug/l	0.10	0.02	1
Acenaphthylene	2.2		ug/l	0.10	0.01	1
Acenaphthene	0.38		ug/l	0.10	0.01	1
Fluorene	0.21		ug/l	0.10	0.01	1
Pentachlorophenol	ND		ug/l	0.10	0.01	1
Phenanthrene	0.37		ug/l	0.05	0.02	1
Anthracene	0.17		ug/l	0.10	0.01	1
Fluoranthene	0.07	J	ug/l	0.10	0.02	1
Pyrene	0.08	J	ug/l	0.10	0.02	1
Benzo(a)anthracene	ND		ug/l	0.05	0.02	1
Chrysene	ND		ug/l	0.10	0.01	1
Benzo(b)fluoranthene	ND		ug/l	0.05	0.01	1
Benzo(k)fluoranthene	ND		ug/l	0.10	0.01	1
Benzo(a)pyrene	ND		ug/l	0.10	0.02	1
Indeno(1,2,3-cd)pyrene	ND		ug/l	0.10	0.01	1
Dibenzo(a,h)anthracene	ND		ug/l	0.05	0.01	1
Benzo(ghi)perylene	ND		ug/l	0.10	0.01	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	55		21-120
Phenol-d6	45		10-120
Nitrobenzene-d5	74		23-120
2-Fluorobiphenyl	52		15-120
2,4,6-Tribromophenol	91		10-120
4-Terphenyl-d14	57		41-149

Project Name: B14-Q4 **Lab Number:** L2358722

Project Number: 21010214 **Report Date:** 10/13/23

SAMPLE RESULTS

Lab ID: L2358722-04 D
Client ID: TM04-PZM006
Sample Location: B14

Date Collected: 10/04/23 14:30
Date Received: 10/04/23
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8270E-SIM
Analytical Date: 10/13/23 12:04
Analyst: RP

Extraction Method: EPA 3510C
Extraction Date: 10/07/23 18:03

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS-SIM - Westborough Lab						
Naphthalene	170		ug/l	0.50	0.24	5

Project Name: B14-Q4 **Lab Number:** L2358722

Project Number: 21010214 **Report Date:** 10/13/23

SAMPLE RESULTS

Lab ID: L2358722-05
Client ID: FIELD BLANK
Sample Location: B14

Date Collected: 10/04/23 14:04
Date Received: 10/04/23
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8270E
Analytical Date: 10/09/23 01:59
Analyst: EK

Extraction Method: EPA 3510C
Extraction Date: 10/07/23 18:02

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Benzaldehyde	ND		ug/l	5.0	0.53	1
Phenol	ND		ug/l	5.0	0.57	1
Bis(2-chloroethyl)ether	ND		ug/l	2.0	0.50	1
2-Chlorophenol	ND		ug/l	2.0	0.48	1
2-Methylphenol	ND		ug/l	5.0	0.49	1
Bis(2-chloroisopropyl)ether	ND		ug/l	2.0	0.53	1
Acetophenone	ND		ug/l	5.0	0.53	1
n-Nitrosodi-n-propylamine	ND		ug/l	5.0	0.64	1
3-Methylphenol/4-Methylphenol	ND		ug/l	5.0	0.48	1
Hexachloroethane	ND		ug/l	2.0	0.58	1
Nitrobenzene	ND		ug/l	1.4	0.77	1
Isophorone	ND		ug/l	5.0	1.2	1
2,4-Dimethylphenol	ND		ug/l	5.0	1.8	1
Bis(2-chloroethoxy)methane	ND		ug/l	5.0	0.50	1
2,4-Dichlorophenol	ND		ug/l	5.0	0.41	1
Naphthalene	ND		ug/l	2.0	0.46	1
4-Chloroaniline	ND		ug/l	3.7	1.1	1
Hexachlorobutadiene	ND		ug/l	2.0	0.66	1
Caprolactam	ND		ug/l	10	3.3	1
2-Methylnaphthalene	ND		ug/l	2.0	0.45	1
Hexachlorocyclopentadiene	ND		ug/l	20	0.69	1
1,2,4,5-Tetrachlorobenzene	ND		ug/l	1.7	0.44	1
2,4,6-Trichlorophenol	ND		ug/l	5.0	0.61	1
2,4,5-Trichlorophenol	ND		ug/l	5.0	0.77	1
Biphenyl	ND		ug/l	2.0	0.46	1
2-Chloronaphthalene	ND		ug/l	2.0	0.44	1
2-Nitroaniline	ND		ug/l	5.0	0.50	1
2,6-Dinitrotoluene	ND		ug/l	5.0	0.93	1

Project Name: B14-Q4 **Lab Number:** L2358722

Project Number: 21010214 **Report Date:** 10/13/23

SAMPLE RESULTS

Lab ID: L2358722-05 Date Collected: 10/04/23 14:04

Client ID: FIELD BLANK Date Received: 10/04/23

Sample Location: B14 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	0.46	1
Acenaphthene	ND		ug/l	2.0	0.53	1
2,4-Dinitrophenol	ND		ug/l	20	6.6	1
2,4-Dinitrotoluene	ND		ug/l	5.0	1.2	1
2,3,4,6-Tetrachlorophenol	ND		ug/l	5.0	0.84	1
Diethyl phthalate	ND		ug/l	5.0	0.38	1
Fluorene	ND		ug/l	2.0	0.41	1
4-Nitroaniline	ND		ug/l	5.0	0.80	1
NDPA/DPA	ND		ug/l	2.0	0.42	1
Hexachlorobenzene	ND		ug/l	2.0	0.46	1
Pentachlorophenol	ND		ug/l	10	1.8	1
Phenanthrene	ND		ug/l	2.0	0.33	1
Anthracene	ND		ug/l	2.0	0.33	1
Carbazole	ND		ug/l	2.0	0.49	1
Di-n-butylphthalate	ND		ug/l	5.0	0.39	1
Fluoranthene	ND		ug/l	2.0	0.26	1
Pyrene	ND		ug/l	2.0	0.28	1
3,3'-Dichlorobenzidine	ND		ug/l	5.0	1.6	1
Benzo(a)anthracene	ND		ug/l	2.0	0.32	1
Chrysene	ND		ug/l	1.4	0.34	1
Bis(2-ethylhexyl)phthalate	ND		ug/l	3.0	1.5	1
Di-n-octylphthalate	ND		ug/l	5.0	1.3	1
Benzo(b)fluoranthene	ND		ug/l	2.0	0.35	1
Benzo(k)fluoranthene	ND		ug/l	2.0	0.37	1
Benzo(a)pyrene	ND		ug/l	2.0	0.41	1
Indeno(1,2,3-cd)pyrene	ND		ug/l	2.0	0.40	1
Dibenzo(a,h)anthracene	ND		ug/l	2.0	0.32	1
Benzo(ghi)perylene	ND		ug/l	2.0	0.30	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	74		21-120
Phenol-d6	59		10-120
Nitrobenzene-d5	90		23-120
2-Fluorobiphenyl	85		15-120
2,4,6-Tribromophenol	97		10-120
4-Terphenyl-d14	93		41-149

Project Name: B14-Q4 **Lab Number:** L2358722

Project Number: 21010214 **Report Date:** 10/13/23

SAMPLE RESULTS

Lab ID: L2358722-05
Client ID: FIELD BLANK
Sample Location: B14

Date Collected: 10/04/23 14:04
Date Received: 10/04/23
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8270E-SIM
Analytical Date: 10/09/23 16:12
Analyst: CMM

Extraction Method: EPA 3510C
Extraction Date: 10/07/23 18:03

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS-SIM - Westborough Lab						
Naphthalene	ND		ug/l	0.10	0.05	1
2-Methylnaphthalene	ND		ug/l	0.10	0.02	1
Acenaphthylene	ND		ug/l	0.10	0.01	1
Acenaphthene	ND		ug/l	0.10	0.01	1
Fluorene	ND		ug/l	0.10	0.01	1
Pentachlorophenol	ND		ug/l	0.10	0.01	1
Phenanthrene	ND		ug/l	0.05	0.02	1
Anthracene	ND		ug/l	0.10	0.01	1
Fluoranthene	ND		ug/l	0.10	0.02	1
Pyrene	ND		ug/l	0.10	0.02	1
Benzo(a)anthracene	ND		ug/l	0.05	0.02	1
Chrysene	ND		ug/l	0.10	0.01	1
Benzo(b)fluoranthene	ND		ug/l	0.05	0.01	1
Benzo(k)fluoranthene	ND		ug/l	0.10	0.01	1
Benzo(a)pyrene	ND		ug/l	0.10	0.02	1
Indeno(1,2,3-cd)pyrene	ND		ug/l	0.10	0.01	1
Dibenzo(a,h)anthracene	ND		ug/l	0.05	0.01	1
Benzo(ghi)perylene	ND		ug/l	0.10	0.01	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	72		21-120
Phenol-d6	59		10-120
Nitrobenzene-d5	94		23-120
2-Fluorobiphenyl	77		15-120
2,4,6-Tribromophenol	116		10-120
4-Terphenyl-d14	71		41-149

Project Name: B14-Q4 **Lab Number:** L2358722

Project Number: 21010214 **Report Date:** 10/13/23

SAMPLE RESULTS

Lab ID: L2358722-06
Client ID: DUP
Sample Location: B14

Date Collected: 10/04/23 00:00
Date Received: 10/04/23
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8270E
Analytical Date: 10/09/23 02:23
Analyst: EK

Extraction Method: EPA 3510C
Extraction Date: 10/07/23 18:02

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Benzaldehyde	ND		ug/l	5.0	0.53	1
Phenol	ND		ug/l	5.0	0.57	1
Bis(2-chloroethyl)ether	ND		ug/l	2.0	0.50	1
2-Chlorophenol	ND		ug/l	2.0	0.48	1
2-Methylphenol	ND		ug/l	5.0	0.49	1
Bis(2-chloroisopropyl)ether	ND		ug/l	2.0	0.53	1
Acetophenone	ND		ug/l	5.0	0.53	1
n-Nitrosodi-n-propylamine	ND		ug/l	5.0	0.64	1
3-Methylphenol/4-Methylphenol	ND		ug/l	5.0	0.48	1
Hexachloroethane	ND		ug/l	2.0	0.58	1
Nitrobenzene	ND		ug/l	1.4	0.77	1
Isophorone	ND		ug/l	5.0	1.2	1
2,4-Dimethylphenol	ND		ug/l	5.0	1.8	1
Bis(2-chloroethoxy)methane	ND		ug/l	5.0	0.50	1
2,4-Dichlorophenol	ND		ug/l	5.0	0.41	1
Naphthalene	0.57	J	ug/l	2.0	0.46	1
4-Chloroaniline	ND		ug/l	3.7	1.1	1
Hexachlorobutadiene	ND		ug/l	2.0	0.66	1
Caprolactam	ND		ug/l	10	3.3	1
2-Methylnaphthalene	ND		ug/l	2.0	0.45	1
Hexachlorocyclopentadiene	ND		ug/l	20	0.69	1
1,2,4,5-Tetrachlorobenzene	ND		ug/l	1.7	0.44	1
2,4,6-Trichlorophenol	ND		ug/l	5.0	0.61	1
2,4,5-Trichlorophenol	ND		ug/l	5.0	0.77	1
Biphenyl	ND		ug/l	2.0	0.46	1
2-Chloronaphthalene	ND		ug/l	2.0	0.44	1
2-Nitroaniline	ND		ug/l	5.0	0.50	1
2,6-Dinitrotoluene	ND		ug/l	5.0	0.93	1

Project Name: B14-Q4 **Lab Number:** L2358722

Project Number: 21010214 **Report Date:** 10/13/23

SAMPLE RESULTS

Lab ID: L2358722-06 Date Collected: 10/04/23 00:00

Client ID: DUP Date Received: 10/04/23

Sample Location: B14 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	0.46	1
Acenaphthene	ND		ug/l	2.0	0.53	1
2,4-Dinitrophenol	ND		ug/l	20	6.6	1
2,4-Dinitrotoluene	ND		ug/l	5.0	1.2	1
2,3,4,6-Tetrachlorophenol	ND		ug/l	5.0	0.84	1
Diethyl phthalate	ND		ug/l	5.0	0.38	1
Fluorene	ND		ug/l	2.0	0.41	1
4-Nitroaniline	ND		ug/l	5.0	0.80	1
NDPA/DPA	ND		ug/l	2.0	0.42	1
Hexachlorobenzene	ND		ug/l	2.0	0.46	1
Pentachlorophenol	ND		ug/l	10	1.8	1
Phenanthrene	ND		ug/l	2.0	0.33	1
Anthracene	ND		ug/l	2.0	0.33	1
Carbazole	ND		ug/l	2.0	0.49	1
Di-n-butylphthalate	ND		ug/l	5.0	0.39	1
Fluoranthene	ND		ug/l	2.0	0.26	1
Pyrene	ND		ug/l	2.0	0.28	1
3,3'-Dichlorobenzidine	ND		ug/l	5.0	1.6	1
Benzo(a)anthracene	ND		ug/l	2.0	0.32	1
Chrysene	ND		ug/l	1.4	0.34	1
Bis(2-ethylhexyl)phthalate	ND		ug/l	3.0	1.5	1
Di-n-octylphthalate	ND		ug/l	5.0	1.3	1
Benzo(b)fluoranthene	ND		ug/l	2.0	0.35	1
Benzo(k)fluoranthene	ND		ug/l	2.0	0.37	1
Benzo(a)pyrene	ND		ug/l	2.0	0.41	1
Indeno(1,2,3-cd)pyrene	ND		ug/l	2.0	0.40	1
Dibenzo(a,h)anthracene	ND		ug/l	2.0	0.32	1
Benzo(ghi)perylene	ND		ug/l	2.0	0.30	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	58		21-120
Phenol-d6	44		10-120
Nitrobenzene-d5	73		23-120
2-Fluorobiphenyl	76		15-120
2,4,6-Tribromophenol	98		10-120
4-Terphenyl-d14	81		41-149

Project Name: B14-Q4 **Lab Number:** L2358722

Project Number: 21010214 **Report Date:** 10/13/23

SAMPLE RESULTS

Lab ID: L2358722-06
Client ID: DUP
Sample Location: B14

Date Collected: 10/04/23 00:00
Date Received: 10/04/23
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8270E-SIM
Analytical Date: 10/10/23 15:08
Analyst: CMM

Extraction Method: EPA 3510C
Extraction Date: 10/07/23 18:03

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS-SIM - Westborough Lab						
Naphthalene	0.58		ug/l	0.10	0.05	1
2-Methylnaphthalene	0.06	J	ug/l	0.10	0.02	1
Acenaphthylene	ND		ug/l	0.10	0.01	1
Acenaphthene	0.09	J	ug/l	0.10	0.01	1
Fluorene	0.05	J	ug/l	0.10	0.01	1
Pentachlorophenol	0.23		ug/l	0.10	0.01	1
Phenanthrene	0.08		ug/l	0.05	0.02	1
Anthracene	0.25		ug/l	0.10	0.01	1
Fluoranthene	0.10	J	ug/l	0.10	0.02	1
Pyrene	0.12		ug/l	0.10	0.02	1
Benzo(a)anthracene	0.04	J	ug/l	0.05	0.02	1
Chrysene	0.05	J	ug/l	0.10	0.01	1
Benzo(b)fluoranthene	0.06		ug/l	0.05	0.01	1
Benzo(k)fluoranthene	0.05	J	ug/l	0.10	0.01	1
Benzo(a)pyrene	0.03	J	ug/l	0.10	0.02	1
Indeno(1,2,3-cd)pyrene	0.06	J	ug/l	0.10	0.01	1
Dibenzo(a,h)anthracene	0.06		ug/l	0.05	0.01	1
Benzo(ghi)perylene	0.06	J	ug/l	0.10	0.01	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	65		21-120
Phenol-d6	58		10-120
Nitrobenzene-d5	110		23-120
2-Fluorobiphenyl	74		15-120
2,4,6-Tribromophenol	118		10-120
4-Terphenyl-d14	71		41-149

Project Name: B14-Q4 **Lab Number:** L2358722

Project Number: 21010214 **Report Date:** 10/13/23

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270E
Analytical Date: 10/08/23 18:29
Analyst: EK

Extraction Method: EPA 3510C
Extraction Date: 10/07/23 08:49

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 01-06 Batch: WG1836804-1					
Benzaldehyde	ND		ug/l	5.0	0.53
Phenol	ND		ug/l	5.0	0.57
Bis(2-chloroethyl)ether	ND		ug/l	2.0	0.50
2-Chlorophenol	ND		ug/l	2.0	0.48
2-Methylphenol	ND		ug/l	5.0	0.49
Bis(2-chloroisopropyl)ether	ND		ug/l	2.0	0.53
Acetophenone	ND		ug/l	5.0	0.53
n-Nitrosodi-n-propylamine	ND		ug/l	5.0	0.64
3-Methylphenol/4-Methylphenol	ND		ug/l	5.0	0.48
Hexachloroethane	ND		ug/l	2.0	0.58
Nitrobenzene	ND		ug/l	1.4	0.77
Isophorone	ND		ug/l	5.0	1.2
2,4-Dimethylphenol	ND		ug/l	5.0	1.8
Bis(2-chloroethoxy)methane	ND		ug/l	5.0	0.50
2,4-Dichlorophenol	ND		ug/l	5.0	0.41
Naphthalene	ND		ug/l	2.0	0.46
4-Chloroaniline	ND		ug/l	3.7	1.1
Hexachlorobutadiene	ND		ug/l	2.0	0.66
Caprolactam	ND		ug/l	10	3.3
2-Methylnaphthalene	ND		ug/l	2.0	0.45
Hexachlorocyclopentadiene	ND		ug/l	20	0.69
1,2,4,5-Tetrachlorobenzene	ND		ug/l	1.7	0.44
2,4,6-Trichlorophenol	ND		ug/l	5.0	0.61
2,4,5-Trichlorophenol	ND		ug/l	5.0	0.77
Biphenyl	ND		ug/l	2.0	0.46
2-Chloronaphthalene	ND		ug/l	2.0	0.44
2-Nitroaniline	ND		ug/l	5.0	0.50
2,6-Dinitrotoluene	ND		ug/l	5.0	0.93
Acenaphthylene	ND		ug/l	2.0	0.46

Project Name: B14-Q4 **Lab Number:** L2358722

Project Number: 21010214 **Report Date:** 10/13/23

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270E
Analytical Date: 10/08/23 18:29
Analyst: EK

Extraction Method: EPA 3510C
Extraction Date: 10/07/23 08:49

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 01-06 Batch: WG1836804-1					
Acenaphthene	ND		ug/l	2.0	0.53
2,4-Dinitrophenol	ND		ug/l	20	6.6
2,4-Dinitrotoluene	ND		ug/l	5.0	1.2
2,3,4,6-Tetrachlorophenol	ND		ug/l	5.0	0.84
Diethyl phthalate	ND		ug/l	5.0	0.38
Fluorene	ND		ug/l	2.0	0.41
4-Nitroaniline	ND		ug/l	5.0	0.80
NDPA/DPA	ND		ug/l	2.0	0.42
Hexachlorobenzene	ND		ug/l	2.0	0.46
Pentachlorophenol	ND		ug/l	10	1.8
Phenanthrene	ND		ug/l	2.0	0.33
Anthracene	ND		ug/l	2.0	0.33
Carbazole	ND		ug/l	2.0	0.49
Di-n-butylphthalate	ND		ug/l	5.0	0.39
Fluoranthene	ND		ug/l	2.0	0.26
Pyrene	ND		ug/l	2.0	0.28
3,3'-Dichlorobenzidine	ND		ug/l	5.0	1.6
Benzo(a)anthracene	ND		ug/l	2.0	0.32
Chrysene	ND		ug/l	1.4	0.34
Bis(2-ethylhexyl)phthalate	ND		ug/l	3.0	1.5
Di-n-octylphthalate	ND		ug/l	5.0	1.3
Benzo(b)fluoranthene	ND		ug/l	2.0	0.35
Benzo(k)fluoranthene	ND		ug/l	2.0	0.37
Benzo(a)pyrene	ND		ug/l	2.0	0.41
Indeno(1,2,3-cd)pyrene	ND		ug/l	2.0	0.40
Dibenzo(a,h)anthracene	ND		ug/l	2.0	0.32
Benzo(ghi)perylene	ND		ug/l	2.0	0.30

Project Name: B14-Q4 **Lab Number:** L2358722

Project Number: 21010214 **Report Date:** 10/13/23

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270E
Analytical Date: 10/08/23 18:29
Analyst: EK

Extraction Method: EPA 3510C
Extraction Date: 10/07/23 08:49

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 01-06 Batch: WG1836804-1					

Surrogate	%Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	60		21-120
Phenol-d6	48		10-120
Nitrobenzene-d5	74		23-120
2-Fluorobiphenyl	76		15-120
2,4,6-Tribromophenol	79		10-120
4-Terphenyl-d14	85		41-149

Project Name: B14-Q4 **Lab Number:** L2358722

Project Number: 21010214 **Report Date:** 10/13/23

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270E-SIM
Analytical Date: 10/10/23 13:29
Analyst: JJW

Extraction Method: EPA 3510C
Extraction Date: 10/07/23 08:50

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS-SIM - Westborough Lab for sample(s): 01-06 Batch: WG1836805-1					
Naphthalene	ND		ug/l	0.10	0.05
2-Methylnaphthalene	ND		ug/l	0.10	0.02
Acenaphthylene	ND		ug/l	0.10	0.01
Acenaphthene	ND		ug/l	0.10	0.01
Fluorene	ND		ug/l	0.10	0.01
Pentachlorophenol	ND		ug/l	0.10	0.01
Phenanthrene	ND		ug/l	0.05	0.02
Anthracene	ND		ug/l	0.10	0.01
Fluoranthene	ND		ug/l	0.10	0.02
Pyrene	ND		ug/l	0.10	0.02
Benzo(a)anthracene	ND		ug/l	0.05	0.02
Chrysene	ND		ug/l	0.10	0.01
Benzo(b)fluoranthene	0.02	J	ug/l	0.05	0.01
Benzo(k)fluoranthene	0.01	J	ug/l	0.10	0.01
Benzo(a)pyrene	ND		ug/l	0.10	0.02
Indeno(1,2,3-cd)pyrene	ND		ug/l	0.10	0.01
Dibenzo(a,h)anthracene	ND		ug/l	0.05	0.01
Benzo(ghi)perylene	ND		ug/l	0.10	0.01

Surrogate	%Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	69		21-120
Phenol-d6	61		10-120
Nitrobenzene-d5	105		23-120
2-Fluorobiphenyl	75		15-120
2,4,6-Tribromophenol	112		10-120
4-Terphenyl-d14	84		41-149

Lab Control Sample Analysis

Batch Quality Control

Project Name: B14-Q4

Project Number: 21010214

Lab Number: L2358722

Report Date: 10/13/23

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-06 Batch: WG1836804-2 WG1836804-3								
Benzaldehyde	84		66		40-140	24		30
Phenol	54		46		12-110	16		30
Bis(2-chloroethyl)ether	69		54		40-140	24		30
2-Chlorophenol	72		59		27-123	20		30
2-Methylphenol	69		59		30-130	16		30
Bis(2-chloroisopropyl)ether	61		48		40-140	24		30
Acetophenone	70		55		39-129	24		30
n-Nitrosodi-n-propylamine	68		56		29-132	19		30
3-Methylphenol/4-Methylphenol	73		60		30-130	20		30
Hexachloroethane	64		55		40-140	15		30
Nitrobenzene	76		60		40-140	24		30
Isophorone	71		57		40-140	22		30
2,4-Dimethylphenol	65		59		30-130	10		30
Bis(2-chloroethoxy)methane	69		57		40-140	19		30
2,4-Dichlorophenol	78		65		30-130	18		30
Naphthalene	72		57		40-140	23		30
4-Chloroaniline	48		51		40-140	6		30
Hexachlorobutadiene	72		57		40-140	23		30
Caprolactam	35		29		10-130	19		30
2-Methylnaphthalene	75		60		40-140	22		30
Hexachlorocyclopentadiene	73		58		40-140	23		30
1,2,4,5-Tetrachlorobenzene	70		58		2-134	19		30
2,4,6-Trichlorophenol	82		70		30-130	16		30

Lab Control Sample Analysis

Batch Quality Control

Project Name: B14-Q4

Project Number: 21010214

Lab Number: L2358722

Report Date: 10/13/23

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-06 Batch: WG1836804-2 WG1836804-3								
2,4,5-Trichlorophenol	78		70		30-130	11		30
Biphenyl	71		59		40-140	18		30
2-Chloronaphthalene	73		62		40-140	16		30
2-Nitroaniline	89		76		52-143	16		30
2,6-Dinitrotoluene	86		70		40-140	21		30
Acenaphthylene	74		61		45-123	19		30
Acenaphthene	68		57		37-111	18		30
2,4-Dinitrophenol	93		87		20-130	7		30
2,4-Dinitrotoluene	89		77		48-143	14		30
2,3,4,6-Tetrachlorophenol	74		68		54-145	8		30
Diethyl phthalate	77		69		40-140	11		30
Fluorene	73		65		40-140	12		30
4-Nitroaniline	78		67		51-143	15		30
NDPA/DPA	74		65		40-140	13		30
Hexachlorobenzene	71		65		40-140	9		30
Pentachlorophenol	68		69		9-103	1		30
Phenanthrene	74		68		40-140	8		30
Anthracene	77		68		40-140	12		30
Carbazole	76		66		55-144	14		30
Di-n-butylphthalate	81		71		40-140	13		30
Fluoranthene	76		67		40-140	13		30
Pyrene	77		65		26-127	17		30
3,3'-Dichlorobenzidine	69		64		40-140	8		30

Lab Control Sample Analysis

Batch Quality Control

Project Name: B14-Q4

Project Number: 21010214

Lab Number: L2358722

Report Date: 10/13/23

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-06 Batch: WG1836804-2 WG1836804-3								
Benzo(a)anthracene	80		72		40-140	11		30
Chrysene	82		74		40-140	10		30
Bis(2-ethylhexyl)phthalate	92		84		40-140	9		30
Di-n-octylphthalate	95		86		40-140	10		30
Benzo(b)fluoranthene	84		75		40-140	11		30
Benzo(k)fluoranthene	80		73		40-140	9		30
Benzo(a)pyrene	88		81		40-140	8		30
Indeno(1,2,3-cd)pyrene	89		79		40-140	12		30
Dibenzo(a,h)anthracene	86		76		40-140	12		30
Benzo(ghi)perylene	86		78		40-140	10		30

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
2-Fluorophenol	64		53		21-120
Phenol-d6	54		44		10-120
Nitrobenzene-d5	74		61		23-120
2-Fluorobiphenyl	74		59		15-120
2,4,6-Tribromophenol	81		73		10-120
4-Terphenyl-d14	79		68		41-149

Lab Control Sample Analysis
Batch Quality Control

Project Name: B14-Q4
Project Number: 21010214

Lab Number: L2358722
Report Date: 10/13/23

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS-SIM - Westborough Lab Associated sample(s): 01-06 Batch: WG1836805-2 WG1836805-3								
Naphthalene	73		63		40-140	15		40
2-Methylnaphthalene	78		65		40-140	18		40
Acenaphthylene	86		72		40-140	18		40
Acenaphthene	76		66		37-111	14		40
Fluorene	81		72		40-140	12		40
Pentachlorophenol	**117**	Q	**106**	Q	9-103	10		40
Phenanthrene	80		72		40-140	11		40
Anthracene	87		78		40-140	11		40
Fluoranthene	93		86		40-140	8		40
Pyrene	92		84		26-127	9		40
Benzo(a)anthracene	97		89		40-140	9		40
Chrysene	87		80		40-140	8		40
Benzo(b)fluoranthene	91		80		40-140	13		40
Benzo(k)fluoranthene	91		80		40-140	13		40
Benzo(a)pyrene	99		89		40-140	11		40
Indeno(1,2,3-cd)pyrene	96		88		40-140	9		40
Dibenzo(a,h)anthracene	91		83		40-140	9		40
Benzo(ghi)perylene	95		86		40-140	10		40

Lab Control Sample Analysis

Batch Quality Control

Project Name: B14-Q4

Project Number: 21010214

Lab Number: L2358722

Report Date: 10/13/23

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS-SIM - Westborough Lab Associated sample(s): 01-06 Batch: WG1836805-2 WG1836805-3								

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
2-Fluorophenol	78		69		21-120
Phenol-d6	75		67		10-120
Nitrobenzene-d5	106		92		23-120
2-Fluorobiphenyl	71		59		15-120
2,4,6-Tribromophenol	**125**	Q	113		10-120
4-Terphenyl-d14	77		81		41-149

Matrix Spike Analysis

Batch Quality Control

Project Name: B14-Q4

Project Number: 21010214

Lab Number: L2358722

Report Date: 10/13/23

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): 01-06 QC Batch ID: WG1836804-4 WG1836804-5 QC Sample: L2358722-01 Client ID: HI10-MWS												
Benzaldehyde	ND	18.2	15	83		13	72		40-140	14		30
Phenol	ND	18.2	9.4	52		8.1	45		12-110	15		30
Bis(2-chloroethyl)ether	ND	18.2	12	66		10	55		40-140	18		30
2-Chlorophenol	ND	18.2	13	72		11	61		27-123	17		30
2-Methylphenol	ND	18.2	12	66		10	55		30-130	18		30
Bis(2-chloroisopropyl)ether	ND	18.2	11	61		9.4	52		40-140	16		30
Acetophenone	ND	18.2	12	66		10	55		39-129	18		30
n-Nitrosodi-n-propylamine	ND	18.2	12	66		10	55		29-132	18		30
3-Methylphenol/4-Methylphenol	0.86J	18.2	14	77		11	61		30-130	24		30
Hexachloroethane	ND	18.2	12	66		10	55		40-140	18		30
Nitrobenzene	ND	18.2	13	72		11	61		40-140	17		30
Isophorone	ND	18.2	12	66		10	55		40-140	18		30
2,4-Dimethylphenol	ND	18.2	13	72		12	66		30-130	8		30
Bis(2-chloroethoxy)methane	ND	18.2	12	66		10	55		40-140	18		30
2,4-Dichlorophenol	ND	18.2	14	77		12	66		30-130	15		30
Naphthalene	40	18.2	57	94		48	44		40-140	17		30
4-Chloroaniline	ND	18.2	9.6	53		7.4	41		40-140	26		30
Hexachlorobutadiene	ND	18.2	12	66		10	55		40-140	18		30
Caprolactam	ND	18.2	6.0J	33		5.3J	29		10-130	12		30
2-Methylnaphthalene	2.2	18.2	15	70		13	59		40-140	14		30
Hexachlorocyclopentadiene	ND	18.2	12J	66		10J	55		40-140	18		30
1,2,4,5-Tetrachlorobenzene	ND	18.2	12	66		10	55		2-134	18		30
2,4,6-Trichlorophenol	ND	18.2	14	77		12	66		30-130	15		30

Matrix Spike Analysis

Batch Quality Control

Project Name: B14-Q4

Project Number: 21010214

Lab Number: L2358722

Report Date: 10/13/23

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): 01-06 QC Batch ID: WG1836804-4 WG1836804-5 QC Sample: L2358722-01 Client ID: HI10-MWS												
2,4,5-Trichlorophenol	ND	18.2	14	77		12	66		30-130	15		30
Biphenyl	ND	18.2	12	66		11	61		40-140	9		30
2-Chloronaphthalene	ND	18.2	13	72		11	61		40-140	17		30
2-Nitroaniline	ND	18.2	15	83		13	72		52-143	14		30
2,6-Dinitrotoluene	ND	18.2	15	83		13	72		40-140	14		30
Acenaphthylene	0.62J	18.2	13	72		11	61		45-123	17		30
Acenaphthene	2.0	18.2	14	77		12	66		37-111	15		30
2,4-Dinitrophenol	ND	18.2	18J	99		16J	88		20-130	12		30
2,4-Dinitrotoluene	ND	18.2	15	83		13	72		48-143	14		30
2,3,4,6-Tetrachlorophenol	ND	18.2	13	72		12	66		54-145	8		30
Diethyl phthalate	ND	18.2	13	72		11	61		40-140	17		30
Fluorene	1.8J	18.2	14	77		12	66		40-140	15		30
4-Nitroaniline	ND	18.2	13	72		11	61		51-143	17		30
NDPA/DPA	ND	18.2	12	66		11	61		40-140	9		30
Hexachlorobenzene	ND	18.2	12	66		11	61		40-140	9		30
Pentachlorophenol	ND	18.2	14	77		12	66		9-103	15		30
Phenanthrene	2.9	18.2	16	72		13	56		40-140	21		30
Anthracene	0.46J	18.2	14	77		12	66		40-140	15		30
Carbazole	3.6	18.2	17	74		14	57		55-144	19		30
Di-n-butylphthalate	ND	18.2	14	77		12	66		40-140	15		30
Fluoranthene	0.72J	18.2	14	77		11	61		40-140	24		30
Pyrene	0.62J	18.2	13	72		11	61		26-127	17		30
3,3'-Dichlorobenzidine	ND	18.2	7.3	40		6.2	**34**	Q	40-140	16		30

Matrix Spike Analysis

Batch Quality Control

Project Name: B14-Q4 ***Lab Number:*** L2358722

Project Number: 21010214 ***Report Date:*** 10/13/23

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): 01-06 QC Batch ID: WG1836804-4 WG1836804-5 QC Sample: L2358722-01 Client ID: HI10-MWS												
Benzo(a)anthracene	ND	18.2	13	72		12	66		40-140	8		30
Chrysene	ND	18.2	14	77		12	66		40-140	15		30
Bis(2-ethylhexyl)phthalate	1.5J	18.2	15	83		13	72		40-140	14		30
Di-n-octylphthalate	ND	18.2	16	88		13	72		40-140	21		30
Benzo(b)fluoranthene	ND	18.2	14	77		12	66		40-140	15		30
Benzo(k)fluoranthene	ND	18.2	14	77		12	66		40-140	15		30
Benzo(a)pyrene	ND	18.2	15	83		13	72		40-140	14		30
Indeno(1,2,3-cd)pyrene	ND	18.2	15	83		13	72		40-140	14		30
Dibenzo(a,h)anthracene	ND	18.2	15	83		12	66		40-140	22		30
Benzo(ghi)perylene	ND	18.2	14	77		13	72		40-140	7		30

Surrogate	MS % Recovery	MS Qualifier	MSD % Recovery	MSD Qualifier	Acceptance Criteria
2,4,6-Tribromophenol	84		70		10-120
2-Fluorobiphenyl	66		58		15-120
2-Fluorophenol	62		53		21-120
4-Terphenyl-d14	71		57		41-149
Nitrobenzene-d5	74		62		23-120
Phenol-d6	51		45		10-120

Matrix Spike Analysis

Batch Quality Control

Project Name: B14-Q4
Project Number: 21010214
Lab Number: L2358722
Report Date: 10/13/23

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 Client ID: HI10-MWS	Associated sample(s): 01-06		QC Batch ID: WG1836805-4			WG1836805-5			QC Sample: L2358722-01			
Naphthalene	33	18.2	44	61		40	**39**	Q	40-140	10		40
2-Methylnaphthalene	2.2	18.2	14	65		14	65		40-140	0		40
Acenaphthylene	0.70	18.2	14	73		13	68		40-140	7		40
Acenaphthene	2.1	18.2	14	65		13	60		37-111	7		40
Fluorene	2.0	18.2	14	66		13	61		40-140	7		40
Pentachlorophenol	0.23	18.2	19	100		18	98		9-103	5		40
Phenanthrene	2.9	18.2	15	67		14	61		40-140	7		40
Anthracene	0.52	18.2	14	74		12	63		40-140	15		40
Fluoranthene	0.95	18.2	14	72		13	66		40-140	7		40
Pyrene	0.75	18.2	14	73		12	62		26-127	15		40
Benzo(a)anthracene	0.07	18.2	15	82		13	71		40-140	14		40
Chrysene	0.06J	18.2	13	72		12	66		40-140	8		40
Benzo(b)fluoranthene	0.05	18.2	15	82		13	71		40-140	14		40
Benzo(k)fluoranthene	0.02J	18.2	15	83		13	72		40-140	14		40
Benzo(a)pyrene	0.04J	18.2	16	88		14	77		40-140	13		40
Indeno(1,2,3-cd)pyrene	0.02J	18.2	15	83		13	72		40-140	14		40
Dibenzo(a,h)anthracene	ND	18.2	14	77		12	66		40-140	15		40
Benzo(ghi)perylene	0.02J	18.2	15	83		12	66		40-140	22		40

Surrogate	MS % Recovery	MS Qualifier	MSD % Recovery	MSD Qualifier	Acceptance Criteria
2,4,6-Tribromophenol	104		100		10-120
2-Fluorobiphenyl	64		62		15-120

Matrix Spike Analysis

Batch Quality Control

Project Name: B14-Q4 ***Lab Number:*** L2358722

Project Number: 21010214 ***Report Date:*** 10/13/23

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): 01-06 QC Batch ID: WG1836805-4 WG1836805-5 QC Sample: L2358722-01 Client ID: HI10-MWS												

Surrogate	*MS % Recovery*	*MS Qualifier*	*MSD % Recovery*	*MSD Qualifier*	*Acceptance Criteria*
2-Fluorophenol	68		64		21-120
4-Terphenyl-d14	63		57		41-149
Nitrobenzene-d5	93		91		23-120
Phenol-d6	63		62		10-120

Project Name: B14-Q4
Project Number: 21010214

Lab Number: L2358722
Report Date: 10/13/23

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(*)
L2358722-01A	Vial HCl preserved	A	NA		4.3	Y	Absent		PA-8260-SIM(14),PA-8260(14)
L2358722-01A1	Vial HCl preserved	A	NA		4.3	Y	Absent		PA-8260-SIM(14),PA-8260(14)
L2358722-01A2	Vial HCl preserved	A	NA		4.3	Y	Absent		PA-8260-SIM(14),PA-8260(14)
L2358722-01B	Vial HCl preserved	A	NA		4.3	Y	Absent		PA-8260-SIM(14),PA-8260(14)
L2358722-01B1	Vial HCl preserved	A	NA		4.3	Y	Absent		PA-8260-SIM(14),PA-8260(14)
L2358722-01B2	Vial HCl preserved	A	NA		4.3	Y	Absent		PA-8260-SIM(14),PA-8260(14)
L2358722-01C	Vial HCl preserved	A	NA		4.3	Y	Absent		PA-8260-SIM(14),PA-8260(14)
L2358722-01C1	Vial HCl preserved	A	NA		4.3	Y	Absent		PA-8260-SIM(14),PA-8260(14)
L2358722-01C2	Vial HCl preserved	A	NA		4.3	Y	Absent		PA-8260-SIM(14),PA-8260(14)
L2358722-01D	Amber 250ml unpreserved	A	12	12	4.3	Y	Absent		PA-8270SIM-LVI(7),PA-8270-LVI(7)
L2358722-01D1	Amber 250ml unpreserved	A	12	12	4.3	Y	Absent		PA-8270SIM-LVI(7),PA-8270-LVI(7)
L2358722-01D2	Amber 250ml unpreserved	A	12	12	4.3	Y	Absent		PA-8270SIM-LVI(7),PA-8270-LVI(7)
L2358722-01E	Amber 250ml unpreserved	A	12	12	4.3	Y	Absent		PA-8270SIM-LVI(7),PA-8270-LVI(7)
L2358722-01E1	Amber 250ml unpreserved	A	12	12	4.3	Y	Absent		PA-8270SIM-LVI(7),PA-8270-LVI(7)
L2358722-01E2	Amber 250ml unpreserved	A	12	12	4.3	Y	Absent		PA-8270SIM-LVI(7),PA-8270-LVI(7)
L2358722-02A	Vial HCl preserved	A	NA		4.3	Y	Absent		PA-8260-SIM(14),PA-8260(14)
L2358722-02B	Vial HCl preserved	A	NA		4.3	Y	Absent		PA-8260-SIM(14),PA-8260(14)
L2358722-02C	Vial HCl preserved	A	NA		4.3	Y	Absent		PA-8260-SIM(14),PA-8260(14)
L2358722-02D	Amber 250ml unpreserved	A	12	12	4.3	Y	Absent		PA-8270SIM-LVI(7),PA-8270-LVI(7)
L2358722-02E	Amber 250ml unpreserved	A	12	12	4.3	Y	Absent		PA-8270SIM-LVI(7),PA-8270-LVI(7)
L2358722-03A	Vial HCl preserved	A	NA		4.3	Y	Absent		PA-8260-SIM(14),PA-8260(14)
L2358722-03B	Vial HCl preserved	A	NA		4.3	Y	Absent		PA-8260-SIM(14),PA-8260(14)

*Values in parentheses indicate holding time in days

Project Name: B14-Q4
Project Number: 21010214

Lab Number: L2358722
Report Date: 10/13/23

Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L2358722-03C	Vial HCl preserved	A	NA		4.3	Y	Absent		PA-8260-SIM(14),PA-8260(14)
L2358722-03D	Amber 250ml unpreserved	A	9	9	4.3	Y	Absent		PA-8270SIM-LVI(7),PA-8270-LVI(7)
L2358722-03E	Amber 250ml unpreserved	A	9	9	4.3	Y	Absent		PA-8270SIM-LVI(7),PA-8270-LVI(7)
L2358722-04A	Vial HCl preserved	A	NA		4.3	Y	Absent		PA-8260-SIM(14),PA-8260(14)
L2358722-04B	Vial HCl preserved	A	NA		4.3	Y	Absent		PA-8260-SIM(14),PA-8260(14)
L2358722-04C	Vial HCl preserved	A	NA		4.3	Y	Absent		PA-8260-SIM(14),PA-8260(14)
L2358722-04D	Amber 250ml unpreserved	A	9	9	4.3	Y	Absent		PA-8270SIM-LVI(7),PA-8270-LVI(7)
L2358722-04E	Amber 250ml unpreserved	A	9	9	4.3	Y	Absent		PA-8270SIM-LVI(7),PA-8270-LVI(7)
L2358722-05A	Vial HCl preserved	A	NA		4.3	Y	Absent		PA-8260-SIM(14),PA-8260(14)
L2358722-05B	Vial HCl preserved	A	NA		4.3	Y	Absent		PA-8260-SIM(14),PA-8260(14)
L2358722-05C	Vial HCl preserved	A	NA		4.3	Y	Absent		PA-8260-SIM(14),PA-8260(14)
L2358722-05D	Amber 250ml unpreserved	A	7	7	4.3	Y	Absent		PA-8270SIM-LVI(7),PA-8270-LVI(7)
L2358722-05E	Amber 250ml unpreserved	A	7	7	4.3	Y	Absent		PA-8270SIM-LVI(7),PA-8270-LVI(7)
L2358722-06A	Vial HCl preserved	A	NA		4.3	Y	Absent		PA-8260-SIM(14),PA-8260(14)
L2358722-06B	Vial HCl preserved	A	NA		4.3	Y	Absent		PA-8260-SIM(14),PA-8260(14)
L2358722-06C	Vial HCl preserved	A	NA		4.3	Y	Absent		PA-8260-SIM(14),PA-8260(14)
L2358722-06D	Amber 250ml unpreserved	A	12	12	4.3	Y	Absent		PA-8270SIM-LVI(7),PA-8270-LVI(7)
L2358722-06E	Amber 250ml unpreserved	A	12	12	4.3	Y	Absent		PA-8270SIM-LVI(7),PA-8270-LVI(7)
L2358722-07A	Vial HCl preserved	A	NA		4.3	Y	Absent		PA-8260-SIM(14),PA-8260(14)
L2358722-07B	Vial HCl preserved	A	NA		4.3	Y	Absent		PA-8260-SIM(14),PA-8260(14)

*Values in parentheses indicate holding time in days

Project Name:	B14-Q4	**Lab Number:**	L2358722
Project Number:	21010214	**Report Date:**	10/13/23

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-Q4	**Lab Number:**	L2358722
Project Number:	21010214	**Report Date:**	10/13/23

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-Q4	**Lab Number:**	L2358722
Project Number:	21010214	**Report Date:**	10/13/23

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-Q4	**Lab Number:**	L2358722
Project Number:	21010214	**Report Date:**	10/13/23

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, Azobenzene; SCM: Iodomethane (methyl iodide), 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene.
EPA 8270E: NPW: Dimethylnaphthalene,1,4-Diphenylhydrazine, alpha-Terpineol; 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.
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, SM9221E, 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 1

Date Rec'd in Lab: 10/5/23

ALPHA Job #: L2358722

ALPHA ANALYTICAL
WESTBORO, MA TEL: 508-898-9220 FAX: 508-898-9193
MANSFIELD, MA TEL: 508-822-9300 FAX: 508-822-3288

Client Information

Client: TPA

Address:

Phone:

Fax:

Email:

☐ These samples have been previously analyzed by Alpha

Project Information

Project Name: B14-Q4

Project Location: B14

Project #: 210102 14

Project Manager: BOB T.

ALPHA Quote #:

Turn-Around Time

☑ Standard ☐ RUSH (only confirmed if pre-approved)

Date Due: Time:

Report Information - Data Deliverables

☐ FAX ☐ EMAIL

☐ ADEx ☐ Add'l Deliverables

Billing Information

☐ Same as Client info PO #:

Regulatory Requirements/Report Limits

State /Fed Program	Criteria

Other Project Specific Requirements/Comments/Detection Limits:

ALPHA Lab ID (Lab Use Only)	Sample ID	Collection Date	Collection Time	Sample Matrix	Sampler's Initials	ANALYSIS: VOC 8260	SVOC 8270 SIM	Sample Specific Comments	TOTAL # BOTTLES
58722-01	HI 10-MWS	10/4/23	1130	GW	TP	X	X	MS MSD/PH 710	15
-02	HI 11-MWS		1300			X	X	PH 710	5
-03	HI 12-MWS		1515			X	X	PH 7 9	5
-	[illegible]								
-04	TMW4-PZM006		1430			X	X	PH 7 9	5
-05	Field Blank		1404			X	X		5
-06	Dup	—	—	—	—	X	X	PH 7 10	5
-07	TB-WT-01	—	—	—	—	X			4

SAMPLE HANDLING
Filtration
☐ Done
☐ Not needed
☐ Lab to do
Preservation
☐ Lab to do
(Please specify below)

Container Type	V	A
Preservative	D	A

10/5/23 0330
10/5/23 0330

Relinquished By:	Date/Time	Received By:	Date/Time
[signature] ARM	10/4/23 1540	[signature] AAL	10-4-23 1540
[signature] AAC	10-4-23 1800	[signature]	10/4/23 1800
[signature]	10/4/23 2100	Anthony Green OCT 04 2023	2100

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.

FORM NO. 07-01 (rev. 14-OCT-07)

ANALYTICAL REPORT

Lab Number:	L2358723
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:	10/13/23

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), OH (CL108), OR (MA-1316), PA (68-03671), RI (LAO00065), TX (T104704476), VT (VT-0935), VA (460195), USDA (Permit #525-23-122-91930).

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: L2358723
Report Date: 10/13/23

Alpha Sample ID	Client ID	Matrix	Sample Location	Collection Date/Time	Receive Date
L2358723-01	TMC-OUTLET	WATER	TMC	10/04/23 10:00	10/04/23
L2358723-02	TMC-TM04	WATER	TMC	10/04/23 10:10	10/04/23
L2358723-03	TMC-BEND	WATER	TMC	10/04/23 10:20	10/04/23
L2358723-04	TMC-RAIL BRIDGE	WATER	TMC	10/04/23 10:30	10/04/23
L2358723-05	DUP	WATER	TMC	10/04/23 00:00	10/04/23
L2358723-06	TRIP BLANK	WATER	TMC	10/03/23 00:00	10/04/23

Project Name:	TMC SW SAMPLING	**Lab Number:**	L2358723
Project Number:	21010216	**Report Date:**	10/13/23

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, solids and tissues are reported on a dry 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	**Lab Number:**	L2358723
Project Number:	21010216	**Report Date:**	10/13/23

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.

Semivolatile Organics

The WG1837983-1 Method Blank, associated with L2358723-01, has concentration aboves the reporting limits for Naphthalene and 2-Methylnaphthalene. Since the associated sample concentrations are either greater than 10x the blank concentrations or non-detect to the RL for these target analytes, no corrective action is required. Any results detected below the reporting limit are qualified with a "B".

The WG1837983-4/-5 MS/MSD recoveries, performed on L2358723-01, are below the acceptance criteria for 3,3'-dichlorobenzidine (0%/0%); however, it has been identified as a "difficult" analyte. The results of the associated sample are reported.

Semivolatile Organics by SIM

The WG1837985-1 Method Blank, associated with L2358723-01, has concentrations above the reporting limits for Naphthalene, 2-Methylnaphthalene, Acenaphthene, Phenanthrene, and Benzo(b)fluoranthene; however, re-extraction outside of holding time achieved similar results. The results of both extractions are reported and are qualified with a "B".

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: Melissa Sturgis Melissa Sturgis

Title: Technical Director/Representative Date: 10/13/23

ORGANICS

VOLATILES

Project Name: TMC SW SAMPLING
Project Number: 21010216
Lab Number: L2358723
Report Date: 10/13/23

SAMPLE RESULTS

Lab ID: L2358723-01
Client ID: TMC-OUTLET
Sample Location: TMC

Date Collected: 10/04/23 10:00
Date Received: 10/04/23
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8260D
Analytical Date: 10/12/23 06:28
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	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	3.8	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	ND		ug/l	0.75	0.20	1

Project Name: TMC SW SAMPLING **Lab Number:** L2358723

Project Number: 21010216 **Report Date:** 10/13/23

SAMPLE RESULTS

Lab ID: L2358723-01 Date Collected: 10/04/23 10:00

Client ID: TMC-OUTLET Date Received: 10/04/23

Sample Location: TMC 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	89		70-130
Toluene-d8	97		70-130
4-Bromofluorobenzene	94		70-130
Dibromofluoromethane	103		70-130

Project Name: TMC SW SAMPLING
Lab Number: L2358723
Project Number: 21010216
Report Date: 10/13/23

SAMPLE RESULTS

Lab ID: L2358723-01
Client ID: TMC-OUTLET
Sample Location: TMC

Date Collected: 10/04/23 10:00
Date Received: 10/04/23
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8260D-SIM(M)
Analytical Date: 10/12/23 06:28
Analyst: MCM

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
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	88		70-130

Project Name: TMC SW SAMPLING
Project Number: 21010216
Lab Number: L2358723
Report Date: 10/13/23

SAMPLE RESULTS

Lab ID: L2358723-02
Client ID: TMC-TM04
Sample Location: TMC

Date Collected: 10/04/23 10:10
Date Received: 10/04/23
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8260D
Analytical Date: 10/12/23 08:28
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	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	3.4	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	0.22	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 **Lab Number:** L2358723

Project Number: 21010216 **Report Date:** 10/13/23

SAMPLE RESULTS

Lab ID: L2358723-02 Date Collected: 10/04/23 10:10

Client ID: TMC-TM04 Date Received: 10/04/23

Sample Location: TMC 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	92		70-130
Toluene-d8	96		70-130
4-Bromofluorobenzene	92		70-130
Dibromofluoromethane	99		70-130

Project Name: TMC SW SAMPLING
Project Number: 21010216
Lab Number: L2358723
Report Date: 10/13/23

SAMPLE RESULTS

Lab ID: L2358723-02
Client ID: TMC-TM04
Sample Location: TMC

Date Collected: 10/04/23 10:10
Date Received: 10/04/23
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8260D-SIM(M)
Analytical Date: 10/12/23 08:28
Analyst: MCM

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
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	101		70-130
4-Bromofluorobenzene	87		70-130

Project Name: TMC SW SAMPLING
Project Number: 21010216
Lab Number: L2358723
Report Date: 10/13/23

SAMPLE RESULTS

Lab ID: L2358723-03
Client ID: TMC-BEND
Sample Location: TMC

Date Collected: 10/04/23 10:20
Date Received: 10/04/23
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8260D
Analytical Date: 10/12/23 08:52
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	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	2.8	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	ND		ug/l	0.75	0.20	1

Project Name: TMC SW SAMPLING **Lab Number:** L2358723

Project Number: 21010216 **Report Date:** 10/13/23

SAMPLE RESULTS

Lab ID: L2358723-03 Date Collected: 10/04/23 10:20

Client ID: TMC-BEND Date Received: 10/04/23

Sample Location: TMC 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	92		70-130
Toluene-d8	97		70-130
4-Bromofluorobenzene	92		70-130
Dibromofluoromethane	98		70-130

Project Name: TMC SW SAMPLING
Project Number: 21010216
Lab Number: L2358723
Report Date: 10/13/23

SAMPLE RESULTS

Lab ID: L2358723-03
Client ID: TMC-BEND
Sample Location: TMC
Date Collected: 10/04/23 10:20
Date Received: 10/04/23
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8260D-SIM(M)
Analytical Date: 10/12/23 08:52
Analyst: MCM

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
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	100		70-130
4-Bromofluorobenzene	87		70-130

Project Name: TMC SW SAMPLING
Project Number: 21010216
Lab Number: L2358723
Report Date: 10/13/23

SAMPLE RESULTS

Lab ID: L2358723-04
Client ID: TMC-RAIL BRIDGE
Sample Location: TMC
Date Collected: 10/04/23 10:30
Date Received: 10/04/23
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8260D
Analytical Date: 10/12/23 09:16
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	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	2.8	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	ND		ug/l	0.75	0.20	1

Project Name: TMC SW SAMPLING **Lab Number:** L2358723

Project Number: 21010216 **Report Date:** 10/13/23

SAMPLE RESULTS

Lab ID: L2358723-04 Date Collected: 10/04/23 10:30

Client ID: TMC-RAIL BRIDGE Date Received: 10/04/23

Sample Location: TMC 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	91		70-130
Toluene-d8	96		70-130
4-Bromofluorobenzene	92		70-130
Dibromofluoromethane	101		70-130

Project Name: TMC SW SAMPLING
Project Number: 21010216
Lab Number: L2358723
Report Date: 10/13/23

SAMPLE RESULTS

Lab ID: L2358723-04
Client ID: TMC-RAIL BRIDGE
Sample Location: TMC
Date Collected: 10/04/23 10:30
Date Received: 10/04/23
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8260D-SIM(M)
Analytical Date: 10/12/23 09:16
Analyst: MCM

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
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	100		70-130
4-Bromofluorobenzene	87		70-130

Project Name: TMC SW SAMPLING
Project Number: 21010216
Lab Number: L2358723
Report Date: 10/13/23

SAMPLE RESULTS

Lab ID: L2358723-05
Client ID: DUP
Sample Location: TMC

Date Collected: 10/04/23 00:00
Date Received: 10/04/23
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8260D
Analytical Date: 10/12/23 09:40
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	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	3.8	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	ND		ug/l	0.75	0.20	1

Project Name: TMC SW SAMPLING **Lab Number:** L2358723

Project Number: 21010216 **Report Date:** 10/13/23

SAMPLE RESULTS

Lab ID: L2358723-05 Date Collected: 10/04/23 00:00

Client ID: DUP Date Received: 10/04/23

Sample Location: TMC 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	94		70-130
Toluene-d8	96		70-130
4-Bromofluorobenzene	90		70-130
Dibromofluoromethane	100		70-130

Project Name: TMC SW SAMPLING
Project Number: 21010216
Lab Number: L2358723
Report Date: 10/13/23

SAMPLE RESULTS

Lab ID: L2358723-05
Client ID: DUP
Sample Location: TMC

Date Collected: 10/04/23 00:00
Date Received: 10/04/23
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8260D-SIM(M)
Analytical Date: 10/12/23 09:40
Analyst: MCM

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
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	101		70-130
4-Bromofluorobenzene	87		70-130

Project Name: TMC SW SAMPLING
Project Number: 21010216
Lab Number: L2358723
Report Date: 10/13/23

SAMPLE RESULTS

Lab ID: L2358723-06
Client ID: TRIP BLANK
Sample Location: TMC

Date Collected: 10/03/23 00:00
Date Received: 10/04/23
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8260D
Analytical Date: 10/12/23 08:04
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	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: L2358723
Report Date: 10/13/23

SAMPLE RESULTS

Lab ID: L2358723-06
Client ID: TRIP BLANK
Sample Location: TMC
Date Collected: 10/03/23 00:00
Date Received: 10/04/23
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	88		70-130
Toluene-d8	97		70-130
4-Bromofluorobenzene	92		70-130
Dibromofluoromethane	99		70-130

Project Name: TMC SW SAMPLING
Project Number: 21010216
Lab Number: L2358723
Report Date: 10/13/23

SAMPLE RESULTS

Lab ID: L2358723-06
Client ID: TRIP BLANK
Sample Location: TMC
Date Collected: 10/03/23 00:00
Date Received: 10/04/23
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8260D-SIM(M)
Analytical Date: 10/12/23 08:04
Analyst: MCM

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
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	100		70-130
4-Bromofluorobenzene	88		70-130

Project Name: TMC SW SAMPLING
Project Number: 21010216
Lab Number: L2358723
Report Date: 10/13/23

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260D-SIM(M)
Analytical Date: 10/12/23 06:05
Analyst: MCM

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS-SIM - Westborough Lab for sample(s): 01-06 Batch: WG1839047-5					
1,1,2,2-Tetrachloroethane	ND		ug/l	0.050	0.006

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	99		70-130
4-Bromofluorobenzene	89		70-130

Project Name: TMC SW SAMPLING
Project Number: 21010216
Lab Number: L2358723
Report Date: 10/13/23

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260D
Analytical Date: 10/12/23 06:05
Analyst: MCM

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 01-06 Batch: WG1839054-5					
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: L2358723
Report Date: 10/13/23

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260D
Analytical Date: 10/12/23 06:05
Analyst: MCM

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 01-06 Batch: WG1839054-5					
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: L2358723
Report Date: 10/13/23

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260D
Analytical Date: 10/12/23 06:05
Analyst: MCM

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 01-06 Batch: WG1839054-5					

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	100		70-130
Toluene-d8	96		70-130
4-Bromofluorobenzene	92		70-130
Dibromofluoromethane	101		70-130

Lab Control Sample Analysis

Batch Quality Control

Project Name: TMC SW SAMPLING

Project Number: 21010216

Lab Number: L2358723

Report Date: 10/13/23

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: WG1839047-3 WG1839047-4								
1,1,2,2-Tetrachloroethane	75		74		70-130	1		25

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
1,2-Dichloroethane-d4	98		98		70-130
4-Bromofluorobenzene	89		89		70-130

Lab Control Sample Analysis
Batch Quality Control

Project Name: TMC SW SAMPLING
Project Number: 21010216

Lab Number: L2358723
Report Date: 10/13/23

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: WG1839054-3 WG1839054-4								
Dichlorodifluoromethane	95		94		36-147	1		20
Chloromethane	97		96		64-130	1		20
Vinyl chloride	130		130		55-140	0		20
Bromomethane	**140**	Q	130		39-139	7		20
Chloroethane	**140**	Q	**140**	Q	55-138	0		20
Trichlorofluoromethane	110		110		62-150	0		20
1,1-Dichloroethene	100		99		61-145	1		20
Carbon disulfide	99		97		51-130	2		20
1,1,2-Trichloro-1,2,2-Trifluoroethane	100		96		70-130	4		20
Methylene chloride	100		97		70-130	3		20
Acetone	110		110		58-148	0		20
trans-1,2-Dichloroethene	100		97		70-130	3		20
Methyl Acetate	100		100		70-130	0		20
Methyl tert butyl ether	100		97		63-130	3		20
1,1-Dichloroethane	100		100		70-130	0		20
cis-1,2-Dichloroethene	100		100		70-130	0		20
Cyclohexane	96		95		70-130	1		20
Chloroform	98		96		70-130	2		20
Carbon tetrachloride	100		100		63-132	0		20
1,1,1-Trichloroethane	100		100		67-130	0		20
2-Butanone	110		100		63-138	10		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

Project Number: 21010216

Lab Number: L2358723

Report Date: 10/13/23

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: WG1839054-3 WG1839054-4								
Trichloroethene	100		96		70-130	4		20
1,2-Dichloropropane	98		95		70-130	3		20
Bromodichloromethane	100		97		67-130	3		20
cis-1,3-Dichloropropene	94		89		70-130	5		20
Toluene	95		94		70-130	1		20
Tetrachloroethene	100		100		70-130	0		20
4-Methyl-2-pentanone	83		85		59-130	2		20
trans-1,3-Dichloropropene	88		86		70-130	2		20
1,1,2-Trichloroethane	91		92		70-130	1		20
Dibromochloromethane	90		87		63-130	3		20
1,2-Dibromoethane	96		93		70-130	3		20
2-Hexanone	85		82		57-130	4		20
Chlorobenzene	96		95		75-130	1		20
Ethylbenzene	91		91		70-130	0		20
p/m-Xylene	95		95		70-130	0		20
o-Xylene	90		85		70-130	6		20
Styrene	90		90		70-130	0		20
Bromoform	74		76		54-136	3		20
Isopropylbenzene	86		85		70-130	1		20
1,1,2,2-Tetrachloroethane	84		83		67-130	1		20
1,3-Dichlorobenzene	89		89		70-130	0		20
1,4-Dichlorobenzene	91		88		70-130	3		20
1,2-Dichlorobenzene	90		91		70-130	1		20

Lab Control Sample Analysis

Batch Quality Control

Project Name: TMC SW SAMPLING

Project Number: 21010216

Lab Number: L2358723

Report Date: 10/13/23

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: WG1839054-3 WG1839054-4								
1,2-Dibromo-3-chloropropane	87		79		41-144	10		20
1,2,4-Trichlorobenzene	87		84		70-130	4		20
1,2,3-Trichlorobenzene	90		89		70-130	1		20

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
1,2-Dichloroethane-d4	91		90		70-130
Toluene-d8	95		97		70-130
4-Bromofluorobenzene	92		95		70-130
Dibromofluoromethane	101		103		70-130

Matrix Spike Analysis

Batch Quality Control

Project Name: TMC SW SAMPLING

Project Number: 21010216

Lab Number: L2358723

Report Date: 10/13/23

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: WG1839047-6 WG1839047-7 QC Sample: L2358723-01 Client ID: TMC-OUTLET												
1,1,2,2-Tetrachloroethane	ND	0.1	0.073	73		0.075	75		70-130	3		30

Surrogate	MS % Recovery	MS Qualifier	MSD % Recovery	MSD Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	100		100		70-130
4-Bromofluorobenzene	87		87		70-130

Matrix Spike Analysis

Batch Quality Control

Project Name: TMC SW SAMPLING

Project Number: 21010216

Lab Number: L2358723

Report Date: 10/13/23

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: WG1839054-6 WG1839054-7 QC Sample: L2358723-01 Client ID: TMC-OUTLET												
Dichlorodifluoromethane	ND	10	8.4	84		7.9	79		36-147	6		20
Chloromethane	ND	10	8.0	80		7.9	79		64-130	1		20
Vinyl chloride	ND	10	12	120		12	120		55-140	0		20
Bromomethane	ND	10	8.1	81		9.2	92		39-139	13		20
Chloroethane	ND	10	13	130		12	120		55-138	8		20
Trichlorofluoromethane	ND	10	10	100		9.0	90		62-150	11		20
1,1-Dichloroethene	ND	10	9.3	93		8.7	87		61-145	7		20
Carbon disulfide	ND	10	8.9	89		8.3	83		51-130	7		20
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	10	9.3	93		8.8	88		70-130	6		20
Methylene chloride	ND	10	8.6	86		8.2	82		70-130	5		20
Acetone	3.8J	10	12	120		11	110		58-148	9		20
trans-1,2-Dichloroethene	ND	10	8.8	88		8.4	84		70-130	5		20
Methyl Acetate	ND	10	8.3	83		7.6	76		70-130	9		20
Methyl tert butyl ether	ND	10	8.2	82		7.9	79		63-130	4		20
1,1-Dichloroethane	ND	10	8.8	88		8.4	84		70-130	5		20
cis-1,2-Dichloroethene	ND	10	8.9	89		8.3	83		70-130	7		20
Cyclohexane	ND	10	8.9J	89		8.4J	84		70-130	6		20
Chloroform	ND	10	8.4	84		8.0	80		70-130	5		20
Carbon tetrachloride	ND	10	9.9	99		9.2	92		63-132	7		20
1,1,1-Trichloroethane	ND	10	9.2	92		8.5	85		67-130	8		20
2-Butanone	ND	10	8.2	82		7.9	79		63-138	4		20
Benzene	ND	10	9.2	92		8.3	83		70-130	10		20
1,2-Dichloroethane	ND	10	9.0	90		8.4	84		70-130	7		20

Matrix Spike Analysis

Batch Quality Control

Project Name: TMC SW SAMPLING
Project Number: 21010216
Lab Number: L2358723
Report Date: 10/13/23

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: WG1839054-6 WG1839054-7 QC Sample: L2358723-01 Client ID: TMC-OUTLET												
Trichloroethene	ND	10	8.3	83		7.9	79		70-130	5		20
1,2-Dichloropropane	ND	10	8.2	82		8.1	81		70-130	1		20
Bromodichloromethane	ND	10	8.0	80		7.8	78		67-130	3		20
cis-1,3-Dichloropropene	ND	10	7.2	72		7.0	70		70-130	3		20
Toluene	ND	10	8.7	87		8.4	84		70-130	4		20
Tetrachloroethene	ND	10	9.6	96		9.1	91		70-130	5		20
4-Methyl-2-pentanone	ND	10	7.4	74		7.1	71		59-130	4		20
trans-1,3-Dichloropropene	ND	10	7.3	73		6.9	**69**	Q	70-130	6		20
1,1,2-Trichloroethane	ND	10	8.1	81		7.8	78		70-130	4		20
Dibromochloromethane	ND	10	7.8	78		7.6	76		63-130	3		20
1,2-Dibromoethane	ND	10	8.1	81		7.9	79		70-130	2		20
2-Hexanone	ND	10	6.5	65		6.4	64		57-130	2		20
Chlorobenzene	ND	10	8.8	88		8.3	83		75-130	6		20
Ethylbenzene	ND	10	8.3	83		8.0	80		70-130	4		20
p/m-Xylene	ND	20	18	90		17	85		70-130	6		20
o-Xylene	ND	20	16	80		15	75		70-130	6		20
Styrene	ND	20	16	80		16	80		70-130	0		20
Bromoform	ND	10	6.4	64		6.1	61		54-136	5		20
Isopropylbenzene	ND	10	8.3	83		7.9	79		70-130	5		20
1,1,2,2-Tetrachloroethane	ND	10	7.7	77		7.6	76		67-130	1		20
1,3-Dichlorobenzene	ND	10	8.4	84		8.0	80		70-130	5		20
1,4-Dichlorobenzene	ND	10	8.4	84		8.1	81		70-130	4		20
1,2-Dichlorobenzene	ND	10	8.4	84		8.0	80		70-130	5		20

Matrix Spike Analysis

Batch Quality Control

Project Name: TMC SW SAMPLING

Project Number: 21010216

Lab Number: L2358723

Report Date: 10/13/23

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: WG1839054-6 WG1839054-7 QC Sample: L2358723-01 Client ID: TMC-OUTLET												
1,2-Dibromo-3-chloropropane	ND	10	8.0	80		7.1	71		41-144	12		20
1,2,4-Trichlorobenzene	ND	10	7.9	79		7.9	79		70-130	0		20
1,2,3-Trichlorobenzene	ND	10	8.3	83		8.4	84		70-130	1		20

Surrogate	MS % Recovery	MS Qualifier	MSD % Recovery	MSD Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	89		90		70-130
4-Bromofluorobenzene	91		91		70-130
Dibromofluoromethane	98		98		70-130
Toluene-d8	98		100		70-130

SEMIVOLATILES

Project Name: TMC SW SAMPLING
Project Number: 21010216
Lab Number: L2358723
Report Date: 10/13/23

SAMPLE RESULTS

Lab ID: L2358723-01
Client ID: TMC-OUTLET
Sample Location: TMC

Date Collected: 10/04/23 10:00
Date Received: 10/04/23
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8270E
Analytical Date: 10/13/23 10:28
Analyst: SZ

Extraction Method: EPA 3510C
Extraction Date: 10/10/23 15:40

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Benzaldehyde	ND		ug/l	5.0	0.53	1
Phenol	ND		ug/l	5.0	0.57	1
Bis(2-chloroethyl)ether	ND		ug/l	2.0	0.50	1
2-Chlorophenol	ND		ug/l	2.0	0.48	1
2-Methylphenol	ND		ug/l	5.0	0.49	1
Bis(2-chloroisopropyl)ether	ND		ug/l	2.0	0.53	1
Acetophenone	ND		ug/l	5.0	0.53	1
n-Nitrosodi-n-propylamine	ND		ug/l	5.0	0.64	1
3-Methylphenol/4-Methylphenol	ND		ug/l	5.0	0.48	1
Hexachloroethane	ND		ug/l	2.0	0.58	1
Nitrobenzene	ND		ug/l	1.4	0.77	1
Isophorone	ND		ug/l	5.0	1.2	1
2,4-Dimethylphenol	ND		ug/l	5.0	1.8	1
Bis(2-chloroethoxy)methane	ND		ug/l	5.0	0.50	1
2,4-Dichlorophenol	ND		ug/l	5.0	0.41	1
Naphthalene	ND		ug/l	2.0	0.46	1
4-Chloroaniline	ND		ug/l	3.7	1.1	1
Hexachlorobutadiene	ND		ug/l	2.0	0.66	1
Caprolactam	ND		ug/l	10	3.3	1
2-Methylnaphthalene	ND		ug/l	2.0	0.45	1
Hexachlorocyclopentadiene	ND		ug/l	20	0.69	1
1,2,4,5-Tetrachlorobenzene	ND		ug/l	1.7	0.44	1
2,4,6-Trichlorophenol	ND		ug/l	5.0	0.61	1
2,4,5-Trichlorophenol	ND		ug/l	5.0	0.77	1
Biphenyl	ND		ug/l	2.0	0.46	1
2-Chloronaphthalene	ND		ug/l	2.0	0.44	1
2-Nitroaniline	ND		ug/l	5.0	0.50	1
2,6-Dinitrotoluene	ND		ug/l	5.0	0.93	1

Project Name: TMC SW SAMPLING **Lab Number:** L2358723

Project Number: 21010216 **Report Date:** 10/13/23

SAMPLE RESULTS

Lab ID: L2358723-01 Date Collected: 10/04/23 10:00

Client ID: TMC-OUTLET Date Received: 10/04/23

Sample Location: TMC 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	0.46	1
Acenaphthene	ND		ug/l	2.0	0.53	1
2,4-Dinitrophenol	ND		ug/l	20	6.6	1
2,4-Dinitrotoluene	ND		ug/l	5.0	1.2	1
2,3,4,6-Tetrachlorophenol	ND		ug/l	5.0	0.84	1
Diethyl phthalate	ND		ug/l	5.0	0.38	1
Fluorene	ND		ug/l	2.0	0.41	1
4-Nitroaniline	ND		ug/l	5.0	0.80	1
NDPA/DPA	ND		ug/l	2.0	0.42	1
Hexachlorobenzene	ND		ug/l	2.0	0.46	1
Pentachlorophenol	ND		ug/l	10	1.8	1
Phenanthrene	ND		ug/l	2.0	0.33	1
Anthracene	ND		ug/l	2.0	0.33	1
Carbazole	ND		ug/l	2.0	0.49	1
Di-n-butylphthalate	ND		ug/l	5.0	0.39	1
Fluoranthene	ND		ug/l	2.0	0.26	1
Pyrene	ND		ug/l	2.0	0.28	1
3,3'-Dichlorobenzidine	ND		ug/l	5.0	1.6	1
Benzo(a)anthracene	ND		ug/l	2.0	0.32	1
Chrysene	ND		ug/l	1.4	0.34	1
Bis(2-ethylhexyl)phthalate	ND		ug/l	3.0	1.5	1
Di-n-octylphthalate	ND		ug/l	5.0	1.3	1
Benzo(b)fluoranthene	ND		ug/l	2.0	0.35	1
Benzo(k)fluoranthene	ND		ug/l	2.0	0.37	1
Benzo(a)pyrene	ND		ug/l	2.0	0.41	1
Indeno(1,2,3-cd)pyrene	ND		ug/l	2.0	0.40	1
Dibenzo(a,h)anthracene	ND		ug/l	2.0	0.32	1
Benzo(ghi)perylene	ND		ug/l	2.0	0.30	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	55		21-120
Phenol-d6	44		10-120
Nitrobenzene-d5	76		23-120
2-Fluorobiphenyl	81		15-120
2,4,6-Tribromophenol	98		10-120
4-Terphenyl-d14	88		41-149

Project Name: TMC SW SAMPLING
Project Number: 21010216
Lab Number: L2358723
Report Date: 10/13/23

SAMPLE RESULTS

Lab ID: L2358723-01
Client ID: TMC-OUTLET
Sample Location: TMC

Date Collected: 10/04/23 10:00
Date Received: 10/04/23
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8270E-SIM
Analytical Date: 10/12/23 16:37
Analyst: RP

Extraction Method: EPA 3510C
Extraction Date: 10/10/23 15:40

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS-SIM - Westborough Lab						
Naphthalene	0.11	B	ug/l	0.10	0.05	1
2-Methylnaphthalene	0.04	JB	ug/l	0.10	0.02	1
Acenaphthylene	0.04	J	ug/l	0.10	0.01	1
Acenaphthene	0.07	JB	ug/l	0.10	0.01	1
Fluorene	0.08	J	ug/l	0.10	0.01	1
Pentachlorophenol	ND		ug/l	0.10	0.01	1
Phenanthrene	0.13	B	ug/l	0.05	0.02	1
Anthracene	0.04	J	ug/l	0.10	0.01	1
Fluoranthene	0.07	J	ug/l	0.10	0.02	1
Pyrene	ND		ug/l	0.10	0.02	1
Benzo(a)anthracene	0.05	J	ug/l	0.05	0.02	1
Chrysene	0.04	J	ug/l	0.10	0.01	1
Benzo(b)fluoranthene	0.07		ug/l	0.05	0.01	1
Benzo(k)fluoranthene	0.02	J	ug/l	0.10	0.01	1
Benzo(a)pyrene	0.03	J	ug/l	0.10	0.02	1
Indeno(1,2,3-cd)pyrene	0.04	J	ug/l	0.10	0.01	1
Dibenzo(a,h)anthracene	ND		ug/l	0.05	0.01	1
Benzo(ghi)perylene	0.04	J	ug/l	0.10	0.01	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	71		21-120
Phenol-d6	60		10-120
Nitrobenzene-d5	105		23-120
2-Fluorobiphenyl	96		15-120
2,4,6-Tribromophenol	105		10-120
4-Terphenyl-d14	100		41-149

Project Name: TMC SW SAMPLING
Project Number: 21010216
Lab Number: L2358723
Report Date: 10/13/23

SAMPLE RESULTS

Lab ID: L2358723-01 RE
Client ID: TMC-OUTLET
Sample Location: TMC

Date Collected: 10/04/23 10:00
Date Received: 10/04/23
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8270E-SIM
Analytical Date: 10/13/23 10:08
Analyst: RP

Extraction Method: EPA 3510C
Extraction Date: 10/12/23 19:29

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS-SIM - Westborough Lab						
Naphthalene	ND		ug/l	0.10	0.05	1
2-Methylnaphthalene	ND		ug/l	0.10	0.02	1
Acenaphthylene	0.02	J	ug/l	0.10	0.01	1
Acenaphthene	0.04	J	ug/l	0.10	0.01	1
Fluorene	0.05	J	ug/l	0.10	0.01	1
Pentachlorophenol	ND		ug/l	0.10	0.01	1
Phenanthrene	0.08	B	ug/l	0.05	0.02	1
Anthracene	0.02	J	ug/l	0.10	0.01	1
Fluoranthene	0.04	J	ug/l	0.10	0.02	1
Pyrene	ND		ug/l	0.10	0.02	1
Benzo(a)anthracene	0.05	J	ug/l	0.05	0.02	1
Chrysene	0.01	J	ug/l	0.10	0.01	1
Benzo(b)fluoranthene	0.02	J	ug/l	0.05	0.01	1
Benzo(k)fluoranthene	0.01	J	ug/l	0.10	0.01	1
Benzo(a)pyrene	ND		ug/l	0.10	0.02	1
Indeno(1,2,3-cd)pyrene	ND		ug/l	0.10	0.01	1
Dibenzo(a,h)anthracene	ND		ug/l	0.05	0.01	1
Benzo(ghi)perylene	ND		ug/l	0.10	0.01	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	52		21-120
Phenol-d6	43		10-120
Nitrobenzene-d5	65		23-120
2-Fluorobiphenyl	58		15-120
2,4,6-Tribromophenol	70		10-120
4-Terphenyl-d14	64		41-149

Project Name: TMC SW SAMPLING
Project Number: 21010216
Lab Number: L2358723
Report Date: 10/13/23

SAMPLE RESULTS

Lab ID: L2358723-02
Client ID: TMC-TM04
Sample Location: TMC

Date Collected: 10/04/23 10:10
Date Received: 10/04/23
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8270E
Analytical Date: 10/09/23 04:21
Analyst: SZ

Extraction Method: EPA 3510C
Extraction Date: 10/07/23 17:33

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Benzaldehyde	ND		ug/l	5.0	0.53	1
Phenol	ND		ug/l	5.0	0.57	1
Bis(2-chloroethyl)ether	ND		ug/l	2.0	0.50	1
2-Chlorophenol	ND		ug/l	2.0	0.48	1
2-Methylphenol	ND		ug/l	5.0	0.49	1
Bis(2-chloroisopropyl)ether	ND		ug/l	2.0	0.53	1
Acetophenone	ND		ug/l	5.0	0.53	1
n-Nitrosodi-n-propylamine	ND		ug/l	5.0	0.64	1
3-Methylphenol/4-Methylphenol	ND		ug/l	5.0	0.48	1
Hexachloroethane	ND		ug/l	2.0	0.58	1
Nitrobenzene	ND		ug/l	1.4	0.77	1
Isophorone	ND		ug/l	5.0	1.2	1
2,4-Dimethylphenol	ND		ug/l	5.0	1.8	1
Bis(2-chloroethoxy)methane	ND		ug/l	5.0	0.50	1
2,4-Dichlorophenol	ND		ug/l	5.0	0.41	1
Naphthalene	ND		ug/l	2.0	0.46	1
4-Chloroaniline	ND		ug/l	3.7	1.1	1
Hexachlorobutadiene	ND		ug/l	2.0	0.66	1
Caprolactam	ND		ug/l	10	3.3	1
2-Methylnaphthalene	ND		ug/l	2.0	0.45	1
Hexachlorocyclopentadiene	ND		ug/l	20	0.69	1
1,2,4,5-Tetrachlorobenzene	ND		ug/l	1.7	0.44	1
2,4,6-Trichlorophenol	ND		ug/l	5.0	0.61	1
2,4,5-Trichlorophenol	ND		ug/l	5.0	0.77	1
Biphenyl	ND		ug/l	2.0	0.46	1
2-Chloronaphthalene	ND		ug/l	2.0	0.44	1
2-Nitroaniline	ND		ug/l	5.0	0.50	1
2,6-Dinitrotoluene	ND		ug/l	5.0	0.93	1

Project Name: TMC SW SAMPLING **Lab Number:** L2358723

Project Number: 21010216 **Report Date:** 10/13/23

SAMPLE RESULTS

Lab ID: L2358723-02 Date Collected: 10/04/23 10:10

Client ID: TMC-TM04 Date Received: 10/04/23

Sample Location: TMC 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	0.46	1
Acenaphthene	ND		ug/l	2.0	0.53	1
2,4-Dinitrophenol	ND		ug/l	20	6.6	1
2,4-Dinitrotoluene	ND		ug/l	5.0	1.2	1
2,3,4,6-Tetrachlorophenol	ND		ug/l	5.0	0.84	1
Diethyl phthalate	ND		ug/l	5.0	0.38	1
Fluorene	ND		ug/l	2.0	0.41	1
4-Nitroaniline	ND		ug/l	5.0	0.80	1
NDPA/DPA	ND		ug/l	2.0	0.42	1
Hexachlorobenzene	ND		ug/l	2.0	0.46	1
Pentachlorophenol	ND		ug/l	10	1.8	1
Phenanthrene	ND		ug/l	2.0	0.33	1
Anthracene	ND		ug/l	2.0	0.33	1
Carbazole	ND		ug/l	2.0	0.49	1
Di-n-butylphthalate	ND		ug/l	5.0	0.39	1
Fluoranthene	ND		ug/l	2.0	0.26	1
Pyrene	ND		ug/l	2.0	0.28	1
3,3'-Dichlorobenzidine	ND		ug/l	5.0	1.6	1
Benzo(a)anthracene	ND		ug/l	2.0	0.32	1
Chrysene	ND		ug/l	1.4	0.34	1
Bis(2-ethylhexyl)phthalate	ND		ug/l	3.0	1.5	1
Di-n-octylphthalate	ND		ug/l	5.0	1.3	1
Benzo(b)fluoranthene	ND		ug/l	2.0	0.35	1
Benzo(k)fluoranthene	ND		ug/l	2.0	0.37	1
Benzo(a)pyrene	ND		ug/l	2.0	0.41	1
Indeno(1,2,3-cd)pyrene	ND		ug/l	2.0	0.40	1
Dibenzo(a,h)anthracene	ND		ug/l	2.0	0.32	1
Benzo(ghi)perylene	ND		ug/l	2.0	0.30	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	69		21-120
Phenol-d6	53		10-120
Nitrobenzene-d5	91		23-120
2-Fluorobiphenyl	86		15-120
2,4,6-Tribromophenol	91		10-120
4-Terphenyl-d14	90		41-149

Project Name: TMC SW SAMPLING
Project Number: 21010216
Lab Number: L2358723
Report Date: 10/13/23

SAMPLE RESULTS

Lab ID: L2358723-02
Client ID: TMC-TM04
Sample Location: TMC

Date Collected: 10/04/23 10:10
Date Received: 10/04/23
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8270E-SIM
Analytical Date: 10/09/23 19:31
Analyst: CMM

Extraction Method: EPA 3510C
Extraction Date: 10/07/23 17:36

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS-SIM - Westborough Lab						
Naphthalene	ND		ug/l	0.10	0.05	1
2-Methylnaphthalene	ND		ug/l	0.10	0.02	1
Acenaphthylene	0.02	J	ug/l	0.10	0.01	1
Acenaphthene	0.07	J	ug/l	0.10	0.01	1
Fluorene	0.08	J	ug/l	0.10	0.01	1
Pentachlorophenol	ND		ug/l	0.10	0.01	1
Phenanthrene	0.10		ug/l	0.05	0.02	1
Anthracene	0.04	J	ug/l	0.10	0.01	1
Fluoranthene	0.05	J	ug/l	0.10	0.02	1
Pyrene	0.03	J	ug/l	0.10	0.02	1
Benzo(a)anthracene	0.03	J	ug/l	0.05	0.02	1
Chrysene	ND		ug/l	0.10	0.01	1
Benzo(b)fluoranthene	ND		ug/l	0.05	0.01	1
Benzo(k)fluoranthene	ND		ug/l	0.10	0.01	1
Benzo(a)pyrene	ND		ug/l	0.10	0.02	1
Indeno(1,2,3-cd)pyrene	ND		ug/l	0.10	0.01	1
Dibenzo(a,h)anthracene	ND		ug/l	0.05	0.01	1
Benzo(ghi)perylene	ND		ug/l	0.10	0.01	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	68		21-120
Phenol-d6	56		10-120
Nitrobenzene-d5	97		23-120
2-Fluorobiphenyl	78		15-120
2,4,6-Tribromophenol	111		10-120
4-Terphenyl-d14	68		41-149

Project Name: TMC SW SAMPLING
Project Number: 21010216
Lab Number: L2358723
Report Date: 10/13/23

SAMPLE RESULTS

Lab ID: L2358723-03
Client ID: TMC-BEND
Sample Location: TMC

Date Collected: 10/04/23 10:20
Date Received: 10/04/23
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8270E
Analytical Date: 10/09/23 01:32
Analyst: SZ

Extraction Method: EPA 3510C
Extraction Date: 10/07/23 17:33

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Benzaldehyde	ND		ug/l	5.0	0.53	1
Phenol	ND		ug/l	5.0	0.57	1
Bis(2-chloroethyl)ether	ND		ug/l	2.0	0.50	1
2-Chlorophenol	ND		ug/l	2.0	0.48	1
2-Methylphenol	ND		ug/l	5.0	0.49	1
Bis(2-chloroisopropyl)ether	ND		ug/l	2.0	0.53	1
Acetophenone	ND		ug/l	5.0	0.53	1
n-Nitrosodi-n-propylamine	ND		ug/l	5.0	0.64	1
3-Methylphenol/4-Methylphenol	ND		ug/l	5.0	0.48	1
Hexachloroethane	ND		ug/l	2.0	0.58	1
Nitrobenzene	ND		ug/l	1.4	0.77	1
Isophorone	ND		ug/l	5.0	1.2	1
2,4-Dimethylphenol	ND		ug/l	5.0	1.8	1
Bis(2-chloroethoxy)methane	ND		ug/l	5.0	0.50	1
2,4-Dichlorophenol	ND		ug/l	5.0	0.41	1
Naphthalene	ND		ug/l	2.0	0.46	1
4-Chloroaniline	ND		ug/l	3.7	1.1	1
Hexachlorobutadiene	ND		ug/l	2.0	0.66	1
Caprolactam	ND		ug/l	10	3.3	1
2-Methylnaphthalene	ND		ug/l	2.0	0.45	1
Hexachlorocyclopentadiene	ND		ug/l	20	0.69	1
1,2,4,5-Tetrachlorobenzene	ND		ug/l	1.7	0.44	1
2,4,6-Trichlorophenol	ND		ug/l	5.0	0.61	1
2,4,5-Trichlorophenol	ND		ug/l	5.0	0.77	1
Biphenyl	ND		ug/l	2.0	0.46	1
2-Chloronaphthalene	ND		ug/l	2.0	0.44	1
2-Nitroaniline	ND		ug/l	5.0	0.50	1
2,6-Dinitrotoluene	ND		ug/l	5.0	0.93	1

Project Name: TMC SW SAMPLING **Lab Number:** L2358723

Project Number: 21010216 **Report Date:** 10/13/23

SAMPLE RESULTS

Lab ID: L2358723-03 Date Collected: 10/04/23 10:20

Client ID: TMC-BEND Date Received: 10/04/23

Sample Location: TMC 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	0.46	1
Acenaphthene	ND		ug/l	2.0	0.53	1
2,4-Dinitrophenol	ND		ug/l	20	6.6	1
2,4-Dinitrotoluene	ND		ug/l	5.0	1.2	1
2,3,4,6-Tetrachlorophenol	ND		ug/l	5.0	0.84	1
Diethyl phthalate	ND		ug/l	5.0	0.38	1
Fluorene	ND		ug/l	2.0	0.41	1
4-Nitroaniline	ND		ug/l	5.0	0.80	1
NDPA/DPA	ND		ug/l	2.0	0.42	1
Hexachlorobenzene	ND		ug/l	2.0	0.46	1
Pentachlorophenol	ND		ug/l	10	1.8	1
Phenanthrene	ND		ug/l	2.0	0.33	1
Anthracene	ND		ug/l	2.0	0.33	1
Carbazole	ND		ug/l	2.0	0.49	1
Di-n-butylphthalate	ND		ug/l	5.0	0.39	1
Fluoranthene	ND		ug/l	2.0	0.26	1
Pyrene	ND		ug/l	2.0	0.28	1
3,3'-Dichlorobenzidine	ND		ug/l	5.0	1.6	1
Benzo(a)anthracene	ND		ug/l	2.0	0.32	1
Chrysene	ND		ug/l	1.4	0.34	1
Bis(2-ethylhexyl)phthalate	ND		ug/l	3.0	1.5	1
Di-n-octylphthalate	ND		ug/l	5.0	1.3	1
Benzo(b)fluoranthene	ND		ug/l	2.0	0.35	1
Benzo(k)fluoranthene	ND		ug/l	2.0	0.37	1
Benzo(a)pyrene	ND		ug/l	2.0	0.41	1
Indeno(1,2,3-cd)pyrene	ND		ug/l	2.0	0.40	1
Dibenzo(a,h)anthracene	ND		ug/l	2.0	0.32	1
Benzo(ghi)perylene	ND		ug/l	2.0	0.30	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	73		21-120
Phenol-d6	54		10-120
Nitrobenzene-d5	81		23-120
2-Fluorobiphenyl	78		15-120
2,4,6-Tribromophenol	80		10-120
4-Terphenyl-d14	73		41-149

Project Name: TMC SW SAMPLING
Project Number: 21010216
Lab Number: L2358723
Report Date: 10/13/23

SAMPLE RESULTS

Lab ID: L2358723-03
Client ID: TMC-BEND
Sample Location: TMC

Date Collected: 10/04/23 10:20
Date Received: 10/04/23
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8270E-SIM
Analytical Date: 10/09/23 19:48
Analyst: CMM

Extraction Method: EPA 3510C
Extraction Date: 10/07/23 17:36

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS-SIM - Westborough Lab						
Naphthalene	0.13		ug/l	0.10	0.05	1
2-Methylnaphthalene	0.06	J	ug/l	0.10	0.02	1
Acenaphthylene	0.02	J	ug/l	0.10	0.01	1
Acenaphthene	0.06	J	ug/l	0.10	0.01	1
Fluorene	0.07	J	ug/l	0.10	0.01	1
Pentachlorophenol	ND		ug/l	0.10	0.01	1
Phenanthrene	0.09		ug/l	0.05	0.02	1
Anthracene	0.04	J	ug/l	0.10	0.01	1
Fluoranthene	0.04	J	ug/l	0.10	0.02	1
Pyrene	0.03	J	ug/l	0.10	0.02	1
Benzo(a)anthracene	0.03	J	ug/l	0.05	0.02	1
Chrysene	0.01	J	ug/l	0.10	0.01	1
Benzo(b)fluoranthene	ND		ug/l	0.05	0.01	1
Benzo(k)fluoranthene	ND		ug/l	0.10	0.01	1
Benzo(a)pyrene	0.06	J	ug/l	0.10	0.02	1
Indeno(1,2,3-cd)pyrene	ND		ug/l	0.10	0.01	1
Dibenzo(a,h)anthracene	ND		ug/l	0.05	0.01	1
Benzo(ghi)perylene	ND		ug/l	0.10	0.01	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	67		21-120
Phenol-d6	55		10-120
Nitrobenzene-d5	95		23-120
2-Fluorobiphenyl	77		15-120
2,4,6-Tribromophenol	109		10-120
4-Terphenyl-d14	64		41-149

Project Name: TMC SW SAMPLING
Project Number: 21010216
Lab Number: L2358723
Report Date: 10/13/23

SAMPLE RESULTS

Lab ID: L2358723-04
Client ID: TMC-RAIL BRIDGE
Sample Location: TMC

Date Collected: 10/04/23 10:30
Date Received: 10/04/23
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8270E
Analytical Date: 10/09/23 01:55
Analyst: SZ

Extraction Method: EPA 3510C
Extraction Date: 10/07/23 17:33

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Benzaldehyde	ND		ug/l	5.0	0.53	1
Phenol	ND		ug/l	5.0	0.57	1
Bis(2-chloroethyl)ether	ND		ug/l	2.0	0.50	1
2-Chlorophenol	ND		ug/l	2.0	0.48	1
2-Methylphenol	ND		ug/l	5.0	0.49	1
Bis(2-chloroisopropyl)ether	ND		ug/l	2.0	0.53	1
Acetophenone	ND		ug/l	5.0	0.53	1
n-Nitrosodi-n-propylamine	ND		ug/l	5.0	0.64	1
3-Methylphenol/4-Methylphenol	ND		ug/l	5.0	0.48	1
Hexachloroethane	ND		ug/l	2.0	0.58	1
Nitrobenzene	ND		ug/l	1.4	0.77	1
Isophorone	ND		ug/l	5.0	1.2	1
2,4-Dimethylphenol	ND		ug/l	5.0	1.8	1
Bis(2-chloroethoxy)methane	ND		ug/l	5.0	0.50	1
2,4-Dichlorophenol	ND		ug/l	5.0	0.41	1
Naphthalene	ND		ug/l	2.0	0.46	1
4-Chloroaniline	ND		ug/l	3.7	1.1	1
Hexachlorobutadiene	ND		ug/l	2.0	0.66	1
Caprolactam	ND		ug/l	10	3.3	1
2-Methylnaphthalene	ND		ug/l	2.0	0.45	1
Hexachlorocyclopentadiene	ND		ug/l	20	0.69	1
1,2,4,5-Tetrachlorobenzene	ND		ug/l	1.7	0.44	1
2,4,6-Trichlorophenol	ND		ug/l	5.0	0.61	1
2,4,5-Trichlorophenol	ND		ug/l	5.0	0.77	1
Biphenyl	ND		ug/l	2.0	0.46	1
2-Chloronaphthalene	ND		ug/l	2.0	0.44	1
2-Nitroaniline	ND		ug/l	5.0	0.50	1
2,6-Dinitrotoluene	ND		ug/l	5.0	0.93	1

Project Name: TMC SW SAMPLING **Lab Number:** L2358723

Project Number: 21010216 **Report Date:** 10/13/23

SAMPLE RESULTS

Lab ID: L2358723-04 Date Collected: 10/04/23 10:30

Client ID: TMC-RAIL BRIDGE Date Received: 10/04/23

Sample Location: TMC 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	0.46	1
Acenaphthene	ND		ug/l	2.0	0.53	1
2,4-Dinitrophenol	ND		ug/l	20	6.6	1
2,4-Dinitrotoluene	ND		ug/l	5.0	1.2	1
2,3,4,6-Tetrachlorophenol	ND		ug/l	5.0	0.84	1
Diethyl phthalate	ND		ug/l	5.0	0.38	1
Fluorene	ND		ug/l	2.0	0.41	1
4-Nitroaniline	ND		ug/l	5.0	0.80	1
NDPA/DPA	ND		ug/l	2.0	0.42	1
Hexachlorobenzene	ND		ug/l	2.0	0.46	1
Pentachlorophenol	ND		ug/l	10	1.8	1
Phenanthrene	ND		ug/l	2.0	0.33	1
Anthracene	ND		ug/l	2.0	0.33	1
Carbazole	ND		ug/l	2.0	0.49	1
Di-n-butylphthalate	ND		ug/l	5.0	0.39	1
Fluoranthene	ND		ug/l	2.0	0.26	1
Pyrene	ND		ug/l	2.0	0.28	1
3,3'-Dichlorobenzidine	ND		ug/l	5.0	1.6	1
Benzo(a)anthracene	ND		ug/l	2.0	0.32	1
Chrysene	ND		ug/l	1.4	0.34	1
Bis(2-ethylhexyl)phthalate	ND		ug/l	3.0	1.5	1
Di-n-octylphthalate	ND		ug/l	5.0	1.3	1
Benzo(b)fluoranthene	ND		ug/l	2.0	0.35	1
Benzo(k)fluoranthene	ND		ug/l	2.0	0.37	1
Benzo(a)pyrene	ND		ug/l	2.0	0.41	1
Indeno(1,2,3-cd)pyrene	ND		ug/l	2.0	0.40	1
Dibenzo(a,h)anthracene	ND		ug/l	2.0	0.32	1
Benzo(ghi)perylene	ND		ug/l	2.0	0.30	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	65		21-120
Phenol-d6	55		10-120
Nitrobenzene-d5	79		23-120
2-Fluorobiphenyl	79		15-120
2,4,6-Tribromophenol	84		10-120
4-Terphenyl-d14	76		41-149

Project Name: TMC SW SAMPLING
Project Number: 21010216
Lab Number: L2358723
Report Date: 10/13/23

SAMPLE RESULTS

Lab ID: L2358723-04
Client ID: TMC-RAIL BRIDGE
Sample Location: TMC

Date Collected: 10/04/23 10:30
Date Received: 10/04/23
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8270E-SIM
Analytical Date: 10/09/23 20:05
Analyst: CMM

Extraction Method: EPA 3510C
Extraction Date: 10/07/23 17:36

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS-SIM - Westborough Lab						
Naphthalene	0.08	J	ug/l	0.10	0.05	1
2-Methylnaphthalene	ND		ug/l	0.10	0.02	1
Acenaphthylene	0.02	J	ug/l	0.10	0.01	1
Acenaphthene	0.05	J	ug/l	0.10	0.01	1
Fluorene	0.06	J	ug/l	0.10	0.01	1
Pentachlorophenol	ND		ug/l	0.10	0.01	1
Phenanthrene	0.08		ug/l	0.05	0.02	1
Anthracene	0.04	J	ug/l	0.10	0.01	1
Fluoranthene	0.03	J	ug/l	0.10	0.02	1
Pyrene	0.02	J	ug/l	0.10	0.02	1
Benzo(a)anthracene	0.02	J	ug/l	0.05	0.02	1
Chrysene	ND		ug/l	0.10	0.01	1
Benzo(b)fluoranthene	ND		ug/l	0.05	0.01	1
Benzo(k)fluoranthene	ND		ug/l	0.10	0.01	1
Benzo(a)pyrene	ND		ug/l	0.10	0.02	1
Indeno(1,2,3-cd)pyrene	ND		ug/l	0.10	0.01	1
Dibenzo(a,h)anthracene	ND		ug/l	0.05	0.01	1
Benzo(ghi)perylene	ND		ug/l	0.10	0.01	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	66		21-120
Phenol-d6	56		10-120
Nitrobenzene-d5	93		23-120
2-Fluorobiphenyl	75		15-120
2,4,6-Tribromophenol	108		10-120
4-Terphenyl-d14	65		41-149

Project Name: TMC SW SAMPLING
Project Number: 21010216
Lab Number: L2358723
Report Date: 10/13/23

SAMPLE RESULTS

Lab ID: L2358723-05
Client ID: DUP
Sample Location: TMC

Date Collected: 10/04/23 00:00
Date Received: 10/04/23
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8270E
Analytical Date: 10/09/23 02:17
Analyst: SZ

Extraction Method: EPA 3510C
Extraction Date: 10/07/23 17:33

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Benzaldehyde	ND		ug/l	5.0	0.53	1
Phenol	ND		ug/l	5.0	0.57	1
Bis(2-chloroethyl)ether	ND		ug/l	2.0	0.50	1
2-Chlorophenol	ND		ug/l	2.0	0.48	1
2-Methylphenol	ND		ug/l	5.0	0.49	1
Bis(2-chloroisopropyl)ether	ND		ug/l	2.0	0.53	1
Acetophenone	ND		ug/l	5.0	0.53	1
n-Nitrosodi-n-propylamine	ND		ug/l	5.0	0.64	1
3-Methylphenol/4-Methylphenol	ND		ug/l	5.0	0.48	1
Hexachloroethane	ND		ug/l	2.0	0.58	1
Nitrobenzene	ND		ug/l	1.4	0.77	1
Isophorone	ND		ug/l	5.0	1.2	1
2,4-Dimethylphenol	ND		ug/l	5.0	1.8	1
Bis(2-chloroethoxy)methane	ND		ug/l	5.0	0.50	1
2,4-Dichlorophenol	ND		ug/l	5.0	0.41	1
Naphthalene	ND		ug/l	2.0	0.46	1
4-Chloroaniline	ND		ug/l	3.7	1.1	1
Hexachlorobutadiene	ND		ug/l	2.0	0.66	1
Caprolactam	ND		ug/l	10	3.3	1
2-Methylnaphthalene	ND		ug/l	2.0	0.45	1
Hexachlorocyclopentadiene	ND		ug/l	20	0.69	1
1,2,4,5-Tetrachlorobenzene	ND		ug/l	1.7	0.44	1
2,4,6-Trichlorophenol	ND		ug/l	5.0	0.61	1
2,4,5-Trichlorophenol	ND		ug/l	5.0	0.77	1
Biphenyl	ND		ug/l	2.0	0.46	1
2-Chloronaphthalene	ND		ug/l	2.0	0.44	1
2-Nitroaniline	ND		ug/l	5.0	0.50	1
2,6-Dinitrotoluene	ND		ug/l	5.0	0.93	1

Project Name: TMC SW SAMPLING **Lab Number:** L2358723

Project Number: 21010216 **Report Date:** 10/13/23

SAMPLE RESULTS

Lab ID: L2358723-05 Date Collected: 10/04/23 00:00

Client ID: DUP Date Received: 10/04/23

Sample Location: TMC 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	0.46	1
Acenaphthene	ND		ug/l	2.0	0.53	1
2,4-Dinitrophenol	ND		ug/l	20	6.6	1
2,4-Dinitrotoluene	ND		ug/l	5.0	1.2	1
2,3,4,6-Tetrachlorophenol	ND		ug/l	5.0	0.84	1
Diethyl phthalate	ND		ug/l	5.0	0.38	1
Fluorene	ND		ug/l	2.0	0.41	1
4-Nitroaniline	ND		ug/l	5.0	0.80	1
NDPA/DPA	ND		ug/l	2.0	0.42	1
Hexachlorobenzene	ND		ug/l	2.0	0.46	1
Pentachlorophenol	ND		ug/l	10	1.8	1
Phenanthrene	ND		ug/l	2.0	0.33	1
Anthracene	ND		ug/l	2.0	0.33	1
Carbazole	ND		ug/l	2.0	0.49	1
Di-n-butylphthalate	ND		ug/l	5.0	0.39	1
Fluoranthene	ND		ug/l	2.0	0.26	1
Pyrene	ND		ug/l	2.0	0.28	1
3,3'-Dichlorobenzidine	ND		ug/l	5.0	1.6	1
Benzo(a)anthracene	ND		ug/l	2.0	0.32	1
Chrysene	ND		ug/l	1.4	0.34	1
Bis(2-ethylhexyl)phthalate	ND		ug/l	3.0	1.5	1
Di-n-octylphthalate	ND		ug/l	5.0	1.3	1
Benzo(b)fluoranthene	ND		ug/l	2.0	0.35	1
Benzo(k)fluoranthene	ND		ug/l	2.0	0.37	1
Benzo(a)pyrene	ND		ug/l	2.0	0.41	1
Indeno(1,2,3-cd)pyrene	ND		ug/l	2.0	0.40	1
Dibenzo(a,h)anthracene	ND		ug/l	2.0	0.32	1
Benzo(ghi)perylene	ND		ug/l	2.0	0.30	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	62		21-120
Phenol-d6	52		10-120
Nitrobenzene-d5	76		23-120
2-Fluorobiphenyl	78		15-120
2,4,6-Tribromophenol	78		10-120
4-Terphenyl-d14	76		41-149

Project Name: TMC SW SAMPLING
Project Number: 21010216
Lab Number: L2358723
Report Date: 10/13/23

SAMPLE RESULTS

Lab ID: L2358723-05
Client ID: DUP
Sample Location: TMC

Date Collected: 10/04/23 00:00
Date Received: 10/04/23
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8270E-SIM
Analytical Date: 10/09/23 20:21
Analyst: CMM

Extraction Method: EPA 3510C
Extraction Date: 10/07/23 17:36

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS-SIM - Westborough Lab						
Naphthalene	0.06	J	ug/l	0.10	0.05	1
2-Methylnaphthalene	ND		ug/l	0.10	0.02	1
Acenaphthylene	0.02	J	ug/l	0.10	0.01	1
Acenaphthene	0.06	J	ug/l	0.10	0.01	1
Fluorene	0.05	J	ug/l	0.10	0.01	1
Pentachlorophenol	ND		ug/l	0.10	0.01	1
Phenanthrene	0.08		ug/l	0.05	0.02	1
Anthracene	0.04	J	ug/l	0.10	0.01	1
Fluoranthene	0.04	J	ug/l	0.10	0.02	1
Pyrene	0.02	J	ug/l	0.10	0.02	1
Benzo(a)anthracene	0.02	J	ug/l	0.05	0.02	1
Chrysene	ND		ug/l	0.10	0.01	1
Benzo(b)fluoranthene	ND		ug/l	0.05	0.01	1
Benzo(k)fluoranthene	ND		ug/l	0.10	0.01	1
Benzo(a)pyrene	ND		ug/l	0.10	0.02	1
Indeno(1,2,3-cd)pyrene	ND		ug/l	0.10	0.01	1
Dibenzo(a,h)anthracene	ND		ug/l	0.05	0.01	1
Benzo(ghi)perylene	ND		ug/l	0.10	0.01	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	59		21-120
Phenol-d6	48		10-120
Nitrobenzene-d5	83		23-120
2-Fluorobiphenyl	67		15-120
2,4,6-Tribromophenol	98		10-120
4-Terphenyl-d14	62		41-149

Project Name: TMC SW SAMPLING
Project Number: 21010216
Lab Number: L2358723
Report Date: 10/13/23

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270E
Analytical Date: 10/08/23 19:40
Analyst: SZ

Extraction Method: EPA 3510C
Extraction Date: 10/07/23 17:33

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 02-05 Batch: WG1836946-1					
Benzaldehyde	ND		ug/l	5.0	0.53
Phenol	ND		ug/l	5.0	0.57
Bis(2-chloroethyl)ether	ND		ug/l	2.0	0.50
2-Chlorophenol	ND		ug/l	2.0	0.48
2-Methylphenol	ND		ug/l	5.0	0.49
Bis(2-chloroisopropyl)ether	ND		ug/l	2.0	0.53
Acetophenone	ND		ug/l	5.0	0.53
n-Nitrosodi-n-propylamine	ND		ug/l	5.0	0.64
3-Methylphenol/4-Methylphenol	ND		ug/l	5.0	0.48
Hexachloroethane	ND		ug/l	2.0	0.58
Nitrobenzene	ND		ug/l	1.4	0.77
Isophorone	ND		ug/l	5.0	1.2
2,4-Dimethylphenol	ND		ug/l	5.0	1.8
Bis(2-chloroethoxy)methane	ND		ug/l	5.0	0.50
2,4-Dichlorophenol	ND		ug/l	5.0	0.41
Naphthalene	ND		ug/l	2.0	0.46
4-Chloroaniline	ND		ug/l	3.7	1.1
Hexachlorobutadiene	ND		ug/l	2.0	0.66
Caprolactam	ND		ug/l	10	3.3
2-Methylnaphthalene	ND		ug/l	2.0	0.45
Hexachlorocyclopentadiene	ND		ug/l	20	0.69
1,2,4,5-Tetrachlorobenzene	ND		ug/l	1.7	0.44
2,4,6-Trichlorophenol	ND		ug/l	5.0	0.61
2,4,5-Trichlorophenol	ND		ug/l	5.0	0.77
Biphenyl	ND		ug/l	2.0	0.46
2-Chloronaphthalene	ND		ug/l	2.0	0.44
2-Nitroaniline	ND		ug/l	5.0	0.50
2,6-Dinitrotoluene	ND		ug/l	5.0	0.93
Acenaphthylene	ND		ug/l	2.0	0.46

Project Name: TMC SW SAMPLING
Project Number: 21010216
Lab Number: L2358723
Report Date: 10/13/23

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270E
Analytical Date: 10/08/23 19:40
Analyst: SZ

Extraction Method: EPA 3510C
Extraction Date: 10/07/23 17:33

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 02-05 Batch: WG1836946-1					
Acenaphthene	ND		ug/l	2.0	0.53
2,4-Dinitrophenol	ND		ug/l	20	6.6
2,4-Dinitrotoluene	ND		ug/l	5.0	1.2
2,3,4,6-Tetrachlorophenol	ND		ug/l	5.0	0.84
Diethyl phthalate	ND		ug/l	5.0	0.38
Fluorene	ND		ug/l	2.0	0.41
4-Nitroaniline	ND		ug/l	5.0	0.80
NDPA/DPA	ND		ug/l	2.0	0.42
Hexachlorobenzene	ND		ug/l	2.0	0.46
Pentachlorophenol	ND		ug/l	10	1.8
Phenanthrene	ND		ug/l	2.0	0.33
Anthracene	ND		ug/l	2.0	0.33
Carbazole	ND		ug/l	2.0	0.49
Di-n-butylphthalate	ND		ug/l	5.0	0.39
Fluoranthene	ND		ug/l	2.0	0.26
Pyrene	ND		ug/l	2.0	0.28
3,3'-Dichlorobenzidine	ND		ug/l	5.0	1.6
Benzo(a)anthracene	ND		ug/l	2.0	0.32
Chrysene	ND		ug/l	1.4	0.34
Bis(2-ethylhexyl)phthalate	ND		ug/l	3.0	1.5
Di-n-octylphthalate	ND		ug/l	5.0	1.3
Benzo(b)fluoranthene	ND		ug/l	2.0	0.35
Benzo(k)fluoranthene	ND		ug/l	2.0	0.37
Benzo(a)pyrene	ND		ug/l	2.0	0.41
Indeno(1,2,3-cd)pyrene	ND		ug/l	2.0	0.40
Dibenzo(a,h)anthracene	ND		ug/l	2.0	0.32
Benzo(ghi)perylene	ND		ug/l	2.0	0.30

Project Name: TMC SW SAMPLING
Project Number: 21010216
Lab Number: L2358723
Report Date: 10/13/23

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270E
Analytical Date: 10/08/23 19:40
Analyst: SZ

Extraction Method: EPA 3510C
Extraction Date: 10/07/23 17:33

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 02-05 Batch: WG1836946-1					

Surrogate	%Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	62		21-120
Phenol-d6	48		10-120
Nitrobenzene-d5	81		23-120
2-Fluorobiphenyl	78		15-120
2,4,6-Tribromophenol	86		10-120
4-Terphenyl-d14	83		41-149

Project Name: TMC SW SAMPLING
Project Number: 21010216
Lab Number: L2358723
Report Date: 10/13/23

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270E-SIM
Analytical Date: 10/09/23 18:58
Analyst: CMM

Extraction Method: EPA 3510C
Extraction Date: 10/07/23 17:36

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS-SIM - Westborough Lab for sample(s): 02-05 Batch: WG1836947-1					
Naphthalene	ND		ug/l	0.10	0.05
2-Methylnaphthalene	ND		ug/l	0.10	0.02
Acenaphthylene	ND		ug/l	0.10	0.01
Acenaphthene	ND		ug/l	0.10	0.01
Fluorene	ND		ug/l	0.10	0.01
Pentachlorophenol	ND		ug/l	0.10	0.01
Phenanthrene	ND		ug/l	0.05	0.02
Anthracene	ND		ug/l	0.10	0.01
Fluoranthene	ND		ug/l	0.10	0.02
Pyrene	ND		ug/l	0.10	0.02
Benzo(a)anthracene	ND		ug/l	0.05	0.02
Chrysene	ND		ug/l	0.10	0.01
Benzo(b)fluoranthene	ND		ug/l	0.05	0.01
Benzo(k)fluoranthene	ND		ug/l	0.10	0.01
Benzo(a)pyrene	ND		ug/l	0.10	0.02
Indeno(1,2,3-cd)pyrene	ND		ug/l	0.10	0.01
Dibenzo(a,h)anthracene	ND		ug/l	0.05	0.01
Benzo(ghi)perylene	ND		ug/l	0.10	0.01

Surrogate	%Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	66		21-120
Phenol-d6	53		10-120
Nitrobenzene-d5	92		23-120
2-Fluorobiphenyl	74		15-120
2,4,6-Tribromophenol	105		10-120
4-Terphenyl-d14	66		41-149

Project Name: TMC SW SAMPLING
Project Number: 21010216
Lab Number: L2358723
Report Date: 10/13/23

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270E
Analytical Date: 10/13/23 09:18
Analyst: SZ

Extraction Method: EPA 3510C
Extraction Date: 10/10/23 15:40

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 01 Batch: WG1837983-1					
Benzaldehyde	ND		ug/l	5.0	0.53
Phenol	ND		ug/l	5.0	0.57
Bis(2-chloroethyl)ether	ND		ug/l	2.0	0.50
2-Chlorophenol	ND		ug/l	2.0	0.48
2-Methylphenol	ND		ug/l	5.0	0.49
Bis(2-chloroisopropyl)ether	ND		ug/l	2.0	0.53
Acetophenone	ND		ug/l	5.0	0.53
n-Nitrosodi-n-propylamine	ND		ug/l	5.0	0.64
3-Methylphenol/4-Methylphenol	ND		ug/l	5.0	0.48
Hexachloroethane	ND		ug/l	2.0	0.58
Nitrobenzene	ND		ug/l	1.4	0.77
Isophorone	ND		ug/l	5.0	1.2
2,4-Dimethylphenol	ND		ug/l	5.0	1.8
Bis(2-chloroethoxy)methane	ND		ug/l	5.0	0.50
2,4-Dichlorophenol	ND		ug/l	5.0	0.41
Naphthalene	10		ug/l	2.0	0.46
4-Chloroaniline	ND		ug/l	3.7	1.1
Hexachlorobutadiene	ND		ug/l	2.0	0.66
Caprolactam	ND		ug/l	10	3.3
2-Methylnaphthalene	2.4		ug/l	2.0	0.45
Hexachlorocyclopentadiene	ND		ug/l	20	0.69
1,2,4,5-Tetrachlorobenzene	ND		ug/l	1.7	0.44
2,4,6-Trichlorophenol	ND		ug/l	5.0	0.61
2,4,5-Trichlorophenol	ND		ug/l	5.0	0.77
Biphenyl	ND		ug/l	2.0	0.46
2-Chloronaphthalene	ND		ug/l	2.0	0.44
2-Nitroaniline	ND		ug/l	5.0	0.50
2,6-Dinitrotoluene	ND		ug/l	5.0	0.93
Acenaphthylene	ND		ug/l	2.0	0.46

Project Name: TMC SW SAMPLING
Project Number: 21010216
Lab Number: L2358723
Report Date: 10/13/23

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270E
Analytical Date: 10/13/23 09:18
Analyst: SZ

Extraction Method: EPA 3510C
Extraction Date: 10/10/23 15:40

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 01 Batch: WG1837983-1					
Acenaphthene	ND		ug/l	2.0	0.53
2,4-Dinitrophenol	ND		ug/l	20	6.6
2,4-Dinitrotoluene	ND		ug/l	5.0	1.2
2,3,4,6-Tetrachlorophenol	ND		ug/l	5.0	0.84
Diethyl phthalate	ND		ug/l	5.0	0.38
Fluorene	ND		ug/l	2.0	0.41
4-Nitroaniline	ND		ug/l	5.0	0.80
NDPA/DPA	ND		ug/l	2.0	0.42
Hexachlorobenzene	ND		ug/l	2.0	0.46
Pentachlorophenol	ND		ug/l	10	1.8
Phenanthrene	ND		ug/l	2.0	0.33
Anthracene	ND		ug/l	2.0	0.33
Carbazole	ND		ug/l	2.0	0.49
Di-n-butylphthalate	ND		ug/l	5.0	0.39
Fluoranthene	ND		ug/l	2.0	0.26
Pyrene	ND		ug/l	2.0	0.28
3,3'-Dichlorobenzidine	ND		ug/l	5.0	1.6
Benzo(a)anthracene	ND		ug/l	2.0	0.32
Chrysene	ND		ug/l	1.4	0.34
Bis(2-ethylhexyl)phthalate	ND		ug/l	3.0	1.5
Di-n-octylphthalate	ND		ug/l	5.0	1.3
Benzo(b)fluoranthene	ND		ug/l	2.0	0.35
Benzo(k)fluoranthene	ND		ug/l	2.0	0.37
Benzo(a)pyrene	ND		ug/l	2.0	0.41
Indeno(1,2,3-cd)pyrene	ND		ug/l	2.0	0.40
Dibenzo(a,h)anthracene	ND		ug/l	2.0	0.32
Benzo(ghi)perylene	ND		ug/l	2.0	0.30

Project Name: TMC SW SAMPLING
Project Number: 21010216
Lab Number: L2358723
Report Date: 10/13/23

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270E
Analytical Date: 10/13/23 09:18
Analyst: SZ

Extraction Method: EPA 3510C
Extraction Date: 10/10/23 15:40

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 01 Batch: WG1837983-1					

Surrogate	%Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	51		21-120
Phenol-d6	38		10-120
Nitrobenzene-d5	70		23-120
2-Fluorobiphenyl	67		15-120
2,4,6-Tribromophenol	80		10-120
4-Terphenyl-d14	81		41-149

Project Name: TMC SW SAMPLING
Project Number: 21010216
Lab Number: L2358723
Report Date: 10/13/23

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270E-SIM
Analytical Date: 10/12/23 22:07
Analyst: RP

Extraction Method: EPA 3510C
Extraction Date: 10/10/23 15:40

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS-SIM - Westborough Lab for sample(s): 01 Batch: WG1837985-1					
Naphthalene	10		ug/l	0.10	0.05
2-Methylnaphthalene	2.6		ug/l	0.10	0.02
Acenaphthylene	0.03	J	ug/l	0.10	0.01
Acenaphthene	0.17		ug/l	0.10	0.01
Fluorene	0.09	J	ug/l	0.10	0.01
Pentachlorophenol	ND		ug/l	0.10	0.01
Phenanthrene	0.15		ug/l	0.05	0.02
Anthracene	0.04	J	ug/l	0.10	0.01
Fluoranthene	0.05	J	ug/l	0.10	0.02
Pyrene	ND		ug/l	0.10	0.02
Benzo(a)anthracene	0.05	J	ug/l	0.05	0.02
Chrysene	0.03	J	ug/l	0.10	0.01
Benzo(b)fluoranthene	0.05		ug/l	0.05	0.01
Benzo(k)fluoranthene	0.02	J	ug/l	0.10	0.01
Benzo(a)pyrene	0.02	J	ug/l	0.10	0.02
Indeno(1,2,3-cd)pyrene	ND		ug/l	0.10	0.01
Dibenzo(a,h)anthracene	ND		ug/l	0.05	0.01
Benzo(ghi)perylene	ND		ug/l	0.10	0.01

Surrogate	%Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	54		21-120
Phenol-d6	44		10-120
Nitrobenzene-d5	76		23-120
2-Fluorobiphenyl	71		15-120
2,4,6-Tribromophenol	76		10-120
4-Terphenyl-d14	70		41-149

Project Name: TMC SW SAMPLING
Project Number: 21010216
Lab Number: L2358723
Report Date: 10/13/23

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270E-SIM
Analytical Date: 10/13/23 09:19
Analyst: RP

Extraction Method: EPA 3510C
Extraction Date: 10/12/23 19:29

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS-SIM - Westborough Lab for sample(s): 01 Batch: WG1839071-1					
Naphthalene	1.4		ug/l	0.10	0.05
2-Methylnaphthalene	0.11		ug/l	0.10	0.02
Acenaphthylene	0.03	J	ug/l	0.10	0.01
Acenaphthene	ND		ug/l	0.10	0.01
Fluorene	0.03	J	ug/l	0.10	0.01
Pentachlorophenol	ND		ug/l	0.10	0.01
Phenanthrene	0.07		ug/l	0.05	0.02
Anthracene	ND		ug/l	0.10	0.01
Fluoranthene	ND		ug/l	0.10	0.02
Pyrene	ND		ug/l	0.10	0.02
Benzo(a)anthracene	ND		ug/l	0.05	0.02
Chrysene	ND		ug/l	0.10	0.01
Benzo(b)fluoranthene	ND		ug/l	0.05	0.01
Benzo(k)fluoranthene	ND		ug/l	0.10	0.01
Benzo(a)pyrene	ND		ug/l	0.10	0.02
Indeno(1,2,3-cd)pyrene	ND		ug/l	0.10	0.01
Dibenzo(a,h)anthracene	ND		ug/l	0.05	0.01
Benzo(ghi)perylene	ND		ug/l	0.10	0.01

Surrogate	%Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	52		21-120
Phenol-d6	40		10-120
Nitrobenzene-d5	68		23-120
2-Fluorobiphenyl	62		15-120
2,4,6-Tribromophenol	67		10-120
4-Terphenyl-d14	66		41-149

Lab Control Sample Analysis
Batch Quality Control

Project Name: TMC SW SAMPLING
Project Number: 21010216

Lab Number: L2358723
Report Date: 10/13/23

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 02-05 Batch: WG1836946-2 WG1836946-3								
Benzaldehyde	78		87		40-140	11		30
Phenol	49		54		12-110	10		30
Bis(2-chloroethyl)ether	66		71		40-140	7		30
2-Chlorophenol	68		75		27-123	10		30
2-Methylphenol	65		73		30-130	12		30
Bis(2-chloroisopropyl)ether	58		63		40-140	8		30
Acetophenone	66		71		39-129	7		30
n-Nitrosodi-n-propylamine	65		74		29-132	13		30
3-Methylphenol/4-Methylphenol	69		74		30-130	7		30
Hexachloroethane	65		70		40-140	7		30
Nitrobenzene	71		79		40-140	11		30
Isophorone	66		72		40-140	9		30
2,4-Dimethylphenol	71		70		30-130	1		30
Bis(2-chloroethoxy)methane	65		73		40-140	12		30
2,4-Dichlorophenol	73		81		30-130	10		30
Naphthalene	70		78		40-140	11		30
4-Chloroaniline	65		58		40-140	11		30
Hexachlorobutadiene	71		77		40-140	8		30
Caprolactam	32		37		10-130	14		30
2-Methylnaphthalene	71		81		40-140	13		30
Hexachlorocyclopentadiene	66		70		40-140	6		30
1,2,4,5-Tetrachlorobenzene	68		74		2-134	8		30
2,4,6-Trichlorophenol	77		84		30-130	9		30

Lab Control Sample Analysis
Batch Quality Control

Project Name: TMC SW SAMPLING
Project Number: 21010216

Lab Number: L2358723
Report Date: 10/13/23

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 02-05 Batch: WG1836946-2 WG1836946-3								
2,4,5-Trichlorophenol	76		83		30-130	9		30
Biphenyl	69		76		40-140	10		30
2-Chloronaphthalene	72		79		40-140	9		30
2-Nitroaniline	83		89		52-143	7		30
2,6-Dinitrotoluene	80		92		40-140	14		30
Acenaphthylene	70		78		45-123	11		30
Acenaphthene	64		71		37-111	10		30
2,4-Dinitrophenol	87		98		20-130	12		30
2,4-Dinitrotoluene	81		89		48-143	9		30
2,3,4,6-Tetrachlorophenol	73		81		54-145	10		30
Diethyl phthalate	72		80		40-140	11		30
Fluorene	70		76		40-140	8		30
4-Nitroaniline	74		81		51-143	9		30
NDPA/DPA	70		77		40-140	10		30
Hexachlorobenzene	68		75		40-140	10		30
Pentachlorophenol	69		76		9-103	10		30
Phenanthrene	72		79		40-140	9		30
Anthracene	75		81		40-140	8		30
Carbazole	72		82		55-144	13		30
Di-n-butylphthalate	74		84		40-140	13		30
Fluoranthene	69		81		40-140	16		30
Pyrene	69		79		26-127	14		30
3,3'-Dichlorobenzidine	62		66		40-140	6		30

Lab Control Sample Analysis
Batch Quality Control

Project Name: TMC SW SAMPLING
Project Number: 21010216

Lab Number: L2358723
Report Date: 10/13/23

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 02-05 Batch: WG1836946-2 WG1836946-3								
Benzo(a)anthracene	75		82		40-140	9		30
Chrysene	76		85		40-140	11		30
Bis(2-ethylhexyl)phthalate	82		92		40-140	11		30
Di-n-octylphthalate	82		95		40-140	15		30
Benzo(b)fluoranthene	81		90		40-140	11		30
Benzo(k)fluoranthene	71		85		40-140	18		30
Benzo(a)pyrene	80		92		40-140	14		30
Indeno(1,2,3-cd)pyrene	80		98		40-140	20		30
Dibenzo(a,h)anthracene	80		92		40-140	14		30
Benzo(ghi)perylene	81		90		40-140	11		30

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
2-Fluorophenol	60		65		21-120
Phenol-d6	49		52		10-120
Nitrobenzene-d5	70		81		23-120
2-Fluorobiphenyl	68		76		15-120
2,4,6-Tribromophenol	76		88		10-120
4-Terphenyl-d14	67		77		41-149

Lab Control Sample Analysis
Batch Quality Control

Project Name: TMC SW SAMPLING
Project Number: 21010216

Lab Number: L2358723
Report Date: 10/13/23

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS-SIM - Westborough Lab Associated sample(s): 02-05 Batch: WG1836947-2 WG1836947-3								
Naphthalene	71		79		40-140	11		40
2-Methylnaphthalene	70		78		40-140	11		40
Acenaphthylene	70		79		40-140	12		40
Acenaphthene	72		80		37-111	11		40
Fluorene	71		79		40-140	11		40
Pentachlorophenol	71		78		9-103	9		40
Phenanthrene	77		84		40-140	9		40
Anthracene	80		88		40-140	10		40
Fluoranthene	69		76		40-140	10		40
Pyrene	68		76		26-127	11		40
Benzo(a)anthracene	75		85		40-140	13		40
Chrysene	80		91		40-140	13		40
Benzo(b)fluoranthene	86		99		40-140	14		40
Benzo(k)fluoranthene	84		99		40-140	16		40
Benzo(a)pyrene	85		98		40-140	14		40
Indeno(1,2,3-cd)pyrene	77		91		40-140	17		40
Dibenzo(a,h)anthracene	89		103		40-140	15		40
Benzo(ghi)perylene	84		97		40-140	14		40

Lab Control Sample Analysis

Batch Quality Control

Project Name: TMC SW SAMPLING

Project Number: 21010216

Lab Number: L2358723

Report Date: 10/13/23

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS-SIM - Westborough Lab Associated sample(s): 02-05 Batch: WG1836947-2 WG1836947-3								

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
2-Fluorophenol	65		71		21-120
Phenol-d6	56		62		10-120
Nitrobenzene-d5	87		96		23-120
2-Fluorobiphenyl	66		74		15-120
2,4,6-Tribromophenol	98		108		10-120
4-Terphenyl-d14	56		63		41-149

Lab Control Sample Analysis
Batch Quality Control

Project Name: TMC SW SAMPLING
Project Number: 21010216

Lab Number: L2358723
Report Date: 10/13/23

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: WG1837983-2 WG1837983-3								
Benzaldehyde	92		72		40-140	24		30
Phenol	59		45		12-110	27		30
Bis(2-chloroethyl)ether	72		54		40-140	29		30
2-Chlorophenol	78		59		27-123	28		30
2-Methylphenol	76		60		30-130	24		30
Bis(2-chloroisopropyl)ether	76		60		40-140	24		30
Acetophenone	75		62		39-129	19		30
n-Nitrosodi-n-propylamine	77		60		29-132	25		30
3-Methylphenol/4-Methylphenol	79		65		30-130	19		30
Hexachloroethane	72		57		40-140	23		30
Nitrobenzene	69		59		40-140	16		30
Isophorone	72		58		40-140	22		30
2,4-Dimethylphenol	82		65		30-130	23		30
Bis(2-chloroethoxy)methane	74		57		40-140	26		30
2,4-Dichlorophenol	84		68		30-130	21		30
Naphthalene	70		56		40-140	22		30
4-Chloroaniline	79		61		40-140	26		30
Hexachlorobutadiene	70		51		40-140	**31**	Q	30
Caprolactam	50		44		10-130	13		30
2-Methylnaphthalene	73		57		40-140	25		30
Hexachlorocyclopentadiene	69		44		40-140	**44**	Q	30
1,2,4,5-Tetrachlorobenzene	72		54		2-134	29		30
2,4,6-Trichlorophenol	82		66		30-130	22		30

Lab Control Sample Analysis
Batch Quality Control

Project Name: TMC SW SAMPLING
Project Number: 21010216

Lab Number: L2358723
Report Date: 10/13/23

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: WG1837983-2 WG1837983-3								
2,4,5-Trichlorophenol	89		64		30-130	**33**	Q	30
Biphenyl	76		58		40-140	27		30
2-Chloronaphthalene	74		55		40-140	29		30
2-Nitroaniline	78		61		52-143	24		30
2,6-Dinitrotoluene	78		57		40-140	**31**	Q	30
Acenaphthylene	76		61		45-123	22		30
Acenaphthene	66		52		37-111	24		30
2,4-Dinitrophenol	96		89		20-130	8		30
2,4-Dinitrotoluene	71		58		48-143	20		30
2,3,4,6-Tetrachlorophenol	84		67		54-145	23		30
Diethyl phthalate	77		61		40-140	23		30
Fluorene	71		56		40-140	24		30
4-Nitroaniline	74		61		51-143	19		30
NDPA/DPA	73		58		40-140	23		30
Hexachlorobenzene	73		55		40-140	28		30
Pentachlorophenol	97		79		9-103	20		30
Phenanthrene	77		59		40-140	26		30
Anthracene	79		60		40-140	27		30
Carbazole	82		62		55-144	28		30
Di-n-butylphthalate	85		65		40-140	27		30
Fluoranthene	78		59		40-140	28		30
Pyrene	79		60		26-127	27		30
3,3'-Dichlorobenzidine	71		53		40-140	29		30

Lab Control Sample Analysis
Batch Quality Control

Project Name: TMC SW SAMPLING
Project Number: 21010216

Lab Number: L2358723
Report Date: 10/13/23

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: WG1837983-2 WG1837983-3								
Benzo(a)anthracene	81		63		40-140	25		30
Chrysene	80		62		40-140	25		30
Bis(2-ethylhexyl)phthalate	98		73		40-140	29		30
Di-n-octylphthalate	92		67		40-140	**31**	Q	30
Benzo(b)fluoranthene	74		61		40-140	19		30
Benzo(k)fluoranthene	81		61		40-140	28		30
Benzo(a)pyrene	84		65		40-140	26		30
Indeno(1,2,3-cd)pyrene	74		56		40-140	28		30
Dibenzo(a,h)anthracene	73		57		40-140	25		30
Benzo(ghi)perylene	72		56		40-140	25		30

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
2-Fluorophenol	66		54		21-120
Phenol-d6	57		47		10-120
Nitrobenzene-d5	79		61		23-120
2-Fluorobiphenyl	74		58		15-120
2,4,6-Tribromophenol	74		62		10-120
4-Terphenyl-d14	79		60		41-149

Lab Control Sample Analysis
Batch Quality Control

Project Name: TMC SW SAMPLING
Project Number: 21010216

Lab Number: L2358723
Report Date: 10/13/23

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: WG1837985-2 WG1837985-3								
Naphthalene	72		75		40-140	4		40
2-Methylnaphthalene	80		81		40-140	1		40
Acenaphthylene	84		85		40-140	1		40
Acenaphthene	74		77		37-111	4		40
Fluorene	79		81		40-140	3		40
Pentachlorophenol	**107**	Q	**107**	Q	9-103	0		40
Phenanthrene	75		80		40-140	6		40
Anthracene	84		87		40-140	4		40
Fluoranthene	80		82		40-140	2		40
Pyrene	77		79		26-127	3		40
Benzo(a)anthracene	92		95		40-140	3		40
Chrysene	83		86		40-140	4		40
Benzo(b)fluoranthene	86		88		40-140	2		40
Benzo(k)fluoranthene	88		90		40-140	2		40
Benzo(a)pyrene	96		98		40-140	2		40
Indeno(1,2,3-cd)pyrene	101		94		40-140	7		40
Dibenzo(a,h)anthracene	97		89		40-140	9		40
Benzo(ghi)perylene	100		92		40-140	8		40

Lab Control Sample Analysis

Batch Quality Control

Project Name: TMC SW SAMPLING

Project Number: 21010216

Lab Number: L2358723

Report Date: 10/13/23

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: WG1837985-2 WG1837985-3								

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
2-Fluorophenol	75		80		21-120
Phenol-d6	71		76		10-120
Nitrobenzene-d5	112		120		23-120
2-Fluorobiphenyl	76		77		15-120
2,4,6-Tribromophenol	119		**128**	Q	10-120
4-Terphenyl-d14	75		77		41-149

Lab Control Sample Analysis

Batch Quality Control

Project Name: TMC SW SAMPLING

Project Number: 21010216

Lab Number: L2358723

Report Date: 10/13/23

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: WG1839071-2 WG1839071-3								
Naphthalene	69		68		40-140	1		40
2-Methylnaphthalene	69		68		40-140	1		40
Acenaphthylene	72		71		40-140	1		40
Acenaphthene	70		68		37-111	3		40
Fluorene	71		69		40-140	3		40
Pentachlorophenol	65		68		9-103	5		40
Phenanthrene	77		72		40-140	7		40
Anthracene	80		76		40-140	5		40
Fluoranthene	75		72		40-140	4		40
Pyrene	76		73		26-127	4		40
Benzo(a)anthracene	76		72		40-140	5		40
Chrysene	82		77		40-140	6		40
Benzo(b)fluoranthene	87		82		40-140	6		40
Benzo(k)fluoranthene	87		84		40-140	4		40
Benzo(a)pyrene	85		81		40-140	5		40
Indeno(1,2,3-cd)pyrene	79		73		40-140	8		40
Dibenzo(a,h)anthracene	89		82		40-140	8		40
Benzo(ghi)perylene	86		78		40-140	10		40

Lab Control Sample Analysis
Batch Quality Control

Project Name: TMC SW SAMPLING
Project Number: 21010216
Lab Number: L2358723
Report Date: 10/13/23

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: WG1839071-2 WG1839071-3

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
2-Fluorophenol	63		60		21-120
Phenol-d6	54		52		10-120
Nitrobenzene-d5	76		75		23-120
2-Fluorobiphenyl	68		67		15-120
2,4,6-Tribromophenol	83		79		10-120
4-Terphenyl-d14	68		67		41-149

Matrix Spike Analysis
Batch Quality Control

Project Name: TMC SW SAMPLING
Project Number: 21010216
Lab Number: L2358723
Report Date: 10/13/23

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 QC Batch ID: WG1837983-4 WG1837983-5 QC Sample: L2358723-01 Client ID: TMC-OUTLET												
Benzaldehyde	ND	18.2	15	83		15	83		40-140	0		30
Phenol	ND	18.2	9.2	51		9.2	51		12-110	0		30
Bis(2-chloroethyl)ether	ND	18.2	13	72		13	72		40-140	0		30
2-Chlorophenol	ND	18.2	13	72		13	72		27-123	0		30
2-Methylphenol	ND	18.2	12	66		11	61		30-130	9		30
Bis(2-chloroisopropyl)ether	ND	18.2	10	55		10	55		40-140	0		30
Acetophenone	ND	18.2	13	72		13	72		39-129	0		30
n-Nitrosodi-n-propylamine	ND	18.2	13	72		13	72		29-132	0		30
3-Methylphenol/4-Methylphenol	ND	18.2	13	72		12	66		30-130	8		30
Hexachloroethane	ND	18.2	13	72		12	66		40-140	8		30
Nitrobenzene	ND	18.2	14	77		15	83		40-140	7		30
Isophorone	ND	18.2	13	72		13	72		40-140	0		30
2,4-Dimethylphenol	ND	18.2	5.4	30		4.2J	**23**	Q	30-130	25		30
Bis(2-chloroethoxy)methane	ND	18.2	13	72		13	72		40-140	0		30
2,4-Dichlorophenol	ND	18.2	15	83		15	83		30-130	0		30
Naphthalene	ND	18.2	14	77		13	72		40-140	7		30
4-Chloroaniline	ND	18.2	8.3	46		6.6	**36**	Q	40-140	23		30
Hexachlorobutadiene	ND	18.2	13	72		14	77		40-140	7		30
Caprolactam	ND	18.2	6.3J	35		6.4J	35		10-130	2		30
2-Methylnaphthalene	ND	18.2	14	77		14	77		40-140	0		30
Hexachlorocyclopentadiene	ND	18.2	14J	77		14J	77		40-140	0		30
1,2,4,5-Tetrachlorobenzene	ND	18.2	14	77		13	72		2-134	7		30
2,4,6-Trichlorophenol	ND	18.2	16	88		16	88		30-130	0		30

Matrix Spike Analysis

Batch Quality Control

Project Name: TMC SW SAMPLING

Project Number: 21010216

Lab Number: L2358723

Report Date: 10/13/23

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 QC Batch ID: WG1837983-4 WG1837983-5 QC Sample: L2358723-01 Client ID: TMC-OUTLET												
2,4,5-Trichlorophenol	ND	18.2	16	88		16	88		30-130	0		30
Biphenyl	ND	18.2	14	77		14	77		40-140	0		30
2-Chloronaphthalene	ND	18.2	14	77		14	77		40-140	0		30
2-Nitroaniline	ND	18.2	16	88		16	88		52-143	0		30
2,6-Dinitrotoluene	ND	18.2	17	94		18	99		40-140	6		30
Acenaphthylene	ND	18.2	14	77		14	77		45-123	0		30
Acenaphthene	ND	18.2	13	72		13	72		37-111	0		30
2,4-Dinitrophenol	ND	18.2	22	120		21	120		20-130	5		30
2,4-Dinitrotoluene	ND	18.2	17	94		16	88		48-143	6		30
2,3,4,6-Tetrachlorophenol	ND	18.2	16	88		15	83		54-145	6		30
Diethyl phthalate	ND	18.2	16	88		15	83		40-140	6		30
Fluorene	ND	18.2	14	77		14	77		40-140	0		30
4-Nitroaniline	ND	18.2	12	66		10	55		51-143	18		30
NDPA/DPA	ND	18.2	14	77		13	72		40-140	7		30
Hexachlorobenzene	ND	18.2	15	83		14	77		40-140	7		30
Pentachlorophenol	ND	18.2	15	83		16	88		9-103	6		30
Phenanthrene	ND	18.2	14	77		14	77		40-140	0		30
Anthracene	ND	18.2	14	77		14	77		40-140	0		30
Carbazole	ND	18.2	15	83		14	77		55-144	7		30
Di-n-butylphthalate	ND	18.2	16	88		16	88		40-140	0		30
Fluoranthene	ND	18.2	15	83		14	77		40-140	7		30
Pyrene	ND	18.2	14	77		13	72		26-127	7		30
3,3'-Dichlorobenzidine	ND	18.2	ND	**0**	Q	ND	**0**	Q	40-140	NC		30

Matrix Spike Analysis

Batch Quality Control

Project Name: TMC SW SAMPLING
Project Number: 21010216
Lab Number: L2358723
Report Date: 10/13/23

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 QC Batch ID: WG1837983-4 WG1837983-5 QC Sample: L2358723-01 Client ID: TMC-OUTLET												
Benzo(a)anthracene	ND	18.2	15	83		15	83		40-140	0		30
Chrysene	ND	18.2	15	83		15	83		40-140	0		30
Bis(2-ethylhexyl)phthalate	ND	18.2	18	99		18	99		40-140	0		30
Di-n-octylphthalate	ND	18.2	18	99		18	99		40-140	0		30
Benzo(b)fluoranthene	ND	18.2	15	83		15	83		40-140	0		30
Benzo(k)fluoranthene	ND	18.2	16	88		16	88		40-140	0		30
Benzo(a)pyrene	ND	18.2	16	88		16	88		40-140	0		30
Indeno(1,2,3-cd)pyrene	ND	18.2	17	94		17	94		40-140	0		30
Dibenzo(a,h)anthracene	ND	18.2	17	94		16	88		40-140	6		30
Benzo(ghi)perylene	ND	18.2	18	99		17	94		40-140	6		30

Surrogate	MS % Recovery	MS Qualifier	MSD % Recovery	MSD Qualifier	Acceptance Criteria
2,4,6-Tribromophenol	92		93		10-120
2-Fluorobiphenyl	80		81		15-120
2-Fluorophenol	63		65		21-120
4-Terphenyl-d14	86		82		41-149
Nitrobenzene-d5	79		84		23-120
Phenol-d6	53		56		10-120

Matrix Spike Analysis
Batch Quality Control

Project Name: TMC SW SAMPLING
Project Number: 21010216
Lab Number: L2358723
Report Date: 10/13/23

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 QC Batch ID: WG1837985-4 WG1837985-5 QC Sample: L2358723-01 Client ID: TMC-OUTLET												
Naphthalene	0.11B	18.2	14	76		16	87		40-140	13		40
2-Methylnaphthalene	0.04JB	18.2	14	77		16	88		40-140	13		40
Acenaphthylene	0.04J	18.2	15	83		17	94		40-140	13		40
Acenaphthene	0.07JB	18.2	14	77		16	88		37-111	13		40
Fluorene	0.08J	18.2	14	77		17	94		40-140	19		40
Pentachlorophenol	ND	18.2	13	72		18	99		9-103	32		40
Phenanthrene	0.13B	18.2	15	82		17	93		40-140	13		40
Anthracene	0.04J	18.2	15	83		17	94		40-140	13		40
Fluoranthene	0.07J	18.2	15	83		18	99		40-140	18		40
Pyrene	ND	18.2	15	83		17	94		26-127	13		40
Benzo(a)anthracene	0.05J	18.2	15	83		17	94		40-140	13		40
Chrysene	0.04J	18.2	15	83		18	99		40-140	18		40
Benzo(b)fluoranthene	0.07	18.2	17	93		20	110		40-140	16		40
Benzo(k)fluoranthene	0.02J	18.2	16	88		18	99		40-140	12		40
Benzo(a)pyrene	0.03J	18.2	16	88		19	100		40-140	17		40
Indeno(1,2,3-cd)pyrene	0.04J	18.2	15	83		18	99		40-140	18		40
Dibenzo(a,h)anthracene	ND	18.2	17	94		20	110		40-140	16		40
Benzo(ghi)perylene	0.04J	18.2	16	88		18	99		40-140	12		40

Surrogate	MS % Recovery	MS Qualifier	MSD % Recovery	MSD Qualifier	Acceptance Criteria
2,4,6-Tribromophenol	83		99		10-120
2-Fluorobiphenyl	78		94		15-120

Matrix Spike Analysis

Batch Quality Control

Project Name: TMC SW SAMPLING

Project Number: 21010216

Lab Number: L2358723

Report Date: 10/13/23

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 QC Batch ID: WG1837985-4 WG1837985-5 QC Sample: L2358723-01 Client ID: TMC-OUTLET												

Surrogate	MS % Recovery	MS Qualifier	MSD % Recovery	MSD Qualifier	Acceptance Criteria
2-Fluorophenol	64		81		21-120
4-Terphenyl-d14	80		93		41-149
Nitrobenzene-d5	89		109		23-120
Phenol-d6	57		72		10-120

Matrix Spike Analysis

Batch Quality Control

Project Name: TMC SW SAMPLING
Project Number: 21010216
Lab Number: L2358723
Report Date: 10/13/23

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 QC Batch ID: WG1839071-4 WG1839071-5 QC Sample: L2358723-01 Client ID: TMC-OUTLET												
Naphthalene	ND	18.2	14	77		11	61		40-140	24		40
2-Methylnaphthalene	ND	18.2	14	77		11	61		40-140	24		40
Acenaphthylene	0.02J	18.2	14	77		12	66		40-140	15		40
Acenaphthene	0.04J	18.2	14	77		11	61		37-111	24		40
Fluorene	0.05J	18.2	14	77		12	66		40-140	15		40
Pentachlorophenol	ND	18.2	15	83		12	66		9-103	22		40
Phenanthrene	0.08B	18.2	14	77		12	66		40-140	15		40
Anthracene	0.02J	18.2	15	83		13	72		40-140	14		40
Fluoranthene	0.04J	18.2	14	77		12	66		40-140	15		40
Pyrene	ND	18.2	14	77		12	66		26-127	15		40
Benzo(a)anthracene	0.05J	18.2	15	83		12	66		40-140	22		40
Chrysene	0.01J	18.2	15	83		13	72		40-140	14		40
Benzo(b)fluoranthene	0.02J	18.2	16	88		15	83		40-140	6		40
Benzo(k)fluoranthene	0.01J	18.2	17	94		14	77		40-140	19		40
Benzo(a)pyrene	ND	18.2	16	88		14	77		40-140	13		40
Indeno(1,2,3-cd)pyrene	ND	18.2	15	83		13	72		40-140	14		40
Dibenzo(a,h)anthracene	ND	18.2	17	94		14	77		40-140	19		40
Benzo(ghi)perylene	ND	18.2	16	88		14	77		40-140	13		40

Surrogate	MS % Recovery	MS Qualifier	MSD % Recovery	MSD Qualifier	Acceptance Criteria
2,4,6-Tribromophenol	86		75		10-120
2-Fluorobiphenyl	75		63		15-120

Matrix Spike Analysis

Batch Quality Control

Project Name: TMC SW SAMPLING

Project Number: 21010216

Lab Number: L2358723

Report Date: 10/13/23

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 QC Batch ID: WG1839071-4 WG1839071-5 QC Sample: L2358723-01 Client ID: TMC-OUTLET												

Surrogate	MS % Recovery	MS Qualifier	MSD % Recovery	MSD Qualifier	Acceptance Criteria
2-Fluorophenol	73		61		21-120
4-Terphenyl-d14	73		60		41-149
Nitrobenzene-d5	83		69		23-120
Phenol-d6	70		58		10-120

Project Name: TMC SW SAMPLING
Project Number: 21010216

Lab Number: L2358723
Report Date: 10/13/23

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(*)
L2358723-01A	Vial HCl preserved	B	NA		5.2	Y	Absent		PA-8260-SIM(14),PA-8260(14)
L2358723-01A1	Vial HCl preserved	B	NA		5.2	Y	Absent		PA-8260-SIM(14),PA-8260(14)
L2358723-01A2	Vial HCl preserved	B	NA		5.2	Y	Absent		PA-8260-SIM(14),PA-8260(14)
L2358723-01B	Vial HCl preserved	B	NA		5.2	Y	Absent		PA-8260-SIM(14),PA-8260(14)
L2358723-01B1	Vial HCl preserved	B	NA		5.2	Y	Absent		PA-8260-SIM(14),PA-8260(14)
L2358723-01B2	Vial HCl preserved	B	NA		5.2	Y	Absent		PA-8260-SIM(14),PA-8260(14)
L2358723-01C	Vial HCl preserved	B	NA		5.2	Y	Absent		PA-8260-SIM(14),PA-8260(14)
L2358723-01C1	Vial HCl preserved	B	NA		5.2	Y	Absent		PA-8260-SIM(14),PA-8260(14)
L2358723-01C2	Vial HCl preserved	B	NA		5.2	Y	Absent		PA-8260-SIM(14),PA-8260(14)
L2358723-01D	Amber 250ml unpreserved	B	9	9	5.2	Y	Absent		PA-8270SIM-LVI(7),PA-8270-LVI(7)
L2358723-01D1	Amber 250ml unpreserved	B	9	9	5.2	Y	Absent		PA-8270SIM-LVI(7),PA-8270-LVI(7)
L2358723-01D2	Amber 250ml unpreserved	B	9	9	5.2	Y	Absent		PA-8270SIM-LVI(7),PA-8270-LVI(7)
L2358723-01E	Amber 250ml unpreserved	B	9	9	5.2	Y	Absent		PA-8270SIM-LVI(7),PA-8270-LVI(7)
L2358723-01E1	Amber 250ml unpreserved	B	9	9	5.2	Y	Absent		PA-8270SIM-LVI(7),PA-8270-LVI(7)
L2358723-01E2	Amber 250ml unpreserved	B	9	9	5.2	Y	Absent		PA-8270SIM-LVI(7),PA-8270-LVI(7)
L2358723-02A	Vial HCl preserved	B	NA		5.2	Y	Absent		PA-8260-SIM(14),PA-8260(14)
L2358723-02B	Vial HCl preserved	B	NA		5.2	Y	Absent		PA-8260-SIM(14),PA-8260(14)
L2358723-02C	Vial HCl preserved	B	NA		5.2	Y	Absent		PA-8260-SIM(14),PA-8260(14)
L2358723-02D	Amber 250ml unpreserved	B	9	9	5.2	Y	Absent		PA-8270SIM-LVI(7),PA-8270-LVI(7)
L2358723-02E	Amber 250ml unpreserved	B	9	9	5.2	Y	Absent		PA-8270SIM-LVI(7),PA-8270-LVI(7)
L2358723-03A	Vial HCl preserved	B	NA		5.2	Y	Absent		PA-8260-SIM(14),PA-8260(14)
L2358723-03B	Vial HCl preserved	B	NA		5.2	Y	Absent		PA-8260-SIM(14),PA-8260(14)

*Values in parentheses indicate holding time in days

Project Name: TMC SW SAMPLING
Project Number: 21010216

Lab Number: L2358723
Report Date: 10/13/23

Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L2358723-03C	Vial HCl preserved	B	NA		5.2	Y	Absent		PA-8260-SIM(14),PA-8260(14)
L2358723-03D	Amber 250ml unpreserved	B	9	9	5.2	Y	Absent		PA-8270SIM-LVI(7),PA-8270-LVI(7)
L2358723-03E	Amber 250ml unpreserved	B	9	9	5.2	Y	Absent		PA-8270SIM-LVI(7),PA-8270-LVI(7)
L2358723-04A	Vial HCl preserved	B	NA		5.2	Y	Absent		PA-8260-SIM(14),PA-8260(14)
L2358723-04B	Vial HCl preserved	B	NA		5.2	Y	Absent		PA-8260-SIM(14),PA-8260(14)
L2358723-04C	Vial HCl preserved	B	NA		5.2	Y	Absent		PA-8260-SIM(14),PA-8260(14)
L2358723-04D	Amber 250ml unpreserved	B	9	9	5.2	Y	Absent		PA-8270SIM-LVI(7),PA-8270-LVI(7)
L2358723-04E	Amber 250ml unpreserved	B	9	9	5.2	Y	Absent		PA-8270SIM-LVI(7),PA-8270-LVI(7)
L2358723-05A	Vial HCl preserved	B	NA		5.2	Y	Absent		PA-8260-SIM(14),PA-8260(14)
L2358723-05B	Vial HCl preserved	B	NA		5.2	Y	Absent		PA-8260-SIM(14),PA-8260(14)
L2358723-05C	Vial HCl preserved	B	NA		5.2	Y	Absent		PA-8260-SIM(14),PA-8260(14)
L2358723-05D	Amber 250ml unpreserved	B	9	9	5.2	Y	Absent		PA-8270SIM-LVI(7),PA-8270-LVI(7)
L2358723-05E	Amber 250ml unpreserved	B	9	9	5.2	Y	Absent		PA-8270SIM-LVI(7),PA-8270-LVI(7)
L2358723-06A	Vial HCl preserved	B	NA		5.2	Y	Absent		PA-8260-SIM(14),PA-8260(14)
L2358723-06B	Vial HCl preserved	B	NA		5.2	Y	Absent		PA-8260-SIM(14),PA-8260(14)

*Values in parentheses indicate holding time in days

Project Name:	TMC SW SAMPLING	**Lab Number:**	L2358723
Project Number:	21010216	**Report Date:**	10/13/23

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.)

Project Name:	TMC SW SAMPLING	**Lab Number:**	L2358723
Project Number:	21010216	**Report Date:**	10/13/23

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, Azobenzene; SCM: Iodomethane (methyl iodide), 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene.
EPA 8270E: NPW: Dimethylnaphthalene,1,4-Diphenylhydrazine, alpha-Terpineol; 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.
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, SM9221E, 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 1

Date Rec'd in Lab: 10/5/23

ALPHA Job #: L2358723

ALPHA ANALYTICAL
WESTBORO, MA TEL: 508-898-9220 FAX: 508-898-9193
MANSFIELD, MA TEL: 508-822-9300 FAX: 508-822-3288

Client Information

Client: Tradepoint Atlantic
Address: 6995 Bethlehem blvd
Sparrows point MD
Phone:
Fax:
Email: JBarna@armgroup.net
Kgnille@armgroup.net
☐ These samples have been previously analyzed by Alpha

Project Information

Project Name: TMC SW Sampling
Project Location: TMC
Project #: 21010216
Project Manager:
ALPHA Quote #:

Turn-Around Time

☒ Standard ☐ RUSH (only confirmed if pre-approved!)
Date Due: Time:

Report Information - Data Deliverables

☐ FAX ☐ EMAIL
☐ ADEx ☐ Add'l Deliverables

Billing Information

☐ Same as Client info PO #:

Regulatory Requirements/Report Limits

State /Fed Program	Criteria

Other Project Specific Requirements/Comments/Detection Limits:

ALPHA Lab ID (Lab Use Only)	Sample ID	Collection Date	Collection Time	Sample Matrix	Sampler's Initials	VOCs 8260	SVOCs 8270 SIM PAHs	Sample Specific Comments	TOTAL # BOTTLES
58723-01	TMC-Outlet	10/4/23	1000	wt	JMB	x	x	MS/MSD	15
-02	TMC-TM04	10/4/23	1010	wt	JMB	x	x		5
-03	TMC-Bend	10/4/23	1020	wt	JMB	x	x		5
-04	TMC-Rail-Bridge	10/4/23	1030	wt	JMB	x	x		5
-05	dup	10/4/23	—	wt	JMB	x	x		5
-06	trip blank	—	—	wt	—	x			4

SAMPLE HANDLING

Filtration
☐ Done
☐ Not needed
☐ Lab to do
Preservation
☐ Lab to do
(Please specify below)

Container Type	VOA	amb	amb
Preservative	HCl	NA	NA

Relinquished By:	Date/Time	Received By:	Date/Time
JMB Barna ARM	10/4/23 1200	NJF AAL	10-4-23 1540
NJF AAL	10-4-23/1800	[illegible] NRL	10/4/23 1800
[illegible] NRL	10/4/23 2400	Anthony Green	OCT 04 2023 2400

10/5/23 0330
10/5/23 0330

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.

ANALYTICAL REPORT

Lab Number:	L2359007
Client:	Tradepoint Atlantic 1600 Sparrows Point Boulevard Baltimore, MD 21219
ATTN:	Robert Tworkowski
Phone:	(443) 649-5073
Project Name:	B14 Q4 SAMPLING
Project Number:	21010214
Report Date:	10/16/23

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), OH (CL108), OR (MA-1316), PA (68-03671), RI (LAO00065), TX (T104704476), VT (VT-0935), VA (460195), USDA (Permit #525-23-122-91930).

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

Project Name: B14 Q4 SAMPLING
Project Number: 21010214

Lab Number: L2359007
Report Date: 10/16/23

Alpha Sample ID	Client ID	Matrix	Sample Location	Collection Date/Time	Receive Date
L2359007-01	B24-001-MWS	WATER	B14	10/05/23 11:15	10/05/23
L2359007-02	HI13-MWS	WATER	B14	10/05/23 13:40	10/05/23
L2359007-03	TS03-PDP002	WATER	B14	10/05/23 12:05	10/05/23
L2359007-04	HI19-MWS	WATER	B14	10/05/23 14:45	10/05/23
L2359007-05	TB-WT-02	WATER	B14	10/05/23 00:00	10/05/23

Project Name:	B14 Q4 SAMPLING	**Lab Number:**	L2359007
Project Number:	21010214	**Report Date:**	10/16/23

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, solids and tissues are reported on a dry 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 Q4 SAMPLING **Lab Number:** L2359007
Project Number: 21010214 **Report Date:** 10/16/23

Case Narrative (continued)

Report Submission

October 16, 2023: This final report includes the results of all requested analyses.

October 12, 2023: This is a preliminary report.

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

Semivolatile Organics

L2359007-02: The surrogate recoveries were outside the acceptance criteria for 2-fluorophenol (6%), phenol-d6 (6%), nitrobenzene-d5 (8%), 2-fluorobiphenyl (9%) and 4-terphenyl-d14 (8%); however, the criteria were achieved upon re-extraction outside of holding time. The results of both extractions are reported; however, all associated compounds are considered to have a potential bias.

Semivolatile Organics by SIM

L2359007-02: The surrogate recoveries were outside the acceptance criteria for 2-fluorophenol (4%), phenol-d6 (5%), nitrobenzene-d5 (9%), 2-fluorobiphenyl (9%) and 4-terphenyl-d14 (8%); however, the criteria were achieved upon re-extraction outside of holding time. The results of both extractions are reported; however, all associated compounds are considered to have a potential bias.

The WG1839793-1 Method Blank, associated with L2359007-02RE, has concentrations above the reporting limits for Naphthalene and Benzo(a)anthracene; however, re-extraction could not be performed due to lack of additional sample volume. The results of the original analyses are reported and are qualified with a "B".

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: Melissa Sturgis Melissa Sturgis

Title: Technical Director/Representative Date: 10/16/23

ORGANICS

VOLATILES

Project Name: B14 Q4 SAMPLING
Project Number: 21010214
Lab Number: L2359007
Report Date: 10/16/23

SAMPLE RESULTS

Lab ID: L2359007-01
Client ID: B24-001-MWS
Sample Location: B14

Date Collected: 10/05/23 11:15
Date Received: 10/05/23
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8260D
Analytical Date: 10/12/23 10:52
Analyst: MKS

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 Q4 SAMPLING
Project Number: 21010214
Lab Number: L2359007
Report Date: 10/16/23

SAMPLE RESULTS

Lab ID: L2359007-01
Client ID: B24-001-MWS
Sample Location: B14
Date Collected: 10/05/23 11:15
Date Received: 10/05/23
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	95		70-130
Toluene-d8	97		70-130
4-Bromofluorobenzene	92		70-130
Dibromofluoromethane	100		70-130

Project Name: B14 Q4 SAMPLING
Project Number: 21010214
Lab Number: L2359007
Report Date: 10/16/23

SAMPLE RESULTS

Lab ID: L2359007-01
Client ID: B24-001-MWS
Sample Location: B14

Date Collected: 10/05/23 11:15
Date Received: 10/05/23
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8260D-SIM(M)
Analytical Date: 10/12/23 10:52
Analyst: MKS

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
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	101		70-130
4-Bromofluorobenzene	87		70-130

Project Name: B14 Q4 SAMPLING
Project Number: 21010214
Lab Number: L2359007
Report Date: 10/16/23

SAMPLE RESULTS

Lab ID: L2359007-02
Client ID: HI13-MWS
Sample Location: B14

Date Collected: 10/05/23 13:40
Date Received: 10/05/23
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8260D
Analytical Date: 10/11/23 07:32
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	0.44	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	0.42	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	3.6		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 Q4 SAMPLING
Project Number: 21010214
Lab Number: L2359007
Report Date: 10/16/23

SAMPLE RESULTS

Lab ID: L2359007-02
Client ID: HI13-MWS
Sample Location: B14
Date Collected: 10/05/23 13:40
Date Received: 10/05/23
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	100		70-130
Toluene-d8	99		70-130
4-Bromofluorobenzene	93		70-130
Dibromofluoromethane	102		70-130

Project Name: B14 Q4 SAMPLING
Project Number: 21010214
Lab Number: L2359007
Report Date: 10/16/23

SAMPLE RESULTS

Lab ID: L2359007-02
Client ID: HI13-MWS
Sample Location: B14
Date Collected: 10/05/23 13:40
Date Received: 10/05/23
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8260D-SIM(M)
Analytical Date: 10/11/23 07:32
Analyst: MCM

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
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	88		70-130

Project Name: B14 Q4 SAMPLING
Project Number: 21010214
Lab Number: L2359007
Report Date: 10/16/23

SAMPLE RESULTS

Lab ID: L2359007-03
Client ID: TS03-PDP002
Sample Location: B14

Date Collected: 10/05/23 12:05
Date Received: 10/05/23
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8260D
Analytical Date: 10/12/23 10:28
Analyst: MKS

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 Q4 SAMPLING
Project Number: 21010214
Lab Number: L2359007
Report Date: 10/16/23

SAMPLE RESULTS

Lab ID: L2359007-03
Client ID: TS03-PDP002
Sample Location: B14
Date Collected: 10/05/23 12:05
Date Received: 10/05/23
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	94		70-130
Toluene-d8	95		70-130
4-Bromofluorobenzene	91		70-130
Dibromofluoromethane	101		70-130

Project Name: B14 Q4 SAMPLING
Project Number: 21010214
Lab Number: L2359007
Report Date: 10/16/23

SAMPLE RESULTS

Lab ID: L2359007-03
Client ID: TS03-PDP002
Sample Location: B14

Date Collected: 10/05/23 12:05
Date Received: 10/05/23
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8260D-SIM(M)
Analytical Date: 10/12/23 10:28
Analyst: MKS

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
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	101		70-130
4-Bromofluorobenzene	87		70-130

Project Name: B14 Q4 SAMPLING
Project Number: 21010214
Lab Number: L2359007
Report Date: 10/16/23

SAMPLE RESULTS

Lab ID: L2359007-04
Client ID: HI19-MWS
Sample Location: B14

Date Collected: 10/05/23 14:45
Date Received: 10/05/23
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8260D
Analytical Date: 10/11/23 07:56
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	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	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	3.7		ug/l	0.75	0.20	1

Project Name: B14 Q4 SAMPLING
Project Number: 21010214
Lab Number: L2359007
Report Date: 10/16/23

SAMPLE RESULTS

Lab ID: L2359007-04
Client ID: HI19-MWS
Sample Location: B14
Date Collected: 10/05/23 14:45
Date Received: 10/05/23
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	2.2		ug/l	1.0	0.33	1
o-Xylene	0.92	J	ug/l	1.0	0.39	1
Xylenes, Total	3.1	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	92		70-130
Toluene-d8	98		70-130
4-Bromofluorobenzene	90		70-130
Dibromofluoromethane	100		70-130

Project Name: B14 Q4 SAMPLING
Project Number: 21010214
Lab Number: L2359007
Report Date: 10/16/23

SAMPLE RESULTS

Lab ID: L2359007-04
Client ID: HI19-MWS
Sample Location: B14
Date Collected: 10/05/23 14:45
Date Received: 10/05/23
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8260D-SIM(M)
Analytical Date: 10/11/23 07:56
Analyst: MCM

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
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	88		70-130

Project Name: B14 Q4 SAMPLING
Project Number: 21010214
Lab Number: L2359007
Report Date: 10/16/23

SAMPLE RESULTS

Lab ID: L2359007-05
Client ID: TB-WT-02
Sample Location: B14

Date Collected: 10/05/23 00:00
Date Received: 10/05/23
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8260D
Analytical Date: 10/12/23 10:04
Analyst: MKS

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 Q4 SAMPLING
Project Number: 21010214
Lab Number: L2359007
Report Date: 10/16/23

SAMPLE RESULTS

Lab ID: L2359007-05
Client ID: TB-WT-02
Sample Location: B14
Date Collected: 10/05/23 00:00
Date Received: 10/05/23
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	93		70-130
Toluene-d8	95		70-130
4-Bromofluorobenzene	93		70-130
Dibromofluoromethane	101		70-130

Project Name: B14 Q4 SAMPLING
Project Number: 21010214
Lab Number: L2359007
Report Date: 10/16/23

SAMPLE RESULTS

Lab ID: L2359007-05
Client ID: TB-WT-02
Sample Location: B14

Date Collected: 10/05/23 00:00
Date Received: 10/05/23
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8260D-SIM(M)
Analytical Date: 10/12/23 10:04
Analyst: MKS

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
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	100		70-130
4-Bromofluorobenzene	87		70-130

Project Name: B14 Q4 SAMPLING **Lab Number:** L2359007

Project Number: 21010214 **Report Date:** 10/16/23

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260D
Analytical Date: 10/11/23 05:57
Analyst: MCM

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 02,04 Batch: WG1838713-5					
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 Q4 SAMPLING **Lab Number:** L2359007

Project Number: 21010214 **Report Date:** 10/16/23

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260D
Analytical Date: 10/11/23 05:57
Analyst: MCM

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 02,04 Batch: WG1838713-5					
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 Q4 SAMPLING
Project Number: 21010214
Lab Number: L2359007
Report Date: 10/16/23

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260D
Analytical Date: 10/11/23 05:57
Analyst: MCM

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 02,04 Batch: WG1838713-5					

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	91		70-130
Toluene-d8	98		70-130
4-Bromofluorobenzene	94		70-130
Dibromofluoromethane	101		70-130

Project Name: B14 Q4 SAMPLING
Project Number: 21010214
Lab Number: L2359007
Report Date: 10/16/23

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260D-SIM(M)
Analytical Date: 10/11/23 05:57
Analyst: MCM

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS-SIM - Westborough Lab for sample(s): 02,04 Batch: WG1838716-5					
1,1,2,2-Tetrachloroethane	ND		ug/l	0.050	0.006

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	101		70-130
4-Bromofluorobenzene	90		70-130

Project Name: B14 Q4 SAMPLING
Project Number: 21010214
Lab Number: L2359007
Report Date: 10/16/23

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260D-SIM(M)
Analytical Date: 10/12/23 06:05
Analyst: MCM

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS-SIM - Westborough Lab for sample(s): 01,03,05 Batch: WG1839047-5					
1,1,2,2-Tetrachloroethane	ND		ug/l	0.050	0.006

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	99		70-130
4-Bromofluorobenzene	89		70-130

Project Name: B14 Q4 SAMPLING **Lab Number:** L2359007

Project Number: 21010214 **Report Date:** 10/16/23

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260D
Analytical Date: 10/12/23 06:05
Analyst: MCM

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 01,03,05 Batch: WG1839054-5					
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 Q4 SAMPLING
Project Number: 21010214
Lab Number: L2359007
Report Date: 10/16/23

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260D
Analytical Date: 10/12/23 06:05
Analyst: MCM

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 01,03,05 Batch: WG1839054-5					
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 Q4 SAMPLING
Project Number: 21010214
Lab Number: L2359007
Report Date: 10/16/23

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260D
Analytical Date: 10/12/23 06:05
Analyst: MCM

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 01,03,05 Batch: WG1839054-5					

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	100		70-130
Toluene-d8	96		70-130
4-Bromofluorobenzene	92		70-130
Dibromofluoromethane	101		70-130

Lab Control Sample Analysis

Batch Quality Control

Project Name: B14 Q4 SAMPLING

Project Number: 21010214

Lab Number: L2359007

Report Date: 10/16/23

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 02,04 Batch: WG1838713-3 WG1838713-4								
Dichlorodifluoromethane	85		85		36-147	0		20
Chloromethane	88		91		64-130	3		20
Vinyl chloride	120		120		55-140	0		20
Bromomethane	110		120		39-139	9		20
Chloroethane	130		130		55-138	0		20
Trichlorofluoromethane	98		96		62-150	2		20
1,1-Dichloroethene	94		95		61-145	1		20
Carbon disulfide	89		90		51-130	1		20
1,1,2-Trichloro-1,2,2-Trifluoroethane	89		92		70-130	3		20
Methylene chloride	97		94		70-130	3		20
Acetone	100		100		58-148	0		20
trans-1,2-Dichloroethene	93		96		70-130	3		20
Methyl Acetate	100		98		70-130	2		20
Methyl tert butyl ether	93		94		63-130	1		20
1,1-Dichloroethane	98		96		70-130	2		20
cis-1,2-Dichloroethene	97		97		70-130	0		20
Cyclohexane	89		92		70-130	3		20
Chloroform	98		92		70-130	6		20
Carbon tetrachloride	100		95		63-132	5		20
1,1,1-Trichloroethane	94		94		67-130	0		20
2-Butanone	100		100		63-138	0		20
Benzene	99		98		70-130	1		20
1,2-Dichloroethane	100		98		70-130	2		20

Lab Control Sample Analysis

Batch Quality Control

Project Name: B14 Q4 SAMPLING

Project Number: 21010214

Lab Number: L2359007

Report Date: 10/16/23

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 02,04 Batch: WG1838713-3 WG1838713-4								
Trichloroethene	91		96		70-130	5		20
1,2-Dichloropropane	96		96		70-130	0		20
Bromodichloromethane	93		94		67-130	1		20
cis-1,3-Dichloropropene	90		90		70-130	0		20
Toluene	92		91		70-130	1		20
Tetrachloroethene	97		94		70-130	3		20
4-Methyl-2-pentanone	78		87		59-130	11		20
trans-1,3-Dichloropropene	82		84		70-130	2		20
1,1,2-Trichloroethane	88		88		70-130	0		20
Dibromochloromethane	87		89		63-130	2		20
1,2-Dibromoethane	92		94		70-130	2		20
2-Hexanone	84		82		57-130	2		20
Chlorobenzene	92		93		75-130	1		20
Ethylbenzene	88		87		70-130	1		20
p/m-Xylene	90		90		70-130	0		20
o-Xylene	85		85		70-130	0		20
Styrene	85		90		70-130	6		20
Bromoform	74		74		54-136	0		20
Isopropylbenzene	83		84		70-130	1		20
1,1,2,2-Tetrachloroethane	82		78		67-130	5		20
1,3-Dichlorobenzene	86		87		70-130	1		20
1,4-Dichlorobenzene	89		89		70-130	0		20
1,2-Dichlorobenzene	88		88		70-130	0		20

Lab Control Sample Analysis

Batch Quality Control

Project Name: B14 Q4 SAMPLING

Project Number: 21010214

Lab Number: L2359007

Report Date: 10/16/23

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 02,04 Batch: WG1838713-3 WG1838713-4								
1,2-Dibromo-3-chloropropane	84		84		41-144	0		20
1,2,4-Trichlorobenzene	85		86		70-130	1		20
1,2,3-Trichlorobenzene	88		90		70-130	2		20

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
1,2-Dichloroethane-d4	92		91		70-130
Toluene-d8	98		97		70-130
4-Bromofluorobenzene	91		93		70-130
Dibromofluoromethane	99		98		70-130

Lab Control Sample Analysis
Batch Quality Control

Project Name: B14 Q4 SAMPLING
Project Number: 21010214

Lab Number: L2359007
Report Date: 10/16/23

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS-SIM - Westborough Lab Associated sample(s): 02,04 Batch: WG1838716-3 WG1838716-4								
1,1,2,2-Tetrachloroethane	78		76		70-130	3		25

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
1,2-Dichloroethane-d4	98		98		70-130
4-Bromofluorobenzene	90		90		70-130

Lab Control Sample Analysis

Batch Quality Control

Project Name: B14 Q4 SAMPLING

Project Number: 21010214

Lab Number: L2359007

Report Date: 10/16/23

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS-SIM - Westborough Lab Associated sample(s): 01,03,05 Batch: WG1839047-3 WG1839047-4								
1,1,2,2-Tetrachloroethane	75		74		70-130	1		25

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
1,2-Dichloroethane-d4	98		98		70-130
4-Bromofluorobenzene	89		89		70-130

Lab Control Sample Analysis

Batch Quality Control

Project Name: B14 Q4 SAMPLING

Project Number: 21010214

Lab Number: L2359007

Report Date: 10/16/23

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01,03,05 Batch: WG1839054-3 WG1839054-4								
Dichlorodifluoromethane	95		94		36-147	1		20
Chloromethane	97		96		64-130	1		20
Vinyl chloride	130		130		55-140	0		20
Bromomethane	**140**	Q	130		39-139	7		20
Chloroethane	**140**	Q	**140**	Q	55-138	0		20
Trichlorofluoromethane	110		110		62-150	0		20
1,1-Dichloroethene	100		99		61-145	1		20
Carbon disulfide	99		97		51-130	2		20
1,1,2-Trichloro-1,2,2-Trifluoroethane	100		96		70-130	4		20
Methylene chloride	100		97		70-130	3		20
Acetone	110		110		58-148	0		20
trans-1,2-Dichloroethene	100		97		70-130	3		20
Methyl Acetate	100		100		70-130	0		20
Methyl tert butyl ether	100		97		63-130	3		20
1,1-Dichloroethane	100		100		70-130	0		20
cis-1,2-Dichloroethene	100		100		70-130	0		20
Cyclohexane	96		95		70-130	1		20
Chloroform	98		96		70-130	2		20
Carbon tetrachloride	100		100		63-132	0		20
1,1,1-Trichloroethane	100		100		67-130	0		20
2-Butanone	110		100		63-138	10		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 Q4 SAMPLING
Project Number: 21010214
Lab Number: L2359007
Report Date: 10/16/23

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01,03,05 Batch: WG1839054-3 WG1839054-4								
Trichloroethene	100		96		70-130	4		20
1,2-Dichloropropane	98		95		70-130	3		20
Bromodichloromethane	100		97		67-130	3		20
cis-1,3-Dichloropropene	94		89		70-130	5		20
Toluene	95		94		70-130	1		20
Tetrachloroethene	100		100		70-130	0		20
4-Methyl-2-pentanone	83		85		59-130	2		20
trans-1,3-Dichloropropene	88		86		70-130	2		20
1,1,2-Trichloroethane	91		92		70-130	1		20
Dibromochloromethane	90		87		63-130	3		20
1,2-Dibromoethane	96		93		70-130	3		20
2-Hexanone	85		82		57-130	4		20
Chlorobenzene	96		95		75-130	1		20
Ethylbenzene	91		91		70-130	0		20
p/m-Xylene	95		95		70-130	0		20
o-Xylene	90		85		70-130	6		20
Styrene	90		90		70-130	0		20
Bromoform	74		76		54-136	3		20
Isopropylbenzene	86		85		70-130	1		20
1,1,2,2-Tetrachloroethane	84		83		67-130	1		20
1,3-Dichlorobenzene	89		89		70-130	0		20
1,4-Dichlorobenzene	91		88		70-130	3		20
1,2-Dichlorobenzene	90		91		70-130	1		20

Lab Control Sample Analysis
Batch Quality Control

Project Name: B14 Q4 SAMPLING
Project Number: 21010214
Lab Number: L2359007
Report Date: 10/16/23

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01,03,05 Batch: WG1839054-3 WG1839054-4								
1,2-Dibromo-3-chloropropane	87		79		41-144	10		20
1,2,4-Trichlorobenzene	87		84		70-130	4		20
1,2,3-Trichlorobenzene	90		89		70-130	1		20

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
1,2-Dichloroethane-d4	91		90		70-130
Toluene-d8	95		97		70-130
4-Bromofluorobenzene	92		95		70-130
Dibromofluoromethane	101		103		70-130

SEMIVOLATILES

Project Name: B14 Q4 SAMPLING
Project Number: 21010214
Lab Number: L2359007
Report Date: 10/16/23

SAMPLE RESULTS

Lab ID: L2359007-01
Client ID: B24-001-MWS
Sample Location: B14

Date Collected: 10/05/23 11:15
Date Received: 10/05/23
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8270E
Analytical Date: 10/11/23 12:40
Analyst: SZ

Extraction Method: EPA 3510C
Extraction Date: 10/10/23 20:15

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Benzaldehyde	ND		ug/l	5.0	0.53	1
Phenol	ND		ug/l	5.0	0.57	1
Bis(2-chloroethyl)ether	ND		ug/l	2.0	0.50	1
2-Chlorophenol	ND		ug/l	2.0	0.48	1
2-Methylphenol	ND		ug/l	5.0	0.49	1
Bis(2-chloroisopropyl)ether	ND		ug/l	2.0	0.53	1
Acetophenone	ND		ug/l	5.0	0.53	1
n-Nitrosodi-n-propylamine	ND		ug/l	5.0	0.64	1
3-Methylphenol/4-Methylphenol	ND		ug/l	5.0	0.48	1
Hexachloroethane	ND		ug/l	2.0	0.58	1
Nitrobenzene	ND		ug/l	1.4	0.77	1
Isophorone	ND		ug/l	5.0	1.2	1
2,4-Dimethylphenol	ND		ug/l	5.0	1.8	1
Bis(2-chloroethoxy)methane	ND		ug/l	5.0	0.50	1
2,4-Dichlorophenol	ND		ug/l	5.0	0.41	1
Naphthalene	0.82	J	ug/l	2.0	0.46	1
4-Chloroaniline	ND		ug/l	3.7	1.1	1
Hexachlorobutadiene	ND		ug/l	2.0	0.66	1
Caprolactam	ND		ug/l	10	3.3	1
2-Methylnaphthalene	ND		ug/l	2.0	0.45	1
Hexachlorocyclopentadiene	ND		ug/l	20	0.69	1
1,2,4,5-Tetrachlorobenzene	ND		ug/l	1.7	0.44	1
2,4,6-Trichlorophenol	ND		ug/l	5.0	0.61	1
2,4,5-Trichlorophenol	ND		ug/l	5.0	0.77	1
Biphenyl	ND		ug/l	2.0	0.46	1
2-Chloronaphthalene	ND		ug/l	2.0	0.44	1
2-Nitroaniline	ND		ug/l	5.0	0.50	1
2,6-Dinitrotoluene	ND		ug/l	5.0	0.93	1

Project Name: B14 Q4 SAMPLING **Lab Number:** L2359007

Project Number: 21010214 **Report Date:** 10/16/23

SAMPLE RESULTS

Lab ID: L2359007-01 Date Collected: 10/05/23 11:15

Client ID: B24-001-MWS Date Received: 10/05/23

Sample Location: B14 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	0.46	1
Acenaphthene	ND		ug/l	2.0	0.53	1
2,4-Dinitrophenol	ND		ug/l	20	6.6	1
2,4-Dinitrotoluene	ND		ug/l	5.0	1.2	1
2,3,4,6-Tetrachlorophenol	ND		ug/l	5.0	0.84	1
Diethyl phthalate	ND		ug/l	5.0	0.38	1
Fluorene	ND		ug/l	2.0	0.41	1
4-Nitroaniline	ND		ug/l	5.0	0.80	1
NDPA/DPA	ND		ug/l	2.0	0.42	1
Hexachlorobenzene	ND		ug/l	2.0	0.46	1
Pentachlorophenol	ND		ug/l	10	1.8	1
Phenanthrene	ND		ug/l	2.0	0.33	1
Anthracene	ND		ug/l	2.0	0.33	1
Carbazole	ND		ug/l	2.0	0.49	1
Di-n-butylphthalate	ND		ug/l	5.0	0.39	1
Fluoranthene	ND		ug/l	2.0	0.26	1
Pyrene	ND		ug/l	2.0	0.28	1
3,3'-Dichlorobenzidine	ND		ug/l	5.0	1.6	1
Benzo(a)anthracene	ND		ug/l	2.0	0.32	1
Chrysene	ND		ug/l	1.4	0.34	1
Bis(2-ethylhexyl)phthalate	ND		ug/l	3.0	1.5	1
Di-n-octylphthalate	ND		ug/l	5.0	1.3	1
Benzo(b)fluoranthene	ND		ug/l	2.0	0.35	1
Benzo(k)fluoranthene	ND		ug/l	2.0	0.37	1
Benzo(a)pyrene	ND		ug/l	2.0	0.41	1
Indeno(1,2,3-cd)pyrene	ND		ug/l	2.0	0.40	1
Dibenzo(a,h)anthracene	ND		ug/l	2.0	0.32	1
Benzo(ghi)perylene	ND		ug/l	2.0	0.30	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	64		21-120
Phenol-d6	52		10-120
Nitrobenzene-d5	70		23-120
2-Fluorobiphenyl	74		15-120
2,4,6-Tribromophenol	79		10-120
4-Terphenyl-d14	84		41-149

Project Name: B14 Q4 SAMPLING
Project Number: 21010214
Lab Number: L2359007
Report Date: 10/16/23

SAMPLE RESULTS

Lab ID: L2359007-01
Client ID: B24-001-MWS
Sample Location: B14

Date Collected: 10/05/23 11:15
Date Received: 10/05/23
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8270E-SIM
Analytical Date: 10/11/23 14:33
Analyst: AH

Extraction Method: EPA 3510C
Extraction Date: 10/10/23 20:15

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS-SIM - Westborough Lab						
Naphthalene	0.90		ug/l	0.10	0.05	1
2-Methylnaphthalene	0.11		ug/l	0.10	0.02	1
Acenaphthylene	ND		ug/l	0.10	0.01	1
Acenaphthene	0.09	J	ug/l	0.10	0.01	1
Fluorene	0.09	J	ug/l	0.10	0.01	1
Pentachlorophenol	ND		ug/l	0.10	0.01	1
Phenanthrene	0.22		ug/l	0.05	0.02	1
Anthracene	0.04	J	ug/l	0.10	0.01	1
Fluoranthene	0.13		ug/l	0.10	0.02	1
Pyrene	ND		ug/l	0.10	0.02	1
Benzo(a)anthracene	0.04	J	ug/l	0.05	0.02	1
Chrysene	0.02	J	ug/l	0.10	0.01	1
Benzo(b)fluoranthene	0.02	J	ug/l	0.05	0.01	1
Benzo(k)fluoranthene	0.01	J	ug/l	0.10	0.01	1
Benzo(a)pyrene	0.02	J	ug/l	0.10	0.02	1
Indeno(1,2,3-cd)pyrene	ND		ug/l	0.10	0.01	1
Dibenzo(a,h)anthracene	ND		ug/l	0.05	0.01	1
Benzo(ghi)perylene	ND		ug/l	0.10	0.01	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	42		21-120
Phenol-d6	50		10-120
Nitrobenzene-d5	74		23-120
2-Fluorobiphenyl	84		15-120
2,4,6-Tribromophenol	**134**	Q	10-120
4-Terphenyl-d14	83		41-149

Project Name: B14 Q4 SAMPLING
Project Number: 21010214
Lab Number: L2359007
Report Date: 10/16/23

SAMPLE RESULTS

Lab ID: L2359007-02
Client ID: HI13-MWS
Sample Location: B14

Date Collected: 10/05/23 13:40
Date Received: 10/05/23
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8270E
Analytical Date: 10/11/23 13:48
Analyst: SZ

Extraction Method: EPA 3510C
Extraction Date: 10/10/23 20:15

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Benzaldehyde	ND		ug/l	5.0	0.53	1
Phenol	ND		ug/l	5.0	0.57	1
Bis(2-chloroethyl)ether	ND		ug/l	2.0	0.50	1
2-Chlorophenol	ND		ug/l	2.0	0.48	1
2-Methylphenol	ND		ug/l	5.0	0.49	1
Bis(2-chloroisopropyl)ether	ND		ug/l	2.0	0.53	1
Acetophenone	ND		ug/l	5.0	0.53	1
n-Nitrosodi-n-propylamine	ND		ug/l	5.0	0.64	1
3-Methylphenol/4-Methylphenol	ND		ug/l	5.0	0.48	1
Hexachloroethane	ND		ug/l	2.0	0.58	1
Nitrobenzene	ND		ug/l	1.4	0.77	1
Isophorone	ND		ug/l	5.0	1.2	1
2,4-Dimethylphenol	ND		ug/l	5.0	1.8	1
Bis(2-chloroethoxy)methane	ND		ug/l	5.0	0.50	1
2,4-Dichlorophenol	ND		ug/l	5.0	0.41	1
Naphthalene	ND		ug/l	2.0	0.46	1
4-Chloroaniline	ND		ug/l	3.7	1.1	1
Hexachlorobutadiene	ND		ug/l	2.0	0.66	1
Caprolactam	ND		ug/l	10	3.3	1
2-Methylnaphthalene	ND		ug/l	2.0	0.45	1
Hexachlorocyclopentadiene	ND		ug/l	20	0.69	1
1,2,4,5-Tetrachlorobenzene	ND		ug/l	1.7	0.44	1
2,4,6-Trichlorophenol	ND		ug/l	5.0	0.61	1
2,4,5-Trichlorophenol	ND		ug/l	5.0	0.77	1
Biphenyl	ND		ug/l	2.0	0.46	1
2-Chloronaphthalene	ND		ug/l	2.0	0.44	1
2-Nitroaniline	ND		ug/l	5.0	0.50	1
2,6-Dinitrotoluene	ND		ug/l	5.0	0.93	1

Project Name: B14 Q4 SAMPLING **Lab Number:** L2359007

Project Number: 21010214 **Report Date:** 10/16/23

SAMPLE RESULTS

Lab ID: L2359007-02 Date Collected: 10/05/23 13:40

Client ID: HI13-MWS Date Received: 10/05/23

Sample Location: B14 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	0.46	1
Acenaphthene	ND		ug/l	2.0	0.53	1
2,4-Dinitrophenol	ND		ug/l	20	6.6	1
2,4-Dinitrotoluene	ND		ug/l	5.0	1.2	1
2,3,4,6-Tetrachlorophenol	ND		ug/l	5.0	0.84	1
Diethyl phthalate	ND		ug/l	5.0	0.38	1
Fluorene	ND		ug/l	2.0	0.41	1
4-Nitroaniline	ND		ug/l	5.0	0.80	1
NDPA/DPA	ND		ug/l	2.0	0.42	1
Hexachlorobenzene	ND		ug/l	2.0	0.46	1
Pentachlorophenol	ND		ug/l	10	1.8	1
Phenanthrene	ND		ug/l	2.0	0.33	1
Anthracene	ND		ug/l	2.0	0.33	1
Carbazole	ND		ug/l	2.0	0.49	1
Di-n-butylphthalate	ND		ug/l	5.0	0.39	1
Fluoranthene	ND		ug/l	2.0	0.26	1
Pyrene	ND		ug/l	2.0	0.28	1
3,3'-Dichlorobenzidine	ND		ug/l	5.0	1.6	1
Benzo(a)anthracene	ND		ug/l	2.0	0.32	1
Chrysene	ND		ug/l	1.4	0.34	1
Bis(2-ethylhexyl)phthalate	ND		ug/l	3.0	1.5	1
Di-n-octylphthalate	ND		ug/l	5.0	1.3	1
Benzo(b)fluoranthene	ND		ug/l	2.0	0.35	1
Benzo(k)fluoranthene	ND		ug/l	2.0	0.37	1
Benzo(a)pyrene	ND		ug/l	2.0	0.41	1
Indeno(1,2,3-cd)pyrene	ND		ug/l	2.0	0.40	1
Dibenzo(a,h)anthracene	ND		ug/l	2.0	0.32	1
Benzo(ghi)perylene	ND		ug/l	2.0	0.30	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	**6**	Q	21-120
Phenol-d6	**6**	Q	10-120
Nitrobenzene-d5	**8**	Q	23-120
2-Fluorobiphenyl	**9**	Q	15-120
2,4,6-Tribromophenol	16		10-120
4-Terphenyl-d14	**8**	Q	41-149

Project Name: B14 Q4 SAMPLING
Project Number: 21010214
Lab Number: L2359007
Report Date: 10/16/23

SAMPLE RESULTS

Lab ID: L2359007-02
Client ID: HI13-MWS
Sample Location: B14

Date Collected: 10/05/23 13:40
Date Received: 10/05/23
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8270E-SIM
Analytical Date: 10/11/23 14:49
Analyst: CMM

Extraction Method: EPA 3510C
Extraction Date: 10/10/23 20:15

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS-SIM - Westborough Lab						
Naphthalene	0.10		ug/l	0.10	0.05	1
2-Methylnaphthalene	ND		ug/l	0.10	0.02	1
Acenaphthylene	ND		ug/l	0.10	0.01	1
Acenaphthene	ND		ug/l	0.10	0.01	1
Fluorene	ND		ug/l	0.10	0.01	1
Pentachlorophenol	ND		ug/l	0.10	0.01	1
Phenanthrene	ND		ug/l	0.05	0.02	1
Anthracene	ND		ug/l	0.10	0.01	1
Fluoranthene	ND		ug/l	0.10	0.02	1
Pyrene	ND		ug/l	0.10	0.02	1
Benzo(a)anthracene	ND		ug/l	0.05	0.02	1
Chrysene	ND		ug/l	0.10	0.01	1
Benzo(b)fluoranthene	ND		ug/l	0.05	0.01	1
Benzo(k)fluoranthene	ND		ug/l	0.10	0.01	1
Benzo(a)pyrene	ND		ug/l	0.10	0.02	1
Indeno(1,2,3-cd)pyrene	ND		ug/l	0.10	0.01	1
Dibenzo(a,h)anthracene	ND		ug/l	0.05	0.01	1
Benzo(ghi)perylene	ND		ug/l	0.10	0.01	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	**4**	Q	21-120
Phenol-d6	**5**	Q	10-120
Nitrobenzene-d5	**9**	Q	23-120
2-Fluorobiphenyl	**9**	Q	15-120
2,4,6-Tribromophenol	11		10-120
4-Terphenyl-d14	**8**	Q	41-149

Project Name: B14 Q4 SAMPLING
Project Number: 21010214
Lab Number: L2359007
Report Date: 10/16/23

SAMPLE RESULTS

Lab ID: L2359007-02 RE
Client ID: HI13-MWS
Sample Location: B14

Date Collected: 10/05/23 13:40
Date Received: 10/05/23
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8270E
Analytical Date: 10/15/23 16:52
Analyst: CMM

Extraction Method: EPA 3510C
Extraction Date: 10/14/23 13:06

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Benzaldehyde	ND		ug/l	5.0	0.53	1
Phenol	ND		ug/l	5.0	0.57	1
Bis(2-chloroethyl)ether	ND		ug/l	2.0	0.50	1
2-Chlorophenol	ND		ug/l	2.0	0.48	1
2-Methylphenol	ND		ug/l	5.0	0.49	1
Bis(2-chloroisopropyl)ether	ND		ug/l	2.0	0.53	1
Acetophenone	ND		ug/l	5.0	0.53	1
n-Nitrosodi-n-propylamine	ND		ug/l	5.0	0.64	1
3-Methylphenol/4-Methylphenol	ND		ug/l	5.0	0.48	1
Hexachloroethane	ND		ug/l	2.0	0.58	1
Nitrobenzene	ND		ug/l	1.4	0.77	1
Isophorone	ND		ug/l	5.0	1.2	1
2,4-Dimethylphenol	ND		ug/l	5.0	1.8	1
Bis(2-chloroethoxy)methane	ND		ug/l	5.0	0.50	1
2,4-Dichlorophenol	ND		ug/l	5.0	0.41	1
Naphthalene	0.63	J	ug/l	2.0	0.46	1
4-Chloroaniline	ND		ug/l	3.7	1.1	1
Hexachlorobutadiene	ND		ug/l	2.0	0.66	1
Caprolactam	ND		ug/l	10	3.3	1
2-Methylnaphthalene	ND		ug/l	2.0	0.45	1
Hexachlorocyclopentadiene	ND		ug/l	20	0.69	1
1,2,4,5-Tetrachlorobenzene	ND		ug/l	1.7	0.44	1
2,4,6-Trichlorophenol	ND		ug/l	5.0	0.61	1
2,4,5-Trichlorophenol	ND		ug/l	5.0	0.77	1
Biphenyl	ND		ug/l	2.0	0.46	1
2-Chloronaphthalene	ND		ug/l	2.0	0.44	1
2-Nitroaniline	ND		ug/l	5.0	0.50	1
2,6-Dinitrotoluene	ND		ug/l	5.0	0.93	1

Project Name: B14 Q4 SAMPLING **Lab Number:** L2359007

Project Number: 21010214 **Report Date:** 10/16/23

SAMPLE RESULTS

Lab ID: L2359007-02 RE
Client ID: HI13-MWS
Sample Location: B14

Date Collected: 10/05/23 13:40
Date Received: 10/05/23
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	0.46	1
Acenaphthene	ND		ug/l	2.0	0.53	1
2,4-Dinitrophenol	ND		ug/l	20	6.6	1
2,4-Dinitrotoluene	ND		ug/l	5.0	1.2	1
2,3,4,6-Tetrachlorophenol	ND		ug/l	5.0	0.84	1
Diethyl phthalate	ND		ug/l	5.0	0.38	1
Fluorene	ND		ug/l	2.0	0.41	1
4-Nitroaniline	ND		ug/l	5.0	0.80	1
NDPA/DPA	ND		ug/l	2.0	0.42	1
Hexachlorobenzene	ND		ug/l	2.0	0.46	1
Pentachlorophenol	ND		ug/l	10	1.8	1
Phenanthrene	ND		ug/l	2.0	0.33	1
Anthracene	ND		ug/l	2.0	0.33	1
Carbazole	ND		ug/l	2.0	0.49	1
Di-n-butylphthalate	ND		ug/l	5.0	0.39	1
Fluoranthene	ND		ug/l	2.0	0.26	1
Pyrene	ND		ug/l	2.0	0.28	1
3,3'-Dichlorobenzidine	ND		ug/l	5.0	1.6	1
Benzo(a)anthracene	ND		ug/l	2.0	0.32	1
Chrysene	ND		ug/l	1.4	0.34	1
Bis(2-ethylhexyl)phthalate	ND		ug/l	3.0	1.5	1
Di-n-octylphthalate	ND		ug/l	5.0	1.3	1
Benzo(b)fluoranthene	ND		ug/l	2.0	0.35	1
Benzo(k)fluoranthene	ND		ug/l	2.0	0.37	1
Benzo(a)pyrene	ND		ug/l	2.0	0.41	1
Indeno(1,2,3-cd)pyrene	ND		ug/l	2.0	0.40	1
Dibenzo(a,h)anthracene	ND		ug/l	2.0	0.32	1
Benzo(ghi)perylene	ND		ug/l	2.0	0.30	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	71		21-120
Phenol-d6	59		10-120
Nitrobenzene-d5	80		23-120
2-Fluorobiphenyl	78		15-120
2,4,6-Tribromophenol	86		10-120
4-Terphenyl-d14	86		41-149

Project Name: B14 Q4 SAMPLING
Project Number: 21010214
Lab Number: L2359007
Report Date: 10/16/23

SAMPLE RESULTS

Lab ID: L2359007-02 RE
Client ID: HI13-MWS
Sample Location: B14

Sample Depth:
Matrix: Water
Analytical Method: 1,8270E-SIM
Analytical Date: 10/15/23 09:55
Analyst: AH

Date Collected: 10/05/23 13:40
Date Received: 10/05/23
Field Prep: Not Specified

Extraction Method: EPA 3510C
Extraction Date: 10/14/23 13:06

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS-SIM - Westborough Lab						
Naphthalene	0.72	B	ug/l	0.10	0.05	1
2-Methylnaphthalene	0.06	J	ug/l	0.10	0.02	1
Acenaphthylene	0.04	J	ug/l	0.10	0.01	1
Acenaphthene	0.08	J	ug/l	0.10	0.01	1
Fluorene	0.06	J	ug/l	0.10	0.01	1
Pentachlorophenol	ND		ug/l	0.10	0.01	1
Phenanthrene	0.11		ug/l	0.05	0.02	1
Anthracene	0.08	J	ug/l	0.10	0.01	1
Fluoranthene	0.05	J	ug/l	0.10	0.02	1
Pyrene	0.09	J	ug/l	0.10	0.02	1
Benzo(a)anthracene	0.03	JB	ug/l	0.05	0.02	1
Chrysene	0.06	J	ug/l	0.10	0.01	1
Benzo(b)fluoranthene	ND		ug/l	0.05	0.01	1
Benzo(k)fluoranthene	ND		ug/l	0.10	0.01	1
Benzo(a)pyrene	ND		ug/l	0.10	0.02	1
Indeno(1,2,3-cd)pyrene	ND		ug/l	0.10	0.01	1
Dibenzo(a,h)anthracene	ND		ug/l	0.05	0.01	1
Benzo(ghi)perylene	ND		ug/l	0.10	0.01	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	72		21-120
Phenol-d6	60		10-120
Nitrobenzene-d5	92		23-120
2-Fluorobiphenyl	80		15-120
2,4,6-Tribromophenol	106		10-120
4-Terphenyl-d14	98		41-149

Project Name: B14 Q4 SAMPLING
Project Number: 21010214
Lab Number: L2359007
Report Date: 10/16/23

SAMPLE RESULTS

Lab ID: L2359007-03
Client ID: TS03-PDP002
Sample Location: B14

Date Collected: 10/05/23 12:05
Date Received: 10/05/23
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8270E
Analytical Date: 10/11/23 14:10
Analyst: SZ

Extraction Method: EPA 3510C
Extraction Date: 10/10/23 20:15

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Benzaldehyde	ND		ug/l	5.0	0.53	1
Phenol	ND		ug/l	5.0	0.57	1
Bis(2-chloroethyl)ether	ND		ug/l	2.0	0.50	1
2-Chlorophenol	ND		ug/l	2.0	0.48	1
2-Methylphenol	ND		ug/l	5.0	0.49	1
Bis(2-chloroisopropyl)ether	ND		ug/l	2.0	0.53	1
Acetophenone	ND		ug/l	5.0	0.53	1
n-Nitrosodi-n-propylamine	ND		ug/l	5.0	0.64	1
3-Methylphenol/4-Methylphenol	ND		ug/l	5.0	0.48	1
Hexachloroethane	ND		ug/l	2.0	0.58	1
Nitrobenzene	ND		ug/l	1.4	0.77	1
Isophorone	ND		ug/l	5.0	1.2	1
2,4-Dimethylphenol	ND		ug/l	5.0	1.8	1
Bis(2-chloroethoxy)methane	ND		ug/l	5.0	0.50	1
2,4-Dichlorophenol	ND		ug/l	5.0	0.41	1
Naphthalene	ND		ug/l	2.0	0.46	1
4-Chloroaniline	ND		ug/l	3.7	1.1	1
Hexachlorobutadiene	ND		ug/l	2.0	0.66	1
Caprolactam	ND		ug/l	10	3.3	1
2-Methylnaphthalene	ND		ug/l	2.0	0.45	1
Hexachlorocyclopentadiene	ND		ug/l	20	0.69	1
1,2,4,5-Tetrachlorobenzene	ND		ug/l	1.7	0.44	1
2,4,6-Trichlorophenol	ND		ug/l	5.0	0.61	1
2,4,5-Trichlorophenol	ND		ug/l	5.0	0.77	1
Biphenyl	ND		ug/l	2.0	0.46	1
2-Chloronaphthalene	ND		ug/l	2.0	0.44	1
2-Nitroaniline	ND		ug/l	5.0	0.50	1
2,6-Dinitrotoluene	ND		ug/l	5.0	0.93	1

Project Name: B14 Q4 SAMPLING **Lab Number:** L2359007

Project Number: 21010214 **Report Date:** 10/16/23

SAMPLE RESULTS

Lab ID: L2359007-03 Date Collected: 10/05/23 12:05

Client ID: TS03-PDP002 Date Received: 10/05/23

Sample Location: B14 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	0.46	1
Acenaphthene	ND		ug/l	2.0	0.53	1
2,4-Dinitrophenol	ND		ug/l	20	6.6	1
2,4-Dinitrotoluene	ND		ug/l	5.0	1.2	1
2,3,4,6-Tetrachlorophenol	ND		ug/l	5.0	0.84	1
Diethyl phthalate	ND		ug/l	5.0	0.38	1
Fluorene	ND		ug/l	2.0	0.41	1
4-Nitroaniline	ND		ug/l	5.0	0.80	1
NDPA/DPA	ND		ug/l	2.0	0.42	1
Hexachlorobenzene	ND		ug/l	2.0	0.46	1
Pentachlorophenol	ND		ug/l	10	1.8	1
Phenanthrene	ND		ug/l	2.0	0.33	1
Anthracene	ND		ug/l	2.0	0.33	1
Carbazole	ND		ug/l	2.0	0.49	1
Di-n-butylphthalate	ND		ug/l	5.0	0.39	1
Fluoranthene	ND		ug/l	2.0	0.26	1
Pyrene	ND		ug/l	2.0	0.28	1
3,3'-Dichlorobenzidine	ND		ug/l	5.0	1.6	1
Benzo(a)anthracene	ND		ug/l	2.0	0.32	1
Chrysene	ND		ug/l	1.4	0.34	1
Bis(2-ethylhexyl)phthalate	ND		ug/l	3.0	1.5	1
Di-n-octylphthalate	ND		ug/l	5.0	1.3	1
Benzo(b)fluoranthene	ND		ug/l	2.0	0.35	1
Benzo(k)fluoranthene	ND		ug/l	2.0	0.37	1
Benzo(a)pyrene	ND		ug/l	2.0	0.41	1
Indeno(1,2,3-cd)pyrene	ND		ug/l	2.0	0.40	1
Dibenzo(a,h)anthracene	ND		ug/l	2.0	0.32	1
Benzo(ghi)perylene	ND		ug/l	2.0	0.30	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	54		21-120
Phenol-d6	46		10-120
Nitrobenzene-d5	62		23-120
2-Fluorobiphenyl	71		15-120
2,4,6-Tribromophenol	73		10-120
4-Terphenyl-d14	74		41-149

Project Name: B14 Q4 SAMPLING
Project Number: 21010214
Lab Number: L2359007
Report Date: 10/16/23

SAMPLE RESULTS

Lab ID: L2359007-03
Client ID: TS03-PDP002
Sample Location: B14

Date Collected: 10/05/23 12:05
Date Received: 10/05/23
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8270E-SIM
Analytical Date: 10/11/23 15:06
Analyst: AH

Extraction Method: EPA 3510C
Extraction Date: 10/10/23 20:15

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS-SIM - Westborough Lab						
Naphthalene	0.35		ug/l	0.10	0.05	1
2-Methylnaphthalene	0.05	J	ug/l	0.10	0.02	1
Acenaphthylene	ND		ug/l	0.10	0.01	1
Acenaphthene	ND		ug/l	0.10	0.01	1
Fluorene	ND		ug/l	0.10	0.01	1
Pentachlorophenol	ND		ug/l	0.10	0.01	1
Phenanthrene	0.03	J	ug/l	0.05	0.02	1
Anthracene	0.02	J	ug/l	0.10	0.01	1
Fluoranthene	ND		ug/l	0.10	0.02	1
Pyrene	ND		ug/l	0.10	0.02	1
Benzo(a)anthracene	0.02	J	ug/l	0.05	0.02	1
Chrysene	ND		ug/l	0.10	0.01	1
Benzo(b)fluoranthene	ND		ug/l	0.05	0.01	1
Benzo(k)fluoranthene	ND		ug/l	0.10	0.01	1
Benzo(a)pyrene	ND		ug/l	0.10	0.02	1
Indeno(1,2,3-cd)pyrene	ND		ug/l	0.10	0.01	1
Dibenzo(a,h)anthracene	ND		ug/l	0.05	0.01	1
Benzo(ghi)perylene	ND		ug/l	0.10	0.01	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	40		21-120
Phenol-d6	47		10-120
Nitrobenzene-d5	71		23-120
2-Fluorobiphenyl	71		15-120
2,4,6-Tribromophenol	114		10-120
4-Terphenyl-d14	57		41-149

Project Name: B14 Q4 SAMPLING
Project Number: 21010214
Lab Number: L2359007
Report Date: 10/16/23

SAMPLE RESULTS

Lab ID: L2359007-04
Client ID: HI19-MWS
Sample Location: B14

Date Collected: 10/05/23 14:45
Date Received: 10/05/23
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8270E
Analytical Date: 10/11/23 14:33
Analyst: SZ

Extraction Method: EPA 3510C
Extraction Date: 10/10/23 20:15

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Benzaldehyde	ND		ug/l	5.0	0.53	1
Phenol	0.98	J	ug/l	5.0	0.57	1
Bis(2-chloroethyl)ether	ND		ug/l	2.0	0.50	1
2-Chlorophenol	ND		ug/l	2.0	0.48	1
2-Methylphenol	1.2	J	ug/l	5.0	0.49	1
Bis(2-chloroisopropyl)ether	ND		ug/l	2.0	0.53	1
Acetophenone	ND		ug/l	5.0	0.53	1
n-Nitrosodi-n-propylamine	ND		ug/l	5.0	0.64	1
3-Methylphenol/4-Methylphenol	16		ug/l	5.0	0.48	1
Hexachloroethane	ND		ug/l	2.0	0.58	1
Nitrobenzene	ND		ug/l	1.4	0.77	1
Isophorone	ND		ug/l	5.0	1.2	1
2,4-Dimethylphenol	38		ug/l	5.0	1.8	1
Bis(2-chloroethoxy)methane	ND		ug/l	5.0	0.50	1
2,4-Dichlorophenol	ND		ug/l	5.0	0.41	1
Naphthalene	34		ug/l	2.0	0.46	1
4-Chloroaniline	ND		ug/l	3.7	1.1	1
Hexachlorobutadiene	ND		ug/l	2.0	0.66	1
Caprolactam	ND		ug/l	10	3.3	1
2-Methylnaphthalene	2.6		ug/l	2.0	0.45	1
Hexachlorocyclopentadiene	ND		ug/l	20	0.69	1
1,2,4,5-Tetrachlorobenzene	ND		ug/l	1.7	0.44	1
2,4,6-Trichlorophenol	ND		ug/l	5.0	0.61	1
2,4,5-Trichlorophenol	ND		ug/l	5.0	0.77	1
Biphenyl	0.80	J	ug/l	2.0	0.46	1
2-Chloronaphthalene	ND		ug/l	2.0	0.44	1
2-Nitroaniline	ND		ug/l	5.0	0.50	1
2,6-Dinitrotoluene	ND		ug/l	5.0	0.93	1

Project Name: B14 Q4 SAMPLING **Lab Number:** L2359007

Project Number: 21010214 **Report Date:** 10/16/23

SAMPLE RESULTS

Lab ID: L2359007-04 Date Collected: 10/05/23 14:45

Client ID: HI19-MWS Date Received: 10/05/23

Sample Location: B14 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Acenaphthylene	0.52	J	ug/l	2.0	0.46	1
Acenaphthene	0.72	J	ug/l	2.0	0.53	1
2,4-Dinitrophenol	ND		ug/l	20	6.6	1
2,4-Dinitrotoluene	ND		ug/l	5.0	1.2	1
2,3,4,6-Tetrachlorophenol	ND		ug/l	5.0	0.84	1
Diethyl phthalate	ND		ug/l	5.0	0.38	1
Fluorene	1.0	J	ug/l	2.0	0.41	1
4-Nitroaniline	ND		ug/l	5.0	0.80	1
NDPA/DPA	ND		ug/l	2.0	0.42	1
Hexachlorobenzene	ND		ug/l	2.0	0.46	1
Pentachlorophenol	ND		ug/l	10	1.8	1
Phenanthrene	2.1		ug/l	2.0	0.33	1
Anthracene	ND		ug/l	2.0	0.33	1
Carbazole	1.7	J	ug/l	2.0	0.49	1
Di-n-butylphthalate	ND		ug/l	5.0	0.39	1
Fluoranthene	0.65	J	ug/l	2.0	0.26	1
Pyrene	0.47	J	ug/l	2.0	0.28	1
3,3'-Dichlorobenzidine	ND		ug/l	5.0	1.6	1
Benzo(a)anthracene	ND		ug/l	2.0	0.32	1
Chrysene	ND		ug/l	1.4	0.34	1
Bis(2-ethylhexyl)phthalate	ND		ug/l	3.0	1.5	1
Di-n-octylphthalate	ND		ug/l	5.0	1.3	1
Benzo(b)fluoranthene	ND		ug/l	2.0	0.35	1
Benzo(k)fluoranthene	ND		ug/l	2.0	0.37	1
Benzo(a)pyrene	ND		ug/l	2.0	0.41	1
Indeno(1,2,3-cd)pyrene	ND		ug/l	2.0	0.40	1
Dibenzo(a,h)anthracene	ND		ug/l	2.0	0.32	1
Benzo(ghi)perylene	ND		ug/l	2.0	0.30	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	63		21-120
Phenol-d6	52		10-120
Nitrobenzene-d5	74		23-120
2-Fluorobiphenyl	73		15-120
2,4,6-Tribromophenol	77		10-120
4-Terphenyl-d14	73		41-149

Project Name: B14 Q4 SAMPLING
Project Number: 21010214
Lab Number: L2359007
Report Date: 10/16/23

SAMPLE RESULTS

Lab ID: L2359007-04
Client ID: HI19-MWS
Sample Location: B14

Date Collected: 10/05/23 14:45
Date Received: 10/05/23
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8270E-SIM
Analytical Date: 10/11/23 16:28
Analyst: AH

Extraction Method: EPA 3510C
Extraction Date: 10/10/23 20:15

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS-SIM - Westborough Lab						
Naphthalene	34		ug/l	0.10	0.05	1
2-Methylnaphthalene	2.5		ug/l	0.10	0.02	1
Acenaphthylene	0.46		ug/l	0.10	0.01	1
Acenaphthene	0.78		ug/l	0.10	0.01	1
Fluorene	1.0		ug/l	0.10	0.01	1
Pentachlorophenol	0.19		ug/l	0.10	0.01	1
Phenanthrene	2.0		ug/l	0.05	0.02	1
Anthracene	0.34		ug/l	0.10	0.01	1
Fluoranthene	0.68		ug/l	0.10	0.02	1
Pyrene	0.44		ug/l	0.10	0.02	1
Benzo(a)anthracene	0.13		ug/l	0.05	0.02	1
Chrysene	0.12		ug/l	0.10	0.01	1
Benzo(b)fluoranthene	0.13		ug/l	0.05	0.01	1
Benzo(k)fluoranthene	0.04	J	ug/l	0.10	0.01	1
Benzo(a)pyrene	0.08	J	ug/l	0.10	0.02	1
Indeno(1,2,3-cd)pyrene	0.06	J	ug/l	0.10	0.01	1
Dibenzo(a,h)anthracene	ND		ug/l	0.05	0.01	1
Benzo(ghi)perylene	0.05	J	ug/l	0.10	0.01	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	41		21-120
Phenol-d6	48		10-120
Nitrobenzene-d5	79		23-120
2-Fluorobiphenyl	71		15-120
2,4,6-Tribromophenol	108		10-120
4-Terphenyl-d14	49		41-149

Project Name: B14 Q4 SAMPLING
Project Number: 21010214
Lab Number: L2359007
Report Date: 10/16/23

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270E
Analytical Date: 10/11/23 08:56
Analyst: SZ

Extraction Method: EPA 3510C
Extraction Date: 10/10/23 20:15

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 01-04 Batch: WG1838088-1					
Benzaldehyde	ND		ug/l	5.0	0.53
Phenol	ND		ug/l	5.0	0.57
Bis(2-chloroethyl)ether	ND		ug/l	2.0	0.50
2-Chlorophenol	ND		ug/l	2.0	0.48
2-Methylphenol	ND		ug/l	5.0	0.49
Bis(2-chloroisopropyl)ether	ND		ug/l	2.0	0.53
Acetophenone	ND		ug/l	5.0	0.53
n-Nitrosodi-n-propylamine	ND		ug/l	5.0	0.64
3-Methylphenol/4-Methylphenol	ND		ug/l	5.0	0.48
Hexachloroethane	ND		ug/l	2.0	0.58
Nitrobenzene	ND		ug/l	1.4	0.77
Isophorone	ND		ug/l	5.0	1.2
2,4-Dimethylphenol	ND		ug/l	5.0	1.8
Bis(2-chloroethoxy)methane	ND		ug/l	5.0	0.50
2,4-Dichlorophenol	ND		ug/l	5.0	0.41
Naphthalene	ND		ug/l	2.0	0.46
4-Chloroaniline	ND		ug/l	3.7	1.1
Hexachlorobutadiene	ND		ug/l	2.0	0.66
Caprolactam	ND		ug/l	10	3.3
2-Methylnaphthalene	ND		ug/l	2.0	0.45
Hexachlorocyclopentadiene	ND		ug/l	20	0.69
1,2,4,5-Tetrachlorobenzene	ND		ug/l	1.7	0.44
2,4,6-Trichlorophenol	ND		ug/l	5.0	0.61
2,4,5-Trichlorophenol	ND		ug/l	5.0	0.77
Biphenyl	ND		ug/l	2.0	0.46
2-Chloronaphthalene	ND		ug/l	2.0	0.44
2-Nitroaniline	ND		ug/l	5.0	0.50
2,6-Dinitrotoluene	ND		ug/l	5.0	0.93
Acenaphthylene	ND		ug/l	2.0	0.46

Project Name: B14 Q4 SAMPLING
Project Number: 21010214
Lab Number: L2359007
Report Date: 10/16/23

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270E
Analytical Date: 10/11/23 08:56
Analyst: SZ

Extraction Method: EPA 3510C
Extraction Date: 10/10/23 20:15

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 01-04 Batch: WG1838088-1					
Acenaphthene	ND		ug/l	2.0	0.53
2,4-Dinitrophenol	ND		ug/l	20	6.6
2,4-Dinitrotoluene	ND		ug/l	5.0	1.2
2,3,4,6-Tetrachlorophenol	ND		ug/l	5.0	0.84
Diethyl phthalate	ND		ug/l	5.0	0.38
Fluorene	ND		ug/l	2.0	0.41
4-Nitroaniline	ND		ug/l	5.0	0.80
NDPA/DPA	ND		ug/l	2.0	0.42
Hexachlorobenzene	ND		ug/l	2.0	0.46
Pentachlorophenol	ND		ug/l	10	1.8
Phenanthrene	ND		ug/l	2.0	0.33
Anthracene	ND		ug/l	2.0	0.33
Carbazole	ND		ug/l	2.0	0.49
Di-n-butylphthalate	ND		ug/l	5.0	0.39
Fluoranthene	ND		ug/l	2.0	0.26
Pyrene	ND		ug/l	2.0	0.28
3,3'-Dichlorobenzidine	ND		ug/l	5.0	1.6
Benzo(a)anthracene	ND		ug/l	2.0	0.32
Chrysene	ND		ug/l	1.4	0.34
Bis(2-ethylhexyl)phthalate	ND		ug/l	3.0	1.5
Di-n-octylphthalate	ND		ug/l	5.0	1.3
Benzo(b)fluoranthene	ND		ug/l	2.0	0.35
Benzo(k)fluoranthene	ND		ug/l	2.0	0.37
Benzo(a)pyrene	ND		ug/l	2.0	0.41
Indeno(1,2,3-cd)pyrene	ND		ug/l	2.0	0.40
Dibenzo(a,h)anthracene	ND		ug/l	2.0	0.32
Benzo(ghi)perylene	ND		ug/l	2.0	0.30

Project Name: B14 Q4 SAMPLING
Project Number: 21010214
Lab Number: L2359007
Report Date: 10/16/23

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270E
Analytical Date: 10/11/23 08:56
Analyst: SZ

Extraction Method: EPA 3510C
Extraction Date: 10/10/23 20:15

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 01-04 Batch: WG1838088-1					

Surrogate	%Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	74		21-120
Phenol-d6	62		10-120
Nitrobenzene-d5	86		23-120
2-Fluorobiphenyl	82		15-120
2,4,6-Tribromophenol	84		10-120
4-Terphenyl-d14	89		41-149

Project Name: B14 Q4 SAMPLING
Project Number: 21010214
Lab Number: L2359007
Report Date: 10/16/23

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270E-SIM
Analytical Date: 10/11/23 13:27
Analyst: AH

Extraction Method: EPA 3510C
Extraction Date: 10/10/23 20:15

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS-SIM - Westborough Lab for sample(s): 01-04 Batch: WG1838089-1					
Naphthalene	ND		ug/l	0.10	0.05
2-Methylnaphthalene	ND		ug/l	0.10	0.02
Acenaphthylene	ND		ug/l	0.10	0.01
Acenaphthene	ND		ug/l	0.10	0.01
Fluorene	ND		ug/l	0.10	0.01
Pentachlorophenol	ND		ug/l	0.10	0.01
Phenanthrene	0.02	J	ug/l	0.05	0.02
Anthracene	ND		ug/l	0.10	0.01
Fluoranthene	ND		ug/l	0.10	0.02
Pyrene	ND		ug/l	0.10	0.02
Benzo(a)anthracene	0.03	J	ug/l	0.05	0.02
Chrysene	ND		ug/l	0.10	0.01
Benzo(b)fluoranthene	0.01	J	ug/l	0.05	0.01
Benzo(k)fluoranthene	0.01	J	ug/l	0.10	0.01
Benzo(a)pyrene	ND		ug/l	0.10	0.02
Indeno(1,2,3-cd)pyrene	ND		ug/l	0.10	0.01
Dibenzo(a,h)anthracene	ND		ug/l	0.05	0.01
Benzo(ghi)perylene	ND		ug/l	0.10	0.01

Surrogate	%Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	55		21-120
Phenol-d6	64		10-120
Nitrobenzene-d5	104		23-120
2-Fluorobiphenyl	94		15-120
2,4,6-Tribromophenol	**135**	Q	10-120
4-Terphenyl-d14	99		41-149

Project Name: B14 Q4 SAMPLING
Project Number: 21010214
Lab Number: L2359007
Report Date: 10/16/23

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270E
Analytical Date: 10/15/23 13:07
Analyst: CMM

Extraction Method: EPA 3510C
Extraction Date: 10/14/23 13:06

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 02 Batch: WG1839785-1					
Benzaldehyde	ND		ug/l	5.0	0.53
Phenol	ND		ug/l	5.0	0.57
Bis(2-chloroethyl)ether	ND		ug/l	2.0	0.50
2-Chlorophenol	ND		ug/l	2.0	0.48
2-Methylphenol	ND		ug/l	5.0	0.49
Bis(2-chloroisopropyl)ether	ND		ug/l	2.0	0.53
Acetophenone	ND		ug/l	5.0	0.53
n-Nitrosodi-n-propylamine	ND		ug/l	5.0	0.64
3-Methylphenol/4-Methylphenol	ND		ug/l	5.0	0.48
Hexachloroethane	ND		ug/l	2.0	0.58
Nitrobenzene	ND		ug/l	1.4	0.77
Isophorone	ND		ug/l	5.0	1.2
2,4-Dimethylphenol	ND		ug/l	5.0	1.8
Bis(2-chloroethoxy)methane	ND		ug/l	5.0	0.50
2,4-Dichlorophenol	ND		ug/l	5.0	0.41
Naphthalene	ND		ug/l	2.0	0.46
4-Chloroaniline	ND		ug/l	3.7	1.1
Hexachlorobutadiene	ND		ug/l	2.0	0.66
Caprolactam	ND		ug/l	10	3.3
2-Methylnaphthalene	ND		ug/l	2.0	0.45
Hexachlorocyclopentadiene	ND		ug/l	20	0.69
1,2,4,5-Tetrachlorobenzene	ND		ug/l	1.7	0.44
2,4,6-Trichlorophenol	ND		ug/l	5.0	0.61
2,4,5-Trichlorophenol	ND		ug/l	5.0	0.77
Biphenyl	ND		ug/l	2.0	0.46
2-Chloronaphthalene	ND		ug/l	2.0	0.44
2-Nitroaniline	ND		ug/l	5.0	0.50
2,6-Dinitrotoluene	ND		ug/l	5.0	0.93
Acenaphthylene	ND		ug/l	2.0	0.46

Project Name: B14 Q4 SAMPLING
Project Number: 21010214
Lab Number: L2359007
Report Date: 10/16/23

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270E
Analytical Date: 10/15/23 13:07
Analyst: CMM

Extraction Method: EPA 3510C
Extraction Date: 10/14/23 13:06

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 02 Batch: WG1839785-1					
Acenaphthene	ND		ug/l	2.0	0.53
2,4-Dinitrophenol	ND		ug/l	20	6.6
2,4-Dinitrotoluene	ND		ug/l	5.0	1.2
2,3,4,6-Tetrachlorophenol	ND		ug/l	5.0	0.84
Diethyl phthalate	ND		ug/l	5.0	0.38
Fluorene	ND		ug/l	2.0	0.41
4-Nitroaniline	ND		ug/l	5.0	0.80
NDPA/DPA	ND		ug/l	2.0	0.42
Hexachlorobenzene	ND		ug/l	2.0	0.46
Pentachlorophenol	ND		ug/l	10	1.8
Phenanthrene	ND		ug/l	2.0	0.33
Anthracene	ND		ug/l	2.0	0.33
Carbazole	ND		ug/l	2.0	0.49
Di-n-butylphthalate	ND		ug/l	5.0	0.39
Fluoranthene	ND		ug/l	2.0	0.26
Pyrene	ND		ug/l	2.0	0.28
3,3'-Dichlorobenzidine	ND		ug/l	5.0	1.6
Benzo(a)anthracene	ND		ug/l	2.0	0.32
Chrysene	ND		ug/l	1.4	0.34
Bis(2-ethylhexyl)phthalate	ND		ug/l	3.0	1.5
Di-n-octylphthalate	ND		ug/l	5.0	1.3
Benzo(b)fluoranthene	ND		ug/l	2.0	0.35
Benzo(k)fluoranthene	ND		ug/l	2.0	0.37
Benzo(a)pyrene	ND		ug/l	2.0	0.41
Indeno(1,2,3-cd)pyrene	ND		ug/l	2.0	0.40
Dibenzo(a,h)anthracene	ND		ug/l	2.0	0.32
Benzo(ghi)perylene	ND		ug/l	2.0	0.30

Project Name: B14 Q4 SAMPLING
Project Number: 21010214
Lab Number: L2359007
Report Date: 10/16/23

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270E
Analytical Date: 10/15/23 13:07
Analyst: CMM

Extraction Method: EPA 3510C
Extraction Date: 10/14/23 13:06

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 02 Batch: WG1839785-1					

Surrogate	%Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	61		21-120
Phenol-d6	52		10-120
Nitrobenzene-d5	68		23-120
2-Fluorobiphenyl	74		15-120
2,4,6-Tribromophenol	75		10-120
4-Terphenyl-d14	87		41-149

Project Name: B14 Q4 SAMPLING
Project Number: 21010214
Lab Number: L2359007
Report Date: 10/16/23

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270E-SIM
Analytical Date: 10/15/23 09:05
Analyst: AH

Extraction Method: EPA 3510C
Extraction Date: 10/14/23 13:06

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS-SIM - Westborough Lab for sample(s): 02 Batch: WG1839793-1					
Naphthalene	0.52		ug/l	0.10	0.05
2-Methylnaphthalene	0.03	J	ug/l	0.10	0.02
Acenaphthylene	ND		ug/l	0.10	0.01
Acenaphthene	ND		ug/l	0.10	0.01
Fluorene	0.01	J	ug/l	0.10	0.01
Pentachlorophenol	ND		ug/l	0.10	0.01
Phenanthrene	0.04	J	ug/l	0.05	0.02
Anthracene	ND		ug/l	0.10	0.01
Fluoranthene	ND		ug/l	0.10	0.02
Pyrene	ND		ug/l	0.10	0.02
Benzo(a)anthracene	0.13		ug/l	0.05	0.02
Chrysene	ND		ug/l	0.10	0.01
Benzo(b)fluoranthene	0.01	J	ug/l	0.05	0.01
Benzo(k)fluoranthene	ND		ug/l	0.10	0.01
Benzo(a)pyrene	ND		ug/l	0.10	0.02
Indeno(1,2,3-cd)pyrene	ND		ug/l	0.10	0.01
Dibenzo(a,h)anthracene	ND		ug/l	0.05	0.01
Benzo(ghi)perylene	ND		ug/l	0.10	0.01

Surrogate	%Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	67		21-120
Phenol-d6	56		10-120
Nitrobenzene-d5	81		23-120
2-Fluorobiphenyl	75		15-120
2,4,6-Tribromophenol	87		10-120
4-Terphenyl-d14	86		41-149

Lab Control Sample Analysis
Batch Quality Control

Project Name: B14 Q4 SAMPLING
Project Number: 21010214

Lab Number: L2359007
Report Date: 10/16/23

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-04 Batch: WG1838088-2 WG1838088-3								
Benzaldehyde	62		70		40-140	12		30
Phenol	40		46		12-110	14		30
Bis(2-chloroethyl)ether	51		56		40-140	9		30
2-Chlorophenol	56		62		27-123	10		30
2-Methylphenol	53		59		30-130	11		30
Bis(2-chloroisopropyl)ether	44		50		40-140	13		30
Acetophenone	51		58		39-129	13		30
n-Nitrosodi-n-propylamine	55		60		29-132	9		30
3-Methylphenol/4-Methylphenol	58		62		30-130	7		30
Hexachloroethane	52		58		40-140	11		30
Nitrobenzene	57		66		40-140	15		30
Isophorone	54		59		40-140	9		30
2,4-Dimethylphenol	48		59		30-130	21		30
Bis(2-chloroethoxy)methane	56		60		40-140	7		30
2,4-Dichlorophenol	65		69		30-130	6		30
Naphthalene	55		63		40-140	14		30
4-Chloroaniline	44		53		40-140	19		30
Hexachlorobutadiene	57		63		40-140	10		30
Caprolactam	30		30		10-130	0		30
2-Methylnaphthalene	58		66		40-140	13		30
Hexachlorocyclopentadiene	60		68		40-140	13		30
1,2,4,5-Tetrachlorobenzene	57		63		2-134	10		30
2,4,6-Trichlorophenol	66		77		30-130	15		30

Lab Control Sample Analysis

Batch Quality Control

Project Name: B14 Q4 SAMPLING

Project Number: 21010214

Lab Number: L2359007

Report Date: 10/16/23

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-04 Batch: WG1838088-2 WG1838088-3								
2,4,5-Trichlorophenol	71		77		30-130	8		30
Biphenyl	58		65		40-140	11		30
2-Chloronaphthalene	60		67		40-140	11		30
2-Nitroaniline	73		79		52-143	8		30
2,6-Dinitrotoluene	73		79		40-140	8		30
Acenaphthylene	60		66		45-123	10		30
Acenaphthene	53		60		37-111	12		30
2,4-Dinitrophenol	80		85		20-130	6		30
2,4-Dinitrotoluene	72		80		48-143	11		30
2,3,4,6-Tetrachlorophenol	66		75		54-145	13		30
Diethyl phthalate	66		73		40-140	10		30
Fluorene	60		66		40-140	10		30
4-Nitroaniline	65		73		51-143	12		30
NDPA/DPA	60		69		40-140	14		30
Hexachlorobenzene	58		70		40-140	19		30
Pentachlorophenol	64		70		9-103	9		30
Phenanthrene	58		67		40-140	14		30
Anthracene	60		69		40-140	14		30
Carbazole	61		69		55-144	12		30
Di-n-butylphthalate	64		72		40-140	12		30
Fluoranthene	60		68		40-140	13		30
Pyrene	61		66		26-127	8		30
3,3'-Dichlorobenzidine	52		58		40-140	11		30

Lab Control Sample Analysis

Batch Quality Control

Project Name: B14 Q4 SAMPLING

Project Number: 21010214

Lab Number: L2359007

Report Date: 10/16/23

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-04 Batch: WG1838088-2 WG1838088-3								
Benzo(a)anthracene	60		67		40-140	11		30
Chrysene	64		70		40-140	9		30
Bis(2-ethylhexyl)phthalate	68		77		40-140	12		30
Di-n-octylphthalate	67		76		40-140	13		30
Benzo(b)fluoranthene	63		70		40-140	11		30
Benzo(k)fluoranthene	60		65		40-140	8		30
Benzo(a)pyrene	65		72		40-140	10		30
Indeno(1,2,3-cd)pyrene	67		74		40-140	10		30
Dibenzo(a,h)anthracene	68		74		40-140	8		30
Benzo(ghi)perylene	71		74		40-140	4		30

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
2-Fluorophenol	49		56		21-120
Phenol-d6	41		46		10-120
Nitrobenzene-d5	62		67		23-120
2-Fluorobiphenyl	61		69		15-120
2,4,6-Tribromophenol	77		84		10-120
4-Terphenyl-d14	62		72		41-149

Lab Control Sample Analysis
Batch Quality Control

Project Name: B14 Q4 SAMPLING
Project Number: 21010214
Lab Number: L2359007
Report Date: 10/16/23

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS-SIM - Westborough Lab Associated sample(s): 01-04 Batch: WG1838089-2 WG1838089-3								
Naphthalene	68		76		40-140	11		40
2-Methylnaphthalene	64		77		40-140	18		40
Acenaphthylene	65		79		40-140	19		40
Acenaphthene	56		78		37-111	33		40
Fluorene	57		77		40-140	30		40
Pentachlorophenol	70		91		9-103	26		40
Phenanthrene	71		88		40-140	21		40
Anthracene	74		94		40-140	24		40
Fluoranthene	71		98		40-140	32		40
Pyrene	72		92		26-127	24		40
Benzo(a)anthracene	72		87		40-140	19		40
Chrysene	74		93		40-140	23		40
Benzo(b)fluoranthene	77		103		40-140	29		40
Benzo(k)fluoranthene	80		94		40-140	16		40
Benzo(a)pyrene	85		100		40-140	16		40
Indeno(1,2,3-cd)pyrene	69		90		40-140	26		40
Dibenzo(a,h)anthracene	78		102		40-140	27		40
Benzo(ghi)perylene	75		97		40-140	26		40

Lab Control Sample Analysis
Batch Quality Control

Project Name: B14 Q4 SAMPLING
Project Number: 21010214

Lab Number: L2359007
Report Date: 10/16/23

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits

Semivolatile Organics by GC/MS-SIM - Westborough Lab Associated sample(s): 01-04 Batch: WG1838089-2 WG1838089-3

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
2-Fluorophenol	39		49		21-120
Phenol-d6	48		60		10-120
Nitrobenzene-d5	72		83		23-120
2-Fluorobiphenyl	63		88		15-120
2,4,6-Tribromophenol	88		**121**	Q	10-120
4-Terphenyl-d14	65		82		41-149

Lab Control Sample Analysis
Batch Quality Control

Project Name: B14 Q4 SAMPLING
Project Number: 21010214

Lab Number: L2359007
Report Date: 10/16/23

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 02 Batch: WG1839785-2 WG1839785-3								
Benzaldehyde	88		81		40-140	8		30
Phenol	59		53		12-110	11		30
Bis(2-chloroethyl)ether	69		61		40-140	12		30
2-Chlorophenol	70		66		27-123	6		30
2-Methylphenol	74		66		30-130	11		30
Bis(2-chloroisopropyl)ether	72		66		40-140	9		30
Acetophenone	70		69		39-129	1		30
n-Nitrosodi-n-propylamine	72		70		29-132	3		30
3-Methylphenol/4-Methylphenol	77		76		30-130	1		30
Hexachloroethane	73		64		40-140	13		30
Nitrobenzene	71		64		40-140	10		30
Isophorone	69		64		40-140	8		30
2,4-Dimethylphenol	79		69		30-130	14		30
Bis(2-chloroethoxy)methane	73		69		40-140	6		30
2,4-Dichlorophenol	78		73		30-130	7		30
Naphthalene	74		68		40-140	8		30
4-Chloroaniline	75		79		40-140	5		30
Hexachlorobutadiene	73		67		40-140	9		30
Caprolactam	54		46		10-130	16		30
2-Methylnaphthalene	73		69		40-140	6		30
Hexachlorocyclopentadiene	62		53		40-140	16		30
1,2,4,5-Tetrachlorobenzene	77		72		2-134	7		30
2,4,6-Trichlorophenol	84		76		30-130	10		30

Lab Control Sample Analysis
Batch Quality Control

Project Name: B14 Q4 SAMPLING
Project Number: 21010214
Lab Number: L2359007
Report Date: 10/16/23

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 02 Batch: WG1839785-2 WG1839785-3								
2,4,5-Trichlorophenol	87		80		30-130	8		30
Biphenyl	78		70		40-140	11		30
2-Chloronaphthalene	73		69		40-140	6		30
2-Nitroaniline	76		65		52-143	16		30
2,6-Dinitrotoluene	74		67		40-140	10		30
Acenaphthylene	76		70		45-123	8		30
Acenaphthene	68		62		37-111	9		30
2,4-Dinitrophenol	102		82		20-130	22		30
2,4-Dinitrotoluene	69		65		48-143	6		30
2,3,4,6-Tetrachlorophenol	82		78		54-145	5		30
Diethyl phthalate	76		70		40-140	8		30
Fluorene	72		68		40-140	6		30
4-Nitroaniline	68		66		51-143	3		30
NDPA/DPA	74		68		40-140	8		30
Hexachlorobenzene	70		65		40-140	7		30
Pentachlorophenol	98		84		9-103	15		30
Phenanthrene	78		72		40-140	8		30
Anthracene	80		75		40-140	6		30
Carbazole	84		76		55-144	10		30
Di-n-butylphthalate	86		77		40-140	11		30
Fluoranthene	78		71		40-140	9		30
Pyrene	79		74		26-127	7		30
3,3'-Dichlorobenzidine	56		64		40-140	13		30

Lab Control Sample Analysis

Batch Quality Control

Project Name: B14 Q4 SAMPLING

Project Number: 21010214

Lab Number: L2359007

Report Date: 10/16/23

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 02 Batch: WG1839785-2 WG1839785-3								
Benzo(a)anthracene	84		78		40-140	7		30
Chrysene	83		78		40-140	6		30
Bis(2-ethylhexyl)phthalate	101		91		40-140	10		30
Di-n-octylphthalate	94		86		40-140	9		30
Benzo(b)fluoranthene	82		77		40-140	6		30
Benzo(k)fluoranthene	81		74		40-140	9		30
Benzo(a)pyrene	88		83		40-140	6		30
Indeno(1,2,3-cd)pyrene	80		74		40-140	8		30
Dibenzo(a,h)anthracene	76		73		40-140	4		30
Benzo(ghi)perylene	79		74		40-140	7		30

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
2-Fluorophenol	68		61		21-120
Phenol-d6	55		54		10-120
Nitrobenzene-d5	72		69		23-120
2-Fluorobiphenyl	78		69		15-120
2,4,6-Tribromophenol	72		66		10-120
4-Terphenyl-d14	73		68		41-149

Lab Control Sample Analysis
Batch Quality Control

Project Name: B14 Q4 SAMPLING
Project Number: 21010214
Lab Number: L2359007
Report Date: 10/16/23

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 Batch: WG1839793-2 WG1839793-3								
Naphthalene	77		74		40-140	4		40
2-Methylnaphthalene	77		75		40-140	3		40
Acenaphthylene	78		76		40-140	3		40
Acenaphthene	79		76		37-111	4		40
Fluorene	79		77		40-140	3		40
Pentachlorophenol	83		70		9-103	17		40
Phenanthrene	85		81		40-140	5		40
Anthracene	91		86		40-140	6		40
Fluoranthene	85		81		40-140	5		40
Pyrene	87		82		26-127	6		40
Benzo(a)anthracene	85		81		40-140	5		40
Chrysene	92		85		40-140	8		40
Benzo(b)fluoranthene	96		86		40-140	11		40
Benzo(k)fluoranthene	98		96		40-140	2		40
Benzo(a)pyrene	97		92		40-140	5		40
Indeno(1,2,3-cd)pyrene	92		87		40-140	6		40
Dibenzo(a,h)anthracene	103		97		40-140	6		40
Benzo(ghi)perylene	98		94		40-140	4		40

Lab Control Sample Analysis

Batch Quality Control

Project Name: B14 Q4 SAMPLING

Project Number: 21010214

Lab Number: L2359007

Report Date: 10/16/23

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 Batch: WG1839793-2 WG1839793-3

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
2-Fluorophenol	68		66		21-120
Phenol-d6	59		56		10-120
Nitrobenzene-d5	82		79		23-120
2-Fluorobiphenyl	72		70		15-120
2,4,6-Tribromophenol	85		81		10-120
4-Terphenyl-d14	77		72		41-149

Project Name: B14 Q4 SAMPLING
Project Number: 21010214

Lab Number: L2359007
Report Date: 10/16/23

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(*)
L2359007-01A	Vial HCl preserved	A	NA		2.4	Y	Absent		PA-8260-SIM(14),PA-8260(14)
L2359007-01B	Vial HCl preserved	A	NA		2.4	Y	Absent		PA-8260-SIM(14),PA-8260(14)
L2359007-01C	Vial HCl preserved	A	NA		2.4	Y	Absent		PA-8260-SIM(14),PA-8260(14)
L2359007-01D	Amber 250ml unpreserved	A	10	10	2.4	Y	Absent		PA-8270SIM-LVI(7),PA-8270-LVI(7)
L2359007-01E	Amber 250ml unpreserved	A	10	10	2.4	Y	Absent		PA-8270SIM-LVI(7),PA-8270-LVI(7)
L2359007-02A	Vial HCl preserved	A	NA		2.4	Y	Absent		PA-8260-SIM(14),PA-8260(14)
L2359007-02B	Vial HCl preserved	A	NA		2.4	Y	Absent		PA-8260-SIM(14),PA-8260(14)
L2359007-02C	Vial HCl preserved	A	NA		2.4	Y	Absent		PA-8260-SIM(14),PA-8260(14)
L2359007-02D	Amber 250ml unpreserved	A	10	10	2.4	Y	Absent		PA-8270SIM-LVI(7),PA-8270-LVI(7)
L2359007-02E	Amber 250ml unpreserved	A	10	10	2.4	Y	Absent		PA-8270SIM-LVI(7),PA-8270-LVI(7)
L2359007-03A	Vial HCl preserved	A	NA		2.4	Y	Absent		PA-8260-SIM(14),PA-8260(14)
L2359007-03B	Vial HCl preserved	A	NA		2.4	Y	Absent		PA-8260-SIM(14),PA-8260(14)
L2359007-03C	Vial HCl preserved	A	NA		2.4	Y	Absent		PA-8260-SIM(14),PA-8260(14)
L2359007-03D	Amber 250ml unpreserved	A	7	7	2.4	Y	Absent		PA-8270SIM-LVI(7),PA-8270-LVI(7)
L2359007-03E	Amber 250ml unpreserved	A	7	7	2.4	Y	Absent		PA-8270SIM-LVI(7),PA-8270-LVI(7)
L2359007-04A	Vial HCl preserved	A	NA		2.4	Y	Absent		PA-8260-SIM(14),PA-8260(14)
L2359007-04B	Vial HCl preserved	A	NA		2.4	Y	Absent		PA-8260-SIM(14),PA-8260(14)
L2359007-04C	Vial HCl preserved	A	NA		2.4	Y	Absent		PA-8260-SIM(14),PA-8260(14)
L2359007-04D	Amber 250ml unpreserved	A	12	12	2.4	Y	Absent		PA-8270SIM-LVI(7),PA-8270-LVI(7)
L2359007-04E	Amber 250ml unpreserved	A	12	12	2.4	Y	Absent		PA-8270SIM-LVI(7),PA-8270-LVI(7)
L2359007-05A	Vial HCl preserved	A	NA		2.4	Y	Absent		PA-8260-SIM(14),PA-8260(14)
L2359007-05B	Vial HCl preserved	A	NA		2.4	Y	Absent		PA-8260-SIM(14),PA-8260(14)
L2359007-05C	Vial HCl preserved	A	NA		2.4	Y	Absent		PA-8260-SIM(14),PA-8260(14)

*Values in parentheses indicate holding time in days

Project Name: B14 Q4 SAMPLING
Project Number: 21010214

Lab Number: L2359007
Report Date: 10/16/23

Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L2359007-05D	Vial HCl preserved	A	NA		2.4	Y	Absent		PA-8260-SIM(14),PA-8260(14)

*Values in parentheses indicate holding time in days

Project Name:	B14 Q4 SAMPLING	**Lab Number:**	L2359007
Project Number:	21010214	**Report Date:**	10/16/23

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 Q4 SAMPLING	**Lab Number:**	L2359007
Project Number:	21010214	**Report Date:**	10/16/23

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 Q4 SAMPLING	**Lab Number:**	L2359007
Project Number:	21010214	**Report Date:**	10/16/23

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 Q4 SAMPLING	**Lab Number:**	L2359007
Project Number:	21010214	**Report Date:**	10/16/23

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, Azobenzene; SCM: Iodomethane (methyl iodide), 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene.
EPA 8270E: NPW: Dimethylnaphthalene,1,4-Diphenylhydrazine, alpha-Terpineol; 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.
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, SM9221E, 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 1

Date Rec'd in Lab: 10/6/23

ALPHA Job #: L2359007

ALPHA ANALYTICAL
WESTBORO, MA TEL: 508-898-9220 FAX: 508-898-9193
MANSFIELD, MA TEL: 508-822-9300 FAX: 508-822-3288

Client Information

Client: Tradepoint Atlantic
Address:
Phone:
Fax:
Email: Jbarra@armgroup.net, kguille@armgroup.net
☐ These samples have been previously analyzed by Alpha

Project Information

Project Name: B14 Q4 Sampling
Project Location: B14
Project #: 21010214
Project Manager: Bob T.
ALPHA Quote #:

Turn-Around Time

☑ Standard ☐ RUSH (only confirmed if pre-approved!)
Date Due: Time:

Report Information - Data Deliverables

☐ FAX ☐ EMAIL
☐ ADEx ☐ Add'l Deliverables

Billing Information

☐ Same as Client info PO #:

Regulatory Requirements/Report Limits

State /Fed Program	Criteria

Other Project Specific Requirements/Comments/Detection Limits:

PH >10 for HI13-MW8 and HI19-MW8

ALPHA Lab ID (Lab Use Only)	Sample ID	Collection Date	Collection Time	Sample Matrix	Sampler's Initials	VOC 8260	SVOC 8270 SIM	Sample Specific Comments	TOTAL # BOTTLES
59007-01	B24-001-MW8	10/5/23	11:15	Wt	JHL	X	X		5
-02	HI13-MW8	10/5/23	1340	Wt	JHL	X	X	*PH>10	5
-03	TS03-PDP002	10/5/23	1205	Wt	JHL	X	X		5
-04	HI19-MW8	10/5/23	1445	Wt	JHL	X	X	*PH>10	5
-05	TB-Wt-02	—	—	—	—	X			4

SAMPLE HANDLING
Filtration
☐ Done ☐ Not needed ☐ Lab to do
Preservation
☐ Lab to do
(Please specify below)

Container Type	V	A
Preservative	B	A

Relinquished By:	Date/Time	Received By:	Date/Time
Sarah Lowe ARM	10/5/23 1600	D. Robinson AAL	10/5/23 1600
D. Robinson AAL	10/5/23 1800		10/5/23 1800
	10/5/23 2100	Anthony Green	OCT 05 2023 2100

10/6/23 0230
10/6/23 0230

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.

ANALYTICAL REPORT

Lab Number:	L2362717
Client:	Tradepoint Atlantic 1600 Sparrows Point Boulevard Baltimore, MD 21219
ATTN:	Robert Tworkowski
Phone:	(443) 649-5073
Project Name:	B14-Q4-2023
Project Number:	20010214
Report Date:	10/31/23

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), OH (CL108), OR (MA-1316), PA (68-03671), RI (LAO00065), TX (T104704476), VT (VT-0935), VA (460195), USDA (Permit #525-23-122-91930).

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

Project Name: B14-Q4-2023
Project Number: 20010214

Lab Number: L2362717
Report Date: 10/31/23

Alpha Sample ID	Client ID	Matrix	Sample Location	Collection Date/Time	Receive Date
L2362717-01	HI22-MWS	WATER	Not Specified	10/20/23 12:35	10/20/23
L2362717-02	TB-WT-01	WATER	Not Specified	10/20/23 00:00	10/20/23

Project Name:	B14-Q4-2023	**Lab Number:**	L2362717
Project Number:	20010214	**Report Date:**	10/31/23

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, solids and tissues are reported on a dry 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-Q4-2023	**Lab Number:**	L2362717
Project Number:	20010214	**Report Date:**	10/31/23

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.

Semivolatile Organics

L2362717-01: The sample has elevated detection limits due to limited sample volume available for analysis.

Semivolatile Organics by SIM

L2362717-01: The sample has elevated detection limits due to limited sample volume available 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: Kelly O'Neill

Title: Technical Director/Representative Date: 10/31/23

ORGANICS

VOLATILES

Project Name: B14-Q4-2023 **Lab Number:** L2362717

Project Number: 20010214 **Report Date:** 10/31/23

SAMPLE RESULTS

Lab ID: L2362717-01 Date Collected: 10/20/23 12:35
Client ID: HI22-MWS Date Received: 10/20/23
Sample Location: Not Specified Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8260D
Analytical Date: 10/28/23 09:26
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	0.76	J	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	3.9	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
1,2-Dichloroethene, Total	ND		ug/l	0.50	0.16	1
Cyclohexane	ND		ug/l	10	0.27	1
Bromochloromethane	ND		ug/l	2.5	0.15	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	0.30	J	ug/l	0.50	0.16	1
1,2-Dichloroethane	ND		ug/l	0.50	0.13	1
Methyl cyclohexane	ND		ug/l	10	0.40	1
Trichloroethene	ND		ug/l	0.50	0.18	1
1,2-Dichloropropane	ND		ug/l	1.0	0.14	1

Project Name: B14-Q4-2023 **Lab Number:** L2362717

Project Number: 20010214 **Report Date:** 10/31/23

SAMPLE RESULTS

Lab ID: L2362717-01 Date Collected: 10/20/23 12:35

Client ID: HI22-MWS Date Received: 10/20/23

Sample Location: Not Specified Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Bromodichloromethane	ND		ug/l	0.50	0.19	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	0.14	1
Toluene	0.26	J	ug/l	0.75	0.20	1
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
1,3-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	97		70-130
Toluene-d8	104		70-130
4-Bromofluorobenzene	110		70-130
Dibromofluoromethane	91		70-130

Project Name: B14-Q4-2023 **Lab Number:** L2362717

Project Number: 20010214 **Report Date:** 10/31/23

SAMPLE RESULTS

Lab ID: L2362717-01 Date Collected: 10/20/23 12:35
Client ID: HI22-MWS Date Received: 10/20/23
Sample Location: Not Specified Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8260D-SIM(M)
Analytical Date: 10/28/23 09:26
Analyst: MCM

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS-SIM - Westborough Lab						
1,4-Dioxane	ND		ug/l	3.0	1.1	1
1,1,2,2-Tetrachloroethane	ND		ug/l	0.050	0.006	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	104		70-130
4-Bromofluorobenzene	106		70-130

Project Name: B14-Q4-2023 **Lab Number:** L2362717

Project Number: 20010214 **Report Date:** 10/31/23

SAMPLE RESULTS

Lab ID: L2362717-02 Date Collected: 10/20/23 00:00
Client ID: TB-WT-01 Date Received: 10/20/23
Sample Location: Not Specified Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8260D
Analytical Date: 10/28/23 09:02
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	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
1,2-Dichloroethene, Total	ND		ug/l	0.50	0.16	1
Cyclohexane	ND		ug/l	10	0.27	1
Bromochloromethane	ND		ug/l	2.5	0.15	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
Methyl cyclohexane	ND		ug/l	10	0.40	1
Trichloroethene	ND		ug/l	0.50	0.18	1
1,2-Dichloropropane	ND		ug/l	1.0	0.14	1

Project Name: B14-Q4-2023 **Lab Number:** L2362717

Project Number: 20010214 **Report Date:** 10/31/23

SAMPLE RESULTS

Lab ID: L2362717-02 Date Collected: 10/20/23 00:00

Client ID: TB-WT-01 Date Received: 10/20/23

Sample Location: Not Specified Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
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
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
1,3-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	96		70-130
Toluene-d8	102		70-130
4-Bromofluorobenzene	112		70-130
Dibromofluoromethane	90		70-130

Project Name: B14-Q4-2023 **Lab Number:** L2362717

Project Number: 20010214 **Report Date:** 10/31/23

SAMPLE RESULTS

Lab ID: L2362717-02 Date Collected: 10/20/23 00:00

Client ID: TB-WT-01 Date Received: 10/20/23

Sample Location: Not Specified Field Prep: Not Specified

Sample Depth:

Matrix: Water

Analytical Method: 1,8260D-SIM(M)

Analytical Date: 10/28/23 09:02

Analyst: MCM

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS-SIM - Westborough Lab						
1,4-Dioxane	ND		ug/l	3.0	1.1	1
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	106		70-130

Project Name: B14-Q4-2023 **Lab Number:** L2362717

Project Number: 20010214 **Report Date:** 10/31/23

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260D
Analytical Date: 10/28/23 07:02
Analyst: TMS

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 01-02 Batch: WG1845566-5					
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
1,2-Dichloroethene, Total	ND		ug/l	0.50	0.16
Cyclohexane	ND		ug/l	10	0.27
Bromochloromethane	ND		ug/l	2.5	0.15
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
Methyl cyclohexane	ND		ug/l	10	0.40
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

Project Name: B14-Q4-2023 **Lab Number:** L2362717

Project Number: 20010214 **Report Date:** 10/31/23

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260D
Analytical Date: 10/28/23 07:02
Analyst: TMS

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 01-02 Batch: WG1845566-5					
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
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
1,3-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-Q4-2023 **Lab Number:** L2362717

Project Number: 20010214 **Report Date:** 10/31/23

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260D
Analytical Date: 10/28/23 07:02
Analyst: TMS

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 01-02 Batch: WG1845566-5					

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	98		70-130
Toluene-d8	102		70-130
4-Bromofluorobenzene	111		70-130
Dibromofluoromethane	91		70-130

Project Name: B14-Q4-2023 **Lab Number:** L2362717

Project Number: 20010214 **Report Date:** 10/31/23

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260D-SIM(M)
Analytical Date: 10/28/23 07:02
Analyst: TMS

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS-SIM - Westborough Lab for sample(s): 01-02 Batch: WG1845568-5					
1,4-Dioxane	ND		ug/l	3.0	1.1
1,1,2,2-Tetrachloroethane	ND		ug/l	0.050	0.006

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

Lab Control Sample Analysis

Batch Quality Control

Project Name: B14-Q4-2023

Project Number: 20010214

Lab Number: L2362717

Report Date: 10/31/23

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: WG1845566-3 WG1845566-4								
Dichlorodifluoromethane	78		81		36-147	4		20
Chloromethane	83		86		64-130	4		20
Vinyl chloride	79		81		55-140	3		20
Bromomethane	62		64		39-139	3		20
Chloroethane	81		82		55-138	1		20
Trichlorofluoromethane	100		97		62-150	3		20
1,1-Dichloroethene	88		89		61-145	1		20
Carbon disulfide	84		86		51-130	2		20
1,1,2-Trichloro-1,2,2-Trifluoroethane	88		90		70-130	2		20
Methylene chloride	90		89		70-130	1		20
Acetone	89		87		58-148	2		20
trans-1,2-Dichloroethene	86		90		70-130	5		20
Methyl Acetate	89		88		70-130	1		20
Methyl tert butyl ether	84		85		63-130	1		20
1,1-Dichloroethane	91		92		70-130	1		20
cis-1,2-Dichloroethene	90		91		70-130	1		20
Cyclohexane	89		95		70-130	7		20
Bromochloromethane	88		88		70-130	0		20
Chloroform	90		88		70-130	2		20
Carbon tetrachloride	92		94		63-132	2		20
1,1,1-Trichloroethane	94		95		67-130	1		20
2-Butanone	87		84		63-138	4		20
Benzene	92		92		70-130	0		20

Lab Control Sample Analysis
Batch Quality Control

Project Name: B14-Q4-2023
Project Number: 20010214

Lab Number: L2362717
Report Date: 10/31/23

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: WG1845566-3 WG1845566-4								
1,2-Dichloroethane	100		99		70-130	1		20
Methyl cyclohexane	82		82		70-130	0		20
Trichloroethene	87		90		70-130	3		20
1,2-Dichloropropane	86		86		70-130	0		20
Bromodichloromethane	85		85		67-130	0		20
cis-1,3-Dichloropropene	77		75		70-130	3		20
Toluene	100		100		70-130	0		20
Tetrachloroethene	100		110		70-130	10		20
4-Methyl-2-pentanone	90		86		59-130	5		20
trans-1,3-Dichloropropene	86		87		70-130	1		20
1,1,2-Trichloroethane	94		97		70-130	3		20
Dibromochloromethane	89		87		63-130	2		20
1,2-Dibromoethane	98		100		70-130	2		20
2-Hexanone	77		74		57-130	4		20
Chlorobenzene	96		98		75-130	2		20
Ethylbenzene	97		100		70-130	3		20
p/m-Xylene	100		100		70-130	0		20
o-Xylene	90		95		70-130	5		20
Styrene	95		95		70-130	0		20
Bromoform	74		72		54-136	3		20
Isopropylbenzene	93		96		70-130	3		20
1,3-Dichlorobenzene	97		100		70-130	3		20
1,4-Dichlorobenzene	97		98		70-130	1		20

Lab Control Sample Analysis

Batch Quality Control

Project Name: B14-Q4-2023

Project Number: 20010214

Lab Number: L2362717

Report Date: 10/31/23

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: WG1845566-3 WG1845566-4								
1,2-Dichlorobenzene	98		99		70-130	1		20
1,2-Dibromo-3-chloropropane	86		80		41-144	7		20
1,2,4-Trichlorobenzene	92		94		70-130	2		20
1,2,3-Trichlorobenzene	100		100		70-130	0		20

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
1,2-Dichloroethane-d4	97		96		70-130
Toluene-d8	102		103		70-130
4-Bromofluorobenzene	110		110		70-130
Dibromofluoromethane	90		90		70-130

Lab Control Sample Analysis

Batch Quality Control

Project Name: B14-Q4-2023

Project Number: 20010214

Lab Number: L2362717

Report Date: 10/31/23

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: WG1845568-3 WG1845568-4								
1,4-Dioxane	91		100		70-130	9		25
1,1,2,2-Tetrachloroethane	81		79		70-130	3		25

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
1,2-Dichloroethane-d4	105		106		70-130
4-Bromofluorobenzene	108		107		70-130

SEMIVOLATILES

Project Name: B14-Q4-2023 **Lab Number:** L2362717

Project Number: 20010214 **Report Date:** 10/31/23

SAMPLE RESULTS

Lab ID: L2362717-01
Client ID: HI22-MWS
Sample Location: Not Specified

Date Collected: 10/20/23 12:35
Date Received: 10/20/23
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8270E
Analytical Date: 10/27/23 04:10
Analyst: IM

Extraction Method: EPA 3510C
Extraction Date: 10/26/23 13:26

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Benzaldehyde	ND		ug/l	10	1.8	1
Phenol	ND		ug/l	10	2.6	1
Bis(2-chloroethyl)ether	ND		ug/l	4.0	1.8	1
2-Chlorophenol	ND		ug/l	4.0	0.81	1
2-Methylphenol	ND		ug/l	10	2.2	1
Bis(2-chloroisopropyl)ether	ND		ug/l	4.0	3.5	1
Acetophenone	ND		ug/l	10	2.0	1
n-Nitrosodi-n-propylamine	ND		ug/l	10	1.5	1
3-Methylphenol/4-Methylphenol	ND		ug/l	10	1.1	1
Hexachloroethane	ND		ug/l	4.0	0.88	1
Nitrobenzene	ND		ug/l	4.0	1.3	1
Isophorone	ND		ug/l	10	1.3	1
2,4-Dimethylphenol	ND		ug/l	10	2.2	1
Bis(2-chloroethoxy)methane	ND		ug/l	10	3.0	1
2,4-Dichlorophenol	ND		ug/l	10	1.0	1
Naphthalene	ND		ug/l	4.0	1.3	1
4-Chloroaniline	ND		ug/l	10	1.3	1
Hexachlorobutadiene	ND		ug/l	4.0	1.2	1
Caprolactam	ND		ug/l	20	2.5	1
2-Methylnaphthalene	ND		ug/l	4.0	1.4	1
Hexachlorocyclopentadiene	ND		ug/l	40	1.2	1
1,2,4,5-Tetrachlorobenzene	ND		ug/l	20	1.2	1
2,4,6-Trichlorophenol	ND		ug/l	10	0.99	1
2,4,5-Trichlorophenol	ND		ug/l	10	0.76	1
Biphenyl	ND		ug/l	4.0	1.3	1
2-Chloronaphthalene	ND		ug/l	4.0	1.1	1
2-Nitroaniline	ND		ug/l	10	1.0	1
2,6-Dinitrotoluene	ND		ug/l	10	0.74	1

Project Name: B14-Q4-2023 **Lab Number:** L2362717

Project Number: 20010214 **Report Date:** 10/31/23

SAMPLE RESULTS

Lab ID: L2362717-01 Date Collected: 10/20/23 12:35

Client ID: HI22-MWS Date Received: 10/20/23

Sample Location: Not Specified 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	4.0	1.2	1
Acenaphthene	ND		ug/l	4.0	2.1	1
2,4-Dinitrophenol	ND		ug/l	40	7.1	1
2,4-Dinitrotoluene	ND		ug/l	10	0.76	1
2,3,4,6-Tetrachlorophenol	ND		ug/l	10	0.94	1
Diethyl phthalate	ND		ug/l	10	8.6	1
Fluorene	ND		ug/l	4.0	2.1	1
4-Nitroaniline	ND		ug/l	10	1.2	1
NDPA/DPA	ND		ug/l	4.0	1.3	1
Hexachlorobenzene	ND		ug/l	4.0	1.4	1
Pentachlorophenol	ND		ug/l	20	3.9	1
Phenanthrene	ND		ug/l	4.0	2.0	1
Anthracene	ND		ug/l	4.0	1.6	1
Carbazole	ND		ug/l	4.0	1.5	1
Di-n-butylphthalate	ND		ug/l	10	1.2	1
Fluoranthene	2.3	J	ug/l	4.0	1.3	1
Pyrene	1.9	J	ug/l	4.0	1.4	1
3,3'-Dichlorobenzidine	ND		ug/l	10	1.7	1
Benzo(a)anthracene	1.6	J	ug/l	4.0	1.5	1
Chrysene	ND		ug/l	4.0	1.6	1
Bis(2-ethylhexyl)phthalate	ND		ug/l	6.0	3.0	1
Di-n-octylphthalate	ND		ug/l	10	4.8	1
Benzo(b)fluoranthene	1.7	J	ug/l	4.0	1.6	1
Benzo(k)fluoranthene	ND		ug/l	4.0	1.6	1
Benzo(a)pyrene	1.4	J	ug/l	4.0	0.89	1
Indeno(1,2,3-cd)pyrene	ND		ug/l	4.0	1.9	1
Dibenzo(a,h)anthracene	ND		ug/l	4.0	0.90	1
Benzo(ghi)perylene	ND		ug/l	4.0	1.5	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	43		21-120
Phenol-d6	30		10-120
Nitrobenzene-d5	69		23-120
2-Fluorobiphenyl	80		15-120
2,4,6-Tribromophenol	72		10-120
4-Terphenyl-d14	80		41-149

Project Name: B14-Q4-2023 **Lab Number:** L2362717

Project Number: 20010214 **Report Date:** 10/31/23

SAMPLE RESULTS

Lab ID: L2362717-01
Client ID: HI22-MWS
Sample Location: Not Specified

Date Collected: 10/20/23 12:35
Date Received: 10/20/23
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8270E-SIM
Analytical Date: 10/27/23 11:40
Analyst: AH

Extraction Method: EPA 3510C
Extraction Date: 10/26/23 13:26

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS-SIM - Westborough Lab						
Naphthalene	0.16	J	ug/l	0.20	0.04	1
2-Methylnaphthalene	0.07	J	ug/l	0.20	0.01	1
Acenaphthylene	0.18	J	ug/l	0.20	0.01	1
Acenaphthene	0.09	J	ug/l	0.20	0.01	1
Fluorene	0.08	J	ug/l	0.20	0.01	1
Phenanthrene	0.88		ug/l	0.20	0.01	1
Anthracene	0.37		ug/l	0.20	0.01	1
Fluoranthene	2.2		ug/l	0.20	0.01	1
Pyrene	1.8		ug/l	0.20	0.02	1
Benzo(a)anthracene	1.5		ug/l	0.20	0.16	1
Chrysene	1.2		ug/l	0.20	0.02	1
Benzo(b)fluoranthene	1.7		ug/l	0.20	0.12	1
Benzo(k)fluoranthene	0.62		ug/l	0.20	0.11	1
Benzo(a)pyrene	1.4		ug/l	0.20	0.07	1
Indeno(1,2,3-cd)pyrene	1.1		ug/l	1.0	0.28	1
Dibenzo(a,h)anthracene	0.22		ug/l	0.20	0.08	1
Benzo(ghi)perylene	0.84	J	ug/l	1.0	0.35	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
Nitrobenzene-d5	77		23-120
2-Fluorobiphenyl	70		15-120
4-Terphenyl-d14	71		41-149

Project Name: B14-Q4-2023 **Lab Number:** L2362717

Project Number: 20010214 **Report Date:** 10/31/23

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270E
Analytical Date: 10/27/23 01:49
Analyst: IM

Extraction Method: EPA 3510C
Extraction Date: 10/26/23 13:26

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 01 Batch: WG1844677-1					
Benzaldehyde	ND		ug/l	5.0	0.90
Phenol	ND		ug/l	5.0	1.3
Bis(2-chloroethyl)ether	ND		ug/l	2.0	0.88
2-Chlorophenol	ND		ug/l	2.0	0.40
2-Methylphenol	ND		ug/l	5.0	1.1
Bis(2-chloroisopropyl)ether	ND		ug/l	2.0	1.8
Acetophenone	ND		ug/l	5.0	0.98
n-Nitrosodi-n-propylamine	ND		ug/l	5.0	0.77
3-Methylphenol/4-Methylphenol	ND		ug/l	5.0	0.55
Hexachloroethane	ND		ug/l	2.0	0.44
Nitrobenzene	ND		ug/l	2.0	0.66
Isophorone	ND		ug/l	5.0	0.66
2,4-Dimethylphenol	ND		ug/l	5.0	1.1
Bis(2-chloroethoxy)methane	ND		ug/l	5.0	1.5
2,4-Dichlorophenol	ND		ug/l	5.0	0.53
Naphthalene	ND		ug/l	2.0	0.67
4-Chloroaniline	ND		ug/l	5.0	0.65
Hexachlorobutadiene	ND		ug/l	2.0	0.60
Caprolactam	ND		ug/l	10	1.3
2-Methylnaphthalene	ND		ug/l	2.0	0.68
Hexachlorocyclopentadiene	ND		ug/l	20	0.61
1,2,4,5-Tetrachlorobenzene	ND		ug/l	10	0.62
2,4,6-Trichlorophenol	ND		ug/l	5.0	0.49
2,4,5-Trichlorophenol	ND		ug/l	5.0	0.38
Biphenyl	ND		ug/l	2.0	0.64
2-Chloronaphthalene	ND		ug/l	2.0	0.54
2-Nitroaniline	ND		ug/l	5.0	0.52
2,6-Dinitrotoluene	ND		ug/l	5.0	0.37
Acenaphthylene	ND		ug/l	2.0	0.59

Project Name: B14-Q4-2023 **Lab Number:** L2362717

Project Number: 20010214 **Report Date:** 10/31/23

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270E
Analytical Date: 10/27/23 01:49
Analyst: IM

Extraction Method: EPA 3510C
Extraction Date: 10/26/23 13:26

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 01 Batch: WG1844677-1					
Acenaphthene	ND		ug/l	2.0	1.1
2,4-Dinitrophenol	ND		ug/l	20	3.6
2,4-Dinitrotoluene	ND		ug/l	5.0	0.38
2,3,4,6-Tetrachlorophenol	ND		ug/l	5.0	0.47
Diethyl phthalate	ND		ug/l	5.0	4.3
Fluorene	ND		ug/l	2.0	1.0
4-Nitroaniline	ND		ug/l	5.0	0.58
NDPA/DPA	ND		ug/l	2.0	0.65
Hexachlorobenzene	ND		ug/l	2.0	0.69
Pentachlorophenol	ND		ug/l	10	2.0
Phenanthrene	ND		ug/l	2.0	0.99
Anthracene	ND		ug/l	2.0	0.79
Carbazole	ND		ug/l	2.0	0.76
Di-n-butylphthalate	ND		ug/l	5.0	0.58
Fluoranthene	ND		ug/l	2.0	0.65
Pyrene	ND		ug/l	2.0	0.70
3,3'-Dichlorobenzidine	ND		ug/l	5.0	0.85
Benzo(a)anthracene	ND		ug/l	2.0	0.77
Chrysene	ND		ug/l	2.0	0.83
Bis(2-ethylhexyl)phthalate	ND		ug/l	3.0	1.5
Di-n-octylphthalate	ND		ug/l	5.0	2.4
Benzo(b)fluoranthene	ND		ug/l	2.0	0.81
Benzo(k)fluoranthene	ND		ug/l	2.0	0.82
Benzo(a)pyrene	ND		ug/l	2.0	0.45
Indeno(1,2,3-cd)pyrene	ND		ug/l	2.0	0.94
Dibenzo(a,h)anthracene	ND		ug/l	2.0	0.45
Benzo(ghi)perylene	ND		ug/l	2.0	0.77

Project Name: B14-Q4-2023
Project Number: 20010214

Lab Number: L2362717
Report Date: 10/31/23

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270E
Analytical Date: 10/27/23 01:49
Analyst: IM

Extraction Method: EPA 3510C
Extraction Date: 10/26/23 13:26

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 01 Batch: WG1844677-1					

Surrogate	%Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	38		21-120
Phenol-d6	28		10-120
Nitrobenzene-d5	64		23-120
2-Fluorobiphenyl	76		15-120
2,4,6-Tribromophenol	71		10-120
4-Terphenyl-d14	86		41-149

Project Name: B14-Q4-2023 **Lab Number:** L2362717

Project Number: 20010214 **Report Date:** 10/31/23

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270E-SIM
Analytical Date: 10/27/23 11:24
Analyst: AH

Extraction Method: EPA 3510C
Extraction Date: 10/26/23 13:26

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS-SIM - Westborough Lab for sample(s): 01 Batch: WG1844678-1					
Naphthalene	0.03	J	ug/l	0.10	0.02
2-Methylnaphthalene	ND		ug/l	0.10	0.01
Acenaphthylene	ND		ug/l	0.10	0.003
Acenaphthene	ND		ug/l	0.10	0.004
Fluorene	ND		ug/l	0.10	0.004
Phenanthrene	ND		ug/l	0.10	0.01
Anthracene	ND		ug/l	0.10	0.004
Fluoranthene	ND		ug/l	0.10	0.01
Pyrene	ND		ug/l	0.10	0.01
Benzo(a)anthracene	ND		ug/l	0.10	0.08
Chrysene	ND		ug/l	0.10	0.01
Benzo(b)fluoranthene	ND		ug/l	0.10	0.06
Benzo(k)fluoranthene	ND		ug/l	0.10	0.06
Benzo(a)pyrene	ND		ug/l	0.10	0.03
Indeno(1,2,3-cd)pyrene	ND		ug/l	0.50	0.14
Dibenzo(a,h)anthracene	ND		ug/l	0.10	0.04
Benzo(ghi)perylene	ND		ug/l	0.50	0.18

Surrogate	%Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	42		21-120
Phenol-d6	29		10-120
Nitrobenzene-d5	70		23-120
2-Fluorobiphenyl	72		15-120
2,4,6-Tribromophenol	74		10-120
4-Terphenyl-d14	76		41-149

Lab Control Sample Analysis
Batch Quality Control

Project Name: B14-Q4-2023
Project Number: 20010214

Lab Number: L2362717
Report Date: 10/31/23

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: WG1844677-2 WG1844677-3								
Benzaldehyde	106		109		40-140	3		30
Phenol	32		33		12-110	3		30
Bis(2-chloroethyl)ether	69		68		40-140	1		30
2-Chlorophenol	73		73		27-123	0		30
2-Methylphenol	63		62		30-130	2		30
Bis(2-chloroisopropyl)ether	58		59		40-140	2		30
Acetophenone	72		73		39-129	1		30
n-Nitrosodi-n-propylamine	68		70		29-132	3		30
3-Methylphenol/4-Methylphenol	58		58		30-130	0		30
Hexachloroethane	54		60		40-140	11		30
Nitrobenzene	71		72		40-140	1		30
Isophorone	68		68		40-140	0		30
2,4-Dimethylphenol	61		59		30-130	3		30
Bis(2-chloroethoxy)methane	67		67		40-140	0		30
2,4-Dichlorophenol	80		80		30-130	0		30
Naphthalene	72		73		40-140	1		30
4-Chloroaniline	64		67		40-140	5		30
Hexachlorobutadiene	70		77		40-140	10		30
Caprolactam	18		18		10-130	0		30
2-Methylnaphthalene	74		75		40-140	1		30
Hexachlorocyclopentadiene	62		61		40-140	2		30
1,2,4,5-Tetrachlorobenzene	81		80		2-134	1		30
2,4,6-Trichlorophenol	89		85		30-130	5		30

Lab Control Sample Analysis
Batch Quality Control

Project Name: B14-Q4-2023
Project Number: 20010214

Lab Number: L2362717
Report Date: 10/31/23

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: WG1844677-2 WG1844677-3								
2,4,5-Trichlorophenol	89		86		30-130	3		30
Biphenyl	78		77		40-140	1		30
2-Chloronaphthalene	76		75		40-140	1		30
2-Nitroaniline	77		76		52-143	1		30
2,6-Dinitrotoluene	83		81		40-140	2		30
Acenaphthylene	76		75		45-123	1		30
Acenaphthene	74		73		37-111	1		30
2,4-Dinitrophenol	71		77		20-130	8		30
2,4-Dinitrotoluene	80		79		48-143	1		30
2,3,4,6-Tetrachlorophenol	85		87		54-145	2		30
Diethyl phthalate	75		75		40-140	0		30
Fluorene	78		78		40-140	0		30
4-Nitroaniline	70		66		51-143	6		30
NDPA/DPA	81		81		40-140	0		30
Hexachlorobenzene	76		78		40-140	3		30
Pentachlorophenol	79		78		9-103	1		30
Phenanthrene	81		80		40-140	1		30
Anthracene	82		80		40-140	2		30
Carbazole	79		78		55-144	1		30
Di-n-butylphthalate	77		75		40-140	3		30
Fluoranthene	84		82		40-140	2		30
Pyrene	85		82		26-127	4		30
3,3'-Dichlorobenzidine	68		69		40-140	1		30

Lab Control Sample Analysis
Batch Quality Control

Project Name: B14-Q4-2023
Project Number: 20010214

Lab Number: L2362717
Report Date: 10/31/23

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: WG1844677-2 WG1844677-3								
Benzo(a)anthracene	82		80		40-140	2		30
Chrysene	89		86		40-140	3		30
Bis(2-ethylhexyl)phthalate	78		76		40-140	3		30
Di-n-octylphthalate	77		75		40-140	3		30
Benzo(b)fluoranthene	79		79		40-140	0		30
Benzo(k)fluoranthene	88		86		40-140	2		30
Benzo(a)pyrene	84		83		40-140	1		30
Indeno(1,2,3-cd)pyrene	92		91		40-140	1		30
Dibenzo(a,h)anthracene	86		85		40-140	1		30
Benzo(ghi)perylene	78		79		40-140	1		30

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
2-Fluorophenol	46		47		21-120
Phenol-d6	33		32		10-120
Nitrobenzene-d5	73		71		23-120
2-Fluorobiphenyl	83		81		15-120
2,4,6-Tribromophenol	76		75		10-120
4-Terphenyl-d14	87		85		41-149

Lab Control Sample Analysis
Batch Quality Control

Project Name: B14-Q4-2023
Project Number: 20010214

Lab Number: L2362717
Report Date: 10/31/23

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: WG1844678-2 WG1844678-3								
Naphthalene	62		61		40-140	2		40
2-Methylnaphthalene	65		65		40-140	0		40
Acenaphthylene	66		66		40-140	0		40
Acenaphthene	61		61		37-111	0		40
Fluorene	65		65		40-140	0		40
Phenanthrene	64		64		40-140	0		40
Anthracene	69		69		40-140	0		40
Fluoranthene	71		70		40-140	1		40
Pyrene	72		71		26-127	1		40
Benzo(a)anthracene	71		73		40-140	3		40
Chrysene	70		70		40-140	0		40
Benzo(b)fluoranthene	66		67		40-140	2		40
Benzo(k)fluoranthene	74		73		40-140	1		40
Benzo(a)pyrene	74		74		40-140	0		40
Indeno(1,2,3-cd)pyrene	88		88		40-140	0		40
Dibenzo(a,h)anthracene	78		78		40-140	0		40
Benzo(ghi)perylene	70		71		40-140	1		40

Lab Control Sample Analysis
Batch Quality Control

Project Name: B14-Q4-2023
Project Number: 20010214

Lab Number: L2362717
Report Date: 10/31/23

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: WG1844678-2 WG1844678-3

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
2-Fluorophenol	45		45		21-120
Phenol-d6	32		32		10-120
Nitrobenzene-d5	75		74		23-120
2-Fluorobiphenyl	71		70		15-120
2,4,6-Tribromophenol	82		81		10-120
4-Terphenyl-d14	77		76		41-149

Project Name: B14-Q4-2023
Project Number: 20010214

Lab Number: L2362717
Report Date: 10/31/23

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(*)
L2362717-01A	Vial HCl preserved	A	NA		5.1	Y	Absent		PA-8260-SIM(14),PA-8260(14)
L2362717-01B	Vial HCl preserved	A	NA		5.1	Y	Absent		PA-8260-SIM(14),PA-8260(14)
L2362717-01C	Vial HCl preserved	A	NA		5.1	Y	Absent		PA-8260-SIM(14),PA-8260(14)
L2362717-01D	Amber 1000ml unpreserved	A	7	7	5.1	Y	Absent		PA-8270(7),PA-8270SIM(7)
L2362717-01E	Amber 1000ml unpreserved	A	7	7	5.1	Y	Absent		PA-8270(7),PA-8270SIM(7)
L2362717-02A	Vial HCl preserved	A	NA		5.1	Y	Absent		PA-8260-SIM(14),PA-8260(14)
L2362717-02B	Vial HCl preserved	A	NA		5.1	Y	Absent		PA-8260-SIM(14),PA-8260(14)
L2362717-02C	Vial HCl preserved	A	NA		5.1	Y	Absent		PA-8260-SIM(14),PA-8260(14)
L2362717-02D	Vial HCl preserved	A	NA		5.1	Y	Absent		PA-8260-SIM(14),PA-8260(14)

*Values in parentheses indicate holding time in days

Project Name:	B14-Q4-2023	**Lab Number:**	L2362717
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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

Project Name:	B14-Q4-2023	**Lab Number:**	L2362717
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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.)

Project Name:	B14-Q4-2023	**Lab Number:**	L2362717
Project Number:	20010214	**Report Date:**	10/31/23

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, Azobenzene; SCM: Iodomethane (methyl iodide), 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene.
EPA 8270E: NPW: Dimethylnaphthalene,1,4-Diphenylhydrazine, alpha-Terpineol; 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.
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, SM9221E, 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 1

ALPHA ANALYTICAL
WESTBORO, MA TEL: 508-898-9220 FAX: 508-898-9193
MANSFIELD, MA TEL: 508-822-9300 FAX: 508-822-3288

Date Rec'd in Lab: 10/21/23

ALPHA Job #: L0360717

Client Information

Client: TPA
Address:
Phone:
Fax:
Email:
☐ These samples have been previously analyzed by Alpha

Project Information

Project Name: B14 - Q4 2023
Project Location:
Project #: 2001014
Project Manager: BOB T.
ALPHA Quote #:

Turn-Around Time

☑ Standard ☐ RUSH (only confirmed if pre-approved!)
Date Due: Time:

Report Information - Data Deliverables

☐ FAX ☐ EMAIL
☐ ADEx ☐ Add'l Deliverables

Billing Information

☐ Same as Client info PO #:

Regulatory Requirements/Report Limits

State /Fed Program	Criteria

Other Project Specific Requirements/Comments/Detection Limits:

ALPHA Lab ID (Lab Use Only)	Sample ID	Collection Date	Collection Time	Sample Matrix	Sampler's Initials	ANALYSIS: VOC 8260	SVOC 8270 SIM	PAH	SAMPLE HANDLING	TOTAL # BOTTLES
L0360717 01	HI 22-MW5	10/20/23	1235	GW	TP	X	X	X		5
02	TB-WT-01	—	—	—	—	X				1

SAMPLE HANDLING
Filtration
☐ Done
☐ Not needed
☐ Lab to do
Preservation
☐ Lab to do
(Please specify below)
Sample Specific Comments

Container Type	V	A	A																			
Preservative	B	A	A																			

Relinquished By:	Date/Time	Received By:	Date/Time
	10/20/23 1730	AAL	10.20.23 1600
AAL	10.20.23 1800		10/20/23 1800
	10/20/23 2100	Anthony Green	OCT 20 2023 2100

10/21/23 0230
10/21/23 0230

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.

APPENDIX C

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
500	1400	-900	0	16
340	1400	-1060	0	17
490	1400	-910	0	18
653	610	43	1	18
355	610	-255	1	19
367	610	-243	1	20
390	610	-220	1	21
390	610	-220	1	22
380	610	-230	1	23
180	610	-430	1	24
500	610	-110	1	25
500	610	-110	1	26
460	610	-150	1	27
400	610	-210	1	28
500	610	-110	1	29
540	610	-70	1	30
500	610	-110	1	31
500	610	-110	1	32
340	610	-270	1	33
490	610	-120	1	34
355	653	-298	1	35
367	653	-286	1	36
390	653	-263	1	37
390	653	-263	1	38
380	653	-273	1	39
180	653	-473	1	40
500	653	-153	1	41
500	653	-153	1	42
460	653	-193	1	43
400	653	-253	1	44

500	653	-153	1	45
540	653	-113	1	46
500	653	-153	1	47
500	653	-153	1	48
340	653	-313	1	49
490	653	-163	1	50
367	355	12	2	50
390	355	35	3	50
390	355	35	4	50
380	355	25	5	50
180	355	-175	5	51
500	355	145	6	51
500	355	145	7	51
460	355	105	8	51
400	355	45	9	51
500	355	145	10	51
540	355	185	11	51
500	355	145	12	51
500	355	145	13	51
340	355	-15	13	52
490	355	135	14	52
390	367	23	15	52
390	367	23	16	52
380	367	13	17	52
180	367	-187	17	53
500	367	133	18	53
500	367	133	19	53
460	367	93	20	53
400	367	33	21	53
500	367	133	22	53
540	367	173	23	53
500	367	133	24	53
500	367	133	25	53
340	367	-27	25	54
490	367	123	26	54
390	390	0	26	54
380	390	-10	26	55
180	390	-210	26	56
500	390	110	27	56
500	390	110	28	56
460	390	70	29	56
400	390	10	30	56
500	390	110	31	56
540	390	150	32	56
500	390	110	33	56
500	390	110	34	56
340	390	-50	34	57
490	390	100	35	57
380	390	-10	35	58
180	390	-210	35	59
500	390	110	36	59
500	390	110	37	59
460	390	70	38	59

400	390	10	39	59
500	390	110	40	59
540	390	150	41	59
500	390	110	42	59
500	390	110	43	59
340	390	-50	43	60
490	390	100	44	60
180	380	-200	44	61
500	380	120	45	61
500	380	120	46	61
460	380	80	47	61
400	380	20	48	61
500	380	120	49	61
540	380	160	50	61
500	380	120	51	61
500	380	120	52	61
340	380	-40	52	62
490	380	110	53	62
500	180	320	54	62
500	180	320	55	62
460	180	280	56	62
400	180	220	57	62
500	180	320	58	62
540	180	360	59	62
500	180	320	60	62
500	180	320	61	62
340	180	160	62	62
490	180	310	63	62
500	500	0	63	62
460	500	-40	63	63
400	500	-100	63	64
500	500	0	63	64
540	500	40	64	64
500	500	0	64	64
500	500	0	64	64
340	500	-160	64	65
490	500	-10	64	66
460	500	-40	64	67
400	500	-100	64	68
500	500	0	64	68
540	500	40	65	68
500	500	0	65	68
500	500	0	65	68
340	500	-160	65	69
490	500	-10	65	70
400	460	-60	65	71
500	460	40	66	71
540	460	80	67	71
500	460	40	68	71
500	460	40	69	71
340	460	-120	69	72
490	460	30	70	72

500	400	100	71	72
540	400	140	72	72
500	400	100	73	72
500	400	100	74	72
340	400	-60	74	73
490	400	90	75	73
540	500	40	76	73
500	500	0	76	73
500	500	0	76	73
340	500	-160	76	74
490	500	-10	76	75
500	540	-40	76	76
500	540	-40	76	77
340	540	-200	76	78
490	540	-50	76	79
500	500	0	76	79
340	500	-160	76	80
490	500	-10	76	81
340	500	-160	76	82
490	500	-10	76	83
490	340	150	77	83

S Statistic = 77 - 83 = -6

Tied Group	Value	Members
1	390	2
2	500	5

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

There are 0 time periods with multiple data

A = 318
B = 0
C = 60
D = 0
E = 22
F = 0
a = 14706
b = 52326
c = 684
Group Variance = 799.333
Z-Score = -0.17685
Comparison Level at 95% confidence level = 1.64485 (upward trend)
-0.17685 <= 1.64485 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
0.1	200	-199.9	7	10
170	200	-30	7	11
405	51	354	8	11
358	51	307	9	11
432 L1	51	381	10	11
140	51	89	11	11
69	51	18	12	11
240	51	189	13	11
54	51	3	14	11
230	51	179	15	11
160	51	109	16	11
180	51	129	17	11
140	51	89	18	11
210	51	159	19	11
160	51	109	20	11
210	51	159	21	11
68	51	17	22	11
0.1	51	-50.9	22	12
170	51	119	23	12
358	405	-47	23	13
432 L1	405	27	24	13
140	405	-265	24	14
69	405	-336	24	15
240	405	-165	24	16
54	405	-351	24	17
230	405	-175	24	18
160	405	-245	24	19
180	405	-225	24	20
140	405	-265	24	21

210	405	-195	24	22
160	405	-245	24	23
210	405	-195	24	24
68	405	-337	24	25
0.1	405	-404.9	24	26
170	405	-235	24	27
432 L1	358	74	25	27
140	358	-218	25	28
69	358	-289	25	29
240	358	-118	25	30
54	358	-304	25	31
230	358	-128	25	32
160	358	-198	25	33
180	358	-178	25	34
140	358	-218	25	35
210	358	-148	25	36
160	358	-198	25	37
210	358	-148	25	38
68	358	-290	25	39
0.1	358	-357.9	25	40
170	358	-188	25	41
140	432 L1	-292	25	42
69	432 L1	-363	25	43
240	432 L1	-192	25	44
54	432 L1	-378	25	45
230	432 L1	-202	25	46
160	432 L1	-272	25	47
180	432 L1	-252	25	48
140	432 L1	-292	25	49
210	432 L1	-222	25	50
160	432 L1	-272	25	51
210	432 L1	-222	25	52
68	432 L1	-364	25	53
0.1	432 L1	-431.9	25	54
170	432 L1	-262	25	55
69	140	-71	25	56
240	140	100	26	56
54	140	-86	26	57
230	140	90	27	57
160	140	20	28	57
180	140	40	29	57
140	140	0	29	57
210	140	70	30	57
160	140	20	31	57
210	140	70	32	57
68	140	-72	32	58
0.1	140	-139.9	32	59
170	140	30	33	59
240	69	171	34	59
54	69	-15	34	60
230	69	161	35	60
160	69	91	36	60
180	69	111	37	60

140	69	71	38	60
210	69	141	39	60
160	69	91	40	60
210	69	141	41	60
68	69	-1	41	61
0.1	69	-68.9	41	62
170	69	101	42	62
54	240	-186	42	63
230	240	-10	42	64
160	240	-80	42	65
180	240	-60	42	66
140	240	-100	42	67
210	240	-30	42	68
160	240	-80	42	69
210	240	-30	42	70
68	240	-172	42	71
0.1	240	-239.9	42	72
170	240	-70	42	73
230	54	176	43	73
160	54	106	44	73
180	54	126	45	73
140	54	86	46	73
210	54	156	47	73
160	54	106	48	73
210	54	156	49	73
68	54	14	50	73
0.1	54	-53.9	50	74
170	54	116	51	74
160	230	-70	51	75
180	230	-50	51	76
140	230	-90	51	77
210	230	-20	51	78
160	230	-70	51	79
210	230	-20	51	80
68	230	-162	51	81
0.1	230	-229.9	51	82
170	230	-60	51	83
180	160	20	52	83
140	160	-20	52	84
210	160	50	53	84
160	160	0	53	84
210	160	50	54	84
68	160	-92	54	85
0.1	160	-159.9	54	86
170	160	10	55	86
140	180	-40	55	87
210	180	30	56	87
160	180	-20	56	88
210	180	30	57	88
68	180	-112	57	89
0.1	180	-179.9	57	90
170	180	-10	57	91

210	140	70	58	91
160	140	20	59	91
210	140	70	60	91
68	140	-72	60	92
0.1	140	-139.9	60	93
170	140	30	61	93
160	210	-50	61	94
210	210	0	61	94
68	210	-142	61	95
0.1	210	-209.9	61	96
170	210	-40	61	97
210	160	50	62	97
68	160	-92	62	98
0.1	160	-159.9	62	99
170	160	10	63	99
68	210	-142	63	100
0.1	210	-209.9	63	101
170	210	-40	63	102
0.1	68	-67.9	63	103
170	68	102	64	103
170	0.1	169.9	65	103

S Statistic = 65 - 103 = -38

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

There are 0 time periods with multiple data

A = 54
B = 0
C = 0
D = 0
E = 6
F = 0
a = 14706
b = 52326
c = 684
Group Variance = 814
Z-Score = -1.29685
Comparison Level at 95% confidence level = 1.64485 (upward trend)
-1.29685 <= 1.64485 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
500	1400	-900	0	16
340	1400	-1060	0	17
490	1400	-910	0	18
653	610	43	1	18
355	610	-255	1	19
367	610	-243	1	20
390	610	-220	1	21
390	610	-220	1	22
380	610	-230	1	23
180	610	-430	1	24
500	610	-110	1	25
500	610	-110	1	26
460	610	-150	1	27
400	610	-210	1	28
500	610	-110	1	29
540	610	-70	1	30
500	610	-110	1	31
500	610	-110	1	32
340	610	-270	1	33
490	610	-120	1	34
355	653	-298	1	35
367	653	-286	1	36
390	653	-263	1	37
390	653	-263	1	38
380	653	-273	1	39
180	653	-473	1	40
500	653	-153	1	41
500	653	-153	1	42
460	653	-193	1	43
400	653	-253	1	44

500	653	-153	1	45
540	653	-113	1	46
500	653	-153	1	47
500	653	-153	1	48
340	653	-313	1	49
490	653	-163	1	50
367	355	12	2	50
390	355	35	3	50
390	355	35	4	50
380	355	25	5	50
180	355	-175	5	51
500	355	145	6	51
500	355	145	7	51
460	355	105	8	51
400	355	45	9	51
500	355	145	10	51
540	355	185	11	51
500	355	145	12	51
500	355	145	13	51
340	355	-15	13	52
490	355	135	14	52
390	367	23	15	52
390	367	23	16	52
380	367	13	17	52
180	367	-187	17	53
500	367	133	18	53
500	367	133	19	53
460	367	93	20	53
400	367	33	21	53
500	367	133	22	53
540	367	173	23	53
500	367	133	24	53
500	367	133	25	53
340	367	-27	25	54
490	367	123	26	54
390	390	0	26	54
380	390	-10	26	55
180	390	-210	26	56
500	390	110	27	56
500	390	110	28	56
460	390	70	29	56
400	390	10	30	56
500	390	110	31	56
540	390	150	32	56
500	390	110	33	56
500	390	110	34	56
340	390	-50	34	57
490	390	100	35	57
380	390	-10	35	58
180	390	-210	35	59
500	390	110	36	59
500	390	110	37	59
460	390	70	38	59

400	390	10	39	59
500	390	110	40	59
540	390	150	41	59
500	390	110	42	59
500	390	110	43	59
340	390	-50	43	60
490	390	100	44	60
180	380	-200	44	61
500	380	120	45	61
500	380	120	46	61
460	380	80	47	61
400	380	20	48	61
500	380	120	49	61
540	380	160	50	61
500	380	120	51	61
500	380	120	52	61
340	380	-40	52	62
490	380	110	53	62
500	180	320	54	62
500	180	320	55	62
460	180	280	56	62
400	180	220	57	62
500	180	320	58	62
540	180	360	59	62
500	180	320	60	62
500	180	320	61	62
340	180	160	62	62
490	180	310	63	62
500	500	0	63	62
460	500	-40	63	63
400	500	-100	63	64
500	500	0	63	64
540	500	40	64	64
500	500	0	64	64
500	500	0	64	64
340	500	-160	64	65
490	500	-10	64	66
460	500	-40	64	67
400	500	-100	64	68
500	500	0	64	68
540	500	40	65	68
500	500	0	65	68
500	500	0	65	68
340	500	-160	65	69
490	500	-10	65	70
400	460	-60	65	71
500	460	40	66	71
540	460	80	67	71
500	460	40	68	71
500	460	40	69	71
340	460	-120	69	72
490	460	30	70	72

500	400	100	71	72
540	400	140	72	72
500	400	100	73	72
500	400	100	74	72
340	400	-60	74	73
490	400	90	75	73
540	500	40	76	73
500	500	0	76	73
500	500	0	76	73
340	500	-160	76	74
490	500	-10	76	75
500	540	-40	76	76
500	540	-40	76	77
340	540	-200	76	78
490	540	-50	76	79
500	500	0	76	79
340	500	-160	76	80
490	500	-10	76	81
340	500	-160	76	82
490	500	-10	76	83
490	340	150	77	83

S Statistic = 77 - 83 = -6

Tied Group	Value	Members
1	390	2
2	500	5

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

There are 0 time periods with multiple data

A = 318
B = 0
C = 60
D = 0
E = 22
F = 0
a = 14706
b = 52326
c = 684
Group Variance = 799.333
Z-Score = -0.17685
Comparison Level at 95% confidence level = -1.64485 (downward trend)
-0.17685 >= -1.64485 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
0.1	200	-199.9	7	10
170	200	-30	7	11
405	51	354	8	11
358	51	307	9	11
432 L1	51	381	10	11
140	51	89	11	11
69	51	18	12	11
240	51	189	13	11
54	51	3	14	11
230	51	179	15	11
160	51	109	16	11
180	51	129	17	11
140	51	89	18	11
210	51	159	19	11
160	51	109	20	11
210	51	159	21	11
68	51	17	22	11
0.1	51	-50.9	22	12
170	51	119	23	12
358	405	-47	23	13
432 L1	405	27	24	13
140	405	-265	24	14
69	405	-336	24	15
240	405	-165	24	16
54	405	-351	24	17
230	405	-175	24	18
160	405	-245	24	19
180	405	-225	24	20
140	405	-265	24	21

210	405	-195	24	22
160	405	-245	24	23
210	405	-195	24	24
68	405	-337	24	25
0.1	405	-404.9	24	26
170	405	-235	24	27
432 L1	358	74	25	27
140	358	-218	25	28
69	358	-289	25	29
240	358	-118	25	30
54	358	-304	25	31
230	358	-128	25	32
160	358	-198	25	33
180	358	-178	25	34
140	358	-218	25	35
210	358	-148	25	36
160	358	-198	25	37
210	358	-148	25	38
68	358	-290	25	39
0.1	358	-357.9	25	40
170	358	-188	25	41
140	432 L1	-292	25	42
69	432 L1	-363	25	43
240	432 L1	-192	25	44
54	432 L1	-378	25	45
230	432 L1	-202	25	46
160	432 L1	-272	25	47
180	432 L1	-252	25	48
140	432 L1	-292	25	49
210	432 L1	-222	25	50
160	432 L1	-272	25	51
210	432 L1	-222	25	52
68	432 L1	-364	25	53
0.1	432 L1	-431.9	25	54
170	432 L1	-262	25	55
69	140	-71	25	56
240	140	100	26	56
54	140	-86	26	57
230	140	90	27	57
160	140	20	28	57
180	140	40	29	57
140	140	0	29	57
210	140	70	30	57
160	140	20	31	57
210	140	70	32	57
68	140	-72	32	58
0.1	140	-139.9	32	59
170	140	30	33	59
240	69	171	34	59
54	69	-15	34	60
230	69	161	35	60
160	69	91	36	60
180	69	111	37	60

140	69	71	38	60
210	69	141	39	60
160	69	91	40	60
210	69	141	41	60
68	69	-1	41	61
0.1	69	-68.9	41	62
170	69	101	42	62
54	240	-186	42	63
230	240	-10	42	64
160	240	-80	42	65
180	240	-60	42	66
140	240	-100	42	67
210	240	-30	42	68
160	240	-80	42	69
210	240	-30	42	70
68	240	-172	42	71
0.1	240	-239.9	42	72
170	240	-70	42	73
230	54	176	43	73
160	54	106	44	73
180	54	126	45	73
140	54	86	46	73
210	54	156	47	73
160	54	106	48	73
210	54	156	49	73
68	54	14	50	73
0.1	54	-53.9	50	74
170	54	116	51	74
160	230	-70	51	75
180	230	-50	51	76
140	230	-90	51	77
210	230	-20	51	78
160	230	-70	51	79
210	230	-20	51	80
68	230	-162	51	81
0.1	230	-229.9	51	82
170	230	-60	51	83
180	160	20	52	83
140	160	-20	52	84
210	160	50	53	84
160	160	0	53	84
210	160	50	54	84
68	160	-92	54	85
0.1	160	-159.9	54	86
170	160	10	55	86
140	180	-40	55	87
210	180	30	56	87
160	180	-20	56	88
210	180	30	57	88
68	180	-112	57	89
0.1	180	-179.9	57	90
170	180	-10	57	91

210	140	70	58	91
160	140	20	59	91
210	140	70	60	91
68	140	-72	60	92
0.1	140	-139.9	60	93
170	140	30	61	93
160	210	-50	61	94
210	210	0	61	94
68	210	-142	61	95
0.1	210	-209.9	61	96
170	210	-40	61	97
210	160	50	62	97
68	160	-92	62	98
0.1	160	-159.9	62	99
170	160	10	63	99
68	210	-142	63	100
0.1	210	-209.9	63	101
170	210	-40	63	102
0.1	68	-67.9	63	103
170	68	102	64	103
170	0.1	169.9	65	103

S Statistic = 65 - 103 = -38

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

There are 0 time periods with multiple data

A = 54
B = 0
C = 0
D = 0
E = 6
F = 0
a = 14706
b = 52326
c = 684
Group Variance = 814
Z-Score = -1.29685
Comparison Level at 95% confidence level = -1.64485 (downward trend)
-1.29685 >= -1.64485 indicating no evidence of a downward trend