April 3, 2023

Mr. Joe Rogers
Michigan Department of Environment, Great Lakes and Energy
Technical Support Unit
Hazardous Waste Section
Materials Management Division
Lansing District Office
Constitution Hall
525 West Allegan Street
Lansing, MI 48909

Subject: Continued Eastern Boundary Investigation Report– Former Hayes Lemmerz;
Ferndale Michigan
1600 West 8 Mile Road
Ferndale, Michigan
MID 041 803 123
Waste Data System Number 395519

Dear Mr. Rogers,

Please find enclosed this Continued Eastern Boundary Investigation Report – Former Hayes Lemmerz facility located at 1600 West Mile Road, Ferndale (Site) prepared by TRC Environmental Corporation (TRC) on behalf of Axle Holdings 1, LLC (Detroit Axle).

Pursuant to Title 40, Code of Federal Regulations, Part 270.11(b), I certify that I am authorized as a responsible corporate officer, president, director, secretary, superintendent, treasurer or vice president of the corporation in charge of the principal business function or any other person who performs similar policy or decision-making functions or operations for the corporation (Axle Holdings 1, LLC).

Axle Holdings 1, LLC

Mike Musheinesh

Printed Name

CEO

Title

Signature

Continued Eastern Boundary Investigation Report

Former Hayes Lemmerz Site Eastern Boundary

April 2023

Prepared For:

Axle Holdings 1, LLC

Prepared By:

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1.0 Background

The former Hayes Lemmerz Site, located at West Eight Mile Road, Ferndale, Oakland County, Michigan (Site) is a former hazardous waste facility regulated under Part 111, Hazardous Waste Management, of the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended, and its administrative rules (Act 451). The Site is identified as Environmental Protection Agency (EPA) ID Number MID 041 803 123. Under Part 111, an owner or operator of such facilities is subject to corrective action to establish environmental protection standards based on zoning and intended land use.

Based on historical groundwater analytical data obtained from the Site indicating the presence of select volatile organic compounds (VOCs) near the Eastern Site Boundary, the Michigan Department of Environment, Great Lakes, and Energy (EGLE), conducted a soil vapor investigation along Pinecrest Drive in 2018. On August 29, 2018, EGLE installed six soil vapor points (18VP-1 through 18VP-6) to depths between 5 and 10 feet below ground surface (bgs) in the right-of-way of Pinecrest Drive between West Eight Mile Road and Fielding Street. The soil vapor points were installed both in the western right-of-way of Pinecrest Drive (along the eastern property boundary of the Site) and the eastern right-of-way of Pinecrest Drive, near private residences.

Soil vapor samples collected in August 2018 and were analyzed by the EGLE Laboratory for TO-15 analysis. Only two locations (18VP-1 and 18VP-3) had detections of trichloroethene at concentrations exceeding the EGLE Residential Volatilization to Indoor Air Pathway (VIAP) screening levels (screening levels) with a maximum detected concentration of 400 µg/m^3. No other constituents were detected above their respective VIAP screening levels.

Subsequent investigations of the Site Property were completed in through 2021, as presented in the Atlas Technical Consultants LLC (Atlas), formerly known as ATC Group Services, LLC (ATC) Resource Conservation and Recovery Act (RCRA) Corrective Actions Description of Current Conditions and Interim Measures Report (CCR), dated April 5, 2021, and revised September 21, 2021.

Atlas also submitted a RCRA Interim Work Plan Investigation Report (Interim Work Plan) for the Eastern Site Boundary located at the Former Hayes Lemmerz Site to EGLE for approval on April 19, 2022. The April 2022 Interim Work Plan scope was later updated after EGLE provided a comment letter dated July 2022. The updated scope was submitted by TRC in a Response to EGLE Comments and Addendum to the RCRA Interim Work Plan Investigation Report – Eastern Site Boundary dated August 2022 (updated work plan). The updated scope consisted of the following:

- Installation of additional monitoring wells screened to the top of clay or the base of sand, across Pinecrest Drive, to delineate groundwater concentrations observed along the eastern Site boundary. Specifically, TRC proposed to install up to six additional monitoring wells in the down-gradient direction (that has been established as predominantly east from the Site). Monitoring wells will be placed at the approximate locations shown within the public right-of-way of residential streets located to the east of the Site, across Pinecrest Drive.

- Conduct one additional soil vapor sampling event at the vapor points installed along the Eastern Site Boundary including the previously installed EGLE soil vapor points. The sampling event will occur in the third quarter of 2022 to account for seasonal groundwater fluctuations and its potential influence on soil vapor concentrations. Soil vapor samples will be submitted for TO-15 analysis.
- Conduct two rounds of low-flow groundwater sampling at the newly installed offsite delineation monitoring wells located off-site across Pinecrest Drive, as well as the existing 12 Eastern Site Boundary wells that were sampled in December 2021. Sampling rounds will be at least 30 days apart. Samples will be analyzed for the full Part 201 VOC list, full Part 201 metals list, 31 PFAS list and methanol.

The updated work plan was approved by the EGLE in a letter dated October 17, 2022. Upon approval, TRC then proceeded with the implementation of the updated work plan scope in September to December 2022. The details related to those activities are discussed below.

The Southern Area assessment and portions of the Site Wide investigation as proposed in the February 2022 RCRA Facility Investigation Work Plan (RFI Workplan) by Atlas and updated in July 2022 by TRC began in December 2022 concurrent with the Eastern Boundary assessment. The Southern Area assessment includes areas of concern (AOCs) 3, 7, 8, 9, 10, 11 and 12, which constitutes the majority of the former building and operational areas. An extensive soil and groundwater sampling event was performed in December 2022 and a second groundwater sampling event was conducted in March 2023. The December 2022 event included the completion and soil sampling of 13 exploratory soil test pits, installation and sampling of 15 shallow monitoring wells and one deep monitoring well into the underlying confined aquifer (as part of the Site Wide investigation), groundwater sampling of four existing monitoring wells, and installation of two soil borings. The March 2023 event included the groundwater sampling of the 15 shallow monitoring wells and one deep monitoring well installed in December 2022, and four previous investigation monitoring wells. It should be noted preexisting monitoring wells that were to be sampled as part of the Southern Area (MW-122, MW-123, MW-124, MW-125, MW-126, MW-127, MW-130, MW-131, MW-132 and MW-133) could not be located and are presumed to be buried, damaged or destroyed. Efforts to locate these wells and repair them and/or properly decommission them are ongoing. Remaining activities to be completed for the Southern Area and the Site Wide investigation include completion of the side wide evaluation of underground tunnels and subsurface utility corridors which is planned for 2023. Upon completion of this event, a report documenting the Southern Area and the Site Wide investigation findings will be submitted to the EGLE.

2.0 Investigation Activity Summary

TRC mobilized to the Site multiple times during the period of September 22, 2022, through December 15, 2022, to implement the updated work plan. The activities completed were as follows:

- September 22 and 23, 2022: TRC completed soil vapor sample collection at VP-1 through VP-14 and 18VP-2 through 18VP-4 and 18VP-6. 18VP-1 and 18VP-5 could not be located and are assumed to have been destroyed during sidewalk improvements. Sampling was conducted using a helium shroud test which uses a large plastic hood to cover the sample train and connections between the vapor point and the Bottle-Vac™ canister to provide leak checks.
- September 27 and 28, 2022: TRC conducted static water level gauging at monitoring wells MW-104 to MW-113 and MW-119 to MW-120; and low-flow groundwater sampling at monitoring wells MW-104 to MW-113 and MW-119 to MW-121. MW-121 was not gauged due to tree root obstruction in the monitoring well.
- October 17 to 20, 2022: TRC provided oversight for the installation of six monitoring wells (MW-22-01 through MW-22-06) along the eastern side of Pinecrest Drive. Monitoring wells were installed by Terra Probe Environmental, Inc. (Terra Probe). Following the installation, the monitoring wells were developed, gauged, and sampled using low-flow methods.
- December 12 to 15, 2022: TRC conducted static water level gauging at monitoring wells MW-104 to MW-113, MW-119 to MW-120, and MW-22-01 to MW-22-06, MW-121 was not gauged due to a tree root obstruction Low-flow groundwater sampling was performed at monitoring wells MW-104, MW-106 to MW-113, MW-119 to MW-121, and MW-22-01 to MW-22-06. All laboratory analytical data was received by January 31, 2022.

2.1 MISS DIG

MISS DIG, Michigan's one-stop underground utility clearance network, was notified of the pending subsurface investigation on October 10, 2022 (Ticket numbers: 2022101001293, 2022101001248, 2022101001228, 2022101001209, 2022101001108, 2022101001084, and 2022101001051), at least 72 hours prior to commencing the subsurface investigation activities. MISS DIG's markings only extend to public properties and right-of-ways.

2.2 Private Utility Locating

Terra Probe was retained to locate and mark private underground utilities, including any buried utilities that might be present on Site. TRC and Terra Probe conducted a ground penetrating radar and electromagnetic survey on October 17, 2022, to identify and mark the location of any potential buried utilities relative to planned monitoring well installation activities.

2.3 Monitoring Well Installation

TRC supervised Terra Probe in the installation of six monitoring wells, MW-22-01 to MW-22-06, from October 17 to 20, 2022. The installation of the monitoring wells was conducted via a track mounted Geoprobe 6620 unit utilizing direct push technology and over drilled using hollow stem augers. Soils were continuously logged by TRC field staff using the Unified Soil Classification System and to verify the depth to groundwater and the underlying low conductivity clay layer. The actual depth of monitoring well installation was determined based on the depth of the clay

layer, the bottom of the well screens were placed at the top of the clay/base of the sand layer at approximately 11 to 17.5 feet below ground surface. Soil boring logs are provided in **Appendix A.**

The monitoring wells were constructed using a 2-inch inside diameter poly vinyl chloride (PVC) casing with a 5-foot screen. The filter packs were comprised of medium washed silica sand and extends approximately two feet above the top of the screen. Following placement of the well screen sand, the well annulus was sealed with bentonite chips and the remaining annulus sealed with concrete approximately 0.5 feet ground surface (ft bgs). The wells were finished with a 1.5-foot by 1.5-foot concrete square, flush mount protective metal cover, which was set approximately 0.5-foot into the concrete surface seal. Well development was performed using pump and surge methods to remove debris from within the well casing and establish good communication with groundwater. Soil cuttings and development water were containerized in drums onsite. The well construction and development details are documented in the diagram provided in **Appendix A.**

2.4 Monitoring Well Survey

The locations and top of casing elevations of the monitoring wells installed in October 2022 were professionally surveyed by BMJ Engineers and Surveyors, Inc. (BMJ) on October 27, 2022 and are shown on **Figure 2.**

2.5 Soil Vapor Sampling

TRC collected soil vapor samples from 18 soil vapor points, VP-01 to VP-14 and 18VP-2 through 18VP-4 and VP18-6, on September 22 and 23, 2022. Soil vapor monitoring points 18VP-1 and 18VP-5 could not be located. Soil vapor samples were collected using the helium shroud method outlined in the EGLE's Guidance Document for the Vapor Intrusion Pathway. As proposed in the updated work plan, soil vapor samples were originally to be collected using 1,1-dicfluoroethane as a tracer gas. However, sampling using the helium shroud method was agreed to during a telephone conversation with Mr. Joe Rogers of the EGLE and documented in an email dated September 16, 2022. The samples were collected using a constructed pathway between the soil vapor point and the 1-liter Bottle-Vac™ canister. The pathway was created using plastic and silicon tubing, as well as plastic stopcocks allowing for the control of flow direction. A calibrated GEM landfill gas meter was used to collect methane, oxygen, and carbon dioxide readings, and a photoionization detector (PID) was used to collect total VOC concentrations during soil vapor sampling.

Before the soil vapor sampling was started a QA/QC test was conducted using a helium shroud test. The helium shroud test uses a large plastic hood to cover the sample train and connections between the vapor point and the Bottle-Vac™ canister. A tracer gas (high- grade helium) was then injected beneath the plastic hood (at a concentration of approximately 20% total hood volume); a grab sample of the air from the tubing located beneath the helium hood was then collected and checked for the presence of helium in the field using a helium detector, thus indicating whether or not a leak was present. The helium shroud sample train pump was then ran for two minutes to test the sample train for leaks while under negative pressure.

Once the QA/QC tests were successfully completed the sample train was connected to the Bottle-Vac™ canister. The Bottle-Vac™ canisters were under negative pressure, so upon completion of the QA/QC tests and evacuation of soil vapor within the tubing, the Bottle-Vac™ canisters were opened allowing for soil vapor to be drawn in and collected. The soil vapor samples were analyzed by Merit Laboratories (Merit) in East Lansing, Michigan for analysis of VOCs in accordance with EPA Method TO-15. Field notes for the soil vapor sampling event is included as **Appendix B.**

2.6 Static Groundwater Elevations

Static groundwater elevation measurements were collected from the existing Eastern Boundary wells on September 27 and 28, 2022, during the first groundwater sampling event. A second round of static groundwater elevations were collected from the existing Eastern Boundary monitoring wells and new monitoring wells installed in October 2022 on December 12, 2022, during the second groundwater sampling event. Static groundwater elevations collected from sampled monitoring wells in December 2022 are summarized in **Table 1** and presented on **Figure 3,** Groundwater Contour Map. The predominant groundwater flow direction along the Eastern Site Boundary is east.

2.7 Groundwater Sampling

Groundwater samples were collected in September/October 2022 from the following Eastern Site Boundary monitoring wells: MW-104 through MW-113, MW-119 though MW-121, and MW-22-01 through MW-22-06. A second round of groundwater sampling was completed in December 2022 at MW-104, MW-106 through MW-113, MW-119 though MW-121, and MW-22-01 through MW-22-06. The groundwater samples were collected using low-flow sampling procedures following stabilization according to EPA Low-Flow Ground-Water Sampling Procedures guidance. During the September/October 2022 event three blind field duplicate samples, a field blank and an equipment blank were collected and for the December 2022 event two blind field duplicate samples, a field blank and an equipment blank were collected for quality assurance/quality control (QA/QC) purposes. The groundwater locations sampled during these events are presented on **Figure 2**. The groundwater samples were packed with “wet” ice and transported under chain of custody in a chilled cooler following collection to Merit in Lansing, Michigan to be analyzed for the following:

- Michigan Part 201 Total Metals by USEPA Methods 6010B/6020A;
- Mercury by USEPA Method 7470A;
- Michigan Part 201 Volatile Organic Compounds (VOCs) by USEPA Method 8260B; and
- 31 Polyfluoroalkyl and perfluoroalkyl substances (PFAS) by ASTM Method D7979.

Additionally, groundwater samples from both events were transported under chain of custody to the Eurofins Environment Testing in Savannah, Georgia to be analyzed for methanol by USEPA Method SW846 8015D. Field notes for the groundwater sampling events are included as **Appendix B**.

2.8 Quality Assurance Program

This section provides a summary of quality assurance procedures followed for sampling, analysis, and data evaluation for the sampling events. Project quality assurance was accomplished by implementing the quality control procedures detailed below.

2.8.1 Contaminant Free Sample Containers / Preservation Methods

Pre-cleaned and pre-preserved sample containers for all soil and groundwater samples were acquired from Merit. Upon collection, the samples were placed in a cooler containing sufficient ice sealed in plastic bags to cool and maintain each sample's temperature at 4°C (± 1°C) through receipt by the laboratory. The temperature in the cooler was measured when samples were received at the laboratory, confirming that the 4°C temperature was maintained throughout the shipping/transport process.

2.8.2 Holding Times

Merit provided the holding times for the parameters to be analyzed. Holding times of each sample were compared to allowable holding times per each method of analysis. All analyses were performed within the allowable holding time (**Appendix C**).

2.8.3 Sample Documentation

Each sample was labeled with the following:

- Site identification
- Sampling date and time
- Sample identification or location and depth
- Sampling team
- Sample preservation method

2.8.4 Sample Transport and Delivery

Samples were picked up and transported under standard COC procedures by Merit Laboratories courier. The alcohol analysis was subcontracted from Merit to Eurofins.

2.8.5 Blind Field Duplicates

Blind field duplicate samples were generally collected at a minimum 10 percent frequency. These samples were prepared by splitting a single sample between two separate containers. Points where duplicate samples were collected were selected by field personnel to provide a range of expected contamination concentrations in the field and were submitted as blind duplicates to the laboratory.

2.8.6 Data Quality Review

Data from each round were evaluated for completeness, overall quality and usability, method-specified sample holding times, precision and accuracy, and potential sample contamination. The data were found to be complete and usable for the purposes of this report.

3.0 Results

3.1 Site Geology and Hydrogeology

3.1.1 Regional Geology

Regionally, the unconsolidated geology beneath the Eastern Site Boundary is described as:

"LAKE SAND AND GRAVEL – Yellowish-brown or pale-brown to gray, calcareous fine to coarse sand with local lenses of rounded medium gravel or pebble layers. Commonly crossbedded; lenticular bedding or tabular foreset bedding locally. Generally well sorted, without significant silt or clay. Clast composition varies, reflecting compositions of materials transported by waves and currents. Nearshore, strand, and deltaic deposits of former glacial and postglacial lakes and present Great Lakes. Includes deposits of beach ridges, offshore bars, and spits; also includes small areas of lake silt and clay (lca), complex lake deposits (lcc), and bedrock outcrop. Locally overlain by eolian sand and silt (ed, eu), alluvium (al), peat (hp), or swamp deposits (hs). Mapped only where extensive. Thickness generally 1-10 m, locally more than 30 m." (Quaternary Geologic Map of the Lake Erie 4 Degree by 6 Degree Quadrangle, United States and Canada; Edited and Integrated by Fullerton and Richmond, 1991).

3.1.2 Site Geology

The Site is situated at an elevation of approximately 660 ft above mean sea level. The topographic gradient at the Site was observed to be generally slightly sloping to the towards the east. Precipitation appears to mostly be managed through infiltration and combined storm drains located on Pinecrest Street.

The soil encountered at the Site generally appeared to be one to two feet of non-native (fill) sandy gravel and clay soils underlain by approximately 10 to 15 feet of native sand underlain by a low permeability sandy clay. For additional stratigraphic information see the soil boring logs and monitoring well construction diagrams in **Appendix A**.

3.1.3 Hydrogeology

Groundwater at the Site was encountered at depths ranging from approximately 5 to 13 feet below ground surface. It is assumed that the variability in the depth of groundwater is likely related to Site topography. Based on water elevation data collected during the December 2022 event, which included Southern Area monitoring wells, the general direction of shallow groundwater flow on the Site under ambient steady state conditions is generally toward the East. The groundwater contour map for the December 2022 Event is presented in **Figure 3**.

3.2 Laboratory Analytical Results

Groundwater and soil vapor analytical results were compared to applicable EGLE Residential Michigan Part 201 criteria and screening levels. Specifically, groundwater concentrations were compared to Residential Drinking Water Cleanup Criteria (RDWCC), Groundwater Surface water Interface Cleanup Criteria (GSICC) and Residential Volatilization to Indoor Air Pathway (R-VIAP) screening levels. Soil vapor analytical results were compared to Residential VIAP

screening levels. Soil vapor and groundwater analytical laboratory reports are included as **Appendix C**.

3.2.1 Groundwater

TRC collected 19 groundwater samples in September/October 2022 and 18 groundwater samples in December 2022 along the Eastern Site Boundary for laboratory analyses. Monitoring well MW-121 was dry during the December 2022 event and was therefore not sampled. Groundwater results are summarized in **Tables 2, 3, and 4** and Part 201 cleanup criteria/screening level exceedances are presented on **Figure 4.** Groundwater sampling results from samples collected by Atlas in April 2020, December 2021, and/or January 2022 are also presented in **Tables 2, 3, and 4.** The following detections and exceedances were noted:

- **Total Metals:** A total of 27 metals were analyzed, of which 19 metals were detected in one or more samples for both the September/October 2022 event and the December 2022 event. During the September/October 2022 event exceedances for RDWCC were observed for one or more of total aluminum, antimony, boron, iron, lead, and/or manganese in samples collected from 16 monitoring wells. During the December 2022 event exceedances for RDWCC criteria were observed for one or more of total aluminum, antimony, boron, iron, manganese, and/or sodium in the samples collected from 15 monitoring wells. During the December 2022 event total selenium exceeded Michigan Part 201 generic GISCC in the samples collected from monitoring wells MW-119 and MW-22-01.
- **Volatile Organic Compounds (VOCs):** A total of 68 VOCs were analyzed, of which 10 VOC constituents were detected in one or more samples for both the September/October 2022 event and the December 2022 event. During the September/October 2022 and December 2022 events exceedances for RDWCC were observed for trichloroethene in the sample collected from MW-107 and during the December 2022 event for vinyl chloride in the sample collected from MW-110. During the September/October 2022 event generic GSICC was exceeded for 1,2-Dichlorobenzene in the sample collected from MW-109 and for chlorobenzene in the samples collected from MW-22-02 and MW-22-05. During the December 2022 event generic GSICC was exceeded for chlorobenzene in the samples collected from MW-106 and MW-22-02. During the September/October 2022 and December 2022 events exceedances for R-VIAP for 1,2-Dichloroethane, 1,4-Dichlorobenzene, chlorobenzene, tetrachloroethene, trichloroethene, and/or vinyl chloride were observed in the samples collected from one or more monitoring wells. Additionally, trichloroethene was observed exceeding NR-VIAP for both the September/October 2022 and December 2022 events in samples collected from MW-107.
- **PFAS:** A total of 31 PFAS constituents were analyzed, of which 16 PFAS constituents were detected in one or more samples for both the September/October 2022 event and the December 2022 event. Two constituents, perfluorooctane sulfonic acid (PFOS) and PFOA were detected in one or more samples exceeding Michigan Part 201 criteria. During both the September/October 2022 and December 2022 events PFOS exceeded the generic GSICC in the sample collected from MW-112. The constituent PFOA exceeded the RDWCC in samples collected from 15 monitoring wells during the September/October 2022 event and from samples collected from nine monitoring wells during the December 2022 event.
- **Alcohols:** The alcohol constituent methanol was not detected in any of the samples collected during either the September/October 2022 or December 2022 sampling events.

3.2.2 Soil Vapor

TRC collected 19 soil vapor samples in September 2022 along the Eastern Site Boundary for laboratory analysis. Soil vapor results are summarized in **Table 5** and criteria exceedances are presented on **Figure 4.** Soil vapor sampling results from samples collected by Atlas in December 2021 and/or February 2022 are also presented in **Table 5**. Analytical data was compared to the EGLE residential VIAP screening levels. The following detections and exceedances were observed:

- **VOCs:** A total of 80 VOCs were analyzed and five were detected. During the September 2022 sampling event the VOC trichloroethene was observed in the samples collected at sampling point 18VP-3 at concentration exceeding R and NR-VIAP.
- **Field Screening Parameters:** Pre- and post-soil vapor sample collection field screening parameters were collected at each soil vapor point for barometric pressure, carbon dioxide, methane, oxygen, and total volatiles via a photo-ionization detector. Helium readings were collected from the shroud interior and the sample train. Soil vapor field screening data are summarized by location in **Table 6**. The following pre and post sample collection average values were observed. It should be noted little variability was observed between the pre and post sampling measurements which indicates little to no leakage from the atmosphere, and lower oxygen being consistent with subsurface soil with a lower level compared to typical atmosphere levels (20.8% Oxygen):
  - Barometric Pressure (inches Hg): Pre 29.35, Post 29.35
  - Carbon Dioxide (%): Pre 1.79, Post 1.77
  - Helium (%): Shroud interior 49.25, Sample train 0.0
  - Methane (%): Not detected
  - Oxygen (%): Pre 19.22, Post 19.34
  - Total Volatiles (PPM): Not detected

4.0 Summary and Conclusions

An initial round of groundwater sampling was performed by TRC on September 27 and 28, 2022 from the existing monitoring wells MW-104 through MW-113, and MW-119 through MW-121. Following the sampling at the existing monitoring wells, on October 17 to 20, 2022 six additional monitoring wells (MW-22-01 through MW-22-06) were installed along the eastern side of Pinecrest Drive and subsequently sampled between October 18 to 20, 2022. These were installed to further delineate any potential migration from the Site along the Eastern Boundary.

A second round of groundwater samples were collected between December 12 to 15, 2022 from monitoring wells MW-104, MW-106 through MW-113, and MW-119 through MW-121, and monitoring wells MW-22-01 through MW-22-06. The collected samples were analyzed by a subcontracted laboratory for VOCs, total metals, alcohols and PFAS. TRC collected soil vapor samples from 18 existing soil vapor monitoring points (VP-1 through VP-14, 18VP-2 through 18VP-4, and 18VP-6) in the Eastern Site Boundary on September 22 and 23, 2022, and analyzed by a subcontract laboratory for TO-15 VOC analysis. Soil vapor monitoring points 18VP-1 and 18VP-5 could not be located.

4.1 Groundwater Conclusions

Based on the results of groundwater analytical data obtained during the September/October 2022 and/or the December 2022 events, select constituents are present within the groundwater at concentrations exceeding one or more applicable Michigan Part 201 cleanup criteria along the Eastern Site Boundary. Those include the following:

- Total Metals:
  - Aluminum was detected above Michigan Part 201 generic RDWCC at MW-104, MW-106 (DUP-02), MW-107, MW-108, MW-112 and MW-121.
  - Antimony was detected above Michigan Part 201 generic RDWCC at MW-107.
  - Boron was detected above Michigan Part 201 generic RDWCC at MW-105 and MW-22-05.
  - Iron was detected above Michigan Part 201 generic RDWCC at MW-108, MW-109, MW-110, MW-111, MW-112, MW-113, MW-22-05 and MW-22-06.
  - Lead was detected above Michigan Part 201 generic RDWCC at MW-112.
  - Manganese was detected above Michigan Part 201 generic RDWCC at MW-104, MW-106, MW-108, MW-109, MW-110, MW-111, MW-112, MW-121, MW-22-01, MW-22-02, MW-22-03, MW-22-04, MW-22-05 and MW-22-06.
  - Selenium was detected above Michigan Part 201 generic GSICC at MW-105, MW-119 and MW-22-01.
  - Sodium was detected above Michigan Part 201 generic RDWCC at MW-22-01.
- PFAS:
  - PFOA was detected above Michigan Part 201 generic RDWCC at MW-104, MW-105, MW-106, MW-107, MW-108, MW-109, MW-110, MW-111, MW-112, MW-120, MW-121, MW-22-02 and MW-22-04.

- PFOS was detected above Michigan Part 201 generic GSICC at MW-112.

- Volatile Organic Compounds (VOCs):
  - 1,2-Dichlorobenzene was detected above Michigan Part 201 generic GSICC at MW-109.
  - 1,2-Dichloroethane was detected above the R-VIAP screening level at MW-22-04.
  - 1,4-Dichlorobenzene was detected above R-VIAP screening level at MW-109.
  - Chlorobenzene was detected above Michigan Part 201 generic GSICC and the R-VIAP screening level at MW-106 (GSICC only), MW-22-02 and MW-22-05.
  - Chloroform was detected above the R-VIAP screening level at MW-108.
  - Tetrachloroethene was detected above R-VIAP screening level at MW-111.
  - Trichloroethene was detected above the R-VIAP screening level at MW-106, MW-111, MW-121, MW-22-02, MW-22-03 and MW-22-04, and above the Michigan Part 201 generic RDWCC at MW-107.
  - Vinyl Chloride was detected above Michigan Part 201 generic RDWCC and the R-VIAP screening level at MW-110.

Note the drinking water scenario for residences in this area is considered incomplete as municipal water supply is available to all locations in this area and groundwater is not utilized for drinking water on-site and there are no potable wells within two miles of the Site. However, the exceedances in groundwater are not delineated in the downgradient direction (east). Therefore, additional assessment of groundwater impacts is planned as part of proposed next steps for the Eastern Boundary.

For Michigan Part 201 generic GSICC exceedances, this potential exposure pathway is also considered incomplete as the nearest surface water is more than 10 miles from the Site (Detroit River). Additionally, the combined sanitary and storm sewers that could potentially intercept groundwater containing any constituent above the GSICC flows to the municipal authority and does not discharge to a surface water body. Additional evaluation of the storm sewers and other utilities and potential migration pathways is planned to be completed in 2023 as part of the Site Wide Investigation.

The R-VIAP exceedances are noted near residential homes in the area. A soil vapor investigation was conducted by the EGLE in 2018, where sub slab soil vapor sampling and indoor air sampling was completed at nine homes along Pinecrest, and no VOCs were detected except for chloroform which is assumed an internal domestic contaminant. However, additional assessment of groundwater and soil vapor to assess VOC mass are planned as part of proposed next steps for the Eastern Boundary to further investigate this pathway.

4.2 Soil Vapor Conclusions

Soil vapor analytical data indicated the presence of only one constituent exceeding applicable EGLE VIAP screening level along the Eastern Site Boundary during the September 2022 sampling event. The VOC trichloroethene was only observed sampling point 18VP-3 at a concentration exceeding the R and NR-VIAP. It should be noted 18VP-3 is located east of

Pinecrest Drive, across the street from the Site. Soil vapor concentrations in the soil vapor points located on the eastern margin of the Site (VP-1 through VP-14) on the west side of Pinecrest Drive are below the EGLE R-VIAP screening levels. While detections of trichloroethene in groundwater were identified in the vicinity of 18VP-3 and prior point 18VP-1; the concentrations are not consistent with the vapor concentration detected in the same area. This could indicate a vadose zone source within the vicinity of the vapor points including potential releases from the combined sewer. There are other facilities that discharge to the sewer that could have discharged trichloroethene to the sewer system. Additional assessment of the soil vapor exceedance is planned as part of proposed next steps for the Eastern Boundary to understand if the combined sewer leakage may be the source of the increased soil vapor exceedance identified in 18VP-3.

4.3 Overall Conclusions

Based upon groundwater exceedances of one or more total metals, VOCs and PFAS generic Part 201 cleanup criteria and R-VIAP screening levels during the groundwater sampling events, and soil vapor exceedances of R-VIAP during the soil vapor sampling events, TRC plans further groundwater delineation in the down-gradient direction to the east of Pinecrest Drive and additional soil vapor delineation to determine the extent of the soil vapors above the R-VIAP. Additionally, investigation of on- and off-site utility corridors to determine potential migration pathways (including potential for sources that are not from the site) is planned for 2023 as part of the Site Wide investigation.

5.0 Proposed Future Activities

Based on the soil vapor and groundwater data, TRC proposes the following future activities be conducted to address the Eastern Site Boundary. All proposed work will follow standard operating procedures, analytical methodology references and QA/QC requirements specified in the February 2022 RFI Workplan by Atlas and updated in July 2022 by TRC for this Site.

- Installation of additional monitoring wells screened to the top of clay or the base of sand, to the east of the monitoring wells MW-22-01 through MW-22-06 along Pinecrest Drive, to delineate groundwater concentrations of metals, VOCs and PFAS observed along the Eastern Site Boundary exceeding RDWCC, GSICC and/or R-VIAP screening levels. Specifically, TRC proposes to install up to 10 additional monitoring wells in the down-gradient direction (which has been established as predominantly east) of the following areas of concern **(Figure 5).** The distance to the east was selected based on the estimated distance to achieve compliance while also attempting to minimize interference from potential residential septic system releases within the neighborhood.
  - **AOC 14:** Installation of proposed MW-23-01 and MW-23-02 at a distance farther downgradient and within right of way to delineate Part 201 cleanup criteria exceedances of iron, selenium, boron and manganese observed in MW-113, MW-119, MW-22-05, or MW-22-06.
  - **AOC 20:** Installation of proposed MW-23-02 (both AOC 14 and 20) and MW-23-03 to delineate Part 201 cleanup criteria exceedances for PFOA, boron, iron, manganese, and chlorobenzene observed in MW-120 or MW-22-05. Installation of soil vapor point VP-23-01 to further evaluate the chlorobenzene mass in the subsurface.
  - **AOC 13 and 19:** Installation of proposed MW-23-04 to MW-23-05 to delineate Part 201 cleanup criteria exceedances for iron, manganese, lead, PFOA, PFOS, 1,2-dichlorobenzene, 1,4-dichlorobeznene, tetrachloroethene, trichloroethene, and vinyl chloride in 18VP-3, MW-109, MW-110, MW-111, MW-112 or MW-22-04. Installation of soil vapor point VP-23-02 to replace 18VP-1 and further evaluate the 1,2-dichlorobenzene, 1,4-dichlorobeznene, tetrachloroethene, trichloroethene, and vinyl chloride mass in the subsurface.
  - **AOC 3:** Installation of proposed MW-23-06 and MW-23-07 to delineate Part 201 cleanup criteria exceedances for antimony, aluminum, manganese, iron, PFOA, chlorobenzene, and trichloroethene in MW-108, MW-107, MW-106 or MW-22-03. Installation of soil vapor point VP-23-03 to further evaluate the chlorobenzene and trichloroethene mass distribution in the subsurface.
  - **AOC 9:** Installation of proposed MW-23-08, MW-23-09 and MW-23-10 to delineate Part 201 cleanup criteria exceedances for manganese, boron, aluminum, sodium, selenium, PFOA, chlorobenzene, trichloroethene in MW-104, MW-105, MW-121, MW-22-01 or MW-22-02. Installation of soil vapor point VP-23-04 to further evaluate the chlorobenzene and trichloroethene mass in the subsurface.
- Installation of four soil vapor points (proposed VP-23-01, VP-23-02, VP-23-03 and VP-23-04) to the north and south along Pinecrest will also be utilized to update the conceptual site model regarding soil vapor mass in the subsurface **(Figure 5).** The EGLE soil vapor points 18VP-1 and 18VP-5 that could not be located will also be replaced as part of this installation.

- Conduct one additional soil vapor sampling event from the four new proposed soil vapor points to be installed in 2023 including the replacement soil vapor points for 18VP-1 and 18VB-5 along the Eastern Site Boundary, along with existing 18VP-3. Soil vapor samples will be submitted for VOCs TO-15 analysis. The results of the proposed sampling and utility investigation will be utilized to determine the next round of recommendations. If vapor points are below R-VIAP for two consecutive events, we propose abandoning the points.
- Conduct two rounds of low-flow groundwater sampling at the 10 proposed offsite delineation monitoring wells located off-site across Pinecrest Drive along with the monitoring wells installed in 2022 (MW-22-01 through MW-22-06), and monitoring wells MW-119, MW-120, MW-110, MW-107 and MW-121 as they are closest to the AOCs. Sampling rounds will be at least 30 days apart. Future groundwater samples will be submitted only for those analytes with one or more current generic Part 201 cleanup criteria exceedances in wells and/or R-VIAP screening levels exceedances in soil vapor along the Eastern Site Boundary. The constituents to be sampled for are the following:
  - Total Metals: Aluminum, antimony, boron, iron, lead, manganese, selenium, and sodium. Aliquot samples will also be filtered in the field and submitted for dissolved metals analysis to evaluate the dissolved metals concentrations. This is consistent with the EGLE comments and TRC responses dated August 16, 2022, in cases where there is turbidity greater than 1 NTU (secondary MCL for drinking water) in the water being sampled, it is recommended a field filtered/dissolved aliquot sample will be collected in addition to the totals sample.
  - VOCs: 1,2-dichlorobenzene, 1,2-dichloroethane, 1,4-dichlorobenzene, chlorobenzene, chloroform, tetrachloroethene, trichloroethene, and vinyl chloride
  - PFAS 31 List which will include pie chart fingerprint reporting on figures to assist in delineating the sources of the PFAS detections.
- Complete a utility investigation to determine additional potential migration pathways and potential for groundwater to infiltrate the combined sewer, proposed as part of the Site Wide Investigation.
- Once the data is received from this proposed sampling, a report will be submitted which will propose next steps if needed to delineate the Part 201 exceedances. If the Eastern Boundary is satisfactorily delineated, we will proceed with the investigation pursuant with the RFI Work Plan schedule.
- Upon review of the data, TRC will evaluate potential public communication strategies around the data being collected and next steps.

Tables

Table 1
Summary of Groundwater Elevation Data - September to December 2022
Former Hayes Lemmerz Site - Eastern Boundary
2000 West 8 Mile Road
Ferndale, MI

Well Location	Installation Date	Well Screen Interval (ft BGS)	TOC Elevation (ft)	September 2022		October 2022		December 2022	
				Depth to Water (ft BTOC)	Groundwater Elevation (ft)	Depth to Water (ft BTOC)	Groundwater Elevation (ft)	Depth to Water (ft BTOC)	Groundwater Elevation (ft)
Eastern Boundary									
MW-104	3/23/2020	15 - 20	663.93	10.65	653.52	--	--	10.76	653.17
MW-105	3/23/2020	9 - 14	663.74	11.44	652.78	--	--	11.80	651.94
MW-106	3/25/2020	7.5 - 12.5	662.92	9.11	653.83	--	--	9.64	653.28
MW-107	3/25/2020	7 - 12	663.02	9.02	653.94	--	--	9.40	653.62
MW-108	3/25/2020	5 - 10	662.51	8.44	653.97	--	--	8.70	653.81
MW-109	3/25/2020	5 - 10	662.05	7.93	662.07	--	--	7.98	654.07
MW-110	3/25/2020	5 - 10	661.87	8.09	653.56	--	--	8.00	653.87
MW-111	3/25/2020	4 - 9	661.50	7.61	653.78	--	--	7.46	654.04
MW-112	3/25/2020	4 - 9	660.27	6.95	653.30	--	--	6.70	653.57
MW-113	3/24/2020	8 - 13	663.98	10.16	654.32	--	--	10.95	653.03
MW-119	4/21/2020	5 - 10	661.78	8.59	653.62	--	--	9.09	652.69
MW-120	4/21/2020	3 - 8	659.69	6.54	653.71	--	--	6.51	653.18
MW-121	4/21/2020	8 - 13	663.11	OBSTRUCTION		--	--	DRY	
MW-22-01	10/17/2022	12.5 - 17.5	662.65	--	--	12.88	649.77	13.08	649.57
MW-22-02	10/17/2022	10 - 15	661.61	--	--	10.36	651.25	10.70	650.91
MW-22-03	10/18/2022	9 - 14	660.55	--	--	7.57	652.98	7.58	652.97
MW-22-04	10/19/2022	7 - 12	658.84	--	--	6.43	652.41	6.00	652.84
MW-22-05	10/19/2022	6 - 11	657.04	--	--	5.27	651.77	5.18	651.86
MW-22-06	10/19/2022	7 - 12	658.72	--	--	6.61	652.11	6.70	652.02
Southern Area[(1)]									
MW-101	3/23/2020	7.5 - 12.5	667.74	--	--	--	--	8.72	659.02
MW-102	3/23/2020	8 - 13	667.05	--	--	--	--	DRY	
MW-103	3/23/2020	8 - 13	666.06	--	--	--	--	11.02	655.04
MW-116	3/30/2020	8 - 13	669.47	--	--	--	--	9.72	659.75
MW-117	3/30/2020	7.5 - 12.5	670.24	--	--	--	--	10.48	659.76
MW-118	3/30/2020	11 - 16	672.81	--	--	--	--	DRY	
MW-128	6/15/2020	8 - 13	668.18	--	--	--	--	11.70	656.48
MW-129	6/15/2020	8 - 13	668.11	--	--	--	--	11.52	656.59
MW-22-07	12/13/2022	14 - 19	670.62	--	--	--	--	12.70	657.92
MW-22-08	12/13/2022	15 - 20	670.96	--	--	--	--	13.20	657.76
MW-22-09	12/13/2022	17 - 22	668.93	--	--	--	--	10.30	658.63
MW-22-10	12/13/2022	15 - 20	671.77	--	--	--	--	13.45	658.32
MW-22-11	12/13/2022	12.5 - 17.5	664.68	--	--	--	--	9.92	654.76
MW-22-12	12/13/2022	15 - 20	670.02	--	--	--	--	13.81	656.21
MW-22-13	12/14/2022	13 - 18	664.35	--	--	--	--	10.65	653.70
MW-22-14	12/14/2022	13 - 18	668.33	--	--	--	--	13.46	654.87
MW-22-15	12/14/2022	14 - 19	670.86	--	--	--	--	14.70	656.16
MW-22-16	12/14/2022	15 - 20	671.16	--	--	--	--	14.70	656.46
MW-22-17	12/15/2022	14 - 19	670.69	--	--	--	--	13.26	657.43
MW-22-18	12/15/2022	16 - 21	671.05	--	--	--	--	14.65	656.40
MW-22-19	12/15/2022	17 - 22	671.30	--	--	--	--	14.90	656.40
MW-22-20	12/15/2022	17 - 22	670.98	--	--	--	--	14.86	656.12
MW-22-21	12/16/2022	17 - 22	671.79	--	--	--	--	14.10	657.69
MW-22-22D	12/21/2022	140 - 150	670.89	--	--	--	--	29.55	641.34

Notes:

Survey conducted by BMJ Engineers & Surveyors on October 27 and December 21, 2022.

Elevation in feet relative to North American Vertical Datum 1988 (NAVD 88).

TOC: Top of well casing.

ft BGS: Feet below ground surface.

ft BTOC: Feet below top of well casing.

--: Not measured

(1) Southern Area monitoring well static water levels were collected to construct a groundwater flow map for the December 2022 monitoring event.

Table 2
Summary of Detected Metals in Groundwater
Former Hayes Lemmerz Site - Eastern Boundary
2000 West 8 Mile Road
Ferndale, MI

Analyte	Aluminum	Antimony	Arsenic	Barium	Beryllium	Boron	Cadmium	Calcium	Chromium[1]	Cobalt
Residential Drinking Water Criteria	50[4]	6.0	10	2,000	4.0	500	5.0	NC	100	40
Non-Residential Drinking Water Criteria	50[4]	6.0	10	2,000	4.0	500	5.0	NC	100	100
Generic GSI Criteria	NA	130[2]	10	670[3]	13[3]	7,200[2]	3.0[2,3]	5.0E+05	11	100
Residential Shallow VIAP Screening Level	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Non-Residential Not In Contact VIAP Screening Level	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L

Sample Location	Residential Status	Sample Interval	Date Sampled									
Investigation Area: Eastern Margin												
MW-104	Residential	15 - 20 ft	4/8/2020	--	--	< 5	< 100	--	--	< 1	--	< 10	--
			1/20/2022	< 100	< 4	< 10	**84.5**	< 2	**106**	< 1	**73,000**	< 10	**1.13**
			9/28/2022	**47**	< 5	< 2	**66**	< 1	**120**	**0.8**	**65,300**	< 5	< 5
			12/12/2022	**113**	< 5	< 2	**61**	< 1	**120**	< 0.5	**60,200**	< 5	< 5
MW-105	Residential	9 - 14 ft	4/8/2020	--	--	< 5	< 100	--	--	< 1	--	< 10	--
			9/28/2022	**14**	< 5	< 2	**69**	< 1	**560**	< 0.5	**175,000**	< 5	< 5
MW-106	Residential	7.5 - 12.5 ft	4/8/2020	--	--	< 5	**135**	--	**277**	< 1	--	< 10	--
			12/10/2021	< 100	< 4	< 10	**35.2**	< 2	**36**	< 19	**79,800**	< 10	< 10
			9/28/2022	< 10	< 5	< 2	**44**	< 1	**350**	< 18	**111,000**	< 5	< 5
			12/15/2022	**43**	< 1	< 2	**49**	< 1	**70**	< 17	**87,000**	< 5	< 5
DUP-02 (MW-106)	Residential	7.5 - 12.5 ft	9/28/2022	**178**	< 5	< 2	**40**	< 1	**70**	< 16	**90,600**	< 5	< 5
MW-107	Residential	7 - 12 ft	4/8/2020	--	--	< 5	< 100	--	--	< 15	--	< 10	--
			12/10/2021	< 100	**17.4**	< 10	**48.5**	< 2	**83**	< 14	**98,800**	< 10	< 10
			9/28/2022	**58**	**12**	< 2	**73**	< 1	**120**	< 13	**97,900**	< 5	< 5
			12/15/2022	**97**	**11**	< 2	**91**	< 1	**110**	< 12	**102,000**	< 5	< 5
MW-108	Residential	5 - 10 ft	4/8/2020	--	--	< 5	< 100	--	--	< 11	--	< 10	--
			12/10/2021	< 100	< 4	< 10	**44.5**	< 2	**153**	< 10	**124,000**	< 10	< 10
			9/28/2022	< 10	< 5	< 2	**46**	< 1	**140**	< 9	**100,000**	< 5	< 5
			12/14/2022	**147**	< 1	< 2	**44**	< 1	**80**	< 8	**102,000**	< 5	< 5
MW-109	Residential	5 - 10 ft	4/8/2020	--	--	< 5	< 100	--	--	< 7	--	< 10	--
			12/10/2021	< 100	< 4	< 10	**26.4**	< 2	**123**	< 6	**142,000**	< 10	**1.48**
			9/28/2022	**10**	< 5	**8**	**70**	< 1	**150**	< 5	**189,000**	< 5	< 5
			12/14/2022	< 10	< 1	**7**	**57**	< 1	**120**	< 4	**155,000**	< 5	< 5
MW-110	Residential	5 - 10 ft	4/9/2020	--	--	< 5	< 100	--	--	< 3	--	< 10	--
			12/10/2021	< 100	< 4	< 10	**11.4**	< 2	**99.9**	< 2	**82,900**	< 10	< 10
			9/27/2022	< 10	< 5	**2**	**13**	< 1	**70**	< 1	**72,000**	< 5	< 5
			12/14/2022	< 10	< 1	< 2	**11**	< 1	**80**	< 0	**68,800**	< 5	< 5
MW-111	Residential	4 - 9 ft	4/9/2020	--	--	< 5	< 100	--	--	< 1	--	< 10	--
			12/10/2021	< 100	< 4	< 10	**11.8**	< 2	**91.3**	< 1	**74,900**	< 10	< 10
			9/27/2022	< 10	< 5	< 2	**12**	< 1	**60**	< 0.5	**76,100**	< 5	< 5
			12/14/2022	< 10	< 1	< 2	**10**	< 1	**60**	< 0.5	**65,500**	< 5	< 5

Notes:

Residential (R)/Non-Residential (NR) Drinking Water Criteria (DWC) and Groundwater Surface Water Interface (GSI) Criteria from Michigan Part 201 Generic Cleanup Criteria, as promulgated December 30, 2013 (updated December 21, 2020).

Residential (R)/Non-Residential (NR) Volatilization to Indoor Air Pathway (VIAP) Screening Levels from Appendix D.1 of the Addendum to the EGLE Guidance Document for the Vapor Intrusion Pathway (September 2020).

The depth to first encountered groundwater is 10 feet below ground surface or less; therefore, the shallow groundwater residential VIAP screening levels apply.

The depth to first encountered groundwater is greater than 5 feet below ground surface; therefore, the groundwater not in contact nonresidential VIAP screening levels apply.

Non-Residential (NR) locations are only compared to the NR DWC, NR VIAP, and GSI criteria.

Only analytes with one or more detection are reported.

ug/L = microgram per liter

NA = Not Applicable; NC = No Criterion; ID = Insufficient Data to Develop Criterion; -- = Parameter Not Analyzed

Bold font denotes concentrations detected above laboratory reporting limits.

Denotes concentrations above one or more criteria.

1) In the absence of valence-specific criteria, total chromium results are conservatively screened against the criteria for chromium (VI), unless otherwise noted.

2) The GSI criterion is not protective for surface water that is used as a drinking water source (Footnote {X}, Michigan Part 201 Criteria Tables).

3) Criterion dependent on hardness (Footnote {G}, Michigan Part 201 Criteria Tables); Criterion shown is based on an estimated hardness of 150 mg $CaCO_3$ /L for the southern Lower Peninsula per the EGLE RRD *GSI Pathway Compliance Options,* April 2018.

4) Criterion is the aestheic drinking water value (Footnote {E}, Michigan Part 201 Criteria Tables).

5) The reporting limit was above one or more criterion, the method detection limit has been substituted

Table 2
Summary of Detected Metals in Groundwater
Former Hayes Lemmerz Site - Eastern Boundary
2000 West 8 Mile Road
Ferndale, MI

Analyte	Aluminum	Antimony	Arsenic	Barium	Beryllium	Boron	Cadmium	Calcium	Chromium[1]	Cobalt
Residential Drinking Water Criteria	50[4]	6.0	10	2,000	4.0	500	5.0	NC	100	40
Non-Residential Drinking Water Criteria	50[4]	6.0	10	2,000	4.0	500	5.0	NC	100	100
Generic GSI Criteria	NA	130[2]	10	670[3]	13[3]	7,200[2]	3.0[2,3]	5.0E+05	11	100
Residential Shallow VIAP Screening Level	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Non-Residential Not In Contact VIAP Screening Level	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L

Sample Location	Residential Status	Sample Interval	Date Sampled									
Investigation Area: Eastern Margin (continued)												
MW-112	Residential	4 - 9 ft	4/9/2020	--	--	< 5	< 100	--	--	< 1	--	< 10	--
			12/10/2021	**26.5**	< 4	< 10	**26.6**	< 2	**338**	< 1	**156,000**	< 10	**0.859**
			9/27/2022	**2,610**	< 5	< 2	**32**	< 1	**90**	< 0.5	**101,000**	< 5	< 5
			12/14/2022	**51**	< 1	< 2	**13**	< 1	**80**	< 0.5	**90,100**	< 5	< 5
DUP-02 (MW-112)	Residential	4 - 9 ft	12/14/2022	**59**	< 1	< 2	**14**	< 1	**80**	< 0.5	**88,900**	< 5	< 5
MW-113	Residential	8 - 13 ft	4/9/2020	--	--	< 5	< 100	--	--	< 1	--	< 10	--
			12/10/2021	< 100	< 4	< 10	**22.3**	< 2	**131**	< 1	**130,000**	< 10	< 10
			9/27/2022	**45**	< 5	< 2	**30**	< 1	**160**	< 0.5	**134,000**	< 5	< 5
			12/15/2022	**15**	< 1	< 2	**32**	< 1	**190**	< 0.5	**141,000**	< 5	< 5
MW-119	Residential	5 - 10 ft	4/23/2020	--	--	< 5	< 100	--	--	< 1	--	< 10	--
			12/10/2021	< 100	< 4	< 10	**19.1**	< 2	**99.4**	< 1	**59,800**	**2.84**	< 10
			9/27/2022	< 10	< 5	< 2	**35**	< 1	**160**	< 0.5	**143,000**	< 5	< 5
			12/14/2022	**18**	< 1	< 2	**33**	< 1	**170**	< 0.5	**148,000**	< 5	< 5
MW-120	Residential	3 - 8 ft	4/23/2020	--	--	< 5	< 100	--	--	< 1	--	< 10	--
			1/20/2022	**33.6**	< 4	< 10	**34.5**	**0.777**	**277**	< 1	**186,000**	< 10	**0.869**
			9/27/2022	**14**	< 5	< 2	**16**	< 1	**230**	**0.9**	**112,000**	< 5	< 5
			12/14/2022	**13**	< 1	< 2	**26**	< 1	**290**	**0.8**	**191,000**	< 5	< 5
DUP-01 (MW-120)	Residential	3 - 8 ft	9/27/2022	**15**	< 5	< 2	**16**	< 1	**240**	< 0.5	**114,000**	< 5	< 5
MW-121	Residential	8 - 13 ft	4/23/2020	--	--	< 5	< 100	--	--	< 1	--	< 10	--
			12/10/2021	**342**	< 4	< 10	**42.7**	< 2	**266**	< 1	**114,000**	**2.6**	< 10
			9/28/2022	**243**	< 5	< 2	**40**	< 1	**70**	< 0.5	**91,600**	< 5	< 5
			12/15/2022	< 10	< 1	< 2	**50**	< 1	**260**	< 0.5	**125,000**	< 5	< 5
MW-22-01	Residential	12.5 - 17.5 ft	10/18/2022	**49**	< 5	< 2	**91**	< 1	**50**	< 0.5	**38,000**	< 5	< 5
			12/12/2022	**15**	< 5	**2**	**84**	< 1	**50**	< 0.5	**114,000**	< 5	< 5
DUP-01 (MW-22-01)	Residential	12.5 - 17.5 ft	10/18/2022	**39**	< 5	< 2	**91**	< 1	**50**	< 0.5	**39,800**	< 5	< 5
MW-22-02	Residential	10 - 15 ft	10/18/2022	**25**	< 5	< 2	**142**	< 1	**100**	< 0.5	**91,000**	< 5	< 5
			12/12/2022	< 10	< 5	**2**	**139**	< 1	**80**	< 0.5	**89,700**	< 5	< 5
DUP-01W (MW-22-02)	Residential	10 - 15 ft	12/12/2022	< 10	< 5	**2**	**137**	< 1	**80**	< 0.5	**93,000**	< 5	< 5
MW-22-03	Residential	9 - 14 ft	10/19/2022	**27**	< 5	< 2	**101**	< 1	**150**	< 0.5	**80,300**	< 5	< 5
			12/12/2022	**13**	< 5	< 2	**133**	< 1	**180**	< 0.5	**104,000**	< 5	< 5
MW-22-04	Residential	7 - 12 ft	10/20/2022	**24**	< 5	< 2	**68**	< 1	**90**	< 0.5	**65,100**	< 5	< 5
			12/15/2022	< 10	< 1	**4**	**62**	< 1	**80**	< 0.5	**94,700**	< 5	< 5
MW-22-05	Residential	6 - 11 ft	10/20/2022	**10**	< 5	**7**	**211**	< 1	**590**	< 0.5	**103,000**	< 5	< 5
			12/15/2022	**23**	< 1	**7**	**127**	< 1	**300**	< 0.5	**80,200**	< 5	< 5
MW-22-06	Residential	7 - 12 ft	10/20/2022	**27**	< 5	**3**	**188**	< 1	**490**	< 0.5	**115,000**	< 5	< 5
			12/15/2022	< 10	< 1	**6**	**206**	< 1	**460**	< 0.5	**139,000**	< 5	< 5

Notes:

Residential (R)/Non-Residential (NR) Drinking Water Criteria (DWC) and Groundwater Surface Water Interface (GSI) Criteria from Michigan Part 201 Generic Cleanup Criteria, as promulgated December 30, 2013 (updated December 21, 2020).

Residential (R)/Non-Residential (NR) Volatilization to Indoor Air Pathway (VIAP) Screening Levels from Appendix D.1 of the Addendum to the EGLE Guidance Document for the Vapor Intrusion Pathway (September 2020).

The depth to first encountered groundwater is 10 feet below ground surface or less; therefore, the shallow groundwater residential VIAP screening levels apply.

The depth to first encountered groundwater is greater than 5 feet below ground surface; therefore, the groundwater not in contact nonresidential VIAP screening levels apply.

Non-Residential (NR) locations are only compared to the NR DWC, NR VIAP, and GSI criteria.

Only analytes with one or more detection are reported.

ug/L = microgram per liter

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Bold font denotes concentrations detected above laboratory reporting limits.

Denotes concentrations above one or more criteria.

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2) The GSI criterion is not protective for surface water that is used as a drinking water source (Footnote {X}, Michigan Part 201 Criteria Tables).

3) Criterion dependent on hardness (Footnote {G}, Michigan Part 201 Criteria Tables); Criterion shown is based on an estimated hardness of 150 mg $CaCO_3$ /L for the southern Lower Peninsula per the EGLE RRD *GSI Pathway Compliance Options,* April 2018.

4) Criterion is the aestheic drinking water value (Footnote {E}, Michigan Part 201 Criteria Tables).

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2000 West 8 Mile Road
Ferndale, MI

Analyte	Copper	Iron	Lead	Magnesium	Manganese	Molybdenum	Nickel	Potassium	Selenium
Residential Drinking Water Criteria	1,400	300[4]	4.0	4.0E+05	50[4]	73	100	NC	50
Non-Residential Drinking Water Criteria	4,000	300[4]	4.0	1.1E+06	50[4]	210	100	NC	50
Generic GSI Criteria	13	5.0E+05	34[2,3]	5.0E+05	2,800[2,3]	3,200[2]	73[3]	5.0E+05	5.0
Residential Shallow VIAP Screening Level	NA	NA	NA	NA	NA	NA	NA	NC	NA
Non-Residential Not In Contact VIAP Screening Level	NA	NA	NA	NA	NA	NA	NA	NC	NA
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L

Sample Location	Residential Status	Sample Interval	Date Sampled								
Investigation Area: Eastern Margin											
MW-104	Residential	15 - 20 ft	4/8/2020	--	--	< 3	--	--	--	--	--	< 5
			1/20/2022	--	**22.2**	< 2	**11,500**	**47.4**	**14**	< 10	**7,240**	**0.686**
			9/28/2022	--	**130**	< 3	**10,500**	**58**	**10**	< 5	**8,240**	< 5
			12/12/2022	**7**	**230**	< 3	**9,960**	**42**	**14**	< 5	**9,060**	< 5
MW-105	Residential	9 - 14 ft	4/8/2020	--	--	< 3	--	--	--	--	--	**5.4**
			9/28/2022	--	**20**	< 3	**24,000**	< 5	**5**	< 5	**10,800**	< 5
MW-106	Residential	7.5 - 12.5 ft	4/8/2020	--	--	< 3	--	--	--	--	--	< 5
			12/10/2021	--	< 100	< 2	**12,900**	**2.4**	< 5	< 10	**2,330**	**0.503**
			9/28/2022	--	**240**	< 3	**18,100**	**73**	**8**	< 5	**10,000**	< 5
			12/15/2022	--	**110**	< 3	**16,700**	**206**	< 5	< 5	**3,910**	< 5
DUP-02 (MW-106)	Residential	7.5 - 12.5 ft	9/28/2022	--	**150**	< 3	**15,000**	**73**	< 5	< 5	**3,450**	< 5
MW-107	Residential	7 - 12 ft	4/8/2020	--	--	< 3	--	--	--	--	--	< 5
			12/10/2021	--	**49.5**	**2.38**	**17,700**	< 10	< 5	< 10	**5,910**	**1.18**
			9/28/2022	--	**110**	< 3	**17,800**	**47**	< 5	< 5	**12,500**	< 5
			12/15/2022	--	**70**	< 3	**17,700**	**35**	< 5	< 5	**12,900**	< 5
MW-108	Residential	5 - 10 ft	4/8/2020	--	--	< 3	--	--	--	--	--	< 5
			12/10/2021	--	< 100	**2.06**	**24,300**	**236**	< 5	**1.66**	**5,220**	< 2
			9/28/2022	--	**110**	< 3	**18,800**	**244**	< 5	< 5	**5,250**	< 5
			12/14/2022	--	**390**	< 3	**19,300**	**348**	< 5	< 5	**5,390**	< 5
MW-109	Residential	5 - 10 ft	4/8/2020	--	--	< 3	--	--	--	--	--	< 5
			12/10/2021	--	< 100	< 2	**25,800**	**1,660**	< 5	< 10	**2,310**	< 2
			9/28/2022	--	**6,060**	< 3	**39,600**	**556**	< 5	< 5	**4,820**	< 5
			12/14/2022	--	**4,960**	< 3	**31,600**	**390**	< 5	< 5	**3,980**	< 5
MW-110	Residential	5 - 10 ft	4/9/2020	--	--	< 3	--	--	--	--	--	< 5
			12/10/2021	--	< 100	< 2	**12,700**	**455**	< 5	< 10	**1,600**	< 2
			9/27/2022	--	**1,290**	< 3	**11,400**	**748**	< 5	< 5	**1,850**	< 5
			12/14/2022	--	**870**	< 3	**10,900**	**626**	< 5	< 5	**1,600**	< 5
MW-111	Residential	4 - 9 ft	4/9/2020	--	--	< 3	--	--	--	--	--	< 5
			12/10/2021	--	< 100	< 2	**12,400**	**135**	**1.6**	< 10	**1,410**	< 2
			9/27/2022	--	**520**	< 3	**10,900**	**946**	< 5	< 5	**1,930**	< 5
			12/14/2022	--	**140**	< 3	**9,710**	**674**	< 5	< 5	**1,550**	< 5

Notes:

Residential (R)/Non-Residential (NR) Drinking Water Criteria (DWC) and Groundwater Surface Water Interface (GSI) Criteria from Michigan Part 201 Generic Cleanup Criteria, as promulgated December 30, 2013 (updated December 21, 2020).

Residential (R)/Non-Residential (NR) Volatilization to Indoor Air Pathway (VIAP) Screening Levels from Appendix D.1 of the Addendum to the EGLE Guidance Document for the Vapor Intrusion Pathway (September 2020).

The depth to first encountered groundwater is 10 feet below ground surface or less; therefore, the shallow groundwater residential VIAP screening levels apply.

The depth to first encountered groundwater is greater than 5 feet below ground surface; therefore, the groundwater not in contact nonresidential VIAP screening levels apply.

Non-Residential (NR) locations are only compared to the NR DWC, NR VIAP, and GSI criteria.

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ug/L = microgram per liter

NA = Not Applicable; NC = No Criterion; ID = Insufficient Data to Develop Criterion; -- = Parameter Not Analyzed

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Denotes concentrations above one or more criteria.

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2) The GSI criterion is not protective for surface water that is used as a drinking water source (Footnote {X}, Michigan Part 201 Criteria Tables).

3) Criterion dependent on hardness (Footnote {G}, Michigan Part 201 Criteria Tables); Criterion shown is based on an estimated hardness of 150 mg $CaCO_3$ /L for the southern Lower Peninsula per the EGLE RRD *GSI Pathway Compliance Options*, April 2018.

4) Criterion is the aesthetic drinking water value (Footnote {E}, Michigan Part 201 Criteria Tables).

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Analyte	Copper	Iron	Lead	Magnesium	Manganese	Molybdenum	Nickel	Potassium	Selenium
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Non-Residential Drinking Water Criteria	4,000	300[4]	4.0	1.1E+06	50[4]	210	100	NC	50
Generic GSI Criteria	13	5.0E+05	34[2,3]	5.0E+05	2,800[2,3]	3,200[2]	73[3]	5.0E+05	5.0
Residential Shallow VIAP Screening Level	NA	NA	NA	NA	NA	NA	NA	NC	NA
Non-Residential Not In Contact VIAP Screening Level	NA	NA	NA	NA	NA	NA	NA	NC	NA
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L

Sample Location	Residential Status	Sample Interval	Date Sampled								
Investigation Area: Eastern Margin (continued)											
MW-112	Residential	4 - 9 ft	4/9/2020	--	--	< 3	--	--	--	--	< 5
			12/10/2021	--	< 100	< 2	**42,400**	**112**	**7.82**	< 10	**664**	**0.419**
			9/27/2022	--	**2,880**	**7**	**28,100**	**487**	**10**	**6**	**1,520**	< 5
			12/14/2022	--	**230**	< 3	**25,100**	**398**	**13**	< 5	**1,330**	< 5
DUP-02 (MW-112)	Residential	4 - 9 ft	12/14/2022	--	**230**	< 3	**24,700**	**384**	**13**	< 5	**1,310**	< 5
MW-113	Residential	8 - 13 ft	4/9/2020	--	--	< 3	--	--	--	--	--	< 5
			12/10/2021	--	< 100	< 2	**22,500**	**14.9**	**3.65**	< 10	**3,140**	**3.88**
			9/27/2022	--	**680**	< 3	**25,400**	**20**	< 5	< 5	**3,900**	< 5
			12/15/2022	--	**140**	< 3	**29,500**	**19**	< 5	< 5	**4,360**	< 5
MW-119	Residential	5 - 10 ft	4/23/2020	--	--	< 3	--	--	--	--	--	< 5
			12/10/2021	--	< 100	< 2	**20,500**	< 10	**4.44**	**1.92**	**3,090**	**5.09**
			9/27/2022	--	< 20	< 3	**25,300**	< 5	< 5	< 5	**4,380**	< 5
			12/14/2022	--	**40**	< 3	**27,400**	< 5	< 5	< 5	**4,550**	**8**
MW-120	Residential	3 - 8 ft	4/23/2020	--	--	< 3	--	--	--	--	--	< 5
			1/20/2022	--	**58**	< 2	**39,100**	**6.16**	**10.9**	**1.61**	**1,010**	**5.42**
			9/27/2022	--	**20**	< 3	**60,300**	**13**	**7**	< 5	**1,690**	< 5
			12/14/2022	--	**30**	< 3	**92,200**	**21**	**11**	< 5	**2,270**	< 5
DUP-01 (MW-120)	Residential	3 - 8 ft	9/27/2022	--	**30**	< 3	**59,000**	**12**	**7**	< 5	**1,710**	< 5
MW-121	Residential	8 - 13 ft	4/23/2020	--	--	< 3	--	--	--	--	--	< 5
			12/10/2021	--	**19.9**	< 2	**19,500**	**0.964**	**7.45**	**3.17**	**8,500**	**0.351**
			9/28/2022	--	**220**	< 3	**15,300**	**78**	< 5	< 5	**3,500**	< 5
			12/15/2022	--	**170**	< 3	**21,200**	**68**	**9**	< 5	**11,800**	< 5
MW-22-01	Residential	12.5 - 17.5 ft	10/18/2022	--	**80**	< 3	**6,760**	**20**	**10**	< 5	**4,970**	< 5
			12/12/2022	< 5	< 20	< 3	**20,300**	**55**	**7**	< 5	**9,010**	**12**
DUP-01 (MW-22-01)	Residential	12.5 - 17.5 ft	10/18/2022	--	**70**	< 3	**7,000**	**21**	**10**	< 5	**5,200**	< 5
MW-22-02	Residential	10 - 15 ft	10/18/2022	--	**40**	< 3	**17,600**	**188**	< 5	< 5	**6,530**	< 5
			12/12/2022	< 5	**30**	< 3	**16,700**	**150**	< 5	< 5	**3,110**	< 5
DUP-01W (MW-22-02)	Residential	10 - 15 ft	12/12/2022	< 5	**30**	< 3	**16,800**	**150**	< 5	< 5	**3,190**	< 5
MW-22-03	Residential	9 - 14 ft	10/19/2022	--	**30**	< 3	**15,400**	**188**	**5**	< 5	**7,210**	< 5
			12/12/2022	< 5	**20**	< 3	**19,100**	**174**	< 5	< 5	**9,080**	< 5
MW-22-04	Residential	7 - 12 ft	10/20/2022	--	**30**	< 3	**10,500**	**153**	**7**	< 5	**4,040**	< 5
			12/15/2022	--	**150**	< 3	**16,300**	**304**	< 5	< 5	**2,290**	< 5
MW-22-05	Residential	6 - 11 ft	10/20/2022	--	**830**	< 3	**48,700**	**168**	**6**	< 5	**12,600**	< 5
			12/15/2022	--	**1,290**	< 3	**38,800**	**91**	< 5	< 5	**6,840**	< 5
MW-22-06	Residential	7 - 12 ft	10/20/2022	--	**70**	< 3	**35,900**	**272**	**6**	< 5	**10,500**	< 5
			12/15/2022	--	**850**	< 3	**43,400**	**157**	< 5	< 5	**7,530**	< 5

Notes:

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Analyte	Sodium	Strontium	Thallium	Titanium	Vanadium	Zinc
Residential Drinking Water Criteria	2.3E+05	4,600	2.0	NC	4.5	2,400
Non-Residential Drinking Water Criteria	3.5E+05	13,000	2.0	NC	62	5,000(4)
Generic GSI Criteria	5.0E+05	21,000	3.7(2)	NC	27	170(3)
Residential Shallow VIAP Screening Level	NC	NA	NA	NC	NA	NA
Non-Residential Not In Contact VIAP Screening Level	NC	NA	NA	NC	NA	NA
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L

Sample Location	Residential Status	Sample Interval	Date Sampled						
Investigation Area: Eastern Margin									
MW-104	Residential	15 - 20 ft	4/8/2020	--	--	--	--	--	--
			1/20/2022	**216,000**	**248**	< 2	< 20	**1.09**	< 50
			9/28/2022	**184,000**	**239**	< 2	< 5	< 5	< 5
			12/12/2022	**168,000**	**214**	< 2	< 5	< 5	< 5
MW-105	Residential	9 - 14 ft	4/8/2020	--	--	--	--	--	--
			9/28/2022	**21,600**	**489**	< 2	< 5	< 5	< 5
MW-106	Residential	7.5 - 12.5 ft	4/8/2020	--	--	--	--	--	--
			12/10/2021	**66,600**	**202**	< 2	< 20	**1.17**	< 50
			9/28/2022	**32,800**	**315**	< 2	< 5	< 5	< 5
			12/15/2022	**122,000**	**262**	< 2	< 5	< 2	< 5
DUP-02 (MW-106)	Residential	7.5 - 12.5 ft	9/28/2022	**85,300**	**256**	< 2	< 5	< 5	< 5
MW-107	Residential	7 - 12 ft	4/8/2020	--	--	--	--	--	--
			12/10/2021	**15,400**	**219**	< 2	< 20	**2.19**	**7.93**
			9/28/2022	**29,900**	**247**	< 2	< 5	< 5	< 5
			12/15/2022	**27,700**	**250**	< 2	< 5	< 2	< 5
MW-108	Residential	5 - 10 ft	4/8/2020	--	--	--	--	--	--
			12/10/2021	**32,400**	**247**	< 2	< 20	< 5	**9.26**
			9/28/2022	**37,900**	**216**	< 2	< 5	< 5	< 5
			12/14/2022	**61,000**	**198**	< 2	**9**	< 2	**5**
MW-109	Residential	5 - 10 ft	4/8/2020	--	--	--	--	--	--
			12/10/2021	**34,800**	**315**	< 2	< 20	< 5	**12.4**
			9/28/2022	**54,700**	**318**	< 2	< 5	< 5	< 5
			12/14/2022	**59,500**	**257**	< 2	< 5	< 2	< 5
MW-110	Residential	5 - 10 ft	4/9/2020	--	--	--	--	--	--
			12/10/2021	**18,800**	**254**	< 2	< 20	< 5	**13.9**
			9/27/2022	**21,700**	**273**	< 2	< 5	< 5	< 5
			12/14/2022	**14,800**	**240**	< 2	< 5	< 2	< 5
MW-111	Residential	4 - 9 ft	4/9/2020	--	--	--	--	--	--
			12/10/2021	**20,500**	**301**	< 2	< 20	< 5	**7.02**
			9/27/2022	**17,200**	**387**	< 2	< 5	< 5	< 5
			12/14/2022	**15,200**	**303**	< 2	< 5	< 2	< 5

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Generic GSI Criteria	5.0E+05	21,000	3.7[2]	NC	27	170[3]
Residential Shallow VIAP Screening Level	NC	NA	NA	NC	NA	NA
Non-Residential Not In Contact VIAP Screening Level	NC	NA	NA	NC	NA	NA
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L

Sample Location	Residential Status	Sample Interval	Date Sampled						
Investigation Area: Eastern Margin (continued)									
MW-112	Residential	4 - 9 ft	4/9/2020	--	--	--	--	--	--
			12/10/2021	**21,700**	**532**	< 2	< 20	**0.936**	**14.3**
			9/27/2022	**19,500**	**334**	< 2	**84**	**8**	**16**
			12/14/2022	**18,900**	**277**	< 2	< 5	< 2	< 5
DUP-02 (MW-112)	Residential	4 - 9 ft	12/14/2022	**18,300**	**271**	< 2	< 5	< 2	< 5
MW-113	Residential	8 - 13 ft	4/9/2020	--	--	--	--	--	--
			12/10/2021	**8,110**	**624**	< 2	< 20	**0.688**	**6.93**
			9/27/2022	**6,960**	**746**	< 2	< 5	< 5	< 5
			12/15/2022	**9,970**	**839**	< 2	< 5	< 2	< 5
MW-119	Residential	5 - 10 ft	4/23/2020	--	--	--	--	--	--
			12/10/2021	**3,840**	**867**	< 2	< 20	< 5	< 50
			9/27/2022	**4,820**	**1,550**	< 2	< 5	< 5	< 5
			12/14/2022	**6,190**	**1,380**	< 2	< 5	< 2	< 5
MW-120	Residential	3 - 8 ft	4/23/2020	--	--	--	--	--	--
			1/20/2022	**10,400**	**1,460**	**0.213**	< 20	**2.88**	< 50
			9/27/2022	**11,100**	**1,240**	< 2	< 5	< 5	< 5
			12/14/2022	**16,700**	**1,860**	< 2	< 5	< 2	< 5
DUP-01 (MW-120)	Residential	3 - 8 ft	9/27/2022	**11,500**	**1,190**	< 2	< 5	< 5	< 5
MW-121	Residential	8 - 13 ft	4/23/2020	--	--	--	--	--	--
			12/10/2021	**38,700**	**320**	< 2	< 20	< 5	**7.12**
			9/28/2022	**86,200**	**259**	< 2	< 5	< 5	< 5
			12/15/2022	**30,300**	**374**	< 2	< 5	< 2	< 5
MW-22-01	Residential	12.5 - 17.5 ft	10/18/2022	**168,000**	**143**	< 2	< 5	< 0.025[5]	< 5
			12/12/2022	**479,000**	**388**	< 2	< 5	< 5	< 5
DUP-01 (MW-22-01)	Residential	12.5 - 17.5 ft	10/18/2022	**173,000**	**145**	< 2	< 5	< 0.025[5]	**14**
MW-22-02	Residential	10 - 15 ft	10/18/2022	**131,000**	**436**	< 2	< 5	< 0.025[5]	< 5
			12/12/2022	**139,000**	**337**	< 2	< 5	< 5	< 5
DUP-01W (MW-22-02)	Residential	10 - 15 ft	12/12/2022	**144,000**	**343**	< 2	< 5	< 5	< 5
MW-22-03	Residential	9 - 14 ft	10/19/2022	**43,700**	**279**	< 2	< 5	< 0.025[5]	< 5
			12/12/2022	**42,500**	**261**	< 2	< 5	< 5	< 5
MW-22-04	Residential	7 - 12 ft	10/20/2022	**32,600**	**224**	< 2	< 5	< 0.025[5]	< 5
			12/15/2022	**44,500**	**287**	< 2	< 5	< 2	< 5
MW-22-05	Residential	6 - 11 ft	10/20/2022	**31,100**	**1,030**	< 2	< 5	< 0.025[6]	< 5
			12/15/2022	**18,900**	**791**	< 2	< 5	< 2	< 5
MW-22-06	Residential	7 - 12 ft	10/20/2022	**33,800**	**989**	< 2	< 5	< 0.025[6]	< 5
			12/15/2022	**28,700**	**1,200**	< 2	< 5	< 2	< 5

Notes:

Residential (R)/Non-Residential (NR) Drinking Water Criteria (DWC) and Groundwater Surface Water Interface (GSI) Criteria from Michigan Part 201 Generic Cleanup Criteria, as promulgated December 30, 2013 (updated December 21, 2020).

Residential (R)/Non-Residential (NR) Volatilization to Indoor Air Pathway (VIAP) Screening Levels from Appendix D.1 of the Addendum to the EGLE Guidance Document for the Vapor Intrusion Pathway (September 2020).

The depth to first encountered groundwater is 10 feet below ground surface or less; therefore, the shallow groundwater residential VIAP screening levels apply.

The depth to first encountered groundwater is greater than 5 feet below ground surface; therefore, the groundwater not in contact nonresidential VIAP screening levels apply.

Non-Residential (NR) locations are only compared to the NR DWC, NR VIAP, and GSI criteria.

Only analytes with one or more detection are reported.

ug/L = microgram per liter

NA = Not Applicable; NC = No Criterion; ID = Insufficient Data to Develop Criterion; -- = Parameter Not Analyzed

Bold font denotes concentrations detected above laboratory reporting limits.

Denotes concentrations above one or more criteria.

1) In the absence of valence-specific criteria, total chromium results are conservatively screened against the criteria for chromium (VI), unless otherwise noted.

2) The GSI criterion is not protective for surface water that is used as a drinking water source (Footnote {X}, Michigan Part 201 Criteria Tables).

3) Criterion dependent on hardness (Footnote {G}, Michigan Part 201 Criteria Tables); Criterion shown is based on an estimated hardness of 150 mg $CaCO_3$ /L for the southern Lower Peninsula per the EGLE RRD *GSI Pathway Compliance Options,* April 2018.

4) Criterion is the aestheic drinking water value (Footnote {E}, Michigan Part 201 Criteria Tables).

5) The reporting limit was above one or more criterion, the method detection limit has been substituted

Table 3
Summary of Detected Volatile Organic Compounds and Alcohols in Groundwater
Former Hayes Lemmerz Site - Eastern Boundary
2000 West 8 Mile Road
Ferndale, MI

Analyte	1,1,1-Trichloro-ethane	1,1,2,2-Tetra-chloroethane	1,1-Dichloro-ethane	1,2,4-Trimethyl-benzene	1,2-Dichloro-benzene	1,2-Dichloro-ethane	1,2-Dichloro-propane	1,3,5-Trimethyl-benzene
Residential Drinking Water Criteria	200	8.5	880	63(1)	600	5.0	5.0	72(1)
Non-Residential Drinking Water Criteria	200	35	2,500	63(1)	600	5.0	5.0	72(1)
Generic GSI Criteria	89	78(2)	740	17	13	360(2)	230(2)	45
Residential Shallow VIAP Screening Level	180	2.4	4.7	25	370	1.4	2.6	18
Non-Residential Not In Contact VIAP Screening Level	19,000	170	300	990	16,000	97	110	690
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L

Sample Location	Residential Status	Sample Interval	Date Sampled							
Investigation Area: Eastern Margin										
MW-104	Residential	15 - 20 ft	4/8/2020	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
			1/20/2022	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
			9/28/2022	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
			12/12/2022	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
MW-105	Residential	9 - 14 ft	4/8/2020	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
			9/28/2022	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
MW-106	Residential	7.5 - 12.5 ft	4/8/2020	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
			12/10/2021	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
			9/28/2022	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
			12/15/2022	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
DUP-02 (MW-106)	Residential	7.5 - 12.5 ft	9/28/2022	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
MW-107	Residential	7 - 12 ft	4/8/2020	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
			12/10/2021	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
			9/28/2022	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
			12/15/2022	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
MW-108	Residential	5 - 10 ft	4/8/2020	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
			12/10/2021	< 1	< 1	< 1	< 1	< 1	< 1	**0.632**	< 1
			9/28/2022	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
			12/14/2022	< 1	< 1	< 1	< 1	< 1	< 1	**1**	< 1
MW-109	Residential	5 - 10 ft	4/8/2020	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
			12/10/2021	< 1	< 1	< 1	< 1	**6.1**	< 1	< 1	< 1
			9/28/2022	< 1	< 1	< 1	< 1	**31**	< 1	< 1	< 1
			12/14/2022	< 1	< 1	< 1	< 1	**33**	< 1	< 1	< 1
MW-110	Residential	5 - 10 ft	4/9/2020	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
			12/10/2021	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
			9/27/2022	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
			12/14/2022	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
MW-111	Residential	4 - 9 ft	4/9/2020	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
			12/10/2021	< 1	**0.373**	< 1	< 1	< 1	< 1	< 1	< 1
			9/27/2022	< 1	**2**	< 1	< 1	< 1	< 1	< 1	< 1
			12/14/2022	< 1	**1**	< 1	< 1	< 1	< 1	< 1	< 1
MW-112	Residential	4 - 9 ft	4/9/2020	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
			12/10/2021	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
			9/27/2022	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
			12/14/2022	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
DUP-02 (MW-112)	Residential	4 - 9 ft	12/14/2022	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1

Notes:

Residential (R)/Non-Residential (NR) Drinking Water Criteria (DWC) and Groundwater Surface Water Interface (GSI) Criteria from Michigan Part 201 Generic Cleanup Criteria, as promulgated December 30, 2013 (updated December 21, 2020).

Residential (R)/Non-Residential (NR) Volatilization to Indoor Air Pathway (VIAP) Screening Levels from Appendix D.1 of the Addendum to the EGLE Guidance Document for the Vapor Intrusion Pathway (September 2020).

The depth to first encountered groundwater is 10 feet below ground surface or less; therefore, the shallow groundwater residential VIAP screening levels apply.

The depth to first encountered groundwater is greater than 5 feet below ground surface; therefore, the groundwater not in contact nonresidential VIAP screening levels apply.

Non-Residential (NR) locations are only compared to the NR DWC, NR VIAP, and GSI criteria

Only analytes with one or more detection are reported.

ug/L = microgram per liter

NA = Not Applicable; No Criterion; ID = Insufficient Data to Develop Criterion; -- = Parameter Not Analyzed

Bold font denotes concentrations detected above laboratory reporting limits.

Denotes concentrations above one or more criteria.

1) Criterion is the aestheic drinking water value (Footnote {E}, Michigan Part 201 Criteria Tables).

2) The GSI criterion is not protective for surface water that is used as a drinking water source (Footnote {X}, Michigan Part 201 Criteria Tables).

3) The VIAP criterion was below Target Detection Limits (TDL), the TDL has been substituted (Footnote {M}, VIAP Guidance Document)

Table 3
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Former Hayes Lemmerz Site - Eastern Boundary
2000 West 8 Mile Road
Ferndale, MI

Analyte	1,1,1-Trichloro-ethane	1,1,2,2-Tetra-chloroethane	1,1-Dichloro-ethane	1,2,4-Trimethyl-benzene	1,2-Dichloro-benzene	1,2-Dichloro-ethane	1,2-Dichloro-propane	1,3,5-Trimethyl-benzene
Residential Drinking Water Criteria	200	8.5	880	63(1)	600	5.0	5.0	72(1)
Non-Residential Drinking Water Criteria	200	35	2,500	63(1)	600	5.0	5.0	72(1)
Generic GSI Criteria	89	78(2)	740	17	13	360(2)	230(2)	45
Residential Shallow VIAP Screening Level	180	2.4	4.7	25	370	1.4	2.6	18
Non-Residential Not In Contact VIAP Screening Level	19,000	170	300	990	16,000	97	110	690
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L

Sample Location	Residential Status	Sample Interval	Date Sampled							
Investigation Area: Eastern Margin (continued)										
MW-113	Residential	8 - 13 ft	4/9/2020	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
			12/10/2021	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
			9/27/2022	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
			12/15/2022	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
MW-119	Residential	5 - 10 ft	4/23/2020	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
			12/10/2021	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
			9/27/2022	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
			12/14/2022	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
MW-120	Residential	3 - 8 ft	4/23/2020	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
			1/20/2022	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
			9/27/2022	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
			12/14/2022	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
DUP-01 (MW-120)	Residential	3 - 8 ft	9/27/2022	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
MW-121	Residential	8 - 13 ft	4/23/2020	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
			12/10/2021	**0.416**	< 1	< 1	< 1	< 1	< 1	< 1	< 1
			9/28/2022	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
			12/15/2022	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
MW-22-01	Residential	12.5 - 17.5 ft	10/18/2022	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
			12/12/2022	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
DUP-01 (MW-22-01)	Residential	12.5 - 17.5 ft	10/18/2022	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
MW-22-02	Residential	10 - 15 ft	10/18/2022	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
			12/12/2022	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
DUP-01W (MW-22-02)	Residential	10 - 15 ft	12/12/2022	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
MW-22-03	Residential	9 - 14 ft	10/19/2022	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
			12/12/2022	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
MW-22-04	Residential	7 - 12 ft	10/20/2022	< 1	< 1	< 1	< 1	< 1	**2**	< 1	< 1
			12/15/2022	< 1	< 1	< 1	< 1	< 1	**2**	< 1	< 1
MW-22-05	Residential	6 - 11 ft	10/20/2022	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
			12/15/2022	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
MW-22-06	Residential	7 - 12 ft	10/20/2022	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
			12/15/2022	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1

Notes:

Residential (R)/Non-Residential (NR) Drinking Water Criteria (DWC) and Groundwater Surface Water Interface (GSI) Criteria from Michigan Part 201 Generic Cleanup Criteria, as promulgated December 30, 2013 (updated December 21, 2020).

Residential (R)/Non-Residential (NR) Volatilization to Indoor Air Pathway (VIAP) Screening Levels from Appendix D.1 of the Addendum to the EGLE Guidance Document for the Vapor Intrusion Pathway (September 2020).

The depth to first encountered groundwater is 10 feet below ground surface or less; therefore, the shallow groundwater residential VIAP screening levels apply.

The depth to first encountered groundwater is greater than 5 feet below ground surface; therefore, the groundwater not in contact nonresidential VIAP screening levels apply.

Non-Residential (NR) locations are only compared to the NR DWC, NR VIAP, and GSI criteria

Only analytes with one or more detection are reported.

ug/L = microgram per liter

NA = Not Applicable; No Criterion; ID = Insufficient Data to Develop Criterion; -- = Parameter Not Analyzed

Bold font denotes concentrations detected above laboratory reporting limits.

Denotes concentrations above one or more criteria.

1) Criterion is the aestheic drinking water value (Footnote {E}, Michigan Part 201 Criteria Tables).

2) The GSI criterion is not protective for surface water that is used as a drinking water source (Footnote {X}, Michigan Part 201 Criteria Tables).

3) The VIAP criterion was below Target Detection Limits (TDL), the TDL has been substituted (Footnote {M}, VIAP Guidance Document)

Table 3
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Former Hayes Lemmerz Site - Eastern Boundary
2000 West 8 Mile Road
Ferndale, MI

Analyte	1,3-Dichloro-benzene	1,4-Dichloro-benzene	1,4-Dioxane	4-Isopropyl-toluene	Acetone	Benzene	Chlorobenzene	Chloroethane
Residential Drinking Water Criteria	6.6	75	7.2	NC	730	5.0	100	430
Non-Residential Drinking Water Criteria	19	75	350	NC	2,100	5.0	100	1,700
Generic GSI Criteria	28	17	280	NC	1,700	200(2)	25	1,100
Residential Shallow VIAP Screening Level	2.6	5.9	1,900	NC	50,000	1.0	33	620
Non-Residential Not In Contact VIAP Screening Level	110	400	1.3E+05	NC	4.0E+07	66	1,400	22,000
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L

Sample Location	Residential Status	Sample Interval	Date Sampled							
Investigation Area: Eastern Margin										
MW-104	Residential	15 - 20 ft	4/8/2020	< 1	< 1	--	< 0.28	< 50	< 1	< 1	< 5
			1/20/2022	< 1	< 1	< 3	--	< 50	< 1	< 1	< 5
			9/28/2022	< 1	< 1	--	< 5	< 50	< 1	< 1	< 5
			12/12/2022	< 1	--	< 1	< 5	< 50	< 1	< 1	< 5
MW-105	Residential	9 - 14 ft	4/8/2020	< 1	< 1	--	< 0.28	< 50	< 1	< 1	< 5
			9/28/2022	< 1	< 1	--	< 5	< 50	< 1	< 1	< 5
MW-106	Residential	7.5 - 12.5 ft	4/8/2020	< 1	< 1	--	< 0.28	< 50	< 1	**8.3**	< 5
			12/10/2021	< 1	< 1	< 3	--	< 50	< 1	**15.8**	< 5
			9/28/2022	< 1	< 1	--	< 5	< 50	< 1	< 1	< 5
			12/15/2022	< 1	< 1	--	< 5	< 50	< 1	**31**	< 5
DUP-02 (MW-106)	Residential	7.5 - 12.5 ft	9/28/2022	< 1	< 1	--	< 5	< 50	< 1	**23**	< 5
MW-107	Residential	7 - 12 ft	4/8/2020	< 1	< 1	--	< 0.28	< 50	< 1	< 1	< 5
			12/10/2021	< 1	< 1	< 3	--	< 50	< 1	**0.362**	< 5
			9/28/2022	< 1	< 1	--	< 5	< 50	< 1	< 1	< 5
			12/15/2022	< 1	< 1	--	< 5	< 50	< 1	< 1	< 5
MW-108	Residential	5 - 10 ft	4/8/2020	< 1	< 1	--	< 0.28	< 50	< 1	< 1	< 5
			12/10/2021	< 1	< 1	< 3	--	< 50	< 1	**0.119**	< 5
			9/28/2022	< 1	< 1	--	< 5	< 50	< 1	< 1	< 5
			12/14/2022	< 1	< 1	--	< 5	< 50	< 1	< 1	< 5
MW-109	Residential	5 - 10 ft	4/8/2020	< 1	< 1	--	< 0.11	< 50	< 1	< 1	< 5
			12/10/2021	< 1	**1.98**	< 3	--	< 50	< 1	< 1	< 5
			9/28/2022	< 1	**10**	--	< 5	< 50	< 1	< 1	< 5
			12/14/2022	< 1	**10**	--	< 5	< 50	< 1	< 1	< 5
MW-110	Residential	5 - 10 ft	4/9/2020	< 1	< 1	--	< 0.11	< 50	< 1	< 1	< 5
			12/10/2021	< 1	< 1	< 3	--	< 50	< 1	**0.84**	< 5
			9/27/2022	< 1	< 1	--	< 5	< 50	< 1	**4**	< 5
			12/14/2022	< 1	< 1	--	< 5	< 50	< 1	**4**	< 5
MW-111	Residential	4 - 9 ft	4/9/2020	< 1	< 1	--	< 0.11	< 50	< 1	< 1	< 5
			12/10/2021	< 1	< 1	< 3	--	< 50	< 1	**0.178**	< 5
			9/27/2022	< 1	< 1	--	< 5	< 50	< 1	**3**	< 5
			12/14/2022	< 1	< 1	--	< 5	< 50	< 1	**2**	< 5
MW-112	Residential	4 - 9 ft	4/9/2020	< 1	< 1	--	< 0.11	< 50	< 1	< 1	< 5
			12/10/2021	< 1	< 1	< 3	--	< 50	< 1	**0.146**	< 5
			9/27/2022	< 1	< 1	--	< 5	< 50	< 1	< 1	< 5
			12/14/2022	< 1	< 1	--	< 5	< 50	< 1	< 1	< 5
DUP-02 (MW-112)	Residential	4 - 9 ft	12/14/2022	< 1	< 1	--	< 5	< 50	< 1	< 1	< 5

Notes:

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Non-Residential Drinking Water Criteria	19	75	350	NC	2,100	5.0	100	1,700
Generic GSI Criteria	28	17	280	NC	1,700	200[(2)]	25	1,100
Residential Shallow VIAP Screening Level	2.6	5.9	1,900	NC	50,000	1.0	33	620
Non-Residential Not In Contact VIAP Screening Level	110	400	1.3E+05	NC	4.0E+07	66	1,400	22,000
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L

Sample Location	Residential Status	Sample Interval	Date Sampled							
Investigation Area: Eastern Margin (continued)										
MW-113	Residential	8 - 13 ft	4/9/2020	< 1	< 1	--	< 0.11	< 50	< 1	< 1	< 5
			12/10/2021	< 1	< 1	< 3	--	< 50	< 1	< 1	< 5
			9/27/2022	< 1	< 1	--	< 5	< 50	< 1	< 1	< 5
			12/15/2022	< 1	< 1	--	< 5	< 50	< 1	< 1	< 5
MW-119	Residential	5 - 10 ft	4/23/2020	< 1	< 1	--	< 0.28	< 50	< 1	< 1	< 5
			12/10/2021	< 1	< 1	< 3	--	< 50	< 1	< 1	< 5
			9/27/2022	< 1	< 1	--	< 5	< 50	< 1	< 1	< 5
			12/14/2022	< 1	< 1	--	< 5	< 50	< 1	< 1	< 5
MW-120	Residential	3 - 8 ft	4/23/2020	< 1	< 1	--	< 0.28	< 50	< 1	< 1	< 5
			1/20/2022	< 1	< 1	< 3	--	< 50	< 1	< 1	< 5
			9/27/2022	< 1	< 1	--	< 5	< 50	< 1	< 1	< 5
			12/14/2022	< 1	< 1	--	< 5	< 50	< 1	< 1	< 5
DUP-01 (MW-120)	Residential	3 - 8 ft	9/27/2022	< 1	< 1	--	< 5	< 50	< 1	< 1	< 5
MW-121	Residential	8 - 13 ft	4/23/2020	< 1	< 1	--	< 0.28	< 50	< 1	< 1	< 5
			12/10/2021	< 1	< 1	< 3	--	< 50	< 1	< 1	< 5
			9/28/2022	< 1	< 1	--	< 5	< 50	< 1	**21**	< 5
			12/15/2022	< 1	< 1	--	< 5	< 50	< 1	< 1	< 5
MW-22-01	Residential	12.5 - 17.5 ft	10/18/2022	< 1	< 1	--	< 5	< 50	< 1	< 1	< 5
			12/12/2022	< 1	--	< 1	< 5	< 50	< 1	< 1	< 5
DUP-01 (MW-22-01)	Residential	12.5 - 17.5 ft	10/18/2022	< 1	< 1	--	< 5	< 50	< 1	< 1	< 5
MW-22-02	Residential	10 - 15 ft	10/18/2022	< 1	< 1	--	< 5	< 50	< 1	**45**	< 5
			12/12/2022	< 1	--	< 1	< 5	< 50	< 1	**58**	< 5
DUP-01W (MW-22-02)	Residential	10 - 15 ft	12/12/2022	< 1	--	< 1	< 5	< 50	< 1	**60**	< 5
MW-22-03	Residential	9 - 14 ft	10/19/2022	< 1	< 1	--	< 5	< 50	< 1	< 1	< 5
			12/12/2022	< 1	--	< 1	< 5	< 50	< 1	< 1	< 5
MW-22-04	Residential	7 - 12 ft	10/20/2022	< 1	< 1	--	< 5	< 50	**1**	**3**	< 5
			12/15/2022	< 1	< 1	--	< 5	< 50	< 1	**3**	< 5
MW-22-05	Residential	6 - 11 ft	10/20/2022	< 1	< 1	--	< 5	< 50	**1**	**54**	< 5
			12/15/2022	< 1	< 1	--	< 5	< 50	< 1	**21**	< 5
MW-22-06	Residential	7 - 12 ft	10/20/2022	< 1	< 1	--	< 5	< 50	< 1	< 1	< 5
			12/15/2022	< 1	< 1	--	< 5	< 50	< 1	< 1	< 5

Notes:

Residential (R)/Non-Residential (NR) Drinking Water Criteria (DWC) and Groundwater Surface Water Interface (GSI) Criteria from Michigan Part 201 Generic Cleanup Criteria, as promulgated December 30, 2013 (updated December 21, 2020).

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Analyte	Chloroform	Chloromethane	cis-1,2-Dichloro-ethene	Ethylbenzene	Methanol	Naphthalene	Tetrachloroethene	Toluene
Residential Drinking Water Criteria	80	260	70	74(1)	3,700	520	5.0	790(1)
Non-Residential Drinking Water Criteria	80	1,100	70	74(1)	10,000	1,500	5.0	790(1)
Generic GSI Criteria	350	ID	620	18	5.9E+05	11	60(2)	270
Residential Shallow VIAP Screening Level	1.0(3)	15	3.4	2.8	1.2E+05	5.0(3)	1.5	300
Non-Residential Not In Contact VIAP Screening Level	32	560	140	170	2.3E+08	300	130	59,000
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L

Sample Location	Residential Status	Sample Interval	Date Sampled							
Investigation Area: Eastern Margin										
MW-104	Residential	15 - 20 ft	4/8/2020	< 1	< 5	< 1	< 1	< 400	< 5	< 1	< 1
			1/20/2022	< 5	--	< 1	< 1	--	< 5	< 1	< 1
			9/28/2022	< 1	< 5	< 1	< 1	< 5,000	< 5	< 1	< 1
			12/12/2022	< 1	< 5	< 1	< 1	--	< 5	< 1	< 1
MW-105	Residential	9 - 14 ft	4/8/2020	< 1	< 5	< 1	< 1	< 400	< 5	< 1	< 1
			9/28/2022	< 1	< 5	< 1	< 1	--	< 5	< 1	< 1
MW-106	Residential	7.5 - 12.5 ft	4/8/2020	< 1	< 5	< 1	< 1	< 400	< 5	< 1	< 1
			12/10/2021	< 5	--	< 1	< 1	--	< 5	< 1	< 1
			9/28/2022	< 1	< 5	< 1	< 1	< 5,000	< 5	< 1	< 1
			12/15/2022	< 1	< 5	< 1	< 1	< 3,700	< 5	< 1	< 1
DUP-02 (MW-106)	Residential	7.5 - 12.5 ft	9/28/2022	< 1	< 5	< 1	< 1	< 5,000	< 5	< 1	< 1
MW-107	Residential	7 - 12 ft	4/8/2020	< 1	< 5	< 1	< 1	< 400	< 5	< 1	< 1
			12/10/2021	**0.479**	--	**0.185**	< 1	--	< 5	< 1	< 1
			9/28/2022	< 1	< 5	< 1	< 1	--	< 5	< 1	< 1
			12/15/2022	< 1	< 5	< 1	< 1	< 3,700	< 5	< 1	< 1
MW-108	Residential	5 - 10 ft	4/8/2020	< 1	< 5	< 1	< 1	< 400	< 5	< 1	< 1
			12/10/2021	**1.33**	--	< 1	< 1	--	< 5	< 1	< 1
			9/28/2022	< 1	< 5	< 1	< 1	< 5,000	< 5	< 1	< 1
			12/14/2022	< 1	< 5	< 1	< 1	< 3,700	< 5	< 1	< 1
MW-109	Residential	5 - 10 ft	4/8/2020	< 1	< 5	< 1	< 1	< 400	< 5	< 1	< 1
			12/10/2021	< 5	--	< 1	< 1	--	< 5	< 1	< 1
			9/28/2022	< 1	< 5	< 1	< 1	< 5,000	< 5	< 1	< 1
			12/14/2022	< 1	< 5	< 1	< 1	< 370	< 5	< 1	< 1
MW-110	Residential	5 - 10 ft	4/9/2020	< 1	< 5	< 1	< 1	< 400	< 5	< 1	< 1
			12/10/2021	< 5	--	**0.186**	< 1	--	< 5	< 1	< 1
			9/27/2022	< 1	< 5	< 1	< 1	< 5,000	< 5	< 1	< 1
			12/14/2022	< 1	< 5	< 1	< 1	< 3,700	< 5	< 1	< 1
MW-111	Residential	4 - 9 ft	4/9/2020	< 1	< 5	< 1	< 1	< 400	< 5	< 1	< 1
			12/10/2021	< 5	--	**0.892**	< 1	--	< 5	**0.398**	< 1
			9/27/2022	< 1	< 5	**2**	< 1	< 5,000	< 5	**4**	< 1
			12/14/2022	< 1	< 5	**2**	< 1	< 3,700	< 5	**3**	< 1
MW-112	Residential	4 - 9 ft	4/9/2020	< 1	< 5	< 1	< 1	< 400	< 5	< 1	< 1
			12/10/2021	< 5	--	**0.273**	< 1	--	< 5	< 1	< 1
			9/27/2022	< 1	< 5	**1**	< 1	< 5,000	< 5	< 1	< 1
			12/14/2022	< 1	< 5	< 1	< 1	< 3,700	< 5	< 1	< 1
DUP-02 (MW-112)	Residential	4 - 9 ft	12/14/2022	< 1	< 5	< 1	< 1	< 3,700	< 5	< 1	< 1

Notes:

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Non-Residential Not In Contact VIAP Screening Level	32	560	140	170	2.3E+08	300	130	59,000
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L

Sample Location	Residential Status	Sample Interval	Date Sampled							
Investigation Area: Eastern Margin (continued)										
MW-113	Residential	8 - 13 ft	4/9/2020	< 1	< 5	< 1	< 1	< 400	< 5	< 1	< 1
			12/10/2021	< 5	--	< 1	< 1	--	< 5	< 1	< 1
			9/27/2022	< 1	< 5	< 1	< 1	< 5,000	< 5	< 1	< 1
			12/15/2022	< 1	< 5	< 1	< 1	< 3,700	< 5	< 1	< 1
MW-119	Residential	5 - 10 ft	4/23/2020	< 1	< 5	< 1	< 1	**1,470**	< 5	< 1	< 1
			12/10/2021	< 5	--	< 1	< 1	--	< 5	< 1	< 1
			9/27/2022	< 1	< 5	< 1	< 1	< 5,000	< 5	< 1	< 1
			12/14/2022	< 1	< 5	< 1	< 1	< 3,700	< 5	< 1	< 1
MW-120	Residential	3 - 8 ft	4/23/2020	< 1	< 5	< 1	< 1	**1,350**	< 5	< 1	< 1
			1/20/2022	< 5	--	< 1	< 1	--	< 5	< 1	< 1
			9/27/2022	< 1	< 5	< 1	< 1	< 500	< 5	< 1	< 1
			12/14/2022	< 1	< 5	< 1	< 1	< 3,700	< 5	< 1	< 1
DUP-01 (MW-120)	Residential	3 - 8 ft	9/27/2022	< 1	< 5	< 1	< 1	--	< 5	< 1	< 1
MW-121	Residential	8 - 13 ft	4/23/2020	< 1	< 5	< 1	< 1	**1,540**	< 5	< 1	< 1
			12/10/2021	**0.177**	--	< 1	< 1	--	< 5	< 1	< 1
			9/28/2022	< 1	< 5	< 1	< 1	< 5,000	< 5	< 1	< 1
			12/15/2022	< 1	< 5	< 1	< 1	< 3,700	< 5	< 1	< 1
MW-22-01	Residential	12.5 - 17.5 ft	10/18/2022	< 1	< 5	< 1	< 1	< 5,000	< 5	< 1	< 1
			12/12/2022	< 1	< 5	< 1	< 1	< 5,000	< 5	< 1	< 1
DUP-01 (MW-22-01)	Residential	12.5 - 17.5 ft	10/18/2022	< 1	< 5	< 1	< 1	< 5,000	< 5	< 1	< 1
MW-22-02	Residential	10 - 15 ft	10/18/2022	< 1	< 5	**2**	< 1	< 5,000	< 5	< 1	< 1
			12/12/2022	< 1	< 5	**1**	< 1	< 5,000	< 5	< 1	< 1
DUP-01W (MW-22-02)	Residential	10 - 15 ft	12/12/2022	< 1	< 5	**1**	< 1	< 5,000	< 5	< 1	< 1
MW-22-03	Residential	9 - 14 ft	10/19/2022	< 1	< 5	**2**	< 1	< 5,000	< 5	< 1	< 1
			12/12/2022	< 1	< 5	**1**	< 1	< 5,000	< 5	< 1	< 1
MW-22-04	Residential	7 - 12 ft	10/20/2022	< 1	< 5	**2**	< 1	< 5,000	< 5	< 1	< 1
			12/15/2022	< 1	< 5	**2**	< 1	< 3,700	< 5	< 1	< 1
MW-22-05	Residential	6 - 11 ft	10/20/2022	< 1	< 5	< 1	< 1	< 5,000	< 5	< 1	< 1
			12/15/2022	< 1	< 5	< 1	< 1	< 3,700	< 5	< 1	< 1
MW-22-06	Residential	7 - 12 ft	10/20/2022	< 1	< 5	< 1	< 1	< 5,000	< 5	< 1	< 1
			12/15/2022	< 1	< 5	< 1	< 1	< 3,700	< 5	< 1	< 1

Notes:

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Analyte	trans-1,2-Dichloro-ethene	Trichloroethene	Trichlorofluoro-methane (Freon 11)	Vinyl chloride	Xylenes, total
Residential Drinking Water Criteria	100	5.0	2,600	2.0	10,000
Non-Residential Drinking Water Criteria	100	5.0	7,300	2.0	10,000
Generic GSI Criteria	1,500	200	NA	13(2)	49
Residential Shallow VIAP Screening Level	16	1.0(3)	22	1.0(3)	75
Non-Residential Not In Contact VIAP Screening Level	580	10	560	18	3,000
Units	ug/L	ug/L	ug/L	ug/L	ug/L

Sample Location	Residential Status	Sample Interval	Date Sampled					
Investigation Area: Eastern Margin								
MW-104	Residential	15 - 20 ft	4/8/2020	< 1	< 1	**2.3**	< 1	< 0.55
			1/20/2022	< 1	< 1	--	< 1	< 3
			9/28/2022	< 1	< 1	< 1	< 1	< 3
			12/12/2022	< 1	< 1	< 1	< 1	< 3
MW-105	Residential	9 - 14 ft	4/8/2020	< 1	< 1	< 1	< 1	< 0.55
			9/28/2022	< 1	< 1	< 1	< 1	< 3
MW-106	Residential	7.5 - 12.5 ft	4/8/2020	< 1	< 1	< 1	< 1	< 0.55
			12/10/2021	< 1	**0.256**	--	< 1	< 3
			9/28/2022	< 1	**2**	< 1	< 1	< 3
			12/15/2022	< 1	< 1	< 1	< 1	< 3
DUP-02 (MW-106)	Residential	7.5 - 12.5 ft	9/28/2022	< 1	< 1	< 1	< 1	< 3
MW-107	Residential	7 - 12 ft	4/8/2020	< 1	**18.5**	**4.5**	< 1	< 0.55
			12/10/2021	< 1	**10.7**	--	< 1	< 3
			9/28/2022	< 1	**14**	**4**	< 1	--
			12/15/2022	< 1	**14**	**4**	< 1	< 3
MW-108	Residential	5 - 10 ft	4/8/2020	< 1	< 1	**1.5**	< 1	< 0.55
			12/10/2021	< 1	**0.558**	--	< 1	< 3
			9/28/2022	< 1	< 1	< 1	< 1	< 3
			12/14/2022	< 1	< 1	< 1	< 1	< 3
MW-109	Residential	5 - 10 ft	4/8/2020	< 1	< 1	< 1	< 1	< 0.4
			12/10/2021	< 1	**0.454**	--	< 1	< 3
			9/28/2022	< 1	< 1	< 1	< 1	< 3
			12/14/2022	< 1	< 1	< 1	< 1	< 3
MW-110	Residential	5 - 10 ft	4/9/2020	< 1	< 1	< 1	< 1	< 0.4
			12/10/2021	< 1	< 1	--	**1.59**	< 3
			9/27/2022	< 1	< 1	< 1	**2**	< 3
			12/14/2022	< 1	< 1	< 1	**3**	< 3
MW-111	Residential	4 - 9 ft	4/9/2020	< 1	**2.7**	< 1	< 1	< 0.4
			12/10/2021	< 1	**1.52**	--	< 1	< 3
			9/27/2022	< 1	**4**	< 1	< 1	< 3
			12/14/2022	< 1	**3**	< 1	< 1	< 3
MW-112	Residential	4 - 9 ft	4/9/2020	< 1	< 1	< 1	< 1	< 0.4
			12/10/2021	< 1	< 1	--	< 1	< 3
			9/27/2022	< 1	< 1	< 1	< 1	< 3
			12/14/2022	< 1	< 1	< 1	< 1	< 3
DUP-02 (MW-112)	Residential	4 - 9 ft	12/14/2022	< 1	< 1	< 1	< 1	< 3

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Generic GSI Criteria	1,500	200	NA	13(2)	49
Residential Shallow VIAP Screening Level	16	1.0(3)	22	1.0(3)	75
Non-Residential Not In Contact VIAP Screening Level	580	10	560	18	3,000
Units	ug/L	ug/L	ug/L	ug/L	ug/L

Sample Location	Residential Status	Sample Interval	Date Sampled					
Investigation Area: Eastern Margin (continued)								
MW-113	Residential	8 - 13 ft	4/9/2020	< 1	< 1	< 1	< 1	< 0.4
			12/10/2021	< 1	< 1	--	< 1	< 3
			9/27/2022	< 1	< 1	< 1	< 1	< 3
			12/15/2022	< 1	< 1	< 1	< 1	< 3
MW-119	Residential	5 - 10 ft	4/23/2020	< 1	< 1	< 1	< 1	< 0.55
			12/10/2021	< 1	**0.259**	--	< 1	< 3
			9/27/2022	< 1	< 1	< 1	< 1	< 3
			12/14/2022	< 1	< 1	< 1	< 1	< 3
MW-120	Residential	3 - 8 ft	4/23/2020	< 1	< 1	< 1	< 1	< 0.55
			1/20/2022	< 1	< 1	--	< 1	< 3
			9/27/2022	< 1	< 1	< 1	< 1	< 3
			12/14/2022	< 1	< 1	< 1	< 1	< 3
DUP-01 (MW-120)	Residential	3 - 8 ft	9/27/2022	< 1	< 1	< 1	< 1	--
MW-121	Residential	8 - 13 ft	4/23/2020	< 1	< 1	< 1	< 1	< 0.55
			12/10/2021	< 1	**0.97**	--	< 1	< 3
			9/28/2022	< 1	< 1	< 1	< 1	< 3
			12/15/2022	< 1	**2**	< 1	< 1	< 3
MW-22-01	Residential	12.5 - 17.5 ft	10/18/2022	< 1	< 1	< 1	< 1	< 3
			12/12/2022	< 1	< 1	< 1	< 1	< 3
DUP-01 (MW-22-01)	Residential	12.5 - 17.5 ft	10/18/2022	< 1	< 1	< 1	< 1	< 3
MW-22-02	Residential	10 - 15 ft	10/18/2022	< 1	**3**	< 1	< 1	< 3
			12/12/2022	< 1	**3**	< 1	< 1	< 3
DUP-01W (MW-22-02)	Residential	10 - 15 ft	12/12/2022	< 1	**3**	< 1	< 1	< 3
MW-22-03	Residential	9 - 14 ft	10/19/2022	< 1	**4**	< 1	< 1	< 3
			12/12/2022	< 1	**3**	**2**	< 1	< 3
MW-22-04	Residential	7 - 12 ft	10/20/2022	< 1	**2**	< 1	< 1	< 3
			12/15/2022	< 1	**2**	< 1	< 1	< 3
MW-22-05	Residential	6 - 11 ft	10/20/2022	< 1	< 1	< 1	< 1	< 3
			12/15/2022	< 1	< 1	< 1	< 1	< 3
MW-22-06	Residential	7 - 12 ft	10/20/2022	< 1	< 1	< 1	**1**	< 3
			12/15/2022	< 1	< 1	< 1	< 1	< 3

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Non-Residential (NR) locations are only compared to the NR DWC, NR VIAP, and GSI criteria

Only analytes with one or more detection are reported.

ug/L = microgram per liter

NA = Not Applicable; No Criterion; ID = Insufficient Data to Develop Criterion; -- = Parameter Not Analyzed

Bold font denotes concentrations detected above laboratory reporting limits.

Denotes concentrations above one or more criteria.

1) Criterion is the aestheic drinking water value (Footnote {E}, Michigan Part 201 Criteria Tables).

2) The GSI criterion is not protective for surface water that is used as a drinking water source (Footnote {X}, Michigan Part 201 Criteria Tables).

3) The VIAP criterion was below Target Detection Limits (TDL), the TDL has been substituted (Footnote {M}, VIAP Guidance Document)

Table 4
Summary of Detected Per- and Polyfluoroalkyl Substances in Groundwater
Former Hayes Lemmerz Site - Eastern Boundary
2000 West 8 Mile Road
Ferndale, MI

Analyte	6:2 Fluorotelomer sulfonic acid (6:2 FTS)	Perfluorobutane sulfonic acid (PFBS)	Perfluorobutanoic acid (PFBA)	Perfluorodecane sulfonic acid (PFDS)	Perfluorodecanoic acid (PFDA)	Perfluoroheptane sulfonic acid (PFHpS)	Perfluoroheptanoic acid (PFHpA)	Perfluorohexane sulfonic acid (PFHxS)	PFHxS-BR
Residential Drinking Water Criteria	NC	420	NC	NC	NC	NC	NC	51	NC
Non-Residential Drinking Water Criteria	NC	420	NC	NC	NC	NC	NC	51	NC
Generic GSI Criteria	NC	NA	NC	NC	NC	NC	NC	NA	NC
Residential Shallow VIAP Screening Level	NC	NC	NC	NC	NC	NC	NC	NC	NC
Non-Residential Not In Contact VIAP Screening Level	NC	NC	NC	NC	NC	NC	NC	NC	NC
Units	ng/L	ng/L	ng/L	ng/L	ng/L	ng/L	ng/L	ng/L	ng/L
Sample Location / **Residential Status** / **Sample Interval** / **Date Sampled**									
Investigation Area: Eastern Margin									
MW-104 / Residential / 15 - 20 ft / 4/14/2020	< 0.91	**4.8**	**8**	< 0.32	< 0.66	< 0.45	**3.4**	**10**	--
1/20/2022	< 6.8	**6.8**	**12**	< 3.4	< 3.4	< 3.4	**5.1**	**12**	--
9/28/2022	< 2	**5.4**	**12**	< 2	< 2	< 2	**2.5**	**10**	**2.6**
12/12/2022	< 2	**6.2**	**10**	< 2	< 2	< 2	**2.3**	**11**	**3.4**
MW-105 / Residential / 9 - 14 ft / 4/14/2020	< 0.95	**3.2**	< 0.31	< 0.33	< 0.69	< 0.47	< 0.45	**5.6**	--
9/28/2022	< 2.1	**4.5**	< 10	< 2.1	< 2.1	< 2.1	**6.7**	**10**	**2.5**
MW-106 / Residential / 7.5 - 12.5 ft / 4/15/2020	< 0.94	**5.8**	**11**	< 0.33	< 0.68	< 0.46	**5.4**	**9.5**	--
12/10/2021	**3.5**	**5.3**	**7.8**	< 3.4	**0.54**	< 3.4	**3.4**	**8.4**	--
9/28/2022	< 2	**3.3**	< 10	< 2	< 2	< 2	**13**	**8**	< 2
12/15/2022	< 1.9	**3.6**	< 9.7	< 1.9	< 1.9	< 1.9	**3.6**	**19**	**2.7**
DUP-01 (MW-106) / Residential / 7.5 - 12.5 ft / 4/15/2020	--	**5.7**	**12**	--	--	--	**5.4**	**9.7**	--
DUP-02 (MW-106) / 9/28/2022	< 2	**3.6**	< 9.8	< 2	< 2	< 2	**3.5**	**25**	**3.4**
MW-107 / Residential / 7 - 12 ft / 4/15/2020	< 0.94	**3.9**	**8.9**	< 0.33	< 0.67	< 0.46	**5.1**	**2.5**	--
12/10/2021	< 6.9	**3.5**	**6.4**	< 3.5	< 3.5	< 3.5	**5.7**	**2.7**	--
9/28/2022	< 2	**3.5**	< 9.8	< 2	< 2	< 2	**3.2**	**4.5**	< 2
12/15/2022	< 1.9	**3**	< 9.5	< 1.9	< 1.9	< 1.9	**3.3**	**6**	< 1.9
MW-108 / Residential / 5 - 10 ft / 4/15/2020	< 0.95	**3.5**	**7.9**	< 0.33	< 0.69	< 0.47	< 0.45	< 0.38	--
12/10/2021	< 7	**5.5**	**15**	< 3.5	< 3.5	< 3.5	**2.2**	**2.4**	--
9/28/2022	< 2	**5.5**	**15**	< 2	< 2	< 2	**2.7**	**2.8**	< 2
12/14/2022	< 1.8	**5.2**	**9.8**	< 1.8	< 1.8	< 1.8	< 1.8	**3.4**	< 1.8
MW-109 / Residential / 5 - 10 ft / 4/15/2020	**120**	**4.3**	**10**	< 0.34	< 0.69	< 0.47	**26**	< 0.39	--
12/10/2021	< 6.9	**5.7**	**12**	< 3.5	< 3.5	< 3.5	**12**	**1.9**	--
9/28/2022	< 2	**8.7**	**22**	< 2	< 2	< 2	**4**	**3.2**	< 2
12/14/2022	< 1.9	**8.2**	**13**	< 1.9	< 1.9	< 1.9	**5.6**	**2.9**	< 1.9
MW-110 / Residential / 5 - 10 ft / 4/15/2020	**3.1**	**4.3**	**5.5**	< 0.33	< 0.68	< 0.46	**5.8**	< 0.38	--
12/10/2021	< 7	**5.6**	**8.2**	< 3.5	< 3.5	< 3.5	**5.8**	**1.5**	--
9/27/2022	< 1.9	**4.2**	< 9.5	< 1.9	< 1.9	< 1.9	**3.1**	**2.2**	< 1.9
12/14/2022	< 1.9	**3.5**	< 9.6	< 1.9	< 1.9	< 1.9	**2.9**	< 1.9	< 1.9

Notes:

Residential (R)/Non-Residential (NR) Drinking Water Criteria (DWC) and Groundwater Surface Water Interface (GSI) Criteria from Michigan Part 201 Generic Cleanup Criteria, as promulgated December 30, 2013 (updated December 21, 2020).

Residential (R)/Non-Residential (NR) Volatilization to Indoor Air Pathway (VIAP) Screening Levels from Appendix D.1 of the Addendum to the EGLE Guidance Document for the Vapor Intrusion Pathway (September 2020).

The depth to first encountered groundwater is 10 feet below ground surface or less; therefore, the shallow groundwater residential VIAP screening levels apply.

The depth to first encountered groundwater is greater than 5 feet below ground surface; therefore, the groundwater not in contact nonresidential VIAP screening levels apply.

Non-Residential (NR) locations are only compared to the NR DWC, NR VIAP, and GSI criteria

Only analytes with one or more detection are reported.

ng/L = nanogram per liter

NC = No Criterion; -- = Parameter Not Analyzed

Bold font denotes concentrations detected above laboratory reporting limits.

Denotes concentrations above one or more criteria.

1) The GSI criterion is not protective for surface water that is used as a drinking water source (Footnote {X}, Michigan Part 201 Criteria Tables).

Table 4
Summary of Detected Per- and Polyfluoroalkyl Substances in Groundwater
Former Hayes Lemmerz Site - Eastern Boundary
2000 West 8 Mile Road
Ferndale, MI

Analyte	6:2 Fluorotelomer sulfonic acid (6:2 FTS)	Perfluorobutane sulfonic acid (PFBS)	Perfluorobutanoic acid (PFBA)	Perfluorodecane sulfonic acid (PFDS)	Perfluorodecanoic acid (PFDA)	Perfluoroheptane sulfonic acid (PFHpS)	Perfluoroheptanoic acid (PFHpA)	Perfluorohexane sulfonic acid (PFHxS)	PFHxS-BR
Residential Drinking Water Criteria	NC	420	NC	NC	NC	NC	NC	51	NC
Non-Residential Drinking Water Criteria	NC	420	NC	NC	NC	NC	NC	51	NC
Generic GSI Criteria	NC	NA	NC	NC	NC	NC	NC	NA	NC
Residential Shallow VIAP Screening Level	NC	NC	NC	NC	NC	NC	NC	NC	NC
Non-Residential Not In Contact VIAP Screening Level	NC	NC	NC	NC	NC	NC	NC	NC	NC
Units	ng/L	ng/L	ng/L	ng/L	ng/L	ng/L	ng/L	ng/L	ng/L
Sample Location / **Residential Status** / **Sample Interval** / **Date Sampled**									
Investigation Area: Eastern Margin (continued)									
MW-111 / Residential / 4 - 9 ft / 4/16/2020	< 0.92	**3.5**	**3**	< 0.32	< 0.66	< 0.45	< 0.44	< 0.37	--
12/10/2021	< 7.1	**2.7**	**3.1**	< 3.6	< 3.6	< 3.6	**1.5**	**1.8**	--
9/27/2022	< 2.2	**5.5**	**11**	< 2.2	< 2.2	< 2.2	**3.8**	**2.3**	< 2.2
12/14/2022	< 1.9	**3**	< 9.4	< 1.9	< 1.9	< 1.9	**2.5**	< 1.9	< 1.9
DUP-02 (MW-111) / Residential / 4 - 9 ft / 4/16/2020	--	**3.1**	**2.5**	--	--	--	--	--	--
MW-112 / Residential / 4 - 9 ft / 4/16/2020	**5.5**	**7**	**19**	< 0.32	< 0.67	< 0.46	**2.8**	**3.9**	--
12/10/2021	< 7.3	**8.6**	**20**	< 3.6	< 3.6	< 3.6	**3.3**	**4.2**	--
9/27/2022	< 1.8	**4.1**	**11**	< 1.8	< 1.8	< 1.8	**1.8**	**3.5**	< 1.8
12/14/2022	< 2	**4.8**	**12**	< 2	< 2	< 2	< 2	**3.9**	< 2
DUP-02 (MW-112) / Residential / 4 - 9 ft / 12/14/2022	< 1.9	**4.7**	**11**	< 1.9	< 1.9	< 1.9	< 1.9	**4.0**	< 1.9
MW-113 / Residential / 8 - 13 ft / 4/16/2020	< 0.92	< 0.2	< 0.3	< 0.32	< 0.66	< 0.45	< 0.44	< 0.37	--
12/10/2021	< 7	**0.75**	**1.1**	< 0.32	< 3.5	< 3.5	< 3.5	**2.4**	--
9/27/2022	< 2.1	< 2.1	< 10	< 2.1	< 2.1	< 2.1	< 2.1	**2.1**	< 2.1
12/15/2022	< 2.1	< 2.1	< 10	< 2.1	< 2.1	< 2.1	< 2.1	**3.5**	< 2.1
MW-119 / Residential / 5 - 10 ft / 4/23/2020	< 0.92	< 0.2	< 0.3	< 0.32	< 0.66	< 0.45	< 0.44	< 0.37	--
12/10/2021	< 7	< 3.5	< 3.5	< 3.5	< 3.5	< 3.5	< 3.5	< 3.5	--
9/27/2022	< 2.1	< 2.1	< 10	< 2.1	< 2.1	< 2.1	< 2.1	< 2.1	< 2.1
12/14/2022	< 2	< 2	< 10	< 2	< 2	< 2	< 2	< 2	< 2
MW-120 / Residential / 3 - 8 ft / 4/23/2020	< 0.95	**3.1**	**7.2**	< 0.33	< 0.68	< 0.47	< 0.45	< 0.38	--
1/20/2022	< 6.8	**1.9**	**8.5**	< 3.4	< 3.4	< 3.4	**0.83**	**1.7**	--
9/27/2022	< 1.9	**3.4**	**24**	< 1.9	< 1.9	< 1.9	< 1.9	**2.8**	< 1.9
12/14/2022	< 1.9	**8.9**	**27**	< 1.9	< 1.9	< 1.9	**2.8**	**2.6**	< 1.9
DUP-01 (MW-120) / Residential / 3 - 8 ft / 4/23/2020	--	**2.8**	**7**	--	--	--	--	--	--
9/27/2022	< 2	**4.5**	**29**	< 2	< 2	< 2	< 2	**3**	< 2
MW-121 / Residential / 8 - 13 ft / 4/23/2020	**3.3**	**3.9**	**12**	< 0.33	< 0.67	< 0.46	**12**	**5.9**	--
12/10/2021	< 6.8	**3.7**	**7.1**	< 3.4	< 3.4	< 3.4	**13**	**7.4**	--
9/28/2022	< 2.1	**3.6**	< 10	< 2.1	< 2.1	< 2.1	**3.2**	**20**	**2.3**
12/15/2022	< 2	**3.8**	< 9.8	< 2	< 2	< 2	**9**	**5.9**	< 2

Notes:

Residential (R)/Non-Residential (NR) Drinking Water Criteria (DWC) and Groundwater Surface Water Interface (GSI) Criteria from Michigan Part 201 Generic Cleanup Criteria, as promulgated December 30, 2013 (updated December 21, 2020).

Residential (R)/Non-Residential (NR) Volatilization to Indoor Air Pathway (VIAP) Screening Levels from Appendix D.1 of the Addendum to the EGLE Guidance Document for the Vapor Intrusion Pathway (September 2020).

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Non-Residential (NR) locations are only compared to the NR DWC, NR VIAP, and GSI criteria

Only analytes with one or more detection are reported.

ng/L = nanogram per liter

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Bold font denotes concentrations detected above laboratory reporting limits.

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1) The GSI criterion is not protective for surface water that is used as a drinking water source (Footnote {X}, Michigan Part 201 Criteria Tables).

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2000 West 8 Mile Road
Ferndale, MI

Analyte	6:2 Fluorotelomer sulfonic acid (6:2 FTS)	Perfluorobutane sulfonic acid (PFBS)	Perfluorobutanoic acid (PFBA)	Perfluorodecane sulfonic acid (PFDS)	Perfluorodecanoic acid (PFDA)	Perfluoroheptane sulfonic acid (PFHpS)	Perfluoroheptanoic acid (PFHpA)	Perfluorohexane sulfonic acid (PFHxS)	PFHxS-BR
Residential Drinking Water Criteria	NC	420	NC	NC	NC	NC	NC	51	NC
Non-Residential Drinking Water Criteria	NC	420	NC	NC	NC	NC	NC	51	NC
Generic GSI Criteria	NC	NA	NC	NC	NC	NC	NC	NA	NC
Residential Shallow VIAP Screening Level	NC	NC	NC	NC	NC	NC	NC	NC	NC
Non-Residential Not In Contact VIAP Screening Level	NC	NC	NC	NC	NC	NC	NC	NC	NC
Units	ng/L	ng/L	ng/L	ng/L	ng/L	ng/L	ng/L	ng/L	ng/L
Sample Location / **Residential Status** / **Sample Interval** / **Date Sampled**									
Investigation Area: Eastern Margin (continued)									
MW-22-01 / Residential / 12.5 - 17.5 ft / 10/18/2022	< 2.1	**44**	**16**	< 2.1	< 2.1	< 2.1	**12**	**6.4**	< 2.1
MW-22-01 / Residential / 12.5 - 17.5 ft / 12/12/2022	< 2	**74**	**18**	< 2	< 2	< 2	**4.6**	**5.6**	**2**
Dup-01 (MW-22-01) / Residential / 12.5 - 17.5 ft / 10/18/2022	< 1.9	**39**	**16**	< 1.9	< 1.9	< 1.9	**8.2**	**5.6**	< 1.9
MW-22-02 / Residential / 10 - 15 ft / 10/18/2022	< 2.1	**4.1**	< 10	< 2.1	< 2.1	< 2.1	**3.5**	**22**	**2.8**
MW-22-02 / Residential / 10 - 15 ft / 12/12/2022	< 2	**4.9**	< 10	< 2	< 2	< 2	**2.6**	**16**	**2.6**
DUP-01W (MW-22-02) / Residential / 10 - 15 ft / 12/12/2022	< 2	**4.5**	< 10	< 2	< 2	< 2	**3.5**	**21**	**2.8**
MW-22-03 / Residential / 9 - 14 ft / 10/19/2022	< 1.9	**6.2**	**10**	< 1.9	< 1.9	< 1.9	**2.4**	**4.2**	< 1.9
MW-22-03 / Residential / 9 - 14 ft / 12/12/2022	< 2.4	**5.2**	**13**	< 2.4	< 2.4	< 2.4	< 2.4	**3.6**	< 2.4
MW-22-04 / Residential / 7 - 12 ft / 10/20/2022	< 2	**5.3**	< 10	< 2	< 2	< 2	< 2	**3**	< 2
MW-22-04 / Residential / 7 - 12 ft / 12/15/2022	< 2.1	**3.3**	< 10	< 2.1	< 2.1	< 2.1	< 2.1	**2.1**	< 2.1
MW-22-05 / Residential / 6 - 11 ft / 10/20/2022	< 2.1	< 2.1	< 10	< 2.1	< 2.1	< 2.1	< 2.1	< 2.1	< 2.1
MW-22-05 / Residential / 6 - 11 ft / 12/15/2022	< 2	< 2	< 9.8	< 2	< 2	< 2	< 2	< 2	< 2
MW-22-06 / Residential / 7 - 12 ft / 10/20/2022	< 1.9	**2.1**	< 9.5	< 1.9	< 1.9	< 1.9	< 1.9	**6.7**	< 1.9
MW-22-06 / Residential / 7 - 12 ft / 12/15/2022	< 2	< 2	< 9.9	< 2	< 2	< 2	< 2	**5.2**	< 2

Notes:

Residential (R)/Non-Residential (NR) Drinking Water Criteria (DWC) and Groundwater Surface Water Interface (GSI) Criteria from Michigan Part 201 Generic Cleanup Criteria, as promulgated December 30, 2013 (updated December 21, 2020).

Residential (R)/Non-Residential (NR) Volatilization to Indoor Air Pathway (VIAP) Screening Levels from Appendix D.1 of the Addendum to the EGLE Guidance Document for the Vapor Intrusion Pathway (September 2020).

The depth to first encountered groundwater is 10 feet below ground surface or less; therefore, the shallow groundwater residential VIAP screening levels apply.

The depth to first encountered groundwater is greater than 5 feet below ground surface; therefore, the groundwater not in contact nonresidential VIAP screening levels apply.

Non-Residential (NR) locations are only compared to the NR DWC, NR VIAP, and GSI criteria

Only analytes with one or more detection are reported.

ng/L = nanogram per liter

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Bold font denotes concentrations detected above laboratory reporting limits.

Denotes concentrations above one or more criteria.

1) The GSI criterion is not protective for surface water that is used as a drinking water source (Footnote {X}, Michigan Part 201 Criteria Tables).

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Former Hayes Lemmerz Site - Eastern Boundary
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Analyte	PFHxS-LN	Perfluorohexanoic acid (PFHxA)	Perfluorononanoic acid (PFNA)	Perfluorooctane sulfonic acid (PFOS)	PFOS-BR	PFOS-LN	Perfluorooctanoic acid (PFOA)	Perfluoropentane sulfonic acid (PFPeS)	Perfluoropentanoic acid (PFPeA)	Potassium perfluoro(perfluoroethyl)cyclohexanesulfonate (PFecHS-K)
Residential Drinking Water Criteria	NC	4.0E+05	6.0	16	NC	NC	8.0	NC	NC	NC
Non-Residential Drinking Water Criteria	NC	4.0E+05	6.0	16	NC	NC	8.0	NC	NC	NC
Generic GSI Criteria	NC	NA	NA	12[(1)]	NC	NC	12,000[(1)]	NC	NC	NC
Residential Shallow VIAP Screening Level	NC	NC	NC	NA	NC	NC	NC	NC	NC	NC
Non-Residential Not In Contact VIAP Screening Level	NC	NC	NC	NA	NC	NC	NC	NC	NC	NC
Units	ng/L	ng/L	ng/L	ng/L	ng/L	ng/L	ng/L	ng/L	ng/L	ng/L

Sample Location	Residential Status	Sample Interval	Date Sampled									
Investigation Area: Eastern Margin												
MW-104	Residential	15 - 20 ft	4/14/2020	--	**4.6**	< 0.57	< 0.38	--	--	**6.2**	< 0.36	**3.2**	--
			1/20/2022	--	**4.3**	< 3.4	**3.7**	--	--	**12**	**0.85**	**3.5**	--
			9/28/2022	**7.7**	**2.8**	< 2	**3.5**	**2.9**	< 2	**9.2**	< 2	< 4	< 2
			12/12/2022	**7.5**	**4.7**	< 2	**3.1**	**2.7**	< 2	**5.6**	< 2	< 4	< 2
MW-105	Residential	9 - 14 ft	4/14/2020	--	< 0.37	< 0.59	**2.4**	--	--	**4.5**	< 0.37	< 0.27	--
			9/28/2022	**7.9**	**9.8**	< 2.1	**3.1**	< 2.1	< 2.1	**19**	**3.2**	**7.7**	< 2.1
MW-106	Residential	7.5 - 12.5 ft	4/15/2020	--	**10**	< 0.59	< 0.4	--	--	**16**	< 0.37	**8**	--
			12/10/2021	--	**3.6**	**0.63**	**3.2**	--	--	**9.9**	**0.95**	**2.7**	--
			9/28/2022	**6.4**	**15**	**2.8**	**4.3**	**3.9**	< 2	**42**	< 2	**12**	< 2
			12/15/2022	**16**	**3.5**	< 1.9	< 1.9	< 1.9	< 1.9	**14**	< 1.9	< 3.9	< 1.9
DUP-01 (MW-106)	Residential	7.5 - 12.5 ft	4/15/2020	--	**11**	--	--	--	--	**18**	--	**8.4**	--
DUP-02 (MW-106)			9/28/2022	**21**	**3.7**	< 2	**3**	< 2	< 2	**15**	< 2	< 3.9	< 2
MW-107	Residential	7 - 12 ft	4/15/2020	--	**7.2**	< 0.58	< 0.39	--	--	**11**	< 0.37	**5.3**	--
			12/10/2021	--	**12**	< 3.5	< 3.5	--	--	**16**	< 0.52	**7.7**	--
			9/28/2022	**3.4**	**5.6**	< 2	< 2	< 2	< 2	**19**	< 2	**4.5**	< 2
			12/15/2022	**4.7**	**4.2**	< 1.9	< 1.9	< 1.9	< 1.9	**14**	< 1.9	**4.2**	< 1.9
MW-108	Residential	5 - 10 ft	4/15/2020	--	**3.3**	< 0.59	< 0.4	--	--	**5**	< 0.37	**2.5**	--
			12/10/2021	--	**3.1**	< 3.5	< 3.5	--	--	**9.3**	**0.64**	**4**	--
			9/28/2022	**2.2**	**2.9**	< 2	< 2	< 2	< 2	**11**	< 2	< 4.1	< 2
			12/14/2022	**2.3**	**2.9**	< 1.8	< 1.8	< 1.8	< 1.8	**5.4**	< 1.8	< 3.7	< 1.8
MW-109	Residential	5 - 10 ft	4/15/2020	--	**26**	< 0.6	< 0.4	--	--	**19**	< 0.38	**17**	--
			12/10/2021	--	**15**	< 3.5	< 3.5	--	--	**21**	**0.73**	**12**	--
			9/28/2022	**2.4**	**10**	< 2	< 2	< 2	< 2	**8.7**	< 2	**9.4**	< 2
			12/14/2022	**2.1**	**9.2**	< 1.9	< 1.9	< 1.9	< 1.9	**8.9**	< 1.9	**9**	< 1.9
MW-110	Residential	5 - 10 ft	4/15/2020	--	**5.7**	< 0.59	< 0.39	--	--	**7.4**	< 0.37	**4.3**	--
			12/10/2021	--	**6.9**	< 3.5	**2.5**	--	--	**14**	< 3.5	**6.8**	--
			9/27/2022	< 1.9	**3.3**	< 1.9	**2.2**	< 1.9	< 1.9	**11**	< 1.9	< 3.8	< 1.9
			12/14/2022	< 1.9	**2.6**	< 1.9	< 1.9	< 1.9	< 1.9	**9.8**	< 1.9	< 3.8	< 1.9

Notes:

Residential (R)/Non-Residential (NR) Drinking Water Criteria (DWC) and Groundwater Surface Water Interface (GSI) Criteria from Michigan Part 201 Generic Cleanup Criteria, as promulgated December 30, 2013 (updated December 21, 2020).

Residential (R)/Non-Residential (NR) Volatilization to Indoor Air Pathway (VIAP) Screening Levels from Appendix D.1 of the Addendum to the EGLE Guidance Document for the Vapor Intrusion Pathway (September 2020).

The depth to first encountered groundwater is 10 feet below ground surface or less; therefore, the shallow groundwater residential VIAP screening levels apply.

The depth to first encountered groundwater is greater than 5 feet below ground surface; therefore, the groundwater not in contact nonresidential VIAP screening levels apply.

Non-Residential (NR) locations are only compared to the NR DWC, NR VIAP, and GSI criteria

Only analytes with one or more detection are reported.

ng/L = nanogram per liter

NC = No Criterion; -- = Parameter Not Analyzed

Bold font denotes concentrations detected above laboratory reporting limits.

Denotes concentrations above one or more criteria.

1) The GSI criterion is not protective for surface water that is used as a drinking water source (Footnote {X}, Michigan Part 201 Criteria Tables).

Table 4
Summary of Detected Per- and Polyfluoroalkyl Substances in Groundwater
Former Hayes Lemmerz Site - Eastern Boundary
2000 West 8 Mile Road
Ferndale, MI

Analyte	PFHxS-LN	Perfluorohexanoic acid (PFHxA)	Perfluorononanoic acid (PFNA)	Perfluorooctane sulfonic acid (PFOS)	PFOS-BR	PFOS-LN	Perfluorooctanoic acid (PFOA)	Perfluoropentane sulfonic acid (PFPeS)	Perfluoropentanoic acid (PFPeA)	Potassium perfluoro(perfluoroethyl)cyclohexanesulfonate (PFecHS-K)
Residential Drinking Water Criteria	NC	4.0E+05	6.0	16	NC	NC	8.0	NC	NC	NC
Non-Residential Drinking Water Criteria	NC	4.0E+05	6.0	16	NC	NC	8.0	NC	NC	NC
Generic GSI Criteria	NC	NA	NA	12[(1)]	NC	NC	12,000[(1)]	NC	NC	NC
Residential Shallow VIAP Screening Level	NC	NC	NC	NA	NC	NC	NC	NC	NC	NC
Non-Residential Not In Contact VIAP Screening Level	NC	NC	NC	NA	NC	NC	NC	NC	NC	NC
Units	ng/L	ng/L	ng/L	ng/L	ng/L	ng/L	ng/L	ng/L	ng/L	ng/L

Sample Location	Residential Status	Sample Interval	Date Sampled									
Investigation Area: Eastern Margin (continued)												
MW-111	Residential	4 - 9 ft	4/16/2020	--	< 0.36	< 0.57	< 0.38	--	--	**4.9**	< 0.36	< 0.26	--
			12/10/2021	--	**1.9**	< 3.6	< 3.6	--	--	**8.7**	< 3.6	**1.4**	--
			9/27/2022	< 2.2	**6.3**	< 2.2	< 2.2	< 2.2	< 2.2	**19**	< 2.2	< 4.4	< 2.2
			12/14/2022	< 1.9	**3.8**	< 1.9	< 1.9	< 1.9	< 1.9	**12**	< 1.9	< 3.8	< 1.9
DUP-02 (MW-111)	Residential	4 - 9 ft	4/16/2020	--	--	--	--	--	--	**2.7**	--	--	--
MW-112	Residential	4 - 9 ft	4/16/2020	--	**3.8**	< 0.58	**7.7**	--	--	**42**	< 0.36	**2.7**	--
			12/10/2021	--	**4.8**	< 3.6	**7.8**	--	--	**69**	**1.6**	**3.5**	--
			9/27/2022	**2.8**	**2.3**	< 1.8	**15**	**11**	**3.6**	**23**	< 1.8	< 3.5	< 1.8
			12/14/2022	**3.2**	**2.7**	< 2	**16**	**12**	**3.1**	**24**	< 2	< 4	< 2
DUP-02 (MW-112)	Residential	4 - 9 ft	12/14/2022	**3.3**	**2.3**	< 1.9	**14**	**11**	**2.4**	**21**	< 1.9	< 3.8	< 1.9
MW-113	Residential	8 - 13 ft	4/16/2020	--	< 0.36	< 0.57	< 0.38	--	--	< 0.42	< 0.36	< 0.26	--
			12/10/2021	--	< 0.36	< 3.5	< 3.5	--	--	< 3.5	< 0.36	< 3.5	--
			9/27/2022	< 2.1	< 2.1	< 2.1	< 2.1	< 2.1	< 2.1	< 2.1	< 2.1	< 4.1	< 2.1
			12/15/2022	**2.7**	< 2.1	< 2.1	< 2.1	< 2.1	< 2.1	< 2.1	< 2.1	< 4.1	< 2.1
MW-119	Residential	5 - 10 ft	4/23/2020	--	< 0.36	< 0.57	< 0.39	--	--	< 0.42	< 0.36	< 0.26	--
			12/10/2021	--	< 3.5	< 3.5	< 3.5	--	--	< 3.5	< 3.5	< 3.5	--
			9/27/2022	< 2.1	< 2.1	< 2.1	< 2.1	< 2.1	< 2.1	< 2.1	< 2.1	< 4.1	< 2.1
			12/14/2022	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 4.1	< 2
MW-120	Residential	3 - 8 ft	4/23/2020	--	< 0.37	< 0.59	< 0.4	--	--	**6.4**	< 0.37	< 0.27	--
			1/20/2022	--	**1.2**	< 3.4	< 3.4	--	--	**18**	**0.7**	< 3.4	--
			9/27/2022	**2.5**	< 1.9	< 1.9	< 1.9	< 1.9	< 1.9	**47**	< 1.9	< 3.8	< 1.9
			12/14/2022	**2.1**	**5.6**	< 1.9	< 1.9	< 1.9	< 1.9	**48**	< 1.9	**5.9**	**1.9**
DUP-01 (MW-120)	Residential	3 - 8 ft	4/23/2020	--	--	--	--	--	--	**5.9**	--	--	--
			9/27/2022	**2.5**	**2.2**	< 2	< 2	< 2	< 2	**49**	< 2	< 3.9	< 2
MW-121	Residential	8 - 13 ft	4/23/2020	--	**22**	< 0.58	< 0.39	--	--	**32**	< 0.37	**18**	--
			12/10/2021	--	**16**	**2.7**	**3.6**	--	--	**37**	**1.2**	**12**	--
			9/28/2022	**17**	**3.9**	< 2.1	**2.6**	< 2.1	< 2.1	**13**	< 2.1	< 4.1	< 2.1
			12/15/2022	**5**	**10**	**2.6**	**3.9**	**3.4**	< 2	**35**	< 2	**12**	< 2

Notes:

Residential (R)/Non-Residential (NR) Drinking Water Criteria (DWC) and Groundwater Surface Water Interface (GSI) Criteria from Michigan Part 201 Generic Cleanup Criteria, as promulgated December 30, 2013 (updated December 21, 2020).

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Residential Drinking Water Criteria	NC	4.0E+05	6.0	16	NC	NC	8.0	NC	NC	NC
Non-Residential Drinking Water Criteria	NC	4.0E+05	6.0	16	NC	NC	8.0	NC	NC	NC
Generic GSI Criteria	NC	NA	NA	12[(1)]	NC	NC	12,000[(1)]	NC	NC	NC
Residential Shallow VIAP Screening Level	NC	NC	NC	NA	NC	NC	NC	NC	NC	NC
Non-Residential Not In Contact VIAP Screening Level	NC	NC	NC	NA	NC	NC	NC	NC	NC	NC
Units	ng/L	ng/L	ng/L	ng/L	ng/L	ng/L	ng/L	ng/L	ng/L	ng/L

Sample Location	Residential Status	Sample Interval	Date Sampled									
Investigation Area: Eastern Margin (continued)												
MW-22-01	Residential	12.5 - 17.5 ft	10/18/2022	**4.4**	**18**	< 2.1	< 2.1	< 2.1	< 2.1	**4.6**	< 2.1	**19**	< 2.1
			12/12/2022	**3.7**	**8.2**	< 2	< 2	< 2	< 2	**4.1**	< 2	**5.8**	< 2
Dup-01 (MW-22-01)	Residential	12.5 - 17.5 ft	10/18/2022	**4.2**	**18**	< 1.9	< 1.9	< 1.9	< 1.9	**5.8**	< 1.9	**19**	< 1.9
MW-22-02	Residential	10 - 15 ft	10/18/2022	**19**	**2.7**	< 2.1	< 2.1	< 2.1	< 2.1	**15**	< 2.1	< 4.1	< 2.1
			12/12/2022	**13**	**3.2**	< 2	< 2	< 2	< 2	**9**	< 2	< 4.1	< 2
DUP-01W (MW-22-02)	Residential	10 - 15 ft	12/12/2022	**18**	**3.2**	< 2	< 2	< 2	< 2	**11**	< 2	< 4.1	< 2
MW-22-03	Residential	9 - 14 ft	10/19/2022	**3.2**	**4.8**	< 1.9	< 1.9	< 1.9	< 1.9	**7.2**	< 1.9	**4.1**	< 1.9
			12/12/2022	**2.7**	**3.3**	< 2.4	< 2.4	< 2.4	< 2.4	**6.4**	< 2.4	< 4.8	< 2.4
MW-22-04	Residential	7 - 12 ft	10/20/2022	< 2	< 2	< 2	< 2	< 2	< 2	**9.2**	< 2	< 4.1	< 2
			12/15/2022	< 2.1	< 2.1	< 2.1	< 2.1	< 2.1	< 2.1	**5.8**	< 2.1	< 4.2	< 2.1
MW-22-05	Residential	6 - 11 ft	10/20/2022	< 2.1	< 2.1	< 2.1	< 2.1	< 2.1	< 2.1	**5.9**	< 2.1	< 4.1	< 2.1
			12/15/2022	< 2	< 2	< 2	< 2	< 2	< 2	**6.4**	< 2	< 3.9	< 2
MW-22-06	Residential	7 - 12 ft	10/20/2022	**5.2**	**3.6**	< 1.9	< 1.9	< 1.9	< 1.9	**3.1**	< 1.9	< 3.8	< 1.9
			12/15/2022	**4**	**2.5**	< 2	< 2	< 2	< 2	< 2	< 2	< 4	< 2

Notes:
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The depth to first encountered groundwater is greater than 5 feet below ground surface; therefore, the groundwater not in contact nonresidential VIAP screening levels apply.
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Only analytes with one or more detection are reported.
ng/L = nanogram per liter
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Table 5
Summary of Detected Volatile Organic Compounds in Soil Vapor
Former Hayes Lemmerz Site - Eastern Boundary
2000 West 8 Mile Road
Ferndale, MI

Analyte				1,1,1-Trichloro-ethane	1,1,2-Trichloro-ethane	1,1-Dichloro-ethane	1,1-Difluoro-ethane	1,2,3-Trimethyl-benzene	1,2,4-Trimethyl-benzene	1,2-Dibromo-ethane	1,2-Dichloro-benzene	1,2-Dichloro-ethane	1,3,5-Trimethyl-benzene	1,4-Dichloro-benzene
Residential VIAP Screening Level				1.7E+05	7.0	530	NC	2,100	2,100	1.4	10,000	33	2,100	220
Non-Residential VIAP Screening Level				2.3E+05	10	1,200	NC	3,100	3,100	3.3	15,000	77	3,100	510
Units				ug/m3	ug/m3	ug/m3	ug/m3	ug/m3	ug/m3	ug/m3	ug/m3	ug/m3	ug/m3	ug/m3
Sample Location	**Residential Status**	**Sample Interval**	**Date Sampled**											
Investigation Area: Eastern Margin														
VP-1	Residential	5 ft	12/2/2021	< 1.09	< 1.09	< 0.802	--	--	**1.14**	< 1.54	< 1.2	< 0.81	< 0.982	< 1.2
			2/11/2022	< 1	< 1	< 0.8	**4.82**	< 1	**2.44**	< 2	< 1	< 0.8	< 1	< 1
			9/22/2022	< 11	< 1.1	< 8.1	--	--	< 9.8	< 0.077	< 12	< 8.1	< 9.8	< 12
VP-2	Residential	5 ft	12/2/2021	< 1.09	< 1.09	< 0.802	--	--	**3.09**	< 1.54	< 1.2	< 0.81	< 0.982	< 1.2
			2/11/2022	< 1	< 1	< 0.8	**8.24**	< 1	< 1	< 2	< 1	< 0.8	< 1	< 1
			9/22/2022	< 11	< 1.1	< 8.1	--	--	< 9.8	< 0.077	< 12	< 8.1	< 9.8	< 12
VP-3	Residential	5 ft	12/2/2021	< 1.09	< 1.09	< 0.802	--	--	**3.89**	< 1.54	< 1.2	< 0.81	**1.02**	< 1.2
			2/11/2022	< 1	< 1	< 0.8	**21.9**	< 1	< 1	< 2	< 1	< 0.8	< 1	< 1
			9/22/2022	< 11	< 1.1	< 8.1	--	--	< 9.8	< 0.077	< 12	< 8.1	< 9.8	< 12
VP-4	Residential	5 ft	12/2/2021	< 1.09	< 1.09	< 0.802	--	--	**2.67**	< 1.54	< 1.2	< 0.81	< 0.982	< 1.2
			2/11/2022	< 1	< 1	< 0.8	**4.9**	< 1	< 1	< 2	< 1	< 0.8	< 1	< 1
			9/22/2022	< 11	< 1.1	< 8.1	--	--	< 9.8	< 0.077	< 12	< 8.1	< 9.8	< 12
VP-5	Residential	5 ft	12/2/2021	< 1.09	< 1.09	< 0.802	--	--	**2.29**	< 1.54	< 1.2	< 0.81	< 0.982	< 1.2
			2/11/2022	< 1	< 1	< 0.8	**11.7**	< 1	< 1	< 2	< 1	< 0.8	< 1	< 1
			9/22/2022	< 11	< 1.1	< 8.1	--	--	< 9.8	< 0.077	< 12	< 8.1	< 9.8	< 12
VP-6	Residential	5 ft	12/2/2021	< 1.09	< 1.09	< 0.802	--	--	**1.73**	< 1.54	< 1.2	< 0.81	< 0.982	< 1.2
			2/11/2022	< 1	< 1	< 0.8	**9.54**	< 1	< 1	< 2	< 1	< 0.8	< 1	< 1
			9/22/2022	< 11	< 1.1	< 8.1	--	--	< 9.8	< 0.077	< 12	< 8.1	< 9.8	< 12

Notes:
Residential and Non-Residential Volatilization to Indoor Air Pathway (VIAP) Screening Levels from Appendix D.1 of the Addendum to the EGLE Guidance Document for the Vapor Intrusion Pathway (September 2020).
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ug/m3 = microgram per cubic meter
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Residential VIAP Screening Level				1.7E+05	7.0	530	NC	2,100	2,100	1.4	10,000	33	2,100	220
Non-Residential VIAP Screening Level				2.3E+05	10	1,200	NC	3,100	3,100	3.3	15,000	77	3,100	510
Units				ug/m3	ug/m3	ug/m3	ug/m3	ug/m3	ug/m3	ug/m3	ug/m3	ug/m3	ug/m3	ug/m3
Sample Location	**Residential Status**	**Sample Interval**	**Date Sampled**											
Investigation Area: Eastern Margin (continued)														
VP-7	Residential	5 ft	12/2/2021	< 1.09	< 1.09	< 0.802	--	--	**3.17**	< 1.54	< 1.2	< 0.81	< 0.982	< 1.2
			2/11/2022	< 1	< 1	< 0.8	**6.8**	< 1	< 1	< 2	< 1	< 0.8	< 1	< 1
			9/22/2022	< 11	< 1.1	< 8.1	--	--	< 9.8	< 0.077	< 12	< 8.1	< 9.8	< 12
VP-8	Residential	5 ft	12/2/2021	< 1.09	< 1.09	< 0.802	--	--	**1.18**	< 1.54	< 1.2	< 0.81	< 0.982	< 1.2
			2/15/2022	< 1	< 1	< 0.8	**7.69**	< 1	< 1	< 2	< 1	< 0.8	< 1	< 1
			9/22/2022	< 11	< 1.1	< 8.1	--	--	< 9.8	< 0.077	< 12	< 8.1	< 9.8	< 12
VP-9	Residential	5 ft	12/3/2021	< 1.09	< 1.09	< 0.802	--	--	**1.3**	< 1.54	< 1.2	< 0.81	< 0.982	< 1.2
			2/15/2022	< 1	< 1	< 0.8	**6.31**	< 1	< 1	< 2	< 1	< 0.8	< 1	< 1
			9/22/2022	< 11	< 1.1	< 8.1	--	--	< 9.8	< 0.077	< 12	< 8.1	< 9.8	< 12
VP-10	Residential	5 ft	12/3/2021	< 1.09	< 1.09	< 0.802	--	--	**2.04**	< 1.54	< 1.2	< 0.81	< 0.982	< 1.2
			2/15/2022	< 1	< 1	< 0.8	**5.28**	< 1	< 1	< 2	< 1	< 0.8	< 1	< 1
			9/22/2022	< 11	< 1.1	< 8.1	--	--	< 9.8	< 0.077	< 12	< 8.1	< 9.8	< 12
VP-11	Residential	5 ft	12/3/2021	< 1.09	< 1.09	< 0.802	--	--	**1.6**	< 1.54	< 1.2	< 0.81	< 0.982	< 1.2
			2/15/2022	< 1	< 1	< 0.8	**3.71**	< 1	< 1	< 2	< 1	< 0.8	< 1	< 1
			9/22/2022	< 11	< 1.1	< 8.1	--	--	< 9.8	< 0.077	< 12	< 8.1	< 9.8	< 12
VP-12	Residential	5 ft	9/23/2022	< 11	< 1.1	< 8.1	--	--	< 9.8	< 0.077	< 12	< 8.1	< 9.8	< 12
VP-13	Residential	5 ft	12/3/2021	< 1.09	< 1.09	< 0.802	--	--	**2.16**	< 1.54	< 1.2	< 0.81	< 0.982	< 1.2
			2/15/2022	< 1	< 1	< 0.8	**4.20**	< 1	**1.84**	< 2	< 1	< 0.8	< 1	< 1
			9/23/2022	< 11	< 1.1	< 8.1	--	--	< 9.8	< 0.077	< 12	< 8.1	< 9.8	< 12
VP-14	Residential	5 ft	12/3/2021	< 1.09	< 1.09	< 0.802	--	--	**2.15**	< 1.54	< 1.2	< 0.81	< 0.982	< 1.2
			2/15/2022	< 1	< 1	< 0.8	**9.24**	< 1	< 1	< 2	< 1	< 0.8	< 1	< 1
			9/23/2022	< 11	< 1.1	< 8.1	--	--	< 9.8	< 0.077	< 12	< 8.1	< 9.8	< 12
18VP-1	Residential	5 ft	8/31/2018	**1.4**	< 1.4	< 1.0	--	--	**2.1**	< 1.9	< 1.5	< 1.0	< 1.2	< 1.5
18VP-2	Residential	5 ft	8/31/2018	< 1.4	< 1.4	< 1.0	--	--	**2.9**	< 1.9	**1.6**	< 1.0	< 1.2	< 1.5
			9/23/2022	< 11	< 1.1	< 8.1	--	--	< 9.8	< 0.077	< 12	< 8.1	< 9.8	< 12
18VP-3	Residential	5 ft	8/31/2018	**17**	< 1.4	< 1.0	--	--	**2.5**	< 1.9	< 1.5	< 1.0	< 1.2	< 1.5
			9/23/2022	**11**	< 1.1	< 8.1	--	--	< 9.8	< 0.077	< 12	< 8.1	< 9.8	< 12
18VP-4	Residential	7 ft	8/31/2018	< 1.4	< 1.4	< 1.0	--	--	**2.7**	< 1.9	**2.3**	< 1.0	< 1.2	< 1.5
			9/23/2022	< 11	< 1.1	< 8.1	--	--	< 9.8	< 0.077	< 12	< 8.1	< 9.8	< 12
18VP-5	Residential	5 ft	8/31/2018	< 1.4	< 1.4	< 1.0	--	--	**3.5**	< 1.9	**1.9**	< 1.0	< 1.2	< 1.5
	Residential	9 ft	8/31/2018	< 1.4	< 1.4	< 1.0	--	--	**4.5**	< 1.9	< 1.5	< 1.0	**1.5**	< 1.5
18VP-6	Residential	5 ft	8/31/2018	< 1.4	< 1.4	< 1.0	--	--	**4.6**	< 1.9	**2.3**	< 1.0	< 1.2	< 1.5
	Residential	10 ft	8/31/2018	< 1.4	< 1.4	< 1.0	--	--	**5.5**	< 1.9	< 1.5	< 1.0	**2**	< 1.5
	Residential	5 ft	9/23/2022	< 11	< 1.1	< 8.1	--	--	< 9.8	< 0.077	< 12	< 8.1	< 9.8	< 12
	Residential	10 ft	9/23/2022	< 11	< 1.1	< 8.1	--	--	< 9.8	< 0.077	< 12	< 8.1	< 9.8	< 12

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Analyte				1,4-Dioxane	2,2,4-Trimethyl-pentane	2-Butanone	4-Ethyltoluene	Acetone	Benzene	Carbon disulfide	Carbon tetrachloride	Chlorobenzene	Chlorodifluoro-methane	Chloroethane
Residential VIAP Screening Level				170	1.2E+05	1.7E+05	NC	1.0E+06	110	24,000	150	1,700	NC	1.4E+05
Non-Residential VIAP Screening Level				400	1.8E+05	1.7E+05	NC	1.0E+06	260	36,000	360	2,600	NC	2.0E+05
Units				ug/m3	ug/m3	ug/m3	ug/m3	ug/m3	ug/m3	ug/m3	ug/m3	ug/m3	ug/m3	ug/m3
Sample Location	**Residential Status**	**Sample Interval**	**Date Sampled**											
Investigation Area: Eastern Margin														
VP-1	Residential	5 ft	12/2/2021	< 0.721	< 0.934	< 3.69	**1.14**	**5.39**	< 0.639	< 0.622	< 1.26	< 0.924	--	< 0.528
			2/11/2022	< 0.7	< 0.9	**3.79**	**2.04**	< 2.98	< 0.6	< 0.6	< 1	< 0.9	< 0.7	< 0.5
			9/22/2022	< 90	< 9.3	< 59	< 9.8	< 48	< 6.4	< 62	< 13	< 9.2	--	< 53
VP-2	Residential	5 ft	12/2/2021	< 0.721	< 0.934	< 3.69	**2.8**	**6.18**	< 0.639	< 0.622	< 1.26	< 0.924	--	< 0.528
			2/11/2022	< 0.7	< 0.9	**6.36**	**0.991**	**29.3**	**0.942**	< 0.6	< 1	< 0.9	< 0.7	< 0.5
			9/22/2022	< 90	< 9.3	< 59	< 9.8	**71**	< 6.4	< 62	< 13	< 9.2	--	< 53
VP-3	Residential	5 ft	12/2/2021	< 0.721	< 0.934	< 3.69	**3.78**	< 2.97	< 0.639	< 0.622	< 1.26	< 0.924	--	< 0.528
			2/11/2022	< 0.7	< 0.9	< 3.70	< 1	**4.72**	< 0.6	< 0.6	< 1	< 0.9	< 0.7	< 0.5
			9/22/2022	< 90	< 9.3	< 59	< 9.8	< 48	< 6.4	< 62	< 13	< 9.2	--	< 53
VP-4	Residential	5 ft	12/2/2021	< 0.721	< 0.934	< 3.69	**2.24**	**3.21**	< 0.639	< 0.622	< 1.26	< 0.924	--	< 0.528
			2/11/2022	< 0.7	< 0.9	< 3.70	< 1	**3.38**	< 0.6	< 0.6	< 1	< 0.9	< 0.7	< 0.5
			9/22/2022	< 90	< 9.3	< 59	< 9.8	< 48	< 6.4	< 62	< 13	< 9.2	--	< 53
VP-5	Residential	5 ft	12/2/2021	< 0.721	< 0.934	< 3.69	**2.18**	**10.8**	**0.85**	< 0.622	< 1.26	< 0.924	--	< 0.528
			2/11/2022	< 0.7	< 0.9	< 3.70	< 1	**27.6**	< 0.6	< 0.6	< 1	< 0.9	< 0.7	< 0.5
			9/22/2022	< 90	< 9.3	< 59	< 9.8	< 48	< 6.4	< 62	< 13	< 9.2	--	< 53
VP-6	Residential	5 ft	12/2/2021	< 0.721	< 0.934	< 3.69	**1.6**	**10.2**	**0.891**	< 0.622	< 1.26	< 0.924	--	< 0.528
			2/11/2022	< 0.7	< 0.9	< 3.70	< 1	**6.81**	< 0.6	< 0.6	< 1	< 0.9	< 0.7	< 0.5
			9/22/2022	< 90	< 9.3	< 59	< 9.8	< 48	< 6.4	< 62	< 13	< 9.2	--	< 53

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Analyte				1,4-Dioxane	2,2,4-Trimethyl-pentane	2-Butanone	4-Ethyltoluene	Acetone	Benzene	Carbon disulfide	Carbon tetrachloride	Chlorobenzene	Chlorodifluoro-methane	Chloroethane
Residential VIAP Screening Level				170	1.2E+05	1.7E+05	NC	1.0E+06	110	24,000	150	1,700	NC	1.4E+05
Non-Residential VIAP Screening Level				400	1.8E+05	1.7E+05	NC	1.0E+06	260	36,000	360	2,600	NC	2.0E+05
Units				ug/m3	ug/m3	ug/m3	ug/m3	ug/m3	ug/m3	ug/m3	ug/m3	ug/m3	ug/m3	ug/m3
Sample Location	**Residential Status**	**Sample Interval**	**Date Sampled**											
Investigation Area: Eastern Margin (continued)														
VP-7	Residential	5 ft	12/2/2021	< 0.721	**2.18**	< 3.69	**2.94**	**31.1**	**2.22**	< 0.622	< 1.26	< 0.924	--	< 0.528
			2/11/2022	< 0.7	< 0.9	**4.02**	< 1	**7**	**0.657**	< 0.6	< 1	< 0.9	< 0.7	< 0.5
			9/22/2022	< 90	< 9.3	< 59	< 9.8	< 48	**13**	< 62	< 13	< 9.2	--	< 53
VP-8	Residential	5 ft	12/2/2021	< 0.721	< 0.934	< 3.69	**1.07**	**4.32**	< 0.639	< 0.622	< 1.26	< 0.924	--	< 0.528
			2/15/2022	< 0.7	< 0.9	< 3.70	< 1	**6.00**	**0.666**	**0.675**	< 1	< 0.9	< 0.7	< 0.5
			9/22/2022	< 90	< 9.3	< 59	< 9.8	< 48	< 6.4	< 62	< 13	< 9.2	--	< 53
VP-9	Residential	5 ft	12/3/2021	< 0.721	< 0.934	< 3.69	**1.3**	< 2.97	< 0.639	< 0.622	< 1.26	< 0.924	--	< 0.528
			2/15/2022	< 0.7	< 0.9	< 3.70	< 1	**4.57**	< 0.6	< 0.6	< 1	< 0.9	< 0.7	< 0.5
			9/22/2022	< 90	< 9.3	< 59	< 9.8	< 48	< 6.4	< 62	< 13	< 9.2	--	< 53
VP-10	Residential	5 ft	12/3/2021	< 0.721	**1.93**	< 3.69	**2.12**	**19.7**	**1.86**	< 0.622	< 1.26	< 0.924	--	< 0.528
			2/15/2022	< 0.7	< 0.9	**4.23**	< 1	**9.89**	< 0.6	**0.66**	< 1	< 0.9	< 0.7	< 0.5
			9/22/2022	< 90	< 9.3	< 59	< 9.8	< 48	< 6.4	< 62	< 13	< 9.2	--	< 53
VP-11	Residential	5 ft	12/3/2021	< 0.721	**1.82**	< 3.69	**1.66**	**4.8**	**6.13**	**0.931**	< 1.26	< 0.924	--	< 0.528
			2/15/2022	< 0.7	< 0.9	< 3.70	< 1	**3.8**	< 0.6	**0.646**	< 1	< 0.9	< 0.7	< 0.5
			9/22/2022	< 90	< 9.3	< 59	< 9.8	< 48	< 6.4	< 62	< 13	< 9.2	--	< 53
VP-12	Residential	5 ft	9/23/2022	< 90	< 9.3	< 59	< 9.8	< 48	< 6.4	< 62	< 13	< 9.2	--	< 53
VP-13	Residential	5 ft	12/3/2021	< 0.721	**1.04**	< 3.69	**2.05**	**11.1**	**1.19**	**3.42**	< 1.26	< 0.924	--	< 0.528
			2/15/2022	< 0.7	< 0.9	< 3.70	**1.98**	< 2.98	< 0.6	< 0.6	< 1	< 0.9	< 0.7	< 0.5
			9/23/2022	< 90	< 9.3	< 59	< 9.8	< 48	< 6.4	< 62	< 13	< 9.2	--	< 53
VP-14	Residential	5 ft	12/3/2021	< 0.721	**1.75**	**4.9**	**2**	**42.5**	**1.77**	< 0.622	< 1.26	< 0.924	--	< 0.528
			2/15/2022	< 0.7	< 0.9	< 3.70	< 1	**6.62**	**0.663**	< 0.6	< 1	< 0.9	< 0.7	< 0.5
			9/23/2022	< 90	< 9.3	< 59	< 9.8	< 48	< 6.4	< 62	< 13	< 9.2	--	< 53
18VP-1	Residential	5 ft	8/31/2018	--	< 1.2	< 14	--	--	**0.85**	--	< 1.6	< 1.1	--	< 0.66
18VP-2	Residential	5 ft	8/31/2018	--	**41**	< 14	--	--	**31**	--	< 1.6	< 1.1	--	< 0.66
			9/23/2022	< 90	< 9.3	< 59	< 9.8	< 48	< 6.4	< 62	< 13	< 9.2	--	< 53
18VP-3	Residential	5 ft	8/31/2018	--	< 1.2	< 14	--	--	**1.1**	--	< 1.6	< 1.1	--	< 0.66
			9/23/2022	< 90	< 9.3	< 59	< 9.8	< 48	< 6.4	< 62	< 13	< 9.2	--	< 53
18VP-4	Residential	7 ft	8/31/2018	--	< 1.2	< 14	--	--	< 0.80	--	< 1.6	< 1.1	--	< 0.66
			9/23/2022	< 90	< 9.3	< 59	< 9.8	**71**	< 6.4	< 62	< 13	< 9.2	--	< 53
18VP-5	Residential	5 ft	8/31/2018	--	< 1.2	< 14	--	--	**2.2**	--	< 1.6	< 1.1	--	< 0.66
	Residential	9 ft	8/31/2018	--	< 1.2	< 14	--	--	**13**	--	< 1.6	**13**	--	< 0.66
18VP-6	Residential	5 ft	8/31/2018	--	< 1.2	< 14	--	--	**1**	--	< 1.6	< 1.1	--	< 0.66
	Residential	10 ft	8/31/2018	--	< 1.2	< 14	--	--	**9.5**	--	< 1.6	**11**	--	< 0.66
	Residential	5 ft	9/23/2022	< 90	< 9.3	< 59	< 9.8	< 48	< 6.4	< 62	< 13	< 9.2	--	< 53
	Residential	10 ft	9/23/2022	< 90	< 9.3	< 59	< 9.8	< 48	< 6.4	< 62	< 13	< 9.2	--	< 53

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Residential VIAP Screening Level				37	3,100	280	2.1E+05	14	11,000	NC	NC	6.3E+05	2,400	340
Non-Residential VIAP Screening Level				87	4,600	410	3.1E+05	83	17,000	NC	NC	6.3E+05	3,600	800
Units				ug/m3	ug/m3	ug/m3	ug/m3	ug/m3	ug/m3	ug/m3	ug/m3	ug/m3	ug/m3	ug/m3
Sample Location	**Residential Status**	**Sample Interval**	**Date Sampled**											
Investigation Area: Eastern Margin														
VP-1	Residential	5 ft	12/2/2021	< 0.973	**0.797**	< 0.793	< 0.689	< 1.7	--	**1.49**	< 1.4	**8.13**	--	**1.98**
			2/11/2022	< 1	< 0.4	< 0.8	< 0.7	< 2	--	**1.38**	< 1	**6.97**	< 0.7	**4.17**
			9/22/2022	< 9.8	< 41	< 7.9	< 6.9	< 1.7	< 9.9	--	< 14	< 47	< 72	< 8.7
VP-2	Residential	5 ft	12/2/2021	< 0.973	< 0.413	< 0.793	**0.923**	< 1.7	--	**1.6**	< 1.4	**12.8**	--	**3.2**
			2/11/2022	< 1	< 0.4	< 0.8	< 0.7	< 2	--	**1.30**	< 1	**23**	< 0.7	**4.40**
			9/22/2022	< 9.8	< 41	< 7.9	< 6.9	< 1.7	< 9.9	--	< 14	< 47	< 72	< 8.7
VP-3	Residential	5 ft	12/2/2021	< 0.973	< 0.413	< 0.793	**1.06**	< 1.7	--	**1.58**	< 1.4	**3.62**	--	**4.86**
			2/11/2022	< 1	< 0.4	< 0.8	**0.904**	< 2	--	**1.25**	< 1	**155**	< 0.7	**5.57**
			9/22/2022	< 9.8	< 41	< 7.9	< 6.9	< 1.7	< 9.9	--	< 14	< 47	< 72	< 8.7
VP-4	Residential	5 ft	12/2/2021	< 0.973	< 0.413	< 0.793	< 0.689	< 1.7	--	**1.57**	< 1.4	**4.94**	--	**3.32**
			2/11/2022	< 1	< 0.4	< 0.8	**0.804**	< 2	--	**1.23**	< 1	**7.78**	< 0.7	**4.57**
			9/22/2022	< 9.8	< 41	< 7.9	< 6.9	< 1.7	< 9.9	--	< 14	< 47	< 72	< 8.7
VP-5	Residential	5 ft	12/2/2021	< 0.973	< 0.413	< 0.793	**1.09**	< 1.7	--	**1.52**	< 1.4	**17.5**	--	**3.91**
			2/11/2022	< 1	**0.449**	< 0.8	**0.763**	< 2	--	**1.23**	< 1	**21.4**	< 0.7	**4.02**
			9/22/2022	< 9.8	< 41	< 7.9	< 6.9	< 1.7	< 9.9	--	< 14	< 47	< 72	< 8.7
VP-6	Residential	5 ft	12/2/2021	< 0.973	**0.587**	< 0.793	**0.919**	< 1.7	--	**1.66**	< 1.4	**25.6**	--	**3.23**
			2/11/2022	< 1	< 0.4	< 0.8	< 0.7	< 2	--	**1.23**	< 1	**14.2**	< 0.7	**3.92**
			9/22/2022	< 9.8	< 41	< 7.9	< 6.9	< 1.7	< 9.9	--	< 14	< 47	< 72	< 8.7

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Residential VIAP Screening Level				37	3,100	280	2.1E+05	14	11,000	NC	NC	6.3E+05	2,400	340
Non-Residential VIAP Screening Level				87	4,600	410	3.1E+05	83	17,000	NC	NC	6.3E+05	3,600	800
Units				ug/m3	ug/m3	ug/m3	ug/m3	ug/m3	ug/m3	ug/m3	ug/m3	ug/m3	ug/m3	ug/m3
Sample Location	**Residential Status**	**Sample Interval**	**Date Sampled**											
Investigation Area: Eastern Margin (continued)														
VP-7	Residential	5 ft	12/2/2021	< 0.973	**0.69**	< 0.793	**2.18**	< 1.7	--	**1.74**	< 1.4	**56**	--	**5.64**
			2/11/2022	< 1	< 0.4	< 0.8	**0.777**	< 2	--	**1.32**	< 1	**19.1**	< 0.7	**5.57**
			9/22/2022	< 9.8	< 41	< 7.9	< 6.9	< 1.7	< 9.9	--	< 14	< 47	< 72	< 8.7
VP-8	Residential	5 ft	12/2/2021	< 0.973	< 0.413	< 0.793	< 0.689	< 1.7	--	**1.49**	< 1.4	**5.47**	--	**2.98**
			2/15/2022	< 1	< 0.4	< 0.8	**0.79**	< 2	--	**1.25**	< 1	**12.8**	**4.19**	**3.94**
			9/22/2022	< 9.8	< 41	< 7.9	< 6.9	< 1.7	< 9.9	--	< 14	< 47	< 72	< 8.7
VP-9	Residential	5 ft	12/3/2021	< 0.973	< 0.413	< 0.793	< 0.689	< 1.7	--	**1.6**	< 1.4	**4.07**	--	**3**
			2/15/2022	< 1	**0.491**	< 0.8	< 0.7	< 2	--	**1.41**	< 1	**15.8**	< 0.7	**2.77**
			9/22/2022	< 9.8	< 41	< 7.9	< 6.9	< 1.7	< 9.9	--	< 14	< 47	< 72	< 8.7
VP-10	Residential	5 ft	12/3/2021	< 0.973	**0.417**	< 0.793	**2.03**	< 1.7	--	**1.46**	< 1.4	**36**	--	**9.49**
			2/15/2022	< 1	< 0.4	< 0.8	< 0.7	< 2	--	**1.04**	< 1	**47.6**	< 0.7	**4.88**
			9/22/2022	< 9.8	< 41	< 7.9	< 6.9	< 1.7	< 9.9	--	< 14	< 47	< 72	< 8.7
VP-11	Residential	5 ft	12/3/2021	< 0.973	< 0.413	< 0.793	**1.78**	< 1.7	--	**1.38**	< 1.4	**19.2**	--	**7.24**
			2/15/2022	< 1	< 0.4	< 0.8	< 0.7	< 2	--	**1.00**	< 1	**4.63**	< 0.7	**5.01**
			9/22/2022	< 9.8	< 41	< 7.9	< 6.9	< 1.7	< 9.9	--	< 14	< 47	< 72	< 8.7
VP-12	Residential	5 ft	9/23/2022	< 9.8	< 41	< 7.9	< 6.9	< 1.7	< 9.9	--	< 14	< 47	< 72	< 8.7
VP-13	Residential	5 ft	12/3/2021	< 0.973	< 0.413	< 0.793	**1.19**	< 1.7	--	**1.48**	< 1.4	**27**	--	**5.38**
			2/15/2022	< 1	< 0.4	< 0.8	< 0.7	< 2	--	**1.16**	< 1	**10.5**	< 0.7	**2.88**
			9/23/2022	< 9.8	< 41	< 7.9	< 6.9	< 1.7	< 9.9	--	< 14	< 47	< 72	< 8.7
VP-14	Residential	5 ft	12/3/2021	< 0.973	**0.758**	< 0.793	**1.83**	< 1.7	--	**1.64**	< 1.4	**3.81**	--	**8.5**
			2/15/2022	< 1	< 0.4	< 0.8	< 0.7	< 2	--	**1.29**	< 1	**31.0**	< 0.7	**4.04**
			9/23/2022	< 9.8	< 41	< 7.9	< 6.9	< 1.7	< 9.9	--	< 14	< 47	< 72	< 8.7
18VP-1	Residential	5 ft	8/31/2018	**2**	< 0.51	**2.2**	--	< 2.1	**1.8**	--	--	--	--	< 1.1
18VP-2	Residential	5 ft	8/31/2018	< 1.2	< 0.51	< 0.99	--	< 2.1	**1.8**	--	--	--	--	**12**
			9/23/2022	< 9.8	< 41	< 7.9	< 6.9	< 1.7	< 9.9	--	< 14	< 47	< 72	< 8.7
18VP-3	Residential	5 ft	8/31/2018	**2.3**	< 0.51	**2.5**	--	< 2.1	**2**	--	--	--	--	**1.7**
			9/23/2022	< 9.8	< 41	< 7.9	< 6.9	< 1.7	< 9.9	--	< 14	< 47	< 72	< 8.7
18VP-4	Residential	7 ft	8/31/2018	< 1.2	< 0.51	< 0.99	--	< 2.1	**1.4**	--	--	--	--	**1.6**
			9/23/2022	< 9.8	< 41	< 7.9	< 6.9	< 1.7	< 9.9	--	< 14	< 47	< 72	< 8.7
18VP-5	Residential	5 ft	8/31/2018	**1.3**	**24**	< 0.99	--	< 2.1	**1.4**	--	--	--	--	**2**
	Residential	9 ft	8/31/2018	< 1.2	**0.74**	< 0.99	--	< 2.1	**1.4**	--	--	--	--	**7.5**
18VP-6	Residential	5 ft	8/31/2018	**9.9**	**1.4**	< 0.99	--	< 2.1	**1.6**	--	--	--	--	**1.9**
	Residential	10 ft	8/31/2018	< 1.2	**0.59**	< 0.99	--	< 2.1	**1.5**	--	--	--	--	**6.8**
	Residential	5 ft	9/23/2022	< 9.8	< 41	< 7.9	< 6.9	< 1.7	< 9.9	--	< 14	< 47	< 72	< 8.7
	Residential	10 ft	9/23/2022	< 9.8	< 41	< 7.9	< 6.9	< 1.7	< 9.9	--	< 14	< 47	< 72	< 8.7

Notes:
Residential and Non-Residential Volatilization to Indoor Air Pathway (VIAP) Screening Levels from Appendix D.1 of the Addendum to the EGLE Guidance Document for the Vapor Intrusion Pathway (September 2020).
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ug/m3 = microgram per cubic meter
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Bold font denotes concentrations detected above laboratory reporting limits.
Denotes concentrations above one or more criteria.

Table 5
Summary of Detected Volatile Organic Compounds in Soil Vapor
Former Hayes Lemmerz Site - Eastern Boundary
2000 West 8 Mile Road
Ferndale, MI

Analyte				Heptane	Hexane	Isopropanol	Isopropylbenzene (Cumene)	m,p-Xylene	Methyl methacrylate	Methylcyclo-hexane	Methylene chloride	Naphthalene	n-Propanol	o-Xylene
Residential VIAP Screening Level				1.2E+05	24,000	7,000	81	NC	NC	NC	21,000	25	83,000	NC
Non-Residential VIAP Screening Level				1.8E+05	36,000	10,000	190	NC	NC	NC	31,000	59	83,000	NC
Units				ug/m3	ug/m3	ug/m3	ug/m3	ug/m3	ug/m3	ug/m3	ug/m3	ug/m3	ug/m3	ug/m3
Sample Location	**Residential Status**	**Sample Interval**	**Date Sampled**											
Investigation Area: Eastern Margin														
VP-1	Residential	5 ft	12/2/2021	< 0.818	**3.08**	--	< 0.983	**7.5**	< 0.819	--	**4.86**	< 3.3	< 3.07	**2.9**
			2/11/2022	< 0.8	< 2.2	--	< 1	**15.9**	< 0.8	**1.18**	< 0.7	< 3.3	< 3.08	**5.40**
			9/22/2022	< 8.2	< 7.0	< 49	--	< 17	< 8.2	--	< 17	< 10	--	< 8.7
VP-2	Residential	5 ft	12/2/2021	**1.15**	**3.6**	--	< 0.983	**12.1**	< 0.819	--	**3.24**	< 3.3	< 3.07	**4.99**
			2/11/2022	< 0.8	< 2.2	--	< 1	**17.2**	< 0.8	**1.1**	< 0.7	< 3.3	< 3.08	**6.01**
			9/22/2022	< 8.2	< 7.0	< 49	--	< 17	< 8.2	--	< 17	< 10	--	< 8.7
VP-3	Residential	5 ft	12/2/2021	**1.01**	< 2.22	--	< 0.983	**19.3**	< 0.819	--	< 0.694	< 3.3	< 3.07	**7.76**
			2/11/2022	< 0.8	< 2.2	--	< 1	**21.6**	< 0.8	**1.51**	< 0.7	< 3.3	< 3.08	**7.36**
			9/22/2022	< 8.2	< 7.0	< 49	--	< 17	< 8.2	--	< 17	< 10	--	< 8.7
VP-4	Residential	5 ft	12/2/2021	< 0.818	**3.51**	--	< 0.983	**13.3**	< 0.819	--	**3.54**	< 3.3	< 3.07	**5.16**
			2/11/2022	< 0.8	< 2.2	--	< 1	**18.0**	< 0.8	**1.38**	< 0.7	< 3.3	< 3.08	**6.14**
			9/22/2022	< 8.2	< 7.0	< 49	--	< 17	< 8.2	--	< 17	< 10	--	< 8.7
VP-5	Residential	5 ft	12/2/2021	**1.39**	**5.96**	--	< 0.983	**15.3**	< 0.819	--	**4.06**	< 3.3	**3.37**	**5.68**
			2/11/2022	< 0.8	< 2.2	--	< 1	**15.6**	**0.990**	**1.39**	< 0.7	< 3.3	**100**	**5.31**
			9/22/2022	< 8.2	< 7.0	< 49	--	< 17	< 8.2	--	< 17	< 10	--	< 8.7
VP-6	Residential	5 ft	12/2/2021	**1.48**	**9.66**	--	< 0.983	**12.6**	< 0.819	--	**4.97**	< 3.3	**4.52**	**4.51**
			2/11/2022	< 0.8	< 2.2	--	< 1	**16.0**	< 0.8	**1.14**	< 0.7	< 3.3	< 3.08	**5.40**
			9/22/2022	< 8.2	< 7.0	< 49	--	< 17	< 8.2	--	< 17	< 10	--	< 8.7

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Analyte				Heptane	Hexane	Isopropanol	Isopropylbenzene (Cumene)	m,p-Xylene	Methyl methacrylate	Methylcyclo-hexane	Methylene chloride	Naphthalene	n-Propanol	o-Xylene
Residential VIAP Screening Level				1.2E+05	24,000	7,000	81	NC	NC	NC	21,000	25	83,000	NC
Non-Residential VIAP Screening Level				1.8E+05	36,000	10,000	190	NC	NC	NC	31,000	59	83,000	NC
Units				ug/m3	ug/m3	ug/m3	ug/m3	ug/m3	ug/m3	ug/m3	ug/m3	ug/m3	ug/m3	ug/m3
Sample Location	**Residential Status**	**Sample Interval**	**Date Sampled**											
Investigation Area: Eastern Margin (continued)														
VP-7	Residential	5 ft	12/2/2021	**3.66**	**10.5**	--	< 0.983	**21.5**	< 0.819	--	**2.47**	< 3.3	**11.8**	**7.5**
			2/11/2022	**0.830**	< 2.2	--	< 1	**21.5**	< 0.8	**1.71**	< 0.7	< 3.3	< 3.08	**7.23**
			9/22/2022	< 8.2	< 7.0	< 49	--	< 17	< 8.2	--	< 17	< 10	--	< 8.7
VP-8	Residential	5 ft	12/2/2021	< 0.818	**19.4**	--	< 0.983	**11.9**	< 0.819	--	**9.83**	< 3.3	< 3.07	**4.3**
			2/15/2022	**1.08**	< 2.2	--	< 1	**15.4**	< 0.8	**1.22**	< 0.7	< 3.3	**3.82**	**5.27**
			9/22/2022	< 8.2	< 7.0	< 49	--	< 17	< 8.2	--	< 17	< 10	--	< 8.7
VP-9	Residential	5 ft	12/3/2021	< 0.818	< 2.22	--	< 0.983	**11**	< 0.819	--	< 0.694	< 3.3	< 3.07	**4.17**
			2/15/2022	< 0.8	< 2.2	--	< 1	**10.2**	< 0.8	< 0.8	< 0.7	< 3.3	< 3.08	**3.5**
			9/22/2022	< 8.2	< 7.0	**220**	--	< 17	< 8.2	--	< 17	< 10	--	< 8.7
VP-10	Residential	5 ft	12/3/2021	**2.93**	**8.88**	--	< 0.983	**31.7**	< 0.819	--	**1.92**	< 3.3	**7.52**	**10.5**
			2/15/2022	< 0.8	< 2.2	--	< 1	**20**	< 0.8	**1.18**	< 0.7	< 3.3	**14**	**5.92**
			9/22/2022	< 8.2	< 7.0	< 49	--	< 17	< 8.2	--	< 17	< 10	--	< 8.7
VP-11	Residential	5 ft	12/3/2021	**7.85**	**6.28**	--	< 0.983	**13.5**	< 0.819	--	< 0.694	< 3.3	< 3.07	**4.9**
			2/15/2022	< 0.8	< 2.2	--	< 1	**17.3**	< 0.8	**1.31**	< 0.7	< 3.3	< 3.08	**5.96**
			9/22/2022	< 8.2	< 7.0	< 49	--	< 17	< 8.2	--	< 17	< 10	--	< 8.7
VP-12	Residential	5 ft	9/23/2022	< 8.2	< 7.0	< 49	--	< 17	< 8.2	--	< 17	< 10	--	< 8.7
VP-13	Residential	5 ft	12/3/2021	**1.85**	**4.2**	--	< 0.983	**17.9**	< 0.819	--	**1.14**	< 3.3	**5.21**	**6.33**
			2/15/2022	< 0.8	< 2.2	--	< 1	**7.05**	< 0.8	< 0.8	< 0.7	< 3.3	< 3.08	**2.28**
			9/23/2022	< 8.2	< 7.0	< 49	--	< 17	< 8.2	--	< 17	< 10	--	< 8.7
VP-14	Residential	5 ft	12/3/2021	**2.36**	**9.94**	--	< 0.983	**27.4**	< 0.819	--	**5.76**	< 3.3	< 3.07	**9.23**
			2/15/2022	< 0.8	< 2.2	--	< 1	**15.0**	< 0.8	**0.983**	< 0.7	< 3.3	**3.82**	**5.14**
			9/23/2022	< 8.2	< 7.0	< 49	--	< 17	< 8.2	--	< 17	< 10	--	< 8.7
18VP-1	Residential	5 ft	8/31/2018	--	< 3.2	--	--	**3.1**	--	--	< 1.0	--	--	**2.1**
18VP-2	Residential	5 ft	8/31/2018	--	**15**	--	--	**35**	--	--	< 1.0	--	--	**14**
			9/23/2022	< 8.2	< 7.0	< 49	--	< 17	< 8.2	--	< 17	< 10	--	< 8.7
18VP-3	Residential	5 ft	8/31/2018	--	< 3.2	--	--	**7**	--	--	< 1.0	--	--	**3.5**
			9/23/2022	< 8.2	< 7.0	< 49	--	< 17	< 8.2	--	< 17	< 10	--	< 8.7
18VP-4	Residential	7 ft	8/31/2018	--	< 3.2	--	--	**6.4**	--	--	< 1.0	--	--	**3.3**
			9/23/2022	< 8.2	< 7.0	**980**	--	< 17	< 8.2	--	< 17	< 10	--	< 8.7
18VP-5	Residential	5 ft	8/31/2018	--	< 3.2	--	--	**8.2**	--	--	< 1.0	--	--	**4.1**
	Residential	9 ft	8/31/2018	--	**19**	--	--	**5.9**	--	--	< 1.0	--	--	**8.7**
18VP-6	Residential	5 ft	8/31/2018	--	< 3.2	--	--	**7.2**	--	--	< 1.0	--	--	**3.9**
	Residential	10 ft	8/31/2018	--	< 3.2	--	--	**10**	--	--	< 1.0	--	--	**11**
	Residential	5 ft	9/23/2022	< 8.2	< 7.0	< 49	--	< 17	< 8.2	--	< 17	< 10	--	< 8.7
	Residential	10 ft	9/23/2022	< 8.2	< 7.0	< 49	--	< 17	< 8.2	--	< 17	< 10	--	< 8.7

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Analyte				Propylene	Styrene	Tetrachloroethene	Tetrahydrofuran	Toluene	TPH - Gasoline Range Organics	Trichloroethene	Trichlorofluoro-methane (Freon 11)	Trichlorotrifluoro-ethane (Freon 113)	Vinyl chloride	Xylenes, total
Residential VIAP Screening Level				NC	1,500	1,400	70,000	1.7E+05	NC	67	15,000	6.6E+05	54	7,600
Non-Residential VIAP Screening Level				NC	3,500	1,400	1.0E+05	2.5E+05	NC	67	22,000	9.7E+05	450	11,000
Units				ug/m3	ug/m3	ug/m3	ug/m3	ug/m3	ug/m3	ug/m3	ug/m3	ug/m3	ug/m3	ug/m3
Sample Location	**Residential Status**	**Sample Interval**	**Date Sampled**											
Investigation Area: Eastern Margin														
VP-1	Residential	5 ft	12/2/2021	< 2.15	**2.54**	< 1.36	< 0.59	**17.3**	--	< 1.07	**1.3**	< 1.53	< 0.511	--
			2/11/2022	< 3.08	**5.00**	< 1	< 0.6	**41.2**	< 700	< 1	**1.22**	< 2	< 0.5	--
			9/22/2022	< 170	< 8.5	< 14	< 5.9	< 7.5	--	< 11	< 11	< 15	< 5.1	< 26
VP-2	Residential	5 ft	12/2/2021	< 2.15	**3.68**	< 1.36	< 0.59	**28.7**	--	< 1.07	**1.46**	< 1.53	< 0.511	--
			2/11/2022	< 3.08	**7.01**	< 1	< 0.6	**38.2**	< 700	< 1	**1.31**	< 2	< 0.5	--
			9/22/2022	< 170	< 8.5	< 14	< 5.9	< 7.5	--	< 11	< 11	< 15	< 5.1	< 26
VP-3	Residential	5 ft	12/2/2021	< 2.15	**7.06**	< 1.36	< 0.59	**35**	--	**1.22**	**1.93**	< 1.53	< 0.511	--
			2/11/2022	< 3.08	**9.35**	< 1	< 0.6	**47.6**	**700**	< 1	**1.57**	< 2	< 0.5	--
			9/22/2022	< 170	< 8.5	< 14	< 5.9	< 7.5	--	< 11	< 11	< 15	< 5.1	< 26
VP-4	Residential	5 ft	12/2/2021	< 2.15	**5.44**	< 1.36	< 0.59	**20**	--	< 1.07	**1.8**	< 1.53	< 0.511	--
			2/11/2022	< 3.08	**7.86**	< 1	< 0.6	**40.4**	< 700	< 1	**1.63**	< 2	< 0.5	--
			9/22/2022	< 170	< 8.5	< 14	< 5.9	< 7.5	--	< 11	< 11	< 15	< 5.1	< 26
VP-5	Residential	5 ft	12/2/2021	< 2.15	**5.4**	< 1.36	< 0.59	**41.8**	--	< 1.07	**1.52**	< 1.53	< 0.511	--
			2/11/2022	< 3.08	**6.49**	< 1	< 0.6	**36.9**	< 700	< 1	< 1	< 2	< 0.5	--
			9/22/2022	< 170	< 8.5	< 14	< 5.9	< 7.5	--	< 11	< 11	< 15	< 5.1	< 26
VP-6	Residential	5 ft	12/2/2021	< 2.15	**4.42**	< 1.36	< 0.59	**36.7**	--	< 1.07	**1.17**	< 1.53	< 0.511	--
			2/11/2022	< 3.08	**7.01**	< 1	< 0.6	**32**	< 700	< 1	< 1	< 2	< 0.5	--
			9/22/2022	< 170	< 8.5	< 14	< 5.9	< 7.5	--	< 11	< 11	< 15	< 5.1	< 26

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Residential VIAP Screening Level				NC	1,500	1,400	70,000	1.7E+05	NC	67	15,000	6.6E+05	54	7,600
Non-Residential VIAP Screening Level				NC	3,500	1,400	1.0E+05	2.5E+05	NC	67	22,000	9.7E+05	450	11,000
Units				ug/m3	ug/m3	ug/m3	ug/m3	ug/m3	ug/m3	ug/m3	ug/m3	ug/m3	ug/m3	ug/m3
Sample Location	**Residential Status**	**Sample Interval**	**Date Sampled**											
Investigation Area: Eastern Margin (continued)														
VP-7	Residential	5 ft	12/2/2021	< 2.15	**5.91**	< 1.36	< 0.59	**88.5**	--	< 1.07	**1.94**	< 1.53	< 0.511	--
			2/11/2022	< 3.08	**9.10**	< 1	< 0.6	**47.2**	**726**	< 1	**2.78**	< 2	< 0.5	--
			9/22/2022	< 170	< 8.5	< 14	< 5.9	**15**	--	< 11	< 11	< 15	< 5.1	< 26
VP-8	Residential	5 ft	12/2/2021	< 2.15	**5.32**	< 1.36	< 0.59	**19.2**	--	< 1.07	**1.15**	< 1.53	< 0.511	--
			2/15/2022	< 3.08	**6.36**	< 1	< 0.6	**45.0**	< 700	< 1	< 1	< 2	< 0.5	--
			9/22/2022	< 170	< 8.5	< 14	< 5.9	< 7.5	--	< 11	< 11	< 15	< 5.1	< 26
VP-9	Residential	5 ft	12/3/2021	< 2.15	**4.12**	< 1.36	< 0.59	**20.3**	--	< 1.07	< 1.12	< 1.53	< 0.511	--
			2/15/2022	< 3.08	**3.95**	< 1	< 0.6	**26.5**	< 700	< 1	< 1	< 2	< 0.5	--
			9/22/2022	< 170	< 8.5	< 14	< 5.9	< 7.5	--	< 11	< 11	< 15	< 5.1	< 26
VP-10	Residential	5 ft	12/3/2021	< 2.15	< 0.851	< 1.36	< 0.59	**60.6**	--	< 1.07	< 1.12	< 1.53	< 0.511	--
			2/15/2022	< 3.08	**7.22**	< 1	< 0.6	**47.6**	< 700	< 1	< 1	< 2	< 0.5	--
			9/22/2022	< 170	< 8.5	< 14	< 5.9	< 7.5	--	< 11	< 11	< 15	< 5.1	< 26
VP-11	Residential	5 ft	12/3/2021	< 2.15	**3.15**	**3.05**	< 0.59	**52**	--	< 1.07	< 1.12	< 1.53	< 0.511	--
			2/15/2022	< 3.08	**6.75**	< 1	< 0.6	**54.8**	< 700	< 1	< 1	< 2	< 0.5	--
			9/22/2022	< 170	< 8.5	< 14	< 5.9	< 7.5	--	< 11	< 11	< 15	< 5.1	< 26
VP-12	Residential	5 ft	9/23/2022	< 170	< 8.5	< 14	< 5.9	< 7.5	--	< 11	< 11	< 15	< 5.1	< 26
VP-13	Residential	5 ft	12/3/2021	< 2.15	< 0.851	< 1.36	< 0.59	**38**	--	< 1.07	< 1.12	< 1.53	< 0.511	--
			2/15/2022	< 3.08	**1.78**	< 1	< 0.6	**9.75**	< 700	< 1	< 1	< 2	< 0.5	--
			9/23/2022	< 170	< 8.5	< 14	< 5.9	< 7.5	--	< 11	< 11	< 15	< 5.1	< 26
VP-14	Residential	5 ft	12/3/2021	< 2.15	< 0.851	< 1.36	< 0.59	**58.4**	--	< 1.07	< 1.12	< 1.53	< 0.511	--
			2/15/2022	< 3.08	**6.02**	< 1	< 0.6	**39.3**	< 700	< 1	< 1	< 2	< 0.5	--
			9/23/2022	< 170	< 8.5	< 14	< 5.9	< 7.5	--	< 11	< 11	< 15	< 5.1	< 26
18VP-1	Residential	5 ft	8/31/2018	--	< 1.1	**2.3**	--	**2.9**	--	**400**	**1.5**	--	**0.92**	--
18VP-2	Residential	5 ft	8/31/2018	--	< 1.1	< 1.7	--	**170**	--	< 1.3	< 1.4	--	< 0.64	--
			9/23/2022	< 170	< 8.5	< 14	< 5.9	< 7.5	--	< 11	< 11	< 15	< 5.1	< 26
18VP-3	Residential	5 ft	8/31/2018	--	< 1.1	**6.1**	--	**4**	--	**180**	< 1.4	--	< 0.64	--
			9/23/2022	< 170	< 8.5	< 14	< 5.9	< 7.5	--	**97**	**45**	< 15	< 5.1	< 26
18VP-4	Residential	7 ft	8/31/2018	--	< 1.1	**3**	--	**6.6**	--	< 1.3	**1.6**	--	< 0.64	--
			9/23/2022	< 170	< 8.5	< 14	< 5.9	< 7.5	--	< 11	< 11	< 15	< 5.1	< 26
18VP-5	Residential	5 ft	8/31/2018	--	< 1.1	**1.7**	--	**7.1**	--	< 1.3	**1.8**	--	< 0.64	--
	Residential	9 ft	8/31/2018	--	**30**	**26**	--	**9.1**	--	< 1.3	**2.1**	--	< 0.64	--
18VP-6	Residential	5 ft	8/31/2018	--	< 1.1	**3.7**	--	**8.6**	--	< 1.3	**2**	--	< 0.64	--
	Residential	10 ft	8/31/2018	--	**27**	**3.2**	--	**11**	--	< 1.3	**2.4**	--	< 0.64	--
	Residential	5 ft	9/23/2022	< 170	< 8.5	< 14	< 5.9	< 7.5	--	< 11	< 11	< 15	< 5.1	< 26
	Residential	10 ft	9/23/2022	< 170	< 8.5	< 14	< 5.9	< 7.5	--	< 11	< 11	< 15	< 5.1	< 26

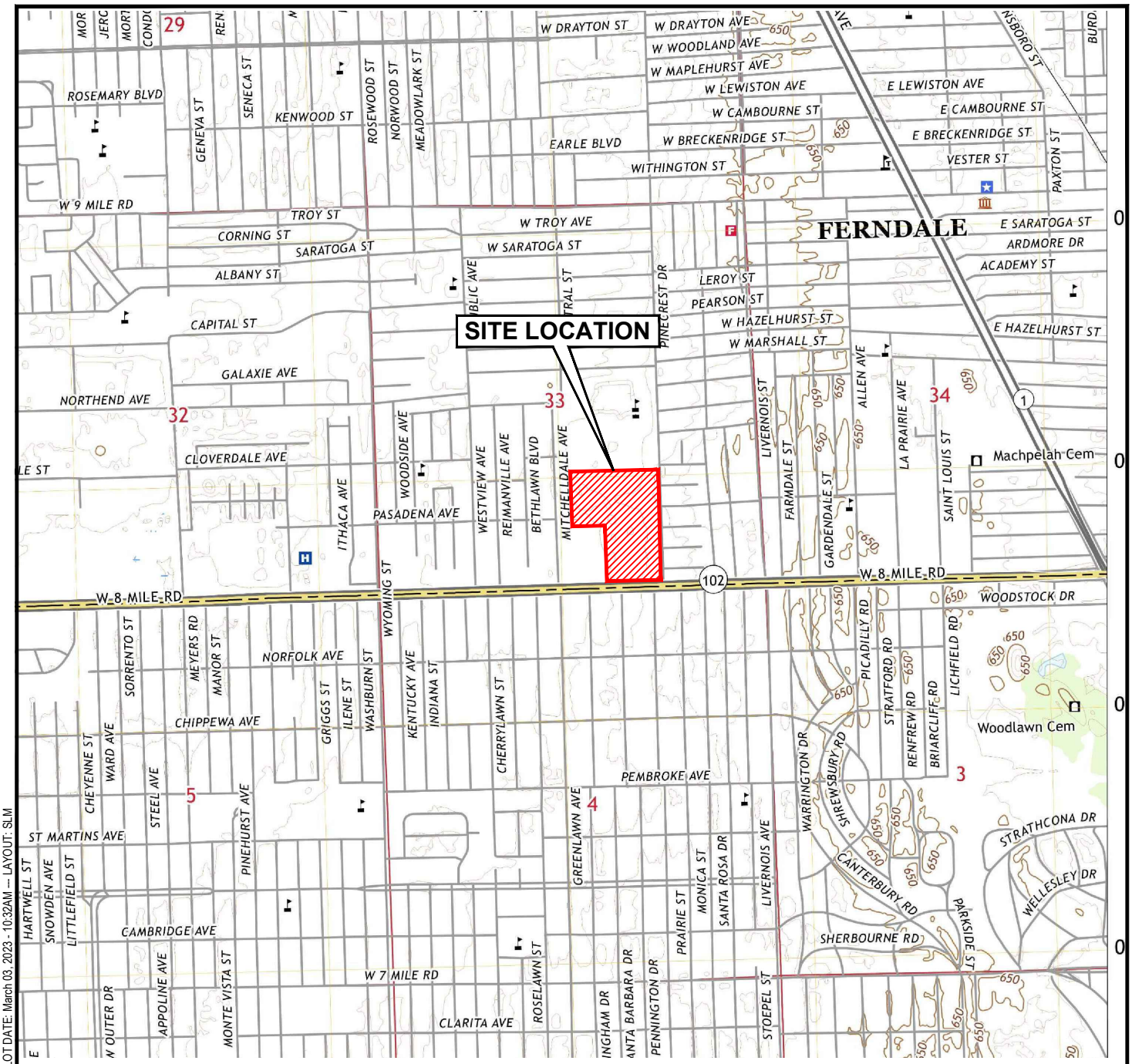
Notes:
Residential and Non-Residential Volatilization to Indoor Air Pathway (VIAP) Screening Levels from Appendix D.1 of the Addendum to the EGLE Guidance Document for the Vapor Intrusion Pathway (September 2020).
Only analytes with one or more detection are reported.
ug/m3 = microgram per cubic meter
NC = No Criterion; -- = Parameter Not Analyzed
Bold font denotes concentrations detected above laboratory reporting limits.
Denotes concentrations above one or more criteria.

Table 6
Summary of Soil Vapor Sampling Field Screening Parameters
Former Hayes Lemmerz Site - Eastern Boundary
2000 West 8 Mile Road
Ferndale, MI

Analyte			**Barometric Pressure**		**Carbon dioxide**		**Helium**		**Methane**		**Oxygen**		**Total Volatiles (via PID)**	
Units			in Hg		%		%		%		%		ppm	
Pre/Post Sample			Pre	Post	Pre	Post	Shroud Interior	Sample Train	Pre	Post	Pre	Post	Pre	Post
VP-1	5 ft	9/22/2022	29.31	29.31	0.7	0.6	33.8	0.0	0	0	20.1	19.3	0	0
VP-2	5 ft	9/22/2022	29.31	29.30	0.5	0.5	40.9	0.0	0	0	19.4	19.4	0	0
VP-3	5 ft	9/22/2022	29.30	29.30	0.5	0.5	41.2	0.0	0	0	19.5	20.1	0	0
VP-4	5 ft	9/22/2022	29.30	29.30	0.6	0.6	52.0	0.0	0	0	19.8	19.9	0	0
VP-5	5 ft	9/22/2022	29.30	29.30	1.5	1.4	58.1	0.0	0	0	18.7	19.2	0	0
VP-6	5 ft	9/22/2022	29.30	29.30	1.5	1.7	41.8	0.0	0	0	18.7	19.7	0	0
VP-7	5 ft	9/22/2022	29.30	29.32	0.8	0.8	48.2	0.0	0	0	20.6	20.6	0	0
VP-8	5 ft	9/22/2022	29.32	29.32	3.0	3.0	52.0	0.0	0	0	18.5	19.0	0	0
VP-9	5 ft	9/22/2022	29.32	29.32	1.9	1.9	60.1	0.0	0	0	20.1	20.4	0	0
VP-10	5 ft	9/22/2022	29.32	29.32	4.1	4.2	45.1	0.0	0	0	18.7	18.8	0	0
VP-11	5 ft	9/22/2022	29.32	29.32	3.5	3.5	55.2	0.0	0	0	19.2	19.3	0	0
VP-12	5 ft	9/23/2022	29.41	29.41	2.2	2.1	57.1	0.0	0	0	19.6	19.5	0	0
VP-13	5 ft	9/23/2022	29.41	29.41	3.9	3.8	47.1	0.0	0	0	18.2	18.3	0	0
VP-14	5 ft	9/23/2022	29.44	29.44	2.4	2.3	60.1	0.0	0	0	19.3	19.2	0	0
18VP-2	5 ft	9/23/2022	29.41	29.41	2.4	2.3	43.8	0.0	0	0	18.4	18.8	0	0
18VP-3	5 ft	9/23/2022	29.41	29.41	1.6	1.6	41.2	0.0	0	0	18.6	18.5	0	0
18VP-4	7 ft	9/23/2022	29.41	29.41	1.0	1.0	58.4	0.0	0	0	19.0	19.0	0	0
18VP-6	5 ft	9/23/2022	29.41	29.41	0.9	0.9	48.1	0.0	0	0	19.4	19.3	0	0
18VP-6	10 ft	9/23/2022	29.41	29.41	1.1	1.0	51.6	0.0	0	0	19.3	19.1	0	0

Notes:
PID = Photo ionization detector
in Hg = Inches of mercury
% = Percent
ppm = Parts per million

Figures



MICHIGAN

QUADRANGLE LOCATION

LEGEND

APPROXIMATE SITE BOUNDARY

MAP SOURCE:

MAP DEVELOPED FROM THE UNITED STATES GEOLOGICAL SURVEY (NAD 83), DATED 2019.

N

0 2000' 4000'

APPROXIMATE SCALE IN FEET

TRC
1540 Eisenhower Place
Ann Arbor, MI 48108
Phone: 734.971.7080
www.trcsolutions.com

PROJECT: **FORMER HAYES LEMMERZ SITE**
EASTERN BOUNDARY
WEST EIGHT MILE ROAD
FERNDALE, MI

TITLE: **SITE LOCATION MAP**

WORKING COPY

DRAWN BY:	E. ALEXANDER
CHECKED BY:	B. YELEN
APPROVED BY:	
DATE:	FEBURARY 2023
PROJ. NO.:	495430.0000.0000
FILE:	495530.00000 FIG1 SLM.dwg

FIGURE 1

8.5x11 -- USER: EAlexander -- ATTACHED XREFS: -- ATTACHED IMAGES: MI_Royal_Oak_20191218_TM:
DRAWING NAME: J:\Detroit Axle Ferndale\495430\00000\495530.00000 FIG1 SLM.dwg -- PLOT DATE: March 03, 2023 - 10:32AM -- LAYOUT: SLM

Version: 2017-10-21

11x17 --- USER: EAlexander --- ATTACHED XREF'S: XREF-BUILDINGS; XREF M-WELLS; XREF M-WELLS- FEB 2023 --- ATTACHED IMAGES:
DRAWING NAME: J:\Detroit Axle Ferndale\495430\0000\ 495530.00000 FIG2 SF EAST BNDY.dwg --- PLOT DATE: March 15, 2023 - 12:53PM --- LAYOUT: SFM EB
Version: 2017-10-21

LEGEND:

- APPROXIMATE PROPERTY BOUNDARY
- AREA OF CONCERN
- OLD RIVER BED
- FORMER BUILDING
- W — WATER LINE
- G — GAS LINE
- ST — STORM SEWER/SANITARY SEWER
- OHE — OVERHEAD ELECTRIC
- TUNNELS
- MW-22-01 — MONITORING WELL BY TRC EASTERN BOUNDARY
- MW-22-07 — MONITORING WELL BY TRC SOUTHERN AREA
- MW-101 — MONITORING WELL BY ATC
- MW-13 — MONITORING WELL BY OTHERS
- MW-C — TEMPORARY/FORMER WELLS BY OTHERS
- A1 — SOIL-GAS MONITORING WELL BY ATC
- 18VP-3 — SOIL-GAS MONITORING WELL BY EGLE
- 18VP-1 — SOIL-GAS MONITORING WELL BY EGLE (DESTROYED)
- B-1 — SOIL BORING
- VP-1 — SOIL-GAS VAPOR POINT BY ATC 2022
- CB — CATCH BASINS
- M — MANHOLE
- gw — GATE WELL
- HYDRANT AND VALVE

NOTE: ALL LOCATIONS ARE APPROXIMATE

Fox St.
Northway St.
PINECREST DRIVE
Fielding St
Marie St
Jean St
Bertha St
EIGHT MILE ROAD

N

150 0 30 60 90 120 150
SCALE: 1" = 150'

AERIAL IMAGERY DATED 2022

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Ann Arbor, MI 48108
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PROJECT:
FORMER HAYES LEMMERZ SITE
EASTERN BOUNDARY
WEST EIGHT MILE ROAD
FERNDALE, MI

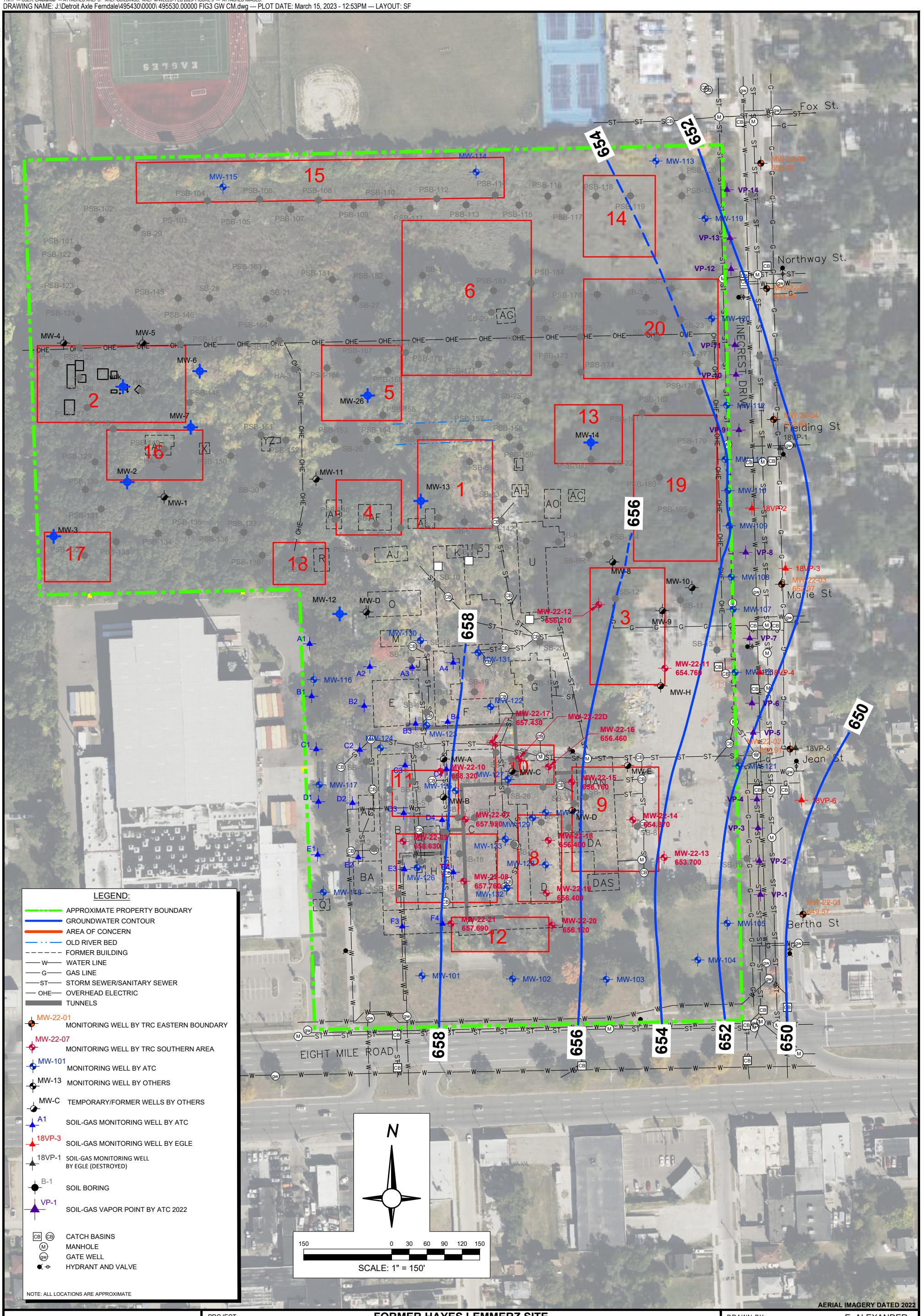
TITLE:
SITE FEATURES MAP
EASTERN BOUNDARY

DRAWN BY:	E. ALEXANDER
CHECKED BY:	B. YELEN
APPROVED BY:	
DATE:	FEBURARY 2023
PROJ. NO.:	495430.0000.0000
FILE:	495530.00000 FIG2 SF EAST BNDY.dwg

FIGURE 2

11x17 --- USER: EAlexander --- ATTACHED XREF'S: XREF-BUILDINGS; XREF M-WELLS- FEB 2023- FIGURE 3 --- ATTACHED IMAGES:
DRAWING NAME: J:\Detroit Axle Ferndale\495430\0000\ 495530.00000 FIG3 GW CM.dwg --- PLOT DATE: March 15, 2023 - 12:53PM --- LAYOUT: SF

Version: 2017-10-21



LEGEND:

- APPROXIMATE PROPERTY BOUNDARY
- GROUNDWATER CONTOUR
- AREA OF CONCERN
- OLD RIVER BED
- FORMER BUILDING
- W — WATER LINE
- G — GAS LINE
- ST — STORM SEWER/SANITARY SEWER
- OHE — OVERHEAD ELECTRIC
- TUNNELS
- MW-22-01 — MONITORING WELL BY TRC EASTERN BOUNDARY
- MW-22-07 — MONITORING WELL BY TRC SOUTHERN AREA
- MW-101 — MONITORING WELL BY ATC
- MW-13 — MONITORING WELL BY OTHERS
- MW-C — TEMPORARY/FORMER WELLS BY OTHERS
- A1 — SOIL-GAS MONITORING WELL BY ATC
- 18VP-3 — SOIL-GAS MONITORING WELL BY EGLE
- 18VP-1 — SOIL-GAS MONITORING WELL BY EGLE (DESTROYED)
- B-1 — SOIL BORING
- VP-1 — SOIL-GAS VAPOR POINT BY ATC 2022
- CB — CATCH BASINS
- M — MANHOLE
- gw — GATE WELL
- HYDRANT AND VALVE

NOTE: ALL LOCATIONS ARE APPROXIMATE

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www.trcsolutions.com

PROJECT:
FORMER HAYES LEMMERZ SITE
EASTERN BOUNDARY
WEST EIGHT MILE ROAD
FERNDALE, MI

TITLE:
GROUNDWATER CONTOUR MAP
DECEMBER 2022

DRAWN BY:	E. ALEXANDER
CHECKED BY:	B. YELEN
APPROVED BY:	
DATE:	FEBURARY 2023
PROJ. NO.:	495430.0000.0000
FILE:	495530.00000 FIG3 GW CM.dwg

FIGURE 3

11x17 --- USER: EAlexander --- ATTACHED XREF'S: XREF M-WELLS; XREF M-WELLS- FEB 2023; XREF-BUILDINGS --- ATTACHED IMAGES:
DRAWING NAME: J:\Detroit Axle Ferndale\495430\0000\ 495530.00000 FIGURE 4.dwg --- PLOT DATE: March 15, 2023 - 1:00PM --- LAYOUT: GROUNDWATER AND SOIL VAPOR PART 201 CLEANUP CRITERIA EXCEEDANCES

Version 2017-1021

MW-113	9/27/2022	12/15/2022
Iron	680	140

MW-119	9/27/2022	12/14/2022
Selenium	<5	8

MW-120	9/27/2022	12/14/2022
PFOA	47	48

MW-112	9/27/2022	12/14/2022
Aluminum	2,610	51
Iron	2,880	230
Lead	7	<3
Manganese	487	398
PFOS	15	16
PFOA	23	24

MW-111	9/27/2022	12/14/2022
Iron	520	140
Manganese	946	674
PFOA	19	12
Tetrachloroethene	4	3
Trichloroethene	4	3

MW-110	9/27/2022	12/14/2022
Iron	1,290	870
Manganese	748	626
PFOA	11	9.8
Vinyl chloride	2	3

MW-109	9/28/2022	12/14/2022
Iron	6,060	4,960
Manganese	556	390
PFOA	8.7	8.9
1,2-Dichlorobenzene	31	33
1,4-Dichlorobenzene	10	10

MW-108	9/28/2022	12/14/2022
Aluminum	<10	147
Iron	110	390
Manganese	244	348
PFOA	11	5.4

MW-107	9/28/2022	12/15/2022
Aluminum	58	97
Antimony	12	11
PFOA	19	14
Trichloroethene	14	14

MW-106	9/28/2022	12/15/2022
Manganese	73	206
PFOA	42	14
Chlorobenzene	<1	31
Trichloroethene	2	<1

MW-105	9/28/2022	12/15/2022
Boron	560	NS-DRY
PFOA	19	NS-DRY

MW-104	9/28/2022	12/15/2022
Aluminum	47	113
Manganese	58	42
PFOA	9.2	5.6

MW-22-06	10/20/2022	12/15/2022
Iron	70	850
Manganese	272	157

MW-22-05	10/20/2022	12/15/2022
Boron	590	300
Iron	830	1,290
Manganese	168	91
Chlorobenzene	54	21

MW-22-04	10/20/2022	12/15/2022
Manganese	153	304
PFOA	9.2	5.8
1,2-Dichloroethane	2	2
Trichloroethene	2	2

18VP-1	8/31/2018	9/23/2022
Trichloroethene	400	NS

18VP-3	8/31/2018	9/23/2022
Trichloroethene	180	97

MW-22-03	10/19/2022	12/15/2022
Manganese	188	174
Trichloroethene	4	3

MW-22-02	10/18/2022	12/12/2022
Manganese	188	150
PFOA	15	9
Chlorobenzene	45	58
Trichloroethene	3	3

MW-121	9/28/2022	12/15/2022
Aluminum	243	<10
Manganese	78	68
PFOA	13	35
Trichloroethene	<1	2

MW-22-01	10/18/2022	12/12/2022
Selenium	<5	12
Sodium	168,000	479,000
Manganese	20	55

LEGEND:

- MW-22-01 MONITORING WELL BY TRC EASTERN BOUNDARY
- MW-22-07 MONITORING WELL BY TRC SOUTHERN AREA
- MW-101 MONITORING WELL BY ATC
- MW-13 MONITORING WELL BY OTHERS
- MW-C TEMPORARY/FORMER WELLS BY OTHERS
- A1 SOIL-GAS MONITORING WELL BY ATC MONITORING WELL BY TRC SOUTHERN BOUNDARY
- 18VP-3 SOIL-GAS MONITORING WELL BY EGLE
- 18VP-1 SOIL-GAS MONITORING WELL BY EGLE (DESTROYED)
- B-1 SOIL BORING
- VP-1 SOIL-GAS VAPOR POINT BY ATC 2022
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- OVERHEAD ELECTRIC
- TUNNELS
- ELECTROMAGNETIC ANOMALY
- CB CATCH BASINS
- M MANHOLE
- GW GATE WELL
- HYDRANT AND VALVE
- IN INCINERATOR
- OS OIL SUMP
- CS COLLECTION SUMP
- C COOLING BASIN
- N NEUTRALIZING BASIN

NE NO SOIL VAPOR EXCEEDANCE

NS NOT SAMPLED

DENOTES GROUNDWATER METALS CONCENTRATIONS ABOVE ONE OR MORE CRITERIA

DENOTES GROUNDWATER PFAS CONCENTRATIONS ABOVE ONE OR MORE CRITERIA

DENOTES GROUNDWATER VOC CONCENTRATIONS ABOVE ONE OR MORE CRITERIA

DENOTES SOIL VAPOR CONCENTRATIONS ABOVE ONE OR MORE SCREENING LEVELS

BOLD FONT DENOTES CONCENTRATIONS DETECTED ABOVE LABORATORY REPORTING LIMITS.

NOTE: ALL LOCATIONS ARE APPROXIMATE

Analyte	Aluminum	Antimony	Boron	Iron	Lead	Manganese	Selenium	Sodium
Residential Drinking Water Criteria	50(3)	6.0	500	300(3)	4.0	50(3)	50	2.3E+05
Non-Residential Drinking Water Criteria	50(3)	6.0	500	300(3)	4.0	50(3)	50	3.5E+05
Generic GSI Criteria	NA	130(1)	7,200(1)	5.0E+05	34(1,2)	2,800(1,2)	5.0	5.0E+05
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L

Notes:
Residential (R)/Non-Residential (NR) Drinking Water Criteria (DWC) and Groundwater Surface Water Interface (GSI) Criteria from Michigan Part 201 Generic Cleanup Criteria, as promulgated December 30, 2013 (updated December 21, 2020).
Residential (R)/Non-Residential (NR) Volatilization to Indoor Air Pathway (VIAP) Screening Levels from Appendix D.1 of the Addendum to the EGLE Guidance Document for the Vapor Intrusion Pathway (September 2020).
Non-Residential (NR) locations are only compared to the NR DWC, NR VIAP, and GSI criteria.
ug/L = microgram per liter
NA = Not Applicable; NC = No Criterion; ID = Insufficient Data to Develop Criterion; - = Parameter Not Analyzed
1) The GSI criterion is not protective for surface water that is used as a drinking water source (Footnote (X), Michigan Part 201 Criteria Tables).
2) Criterion dependent on hardness (Footnote (G), Michigan Part 201 Criteria Tables). Criterion shown is based on an estimated hardness of 150 mg $CaCO_3$/L for the southern Lower Peninsula per the EGLE RRD *GSI Pathway Compliance Options*, April 2018.
3) Criterion is the aesthetic drinking water value (Footnote (E), Michigan Part 201 Criteria Tables).

Analyte	Perfluorooctane sulfonic acid (PFOS)	Perfluorooctanoic acid (PFOA)
Residential Drinking Water Criteria	16	8.0
Non-Residential Drinking Water Criteria	16	8.0
Generic GSI Criteria	12(1)	12,000(1)
Units	ng/L	ng/L

Notes:
Residential (R)/Non-Residential (NR) Drinking Water Criteria (DWC) and Groundwater Surface Water Interface (GSI) Criteria from Michigan Part 201 Generic Cleanup Criteria, as promulgated December 30, 2013 (updated December 21, 2020).
Residential (R)/Non-Residential (NR) Volatilization to Indoor Air Pathway (VIAP) Screening Levels from Appendix D.1 of the Addendum to the EGLE Guidance Document for the Vapor Intrusion Pathway (September 2020).
Non-Residential (NR) locations are only compared to the NR DWC, NR VIAP, and GSI criteria
ng/L = nanogram per liter
1) The GSI criterion is not protective for surface water that is used as a drinking water source (Footnote (X), Michigan Part 201 Criteria Tables).

Analyte	1,2-Dichloro-benzene	1,2-Dichloro-ethane	1,4-Dichloro-benzene	Benzene	Chlorobenzene	Trichloroethene	Vinyl chloride
Residential Drinking Water Criteria	600	5.0	75	5.0	100	5.0	2.0
Non-Residential Drinking Water Criteria	600	5.0	75	5.0	100	5.0	2.0
Generic GSI Criteria	13	360(1)	17	200(1)	25	200	13(1)
Residential Shallow VIAP Screening Level	370	1.4	5.9	1.0	33	1.0(2)	1.0(2)
Non-Residential Not In Contact VIAP Screening Level	16,000	97	400	66	1,400	10	18
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L

Notes:
Residential (R)/Non-Residential (NR) Drinking Water Criteria (DWC) and Groundwater Surface Water Interface (GSI) Criteria from Michigan Part 201 Generic Cleanup Criteria, as promulgated December 30, 2013 (updated December 21, 2020).
Residential (R)/Non-Residential (NR) Volatilization to Indoor Air Pathway (VIAP) Screening Levels from Appendix D.1 of the Addendum to the EGLE Guidance Document for the Vapor Intrusion Pathway (September 2020).
The depth to first encountered groundwater is 10 feet below ground surface or less; therefore, the shallow groundwater residential VIAP screening levels apply.
The depth to first encountered groundwater is greater than 5 feet below ground surface; therefore, the groundwater not in contact non-residential VIAP screening levels apply.
Non-Residential (NR) locations are only compared to the NR DWC, NR VIAP, and GSI criteria
ug/L = microgram per liter
NA = Not Applicable; No Criterion; ID = Insufficient Data to Develop Criterion; - = Parameter Not Analyzed
1) The GSI criterion is not protective for surface water that is used as a drinking water source (Footnote (X), Michigan Part 201 Criteria Tables).
2) The VIAP criterion was below Target Detection Limits (TDL); the TDL has been substituted (Footnote (M), VIAP Guidance Document)

Analyte	Trichloroethene	Chloroform
Residential VIAP Screening Level	67	37
Non-Residential VIAP Screening Level	67	87
Units	ug/m3	ug/m3

Notes:
Residential and Non-Residential Volatilization to Indoor Air Pathway (VIAP) Screening Levels from Appendix D.1 of the Addendum to the EGLE Guidance Document for the Vapor Intrusion Pathway (September 2020).

N

150 0 30 60 90 120 150

SCALE: 1" = 150'

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Ann Arbor, MI 48108
Phone: 734.971.7080
www.trcsolutions.com

PROJECT:
FORMER HAYES LEMMERZ SITE
EASTERN BOUNDARY
WEST EIGHT MILE ROAD
FERNDALE, MI

TITLE:
GROUNDWATER AND SOIL VAPOR PART 201 CLEANUP CRITERIA EXCEEDANCES

DRAWN BY:	E. ALEXANDER
CHECKED BY:	B. YELEN
APPROVED BY:	
DATE:	FEBURARY 2023
PROJ. NO.:	495430.0000.0000
FILE:	495530.00000 FIGURE 4.dwg

FIGURE 4

11x17 --- USER: EAlexander --- ATTACHED XREF'S: XREF M-WELLS- FEB 2023; XREF-BUILDINGS --- ATTACHED IMAGES:
DRAWING NAME: J:\Detroit Axle Ferndale\495430\0000\ 495530.00000 FIGURE 5.dwg --- PLOT DATE: March 15, 2023 - 1:00PM --- LAYOUT: PROPOSED MONITORING WELL AND SOIL-GAS VAPOR POINT MAP
Version 2017-10-21

MW-113	9/27/2022	12/15/2022
Iron	680	140

MW-119	9/27/2022	12/14/2022
Selenium	<5	8

MW-120	9/27/2022	12/14/2022
PFOA	47	48

MW-112	9/27/2022	12/14/2022
Aluminum	2,610	51
Iron	2,880	230
Lead	7	<3
Manganese	487	398
PFOS	15	16
PFOA	23	24

MW-111	9/27/2022	12/14/2022
Iron	520	140
Manganese	946	674
PFOA	19	12
Tetrachloroethene	4	3
Trichloroethene	4	3

MW-110	9/27/2022	12/14/2022
Iron	1,290	870
Manganese	748	626
PFOA	11	9.8
Vinyl chloride	2	3

MW-109	9/28/2022	12/14/2022
Iron	6,060	4,960
Manganese	556	390
PFOA	8.7	8.9
1,2-Dichlorobenzene	31	33
1,4-Dichlorobenzene	10	10

MW-108	9/28/2022	12/14/2022
Aluminum	<10	147
Iron	110	390
Manganese	244	348
PFOA	11	5.4

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Aluminum	58	97
Antimony	12	11
PFOA	19	14
Trichloroethene	14	14

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Manganese	73	206
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Trichloroethene	2	<1

MW-105	9/28/2022	12/15/2022
Boron	560	NS-DRY
PFOA	19	NS-DRY

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Aluminum	47	113
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PFOA	9.2	5.6

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Iron	70	850
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MW-22-05	10/20/2022	12/15/2022
Boron	590	300
Iron	830	1,290
Manganese	168	91
Chlorobenzene	54	21

MW-22-04	10/20/2022	12/15/2022
Manganese	153	304
PFOA	9.2	5.8
1,2-Dichloroethane	2	2
Trichloroethene	2	2

18VP-1	8/31/2018	9/23/2022
Trichloroethene	400	NS

18VP-3	8/31/2018	9/23/2022
Trichloroethene	180	97

MW-22-03	10/19/2022	12/15/2022
Manganese	188	174
Trichloroethene	4	3

MW-22-02	10/18/2022	12/12/2022
Manganese	188	150
PFOA	15	9
Chlorobenzene	45	58
Trichloroethene	3	3

MW-121	9/28/2022	12/15/2022
Aluminum	243	<10
Manganese	78	68
PFOA	13	35
Trichloroethene	<1	2

MW-22-01	10/18/2022	12/12/2022
Selenium	<5	12
Sodium	168,000	479,000
Manganese	20	55

LEGEND:

- MW-22-01 — MONITORING WELL BY TRC EASTERN BOUNDARY
- MW-22-07 — MONITORING WELL BY TRC SOUTHERN AREA
- MW-101 — MONITORING WELL BY ATC
- MW-13 — MONITORING WELL BY OTHERS
- MW-C — TEMPORARY/FORMER WELLS BY OTHERS
- A1 — SOIL-GAS MONITORING WELL BY ATC / MONITORING WELL BY TRC SOUTHERN BOUNDARY
- 18VP-3 — SOIL-GAS MONITORING WELL BY EGLE
- 18VP-1 — SOIL-GAS MONITORING WELL BY EGLE (DESTROYED)
- B-1 — SOIL BORING
- VP-1 — SOIL-GAS VAPOR POINT BY ATC 2022
- APPROXIMATE PROPERTY BOUNDARY
- OLD RIVER BED
- FORMER BUILDING
- W — WATER LINE
- G — GAS LINE
- ST — STORM SEWER/SANITARY SEWER
- OHE — OVERHEAD ELECTRIC
- TUNNELS
- ELECTROMAGNETIC ANOMALY
- CB — CATCH BASINS
- M — MANHOLE
- gw — GATE WELL
- HYDRANT AND VALVE
- IN — INCINERATOR
- OS — OIL SUMP
- CS — COLLECTION SUMP
- C — COOLING BASIN
- N — NEUTRALIZING BASIN

NE — NO SOIL VAPOR EXCEEDANCE
NS — NOT SAMPLED
DENOTES GROUNDWATER METALS CONCENTRATIONS ABOVE ONE OR MORE CRITERIA
DENOTES GROUNDWATER PFAS CONCENTRATIONS ABOVE ONE OR MORE CRITERIA
DENOTES GROUNDWATER VOC CONCENTRATIONS ABOVE ONE OR MORE CRITERIA
DENOTES SOIL VAPOR CONCENTRATIONS ABOVE ONE OR MORE SCREENING LEVELS
BOLD FONT DENOTES CONCENTRATIONS DETECTED ABOVE LABORATORY REPORTING LIMITS.
PROPOSED MONITORING WELL
PROPOSED SOIL-GAS VAPOR POINT

NOTE: ALL LOCATIONS ARE APPROXIMATE

Analyte	Aluminum	Antimony	Boron	Iron	Lead	Manganese	Selenium	Sodium
Residential Drinking Water Criteria	50(3)	6.0	500	300(3)	4.0	50(3)	50	2.3E+05
Non-Residential Drinking Water Criteria	50(3)	6.0	500	300(3)	4.0	50(3)	50	3.5E+05
Generic GSI Criteria	N/A	130(1)	7,200(1)	5.0E+05	34(1,2)	2,800(1,2)	5.0	5.0E+05
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L

Notes:
Residential (R)/Non-Residential (NR) Drinking Water Criteria (DWC) and Groundwater Surface Water Interface (GSI) Criteria from Michigan Part 201 Generic Cleanup Criteria, as promulgated December 30, 2013 (updated December 21, 2020).
Residential (R)/Non-Residential (NR) Volatilization to Indoor Air Pathway (VIAP) Screening Levels from Appendix D.1 of the Addendum to the EGLE Guidance Document for the Vapor Intrusion Pathway (September 2020).
Non-Residential (NR) locations are only compared to the NR DWC, NR VIAP, and GSI criteria.
ug/L = microgram per liter
NA = Not Applicable; NC = No Criterion; ID = Insufficient Data to Develop Criterion; – = Parameter Not Analyzed
1) The GSI criterion is not protective for surface water that is used as a drinking water source (Footnote (X), Michigan Part 201 Criteria Tables).
2) Criterion dependent on hardness (Footnote (G), Michigan Part 201 Criteria Tables). Criterion shown is based on an estimated hardness of 150 mg $CaCO_3$/L for the southern Lower Peninsula per the EGLE RRD *GSI Pathway Compliance Options*, April 2018.
3) Criterion is the aesthetic drinking water value (Footnote (E), Michigan Part 201 Criteria Tables).

Analyte	Perfluorooctane sulfonic acid (PFOS)	Perfluorooctanoic acid (PFOA)
Residential Drinking Water Criteria	16	8.0
Non-Residential Drinking Water Criteria	16	8.0
Generic GSI Criteria	12(3)	12,000(1)
Units	ng/L	ng/L

Notes:
Residential (R)/Non-Residential (NR) Drinking Water Criteria (DWC) and Groundwater Surface Water Interface (GSI) Criteria from Michigan Part 201 Generic Cleanup Criteria, as promulgated December 30, 2013 (updated December 21, 2020).
Residential (R)/Non-Residential (NR) Volatilization to Indoor Air Pathway (VIAP) Screening Levels from Appendix D.1 of the Addendum to the EGLE Guidance Document for the Vapor Intrusion Pathway (September 2020).
Non-Residential (NR) locations are only compared to the NR DWC, NR VIAP, and GSI criteria
ng/L = nanogram per liter
1) The GSI criterion is not protective for surface water that is used as a drinking water source (Footnote (X), Michigan Part 201 Criteria Tables).

Analyte	1,2-Dichloro-benzene	1,2-Dichloro-ethane	1,4-Dichloro-benzene	Benzene	Chlorobenzene	Trichloroethene	Vinyl chloride
Residential Drinking Water Criteria	600	5.0	75	5.0	100	5.0	2.0
Non-Residential Drinking Water Criteria	600	5.0	75	5.0	100	5.0	2.0
Generic GSI Criteria	13	360(1)	17	200(1)	25	200	18(3)
Residential Shallow VIAP Screening Level	370	1.4	5.9	1.0	33	1.0(2)	1.0(3)
Non-Residential Not In Contact VIAP Screening Level	16,000	97	400	88	1,400	10	18
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L

Notes:
Residential (R)/Non-Residential (NR) Drinking Water Criteria (DWC) and Groundwater Surface Water Interface (GSI) Criteria from Michigan Part 201 Generic Cleanup Criteria, as promulgated December 30, 2013 (updated December 21, 2020).
Residential (R)/Non-Residential (NR) Volatilization to Indoor Air Pathway (VIAP) Screening Levels from Appendix D.1 of the Addendum to the EGLE Guidance Document for the Vapor Intrusion Pathway (September 2020).
The depth to first encountered groundwater is 10 feet below ground surface or less; therefore, the shallow groundwater residential VIAP screening levels apply.
The depth to first encountered groundwater is greater than 5 feet below ground surface; therefore, the groundwater not in contact non-residential VIAP screening levels apply.
Non-Residential (NR) locations are only compared to the NR DWC, NR VIAP, and GSI criteria
ug/L = microgram per liter
NA = Not Applicable; Nc Criterion; ID = Insufficient Data to Develop Criterion; – = Parameter Not Analyzed
1) The GSI criterion is not protective for surface water that is used as a drinking water source (Footnote (X), Michigan Part 201 Criteria Tables).
2) The VIAP criterion was below Target Detection Limits (TDL); the TDL has been substituted (Footnote (M), VIAP Guidance Document)

Analyte	Trichloroethene	Chloroform
Residential VIAP Screening Level	67	37
Non-Residential VIAP Screening Level	67	67
Units	ug/m3	ug/m3

Notes:
Residential and Non-Residential Volatilization to Indoor Air Pathway (VIAP) Screening Levels from Appendix D.1 of the Addendum to the EGLE Guidance Document for the Vapor Intrusion Pathway (September 2020).

N

150 0 30 60 90 120 150
SCALE: 1" = 150'

TRC
1540 Eisenhower Place
Ann Arbor, MI 48108
Phone: 734.971.7080
www.trcsolutions.com

PROJECT:
FORMER HAYES LEMMERZ SITE
EASTERN BOUNDARY
WEST EIGHT MILE ROAD
FERNDALE, MI

TITLE:
PROPOSED MONITORING WELL AND SOIL-GAS VAPOR POINT MAP

DRAWN BY:	E. ALEXANDER
CHECKED BY:	B. YELEN
APPROVED BY:	
DATE:	FEBURARY 2023
PROJ. NO.:	495430.0000.0000
FILE:	495530.00000 FIGURE 5.dwg

FIGURE 5

Appendix A
Soil Boring Logs and Monitoring Well Installation Diagrams

WELL CONSTRUCTION LOG

WELL NO. MW-22-01

Facility/Project Name:	Date Drilling Started:	Date Drilling Completed:	Project Number:
Former Hayes Lemmerz Site - Eastern Boundary	10/17/22	10/17/22	495430.0000

Drilling Firm:	Drilling Method:	Surface Elev. (ft)	TOC Elevation (ft)	Total Depth (ft bgs)	Borehole Dia. (in)
Terraprobe, INC.	Direct Push	663.0	662.65	20.0	2

Boring Location: Northeast of Pinecrest Dr. and Bertha St.

N: 347435.5 E: 13452485.4

Personnel
Logged By - Brian Yelen
Driller - Scott Seals

Drilling Equipment: Geoprobe 6620

Civil Town/City/or Village:	County:	State:
Ferndale	Oakland	MI

Water Level Observations:
While Drilling: Date/Time 10/17/22 00:00 ▽ Depth (ft bgs) 12.0
After Drilling: Date/Time Depth (ft bgs)

SAMPLE NUMBER AND TYPE	SAMPLE RECOVERY (%)	BLOW COUNTS	DEPTH IN FEET	LITHOLOGIC DESCRIPTION	USCS	GRAPHIC LOG	WELL DIAGRAM	COMMENTS
1 GP	75		0	**ASPHALT**				
				SANDY GRAVEL mostly gravel, little to some medium to coarse sand, gray (10YR 5/1), no odor, dry, loose.	GP			
			2	**SAND** mostly fine to medium sand, dark yellowish brown (10YR 5/6), no odor, moist, loose.				
2 GP	80		4	Changes to gray (10YR 6/1) at 5.0 feet below ground surface.				
3 GP	75		8		SP			
			10					
			12 ▽	Changes to wet at 12.0 feet below ground surface.				
4 GP	100		14					Well screened between 12.5 and 17.5 feet below ground surface.
			16					
				SAND mostly coarse sand, few fine to medium sand, brown (10YR 4/3), no odor, wet, loose.	SP			
5 GP	75		18	**SANDY CLAY** mostly clay, few to little fine sand, low plasticity, dark gray (10YR 4/1), no odor, stiff.	CL			
			20	End of boring at 20.0 feet below ground surface.				

SOIL BORING LOG WITH PHOTO MW-22-01_MW-22-06 LOGS3.14.23.GPJ 495430.0000 3/14/23

Signature:

Firm: TRC
1540 Eisenhower Place Ann Arbor, Michigan
734-971-7080
Fax

Checked By: _____

WELL CONSTRUCTION LOG

WELL NO. MW-22-02

Facility/Project Name:	Date Drilling Started:	Date Drilling Completed:	Project Number:
Former Hayes Lemmerz Site - Eastern Boundary	10/17/22	10/17/22	495430.0000

Drilling Firm:	Drilling Method:	Surface Elev. (ft)	TOC Elevation (ft)	Total Depth (ft bgs)	Borehole Dia. (in)
Terraprobe, INC.	Direct Push	662.0	661.61	16.0	2

Boring Location: Northeast of Pinecrest Dr. and Jean St.

N: 347717.0 E: 13452463.3

Personnel
Logged By - Brian Yelen
Driller - Scott Seals

Drilling Equipment: Geoprobe 6620

Civil Town/City/or Village:	County:	State:
Ferndale	Oakland	MI

Water Level Observations:
While Drilling: Date/Time 10/17/22 00:00 ▽ Depth (ft bgs) 9.0
After Drilling: Date/Time Depth (ft bgs)

SAMPLE NUMBER AND TYPE	SAMPLE RECOVERY (%)	BLOW COUNTS	DEPTH IN FEET	LITHOLOGIC DESCRIPTION	USCS	GRAPHIC LOG	WELL DIAGRAM	COMMENTS
			0	**ASPHALT**				
1 GP	75		2	**SANDY GRAVEL** mostly gravel, little to some medium to coarse sand, gray (10YR 5/1), no odor, dry, loose.	GP			
				SAND mostly fine to medium sand, dark yellowish brown (10YR 5/6), no odor, moist, loose.				
2 GP	80		4					
				Changes to gray (10YR 6/1) at 5.0 feet below ground surface.				
			6					
			8		SP			
3 GP	100			▽ Changes to wet at 9.0 feet below ground surface.				Well screened between 10.0 and 15.0 feet below ground surface.
			10					
			12					
4 GP	100		14					
				SANDY CLAY mostly clay, few to little fine sand, low plasticity, dark gray (10YR 4/1), no odor, stiff.	CL			
			16	End of boring at 16.0 feet below ground surface.				

SOIL BORING LOG WITH PHOTO MW-22-01_MW-22-06 LOGS3.14.23.GPJ 495430.0000 3/14/23

Signature:

Firm: TRC
1540 Eisenhower Place Ann Arbor, Michigan
734-971-7080
Fax

Checked By: _____

WELL CONSTRUCTION LOG

WELL NO. MW-22-03

Facility/Project Name:	Date Drilling Started:	Date Drilling Completed:	Project Number:
Former Hayes Lemmerz Site - Eastern Boundary	10/18/22	10/18/22	495430.0000

Drilling Firm:	Drilling Method:	Surface Elev. (ft)	TOC Elevation (ft)	Total Depth (ft bgs)	Borehole Dia. (in)
Terraprobe, INC.	Direct Push	661.0	660.55	16.0	2

Boring Location: Northeast of Pinecrest Dr. and Marie St.

N: 347997.5 E: 13452449.1

Personnel
Logged By - Brian Yelen
Driller - Scott Seals

Drilling Equipment: Geoprobe 6620

Civil Town/City/or Village:	County:	State:
Ferndale	Oakland	MI

Water Level Observations:
While Drilling: Date/Time 10/18/22 00:00 ▽ Depth (ft bgs) 8.0
After Drilling: Date/Time Depth (ft bgs)

SAMPLE NUMBER AND TYPE	SAMPLE RECOVERY (%)	BLOW COUNTS	DEPTH IN FEET	LITHOLOGIC DESCRIPTION	USCS	GRAPHIC LOG	WELL DIAGRAM	COMMENTS
			0	**ASPHALT**				
1 GP	65			**SANDY GRAVEL** mostly gravel, little to some medium to coarse sand, gray (10YR 5/1), no odor, dry, loose.	GP			
			2	**SAND** mostly fine to medium sand, dark yellowish brown (10YR 5/6), no odor, moist, loose.				
2 GP	65		4					
			6		SP			
			8	▽ Changes to wet at 8.0 feet below ground surface.				
3 GP	70		10	Changes to gray (10YR 4/1) at 10.0 feet below ground surface.				Well screened between 9.0 and 14.0 feet below ground surface.
			12	**SAND** mostly coarse sand, few fine to medium sand, gray (10YR 4/1), no odor, wet, loose.	SP			
4 GP	90			**SAND** mostly fine to medium sand, gray (10YR 4/1), no odor, wet, loose.	SP			
			14	**SANDY CLAY** mostly clay, few to little fine sand, low plasticity, dark gray (10YR 4/1), no odor, stiff.	CL			
			16	End of boring at 16.0 feet below ground surface.				

SOIL BORING LOG WITH PHOTO MW-22-01_MW-22-06 LOGS3.14.23.GPJ 495430.0000 3/14/23

Signature:

Firm: TRC
1540 Eisenhower Place Ann Arbor, Michigan

734-971-7080
Fax

Checked By: _____

WELL CONSTRUCTION LOG

WELL NO. MW-22-04

Facility/Project Name:	Date Drilling Started:	Date Drilling Completed:	Project Number:
Former Hayes Lemmerz Site - Eastern Boundary	10/19/22	10/19/22	495430.0000

Drilling Firm:	Drilling Method:	Surface Elev. (ft)	TOC Elevation (ft)	Total Depth (ft bgs)	Borehole Dia. (in)
Terraprobe, INC.	Direct Push	659.1	658.84	16.0	2

Boring Location: Northeast of Pinecrest Dr. and Fielding St.

N: 348278.2 E: 13452435.3

Personnel
Logged By - Brian Yelen
Driller - Scott Seals

Drilling Equipment: Geoprobe 6620

Civil Town/City/or Village:	County:	State:
Ferndale	Oakland	MI

Water Level Observations:
While Drilling: Date/Time 10/19/22 00:00 ▽ Depth (ft bgs) 6.0
After Drilling: Date/Time Depth (ft bgs)

SAMPLE NUMBER AND TYPE	SAMPLE RECOVERY (%)	BLOW COUNTS	DEPTH IN FEET	LITHOLOGIC DESCRIPTION	USCS	GRAPHIC LOG	WELL DIAGRAM	COMMENTS
			0	**ASPHALT**				
1 GP	75			**SANDY GRAVEL** mostly gravel, little to some medium to coarse sand, gray (10YR 5/1), no odor, dry, loose.	GP			
			2	**SAND** mostly fine to medium sand, dark yellowish brown (10YR 5/6), no odor, moist, loose.				
			4					
2 GP	90		6 ▽	Changes to wet at 6.0 feet below ground surface.	SP			
				Changes to dark gray (10YR 4/1) at 7.0 feet below ground surface.				Well screened between 7.0 and 12.0 feet below ground surface.
			8					
3 GP	100		10					
			12	**SAND** mostly coarse sand, few fine to medium sand, dark gray (10YR 4/1), no odor, wet, loose.	SP			
				SANDY CLAY mostly clay, few to little fine sand, low plasticity, dark gray (10YR 4/1), no odor, stiff.				
4 GP	100		14		CL			
			16	End of boring at 16.0 feet below ground surface.				

SOIL BORING LOG WITH PHOTO MW-22-01_MW-22-06 LOGS3.14.23.GPJ 495430.0000 3/14/23

Signature:

Firm: TRC
1540 Eisenhower Place Ann Arbor, Michigan
734-971-7080
Fax

Checked By: _____

WELL CONSTRUCTION LOG

WELL NO. MW-22-05

Facility/Project Name:	Date Drilling Started:	Date Drilling Completed:	Project Number:
Former Hayes Lemmerz Site - Eastern Boundary	10/19/22	10/19/22	495430.0000

Drilling Firm:	Drilling Method:	Surface Elev. (ft)	TOC Elevation (ft)	Total Depth (ft bgs)	Borehole Dia. (in)
Terraprobe, INC.	Direct Push	657.4	657.04	12.0	2

Boring Location: Northeast of Pincrest Dr. and Northway St.

N: 348501.1 E: 13452423.4

Personnel
Logged By - Brian Yelen
Driller - Scott Seals

Drilling Equipment: Geoprobe 6620

Civil Town/City/or Village:	County:	State:
Ferndale	Oakland	MI

Water Level Observations:
While Drilling: Date/Time 10/19/22 00:00 ▽ Depth (ft bgs) 5.0
After Drilling: Date/Time Depth (ft bgs)

SAMPLE NUMBER AND TYPE	SAMPLE RECOVERY (%)	BLOW COUNTS	DEPTH IN FEET	LITHOLOGIC DESCRIPTION	USCS	GRAPHIC LOG	WELL DIAGRAM	COMMENTS
			0	**ASPHALT**				
				SANDY GRAVEL mostly gravel, little to some medium to coarse sand, gray (10YR 5/1), no odor, dry, loose.	GP			
				CLAY mostly clay, few fine to medium sand, medium to high plasticity, very dark brown (10YR 2/2) no odor, moist, soft.	CL			
1 GP	60		2	**SAND** mostly fine to medium sand, dark yellowish brown (10YR 5/6), no odor, moist, loose.				
			4	▽ Changes to wet at 5.0 feet below ground surface.				
2 GP	90		6		SP			Well screened between 6.0 and 11.0 feet below ground surface.
				Changes to gray (10YR 5/1) at 7.0 feet below ground surface.				
			8	Changes to little to some coarse sand at 9.0 feet below ground surface.				
3 GP	90		10	Changes to no coarse sand at 10.0 feet below ground surface.				
				SANDY CLAY mostly clay, few to little fine sand, low plasticity, dark gray (10YR 4/1), no odor, stiff.	CL			
			12	End of boring at 12.0 feet below ground surface.				

SOIL BORING LOG WITH PHOTO MW-22-01_MW-22-06 LOGS3.14.23.GPJ 495430.0000 3/14/23

Signature:

Firm: TRC
1540 Eisenhower Place Ann Arbor, Michigan
734-971-7080
Fax

Checked By: _____

WELL CONSTRUCTION LOG

WELL NO. MW-22-06

Facility/Project Name:	Date Drilling Started:	Date Drilling Completed:	Project Number:
Former Hayes Lemmerz Site - Eastern Boundary	10/19/22	10/19/22	495430.0000

Drilling Firm:	Drilling Method:	Surface Elev. (ft)	TOC Elevation (ft)	Total Depth (ft bgs)	Borehole Dia. (in)
Terraprobe, INC.	Direct Push	659.1	658.72	12.0	2

Boring Location: East of Pincrest Dr. between Fox St. and Northway St.

N: 348714.7 E: 13452413.5

Personnel
Logged By - Brian Yelen
Driller - Scott Seals

Drilling Equipment: Geoprobe 6620

Civil Town/City/or Village:	County:	State:
Ferndale	Oakland	MI

Water Level Observations:
While Drilling: Date/Time 10/19/22 00:00 ▽ Depth (ft bgs) 8.0
After Drilling: Date/Time Depth (ft bgs)

SAMPLE NUMBER AND TYPE	SAMPLE RECOVERY (%)	BLOW COUNTS	DEPTH IN FEET	LITHOLOGIC DESCRIPTION	USCS	GRAPHIC LOG	WELL DIAGRAM	COMMENTS
			0	**ASPHALT**				
				SANDY GRAVEL mostly gravel, little to some medium to coarse sand, gray (10YR 5/1), no odor, dry, loose.	GP			
				SAND mostly fine to medium sand, dark yellowish brown (10YR 5/6), no odor, moist, loose.				
1 GP	30		2					
			4					
2 GP	80		6		SP			
			8	▽ Changes to wet at 8.0 feet below ground surface.				Well screened between 7.0 and 12.0 feet below ground surface.
				Changes to gray (10YR 5/1) at 9.0 feet below ground surface.				
3 GP	100		10					
			12	**SANDY CLAY** mostly clay, few to little fine sand, low plasticity, dark gray (10YR 4/1), no odor, stiff.	CL			
				End of boring at 12.0 feet below ground surface.				

SOIL BORING LOG WITH PHOTO MW-22-01_MW-22-06 LOGS3.14.23.GPJ 495430.0000 3/14/23

Signature:

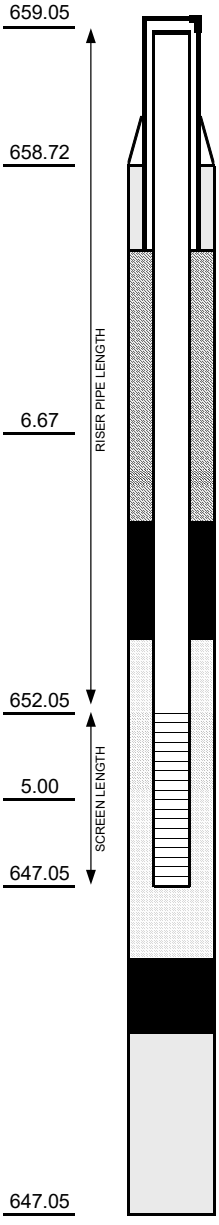
Firm: TRC
1540 Eisenhower Place Ann Arbor, Michigan
734-971-7080
Fax

Checked By: _____

WELL CONSTRUCTION DIAGRAM

PROJ. NAME:	DETROIT AXLE EASTERN BOUNDARY	WELL ID:	**MW-22-06**
PROJ. NO:	495430.0000	DATE INSTALLED: 10/19/2022 INSTALLED BY: Brian Yelen	CHECKED BY: HS 11/7/22

ELEVATION (BENCHMARK: USGS)	DEPTH BELOW OR ABOVE GROUND SURFACE (FEET)	
659.05	0.0	GROUND SURFACE
658.72	0.33	TOP OF CASING
	1.0	CEMENT SURFACE PLUG
		GROUT/BACKFILL MATERIAL: NA
		GROUT/BACKFILL METHOD: NA
6.67		RISER PIPE LENGTH
	NA	GROUT
		BENTONITE SEAL MATERIAL: MEDIUM CHIPS
	5.0	BENTONITE SEAL
652.05	7.0	TOP OF SCREEN
5.00		SCREEN LENGTH
		FILTER PACK MATERIAL: MEDIUM, WASHED SAND
647.05	12.0	BOTTOM OF SCREEN
	NA	BOTTOM OF FILTER PACK
	NA	BENTONITE PLUG
		BACKFILL MATERIAL: NA
647.05	12.0	HOLE BOTTOM



NOTES:

CASING AND SCREEN DETAILS

TYPE OF RISER: 2-INCH PVC

PIPE SCHEDULE: 40

PIPE JOINTS: THREADED O-RINGS

SOLVENT USED? NO

SCREEN TYPE: 2-INCH PVC

SCR. SLOT SIZE: 0.01-INCH

BOREHOLE DIAMETER: 8 IN. FROM 0 TO 12.0 FT.
_____ IN. FROM _____ TO _____ FT.

SURF. CASING DIAMETER: _____ IN. FROM _____ TO _____ FT.
_____ IN. FROM _____ TO _____ FT.

WELL DEVELOPMENT

DEVELOPMENT METHOD: SURGE AND PUMP

TIME DEVELOPING: 15 MINUTES

WATER REMOVED: 10 GALLONS

WATER ADDED: 0 GALLONS

WATER CLARITY BEFORE / AFTER DEVELOPMENT

CLARITY BEFORE: Very Turbid

COLOR BEFORE: Brown/Gray

CLARITY AFTER: Clear

COLOR AFTER: Clear

ODOR (IF PRESENT): None

WATER LEVEL SUMMARY

MEASUREMENT (FEET)			DATE	TIME
DTB BEFORE DEVELOPING:	11.82	T/PVC	10/19/2022	14:54
DTB AFTER DEVELOPING:	11.82	T/PVC	10/19/2022	15:11
SWE BEFORE DEVELOPING:	6.61	T/PVC	10/19/2022	14:54
SWE AFTER DEVELOPING:	8.21	T/PVC	10/19/2022	15:11
OTHER SWE:		T/PVC		
OTHER SWE:		T/PVC		

PROTECTIVE CASING DETAILS

PERMANENT, LEGIBLE WELL LABEL ADDED? ☑ YES ☐ NO

PROTECTIVE COVER AND LOCK INSTALLED? ☑ YES ☐ NO

LOCK KEY NUMBER: NA

WELL CONSTRUCTION DIAGRAM

PROJ. NAME: DETROIT AXLE EASTERN BOUNDARY		WELL ID:	**MW-22-05**
PROJ. NO: 495430.0000	DATE INSTALLED: 10/19/2022 INSTALLED BY: Brian Yelen		CHECKED BY: HS 11/7/22

ELEVATION (BENCHMARK: USGS)	DEPTH BELOW OR ABOVE GROUND SURFACE (FEET)
657.41	0.0 GROUND SURFACE
657.04	0.37 TOP OF CASING
	1.0 CEMENT SURFACE PLUG
	GROUT/BACKFILL MATERIAL: NA
	GROUT/BACKFILL METHOD: NA
5.63	
	NA GROUT
	BENTONITE SEAL MATERIAL: MEDIUM CHIPS
	4.0 BENTONITE SEAL
651.41	6.0 TOP OF SCREEN
	FILTER PACK MATERIAL: MEDIUM, WASHED SAND
5.00	
646.41	11.0 BOTTOM OF SCREEN
	NA BOTTOM OF FILTER PACK
	NA BENTONITE PLUG
	BACKFILL MATERIAL: NA
646.41	11.0 HOLE BOTTOM

RISER PIPE LENGTH

SCREEN LENGTH

NOTES:

CASING AND SCREEN DETAILS

TYPE OF RISER: 2-INCH PVC

PIPE SCHEDULE: 40

PIPE JOINTS: THREADED O-RINGS

SOLVENT USED? NO

SCREEN TYPE: 2-INCH PVC

SCR. SLOT SIZE: 0.01-INCH

BOREHOLE DIAMETER: 8 IN. FROM 0 TO 11.0 FT.
_____ IN. FROM _____ TO _____ FT.

SURF. CASING DIAMETER: _____ IN. FROM _____ TO _____ FT.
_____ IN. FROM _____ TO _____ FT.

WELL DEVELOPMENT

DEVELOPMENT METHOD: SURGE AND PUMP

TIME DEVELOPING: 15 MINUTES

WATER REMOVED: 7.5 GALLONS

WATER ADDED: 0 GALLONS

WATER CLARITY BEFORE / AFTER DEVELOPMENT

CLARITY BEFORE: Very Turbid

COLOR BEFORE: Brown

CLARITY AFTER: Clear

COLOR AFTER: Clear

ODOR (IF PRESENT): Moderate Odor

WATER LEVEL SUMMARY

MEASUREMENT (FEET)			DATE	TIME
DTB BEFORE DEVELOPING:	10.50	T/PVC	10/19/2022	12:42
DTB AFTER DEVELOPING:	10.53	T/PVC	10/19/2022	13:15
SWE BEFORE DEVELOPING:	5.33	T/PVC	10/19/2022	12:42
SWE AFTER DEVELOPING:	6.22	T/PVC	10/19/2022	13:15
OTHER SWE:		T/PVC		
OTHER SWE:		T/PVC		

PROTECTIVE CASING DETAILS

PERMANENT, LEGIBLE WELL LABEL ADDED? ☑ YES ☐ NO

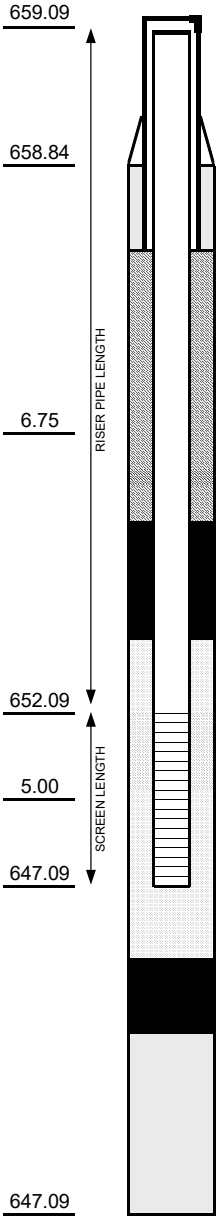
PROTECTIVE COVER AND LOCK INSTALLED? ☑ YES ☐ NO

LOCK KEY NUMBER: NA

WELL CONSTRUCTION DIAGRAM

PROJ. NAME:	DETROIT AXLE EASTERN BOUNDARY	WELL ID:	**MW-22-04**
PROJ. NO:	495430.0000	DATE INSTALLED: 10/19/2022 INSTALLED BY: Brian Yelen	CHECKED BY: HS 11/7/22

ELEVATION (BENCHMARK: USGS)	DEPTH BELOW OR ABOVE GROUND SURFACE (FEET)	
659.09	0.0	GROUND SURFACE
658.84	0.25	TOP OF CASING
	1.0	CEMENT SURFACE PLUG
		GROUT/BACKFILL MATERIAL: NA
		GROUT/BACKFILL METHOD: NA
6.75		RISER PIPE LENGTH
	NA	GROUT
		BENTONITE SEAL MATERIAL: MEDIUM CHIPS
	5.0	BENTONITE SEAL
652.09	7.0	TOP OF SCREEN
5.00		SCREEN LENGTH
		FILTER PACK MATERIAL: MEDIUM, WASHED SAND
647.09	12.0	BOTTOM OF SCREEN
	NA	BOTTOM OF FILTER PACK
	NA	BENTONITE PLUG
		BACKFILL MATERIAL: NA
647.09	12.0	HOLE BOTTOM



NOTES:

CASING AND SCREEN DETAILS

TYPE OF RISER: 2-INCH PVC

PIPE SCHEDULE: 40

PIPE JOINTS: THREADED O-RINGS

SOLVENT USED? NO

SCREEN TYPE: 2-INCH PVC

SCR. SLOT SIZE: 0.01-INCH

BOREHOLE DIAMETER: 8 IN. FROM 0 TO 12.0 FT.
_____ IN. FROM _____ TO _____ FT.

SURF. CASING DIAMETER: _____ IN. FROM _____ TO _____ FT.
_____ IN. FROM _____ TO _____ FT.

WELL DEVELOPMENT

DEVELOPMENT METHOD: SURGE AND PUMP

TIME DEVELOPING: 30 MINUTES

WATER REMOVED: 20 GALLONS

WATER ADDED: 0 GALLONS

WATER CLARITY BEFORE / AFTER DEVELOPMENT

CLARITY BEFORE: Very Turbid

COLOR BEFORE: Brown

CLARITY AFTER: Clear

COLOR AFTER: Clear

ODOR (IF PRESENT): None

WATER LEVEL SUMMARY

MEASUREMENT (FEET)			DATE	TIME
DTB BEFORE DEVELOPING:	11.69	T/PVC	10/19/2022	10:54
DTB AFTER DEVELOPING:	11.69	T/PVC	10/19/2022	11:19
SWE BEFORE DEVELOPING:	6.39	T/PVC	10/19/2022	10:54
SWE AFTER DEVELOPING:	6.59	T/PVC	10/19/2022	11:19
OTHER SWE:		T/PVC		
OTHER SWE:		T/PVC		

PROTECTIVE CASING DETAILS

PERMANENT, LEGIBLE WELL LABEL ADDED? ☑ YES ☐ NO

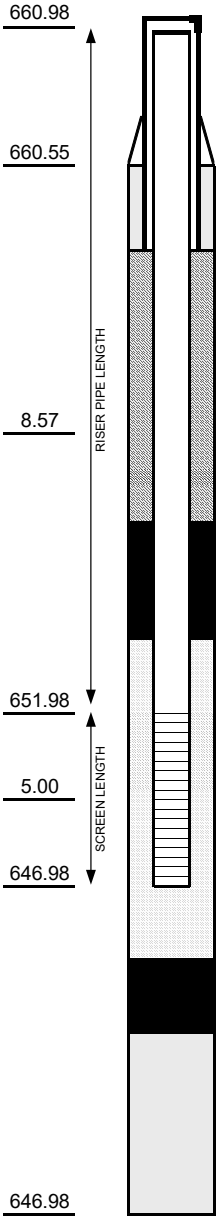
PROTECTIVE COVER AND LOCK INSTALLED? ☑ YES ☐ NO

LOCK KEY NUMBER: NA

WELL CONSTRUCTION DIAGRAM

PROJ. NAME:	DETROIT AXLE EASTERN BOUNDARY	WELL ID:	**MW-22-03**
PROJ. NO:	495430.0000	DATE INSTALLED: 10/18/2022 INSTALLED BY: Brian Yelen	CHECKED BY: HS 11/7/22

ELEVATION (BENCHMARK: USGS)	DEPTH BELOW OR ABOVE GROUND SURFACE (FEET)	
660.98	0.0	GROUND SURFACE
660.55	0.43	TOP OF CASING
	1.0	CEMENT SURFACE PLUG
		GROUT/BACKFILL MATERIAL: NA
		GROUT/BACKFILL METHOD: NA
8.57		RISER PIPE LENGTH
	NA	GROUT
		BENTONITE SEAL MATERIAL: MEDIUM CHIPS
	7.0	BENTONITE SEAL
651.98	9.0	TOP OF SCREEN
5.00		SCREEN LENGTH
		FILTER PACK MATERIAL: MEDIUM, WASHED SAND
646.98	14.0	BOTTOM OF SCREEN
	NA	BOTTOM OF FILTER PACK
	NA	BENTONITE PLUG
		BACKFILL MATERIAL: NA
646.98	14.0	HOLE BOTTOM



NOTES:

CASING AND SCREEN DETAILS

TYPE OF RISER: 2-INCH PVC

PIPE SCHEDULE: 40

PIPE JOINTS: THREADED O-RINGS

SOLVENT USED? NO

SCREEN TYPE: 2-INCH PVC

SCR. SLOT SIZE: 0.01-INCH

BOREHOLE DIAMETER: 8 IN. FROM 0 TO 14.0 FT.
_____ IN. FROM _____ TO _____ FT.

SURF. CASING DIAMETER: _____ IN. FROM _____ TO _____ FT.
_____ IN. FROM _____ TO _____ FT.

WELL DEVELOPMENT

DEVELOPMENT METHOD: SURGE AND PUMP

TIME DEVELOPING: 30 MINUTES

WATER REMOVED: 20 GALLONS

WATER ADDED: 0 GALLONS

WATER CLARITY BEFORE / AFTER DEVELOPMENT

CLARITY BEFORE: Very Turbid

COLOR BEFORE: Brown

CLARITY AFTER: Slightly turbid

COLOR AFTER: Mostly clear

ODOR (IF PRESENT): None

WATER LEVEL SUMMARY

MEASUREMENT (FEET)			DATE	TIME
DTB BEFORE DEVELOPING:	13.82	T/PVC	10/18/2022	13:30
DTB AFTER DEVELOPING:	13.82	T/PVC	10/18/2022	14:00
SWE BEFORE DEVELOPING:	7.54	T/PVC	10/18/2022	13:30
SWE AFTER DEVELOPING:	7.71	T/PVC	10/18/2022	14:00
OTHER SWE:		T/PVC		
OTHER SWE:		T/PVC		

PROTECTIVE CASING DETAILS

PERMANENT, LEGIBLE WELL LABEL ADDED? ☑ YES ☐ NO

PROTECTIVE COVER AND LOCK INSTALLED? ☑ YES ☐ NO

LOCK KEY NUMBER: NA

WELL CONSTRUCTION DIAGRAM

PROJ. NAME:	DETROIT AXLE EASTERN BOUNDARY	WELL ID:	**MW-22-02**
PROJ. NO:	495430.0000	DATE INSTALLED: 10/17/2022 INSTALLED BY: Brian Yelen	CHECKED BY: HS 11/7/22

ELEVATION (BENCHMARK: USGS)	DEPTH BELOW OR ABOVE GROUND SURFACE (FEET)	
661.95	0.0	GROUND SURFACE
661.61	0.34	TOP OF CASING
	0.5	CEMENT SURFACE PLUG
		GROUT/BACKFILL MATERIAL: NA
		GROUT/BACKFILL METHOD: NA
9.66		RISER PIPE LENGTH
	NA	GROUT
		BENTONITE SEAL MATERIAL: MEDIUM CHIPS
	8.0	BENTONITE SEAL
651.95	10.0	TOP OF SCREEN
5.00		SCREEN LENGTH
		FILTER PACK MATERIAL: MEDIUM, WASHED SAND
646.95	15.0	BOTTOM OF SCREEN
	NA	BOTTOM OF FILTER PACK
	NA	BENTONITE PLUG
		BACKFILL MATERIAL: NA
646.95	15.0	HOLE BOTTOM

NOTES:

CASING AND SCREEN DETAILS

TYPE OF RISER: 2-INCH PVC

PIPE SCHEDULE: 40

PIPE JOINTS: THREADED O-RINGS

SOLVENT USED? NO

SCREEN TYPE: 2-INCH PVC

SCR. SLOT SIZE: 0.01-INCH

BOREHOLE DIAMETER: 8 IN. FROM 0 TO 15.0 FT.

_____ IN. FROM _____ TO _____ FT.

SURF. CASING DIAMETER: _____ IN. FROM _____ TO _____ FT.

_____ IN. FROM _____ TO _____ FT.

WELL DEVELOPMENT

DEVELOPMENT METHOD: SURGE AND PUMP

TIME DEVELOPING: 25 MINUTES

WATER REMOVED: 15 GALLONS

WATER ADDED: 0 GALLONS

WATER CLARITY BEFORE / AFTER DEVELOPMENT

CLARITY BEFORE: Very Turbid

COLOR BEFORE: Brown

CLARITY AFTER: Clear

COLOR AFTER: Clear

ODOR (IF PRESENT): None

WATER LEVEL SUMMARY

MEASUREMENT (FEET)			DATE	TIME
DTB BEFORE DEVELOPING:	14.80	T/PVC	10/17/2022	13:30
DTB AFTER DEVELOPING:	14.84	T/PVC	10/17/2022	13:56
SWE BEFORE DEVELOPING:	10.36	T/PVC	10/17/2022	13:30
SWE AFTER DEVELOPING:	11.24	T/PVC	10/17/2022	13:56
OTHER SWE:		T/PVC		
OTHER SWE:		T/PVC		

PROTECTIVE CASING DETAILS

PERMANENT, LEGIBLE WELL LABEL ADDED? ☑ YES ☐ NO

PROTECTIVE COVER AND LOCK INSTALLED? ☑ YES ☐ NO

LOCK KEY NUMBER: NA

WELL CONSTRUCTION DIAGRAM

PROJ. NAME:	DETROIT AXLE EASTERN BOUNDARY	WELL ID:	**MW-22-01**
PROJ. NO:	495430.0000	DATE INSTALLED: 10/17/2022 INSTALLED BY: Brian Yelen	CHECKED BY: HS 11/7/22

ELEVATION (BENCHMARK: USGS)	DEPTH BELOW OR ABOVE GROUND SURFACE (FEET)	
662.97	0.0	GROUND SURFACE
662.65	0.32	TOP OF CASING
	1.0	CEMENT SURFACE PLUG
		GROUT/BACKFILL MATERIAL: NA
		GROUT/BACKFILL METHOD: NA
12.18		RISER PIPE LENGTH
	NA	GROUT
		BENTONITE SEAL MATERIAL: MEDIUM CHIPS
	10.0	BENTONITE SEAL
650.47	12.5	TOP OF SCREEN
5.00		SCREEN LENGTH
		FILTER PACK MATERIAL: MEDIUM, WASHED SAND
645.47	17.5	BOTTOM OF SCREEN
	NA	BOTTOM OF FILTER PACK
	NA	BENTONITE PLUG
		BACKFILL MATERIAL: NA
645.47	17.5	HOLE BOTTOM

NOTES:

CASING AND SCREEN DETAILS

TYPE OF RISER: 2-INCH PVC

PIPE SCHEDULE: 40

PIPE JOINTS: THREADED O-RINGS

SOLVENT USED? NO

SCREEN TYPE: 2-INCH PVC

SCR. SLOT SIZE: 0.01-INCH

BOREHOLE DIAMETER: 8 IN. FROM 0 TO 17.5 FT.
_____ IN. FROM _____ TO _____ FT.

SURF. CASING DIAMETER: _____ IN. FROM _____ TO _____ FT.
_____ IN. FROM _____ TO _____ FT.

WELL DEVELOPMENT

DEVELOPMENT METHOD: SURGE AND PUMP

TIME DEVELOPING: 45 MINUTES

WATER REMOVED: 12 GALLONS

WATER ADDED: 0 GALLONS

WATER CLARITY BEFORE / AFTER DEVELOPMENT

CLARITY BEFORE: Very Turbid

COLOR BEFORE: Brown

CLARITY AFTER: Clear

COLOR AFTER: Clear

ODOR (IF PRESENT): None

WATER LEVEL SUMMARY

MEASUREMENT (FEET)			DATE	TIME
DTB BEFORE DEVELOPING:	16.65	T/PVC	10/17/2022	12:25
DTB AFTER DEVELOPING:	16.71	T/PVC	10/17/2022	13:07
SWE BEFORE DEVELOPING:	12.87	T/PVC	10/17/2022	12:25
SWE AFTER DEVELOPING:	13.06	T/PVC	10/17/2022	13:07
OTHER SWE:		T/PVC		
OTHER SWE:		T/PVC		

PROTECTIVE CASING DETAILS

PERMANENT, LEGIBLE WELL LABEL ADDED? ☑ YES ☐ NO

PROTECTIVE COVER AND LOCK INSTALLED? ☑ YES ☐ NO

LOCK KEY NUMBER: NA

Appendix B
Field Notes

TRC

PROJECT NAME:	DA - Eastern RCRA Assessment
PROJECT NUMBER:	495430.0000.0000
PROJECT MANAGER:	Kelly Cratsenburg
SITE LOCATION:	2000 Eight Mile Road Ferndale, MI
DATES OF FIELDWORK:	9/22/2022 TO 9/23/2022
PURPOSE OF FIELDWORK:	Soil Vapor Sampling
WORK PERFORMED BY:	Jake Krenz

SIGNED 9-26-22 DATE

CHECKED BY Schmadt 9/26/22 DATE

TRC

GENERAL NOTES

PROJECT NAME:	DA - Eastern RCRA Assessme	DATE: 9-22-22	TIME ARRIVED: 0900
PROJECT NUMBER:	495430.0000.0000	AUTHOR: Jake Krenz	TIME LEFT: 1630

WEATHER

TEMPERATURE: 70 °F WIND: 0-5 MPH VISIBILITY: Sunny

WORK / SAMPLING PERFORMED

looked for and found 4 EGLE vapor points, couldn't find 2 of them

Sampled VP-1 through VP-11

took another look for last 2 EGLE vapor points

PROBLEMS ENCOUNTERED	CORRECTIVE ACTION TAKEN
Unable to locate 2 EGLE vapor points	Terra probe is coming out tomorrow with GPR, hopefully they can find the vapor points

COMMUNICATION

NAME	REPRESENTING	SUBJECT / COMMENTS
K. Crattenburg	TRC	On / off site

INVESTIGATION DERIVED WASTE SUMMARY

WASTE MATRIX	QUANTITY	COMMENTS

SIGNED 9-26-22 DATE

CHECKED BY Schnell 9/26/22 DATE

TRC

GENERAL NOTES

PROJECT NAME:	DA - Eastern RCRA Assessme	DATE: 9-23-22	TIME ARRIVED: 0800
PROJECT NUMBER:	495430.0000.0000	AUTHOR: Jake Krenz	TIME LEFT: 1200

WEATHER

TEMPERATURE: 68 °F WIND: 0-5 MPH VISIBILITY: Sunny

WORK / SAMPLING PERFORMED

completed soil vapor sampling (VP-12 through VP-14 & 4 EGLE points). (15)

Terra probe unable to locate remaining EGLE points.

Demobe / fill out COC

PROBLEMS ENCOUNTERED	CORRECTIVE ACTION TAKEN
Unable to locate last 2 EGLE points	Did not sample

COMMUNICATION

NAME	REPRESENTING	SUBJECT / COMMENTS
K. Cratsenburg	TRC	Site updates

INVESTIGATION DERIVED WASTE SUMMARY

WASTE MATRIX	QUANTITY	COMMENTS

9-26-22
SIGNED DATE

Henry Schmidt 9/26/22
CHECKED BY DATE

TRC

PID FIELD CALIBRATION LOG

PROJECT NAME:	DA - Eastern RCRA Assessmer	MODEL:	MiniRae
PROJECT NUMBER.:	495430.0000.0000	LAMP VOLTAGE:	10.6V
SAMPLER NAME:	Jake Krenz	SERIAL NO.:	~~Ann Arbor~~ Rental

PID CALIBRATION CHECK

	DATE: 9-22-22 TIME: 0910 INITIALS: JK	DATE: 9-23-22 TIME: 0812 INITIALS: JK	DATE: TIME: INITIALS:	DATE: TIME: INITIALS:	DATE: TIME: INITIALS:
BATTERY CHECK	☒	☒	☐	☐	☐
ZERO GAS	0.0 / 0.0	0.0 / 0.0	/	/	/
SPAN GAS	100.0 / 100.0	100.0 / 100.0	/	/	/
AUDIBLE FAN MOTOR CHECK	☒	☒	☐	☐	☐
RESPONSE CHECK	☒	☒	☐	☐	☐

NOTES

PROBLEMS ENCOUNTERED	CORRECTIVE ACTION

Jake Krenz 9-26-22
SIGNED DATE

Henry Schmidt 9/26/22
CHECKED DATE

TRC

AIR / VAPOR SAMPLE LOG

PROJECT NAME:	DA - Eastern RCRA Assessment	PREPARED	CHECKED
PROJECT NUMBER:	495430.0000.0000	BY: JK DATE: 9-22-22	BY: JS DATE: 9/26/22

SAMPLE INFORMATION

SAMPLE TYPE:	☐ COMPOSITE ☒ GRAB	**SAMPLE ID:** VP-1	
SAMPLE MEDIA	☐ INDOOR AIR ☒ SOIL VAPOR ☐ SYSTEM PERFORMANCE ☐ OTHER	LOCATION:	LOCATION COORDINATES: N: E:
SAMPLE DURATION:	5 mins	SAMPLE HEIGHT / (DEPTH):	5 ft
SAMPLE CONTAINER TYPE:	☐ SUMMA CANISTER ☐ TEDLAR BAG	☒ OTHER: Bottle Vac	
FLOW VALVE ID / SERIAL NUMBER:	317	CANISTER SERIAL NUMBER:	20100417240

READING	TIME	VACUUM (INCHES - Hg / PSIG)	DATE	INITIALS	COMMENTS
INITIAL VACUUM CHECK	—	-30	9-19-22	lab	lab provided
INITIAL FIELD VACUUM	1115	-28	9-22-22	JK	
FINAL FIELD VACUUM	1136	-6	9-22-22	JK	

SAMPLE START TIME:	1131	**SAMPLE STOP TIME:**	1136

NOTES AND OBSERVATIONS

MOTORIZED VEHICLE STORAGE :
None

MOTORIZED VEHICLE TRAFFIC:
Vehicle traffic on Pinecrest and 8 mile

OPERATIONS (e.g., painting, oil recovery):
None

CLEANERS / SOLVENTS IN USE:
None

MATERIAL STORAGE (e.g., paint, gasoline):
None (gas station @ Pinecrest/8mile)

NOTICEABLE ODORS:
none

AUDIBLE OR NEARBY HVAC OPERATION:
HVAC system at gas station, corner of Pinecrest and 8 mile

PRE SAMPLE - O2: 20.1% CO2: 0.7% CH4: 0.0% PID: 0.0 BAROMETRIC PRESSURE: 29.31 in Hg

POST SAMPLE - O2: 19.3% CO2: 0.6% CH4: 0.0% PID: 0.0 BAROMETRIC PRESSURE: 29.31 "Hg

ADDITIONAL COMMENTS: No water in port, pulled 3 syringes from sample point to check.
- let GEM run for 2 mins on sample port pre and post sample before recording readings
- Helium conc. in shroud 33.8%, no helium leak detected in sample train, purged for 2 mins with pump on helium shroud

SHIPPING METHOD:	Courier	DATE SHIPPED:	9-26-22	AIRBILL NUMBER:	—
COC NUMBER:	—	SIGNATURE:		DATE SIGNED:	9-26-22

TRC

AIR / VAPOR SAMPLE LOG

PROJECT NAME:	DA - Eastern RCRA Assessment	PREPARED	CHECKED
PROJECT NUMBER:	495430.0000.0000	BY: JK DATE: 9-22-22	BY: MS DATE: 9/26/22

SAMPLE INFORMATION

SAMPLE TYPE:	☐ COMPOSITE ☒ GRAB	**SAMPLE ID:**	VP-2
SAMPLE MEDIA	☐ INDOOR AIR ☒ SOIL VAPOR ☐ SYSTEM PERFORMANCE ☐ OTHER	LOCATION:	LOCATION COORDINATES: N: E:
SAMPLE DURATION:	5 mins	SAMPLE HEIGHT / (DEPTH):	5ft
SAMPLE CONTAINER TYPE:	☐ SUMMA CANISTER ☐ TEDLAR BAG	☒ OTHER:	Bottle Vac
FLOW VALVE ID / SERIAL NUMBER:	405	CANISTER SERIAL NUMBER:	20100047407

READING	TIME	VACUUM (INCHES - Hg / PSIG)	DATE	INITIALS	COMMENTS
INITIAL VACUUM CHECK	—	-30 ~~Hg~~	9/19/22	lab	lab provided
INITIAL FIELD VACUUM	1150	-27	9/22/22	SK	
FINAL FIELD VACUUM	1212	-6	9/22/22	SK	

SAMPLE START TIME:	1207	**SAMPLE STOP TIME:**	1212

NOTES AND OBSERVATIONS

MOTORIZED VEHICLE STORAGE :
None

MOTORIZED VEHICLE TRAFFIC:
Pinecrest Drive

OPERATIONS (e.g., painting, oil recovery):
None

CLEANERS / SOLVENTS IN USE:
None

MATERIAL STORAGE (e.g., paint, gasoline):
gas station @ Pinecrest and 8 mile

NOTICEABLE ODORS:
None

AUDIBLE OR NEARBY HVAC OPERATION:
HVAC at gas station @ Pinecrest / 8 mile

PRE SAMPLE - O2: 19.4% CO2: 0.5% CH4: 0.0% PID: 0.0 BAROMETRIC PRESSURE: 29.31" Hg

POST SAMPLE - O2: 10.4% CO2: 0.5% CH4: 0.0% PID: 0.0 BAROMETRIC PRESSURE: 29.30" Hg

ADDITIONAL COMMENTS: No water in sample port, pulled 3 syringes to check (60ml syringe)
-Next Gen landfill gas meter run on sample port for 2 min pre and post sample before recording readings
-Helium in shroud conc. 40.9%; no leaks detected in sample train.
-purged port for 2 min with pump on shroud. before collecting sample

SHIPPING METHOD:	Courier	DATE SHIPPED:	9-26-22	AIRBILL NUMBER:	—
COC NUMBER:	—	SIGNATURE:	[signature]	DATE SIGNED:	9-26-22

TRC

AIR / VAPOR SAMPLE LOG

PROJECT NAME: DA - Eastern RCRA Assessment	PREPARED	CHECKED
PROJECT NUMBER: 495430.0000.0000	BY: JK DATE: 9-22-22	BY: MS DATE: 9/26/22

SAMPLE INFORMATION

SAMPLE TYPE: ☐ COMPOSITE ☒ GRAB	**SAMPLE ID:** VP-3		
SAMPLE MEDIA: ☐ INDOOR AIR ☒ SOIL VAPOR ☐ SYSTEM PERFORMANCE ☐ OTHER	LOCATION: ✓	LOCATION COORDINATES: N: ✓ E:	
SAMPLE DURATION: 6 mins	SAMPLE HEIGHT / (DEPTH): 5 ft		
SAMPLE CONTAINER TYPE: ☐ SUMMA CANISTER ☐ TEDLAR BAG ☒ OTHER: Bottle Vac			
FLOW VALVE ID / SERIAL NUMBER: 30	CANISTER SERIAL NUMBER: 12424		

READING	TIME	VACUUM (INCHES - Hg / PSIG)	DATE	INITIALS	COMMENTS
INITIAL VACUUM CHECK	—	-30	9-19-22	—	lab provided
INITIAL FIELD VACUUM	1221	-30	9-22-22	JK	
FINAL FIELD VACUUM	1234	-6	9-22-22	JK	

SAMPLE START TIME: 1228	**SAMPLE STOP TIME:** 1234

NOTES AND OBSERVATIONS

MOTORIZED VEHICLE STORAGE : ~~none~~ residential driveways

MOTORIZED VEHICLE TRAFFIC: Pinecrest Drive

OPERATIONS (e.g., painting, oil recovery): None

CLEANERS / SOLVENTS IN USE: None

MATERIAL STORAGE (e.g., paint, gasoline): gas station @ Pinecrest and 8 mile

NOTICEABLE ODORS: none

AUDIBLE OR NEARBY HVAC OPERATION: gas station @ Pinecrest/8 mile

PRE SAMPLE - O2: 19.5% CO2: 0.5% CH4: 0.0% PID: 0.0 BAROMETRIC PRESSURE: 29.30 "Hg

POST SAMPLE - O2: 20.1% CO2: 0.5% CH4: 0.0% PID: 0.0 BAROMETRIC PRESSURE: 29.30 "Hg

ADDITIONAL COMMENTS: No water in port, pulled 7x 60mL syringe to check let GEM and PID run on point for 2min before recording readings (pre/post), Helium conc in shroud 41.2%, no leaks detected in sample train. let sample port purge for 2 min w/ pump on shroud prior to collecting sample

SHIPPING METHOD: Courier	DATE SHIPPED: 9-26-22	AIRBILL NUMBER: —
COC NUMBER: —	SIGNATURE: [signature]	DATE SIGNED: 9-26-22

TRC

AIR / VAPOR SAMPLE LOG

PROJECT NAME:	DA - Eastern RCRA Assessment	PREPARED	CHECKED
PROJECT NUMBER:	495430.0000.0000	BY: JK DATE: 9-22-22	BY: MS DATE: 9/26/22

SAMPLE INFORMATION

SAMPLE TYPE:	☐ COMPOSITE ☒ GRAB	**SAMPLE ID:** VP-4	
SAMPLE MEDIA	☐ INDOOR AIR ☒ SOIL VAPOR ☐ SYSTEM PERFORMANCE ☐ OTHER	LOCATION: ✓	LOCATION COORDINATES: N: ✓ E:
SAMPLE DURATION:	7 mins	SAMPLE HEIGHT / (DEPTH):	5 Ft
SAMPLE CONTAINER TYPE:	☐ SUMMA CANISTER ☐ TEDLAR BAG ☒ OTHER: Bottle Vac		
FLOW VALVE ID / SERIAL NUMBER:	202	CANISTER SERIAL NUMBER:	2010042808

READING	TIME	VACUUM (INCHES - Hg / PSIG)	DATE	INITIALS	COMMENTS
INITIAL VACUUM CHECK	—	-30	9-19-22	—	lab provided
INITIAL FIELD VACUUM	1244	-30	9-22-22	JK	
FINAL FIELD VACUUM	1258	-6	9-22-22	JK	

SAMPLE START TIME:	1251	**SAMPLE STOP TIME:**	1258

NOTES AND OBSERVATIONS

MOTORIZED VEHICLE STORAGE :
Residential driveways

MOTORIZED VEHICLE TRAFFIC:
Pine crest Drive

OPERATIONS (e.g., painting, oil recovery):
None

CLEANERS / SOLVENTS IN USE:
None

MATERIAL STORAGE (e.g., paint, gasoline):
None

NOTICEABLE ODORS:
None

AUDIBLE OR NEARBY HVAC OPERATION:
None

PRE SAMPLE - O2: 19.8% CO2: 0.6% CH4: 0.0% PID: 0.0 BAROMETRIC PRESSURE: 29.30 "Hg

POST SAMPLE - O2: 19.9% CO2: 0.6% CH4: 0.0% PID: 0.0 BAROMETRIC PRESSURE: 29.30 "Hg

ADDITIONAL COMMENTS: NO water in port, pulled 3x 60mL syringe to check let GEM/PID run for 2 mins each pre/post sample on port before recording readings Helium conc. in shroud 58.0%, no leak detected in sample train let pump on shroud purge ~~pump~~ sample port for 2 mins prior to sample collection

SHIPPING METHOD:	Courier	DATE SHIPPED:	9-26-22	AIRBILL NUMBER:	—
COC NUMBER:	—	SIGNATURE:		DATE SIGNED:	9-26-22

REVISED 04/2019

TRC

AIR / VAPOR SAMPLE LOG

PROJECT NAME:	DA - Eastern RCRA Assessment	PREPARED	CHECKED
PROJECT NUMBER:	495430.0000.0000	BY: JK DATE: 9-22-22	BY: HS DATE: 9/26/22

SAMPLE INFORMATION

SAMPLE TYPE:	☐ COMPOSITE ☒ GRAB	**SAMPLE ID:**	UP-5
SAMPLE MEDIA	☐ INDOOR AIR ☒ SOIL VAPOR ☐ SYSTEM PERFORMANCE ☐ OTHER	LOCATION:	LOCATION COORDINATES: N: E:
SAMPLE DURATION:	9 mins	SAMPLE HEIGHT / (DEPTH):	5ft
SAMPLE CONTAINER TYPE:	☐ SUMMA CANISTER ☐ TEDLAR BAG ☒ OTHER: Bottle Vac		
FLOW VALVE ID / SERIAL NUMBER:	109	CANISTER SERIAL NUMBER:	201003895 3

READING	TIME	VACUUM (INCHES - Hg / PSIG)	DATE	INITIALS	COMMENTS
INITIAL VACUUM CHECK	—	-30	9-19-22	—	lab provided
INITIAL FIELD VACUUM	1309	-30	9-22-22	JK	
FINAL FIELD VACUUM	1322	-6	9-22-22	JK	

SAMPLE START TIME:	1313	**SAMPLE STOP TIME:**	1322

NOTES AND OBSERVATIONS

MOTORIZED VEHICLE STORAGE :
None

MOTORIZED VEHICLE TRAFFIC:
Pinecrest Drive

OPERATIONS (e.g., painting, oil recovery):
None

CLEANERS / SOLVENTS IN USE:
None

MATERIAL STORAGE (e.g., paint, gasoline):
None

NOTICEABLE ODORS:
None

AUDIBLE OR NEARBY HVAC OPERATION:
None

PRE SAMPLE - O2: 18.7% CO2: 1.5% CH4: 0.00% PID: 0.0 BAROMETRIC PRESSURE: 29.30"Hg

POST SAMPLE - O2: 19.2% CO2: 1.4% CH4: 0.0% PID: 0.0 BAROMETRIC PRESSURE: 29.30"Hg

ADDITIONAL COMMENTS: No water in port purged 7x 60ml syringe to check
let GEM/PID run 2 min each on port befor collecting pre/post readings
Helium conc in shroud 58.1%, no leak detected in sample train
let pump on Shroud purge for 2 min prior to sample collection

SHIPPING METHOD:	Courier	DATE SHIPPED:	9-26-22	AIRBILL NUMBER:	—
COC NUMBER:	—	SIGNATURE:		DATE SIGNED:	9-26-22

TRC

AIR / VAPOR SAMPLE LOG

PROJECT NAME:	DA - Eastern RCRA Assessment	PREPARED	CHECKED
PROJECT NUMBER:	495430.0000.0000	BY: JK DATE: 9-22-22	BY: AJ DATE: 9/26/22

SAMPLE INFORMATION

SAMPLE TYPE:	☐ COMPOSITE ☒ GRAB	**SAMPLE ID:** VP-6	
SAMPLE MEDIA	☐ INDOOR AIR ☒ SOIL VAPOR ☐ SYSTEM PERFORMANCE ☐ OTHER	LOCATION:	LOCATION COORDINATES: N: E:
SAMPLE DURATION:	5 mins	SAMPLE HEIGHT / (DEPTH):	5 ft
SAMPLE CONTAINER TYPE:	☐ SUMMA CANISTER ☐ TEDLAR BAG ☒ OTHER: Bottle Vac		
FLOW VALVE ID / SERIAL NUMBER:	232	CANISTER SERIAL NUMBER:	16840

READING	TIME	VACUUM (INCHES - Hg / PSIG)	DATE	INITIALS	COMMENTS
INITIAL VACUUM CHECK	—	-30	9-19-22	—	lab provided
INITIAL FIELD VACUUM	1315	-27	9-22-22	JK	
FINAL FIELD VACUUM	1333	-6	9-22-22	JK	

SAMPLE START TIME:	1328	**SAMPLE STOP TIME:**	1333

NOTES AND OBSERVATIONS

MOTORIZED VEHICLE STORAGE :
residential driveways

MOTORIZED VEHICLE TRAFFIC:
Pinecrest Drive

OPERATIONS (e.g., painting, oil recovery):
None

CLEANERS / SOLVENTS IN USE:
None

MATERIAL STORAGE (e.g., paint, gasoline):
None

NOTICEABLE ODORS:
None

AUDIBLE OR NEARBY HVAC OPERATION:
None

PRE SAMPLE - O2: 18.7% CO2: 1.5% CH4: 0.0% PID: 0.0 BAROMETRIC PRESSURE: 29.30 "Hg

POST SAMPLE - O2: 19.7% CO2: 1.7% CH4: 0.0% PID: 0.0 BAROMETRIC PRESSURE: 29.30

ADDITIONAL COMMENTS: No water in port, purged 3X 60mL syringe to check
Jet GEM/PID run on port for 2 min each before collecting pre/post sample readings
Helium conc. in shroud 41.8%, no leaks detected in sample train
Jet pump on shroud purge sample port for 2 min prior to sample collection

SHIPPING METHOD:	Courier	DATE SHIPPED:	9-26-22	AIRBILL NUMBER:	—
COC NUMBER:	—	SIGNATURE:		DATE SIGNED:	9-26-22

TRC

AIR / VAPOR SAMPLE LOG

PROJECT NAME: DA - Eastern RCRA Assessment	PREPARED	CHECKED
PROJECT NUMBER: 495430.0000.0000	BY: JK DATE: 9-22-22	BY: [illegible] DATE: 9/26/22

SAMPLE INFORMATION

SAMPLE TYPE: ☐ COMPOSITE ☒ GRAB	**SAMPLE ID:** VP-7		
SAMPLE MEDIA: ☐ INDOOR AIR ☒ SOIL VAPOR ☐ SYSTEM PERFORMANCE ☐ OTHER	LOCATION:	LOCATION COORDINATES: N: E:	
SAMPLE DURATION: 5 mins	SAMPLE HEIGHT / (DEPTH): 5 Ft		
SAMPLE CONTAINER TYPE: ☐ SUMMA CANISTER ☐ TEDLAR BAG ☒ OTHER: Bottle Vac			
FLOW VALVE ID / SERIAL NUMBER: 52	CANISTER SERIAL NUMBER: 20100047307		

READING	TIME	VACUUM (INCHES - Hg / PSIG)	DATE	INITIALS	COMMENTS
INITIAL VACUUM CHECK	—	-30	9-19-22	—	lab provided
INITIAL FIELD VACUUM	1325	-29.5	9-22-22	JK	
FINAL FIELD VACUUM	1356	-6	9-22-22	JK	

SAMPLE START TIME: 1351	**SAMPLE STOP TIME:** 1356

NOTES AND OBSERVATIONS

MOTORIZED VEHICLE STORAGE : Residential Driveways

MOTORIZED VEHICLE TRAFFIC: Pine Crest Drive

OPERATIONS (e.g., painting, oil recovery): None

CLEANERS / SOLVENTS IN USE: None

MATERIAL STORAGE (e.g., paint, gasoline): None

NOTICEABLE ODORS: None

AUDIBLE OR NEARBY HVAC OPERATION: None

PRE SAMPLE - O2: 20.6% CO2: 0.8% CH4: 0.0% PID: 0.0 BAROMETRIC PRESSURE: 29.30 "Hg

POST SAMPLE - O2: 20.6% CO2: 0.8% CH4: 0.0% PID: 0.0 BAROMETRIC PRESSURE: 29.32 "Hg

ADDITIONAL COMMENTS: No water in port, purged 3x 60mL Syringe to check
let GEM/PID run on port for 2 min each before collecting pre/post readings
shroud Helium conc. 47.2%, no leaks detected in sample train
let pump on shroud purge point for 2 min prior to sample collection

SHIPPING METHOD: Courier	DATE SHIPPED: 9-26-22	AIRBILL NUMBER: —			
COC NUMBER: —	SIGNATURE: [signature]	DATE SIGNED: 9-26-22			

TRC

AIR / VAPOR SAMPLE LOG

PROJECT NAME:	DA - Eastern RCRA Assessment	PREPARED	CHECKED
PROJECT NUMBER:	495430.0000.0000	BY: JK DATE: 9.22-22	BY: [illegible] DATE: 9/26/22

SAMPLE INFORMATION

SAMPLE TYPE:	☐ COMPOSITE ☒ GRAB	**SAMPLE ID:** VP-8	
SAMPLE MEDIA	☐ INDOOR AIR ☒ SOIL VAPOR ☐ SYSTEM PERFORMANCE ☐ OTHER	LOCATION:	LOCATION COORDINATES: N: E:
SAMPLE DURATION:	5 min	SAMPLE HEIGHT / (DEPTH):	5 ft
SAMPLE CONTAINER TYPE:	☐ SUMMA CANISTER ☐ TEDLAR BAG ☒ OTHER: Bottle Vac		
FLOW VALVE ID / SERIAL NUMBER:	~~933~~ 166	CANISTER SERIAL NUMBER:	~~2010034892~~ 18353

READING	TIME	VACUUM (INCHES - Hg / PSIG)	DATE	INITIALS	COMMENTS
INITIAL VACUUM CHECK	—	-30	9-19-22	—	lab provided
INITIAL FIELD VACUUM	1406	-26	9-22-22	JK	
FINAL FIELD VACUUM	1423	-6	9-22-22	JK	

SAMPLE START TIME:	1418	**SAMPLE STOP TIME:**	1423

NOTES AND OBSERVATIONS

MOTORIZED VEHICLE STORAGE: residential Driveways

MOTORIZED VEHICLE TRAFFIC: Pinecrest Ave

OPERATIONS (e.g., painting, oil recovery): None

CLEANERS / SOLVENTS IN USE: None

MATERIAL STORAGE (e.g., paint, gasoline): None

NOTICEABLE ODORS: None

AUDIBLE OR NEARBY HVAC OPERATION: None

PRE SAMPLE - O2: 18.5% CO2: 3.0% CH4: 0.0% PID: 0.0 BAROMETRIC PRESSURE: 29.32 "Hg

POST SAMPLE - O2: 19.0% CO2: 3.0% CH4: 0.0% PID: 0.0 BAROMETRIC PRESSURE: 29.32 "Hg

ADDITIONAL COMMENTS: No water in port, purged 3x 60mL Syringes to clear
let GEM/PID run for 2 min each before recording pre/post sample readings
Helium conc. in shroud 52.0%, no leaks detected in sample train

let pump on shroud purge for a min prior to sample collection

SHIPPING METHOD:	Courier	DATE SHIPPED:	9-26-22	AIRBILL NUMBER:	—
COC NUMBER:	—	SIGNATURE:	[signature]	DATE SIGNED:	9-26-22

TRC

AIR / VAPOR SAMPLE LOG

PROJECT NAME:	DA - Eastern RCRA Assessment	PREPARED	CHECKED
PROJECT NUMBER:	495430.0000.0000	BY: JK DATE: 9-22-22	BY: HS DATE: 9/16/22

SAMPLE INFORMATION

SAMPLE TYPE:	☐ COMPOSITE ☒ GRAB	**SAMPLE ID:** VP-9	
SAMPLE MEDIA	☐ INDOOR AIR ☒ SOIL VAPOR ☐ SYSTEM PERFORMANCE ☐ OTHER	LOCATION:	LOCATION COORDINATES: N: E:
SAMPLE DURATION:	5 mins	SAMPLE HEIGHT / (DEPTH):	5ft
SAMPLE CONTAINER TYPE:	☐ SUMMA CANISTER ☐ TEDLAR BAG ☒ OTHER: Bottle Vac		
FLOW VALVE ID / SERIAL NUMBER:	342	CANISTER SERIAL NUMBER:	2010042337

READING	TIME	VACUUM (INCHES - Hg / PSIG)	DATE	INITIALS	COMMENTS
INITIAL VACUUM CHECK	—	-30	9-19-22	—	lab provided
INITIAL FIELD VACUUM	1435	-28	9-22-22	JK	
FINAL FIELD VACUUM	1448	-6	9-22-22	JK	

SAMPLE START TIME:	1443	**SAMPLE STOP TIME:**	1448

NOTES AND OBSERVATIONS

MOTORIZED VEHICLE STORAGE :
residential Driveways

MOTORIZED VEHICLE TRAFFIC:
Pinecrest Drive

OPERATIONS (e.g., painting, oil recovery):
None

CLEANERS / SOLVENTS IN USE:
None

MATERIAL STORAGE (e.g., paint, gasoline):
None

NOTICEABLE ODORS:
None

AUDIBLE OR NEARBY HVAC OPERATION:
None

PRE SAMPLE - O2: 20.1% CO2: 1.9% CH4: 0.0% PID: 0.0 BAROMETRIC PRESSURE: 29.32 "Hg

POST SAMPLE - O2: 20.4% CO2: 1.9% CH4: 0.0% PID: 0.0 BAROMETRIC PRESSURE: 29.32 "Hg

ADDITIONAL COMMENTS: No water in port purged 3x 60mL Syringes to check
Jet GEM/PID run for 2 min each prior to collecting pre/post readings
Helium conc. in shroud 60.1% no leaks detected in sample train.
Jet pump on shroud purge for 2 min prior to sample collection

SHIPPING METHOD:	Courier	DATE SHIPPED:	9-26-22	AIRBILL NUMBER:	—
COC NUMBER:	—	SIGNATURE:		DATE SIGNED:	9-26-22

TRC

AIR / VAPOR SAMPLE LOG

PROJECT NAME:	DA - Eastern RCRA Assessment	PREPARED	CHECKED
PROJECT NUMBER:	495430.0000.0000	BY: JK DATE: 9-22-22	BY: AS DATE: 9/26/22

SAMPLE INFORMATION

SAMPLE TYPE:	☐ COMPOSITE ☒ GRAB	**SAMPLE ID:** VP-10	
SAMPLE MEDIA	☐ INDOOR AIR ☒ SOIL VAPOR ☐ SYSTEM PERFORMANCE ☐ OTHER	LOCATION:	LOCATION COORDINATES: N: E:
SAMPLE DURATION:	5 mins	SAMPLE HEIGHT / (DEPTH):	5 Ft
SAMPLE CONTAINER TYPE:	☐ SUMMA CANISTER ☐ TEDLAR BAG ☒ OTHER: Bottle Vac		
FLOW VALVE ID / SERIAL NUMBER:	310	CANISTER SERIAL NUMBER:	20100047309

READING	TIME	VACUUM (INCHES - Hg / PSIG)	DATE	INITIALS	COMMENTS
INITIAL VACUUM CHECK	—	-30	9-19-22	—	lab provided
INITIAL FIELD VACUUM	1451	-28.5	9-22-22	JK	
FINAL FIELD VACUUM	~~1454~~ 1504	-6	9-22-22	JK	

SAMPLE START TIME:	1459	**SAMPLE STOP TIME:**	1504

NOTES AND OBSERVATIONS

MOTORIZED VEHICLE STORAGE : Residential Drive ways

MOTORIZED VEHICLE TRAFFIC: Pine crest Drive

OPERATIONS (e.g., painting, oil recovery): None

CLEANERS / SOLVENTS IN USE: None

MATERIAL STORAGE (e.g., paint, gasoline): None

NOTICEABLE ODORS: None

AUDIBLE OR NEARBY HVAC OPERATION: None

PRE SAMPLE - O2: 18.7% CO2: 4.1% CH4: 0.00% PID: 0.0 BAROMETRIC PRESSURE: 29.32 "Hg

POST SAMPLE - O2: 18.89% CO2: 4.2% CH4: 0.00% PID: 0.0 BAROMETRIC PRESSURE: 29.32 "Hg

ADDITIONAL COMMENTS: No water in port, purged 3x 60 mL syringe to Clutch 1st GEM/PID ran for 2 min each prior to collecting pre/post readings Helium in shroud 45.7%, no leaks detected 1st sample from 1st pump on shroud purge for 2 mins prior to sample collection

SHIPPING METHOD:	Courier	DATE SHIPPED:	9-26-22	AIRBILL NUMBER:	—
COC NUMBER:	—	SIGNATURE:		DATE SIGNED:	9-26-22

TRC

AIR / VAPOR SAMPLE LOG

PROJECT NAME:	DA - Eastern RCRA Assessment	PREPARED	CHECKED
PROJECT NUMBER:	495430.0000.0000	BY: JK DATE: 9-22-22	BY: MS DATE: 9/26/22

SAMPLE INFORMATION

SAMPLE TYPE:	☐ COMPOSITE ☒ GRAB	SAMPLE ID: VP-11	
SAMPLE MEDIA	☐ INDOOR AIR ☒ SOIL VAPOR ☐ SYSTEM PERFORMANCE ☐ OTHER	LOCATION:	LOCATION COORDINATES: N: E:
SAMPLE DURATION:	5 mins	SAMPLE HEIGHT / (DEPTH):	5 ft
SAMPLE CONTAINER TYPE:	☐ SUMMA CANISTER ☐ TEDLAR BAG ☒ OTHER: Bottle Vac		
FLOW VALVE ID / SERIAL NUMBER:	19	CANISTER SERIAL NUMBER:	20100040114

READING	TIME	VACUUM (INCHES - Hg / PSIG)	DATE	INITIALS	COMMENTS
INITIAL VACUUM CHECK	—	-70	9-19-22	—	lab provided
INITIAL FIELD VACUUM	1510	-30	9-22-22	JK	
FINAL FIELD VACUUM	1525	-6	9-22-22	JK	

SAMPLE START TIME:	1515	**SAMPLE STOP TIME:**	1525

NOTES AND OBSERVATIONS

MOTORIZED VEHICLE STORAGE :
Residential Driveways

MOTORIZED VEHICLE TRAFFIC:
Pine crest Drive

OPERATIONS (e.g., painting, oil recovery):
None

CLEANERS / SOLVENTS IN USE:
None

MATERIAL STORAGE (e.g., paint, gasoline):
None

NOTICEABLE ODORS:
None

AUDIBLE OR NEARBY HVAC OPERATION:
None

PRE SAMPLE - O2: 19.2% CO2: 3.5% CH4: 0.0% PID: 0.0 BAROMETRIC PRESSURE: 29.32" Hg

POST SAMPLE - O2: 19.3% CO2: 3.5% CH4: 0.0% PID: 0.0 BAROMETRIC PRESSURE: 29.32" Hg

ADDITIONAL COMMENTS: No water in port, purged 7x 60mL Syringe to check let GEM/PID run for 2 min each on port before recording readings pre/post sample Helium in shroud 55.2%, no leaks detected in sample train. let pump on shroud purge for 2 min prior to sample collection

SHIPPING METHOD:	Courier	DATE SHIPPED:	9-26-22	AIRBILL NUMBER:	—
COC NUMBER:	—	SIGNATURE:		DATE SIGNED:	9-26-22

TRC

AIR / VAPOR SAMPLE LOG

PROJECT NAME:	DA - Eastern RCRA Assessment	PREPARED	CHECKED
PROJECT NUMBER:	495430.0000.0000	BY: JK DATE: 9-23-22	BY: MS DATE: 9/26/22

SAMPLE INFORMATION

SAMPLE TYPE:	☐ COMPOSITE ☒ GRAB	**SAMPLE ID:** VP-12	
SAMPLE MEDIA	☐ INDOOR AIR ☒ SOIL VAPOR ☐ SYSTEM PERFORMANCE ☐ OTHER	LOCATION: ~	LOCATION COORDINATES: N: ~ E:
SAMPLE DURATION:	5 min	SAMPLE HEIGHT / (DEPTH):	5 ft
SAMPLE CONTAINER TYPE:	☐ SUMMA CANISTER ☐ TEDLAR BAG ☒ OTHER: Bottle Vac		
FLOW VALVE ID / SERIAL NUMBER:	22	CANISTER SERIAL NUMBER:	20100423I4

READING	TIME	VACUUM (INCHES - Hg) PSIG)	DATE	INITIALS	COMMENTS
INITIAL VACUUM CHECK	~	-30	9-19-22	~	Lab provided
INITIAL FIELD VACUUM	0822	-29	9-23-22	JK	
FINAL FIELD VACUUM	0840	-6	9-23-22	JK	

SAMPLE START TIME:	0835	**SAMPLE STOP TIME:**	0840

NOTES AND OBSERVATIONS

MOTORIZED VEHICLE STORAGE :
Residential Driveways

MOTORIZED VEHICLE TRAFFIC:
Pine crest Drive

OPERATIONS (e.g., painting, oil recovery):
None

CLEANERS / SOLVENTS IN USE:
None

MATERIAL STORAGE (e.g., paint, gasoline):
None

NOTICEABLE ODORS:
None

AUDIBLE OR NEARBY HVAC OPERATION:
None

PRE SAMPLE - O2: 19.6% CO2: 2.2% CH4: 0.0% PID: 0.0 BAROMETRIC PRESSURE: 29.41 "Hg

POST SAMPLE - O2: 19.5% CO2: 2.1% CH4: 0.0% PID: 0.0 BAROMETRIC PRESSURE: 29.41 "Hg

ADDITIONAL COMMENTS: No water in Port, purged 3x 60mL syringes to check
let GEM/PID run for 2 min each on port before collecting pre/post sample readings
Helium in shroud conc. 57.1% no Leaks detected in sample train
let pump on shroud purge for 2 min prior to sample collection

SHIPPING METHOD:	Courier	DATE SHIPPED:	9-26-22	AIRBILL NUMBER:	~
COC NUMBER:	~	SIGNATURE:	JC Ry	DATE SIGNED:	9-26-22

TRC

AIR / VAPOR SAMPLE LOG

PROJECT NAME:	DA - Eastern RCRA Assessment	PREPARED	CHECKED
PROJECT NUMBER:	495430.0000.0000	BY: JK DATE: 9-23-22	BY: HS DATE: 9/26/22

SAMPLE INFORMATION

SAMPLE TYPE:	☐ COMPOSITE ☒ GRAB	**SAMPLE ID:** VP-13	
SAMPLE MEDIA	☐ INDOOR AIR ☒ SOIL VAPOR ☐ SYSTEM PERFORMANCE ☐ OTHER	LOCATION: ✓	LOCATION COORDINATES: N: ✓ E:
SAMPLE DURATION:	5 6 mins (MS)	SAMPLE HEIGHT / (DEPTH):	5 ft
SAMPLE CONTAINER TYPE:	☐ SUMMA CANISTER ☐ TEDLAR BAG ☒ OTHER: Bottle Vac		
FLOW VALVE ID / SERIAL NUMBER:	344	CANISTER SERIAL NUMBER:	20100033695

READING	TIME	VACUUM (INCHES - Hg / PSIG)	DATE	INITIALS	COMMENTS
INITIAL VACUUM CHECK	—	-30	9-19-22	—	lab provided
INITIAL FIELD VACUUM	0844	-29	9-23-22	JK	
FINAL FIELD VACUUM	0854	-6	9-23-22	JK	

SAMPLE START TIME:	0849	**SAMPLE STOP TIME:**	~~0854~~ 0854

NOTES AND OBSERVATIONS

MOTORIZED VEHICLE STORAGE :
Residential Driveways

MOTORIZED VEHICLE TRAFFIC:
Pine crest Drive

OPERATIONS (e.g., painting, oil recovery):
None

CLEANERS / SOLVENTS IN USE:
None

MATERIAL STORAGE (e.g., paint, gasoline):
None

NOTICEABLE ODORS:
None

AUDIBLE OR NEARBY HVAC OPERATION:
None

PRE SAMPLE - O2: 18.2% CO2: 3.9% CH4: 0.0 % PID: 0.0 BAROMETRIC PRESSURE: 29.41 "Hg

POST SAMPLE - O2: 18.7% CO2: 3.8% CH4: 0.0% PID: 0.0 BAROMETRIC PRESSURE: 29.41 "Hg

ADDITIONAL COMMENTS: No water in port, purged 7X 60mL syringes to check
let GEM/PID run for 2 min each pre/post sample before collecting readings
Helium conc. in shroud 47.190, no leak detected in sample train
let pump on shroud purge for 2 min prior to sample collection

SHIPPING METHOD:	Courier	DATE SHIPPED:	9-26-22	AIRBILL NUMBER:	—
COC NUMBER:	—	SIGNATURE:		DATE SIGNED:	9-26-22

TRC

AIR / VAPOR SAMPLE LOG

PROJECT NAME:	DA - Eastern RCRA Assessment	PREPARED	CHECKED
PROJECT NUMBER:	495430.0000.0000	BY: JK DATE: 9-23-22	BY: MS DATE: 9/26/22

SAMPLE INFORMATION

SAMPLE TYPE:	☐ COMPOSITE ☐ GRAB	**SAMPLE ID:**	VP-14
SAMPLE MEDIA	☐ INDOOR AIR ☐ SOIL VAPOR ☐ SYSTEM PERFORMANCE ☐ OTHER	LOCATION:	LOCATION COORDINATES: N: E:
SAMPLE DURATION:	6 min	SAMPLE HEIGHT / (DEPTH):	5 ft
SAMPLE CONTAINER TYPE:	☐ SUMMA CANISTER ☐ TEDLAR BAG ☑ OTHER: Bottle Vac		
FLOW VALVE ID / SERIAL NUMBER:	307	CANISTER SERIAL NUMBER:	20100044177

READING	TIME	VACUUM (INCHES - Hg / PSIG)	DATE	INITIALS	COMMENTS
INITIAL VACUUM CHECK	—	-30	9-19-22	—	lab Provided
INITIAL FIELD VACUUM	0854	-30	9-23-22	SK	
FINAL FIELD VACUUM	0914	-5	9-23-22	JK	

SAMPLE START TIME:	0908	**SAMPLE STOP TIME:**	0914

NOTES AND OBSERVATIONS

MOTORIZED VEHICLE STORAGE :
residential Driveways

MOTORIZED VEHICLE TRAFFIC:
Pinecrest Drive

OPERATIONS (e.g., painting, oil recovery):
None

CLEANERS / SOLVENTS IN USE:
None

MATERIAL STORAGE (e.g., paint, gasoline):
None

NOTICEABLE ODORS:
None

AUDIBLE OR NEARBY HVAC OPERATION:
None

PRE SAMPLE - O2: 19.3 % CO2: 2.4 % CH4: 0.0 % PID: 0.0 BAROMETRIC PRESSURE: 29.41"Hg

POST SAMPLE - O2: 19.2% CO2: 2.3% CH4: 0.00% PID: 0.0 BAROMETRIC PRESSURE: 29.44"Hg

ADDITIONAL COMMENTS: No water in port purged 3x 60 mL syringes to check
let GEM/PID run for 2 min each pre/post sample before collecting readings
Helium conc. in shroud 60.1%, no leak detected in sample train
let pump on shroud purge for 2 min prior to sample collection

SHIPPING METHOD:	Courier	DATE SHIPPED:	9-26-22	AIRBILL NUMBER:	—
COC NUMBER:	—	SIGNATURE:		DATE SIGNED:	9-26-22

TRC

AIR / VAPOR SAMPLE LOG

PROJECT NAME:	DA - Eastern RCRA Assessment	PREPARED	CHECKED
PROJECT NUMBER:	495430.0000.0000	BY: JK DATE: 9-27-22	BY: HS DATE: 9/26/22

SAMPLE INFORMATION

SAMPLE TYPE:	☐ COMPOSITE ☒ GRAB	**SAMPLE ID:**	18VP-3
SAMPLE MEDIA	☐ INDOOR AIR ☒ SOIL VAPOR ☐ SYSTEM PERFORMANCE ☐ OTHER	LOCATION:	LOCATION COORDINATES: N: E:
SAMPLE DURATION:	5 mins	SAMPLE HEIGHT / (DEPTH):	5ft
SAMPLE CONTAINER TYPE:	☐ SUMMA CANISTER ☐ TEDLAR BAG ☒ OTHER:		Bottle Vac
FLOW VALVE ID / SERIAL NUMBER:	280	CANISTER SERIAL NUMBER:	20100473II

READING	TIME	VACUUM (INCHES - Hg / PSIG)	DATE	INITIALS	COMMENTS
INITIAL VACUUM CHECK	—	-30	9-19-22	—	lab provided
INITIAL FIELD VACUUM	0927	-29	9-27-22	JK	
FINAL FIELD VACUUM	0943	-5	9-27-22	JK	

SAMPLE START TIME:	0938	**SAMPLE STOP TIME:**	0943

NOTES AND OBSERVATIONS

MOTORIZED VEHICLE STORAGE :
Residential Driveways

MOTORIZED VEHICLE TRAFFIC:
Pinecrest Drive

OPERATIONS (e.g., painting, oil recovery):
None

CLEANERS / SOLVENTS IN USE:
None

MATERIAL STORAGE (e.g., paint, gasoline):
None

NOTICEABLE ODORS:
None

AUDIBLE OR NEARBY HVAC OPERATION:
None

PRE SAMPLE - O2: 18.6% CO2: 1.6% CH4: 0.0% PID: 0.0 BAROMETRIC PRESSURE: 29.41 "Hg

POST SAMPLE - O2: 18.5% CO2: CH4: PID: BAROMETRIC PRESSURE:

ADDITIONAL COMMENTS: No water in port, purged 3x 60mL Syringes to check
let GEM/PID run for 2 min on port pre/post Sample before collecting readings
Helium conc in shroud 41.2%, no leaks detected in sample train
let pump on shroud purge for 2min prior to sample collection

SHIPPING METHOD:	Courier	DATE SHIPPED:	9-26-22	AIRBILL NUMBER:	—
COC NUMBER:	—	SIGNATURE:	[signature]	DATE SIGNED:	9-26-22

TRC

AIR / VAPOR SAMPLE LOG

PROJECT NAME: DA-Eastern RCRA Assessment	PREPARED	CHECKED
PROJECT NUMBER: 495430.0000.0000	BY: ~~JKHS~~ DATE: 9-23-22	BY: MS DATE: 9/26/22

SAMPLE INFORMATION

SAMPLE TYPE: ☐ COMPOSITE ☑ GRAB	**SAMPLE ID:** 18VP-4	
SAMPLE MEDIA: ☐ INDOOR AIR ☑ SOIL VAPOR ☐ SYSTEM PERFORMANCE ☐ OTHER	LOCATION: See figure	LOCATION COORDINATES: N: NA E: NA
SAMPLE DURATION: 5 mins	SAMPLE HEIGHT / (DEPTH): 7ft	
SAMPLE CONTAINER TYPE: ☐ SUMMA CANISTER ☐ TEDLAR BAG ☑ OTHER: Bottle-Vac		
FLOW VALVE ID / SERIAL NUMBER: 379	CANISTER SERIAL NUMBER: 2010047659	

READING	TIME	VACUUM (INCHES - Hg / PSIG)	DATE	INITIALS	COMMENTS
INITIAL VACUUM CHECK	—	-30	9-19-22	—	lab provided
INITIAL FIELD VACUUM	0954	-30	JK ↔	9-23-22	
FINAL FIELD VACUUM	~~1010~~ 1011	-6	~~9-23-22~~ 9-23-22	JK	

SAMPLE START TIME: 1006	**SAMPLE STOP TIME:** 1011

NOTES AND OBSERVATIONS

MOTORIZED VEHICLE STORAGE: Residential Driveways

MOTORIZED VEHICLE TRAFFIC: Pine Crest Drive

OPERATIONS (e.g., painting, oil recovery): None

CLEANERS / SOLVENTS IN USE: None

MATERIAL STORAGE (e.g., paint, gasoline): None

NOTICEABLE ODORS: None

AUDIBLE OR NEARBY HVAC OPERATION: None

PRE SAMPLE - O2: 21.0% CO2: 1.0% CH4: 0.0% PID: 0.0 BAROMETRIC PRESSURE: 29.41 "Hg

POST SAMPLE - O2: 21.0% CO2: 1.0% CH4: 0.0% PID: 0.0 BAROMETRIC PRESSURE: 29.41 "Hg

ADDITIONAL COMMENTS: No water in port, purged 3x 60mL Syringe to check
let GEM / PID run on point for 2 min each pre/post sample before collecting readings
Helium conc. in shroud 58.4% No leaks detected in sample train.
let pump off shroud purge for 2 min prior to sample collection

SHIPPING METHOD: Courier	DATE SHIPPED: 9-26-22	AIRBILL NUMBER: NA
COC NUMBER: NA	SIGNATURE:	DATE SIGNED: 9-26-22

TRC

AIR / VAPOR SAMPLE LOG

PROJECT NAME:	DA-Eastern RCRA Assessment	PREPARED	CHECKED
PROJECT NUMBER:	495430.0000.0000	BY: ~~HS~~ JK DATE: 9-27-22	BY: HS DATE: 9/26/22

SAMPLE INFORMATION

SAMPLE TYPE:	☐ COMPOSITE ☑ GRAB	**SAMPLE ID:**	18VP-6 5'
SAMPLE MEDIA	☐ INDOOR AIR ☑ SOIL VAPOR ☐ SYSTEM PERFORMANCE ☐ OTHER	LOCATION: See figure	LOCATION COORDINATES: N: NA E: NA
SAMPLE DURATION:	7 min	SAMPLE HEIGHT / (DEPTH):	5 ft
SAMPLE CONTAINER TYPE:	☐ SUMMA CANISTER ☐ TEDLAR BAG ☑ OTHER: Bottle-Vac		
FLOW VALVE ID / SERIAL NUMBER:	102	CANISTER SERIAL NUMBER:	28916

READING	TIME	VACUUM (INCHES - Hg / PSIG)	DATE	INITIALS	COMMENTS
INITIAL VACUUM CHECK	—	-30	9-21-22	—	lab provided
INITIAL FIELD VACUUM	1029	-26	9-23-22	JK	
FINAL FIELD VACUUM	1059	-6	9-23-22	JK	

SAMPLE START TIME:	~~0852~~ 1052	**SAMPLE STOP TIME:**	1059

NOTES AND OBSERVATIONS

MOTORIZED VEHICLE STORAGE : Residential Driveways

MOTORIZED VEHICLE TRAFFIC: Pinecrest Drive

OPERATIONS (e.g., painting, oil recovery): None

CLEANERS / SOLVENTS IN USE: None

MATERIAL STORAGE (e.g., paint, gasoline): None

NOTICEABLE ODORS: None

AUDIBLE OR NEARBY HVAC OPERATION: None

PRE SAMPLE - O2: 19.4% CO2: 0.9% CH4: 0.0% PID: 0.0 BAROMETRIC PRESSURE: 29.41 "Hg

POST SAMPLE - O2: 19.3% CO2: 0.9% CH4: 0.0% PID: 0.0 BAROMETRIC PRESSURE: 29.41 "Hg

ADDITIONAL COMMENTS: No water in port purged 3x 60mL Syringes to check
Set GEM/PID sun for 2 min each pre/post sample before collecting readings
Helium conc. in Shroud 48.1%, No leaks Detected in Sample train
Set pump on shroud purge for 2 min prior to sample collection

SHIPPING METHOD:	Courier	DATE SHIPPED:	9-26-22	AIRBILL NUMBER:	NA
COC NUMBER:	NA	SIGNATURE:		DATE SIGNED:	9-26-22

TRC

AIR / VAPOR SAMPLE LOG

PROJECT NAME:	DA-Eastern RCRA Assessment	PREPARED		CHECKED	
PROJECT NUMBER:	495430.0000.0000	BY: ~~HS~~ JK DATE: 9-23-22		BY: HS DATE:	9/26/22

SAMPLE INFORMATION			
SAMPLE TYPE:	☐ COMPOSITE ☑ GRAB	**SAMPLE ID:**	18VP-6 10'
SAMPLE MEDIA	☐ INDOOR AIR ☑ SOIL VAPOR ☐ SYSTEM PERFORMANCE ☐ OTHER	LOCATION: See figure	LOCATION COORDINATES: N: NA E: NA
SAMPLE DURATION:	8 mins	SAMPLE HEIGHT / (DEPTH):	10ft
SAMPLE CONTAINER TYPE:	☐ SUMMA CANISTER ☐ TEDLAR BAG ☑ OTHER: Bottle-Vac		
FLOW VALVE ID / SERIAL NUMBER:	23	CANISTER SERIAL NUMBER:	20100042278

READING	TIME	VACUUM (INCHES - Hg / PSIG)	DATE	INITIALS	COMMENTS
INITIAL VACUUM CHECK	—	-30	9-19-22	—	lab provided
INITIAL FIELD VACUUM	1042	-30	9-23-22	JK	
FINAL FIELD VACUUM	1104	-6	9-23-22	JK	

SAMPLE START TIME:	1056	**SAMPLE STOP TIME:**	1104

NOTES AND OBSERVATIONS

MOTORIZED VEHICLE STORAGE : ~~Private~~ Residential Driveways

MOTORIZED VEHICLE TRAFFIC: Pinecrest Drive

OPERATIONS (e.g., painting, oil recovery): None

CLEANERS / SOLVENTS IN USE: None

MATERIAL STORAGE (e.g., paint, gasoline): None

NOTICEABLE ODORS: None

AUDIBLE OR NEARBY HVAC OPERATION: None

PRE SAMPLE - O2: 19.3% CO2: 1.1% CH4: 0.0% PID: 0.0 BAROMETRIC PRESSURE: ~~29.42~~ 29.41 "Hg

POST SAMPLE - O2: 19.1% CO2: 1.0% CH4: 0.0% PID: 0.0 BAROMETRIC PRESSURE: ~~29.41~~ 29.41 "Hg

ADDITIONAL COMMENTS: NO water in port, purged 6x 60mL Syringes to check
let GEM/PID run for 2 min each prior to collecting pre/post sample readings
Helium in Shround conc: 51.6% No leaks detected in sample train
let pump on Shround run for 3 min prior to sample collection

SHIPPING METHOD: Courier	DATE SHIPPED: 9-26-22	AIRBILL NUMBER: NA
COC NUMBER: NA	SIGNATURE:	DATE SIGNED: 9-26-22

TRC

AIR / VAPOR SAMPLE LOG

PROJECT NAME:	DA-Eastern RCRA Assessment	PREPARED	CHECKED
PROJECT NUMBER:	495430.0000.0000	BY: ~~HS~~ SK DATE: 9-23-22	BY: JS DATE: 9/26/22

SAMPLE INFORMATION

SAMPLE TYPE:	☐ COMPOSITE ☑ GRAB	**SAMPLE ID:** 18VP-2	
SAMPLE MEDIA	☐ INDOOR AIR ☑ SOIL VAPOR ☐ SYSTEM PERFORMANCE ☐ OTHER	LOCATION: See figure	LOCATION COORDINATES: N: NA E: NA
SAMPLE DURATION:	12 mins	SAMPLE HEIGHT / (DEPTH):	5ft
SAMPLE CONTAINER TYPE:	☐ SUMMA CANISTER ☐ TEDLAR BAG	☑ OTHER: Bottle-Vac	
FLOW VALVE ID / SERIAL NUMBER:	129	CANISTER SERIAL NUMBER:	2010042262

READING	TIME	VACUUM (INCHES - Hg / PSIG)	DATE	INITIALS	COMMENTS
INITIAL VACUUM CHECK	—	-30	9-19-22	—	lab Provided
INITIAL FIELD VACUUM	1115	-29.5	9-23-22	SK	
FINAL FIELD VACUUM	1135	-6	9-23-22	JK	

SAMPLE START TIME:	1123	**SAMPLE STOP TIME:**	1135

NOTES AND OBSERVATIONS

MOTORIZED VEHICLE STORAGE: Residential Driveways

MOTORIZED VEHICLE TRAFFIC: Pinecrest Drive

OPERATIONS (e.g., painting, oil recovery): None

CLEANERS / SOLVENTS IN USE: None

MATERIAL STORAGE (e.g., paint, gasoline): None

NOTICEABLE ODORS: None

AUDIBLE OR NEARBY HVAC OPERATION: None

PRE SAMPLE - O2: 18.4% CO2: 2.4% CH4: 0.0% PID: 0.0 BAROMETRIC PRESSURE: 29.41 "Hg

POST SAMPLE - O2: 18.8% CO2: 2.3% CH4: 0.0% PID: 0.0 BAROMETRIC PRESSURE: 29.41 "Hg

ADDITIONAL COMMENTS: No water in port, purged 3x 60mL syringes to check, let GEM/PID run for 2 min each prior to collecting pre/post sample readings
Helium conc. in Shroud = 43.8% No leaks detected in sample Train
let pump on shroud purge for 2 min prior to sample collection

SHIPPING METHOD: Courier	DATE SHIPPED: 9-26-22	AIRBILL NUMBER: NA
COC NUMBER: NA	SIGNATURE:	DATE SIGNED: 9-26-22

Merit Laboratories, Inc.

2680 East Lansing Dr., East Lansing, MI 48823
Phone (517) 332-0167 Fax (517) 332-4034
www.meritlabs.com

C.O.C. PAGE # 1 OF 2

A5764

AIR/GAS SAMPLES CHAIN OF CUSTODY RECORD

QC: MS 9/26/22

Pg 24 of 25

REPORT TO

CONTACT NAME: Kelly Cratsenburg
COMPANY: TRC
ADDRESS: 1540 Eisenhower Place
CITY: Ann Arbor STATE: MI ZIP CODE: 48108
PHONE NO.: 734-412-5424 FAX NO.: —— P.O. NO.: 138681
EMAIL ADDRESS: KCratsenburg@TRCcompanies.com QUOTE NO.:

INVOICE TO

☒ SAME
CONTACT NAME:
COMPANY:
ADDRESS:
CITY: STATE: ZIP CODE:
PHONE NO.: EMAIL ADDRESS:

ANALYSIS (ATTACH LIST IF MORE SPACE IS REQUIRED)

PROJECT NO./NAME: Detroit Axle Ferndale, MI
SAMPLER(S) - PLEASE PRINT/SIGN NAME: Zach Kranz / [signature]

TURNAROUND TIME REQUIRED ☐ 1 DAY ☐ 2 DAYS ☐ 3 DAYS ☒ STANDARD ☐ OTHER

DELIVERABLES REQUIRED ☐ LEVEL II ☐ LEVEL III ☐ LEVEL IV ☐ EDD ☒ OTHER TRC EDD

Certifications: ☐ DoD ☐ NELAP

MERIT LAB NO. (FOR LAB USE ONLY)	SAMPLE TAG IDENTIFICATION-DESCRIPTION	Start Date	Start Time	Stop Date	Stop Time	Canister Vacuum in Field, "Hg (Start)	Canister Vacuum in Field, "Hg (Stop)	Flow Controller ID	Canister ID	Indoor Air	Ambient Air	Soil Gas	Landfill Gas	Other (specify in notes)	TO-15	Other (specify in notes)
	VP-1	9-22-22	1131	9-22-22	1136	-28	-6	317	2010047240			X			X	
	VP-2	9-22-22	1207	9-22-22	1212	-27	-6	405	2010047107			X			X	
	VP-3	9-22-22	1228	9-22-22	1234	-30	-6	30	17424			X			X	
	VP-4	9-22-22	1251	9-22-22	1258	-30	-6	202	2010043808			X			X	
	VP-5	9-22-22	1313	9-22-22	1322	-30	-6	109	2010038058			X			X	
	VP-6	9-22-22	1328	9-22-22	1333	-27	-6	232	16840			X			X	
	VP-7	9-22-22	1351	9-22-22	1356	-29.5	-6	52	2010047307			X			X	
	VP-8	9-22-22	1418	9-22-22	1423	-26	-6	166	18353			X			X	
	VP-9	9-22-22	1413	9-22-22	1418	-28	-6	342	2010042332			X			X	
	VP-10	9-22-22	1459	9-22-22	1504	-28.5	-6	310	2010047309			X			X	

Temperature (Fahrenheit)

	Interior	Ambient	Notes
Start			
Stop			

Pressure (inches of Hg)

	Interior	Ambient	Notes
Start			
Stop			

Notes: Please use TRC EDD format

	Signature/Organization	Date	Time
RELINQUISHED BY: ☒ Sampler	[signature]	9-23-22	1235
RECEIVED BY:	TRC Storage	9-23-22	1235
RELINQUISHED BY:	TRC	[illegible]	2:00
RECEIVED BY:	[signature]	[illegible]	[illegible]

	Signature/Organization	Date	Time
RELINQUISHED BY:			
RECEIVED BY:			

SEAL NO. SEAL INTACT YES ☐ NO ☐ INITIALS
SEAL NO. SEAL INTACT YES ☐ NO ☐ INITIALS
TEMP. ON ARRIVAL ______

PLEASE NOTE: SIGNING ACKNOWLEDGES ADHERENCE TO MERIT'S SAMPLE ACCEPTANCE POLICY ON REVERSE SIDE

Rev. 06/28/19

Merit Laboratories, Inc.
2680 East Lansing Dr., East Lansing, MI 48823
Phone (517) 332-0167 Fax (517) 332-4034
www.meritlabs.com

C.O.C. PAGE # 2 OF 2

A5765

AIR/GAS SAMPLES CHAIN OF CUSTODY RECORD

REPORT TO

CONTACT NAME: Kelly Contsanburg
COMPANY: TRC
ADDRESS: 1540 Eisenhower Place
CITY: Ann Arbor STATE: MI ZIP CODE: 48108
PHONE NO.: 734-412-5424 FAX NO.:
P.O. NO.: 188681
QUOTE NO.:
EMAIL ADDRESS: KContsanburg@TRCcompanies.com

INVOICE TO

CONTACT NAME: ☐ SAME
COMPANY:
ADDRESS:
CITY: STATE: ZIP CODE:
PHONE NO.: EMAIL ADDRESS:

ANALYSIS (ATTACH LIST IF MORE SPACE IS REQUIRED)

PROJECT NO./NAME: Detroit Axle Family MI
SAMPLER(S) - PLEASE PRINT/SIGN NAME: Jacob Kretz

Certifications ☐ DoD ☐ NELAP

TURNAROUND TIME REQUIRED ☐ 1 DAY ☐ 2 DAYS ☐ 3 DAYS ☒ STANDARD ☐ OTHER

DELIVERABLES REQUIRED ☐ LEVEL II ☐ LEVEL III ☐ LEVEL IV ☐ EDD ☐ OTHER TRC EDD

MERIT LAB NO. FOR LAB USE ONLY	SAMPLE TAG IDENTIFICATION-DESCRIPTION	Start Date	Start Time	Stop Date	Stop Time	Canister Vacuum in Field, "Hg (Start)	Canister Vacuum in Field, "Hg (Stop)	Flow Controller ID	Canister ID	Sample Type: Indoor Air	Ambient Air	Soil Gas	Landfill Gas	Other (specify in notes)	Analyses: TO-15	Other (specify in notes)	
	~~VP-12~~ VP-12	9-23-22	0835	9-23-22	0840	-29	-6	92	3010041334			X			X		
	~~VP-12~~ VP-11	9-23-22	1515	9-22-22	1525	-30	-6	19	3010041014			X			X		
	VP-13	9-23-22	0849	9-23-22	0854	-29	-6	344	3010033695			X			X		
	VP-14	9-23-22	0908	9-23-22	0914	-30	-5	307	3010041417			X			X		
	18VP-3	9-23-23	0938	9-23-22	0943	-29	-5	280	3010041731			X			X		
	18VP-4	9-23-22	1006	9-23-22	1011	-30	-6	379	3010041769			X			X		
	18VP-6 5'	9-23-22	1052	9-23-22	1059	-26	-6	102	38916			X			X		
	18VP-6 10'	9-23-22	1056	9-23-22	1104	-30	-6	23	3010041237			X			X		
	18VP-2	9-23-22	1103	9-23-22	1135	-29.5	-6	129	3010041236			X			X		

Q0 HS 9/26/22

Temperature (Fahrenheit)	Interior	Ambient	Notes
Start			
Stop			

Pressure (inches of Hg)	Interior	Ambient	Notes
Start			
Stop			

Notes: Please use TRC EDD Format pg 2 of 2

RELINQUISHED BY: SIGNATURE/ORGANIZATION	☒ Sampler	DATE 9-23-22	TIME 1335
RECEIVED BY: SIGNATURE/ORGANIZATION	Fed Ex	DATE 9-23-22	TIME 1335
RELINQUISHED BY: SIGNATURE/ORGANIZATION	TRC	DATE 9/26	TIME 900
RECEIVED BY: SIGNATURE/ORGANIZATION		DATE 9/26	TIME 900

RELINQUISHED BY: SIGNATURE/ORGANIZATION — DATE — TIME
RECEIVED BY: SIGNATURE/ORGANIZATION — DATE — TIME

SEAL NO. — SEAL INTACT YES ☐ NO ☐ — INITIALS
SEAL NO. — SEAL INTACT YES ☐ NO ☐ — INITIALS

TEMP. ON ARRIVAL

PLEASE NOTE: SIGNING ACKNOWLEDGES ADHERENCE TO MERIT'S SAMPLE ACCEPTANCE POLICY ON REVERSE SIDE

Rev. 06/28/19

TRC

PROJECT NAME:	DA-Eastern RCRA Assessment
PROJECT NUMBER:	495430.0000.0000 phase 2
PROJECT MANAGER:	Kelly Cratsenburg
SITE LOCATION:	2000 8 Mile Road, Ferndale, MI 48220
DATES OF FIELDWORK:	9/27/2022 TO ~~9/29/2022~~ 9-28-2022
PURPOSE OF FIELDWORK:	
WORK PERFORMED BY:	Henry Schnaidt, Javier Jasso

Henry Schnaidt 9/29/22
SIGNED DATE

9/30/22
CHECKED BY DATE

TRC

GENERAL NOTES

PROJECT NAME: DA-Eastern RCRA Assessmen	DATE: 9/27/22	TIME ARRIVED: 730
PROJECT NUMBER: 495430.0000.0000	AUTHOR: Henry Schnaidt, Javier	TIME LEFT: 1430

WEATHER		
TEMPERATURE: 65 °F	WIND: 5-15 MPH	VISIBILITY: partly cloudy

WORK / SAMPLING PERFORMED

Took SWL measurements for 13 EB monitoring wells
Sampled MW-120, 119, 113, 112, 111, 110
Took Dup-01 at MW-120
unable to use bladder pump except for at MW-113 (other wells not enough water)
MW-113 sampled w/ peristaltic pump AND bladder pump
MW-120, 119, 112, 111, 110 sampled with peristaltic only

PROBLEMS ENCOUNTERED	CORRECTIVE ACTION TAKEN
Not enough water for bladder pump for VOCs + methanol	Used peristaltic for VOCs & methanol (except at MW-120)

COMMUNICATION

NAME	REPRESENTING	SUBJECT / COMMENTS
K Eastenbury	TRC	project updates
B. Yelen	TRC	" "

INVESTIGATION DERIVED WASTE SUMMARY

WASTE MATRIX	QUANTITY	COMMENTS
GW	~15 gallons	Drummed on site (1 drum)

SIGNED: HS DATE: 9/27/22 CHECKED BY: [signature] DATE: 9-30-2022

REVISED 04/2019

TRC

GENERAL NOTES

PROJECT NAME: DA-Eastern RCRA Assessmen	DATE: 9/27/22	TIME ARRIVED: 07ca
PROJECT NUMBER: 495430.0000.0000	AUTHOR: Henry Schnaidt, Javier	TIME LEFT: 14/T

WEATHER		
TEMPERATURE: 51 °F	WIND: 20 MPH	VISIBILITY: OVC/ Cont

WORK / SAMPLING PERFORMED

water levels

well Sampled : mw 120, 113, 110

PROBLEMS ENCOUNTERED	CORRECTIVE ACTION TAKEN

COMMUNICATION

NAME	REPRESENTING	SUBJECT / COMMENTS

INVESTIGATION DERIVED WASTE SUMMARY

WASTE MATRIX	QUANTITY	COMMENTS
GW (PW)	See ~~next~~ previous page	Drummed onsite (1 drum) & (PW)

SIGNED 9/28/22 DATE

CHECKED BY 9-30-22 DATE

REVISED 04/2019

TRC

GENERAL NOTES

PROJECT NAME: DA-Eastern RCRA Assessmen	DATE: 9/28/22	TIME ARRIVED: 800
PROJECT NUMBER: 495430.0000.0000	AUTHOR: Henry Schnaidt, Javier	TIME LEFT: 1600

WEATHER

TEMPERATURE: 50-60 °F WIND: S-10 MPH VISIBILITY: partly/mostly cloudy

WORK / SAMPLING PERFORMED

Sampled wells MW-109, 107, 106, 121, 104, 105

Rocks in bottom of MW-121, unable to take SWL or DTB

MW-107, 106, and 104 sampled w/ both peristaltic AND bladder pump. MW-109, 108, 121, 105 sampled w/ peristaltic pump only.

PROBLEMS ENCOUNTERED	CORRECTIVE ACTION TAKEN

COMMUNICATION

NAME	REPRESENTING	SUBJECT / COMMENTS
B. Yelen	TRC	project communication

INVESTIGATION DERIVED WASTE SUMMARY

WASTE MATRIX	QUANTITY	COMMENTS
GW	~15 gallons	Drummed onsite (1 drum)

HS 9/28/22
SIGNED DATE

9-30-22
CHECKED BY DATE

TRC

GENERAL NOTES

PROJECT NAME:	DA-Eastern RCRA Assessmen	DATE: 9/28/22	TIME ARRIVED: 0750
PROJECT NUMBER:	495430.0000.0000	AUTHOR: Henry Schnaidt, Javier	TIME LEFT: 1515

WEATHER

TEMPERATURE: 50 °F WIND: 10 MPH VISIBILITY: Overcast

WORK / SAMPLING PERFORMED

Wells Sampled: MW-108, 107, 106, Dup #2, 104

PROBLEMS ENCOUNTERED	CORRECTIVE ACTION TAKEN

COMMUNICATION

NAME	REPRESENTING	SUBJECT / COMMENTS

INVESTIGATION DERIVED WASTE SUMMARY

WASTE MATRIX	QUANTITY	COMMENTS
GW	See previous page	Drummed on site (1 drum) 1 drum filled to 50-60% capacity, 1 drum empty, located by gate with other drums (not from TRC)

SIGNED 9/28/22 DATE

CHECKED BY 9-30-22 DATE

TRC

EQUIPMENT SUMMARY

PROJECT NAME:	DA-Eastern RCRA Assessme	SAMPLER NAME:	Henry Schmaidt, Javier Jasso
PROJECT NO.:	495430.0000.0000		

WATER LEVEL MEASUREMENTS COLLECTED WITH:

HERON DIPPER-T	TRC A2
NAME AND MODEL OF INSTRUMENT	SERIAL NUMBER (IF APPLICABLE)

PRODUCT LEVEL MEASUREMENTS COLLECTED WITH:

NA	NA
NAME AND MODEL OF INSTRUMENT	SERIAL NUMBER (IF APPLICABLE)

DEPTH TO BOTTOM OF WELL MEASUREMENTS COLLECTED WITH:

HERON DIPPER-T	TRC A2
NAME AND MODEL OF INSTRUMENT	SERIAL NUMBER (IF APPLICABLE)

PURGING METHOD peristaltic (A2)

~~BLADDER PUMP (QED SAMPLE PRO)~~ ~~bladder~~ pump	~~PROJECT DEDICATED~~
NAME AND MODEL OF PUMP OR TYPE OF BAILER	SERIAL NUMBER (IF APPLICABLE)

SAMPLING METHOD

~~BLADDER PUMP (QED SAMPLE PRO)~~ peristaltic pump (A2)	~~PROJECT DEDICATED~~
NAME AND MODEL OF PUMP OR TYPE OF BAILER	SERIAL NUMBER (IF APPLICABLE)
NA	~~0.45 MICRON~~
NAME AND MODEL OF FILTERATION DEVICE	FILTER TYPE AND SIZE
DISPOSABLE POLY TUBING	☑ LOW-FLOW SAMPLING EVENT
TUBING TYPE	

PURGE WATER DISPOSAL METHOD

☑ GROUND ☑ DRUM ☐ POTW ☐ POLYTANK ☐ OTHER _____

DECONTAMINATION AND FIELD BLANK WATER SOURCE

STORE BOUGHT	LABORATORY PROVIDED
POTABLE WATER SOURCE	DI WATER SOURCE
HS 9/20/22	9-30-22
SIGNED DATE	CHECKED BY DATE

REVISED 04/2019

TRC

EQUIPMENT SUMMARY

PROJECT NAME:	DA-Eastern RCRA Assessme	SAMPLER NAME:	Henry Schnaidt, Javier Jasso
PROJECT NO.:	495430.0000.0000		

WATER LEVEL MEASUREMENTS COLLECTED WITH:

HERON DIPPER-T	TRC A2
NAME AND MODEL OF INSTRUMENT	SERIAL NUMBER (IF APPLICABLE)

PRODUCT LEVEL MEASUREMENTS COLLECTED WITH:

NA	NA
NAME AND MODEL OF INSTRUMENT	SERIAL NUMBER (IF APPLICABLE)

DEPTH TO BOTTOM OF WELL MEASUREMENTS COLLECTED WITH:

HERON DIPPER-T	TRC A2
NAME AND MODEL OF INSTRUMENT	SERIAL NUMBER (IF APPLICABLE)

PURGING METHOD

BLADDER PUMP (QED SAMPLE PRO) + peristaltic pump	PROJECT DEDICATED
NAME AND MODEL OF PUMP OR TYPE OF BAILER	SERIAL NUMBER (IF APPLICABLE)

SAMPLING METHOD

BLADDER PUMP (QED SAMPLE PRO) + peristaltic pump	PROJECT DEDICATED
NAME AND MODEL OF PUMP OR TYPE OF BAILER	SERIAL NUMBER (IF APPLICABLE)

NA	~~0.45 MICRON~~
NAME AND MODEL OF FILTERATION DEVICE	FILTER TYPE AND SIZE

DISPOSABLE POLY TUBING	☑ LOW-FLOW SAMPLING EVENT
TUBING TYPE	

PURGE WATER DISPOSAL METHOD

☑ GROUND ☑ DRUM ☐ POTW ☐ POLYTANK ☐ OTHER _____

DECONTAMINATION AND FIELD BLANK WATER SOURCE

STORE BOUGHT	LABORATORY PROVIDED
POTABLE WATER SOURCE	DI WATER SOURCE
SIGNED 9/30/22 DATE	CHECKED BY 9-30-22 DATE

REVISED 04/2019

TRC

WATER QUALITY METER CALIBRATION LOG

PROJECT NAME:	DA-Eastern RCRA Assessment	MODEL: YSI Pro DSS	SAMPLER: HS, JJ
PROJECT NO.:	495430.0000.0000	SERIAL #: TRC A2	DATE: 9/27/22

PH CALIBRATION CHECK

pH 7 (LOT #): 26F083 (EXP. DATE): JUN/24 POST-CAL. READING / STANDARD	pH 4 / 10 (LOT #): 26E870 (EXP. DATE): MAY/24 POST-CAL. READING / STANDARD	CAL. RANGE	TIME
7.00 / 7.00	4.00 / 4.00	☒ WITHIN RANGE	732
/	/	☐ WITHIN RANGE	
/	/	☐ WITHIN RANGE	
/	/	☐ WITHIN RANGE	

SPECIFIC CONDUCTIVITY CALIBRATION CHECK

CAL. READING (LOT #): 26F716 (EXP. DATE): JUN/23 POST-CAL. READING / STANDARD	TEMPERATURE (°CELSIUS)	CAL. RANGE	TIME
1260 / 1260	18.5	☒ WITHIN RANGE	734
/		☐ WITHIN RANGE	
/		☐ WITHIN RANGE	
/		☐ WITHIN RANGE	

ORP CALIBRATION CHECK

CAL. READING (LOT #): 26100076 (EXP. DATE): 2027-07-07 POST-CAL. READING / STANDARD	TEMPERATURE (°CELSIUS)	CAL. RANGE	TIME
227 / 227	13.0	☒ WITHIN RANGE	739
/		☐ WITHIN RANGE	
/		☐ WITHIN RANGE	
/		☐ WITHIN RANGE	

D.O. CALIBRATION CHECK

CAL. READING POST-CAL. READING /SATURATED AIR	TEMPERATURE (°CELSIUS)	CAL. RANGE	TIME
10.26 / 10.26	13.1	☒ WITHIN RANGE	742
/		☐ WITHIN RANGE	
/		☐ WITHIN RANGE	
/		☐ WITHIN RANGE	

TURBIDITY CALIBRATION CHECK

CALIBRATION READING (NTU) (LOT #): 19040115 (EXP. DATE): 8/20 POST-CAL. READING / STANDARD	(LOT #): 18293474 (EXP. DATE): 4/20 POST-CAL. READING / STANDARD	CAL. RANGE	TIME
0.00 / 0.00	10.00 / 10.00	☒ WITHIN RANGE	745
/	/	☐ WITHIN RANGE	
/	/	☐ WITHIN RANGE	
/	/	☐ WITHIN RANGE	

COMMENTS

☐ AUTOCAL SOLUTION (LOT #): (EXP. DATE):	☑ STANDARD SOLUTION (S) LIST LOT NUMBERS AND EXPIRATION DATES UNDER CALIBRATION CHECK

CALIBRATED PARAMETERS		CALIBRATION RANGES [1]	
☐	pH	pH:	+/- 0.2 S.U.
☐	COND	COND:	+/- 1% OF CAL. STANDARD
☐	ORP	ORP:	+/- 25 mV
☐	D.O.	D.O.:	VARIES
☐	TURB	TURB:	+/- 5% OF CAL. STANDARD
☐	_____	[1] CALIBRATION RANGES ARE SPECIFIC TO THE MODEL OF THE WATER QUALITY METER	
☐	_____		

NOTES

PROBLEMS ENCOUNTERED	CORRECTIVE ACTIONS

HS 9/27/22
SIGNED DATE

9-30-2022
CHECKED BY DATE

TRC

WATER QUALITY METER CALIBRATION LOG

PROJECT NAME:	DA-Eastern RCRA Assessment	MODEL: YSI Pro DSS	SAMPLER: HS JJ
PROJECT NO.:	495430.0000.0000	SERIAL #: ~~TRC A2~~ Geotech RENTAL	DATE: 9/27/22

PH CALIBRATION CHECK

pH 7 (LOT #): 26F 003 (EXP. DATE): 6/24 POST-CAL. READING / STANDARD	pH 4 / 10 (LOT #): 26E 820 (EXP. DATE): 5/24 POST-CAL. READING / STANDARD	CAL. RANGE	TIME
700 / 700	400 / 400	☑ WITHIN RANGE	0805
/	/	☐ WITHIN RANGE	
/	/	☐ WITHIN RANGE	
/	/	☐ WITHIN RANGE	

SPECIFIC CONDUCTIVITY CALIBRATION CHECK

CAL. READING (LOT #): 26F 71C (EXP. DATE): 6/23 POST-CAL. READING / STANDARD	TEMPERATURE (°CELSIUS)	CAL. RANGE	TIME
1413 / 1413	15.6	☑ WITHIN RANGE	0811
/		☐ WITHIN RANGE	
/		☐ WITHIN RANGE	
/		☐ WITHIN RANGE	

ORP CALIBRATION CHECK

CAL. READING (LOT #): 21 100307 (EXP. DATE): 11/26 POST-CAL. READING / STANDARD	TEMPERATURE (°CELSIUS)	CAL. RANGE	TIME
237 / 237	15.6	☑ WITHIN RANGE	0805
/		☐ WITHIN RANGE	
/		☐ WITHIN RANGE	
/		☐ WITHIN RANGE	

D.O. CALIBRATION CHECK

CAL. READING POST-CAL. READING /SATURATED AIR	TEMPERATURE (°CELSIUS)	CAL. RANGE	TIME
9.01 / 9.01	16.0	☑ WITHIN RANGE	0801
/		☐ WITHIN RANGE	
/		☐ WITHIN RANGE	
/		☐ WITHIN RANGE	

TURBIDITY CALIBRATION CHECK

CALIBRATION READING (NTU) (LOT #): A2172 (EXP. DATE): 6/24 POST-CAL. READING / STANDARD	(LOT #): (EXP. DATE): POST-CAL. READING / STANDARD	CAL. RANGE	TIME
0 / 0	/	☑ WITHIN RANGE	0801
100 / 100	/	☑ WITHIN RANGE	0811
/	/	☐ WITHIN RANGE	
/	/	☐ WITHIN RANGE	

COMMENTS

☐ AUTOCAL SOLUTION (LOT #): (EXP. DATE):	☑ STANDARD SOLUTION (S) LIST LOT NUMBERS AND EXPIRATION DATES UNDER CALIBRATION CHECK
CALIBRATED PARAMETERS	**CALIBRATION RANGES (1)**
☐ pH	pH: +/- 0.2 S.U.
☐ COND	COND: +/- 1% OF CAL. STANDARD
☐ ORP	ORP: +/- 25 mV
☐ D.O.	D.O.: VARIES
☐ TURB	TURB: +/- 5% OF CAL. STANDARD
☐ _____	(1) CALIBRATION RANGES ARE SPECIFIC TO THE MODEL OF THE WATER QUALITY METER
☐ _____	

NOTES

PROBLEMS ENCOUNTERED	CORRECTIVE ACTIONS

SIGNED 9/28/22 DATE

CHECKED BY 9-30-22 DATE

TRC

WATER QUALITY METER CALIBRATION LOG

PROJECT NAME:	DA-Eastern RCRA Assessment	MODEL: YSI Pro DSS	SAMPLER: HS, JJ
PROJECT NO.:	495430.0000.0000	SERIAL #: TRC A2	DATE: 9/28/22

PH CALIBRATION CHECK

pH 7 (LOT #): 26F083 (EXP. DATE): JUN/24 POST-CAL. READING / STANDARD	pH 4 / 10 (LOT #): 26E870 (EXP. DATE): MAY/24 POST-CAL. READING / STANDARD	CAL. RANGE	TIME
7.00 / 7.00	4.00 / 4.00	☒ WITHIN RANGE	832
/	/	☐ WITHIN RANGE	
/	/	☐ WITHIN RANGE	
/	/	☐ WITHIN RANGE	

SPECIFIC CONDUCTIVITY CALIBRATION CHECK

CAL. READING (LOT #): 26F716 (EXP. DATE): JUN/23 POST-CAL. READING / STANDARD	TEMPERATURE (°CELSIUS)	CAL. RANGE	TIME
1167 / 1167	12.8	☒ WITHIN RANGE	835
/		☐ WITHIN RANGE	
/		☐ WITHIN RANGE	
/		☐ WITHIN RANGE	

ORP CALIBRATION CHECK

CAL. READING (LOT #): 26/000 076 (EXP. DATE): 2027-07-07 POST-CAL. READING / STANDARD	TEMPERATURE (°CELSIUS)	CAL. RANGE	TIME
227 / 227	12.7	☒ WITHIN RANGE	838
/		☐ WITHIN RANGE	
/		☐ WITHIN RANGE	
/		☐ WITHIN RANGE	

D.O. CALIBRATION CHECK

CAL. READING POST-CAL. READING /SATURATED AIR	TEMPERATURE (°CELSIUS)	CAL. RANGE	TIME
10.26 / 10.26	12.9	☒ WITHIN RANGE	841
/		☐ WITHIN RANGE	
/		☐ WITHIN RANGE	
/		☐ WITHIN RANGE	

TURBIDITY CALIBRATION CHECK

CALIBRATION READING (NTU) (LOT #): 19040H5 (EXP. DATE): 8/20 POST-CAL. READING / STANDARD	(LOT #): 18293474 (EXP. DATE): 4/20 POST-CAL. READING / STANDARD	CAL. RANGE	TIME
0.00 / 0.00	10.00 / 10.00	☒ WITHIN RANGE	853
/	/	☐ WITHIN RANGE	
/	/	☐ WITHIN RANGE	
/	/	☐ WITHIN RANGE	

COMMENTS

☐ AUTOCAL SOLUTION (LOT #): (EXP. DATE):	☑ STANDARD SOLUTION (S) LIST LOT NUMBERS AND EXPIRATION DATES UNDER CALIBRATION CHECK
CALIBRATED PARAMETERS	CALIBRATION RANGES (1)
☐ pH	pH: +/- 0.2 S.U.
☐ COND	COND: +/- 1% OF CAL. STANDARD
☐ ORP	ORP: +/- 25 mV
☐ D.O.	D.O.: VARIES
☐ TURB	TURB: +/- 5% OF CAL. STANDARD
☐ _____	(1) CALIBRATION RANGES ARE SPECIFIC TO THE MODEL OF THE WATER QUALITY METER
☐ _____	

NOTES

PROBLEMS ENCOUNTERED	CORRECTIVE ACTIONS

HS 9/28/22
SIGNED DATE

9-30-22
CHECKED BY DATE

TRC

WATER QUALITY METER CALIBRATION LOG

PROJECT NAME:	DA-Eastern RCRA Assessment	MODEL: YSI Pro DSS	SAMPLER: HS JJ
PROJECT NO.:	495430.0000.0000	SERIAL #: ~~TRC A2~~ Biotech RENTAL	DATE: 9/28/22

PH CALIBRATION CHECK

pH 7 (LOT #): 26F0B3 (EXP. DATE): 6/24	pH 4 / 10 (LOT #): 26E 870 (EXP. DATE): 5/24	CAL. RANGE	TIME
POST-CAL. READING / STANDARD	POST-CAL. READING / STANDARD		
700 / 700	400 / 400	☒ WITHIN RANGE	0752
/	/	☐ WITHIN RANGE	
/	/	☐ WITHIN RANGE	
/	/	☐ WITHIN RANGE	

SPECIFIC CONDUCTIVITY CALIBRATION CHECK

CAL. READING (LOT #): 26F716 (EXP. DATE): 6/23	TEMPERATURE (°CELSIUS)	CAL. RANGE	TIME
POST-CAL. READING / STANDARD			
1213 / 1213	15.C	☐ WITHIN RANGE	0751
/		☐ WITHIN RANGE	
/		☐ WITHIN RANGE	
/		☐ WITHIN RANGE	

ORP CALIBRATION CHECK

CAL. READING (LOT #): 21K00357 (EXP. DATE): 1/24	TEMPERATURE (°CELSIUS)	CAL. RANGE	TIME
POST-CAL. READING / STANDARD			
227 / 227	16.0	☒ WITHIN RANGE	0751
/		☐ WITHIN RANGE	
/		☐ WITHIN RANGE	
/		☐ WITHIN RANGE	

D.O. CALIBRATION CHECK

CAL. READING	TEMPERATURE (°CELSIUS)	CAL. RANGE	TIME
POST-CAL. READING /SATURATED AIR			
9.61 / 9.61	16.0	☐ WITHIN RANGE	0711
/		☐ WITHIN RANGE	
/		☐ WITHIN RANGE	
/		☐ WITHIN RANGE	

TURBIDITY CALIBRATION CHECK

CALIBRATION READING (NTU) (LOT #): A21172 (EXP. DATE): 6/24	(LOT #): (EXP. DATE):	CAL. RANGE	TIME
POST-CAL. READING / STANDARD	POST-CAL. READING / STANDARD		
0 / 0	/	☒ WITHIN RANGE	0751
100 / 100	/	☑ WITHIN RANGE	0751
/	/	☐ WITHIN RANGE	
/	/	☐ WITHIN RANGE	

COMMENTS

☐ AUTOCAL SOLUTION (LOT #): (EXP. DATE):	☑ STANDARD SOLUTION (S) LIST LOT NUMBERS AND EXPIRATION DATES UNDER CALIBRATION CHECK
CALIBRATED PARAMETERS	CALIBRATION RANGES (1)
☐ pH	pH: +/- 0.2 S.U.
☐ COND	COND: +/- 1% OF CAL. STANDARD
☐ ORP	ORP: +/- 25 mV
☐ D.O.	D.O.: VARIES
☐ TURB	TURB: +/- 5% OF CAL. STANDARD
☐ _____	(1) CALIBRATION RANGES ARE SPECIFIC TO THE MODEL OF THE WATER QUALITY METER
☐ _____	

NOTES

PROBLEMS ENCOUNTERED	CORRECTIVE ACTIONS

SIGNED 9/28/22 DATE

CHECKED BY 9-30-22 DATE

TRC

WATER LEVEL DATA

PROJECT NAME: DA-Eastern RCRA Assessment	DATE: 9/27/22 + 9/28/22
PROJECT NUMBER: 495430.0000.0000	AUTHOR: Henry Schnaidt, Javier Jasso

WELL LOCATION	TIME	REFERENCE	DEPTH TO WATER (FEET)	DEPTH TO BOTTOM (FEET)	DEPTH TO PRODUCT (FEET)	WATER ELEVATION
MW-121	803	TOC	~~BOTTOM~~ NM	NM *		
MW-120	818	TOC	6.54	7.35		
MW-119	822	TOC	8.59	9.41		
MW-113	828	TOC	10.16	12.53		

HS 9/27/22

* unable to measure water level / depth to bottom of MW-121 due to roots on bottom of WPM

* Depth to bottom measured after samples taken

ALL WATER LEVELS MUST INCLUDE REFERENCE POINT AND TAPE CORRECTION FACTOR
(E.G., 1.1 + 0.00 T/PVC).

HS 9/27/22
SIGNED DATE

9-30-22
CHECKED DATE

TRC

WATER LEVEL DATA

HS 9/27/22 + 9/28/22

PROJECT NAME:	DA-Eastern RCRA Assessment	DATE: 9/28/22
PROJECT NUMBER:	495430.0000.0000	AUTHOR: Henry Schnaidt, Javier Jasso

WELL LOCATION	TIME	REFERENCE	DEPTH TO WATER (FEET)	DEPTH TO BOTTOM (FEET) *	DEPTH TO PRODUCT (FEET)	WATER ELEVATION
MW-106	0732	TOC	9.11	12.31		
MW-107	0736		9.02	12.10		
MW 108	0740		8.44	9.95		
MW-109	0744		7.93	10.00		
MW 110	0747		8.09	NM		
MW-111	0752		7.41	8.79		
MW-112	0753		6.95	8.74		
MW-104	0811		10.61	20.12		
MW 105	0814		11.44	12.65		

* Depth to bottom measured after sampling event

ALL WATER LEVELS MUST INCLUDE REFERENCE POINT AND TAPE CORRECTION FACTOR
(E.G., 1.1 + 0.00 T/PVC).

9/28/22
SIGNED DATE

9-30-22
CHECKED DATE

REVISED 04/2019

TRC WATER SAMPLE LOG

PROJECT NAME:	DA-Eastern RCRA Assessmen	PREPARED		CHECKED	
PROJECT NUMBER:	495430.0000.0000	BY: (HS), JJ	DATE: 9/27/22	BY: JK	DATE: 9-30-22

SAMPLE ID: MW-120 | WELL DIAMETER: ☑ 2" ☐ 4" ☐ 6" ☐ OTHER

WELL MATERIAL: ☑ PVC ☐ SS ☐ IRON ☐ GALVANIZED STEEL ☐ OTHER

SAMPLE TYPE: ☑ GW ☐ WW ☐ SW ☐ DI ☐ LEACHATE ☐ OTHER

PURGING	TIME: 910	DATE: 9/27/22	SAMPLE	TIME: 930	DATE: 9/27/22
PURGE METHOD: ☑ PUMP ~~BLADDER PUMP (QED)~~ peristaltic ☐ BAILER BAILER (DISPOSABLE)			PH: 7.02 SU	CONDUCTIVITY: 717 umhos/cm	
			ORP: 103.0 mV	DO: 2.2 mg/L	
DEPTH TO WATER: 6.54 T/ PVC			TURBIDITY: 2.90 NTU		
DEPTH TO BOTTOM: ~~7~~.35 T/ PVC			☒ NONE ☐ SLIGHT ☐ MODERATE ☐ VERY		
WELL VOLUME: — ☐ LITERS ☐ GALLONS			TEMPERATURE: 13.1 °C	OTHER: —	
VOLUME REMOVED: 4 ☒ LITERS ☐ GALLONS			COLOR: clear	ODOR: none	
COLOR: clear	ODOR: none		FILTRATE (0.45 um) ☐ YES ☒ NO		
TURBIDITY			FILTRATE COLOR: —	FILTRATE ODOR: —	
☐ NONE ☒ SLIGHT ☐ MODERATE ☐ VERY			QC SAMPLE: ☐ MS/MSD ☒ DUP- 01		
DISPOSAL METHOD: ☐ GROUND ☑ DRUM ☐ OTHER			COMMENTS: ~~Bladder pump log (VOCs and methanol)~~		

TIME	PURGE RATE (ML/MIN)	PH (SU)	CONDUCTIVITY (umhos/cm)	ORP (mV)	D.O. (mg/L)	TURBIDITY (NTU)	TEMPERATURE (°C)	WATER LEVEL (FEET)	CUMULATIVE PURGE VOLUME (GAL OR L)
910	200	6.84	707	110.2	2.2	30.2	13.1	6.95	INITIAL
915	200	6.95	717	104.7	1.9	9.99	13.1	7.03	1
920	200	6.99	720	103.8	2.1	4.86	13.1	7.10	2
925	200	7.00	720	103.7	2.1	3.55	13.1	7.11	3
930	200	7.02	717	103.0	2.2	2.90	13.1	7.13	4

NOTE: STABILIZATION TEST IS COMPLETE WHEN 3 SUCCESSIVE READINGS ARE WITHIN THE FOLLOWING LIMITS:

pH: +/- 0.1 COND.: +/- 3% ORP: +/- 10 D.O.: +/- 10 % TURB: +/- 10 % or </= 5 TEMP.: +/- 0.3°C

BOTTLES FILLED — PRESERVATIVE CODES A - NONE B - HNO3 C - H2SO4 D - NaOH E - HCL F - ____

NUMBER	SIZE	TYPE	PRESERVATIVE	FILTERED	NUMBER	SIZE	TYPE	PRESERVATIVE	FILTERED
~~3~~	~~40 mL~~	~~VOA~~	~~E~~	☐ Y ☑ N	(HS)				☐ Y ☐ N
~~3~~	~~40 mL~~	~~VOA~~	(HS) ~~A~~	☐ Y ☑ N					☐ Y ☐ N
6	15mL	plastic	A	☐ Y ☒ N					☐ Y ☐ N
2	125mL	plastic	B	☐ Y ☐ N					☐ Y ☐ N
				☐ Y ☐ N					☐ Y ☐ N

SHIPPING METHOD: Courier	DATE SHIPPED: 9/29/22	AIRBILL NUMBER: —
COC NUMBER: —	SIGNATURE: HS	DATE SIGNED: 9/27/22

TRC WATER SAMPLE LOG

PROJECT NAME:	DA-Eastern RCRA Assessmen	PREPARED		CHECKED	
PROJECT NUMBER:	495430.0000.0000	BY: HS (JJ)	DATE: 9/27/22	BY: SK	DATE: 9-30-22

SAMPLE ID: MW-120 | WELL DIAMETER: ☑ 2" ☐ 4" ☐ 6" ☐ OTHER

WELL MATERIAL: ☑ PVC ☐ SS ☐ IRON ☐ GALVANIZED STEEL ☐ OTHER

SAMPLE TYPE: ☑ GW ☐ WW ☐ SW ☐ DI ☐ LEACHATE ☐ OTHER

PURGING	TIME: 1016	DATE: 9/27/22	SAMPLE	TIME: 1041	DATE: 9/27/22
PURGE METHOD: ☑ PUMP ~~BLADDER PUMP (QED)~~ Peristaltic ☐ BAILER ☐ BAILER (DISPOSABLE)			PH: 6.61 SU	CONDUCTIVITY: 918 umhos/cm	
			ORP: 219.1 mV	DO: 1.6 mg/L	
DEPTH TO WATER: 6.67 T/ PVC			TURBIDITY: 3.9 NTU		
DEPTH TO BOTTOM: 7.35 T/ PVC			☐ NONE ☐ SLIGHT ☐ MODERATE ☐ VERY		
WELL VOLUME: NA ☐ LITERS ☐ GALLONS			TEMPERATURE: 13.1 °C	OTHER:	
VOLUME REMOVED: 2.5 ☒ LITERS ☐ GALLONS			COLOR: Clear	ODOR: non	
COLOR: Brown	ODOR: non		FILTRATE (0.45 um) ☐ YES ☒ NO		
TURBIDITY ☐ NONE ☐ SLIGHT ☐ MODERATE ☒ VERY			FILTRATE COLOR:	FILTRATE ODOR:	
			QC SAMPLE: ☐ MS/MSD ☑ DUP- 01		
DISPOSAL METHOD: ☐ GROUND ☑ DRUM ☐ OTHER			COMMENTS: ~~Bladder pump~~ Peristaltic log (VOCs and methanol)		

TIME	PURGE RATE (ML/MIN)	PH (SU)	CONDUCTIVITY (umhos/cm)	ORP (mV)	D.O. (mg/L)	TURBIDITY (NTU)	TEMPERATURE (°C)	WATER LEVEL (FEET)	CUMULATIVE PURGE VOLUME (GAL OR L)
1016	100	6.64	918	199.0	1.60	30.0	13.0	6.57	INITIAL
1021		6.74	924	215	1.90	7.0	17.2	7.10	0.5
1026		6.76	937	214.0	1.7	5.6	13.1	7.00	1.0
1031		6.80	931	214.8	1.5	4.0	13.1	7.00	1.5
1036		6.81	920	219.0	1.6	3.8	13.2	7.00	2.0
1041		6.61	918	219.1	1.6	3.9	13.1	7.00	2.5
~~1046~~								~~7.00~~	~~3~~
HS								HS	

Attempted to Sample with bladder, ran out of water, had to sample w/ peristaltic

NOTE: STABILIZATION TEST IS COMPLETE WHEN 3 SUCCESSIVE READINGS ARE WITHIN THE FOLLOWING LIMITS:

pH: +/- **0.1** COND.: +/- **3%** ORP: +/- **10** D.O.: +/- **10 %** TURB: +/- **10 %** or </= **5** TEMP.: +/- **0.3°C**

BOTTLES FILLED — PRESERVATIVE CODES A - NONE B - HNO3 C - H2SO4 D - NaOH E - HCL F - _____

NUMBER	SIZE	TYPE	PRESERVATIVE	FILTERED	NUMBER	SIZE	TYPE	PRESERVATIVE	FILTERED
6	40 mL	VOA	E	☐ Y ☑ N					☐ Y ☐ N
6	40 mL	VOA	A	☐ Y ☑ N					☐ Y ☐ N
				☐ Y ☐ N					☐ Y ☐ N
				☐ Y ☐ N					☐ Y ☐ N
		courier	HS	☐ Y ☐ N					☐ Y ☐ N

SHIPPING METHOD: ~~FedEx~~	DATE SHIPPED: 9/29/22	AIRBILL NUMBER: ~~N/A~~
COC NUMBER: ~~Enclosed~~	SIGNATURE: HS	DATE SIGNED: 9/27/22

NO

TRC

WATER SAMPLE LOG

PROJECT NAME:	DA-Eastern RCRA Assessmen	PREPARED		CHECKED	
PROJECT NUMBER:	495430.0000.0000	BY: (HS) JJ	DATE: 9/27/22	BY: JK	DATE: 9-30-22

SAMPLE ID: MW-119	WELL DIAMETER: [x] 2" [ ] 4" [ ] 6" [ ] OTHER		
WELL MATERIAL: [x] PVC [ ] SS [ ] IRON [ ] GALVANIZED STEEL	[ ] OTHER		
SAMPLE TYPE: [x] GW [ ] WW [ ] SW [ ] DI [ ] LEACHATE	[ ] OTHER		

PURGING		SAMPLE	
TIME: 953	DATE: 9/27/22	TIME: 1013	DATE: 9/27/22
PURGE METHOD: [x] PUMP ~~BLADDER PUMP (QED)~~ peristaltic; [ ] BAILER BAILER (DISPOSABLE)		PH: 6.97 SU	CONDUCTIVITY: 651 umhos/cm
		ORP: 124.0 mV	DO: 7.1 mg/L
DEPTH TO WATER: 8.59 T/ PVC		TURBIDITY: 2.48 NTU	
DEPTH TO BOTTOM: 9.41 T/ PVC		[x] NONE [ ] SLIGHT [ ] MODERATE [ ] VERY	
WELL VOLUME: — [ ] LITERS [ ] GALLONS		TEMPERATURE: 13.8 °C	OTHER: —
VOLUME REMOVED: 2.5 [x] LITERS [ ] GALLONS		COLOR: clear	ODOR: none
COLOR: clear	ODOR: none	FILTRATE (0.45 um) [ ] YES [x] NO	
TURBIDITY		FILTRATE COLOR: —	FILTRATE ODOR: —
[ ] NONE [x] SLIGHT [ ] MODERATE [ ] VERY		QC SAMPLE: [ ] MS/MSD	[ ] DUP- —
DISPOSAL METHOD: [ ] GROUND [x] DRUM [ ] OTHER		COMMENTS: ~~Bladder pump log (VOCs and methanol)~~ peristaltic	

TIME	PURGE RATE (ML/MIN)	PH (SU)	CONDUCTIVITY (umhos/cm)	ORP (mV)	D.O. (mg/L)	TURBIDITY (NTU)	TEMPERATURE (°C)	WATER LEVEL (FEET)	CUMULATIVE PURGE VOLUME (GAL OR L)
953	200	7.06	648	116.9	6.3	8.09	13.7	8.59	INITIAL
958	100	7.01	648	122.1	7.5	6.08	13.7	9.41	1
1003	100	6.99	649	124.4	7.3	3.78	13.7	9.41	1.5
1008	100	6.98	650	124.3	7.2	2.60	13.7	9.41	2
1013	100	6.97	651	124.0	7.1	2.48	13.8	9.41	2.5

~~well~~ ~~Ran~~ (HS) water level lowered to bottom of well, unable to use bladder pump for VOCs + Methanol

NOTE: STABILIZATION TEST IS COMPLETE WHEN 3 SUCCESSIVE READINGS ARE WITHIN THE FOLLOWING LIMITS:

pH: +/- **0.1** COND.: +/- **3%** ORP: +/- **10** D.O.: +/- **10 %** TURB: +/- **10 %** or </= **5** TEMP.: +/- **0.3°C**

BOTTLES FILLED — PRESERVATIVE CODES A - NONE B - HNO3 C - H2SO4 D - NaOH E - HCL F - ______

NUMBER	SIZE	TYPE	PRESERVATIVE	FILTERED	NUMBER	SIZE	TYPE	PRESERVATIVE	FILTERED
~~3~~	~~40 mL~~	~~VOA~~	~~E~~	[ ] Y [x] N	(HS)				[ ] Y [ ] N
~~3~~	~~40 mL~~	~~VOA~~	~~A~~	[ ] Y [x] N					[ ] Y [ ] N
7	15 mL	plastic	A	[ ] Y [x] N	3	40 mL	VOA	E	[ ] Y [x] N
1	125 mL	plastic	B	[ ] Y [x] N					[ ] Y [ ] N
3	40 mL	VOA	A	[ ] Y [x] N					[ ] Y [ ] N

SHIPPING METHOD:	Courier	DATE SHIPPED:	9/29/22	AIRBILL NUMBER:	—
COC NUMBER:	—	SIGNATURE:	HS	DATE SIGNED:	9/27/22

TRC WATER SAMPLE LOG

PROJECT NAME:	DA-Eastern RCRA Assessmen	PREPARED		CHECKED	
PROJECT NUMBER:	495430.0000.0000	BY: (HS) JJ	DATE: 9/27/22	BY: SK	DATE: 9-30-22

SAMPLE ID: MW-113 | WELL DIAMETER: ☑ 2" ☐ 4" ☐ 6" ☐ OTHER

WELL MATERIAL: ☑ PVC ☐ SS ☐ IRON ☐ GALVANIZED STEEL ☐ OTHER

SAMPLE TYPE: ☑ GW ☐ WW ☐ SW ☐ DI ☐ LEACHATE ☐ OTHER

PURGING	TIME: 1107	DATE: 9/27/22	SAMPLE	TIME: 1127	DATE: 9/27/22
PURGE METHOD: ☑ PUMP ~~BLADDER PUMP (QED)~~ peristaltic; ☐ BAILER ~~BAILER (DISPOSABLE)~~			PH: 7.02 SU	CONDUCTIVITY: 631 umhos/cm	
			ORP: 6.3 mV	DO: 5.4 mg/L	
DEPTH TO WATER: 10.16 T/ PVC			TURBIDITY: 4.01 NTU		
DEPTH TO BOTTOM: 12.53 T/ PVC			☒ NONE ☐ SLIGHT ☐ MODERATE ☐ VERY		
WELL VOLUME: — ☐ LITERS ☐ GALLONS			TEMPERATURE: 14.5 °C	OTHER: —	
VOLUME REMOVED: 4 ☒ LITERS ☐ GALLONS			COLOR: clear	ODOR: none	
COLOR: clear ODOR: none			FILTRATE (0.45 um) ☐ YES ☒ NO		
TURBIDITY ☐ NONE ☒ SLIGHT ☐ MODERATE ☐ VERY			FILTRATE COLOR: —	FILTRATE ODOR: —	
			QC SAMPLE: ☐ MS/MSD ☐ DUP- —		
DISPOSAL METHOD: ☐ GROUND ☑ DRUM ☐ OTHER			COMMENTS: ~~Bladder pump log (VOCs and methanol)~~ peristaltic		

TIME	PURGE RATE (ML/MIN)	PH (SU)	CONDUCTIVITY (umhos/cm)	ORP (mV)	D.O. (mg/L)	TURBIDITY (NTU)	TEMPERATURE (°C)	WATER LEVEL (FEET)	CUMULATIVE PURGE VOLUME (GAL OR L)
1107	200	7.11	766	-70.2	1.7	10.47	14.1	10.16	INITIAL
1112	200	7.05	656	-17.2	4.7	4.45	14.4	10.23	1
1117	200	7.03	631	-2.6	5.3	4.27	14.4	10.23	2
1122	200	7.02	627	3.3	5.5	4.13	14.4	10.23	3
1127	200	7.02	631	6.3	5.4	4.01	14.5	10.23	4

NOTE: STABILIZATION TEST IS COMPLETE WHEN 3 SUCCESSIVE READINGS ARE WITHIN THE FOLLOWING LIMITS:

pH: +/- 0.1 COND.: +/- 3% ORP: +/- 10 D.O.: +/- 10 % TURB: +/- 10 % or </= 5 TEMP.: +/- 0.3°C

BOTTLES FILLED — PRESERVATIVE CODES A - NONE B - HNO3 C - H2SO4 D - NaOH E - HCL F - _____

NUMBER	SIZE	TYPE	PRESERVATIVE	FILTERED	NUMBER	SIZE	TYPE	PRESERVATIVE	FILTERED
~~3~~	~~40 mL~~	~~VOA~~	~~E~~	☐ Y ☑ N					☐ Y ☐ N
~~3~~	~~40 mL~~	~~VOA~~	~~A~~	☐ Y ☑ N	HS				☐ Y ☐ N
3	1 Sml	plstic	A	☐ Y ☒ N					☐ Y ☐ N
1	125ml	plstic	B	☐ Y ☒ N					☐ Y ☐ N
				☐ Y ☐ N					☐ Y ☐ N

SHIPPING METHOD: Courier	DATE SHIPPED: 9-29-22	AIRBILL NUMBER: —
COC NUMBER: —	SIGNATURE: HS	DATE SIGNED: 9/27/22

TRC WATER SAMPLE LOG

PROJECT NAME:	DA-Eastern RCRA Assessmen	PREPARED		CHECKED	
PROJECT NUMBER:	495430.0000.0000	BY: HS JJ	DATE: 9/27/22	BY: JK	DATE: 9-30-22

SAMPLE ID: MW-113 | WELL DIAMETER: ☑ 2" ☐ 4" ☐ 6" ☐ OTHER

WELL MATERIAL: ☑ PVC ☐ SS ☐ IRON ☐ GALVANIZED STEEL ☐ OTHER

SAMPLE TYPE: ☑ GW ☐ WW ☐ SW ☐ DI ☐ LEACHATE ☐ OTHER

PURGING	TIME: 1141	DATE: 9/27/22	SAMPLE	TIME: 1220	DATE: 9/27/22
PURGE METHOD: ☑ PUMP ☐ BAILER	BLADDER PUMP (QED) / BAILER (DISPOSABLE)		PH: 6.60 SU	CONDUCTIVITY: 720 umhos/cm	
			ORP: 148.3 mV	DO: 4.9 mg/L	
DEPTH TO WATER: 10.13 T/ PVC			TURBIDITY: 8.9 NTU		
DEPTH TO BOTTOM: 12.53 T/ PVC			☒ NONE ☐ SLIGHT ☐ MODERATE ☐ VERY		
WELL VOLUME: NA ☐ LITERS ☐ GALLONS			TEMPERATURE: 14.3 °C	OTHER:	
VOLUME REMOVED: 5.5 ☒ LITERS ☐ GALLONS			COLOR: clear	ODOR: none	
COLOR: cloudy	ODOR: none		FILTRATE (0.45 um) ☐ YES ☒ NO		
TURBIDITY			FILTRATE COLOR:	FILTRATE ODOR:	
☐ NONE ☐ SLIGHT ☐ MODERATE ☒ VERY			QC SAMPLE: ☐ MS/MSD ☐ DUP-		
DISPOSAL METHOD: ☐ GROUND ☑ DRUM ☐ OTHER			COMMENTS: Bladder pump log (VOCs and methanol)		

TIME	PURGE RATE (ML/MIN)	PH (SU)	CONDUCTIVITY (umhos/cm)	ORP (mV)	D.O. (mg/L)	TURBIDITY (NTU)	TEMPERATURE (°C)	WATER LEVEL (FEET)	CUMULATIVE PURGE VOLUME (GAL OR L)
1141	200	6.74	750	171.9	9.71	93	16.7	10.13	INITIAL
1150		6.58	741	130.0	6.61	92	15.1	10.14	1
1155		6.58	768	126.0	5.5	43	14.7	10.15	2
1200		6.60	770	136.0	5.4	27	14.5	10.15	3
1205	100	6.60	782	147.5	5.0	13	14.3	10.15	4
1210		6.60	766	147.8	5.0	9.3	14.3	10.15	4.5
1215		6.60	767	148.0	5.0	9.2	14.2	10.15	5
1220		6.60	770	148.3	4.9	8.9	14.3	10.15	5.5

Sufficient water to use bladder pump for VOCs & Methanol

NOTE: STABILIZATION TEST IS COMPLETE WHEN 3 SUCCESSIVE READINGS ARE WITHIN THE FOLLOWING LIMITS:

pH: +/- 0.1 COND.: +/- 3% ORP: +/- 10 D.O.: +/- 10 % TURB: +/- 10 % or </= 5 TEMP.: +/- 0.3°C

BOTTLES FILLED — PRESERVATIVE CODES A - NONE B - HNO3 C - H2SO4 D - NaOH E - HCL F - _____

NUMBER	SIZE	TYPE	PRESERVATIVE	FILTERED	NUMBER	SIZE	TYPE	PRESERVATIVE	FILTERED
3	40 mL	VOA	E	☐ Y ☑ N					☐ Y ☐ N
3	40 mL	VOA	A	☐ Y ☑ N					☐ Y ☐ N
~~1~~	~~250~~	~~P~~	~~B~~	☐ Y ☒ N	(FD)				☐ Y ☐ N
				☐ Y ☐ N					☐ Y ☐ N
				☐ Y ☐ N					☐ Y ☐ N

SHIPPING METHOD:	Carrier	DATE SHIPPED:	9/29/22	AIRBILL NUMBER:	NA
COC NUMBER:	NA	SIGNATURE:	HS	DATE SIGNED:	9/27/22

WATER SAMPLE LOG

PROJECT NAME:	DA-Eastern RCRA Assessmen	PREPARED		CHECKED	
PROJECT NUMBER:	495430.0000.0000	BY: (HS), JJ	DATE: 9/27/22	BY: JK	DATE: 9-30-22

SAMPLE ID: MW-112 | WELL DIAMETER: ☑ 2" ☐ 4" ☐ 6" ☐ OTHER

WELL MATERIAL: ☑ PVC ☐ SS ☐ IRON ☐ GALVANIZED STEEL ☐ OTHER

SAMPLE TYPE: ☑ GW ☐ WW ☐ SW ☐ DI ☐ LEACHATE ☐ OTHER

PURGING	TIME: 1213	DATE: 9/27/22	SAMPLE	TIME: 1233	DATE: 9/27/22

PURGE METHOD: ☑ PUMP (PERISTALTIC PUMP) ☐ BAILER (BAILER (DISPOSABLE))

DEPTH TO WATER: 6.95 T/ PVC

DEPTH TO BOTTOM: 8.74 T/ PVC

WELL VOLUME: — ☒ LITERS ☐ GALLONS

VOLUME REMOVED: 4 ☐ LITERS ☐ GALLONS

COLOR: clear ODOR: Slight

TURBIDITY: ☐ NONE ☒ SLIGHT ☐ MODERATE ☐ VERY

DISPOSAL METHOD: ☐ GROUND ☑ DRUM ☐ OTHER

PH: 7.35 SU | CONDUCTIVITY: 473.0 umhos/cm

ORP: -121.3 mV | DO: 0.9 mg/L

TURBIDITY: 3.88 NTU

☒ NONE ☐ SLIGHT ☐ MODERATE ☐ VERY

TEMPERATURE: 13.2 °C | OTHER:

COLOR: Clear | ODOR: None

FILTRATE (0.45 um) ☐ YES ☒ NO

FILTRATE COLOR: — | FILTRATE ODOR: —

QC SAMPLE: ☐ MS/MSD ☐ DUP- —

COMMENTS: ~~Peristaltic pump log (PFAS and metals)~~ well went dry after PFAS sample had to recharge and collect metals, +VOCs + Methanol w/ peristaltic pump; not enough water for bladder pump

TIME	PURGE RATE (ML/MIN)	PH (SU)	CONDUCTIVITY (umhos/cm)	ORP (mV)	D.O. (mg/L)	TURBIDITY (NTU)	TEMPERATURE (°C)	WATER LEVEL (FEET)	CUMULATIVE PURGE VOLUME (GAL OR L)
1218	200	7.39	486.5	-123.6	1.3	19.7	13.3	~~7.34~~ (6.95)	INITIAL
1218	200	7.37	473.0	-118.3	1.1	18.7	13.2	7.34	1
1223	200	7.36	471.5	-120.6	1.0	4.73	13.2	7.37	2
1228	200	7.35	473.6	-120.5	1.0	3.74	13.2	7.39	3
1233	200	7.35	473.0	-121.3	0.9	3.88	13.2	7.40	4

NOTE: STABILIZATION TEST IS COMPLETE WHEN 3 SUCCESSIVE READINGS ARE WITHIN THE FOLLOWING LIMITS:

pH: +/- 0.1 COND.: +/- 3% ORP: +/- 10 D.O.: +/- 10 % TURB: +/- 10 % or </= 5 TEMP.: +/- 0.3°C

BOTTLES FILLED — PRESERVATIVE CODES A - NONE B - HNO3 C - H2SO4 D - NaOH E - HCL F - _____

NUMBER	SIZE	TYPE	PRESERVATIVE	FILTERED	NUMBER	SIZE	TYPE	PRESERVATIVE	FILTERED
3	15 mL	PLASTIC	A	☐ Y ☑ N					☐ Y ☐ N
1	125 mL	PLASTIC	B	☐ Y ☑ N					☐ Y ☐ N
3	40 ml	VOA	A	☐ Y ☒ N					☐ Y ☐ N
3	40ml	VOA	E	☐ Y ☒ N					☐ Y ☐ N
				☐ Y ☐ N					☐ Y ☐ N

SHIPPING METHOD:	Courier	DATE SHIPPED:		AIRBILL NUMBER:	
COC NUMBER:	—	SIGNATURE:	HS	DATE SIGNED:	9/27/22

WATER SAMPLE LOG

PROJECT NAME:	DA-Eastern RCRA Assessmen	PREPARED		CHECKED	
PROJECT NUMBER:	495430.0000.0000	BY: HS, JJ	DATE: 9/27/22	BY: SR	DATE: 9-30-22

SAMPLE ID: MW-111 | WELL DIAMETER: ☑ 2" ☐ 4" ☐ 6" ☐ OTHER

WELL MATERIAL: ☑ PVC ☐ SS ☐ IRON ☐ GALVANIZED STEEL ☐ OTHER

SAMPLE TYPE: ☑ GW ☐ WW ☐ SW ☐ DI ☐ LEACHATE ☐ OTHER

PURGING	TIME: 1302	DATE: 9/27/22	SAMPLE	TIME: 1317	DATE: 9/27/22
PURGE METHOD:	☑ PUMP PERISTALTIC PUMP / ☐ BAILER BAILER (DISPOSABLE)		PH: 7.35 SU	CONDUCTIVITY: 388.9 umhos/cm	
			ORP: -74.9 mV	DO: 0.9 mg/L	
DEPTH TO WATER: 7.68 T/ PVC			TURBIDITY: 2.63 NTU		
DEPTH TO BOTTOM: 8.79 T/ PVC			☒ NONE ☐ SLIGHT ☐ MODERATE ☐ VERY		
WELL VOLUME: — ☐ LITERS ☐ GALLONS			TEMPERATURE: 12.9 °C	OTHER: —	
VOLUME REMOVED: 3 ☒ LITERS ☐ GALLONS			COLOR: Clear	ODOR: none	
COLOR: Clear	ODOR: none		FILTRATE (0.45 um) ☐ YES ☒ NO		
TURBIDITY			FILTRATE COLOR: —	FILTRATE ODOR: —	
☐ NONE ☒ SLIGHT ☐ MODERATE ☐ VERY			QC SAMPLE: ☐ MS/MSD ☐ DUP- —		
DISPOSAL METHOD: ☐ GROUND ☑ DRUM ☐ OTHER			COMMENTS: Peristaltic pump log ~~(PFAS and metals)~~ (VOC)		

TIME	PURGE RATE (ML/MIN)	PH (SU)	CONDUCTIVITY (umhos/cm)	ORP (mV)	D.O. (mg/L)	TURBIDITY (NTU)	TEMPERATURE (°C)	WATER LEVEL (FEET)	CUMULATIVE PURGE VOLUME (GAL OR L)
1302	200	7.36	390.8	-82.0	2.6	12.3	13.0	7.68	INITIAL
1307	200	7.35	390.0	-78.3	1.2	4.01	13.0	7.95	1
1312	200	7.35	389.1	-75.0	1.0	3.21	13.0	7.96	2
1317	200	7.35	388.9	-74.9	0.9	2.63	12.9	7.97	3

Sampled VOCs + Methanol w/ peristaltic as well; not enough water for bladder pump

NOTE: STABILIZATION TEST IS COMPLETE WHEN 3 SUCCESSIVE READINGS ARE WITHIN THE FOLLOWING LIMITS:

pH: +/- **0.1** COND.: +/- **3%** ORP: +/- **10** D.O.: +/- **10 %** TURB: +/- **10 %** or </= **5** TEMP.: +/- **0.3°C**

BOTTLES FILLED — PRESERVATIVE CODES A - NONE B - HNO3 C - H2SO4 D - NaOH E - HCL F - _____

NUMBER	SIZE	TYPE	PRESERVATIVE	FILTERED	NUMBER	SIZE	TYPE	PRESERVATIVE	FILTERED
3	15 mL	PLASTIC	A	☐ Y ☑ N					☐ Y ☐ N
1	125 mL	PLASTIC	B	☐ Y ☑ N					☐ Y ☐ N
3	40 mL	VOA	A	☐ Y ☒ N					☐ Y ☐ N
3	40mL	VOA	E	☐ Y ☒ N					☐ Y ☐ N
				☐ Y ☐ N					☐ Y ☐ N

SHIPPING METHOD:	Courier	DATE SHIPPED:	9/29/22	AIRBILL NUMBER:	—
COC NUMBER:	—	SIGNATURE:	MS	DATE SIGNED:	9/27/22

TRC WATER SAMPLE LOG

PROJECT NAME:	DA-Eastern RCRA Assessmen	PREPARED		CHECKED	
PROJECT NUMBER:	495430.0000.0000	BY: HS (JJ)	DATE: 9/27/22	BY: SK	DATE: 9-30-22

SAMPLE ID: MW-110 | WELL DIAMETER: ☑ 2" ☐ 4" ☐ 6" ☐ OTHER

WELL MATERIAL: ☑ PVC ☐ SS ☐ IRON ☐ GALVANIZED STEEL ☐ OTHER

SAMPLE TYPE: ☑ GW ☐ WW ☐ SW ☐ DI ☐ LEACHATE ☐ OTHER

PURGING	TIME: 1332	DATE: 9/27/22	SAMPLE	TIME: 1347	DATE: 9/27/22

PURGE METHOD: ☑ PUMP ~~BLADDER PUMP (QED)~~ peristaltic ☐ BAILER ☐ BAILER (DISPOSABLE)

DEPTH TO WATER: 8.10 T/ PVC

DEPTH TO BOTTOM: NM T/ PVC <10'

WELL VOLUME: NA ☐ LITERS ☐ GALLONS

VOLUME REMOVED: 2.5 ☐ LITERS ☐ GALLONS

COLOR: clear ODOR: none

TURBIDITY ☐ NONE ☑ SLIGHT ☐ MODERATE ☐ VERY

DISPOSAL METHOD: ☐ GROUND ☑ DRUM ☐ OTHER

PH: 7.15 SU | CONDUCTIVITY: 500 umhos/cm

ORP: -138.1 mV | DO: 0.36 mg/L

TURBIDITY: 2.6 NTU

☑ NONE ☐ SLIGHT ☐ MODERATE ☐ VERY

TEMPERATURE: 12.9 °C | OTHER: —

COLOR: clear | ODOR: none

FILTRATE (0.45 um) ☐ YES ☑ NO

FILTRATE COLOR: — | FILTRATE ODOR: —

QC SAMPLE: ☐ MS/MSD ☐ DUP- —

COMMENTS: ~~Bladder pump log (VOCs and methanol)~~ Peristaltic pump used; not enough water for bladder pump

TIME	PURGE RATE (ML/MIN)	PH (SU)	CONDUCTIVITY (umhos/cm)	ORP (mV)	D.O. (mg/L)	TURBIDITY (NTU)	TEMPERATURE (°C)	WATER LEVEL (FEET)	CUMULATIVE PURGE VOLUME (GAL OR L)
1332	100	7.30	490	-82.7	0.80	17.5	14.2	8.10	INITIAL
1337		7.12	548	-119.5	1.71	12.5	13.0	8.35	.5
1332		7.06	512	-119.5	1.40	5.8	13.0	8.37	1
1337		7.14	503	-138.0	0.53	2.7	12.9	8.40	1.5
1342		7.15	501	-138.5	0.41	2.6	12.9	8.45	2
1347		7.15	500	-138.1	0.36	2.8	12.9	8.46	2.5
									→
									MS

NOTE: STABILIZATION TEST IS COMPLETE WHEN 3 SUCCESSIVE READINGS ARE WITHIN THE FOLLOWING LIMITS:

pH: +/- 0.1 COND.: +/- 3% ORP: +/- 10 D.O.: +/- 10 % TURB: +/- 10 % or </= 5 TEMP.: +/- 0.3°C

BOTTLES FILLED | PRESERVATIVE CODES A - NONE B - HNO3 C - H2SO4 D - NaOH E - HCL F - _____

NUMBER	SIZE	TYPE	PRESERVATIVE	FILTERED	NUMBER	SIZE	TYPE	PRESERVATIVE	FILTERED
3	40 mL	VOA	E	☐ Y ☑ N					☐ Y ☐ N
3	40 mL	VOA	A	☐ Y ☑ N					☐ Y ☐ N
1	125 mL	plastic	B	☐ Y ☑ N					☐ Y ☐ N
3	15 mL	plastic	A	☐ Y ☑ N					☐ Y ☐ N
				☐ Y ☐ N					☐ Y ☐ N

SHIPPING METHOD:	Courier	DATE SHIPPED:	9/29/22	AIRBILL NUMBER:	—
COC NUMBER:	—	SIGNATURE:	MS	DATE SIGNED:	9/27/22

TRC WATER SAMPLE LOG

PROJECT NAME:	DA-Eastern RCRA Assessmen	PREPARED		CHECKED	
PROJECT NUMBER:	495430.0000.0000	BY: HS, JJ	DATE: 9/28/22	BY: SK	DATE: 9-30-22

SAMPLE ID: MW-109 | WELL DIAMETER: ☑ 2" ☐ 4" ☐ 6" ☐ OTHER

WELL MATERIAL: ☑ PVC ☐ SS ☐ IRON ☐ GALVANIZED STEEL ☐ OTHER

SAMPLE TYPE: ☑ GW ☐ WW ☐ SW ☐ DI ☐ LEACHATE ☐ OTHER

PURGING	TIME: 858	DATE: 9/28/22

PURGE METHOD: ☑ PUMP PERISTALTIC PUMP ☐ BAILER BAILER (DISPOSABLE)

DEPTH TO WATER: 8.03 T/ PVC

DEPTH TO BOTTOM: 10.00 T/ PVC

WELL VOLUME: ~~5~~ ☐ LITERS ☐ GALLONS

VOLUME REMOVED: 5 ☒ LITERS ☐ GALLONS

COLOR: clear ODOR: ~~Faint~~ Slight

TURBIDITY ☐ NONE ☒ SLIGHT ☐ MODERATE ☐ VERY

DISPOSAL METHOD: ☐ GROUND ☑ DRUM ☐ OTHER

SAMPLE	TIME: 925	DATE: 9/28/22

PH: 6.88 SU CONDUCTIVITY: 1058 umhos/cm

ORP: -130.9 mV DO: 0.6 mg/L

TURBIDITY: 2.14 NTU

☒ NONE ☐ SLIGHT ☐ MODERATE ☐ VERY

TEMPERATURE: 13.0 °C OTHER: —

COLOR: Clear ODOR: Slight/moderate

FILTRATE (0.45 um) ☐ YES ☒ NO

FILTRATE COLOR: — FILTRATE ODOR: —

QC SAMPLE: ☐ MS/MSD ☐ DUP- —

COMMENTS: Peristaltic pump log ~~(PFAS and metals)~~ MS

Insufficient water to use bladder pump, used PPI Stealth for VOCs + MS hand

TIME	PURGE RATE (ML/MIN)	PH (SU)	CONDUCTIVITY (umhos/cm)	ORP (mV)	D.O. (mg/L)	TURBIDITY (NTU)	TEMPERATURE (°C)	WATER LEVEL (FEET)	CUMULATIVE PURGE VOLUME (GAL OR L)
858	200	6.50	1006	-40.9	1.3	5.09	12.9	8.03	INITIAL
903	200	6.69	1044	-88.1	0.8	4.32	13.0	8.24	1
908	200	6.80	1055	-113.3	0.7	2.46	13.0	8.25	2
915	200	6.85	1057	-124.9	0.6	2.18	13.0	8.25	3
920	200	6.87	1056	-127.9	0.6	2.16	13.0	8.25	4
925	200	6.88	1058	-130.9	0.6	2.14	13.0	8.25	5

NOTE: STABILIZATION TEST IS COMPLETE WHEN 3 SUCCESSIVE READINGS ARE WITHIN THE FOLLOWING LIMITS:

pH: +/- **0.1** COND.: +/- **3%** ORP: +/- **10** D.O.: +/- **10 %** TURB: +/- **10 %** or </= **5** TEMP.: +/- **0.3°C**

BOTTLES FILLED — PRESERVATIVE CODES A - NONE B - HNO3 C - H2SO4 D - NaOH E - HCL F - _____

NUMBER	SIZE	TYPE	PRESERVATIVE	FILTERED	NUMBER	SIZE	TYPE	PRESERVATIVE	FILTERED
3	15 mL	PLASTIC	A	☐ Y ☑ N					☐ Y ☐ N
1	125 mL	PLASTIC	B	☐ Y ☑ N					☐ Y ☐ N
3	40mL	VOA	A	☐ Y ☒ N					☐ Y ☐ N
3	40mL	VOA	E	☐ Y ☒ N					☐ Y ☐ N
				☐ Y ☐ N					☐ Y ☐ N

SHIPPING METHOD:	Courier	DATE SHIPPED:	9-29-22	AIRBILL NUMBER:	—
COC NUMBER:	—	SIGNATURE:	MS	DATE SIGNED:	9/28/22

TRC WATER SAMPLE LOG

PROJECT NAME:	DA-Eastern RCRA Assessmen	PREPARED		CHECKED	
PROJECT NUMBER:	495430.0000.0000	BY: HS (JJ)	DATE: 9/28/22	BY: JK	DATE: 9-30-22

SAMPLE ID: MW-108 | WELL DIAMETER: ☑ 2" ☐ 4" ☐ 6" ☐ OTHER

WELL MATERIAL: ☑ PVC ☐ SS ☐ IRON ☐ GALVANIZED STEEL ☐ OTHER

SAMPLE TYPE: ☑ GW ☐ WW ☐ SW ☐ DI ☐ LEACHATE ☐ OTHER

PURGING	TIME: 0830	DATE: 9/20/22	SAMPLE	TIME: 0910	DATE: 9/28/22

PURGE METHOD: ☑ PUMP ~~BLADDER PUMP (QED)~~ as a Stabilizer ☐ BAILER ☐ BAILER (DISPOSABLE)

DEPTH TO WATER: 8.43 T/ PVC

DEPTH TO BOTTOM: 9.95 T/ PVC

WELL VOLUME: N/A ☐ LITERS ☐ GALLONS

VOLUME REMOVED: 4 ☑ LITERS ☐ GALLONS

COLOR: grayish ODOR: Slight

TURBIDITY ☐ NONE ☐ SLIGHT ☐ MODERATE ☑ VERY

DISPOSAL METHOD: ☐ GROUND ☑ DRUM ☐ OTHER

PH: 6.82 SU | CONDUCTIVITY: 793 umhos/cm

ORP: -36.1 mV | DO: 0.7 mg/L

TURBIDITY: 2.2 NTU

☑ ~~NONE~~ ☐ SLIGHT ☐ MODERATE ☐ VERY

TEMPERATURE: 13.1 °C | OTHER:

COLOR: clear | ODOR:

FILTRATE (0.45 um) ☐ YES ☑ ~~NO~~

FILTRATE COLOR: | FILTRATE ODOR:

QC SAMPLE: ☐ MS/MSD ☐ DUP-

COMMENTS: ~~Bladder pump log (VOCs and methanol)~~

TIME	PURGE RATE (ML/MIN)	PH (SU)	CONDUCTIVITY (umhos/cm)	ORP (mV)	D.O. (mg/L)	TURBIDITY (NTU)	TEMPERATURE (°C)	WATER LEVEL (FEET)	CUMULATIVE PURGE VOLUME (GAL OR L)
0830	100	4.C	0.0	111	9.0	300	14.1	8.43	INITIAL
0835		6.69	77	38.1	2.0	33	13.6	8.5	0.5
0840		6.83	792	8.6	064	3.4	13.6	8.58	1
0845		6.85	791	-5.7	044	2.6	13.6	8.60	1.5
0850		6.85	790	-20.0	029	2.5	13.6	8.60	2
0855		6.85	799	-26.5	036	2.9	13.5	8.60	2.5
0900		6.87	791	-35.9	019	2.6	13.5	8.61	3
0905		6.88	799	-36.5	027	2.8	13.5	8.60	3.5
0910		6.86	793	-36.1	030	2.8	13.1	8.60	4

Not enough water for bladder pump, used peristaltic for all samples including VOCs + methanol

NOTE: STABILIZATION TEST IS COMPLETE WHEN 3 SUCCESSIVE READINGS ARE WITHIN THE FOLLOWING LIMITS:

pH: +/- 0.1 COND.: +/- 3% ORP: +/- 10 D.O.: +/- 10 % TURB: +/- 10 % or </= 5 TEMP.: +/- 0.3°C

BOTTLES FILLED | PRESERVATIVE CODES A - NONE B - HNO3 C - H2SO4 D - NaOH E - HCL F - _____

NUMBER	SIZE	TYPE	PRESERVATIVE	FILTERED	NUMBER	SIZE	TYPE	PRESERVATIVE	FILTERED
3	40 mL	VOA	E	☐ Y ☑ N					☐ Y ☐ N
3	40 mL	VOA	A	☐ Y ☑ N					☐ Y ☐ N
3	15mL	plastic	A	☐ Y ☒ N					☐ Y ☐ N
1	125	plastic	B	☐ Y ☒ N					☐ Y ☐ N
				☐ Y ☐ N					☐ Y ☐ N

SHIPPING METHOD:	Car	DATE SHIPPED:	9/29/22	AIRBILL NUMBER:	N/A
COC NUMBER:	N/A	SIGNATURE:	MS	DATE SIGNED:	9/28/22

~~AMW-107~~ ~~9.95~~ (HS)

TRC WATER SAMPLE LOG

PROJECT NAME:	DA-Eastern RCRA Assessmen	PREPARED	9/28/22	CHECKED	
PROJECT NUMBER:	495430.0000.0000	BY: (HS) JJ	DATE: ~~9/28/22~~ (HS)	BY: JK	DATE: 9-30-22

SAMPLE ID: MW-107 | WELL DIAMETER: ☑ 2" ☐ 4" ☐ 6" ☐ OTHER

WELL MATERIAL: ☑ PVC ☐ SS ☐ IRON ☐ GALVANIZED STEEL ☐ OTHER

SAMPLE TYPE: ☑ GW ☐ WW ☐ SW ☐ DI ☐ LEACHATE ☐ OTHER

PURGING	TIME: 1008	DATE: 9/28/22

PURGE METHOD: ☑ PUMP PERISTALTIC PUMP ☐ BAILER BAILER (DISPOSABLE)

DEPTH TO WATER: 9.00 T/ PVC

DEPTH TO BOTTOM: ~~9.10~~ T/ PVC (HS) 12.10

WELL VOLUME: — ☐ LITERS ☐ GALLONS

VOLUME REMOVED: 3 ☒ LITERS ☐ GALLONS

COLOR: brown ODOR: none

TURBIDITY ☐ NONE ☐ SLIGHT ☐ MODERATE ☒ VERY

DISPOSAL METHOD: ☐ GROUND ☑ DRUM ☐ OTHER

SAMPLE	TIME: 1023	DATE: 9/28/22

PH: 7.07 SU CONDUCTIVITY: 622 umhos/cm

ORP: −37.6 mV DO: 0.8 mg/L

TURBIDITY: 3.35 NTU

☒ NONE ☐ SLIGHT ☐ MODERATE ☐ VERY

TEMPERATURE: 14.7 °C OTHER: —

COLOR: Clear ODOR: none

FILTRATE (0.45 um) ☐ YES ☒ NO

FILTRATE COLOR: — FILTRATE ODOR: —

QC SAMPLE: ☐ MS/MSD ☐ DUP- —

COMMENTS: Peristaltic pump log (PFAS and metals)

TIME	PURGE RATE (ML/MIN)	PH (SU)	CONDUCTIVITY (umhos/cm)	ORP (mV)	D.O. (mg/L)	TURBIDITY (NTU)	TEMPERATURE (°C)	WATER LEVEL (FEET)	CUMULATIVE PURGE VOLUME (GAL OR L)
1008	200	7.03	615	−44.2	1.4	13.8	14.7	9.10	INITIAL
1013	200	7.06	622	−38.8	1.0	4.56	14.7	9.17	1
1018	200	7.07	622	−38.6	0.8	3.34	14.7	9.17	2
1023	200	7.07	622	−37.6	0.8	3.35	14.7	9.17	3

Sufficient water for bladder pump, see next page for bladder pump log

NOTE: STABILIZATION TEST IS COMPLETE WHEN 3 SUCCESSIVE READINGS ARE WITHIN THE FOLLOWING LIMITS:

pH: +/- **0.1** COND.: +/- **3%** ORP: +/- **10** D.O.: +/- **10 %** TURB: +/- **10 %** or **</= 5** TEMP.: +/- **0.3°C**

BOTTLES FILLED — PRESERVATIVE CODES A - NONE B - HNO3 C - H2SO4 D - NaOH E - HCL F - _____

NUMBER	SIZE	TYPE	PRESERVATIVE	FILTERED	NUMBER	SIZE	TYPE	PRESERVATIVE	FILTERED
3	15 mL	PLASTIC	A	☐ Y ☑ N					☐ Y ☐ N
1	125 mL	PLASTIC	B	☐ Y ☑ N					☐ Y ☐ N
				☐ Y ☐ N					☐ Y ☐ N
				☐ Y ☐ N					☐ Y ☐ N
				☐ Y ☐ N					☐ Y ☐ N

SHIPPING METHOD:	Courier	DATE SHIPPED:	9/29/22	AIRBILL NUMBER:	—
COC NUMBER:	—	SIGNATURE:	HS	DATE SIGNED:	9/28/22

TRC WATER SAMPLE LOG

PROJECT NAME:	DA-Eastern RCRA Assessmen	PREPARED		CHECKED	
PROJECT NUMBER:	495430.0000.0000	BY: HS JJ	DATE: 9/28/22	BY: JK	DATE: 9-30-22

SAMPLE ID: MW-107 WELL DIAMETER: ☑ 2" ☐ 4" ☐ 6" ☐ OTHER

WELL MATERIAL: ☑ PVC ☐ SS ☐ IRON ☐ GALVANIZED STEEL ☐ OTHER

SAMPLE TYPE: ☑ GW ☐ WW ☐ SW ☐ DI ☐ LEACHATE ☐ OTHER

PURGING	TIME: 1040	DATE: 9/28/22	SAMPLE	TIME: 1140	DATE: 9/28/22

PURGE METHOD: ☑ PUMP BLADDER PUMP (QED) ☐ BAILER BAILER (DISPOSABLE)

DEPTH TO WATER: 9.08 T/ PVC

DEPTH TO BOTTOM: 12.10 T/ PVC

WELL VOLUME: NA ☐ LITERS ☐ GALLONS

VOLUME REMOVED: 2 ☑ LITERS ☐ GALLONS

COLOR: Brown ODOR: NOR

TURBIDITY ☐ NONE ☐ SLIGHT ☐ MODERATE ☑ VERY

DISPOSAL METHOD: ☐ GROUND ☑ DRUM ☐ OTHER

PH: 6.80 SU CONDUCTIVITY: 747 umhos/cm

ORP: 6.5 mV DO: 0.13 mg/L

TURBIDITY: 9.9 NTU

☑ NONE ☐ SLIGHT ☐ MODERATE ☐ VERY

TEMPERATURE: 14.6 °C OTHER: —

COLOR: Clear ODOR: NOR

FILTRATE (0.45 um) ☐ YES ☑ NO

FILTRATE COLOR: — FILTRATE ODOR: —

QC SAMPLE: ☐ MS/MSD ☐ DUP- —

COMMENTS: Bladder pump log (VOCs and methanol)

TIME	PURGE RATE (ML/MIN)	PH (SU)	CONDUCTIVITY (umhos/cm)	ORP (mV)	D.O. (mg/L)	TURBIDITY (NTU)	TEMPERATURE (°C)	WATER LEVEL (FEET)	CUMULATIVE PURGE VOLUME (GAL OR L)
1040	200	6.94	756	150.0	1.0	300	14.6	9.08	INITIAL
1045		6.89	749	132.0	1.2	288	14.7	9.13	1
1050		6.70	741	109.0	0.79	120	14.7	9.13	2
1055		6.65	746	73.1	0.54	61.5	14.6	9.17	3
1100		6.84	746	44.6	0.44	40	14.5	9.13	4
1105		6.80	747	30.1	0.51	43	14.6	9.12	5
1110		6.77	746	22	0.30	26	14.6	9.12	6
1115		6.78	747	18.6	0.29	14	14.7	9.10	7
1120		6.77	747	14.0	0.24	12	14.7	9.10	8
1125		6.78	747	13.0	0.19	10	14.7	9.16	9

NOTE: STABILIZATION TEST IS COMPLETE WHEN 3 SUCCESSIVE READINGS ARE WITHIN THE FOLLOWING LIMITS:

pH: +/- 0.1 COND.: +/- 3% ORP: +/- 10 D.O.: +/- 10 % TURB: +/- 10 % or </= 5 TEMP.: +/- 0.3°C

BOTTLES FILLED — PRESERVATIVE CODES A - NONE B - HNO3 C - H2SO4 D - NaOH E - HCL F - _____

NUMBER	SIZE	TYPE	PRESERVATIVE	FILTERED	NUMBER	SIZE	TYPE	PRESERVATIVE	FILTERED
3	40 mL	VOA	E	☐ Y ☑ N					☐ Y ☐ N
3	40 mL	VOA	A	☐ Y ☑ N					☐ Y ☐ N
				☐ Y ☐ N					☐ Y ☐ N
				☐ Y ☐ N					☐ Y ☐ N
				☐ Y ☐ N					☐ Y ☐ N

SHIPPING METHOD:	Courier	DATE SHIPPED:	9/29/22	AIRBILL NUMBER:	NA
COC NUMBER:	NA	SIGNATURE:	[signature]	DATE SIGNED:	9/28/22

TRC

WATER SAMPLE LOG

(CONTINUED FROM PREVIOUS PAGE)

PROJECT NAME:	DA-Eastern RCRA Assessment	PREPARED			CHECKED		
PROJECT NUMBER:	495430.0000.0000	BY:	HS (JJ)	DATE: 9/28/22	BY: SK	DATE: 9-70-22	

SAMPLE ID: MW-107

TIME	PURGE RATE (ML/MIN)	PH (SU)	CONDUCTIVITY (umhos/cm)	ORP (mV)	D.O. (mg/L)	TURBIDITY (NTU)	TEMPERATURE (°C)	WATER LEVEL (FEET)	CUMULATIVE PURGE VOLUME (GAL OR L)
1130	200	6.80	747	7	017	10	14.6	9.10	10
1135		6.80	747	7	015	9.9	14.6	9.10	11
1140		6.80	747	6.5	013	9.9	14.6	9.10	12

SIGNATURE: HS DATE SIGNED: 9/28/22

TRC WATER SAMPLE LOG

PROJECT NAME:	DA-Eastern RCRA Assessmen	PREPARED		CHECKED	
PROJECT NUMBER:	495430.0000.0000	BY: HS, JJ	DATE: 9/28/22	BY: SK	DATE: 9-30-22

SAMPLE ID: MW-106 WELL DIAMETER: ☑ 2" ☐ 4" ☐ 6" ☐ OTHER

WELL MATERIAL: ☑ PVC ☐ SS ☐ IRON ☐ GALVANIZED STEEL ☐ OTHER

SAMPLE TYPE: ☑ GW ☐ WW ☐ SW ☐ DI ☐ LEACHATE ☐ OTHER

PURGING	TIME: 1057	DATE: ~~9/28/22~~	(H) SAMPLE	TIME: 1125	DATE: 9/28/22

PURGE METHOD: ☑ PUMP PERISTALTIC PUMP 9/28/22 ☐ BAILER BAILER (DISPOSABLE)

DEPTH TO WATER: 9.17 T/ PVC

DEPTH TO BOTTOM: 12.31 T/ PVC

WELL VOLUME: — ☐ LITERS ☐ GALLONS

VOLUME REMOVED: 5 ☒ LITERS ☐ GALLONS

COLOR: brownish ODOR: none

TURBIDITY ☐ NONE ☐ SLIGHT ☐ MODERATE ☐ VERY

DISPOSAL METHOD: ☐ GROUND ☑ DRUM ☐ OTHER

PH: 7.18 SU CONDUCTIVITY: 849 umhos/cm

ORP: -17.6 mV DO: 2.3 mg/L

TURBIDITY: 4.79 NTU

☒ NONE ☐ SLIGHT ☐ MODERATE ☐ VERY

TEMPERATURE: 18.6 °C OTHER: —

COLOR: clear ODOR: none

FILTRATE (0.45 um) ☐ YES ☒ NO

FILTRATE COLOR: — FILTRATE ODOR: —

QC SAMPLE: ☐ MS/MSD ☒ DUP- 02

COMMENTS: Peristaltic pump log (PFAS and metals)

TIME	PURGE RATE (ML/MIN)	PH (SU)	CONDUCTIVITY (umhos/cm)	ORP (mV)	D.O. (mg/L)	TURBIDITY (NTU)	TEMPERATURE (°C)	WATER LEVEL (FEET)	CUMULATIVE PURGE VOLUME (GAL OR L)
1057	200	7.19	775	-5.4	2.9	22.4	18.5	9.17	INITIAL
1102	200	7.17	817	-14.3	2.8	9.68	18.5	9.23	1
1108	200	7.16	841	-17.6	2.3	11.2	18.5	9.25	2
1115	200	7.16	849	-18.7	2.3	4.41	18.7	9.25	3
1120	200	7.17	847	-18.4	2.3	4.98	18.6	9.25	4
1125	200	7.18	849	-17.6	2.3	4.79	18.6	9.25	5

Sufficient water for bladder pump, see next page for log

NOTE: STABILIZATION TEST IS COMPLETE WHEN 3 SUCCESSIVE READINGS ARE WITHIN THE FOLLOWING LIMITS:

pH: +/- **0.1** COND.: +/- **3%** ORP: +/- **10** D.O.: +/- **10 %** TURB: +/- **10 %** or </= **5** TEMP.: +/- **0.3°C**

BOTTLES FILLED — PRESERVATIVE CODES A - NONE B - HNO3 C - H2SO4 D - NaOH E - HCL F - _____

NUMBER	SIZE	TYPE	PRESERVATIVE	FILTERED	NUMBER	SIZE	TYPE	PRESERVATIVE	FILTERED
6	15 mL	PLASTIC	A	☐ Y ☑ N					☐ Y ☐ N
2	125 mL	PLASTIC	B	☐ Y ☑ N					☐ Y ☐ N
				☐ Y ☐ N					☐ Y ☐ N
				☐ Y ☐ N					☐ Y ☐ N
				☐ Y ☐ N					☐ Y ☐ N

SHIPPING METHOD:	Courier	DATE SHIPPED:	9/29/22	AIRBILL NUMBER:	—
COC NUMBER:	—	SIGNATURE:	HS	DATE SIGNED:	9/28/22

TRC WATER SAMPLE LOG

PROJECT NAME:	DA-Eastern RCRA Assessmen	PREPARED		CHECKED	
PROJECT NUMBER:	495430.0000.0000	BY: HS, JJ	DATE: 9/28/22	BY: JK	DATE: 9-30-22

SAMPLE ID: MW-108 | WELL DIAMETER: ☑ 2" ☐ 4" ☐ 6" ☐ OTHER

WELL MATERIAL: ☑ PVC ☐ SS ☐ IRON ☐ GALVANIZED STEEL ☐ OTHER

SAMPLE TYPE: ☑ GW ☐ WW ☐ SW ☐ DI ☐ LEACHATE ☐ OTHER

PURGING	TIME: 1156	DATE: 9/28/22

PURGE METHOD: ☑ PUMP BLADDER PUMP (QED) ☐ BAILER BAILER (DISPOSABLE)

DEPTH TO WATER: 9.10 T/ PVC

DEPTH TO BOTTOM: 12-31 T/ PVC

WELL VOLUME: NA ☐ LITERS ☐ GALLONS

VOLUME REMOVED: 9 ☑ LITERS ☐ GALLONS

COLOR: Brown ODOR: NON

TURBIDITY ☐ NONE ☐ SLIGHT ☐ MODERATE ☑ VERY

DISPOSAL METHOD: ☐ GROUND ☑ DRUM ☐ OTHER

SAMPLE	TIME: 1241	DATE: 9/28/22

PH: 7.08 SU CONDUCTIVITY: 933 umhos/cm

ORP: 113.5 mV DO: 1.5 mg/L

TURBIDITY: 18.0 NTU

☑ NONE ☐ SLIGHT ☐ MODERATE ☐ VERY

TEMPERATURE: 18.3 °C OTHER:

COLOR: Clear ODOR: NON

FILTRATE (0.45 um) ☐ YES ☑ NO

FILTRATE COLOR: FILTRATE ODOR:

QC SAMPLE: ☐ MS/MSD ☑ DUP- H02

COMMENTS: Bladder pump log (VOCs and methanol)

TIME	PURGE RATE (ML/MIN)	PH (SU)	CONDUCTIVITY (umhos/cm)	ORP (mV)	D.O. (mg/L)	TURBIDITY (NTU)	TEMPERATURE (°C)	WATER LEVEL (FEET)	CUMULATIVE PURGE VOLUME (GAL OR L)
1156	200	7.03	796	128.9	1.0	550	16.6	9.10	INITIAL
1201		7.03	847	130.5	3.0	400	18.0	9.15	1
1206		7.07	879	131.5	2.5	186	18.0	9.15	2
1211		7.07	938	132.1	1.6	74	18.2	9.15	3
1216		7.07	950	121.0	1.4	42	18.3	9.11	4
1221		7.07	948	118.0	1.4	31	18.2	9.11	5
1226		7.07	945	116.0	1.4	20	18.1	9.11	6
1231		7.06	932	113.9	1.5	18.0	18.2	9.11	7
1236		7.08	930	113.7	1.5	18.0	18.1	9.11	8
1241		7.06	933	113.5	1.5	18.0	18.3	9.11	9

NOTE: STABILIZATION TEST IS COMPLETE WHEN 3 SUCCESSIVE READINGS ARE WITHIN THE FOLLOWING LIMITS:

pH: +/- 0.1 COND.: +/- 3% ORP: +/- 10 D.O.: +/- 10 % TURB: +/- 10 % or </= 5 TEMP.: +/- 0.3°C

BOTTLES FILLED | PRESERVATIVE CODES A - NONE B - HNO3 C - H2SO4 D - NaOH E - HCL F - _____

NUMBER	SIZE	TYPE	PRESERVATIVE	FILTERED	NUMBER	SIZE	TYPE	PRESERVATIVE	FILTERED
6	40 mL	VOA	E	☐ Y ☑ N					☐ Y ☐ N
6	40 mL	VOA	A	☐ Y ☑ N					☐ Y ☐ N
				☐ Y ☐ N					☐ Y ☐ N
				☐ Y ☐ N					☐ Y ☐ N
				☐ Y ☐ N					☐ Y ☐ N

SHIPPING METHOD:	Courier	DATE SHIPPED:	9/29/22	AIRBILL NUMBER:	—
COC NUMBER:	—	SIGNATURE:	JK	DATE SIGNED:	9/28/22

WATER SAMPLE LOG

PROJECT NAME:	DA-Eastern RCRA Assessmen	PREPARED		CHECKED	
PROJECT NUMBER:	495430.0000.0000	BY: (HS) JJ	DATE: 9/28/22	BY: JK	DATE: 9-30-22

SAMPLE ID: MW-121 | WELL DIAMETER: ☑ 2" ☐ 4" ☐ 6" ☐ OTHER

WELL MATERIAL: ☑ PVC ☐ SS ☐ IRON ☐ GALVANIZED STEEL ☐ OTHER

SAMPLE TYPE: ☑ GW ☐ WW ☐ SW ☐ DI ☐ LEACHATE ☐ OTHER

PURGING	TIME: 1202	DATE: 9/28/22	SAMPLE	TIME: 1232	DATE: 9/28/22
PURGE METHOD:	☑ PUMP ☐ BAILER	PERISTALTIC PUMP BAILER (DISPOSABLE)	PH: 7.01 SU	CONDUCTIVITY: 705 umhos/cm	
DEPTH TO WATER:	NM T/ PVC		ORP: -66.6 mV	DO: 1.0 mg/L	
DEPTH TO BOTTOM:	NM T/ PVC		TURBIDITY: 1.96 NTU		
WELL VOLUME:	6 ☐ LITERS	☐ GALLONS	☒ NONE ☐ SLIGHT ☐ MODERATE ☐ VERY		
VOLUME REMOVED:	6 ☒ LITERS	☐ GALLONS	TEMPERATURE: 18.1 °C	OTHER:	
COLOR:	CLOUDY	ODOR: none	COLOR: Clear	ODOR: none	
TURBIDITY			FILTRATE (0.45 um) ☐ YES ☒ NO		
☐ NONE ☐ SLIGHT ☐ MODERATE ☐ VERY			FILTRATE COLOR:	FILTRATE ODOR:	
DISPOSAL METHOD:	☐ GROUND ☑ DRUM ☐ OTHER		QC SAMPLE: ☐ MS/MSD ☐ DUP-		
			COMMENTS: Peristaltic pump log (PFAS and metals)		

TIME	PURGE RATE (ML/MIN)	PH (SU)	CONDUCTIVITY (umhos/cm)	ORP (mV)	D.O. (mg/L)	TURBIDITY (NTU)	TEMPERATURE (°C)	WATER LEVEL (FEET)	CUMULATIVE PURGE VOLUME (GAL OR L)
1202	200	6.64	749	-51.7	2.6	5.20	17.6	NM	INITIAL
1207	200	6.64	732	-38.4	1.7	3.95	18.0		1
1212	200	6.81	715	-49.8	1.46	2.60	18.0		2
1217	200	6.92	708	-59.3	1.3	1.90	18.1		3
1222	200	6.98	706	-64.1	0.9	2.06	18.1		4
1227	200	7.00	705	-66.1	1.0	1.90	18.1		5
1232	200	7.01	705	-66.6	1.0	1.96	18.1		6

unable to take water level due to roots in bottom of well

unable to use bladder pump due to roots in bottom of well

NOTE: STABILIZATION TEST IS COMPLETE WHEN 3 SUCCESSIVE READINGS ARE WITHIN THE FOLLOWING LIMITS:

pH: +/- 0.1 COND.: +/- 3% ORP: +/- 10 D.O.: +/- 10 % TURB: +/- 10 % or </= 5 TEMP.: +/- 0.3°C

BOTTLES FILLED | PRESERVATIVE CODES A - NONE B - HNO3 C - H2SO4 D - NaOH E - HCL F - _____

NUMBER	SIZE	TYPE	PRESERVATIVE	FILTERED	NUMBER	SIZE	TYPE	PRESERVATIVE	FILTERED
3	15 mL	PLASTIC	A	☐ Y ☑ N					☐ Y ☐ N
1	125 mL	PLASTIC	B	☐ Y ☑ N					☐ Y ☐ N
3	40mL	VOA	A	☐ Y ☒ N					☐ Y ☐ N
3	40mL	VOA	E	☐ Y ☒ N					☐ Y ☐ N
				☐ Y ☐ N					☐ Y ☐ N

SHIPPING METHOD:	Courier	DATE SHIPPED:	9/29/22	AIRBILL NUMBER:	
COC NUMBER:		SIGNATURE:	HS	DATE SIGNED:	9/28/22

TRC

WATER SAMPLE LOG

PROJECT NAME:	DA-Eastern RCRA Assessmen	PREPARED		CHECKED	
PROJECT NUMBER:	495430.0000.0000	BY: HS, JJ	DATE: 9/28/22	BY: JK	DATE 9-30-22

SAMPLE ID: MW-105 | WELL DIAMETER: ☑ 2" ☐ 4" ☐ 6" ☐ OTHER

WELL MATERIAL: ☑ PVC ☐ SS ☐ IRON ☐ GALVANIZED STEEL ☐ OTHER

SAMPLE TYPE: ☑ GW ☐ WW ☐ SW ☐ DI ☐ LEACHATE ☐ OTHER

PURGING	TIME: 1348	DATE: 9/28/22	SAMPLE	TIME: 1423	DATE: 9/28/22

PURGE METHOD: ☑ PUMP ~~BLADDER PUMP (QED)~~ peristaltic ☐ BAILER BAILER (DISPOSABLE)

DEPTH TO WATER: 11.35 T/ PVC

DEPTH TO BOTTOM: 12.65 T/ PVC

WELL VOLUME: NA ☐ LITERS ☐ GALLONS

VOLUME REMOVED: 3.5 ☒ LITERS ☐ GALLONS

COLOR: Clear ODOR: none

TURBIDITY ☐ NONE ☒ SLIGHT ☐ MODERATE ☐ VERY

DISPOSAL METHOD: ☐ GROUND ☑ DRUM ☐ OTHER

PH: 7.01 SU | CONDUCTIVITY: 1046 umhos/cm

ORP: 173.5 mV | DO: 3.84 mg/L

TURBIDITY: 3.01 NTU

☒ NONE ☐ SLIGHT ☐ MODERATE ☐ VERY

TEMPERATURE: 15.3 °C | OTHER: —

COLOR: Clear | ODOR: none

FILTRATE (0.45 um) ☐ YES ☒ NO

FILTRATE COLOR: — | FILTRATE ODOR: —

QC SAMPLE: ☐ MS/MSD ☐ DUP- —

COMMENTS: ~~Bladder pump log (VOCs and methanol)~~ peristaltic pump unable to use bladder pump: not enough water at bottom of well; collected VOCs + Methanol via peristaltic pump

TIME	PURGE RATE (ML/MIN)	PH (SU)	CONDUCTIVITY (umhos/cm)	ORP (mV)	D.O. (mg/L)	TURBIDITY (NTU)	TEMPERATURE (°C)	WATER LEVEL (FEET)	CUMULATIVE PURGE VOLUME (GAL OR L)
1348	100	7.24	487	139.5	10.0	21.0	16.5	11.35	INITIAL
1353		6.98	1058	157.1	3.46	5.93	15.4	11.45	0.5
1358		6.99	1051	120.6	3.17	3.17	15.3	11.48	1
1403		7.00	1041	142.6	3.07	3.68	15.4	11.48	1.5
1408		7.01	1037	152.5	3.23	3.21	15.4	11.50	2
1413		7.01	1041	163.6	2.99	3.16	15.3	11.51	2.5
1418		7.01	1042	169.6	2.95	3.15	15.3	11.52	3
1423		7.01	1046	173.5	2.84	3.01	15.3	11.49	3.5
				PFAS FB-01 and EB-01 taken after this sample					

NOTE: STABILIZATION TEST IS COMPLETE WHEN 3 SUCCESSIVE READINGS ARE WITHIN THE FOLLOWING LIMITS:

pH: +/- 0.1 COND.: +/- 3% ORP: +/- 10 D.O.: +/- 10 % TURB: +/- 10 % or </= 5 TEMP.: +/- 0.3°C

BOTTLES FILLED | PRESERVATIVE CODES A - NONE B - HNO3 C - H2SO4 D - NaOH E - HCL F - _____

NUMBER	SIZE	TYPE	PRESERVATIVE	FILTERED	NUMBER	SIZE	TYPE	PRESERVATIVE	FILTERED
3	40 mL	VOA	E	☐ Y ☑ N					☐ Y ☐ N
3	40 mL	VOA	A	☐ Y ☑ N					☐ Y ☐ N
1	125mL	plastic	B	☐ Y ☒ N					☐ Y ☐ N
3	15mL	plastic	A	☐ Y ☒ N					☐ Y ☐ N
				☐ Y ☐ N					☐ Y ☐ N

SHIPPING METHOD:	Carrier	DATE SHIPPED:	9/29/22	AIRBILL NUMBER:	NA
COC NUMBER:	NA	SIGNATURE:		DATE SIGNED:	9/28/22

WATER SAMPLE LOG

PROJECT NAME:	DA-Eastern RCRA Assessmen	PREPARED		CHECKED	
PROJECT NUMBER:	495430.0000.0000	BY: (HS) JJ	DATE: 9/28/22	BY: SK	DATE: 9-30-22

SAMPLE ID: MW-104 WELL DIAMETER: ☑ 2" ☐ 4" ☐ 6" ☐ OTHER

WELL MATERIAL: ☑ PVC ☐ SS ☐ IRON ☐ GALVANIZED STEEL ☐ OTHER

SAMPLE TYPE: ☑ GW ☐ WW ☐ SW ☐ DI ☐ LEACHATE ☐ OTHER

PURGING	TIME: 1311	DATE: 9/28/22	SAMPLE	TIME: 1338	DATE: 9/28/22

PURGE METHOD: ☑ PUMP BLADDER PUMP (QED) ☐ BAILER BAILER (DISPOSABLE)

DEPTH TO WATER: 10.23 T/ PVC

DEPTH TO BOTTOM: 20.12 T/ PVC

WELL VOLUME: — ☐ LITERS ☐ GALLONS

VOLUME REMOVED: 5 ☒ LITERS ☐ GALLONS

COLOR: brownish ODOR: none

TURBIDITY ☐ NONE ☐ SLIGHT ☒ MODERATE ☐ VERY

DISPOSAL METHOD: ☐ GROUND ☑ DRUM ☐ OTHER

PH: 7.44 SU CONDUCTIVITY: 987 umhos/cm

ORP: -63.2 mV DO: 0.7 mg/L

TURBIDITY: 6.16 NTU

☐ NONE ☒ SLIGHT ☐ MODERATE ☐ VERY

TEMPERATURE: 13.8 °C OTHER: —

COLOR: clear ODOR: none

FILTRATE (0.45 um) ☐ YES ☒ NO

FILTRATE COLOR: — FILTRATE ODOR: —

QC SAMPLE: ☐ MS/MSD ☐ DUP- —

COMMENTS: Bladder pump log (VOCs and methanol)

TIME	PURGE RATE (ML/MIN)	PH (SU)	CONDUCTIVITY (umhos/cm)	ORP (mV)	D.O. (mg/L)	TURBIDITY (NTU)	TEMPERATURE (°C)	WATER LEVEL (FEET)	CUMULATIVE PURGE VOLUME (GAL OR L)
1311	200	7.54	1153	-76.3	1.3	60.6	13.9	10.23	INITIAL
1317	200	7.50	1079	-69.1	0.8	11.15	13.9	10.39	1
1322	200	7.47	1006	-63.2	0.7	7.59	13.8	10.39	2
1327	200	7.45	988	-61.6	0.7	6.78	13.8	10.39	3
1332	200	7.44	987	-60.9	0.6	6.44	13.9	10.39	4
1338	200	7.44	987	-63.2	0.7	6.16	13.8	10.39	5

3 different water samples VOCs & Methanol with bladder pump

NOTE: STABILIZATION TEST IS COMPLETE WHEN 3 SUCCESSIVE READINGS ARE WITHIN THE FOLLOWING LIMITS:

pH: +/- 0.1 COND.: +/- 3% ORP: +/- 10 D.O.: +/- 10 % TURB: +/- 10 % or </= 5 TEMP.: +/- 0.3°C

BOTTLES FILLED — PRESERVATIVE CODES A - NONE B - HNO3 C - H2SO4 D - NaOH E - HCL F - ____

NUMBER	SIZE	TYPE	PRESERVATIVE	FILTERED	NUMBER	SIZE	TYPE	PRESERVATIVE	FILTERED
3	40 mL	VOA	E	☐ Y ☑ N					☐ Y ☐ N
3	40 mL	VOA	A	☐ Y ☑ N					☐ Y ☐ N
				☐ Y ☐ N					☐ Y ☐ N
				☐ Y ☐ N					☐ Y ☐ N
				☐ Y ☐ N					☐ Y ☐ N

SHIPPING METHOD:	Courier	DATE SHIPPED:	9/29/22	AIRBILL NUMBER:	—
COC NUMBER:	—	SIGNATURE:	PS	DATE SIGNED:	9/28/22

WATER SAMPLE LOG

PROJECT NAME: DA-Eastern RCRA Assessmen	PREPARED	CHECKED
PROJECT NUMBER: 495430.0000.0000	BY: HS (JJ) DATE: 9/28/22	BY: JLC DATE: 9-30-22

SAMPLE ID: MW-104 | WELL DIAMETER: ☑ 2" ☐ 4" ☐ 6" ☐ OTHER

WELL MATERIAL: ☑ PVC ☐ SS ☐ IRON ☐ GALVANIZED STEEL ☐ OTHER

SAMPLE TYPE: ☑ GW ☐ WW ☐ SW ☐ DI ☐ LEACHATE ☐ OTHER

PURGING	TIME: 1405	DATE: 9/22/22

PURGE METHOD: ☑ PUMP BLADDER PUMP (QED) ☐ BAILER BAILER (DISPOSABLE)

DEPTH TO WATER: 1035 T/ PVC

DEPTH TO BOTTOM: 20.12 T/ PVC

WELL VOLUME: NA ☐ LITERS ☐ GALLONS

VOLUME REMOVED: ☑ LITERS ☐ GALLONS

COLOR: Brown ODOR: none

TURBIDITY ☐ NONE ☐ SLIGHT ☐ MODERATE ☑ VERY

DISPOSAL METHOD: ☐ GROUND ☑ DRUM ☐ OTHER

SAMPLE	TIME: 1530	DATE: 9/22/22

PH: 7.90 SU CONDUCTIVITY: 991 umhos/cm

ORP: 35.7 mV DO: 0.6 mg/L

TURBIDITY: 13.9 NTU

☒ NONE ☒ SLIGHT ☐ MODERATE ☐ VERY

TEMPERATURE: 13.7 °C OTHER: —

COLOR: Cloudish ODOR: mold

FILTRATE (0.45 um) ☐ YES ☒ NO

FILTRATE COLOR: — FILTRATE ODOR: —

QC SAMPLE: ☐ MS/MSD ☐ DUP- —

COMMENTS: Bladder pump log (VOCs and methanol)

TIME	PURGE RATE (ML/MIN)	PH (SU)	CONDUCTIVITY (umhos/cm)	ORP (mV)	D.O. (mg/L)	TURBIDITY (NTU)	TEMPERATURE (°C)	WATER LEVEL (FEET)	CUMULATIVE PURGE VOLUME (GAL OR L)
1405	200	5.68	671	146.3	10.5	1645	13.5	1035	INITIAL
1410		6.82	841	94.5	1.4	1275	14.4	1035	1
1415		7.15	858	79.5	1.8	1325	14.3	1035	2
1420		7.25	885	68.4	1.0	1045	13.9	1035	3
1425		7.30	911	61.8	0.9	815	13.9	1035	4
1430		7.31	923	57.7	0.9	635	13.9	1035	5
1435		7.33	934	54.1	0.8	114	13.9	1035	6
1440		7.35	961	50.6	0.8	93	13.8	1035	7
1445		7.36	978	49.0	0.7	86	13.8	1035	8
1450		7.37	983	46.7	0.7	58.5	13.8	1035	9

NOTE: STABILIZATION TEST IS COMPLETE WHEN 3 SUCCESSIVE READINGS ARE WITHIN THE FOLLOWING LIMITS:

pH: +/- **0.1** COND.: +/- **3%** ORP: +/- **10** D.O.: +/- **10 %** TURB: +/- **10 %** or </= **5** TEMP.: +/- **0.3°C**

BOTTLES FILLED — PRESERVATIVE CODES A - NONE B - HNO3 C - H2SO4 D - NaOH E - HCL F - _____

NUMBER	SIZE	TYPE	PRESERVATIVE	FILTERED	NUMBER	SIZE	TYPE	PRESERVATIVE	FILTERED
3	40 mL	VOA	E	☐ Y ☑ N					☐ Y ☐ N
3	40 mL	VOA	A	☐ Y ☑ N					☐ Y ☐ N
				☐ Y ☐ N					☐ Y ☐ N
				☐ Y ☐ N					☐ Y ☐ N
				☐ Y ☐ N					☐ Y ☐ N

SHIPPING METHOD: Courier	DATE SHIPPED: 9/29/22	AIRBILL NUMBER: —
COC NUMBER: —	SIGNATURE: [signature]	DATE SIGNED: 9/28/22

TRC **WATER SAMPLE LOG** (CONTINUED FROM PREVIOUS PAGE)

PROJECT NAME: DA-Eastern RCRA Assessment	PREPARED		CHECKED	
PROJECT NUMBER: 495430.0000.0000	BY: HS, GJ	DATE: 9/28/22	BY: JK	DATE: 9-30-22

SAMPLE ID: MW-104

TIME	PURGE RATE (ML/MIN)	PH (SU)	CONDUCTIVITY (umhos/cm)	ORP (mV)	D.O. (mg/L)	TURBIDITY (NTU)	TEMPERATURE (°C)	WATER LEVEL (FEET)	CUMULATIVE PURGE VOLUME (GAL OR L)
1455	200	7.35	984	45.5	0.7	49.5	13.8	103.5	10
1500		7.36	985	44.5	0.7	37.5	13.8	103.5	11
1505		7.39	987	42.8	0.7	31.0	13.7	103.5	12
1510		7.39	987	42.3	0.6	24	13.7	103.5	14
1515		7.40	991	41.0	0.6	21	13.7	103.5	15
1520		7.40	991	38.8	0.6	15	13.7	103.5	16
1525		7.40	990	35.8	0.6	14	13.7	103.5	17
1530		7.40	991	35.7	0.6	13.9	13.7	103.5	18 13
1535								104.6	14

(GJ)

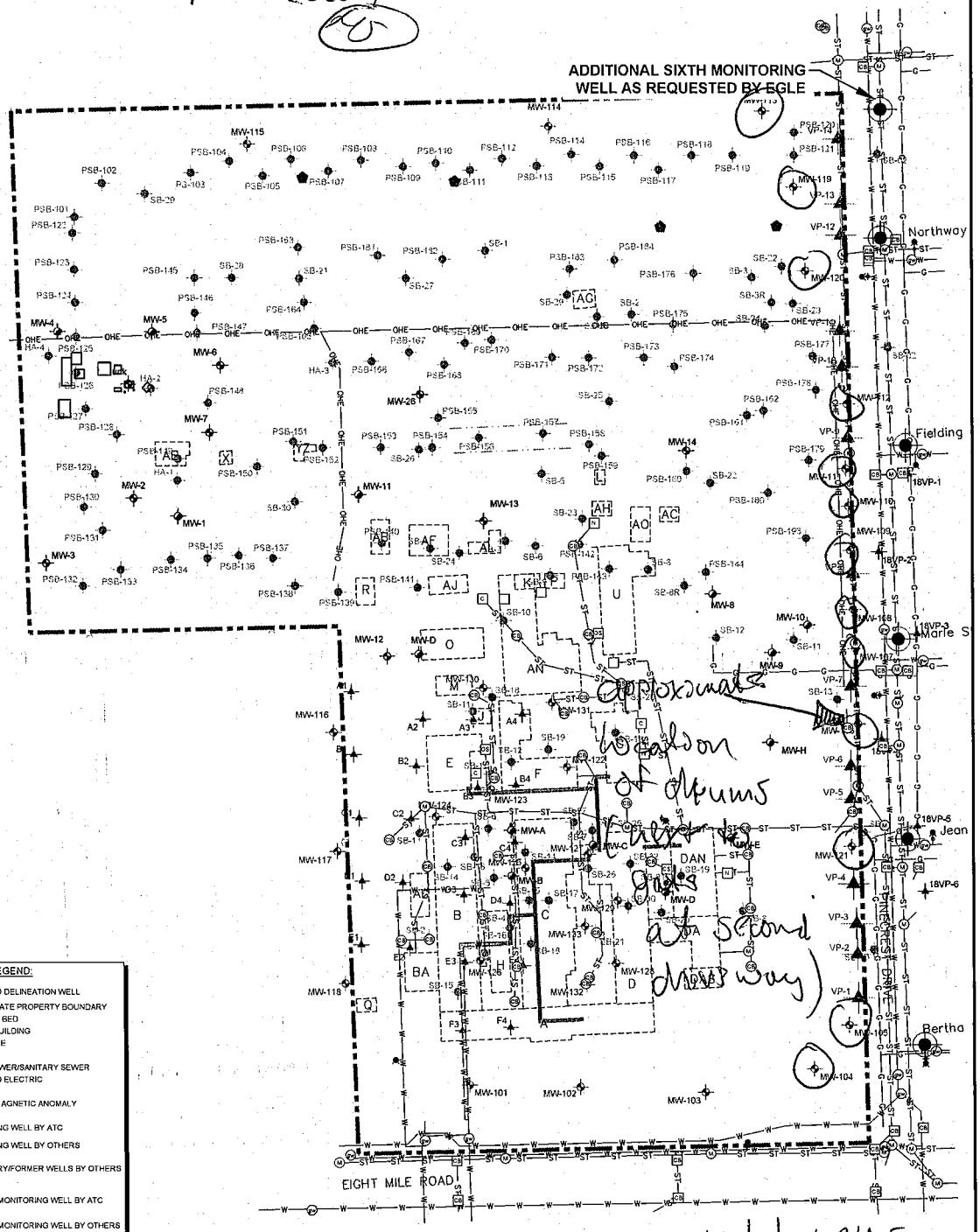
SIGNATURE: HS DATE SIGNED: 9/28/22

Henry Schmidt 9/28/22

Pg 34 of 38

11x17 — USER: EAlexander — ATTACHED XREFS: XREF-MWELLS, XREF-BUILDINGS — ATTACHED IMAGES:
DRAWING NAME: J:\Detroit Axle Ferndale\495430\0000\495530-EB WP PL.dwg — PLOT DATE: August 31, 2022 - 8:57AM — LAYOUT: EB WP PL

checked by [signature] 9/30/22



LEGEND:

- PROPOSED DELINEATION WELL
- APPROXIMATE PROPERTY BOUNDARY
- OLD RIVER BED
- FORMER BUILDING
- W — WATER LINE
- G — GAS LINE
- ST — STORM SEWER/SANITARY SEWER
- OHE — OVERHEAD ELECTRIC
- TUNNELS
- ELECTROMAGNETIC ANOMALY
- MW-101 MONITORING WELL BY ATC
- MW-13 MONITORING WELL BY OTHERS
- MW-C TEMPORARY/FORMER WELLS BY OTHERS
- A1 SOIL-GAS MONITORING WELL BY ATC
- 18VP-3 SOIL-GAS MONITORING WELL BY OTHERS
- B-1 SOIL BORING
- VP-1 SOIL-GAS VAPOR POINT BY ATC 2022
- CB CATCH BASINS
- M MANHOLE
- GW GATE WELL
- HYDRANT AND VALVE
- I INCINERATOR
- OS OIL SUMP
- CS COLLECTION SUMP
- C COOLING BASIN
- N NEUTRALIZING BASIN
- GEOPHYSICAL ANOMALY

NOTE: ALL LOCATIONS ARE APPROXIMATE

TRC
1540 Eisenhower Place
Ann Arbor, MI 48108
Phone: 734.971.7080
www.trcsolutions.com

PROJECT
DETROIT AXLE FERNDALE
FORMER HAYES LEMMERZ SITE
WEST EIGHT MILE ROAD
FERNDALE, MI

TITLE
EASTERN BOUNDARY WORK PLAN- PROPOSED LOCATIONS
WORKING COPY

DRAWN BY:	E.ALEXANDER
CHECKED BY:	K. CRATSENBERG
APPROVED BY:	—
DATE:	AUGUST 2022
PROJ. NO.	495430.0000.0000
FILE:	495530-EB WP PL.dwg

FIGURE 1

2680 East Lansing Dr., East Lansing, MI 48823
Phone (517) 332-0167 Fax (517) 332-4034
www.meritlabs.com

C.O.C. PAGE # ____ OF ____ 154527

CHAIN OF CUSTODY RECORD

REPORT TO

CONTACT NAME	Kelly Cruikshank
COMPANY	TRC
ADDRESS	1540 Eisenhower Place
CITY	Ann Arbor MI
STATE	MI
ZIP CODE	48108
PHONE NO.	
CELL NO.	
P.O. NO.	189445
E-MAIL ADDRESS	[illegible]
QUOTE NO.	

INVOICE TO

CONTACT NAME	☐ SAME
COMPANY	
ADDRESS	
CITY	
STATE	
ZIP CODE	
PHONE NO.	
E-MAIL ADDRESS	

PROJECT NO./NAME: OA-[illegible] RCRA Assessment / 495430

SAMPLER(S) - PLEASE PRINT/SIGN NAME: H. Schmidt [illegible]

TURNAROUND TIME REQUIRED ☐ 1 DAY ☐ 2 DAYS ☐ 3 DAYS ☒ STANDARD ☐ OTHER ____

DELIVERABLES REQUIRED ☐ STD ☐ LEVEL II ☐ LEVEL III ☐ LEVEL IV ☐ EDD ☒ OTHER TRC EDD

MATRIX CODE: W=WATER GW=GROUNDWATER WW=WASTEWATER S=SOIL L=LIQUID SD=SOLID SL=SLUDGE DW=DRINKING WATER O=OIL WP=WIPE A=AIR WS=WASTE

ANALYSIS (ATTACH LIST IF MORE SPACE IS REQUIRED)

MERIT LAB NO. (FOR LAB USE ONLY)	COLLECTION DATE	COLLECTION TIME	SAMPLE TAG IDENTIFICATION-DESCRIPTION	MATRIX	# OF BOTTLES	NONE	HCl	HNO_3	H_2SO_4	NaOH	MeOH	OTHER	MI Part 201 Full List Metals	MI Part 201 Full List VOCs	Methane
	9/27/22	930/1041	MW-120	GW	7	3	3	1					X	X	X
	↓	1013	MW-119	↓	↓	↓	↓	↓					X	X	X
	↓	1127/1220	MW-113	↓	↓	↓	↓	↓					X	X	X
	↓	1237	MW-112	↓	↓	↓	↓	↓					X	X	X
	↓	1317	MW-111	↓	↓	↓	↓	↓					X	X	X
	↓	1347	MW-110	↓	↓	↓	↓	↓					X	X	X
	↓	—	Dup-01	↓	↓	↓	↓	↓					X	X	X
	9/27/22	—	TRIP BLANK	1	1		1							X	

Certifications: ☐ OHIO VAP ☐ Drinking Water ☐ DoD ☐ NPDES

Project Locations: ☐ Detroit ☐ New York ☐ Other ____

Special Instructions:
* no TICs
on 1,4-Dioxane SIMs needed
Note: samples w/ split times were taken w/ peristaltic pump and bladder (VOCs + Methane)

RELINQUISHED BY: SIGNATURE/ORGANIZATION	Hannah Schmidt ☒ Sampler	DATE 9/28/22	TIME 1730
RECEIVED BY: SIGNATURE/ORGANIZATION	[signature]	DATE 9/29/22	TIME 800
RELINQUISHED BY: SIGNATURE/ORGANIZATION		DATE	TIME
RECEIVED BY: SIGNATURE/ORGANIZATION		DATE	TIME
RELINQUISHED BY: SIGNATURE/ORGANIZATION		DATE	TIME
RECEIVED BY: SIGNATURE/ORGANIZATION		DATE	TIME

SEAL NO. ____ SEAL INTACT YES ☐ NO ☐ INITIALS ____
SEAL NO. ____ SEAL INTACT YES ☐ NO ☐ INITIALS ____
NOTES: TEMP. ON ARRIVAL ____

HS 9/28/22 checked by JK 9/30/22 pg 35 of 90

PLEASE NOTE: SIGNING ACKNOWLEDGES ADHERENCE TO MERIT'S SAMPLE ACCEPTANCE POLICY ON REVERSE SIDE

Rev. 1.26.22

TO 9/28/22 VM JK 9/30/22 pg 36 of 38

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C.O.C. PAGE # ______ OF ______ 154471

CHAIN OF CUSTODY RECORD

REPORT TO

CONTACT NAME: Kelly [illegible]
COMPANY: TEC
ADDRESS: 1310 [illegible] Hall
CITY: Ann Arbor STATE: MI ZIP CODE: 48103
PHONE NO.: CELL NO.: P.O. NO.: 59445
E-MAIL ADDRESS: [illegible] QUOTE NO.:

INVOICE TO

CONTACT NAME: ☐ SAME
COMPANY:
ADDRESS:
CITY: STATE: ZIP CODE:
PHONE NO.: E-MAIL ADDRESS:

PROJECT NO./NAME: [illegible] RCRA Assessment / 405430
SAMPLER(S) - PLEASE PRINT/SIGN NAME: H. Schmidt, J. Jackson

TURNAROUND TIME REQUIRED ☐ 1 DAY ☐ 2 DAYS ☐ 3 DAYS ☒ STANDARD ☐ OTHER ______

DELIVERABLES REQUIRED ☐ STD ☐ LEVEL II ☐ LEVEL III ☐ LEVEL IV ☐ EDD ☒ OTHER Toledo

MATRIX CODE: W=WATER GW=GROUNDWATER WW=WASTEWATER S=SOIL L=LIQUID SD=SOLID SL=SLUDGE DW=DRINKING WATER O=OIL WP=WIPE A=AIR WS=WASTE

ANALYSIS (ATTACH LIST IF MORE SPACE IS REQUIRED)

MERIT LAB NO. (FOR LAB USE ONLY)	DATE	TIME	SAMPLE TAG IDENTIFICATION-DESCRIPTION	MATRIX	# OF BOTTLES	NONE	HCl	HNO_3	H_2SO_4	NaOH	MeOH	OTHER	App. I + 2011 Full List Metals	App. I + 2011 Full List VOCs*	Methanol
	9/28/22	925	MW-109	GW	7	3	3	1					X	X	X
	↓	930	MW-108	↓	↓	↓	↓	↓					X	X	X
	↓	1123/1140	MW-107	↓	↓	↓	↓	↓					X	X	X
	↓	1125/1241	MW-106	↓	↓	↓	↓	↓					X	X	X
	↓	1232	MW-121	↓	↓	↓	↓	↓					X	X	X
	↓	1335/1530	MW-104	↓	↓	↓	↓	↓					X	X	X
	↓	1423	MW-105	↓	↓	↓	↓	↓					X	X	X
	↓	—	Dup-02	↓	↓	↓	↓	↓					X	X	X
	9/28/22	—	TRIP BLANK 2	|	|		|							X	

Certifications: ☐ OHIO VAP ☐ Drinking Water ☐ DoD ☐ NPDES
Project Locations: ☐ Detroit ☐ New York ☐ Other ______

Special Instructions: * No TICs on 1,4-Dioxane SIMs needed. Note: Samples w/ split [illegible] w/ [illegible] (PFAS + Metals | and bladder | VOCs + Methanol)

RELINQUISHED BY: SIGNATURE/ORGANIZATION	☒ Sampler	DATE	TIME
[illegible signature]		9/28/22	1730
RECEIVED BY: SIGNATURE/ORGANIZATION		DATE	TIME
[illegible signature]		9/29/22	800
RELINQUISHED BY: SIGNATURE/ORGANIZATION		DATE	TIME
RECEIVED BY: SIGNATURE/ORGANIZATION		DATE	TIME

RELINQUISHED BY: SIGNATURE/ORGANIZATION DATE TIME
RECEIVED BY: SIGNATURE/ORGANIZATION DATE TIME

SEAL NO. SEAL INTACT YES☐ NO☐ INITIALS
SEAL NO. SEAL INTACT YES☐ NO☐ INITIALS
NOTES: TEMP. ON ARRIVAL ______

PLEASE NOTE: SIGNING ACKNOWLEDGES ADHERENCE TO MERIT'S SAMPLE ACCEPTANCE POLICY ON REVERSE SIDE

Rev. 1.26.22

Merit Laboratories, Inc.

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Phone (517) 332-0167 Fax (517) 332-4034
www.meritlabs.com

C.O.C. PAGE # ______ OF ______ 154528

CHAIN OF CUSTODY RECORD

REPORT TO

CONTACT NAME: Kelly Cadsenbury
COMPANY: TRC
ADDRESS: 1540 Eisenhower Place
CITY: Ann Arbor STATE: MI ZIP CODE: 48108
PHONE NO.: CELL NO.: P.O. NO.: 189445
E-MAIL ADDRESS: kcassenbury, hschmidt, ackland@trccompanies.com QUOTE NO.:

INVOICE TO

☐ SAME
CONTACT NAME:
COMPANY:
ADDRESS:
CITY: STATE: ZIP CODE:
PHONE NO.: E-MAIL ADDRESS:

PROJECT NO./NAME: DA-Bohum RCRA Assessment / 495430
SAMPLER(S) - PLEASE PRINT/SIGN NAME: H. Schmidt J. Dassio

TURNAROUND TIME REQUIRED ☐ 1 DAY ☐ 2 DAYS ☐ 3 DAYS ☒ STANDARD ☐ OTHER ______

DELIVERABLES REQUIRED ☐ STD ☐ LEVEL II ☐ LEVEL III ☐ LEVEL IV ☐ EDD ☒ OTHER TRC EDD

MATRIX CODE: W=WATER GW=GROUNDWATER WW=WASTEWATER S=SOIL L=LIQUID SD=SOLID SL=SLUDGE DW=DRINKING WATER O=OIL WP=WIPE A=AIR WS=WASTE

ANALYSIS (ATTACH LIST IF MORE SPACE IS REQUIRED)

MERIT LAB NO. (FOR LAB USE ONLY)	COLLECTION DATE	COLLECTION TIME	SAMPLE TAG IDENTIFICATION-DESCRIPTION	MATRIX	# OF BOTTLES	NONE	HCl	HNO_3	H_2SO_4	NaOH	MeOH	OTHER	List 31 PFAS
	9/21/22	930	MW-120	GW	3	3							X
	↓	1013	MW-119	↓	↓	↓							X
	↓	1127	MW-113	↓	↓	↓							X
	↓	1237	MW-112	↓	↓	↓							X
	↓	1317	MW-111	↓	↓	↓							X
	↓	1347	MW-110	↓	↓	↓							X
	↓	—	Dup-01	↓	↓	↓							X

Certifications
☐ OHIO VAP ☐ Drinking Water
☐ DoD ☐ NPDES

Project Locations
☐ Detroit ☐ New York
☐ Other ______

Special Instructions

HS 9/28/22 ✓By JK 9-30-22

RELINQUISHED BY: SIGNATURE/ORGANIZATION	☒ Sampler	DATE	TIME
Hans Schmidt		9/23/22	1730
RECEIVED BY: SIGNATURE/ORGANIZATION		DATE	TIME
[signature]		9/29/22	800
RELINQUISHED BY: SIGNATURE/ORGANIZATION		DATE	TIME
RECEIVED BY: SIGNATURE/ORGANIZATION		DATE	TIME

RELINQUISHED BY: SIGNATURE/ORGANIZATION DATE TIME
RECEIVED BY: SIGNATURE/ORGANIZATION DATE TIME

SEAL NO. SEAL INTACT YES ☐ NO ☐ INITIALS
SEAL NO. SEAL INTACT YES ☐ NO ☐ INITIALS

NOTES: TEMP. ON ARRIVAL ______

PLEASE NOTE: SIGNING ACKNOWLEDGES ADHERENCE TO MERIT'S SAMPLE ACCEPTANCE POLICY ON REVERSE SIDE

Rev. 1.26.22

Merit Laboratories, Inc.

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C.O.C. PAGE # ______ OF ______ 154472

HS 9/28/22 VBy JK 9-30-22 Pg 38 of 38

CHAIN OF CUSTODY RECORD

REPORT TO

CONTACT NAME	Kelly Oudenburg
COMPANY	TRC
ADDRESS	1540 Eisenhower Place
CITY	Ann Arbor
STATE	MI
ZIP CODE	48108
PHONE NO.	
CELL NO.	
P.O. NO.	159445
E-MAIL ADDRESS	koudenburg, hschmidt, ... @trccompanies.com
QUOTE NO.	
PROJECT NO./NAME	CA - Consumers RCRA Assessment / 405430
SAMPLER(S) - PLEASE PRINT/SIGN NAME	H. Schmidt J. Daudo

INVOICE TO

CONTACT NAME	☐ SAME
COMPANY	
ADDRESS	
CITY	
STATE	
ZIP CODE	
PHONE NO.	
E-MAIL ADDRESS	

TURNAROUND TIME REQUIRED ☐ 1 DAY ☐ 2 DAYS ☐ 3 DAYS ☒ STANDARD ☐ OTHER ______

DELIVERABLES REQUIRED ☐ STD ☐ LEVEL II ☐ LEVEL III ☐ LEVEL IV ☐ EDD ☒ OTHER TRC EDD

MATRIX CODE: W=WATER GW=GROUNDWATER WW=WASTEWATER S=SOIL L=LIQUID SD=SOLID SL=SLUDGE DW=DRINKING WATER O=OIL WP=WIPE A=AIR WS=WASTE

ANALYSIS (ATTACH LIST IF MORE SPACE IS REQUIRED)

MERIT LAB NO. (FOR LAB USE ONLY)	COLLECTION DATE	COLLECTION TIME	SAMPLE TAG IDENTIFICATION-DESCRIPTION	MATRIX	# OF BOTTLES	NONE	HCl	HNO_3	H_2SO_4	NaOH	MeOH	OTHER	List 31 PFAS
	9/28/22	825	MW-109	GW	3	3							X
		910	MW-108										X
		1023	MW-107										X
		1125	MW-106										X
		1232	MW-121										X
		1338	MW-104										X
		1423	MW-105										X
		—	Dup-02										X
		1441	FB-01		1								X
		1441	FB-01		3	3							X

Certifications
☐ OHIO VAP ☐ Drinking Water
☐ DoD ☐ NPDES

Project Locations
☐ Detroit ☐ New York
☐ Other ______

Special Instructions

RELINQUISHED BY: SIGNATURE/ORGANIZATION	Harmony Schmidt ☒ Sampler	DATE 9/28/22	TIME 1730
RECEIVED BY: SIGNATURE/ORGANIZATION	[signature]	DATE 9/29/22	TIME 800
RELINQUISHED BY: SIGNATURE/ORGANIZATION		DATE	TIME
RECEIVED BY: SIGNATURE/ORGANIZATION		DATE	TIME
RELINQUISHED BY: SIGNATURE/ORGANIZATION		DATE	TIME
RECEIVED BY: SIGNATURE/ORGANIZATION		DATE	TIME

SEAL NO.	SEAL INTACT YES ☐ NO ☐	INITIALS
SEAL NO.	SEAL INTACT YES ☐ NO ☐	INITIALS

NOTES: TEMP. ON ARRIVAL ______

PLEASE NOTE: SIGNING ACKNOWLEDGES ADHERENCE TO MERIT'S SAMPLE ACCEPTANCE POLICY ON REVERSE SIDE

Rev. 1.26.22

TRC

PROJECT NAME:	DA-Eastern RCRA Assessment
PROJECT NUMBER:	495430.0000.0000 Phase II
PROJECT MANAGER:	Kelly Cratsenburg
SITE LOCATION:	2000 8 Mile Road, Ferndale, MI 48220
DATES OF FIELDWORK:	10/17/2022 TO 10/20/2022
PURPOSE OF FIELDWORK:	Monitoring Well Install and GW Sampling
WORK PERFORMED BY:	Brian Yelen, Henry Schnaidt

Henry Schnaidt — SIGNED — DATE 10/21/2022

CHECKED BY — DATE 11/1/22

REVISED 04/2019

TRC

GENERAL NOTES

PROJECT NAME:	DA-Eastern RCRA Assessmen	DATE: 10.17.22	TIME ARRIVED: 0800
PROJECT NUMBER:	495430.0000.0000	AUTHOR: Brian Yelen, Henry Sch	TIME LEFT: 1600

WEATHER		
TEMPERATURE: 60+ °F	WIND: 0-5 MPH	VISIBILITY: CLEAR

WORK / SAMPLING PERFORMED

INSTALL MW-22-01, MW-22-02
DEVELOPED MW-22-01, MW-22-02

PROBLEMS ENCOUNTERED	CORRECTIVE ACTION TAKEN
—	—

COMMUNICATION

NAME	REPRESENTING	SUBJECT / COMMENTS
K. CRATSENBURG	TRC	UPDATES

INVESTIGATION DERIVED WASTE SUMMARY

WASTE MATRIX	QUANTITY	COMMENTS
SOIL	NM	DRUM
GW	NM	DRUM

BY 11.1.22
SIGNED DATE

HS 11/7/22
CHECKED BY DATE

TRC

GENERAL NOTES

PROJECT NAME:	DA-Eastern RCRA Assessmen	DATE: 10.18.22	TIME ARRIVED: 0800
PROJECT NUMBER:	495430.0000.0000	AUTHOR: Brian Yelen, Henry Schi	TIME LEFT: 1600

WEATHER

TEMPERATURE: 45 °F WIND: 5-10 MPH VISIBILITY: OVERCAST | RAIN

WORK / SAMPLING PERFORMED

INSTALL MW-22-03
DEVELOP MW-22-03
SAMPLE MW-22-01, MW-22-02

PROBLEMS ENCOUNTERED	CORRECTIVE ACTION TAKEN
1ST DRILL RIG BROKE	2ND RIG BROUGHT ONSITE

COMMUNICATION

NAME	REPRESENTING	SUBJECT / COMMENTS
K. CRATSENBERG	TRC	UPDATES

INVESTIGATION DERIVED WASTE SUMMARY

WASTE MATRIX	QUANTITY	COMMENTS
SOIL	NM	DRUM
GW	NM	DRUM

BY 11.1.22
SIGNED DATE

HS 11/7/22
CHECKED BY DATE

TRC

GENERAL NOTES

PROJECT NAME: DA-Eastern RCRA Assessmen	DATE: 10.19.22	TIME ARRIVED: 800
PROJECT NUMBER: 495430.0000.0000	AUTHOR: Brian Yelen, Henry Schi	TIME LEFT: 1600

WEATHER		
TEMPERATURE: 45 °F	WIND: 15-20 MPH	VISIBILITY: OVERCAST

WORK / SAMPLING PERFORMED	
INSTALL	MW-22-04, MW-22-05, MW-22-06
DEVELOP	MW-22-04, MW-22-05, MW-22-06
SAMPLE	MW-22-03

PROBLEMS ENCOUNTERED	CORRECTIVE ACTION TAKEN
—	—

COMMUNICATION		
NAME	REPRESENTING	SUBJECT / COMMENTS
K CHITSCHNBURG	TRC	UPDATES

INVESTIGATION DERIVED WASTE SUMMARY		
WASTE MATRIX	QUANTITY	COMMENTS
SOIL	NM	DRUM
GW	NM	DRUM

BY 11.1.22
SIGNED DATE

HS 9/7/22
CHECKED BY DATE

TRC

GENERAL NOTES

PROJECT NAME:	DA-Eastern RCRA Assessmen	DATE: 10/20/22	TIME ARRIVED: 945
PROJECT NUMBER:	495430.0000.0000	AUTHOR: Brian Yelen, Henry Sch	TIME LEFT: 1400

WEATHER

TEMPERATURE: 40 °F WIND: 5 - 15 MPH VISIBILITY: cloudy, windy / snowy

WORK / SAMPLING PERFORMED

Sampled MW-22-04, 05, and 06

Removed covers & buckets

Labelled MW-22-04 as "04", 05, 06

Total drum count: 2 empty, 3 filled w/ water, 5 soil, 1 w/ unknown contents labelled "non haz" (previous consultant)

drums:
10 full
2 empty

1 unlabelled (previous consultant)

PROBLEMS ENCOUNTERED	CORRECTIVE ACTION TAKEN

COMMUNICATION

NAME	REPRESENTING	SUBJECT / COMMENTS
K. Cavalcanti	TRC	Project comm.

INVESTIGATION DERIVED WASTE SUMMARY

WASTE MATRIX	QUANTITY	COMMENTS
GW	NM	Drummed onsite

HS 10/21/22
SIGNED DATE

CHECKED BY 11/1/22
DATE

TRC

EQUIPMENT SUMMARY

PROJECT NAME:	DA-Eastern RCRA Assessme	SAMPLER NAME:	Brian Yelen, Henry Schnaidt
PROJECT NO.:	495430.0000.0000		

WATER LEVEL MEASUREMENTS COLLECTED WITH:

NAME AND MODEL OF INSTRUMENT	SERIAL NUMBER (IF APPLICABLE)
HERON DIPPER-T	TRC A2

PRODUCT LEVEL MEASUREMENTS COLLECTED WITH:

NAME AND MODEL OF INSTRUMENT	SERIAL NUMBER (IF APPLICABLE)
NA	NA

DEPTH TO BOTTOM OF WELL MEASUREMENTS COLLECTED WITH:

NAME AND MODEL OF INSTRUMENT	SERIAL NUMBER (IF APPLICABLE)
HERON DIPPER-T	TRC A2

PURGING METHOD

NAME AND MODEL OF PUMP OR TYPE OF BAILER	SERIAL NUMBER (IF APPLICABLE)
peristaltic	~~NA~~ TRC A2

SAMPLING METHOD

NAME AND MODEL OF PUMP OR TYPE OF BAILER	SERIAL NUMBER (IF APPLICABLE)
peristaltic	~~NA~~ TRC A2
NA	0.45 MICRON
NAME AND MODEL OF FILTERATION DEVICE	FILTER TYPE AND SIZE

DISPOSABLE POLY TUBING
TUBING TYPE

☑ LOW-FLOW SAMPLING EVENT

PURGE WATER DISPOSAL METHOD

☑ GROUND ☑ DRUM ☐ POTW ☐ POLYTANK ☐ OTHER _____

DECONTAMINATION AND FIELD BLANK WATER SOURCE

POTABLE WATER SOURCE	DI WATER SOURCE
STORE BOUGHT	LABORATORY PROVIDED

SIGNED	DATE	CHECKED BY	DATE
MS	10/27/22	AW	11/1/22

REVISED 04/2019

TRC

WATER QUALITY METER CALIBRATION LOG

PROJECT NAME:	DA-Eastern RCRA Assessment	MODEL: YSI Pro DSS	SAMPLER: BY (HS)
PROJECT NO.:	495430.0000.0000	SERIAL #: TRC A2	DATE: 10/18/22

PH CALIBRATION CHECK

pH 7 (LOT #): 26F083 (EXP. DATE): JUN/24 POST-CAL. READING / STANDARD	pH 4 / 10 (LOT #): 260849 (EXP. DATE): APR/24 POST-CAL. READING / STANDARD	CAL. RANGE	TIME
7.00 / 7.00	4.00 / 4.00	☒ WITHIN RANGE	904
/	/	☐ WITHIN RANGE	
/	/	☐ WITHIN RANGE	
/	/	☐ WITHIN RANGE	

SPECIFIC CONDUCTIVITY CALIBRATION CHECK

CAL. READING (LOT #): 26F71A (EXP. DATE): JUN/23 POST-CAL. READING / STANDARD	TEMPERATURE (°CELSIUS)	CAL. RANGE	TIME
1413 / 1413	25.8	☒ WITHIN RANGE	907
/		☐ WITHIN RANGE	
/		☐ WITHIN RANGE	
/		☐ WITHIN RANGE	

ORP CALIBRATION CHECK

CAL. READING (LOT #): 21K100304 (EXP. DATE): 2026-11-03 POST-CAL. READING / STANDARD	TEMPERATURE (°CELSIUS)	CAL. RANGE	TIME
227 / 227	15.2	☒ WITHIN RANGE	910
/		☐ WITHIN RANGE	
/		☐ WITHIN RANGE	
/		☐ WITHIN RANGE	

D.O. CALIBRATION CHECK

CAL. READING POST-CAL. READING /SATURATED AIR	TEMPERATURE (°CELSIUS)	CAL. RANGE	TIME
9.41 / 9.41	17.1	☒ WITHIN RANGE	913
/		☐ WITHIN RANGE	
/		☐ WITHIN RANGE	
/		☐ WITHIN RANGE	

TURBIDITY CALIBRATION CHECK

CALIBRATION READING (NTU) (LOT #): DI H20 (EXP. DATE): POST-CAL. READING / STANDARD	(LOT #): A2172 (EXP. DATE): JUN-24 POST-CAL. READING / STANDARD	CAL. RANGE	TIME
0.00 / 0.00	10000 / 10000	☒ WITHIN RANGE	916
/	/	☐ WITHIN RANGE	
/	/	☐ WITHIN RANGE	
/	/	☐ WITHIN RANGE	

COMMENTS

☐ AUTOCAL SOLUTION (LOT #): (EXP. DATE):	☑ STANDARD SOLUTION (S) LIST LOT NUMBERS AND EXPIRATION DATES UNDER CALIBRATION CHECK
CALIBRATED PARAMETERS	CALIBRATION RANGES [1]
☐ pH	pH: +/- 0.2 S.U.
☐ COND	COND: +/- 1% OF CAL. STANDARD
☐ ORP	ORP: +/- 25 mV
☐ D.O.	D.O.: VARIES
☐ TURB	TURB: +/- 5% OF CAL. STANDARD
☐ _____	[1] CALIBRATION RANGES ARE SPECIFIC TO THE MODEL OF THE WATER QUALITY METER
☐ _____	

NOTES

PROBLEMS ENCOUNTERED	CORRECTIVE ACTIONS

MS 10/21/22
SIGNED DATE

AV 11/1/22
CHECKED BY DATE

TRC

WATER QUALITY METER CALIBRATION LOG

PROJECT NAME:	DA-Eastern RCRA Assessment	MODEL: YSI Pro DSS	SAMPLER: BY, HS
PROJECT NO.:	495430.0000.0000	SERIAL #: TRC A2	DATE: 10/19/22

PH CALIBRATION CHECK

pH 7 (LOT #): 26F083 (EXP. DATE): JUN/24 POST-CAL. READING / STANDARD	pH 4 / 10 (LOT #): 26D849 (EXP. DATE): APR/24 POST-CAL. READING / STANDARD	CAL. RANGE	TIME
7.00 / 7.00	4.00 / 4.00	☒ WITHIN RANGE	820
/	/	☐ WITHIN RANGE	
/	/	☐ WITHIN RANGE	
/	/	☐ WITHIN RANGE	

SPECIFIC CONDUCTIVITY CALIBRATION CHECK

CAL. READING (LOT #): 26F718 (EXP. DATE): JUN/23 POST-CAL. READING / STANDARD	TEMPERATURE (°CELSIUS)	CAL. RANGE	TIME
1213 / 1213	17.4	☒ WITHIN RANGE	825
/		☐ WITHIN RANGE	
/		☐ WITHIN RANGE	
/		☐ WITHIN RANGE	

ORP CALIBRATION CHECK

CAL. READING (LOT #): 21K100307 (EXP. DATE): 2026 - NOV POST-CAL. READING / STANDARD	TEMPERATURE (°CELSIUS)	CAL. RANGE	TIME
227 / 227	18.2	☒ WITHIN RANGE	827
/		☐ WITHIN RANGE	
/		☐ WITHIN RANGE	
/		☐ WITHIN RANGE	

D.O. CALIBRATION CHECK

CAL. READING POST-CAL. READING /SATURATED AIR	TEMPERATURE (°CELSIUS)	CAL. RANGE	TIME
11.82	7.2	☐ WITHIN RANGE	831
/		☐ WITHIN RANGE	
/		☐ WITHIN RANGE	
/		☐ WITHIN RANGE	

TURBIDITY CALIBRATION CHECK

CALIBRATION READING (NTU) (LOT #): DF420 (EXP. DATE):	(LOT #): A2172 (EXP. DATE): JUN-24 POST-CAL. READING / STANDARD	CAL. RANGE	TIME
0.00 / 10.00	10.00 / 10.00	☒ WITHIN RANGE	833
/	/	☐ WITHIN RANGE	
/	/	☐ WITHIN RANGE	
/	/	☐ WITHIN RANGE	

COMMENTS

☐ AUTOCAL SOLUTION (LOT #): (EXP. DATE):	☑ STANDARD SOLUTION (S) LIST LOT NUMBERS AND EXPIRATION DATES UNDER CALIBRATION CHECK
CALIBRATED PARAMETERS	CALIBRATION RANGES [1]
☐ pH	pH: +/- 0.2 S.U.
☐ COND	COND: +/- 1% OF CAL. STANDARD
☐ ORP	ORP: +/- 25 mV
☐ D.O.	D.O.: VARIES
☐ TURB	TURB: +/- 5% OF CAL. STANDARD
☐ _____	[1] CALIBRATION RANGES ARE SPECIFIC TO THE MODEL OF THE WATER QUALITY METER
☐ _____	

NOTES

✓

PROBLEMS ENCOUNTERED	CORRECTIVE ACTIONS
	✓

HS 10/19/2022 SIGNED DATE

AW 11/1/22 CHECKED BY DATE

TRC

WATER QUALITY METER CALIBRATION LOG

PROJECT NAME:	DA-Eastern RCRA Assessment	MODEL: YSI Pro DSS	SAMPLER: BY, (HS)
PROJECT NO.:	495430.0000.0000	SERIAL #: TRC A2	DATE: 10/20/22

PH CALIBRATION CHECK

pH 7 (LOT #): 26F083 (EXP. DATE): JUN/24 POST-CAL. READING / STANDARD	pH 4 / 10 (LOT #): 260849 (EXP. DATE): APR/24 POST-CAL. READING / STANDARD	CAL. RANGE	TIME
7.00 / 7.00	4.00 / 4.00	☒ WITHIN RANGE	836
/	/	☐ WITHIN RANGE	
/	/	☐ WITHIN RANGE	
/	/	☐ WITHIN RANGE	

SPECIFIC CONDUCTIVITY CALIBRATION CHECK

CAL. READING (LOT #): 26F7U (EXP. DATE): JUN/23 POST-CAL. READING / STANDARD	TEMPERATURE (°CELSIUS)	CAL. RANGE	TIME
1260 / 1260	18.9	☒ WITHIN RANGE	839
/		☐ WITHIN RANGE	
/		☐ WITHIN RANGE	
/		☐ WITHIN RANGE	

ORP CALIBRATION CHECK

CAL. READING (LOT #): 21K100307 (EXP. DATE): 2026-11-03 POST-CAL. READING / STANDARD	TEMPERATURE (°CELSIUS)	CAL. RANGE	TIME
223 / 223	18.7	☒ WITHIN RANGE	841
/		☐ WITHIN RANGE	
/		☐ WITHIN RANGE	
/		☐ WITHIN RANGE	

D.O. CALIBRATION CHECK

CAL. READING POST-CAL. READING /SATURATED AIR	TEMPERATURE (°CELSIUS)	CAL. RANGE	TIME
9.03 / 9.03	18.8	☒ WITHIN RANGE	843
/		☐ WITHIN RANGE	
/		☐ WITHIN RANGE	
/		☐ WITHIN RANGE	

TURBIDITY CALIBRATION CHECK

CALIBRATION READING (NTU) (LOT #): DI H2O (EXP. DATE): POST-CAL. READING / STANDARD	(LOT #): 12J47Z (EXP. DATE): JUN/24 POST-CAL. READING / STANDARD	CAL. RANGE	TIME
0.00 / 0.00	10.00 / 10.00	☒ WITHIN RANGE	847
/	/	☐ WITHIN RANGE	
/	/	☐ WITHIN RANGE	
/	/	☐ WITHIN RANGE	

COMMENTS

☐ AUTOCAL SOLUTION (LOT #): (EXP. DATE):	☑ STANDARD SOLUTION (S) LIST LOT NUMBERS AND EXPIRATION DATES UNDER CALIBRATION CHECK
CALIBRATED PARAMETERS	CALIBRATION RANGES [1]
☐ pH	pH: +/- 0.2 S.U.
☐ COND	COND: +/- 1% OF CAL. STANDARD
☐ ORP	ORP: +/- 25 mV
☐ D.O.	D.O.: VARIES
☐ TURB	TURB: +/- 5% OF CAL. STANDARD
☐ _____	[1] CALIBRATION RANGES ARE SPECIFIC TO THE MODEL OF THE WATER QUALITY METER
☐ _____	

NOTES

PROBLEMS ENCOUNTERED	CORRECTIVE ACTIONS

10/22/22
SIGNED DATE

AW 11/1/22
CHECKED BY DATE

TRC

LOG OF SOIL BORING

PROJECT NAME: DA-Eastern RCRA Assessment		SOIL BORING ID: MW-22-01	
PROJECT NUMBER: 495430.0000.0000		LOCATION: ~~NA~~ PINECREST & BERTHA	SHEET 1 OF 2
LOGGED BY: Brian Yelen, Henry Schnaidt			SURFACE ELEV.: NA
PROJECT LOCATION: 2000 8 Mile Road, Ferndale, MI 48220		N: — E: —	DATE STARTED: 10.17.22
DRILLED BY: TERRAPROBE, INC.	DRILLER NAME: SCOTT SEALS		DATE COMPLETED: 10.17.22

NO.	TYPE	%	BLOWS	PID	DEPTH	VISUAL CLASSIFICATION AND OBSERVATIONS	COMMENT
						ASPHALT	
						SANDY GRAVEL, MD GRV, L-S M-C SAND, GRAY 10 YR 5/1, NO ODOR, DRY, LOOSE	
1	DP	75	-	-	1.0		SCREEN 12.5-17.5' BGS
					2.0	SAND, MD F-M SAND, DK YELLOWISH BR 10 YR 5/6, NO ODOR, MST	
					3.0		
					4.0		
					5.0	∆ GRAY 10 YR 6/1 AT 5.0 FT BGS	
2	DP	80	-	-	6.0		
					7.0		
					8.0		
					9.0		
3	DP	75	-	-	10.0		
					11.0		
					12.0	∆ WET AT 12.0 FT BGS	

DRILLING METHOD	
DIRECT PUSH	
DRILL RIG	
GEOPROBE 6620	
BORING DIAMETER	2"

WATER LEVEL OBSERVATIONS			
FIRST OCCURRENCE: 12.0			
DATE	TIME	DEPTH TO WATER	DEPTH TO BOTTOM

BY 11.1.22
SIGNED DATE

HS 4/7/23
CHECKED DATE

TRC

LOG OF SOIL BORING

SHEET 2 OF 2

PROJECT NAME: DA-Eastern RCRA Assessment

SOIL BORING ID: MW-22 -01

NO.	TYPE	%	BLOWS	PID	DEPTH	VISUAL CLASSIFICATION AND OBSERVATIONS	COMMENT
					13.0	SAA	
4	SP	100	—	—	14.0		
					15.0		
					16.0	~~SAND~~, MD C. SAND, F F-M SAND, DR 10 YR 4/3, NO ODOR, WET, LOOSE	
					17.0		
5	SP	75	—	—	18.0	SANDY CLAY, MD CL, ~~FR-F~~ F-L F SAND, DK GR 10 YR 4/1, ~~LOW~~ PLAS, NO ODOR, DENSE	
					19.0		
					20.0	EOB 20.0	
					21.0		
					22.0		
					23.0		
					24.0		
					25.0		
					26.0		

BY 11.1.22
SIGNED DATE

HS 11/7/22
CHECKED DATE

TRC

LOG OF SOIL BORING

PROJECT NAME: DA-Eastern RCRA Assessment		SOIL BORING ID: MW-22-02	
PROJECT NUMBER: 495430.0000.0000		LOCATION: ~~NA~~ PINECREST & JEAN	SHEET 1 OF 2
LOGGED BY: Brian Yelen, Henry Schnaidt			SURFACE ELEV.: NA
PROJECT LOCATION: 2000 8 Mile Road, Ferndale, MI 48220		N: – E: –	DATE STARTED: 10.17.22
DRILLED BY: TERRAPROBE, INC.	DRILLER NAME: SS		DATE COMPLETED: 10.17.22

NO.	TYPE	%	BLOWS	PID	DEPTH	VISUAL CLASSIFICATION AND OBSERVATIONS	COMMENT
1	DP	75	-	-	0	ASPHALT	
					1.0	SA -01	WELL 10-15'
					2.0	SA -01	
2	DP	50	-	-	3.0		
					4.0		
					5.0		
					6.0		
					7.0		
					8.0		
3	DP	10"	-	-	9.0	▷ WET AT 9.0' BGS	
					10.0		
					11.0		
					12.0		

DRILLING METHOD
DIRECT PUSH
DRILL RIG
GEOPROBE 6620
BORING DIAMETER 2"

WATER LEVEL OBSERVATIONS			
FIRST OCCURRENCE: 9.0			
DATE	TIME	DEPTH TO WATER	DEPTH TO BOTTOM

BY 11.1.22
SIGNED DATE

HS 11/7/22
CHECKED DATE

TRC

LOG OF SOIL BORING

SHEET 2 OF 2

PROJECT NAME: DA-Eastern RCRA Assessment

SOIL BORING ID: MW-22-02

NO.	TYPE	%	BLOWS	PID	DEPTH	VISUAL CLASSIFICATION AND OBSERVATIONS	COMMENT
						SAA	
					13.0		
4	DP	100	-	-	14.0		
					15.0	CLAY, SA -01	
					16.0	EOB 16'	
					17.0		
					18.0		
					19.0		
					20.0		
					21.0		
					22.0		
					23.0		
					24.0		
					25.0		
					26.0		

BV 11.1.22
SIGNED DATE

HS 11/7/22
CHECKED DATE

TRC

LOG OF SOIL BORING

PROJECT NAME:	DA-Eastern RCRA Assessment	SOIL BORING ID: MW-22 -03	
PROJECT NUMBER:	495430.0000.0000	LOCATION: NA PINECREST + MARIE	SHEET 1 OF 2
LOGGED BY:	Brian Yelen, Henry Schnaidt		SURFACE ELEV.: NA
PROJECT LOCATION:	2000 8 Mile Road, Ferndale, MI 48220	N: — E: —	DATE STARTED: 10.18.22.
DRILLED BY:	TERRAPROBE, INC. DRILLER NAME: SS		DATE COMPLETED: 10.18.22.

NO.	TYPE	%	BLOWS	PID	DEPTH	VISUAL CLASSIFICATION AND OBSERVATIONS	COMMENT
						ASPHALT/CONC	
					1.0	SANDY GRV SA SB-01	WELL
1	DP	65	-	-			9-14'
					2.0	SAND SA SB-01	
					3.0		
					4.0		
					5.0		
2	DP	65	-	-	6.0		
					7.0		
					8.0	Δ WET @ 8.0' BGS	
					9.0		
3	DP		-	-	10.0	Δ GRAY 10YR 4/1 @ 10' BGS	
					11.0		
					12.0		

DRILLING METHOD
DIRECT PUSH
DRILL RIG
GEOPROBE 6620
BORING DIAMETER 2"

WATER LEVEL OBSERVATIONS			
FIRST OCCURRENCE: 8.0			
DATE	TIME	DEPTH TO WATER	DEPTH TO BOTTOM

RBY 11.1.22
SIGNED DATE

HS 11/7/22
CHECKED DATE

TRC

LOG OF SOIL BORING

SHEET 2 OF 2

PROJECT NAME: DA-Eastern RCRA Assessment

SOIL BORING ID: MW-22-03

NO.	TYPE	%	BLOWS	PID	DEPTH	VISUAL CLASSIFICATION AND OBSERVATIONS	COMMENT
						SAND, MD C; SAND, F F-M SAND, GRAY 10 YR 4/1, NO ODOR WET, LOOSE	
					13.0		
4	DP	90	-	-		SAND, MD F-M SAND, GRAY 10 YR 4/1, NO ODOR, WET, LOOSE	
					14.0		
						CLAY SA SB-01	
					15.0		
					16.0	EOB 16'	
					17.0		
					18.0		
					19.0		
					20.0		
					21.0		
					22.0		
					23.0		
					24.0		
					25.0		
					26.0		

BY 11.1.22
SIGNED DATE

HS 11/7/22
CHECKED DATE

TRC

LOG OF SOIL BORING

PROJECT NAME: DA-Eastern RCRA Assessment	SOIL BORING ID: MW-22-04		
PROJECT NUMBER: 495430.0000.0000	LOCATION: NA	SHEET 1 OF 2	
LOGGED BY: Brian Yelen, Henry Schnaidt	PINECREST + FIELDING	SURFACE ELEV.: NA	
PROJECT LOCATION: 2000 8 Mile Road, Ferndale, MI 48220	N: — E: —	DATE STARTED: 10.19.22	
DRILLED BY: TERRAPROBE, INC.	DRILLER NAME: SS	DATE COMPLETED: 10.19.22	

NO.	TYPE	%	BLOWS	PID	DEPTH	VISUAL CLASSIFICATION AND OBSERVATIONS	COMMENT
						ASPHALT + CONC	
					1.0	GRV w/ SAND SA -01	WELL
1	DP	75	-	-	2.0	SAND SA -01	7-12
					3.0		
					4.0		
					5.0		
2	DP	90	-	-	6.0	Δ WET AT 6.0' BGS	
					7.0	Δ DK GRAY 10 YR 4/1 AT 7.0' BGS	
					8.0		
					9.0		
3	DP	100	-	-	10.0		
					11.0	SAND, MD C, SAND, F F-M SAND, DK GRAY 10YR 4/1, NO ODOR, WET (11.5-12')	
					12.0	GRAY SA -01 (BY)	EOB 12.0

DRILLING METHOD	WATER LEVEL OBSERVATIONS			
DIRECT PUSH	FIRST OCCURRENCE: 6.0'			
DRILL RIG	DATE	TIME	DEPTH TO WATER	DEPTH TO BOTTOM
GEOPROBE 6620				
BORING DIAMETER 2"				

BY 11.1.22
SIGNED DATE

HS 11/7/22
CHECKED DATE

TRC

LOG OF SOIL BORING

SHEET 2 OF 2

PROJECT NAME: DA-Eastern RCRA Assessment | SOIL BORING ID: MW-22-04

NO.	TYPE	%	BLOWS	PID	DEPTH	VISUAL CLASSIFICATION AND OBSERVATIONS	COMMENT
						CLAY SA -01	
					13.0		
4	DP	100	-	-	14.0		
					15.0		
					16.0	16.0 EOB	
					17.0		
					18.0		
					19.0		
					20.0		
					21.0		
					22.0		
					23.0		
					24.0		
					25.0		
					26.0		

BY 11.1.22
SIGNED DATE

HS 11/7/22
CHECKED DATE

TRC

LOG OF SOIL BORING

PROJECT NAME: DA-Eastern RCRA Assessment		SOIL BORING ID: MW-22-05	
PROJECT NUMBER: 495430.0000.0000		LOCATION: NA NORTHWAY & PINECREST	SHEET 1 OF 1
LOGGED BY: Brian Yelen, Henry Schnaidt			SURFACE ELEV.: NA
PROJECT LOCATION: 2000 8 Mile Road, Ferndale, MI 48220		N: — E: —	DATE STARTED: 10.19.22
DRILLED BY: TERRAPROBE, INC.	DRILLER NAME: SS		DATE COMPLETED: 10.19.22

NO.	TYPE	%	BLOWS	PID	DEPTH	VISUAL CLASSIFICATION AND OBSERVATIONS	COMMENT
						ASPHALT/CONC	WELL 6-11'
					1.0	GRV SA SB-01	
1	DP	60	-	-		CLAY, MO CL, F F-M SAND M-M PLAS V. DK BR 10 YR 2/2, NO ODOR, MST, SOFT-LOW DENSC	
					2.0	SAND SA SB-01	
					3.0		
					4.0		
					5.0	Δ WET AT 5.0' BGS	
2	DP	90	-	-	6.0		
					7.0	Δ GRAY 10 YR 5/1 @ 7.0'	
					8.0		
					9.0	Δ L-S COARSE SAND @ 9'	
			-	-			
3					10.0	Δ NO CL SAND @ 10'	
					11.0	CLAY SA SB-01	
					12.0		EOB 12.0

DRILLING METHOD	
DIRECT PUSH	
DRILL RIG	
GEOPROBE 6620	
BORING DIAMETER	2"

WATER LEVEL OBSERVATIONS

FIRST OCCURRENCE: 5.0'

DATE	TIME	DEPTH TO WATER	DEPTH TO BOTTOM

BY 11.1.22
SIGNED DATE

HS 11/7/22
CHECKED DATE

TRC

LOG OF SOIL BORING

PROJECT NAME:	DA-Eastern RCRA Assessment	SOIL BORING ID: MW-22-06	
PROJECT NUMBER:	495430.0000.0000	LOCATION: NA S OF SHASTA PT/FOX & PINECREST	SHEET 1 OF 1
LOGGED BY:	Brian Yelen, Henry Schnaidt		SURFACE ELEV.: NA
PROJECT LOCATION:	2000 8 Mile Road, Ferndale, MI 48220	N: — E: —	DATE STARTED: 10.19.22
DRILLED BY:	TERRAPROBE, INC.	DRILLER NAME: SS	DATE COMPLETED: 10.19.22

NO.	TYPE	%	BLOWS	PID	DEPTH	VISUAL CLASSIFICATION AND OBSERVATIONS	COMMENT
						ASPHALT/CONC	WELL
					1.0	GRV SA SB-01	7-12
1	DP	30	-	-	2.0	SAND SA SB-01	
					3.0		
					4.0		
					5.0		
2	DP	30	-	-	6.0		
					7.0		
					8.0	▽ WET @ 8.0'	
					9.0	▽ GRAY TO YR 5/1 @ 9.0'	
3	PP	100	-	-	10.0		
					11.0		
					12.0	CLAY, SA SB-01	EOB 12.0

DRILLING METHOD	
DIRECT PUSH	
DRILL RIG	
GEOPROBE 6620	
BORING DIAMETER	
2"	

WATER LEVEL OBSERVATIONS

FIRST OCCURRENCE: 8.0'

DATE	TIME	DEPTH TO WATER	DEPTH TO BOTTOM

BY 11.1.22
SIGNED DATE

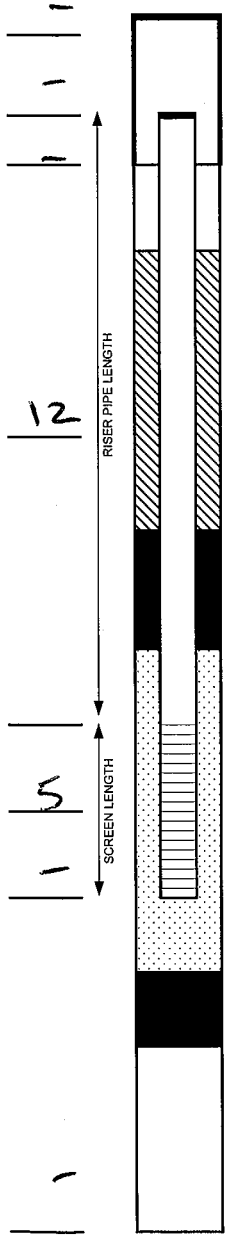
HS 11/7/22
CHECKED DATE

WELL CONSTRUCTION DIAGRAM

PROJ. NAME: DA-Eastern RCRA Assessment		WELL ID:	MW-22-01
PROJ. NO: 495430.0000.0	DATE INSTALLED: 10.17.22	INSTALLED BY: Brian Yelen, Henry Schna	CHECKED BY: HS 11/7/22

ELEVATION (BENCHMARK: USGS)

DEPTH BELOW OR ABOVE GROUND SURFACE (FEET)



- 0.0 GROUND SURFACE
- 0.5 TOP OF CASING
- 1 CEMENT SURFACE PLUG
- GROUT/BACKFILL MATERIAL: NA
- GROUT/BACKFILL METHOD: NA
- NA GROUT
- BENTONITE SEAL MATERIAL: MOD CHIPS
- 10 BENTONITE SEAL
- 12.5 TOP OF SCREEN
- FILTER PACK MATERIAL: MOD SAND
- 17.5 BOTTOM OF SCREEN
- NA BOTTOM OF FILTER PACK
- NA BENTONITE PLUG
- BACKFILL MATERIAL: ~~COLLAPSE~~
- 17.5 ~~20~~ HOLE BOTTOM

NOTES:

CASING AND SCREEN DETAILS

- **TYPE OF RISER:** PVC
- PIPE SCHEDULE: 40
- PIPE JOINTS: O-RING
- SOLVENT USED? NO
- **SCREEN TYPE:** PVC
- SCR. SLOT SIZE: 10 SLOT
- BOREHOLE DIAMETER: 8 IN. FROM 0 TO 17.5 FT.
  ____ IN. FROM ____ TO ____ FT.
- SURF. CASING DIAMETER: ____ IN. FROM ____ TO ____ FT.
  ____ IN. FROM ____ TO ____ FT.

WELL DEVELOPMENT

- DEVELOPMENT METHOD: Surge and purge
- TIME DEVELOPING: 45 min ~~HOURS~~
- WATER REMOVED: 12 GALLONS
- WATER ADDED: 0 GALLONS

WATER CLARITY BEFORE / AFTER DEVELOPMENT

- CLARITY BEFORE: very turbid
- COLOR BEFORE: Brown
- CLARITY AFTER: Clear
- COLOR AFTER: clear
- ODOR (IF PRESENT): None

WATER LEVEL SUMMARY

MEASUREMENT (FEET)			DATE	TIME
DTB BEFORE DEVELOPING:	16.65	T/PVC	10/17/22	12.25
DTB AFTER DEVELOPING:	16.71	T/PVC	10/17/22	1307
SWE BEFORE DEVELOPING:	12.87	T/PVC	10/17/22	1225
SWE AFTER DEVELOPING:	13.06	T/PVC	10/17/22	1307
OTHER SWE:		T/PVC		
OTHER SWE:		T/PVC		

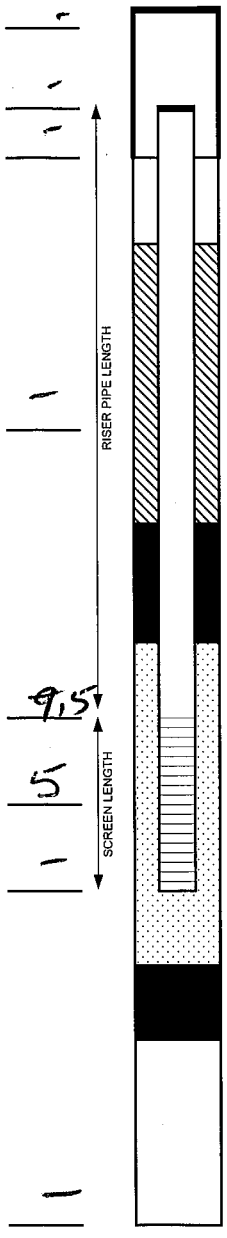
PROTECTIVE CASING DETAILS

- PERMANENT, LEGIBLE WELL LABEL ADDED? ☒ YES ☐ NO
- PROTECTIVE COVER AND ~~LOCK~~ INSTALLED? ☒ YES ☐ NO
- LOCK KEY NUMBER: NA

WELL CONSTRUCTION DIAGRAM

PROJ. NAME: DA-Eastern RCRA Assessment		WELL ID:	MW-22 -02
PROJ. NO: 495430.0000.0	DATE INSTALLED: 10.17.22	INSTALLED BY: Brian Yelen, Henry Schna	CHECKED BY: HS 11/7/22

ELEVATION (BENCHMARK: USGS)	DEPTH BELOW OR ABOVE GROUND SURFACE (FEET)



0.0 GROUND SURFACE

0.5 TOP OF CASING

0.5 CEMENT SURFACE PLUG

GROUT/BACKFILL MATERIAL: NA

GROUT/BACKFILL METHOD: NA

NA GROUT

BENTONITE SEAL MATERIAL: MED CHIPS

8 BENTONITE SEAL

9.5

10 TOP OF SCREEN

5

FILTER PACK MATERIAL: MED SAND

15 BOTTOM OF SCREEN

NA BOTTOM OF FILTER PACK

NA BENTONITE PLUG

BACKFILL MATERIAL: NA

15 HOLE BOTTOM

NOTES:

CASING AND SCREEN DETAILS

TYPE OF RISER: PVC

PIPE SCHEDULE: 40

PIPE JOINTS: ORING

SOLVENT USED? NO

SCREEN TYPE: PVC

SCR. SLOT SIZE: 10 SLOT

BOREHOLE DIAMETER: 8 IN. FROM 0 TO 15 FT.
___ IN. FROM ___ TO ___ FT.

SURF. CASING DIAMETER: ___ IN. FROM ___ TO ___ FT.
___ IN. FROM ___ TO ___ FT.

WELL DEVELOPMENT

DEVELOPMENT METHOD: Surge and purge

TIME DEVELOPING: 25 ~~HOURS~~ min

WATER REMOVED: 15 GALLONS

WATER ADDED: 0 GALLONS

WATER CLARITY BEFORE / AFTER DEVELOPMENT

CLARITY BEFORE: Very Turbid

COLOR BEFORE: Brown

CLARITY AFTER: Clear

COLOR AFTER: Clear

ODOR (IF PRESENT): None

WATER LEVEL SUMMARY

MEASUREMENT (FEET)			DATE	TIME
DTB BEFORE DEVELOPING:	14.80	T/PVC	10/17/22	1330
DTB AFTER DEVELOPING:	14.84	T/PVC	↓	1356
SWE BEFORE DEVELOPING:	10.36	T/PVC	↓	1330
SWE AFTER DEVELOPING:	11.24	T/PVC	↓	1356
OTHER SWE:		T/PVC		
OTHER SWE:		T/PVC		

PROTECTIVE CASING DETAILS

PERMANENT, LEGIBLE WELL LABEL ADDED? ☒ YES ☐ NO

PROTECTIVE COVER AND ~~LOCK~~ INSTALLED? ☒ YES ☐ NO

LOCK KEY NUMBER: NA

WELL CONSTRUCTION DIAGRAM

PROJ. NAME: DA-Eastern RCRA Assessment		WELL ID:	MW-22-03
PROJ. NO: 495430.0000.0	DATE INSTALLED: 10.18.22	INSTALLED BY: Brian Yelen, Henry Schna	CHECKED BY: HS 11/7/22

ELEVATION (BENCHMARK: USGS)	DEPTH BELOW OR ABOVE GROUND SURFACE (FEET)
	0.0 GROUND SURFACE
	0.5 TOP OF CASING
	1 CEMENT SURFACE PLUG
	GROUT/BACKFILL MATERIAL: NA
	GROUT/BACKFILL METHOD: NA
8.5	RISER PIPE LENGTH
	NA GROUT
	BENTONITE SEAL MATERIAL: MED CHIPS
	7 BENTONITE SEAL
	9 TOP OF SCREEN
5	SCREEN LENGTH
	FILTER PACK MATERIAL: MED SAND
	14 BOTTOM OF SCREEN
	NA BOTTOM OF FILTER PACK
	NA BENTONITE PLUG
	BACKFILL MATERIAL: NA
	14 HOLE BOTTOM

NOTES:

CASING AND SCREEN DETAILS

- TYPE OF RISER: PVC
- PIPE SCHEDULE: 40
- PIPE JOINTS: O-RING
- SOLVENT USED? NO
- SCREEN TYPE: PVC
- SCR. SLOT SIZE: 10 SLOT
- BOREHOLE DIAMETER: 8 IN. FROM 0 TO 14 FT.
  ____ IN. FROM ____ TO ____ FT.
- SURF. CASING DIAMETER: ____ IN. FROM ____ TO ____ FT.
  ____ IN. FROM ____ TO ____ FT.

WELL DEVELOPMENT

- DEVELOPMENT METHOD: Surge + purge
- TIME DEVELOPING: 30 ~~HOURS~~ min
- WATER REMOVED: 20 GALLONS
- WATER ADDED: 0 GALLONS

WATER CLARITY BEFORE / AFTER DEVELOPMENT

- CLARITY BEFORE: Very turbid
- COLOR BEFORE: Brown
- CLARITY AFTER: Slightly turbid
- COLOR AFTER: Mostly clear
- ODOR (IF PRESENT): None

WATER LEVEL SUMMARY

MEASUREMENT (FEET)			DATE	TIME
DTB BEFORE DEVELOPING:	13.82	T/PVC	10/18/22	1330
DTB AFTER DEVELOPING:	13.82	T/PVC	↓	1400
SWE BEFORE DEVELOPING:	7.54	T/PVC	↓	1330
SWE AFTER DEVELOPING:	7.71	T/PVC	↓	1400
OTHER SWE:		T/PVC		
OTHER SWE:		T/PVC		

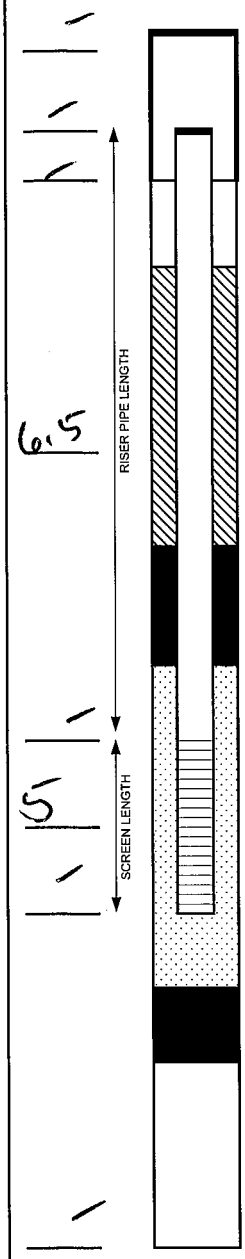
PROTECTIVE CASING DETAILS

- PERMANENT, LEGIBLE WELL LABEL ADDED? ☒ YES ☐ NO
- PROTECTIVE COVER AND ~~LOCK~~ INSTALLED? ☒ YES ☐ NO
- LOCK KEY NUMBER: NA

WELL CONSTRUCTION DIAGRAM

PROJ. NAME: DA-Eastern RCRA Assessment		WELL ID:	MW-22-01
PROJ. NO: 495430.0000.0	DATE INSTALLED: 10.19.22	INSTALLED BY: (Brian Yelen, Henry Schna	CHECKED BY: HS 11/7/22

ELEVATION (BENCHMARK: USGS)	DEPTH BELOW OR ABOVE GROUND SURFACE (FEET)



0.0 GROUND SURFACE

-0.5 TOP OF CASING

1 CEMENT SURFACE PLUG

GROUT/BACKFILL MATERIAL: NA

GROUT/BACKFILL METHOD: NA

6.5

NA GROUT

BENTONITE SEAL MATERIAL: MED CHIPS

5 BENTONITE SEAL

7 TOP OF SCREEN

FILTER PACK MATERIAL: MED SAND

5

12 BOTTOM OF SCREEN

NA BOTTOM OF FILTER PACK

NA BENTONITE PLUG

BACKFILL MATERIAL: NA

NA HOLE BOTTOM

NOTES:

CASING AND SCREEN DETAILS

TYPE OF RISER: PVC

PIPE SCHEDULE: 40

PIPE JOINTS: O-RING

SOLVENT USED? NO

SCREEN TYPE: PVC

SCR. SLOT SIZE: 10 SLOT

BOREHOLE DIAMETER: 8 IN. FROM 0 TO 12 FT.
____ IN. FROM ____ TO ____ FT.

SURF. CASING DIAMETER: ____ IN. FROM ____ TO ____ FT.
____ IN. FROM ____ TO ____ FT.

WELL DEVELOPMENT

DEVELOPMENT METHOD: Surge & purge

TIME DEVELOPING: 30 ~~HOURS~~ min

WATER REMOVED: 20 GALLONS

WATER ADDED: 0 GALLONS

WATER CLARITY BEFORE / AFTER DEVELOPMENT

CLARITY BEFORE: Turbid

COLOR BEFORE: Brown

CLARITY AFTER: Clear

COLOR AFTER: Clear

ODOR (IF PRESENT): None

WATER LEVEL SUMMARY

MEASUREMENT (FEET)			DATE	TIME
DTB BEFORE DEVELOPING:	11.69	T/PVC	10/19/22	1054
DTB AFTER DEVELOPING:	11.69	T/PVC	↓	1110
SWE BEFORE DEVELOPING:	6.39	T/PVC	↓	1054
SWE AFTER DEVELOPING:	6.59	T/PVC	↓	1109
OTHER SWE:		T/PVC		
OTHER SWE:		T/PVC		

PROTECTIVE CASING DETAILS

PERMANENT, LEGIBLE WELL LABEL ADDED? ☒ YES ☐ NO

PROTECTIVE COVER AND ~~LOCK~~ INSTALLED? ☒ YES ☐ NO

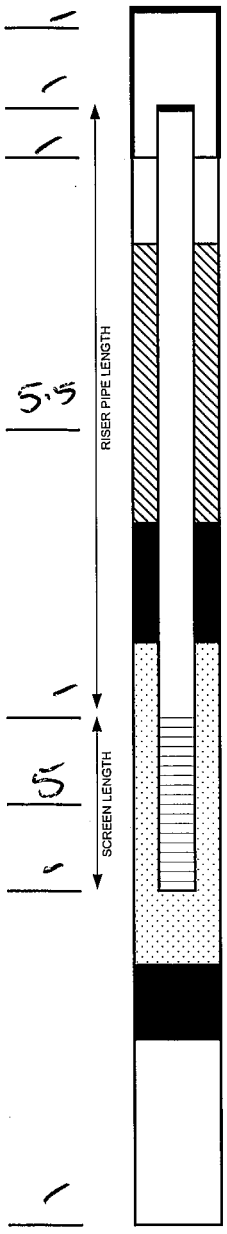
LOCK KEY NUMBER: NA

TRC

WELL CONSTRUCTION DIAGRAM

PROJ. NAME: DA-Eastern RCRA Assessment		WELL ID:	MW-22-05
PROJ. NO: 495430.0000.0	DATE INSTALLED: 10.19.22	INSTALLED BY: Brian Yelen, Henry Schna	CHECKED BY: HS 11/7/22

ELEVATION (BENCHMARK: USGS)	DEPTH BELOW OR ABOVE GROUND SURFACE (FEET)



0.0 GROUND SURFACE

0.5 TOP OF CASING

1 CEMENT SURFACE PLUG

GROUT/BACKFILL MATERIAL: NA

GROUT/BACKFILL METHOD: NA

5.5

NA GROUT

BENTONITE SEAL MATERIAL: MED CHIPS

4 BENTONITE SEAL

6 TOP OF SCREEN

5

FILTER PACK MATERIAL: MED SAND

11 BOTTOM OF SCREEN

NA BOTTOM OF FILTER PACK

NA BENTONITE PLUG

BACKFILL MATERIAL: NA

11 HOLE BOTTOM

NOTES:

CASING AND SCREEN DETAILS

TYPE OF RISER: PVC

PIPE SCHEDULE: 40

PIPE JOINTS: O-RING

SOLVENT USED? NO

SCREEN TYPE: PVC

SCR. SLOT SIZE: 10 SLOT

BOREHOLE DIAMETER: 8 IN. FROM 0 TO 11 FT.
____ IN. FROM ____ TO ____ FT.

SURF. CASING DIAMETER: ____ IN. FROM ____ TO ____ FT.
____ IN. FROM ____ TO ____ FT.

WELL DEVELOPMENT

DEVELOPMENT METHOD: (HS) Surge and purge

TIME DEVELOPING: 15 ~~30~~ HOURS non

WATER REMOVED: 7.5 GALLONS

WATER ADDED: 0 GALLONS

WATER CLARITY BEFORE / AFTER DEVELOPMENT

CLARITY BEFORE: Very turbid

COLOR BEFORE: Brown

CLARITY AFTER: Clear

COLOR AFTER: Clear

ODOR (IF PRESENT): ~~strong~~ moderate odor

(HS)

WATER LEVEL SUMMARY

MEASUREMENT (FEET)			DATE	TIME
DTB BEFORE DEVELOPING:	10.50	T/PVC	10/19/22	1242
DTB AFTER DEVELOPING:	10.53	T/PVC	↓	1315
SWE BEFORE DEVELOPING:	5.33	T/PVC		1242
SWE AFTER DEVELOPING:	6.22	T/PVC	↓	1315
OTHER SWE:		T/PVC		
OTHER SWE:		T/PVC		

PROTECTIVE CASING DETAILS

PERMANENT, LEGIBLE WELL LABEL ADDED? ☒ YES ☐ NO

PROTECTIVE COVER AND ~~LOCK~~ INSTALLED? ☒ YES ☐ NO

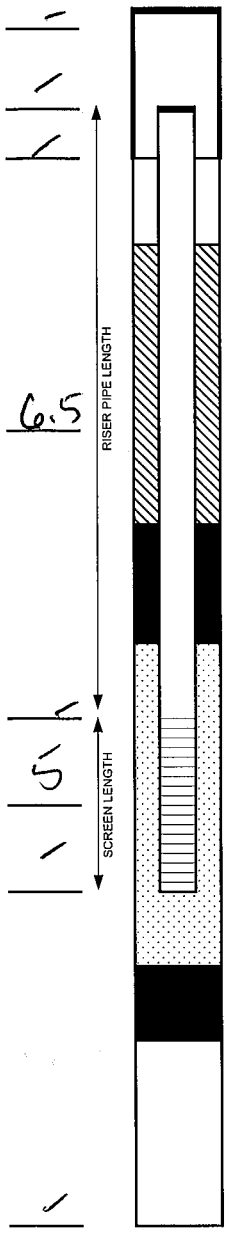
LOCK KEY NUMBER: NA

TRC

WELL CONSTRUCTION DIAGRAM

PROJ. NAME: DA-Eastern RCRA Assessment		WELL ID:	MW-22-06
PROJ. NO: 495430.0000.0	DATE INSTALLED: 10.19.22	INSTALLED BY: Brian Yelen, Henry Schna	CHECKED BY: HS 11/7/22

ELEVATION (BENCHMARK: USGS)	DEPTH BELOW OR ABOVE GROUND SURFACE (FEET)



0.0 GROUND SURFACE

0.5 TOP OF CASING

1 CEMENT SURFACE PLUG

GROUT/BACKFILL MATERIAL: NA

GROUT/BACKFILL METHOD: NA

6.5

NA GROUT

BENTONITE SEAL MATERIAL: MED CHIPS

5 BENTONITE SEAL

7 TOP OF SCREEN

5

FILTER PACK MATERIAL: MED SAND

12 BOTTOM OF SCREEN

NA BOTTOM OF FILTER PACK

NA BENTONITE PLUG

BACKFILL MATERIAL: NA

12 HOLE BOTTOM

NOTES:

CASING AND SCREEN DETAILS

TYPE OF RISER: PVC

PIPE SCHEDULE: 40

PIPE JOINTS: O-RING

SOLVENT USED? NO

SCREEN TYPE: PVC

SCR. SLOT SIZE: 10 SLOT

BOREHOLE DIAMETER: 8 IN. FROM 0 TO 12 FT.
___ IN. FROM ___ TO ___ FT.

SURF. CASING DIAMETER: ___ IN. FROM ___ TO ___ FT.
___ IN. FROM ___ TO ___ FT.

WELL DEVELOPMENT

DEVELOPMENT METHOD: ___

TIME DEVELOPING: 15 ~~HOURS~~ min

WATER REMOVED: 10 GALLONS

WATER ADDED: 0 GALLONS

WATER CLARITY BEFORE / AFTER DEVELOPMENT

CLARITY BEFORE: very turbid

COLOR BEFORE: Brown/gray

CLARITY AFTER: clear

COLOR AFTER: clear

ODOR (IF PRESENT): none

WATER LEVEL SUMMARY

MEASUREMENT (FEET)			DATE	TIME
DTB BEFORE DEVELOPING:	11.82	T/PVC	10/19/22	1454
DTB AFTER DEVELOPING:	11.82	T/PVC	↓	1514
SWE BEFORE DEVELOPING:	6.61	T/PVC	↓	1454
SWE AFTER DEVELOPING:	8.21	T/PVC	↓	1514
OTHER SWE:		T/PVC		
OTHER SWE:		T/PVC		

PROTECTIVE CASING DETAILS

PERMANENT, LEGIBLE WELL LABEL ADDED? ☒ YES ☐ NO

PROTECTIVE COVER AND ~~LOCK~~ INSTALLED? ☒ YES ☐ NO

LOCK KEY NUMBER: NA

TRC

WATER LEVEL DATA

+ 10/19/22 + 10/20/22

PROJECT NAME:	DA-Eastern RCRA Assessment	DATE:	10/18/22
PROJECT NUMBER:	495430.0000.0000	AUTHOR:	Brian Yelen, Henry Schnaidt

WELL LOCATION	TIME	REFERENCE	DEPTH TO WATER (FEET)	DEPTH TO BOTTOM (FEET)	DEPTH TO PRODUCT (FEET)	WATER ELEVATION	
MW-22-01	933	TOC	12.88	16.71	NM	NA	10/18
MW-22-02	1116	TOC	10.36	14.84	NM	NA	
MW-22-03	839	TOC	7.57	13.82	NM	NA	10/19
MW-22-04	1004	TOC	6.43	11.69	NM	NA	
MW-22-05	1112	TOC	5.27	10.53	NM	NA	10/20
MW-22-06	1230	TOC	6.61	11.82	NM	NA	

ALL WATER LEVELS MUST INCLUDE REFERENCE POINT AND TAPE CORRECTION FACTOR
(E.G., 1.1 + 0.00 T/PVC).

HJ 10/20/22

SIGNED DATE

CHECKED DATE

TRC

WATER SAMPLE LOG

PROJECT NAME: DA-Eastern RCRA Assessmen	PREPARED		CHECKED	
PROJECT NUMBER: 495430.0000.0000	BY: BY, HS	DATE: 10/18/22	BY: AW	DATE: 11/1/22

SAMPLE ID: MW-22-01 | WELL DIAMETER: ☑ 2" ☐ 4" ☐ 6" ☐ OTHER

WELL MATERIAL: ☑ PVC ☐ SS ☐ IRON ☐ GALVANIZED STEEL ☐ OTHER

SAMPLE TYPE: ☑ GW ☐ WW ☐ SW ☐ DI ☐ LEACHATE ☐ OTHER

PURGING	TIME: 945	DATE: 10/18/22	SAMPLE	TIME: 1017	DATE: 10/18/22

PURGE METHOD: ☑ PUMP peristaltic ☐ BAILER BAILER (DISPOSABLE)

DEPTH TO WATER: 12.88 T/ PVC

DEPTH TO BOTTOM: 16.71 T/ PVC

WELL VOLUME: NM ☐ LITERS ☐ GALLONS

VOLUME REMOVED: 6 ☒ LITERS ☐ GALLONS

COLOR: Clear ODOR: none

TURBIDITY ☐ NONE ☒ SLIGHT ☐ MODERATE ☐ VERY

DISPOSAL METHOD: ☐ GROUND ☑ DRUM ☐ OTHER

PH: 7.66 SU CONDUCTIVITY: 916 umhos/cm

ORP: 6.5 mV DO: 4.64 mg/L

TURBIDITY: 3.26 NTU

☐ NONE ☒ SLIGHT ☐ MODERATE ☐ VERY

TEMPERATURE: 17.6 °C OTHER: —

COLOR: Clear ODOR: none

FILTRATE (0.45 um) ☐ YES ☒ NO

FILTRATE COLOR: — FILTRATE ODOR: —

QC SAMPLE: ☐ MS/MSD ☒ DUP- 01

COMMENTS: ~~Peristaltic pump log (PFAS and metals)~~

TIME	PURGE RATE (ML/MIN)	PH (SU)	CONDUCTIVITY (umhos/cm)	ORP (mV)	D.O. (mg/L)	TURBIDITY (NTU)	TEMPERATURE (°C)	WATER LEVEL (FEET)	CUMULATIVE PURGE VOLUME (GAL OR L)
945	200	7.58	693	61.5	4.95	29.16	17.4	12.88	INITIAL
952	200	7.65	807	43.5	5.45	14.23	17.7	12.95	1
957	200	7.64	856	28.2	5.17	10.23	17.6	12.95	2
1002	200	7.64	878	20.9	4.97	8.61	17.6	12.95	3
1007	200	7.64	887	15.2	4.82	2.93	17.6	12.95	4
1012	200	7.65	898	10.8	4.26	1.79	17.7	12.95	5
1017	200	7.66	916	6.5	4.64	3.26	17.6	12.95	6

NOTE: STABILIZATION TEST IS COMPLETE WHEN 3 SUCCESSIVE READINGS ARE WITHIN THE FOLLOWING LIMITS:

pH: +/- **0.1** COND.: +/- **3%** ORP: +/- **10** D.O.: +/- **10 %** TURB: +/- **10 %** or </= **5** TEMP.: +/- **0.3°C**

BOTTLES FILLED — PRESERVATIVE CODES A - NONE B - HNO3 C - H2SO4 D - NaOH E - HCL F - _____

NUMBER	SIZE	TYPE	PRESERVATIVE	FILTERED	NUMBER	SIZE	TYPE	PRESERVATIVE	FILTERED
3	15 mL	PLASTIC	A	☐ Y ☑ N					☐ Y ☐ N
1	125 mL	PLASTIC	B	☐ Y ☑ N					☐ Y ☐ N
3	40	VOA	A	☐ Y ☒ N					☐ Y ☐ N
3	40	VOA	E	☐ Y ☒ N					☐ Y ☐ N
				☐ Y ☐ N					☐ Y ☐ N

SHIPPING METHOD: Courier	DATE SHIPPED: 10/21/22	AIRBILL NUMBER: —
COC NUMBER: —	SIGNATURE: HS	DATE SIGNED: 10/18/22

TRC

WATER SAMPLE LOG

PROJECT NAME:	DA-Eastern RCRA Assessmen	PREPARED		CHECKED	
PROJECT NUMBER:	495430.0000.0000	BY: BY, HS	DATE: 10/18/22	BY: AW	DATE: 11/1/22

SAMPLE ID: MW-22-02 | WELL DIAMETER: ☑ 2" ☐ 4" ☐ 6" ☐ OTHER

WELL MATERIAL: ☑ PVC ☐ SS ☐ IRON ☐ GALVANIZED STEEL ☐ OTHER

SAMPLE TYPE: ☑ GW ☐ WW ☐ SW ☐ DI ☐ LEACHATE ☐ OTHER

PURGING	TIME: 1120	DATE: 10/18/22	SAMPLE	TIME: 1205	DATE: 10/18/22
PURGE METHOD: ☑ PUMP peristaltic ☐ BAILER BAILER (DISPOSABLE)			PH: 7.27 SU	CONDUCTIVITY: 1081 umhos/cm	
			ORP: 6.8 mV	DO: 3.73 mg/L	
DEPTH TO WATER: 10.36 T/ PVC			TURBIDITY: 0.17 NTU		
DEPTH TO BOTTOM: 14.84 T/ PVC			☒ NONE ☐ SLIGHT ☐ MODERATE ☐ VERY		
WELL VOLUME: NM ☐ LITERS ☐ GALLONS			TEMPERATURE: 17.7 °C	OTHER: —	
VOLUME REMOVED: 9 ☒ LITERS ☐ GALLONS			COLOR: clear	ODOR: none	
COLOR: clear ODOR: none			FILTRATE (0.45 um) ☐ YES ☒ NO		
TURBIDITY ☐ NONE ☒ SLIGHT ☐ MODERATE ☐ VERY			FILTRATE COLOR: —	FILTRATE ODOR: —	
			QC SAMPLE: ☐ MS/MSD	☐ DUP- —	
DISPOSAL METHOD: ☐ GROUND ☑ DRUM ☐ OTHER			COMMENTS: ~~Peristaltic pump log (PFAS and metals)~~		

TIME	PURGE RATE (ML/MIN)	PH (SU)	CONDUCTIVITY (umhos/cm)	ORP (mV)	D.O. (mg/L)	TURBIDITY (NTU)	TEMPERATURE (°C)	WATER LEVEL (FEET)	CUMULATIVE PURGE VOLUME (GAL OR L)
1120	200	7.22	1117	64.9	5.71	10.19	17.3	10.36	INITIAL
1125	200	7.20	1136	56.3	5.33	6.34	17.5	10.52	1
1130	200	7.21	1138	48.7	5.00	4.05	17.6	10.54	2
1135	200	7.22	1143	43.2	4.77	0.59	17.6	10.55	3
1140	200	7.23	1146	35.5	4.49	0.64	17.7	10.55	4
1145	200	7.23	1132	29.2	4.32	1.05	17.6	10.55	5
1150	200	7.24	1126	22.9	4.11	1.14	17.5	10.55	6
1155	200	7.25	1114	15.3	3.87	0.66	17.5	10.55	7
1200	200	7.27	1081	8.9	3.76	0.15	17.6	10.55	8
1205	200	7.27	1081	6.8	3.73	0.17	17.7	10.55	9

NOTE: STABILIZATION TEST IS COMPLETE WHEN 3 SUCCESSIVE READINGS ARE WITHIN THE FOLLOWING LIMITS:

pH: +/- 0.1 COND.: +/- 3% ORP: +/- 10 D.O.: +/- 10 % TURB: +/- 10 % or </= 5 TEMP.: +/- 0.3°C

BOTTLES FILLED — PRESERVATIVE CODES A - NONE B - HNO3 C - H2SO4 D - NaOH E - HCL F - _____

NUMBER	SIZE	TYPE	PRESERVATIVE	FILTERED	NUMBER	SIZE	TYPE	PRESERVATIVE	FILTERED
3	15 mL	PLASTIC	A	☐ Y ☑ N					☐ Y ☐ N
1	125 mL	PLASTIC	B	☐ Y ☑ N					☐ Y ☐ N
3	40	VOA	A	☐ Y ☒ N					☐ Y ☐ N
3	40	VOA	E	☐ Y ☒ N					☐ Y ☐ N
				☐ Y ☒ N					☐ Y ☐ N

SHIPPING METHOD:	Courier	DATE SHIPPED:	10/21/22	AIRBILL NUMBER:	—
COC NUMBER:	—	SIGNATURE:	HS	DATE SIGNED:	10/18/22

TRC

WATER SAMPLE LOG

PROJECT NAME: DA-Eastern RCRA Assessmen	PREPARED	CHECKED
PROJECT NUMBER: 495430.0000.0000	BY: BY, (HS) DATE: 10/18/22	BY: AW DATE: 11/1/22

SAMPLE ID: MW-22-03 WELL DIAMETER: ☑ 2" ☐ 4" ☐ 6" ☐ OTHER

WELL MATERIAL: ☑ PVC ☐ SS ☐ IRON ☐ GALVANIZED STEEL ☐ OTHER

SAMPLE TYPE: ☑ GW ☐ WW ☐ SW ☐ DI ☐ LEACHATE ☐ OTHER

PURGING	TIME: 853	DATE: 10/19/22

PURGE METHOD: ☑ PUMP peristaltic ☐ BAILER ☐ BAILER (DISPOSABLE)

DEPTH TO WATER: 7.57 T/ PVC

DEPTH TO BOTTOM: 13.82 T/ PVC

WELL VOLUME: N/A ☐ LITERS ☐ GALLONS

VOLUME REMOVED: 6 ☒ LITERS ☐ GALLONS

COLOR: Gray ODOR: none

TURBIDITY ☐ NONE ☐ SLIGHT ☒ MODERATE ☐ VERY

DISPOSAL METHOD: ☐ GROUND ☑ DRUM ☐ OTHER

SAMPLE	TIME: 926	DATE: 10/19/22

PH: 7.35 SU CONDUCTIVITY: 643 umhos/cm

ORP: -0.6 mV DO: 3.02 mg/L

TURBIDITY: 2.48 NTU

☐ NONE ☐ SLIGHT ☐ MODERATE ☐ VERY

TEMPERATURE: 17.7 °C OTHER: —

COLOR: Clear ODOR: none

FILTRATE (0.45 um) ☐ YES ☒ NO

FILTRATE COLOR: — FILTRATE ODOR: —

QC SAMPLE: ☐ MS/MSD ☐ DUP- —

COMMENTS: ~~Peristaltic pump log (PFAS and metals)~~

TIME	PURGE RATE (ML/MIN)	PH (SU)	CONDUCTIVITY (umhos/cm)	ORP (mV)	D.O. (mg/L)	TURBIDITY (NTU)	TEMPERATURE (°C)	WATER LEVEL (FEET)	CUMULATIVE PURGE VOLUME (GAL OR L)
853	200	7.24	637	95.7	3.71	28.11	17.6	7.57	INITIAL
858	200	7.29	641	42.5	3.50	13.34	17.9	7.64	1
903	200	7.32	643	25.9	3.30	8.00	18.0	7.65	2
908	200	7.33	645	13.4	3.16	2.09	17.9	7.65	3
915	200	7.34	647	6.8	3.14	1.38	18.0	7.65	4
920	200	7.34	648	1.9	3.05	2.10	17.8	7.65	5
926	200	7.35	643	-0.6	3.02	2.48	17.7	7.65	6

NOTE: STABILIZATION TEST IS COMPLETE WHEN 3 SUCCESSIVE READINGS ARE WITHIN THE FOLLOWING LIMITS:

pH: +/- **0.1** COND.: +/- **3%** ORP: +/- **10** D.O.: +/- **10 %** TURB: +/- **10 %** or </= **5** TEMP.: +/- **0.3°C**

BOTTLES FILLED — PRESERVATIVE CODES A - NONE B - HNO3 C - H2SO4 D - NaOH E - HCL F - _____

NUMBER	SIZE	TYPE	PRESERVATIVE	FILTERED	NUMBER	SIZE	TYPE	PRESERVATIVE	FILTERED
3	15 mL	PLASTIC	A	☐ Y ☑ N					☐ Y ☐ N
1	125 mL	PLASTIC	B	☐ Y ☑ N					☐ Y ☐ N
3	40	VOA	A	☐ Y ☒ N					☐ Y ☐ N
3	40	VOA	E	☐ Y ☒ N					☐ Y ☐ N
				☐ Y ☐ N					☐ Y ☐ N

SHIPPING METHOD: Courier	DATE SHIPPED: 10/21/22	AIRBILL NUMBER: —
COC NUMBER: —	SIGNATURE: HS	DATE SIGNED: 10/19/22

WATER SAMPLE LOG

PROJECT NAME:	DA-Eastern RCRA Assessmen	PREPARED		CHECKED	
PROJECT NUMBER:	495430.0000.0000	BY: BY (HS)	DATE: 10/20/22	BY: AW	DATE: 11/1/22

SAMPLE ID: MW-22-04 | WELL DIAMETER: ☑ 2" ☐ 4" ☐ 6" ☐ OTHER

WELL MATERIAL: ☑ PVC ☐ SS ☐ IRON ☐ GALVANIZED STEEL ☐ OTHER

SAMPLE TYPE: ☑ GW ☐ WW ☐ SW ☐ DI ☐ LEACHATE ☐ OTHER

PURGING	TIME: 1018	DATE: 10/20/22	SAMPLE	TIME: 1043	DATE: 10/20/22
PURGE METHOD: ☑ PUMP peristaltic ☐ BAILER ☐ BAILER (DISPOSABLE)			PH: 7.49 SU	CONDUCTIVITY: 527 umhos/cm	
			ORP: -36.0 mV	DO: 3.18 mg/L	
DEPTH TO WATER: 6.43 T/ PVC			TURBIDITY: 4.46 NTU		
DEPTH TO BOTTOM: 11.69 T/ PVC			☐ NONE ☒ SLIGHT ☐ MODERATE ☐ VERY		
WELL VOLUME: NM ☐ LITERS ☐ GALLONS			TEMPERATURE: 17.0 °C	OTHER: —	
VOLUME REMOVED: 5 ☒ LITERS ☐ GALLONS			COLOR: clear	ODOR: none	
COLOR: clear ODOR: none			FILTRATE (0.45 um) ☐ YES ☒ NO		
TURBIDITY ☐ NONE ☒ SLIGHT ☐ MODERATE ☐ VERY			FILTRATE COLOR: —	FILTRATE ODOR: —	
			QC SAMPLE: ☐ MS/MSD	☐ DUP- —	
DISPOSAL METHOD: ☐ GROUND ☑ DRUM ☐ OTHER			COMMENTS: ~~Peristaltic pump log (PFAS and metals)~~		

TIME	PURGE RATE (ML/MIN)	PH (SU)	CONDUCTIVITY (umhos/cm)	ORP (mV)	D.O. (mg/L)	TURBIDITY (NTU)	TEMPERATURE (°C)	WATER LEVEL (FEET)	CUMULATIVE PURGE VOLUME (GAL OR L)
1018	200	7.42	564	-31.5	2.21	16.15	16.8	6.43	INITIAL
1023	200	7.44	561	-36.9	2.49	10.16	16.9	6.51	1
1028	200	7.46	552	-41.9	2.69	1.89	16.8	6.52	2
1033	200	7.47	540	-36.8	2.95	2.79	16.9	6.53	3
1038	200	7.48	532	-34.9	3.14	3.68	16.9	6.53	4
1043	200	7.49	527	-36.0	3.18	4.46	17.0	6.53	5

NOTE: STABILIZATION TEST IS COMPLETE WHEN 3 SUCCESSIVE READINGS ARE WITHIN THE FOLLOWING LIMITS:

pH: +/- **0.1** COND.: +/- **3%** ORP: +/- **10** D.O.: +/- **10 %** TURB: +/- **10 %** or </= **5** TEMP.: +/- **0.3°C**

BOTTLES FILLED — PRESERVATIVE CODES A - NONE B - HNO3 C - H2SO4 D - NaOH E - HCL F - _____

NUMBER	SIZE	TYPE	PRESERVATIVE	FILTERED	NUMBER	SIZE	TYPE	PRESERVATIVE	FILTERED
3	15 mL	PLASTIC	A	☐ Y ☑ N					☐ Y ☐ N
1	125 mL	PLASTIC	B	☐ Y ☑ N					☐ Y ☐ N
3	40	VOA	A	☐ Y ☒ N					☐ Y ☐ N
3	40	VOA	E	☐ Y ☒ N					☐ Y ☐ N
				☐ Y ☐ N					☐ Y ☐ N

SHIPPING METHOD:	Courier	DATE SHIPPED:	10/21/22	AIRBILL NUMBER:	—
COC NUMBER:	—	SIGNATURE:	HS	DATE SIGNED:	10/20/22

TRC WATER SAMPLE LOG

PROJECT NAME: DA-Eastern RCRA Assessmen	PREPARED		CHECKED	
PROJECT NUMBER: 495430.0000.0000	BY: BY, HS	DATE: 10/20/22	BY: AW	DATE: 11/1/22

SAMPLE ID: MW-22-05 | WELL DIAMETER: ☑ 2" ☐ 4" ☐ 6" ☐ OTHER

WELL MATERIAL: ☑ PVC ☐ SS ☐ IRON ☐ GALVANIZED STEEL ☐ OTHER

SAMPLE TYPE: ☑ GW ☐ WW ☐ SW ☐ DI ☐ LEACHATE ☐ OTHER

PURGING	TIME: 1128	DATE: 10/20/22
PURGE METHOD: ☑ PUMP peristaltic ☐ BAILER ☐ BAILER (DISPOSABLE)		
DEPTH TO WATER: 5.27 T/ PVC		
DEPTH TO BOTTOM: 10.53 T/ PVC		
WELL VOLUME: NM ☐ LITERS ☐ GALLONS		
VOLUME REMOVED: 6 ☒ LITERS ☐ GALLONS		
COLOR: Clear	ODOR: Slight	
TURBIDITY ☐ NONE ☒ SLIGHT ☐ MODERATE ☐ VERY		
DISPOSAL METHOD: ☐ GROUND ☑ DRUM ☐ OTHER		

SAMPLE	TIME: 1159	DATE: 10/20/22
PH: 7.32 SU	CONDUCTIVITY: 887 umhos/cm	
ORP: -146.0 mV	DO: 2.25 mg/L	
TURBIDITY: 2.06 NTU		
☐ NONE ☒ SLIGHT ☐ MODERATE ☐ VERY		
TEMPERATURE: 18.4 °C	OTHER: —	
COLOR: Clear	ODOR: Moderate	
FILTRATE (0.45 um) ☐ YES ☒ NO		
FILTRATE COLOR: —	FILTRATE ODOR: —	
QC SAMPLE: ☐ MS/MSD ☐ DUP- —		
COMMENTS: ~~Peristaltic pump log (PFAS and metals)~~		

TIME	PURGE RATE (ML/MIN)	PH (SU)	CONDUCTIVITY (umhos/cm)	ORP (mV)	D.O. (mg/L)	TURBIDITY (NTU)	TEMPERATURE (°C)	WATER LEVEL (FEET)	CUMULATIVE PURGE VOLUME (GAL OR L)
1128	200	7.29	900	-70.6	2.61	2.01	18.6	5.27	INITIAL
1133	200	7.30	899	-106.6	2.50	4.87	18.6	5.57	1
1138	200	7.30	899	-116.5	2.56	4.74	18.6	5.58	2
1143	200	7.31	896	-131.5	2.20	4.92	18.6	5.58	3
1149	200	7.31	896	-137.6	2.28	2.34	18.7	5.58	4
1154	200	7.32	895	-142.4	2.34	2.01	18.5	5.58	5
1159	200	7.32	887	-146.0	2.25	2.06	18.4	5.58	6

NOTE: STABILIZATION TEST IS COMPLETE WHEN 3 SUCCESSIVE READINGS ARE WITHIN THE FOLLOWING LIMITS:

pH: +/- **0.1** COND.: +/- **3%** ORP: +/- **10** D.O.: +/- **10 %** TURB: +/- **10 %** or </= **5** TEMP.: +/- **0.3°C**

BOTTLES FILLED — PRESERVATIVE CODES A - NONE B - HNO3 C - H2SO4 D - NaOH E - HCL F - ____

NUMBER	SIZE	TYPE	PRESERVATIVE	FILTERED	NUMBER	SIZE	TYPE	PRESERVATIVE	FILTERED
3	15 mL	PLASTIC	A	☐ Y ☑ N					☐ Y ☐ N
1	125 mL	PLASTIC	B	☐ Y ☑ N					☐ Y ☐ N
3	40	VOA	A	☐ Y ☒ N					☐ Y ☐ N
3	40	VOA	B	☐ Y ☒ N					☐ Y ☐ N
				☐ Y ☐ N					☐ Y ☐ N

SHIPPING METHOD: courier	DATE SHIPPED: 10/21/22	AIRBILL NUMBER: —
COC NUMBER: —	SIGNATURE: [signature]	DATE SIGNED: 10/21/22

WATER SAMPLE LOG

PROJECT NAME: DA-Eastern RCRA Assessmen	PREPARED		CHECKED	
PROJECT NUMBER: 495430.0000.0000	BY: BY, HS	DATE: 10/20/22	BY: AW	DATE: 10/1/22

SAMPLE ID: MW-22-06 | WELL DIAMETER: ☑ 2" ☐ 4" ☐ 6" ☐ OTHER

WELL MATERIAL: ☑ PVC ☐ SS ☐ IRON ☐ GALVANIZED STEEL ☐ OTHER

SAMPLE TYPE: ☑ GW ☐ WW ☐ SW ☐ DI ☐ LEACHATE ☐ OTHER

PURGING	TIME: 1242	DATE: 10/20/22	SAMPLE	TIME: 1258	DATE: 10/20/22
PURGE METHOD: ☑ PUMP peristaltic ☐ BAILER ☐ BAILER (DISPOSABLE)			PH: 7.24 SU	CONDUCTIVITY: 868 umhos/cm	
			ORP: 32.3 mV	DO: 5.27 mg/L	
DEPTH TO WATER: 6.61 T/ PVC			TURBIDITY: 0.02 NTU		
DEPTH TO BOTTOM: 11.82 T/ PVC			☑ NONE ☐ SLIGHT ☐ MODERATE ☐ VERY		
WELL VOLUME: NM ☐ LITERS ☐ GALLONS			TEMPERATURE: 17.8 °C	OTHER: —	
VOLUME REMOVED: 3 ☑ LITERS ☐ GALLONS			COLOR: clear	ODOR: none	
COLOR: clear	ODOR: none		FILTRATE (0.45 um) ☐ YES ☒ NO		
TURBIDITY ☐ NONE ☒ SLIGHT ☐ MODERATE ☐ VERY			FILTRATE COLOR: —	FILTRATE ODOR: —	
			QC SAMPLE: ☐ MS/MSD	☐ DUP- —	
DISPOSAL METHOD: ☐ GROUND ☑ DRUM ☐ OTHER			COMMENTS: ~~Peristaltic pump log (PFAS and metals)~~		

TIME	PURGE RATE (ML/MIN)	PH (SU)	CONDUCTIVITY (umhos/cm)	ORP (mV)	D.O. (mg/L)	TURBIDITY (NTU)	TEMPERATURE (°C)	WATER LEVEL (FEET)	CUMULATIVE PURGE VOLUME (GAL OR L)
1242	200	7.26	900	45.6	5.30	4.18	17.9	6.61	INITIAL
1247	200	7.25	892	41.6	5.25	2.12	17.8	6.79	1
1253	200	7.25	880	37.2	5.29	0.11	17.8	6.79	2
1258	200	7.24	868	32.3	5.27	0.02	17.8	6.79	3

NOTE: STABILIZATION TEST IS COMPLETE WHEN 3 SUCCESSIVE READINGS ARE WITHIN THE FOLLOWING LIMITS:

pH: +/- **0.1** COND.: +/- **3%** ORP: +/- **10** D.O.: +/- **10 %** TURB: +/- **10 %** or </= **5** TEMP.: +/- **0.3°C**

BOTTLES FILLED — PRESERVATIVE CODES A - NONE B - HNO3 C - H2SO4 D - NaOH E - HCL F - _____

NUMBER	SIZE	TYPE	PRESERVATIVE	FILTERED	NUMBER	SIZE	TYPE	PRESERVATIVE	FILTERED
3	15 mL	PLASTIC	A	☐ Y ☑ N					☐ Y ☐ N
1	125 mL	PLASTIC	B	☐ Y ☑ N					☐ Y ☐ N
3	40	VOA	A	☐ Y ☒ N					☐ Y ☐ N
3	40	VOA	E	☐ Y ☒ N					☐ Y ☐ N
				☐ Y ☐ N					☐ Y ☐ N

SHIPPING METHOD: Courier	DATE SHIPPED: 10/21/22	AIRBILL NUMBER: —
COC NUMBER: —	SIGNATURE: HS	DATE SIGNED: 10/20/22

2680 East Lansing Dr., East Lansing, MI 48823
Phone (517) 332-0167 Fax (517) 332-4034
www.meritlabs.com

C.O.C. PAGE # 1 OF 1 154860

CHAIN OF CUSTODY RECORD

REPORT TO

CONTACT NAME: Kelly Cadsenburg
COMPANY: TRC
ADDRESS: 1540 Eisenhower Place
CITY: Ann Arbor STATE: MI ZIP CODE: 48108
PHONE NO.: CELL NO.: P.O. NO.: 129445
E-MAIL ADDRESS: Kcadsenburg@trccompanies.com QUOTE NO.:

INVOICE TO

☐ SAME
CONTACT NAME:
COMPANY:
ADDRESS:
CITY: STATE: ZIP CODE:
PHONE NO.: E-MAIL ADDRESS:

PROJECT NO./NAME: 49_430.0000.0000/Detroit Arr EBEW
SAMPLER(S) - PLEASE PRINT/SIGN NAME: Henry Schmidt

TURNAROUND TIME REQUIRED ☐ 1 DAY ☐ 2 DAYS ☐ 3 DAYS ☒ STANDARD ☐ OTHER

DELIVERABLES REQUIRED ☐ STD ☐ LEVEL II ☐ LEVEL III ☐ LEVEL IV ☐ EDD ☒ OTHER TRC EDD

MATRIX CODE: W=WATER GW=GROUNDWATER WW=WASTEWATER S=SOIL L=LIQUID SD=SOLID SL=SLUDGE DW=DRINKING WATER O=OIL WP=WIPE A=AIR WS=WASTE

ANALYSIS (ATTACH LIST IF MORE SPACE IS REQUIRED)

MERIT LAB NO. (FOR LAB USE ONLY)	COLLECTION DATE	COLLECTION TIME	SAMPLE TAG IDENTIFICATION-DESCRIPTION	MATRIX	# OF BOTTLES	NONE	HCl	HNO_3	H_2SO_4	NaOH	MeOH	OTHER	Full List Part 201 Metals	Full List Part 201 VOCs	Methanol
	10/18/22	1017	MW-22-01	GW	7	3	3	1					X	X	X
	10/18/22	1205	MW-22-02	GW	7	3	3	1					X	X	X
	10/19/22	926	MW-22-03	GW	7	3	3	1					X	X	X
	10/20/22	1040	MW-22-04	GW	7	3	3	1					X	X	X
	10/20/22	1159	MW-22-05	GW	7	3	3	1					X	X	X
	10/20/22	1258	MW-22-06	GW	7	3	3	1					X	X	X
	10/19/22	—	Dup-01	GW	7	3	3	1					X	X	X

Certifications
☐ OHIO VAP ☐ Drinking Water
☐ DoD ☐ NPDES

Project Locations
☐ Detroit ☐ New York
☐ Other

Special Instructions

RELINQUISHED BY: SIGNATURE/ORGANIZATION: Henry Schmidt ☒ Sampler	DATE 10/20/22	TIME 1600
RECEIVED BY: SIGNATURE/ORGANIZATION: [signature]	DATE 10/21/22	TIME 800
RELINQUISHED BY: SIGNATURE/ORGANIZATION	DATE	TIME
RECEIVED BY: SIGNATURE/ORGANIZATION	DATE	TIME
RELINQUISHED BY: SIGNATURE/ORGANIZATION	DATE	TIME
RECEIVED BY: SIGNATURE/ORGANIZATION	DATE	TIME

SEAL NO. SEAL INTACT YES ☐ NO ☐ INITIALS
SEAL NO. SEAL INTACT YES ☐ NO ☐ INITIALS
NOTES: TEMP. ON ARRIVAL

2680 East Lansing Dr., East Lansing, MI 48823
Phone (517) 332-0167 Fax (517) 332-4034
www.meritlabs.com

C.O.C. PAGE # 1 OF 1 154861

CHAIN OF CUSTODY RECORD

REPORT TO

CONTACT NAME: Kelli Cutsenberg
COMPANY: TRC
ADDRESS: 1540 Eisenhower Place
CITY: Ann Arbor STATE: MI ZIP CODE: 48108
PHONE NO.: CELL NO.: P.O. NO.: 189445
E-MAIL ADDRESS: Kcutsenberg@trccompanies.com QUOTE NO.:

INVOICE TO

☐ SAME
CONTACT NAME:
COMPANY:
ADDRESS:
CITY: STATE: ZIP CODE:
PHONE NO.: E-MAIL ADDRESS:

PROJECT NO./NAME: U05430.0000.0000 / Detroit Axle EB GW
SAMPLER(S) - PLEASE PRINT/SIGN NAME: Henry Schmidt

TURNAROUND TIME REQUIRED ☐ 1 DAY ☐ 2 DAYS ☐ 3 DAYS ☒ STANDARD ☐ OTHER

DELIVERABLES REQUIRED ☐ STD ☐ LEVEL II ☐ LEVEL III ☐ LEVEL IV ☐ EDD ☒ OTHER TRC EDD

MATRIX CODE: W=WATER GW=GROUNDWATER WW=WASTEWATER S=SOIL L=LIQUID SD=SOLID SL=SLUDGE DW=DRINKING WATER O=OIL WP=WIPE A=AIR WS=WASTE

ANALYSIS (ATTACH LIST IF MORE SPACE IS REQUIRED)

MERIT LAB NO. (FOR LAB USE ONLY)	COLLECTION DATE	COLLECTION TIME	SAMPLE TAG IDENTIFICATION-DESCRIPTION	MATRIX	# OF BOTTLES	NONE	HCl	HNO_3	H_2SO_4	NaOH	MeOH	OTHER	31 PFAS
	10/18/22	1017	MW-22-01	GW	3	3							X
	10/19/22	1205	MW-22-02	GW	3	3							X
	10/19/22	926	MW-22-03	GW	3	3							X
	10/20/22	1043	MW-22-04	GW	3	3							X
	10/20/22	1139	MW-22-05	GW	3	3							X
	10/20/22	1258	MW-22-06	GW	3	3							X
	10/18/22	—	DUP-01	GW	3	3							X
	10/19/22	1008	EB-01	W	3	3							X
	10/18/22	1009	FB-01	W	1	1							X

Certifications
☐ OHIO VAP ☐ Drinking Water
☐ DoD ☐ NPDES

Project Locations
☐ Detroit ☐ New York
☐ Other

Special Instructions

RELINQUISHED BY: SIGNATURE/ORGANIZATION: Henry Schmidt ☒ Sampler DATE 10/20/22 TIME 1600
RECEIVED BY: SIGNATURE/ORGANIZATION: [signature] DATE 10/21/22 TIME 800
RELINQUISHED BY: SIGNATURE/ORGANIZATION: DATE TIME
RECEIVED BY: SIGNATURE/ORGANIZATION: DATE TIME

RELINQUISHED BY: SIGNATURE/ORGANIZATION: DATE TIME
RECEIVED BY: SIGNATURE/ORGANIZATION: DATE TIME

SEAL NO. SEAL INTACT YES ☐ NO ☐ INITIALS
SEAL NO. SEAL INTACT YES ☐ NO ☐ INITIALS
NOTES: TEMP. ON ARRIVAL

HS 10/21/22

Pg 34 of 34

PLEASE NOTE: SIGNING ACKNOWLEDGES ADHERENCE TO MERIT'S SAMPLE ACCEPTANCE POLICY ON REVERSE SIDE

Rev. 1.26.22

TRC

PROJECT NAME:	Eastern DA ~~Southerin~~ Investigation
PROJECT NUMBER:	495430.0000
PROJECT MANAGER:	Kelly Cratsenburg
SITE LOCATION:	1600 West 8 Mile Road Ferndale, MI 48167
DATES OF FIELDWORK:	12/12/022 TO 12/23/2022
PURPOSE OF FIELDWORK:	Groundwater Sampling
WORK PERFORMED BY:	A Whaley, J Jasso

SIGNED DATE 12/16/22

CHECKED BY DATE 12.23.22

TRC

GENERAL NOTES

PROJECT NAME: DA ~~Southern~~ East Investigation	DATE: 12.12.22	TIME ARRIVED: 0830
PROJECT NUMBER: 495430.0002	AUTHOR: AW, JJ	TIME LEFT: 1630

WEATHER		
TEMPERATURE: 35 °F	WIND: 0-5 MPH	VISIBILITY: Overcast

WORK / SAMPLING PERFORMED

Water levels Eastern Boundary, Southern boundary and adjacent

Meet w/ Brian / Henry and job site @ 0900

Calibrate Meter 1230 to begin sampling EB
Sampled MW-104, MW-22-01, MW-22-02, MW-22-03 Dup-01W

PROBLEMS ENCOUNTERED	CORRECTIVE ACTION TAKEN
Old wells ~~Covers~~ filled with water and soil, removed before collecting water level.	

COMMUNICATION

NAME	REPRESENTING	SUBJECT / COMMENTS
Kelly Cratsenburg	TRC	Check in/out, Updates

INVESTIGATION DERIVED WASTE SUMMARY

WASTE MATRIX	QUANTITY	COMMENTS
GW	NM	Purge to ground

Caitlin White 12.21.22
SIGNED DATE

David Dixon 12-29-22
CHECKED BY DATE

TRC

GENERAL NOTES

PROJECT NAME: DA ~~Southern Investigation~~ East	DATE: 12/14/22	TIME ARRIVED: 0700
PROJECT NUMBER: 495430.0008	AUTHOR: AW, JJ	TIME LEFT: 1515

WEATHER		
TEMPERATURE: 32 °F	WIND: 15 MPH	VISIBILITY: Overcast

WORK / SAMPLING PERFORMED
Wells Sampled
~~MW-16~~ Dup #3, 119, 120, 112, 111, 110, 109, 108

PROBLEMS ENCOUNTERED	CORRECTIVE ACTION TAKEN

COMMUNICATION		
NAME	REPRESENTING	SUBJECT / COMMENTS
Kelly Cratsenburg	TRC	Check in/out, Updates

INVESTIGATION DERIVED WASTE SUMMARY		
WASTE MATRIX	QUANTITY	COMMENTS
GW	NM	Purge to ground

SIGNED 12/16/22 DATE

CHECKED BY AW 12.23.22 DATE

TRC

GENERAL NOTES

PROJECT NAME: DA ~~Southern~~ East Investigation	DATE: 12/15/22	TIME ARRIVED: 0830
PROJECT NUMBER: 495430.0000	AUTHOR: AW, JJ	TIME LEFT: 1430

WEATHER		
TEMPERATURE: 37 °F	WIND: 15 MPH	VISIBILITY: Overcast + Rain

WORK / SAMPLING PERFORMED

Wells Sampled = MW-107, 100, 121, 113, 2204, 2204T, 22-04

PROBLEMS ENCOUNTERED	CORRECTIVE ACTION TAKEN

COMMUNICATION

NAME	REPRESENTING	SUBJECT / COMMENTS
Kelly Cratsenburg	TRC	Check in/out, Updates

INVESTIGATION DERIVED WASTE SUMMARY

WASTE MATRIX	QUANTITY	COMMENTS
GW	NM	Purge to ground

SIGNED 12/16/22 DATE

CHECKED BY AW 12.22.22 DATE

TRC

EQUIPMENT SUMMARY

PROJECT NAME:	DA ~~Southern~~ East Investigation	SAMPLER NAME:	A Whaley, J Jasso
PROJECT NO.:	495430.0007		

WATER LEVEL MEASUREMENTS COLLECTED WITH:

HERON DIPPER-T	PROJECT DEDICATED
NAME AND MODEL OF INSTRUMENT	SERIAL NUMBER (IF APPLICABLE)

PRODUCT LEVEL MEASUREMENTS COLLECTED WITH:

NA	
NAME AND MODEL OF INSTRUMENT	SERIAL NUMBER (IF APPLICABLE)

DEPTH TO BOTTOM OF WELL MEASUREMENTS COLLECTED WITH:

HERON DIPPER-T	PROJECT DEDICATED
NAME AND MODEL OF INSTRUMENT	SERIAL NUMBER (IF APPLICABLE)

PURGING METHOD

PERISTALTIC PUMP	TRC A2
NAME AND MODEL OF PUMP OR TYPE OF BAILER	SERIAL NUMBER (IF APPLICABLE)

SAMPLING METHOD

PERISTALTIC PUMP	TRC A2
NAME AND MODEL OF PUMP OR TYPE OF BAILER	SERIAL NUMBER (IF APPLICABLE)
GEOTECH DISPOSABLE FILTER	0.45 MICRON
NAME AND MODEL OF FILTERATION DEVICE	FILTER TYPE AND SIZE
DEDICATED POLY TUBING	☑ LOW-FLOW SAMPLING EVENT
TUBING TYPE	

PURGE WATER DISPOSAL METHOD

☑ GROUND ☐ DRUM ☐ POTW ☐ POLYTANK ☐ OTHER _____

DECONTAMINATION AND FIELD BLANK WATER SOURCE

STORE BOUGHT	LABORATORY PROVIDED
POTABLE WATER SOURCE	DI WATER SOURCE
[signature] 12/16/22	AW 12.23.22
SIGNED DATE	CHECKED BY DATE

REVISED 04/2019

TRC

WATER LEVEL DATA

PROJECT NAME:	DA Eastern Boundary	DATE:	12.12.22
PROJECT NUMBER:	495430.0000	AUTHOR:	AW

WELL LOCATION	TIME	REFERENCE	DEPTH TO WATER (FEET)	DEPTH TO BOTTOM (FEET)	DEPTH TO PRODUCT (FEET)	WATER ELEVATION
MW-104	0941	TOC	10.76	NM	NA	NM
MW-105	0944		11.80	12.65		
MW-106	1000		9.64	NM		
MW-107	1005		9.40	NM		
MW-108	1015		8.70	9.90		
MW-109	1019		7.98	NM		
MW-110	1024		8.00			
MW-111	1035		7.46			
MW-112	1026		6.70			
MW-113	1050		10.95			
MW-119	1045		9.09			
MW-120	1040		6.51			
MW-121	1140		DRY	9.80		
MW-22-01	1132		13.08	NM		
MW-22-02	1128		10.70			
MW-22-03	1125		7.58			
MW-22-04	1120		6.00			
MW-22-05	1112		5.18			
MW-22-06	1105		6.70			

ALL WATER LEVELS MUST INCLUDE REFERENCE POINT AND TAPE CORRECTION FACTOR
(E.G., 1.1 + 0.00 T/PVC).

AW — SIGNED — 12.28.22 — DATE

DD — CHECKED — 12.29.22 — DATE

TRC

WATER QUALITY METER CALIBRATION LOG

PROJECT NAME:	DA ~~Southern~~ East Investigation	MODEL: YSI ProDSS	SAMPLER: (AW) JJ
PROJECT NO.:	495430.0000	SERIAL #: TRC A2	DATE: 12.12.22

PH CALIBRATION CHECK

pH 7 (LOT #): ZGH 764 (EXP. DATE): Aug/24 POST-CAL. READING / STANDARD	pH 4 / 10 (LOT #): ZGG905 (EXP. DATE): Jul/24 POST-CAL. READING / STANDARD	CAL. RANGE	TIME
7.03 / 7.03	4.00 / 4.00	☒ WITHIN RANGE	1238
/	/	☐ WITHIN RANGE	
/	/	☐ WITHIN RANGE	
/	/	☐ WITHIN RANGE	

SPECIFIC CONDUCTIVITY CALIBRATION CHECK

CAL. READING (LOT #): ZGH 493 (EXP. DATE): Aug/23 POST-CAL. READING / STANDARD	TEMPERATURE (°CELSIUS)	CAL. RANGE	TIME
1200 / 1200	16.8	☒ WITHIN RANGE	1245
/		☐ WITHIN RANGE	
/		☐ WITHIN RANGE	
/		☐ WITHIN RANGE	

ORP CALIBRATION CHECK

CAL. READING (LOT #): (EXP. DATE): POST-CAL. READING / STANDARD	TEMPERATURE (°CELSIUS)	CAL. RANGE	TIME
225.2 / 225.2	17.2	☒ WITHIN RANGE	1250
/		☐ WITHIN RANGE	
/		☐ WITHIN RANGE	
/		☐ WITHIN RANGE	

D.O. CALIBRATION CHECK

CAL. READING POST-CAL. READING /SATURATED AIR	TEMPERATURE (°CELSIUS)	CAL. RANGE	TIME
8.9 / 8.9	17.6	☒ WITHIN RANGE	1248
/		☐ WITHIN RANGE	
/		☐ WITHIN RANGE	
/		☐ WITHIN RANGE	

TURBIDITY CALIBRATION CHECK

CALIBRATION READING (NTU) (LOT #): 1401540 (EXP. DATE): 8/23 POST-CAL. READING / STANDARD	(LOT #): (EXP. DATE): POST-CAL. READING / STANDARD	CAL. RANGE	TIME
0.00 0.00	/	☒ WITHIN RANGE	1300
/	/	☐ WITHIN RANGE	
/	/	☐ WITHIN RANGE	
/	/	☐ WITHIN RANGE	

COMMENTS

☐ AUTOCAL SOLUTION (LOT #): (EXP. DATE):	☑ STANDARD SOLUTION (S) LIST LOT NUMBERS AND EXPIRATION DATES UNDER CALIBRATION CHECK
CALIBRATED PARAMETERS	CALIBRATION RANGES [1]
☐ pH	pH: +/- 0.2 S.U.
☐ COND	COND: +/- 1% OF CAL. STANDARD
☐ ORP	ORP: +/- 25 mV
☐ D.O.	D.O.: VARIES
☐ TURB	TURB: +/- 5% OF CAL. STANDARD
☐ ______	[1] CALIBRATION RANGES ARE SPECIFIC TO THE MODEL OF THE WATER QUALITY METER
☐ ______	

NOTES

Separate turbidity Meter

PROBLEMS ENCOUNTERED	CORRECTIVE ACTIONS

SIGNED: [signature] DATE: 12-21-22

CHECKED BY: David [signature] DATE: 12-29-22

TRC

WATER QUALITY METER CALIBRATION LOG

PROJECT NAME:	DA ~~Southern~~ East Investigation	MODEL: YSI ProDSS	SAMPLER: AW, JJ
PROJECT NO.:	495430.0000	SERIAL #: TRC A2	DATE: 12/14/22

PH CALIBRATION CHECK

pH 7 (LOT #): 26H7624 (EXP. DATE): 6/24 POST-CAL. READING / STANDARD	pH 4 / 10 (LOT #): 26H6668 (EXP. DATE): 8/24 POST-CAL. READING / STANDARD	CAL. RANGE	TIME
7.00 / 7.00	4.00 / 4.00	☑ WITHIN RANGE	0730
/	/	☐ WITHIN RANGE	
/	/	☐ WITHIN RANGE	
/	/	☐ WITHIN RANGE	

SPECIFIC CONDUCTIVITY CALIBRATION CHECK

CAL. READING (LOT #): 26H1493 (EXP. DATE): 8/23 POST-CAL. READING / STANDARD	TEMPERATURE (°CELSIUS)	CAL. RANGE	TIME
1167 / 1167	16.0	☑ WITHIN RANGE	0730
/		☐ WITHIN RANGE	
/		☐ WITHIN RANGE	
/		☐ WITHIN RANGE	

ORP CALIBRATION CHECK

CAL. READING (LOT #): 206100576 (EXP. DATE): 7/27 POST-CAL. READING / STANDARD	TEMPERATURE (°CELSIUS)	CAL. RANGE	TIME
227 / 227	13.	☑ WITHIN RANGE	0730
/		☐ WITHIN RANGE	
/		☐ WITHIN RANGE	
/		☐ WITHIN RANGE	

D.O. CALIBRATION CHECK

CAL. READING POST-CAL. READING /SATURATED AIR	TEMPERATURE (°CELSIUS)	CAL. RANGE	TIME
10.36 / 10.2	13.1	☑ WITHIN RANGE	0730
/		☐ WITHIN RANGE	
/		☐ WITHIN RANGE	
/		☐ WITHIN RANGE	

TURBIDITY CALIBRATION CHECK

CALIBRATION READING (NTU) (LOT #): A2175 (EXP. DATE): 6/24 POST-CAL. READING / STANDARD	(LOT #): (EXP. DATE): POST-CAL. READING / STANDARD	CAL. RANGE	TIME
0 / 0	/	☑ WITHIN RANGE	0730
100 / 100	/	☑ WITHIN RANGE	0730
/	/	☐ WITHIN RANGE	
/	/	☐ WITHIN RANGE	

COMMENTS

☐ AUTOCAL SOLUTION (LOT #): (EXP. DATE):	☑ STANDARD SOLUTION (S) LIST LOT NUMBERS AND EXPIRATION DATES UNDER CALIBRATION CHECK
CALIBRATED PARAMETERS	CALIBRATION RANGES (1)
☐ pH	pH: +/- 0.2 S.U.
☐ COND	COND: +/- 1% OF CAL. STANDARD
☐ ORP	ORP: +/- 25 mV
☐ D.O.	D.O.: VARIES
☐ TURB	TURB: +/- 5% OF CAL. STANDARD
☐ _____	(1) CALIBRATION RANGES ARE SPECIFIC TO THE MODEL OF THE WATER QUALITY METER
☐ _____	

NOTES

DO out of Range

PROBLEMS ENCOUNTERED	CORRECTIVE ACTIONS

SIGNED [signature] 12/14/22 DATE

AW CHECKED BY 12.23.22 DATE

TRC

WATER QUALITY METER CALIBRATION LOG

PROJECT NAME:	DA ~~Southern~~ East Investigation	MODEL: YSI ProDSS	SAMPLER: AW, JJ
PROJECT NO.:	495430.0000	SERIAL #: TRC A2	DATE: 12/15/22

PH CALIBRATION CHECK

pH 7 (LOT #): 26H176 (EXP. DATE): 6/24 POST-CAL. READING / STANDARD	pH 4 /.10 (LOT #): 26H1062 (EXP. DATE): 6/24 POST-CAL. READING / STANDARD	CAL. RANGE	TIME
7.00 / 7.00	4.00 / 4.00	☑ WITHIN RANGE	0535
/	/	☐ WITHIN RANGE	
/	/	☐ WITHIN RANGE	
/	/	☐ WITHIN RANGE	

SPECIFIC CONDUCTIVITY CALIBRATION CHECK

CAL. READING (LOT #): 26H1493 (EXP. DATE): 6/23 POST-CAL. READING / STANDARD	TEMPERATURE (°CELSIUS)	CAL. RANGE	TIME
1497 / 1413	16°C	☑ WITHIN RANGE	0537
/		☐ WITHIN RANGE	
/		☐ WITHIN RANGE	
/		☐ WITHIN RANGE	

ORP CALIBRATION CHECK

CAL. READING (LOT #): 20K1006 (EXP. DATE): 7/23 POST-CAL. READING / STANDARD	TEMPERATURE (°CELSIUS)	CAL. RANGE	TIME
227 / 225	13.C	☑ WITHIN RANGE	0542
/		☐ WITHIN RANGE	
/		☐ WITHIN RANGE	
/		☐ WITHIN RANGE	

D.O. CALIBRATION CHECK

CAL. READING POST-CAL. READING /SATURATED AIR	TEMPERATURE (°CELSIUS)	CAL. RANGE	TIME
/		☐ WITHIN RANGE	
/		☐ WITHIN RANGE	
/		☐ WITHIN RANGE	
/		☐ WITHIN RANGE	

TURBIDITY CALIBRATION CHECK

CALIBRATION READING (NTU) (LOT #): A3178 (EXP. DATE): 6/24 POST-CAL. READING / STANDARD	(LOT #): (EXP. DATE): POST-CAL. READING / STANDARD	CAL. RANGE	TIME
0 / 0	/	☑ WITHIN RANGE	0528
100 / 100	/	☑ WITHIN RANGE	0539
/	/	☐ WITHIN RANGE	
/	/	☐ WITHIN RANGE	

COMMENTS

☐ AUTOCAL SOLUTION (LOT #): (EXP. DATE):	☑ STANDARD SOLUTION (S) LIST LOT NUMBERS AND EXPIRATION DATES UNDER CALIBRATION CHECK
CALIBRATED PARAMETERS	CALIBRATION RANGES (1)
☐ pH	pH: +/- 0.2 S.U.
☐ COND	COND: +/- 1% OF CAL. STANDARD
☐ ORP	ORP: +/- 25 mV
☐ D.O.	D.O.: VARIES
☐ TURB	TURB: +/- 5% OF CAL. STANDARD
☐ _____	(1) CALIBRATION RANGES ARE SPECIFIC TO THE MODEL OF THE WATER QUALITY METER
☐ _____	

NOTES

Do out of Range

PROBLEMS ENCOUNTERED	CORRECTIVE ACTIONS

SIGNED [signature] 12/15/22 DATE

AW 12.23.22 CHECKED BY DATE

TRC Eastern WATER SAMPLE LOG

PROJECT NAME: DA ~~Southern~~ Investigation	PREPARED		CHECKED	
PROJECT NUMBER: 495430.0000	BY: AW JJ	DATE: 12.12.22	BY: DD	DATE: 12.29.22

SAMPLE ID: MW-104 WELL DIAMETER: ☑ 2" ☐ 4" ☐ 6" ☐ OTHER

WELL MATERIAL: ☑ PVC ☐ SS ☐ IRON ☐ GALVANIZED STEEL ☐ OTHER

SAMPLE TYPE: ☑ GW ☐ WW ☐ SW ☐ DI ☐ LEACHATE ☐ OTHER

PURGING	TIME: 1255	DATE: 12.12.22	SAMPLE	TIME: 1330	DATE: 12.12.22
PURGE METHOD: ☑ PUMP PERISTALTIC PUMP ☐ BAILER			PH: 7.40 SU	CONDUCTIVITY: 7.85	umhos/cm
			ORP: 114.2 mV	DO: 0.8	mg/L
DEPTH TO WATER: 10.70 T/ PVC			TURBIDITY: 4.92 NTU		
DEPTH TO BOTTOM: T/ PVC			☒ NONE ☐ SLIGHT ☐ MODERATE ☐ VERY		
WELL VOLUME: NM ☐ LITERS ☐ GALLONS			TEMPERATURE: 12.3 °C	OTHER:	
VOLUME REMOVED: ☑ LITERS ☐ GALLONS			COLOR: Clear	ODOR: None	
COLOR: Slight gray	ODOR: None		FILTRATE (0.45 um) ☐ YES ☑ NO		
TURBIDITY			FILTRATE COLOR: NA	FILTRATE ODOR: NA	
☐ NONE ☒ SLIGHT ☐ MODERATE ☐ VERY			QC SAMPLE: ☐ MS/MSD ☐ DUP-		
DISPOSAL METHOD: ☑ GROUND ☐ DRUM ☐ OTHER			COMMENTS:		

TIME	PURGE RATE (ML/MIN)	PH (SU)	CONDUCTIVITY (umhos/cm)	ORP (mV)	D.O. (mg/L)	TURBIDITY (NTU)	TEMPERATURE (°C)	WATER LEVEL (FEET)	CUMULATIVE PURGE VOLUME (GAL OR L)
1255	200	6.42	607	168.2	2.9	34.5	11.7	10.80	INITIAL
1300	↓	6.86	650	145.0	1.2	26.9	12.0	↓	1.0
1305		7.13	737	135.0	1.0	19.1	12.1		2.0
1310		7.27	769	128.0	0.9	12.4	12.2		3.0
1315		7.36	789	121.2	0.8	8.40	12.2		4.0
1320		7.40	798	117.6	0.8	4.75	12.2		5.0
1325		7.40	786	115.8	0.8	4.24	12.2		6.0
1330	↓	7.40	785	114.2	0.8	4.92	12.3	↓	7.0

NOTE: STABILIZATION TEST IS COMPLETE WHEN 3 SUCCESSIVE READINGS ARE WITHIN THE FOLLOWING LIMITS:

pH: +/- **0.1** COND.: +/- **10 %** ORP: +/- **10 %** D.O.: +/- **10 %** TURB: +/- **10 %** or </= **5** TEMP.: +/- **0.5°C**

BOTTLES FILLED — PRESERVATIVE CODES A - NONE B - HNO3 C - H2SO4 D - NaOH E - HCL F - _____

NUMBER	SIZE	TYPE	PRESERVATIVE	FILTERED	NUMBER	SIZE	TYPE	PRESERVATIVE	FILTERED
	1 L	AMBER	A	☐ Y ☑ N		125 mL	AMBER	A	☐ Y ☑ N
1	125 mL	PLASTIC	B	☐ Y ☑ N					☐ Y ☐ N
2	15 mL	PLASTIC	A	☐ Y ☑ N					☐ Y ☐ N
2	40 mL	VOA	E	☐ Y ☑ N					☐ Y ☐ N
2	40 mL	VOA	A	☐ Y ☑ N					☐ Y ☐ N

SHIPPING METHOD: Courier	DATE SHIPPED: 12.13.22	AIRBILL NUMBER: NA
COC NUMBER: NA	SIGNATURE: AW	DATE SIGNED: 12.21.22

TRC WATER SAMPLE LOG

PROJECT NAME: DA ~~Southern~~ East Investigation	PREPARED	CHECKED
PROJECT NUMBER: 495430.0004	BY: (AW) JJ DATE: 12.12.22	BY: DD DATE: 12-29-22

SAMPLE ID: MW-22-01 | WELL DIAMETER: ☑ 2" ☐ 4" ☐ 6" ☐ OTHER

WELL MATERIAL: ☑ PVC ☐ SS ☐ IRON ☐ GALVANIZED STEEL ☐ OTHER

SAMPLE TYPE: ☑ GW ☐ WW ☐ SW ☐ DI ☐ LEACHATE ☐ OTHER

PURGING	TIME: 1355	DATE: 12-12-22

PURGE METHOD: ☑ PUMP PERISTALTIC PUMP ☐ BAILER

DEPTH TO WATER: 13.10 T/ PVC

DEPTH TO BOTTOM: NM T/ PVC

WELL VOLUME: NM ☐ LITERS ☐ GALLONS

VOLUME REMOVED: 3.0 ☑ LITERS ☐ GALLONS

COLOR: Clear ODOR: None

TURBIDITY

☒ NONE ☐ SLIGHT ☐ MODERATE ☐ VERY

DISPOSAL METHOD: ☑ GROUND ☐ DRUM ☐ OTHER

SAMPLE	TIME: 1410	DATE: 12-12-22

PH: 7.41 SU | CONDUCTIVITY: 2277 umhos/cm

ORP: ~~115.2~~ 115.0 mV | DO: 2.6 mg/L

TURBIDITY: 2.39 NTU

☒ NONE ☐ SLIGHT ☐ MODERATE ☐ VERY

TEMPERATURE: 14.8 °C | OTHER:

COLOR: Clear | ODOR: None

FILTRATE (0.45 um) ☐ YES ☑ NO

FILTRATE COLOR: NA | FILTRATE ODOR: NA

QC SAMPLE: ☐ MS/MSD ☐ DUP-

COMMENTS:

TIME	PURGE RATE (ML/MIN)	PH (SU)	CONDUCTIVITY (umhos/cm)	ORP (mV)	D.O. (mg/L)	TURBIDITY (NTU)	TEMPERATURE (°C)	WATER LEVEL (FEET)	CUMULATIVE PURGE VOLUME (GAL OR L)
1355	200	7.30	2106	123.8	2.8	3.60	14.1	13.10	INITIAL
1400	↓	7.40	2273	115.2	2.5	3.78	14.7	13.15	1.0
1405		7.40	2283	115.0	2.6	2.52	14.7	↓	2.0
1410	↓	7.41	2277	115.0	2.6	2.39	14.8	↓	3.0

NOTE: STABILIZATION TEST IS COMPLETE WHEN 3 SUCCESSIVE READINGS ARE WITHIN THE FOLLOWING LIMITS:

pH: +/- **0.1** COND.: +/- **10 %** ORP: +/- **10 %** D.O.: +/- **10 %** TURB: +/- **10 %** or </= **5** TEMP.: +/- **0.5°C**

BOTTLES FILLED | PRESERVATIVE CODES A - NONE B - HNO3 C - H2SO4 D - NaOH E - HCL F - _____

NUMBER	SIZE	TYPE	PRESERVATIVE	FILTERED	NUMBER	SIZE	TYPE	PRESERVATIVE	FILTERED
	1 L	AMBER	A	☐ Y ☑ N		125 mL	AMBER	A	☐ Y ☑ N
1	125 mL	PLASTIC	B	☐ Y ☑ N					☐ Y ☐ N
3	15 mL	PLASTIC	A	☐ Y ☑ N					☐ Y ☐ N
3	40 mL	VOA	E	☐ Y ☑ N					☐ Y ☐ N
3	40 mL	VOA	A	☐ Y ☑ N					☐ Y ☐ N

SHIPPING METHOD: Courier	DATE SHIPPED: 12.13.22	AIRBILL NUMBER: NA
COC NUMBER: NA	SIGNATURE: AW	DATE SIGNED: 12.21.22

TRC East WATER SAMPLE LOG

PROJECT NAME: DA ~~Southern~~ Investigation	PREPARED		CHECKED	
PROJECT NUMBER: 495430.0000	BY: AW JJ	DATE: 12.12.22	BY: DD	DATE: 12-29-22

SAMPLE ID: MW-22-02 | WELL DIAMETER: ☑ 2" ☐ 4" ☐ 6" ☐ OTHER

WELL MATERIAL: ☑ PVC ☐ SS ☐ IRON ☐ GALVANIZED STEEL ☐ OTHER

SAMPLE TYPE: ☑ GW ☐ WW ☐ SW ☐ DI ☐ LEACHATE ☐ OTHER

PURGING	TIME: 1430	DATE: 12.12.22	SAMPLE	TIME: 1500	DATE: 12.12.22

PURGE METHOD: ☑ PUMP PERISTALTIC PUMP ☐ BAILER

DEPTH TO WATER: 10.72 T/ PVC

DEPTH TO BOTTOM: NM T/ PVC

WELL VOLUME: NM ☐ LITERS ☐ GALLONS

VOLUME REMOVED: 6.0 ☑ LITERS ☐ GALLONS

COLOR: Clear ODOR: None

TURBIDITY: ☒ NONE ☐ SLIGHT ☐ MODERATE ☐ VERY

DISPOSAL METHOD: ☑ GROUND ☐ DRUM ☐ OTHER

PH: 7.37 SU CONDUCTIVITY: 807 umhos/cm

ORP: 78.1 mV DO: 0.9 mg/L

TURBIDITY: 1.66 NTU

☒ NONE ☐ SLIGHT ☐ MODERATE ☐ VERY

TEMPERATURE: 14.5 °C OTHER:

COLOR: Clear ODOR: None

FILTRATE (0.45 um) ☐ YES ☑ NO

FILTRATE COLOR: NA FILTRATE ODOR: NA

QC SAMPLE: ☐ MS/MSD ☒ DUP- GIW

COMMENTS:

TIME	PURGE RATE (ML/MIN)	PH (SU)	CONDUCTIVITY (umhos/cm)	ORP (mV)	D.O. (mg/L)	TURBIDITY (NTU)	TEMPERATURE (°C)	WATER LEVEL (FEET)	CUMULATIVE PURGE VOLUME (GAL OR L)
1430	200	7.76	652	75.4	4.3	3.34	13.2	10.72	INITIAL
1435	|	7.48	544	75.1	1.0	2.22	14.2	10.85	1.0
1440	|	7.43	592	76.9	1.5	2.68	14.4	10.90	2.0
1445	|	7.41	626	80.9	1.2	2.13	14.4	|	3.0
1450	|	7.38	741	83.0	1.0	2.33	14.5	|	4.0
1455	|	7.37	782	80.9	0.9	1.89	14.6	|	5.0
1500	|	7.37	807	78.1	0.9	1.66	14.5	|	6.0

NOTE: STABILIZATION TEST IS COMPLETE WHEN 3 SUCCESSIVE READINGS ARE WITHIN THE FOLLOWING LIMITS:

pH: +/- **0.1** COND.: +/- **10 %** ORP: +/- **10 %** D.O.: +/- **10 %** TURB: +/- **10 %** or </= **5** TEMP.: +/- **0.5°C**

BOTTLES FILLED — PRESERVATIVE CODES A - NONE B - HNO3 C - H2SO4 D - NaOH E - HCL F - _____

NUMBER	SIZE	TYPE	PRESERVATIVE	FILTERED	NUMBER	SIZE	TYPE	PRESERVATIVE	FILTERED
	1 L	AMBER	A	☐ Y ☑ N		125 mL	AMBER	A	☐ Y ☑ N
2	125 mL	PLASTIC	B	☐ Y ☑ N					☐ Y ☐ N
6	15 mL	PLASTIC	A	☐ Y ☑ N					☐ Y ☐ N
6	40 mL	VOA	E	☐ Y ☑ N					☐ Y ☐ N
6	40 mL	VOA	A	☐ Y ☑ N					☐ Y ☐ N

SHIPPING METHOD: Courier	DATE SHIPPED: 12.13.22	AIRBILL NUMBER: NA
COC NUMBER: NA	SIGNATURE: AW	DATE SIGNED: 12.21.22

TRC WATER SAMPLE LOG

PROJECT NAME: DA ~~Southern~~ East Investigation	PREPARED		CHECKED	
PROJECT NUMBER: 495430.0000	BY: AW JJ	DATE: 12.12.22	BY: DD	DATE: 12-29-22

SAMPLE ID: MW-22-03 | WELL DIAMETER: ☑ 2" ☐ 4" ☐ 6" ☐ OTHER

WELL MATERIAL: ☑ PVC ☐ SS ☐ IRON ☐ GALVANIZED STEEL ☐ OTHER

SAMPLE TYPE: ☑ GW ☐ WW ☐ SW ☐ DI ☐ LEACHATE ☐ OTHER

PURGING	TIME: 1530	DATE: 12.12.22

PURGE METHOD: ☑ PUMP PERISTALTIC PUMP ☐ BAILER

DEPTH TO WATER: 7.60 T/ PVC

DEPTH TO BOTTOM: NM T/ PVC

WELL VOLUME: NM ☐ LITERS ☐ GALLONS

VOLUME REMOVED: 4.0 ☑ LITERS ☐ GALLONS

COLOR: Clear ODOR: None

TURBIDITY

☒ NONE ☐ SLIGHT ☐ MODERATE ☐ VERY

DISPOSAL METHOD: ☑ GROUND ☐ DRUM ☐ OTHER

SAMPLE	TIME: 1550	DATE: 12.12.22

PH: 7.28 SU CONDUCTIVITY: 596 umhos/cm

ORP: 69.6 mV DO: 1.3 mg/L

TURBIDITY: 2.46 NTU

☒ NONE ☐ SLIGHT ☐ MODERATE ☐ VERY

TEMPERATURE: 13.6 °C OTHER:

COLOR: Clear ODOR: None

FILTRATE (0.45 um) ☐ YES ☑ NO

FILTRATE COLOR: NA FILTRATE ODOR: NA

QC SAMPLE: ☐ MS/MSD ☐ DUP-

COMMENTS:

TIME	PURGE RATE (ML/MIN)	PH (SU)	CONDUCTIVITY (umhos/cm)	ORP (mV)	D.O. (mg/L)	TURBIDITY (NTU)	TEMPERATURE (°C)	WATER LEVEL (FEET)	CUMULATIVE PURGE VOLUME (GAL OR L)
1530	200	7.42	565	64.4	2.6	5.27	12.6	7.60	INITIAL
1535	|	7.31	584	67.2	1.6	4.39	13.4	7.64	1.0
1540	|	7.28	595	68.7	1.4	2.77	13.4	|	2.0
1545	|	7.29	592	68.9	1.3	2.58	13.5	|	3.0
1550		7.28	596	69.6	1.3	2.46	13.6		4.0

NOTE: STABILIZATION TEST IS COMPLETE WHEN 3 SUCCESSIVE READINGS ARE WITHIN THE FOLLOWING LIMITS:

pH: +/- **0.1** COND.: +/- **10 %** ORP: +/- **10 %** D.O.: +/- **10 %** TURB: +/- **10 %** or </= **5** TEMP.: +/- **0.5°C**

BOTTLES FILLED — PRESERVATIVE CODES A - NONE B - HNO3 C - H2SO4 D - NaOH E - HCL F - _____

NUMBER	SIZE	TYPE	PRESERVATIVE	FILTERED	NUMBER	SIZE	TYPE	PRESERVATIVE	FILTERED
	1 L	AMBER	A	☐ Y ☑ N		125 mL	AMBER	A	☐ Y ☑ N
1	125 mL	PLASTIC	B	☐ Y ☑ N					☐ Y ☐ N
3	15 mL	PLASTIC	A	☐ Y ☑ N					☐ Y ☐ N
3	40 mL	VOA	E	☐ Y ☑ N					☐ Y ☐ N
3	40 mL	VOA	A	☐ Y ☑ N					☐ Y ☐ N

SHIPPING METHOD: Courier	DATE SHIPPED: 12.13.22	AIRBILL NUMBER: NA
COC NUMBER: NA	SIGNATURE: AW	DATE SIGNED: 12.21.22

TRC WATER SAMPLE LOG

PROJECT NAME: DA ~~Southern~~ East Investigation	PREPARED	CHECKED
PROJECT NUMBER: 495430.0000	BY: AW/JJ DATE: 12/14/22	BY: AW DATE: 12.23.22

SAMPLE ID: MW-119 WELL DIAMETER: ☑ 2" ☐ 4" ☐ 6" ☐ OTHER

WELL MATERIAL: ☑ PVC ☐ SS ☐ IRON ☐ GALVANIZED STEEL ☐ OTHER

SAMPLE TYPE: ☑ GW ☐ WW ☐ SW ☐ DI ☐ LEACHATE ☐ OTHER

PURGING	TIME: 0910	DATE: 12/14/22

PURGE METHOD: ☑ PUMP PERISTALTIC PUMP ☐ BAILER

DEPTH TO WATER: 9.11 T/ PVC

DEPTH TO BOTTOM: T/ PVC

WELL VOLUME: NM ☐ LITERS ☐ GALLONS

VOLUME REMOVED: ☑ LITERS ☐ GALLONS

COLOR: clear ODOR: none

TURBIDITY ☑ NONE ☐ SLIGHT ☐ MODERATE ☐ VERY

DISPOSAL METHOD: ☑ GROUND ☐ DRUM ☐ OTHER

SAMPLE	TIME: 0930	DATE: 12/14/22

PH: 7.17 SU CONDUCTIVITY: 777 umhos/cm

ORP: -11.8 mV DO: ____ mg/L

TURBIDITY: 12.0 NTU

☑ NONE ☐ SLIGHT ☐ MODERATE ☐ VERY

TEMPERATURE: 8.0 °C OTHER: ____

COLOR: clear ODOR: none

FILTRATE (0.45 um) ☐ YES ☑ NO

FILTRATE COLOR: NA FILTRATE ODOR: NA

QC SAMPLE: ☐ MS/MSD ☐ DUP- ____

COMMENTS: Do out of Range

TIME	PURGE RATE (ML/MIN)	PH (SU)	CONDUCTIVITY (umhos/cm)	ORP (mV)	D.O. (mg/L)	TURBIDITY (NTU)	TEMPERATURE (°C)	WATER LEVEL (FEET)	CUMULATIVE PURGE VOLUME (GAL OR L)
0910	100	7.17	777	-11.8		12.0	8.0	9.11	INITIAL (DAW)
0915									.5
0920									1
0925									1.5
0930									2
0935									

NOTE: STABILIZATION TEST IS COMPLETE WHEN 3 SUCCESSIVE READINGS ARE WITHIN THE FOLLOWING LIMITS:

pH: +/- **0.1** COND.: +/- **10 %** ORP: +/- **10 %** D.O.: +/- **10 %** TURB: +/- **10 %** or </= **5** TEMP.: +/- **0.5°C**

BOTTLES FILLED — PRESERVATIVE CODES A - NONE B - HNO3 C - H2SO4 D - NaOH E - HCL F - ____

NUMBER	SIZE	TYPE	PRESERVATIVE	FILTERED	NUMBER	SIZE	TYPE	PRESERVATIVE	FILTERED
	1 L	AMBER	A	☐ Y ☑ N		125 mL	AMBER	A	☐ Y ☑ N
1	125 mL	PLASTIC	B	☐ Y ☑ N					☐ Y ☐ N
3	15 mL	PLASTIC	A	☐ Y ☑ N					☐ Y ☐ N
3	40 mL	VOA	E	☐ Y ☑ N					☐ Y ☐ N
3	40 mL	VOA	A	☐ Y ☑ N					☐ Y ☐ N

SHIPPING METHOD: Courier	DATE SHIPPED: NA	AIRBILL NUMBER: NA
COC NUMBER: NA	SIGNATURE:	DATE SIGNED: 12/16/22

TRC WATER SAMPLE LOG

PROJECT NAME: DA ~~Southern~~ East Investigation	PREPARED		CHECKED	
PROJECT NUMBER: 495430.0000	BY: AW, JJ	DATE: 12/14/22	BY: AW	DATE: 12.23.22

SAMPLE ID: MW 120 | WELL DIAMETER: ☑ 2" ☐ 4" ☐ 6" ☐ OTHER

WELL MATERIAL: ☑ PVC ☐ SS ☐ IRON ☐ GALVANIZED STEEL ☐ OTHER

SAMPLE TYPE: ☑ GW ☐ WW ☐ SW ☐ DI ☐ LEACHATE ☐ OTHER

PURGING	TIME: 1000	DATE: 12/14/22	SAMPLE	TIME: 1030	DATE: 12/14/22

PURGE METHOD: ☑ PUMP PERISTALTIC PUMP ☐ BAILER

DEPTH TO WATER: 6.10 T/ PVC

DEPTH TO BOTTOM: T/ PVC

WELL VOLUME: NM ☐ LITERS ☐ GALLONS

VOLUME REMOVED: 3 ☑ LITERS ☐ GALLONS

COLOR: Clear ODOR: none

TURBIDITY ☑ NONE ☐ SLIGHT ☐ MODERATE ☐ VERY

DISPOSAL METHOD: ☑ GROUND ☐ DRUM ☐ OTHER

PH: 7.00 SU | CONDUCTIVITY: 1325 umhos/cm

ORP: -81.0 mV | DO: _____ mg/L

TURBIDITY: 3.4 NTU

☑ NONE ☐ SLIGHT ☐ MODERATE ☐ VERY

TEMPERATURE: 8.8 °C | OTHER: _____

COLOR: Clear ODOR: none

FILTRATE (0.45 um) ☐ YES ☑ NO

FILTRATE COLOR: NA | FILTRATE ODOR: NA

QC SAMPLE: ☐ MS/MSD ☐ DUP- _____

COMMENTS: DO out of Range

TIME	PURGE RATE (ML/MIN)	PH (SU)	CONDUCTIVITY (umhos/cm)	ORP (mV)	D.O. (mg/L)	TURBIDITY (NTU)	TEMPERATURE (°C)	WATER LEVEL (FEET)	CUMULATIVE PURGE VOLUME (GAL OR L)
1000	100	7.34	1623	48.6	NM	90	7.0	6.8	INITIAL
1005		6.93	1393	2.2		6.7	8.1	6.8c	1
1010		6.95	1347	-60.0		5.3	8.5	6.85	1
1015		6.97	1336	-70.0		3.6	8.5	6.86	1.5
1020		7.00	1326	-80.5		3.4	8.6	6.880	2
1025		7.00	1327	-81.0		3.4	8.7	6.96	2.5
1030		7.00	1325	-81.0		3.4	8.8	6.93	3

NOTE: STABILIZATION TEST IS COMPLETE WHEN 3 SUCCESSIVE READINGS ARE WITHIN THE FOLLOWING LIMITS:

pH: +/- **0.1** COND.: +/- **10 %** ORP: +/- **10 %** D.O.: +/- **10 %** TURB: +/- **10 %** or </= **5** TEMP.: +/- **0.5°C**

BOTTLES FILLED | PRESERVATIVE CODES A - NONE B - HNO3 C - H2SO4 D - NaOH E - HCL F - _____

NUMBER	SIZE	TYPE	PRESERVATIVE	FILTERED	NUMBER	SIZE	TYPE	PRESERVATIVE	FILTERED
	1 L	AMBER	A	☐ Y ☑ N		125 mL	AMBER	A	☐ Y ☑ N
1	125 mL	PLASTIC	B	☐ Y ☑ N					☐ Y ☐ N
3	15 mL	PLASTIC	A	☐ Y ☑ N					☐ Y ☐ N
3	40 mL	VOA	E	☐ Y ☑ N					☐ Y ☐ N
3	40 mL	VOA	A	☐ Y ☑ N					☐ Y ☐ N

SHIPPING METHOD: Courier	DATE SHIPPED: 12.19.22	AIRBILL NUMBER: NA
COC NUMBER: NA	SIGNATURE:	DATE SIGNED: 12/14/22

TRC

WATER SAMPLE LOG

PROJECT NAME: DA ~~Southern~~ East Investigation	PREPARED	CHECKED
PROJECT NUMBER: 495430.0000	BY: AW, DJ DATE: 12/14/22	BY: AW DATE: 12.23.22

SAMPLE ID: MW 112 | WELL DIAMETER: ☑ 2" ☐ 4" ☐ 6" ☐ OTHER

WELL MATERIAL: ☑ PVC ☐ SS ☐ IRON ☐ GALVANIZED STEEL ☐ OTHER

SAMPLE TYPE: ☑ GW ☐ WW ☐ SW ☐ DI ☐ LEACHATE ☐ OTHER

PURGING	TIME: 1057	DATE: 12/14/22

PURGE METHOD: ☑ PUMP PERISTALTIC PUMP ☐ BAILER

DEPTH TO WATER: 6.26 T/ PVC

DEPTH TO BOTTOM: T/ PVC

WELL VOLUME: NM ☐ LITERS ☐ GALLONS

VOLUME REMOVED: 3 ☑ LITERS ☐ GALLONS

COLOR: Brown ODOR: none

TURBIDITY ☐ NONE ☐ SLIGHT ☐ MODERATE ☑ VERY

DISPOSAL METHOD: ☑ GROUND ☐ DRUM ☐ OTHER

SAMPLE	TIME: 1115	DATE: 12/14/22

PH: 7.26 SU CONDUCTIVITY: 606 umhos/cm

ORP: -170.1 mV DO: NM mg/L

TURBIDITY: 5.7 NTU

☑ NONE ☐ SLIGHT ☐ MODERATE ☐ VERY

TEMPERATURE: 9.7 °C OTHER:

COLOR: Clear ODOR: none

FILTRATE (0.45 um) ☐ YES ☑ NO

FILTRATE COLOR: NA FILTRATE ODOR: NA

QC SAMPLE: ☐ MS/MSD ☒ DUP- +12

COMMENTS: Do not working

TIME	PURGE RATE (ML/MIN)	PH (SU)	CONDUCTIVITY (umhos/cm)	ORP (mV)	D.O. (mg/L)	TURBIDITY (NTU)	TEMPERATURE (°C)	WATER LEVEL (FEET)	CUMULATIVE PURGE VOLUME (GAL OR L)
1057	100	7.86	305	-15.4	NA	280	8.7	6.70	INITIAL
1100		7.36	624	-88.1		166	9.3	6.90	.5
1103		7.28	618	-143.0		22.7	9.6	6.96	1
1106		7.26	613	-170.8		6.4	9.7	6.90	1.5
1109		7.25	606	-190.0		5.9	9.7	6.90	2
1112		7.25	604	-190.3		5.7	9.7	6.90	2.5
1115		7.25	605	-190.5		5.7	9.7	6.90	3

NOTE: STABILIZATION TEST IS COMPLETE WHEN 3 SUCCESSIVE READINGS ARE WITHIN THE FOLLOWING LIMITS:

pH: +/- **0.1** COND.: +/- **10 %** ORP: +/- **10 %** D.O.: +/- **10 %** TURB: +/- **10 %** or </= **5** TEMP.: +/- **0.5°C**

BOTTLES FILLED — PRESERVATIVE CODES A - NONE B - HNO3 C - H2SO4 D - NaOH E - HCL F - _____

NUMBER	SIZE	TYPE	PRESERVATIVE	FILTERED	NUMBER	SIZE	TYPE	PRESERVATIVE	FILTERED
	1 L	AMBER	A	☐ Y ☑ N		125 mL	AMBER	A	☐ Y ☑ N
2	125 mL	PLASTIC	B	☐ Y ☑ N					☐ Y ☐ N
6	15 mL	PLASTIC	A	☐ Y ☑ N					☐ Y ☐ N
6	40 mL	VOA	E	☐ Y ☑ N					☐ Y ☐ N
6	40 mL	VOA	A	☐ Y ☑ N					☐ Y ☐ N

SHIPPING METHOD: Courier	DATE SHIPPED: 12.15.22	AIRBILL NUMBER: NA
COC NUMBER: NA	SIGNATURE:	DATE SIGNED: 12/16/22

TRC WATER SAMPLE LOG

PROJECT NAME: DA ~~Southern~~ East Investigation	PREPARED	CHECKED
PROJECT NUMBER: 495430.0000	BY: AW, JJ DATE: 12/14/22	BY: AW DATE: 12.23.22

SAMPLE ID: MW-111 | WELL DIAMETER: ☑ 2" ☐ 4" ☐ 6" ☐ OTHER

WELL MATERIAL: ☑ PVC ☐ SS ☐ IRON ☐ GALVANIZED STEEL ☐ OTHER

SAMPLE TYPE: ☑ GW ☐ WW ☐ SW ☐ DI ☐ LEACHATE ☐ OTHER

PURGING	TIME: 1156	DATE: 12/14/22

PURGE METHOD: ☑ PUMP PERISTALTIC PUMP ☐ BAILER

DEPTH TO WATER: 7.48 T/ PVC

DEPTH TO BOTTOM: T/ PVC

WELL VOLUME: NM ☐ LITERS ☐ GALLONS

VOLUME REMOVED: 3.5 ☑ LITERS ☐ GALLONS

COLOR: cloudy ODOR: none

TURBIDITY ☐ NONE ☐ SLIGHT ☒ MODERATE ☐ VERY

DISPOSAL METHOD: ☑ GROUND ☐ DRUM ☐ OTHER

SAMPLE	TIME: 1331	DATE: 12/14/22

PH: 7.23 SU CONDUCTIVITY: 426 umhos/cm

ORP: -179.5 mV DO: NM mg/L

TURBIDITY: 2.9 NTU

☐ NONE ☐ SLIGHT ☐ MODERATE ☐ VERY

TEMPERATURE: 9.6 °C OTHER:

COLOR: clear ODOR: none

FILTRATE (0.45 um) ☐ YES ☑ NO

FILTRATE COLOR: NA FILTRATE ODOR: NA

QC SAMPLE: ☐ MS/MSD ☐ DUP-

COMMENTS: Donetworking

TIME	PURGE RATE (ML/MIN)	PH (SU)	CONDUCTIVITY (umhos/cm)	ORP (mV)	D.O. (mg/L)	TURBIDITY (NTU)	TEMPERATURE (°C)	WATER LEVEL (FEET)	CUMULATIVE PURGE VOLUME (GAL OR L)
1156	100	7.26	217	-50.3	NM	52	8.5	7.48	INITIAL
1201		7.31	433	-95.0		45.7	9.1	7.60	1
1206		7.22	430	-135.3		18.5	9.5	7.60	1
1211		7.23	427	-154.8		8.0	9.5	7.60	1.5
1216		7.23	426	-170.8		5.0	9.6	7.60	2
1221		7.23	425	-179.0		4.0	9.6	7.60	2.5
1226		7.23	425	-179.5		3.0	9.6	7.60	3
1231		7.23	426	-179.5		2.9	9.6	7.60	3.5

NOTE: STABILIZATION TEST IS COMPLETE WHEN 3 SUCCESSIVE READINGS ARE WITHIN THE FOLLOWING LIMITS:

pH: +/- **0.1** COND.: +/- **10 %** ORP: +/- **10 %** D.O.: +/- **10 %** TURB: +/- **10 %** or </= **5** TEMP.: +/- **0.5°C**

BOTTLES FILLED — PRESERVATIVE CODES A - NONE B - HNO3 C - H2SO4 D - NaOH E - HCL F - _____

NUMBER	SIZE	TYPE	PRESERVATIVE	FILTERED	NUMBER	SIZE	TYPE	PRESERVATIVE	FILTERED
	1 L	AMBER	A	☐ Y ☑ N		125 mL	AMBER	A	☐ Y ☑ N
1	125 mL	PLASTIC	B	☐ Y ☑ N					☐ Y ☐ N
3	15 mL	PLASTIC	A	☐ Y ☑ N					☐ Y ☐ N
3	40 mL	VOA	E	☐ Y ☑ N					☐ Y ☐ N
3	40 mL	VOA	A	☐ Y ☑ N					☐ Y ☐ N

SHIPPING METHOD: Courier	DATE SHIPPED: 12.15.22	AIRBILL NUMBER: NA
COC NUMBER: NA	SIGNATURE:	DATE SIGNED: 12/14/22

TRC WATER SAMPLE LOG

PROJECT NAME: DA ~~Southern~~ East Investigation	PREPARED		CHECKED	
PROJECT NUMBER: 495430.0000	BY: AW, JJ	DATE: 12/14/22	BY: AW	DATE: 12.23.22

SAMPLE ID: MW110 | WELL DIAMETER: ☑ 2" ☐ 4" ☐ 6" ☐ OTHER

WELL MATERIAL: ☑ PVC ☐ SS ☐ IRON ☐ GALVANIZED STEEL ☐ OTHER

SAMPLE TYPE: ☑ GW ☐ WW ☐ SW ☐ DI ☐ LEACHATE ☐ OTHER

PURGING	TIME: 1251	DATE: 12/14/22	SAMPLE	TIME: 1325	DATE: 12/14/22
PURGE METHOD: ☑ PUMP PERISTALTIC PUMP ☐ BAILER			PH: 7.21 SU	CONDUCTIVITY: 433 umhos/cm	
DEPTH TO WATER: 8.0 T/ PVC			ORP: -161.0 mV	DO: NM mg/L	
DEPTH TO BOTTOM: T/ PVC			TURBIDITY: 3.9 NTU		
WELL VOLUME: NM ☐ LITERS ☐ GALLONS			☐ NONE ☐ SLIGHT ☐ MODERATE ☐ VERY		
VOLUME REMOVED: 3 ☑ LITERS ☐ GALLONS			TEMPERATURE: 10.0 °C	OTHER:	
COLOR: Browns ODOR: NOR			COLOR: Clear	ODOR: NOR	
TURBIDITY ☐ NONE ☐ SLIGHT ☑ MODERATE ☐ VERY			FILTRATE (0.45 um) ☐ YES ☑ NO		
			FILTRATE COLOR: NA	FILTRATE ODOR: NA	
			QC SAMPLE: ☐ MS/MSD ☐ DUP-		
DISPOSAL METHOD: ☑ GROUND ☐ DRUM ☐ OTHER			COMMENTS: Do not working		

TIME	PURGE RATE (ML/MIN)	PH (SU)	CONDUCTIVITY (umhos/cm)	ORP (mV)	D.O. (mg/L)	TURBIDITY (NTU)	TEMPERATURE (°C)	WATER LEVEL (FEET)	CUMULATIVE PURGE VOLUME (GAL OR L)
1251	100	7.61	216	-52.3	NM	50	8.8	8.0	INITIAL
1300		7.28	440	-148.1		60	9.5	8.13	.5
1305		7.19	434	-160.8		27.3	9.7	8.15	1
1310		7.19	433	-165.8		10.3	9.9	8.15	1.5
1315		7.20	433	-160.8		4.09	9.9	8.15	2
1320		7.21	432	-160.8		3.9	10.0	8.15	2.5
1325		7.21	433	-161.0		3.9	10.0	8.14	3

NOTE: STABILIZATION TEST IS COMPLETE WHEN 3 SUCCESSIVE READINGS ARE WITHIN THE FOLLOWING LIMITS:

pH: +/- **0.1** COND.: +/- **10 %** ORP: +/- **10 %** D.O.: +/- **10 %** TURB: +/- **10 %** or </= **5** TEMP.: +/- **0.5°C**

BOTTLES FILLED — PRESERVATIVE CODES A - NONE B - HNO3 C - H2SO4 D - NaOH E - HCL F - _____

NUMBER	SIZE	TYPE	PRESERVATIVE	FILTERED	NUMBER	SIZE	TYPE	PRESERVATIVE	FILTERED
	1 L	AMBER	A	☐ Y ☑ N		125 mL	AMBER	A	☐ Y ☑ N
1	125 mL	PLASTIC	B	☐ Y ☑ N					☐ Y ☐ N
3	15 mL	PLASTIC	A	☐ Y ☑ N					☐ Y ☐ N
3	40 mL	VOA	E	☐ Y ☑ N					☐ Y ☐ N
3	40 mL	VOA	A	☐ Y ☑ N					☐ Y ☐ N

SHIPPING METHOD: Courier	DATE SHIPPED: 12.15.22	AIRBILL NUMBER: NA
COC NUMBER: NA	SIGNATURE:	DATE SIGNED: 12/16/22

TRC

WATER SAMPLE LOG

PROJECT NAME:	DA ~~Southern~~ East Investigation	PREPARED		CHECKED	
PROJECT NUMBER:	495430.0006	BY: AW, JJ	DATE: 12/14/22	BY: AW	DATE: 12.23.22

SAMPLE ID: MW-109 | WELL DIAMETER: ☑ 2" ☐ 4" ☐ 6" ☐ OTHER

WELL MATERIAL: ☑ PVC ☐ SS ☐ IRON ☐ GALVANIZED STEEL ☐ OTHER

SAMPLE TYPE: ☑ GW ☐ WW ☐ SW ☐ DI ☐ LEACHATE ☐ OTHER

PURGING	TIME: 1345	DATE: 12/14/22	SAMPLE	TIME: 1415	DATE: 12/14/22

PURGE METHOD: ☑ PUMP PERISTALTIC PUMP ☐ BAILER

DEPTH TO WATER: 7.97 T/ PVC

DEPTH TO BOTTOM: T/ PVC

WELL VOLUME: NM 3 ☐ LITERS ☐ GALLONS

VOLUME REMOVED: ☑ LITERS ☐ GALLONS

COLOR: Clear ODOR: Slight

TURBIDITY ☑ NONE ☐ SLIGHT ☐ MODERATE ☐ VERY

DISPOSAL METHOD: ☑ GROUND ☐ DRUM ☐ OTHER

PH: 7.09 SU | CONDUCTIVITY: 1092 umhos/cm

ORP: -102.3 mV | DO: NM mg/L

TURBIDITY: 3.4 NTU

☑ NONE ☐ SLIGHT ☐ MODERATE ☐ VERY

TEMPERATURE: 10.5 °C | OTHER:

COLOR: Clear | ODOR: Slight

FILTRATE (0.45 um) ☐ YES ☑ NO

FILTRATE COLOR: NA | FILTRATE ODOR: NA

QC SAMPLE: ☐ MS/MSD ☐ DUP-

COMMENTS:

TIME	PURGE RATE (ML/MIN)	PH (SU)	CONDUCTIVITY (umhos/cm)	ORP (mV)	D.O. (mg/L)	TURBIDITY (NTU)	TEMPERATURE (°C)	WATER LEVEL (FEET)	CUMULATIVE PURGE VOLUME (GAL OR L)
1345	100	7.16	467	-89.6	NM	15.0	9.4	7.97	INITIAL
1350		7.03	1036	-143.0		7.3	9.9	8.13	.5
1355		7.05	1088	-166.0		4.3	10.3	8.15	1
1400		7.07	1087	-160.5		3.6	10.3	8.14	1.5
1405		7.09	1089	-161.8		3.4	10.4	8.14	2
1410		7.09	1082	-162.0		3.4	10.5	8.14	2.5
1415		7.09	1092	-102.3		3.4	10.5	8.14	3

NOTE: STABILIZATION TEST IS COMPLETE WHEN 3 SUCCESSIVE READINGS ARE WITHIN THE FOLLOWING LIMITS:

pH: +/- **0.1** COND.: +/- **10 %** ORP: +/- **10 %** D.O.: +/- **10 %** TURB: +/- **10 %** or </= **5** TEMP.: +/- **0.5°C**

BOTTLES FILLED | PRESERVATIVE CODES A - NONE B - HNO3 C - H2SO4 D - NaOH E - HCL F - _____

NUMBER	SIZE	TYPE	PRESERVATIVE	FILTERED	NUMBER	SIZE	TYPE	PRESERVATIVE	FILTERED
	1 L	AMBER	A	☐ Y ☑ N		125 mL	AMBER	A	☐ Y ☑ N
1	125 mL	PLASTIC	B	☐ Y ☑ N					☐ Y ☐ N
3	15 mL	PLASTIC	A	☐ Y ☑ N					☐ Y ☐ N
3	40 mL	VOA	E	☐ Y ☑ N					☐ Y ☐ N
3	40 mL	VOA	A	☐ Y ☑ N					☐ Y ☐ N

SHIPPING METHOD:	Courier	DATE SHIPPED:	12.15.22	AIRBILL NUMBER:	NA
COC NUMBER:	NA	SIGNATURE:		DATE SIGNED:	12/16/22

TRC WATER SAMPLE LOG

PROJECT NAME: DA ~~Southern~~ East Investigation	PREPARED		CHECKED	
PROJECT NUMBER: 495430.0000	BY: AW, JJ	DATE: 12/14/22	BY: AW	DATE: 12.23.22

SAMPLE ID: MW-108 WELL DIAMETER: ☑ 2" ☐ 4" ☐ 6" ☐ OTHER

WELL MATERIAL: ☑ PVC ☐ SS ☐ IRON ☐ GALVANIZED STEEL ☐ OTHER

SAMPLE TYPE: ☑ GW ☐ WW ☐ SW ☐ DI ☐ LEACHATE ☐ OTHER

PURGING	TIME: 1433	DATE: 12/14/22	SAMPLE	TIME: 1458	DATE: 12/14/22

PURGE METHOD: ☑ PUMP PERISTALTIC PUMP ☐ BAILER

DEPTH TO WATER: 8.64 T/ PVC

DEPTH TO BOTTOM: T/ PVC

WELL VOLUME: NM ☐ LITERS ☐ GALLONS

VOLUME REMOVED: 2.1 ☑ LITERS ☐ GALLONS

COLOR: Brownish ODOR: none

TURBIDITY ☐ NONE ☐ SLIGHT ☐ MODERATE ☐ VERY

DISPOSAL METHOD: ☑ GROUND ☐ DRUM ☐ OTHER

PH: 7.29 SU CONDUCTIVITY: 791 umhos/cm

ORP: -170.5 mV DO: NM mg/L

TURBIDITY: 49 NTU

☑ NONE ☐ SLIGHT ☐ MODERATE ☐ VERY

TEMPERATURE: 10.5 °C OTHER:

COLOR: clear ODOR: none

FILTRATE (0.45 um) ☐ YES ☑ NO

FILTRATE COLOR: NA FILTRATE ODOR: NA

QC SAMPLE: ☐ MS/MSD ☐ DUP-

COMMENTS: DO Not Working

TIME	PURGE RATE (ML/MIN)	PH (SU)	CONDUCTIVITY (umhos/cm)	ORP (mV)	D.O. (mg/L)	TURBIDITY (NTU)	TEMPERATURE (°C)	WATER LEVEL (FEET)	CUMULATIVE PURGE VOLUME (GAL OR L)
1433	100	7.64	457	-83.5	NM	170.0	9.5	8.64	INITIAL
1438		7.33	830	-136.5		84.0	10.0	8.76	.5
1443		7.30	804	-155.0		17.0	10.2	8.76	1
1448		7.29	793	-170.0		5.0	10.4	8.76	1.5
1453		7.29	793	-170.3		4.9	10.5	8.76	2
1458		7.29	791	-170.5		4.3	10.5	8.76	2.1
1503									3

NOTE: STABILIZATION TEST IS COMPLETE WHEN 3 SUCCESSIVE READINGS ARE WITHIN THE FOLLOWING LIMITS:

pH: +/- **0.1** COND.: +/- **10 %** ORP: +/- **10 %** D.O.: +/- **10 %** TURB: +/- **10 %** or </= **5** TEMP.: +/- **0.5°C**

BOTTLES FILLED — PRESERVATIVE CODES A - NONE B - HNO3 C - H2SO4 D - NaOH E - HCL F - _____

NUMBER	SIZE	TYPE	PRESERVATIVE	FILTERED	NUMBER	SIZE	TYPE	PRESERVATIVE	FILTERED
	1 L	AMBER	A	☐ Y ☑ N		125 mL	AMBER	A	☐ Y ☑ N
1	125 mL	PLASTIC	B	☐ Y ☑ N					☐ Y ☐ N
3	15 mL	PLASTIC	A	☐ Y ☑ N					☐ Y ☐ N
3	40 mL	VOA	E	☐ Y ☑ N					☐ Y ☐ N
1	40 mL	VOA	A	☐ Y ☑ N					☐ Y ☐ N

SHIPPING METHOD: Courier	DATE SHIPPED: 12.15.22	AIRBILL NUMBER: NA
COC NUMBER: NA	SIGNATURE:	DATE SIGNED: 12/16/22

TRC WATER SAMPLE LOG

PROJECT NAME: DA ~~Southern~~ East Investigation	PREPARED		CHECKED	
PROJECT NUMBER: 495430.0000	BY: AW, JJ	DATE: 12/16/22	BY: AW	DATE: 12.23.22

SAMPLE ID: MW-107 | WELL DIAMETER: ☑ 2" ☐ 4" ☐ 6" ☐ OTHER

WELL MATERIAL: ☑ PVC ☐ SS ☐ IRON ☐ GALVANIZED STEEL ☐ OTHER

SAMPLE TYPE: ☑ GW ☐ WW ☐ SW ☐ DI ☐ LEACHATE ☐ OTHER

PURGING	TIME: 0732	DATE: 12/15/22	SAMPLE	TIME: 0807	DATE: 12/15/22
PURGE METHOD: ☑ PUMP PERISTALTIC PUMP ☐ BAILER			PH: 7.12 SU	CONDUCTIVITY: 694 umhos/cm	
DEPTH TO WATER: 9.46 T/ PVC			ORP: -188.8 mV	DO: NM mg/L	
DEPTH TO BOTTOM: T/ PVC			TURBIDITY: 24 NTU		
WELL VOLUME: NM ☐ LITERS ☐ GALLONS			☐ NONE ☐ SLIGHT ☐ MODERATE ☐ VERY		
VOLUME REMOVED: 4L ☑ LITERS ☐ GALLONS			TEMPERATURE: 11.7 °C	OTHER:	
COLOR: Brown ODOR: none			COLOR: clear	ODOR: none	
TURBIDITY ☐ NONE ☐ SLIGHT ☐ MODERATE ☐ VERY			FILTRATE (0.45 um) ☐ YES ☑ NO		
			FILTRATE COLOR: NA	FILTRATE ODOR: NA	
			QC SAMPLE: ☐ MS/MSD ☐ DUP-		
DISPOSAL METHOD: ☑ GROUND ☐ DRUM ☐ OTHER			COMMENTS: DO not working		

TIME	PURGE RATE (ML/MIN)	PH (SU)	CONDUCTIVITY (umhos/cm)	ORP (mV)	D.O. (mg/L)	TURBIDITY (NTU)	TEMPERATURE (°C)	WATER LEVEL (FEET)	CUMULATIVE PURGE VOLUME (GAL OR L)
0733	140	4.66	302	175	NM	300	11.9	9.46	INITIAL
0737		7.04	681	-138.7		305	11.3	9.45	1
0732		7.06	689	-135.6		137.0	11.3	9.45	1
0737		7.06	689	-140		126	11.5	9.45	1.5
0742		7.09	694	-160		47	11.5	9.45	2
0747		7.10	693	-170.5		21	11.6	9.45	2.5
0752		7.11	694	-176.0		14	11.7	9.45	3
0757		7.11	696	-190.0		8	11.6	9.45	3.5
0802		7.12	694	-188.8		7.9	11.6	9.45	4
0807		7.12	694	-188.8		7.9	11.7	9.45	4.5

NOTE: STABILIZATION TEST IS COMPLETE WHEN 3 SUCCESSIVE READINGS ARE WITHIN THE FOLLOWING LIMITS:

pH: +/- **0.1** COND.: +/- **10 %** ORP: +/- **10 %** D.O.: +/- **10 %** TURB: +/- **10 %** or </= **5** TEMP.: +/- **0.5°C**

BOTTLES FILLED — PRESERVATIVE CODES: A - NONE B - HNO3 C - H2SO4 D - NaOH E - HCL F - _____

NUMBER	SIZE	TYPE	PRESERVATIVE	FILTERED	NUMBER	SIZE	TYPE	PRESERVATIVE	FILTERED
	1 L	AMBER	A	☐ Y ☑ N		125 mL	AMBER	A	☐ Y ☑ N
1	125 mL	PLASTIC	B	☐ Y ☑ N					☐ Y ☐ N
3	15 mL	PLASTIC	A	☐ Y ☑ N					☐ Y ☐ N
3	40 mL	VOA	E	☐ Y ☑ N					☐ Y ☐ N
3	40 mL	VOA	A	☐ Y ☑ N					☐ Y ☐ N

SHIPPING METHOD: Courier	DATE SHIPPED: 12.16.22	AIRBILL NUMBER: NA
COC NUMBER: NA	SIGNATURE:	DATE SIGNED: 12/16/22

TRC WATER SAMPLE LOG

PROJECT NAME: DA ~~Southern~~ East Investigation	PREPARED	CHECKED
PROJECT NUMBER: 495430.0000	BY: AW, JJ DATE: 12/14/22	BY: AV DATE: 12.23.22

SAMPLE ID: MW 104 | WELL DIAMETER: ☑ 2" ☐ 4" ☐ 6" ☐ OTHER

WELL MATERIAL: ☑ PVC ☐ SS ☐ IRON ☐ GALVANIZED STEEL ☐ OTHER

SAMPLE TYPE: ☑ GW ☐ WW ☐ SW ☐ DI ☐ LEACHATE ☐ OTHER

PURGING	TIME: 0838	DATE: 12/15/22

PURGE METHOD: ☑ PUMP PERISTALTIC PUMP ☐ BAILER

DEPTH TO WATER: 9.65 T/ PVC

DEPTH TO BOTTOM: NM T/ PVC

WELL VOLUME: NM ☐ LITERS ☐ GALLONS

VOLUME REMOVED: 4.5 ☑ LITERS ☐ GALLONS

COLOR: Brownish ODOR: non

TURBIDITY ☐ NONE ☐ SLIGHT ☐ MODERATE ☑ VERY

DISPOSAL METHOD: ☑ GROUND ☐ DRUM ☐ OTHER

SAMPLE	TIME: 0923	DATE: 12/15/22

PH: 7.19 SU CONDUCTIVITY: 1074 umhos/cm

ORP: -183.0 mV DO: NM mg/L

TURBIDITY: 3.5 NTU

☑ NONE ☐ SLIGHT ☐ MODERATE ☐ VERY

TEMPERATURE: 13.1 °C OTHER:

COLOR: Clear ODOR: non

FILTRATE (0.45 um) ☐ YES ☑ NO

FILTRATE COLOR: NA FILTRATE ODOR: NA

QC SAMPLE: ☐ MS/MSD ☐ DUP-

COMMENTS: DO not working

TIME	PURGE RATE (ML/MIN)	PH (SU)	CONDUCTIVITY (umhos/cm)	ORP (mV)	D.O. (mg/L)	TURBIDITY (NTU)	TEMPERATURE (°C)	WATER LEVEL (FEET)	CUMULATIVE PURGE VOLUME (GAL OR L)
0838	100	7.55	618	+241.5	NM	860	11.4	9.65	INITIAL
0843		7.22	1410	-149.5		540	12.2	9.70	.5
0848		7.23	1409	-166.6		450	12.6	9.76	1
0853		7.23	1347	-181.7		379	12.9	9.76	1.5
0858		7.25	1203	-167.7		4.5	12.9	9.76	2
0903		7.23	1175	-170.0		6.0	13.0	9.70	2.5
0908		7.21	1100	-180.5		4.5	13.1	9.70	3
0913		7.20	1086	-182.8		3.9	13.1	9.76	3.5
0918		7.19	1074	-182.6		3.8	13.2	9.70	4
0923		7.19	1074	-183.0		3.5	13.1	9.76	4.5

NOTE: STABILIZATION TEST IS COMPLETE WHEN 3 SUCCESSIVE READINGS ARE WITHIN THE FOLLOWING LIMITS:

pH: +/- 0.1 COND.: +/- 10 % ORP: +/- 10 % D.O.: +/- 10 % TURB: +/- 10 % or </= 5 TEMP.: +/- 0.5°C

BOTTLES FILLED — PRESERVATIVE CODES: A - NONE B - HNO3 C - H2SO4 D - NaOH E - HCL F - _____

NUMBER	SIZE	TYPE	PRESERVATIVE	FILTERED	NUMBER	SIZE	TYPE	PRESERVATIVE	FILTERED
	1 L	AMBER	A	☐ Y ☑ N		125 mL	AMBER	A	☐ Y ☑ N
1	125 mL	PLASTIC	B	☐ Y ☑ N					☐ Y ☐ N
3	15 mL	PLASTIC	A	☐ Y ☑ N					☐ Y ☐ N
3	40 mL	VOA	E	☐ Y ☑ N					☐ Y ☐ N
3	40 mL	VOA	A	☐ Y ☑ N					☐ Y ☐ N

SHIPPING METHOD: Courier	DATE SHIPPED: 12.16.22	AIRBILL NUMBER: NA
COC NUMBER: NA	SIGNATURE:	DATE SIGNED: 1/6/23

TRC WATER SAMPLE LOG

PROJECT NAME: DA ~~Southern~~ East Investigation	PREPARED		CHECKED	
PROJECT NUMBER: 495430.0000	BY: AW, JJ	DATE: 12/16/22	BY: AW	DATE: 12.23.22

SAMPLE ID: MW-131 | WELL DIAMETER: ☑ 2" ☐ 4" ☐ 6" ☐ OTHER

WELL MATERIAL: ☑ PVC ☐ SS ☐ IRON ☐ GALVANIZED STEEL ☐ OTHER

SAMPLE TYPE: ☑ GW ☐ WW ☐ SW ☐ DI ☐ LEACHATE ☐ OTHER

PURGING	TIME: 0945	DATE: 12/15/22

PURGE METHOD: ☑ PUMP PERISTALTIC PUMP ☐ BAILER

DEPTH TO WATER: 10.72 T/ PVC

DEPTH TO BOTTOM: NM T/ PVC

WELL VOLUME: NM ☐ LITERS ☐ GALLONS

VOLUME REMOVED: 3 ☑ LITERS ☐ GALLONS

COLOR: Clear ODOR: None

TURBIDITY ☑ NONE ☐ SLIGHT ☐ MODERATE ☐ VERY

DISPOSAL METHOD: ☑ GROUND ☐ DRUM ☐ OTHER

SAMPLE	TIME: 1015	DATE: 12/15/22

PH: 7.08 SU | CONDUCTIVITY: 808 umhos/cm

ORP: -179.8 mV | DO: NM mg/L

TURBIDITY: 3.0 NTU

☑ NONE ☐ SLIGHT ☐ MODERATE ☐ VERY

TEMPERATURE: 14C °C | OTHER:

COLOR: Clear | ODOR: None

FILTRATE (0.45 um) ☐ YES ☑ NO

FILTRATE COLOR: NA | FILTRATE ODOR: NA

QC SAMPLE: ☐ MS/MSD ☐ DUP-

COMMENTS: Do not Working

TIME	PURGE RATE (ML/MIN)	PH (SU)	CONDUCTIVITY (umhos/cm)	ORP (mV)	D.O. (mg/L)	TURBIDITY (NTU)	TEMPERATURE (°C)	WATER LEVEL (FEET)	CUMULATIVE PURGE VOLUME (GAL OR L)
0945	100	7.50	384	-46.6	NM	8.0	12.1	10.61	INITIAL
0952		7.03	809	-138.8		3.8	13.3	10.67	.5
0957		7.05	804	-170.0		3.4	13.9	10.67	1
1000		7.07	810	-181.5		3.1	14.1	10.67	1.5
1005		7.07	809	-180.9		3.0	14.1	10.67	2
1010		7.06	808	-179.8		3.1	13.9	10.67	2.5
1015		7.08	808	-179.8		3.0	14.0	10.67	3

NOTE: STABILIZATION TEST IS COMPLETE WHEN 3 SUCCESSIVE READINGS ARE WITHIN THE FOLLOWING LIMITS:

pH: +/- 0.1 COND.: +/- 10 % ORP: +/- 10 % D.O.: +/- 10 % TURB: +/- 10 % or </= 5 TEMP.: +/- 0.5°C

BOTTLES FILLED — PRESERVATIVE CODES A - NONE B - HNO3 C - H2SO4 D - NaOH E - HCL F - _____

NUMBER	SIZE	TYPE	PRESERVATIVE	FILTERED	NUMBER	SIZE	TYPE	PRESERVATIVE	FILTERED
	1 L	AMBER	A	☐ Y ☑ N		125 mL	AMBER	A	☐ Y ☑ N
1	125 mL	PLASTIC	B	☐ Y ☑ N					☐ Y ☐ N
3	15 mL	PLASTIC	A	☐ Y ☑ N					☐ Y ☐ N
3	40 mL	VOA	E	☐ Y ☑ N					☐ Y ☐ N
3	40 mL	VOA	A	☐ Y ☑ N					☐ Y ☐ N

SHIPPING METHOD: Courier	DATE SHIPPED: 12.16.22	AIRBILL NUMBER: NA
COC NUMBER: NA	SIGNATURE:	DATE SIGNED: 12/16/22

TRC WATER SAMPLE LOG

PROJECT NAME: DA ~~Southern~~ East Investigation	PREPARED	CHECKED
PROJECT NUMBER: 495430.0000	BY: AW, JJ DATE: 11/16/22	BY: AW DATE: 12.23.22

SAMPLE ID: MW-113 | WELL DIAMETER: ☑ 2" ☐ 4" ☐ 6" ☐ OTHER

WELL MATERIAL: ☑ PVC ☐ SS ☐ IRON ☐ GALVANIZED STEEL ☐ OTHER

SAMPLE TYPE: ☑ GW ☐ WW ☐ SW ☐ DI ☐ LEACHATE ☐ OTHER

PURGING	TIME: 1051	DATE: 12/16/22	SAMPLE	TIME: 1117	DATE: 12/16/22
PURGE METHOD: ☑ PUMP PERISTALTIC PUMP ☐ BAILER			PH: 7.00 SU	CONDUCTIVITY: 851 umhos/cm	
DEPTH TO WATER: 10.98 T/ PVC			ORP: -132.0 mV	DO: NM mg/L	
DEPTH TO BOTTOM: NM T/ PVC			TURBIDITY: 4.7 NTU		
WELL VOLUME: NM ☐ LITERS ☐ GALLONS			~~NONE~~ ☐ SLIGHT ☐ MODERATE ☐ VERY		
VOLUME REMOVED: clear ☑ LITERS ☐ GALLONS			TEMPERATURE: 11.3 °C	OTHER:	
COLOR: Clear	ODOR: nor		COLOR: clear	ODOR: non	
TURBIDITY			FILTRATE (0.45 um) ☐ YES ☑ NO		
~~NONE~~ ☐ SLIGHT ☐ MODERATE ☐ VERY			FILTRATE COLOR: NA	FILTRATE ODOR: NA	
DISPOSAL METHOD: ☑ GROUND ☐ DRUM ☐ OTHER			QC SAMPLE: ☐ MS/MSD ☐ DUP-		
			COMMENTS: DO not working		

TIME	PURGE RATE (ML/MIN)	PH (SU)	CONDUCTIVITY (umhos/cm)	ORP (mV)	D.O. (mg/L)	TURBIDITY (NTU)	TEMPERATURE (°C)	WATER LEVEL (FEET)	CUMULATIVE PURGE VOLUME (GAL OR L)
1051	190	7.04	441	-54.7	NM	180	10.4	10.98	INITIAL
1100		6.99	930	-115.0		14.1	10.8	11.08	.5
1105		6.99	851	-131.5		4.8	11.2	11.08	1
1110		6.99	818	-131.8		4.8	11.2	11.08	1.5
1115		7.00	851	-132.0		4.7	11.3	11.08	2
1120									2.5

NOTE: STABILIZATION TEST IS COMPLETE WHEN 3 SUCCESSIVE READINGS ARE WITHIN THE FOLLOWING LIMITS:

pH: +/- 0.1 COND.: +/- 10 % ORP: +/- 10 % D.O.: +/- 10 % TURB: +/- 10 % or </= 5 TEMP.: +/- 0.5°C

BOTTLES FILLED — PRESERVATIVE CODES: A - NONE B - HNO3 C - H2SO4 D - NaOH E - HCL F - _____

NUMBER	SIZE	TYPE	PRESERVATIVE	FILTERED	NUMBER	SIZE	TYPE	PRESERVATIVE	FILTERED
	1 L	AMBER	A	☐ Y ☑ N		125 mL	AMBER	A	☐ Y ☑ N
1	125 mL	PLASTIC	B	☐ Y ☑ N					☐ Y ☐ N
3	15 mL	PLASTIC	A	☐ Y ☑ N					☐ Y ☐ N
3	40 mL	VOA	E	☐ Y ☑ N					☐ Y ☐ N
3	40 mL	VOA	A	☐ Y ☑ N					☐ Y ☐ N

SHIPPING METHOD: Courier	DATE SHIPPED: 12.16.22	AIRBILL NUMBER: NA
COC NUMBER: NA	SIGNATURE:	DATE SIGNED: 12/16/22

TRC WATER SAMPLE LOG

PROJECT NAME: DA ~~Southern~~ East Investigation	PREPARED		CHECKED	
PROJECT NUMBER: 495430.0000	BY: AW, JJ	DATE: 12/6/22	BY: AW	DATE: 12.23.22

SAMPLE ID: MW-23-04 | WELL DIAMETER: ☑ 2" ☐ 4" ☐ 6" ☐ OTHER

WELL MATERIAL: ☑ PVC ☐ SS ☐ IRON ☐ GALVANIZED STEEL ☐ OTHER

SAMPLE TYPE: ☑ GW ☐ WW ☐ SW ☐ DI ☐ LEACHATE ☐ OTHER

PURGING	TIME: 1137	DATE: 12/15/22

PURGE METHOD: ☑ PUMP PERISTALTIC PUMP ☐ BAILER

DEPTH TO WATER: 6.00 T/ PVC

DEPTH TO BOTTOM: NM T/ PVC

WELL VOLUME: NM ☐ LITERS ☐ GALLONS

VOLUME REMOVED: 5 ☑ LITERS ☐ GALLONS

COLOR: Brownish ODOR: non

TURBIDITY ☐ NONE ☐ SLIGHT ☐ MODERATE ☑ VERY

DISPOSAL METHOD: ☑ GROUND ☐ DRUM ☐ OTHER

SAMPLE	TIME: 1200	DATE: 12/15/22

PH: 7.35 SU CONDUCTIVITY: 763 umhos/cm

ORP: -191.3 mV DO: NM mg/L

TURBIDITY: 5.3 NTU

☑ NONE ☐ SLIGHT ☐ MODERATE ☐ VERY

TEMPERATURE: 12.4 °C OTHER:

COLOR: Clear ODOR: none

FILTRATE (0.45 um) ☐ YES ☑ NO

FILTRATE COLOR: NA FILTRATE ODOR: NA

QC SAMPLE: ☐ MS/MSD ☐ DUP-

COMMENTS: DO not working

TIME	PURGE RATE (ML/MIN)	PH (SU)	CONDUCTIVITY (umhos/cm)	ORP (mV)	D.O. (mg/L)	TURBIDITY (NTU)	TEMPERATURE (°C)	WATER LEVEL (FEET)	CUMULATIVE PURGE VOLUME (GAL OR L)
1137	200	7.57	763	-53.0	NM	1500	11.5	6.00	INITIAL
1140		7.30	764	-145.3		200	12.0	6.08	1
1145		7.36	774	-174.5		21.8	12.3	6.08	2
1150		7.35	771	-190.8		5.5	12.3	6.08	3
1155		7.35	766	-191.0		5.3	12.4	6.08	4
1200		7.35	763	-191.3		5.3	12.4	6.08	5
1205									6
1210									7
									8

NOTE: STABILIZATION TEST IS COMPLETE WHEN 3 SUCCESSIVE READINGS ARE WITHIN THE FOLLOWING LIMITS:

pH: +/- 0.1 COND.: +/- 10 % ORP: +/- 10 % D.O.: +/- 10 % TURB: +/- 10 % or </= 5 TEMP.: +/- 0.5°C

BOTTLES FILLED — PRESERVATIVE CODES A - NONE B - HNO3 C - H2SO4 D - NaOH E - HCL F - _____

NUMBER	SIZE	TYPE	PRESERVATIVE	FILTERED	NUMBER	SIZE	TYPE	PRESERVATIVE	FILTERED
	1 L	AMBER	A	☐ Y ☑ N		125 mL	AMBER	A	☐ Y ☑ N
1	125 mL	PLASTIC	B	☐ Y ☑ N					☐ Y ☐ N
3	15 mL	PLASTIC	A	☐ Y ☑ N					☐ Y ☐ N
3	40 mL	VOA	E	☐ Y ☑ N					☐ Y ☐ N
3	40 mL	VOA	A	☐ Y ☑ N					☐ Y ☐ N

SHIPPING METHOD: Courier	DATE SHIPPED: 12.16.22	AIRBILL NUMBER: NA
COC NUMBER: NA	SIGNATURE:	DATE SIGNED: 12/16/22

TRC

WATER SAMPLE LOG

PROJECT NAME:	DA ~~Southern~~ East Investigation	PREPARED		CHECKED	
PROJECT NUMBER:	495430.0000	BY: AW, JJ	DATE: 12/14/22	BY: AW	DATE: 12.23.22

SAMPLE ID: MW-22-05 | WELL DIAMETER: ☑ 2" ☐ 4" ☐ 6" ☐ OTHER

WELL MATERIAL: ☑ PVC ☐ SS ☐ IRON ☐ GALVANIZED STEEL ☐ OTHER

SAMPLE TYPE: ☑ GW ☐ WW ☐ SW ☐ DI ☐ LEACHATE ☐ OTHER

PURGING	TIME: 1218	DATE: 12/15/22	SAMPLE	TIME: 1318	DATE: 12/15/22
PURGE METHOD:	☑ PUMP PERISTALTIC PUMP ☐ BAILER		PH: 7.24 SU	CONDUCTIVITY: 601 umhos/cm	
DEPTH TO WATER:	6.08 T/ PVC		ORP: -126.7 mV	DO: NM mg/L	
DEPTH TO BOTTOM:	NM T/ PVC		TURBIDITY: 8.6 NTU		
WELL VOLUME:	NM ☐ LITERS ☐ GALLONS		☒ NONE ☐ SLIGHT ☐ MODERATE ☐ VERY		
VOLUME REMOVED:	12 ☑ LITERS ☐ GALLONS		TEMPERATURE: 12.3 °C	OTHER:	
COLOR:	Brownish ODOR: none		COLOR: Clear	ODOR: none	
TURBIDITY			FILTRATE (0.45 um) ☐ YES	☑ NO	
☐ NONE ☐ SLIGHT ☐ MODERATE	☒ VERY		FILTRATE COLOR: NA	FILTRATE ODOR: NA	
DISPOSAL METHOD:	☑ GROUND ☐ DRUM ☐ OTHER		QC SAMPLE: ☐ MS/MSD	☐ DUP-	
			COMMENTS: DO not working		

TIME	PURGE RATE (ML/MIN)	PH (SU)	CONDUCTIVITY (umhos/cm)	ORP (mV)	D.O. (mg/L)	TURBIDITY (NTU)	TEMPERATURE (°C)	WATER LEVEL (FEET)	CUMULATIVE PURGE VOLUME (GAL OR L)
1218	200	7.43	432	-145.3	NM	2500	10.0	6.08	INITIAL
1223		7.17	964	-177.9		1618	12.3	6.28	1
1228		7.21	956	-194.9		200	13.5	6.28	2
1233		7.20	947	-180.3		82.5	12.7	6.28	3
1238		7.22	846	-166.5		63	12.6	6.28	4
1243		7.25	633	-130.0		33.5	12.4	6.28	5
1248		7.27	568	-120.2		23.7	12.4	6.28	6
1253		7.26	572	-119.3		18.3	12.3	6.28	7
1258		7.25	592	-122.5		16.3	12.3	6.28	8
1303		7.27	621	-115.3		11.5	12.3	6.28	9

NOTE: STABILIZATION TEST IS COMPLETE WHEN 3 SUCCESSIVE READINGS ARE WITHIN THE FOLLOWING LIMITS:

pH: +/- **0.1** COND.: +/- **10 %** ORP: +/- **10 %** D.O.: +/- **10 %** TURB: +/- **10 %** or </= **5** TEMP.: +/- **0.5°C**

BOTTLES FILLED — PRESERVATIVE CODES A.- NONE B - HNO3 C - H2SO4 D - NaOH E - HCL F - _____

NUMBER	SIZE	TYPE	PRESERVATIVE	FILTERED	NUMBER	SIZE	TYPE	PRESERVATIVE	FILTERED
	1 L	AMBER	A	☐ Y ☑ N		125 mL	AMBER	A	☐ Y ☑ N
1	125 mL	PLASTIC	B	☐ Y ☑ N					☐ Y ☐ N
3	15 mL	PLASTIC	A	☐ Y ☑ N					☐ Y ☐ N
3	40 mL	VOA	E	☐ Y ☑ N					☐ Y ☐ N
3	40 mL	VOA	A	☐ Y ☑ N					☐ Y ☐ N

SHIPPING METHOD:	Courier	DATE SHIPPED:	12.16.22	AIRBILL NUMBER:	NA
COC NUMBER:	NA	SIGNATURE:		DATE SIGNED:	12/14/22

TRC WATER SAMPLE LOG

(CONTINUED FROM PREVIOUS PAGE)

PROJECT NAME:	DA ~~Southern~~ East Investigation	PREPARED		CHECKED	
PROJECT NUMBER:	495430.0000	BY: AW, JJ	DATE: 12/14/22	BY: AW	DATE: 12.23.22

SAMPLE ID: MW- 22-05

TIME	PURGE RATE (ML/MIN)	PH (SU)	CONDUCTIVITY (umhos/cm)	ORP (mV)	D.O. (mg/L)	TURBIDITY (NTU)	TEMPERATURE (°C)	WATER LEVEL (FEET)	CUMULATIVE PURGE VOLUME (GAL OR L)
1308	200	7.24	638	-126.1	NM	8.7	12.4	628	10
1313	|	7.24	618	-126.5	|	8.5	12.3	628	11
1318	|	7.24	615	-126.7	|	8.6	12.3	628	12

SIGNATURE: [signature] 12/14/22 DATE SIGNED: _____

REVISED 04/2019

TRC WATER SAMPLE LOG

PROJECT NAME: DA ~~Southern~~ East Investigation	PREPARED		CHECKED	
PROJECT NUMBER: 495430.0000	BY: AW, JJ	DATE: 12/14/22	BY: AW	DATE: 12.23.22

SAMPLE ID: MW-32-06 | WELL DIAMETER: ☑ 2" ☐ 4" ☐ 6" ☐ OTHER

WELL MATERIAL: ☑ PVC ☐ SS ☐ IRON ☐ GALVANIZED STEEL ☐ OTHER

SAMPLE TYPE: ☑ GW ☐ WW ☐ SW ☐ DI ☐ LEACHATE ☐ OTHER

PURGING	TIME: 1330	DATE: 12/15/22

PURGE METHOD: ☑ PUMP PERISTALTIC PUMP ☐ BAILER

DEPTH TO WATER: 6.88 T/ PVC

DEPTH TO BOTTOM: NM T/ PVC

WELL VOLUME: NM ☐ LITERS ☐ GALLONS

VOLUME REMOVED: 5 ☑ LITERS ☐ GALLONS

COLOR: Brownish ODOR: none

TURBIDITY ☐ NONE ☐ SLIGHT ☐ MODERATE ☐ ~~VERY~~

DISPOSAL METHOD: ☑ GROUND ☐ DRUM ☐ OTHER

SAMPLE	TIME: 1355	DATE: 12/15/22

PH: 7.16 SU | CONDUCTIVITY: 960 umhos/cm

ORP: -188.5 mV | DO: NM mg/L

TURBIDITY: 4.9 NTU

☑ ~~NONE~~ ☐ SLIGHT ☐ MODERATE ☐ VERY

TEMPERATURE: 13.6 °C | OTHER:

COLOR: Clear | ODOR: none

FILTRATE (0.45 um) ☐ YES ☑ NO

FILTRATE COLOR: NA | FILTRATE ODOR: NA

QC SAMPLE: ☐ MS/MSD ☐ DUP-

COMMENTS: DO not working

TIME	PURGE RATE (ML/MIN)	PH (SU)	CONDUCTIVITY (umhos/cm)	ORP (mV)	D.O. (mg/L)	TURBIDITY (NTU)	TEMPERATURE (°C)	WATER LEVEL (FEET)	CUMULATIVE PURGE VOLUME (GAL OR L)
1330	200	7.63	475	-64.4	NM	100	12.0	6.88	INITIAL
1335		7.15	930	-140.0		18.8	13.5	6.90	1
1340		7.15	950	-176.7		9.7	13.6	6.91	2
1345		7.16	958	-180.0		5.0	13.6	6.91	3
1350		7.16	960	-180.3		5.0	13.6	6.91	4
1355		7.16	960	-188.5		4.9	13.6	6.91	5

NOTE: STABILIZATION TEST IS COMPLETE WHEN 3 SUCCESSIVE READINGS ARE WITHIN THE FOLLOWING LIMITS:

pH: +/- **0.1** COND.: +/- **10 %** ORP: +/- **10 %** D.O.: +/- **10 %** TURB: +/- **10 %** or </= **5** TEMP.: +/- **0.5°C**

BOTTLES FILLED | PRESERVATIVE CODES A - NONE B - HNO3 C - H2SO4 D - NaOH E - HCL F - _____

NUMBER	SIZE	TYPE	PRESERVATIVE	FILTERED	NUMBER	SIZE	TYPE	PRESERVATIVE	FILTERED
	1 L	AMBER	A	☐ Y ☑ N		125 mL	AMBER	A	☐ Y ☑ N
1	125 mL	PLASTIC	B	☐ Y ☑ N					☐ Y ☐ N
3	15 mL	PLASTIC	A	☐ Y ☑ N					☐ Y ☐ N
3	40 mL	VOA	E	☐ Y ☑ N					☐ Y ☐ N
3	40 mL	VOA	A	☐ Y ☑ N					☐ Y ☐ N

SHIPPING METHOD: Courier	DATE SHIPPED: 12.16.22	AIRBILL NUMBER: NA
COC NUMBER: NA	SIGNATURE:	DATE SIGNED: 12/16/22

TRC

WATER SAMPLE LOG

PROJECT NAME:	DA ~~Southern~~ East Investigation	PREPARED		CHECKED	
PROJECT NUMBER:	495430.0000	BY: AW, JJ	DATE: 1/16/23	BY: AW	DATE: 12.23.22

SAMPLE ID: FB2 BL | WELL DIAMETER: ☑ 2" ☐ 4" ☐ 6" ☐ OTHER

WELL MATERIAL: ☑ PVC ☐ SS ☐ IRON ☐ GALVANIZED STEEL ☐ OTHER

SAMPLE TYPE: ☑ GW ☐ WW ☐ SW ☐ DI ☐ LEACHATE ☐ OTHER

PURGING	TIME:	DATE:	SAMPLE	TIME:	DATE: 1/16/23

PURGE METHOD: ☑ PUMP PERISTALTIC PUMP ☐ BAILER

DEPTH TO WATER: ~~T/ PVC~~

DEPTH TO BOTTOM: T/ PVC

WELL VOLUME: NM ☐ LITERS ☐ GALLONS

VOLUME REMOVED: ☑ LITERS ☐ GALLONS

COLOR: ODOR:

TURBIDITY ☐ NONE ☐ SLIGHT ☐ MODERATE ☐ VERY

DISPOSAL METHOD: ☑ GROUND ☐ DRUM ☐ OTHER

PH: SU | CONDUCTIVITY: umhos/cm

ORP: mV | DO: mg/L

TURBIDITY: 0 NTU

☑ NONE ☐ SLIGHT ☐ MODERATE ☐ VERY

TEMPERATURE: °C | OTHER:

COLOR: Clr | ODOR: Non

FILTRATE (0.45 um) ☐ YES ☑ NO

FILTRATE COLOR: NA | FILTRATE ODOR: NA

QC SAMPLE: ☐ MS/MSD ☐ DUP-

COMMENTS:

TIME	PURGE RATE (ML/MIN)	PH (SU)	CONDUCTIVITY (umhos/cm)	ORP (mV)	D.O. (mg/L)	TURBIDITY (NTU)	TEMPERATURE (°C)	WATER LEVEL (FEET)	CUMULATIVE PURGE VOLUME (GAL OR L)
									INITIAL

NOTE: STABILIZATION TEST IS COMPLETE WHEN 3 SUCCESSIVE READINGS ARE WITHIN THE FOLLOWING LIMITS:

pH: +/- **0.1** COND.: +/- **10 %** ORP: +/- **10 %** D.O.: +/- **10 %** TURB: +/- **10 %** or </= **5** TEMP.: +/- **0.5°C**

BOTTLES FILLED | PRESERVATIVE CODES A - NONE B - HNO3 C - H2SO4 D - NaOH E - HCL F - _____

NUMBER	SIZE	TYPE	PRESERVATIVE	FILTERED	NUMBER	SIZE	TYPE	PRESERVATIVE	FILTERED
	1 L	AMBER	A	☐ Y ☑ N		125 mL	AMBER	A	☐ Y ☑ N
	125 mL	PLASTIC	B	☐ Y ☑ N					☐ Y ☐ N
1	15 mL	PLASTIC	A	☐ Y ☑ N					☐ Y ☐ N
	40 mL	VOA	E	☐ Y ☑ N					☐ Y ☐ N
	40 mL	VOA	A	☐ Y ☑ N					☐ Y ☐ N

SHIPPING METHOD:	Courier	DATE SHIPPED: 12.16.22	AIRBILL NUMBER: NA
COC NUMBER:	NA	SIGNATURE:	DATE SIGNED: 1/16/23

TRC

WATER SAMPLE LOG

PROJECT NAME: DA ~~Southern~~ East Investigation	PREPARED		CHECKED	
PROJECT NUMBER: 495430.0000	BY: AW, JJ	DATE: 12/16/22	BY: AW	DATE: 12.23.22

SAMPLE ID: E.B # 1 WELL DIAMETER: ☑ 2" ☐ 4" ☐ 6" ☐ OTHER _____

WELL MATERIAL: ☑ PVC ☐ SS ☐ IRON ☐ GALVANIZED STEEL ☐ OTHER _____

SAMPLE TYPE: ☑ GW ☐ WW ☐ SW ☐ DI ☐ LEACHATE ☐ OTHER _____

PURGING	TIME:	DATE:

PURGE METHOD: ☑ PUMP PERISTALTIC PUMP ☐ BAILER _____

DEPTH TO WATER: _____ T/ PVC

DEPTH TO BOTTOM: T/ PVC

WELL VOLUME: NM ☐ LITERS ☐ GALLONS

VOLUME REMOVED: _____ ☑ LITERS ☐ GALLONS

COLOR: _____ ODOR: _____

TURBIDITY ☐ NONE ☐ SLIGHT ☐ MODERATE ☐ VERY

DISPOSAL METHOD: ☑ GROUND ☐ DRUM ☐ OTHER

SAMPLE	TIME:	DATE: 12/16/22

PH: _____ SU CONDUCTIVITY: _____ umhos/cm

ORP: _____ mV DO: _____ mg/L

TURBIDITY: _____ NTU

☑ NONE ☐ SLIGHT ☐ MODERATE ☐ VERY

TEMPERATURE: _____ °C OTHER: _____

COLOR: clear ODOR: none

FILTRATE (0.45 um) ☐ YES ☑ NO

FILTRATE COLOR: NA FILTRATE ODOR: NA

QC SAMPLE: ☐ MS/MSD ☐ DUP- _____

COMMENTS:

TIME	PURGE RATE (ML/MIN)	PH (SU)	CONDUCTIVITY (umhos/cm)	ORP (mV)	D.O. (mg/L)	TURBIDITY (NTU)	TEMPERATURE (°C)	WATER LEVEL (FEET)	CUMULATIVE PURGE VOLUME (GAL OR L)
									INITIAL

NOTE: STABILIZATION TEST IS COMPLETE WHEN 3 SUCCESSIVE READINGS ARE WITHIN THE FOLLOWING LIMITS:

pH: +/- **0.1** COND.: +/- **10 %** ORP: +/- **10 %** D.O.: +/- **10 %** TURB: +/- **10 %** or </= **5** TEMP.: +/- **0.5°C**

BOTTLES FILLED — PRESERVATIVE CODES A - NONE B - HNO3 C - H2SO4 D - NaOH E - HCL F - _____

NUMBER	SIZE	TYPE	PRESERVATIVE	FILTERED	NUMBER	SIZE	TYPE	PRESERVATIVE	FILTERED
	1 L	AMBER	A	☐ Y ☑ N		125 mL	AMBER	A	☐ Y ☑ N
1	125 mL	PLASTIC	B	☐ Y ☑ N					☐ Y ☐ N
3	15 mL	PLASTIC	A	☐ Y ☑ N					☐ Y ☐ N
3	40 mL	VOA	E	☐ Y ☑ N					☐ Y ☐ N
3	40 mL	VOA	A	☐ Y ☑ N					☐ Y ☐ N

SHIPPING METHOD: Courier	DATE SHIPPED: 12.16.22	AIRBILL NUMBER: NA
COC NUMBER: NA	SIGNATURE:	DATE SIGNED: 12/16/22

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www.meritlabs.com

C.O.C. PAGE # _____ OF _____ 158657

CHAIN OF CUSTODY RECORD

REPORT TO

CONTACT NAME: Kelly Cruikenburg
COMPANY: TRC
ADDRESS: 1540 Eisenhower Place
CITY: Ann Arbor STATE: MI ZIP CODE: 48105
PHONE NO. | CELL NO. | P.O. NO.: 169455
E-MAIL ADDRESS | QUOTE NO.

INVOICE TO

CONTACT NAME ☑ SAME
COMPANY
ADDRESS
CITY | STATE | ZIP CODE
PHONE NO. | E-MAIL ADDRESS

PROJECT NO./NAME | SAMPLER(S) - PLEASE PRINT/SIGN NAME

TURNAROUND TIME REQUIRED ☐ 1 DAY ☐ 2 DAYS ☐ 3 DAYS ☐ STANDARD ☐ OTHER _____

DELIVERABLES REQUIRED ☐ STD ☐ LEVEL II ☐ LEVEL III ☐ LEVEL IV ☐ EDD ☐ OTHER _____

MATRIX CODE: W=WATER GW=GROUNDWATER WW=WASTEWATER S=SOIL L=LIQUID SD=SOLID SL=SLUDGE DW=DRINKING WATER O=OIL WP=WIPE A=AIR WS=WASTE

ANALYSIS (ATTACH LIST IF MORE SPACE IS REQUIRED): PFC

Certifications
☐ OHIO VAP ☐ Drinking Water
☐ DoD ☐ NPDES

Project Locations
☐ Detroit ☐ New York
☐ Other _____

Special Instructions

MERIT LAB NO. (FOR LAB USE ONLY)	COLLECTION DATE	COLLECTION TIME	SAMPLE TAG IDENTIFICATION-DESCRIPTION	MATRIX	# OF BOTTLES	# Containers & Preservatives: NONE	HCl	HNO_3	H_2SO_4	NaOH	MeOH	OTHER
	12/14	0947	[illegible]	W	3	4						
	"	—	Dup #3	W	3	4						
	"	0932	MW 119	W	3	4						
	"	1032	MW 120	W	3	4						
	"	1121	MW 117	W	3	4						
	"	1231	MW 111	W	3	4						
	"	1321	MW 110	W	3	4						
	"	1417	MW 109	W	3	4						
	"	1458	MW-108	W	3	4						

RELINQUISHED BY: SIGNATURE/ORGANIZATION ☐ Sampler DATE 12/15/22 TIME 1430
RECEIVED BY: SIGNATURE/ORGANIZATION TRC DATE 12/15/22 TIME

RELINQUISHED BY: SIGNATURE/ORGANIZATION TRC DATE 12/15 TIME [illegible]
RECEIVED BY: SIGNATURE/ORGANIZATION [illegible] DATE 12/15 TIME 500

RELINQUISHED BY: SIGNATURE/ORGANIZATION [illegible] DATE 12/15/22 TIME 1430
RECEIVED BY: SIGNATURE/ORGANIZATION DATE TIME

SEAL NO. SEAL INTACT YES ☐ NO ☐ INITIALS
SEAL NO. SEAL INTACT YES ☐ NO ☐ INITIALS

NOTES: TEMP. ON ARRIVAL _____

PLEASE NOTE: SIGNING ACKNOWLEDGES ADHERENCE TO MERIT'S SAMPLE ACCEPTANCE POLICY ON REVERSE SIDE

Rev. 1.26.22

2680 East Lansing Dr., East Lansing, MI 48823
Phone (517) 332-0167 Fax (517) 332-4034
www.meritlabs.com

Merit Laboratories, Inc.

C.O.C. PAGE # ______ OF ______ 158653

CHAIN OF CUSTODY RECORD

REPORT TO

CONTACT NAME Kelly Cratsenberg
COMPANY TRC
ADDRESS 1540 Eisenhower Place
CITY Ann Arbor STATE MI ZIP CODE 48108
PHONE NO. CELL NO. P.O. NO. 189451
E-MAIL ADDRESS QUOTE NO.

INVOICE TO

CONTACT NAME ☐SAME
COMPANY
ADDRESS
CITY STATE ZIP CODE
PHONE NO. E-MAIL ADDRESS

PROJECT NO./NAME Detroit Axle F
SAMPLER(S) - PLEASE PRINT/SIGN NAME

TURNAROUND TIME REQUIRED ☐ 1 DAY ☐ 2 DAYS ☐ 3 DAYS ☐ STANDARD ☐ OTHER ______

DELIVERABLES REQUIRED ☐ STD ☐ LEVEL II ☐ LEVEL III ☐ LEVEL IV ☐ EDD ☐ OTHER ______

MATRIX CODE: W=WATER GW=GROUNDWATER WW=WASTEWATER S=SOIL L=LIQUID SD=SOLID SL=SLUDGE DW=DRINKING WATER O=OIL WP=WIPE A=AIR WS=WASTE

ANALYSIS (ATTACH LIST IF MORE SPACE IS REQUIRED)

MERIT LAB NO. (FOR LAB USE ONLY)	COLLECTION DATE	COLLECTION TIME	SAMPLE TAG IDENTIFICATION-DESCRIPTION	MATRIX	# OF BOTTLES	NONE	HCl	HNO_3	H_2SO_4	NaOH	MeOH	OTHER	VOC/Formaldehyde	metals/Hardness	alcohol/glycol
	~~[illegible]~~	~~[illegible]~~	~~[illegible]~~	W	7	4	2	1					+	+	+
	12/11	—	Dup #2	W	7	4	2	1					+	+	+
	12/11	0920	MW 119	W	7	4	2	1					+	+	+
	12/11	1030	MW 120	W	7	4	2	1					+	+	+
	12/11	1121	MW 113	W	7	4	2	1					+	+	+
	12/11	1231	MW 111	W	7	4	2	1					+	+	+
	12/11	1325	MW 110	W	7	4	2	1					+	+	+
	12/11	1415	MW 109	W	7	4	2	1					+	+	+
	12/11	1458	MW-108	W	7	4	2	1					+	+	+

Certifications
☐ OHIO VAP ☐ Drinking Water
☐ DoD ☐ NPDES

Project Locations
☐ Detroit ☐ New York
☐ Other ______

Special Instructions

RELINQUISHED BY: SIGNATURE/ORGANIZATION [signature] ☑ Sampler 12/14/22 DATE 12/14 TIME 1420
RECEIVED BY: SIGNATURE/ORGANIZATION TRC DATE TIME

RELINQUISHED BY: SIGNATURE/ORGANIZATION TRC DATE 12/15 TIME 800
RECEIVED BY: SIGNATURE/ORGANIZATION [signature] DATE 12/15 TIME 800

RELINQUISHED BY: SIGNATURE/ORGANIZATION TRC [signature] DATE 12/14/22 TIME 1430
RECEIVED BY: SIGNATURE/ORGANIZATION DATE TIME

SEAL NO. SEAL INTACT YES☐ NO☐ INITIALS
SEAL NO. SEAL INTACT YES☐ NO☐ INITIALS

NOTES: TEMP. ON ARRIVAL ______

PLEASE NOTE: SIGNING ACKNOWLEDGES ADHERENCE TO MERIT'S SAMPLE ACCEPTANCE POLICY ON REVERSE SIDE

Rev. 1.26.22

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C.O.C. PAGE # ______ OF ______ 158654

CHAIN OF COSTODY RECORD

REPORT TO

CONTACT NAME: Kely Cratsenburg
COMPANY: TRC
ADDRESS: 1540 Eisenhower Place
CITY: Ann Arbor STATE: MI ZIP CODE: 48106
PHONE NO. CELL NO. P.O. NO. 189455
E-MAIL ADDRESS QUOTE NO.

INVOICE TO

☐ SAME
CONTACT NAME
COMPANY
ADDRESS
CITY STATE ZIP CODE
PHONE NO. E-MAIL ADDRESS

PROJECT NO./NAME: Eastern Boundary D.A
SAMPLER(S) - PLEASE PRINT/SIGN NAME

TURNAROUND TIME REQUIRED ☐ 1 DAY ☐ 2 DAYS ☐ 3 DAYS ☒ STANDARD ☐ OTHER ______

DELIVERABLES REQUIRED ☐ STD ☐ LEVEL II ☐ LEVEL III ☐ LEVEL IV ☒ EDD ☐ OTHER TRC

MATRIX CODE: W=WATER GW=GROUNDWATER WW=WASTEWATER S=SOIL L=LIQUID SD=SOLID SL=SLUDGE DW=DRINKING WATER O=OIL WP=WIPE A=AIR WS=WASTE

ANALYSIS (ATTACH LIST IF MORE SPACE IS REQUIRED)

MERIT LAB NO. (FOR LAB USE ONLY)	DATE	TIME	SAMPLE TAG IDENTIFICATION-DESCRIPTION	MATRIX	# OF BOTTLES	NONE	HCl	HNO_3	H_2SO_4	NaOH	MeOH	OTHER	VOCs	metals	alcohols
	12/1/22	0807	MW-107	W	7	+	+	+					+	+	+
	'' ''	0922	MW-106	W	7	+	+	+					+	+	+
	'' ''	1015	MW 121	W	7	+	+	+					+	+	+
	'' ''	1115	MW 113	W	7	+	+	+					+	+	+
	'' ''	1200	MW-22-04	W	7	+	+	+					+	+	+
	'' ''	1318	MW-2205	W	7	+	+	+					+	+	+
	'' ''	1355	MW 22-06	W	7	+	+	+					+	+	+

Certifications
☐ OHIO VAP ☐ Drinking Water
☐ DoD ☐ NPDES

Project Locations
☐ Detroit ☐ New York
☐ Other ______

Special Instructions
Detroit Axle Eastern Boundary

RELINQUISHED BY: SIGNATURE/ORGANIZATION	[signature] ☒ Sampler	DATE 12/15/22	TIME 1545
RECEIVED BY: SIGNATURE/ORGANIZATION	[signature]	DATE 12/16/22	TIME 800
RELINQUISHED BY: SIGNATURE/ORGANIZATION		DATE	TIME
RECEIVED BY: SIGNATURE/ORGANIZATION		DATE	TIME

RELINQUISHED BY: SIGNATURE/ORGANIZATION	[signature]	DATE 12/15/22	TIME 1545
RECEIVED BY: SIGNATURE/ORGANIZATION		DATE	TIME

SEAL NO. SEAL INTACT YES ☐ NO ☐ INITIALS
SEAL NO. SEAL INTACT YES ☐ NO ☐ INITIALS
NOTES: TEMP. ON ARRIVAL ______

PLEASE NOTE: SIGNING ACKNOWLEDGES ADHERENCE TO MERIT'S SAMPLE ACCEPTANCE POLICY ON REVERSE SIDE

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Phone (517) 332-0167 Fax (517) 332-4034
www.meritlabs.com

C.O.C. PAGE # ______ OF ______ 158656

CHAIN OF CUSTODY RECORD

REPORT TO

CONTACT NAME: Kelly Crat[illegible]senburg
COMPANY: TRC
ADDRESS: 1540 Eisenhower Place
CITY: Ann Arbor STATE: MI ZIP CODE: 48108
PHONE NO.: CELL NO.: P.O. NO.: 189455
E-MAIL ADDRESS: QUOTE NO.:

INVOICE TO

☐ SAME
CONTACT NAME:
COMPANY:
ADDRESS:
CITY: STATE: ZIP CODE:
PHONE NO.: E-MAIL ADDRESS:

PROJECT NO./NAME: Eastern Boundary D. A.
SAMPLER(S) - PLEASE PRINT/SIGN NAME:

TURNAROUND TIME REQUIRED ☐ 1 DAY ☐ 2 DAYS ☐ 3 DAYS ☒ STANDARD ☐ OTHER

DELIVERABLES REQUIRED ☐ STD ☐ LEVEL II ☐ LEVEL III ☐ LEVEL IV ☒ EDD ☐ OTHER TRC

MATRIX CODE: W=WATER GW=GROUNDWATER WW=WASTEWATER S=SOIL L=LIQUID SD=SOLID SL=SLUDGE DW=DRINKING WATER O=OIL WP=WIPE A=AIR WS=WASTE

ANALYSIS (ATTACH LIST IF MORE SPACE IS REQUIRED)

MERIT LAB NO. (FOR LAB USE ONLY)	COLLECTION DATE	COLLECTION TIME	SAMPLE TAG IDENTIFICATION-DESCRIPTION	MATRIX	# OF BOTTLES	NONE	HCl	HNO_3	H_2SO_4	NaOH	MeOH	OTHER	[illegible]	31 PFAS
	01/15/21	0905	MW-107	W	3	+							X	X
	〃	0933	MW 106	W	3	+							X	X
	〃	1011	MW-121	W	3	+							X	X
	〃	1115	MW 113	W	3	+							X	X
	〃	1200	MW-22-04	W	3	+							X	X
	〃	1318	MW-22-05	W	3	+								X
	〃	1355	MW-22-06	W	3	+								X
	〃	1406	Field blank #1	DI	1	+								X
	〃	1420	Equipment Blank #1	DI	3	+								X

Certifications: ☐ OHIO VAP ☐ Drinking Water ☐ DoD ☐ NPDES

Project Locations: ☐ Detroit ☐ New York ☐ Other

Special Instructions: Detroit Dixie Eastern Boundary

RELINQUISHED BY: SIGNATURE/ORGANIZATION	[signature]	☐ Sampler	DATE [illegible]	TIME 1545
RECEIVED BY: SIGNATURE/ORGANIZATION	TRC		DATE	TIME
RELINQUISHED BY: SIGNATURE/ORGANIZATION	TRC		DATE 12/16/22	TIME 800
RECEIVED BY: SIGNATURE/ORGANIZATION	[signature]		DATE 12/16/22	TIME 800

RELINQUISHED BY: SIGNATURE/ORGANIZATION [signature] DATE [illegible] TIME [illegible]
RECEIVED BY: SIGNATURE/ORGANIZATION DATE TIME

SEAL NO. SEAL INTACT YES ☐ NO ☐ INITIALS
SEAL NO. SEAL INTACT YES ☐ NO ☐ INITIALS

NOTES: TEMP. ON ARRIVAL ______

PLEASE NOTE: SIGNING ACKNOWLEDGES ADHERENCE TO MERIT'S SAMPLE ACCEPTANCE POLICY ON REVERSE SIDE

Rev. 1.26.22

Appendix C
Laboratory Analytical Data

Analytical Laboratory Report

Supplemental Report

Report ID: S40706.01(02)+QC02
Generated on 10/27/2022
Replaces report S40706.01(01) generated on 10/11/2022

Report to

Attention: Kelly Cratsenburg
TRC
1540 Eisenhower Place
Ann Arbor, MI 48108

Phone: 734-585-7829 C: 734-412-5424 FAX:
Email: KCratsenburg@trccompanies.com

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Report Summary

Lab Sample ID(s): S40706.01-S40706.19
Project: Detroit Axle Ferndale, MI
Collected Date(s): 09/22/2022 - 09/23/2022
Submitted Date/Time: 09/26/2022 11:20
Sampled by: Jacob Krenz
P.O. #: 188681

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Maya Murshak
Technical Director

General Report Notes

Analytical results relate only to the samples tested, in the condition received by the laboratory.
Methods may be modified for improved performance.
Results reported on a dry weight basis where applicable.
'Not detected' indicates that parameter was not found at a level equal to or greater than the reporting limit (RL).
When MDL results are provided, then 'Not detected' indicates that parameter was not found at a level equal to or greater than the MDL.
40 CFR Part 136 Table II Required Containers, Preservation Techniques and Holding Times for the Clean Water Act specify that samples for acrolein and acrylonitrile, and 2-chloroethylvinyl ether need to be preserved at a pH in the range of 4 to 5 or if not preserved, analyzed within 3 days of sampling.
QA/QC corresponding to this analytical report is a separate document with the same Merit ID reference and is available upon request.
Full accreditation certificates are available upon request. Starred (*) analytes are not NELAP accredited.
Samples are held by the lab for 30 days from the final report date unless a written request to hold longer is provided by the client.

Limits for drinking water samples, are listed as the MCL Limits (Maximum Contaminant Level Concentrations)
PFAS requirement: Section 9.3.8 of U.S. EPA Method 537.1 states "If the method analyte(s) found in the Field Sample is present in the FRB at a concentration greater than 1/3 the MRL, then all samples collected with that FRB are invalid and must be recollected and reanalyzed."
Samples submitted without an accompanying FRB may not be acceptable for compliance purposes.
Wisconsin PFAs analysis: MDL = LOD; RL = LOQ. LOD and LOQ are adjusted for dilution.

Report Narrative

Samples re-analyzed to meet client requested RLs

Laboratory Certifications

Authority	Certification ID
Michigan DEQ	#9956
DOD ELAP/ISO 17025	#69699
WBENC	#2005110032
Ohio VAP	#CL0002
Indiana DOH	#C-MI-07
New York NELAC	#11814
North Carolina DENR	#680
North Carolina DOH	#26702
Alaska CSLAP	#17-001
Pennsylvania DEP	#68-05884
Wisconsin DNR	FID# 399147320

Qualifier Descriptions

Qualifier	Description
!	Result is outside of stated limit criteria
B	Compound also found in associated method blank
E	Concentration exceeds calibration range
F	Analysis run outside of holding time
G	Estimated result due to extraction run outside of holding time
H	Sample submitted and run outside of holding time
I	Matrix interference with internal standard
J	Estimated value less than reporting limit, but greater than MDL
L	Elevated reporting limit due to low sample amount
M	Result reported to MDL not RDL
O	Analysis performed by outside laboratory. See attached report.
R	Preliminary result
S	Surrogate recovery outside of control limits
T	No correction for total solids
X	Elevated reporting limit due to matrix interference
Y	Elevated reporting limit due to high target concentration
b	Value detected less than reporting limit, but greater than MDL
e	Reported value estimated due to interference
j	Analyte also found in associated method blank
p	Benzo(b)Fluoranthene and Benzo(k)Fluoranthene integrated as one peak.
x	Preserved from bulk sample

Glossary of Abbreviations

Abbreviation	Description
RL/RDL	Reporting Limit
MDL	Method Detection Limit
MS	Matrix Spike
MSD	Matrix Spike Duplicate
SW	EPA SW 846 (Soil and Wastewater) Methods
E	EPA Methods
SM	Standard Methods
LN	Linear
BR	Branched

Method Summary

Method	Version
N/A	Not Applicable
TO-15	EPA TO-15 Second Edition January 1999

Sample Summary (19 samples)

Sample ID	Sample Tag	Matrix	Collected Date/Time
S40706.01	VP-1	Air	09/22/22 11:31 - 09/22/22 11:36
S40706.02	VP-2	Air	09/22/22 12:07 - 09/22/22 12:12
S40706.03	VP-3	Air	09/22/22 12:28 - 09/22/22 12:34
S40706.04	VP-4	Air	09/22/22 12:51 - 09/22/22 12:58
S40706.05	VP-5	Air	09/22/22 13:13 - 09/22/22 13:22
S40706.06	VP-6	Air	09/22/22 13:28 - 09/22/22 13:33
S40706.07	VP-7	Air	09/22/22 13:51 - 09/22/22 13:56
S40706.08	VP-8	Air	09/22/22 14:18 - 09/22/22 14:23
S40706.09	VP-9	Air	09/22/22 14:43 - 09/22/22 14:48
S40706.10	VP-10	Air	09/22/22 14:59 - 09/22/22 15:04
S40706.11	VP-12	Air	09/23/22 08:35 - 09/23/22 08:40
S40706.12	VP-11	Air	09/22/22 15:15 - 09/22/22 15:25
S40706.13	VP-13	Air	09/23/22 08:49 - 09/23/22 08:54
S40706.14	VP-14	Air	09/23/22 09:08 - 09/23/22 09:14
S40706.15	18VP-3	Air	09/23/22 09:38 - 09/23/22 09:43
S40706.16	18VP-4	Air	09/23/22 10:06 - 09/23/22 10:11
S40706.17	18VP-6 5'	Air	09/23/22 10:52 - 09/23/22 10:59
S40706.18	18VP-6 10'	Air	09/23/22 10:56 - 09/23/22 11:04
S40706.19	18VP-2	Air	09/23/22 11:23 - 09/23/22 11:35

Lab Sample ID: S40706.01
Sample Tag: VP-1
Collected Date/Time: 09/22/2022 11:31 - 09/22/2022 11:36
Matrix: Air
COC Reference: A5764

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
1	Air Canister	None	No	RT	IR

Extraction / Prep.

Parameter	Result	Method	Run Date	Analyst	Flags
Pressure check for TO-15*	-6	N/A	09/27/22 18:00	BDO	

Organics - Volatiles

TO-15, Method: TO-15, Run Date: 10/06/22 22:09, Analyst: NDK

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Acetone	Not detected	20		ppbv	10	67-64-1	
1,3-Butadiene	Not detected	20		ppbv	10	106-99-0	
Benzene	Not detected	2		ppbv	10	71-43-2	
Bromodichloromethane	Not detected	2		ppbv	10	75-27-4	
Bromoform	Not detected	2		ppbv	10	75-25-2	
Bromomethane	Not detected	2		ppbv	10	74-83-9	
Vinyl bromide	Not detected	2		ppbv	10	593-60-2	
Benzyl chloride	Not detected	2		ppbv	10	100-44-7	
Carbon disulfide	Not detected	20		ppbv	10	75-15-0	
Chlorobenzene	Not detected	2		ppbv	10	108-90-7	
Chloroethane	Not detected	20		ppbv	10	75-00-3	
Chloroform	Not detected	2		ppbv	10	67-66-3	
Chloromethane	Not detected	20		ppbv	10	74-87-3	
3-Chloropropene	Not detected	20		ppbv	10	107-05-1	
2-Chlorotoluene	Not detected	2		ppbv	10	95-49-8	
Carbon tetrachloride	Not detected	2		ppbv	10	56-23-5	
Cyclohexane	Not detected	2		ppbv	10	110-82-7	
1,1-Dichloroethane	Not detected	2		ppbv	10	75-34-3	
1,1-Dichloroethene	Not detected	2		ppbv	10	75-35-4	
1,2-Dibromoethane	Not detected	2		ppbv	10	106-93-4	
1,2-Dichloroethane	Not detected	2		ppbv	10	107-06-2	
1,2-Dichloropropane	Not detected	2		ppbv	10	78-87-5	
1,4-Dioxane	Not detected	25		ppbv	10	123-91-1	
Dichlorodifluoromethane	Not detected	2		ppbv	10	75-71-8	
Dibromochloromethane	Not detected	2		ppbv	10	124-48-1	
trans-1,2-Dichloroethene	Not detected	2		ppbv	10	156-60-5	
cis-1,2-Dichloroethene	Not detected	2		ppbv	10	156-59-2	
cis-1,3-Dichloropropene	Not detected	2		ppbv	10	10061-01-5	
1,3-Dichlorobenzene	Not detected	2		ppbv	10	541-73-1	
1,2-Dichlorobenzene	Not detected	2		ppbv	10	95-50-1	
1,4-Dichlorobenzene	Not detected	2		ppbv	10	106-46-7	
trans-1,3-Dichloropropene	Not detected	2		ppbv	10	10061-02-6	
Ethanol*	Not detected	25		ppbv	10	64-17-5	
Ethylbenzene	Not detected	2		ppbv	10	100-41-4	
Ethyl Acetate*	Not detected	20		ppbv	10	141-78-6	
4-Ethyltoluene	Not detected	2		ppbv	10	622-96-8	
Freon 113	Not detected	2		ppbv	10	76-13-1	

Lab Sample ID: S40706.01 (continued)
Sample Tag: VP-1

TO-15, Method: TO-15, Run Date: 10/06/22 22:09, Analyst: NDK (continued)

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Freon 114	Not detected	2		ppbv	10	76-14-2	
Heptane	Not detected	2		ppbv	10	142-82-5	
Hexachlorobutadiene	Not detected	2		ppbv	10	87-68-3	
Hexane	Not detected	2		ppbv	10	110-54-3	
2-Hexanone*	Not detected	5		ppbv	10	591-78-6	
Isopropyl Alcohol*	Not detected	20		ppbv	10	67-63-0	
Methylene chloride	Not detected	5		ppbv	10	75-09-2	
2-Butanone (MEK)	Not detected	20		ppbv	10	78-93-3	
4-Methyl-2-pentanone (MIBK)	Not detected	5		ppbv	10	108-10-1	
tert-Methyl butyl ether (MTBE)	Not detected	2		ppbv	10	1634-04-4	
Methyl methacrylate	Not detected	2		ppbv	10	80-62-6	
Naphthalene	Not detected	2		ppbv	10	91-20-3	
Propylene*	Not detected	100		ppbv	10	115-07-1	
Styrene	Not detected	2		ppbv	10	100-42-5	
1,1,1-Trichloroethane	Not detected	2		ppbv	10	71-55-6	
1,1,2,2-Tetrachloroethane	Not detected	2		ppbv	10	79-34-5	
1,1,2-Trichloroethane	Not detected	2		ppbv	10	79-00-5	
1,2,4-Trichlorobenzene	Not detected	5		ppbv	10	120-82-1	
1,2,4-Trimethylbenzene	Not detected	2		ppbv	10	95-63-6	
1,3,5-Trimethylbenzene	Not detected	2		ppbv	10	108-67-8	
2,2,4-Trimethylpentane	Not detected	2		ppbv	10	540-84-1	
Tert-butyl Alcohol	Not detected	20		ppbv	10	75-65-0	
Tetrachloroethene	Not detected	2		ppbv	10	127-18-4	
Tetrahydrofuran*	Not detected	2		ppbv	10	109-99-9	
Toluene	Not detected	2		ppbv	10	108-88-3	
Trichloroethene	Not detected	2		ppbv	10	79-01-6	
Trichlorofluoromethane	Not detected	2		ppbv	10	75-69-4	
Vinyl chloride	Not detected	2		ppbv	10	75-01-4	
Vinyl acetate	Not detected	20		ppbv	10	108-05-4	
p,m-Xylene	Not detected	4		ppbv	10		
o-Xylene	Not detected	2		ppbv	10	95-47-6	
Total Xylenes	Not detected	6		ppbv	10	1330-20-7	

TO-15, Method: TO-15, Run Date: 10/06/22 22:09, Analyst: NDK

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Acetone	Not detected	48		ug/m3	10	67-64-1	
1,3-Butadiene	Not detected	44		ug/m3	10	106-99-0	
Benzene	Not detected	6.4		ug/m3	10	71-43-2	
Bromodichloromethane	Not detected	13		ug/m3	10	75-27-4	
Bromoform	Not detected	21		ug/m3	10	75-25-2	
Bromomethane	Not detected	7.8		ug/m3	10	74-83-9	
Vinyl bromide	Not detected	8.7		ug/m3	10	593-60-2	
Benzyl chloride	Not detected	10		ug/m3	10	100-44-7	
Carbon disulfide	Not detected	62		ug/m3	10	75-15-0	
Chlorobenzene	Not detected	9.2		ug/m3	10	108-90-7	
Chloroethane	Not detected	53		ug/m3	10	75-00-3	
Chloroform	Not detected	9.8		ug/m3	10	67-66-3	
Chloromethane	Not detected	41		ug/m3	10	74-87-3	
3-Chloropropene	Not detected	63		ug/m3	10	107-05-1	
2-Chlorotoluene	Not detected	10		ug/m3	10	95-49-8	

Lab Sample ID: S40706.01 (continued)
Sample Tag: VP-1

TO-15, Method: TO-15, Run Date: 10/06/22 22:09, Analyst: NDK (continued)

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Carbon tetrachloride	Not detected	13		ug/m3	10	56-23-5	
Cyclohexane	Not detected	6.9		ug/m3	10	110-82-7	
1,1-Dichloroethane	Not detected	8.1		ug/m3	10	75-34-3	
1,1-Dichloroethene	Not detected	7.9		ug/m3	10	75-35-4	
1,2-Dibromoethane	Not detected	15		ug/m3	10	106-93-4	
1,2-Dichloroethane	Not detected	8.1		ug/m3	10	107-06-2	
1,2-Dichloropropane	Not detected	9.2		ug/m3	10	78-87-5	
1,4-Dioxane	Not detected	90		ug/m3	10	123-91-1	
Dichlorodifluoromethane	Not detected	9.9		ug/m3	10	75-71-8	
Dibromochloromethane	Not detected	17		ug/m3	10	124-48-1	
trans-1,2-Dichloroethene	Not detected	7.9		ug/m3	10	156-60-5	
cis-1,2-Dichloroethene	Not detected	7.9		ug/m3	10	156-59-2	
cis-1,3-Dichloropropene	Not detected	9.1		ug/m3	10	10061-01-5	
1,3-Dichlorobenzene	Not detected	12		ug/m3	10	541-73-1	
1,2-Dichlorobenzene	Not detected	12		ug/m3	10	95-50-1	
1,4-Dichlorobenzene	Not detected	12		ug/m3	10	106-46-7	
trans-1,3-Dichloropropene	Not detected	9.1		ug/m3	10	10061-02-6	
Ethanol*	Not detected	47		ug/m3	10	64-17-5	
Ethylbenzene	Not detected	8.7		ug/m3	10	100-41-4	
Ethyl Acetate*	Not detected	72		ug/m3	10	141-78-6	
4-Ethyltoluene	Not detected	9.8		ug/m3	10	622-96-8	
Freon 113	Not detected	15		ug/m3	10	76-13-1	
Freon 114	Not detected	14		ug/m3	10	76-14-2	
Heptane	Not detected	8.2		ug/m3	10	142-82-5	
Hexachlorobutadiene	Not detected	21		ug/m3	10	87-68-3	
Hexane	Not detected	7.0		ug/m3	10	110-54-3	
2-Hexanone*	Not detected	20		ug/m3	10	591-78-6	
Isopropyl Alcohol*	Not detected	49		ug/m3	10	67-63-0	
Methylene chloride	Not detected	17		ug/m3	10	75-09-2	
2-Butanone (MEK)	Not detected	59		ug/m3	10	78-93-3	
4-Methyl-2-pentanone (MIBK)	Not detected	20		ug/m3	10	108-10-1	
tert-Methyl butyl ether (MTBE)	Not detected	7.2		ug/m3	10	1634-04-4	
Methyl methacrylate	Not detected	8.2		ug/m3	10	80-62-6	
Naphthalene	Not detected	10		ug/m3	10	91-20-3	
Propylene*	Not detected	170		ug/m3	10	115-07-1	
Styrene	Not detected	8.5		ug/m3	10	100-42-5	
1,1,1-Trichloroethane	Not detected	11		ug/m3	10	71-55-6	
1,1,2,2-Tetrachloroethane	Not detected	14		ug/m3	10	79-34-5	
1,1,2-Trichloroethane	Not detected	11		ug/m3	10	79-00-5	
1,2,4-Trichlorobenzene	Not detected	37		ug/m3	10	120-82-1	
1,2,4-Trimethylbenzene	Not detected	9.8		ug/m3	10	95-63-6	
1,3,5-Trimethylbenzene	Not detected	9.8		ug/m3	10	108-67-8	
2,2,4-Trimethylpentane	Not detected	9.3		ug/m3	10	540-84-1	
Tert-butyl Alcohol	Not detected	61		ug/m3	10	75-65-0	
Tetrachloroethene	Not detected	14		ug/m3	10	127-18-4	
Tetrahydrofuran*	Not detected	5.9		ug/m3	10	109-99-9	
Toluene	Not detected	7.5		ug/m3	10	108-88-3	
Trichloroethene	Not detected	11		ug/m3	10	79-01-6	
Trichlorofluoromethane	Not detected	11		ug/m3	10	75-69-4	
Vinyl chloride	Not detected	5.1		ug/m3	10	75-01-4	

Lab Sample ID: S40706.01 (continued)
Sample Tag: VP-1

TO-15, Method: TO-15, Run Date: 10/06/22 22:09, Analyst: NDK (continued)

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Vinyl acetate	Not detected	70		ug/m3	10	108-05-4	
p,m-Xylene	Not detected	17		ug/m3	10		
o-Xylene	Not detected	8.7		ug/m3	10	95-47-6	
Total Xylenes	Not detected	26		ug/m3	10	1330-20-7	

TO-15 (Replicate 01), Method: TO-15, Run Date: 10/20/22 17:28, Analyst: NDK

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Acetone	8.2	2.0		ppbv	1	67-64-1	
1,3-Butadiene	Not detected	2.0		ppbv	1	106-99-0	
Benzene	0.3	0.2		ppbv	1	71-43-2	
Bromodichloromethane	Not detected	0.2		ppbv	1	75-27-4	
Bromoform	Not detected	0.2		ppbv	1	75-25-2	
Bromomethane	Not detected	0.2		ppbv	1	74-83-9	
Vinyl bromide	Not detected	0.2		ppbv	1	593-60-2	
Benzyl chloride	Not detected	0.2		ppbv	1	100-44-7	
Carbon disulfide	Not detected	2.0		ppbv	1	75-15-0	
Chlorobenzene	Not detected	0.2		ppbv	1	108-90-7	
Chloroethane	Not detected	2.0		ppbv	1	75-00-3	
Chloroform	Not detected	0.2		ppbv	1	67-66-3	
Chloromethane	Not detected	2.0		ppbv	1	74-87-3	
3-Chloropropene	Not detected	2.0		ppbv	1	107-05-1	
2-Chlorotoluene	Not detected	0.2		ppbv	1	95-49-8	
Carbon tetrachloride	Not detected	0.2		ppbv	1	56-23-5	
Cyclohexane	Not detected	0.2		ppbv	1	110-82-7	
1,1-Dichloroethane	Not detected	0.2		ppbv	1	75-34-3	
1,1-Dichloroethene	Not detected	0.2		ppbv	1	75-35-4	
1,2-Dibromoethane	Not detected	0.01		ppbv	1	106-93-4	M
1,2-Dichloroethane	Not detected	0.2		ppbv	1	107-06-2	
1,2-Dichloropropane	Not detected	0.2		ppbv	1	78-87-5	
1,4-Dioxane	Not detected	2.5		ppbv	1	123-91-1	
Dichlorodifluoromethane	0.5	0.2		ppbv	1	75-71-8	
Dibromochloromethane	Not detected	0.2		ppbv	1	124-48-1	
trans-1,2-Dichloroethene	Not detected	0.2		ppbv	1	156-60-5	
cis-1,2-Dichloroethene	Not detected	0.2		ppbv	1	156-59-2	
cis-1,3-Dichloropropene	Not detected	0.2		ppbv	1	10061-01-5	
1,3-Dichlorobenzene	1.3	0.2		ppbv	1	541-73-1	
1,2-Dichlorobenzene	Not detected	0.2		ppbv	1	95-50-1	
1,4-Dichlorobenzene	Not detected	0.2		ppbv	1	106-46-7	
trans-1,3-Dichloropropene	Not detected	0.2		ppbv	1	10061-02-6	
Ethanol*	7.8	2.5		ppbv	1	64-17-5	
Ethylbenzene	Not detected	0.2		ppbv	1	100-41-4	
Ethyl Acetate*	Not detected	2.0		ppbv	1	141-78-6	
4-Ethyltoluene	Not detected	0.2		ppbv	1	622-96-8	
Freon 113	Not detected	0.2		ppbv	1	76-13-1	
Freon 114	Not detected	0.2		ppbv	1	76-14-2	
Heptane	Not detected	0.2		ppbv	1	142-82-5	
Hexachlorobutadiene	Not detected	0.2		ppbv	1	87-68-3	
Hexane	Not detected	0.2		ppbv	1	110-54-3	
2-Hexanone*	Not detected	0.5		ppbv	1	591-78-6	

M-Result reported to MDL not RDL

Lab Sample ID: S40706.01 (continued)
Sample Tag: VP-1

TO-15 (Replicate 01), Method: TO-15, Run Date: 10/20/22 17:28, Analyst: NDK (continued)

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Isopropyl Alcohol*	4.5	2.0		ppbv	1	67-63-0	
Methylene chloride	Not detected	0.5		ppbv	1	75-09-2	
2-Butanone (MEK)	Not detected	2.0		ppbv	1	78-93-3	
4-Methyl-2-pentanone (MIBK)	Not detected	0.5		ppbv	1	108-10-1	
tert-Methyl butyl ether (MTBE)	Not detected	0.2		ppbv	1	1634-04-4	
Methyl methacrylate	Not detected	0.2		ppbv	1	80-62-6	
Naphthalene	Not detected	0.2		ppbv	1	91-20-3	
Propylene*	Not detected	10		ppbv	1	115-07-1	
Styrene	Not detected	0.2		ppbv	1	100-42-5	
1,1,1-Trichloroethane	Not detected	0.2		ppbv	1	71-55-6	
1,1,2,2-Tetrachloroethane	Not detected	0.2		ppbv	1	79-34-5	
1,1,2-Trichloroethane	Not detected	0.2		ppbv	1	79-00-5	
1,2,4-Trichlorobenzene	Not detected	0.5		ppbv	1	120-82-1	
1,2,4-Trimethylbenzene	0.2	0.2		ppbv	1	95-63-6	
1,3,5-Trimethylbenzene	Not detected	0.2		ppbv	1	108-67-8	
2,2,4-Trimethylpentane	Not detected	0.2		ppbv	1	540-84-1	
Tert-butyl Alcohol	Not detected	2.0		ppbv	1	75-65-0	
Tetrachloroethene	Not detected	0.2		ppbv	1	127-18-4	
Tetrahydrofuran*	Not detected	0.2		ppbv	1	109-99-9	
Toluene	0.4	0.2		ppbv	1	108-88-3	
Trichloroethene	Not detected	0.2		ppbv	1	79-01-6	
Trichlorofluoromethane	0.3	0.2		ppbv	1	75-69-4	
Vinyl chloride	Not detected	0.2		ppbv	1	75-01-4	
Vinyl acetate	Not detected	2.0		ppbv	1	108-05-4	
p,m-Xylene	Not detected	0.4		ppbv	1		
o-Xylene	Not detected	0.2		ppbv	1	95-47-6	
Total Xylenes	Not detected	0.6		ppbv	1	1330-20-7	

TO-15 (Replicate 01), Method: TO-15, Run Date: 10/20/22 17:28, Analyst: NDK

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Acetone	19	4.8		ug/m3	1	67-64-1	
1,3-Butadiene	Not detected	4.4		ug/m3	1	106-99-0	
Benzene	0.96	0.64		ug/m3	1	71-43-2	
Bromodichloromethane	Not detected	1.3		ug/m3	1	75-27-4	
Bromoform	Not detected	2.1		ug/m3	1	75-25-2	
Bromomethane	Not detected	0.78		ug/m3	1	74-83-9	
Vinyl bromide	Not detected	0.87		ug/m3	1	593-60-2	
Benzyl chloride	Not detected	1.0		ug/m3	1	100-44-7	
Carbon disulfide	Not detected	6.2		ug/m3	1	75-15-0	
Chlorobenzene	Not detected	0.92		ug/m3	1	108-90-7	
Chloroethane	Not detected	5.3		ug/m3	1	75-00-3	
Chloroform	Not detected	0.98		ug/m3	1	67-66-3	
Chloromethane	Not detected	4.1		ug/m3	1	74-87-3	
3-Chloropropene	Not detected	6.3		ug/m3	1	107-05-1	
2-Chlorotoluene	Not detected	1.0		ug/m3	1	95-49-8	
Carbon tetrachloride	Not detected	1.3		ug/m3	1	56-23-5	
Cyclohexane	Not detected	0.69		ug/m3	1	110-82-7	
1,1-Dichloroethane	Not detected	0.81		ug/m3	1	75-34-3	
1,1-Dichloroethene	Not detected	0.79		ug/m3	1	75-35-4	
1,2-Dibromoethane	Not detected	0.077		ug/m3	1	106-93-4	M

M-Result reported to MDL not RDL

Lab Sample ID: S40706.01 (continued)
Sample Tag: VP-1

TO-15 (Replicate 01), Method: TO-15, Run Date: 10/20/22 17:28, Analyst: NDK (continued)

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
1,2-Dichloroethane	Not detected	0.81		ug/m3	1	107-06-2	
1,2-Dichloropropane	Not detected	0.92		ug/m3	1	78-87-5	
1,4-Dioxane	Not detected	9.0		ug/m3	1	123-91-1	
Dichlorodifluoromethane	2.5	0.99		ug/m3	1	75-71-8	
Dibromochloromethane	Not detected	1.7		ug/m3	1	124-48-1	
trans-1,2-Dichloroethene	Not detected	0.79		ug/m3	1	156-60-5	
cis-1,2-Dichloroethene	Not detected	0.79		ug/m3	1	156-59-2	
cis-1,3-Dichloropropene	Not detected	0.91		ug/m3	1	10061-01-5	
1,3-Dichlorobenzene	7.8	1.2		ug/m3	1	541-73-1	
1,2-Dichlorobenzene	Not detected	1.2		ug/m3	1	95-50-1	
1,4-Dichlorobenzene	Not detected	1.2		ug/m3	1	106-46-7	
trans-1,3-Dichloropropene	Not detected	0.91		ug/m3	1	10061-02-6	
Ethanol*	15	4.7		ug/m3	1	64-17-5	
Ethylbenzene	Not detected	0.87		ug/m3	1	100-41-4	
Ethyl Acetate*	Not detected	7.2		ug/m3	1	141-78-6	
4-Ethyltoluene	Not detected	0.98		ug/m3	1	622-96-8	
Freon 113	Not detected	1.5		ug/m3	1	76-13-1	
Freon 114	Not detected	1.4		ug/m3	1	76-14-2	
Heptane	Not detected	0.82		ug/m3	1	142-82-5	
Hexachlorobutadiene	Not detected	2.1		ug/m3	1	87-68-3	
Hexane	Not detected	0.70		ug/m3	1	110-54-3	
2-Hexanone*	Not detected	2.0		ug/m3	1	591-78-6	
Isopropyl Alcohol*	11	4.9		ug/m3	1	67-63-0	
Methylene chloride	Not detected	1.7		ug/m3	1	75-09-2	
2-Butanone (MEK)	Not detected	5.9		ug/m3	1	78-93-3	
4-Methyl-2-pentanone (MIBK)	Not detected	2.0		ug/m3	1	108-10-1	
tert-Methyl butyl ether (MTBE)	Not detected	0.72		ug/m3	1	1634-04-4	
Methyl methacrylate	Not detected	0.82		ug/m3	1	80-62-6	
Naphthalene	Not detected	1.0		ug/m3	1	91-20-3	
Propylene*	Not detected	17		ug/m3	1	115-07-1	
Styrene	Not detected	0.85		ug/m3	1	100-42-5	
1,1,1-Trichloroethane	Not detected	1.1		ug/m3	1	71-55-6	
1,1,2,2-Tetrachloroethane	Not detected	1.4		ug/m3	1	79-34-5	
1,1,2-Trichloroethane	Not detected	1.1		ug/m3	1	79-00-5	
1,2,4-Trichlorobenzene	Not detected	3.7		ug/m3	1	120-82-1	
1,2,4-Trimethylbenzene	0.98	0.98		ug/m3	1	95-63-6	
1,3,5-Trimethylbenzene	Not detected	0.98		ug/m3	1	108-67-8	
2,2,4-Trimethylpentane	Not detected	0.93		ug/m3	1	540-84-1	
Tert-butyl Alcohol	Not detected	6.1		ug/m3	1	75-65-0	
Tetrachloroethene	Not detected	1.4		ug/m3	1	127-18-4	
Tetrahydrofuran*	Not detected	0.59		ug/m3	1	109-99-9	
Toluene	1.5	0.75		ug/m3	1	108-88-3	
Trichloroethene	Not detected	1.1		ug/m3	1	79-01-6	
Trichlorofluoromethane	1.7	1.1		ug/m3	1	75-69-4	
Vinyl chloride	Not detected	0.51		ug/m3	1	75-01-4	
Vinyl acetate	Not detected	7.0		ug/m3	1	108-05-4	
p,m-Xylene	Not detected	1.7		ug/m3	1		
o-Xylene	Not detected	0.87		ug/m3	1	95-47-6	
Total Xylenes	Not detected	2.6		ug/m3	1	1330-20-7	

Lab Sample ID: S40706.02

Sample Tag: VP-2

Collected Date/Time: 09/22/2022 12:07 - 09/22/2022 12:12

Matrix: Air

COC Reference: A5764

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
1	Air Canister	None	No	RT	IR

Extraction / Prep.

Parameter	Result	Method	Run Date	Analyst	Flags
Pressure check for TO-15*	-5.5	N/A	09/27/22 18:00	BDO	

Organics - Volatiles

TO-15, Method: TO-15, Run Date: 10/06/22 22:39, Analyst: NDK

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Acetone	30	20		ppbv	10	67-64-1	
1,3-Butadiene	Not detected	20		ppbv	10	106-99-0	
Benzene	Not detected	2		ppbv	10	71-43-2	
Bromodichloromethane	Not detected	2		ppbv	10	75-27-4	
Bromoform	Not detected	2		ppbv	10	75-25-2	
Bromomethane	Not detected	2		ppbv	10	74-83-9	
Vinyl bromide	Not detected	2		ppbv	10	593-60-2	
Benzyl chloride	Not detected	2		ppbv	10	100-44-7	
Carbon disulfide	Not detected	20		ppbv	10	75-15-0	
Chlorobenzene	Not detected	2		ppbv	10	108-90-7	
Chloroethane	Not detected	20		ppbv	10	75-00-3	
Chloroform	Not detected	2		ppbv	10	67-66-3	
Chloromethane	Not detected	20		ppbv	10	74-87-3	
3-Chloropropene	Not detected	20		ppbv	10	107-05-1	
2-Chlorotoluene	Not detected	2		ppbv	10	95-49-8	
Carbon tetrachloride	Not detected	2		ppbv	10	56-23-5	
Cyclohexane	Not detected	2		ppbv	10	110-82-7	
1,1-Dichloroethane	Not detected	2		ppbv	10	75-34-3	
1,1-Dichloroethene	Not detected	2		ppbv	10	75-35-4	
1,2-Dibromoethane	Not detected	2		ppbv	10	106-93-4	
1,2-Dichloroethane	Not detected	2		ppbv	10	107-06-2	
1,2-Dichloropropane	Not detected	2		ppbv	10	78-87-5	
1,4-Dioxane	Not detected	25		ppbv	10	123-91-1	
Dichlorodifluoromethane	Not detected	2		ppbv	10	75-71-8	
Dibromochloromethane	Not detected	2		ppbv	10	124-48-1	
trans-1,2-Dichloroethene	Not detected	2		ppbv	10	156-60-5	
cis-1,2-Dichloroethene	Not detected	2		ppbv	10	156-59-2	
cis-1,3-Dichloropropene	Not detected	2		ppbv	10	10061-01-5	
1,3-Dichlorobenzene	Not detected	2		ppbv	10	541-73-1	
1,2-Dichlorobenzene	Not detected	2		ppbv	10	95-50-1	
1,4-Dichlorobenzene	Not detected	2		ppbv	10	106-46-7	
trans-1,3-Dichloropropene	Not detected	2		ppbv	10	10061-02-6	
Ethanol*	Not detected	25		ppbv	10	64-17-5	
Ethylbenzene	Not detected	2		ppbv	10	100-41-4	
Ethyl Acetate*	Not detected	20		ppbv	10	141-78-6	
4-Ethyltoluene	Not detected	2		ppbv	10	622-96-8	
Freon 113	Not detected	2		ppbv	10	76-13-1	

Lab Sample ID: S40706.02 (continued)
Sample Tag: VP-2

TO-15, Method: TO-15, Run Date: 10/06/22 22:39, Analyst: NDK (continued)

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Freon 114	Not detected	2		ppbv	10	76-14-2	
Heptane	Not detected	2		ppbv	10	142-82-5	
Hexachlorobutadiene	Not detected	2		ppbv	10	87-68-3	
Hexane	Not detected	2		ppbv	10	110-54-3	
2-Hexanone*	Not detected	5		ppbv	10	591-78-6	
Isopropyl Alcohol*	Not detected	20		ppbv	10	67-63-0	
Methylene chloride	Not detected	5		ppbv	10	75-09-2	
2-Butanone (MEK)	Not detected	20		ppbv	10	78-93-3	
4-Methyl-2-pentanone (MIBK)	Not detected	5		ppbv	10	108-10-1	
tert-Methyl butyl ether (MTBE)	Not detected	2		ppbv	10	1634-04-4	
Methyl methacrylate	Not detected	2		ppbv	10	80-62-6	
Naphthalene	Not detected	2		ppbv	10	91-20-3	
Propylene*	Not detected	100		ppbv	10	115-07-1	
Styrene	Not detected	2		ppbv	10	100-42-5	
1,1,1-Trichloroethane	Not detected	2		ppbv	10	71-55-6	
1,1,2,2-Tetrachloroethane	Not detected	2		ppbv	10	79-34-5	
1,1,2-Trichloroethane	Not detected	2		ppbv	10	79-00-5	
1,2,4-Trichlorobenzene	Not detected	5		ppbv	10	120-82-1	
1,2,4-Trimethylbenzene	Not detected	2		ppbv	10	95-63-6	
1,3,5-Trimethylbenzene	Not detected	2		ppbv	10	108-67-8	
2,2,4-Trimethylpentane	Not detected	2		ppbv	10	540-84-1	
Tert-butyl Alcohol	Not detected	20		ppbv	10	75-65-0	
Tetrachloroethene	Not detected	2		ppbv	10	127-18-4	
Tetrahydrofuran*	Not detected	2		ppbv	10	109-99-9	
Toluene	Not detected	2		ppbv	10	108-88-3	
Trichloroethene	Not detected	2		ppbv	10	79-01-6	
Trichlorofluoromethane	Not detected	2		ppbv	10	75-69-4	
Vinyl chloride	Not detected	2		ppbv	10	75-01-4	
Vinyl acetate	Not detected	20		ppbv	10	108-05-4	
p,m-Xylene	Not detected	4		ppbv	10		
o-Xylene	Not detected	2		ppbv	10	95-47-6	
Total Xylenes	Not detected	6		ppbv	10	1330-20-7	

TO-15, Method: TO-15, Run Date: 10/06/22 22:39, Analyst: NDK

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Acetone	71	48		ug/m3	10	67-64-1	
1,3-Butadiene	Not detected	44		ug/m3	10	106-99-0	
Benzene	Not detected	6.4		ug/m3	10	71-43-2	
Bromodichloromethane	Not detected	13		ug/m3	10	75-27-4	
Bromoform	Not detected	21		ug/m3	10	75-25-2	
Bromomethane	Not detected	7.8		ug/m3	10	74-83-9	
Vinyl bromide	Not detected	8.7		ug/m3	10	593-60-2	
Benzyl chloride	Not detected	10		ug/m3	10	100-44-7	
Carbon disulfide	Not detected	62		ug/m3	10	75-15-0	
Chlorobenzene	Not detected	9.2		ug/m3	10	108-90-7	
Chloroethane	Not detected	53		ug/m3	10	75-00-3	
Chloroform	Not detected	9.8		ug/m3	10	67-66-3	
Chloromethane	Not detected	41		ug/m3	10	74-87-3	
3-Chloropropene	Not detected	63		ug/m3	10	107-05-1	
2-Chlorotoluene	Not detected	10		ug/m3	10	95-49-8	

Lab Sample ID: S40706.02 (continued)
Sample Tag: VP-2

TO-15, Method: TO-15, Run Date: 10/06/22 22:39, Analyst: NDK (continued)

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Carbon tetrachloride	Not detected	13		ug/m3	10	56-23-5	
Cyclohexane	Not detected	6.9		ug/m3	10	110-82-7	
1,1-Dichloroethane	Not detected	8.1		ug/m3	10	75-34-3	
1,1-Dichloroethene	Not detected	7.9		ug/m3	10	75-35-4	
1,2-Dibromoethane	Not detected	15		ug/m3	10	106-93-4	
1,2-Dichloroethane	Not detected	8.1		ug/m3	10	107-06-2	
1,2-Dichloropropane	Not detected	9.2		ug/m3	10	78-87-5	
1,4-Dioxane	Not detected	90		ug/m3	10	123-91-1	
Dichlorodifluoromethane	Not detected	9.9		ug/m3	10	75-71-8	
Dibromochloromethane	Not detected	17		ug/m3	10	124-48-1	
trans-1,2-Dichloroethene	Not detected	7.9		ug/m3	10	156-60-5	
cis-1,2-Dichloroethene	Not detected	7.9		ug/m3	10	156-59-2	
cis-1,3-Dichloropropene	Not detected	9.1		ug/m3	10	10061-01-5	
1,3-Dichlorobenzene	Not detected	12		ug/m3	10	541-73-1	
1,2-Dichlorobenzene	Not detected	12		ug/m3	10	95-50-1	
1,4-Dichlorobenzene	Not detected	12		ug/m3	10	106-46-7	
trans-1,3-Dichloropropene	Not detected	9.1		ug/m3	10	10061-02-6	
Ethanol*	Not detected	47		ug/m3	10	64-17-5	
Ethylbenzene	Not detected	8.7		ug/m3	10	100-41-4	
Ethyl Acetate*	Not detected	72		ug/m3	10	141-78-6	
4-Ethyltoluene	Not detected	9.8		ug/m3	10	622-96-8	
Freon 113	Not detected	15		ug/m3	10	76-13-1	
Freon 114	Not detected	14		ug/m3	10	76-14-2	
Heptane	Not detected	8.2		ug/m3	10	142-82-5	
Hexachlorobutadiene	Not detected	21		ug/m3	10	87-68-3	
Hexane	Not detected	7.0		ug/m3	10	110-54-3	
2-Hexanone*	Not detected	20		ug/m3	10	591-78-6	
Isopropyl Alcohol*	Not detected	49		ug/m3	10	67-63-0	
Methylene chloride	Not detected	17		ug/m3	10	75-09-2	
2-Butanone (MEK)	Not detected	59		ug/m3	10	78-93-3	
4-Methyl-2-pentanone (MIBK)	Not detected	20		ug/m3	10	108-10-1	
tert-Methyl butyl ether (MTBE)	Not detected	7.2		ug/m3	10	1634-04-4	
Methyl methacrylate	Not detected	8.2		ug/m3	10	80-62-6	
Naphthalene	Not detected	10		ug/m3	10	91-20-3	
Propylene*	Not detected	170		ug/m3	10	115-07-1	
Styrene	Not detected	8.5		ug/m3	10	100-42-5	
1,1,1-Trichloroethane	Not detected	11		ug/m3	10	71-55-6	
1,1,2,2-Tetrachloroethane	Not detected	14		ug/m3	10	79-34-5	
1,1,2-Trichloroethane	Not detected	11		ug/m3	10	79-00-5	
1,2,4-Trichlorobenzene	Not detected	37		ug/m3	10	120-82-1	
1,2,4-Trimethylbenzene	Not detected	9.8		ug/m3	10	95-63-6	
1,3,5-Trimethylbenzene	Not detected	9.8		ug/m3	10	108-67-8	
2,2,4-Trimethylpentane	Not detected	9.3		ug/m3	10	540-84-1	
Tert-butyl Alcohol	Not detected	61		ug/m3	10	75-65-0	
Tetrachloroethene	Not detected	14		ug/m3	10	127-18-4	
Tetrahydrofuran*	Not detected	5.9		ug/m3	10	109-99-9	
Toluene	Not detected	7.5		ug/m3	10	108-88-3	
Trichloroethene	Not detected	11		ug/m3	10	79-01-6	
Trichlorofluoromethane	Not detected	11		ug/m3	10	75-69-4	
Vinyl chloride	Not detected	5.1		ug/m3	10	75-01-4	

Lab Sample ID: S40706.02 (continued)
Sample Tag: VP-2

TO-15, Method: TO-15, Run Date: 10/06/22 22:39, Analyst: NDK (continued)

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Vinyl acetate	Not detected	70		ug/m3	10	108-05-4	
p,m-Xylene	Not detected	17		ug/m3	10		
o-Xylene	Not detected	8.7		ug/m3	10	95-47-6	
Total Xylenes	Not detected	26		ug/m3	10	1330-20-7	

TO-15 (Replicate 01), Method: TO-15, Run Date: 10/20/22 17:59, Analyst: NDK

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Acetone	24.8	2.0		ppbv	1	67-64-1	
1,3-Butadiene	Not detected	2.0		ppbv	1	106-99-0	
Benzene	0.5	0.2		ppbv	1	71-43-2	
Bromodichloromethane	Not detected	0.2		ppbv	1	75-27-4	
Bromoform	Not detected	0.2		ppbv	1	75-25-2	
Bromomethane	Not detected	0.2		ppbv	1	74-83-9	
Vinyl bromide	Not detected	0.2		ppbv	1	593-60-2	
Benzyl chloride	Not detected	0.2		ppbv	1	100-44-7	
Carbon disulfide	Not detected	2.0		ppbv	1	75-15-0	
Chlorobenzene	Not detected	0.2		ppbv	1	108-90-7	
Chloroethane	Not detected	2.0		ppbv	1	75-00-3	
Chloroform	Not detected	0.2		ppbv	1	67-66-3	
Chloromethane	Not detected	2.0		ppbv	1	74-87-3	
3-Chloropropene	Not detected	2.0		ppbv	1	107-05-1	
2-Chlorotoluene	Not detected	0.2		ppbv	1	95-49-8	
Carbon tetrachloride	Not detected	0.2		ppbv	1	56-23-5	
Cyclohexane	Not detected	0.2		ppbv	1	110-82-7	
1,1-Dichloroethane	Not detected	0.2		ppbv	1	75-34-3	
1,1-Dichloroethene	Not detected	0.2		ppbv	1	75-35-4	
1,2-Dibromoethane	Not detected	0.01		ppbv	1	106-93-4	M
1,2-Dichloroethane	Not detected	0.2		ppbv	1	107-06-2	
1,2-Dichloropropane	Not detected	0.2		ppbv	1	78-87-5	
1,4-Dioxane	Not detected	2.5		ppbv	1	123-91-1	
Dichlorodifluoromethane	0.5	0.2		ppbv	1	75-71-8	
Dibromochloromethane	Not detected	0.2		ppbv	1	124-48-1	
trans-1,2-Dichloroethene	Not detected	0.2		ppbv	1	156-60-5	
cis-1,2-Dichloroethene	Not detected	0.2		ppbv	1	156-59-2	
cis-1,3-Dichloropropene	Not detected	0.2		ppbv	1	10061-01-5	
1,3-Dichlorobenzene	0.6	0.2		ppbv	1	541-73-1	
1,2-Dichlorobenzene	Not detected	0.2		ppbv	1	95-50-1	
1,4-Dichlorobenzene	Not detected	0.2		ppbv	1	106-46-7	
trans-1,3-Dichloropropene	Not detected	0.2		ppbv	1	10061-02-6	
Ethanol*	8.4	2.5		ppbv	1	64-17-5	
Ethylbenzene	Not detected	0.2		ppbv	1	100-41-4	
Ethyl Acetate*	Not detected	2.0		ppbv	1	141-78-6	
4-Ethyltoluene	Not detected	0.2		ppbv	1	622-96-8	
Freon 113	Not detected	0.2		ppbv	1	76-13-1	
Freon 114	Not detected	0.2		ppbv	1	76-14-2	
Heptane	Not detected	0.9		ppbv	1	142-82-5	
Hexachlorobutadiene	Not detected	0.2		ppbv	1	87-68-3	
Hexane	Not detected	0.2		ppbv	1	110-54-3	
2-Hexanone*	Not detected	0.5		ppbv	1	591-78-6	

M-Result reported to MDL not RDL

Lab Sample ID: S40706.02 (continued)
Sample Tag: VP-2

TO-15 (Replicate 01), Method: TO-15, Run Date: 10/20/22 17:59, Analyst: NDK (continued)

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Isopropyl Alcohol*	3.8	2.0		ppbv	1	67-63-0	
Methylene chloride	Not detected	0.5		ppbv	1	75-09-2	
2-Butanone (MEK)	Not detected	2.0		ppbv	1	78-93-3	
4-Methyl-2-pentanone (MIBK)	Not detected	0.5		ppbv	1	108-10-1	
tert-Methyl butyl ether (MTBE)	Not detected	0.2		ppbv	1	1634-04-4	
Methyl methacrylate	Not detected	0.2		ppbv	1	80-62-6	
Naphthalene	Not detected	0.2		ppbv	1	91-20-3	
Propylene*	Not detected	10		ppbv	1	115-07-1	
Styrene	Not detected	0.2		ppbv	1	100-42-5	
1,1,1-Trichloroethane	Not detected	0.2		ppbv	1	71-55-6	
1,1,2,2-Tetrachloroethane	Not detected	0.2		ppbv	1	79-34-5	
1,1,2-Trichloroethane	Not detected	0.2		ppbv	1	79-00-5	
1,2,4-Trichlorobenzene	Not detected	0.5		ppbv	1	120-82-1	
1,2,4-Trimethylbenzene	0.2	0.2		ppbv	1	95-63-6	
1,3,5-Trimethylbenzene	Not detected	0.2		ppbv	1	108-67-8	
2,2,4-Trimethylpentane	Not detected	0.2		ppbv	1	540-84-1	
Tert-butyl Alcohol	Not detected	2.0		ppbv	1	75-65-0	
Tetrachloroethene	Not detected	0.2		ppbv	1	127-18-4	
Tetrahydrofuran*	Not detected	0.2		ppbv	1	109-99-9	
Toluene	0.5	0.2		ppbv	1	108-88-3	
Trichloroethene	Not detected	0.2		ppbv	1	79-01-6	
Trichlorofluoromethane	0.3	0.2		ppbv	1	75-69-4	
Vinyl chloride	Not detected	0.2		ppbv	1	75-01-4	
Vinyl acetate	Not detected	2.0		ppbv	1	108-05-4	
p,m-Xylene	Not detected	0.4		ppbv	1		
o-Xylene	Not detected	0.2		ppbv	1	95-47-6	
Total Xylenes	Not detected	0.6		ppbv	1	1330-20-7	

TO-15 (Replicate 01), Method: TO-15, Run Date: 10/20/22 17:59, Analyst: NDK

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Acetone	58.9	4.8		ug/m3	1	67-64-1	
1,3-Butadiene	Not detected	4.4		ug/m3	1	106-99-0	
Benzene	1.6	0.64		ug/m3	1	71-43-2	
Bromodichloromethane	Not detected	1.3		ug/m3	1	75-27-4	
Bromoform	Not detected	2.1		ug/m3	1	75-25-2	
Bromomethane	Not detected	0.78		ug/m3	1	74-83-9	
Vinyl bromide	Not detected	0.87		ug/m3	1	593-60-2	
Benzyl chloride	Not detected	1.0		ug/m3	1	100-44-7	
Carbon disulfide	Not detected	6.2		ug/m3	1	75-15-0	
Chlorobenzene	Not detected	0.92		ug/m3	1	108-90-7	
Chloroethane	Not detected	5.3		ug/m3	1	75-00-3	
Chloroform	Not detected	0.98		ug/m3	1	67-66-3	
Chloromethane	Not detected	4.1		ug/m3	1	74-87-3	
3-Chloropropene	Not detected	6.3		ug/m3	1	107-05-1	
2-Chlorotoluene	Not detected	1.0		ug/m3	1	95-49-8	
Carbon tetrachloride	Not detected	1.3		ug/m3	1	56-23-5	
Cyclohexane	Not detected	0.69		ug/m3	1	110-82-7	
1,1-Dichloroethane	Not detected	0.81		ug/m3	1	75-34-3	
1,1-Dichloroethene	Not detected	0.79		ug/m3	1	75-35-4	
1,2-Dibromoethane	Not detected	0.077		ug/m3	1	106-93-4	M

M-Result reported to MDL not RDL

Lab Sample ID: S40706.02 (continued)
Sample Tag: VP-2

TO-15 (Replicate 01), Method: TO-15, Run Date: 10/20/22 17:59, Analyst: NDK (continued)

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
1,2-Dichloroethane	Not detected	0.81		ug/m3	1	107-06-2	
1,2-Dichloropropane	Not detected	0.92		ug/m3	1	78-87-5	
1,4-Dioxane	Not detected	9.0		ug/m3	1	123-91-1	
Dichlorodifluoromethane	2.5	0.99		ug/m3	1	75-71-8	
Dibromochloromethane	Not detected	1.7		ug/m3	1	124-48-1	
trans-1,2-Dichloroethene	Not detected	0.79		ug/m3	1	156-60-5	
cis-1,2-Dichloroethene	Not detected	0.79		ug/m3	1	156-59-2	
cis-1,3-Dichloropropene	Not detected	0.91		ug/m3	1	10061-01-5	
1,3-Dichlorobenzene	3.6	1.2		ug/m3	1	541-73-1	
1,2-Dichlorobenzene	Not detected	1.2		ug/m3	1	95-50-1	
1,4-Dichlorobenzene	Not detected	1.2		ug/m3	1	106-46-7	
trans-1,3-Dichloropropene	Not detected	0.91		ug/m3	1	10061-02-6	
Ethanol*	16	4.7		ug/m3	1	64-17-5	
Ethylbenzene	Not detected	0.87		ug/m3	1	100-41-4	
Ethyl Acetate*	Not detected	7.2		ug/m3	1	141-78-6	
4-Ethyltoluene	Not detected	0.98		ug/m3	1	622-96-8	
Freon 113	Not detected	1.5		ug/m3	1	76-13-1	
Freon 114	Not detected	1.4		ug/m3	1	76-14-2	
Heptane	Not detected	3.7		ug/m3	1	142-82-5	
Hexachlorobutadiene	Not detected	2.1		ug/m3	1	87-68-3	
Hexane	Not detected	0.70		ug/m3	1	110-54-3	
2-Hexanone*	Not detected	2.0		ug/m3	1	591-78-6	
Isopropyl Alcohol*	9.3	4.9		ug/m3	1	67-63-0	
Methylene chloride	Not detected	1.7		ug/m3	1	75-09-2	
2-Butanone (MEK)	Not detected	5.9		ug/m3	1	78-93-3	
4-Methyl-2-pentanone (MIBK)	Not detected	2.0		ug/m3	1	108-10-1	
tert-Methyl butyl ether (MTBE)	Not detected	0.72		ug/m3	1	1634-04-4	
Methyl methacrylate	Not detected	0.82		ug/m3	1	80-62-6	
Naphthalene	Not detected	1.0		ug/m3	1	91-20-3	
Propylene*	Not detected	17		ug/m3	1	115-07-1	
Styrene	Not detected	0.85		ug/m3	1	100-42-5	
1,1,1-Trichloroethane	Not detected	1.1		ug/m3	1	71-55-6	
1,1,2,2-Tetrachloroethane	Not detected	1.4		ug/m3	1	79-34-5	
1,1,2-Trichloroethane	Not detected	1.1		ug/m3	1	79-00-5	
1,2,4-Trichlorobenzene	Not detected	3.7		ug/m3	1	120-82-1	
1,2,4-Trimethylbenzene	0.98	0.98		ug/m3	1	95-63-6	
1,3,5-Trimethylbenzene	Not detected	0.98		ug/m3	1	108-67-8	
2,2,4-Trimethylpentane	Not detected	0.93		ug/m3	1	540-84-1	
Tert-butyl Alcohol	Not detected	6.1		ug/m3	1	75-65-0	
Tetrachloroethene	Not detected	1.4		ug/m3	1	127-18-4	
Tetrahydrofuran*	Not detected	0.59		ug/m3	1	109-99-9	
Toluene	1.9	0.75		ug/m3	1	108-88-3	
Trichloroethene	Not detected	1.1		ug/m3	1	79-01-6	
Trichlorofluoromethane	1.7	1.1		ug/m3	1	75-69-4	
Vinyl chloride	Not detected	0.51		ug/m3	1	75-01-4	
Vinyl acetate	Not detected	7.0		ug/m3	1	108-05-4	
p,m-Xylene	Not detected	1.7		ug/m3	1		
o-Xylene	Not detected	0.87		ug/m3	1	95-47-6	
Total Xylenes	Not detected	2.6		ug/m3	1	1330-20-7	

Lab Sample ID: S40706.03
Sample Tag: VP-3
Collected Date/Time: 09/22/2022 12:28 - 09/22/2022 12:34
Matrix: Air
COC Reference: A5764

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
1	Air Canister	None	No	RT	IR

Extraction / Prep.

Parameter	Result	Method	Run Date	Analyst	Flags
Pressure check for TO-15*	-5.5	N/A	09/27/22 18:00	BDO	

Organics - Volatiles

TO-15, Method: TO-15, Run Date: 10/06/22 23:09, Analyst: NDK

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Acetone	Not detected	20		ppbv	10	67-64-1	
1,3-Butadiene	Not detected	20		ppbv	10	106-99-0	
Benzene	Not detected	2		ppbv	10	71-43-2	
Bromodichloromethane	Not detected	2		ppbv	10	75-27-4	
Bromoform	Not detected	2		ppbv	10	75-25-2	
Bromomethane	Not detected	2		ppbv	10	74-83-9	
Vinyl bromide	Not detected	2		ppbv	10	593-60-2	
Benzyl chloride	Not detected	2		ppbv	10	100-44-7	
Carbon disulfide	Not detected	20		ppbv	10	75-15-0	
Chlorobenzene	Not detected	2		ppbv	10	108-90-7	
Chloroethane	Not detected	20		ppbv	10	75-00-3	
Chloroform	Not detected	2		ppbv	10	67-66-3	
Chloromethane	Not detected	20		ppbv	10	74-87-3	
3-Chloropropene	Not detected	20		ppbv	10	107-05-1	
2-Chlorotoluene	Not detected	2		ppbv	10	95-49-8	
Carbon tetrachloride	Not detected	2		ppbv	10	56-23-5	
Cyclohexane	Not detected	2		ppbv	10	110-82-7	
1,1-Dichloroethane	Not detected	2		ppbv	10	75-34-3	
1,1-Dichloroethene	Not detected	2		ppbv	10	75-35-4	
1,2-Dibromoethane	Not detected	2		ppbv	10	106-93-4	
1,2-Dichloroethane	Not detected	2		ppbv	10	107-06-2	
1,2-Dichloropropane	Not detected	2		ppbv	10	78-87-5	
1,4-Dioxane	Not detected	25		ppbv	10	123-91-1	
Dichlorodifluoromethane	Not detected	2		ppbv	10	75-71-8	
Dibromochloromethane	Not detected	2		ppbv	10	124-48-1	
trans-1,2-Dichloroethene	Not detected	2		ppbv	10	156-60-5	
cis-1,2-Dichloroethene	Not detected	2		ppbv	10	156-59-2	
cis-1,3-Dichloropropene	Not detected	2		ppbv	10	10061-01-5	
1,3-Dichlorobenzene	Not detected	2		ppbv	10	541-73-1	
1,2-Dichlorobenzene	Not detected	2		ppbv	10	95-50-1	
1,4-Dichlorobenzene	Not detected	2		ppbv	10	106-46-7	
trans-1,3-Dichloropropene	Not detected	2		ppbv	10	10061-02-6	
Ethanol*	Not detected	25		ppbv	10	64-17-5	
Ethylbenzene	Not detected	2		ppbv	10	100-41-4	
Ethyl Acetate*	Not detected	20		ppbv	10	141-78-6	
4-Ethyltoluene	Not detected	2		ppbv	10	622-96-8	
Freon 113	Not detected	2		ppbv	10	76-13-1	

Lab Sample ID: S40706.03 (continued)
Sample Tag: VP-3

TO-15, Method: TO-15, Run Date: 10/06/22 23:09, Analyst: NDK (continued)

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Freon 114	Not detected	2		ppbv	10	76-14-2	
Heptane	Not detected	2		ppbv	10	142-82-5	
Hexachlorobutadiene	Not detected	2		ppbv	10	87-68-3	
Hexane	Not detected	2		ppbv	10	110-54-3	
2-Hexanone*	Not detected	5		ppbv	10	591-78-6	
Isopropyl Alcohol*	Not detected	20		ppbv	10	67-63-0	
Methylene chloride	Not detected	5		ppbv	10	75-09-2	
2-Butanone (MEK)	Not detected	20		ppbv	10	78-93-3	
4-Methyl-2-pentanone (MIBK)	Not detected	5		ppbv	10	108-10-1	
tert-Methyl butyl ether (MTBE)	Not detected	2		ppbv	10	1634-04-4	
Methyl methacrylate	Not detected	2		ppbv	10	80-62-6	
Naphthalene	Not detected	2		ppbv	10	91-20-3	
Propylene*	Not detected	100		ppbv	10	115-07-1	
Styrene	Not detected	2		ppbv	10	100-42-5	
1,1,1-Trichloroethane	Not detected	2		ppbv	10	71-55-6	
1,1,2,2-Tetrachloroethane	Not detected	2		ppbv	10	79-34-5	
1,1,2-Trichloroethane	Not detected	2		ppbv	10	79-00-5	
1,2,4-Trichlorobenzene	Not detected	5		ppbv	10	120-82-1	
1,2,4-Trimethylbenzene	Not detected	2		ppbv	10	95-63-6	
1,3,5-Trimethylbenzene	Not detected	2		ppbv	10	108-67-8	
2,2,4-Trimethylpentane	Not detected	2		ppbv	10	540-84-1	
Tert-butyl Alcohol	Not detected	20		ppbv	10	75-65-0	
Tetrachloroethene	Not detected	2		ppbv	10	127-18-4	
Tetrahydrofuran*	Not detected	2		ppbv	10	109-99-9	
Toluene	Not detected	2		ppbv	10	108-88-3	
Trichloroethene	Not detected	2		ppbv	10	79-01-6	
Trichlorofluoromethane	Not detected	2		ppbv	10	75-69-4	
Vinyl chloride	Not detected	2		ppbv	10	75-01-4	
Vinyl acetate	Not detected	20		ppbv	10	108-05-4	
p,m-Xylene	Not detected	4		ppbv	10		
o-Xylene	Not detected	2		ppbv	10	95-47-6	
Total Xylenes	Not detected	6		ppbv	10	1330-20-7	

TO-15, Method: TO-15, Run Date: 10/06/22 23:09, Analyst: NDK

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Acetone	Not detected	48		ug/m3	10	67-64-1	
1,3-Butadiene	Not detected	44		ug/m3	10	106-99-0	
Benzene	Not detected	6.4		ug/m3	10	71-43-2	
Bromodichloromethane	Not detected	13		ug/m3	10	75-27-4	
Bromoform	Not detected	21		ug/m3	10	75-25-2	
Bromomethane	Not detected	7.8		ug/m3	10	74-83-9	
Vinyl bromide	Not detected	8.7		ug/m3	10	593-60-2	
Benzyl chloride	Not detected	10		ug/m3	10	100-44-7	
Carbon disulfide	Not detected	62		ug/m3	10	75-15-0	
Chlorobenzene	Not detected	9.2		ug/m3	10	108-90-7	
Chloroethane	Not detected	53		ug/m3	10	75-00-3	
Chloroform	Not detected	9.8		ug/m3	10	67-66-3	
Chloromethane	Not detected	41		ug/m3	10	74-87-3	
3-Chloropropene	Not detected	63		ug/m3	10	107-05-1	
2-Chlorotoluene	Not detected	10		ug/m3	10	95-49-8	

Lab Sample ID: S40706.03 (continued)
Sample Tag: VP-3

TO-15, Method: TO-15, Run Date: 10/06/22 23:09, Analyst: NDK (continued)

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Carbon tetrachloride	Not detected	13		ug/m3	10	56-23-5	
Cyclohexane	Not detected	6.9		ug/m3	10	110-82-7	
1,1-Dichloroethane	Not detected	8.1		ug/m3	10	75-34-3	
1,1-Dichloroethene	Not detected	7.9		ug/m3	10	75-35-4	
1,2-Dibromoethane	Not detected	15		ug/m3	10	106-93-4	
1,2-Dichloroethane	Not detected	8.1		ug/m3	10	107-06-2	
1,2-Dichloropropane	Not detected	9.2		ug/m3	10	78-87-5	
1,4-Dioxane	Not detected	90		ug/m3	10	123-91-1	
Dichlorodifluoromethane	Not detected	9.9		ug/m3	10	75-71-8	
Dibromochloromethane	Not detected	17		ug/m3	10	124-48-1	
trans-1,2-Dichloroethene	Not detected	7.9		ug/m3	10	156-60-5	
cis-1,2-Dichloroethene	Not detected	7.9		ug/m3	10	156-59-2	
cis-1,3-Dichloropropene	Not detected	9.1		ug/m3	10	10061-01-5	
1,3-Dichlorobenzene	Not detected	12		ug/m3	10	541-73-1	
1,2-Dichlorobenzene	Not detected	12		ug/m3	10	95-50-1	
1,4-Dichlorobenzene	Not detected	12		ug/m3	10	106-46-7	
trans-1,3-Dichloropropene	Not detected	9.1		ug/m3	10	10061-02-6	
Ethanol*	Not detected	47		ug/m3	10	64-17-5	
Ethylbenzene	Not detected	8.7		ug/m3	10	100-41-4	
Ethyl Acetate*	Not detected	72		ug/m3	10	141-78-6	
4-Ethyltoluene	Not detected	9.8		ug/m3	10	622-96-8	
Freon 113	Not detected	15		ug/m3	10	76-13-1	
Freon 114	Not detected	14		ug/m3	10	76-14-2	
Heptane	Not detected	8.2		ug/m3	10	142-82-5	
Hexachlorobutadiene	Not detected	21		ug/m3	10	87-68-3	
Hexane	Not detected	7.0		ug/m3	10	110-54-3	
2-Hexanone*	Not detected	20		ug/m3	10	591-78-6	
Isopropyl Alcohol*	Not detected	49		ug/m3	10	67-63-0	
Methylene chloride	Not detected	17		ug/m3	10	75-09-2	
2-Butanone (MEK)	Not detected	59		ug/m3	10	78-93-3	
4-Methyl-2-pentanone (MIBK)	Not detected	20		ug/m3	10	108-10-1	
tert-Methyl butyl ether (MTBE)	Not detected	7.2		ug/m3	10	1634-04-4	
Methyl methacrylate	Not detected	8.2		ug/m3	10	80-62-6	
Naphthalene	Not detected	10		ug/m3	10	91-20-3	
Propylene*	Not detected	170		ug/m3	10	115-07-1	
Styrene	Not detected	8.5		ug/m3	10	100-42-5	
1,1,1-Trichloroethane	Not detected	11		ug/m3	10	71-55-6	
1,1,2,2-Tetrachloroethane	Not detected	14		ug/m3	10	79-34-5	
1,1,2-Trichloroethane	Not detected	11		ug/m3	10	79-00-5	
1,2,4-Trichlorobenzene	Not detected	37		ug/m3	10	120-82-1	
1,2,4-Trimethylbenzene	Not detected	9.8		ug/m3	10	95-63-6	
1,3,5-Trimethylbenzene	Not detected	9.8		ug/m3	10	108-67-8	
2,2,4-Trimethylpentane	Not detected	9.3		ug/m3	10	540-84-1	
Tert-butyl Alcohol	Not detected	61		ug/m3	10	75-65-0	
Tetrachloroethene	Not detected	14		ug/m3	10	127-18-4	
Tetrahydrofuran*	Not detected	5.9		ug/m3	10	109-99-9	
Toluene	Not detected	7.5		ug/m3	10	108-88-3	
Trichloroethene	Not detected	11		ug/m3	10	79-01-6	
Trichlorofluoromethane	Not detected	11		ug/m3	10	75-69-4	
Vinyl chloride	Not detected	5.1		ug/m3	10	75-01-4	

Lab Sample ID: S40706.03 (continued)
Sample Tag: VP-3

TO-15, Method: TO-15, Run Date: 10/06/22 23:09, Analyst: NDK (continued)

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Vinyl acetate	Not detected	70		ug/m3	10	108-05-4	
p,m-Xylene	Not detected	17		ug/m3	10		
o-Xylene	Not detected	8.7		ug/m3	10	95-47-6	
Total Xylenes	Not detected	26		ug/m3	10	1330-20-7	

TO-15 (Replicate 01), Method: TO-15, Run Date: 10/20/22 18:30, Analyst: NDK

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Acetone	6.6	2.0		ppbv	1	67-64-1	
1,3-Butadiene	Not detected	2.0		ppbv	1	106-99-0	
Benzene	Not detected	0.2		ppbv	1	71-43-2	
Bromodichloromethane	Not detected	0.2		ppbv	1	75-27-4	
Bromoform	Not detected	0.2		ppbv	1	75-25-2	
Bromomethane	Not detected	0.2		ppbv	1	74-83-9	
Vinyl bromide	Not detected	0.2		ppbv	1	593-60-2	
Benzyl chloride	Not detected	0.2		ppbv	1	100-44-7	
Carbon disulfide	Not detected	2.0		ppbv	1	75-15-0	
Chlorobenzene	Not detected	0.2		ppbv	1	108-90-7	
Chloroethane	Not detected	2.0		ppbv	1	75-00-3	
Chloroform	Not detected	0.2		ppbv	1	67-66-3	
Chloromethane	Not detected	2.0		ppbv	1	74-87-3	
3-Chloropropene	Not detected	2.0		ppbv	1	107-05-1	
2-Chlorotoluene	Not detected	0.2		ppbv	1	95-49-8	
Carbon tetrachloride	Not detected	0.2		ppbv	1	56-23-5	
Cyclohexane	Not detected	0.2		ppbv	1	110-82-7	
1,1-Dichloroethane	Not detected	0.2		ppbv	1	75-34-3	
1,1-Dichloroethene	Not detected	0.2		ppbv	1	75-35-4	
1,2-Dibromoethane	Not detected	0.01		ppbv	1	106-93-4	M
1,2-Dichloroethane	Not detected	0.2		ppbv	1	107-06-2	
1,2-Dichloropropane	Not detected	0.2		ppbv	1	78-87-5	
1,4-Dioxane	Not detected	2.5		ppbv	1	123-91-1	
Dichlorodifluoromethane	0.5	0.2		ppbv	1	75-71-8	
Dibromochloromethane	Not detected	0.2		ppbv	1	124-48-1	
trans-1,2-Dichloroethene	Not detected	0.2		ppbv	1	156-60-5	
cis-1,2-Dichloroethene	Not detected	0.2		ppbv	1	156-59-2	
cis-1,3-Dichloropropene	Not detected	0.2		ppbv	1	10061-01-5	
1,3-Dichlorobenzene	0.6	0.2		ppbv	1	541-73-1	
1,2-Dichlorobenzene	Not detected	0.2		ppbv	1	95-50-1	
1,4-Dichlorobenzene	Not detected	0.2		ppbv	1	106-46-7	
trans-1,3-Dichloropropene	Not detected	0.2		ppbv	1	10061-02-6	
Ethanol*	10.1	2.5		ppbv	1	64-17-5	
Ethylbenzene	Not detected	0.2		ppbv	1	100-41-4	
Ethyl Acetate*	Not detected	2.0		ppbv	1	141-78-6	
4-Ethyltoluene	Not detected	0.2		ppbv	1	622-96-8	
Freon 113	Not detected	0.2		ppbv	1	76-13-1	
Freon 114	Not detected	0.2		ppbv	1	76-14-2	
Heptane	Not detected	0.2		ppbv	1	142-82-5	
Hexachlorobutadiene	Not detected	0.2		ppbv	1	87-68-3	
Hexane	0.3	0.2		ppbv	1	110-54-3	
2-Hexanone*	Not detected	0.5		ppbv	1	591-78-6	

M-Result reported to MDL not RDL

Lab Sample ID: S40706.03 (continued)
Sample Tag: VP-3

TO-15 (Replicate 01), Method: TO-15, Run Date: 10/20/22 18:30, Analyst: NDK (continued)

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Isopropyl Alcohol*	5.2	2.0		ppbv	1	67-63-0	
Methylene chloride	0.8	0.5		ppbv	1	75-09-2	
2-Butanone (MEK)	Not detected	2.0		ppbv	1	78-93-3	
4-Methyl-2-pentanone (MIBK)	Not detected	0.5		ppbv	1	108-10-1	
tert-Methyl butyl ether (MTBE)	Not detected	0.2		ppbv	1	1634-04-4	
Methyl methacrylate	Not detected	0.2		ppbv	1	80-62-6	
Naphthalene	Not detected	0.2		ppbv	1	91-20-3	
Propylene*	Not detected	10		ppbv	1	115-07-1	
Styrene	Not detected	0.2		ppbv	1	100-42-5	
1,1,1-Trichloroethane	Not detected	0.2		ppbv	1	71-55-6	
1,1,2,2-Tetrachloroethane	Not detected	0.2		ppbv	1	79-34-5	
1,1,2-Trichloroethane	Not detected	0.2		ppbv	1	79-00-5	
1,2,4-Trichlorobenzene	Not detected	0.5		ppbv	1	120-82-1	
1,2,4-Trimethylbenzene	Not detected	0.2		ppbv	1	95-63-6	
1,3,5-Trimethylbenzene	Not detected	0.2		ppbv	1	108-67-8	
2,2,4-Trimethylpentane	Not detected	0.2		ppbv	1	540-84-1	
Tert-butyl Alcohol	Not detected	2.0		ppbv	1	75-65-0	
Tetrachloroethene	0.3	0.2		ppbv	1	127-18-4	
Tetrahydrofuran*	Not detected	0.2		ppbv	1	109-99-9	
Toluene	0.4	0.2		ppbv	1	108-88-3	
Trichloroethene	0.5	0.2		ppbv	1	79-01-6	
Trichlorofluoromethane	0.3	0.2		ppbv	1	75-69-4	
Vinyl chloride	Not detected	0.2		ppbv	1	75-01-4	
Vinyl acetate	Not detected	2.0		ppbv	1	108-05-4	
p,m-Xylene	Not detected	0.4		ppbv	1		
o-Xylene	Not detected	0.2		ppbv	1	95-47-6	
Total Xylenes	Not detected	0.6		ppbv	1	1330-20-7	

TO-15 (Replicate 01), Method: TO-15, Run Date: 10/20/22 18:30, Analyst: NDK

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Acetone	16	4.8		ug/m3	1	67-64-1	
1,3-Butadiene	Not detected	4.4		ug/m3	1	106-99-0	
Benzene	Not detected	0.64		ug/m3	1	71-43-2	
Bromodichloromethane	Not detected	1.3		ug/m3	1	75-27-4	
Bromoform	Not detected	2.1		ug/m3	1	75-25-2	
Bromomethane	Not detected	0.78		ug/m3	1	74-83-9	
Vinyl bromide	Not detected	0.87		ug/m3	1	593-60-2	
Benzyl chloride	Not detected	1.0		ug/m3	1	100-44-7	
Carbon disulfide	Not detected	6.2		ug/m3	1	75-15-0	
Chlorobenzene	Not detected	0.92		ug/m3	1	108-90-7	
Chloroethane	Not detected	5.3		ug/m3	1	75-00-3	
Chloroform	Not detected	0.98		ug/m3	1	67-66-3	
Chloromethane	Not detected	4.1		ug/m3	1	74-87-3	
3-Chloropropene	Not detected	6.3		ug/m3	1	107-05-1	
2-Chlorotoluene	Not detected	1.0		ug/m3	1	95-49-8	
Carbon tetrachloride	Not detected	1.3		ug/m3	1	56-23-5	
Cyclohexane	Not detected	0.69		ug/m3	1	110-82-7	
1,1-Dichloroethane	Not detected	0.81		ug/m3	1	75-34-3	
1,1-Dichloroethene	Not detected	0.79		ug/m3	1	75-35-4	
1,2-Dibromoethane	Not detected	0.077		ug/m3	1	106-93-4	M

M-Result reported to MDL not RDL

Lab Sample ID: S40706.03 (continued)
Sample Tag: VP-3

TO-15 (Replicate 01), Method: TO-15, Run Date: 10/20/22 18:30, Analyst: NDK (continued)

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
1,2-Dichloroethane	Not detected	0.81		ug/m3	1	107-06-2	
1,2-Dichloropropane	Not detected	0.92		ug/m3	1	78-87-5	
1,4-Dioxane	Not detected	9.0		ug/m3	1	123-91-1	
Dichlorodifluoromethane	2.5	0.99		ug/m3	1	75-71-8	
Dibromochloromethane	Not detected	1.7		ug/m3	1	124-48-1	
trans-1,2-Dichloroethene	Not detected	0.79		ug/m3	1	156-60-5	
cis-1,2-Dichloroethene	Not detected	0.79		ug/m3	1	156-59-2	
cis-1,3-Dichloropropene	Not detected	0.91		ug/m3	1	10061-01-5	
1,3-Dichlorobenzene	3.6	1.2		ug/m3	1	541-73-1	
1,2-Dichlorobenzene	Not detected	1.2		ug/m3	1	95-50-1	
1,4-Dichlorobenzene	Not detected	1.2		ug/m3	1	106-46-7	
trans-1,3-Dichloropropene	Not detected	0.91		ug/m3	1	10061-02-6	
Ethanol*	19.0	4.7		ug/m3	1	64-17-5	
Ethylbenzene	Not detected	0.87		ug/m3	1	100-41-4	
Ethyl Acetate*	Not detected	7.2		ug/m3	1	141-78-6	
4-Ethyltoluene	Not detected	0.98		ug/m3	1	622-96-8	
Freon 113	Not detected	1.5		ug/m3	1	76-13-1	
Freon 114	Not detected	1.4		ug/m3	1	76-14-2	
Heptane	Not detected	0.82		ug/m3	1	142-82-5	
Hexachlorobutadiene	Not detected	2.1		ug/m3	1	87-68-3	
Hexane	1.1	0.70		ug/m3	1	110-54-3	
2-Hexanone*	Not detected	2.0		ug/m3	1	591-78-6	
Isopropyl Alcohol*	13	4.9		ug/m3	1	67-63-0	
Methylene chloride	2.8	1.7		ug/m3	1	75-09-2	
2-Butanone (MEK)	Not detected	5.9		ug/m3	1	78-93-3	
4-Methyl-2-pentanone (MIBK)	Not detected	2.0		ug/m3	1	108-10-1	
tert-Methyl butyl ether (MTBE)	Not detected	0.72		ug/m3	1	1634-04-4	
Methyl methacrylate	Not detected	0.82		ug/m3	1	80-62-6	
Naphthalene	Not detected	1.0		ug/m3	1	91-20-3	
Propylene*	Not detected	17		ug/m3	1	115-07-1	
Styrene	Not detected	0.85		ug/m3	1	100-42-5	
1,1,1-Trichloroethane	Not detected	1.1		ug/m3	1	71-55-6	
1,1,2,2-Tetrachloroethane	Not detected	1.4		ug/m3	1	79-34-5	
1,1,2-Trichloroethane	Not detected	1.1		ug/m3	1	79-00-5	
1,2,4-Trichlorobenzene	Not detected	3.7		ug/m3	1	120-82-1	
1,2,4-Trimethylbenzene	Not detected	0.98		ug/m3	1	95-63-6	
1,3,5-Trimethylbenzene	Not detected	0.98		ug/m3	1	108-67-8	
2,2,4-Trimethylpentane	Not detected	0.93		ug/m3	1	540-84-1	
Tert-butyl Alcohol	Not detected	6.1		ug/m3	1	75-65-0	
Tetrachloroethene	2.0	1.4		ug/m3	1	127-18-4	
Tetrahydrofuran*	Not detected	0.59		ug/m3	1	109-99-9	
Toluene	1.5	0.75		ug/m3	1	108-88-3	
Trichloroethene	2.7	1.1		ug/m3	1	79-01-6	
Trichlorofluoromethane	1.7	1.1		ug/m3	1	75-69-4	
Vinyl chloride	Not detected	0.51		ug/m3	1	75-01-4	
Vinyl acetate	Not detected	7.0		ug/m3	1	108-05-4	
p,m-Xylene	Not detected	1.7		ug/m3	1		
o-Xylene	Not detected	0.87		ug/m3	1	95-47-6	
Total Xylenes	Not detected	2.6		ug/m3	1	1330-20-7	

Lab Sample ID: S40706.04

Sample Tag: VP-4

Collected Date/Time: 09/22/2022 12:51 - 09/22/2022 12:58

Matrix: Air

COC Reference: A5764

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
1	Air Canister	None	No	RT	IR

Extraction / Prep.

Parameter	Result	Method	Run Date	Analyst	Flags
Pressure check for TO-15*	-7	N/A	09/27/22 18:00	BDO	

Organics - Volatiles

TO-15, Method: TO-15, Run Date: 10/06/22 23:39, Analyst: NDK

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Acetone	Not detected	20		ppbv	10	67-64-1	
1,3-Butadiene	Not detected	20		ppbv	10	106-99-0	
Benzene	Not detected	2		ppbv	10	71-43-2	
Bromodichloromethane	Not detected	2		ppbv	10	75-27-4	
Bromoform	Not detected	2		ppbv	10	75-25-2	
Bromomethane	Not detected	2		ppbv	10	74-83-9	
Vinyl bromide	Not detected	2		ppbv	10	593-60-2	
Benzyl chloride	Not detected	2		ppbv	10	100-44-7	
Carbon disulfide	Not detected	20		ppbv	10	75-15-0	
Chlorobenzene	Not detected	2		ppbv	10	108-90-7	
Chloroethane	Not detected	20		ppbv	10	75-00-3	
Chloroform	Not detected	2		ppbv	10	67-66-3	
Chloromethane	Not detected	20		ppbv	10	74-87-3	
3-Chloropropene	Not detected	20		ppbv	10	107-05-1	
2-Chlorotoluene	Not detected	2		ppbv	10	95-49-8	
Carbon tetrachloride	Not detected	2		ppbv	10	56-23-5	
Cyclohexane	Not detected	2		ppbv	10	110-82-7	
1,1-Dichloroethane	Not detected	2		ppbv	10	75-34-3	
1,1-Dichloroethene	Not detected	2		ppbv	10	75-35-4	
1,2-Dibromoethane	Not detected	2		ppbv	10	106-93-4	
1,2-Dichloroethane	Not detected	2		ppbv	10	107-06-2	
1,2-Dichloropropane	Not detected	2		ppbv	10	78-87-5	
1,4-Dioxane	Not detected	25		ppbv	10	123-91-1	
Dichlorodifluoromethane	Not detected	2		ppbv	10	75-71-8	
Dibromochloromethane	Not detected	2		ppbv	10	124-48-1	
trans-1,2-Dichloroethene	Not detected	2		ppbv	10	156-60-5	
cis-1,2-Dichloroethene	Not detected	2		ppbv	10	156-59-2	
cis-1,3-Dichloropropene	Not detected	2		ppbv	10	10061-01-5	
1,3-Dichlorobenzene	Not detected	2		ppbv	10	541-73-1	
1,2-Dichlorobenzene	Not detected	2		ppbv	10	95-50-1	
1,4-Dichlorobenzene	Not detected	2		ppbv	10	106-46-7	
trans-1,3-Dichloropropene	Not detected	2		ppbv	10	10061-02-6	
Ethanol*	Not detected	25		ppbv	10	64-17-5	
Ethylbenzene	Not detected	2		ppbv	10	100-41-4	
Ethyl Acetate*	Not detected	20		ppbv	10	141-78-6	
4-Ethyltoluene	Not detected	2		ppbv	10	622-96-8	
Freon 113	Not detected	2		ppbv	10	76-13-1	

Lab Sample ID: S40706.04 (continued)
Sample Tag: VP-4

TO-15, Method: TO-15, Run Date: 10/06/22 23:39, Analyst: NDK (continued)

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Freon 114	Not detected	2		ppbv	10	76-14-2	
Heptane	Not detected	2		ppbv	10	142-82-5	
Hexachlorobutadiene	Not detected	2		ppbv	10	87-68-3	
Hexane	Not detected	2		ppbv	10	110-54-3	
2-Hexanone*	Not detected	5		ppbv	10	591-78-6	
Isopropyl Alcohol*	Not detected	20		ppbv	10	67-63-0	
Methylene chloride	Not detected	5		ppbv	10	75-09-2	
2-Butanone (MEK)	Not detected	20		ppbv	10	78-93-3	
4-Methyl-2-pentanone (MIBK)	Not detected	5		ppbv	10	108-10-1	
tert-Methyl butyl ether (MTBE)	Not detected	2		ppbv	10	1634-04-4	
Methyl methacrylate	Not detected	2		ppbv	10	80-62-6	
Naphthalene	Not detected	2		ppbv	10	91-20-3	
Propylene*	Not detected	100		ppbv	10	115-07-1	
Styrene	Not detected	2		ppbv	10	100-42-5	
1,1,1-Trichloroethane	Not detected	2		ppbv	10	71-55-6	
1,1,2,2-Tetrachloroethane	Not detected	2		ppbv	10	79-34-5	
1,1,2-Trichloroethane	Not detected	2		ppbv	10	79-00-5	
1,2,4-Trichlorobenzene	Not detected	5		ppbv	10	120-82-1	
1,2,4-Trimethylbenzene	Not detected	2		ppbv	10	95-63-6	
1,3,5-Trimethylbenzene	Not detected	2		ppbv	10	108-67-8	
2,2,4-Trimethylpentane	Not detected	2		ppbv	10	540-84-1	
Tert-butyl Alcohol	Not detected	20		ppbv	10	75-65-0	
Tetrachloroethene	Not detected	2		ppbv	10	127-18-4	
Tetrahydrofuran*	Not detected	2		ppbv	10	109-99-9	
Toluene	Not detected	2		ppbv	10	108-88-3	
Trichloroethene	Not detected	2		ppbv	10	79-01-6	
Trichlorofluoromethane	Not detected	2		ppbv	10	75-69-4	
Vinyl chloride	Not detected	2		ppbv	10	75-01-4	
Vinyl acetate	Not detected	20		ppbv	10	108-05-4	
p,m-Xylene	Not detected	4		ppbv	10		
o-Xylene	Not detected	2		ppbv	10	95-47-6	
Total Xylenes	Not detected	6		ppbv	10	1330-20-7	

TO-15, Method: TO-15, Run Date: 10/06/22 23:39, Analyst: NDK

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Acetone	Not detected	48		ug/m3	10	67-64-1	
1,3-Butadiene	Not detected	44		ug/m3	10	106-99-0	
Benzene	Not detected	6.4		ug/m3	10	71-43-2	
Bromodichloromethane	Not detected	13		ug/m3	10	75-27-4	
Bromoform	Not detected	21		ug/m3	10	75-25-2	
Bromomethane	Not detected	7.8		ug/m3	10	74-83-9	
Vinyl bromide	Not detected	8.7		ug/m3	10	593-60-2	
Benzyl chloride	Not detected	10		ug/m3	10	100-44-7	
Carbon disulfide	Not detected	62		ug/m3	10	75-15-0	
Chlorobenzene	Not detected	9.2		ug/m3	10	108-90-7	
Chloroethane	Not detected	53		ug/m3	10	75-00-3	
Chloroform	Not detected	9.8		ug/m3	10	67-66-3	
Chloromethane	Not detected	41		ug/m3	10	74-87-3	
3-Chloropropene	Not detected	63		ug/m3	10	107-05-1	
2-Chlorotoluene	Not detected	10		ug/m3	10	95-49-8	

Lab Sample ID: S40706.04 (continued)
Sample Tag: VP-4

TO-15, Method: TO-15, Run Date: 10/06/22 23:39, Analyst: NDK (continued)

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Carbon tetrachloride	Not detected	13		ug/m3	10	56-23-5	
Cyclohexane	Not detected	6.9		ug/m3	10	110-82-7	
1,1-Dichloroethane	Not detected	8.1		ug/m3	10	75-34-3	
1,1-Dichloroethene	Not detected	7.9		ug/m3	10	75-35-4	
1,2-Dibromoethane	Not detected	15		ug/m3	10	106-93-4	
1,2-Dichloroethane	Not detected	8.1		ug/m3	10	107-06-2	
1,2-Dichloropropane	Not detected	9.2		ug/m3	10	78-87-5	
1,4-Dioxane	Not detected	90		ug/m3	10	123-91-1	
Dichlorodifluoromethane	Not detected	9.9		ug/m3	10	75-71-8	
Dibromochloromethane	Not detected	17		ug/m3	10	124-48-1	
trans-1,2-Dichloroethene	Not detected	7.9		ug/m3	10	156-60-5	
cis-1,2-Dichloroethene	Not detected	7.9		ug/m3	10	156-59-2	
cis-1,3-Dichloropropene	Not detected	9.1		ug/m3	10	10061-01-5	
1,3-Dichlorobenzene	Not detected	12		ug/m3	10	541-73-1	
1,2-Dichlorobenzene	Not detected	12		ug/m3	10	95-50-1	
1,4-Dichlorobenzene	Not detected	12		ug/m3	10	106-46-7	
trans-1,3-Dichloropropene	Not detected	9.1		ug/m3	10	10061-02-6	
Ethanol*	Not detected	47		ug/m3	10	64-17-5	
Ethylbenzene	Not detected	8.7		ug/m3	10	100-41-4	
Ethyl Acetate*	Not detected	72		ug/m3	10	141-78-6	
4-Ethyltoluene	Not detected	9.8		ug/m3	10	622-96-8	
Freon 113	Not detected	15		ug/m3	10	76-13-1	
Freon 114	Not detected	14		ug/m3	10	76-14-2	
Heptane	Not detected	8.2		ug/m3	10	142-82-5	
Hexachlorobutadiene	Not detected	21		ug/m3	10	87-68-3	
Hexane	Not detected	7.0		ug/m3	10	110-54-3	
2-Hexanone*	Not detected	20		ug/m3	10	591-78-6	
Isopropyl Alcohol*	Not detected	49		ug/m3	10	67-63-0	
Methylene chloride	Not detected	17		ug/m3	10	75-09-2	
2-Butanone (MEK)	Not detected	59		ug/m3	10	78-93-3	
4-Methyl-2-pentanone (MIBK)	Not detected	20		ug/m3	10	108-10-1	
tert-Methyl butyl ether (MTBE)	Not detected	7.2		ug/m3	10	1634-04-4	
Methyl methacrylate	Not detected	8.2		ug/m3	10	80-62-6	
Naphthalene	Not detected	10		ug/m3	10	91-20-3	
Propylene*	Not detected	170		ug/m3	10	115-07-1	
Styrene	Not detected	8.5		ug/m3	10	100-42-5	
1,1,1-Trichloroethane	Not detected	11		ug/m3	10	71-55-6	
1,1,2,2-Tetrachloroethane	Not detected	14		ug/m3	10	79-34-5	
1,1,2-Trichloroethane	Not detected	11		ug/m3	10	79-00-5	
1,2,4-Trichlorobenzene	Not detected	37		ug/m3	10	120-82-1	
1,2,4-Trimethylbenzene	Not detected	9.8		ug/m3	10	95-63-6	
1,3,5-Trimethylbenzene	Not detected	9.8		ug/m3	10	108-67-8	
2,2,4-Trimethylpentane	Not detected	9.3		ug/m3	10	540-84-1	
Tert-butyl Alcohol	Not detected	61		ug/m3	10	75-65-0	
Tetrachloroethene	Not detected	14		ug/m3	10	127-18-4	
Tetrahydrofuran*	Not detected	5.9		ug/m3	10	109-99-9	
Toluene	Not detected	7.5		ug/m3	10	108-88-3	
Trichloroethene	Not detected	11		ug/m3	10	79-01-6	
Trichlorofluoromethane	Not detected	11		ug/m3	10	75-69-4	
Vinyl chloride	Not detected	5.1		ug/m3	10	75-01-4	

Lab Sample ID: S40706.04 (continued)
Sample Tag: VP-4

TO-15, Method: TO-15, Run Date: 10/06/22 23:39, Analyst: NDK (continued)

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Vinyl acetate	Not detected	70		ug/m3	10	108-05-4	
p,m-Xylene	Not detected	17		ug/m3	10		
o-Xylene	Not detected	8.7		ug/m3	10	95-47-6	
Total Xylenes	Not detected	26		ug/m3	10	1330-20-7	

TO-15 (Replicate 01), Method: TO-15, Run Date: 10/20/22 19:01, Analyst: NDK

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Acetone	9.1	2.0		ppbv	1	67-64-1	
1,3-Butadiene	Not detected	2.0		ppbv	1	106-99-0	
Benzene	0.2	0.2		ppbv	1	71-43-2	
Bromodichloromethane	Not detected	0.2		ppbv	1	75-27-4	
Bromoform	Not detected	0.2		ppbv	1	75-25-2	
Bromomethane	Not detected	0.2		ppbv	1	74-83-9	
Vinyl bromide	Not detected	0.2		ppbv	1	593-60-2	
Benzyl chloride	Not detected	0.2		ppbv	1	100-44-7	
Carbon disulfide	Not detected	2.0		ppbv	1	75-15-0	
Chlorobenzene	Not detected	0.2		ppbv	1	108-90-7	
Chloroethane	Not detected	2.0		ppbv	1	75-00-3	
Chloroform	Not detected	0.2		ppbv	1	67-66-3	
Chloromethane	Not detected	2.0		ppbv	1	74-87-3	
3-Chloropropene	Not detected	2.0		ppbv	1	107-05-1	
2-Chlorotoluene	Not detected	0.2		ppbv	1	95-49-8	
Carbon tetrachloride	Not detected	0.2		ppbv	1	56-23-5	
Cyclohexane	Not detected	0.2		ppbv	1	110-82-7	
1,1-Dichloroethane	Not detected	0.2		ppbv	1	75-34-3	
1,1-Dichloroethene	Not detected	0.2		ppbv	1	75-35-4	
1,2-Dibromoethane	Not detected	0.01		ppbv	1	106-93-4	M
1,2-Dichloroethane	Not detected	0.2		ppbv	1	107-06-2	
1,2-Dichloropropane	Not detected	0.2		ppbv	1	78-87-5	
1,4-Dioxane	Not detected	2.5		ppbv	1	123-91-1	
Dichlorodifluoromethane	0.5	0.2		ppbv	1	75-71-8	
Dibromochloromethane	Not detected	0.2		ppbv	1	124-48-1	
trans-1,2-Dichloroethene	Not detected	0.2		ppbv	1	156-60-5	
cis-1,2-Dichloroethene	Not detected	0.2		ppbv	1	156-59-2	
cis-1,3-Dichloropropene	Not detected	0.2		ppbv	1	10061-01-5	
1,3-Dichlorobenzene	0.9	0.2		ppbv	1	541-73-1	
1,2-Dichlorobenzene	Not detected	0.2		ppbv	1	95-50-1	
1,4-Dichlorobenzene	Not detected	0.2		ppbv	1	106-46-7	
trans-1,3-Dichloropropene	Not detected	0.2		ppbv	1	10061-02-6	
Ethanol*	7.7	2.5		ppbv	1	64-17-5	
Ethylbenzene	Not detected	0.2		ppbv	1	100-41-4	
Ethyl Acetate*	Not detected	2.0		ppbv	1	141-78-6	
4-Ethyltoluene	Not detected	0.2		ppbv	1	622-96-8	
Freon 113	Not detected	0.2		ppbv	1	76-13-1	
Freon 114	Not detected	0.2		ppbv	1	76-14-2	
Heptane	Not detected	0.3		ppbv	1	142-82-5	
Hexachlorobutadiene	Not detected	0.2		ppbv	1	87-68-3	
Hexane	Not detected	0.2		ppbv	1	110-54-3	
2-Hexanone*	Not detected	0.5		ppbv	1	591-78-6	

M-Result reported to MDL not RDL

Lab Sample ID: S40706.04 (continued)
Sample Tag: VP-4

TO-15 (Replicate 01), Method: TO-15, Run Date: 10/20/22 19:01, Analyst: NDK (continued)

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Isopropyl Alcohol*	4.3	2.0		ppbv	1	67-63-0	
Methylene chloride	Not detected	0.5		ppbv	1	75-09-2	
2-Butanone (MEK)	Not detected	2.0		ppbv	1	78-93-3	
4-Methyl-2-pentanone (MIBK)	Not detected	0.5		ppbv	1	108-10-1	
tert-Methyl butyl ether (MTBE)	Not detected	0.2		ppbv	1	1634-04-4	
Methyl methacrylate	Not detected	0.2		ppbv	1	80-62-6	
Naphthalene	Not detected	0.2		ppbv	1	91-20-3	
Propylene*	Not detected	10		ppbv	1	115-07-1	
Styrene	Not detected	0.2		ppbv	1	100-42-5	
1,1,1-Trichloroethane	Not detected	0.2		ppbv	1	71-55-6	
1,1,2,2-Tetrachloroethane	Not detected	0.2		ppbv	1	79-34-5	
1,1,2-Trichloroethane	Not detected	0.2		ppbv	1	79-00-5	
1,2,4-Trichlorobenzene	Not detected	0.5		ppbv	1	120-82-1	
1,2,4-Trimethylbenzene	Not detected	0.2		ppbv	1	95-63-6	
1,3,5-Trimethylbenzene	Not detected	0.2		ppbv	1	108-67-8	
2,2,4-Trimethylpentane	Not detected	0.2		ppbv	1	540-84-1	
Tert-butyl Alcohol	Not detected	2.0		ppbv	1	75-65-0	
Tetrachloroethene	0.2	0.2		ppbv	1	127-18-4	
Tetrahydrofuran*	Not detected	0.2		ppbv	1	109-99-9	
Toluene	0.4	0.2		ppbv	1	108-88-3	
Trichloroethene	Not detected	0.2		ppbv	1	79-01-6	
Trichlorofluoromethane	0.2	0.2		ppbv	1	75-69-4	
Vinyl chloride	Not detected	0.2		ppbv	1	75-01-4	
Vinyl acetate	Not detected	2.0		ppbv	1	108-05-4	
p,m-Xylene	Not detected	0.4		ppbv	1		
o-Xylene	Not detected	0.2		ppbv	1	95-47-6	
Total Xylenes	Not detected	0.6		ppbv	1	1330-20-7	

TO-15 (Replicate 01), Method: TO-15, Run Date: 10/20/22 19:01, Analyst: NDK

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Acetone	22	4.8		ug/m3	1	67-64-1	
1,3-Butadiene	Not detected	4.4		ug/m3	1	106-99-0	
Benzene	0.64	0.64		ug/m3	1	71-43-2	
Bromodichloromethane	Not detected	1.3		ug/m3	1	75-27-4	
Bromoform	Not detected	2.1		ug/m3	1	75-25-2	
Bromomethane	Not detected	0.78		ug/m3	1	74-83-9	
Vinyl bromide	Not detected	0.87		ug/m3	1	593-60-2	
Benzyl chloride	Not detected	1.0		ug/m3	1	100-44-7	
Carbon disulfide	Not detected	6.2		ug/m3	1	75-15-0	
Chlorobenzene	Not detected	0.92		ug/m3	1	108-90-7	
Chloroethane	Not detected	5.3		ug/m3	1	75-00-3	
Chloroform	Not detected	0.98		ug/m3	1	67-66-3	
Chloromethane	Not detected	4.1		ug/m3	1	74-87-3	
3-Chloropropene	Not detected	6.3		ug/m3	1	107-05-1	
2-Chlorotoluene	Not detected	1.0		ug/m3	1	95-49-8	
Carbon tetrachloride	Not detected	1.3		ug/m3	1	56-23-5	
Cyclohexane	Not detected	0.69		ug/m3	1	110-82-7	
1,1-Dichloroethane	Not detected	0.81		ug/m3	1	75-34-3	
1,1-Dichloroethene	Not detected	0.79		ug/m3	1	75-35-4	
1,2-Dibromoethane	Not detected	0.077		ug/m3	1	106-93-4	M

M-Result reported to MDL not RDL

Lab Sample ID: S40706.04 (continued)
Sample Tag: VP-4

TO-15 (Replicate 01), Method: TO-15, Run Date: 10/20/22 19:01, Analyst: NDK (continued)

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
1,2-Dichloroethane	Not detected	0.81		ug/m3	1	107-06-2	
1,2-Dichloropropane	Not detected	0.92		ug/m3	1	78-87-5	
1,4-Dioxane	Not detected	9.0		ug/m3	1	123-91-1	
Dichlorodifluoromethane	2.5	0.99		ug/m3	1	75-71-8	
Dibromochloromethane	Not detected	1.7		ug/m3	1	124-48-1	
trans-1,2-Dichloroethene	Not detected	0.79		ug/m3	1	156-60-5	
cis-1,2-Dichloroethene	Not detected	0.79		ug/m3	1	156-59-2	
cis-1,3-Dichloropropene	Not detected	0.91		ug/m3	1	10061-01-5	
1,3-Dichlorobenzene	5.4	1.2		ug/m3	1	541-73-1	
1,2-Dichlorobenzene	Not detected	1.2		ug/m3	1	95-50-1	
1,4-Dichlorobenzene	Not detected	1.2		ug/m3	1	106-46-7	
trans-1,3-Dichloropropene	Not detected	0.91		ug/m3	1	10061-02-6	
Ethanol*	15	4.7		ug/m3	1	64-17-5	
Ethylbenzene	Not detected	0.87		ug/m3	1	100-41-4	
Ethyl Acetate*	Not detected	7.2		ug/m3	1	141-78-6	
4-Ethyltoluene	Not detected	0.98		ug/m3	1	622-96-8	
Freon 113	Not detected	1.5		ug/m3	1	76-13-1	
Freon 114	Not detected	1.4		ug/m3	1	76-14-2	
Heptane	Not detected	1.2		ug/m3	1	142-82-5	
Hexachlorobutadiene	Not detected	2.1		ug/m3	1	87-68-3	
Hexane	Not detected	0.70		ug/m3	1	110-54-3	
2-Hexanone*	Not detected	2.0		ug/m3	1	591-78-6	
Isopropyl Alcohol*	11	4.9		ug/m3	1	67-63-0	
Methylene chloride	Not detected	1.7		ug/m3	1	75-09-2	
2-Butanone (MEK)	Not detected	5.9		ug/m3	1	78-93-3	
4-Methyl-2-pentanone (MIBK)	Not detected	2.0		ug/m3	1	108-10-1	
tert-Methyl butyl ether (MTBE)	Not detected	0.72		ug/m3	1	1634-04-4	
Methyl methacrylate	Not detected	0.82		ug/m3	1	80-62-6	
Naphthalene	Not detected	1.0		ug/m3	1	91-20-3	
Propylene*	Not detected	17		ug/m3	1	115-07-1	
Styrene	Not detected	0.85		ug/m3	1	100-42-5	
1,1,1-Trichloroethane	Not detected	1.1		ug/m3	1	71-55-6	
1,1,2,2-Tetrachloroethane	Not detected	1.4		ug/m3	1	79-34-5	
1,1,2-Trichloroethane	Not detected	1.1		ug/m3	1	79-00-5	
1,2,4-Trichlorobenzene	Not detected	3.7		ug/m3	1	120-82-1	
1,2,4-Trimethylbenzene	Not detected	0.98		ug/m3	1	95-63-6	
1,3,5-Trimethylbenzene	Not detected	0.98		ug/m3	1	108-67-8	
2,2,4-Trimethylpentane	Not detected	0.93		ug/m3	1	540-84-1	
Tert-butyl Alcohol	Not detected	6.1		ug/m3	1	75-65-0	
Tetrachloroethene	1.4	1.4		ug/m3	1	127-18-4	
Tetrahydrofuran*	Not detected	0.59		ug/m3	1	109-99-9	
Toluene	1.5	0.75		ug/m3	1	108-88-3	
Trichloroethene	Not detected	1.1		ug/m3	1	79-01-6	
Trichlorofluoromethane	1.1	1.1		ug/m3	1	75-69-4	
Vinyl chloride	Not detected	0.51		ug/m3	1	75-01-4	
Vinyl acetate	Not detected	7.0		ug/m3	1	108-05-4	
p,m-Xylene	Not detected	1.7		ug/m3	1		
o-Xylene	Not detected	0.87		ug/m3	1	95-47-6	
Total Xylenes	Not detected	2.6		ug/m3	1	1330-20-7	

Lab Sample ID: S40706.05

Sample Tag: VP-5

Collected Date/Time: 09/22/2022 13:13 - 09/22/2022 13:22

Matrix: Air

COC Reference: A5764

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
1	Air Canister	None	No	RT	IR

Extraction / Prep.

Parameter	Result	Method	Run Date	Analyst	Flags
Pressure check for TO-15*	-6.5	N/A	09/27/22 18:00	BDO	

Organics - Volatiles

TO-15, Method: TO-15, Run Date: 10/07/22 00:09, Analyst: NDK

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Acetone	Not detected	20		ppbv	10	67-64-1	
1,3-Butadiene	Not detected	20		ppbv	10	106-99-0	
Benzene	Not detected	2		ppbv	10	71-43-2	
Bromodichloromethane	Not detected	2		ppbv	10	75-27-4	
Bromoform	Not detected	2		ppbv	10	75-25-2	
Bromomethane	Not detected	2		ppbv	10	74-83-9	
Vinyl bromide	Not detected	2		ppbv	10	593-60-2	
Benzyl chloride	Not detected	2		ppbv	10	100-44-7	
Carbon disulfide	Not detected	20		ppbv	10	75-15-0	
Chlorobenzene	Not detected	2		ppbv	10	108-90-7	
Chloroethane	Not detected	20		ppbv	10	75-00-3	
Chloroform	Not detected	2		ppbv	10	67-66-3	
Chloromethane	Not detected	20		ppbv	10	74-87-3	
3-Chloropropene	Not detected	20		ppbv	10	107-05-1	
2-Chlorotoluene	Not detected	2		ppbv	10	95-49-8	
Carbon tetrachloride	Not detected	2		ppbv	10	56-23-5	
Cyclohexane	Not detected	2		ppbv	10	110-82-7	
1,1-Dichloroethane	Not detected	2		ppbv	10	75-34-3	
1,1-Dichloroethene	Not detected	2		ppbv	10	75-35-4	
1,2-Dibromoethane	Not detected	2		ppbv	10	106-93-4	
1,2-Dichloroethane	Not detected	2		ppbv	10	107-06-2	
1,2-Dichloropropane	Not detected	2		ppbv	10	78-87-5	
1,4-Dioxane	Not detected	25		ppbv	10	123-91-1	
Dichlorodifluoromethane	Not detected	2		ppbv	10	75-71-8	
Dibromochloromethane	Not detected	2		ppbv	10	124-48-1	
trans-1,2-Dichloroethene	Not detected	2		ppbv	10	156-60-5	
cis-1,2-Dichloroethene	Not detected	2		ppbv	10	156-59-2	
cis-1,3-Dichloropropene	Not detected	2		ppbv	10	10061-01-5	
1,3-Dichlorobenzene	Not detected	2		ppbv	10	541-73-1	
1,2-Dichlorobenzene	Not detected	2		ppbv	10	95-50-1	
1,4-Dichlorobenzene	Not detected	2		ppbv	10	106-46-7	
trans-1,3-Dichloropropene	Not detected	2		ppbv	10	10061-02-6	
Ethanol*	Not detected	25		ppbv	10	64-17-5	
Ethylbenzene	Not detected	2		ppbv	10	100-41-4	
Ethyl Acetate*	Not detected	20		ppbv	10	141-78-6	
4-Ethyltoluene	Not detected	2		ppbv	10	622-96-8	
Freon 113	Not detected	2		ppbv	10	76-13-1	

Lab Sample ID: S40706.05 (continued)
Sample Tag: VP-5

TO-15, Method: TO-15, Run Date: 10/07/22 00:09, Analyst: NDK (continued)

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Freon 114	Not detected	2		ppbv	10	76-14-2	
Heptane	Not detected	2		ppbv	10	142-82-5	
Hexachlorobutadiene	Not detected	2		ppbv	10	87-68-3	
Hexane	Not detected	2		ppbv	10	110-54-3	
2-Hexanone*	Not detected	5		ppbv	10	591-78-6	
Isopropyl Alcohol*	Not detected	20		ppbv	10	67-63-0	
Methylene chloride	Not detected	5		ppbv	10	75-09-2	
2-Butanone (MEK)	Not detected	20		ppbv	10	78-93-3	
4-Methyl-2-pentanone (MIBK)	Not detected	5		ppbv	10	108-10-1	
tert-Methyl butyl ether (MTBE)	Not detected	2		ppbv	10	1634-04-4	
Methyl methacrylate	Not detected	2		ppbv	10	80-62-6	
Naphthalene	Not detected	2		ppbv	10	91-20-3	
Propylene*	Not detected	100		ppbv	10	115-07-1	
Styrene	Not detected	2		ppbv	10	100-42-5	
1,1,1-Trichloroethane	Not detected	2		ppbv	10	71-55-6	
1,1,2,2-Tetrachloroethane	Not detected	2		ppbv	10	79-34-5	
1,1,2-Trichloroethane	Not detected	2		ppbv	10	79-00-5	
1,2,4-Trichlorobenzene	Not detected	5		ppbv	10	120-82-1	
1,2,4-Trimethylbenzene	Not detected	2		ppbv	10	95-63-6	
1,3,5-Trimethylbenzene	Not detected	2		ppbv	10	108-67-8	
2,2,4-Trimethylpentane	Not detected	2		ppbv	10	540-84-1	
Tert-butyl Alcohol	Not detected	20		ppbv	10	75-65-0	
Tetrachloroethene	Not detected	2		ppbv	10	127-18-4	
Tetrahydrofuran*	Not detected	2		ppbv	10	109-99-9	
Toluene	Not detected	2		ppbv	10	108-88-3	
Trichloroethene	Not detected	2		ppbv	10	79-01-6	
Trichlorofluoromethane	Not detected	2		ppbv	10	75-69-4	
Vinyl chloride	Not detected	2		ppbv	10	75-01-4	
Vinyl acetate	Not detected	20		ppbv	10	108-05-4	
p,m-Xylene	Not detected	4		ppbv	10		
o-Xylene	Not detected	2		ppbv	10	95-47-6	
Total Xylenes	Not detected	6		ppbv	10	1330-20-7	

TO-15, Method: TO-15, Run Date: 10/07/22 00:09, Analyst: NDK

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Acetone	Not detected	48		ug/m3	10	67-64-1	
1,3-Butadiene	Not detected	44		ug/m3	10	106-99-0	
Benzene	Not detected	6.4		ug/m3	10	71-43-2	
Bromodichloromethane	Not detected	13		ug/m3	10	75-27-4	
Bromoform	Not detected	21		ug/m3	10	75-25-2	
Bromomethane	Not detected	7.8		ug/m3	10	74-83-9	
Vinyl bromide	Not detected	8.7		ug/m3	10	593-60-2	
Benzyl chloride	Not detected	10		ug/m3	10	100-44-7	
Carbon disulfide	Not detected	62		ug/m3	10	75-15-0	
Chlorobenzene	Not detected	9.2		ug/m3	10	108-90-7	
Chloroethane	Not detected	53		ug/m3	10	75-00-3	
Chloroform	Not detected	9.8		ug/m3	10	67-66-3	
Chloromethane	Not detected	41		ug/m3	10	74-87-3	
3-Chloropropene	Not detected	63		ug/m3	10	107-05-1	
2-Chlorotoluene	Not detected	10		ug/m3	10	95-49-8	

Lab Sample ID: S40706.05 (continued)
Sample Tag: VP-5

TO-15, Method: TO-15, Run Date: 10/07/22 00:09, Analyst: NDK (continued)

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Carbon tetrachloride	Not detected	13		ug/m3	10	56-23-5	
Cyclohexane	Not detected	6.9		ug/m3	10	110-82-7	
1,1-Dichloroethane	Not detected	8.1		ug/m3	10	75-34-3	
1,1-Dichloroethene	Not detected	7.9		ug/m3	10	75-35-4	
1,2-Dibromoethane	Not detected	15		ug/m3	10	106-93-4	
1,2-Dichloroethane	Not detected	8.1		ug/m3	10	107-06-2	
1,2-Dichloropropane	Not detected	9.2		ug/m3	10	78-87-5	
1,4-Dioxane	Not detected	90		ug/m3	10	123-91-1	
Dichlorodifluoromethane	Not detected	9.9		ug/m3	10	75-71-8	
Dibromochloromethane	Not detected	17		ug/m3	10	124-48-1	
trans-1,2-Dichloroethene	Not detected	7.9		ug/m3	10	156-60-5	
cis-1,2-Dichloroethene	Not detected	7.9		ug/m3	10	156-59-2	
cis-1,3-Dichloropropene	Not detected	9.1		ug/m3	10	10061-01-5	
1,3-Dichlorobenzene	Not detected	12		ug/m3	10	541-73-1	
1,2-Dichlorobenzene	Not detected	12		ug/m3	10	95-50-1	
1,4-Dichlorobenzene	Not detected	12		ug/m3	10	106-46-7	
trans-1,3-Dichloropropene	Not detected	9.1		ug/m3	10	10061-02-6	
Ethanol*	Not detected	47		ug/m3	10	64-17-5	
Ethylbenzene	Not detected	8.7		ug/m3	10	100-41-4	
Ethyl Acetate*	Not detected	72		ug/m3	10	141-78-6	
4-Ethyltoluene	Not detected	9.8		ug/m3	10	622-96-8	
Freon 113	Not detected	15		ug/m3	10	76-13-1	
Freon 114	Not detected	14		ug/m3	10	76-14-2	
Heptane	Not detected	8.2		ug/m3	10	142-82-5	
Hexachlorobutadiene	Not detected	21		ug/m3	10	87-68-3	
Hexane	Not detected	7.0		ug/m3	10	110-54-3	
2-Hexanone*	Not detected	20		ug/m3	10	591-78-6	
Isopropyl Alcohol*	Not detected	49		ug/m3	10	67-63-0	
Methylene chloride	Not detected	17		ug/m3	10	75-09-2	
2-Butanone (MEK)	Not detected	59		ug/m3	10	78-93-3	
4-Methyl-2-pentanone (MIBK)	Not detected	20		ug/m3	10	108-10-1	
tert-Methyl butyl ether (MTBE)	Not detected	7.2		ug/m3	10	1634-04-4	
Methyl methacrylate	Not detected	8.2		ug/m3	10	80-62-6	
Naphthalene	Not detected	10		ug/m3	10	91-20-3	
Propylene*	Not detected	170		ug/m3	10	115-07-1	
Styrene	Not detected	8.5		ug/m3	10	100-42-5	
1,1,1-Trichloroethane	Not detected	11		ug/m3	10	71-55-6	
1,1,2,2-Tetrachloroethane	Not detected	14		ug/m3	10	79-34-5	
1,1,2-Trichloroethane	Not detected	11		ug/m3	10	79-00-5	
1,2,4-Trichlorobenzene	Not detected	37		ug/m3	10	120-82-1	
1,2,4-Trimethylbenzene	Not detected	9.8		ug/m3	10	95-63-6	
1,3,5-Trimethylbenzene	Not detected	9.8		ug/m3	10	108-67-8	
2,2,4-Trimethylpentane	Not detected	9.3		ug/m3	10	540-84-1	
Tert-butyl Alcohol	Not detected	61		ug/m3	10	75-65-0	
Tetrachloroethene	Not detected	14		ug/m3	10	127-18-4	
Tetrahydrofuran*	Not detected	5.9		ug/m3	10	109-99-9	
Toluene	Not detected	7.5		ug/m3	10	108-88-3	
Trichloroethene	Not detected	11		ug/m3	10	79-01-6	
Trichlorofluoromethane	Not detected	11		ug/m3	10	75-69-4	
Vinyl chloride	Not detected	5.1		ug/m3	10	75-01-4	

Lab Sample ID: S40706.05 (continued)
Sample Tag: VP-5

TO-15, Method: TO-15, Run Date: 10/07/22 00:09, Analyst: NDK (continued)

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Vinyl acetate	Not detected	70		ug/m3	10	108-05-4	
p,m-Xylene	Not detected	17		ug/m3	10		
o-Xylene	Not detected	8.7		ug/m3	10	95-47-6	
Total Xylenes	Not detected	26		ug/m3	10	1330-20-7	

TO-15 (Replicate 01), Method: TO-15, Run Date: 10/20/22 19:32, Analyst: NDK

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Acetone	7.7	2.0		ppbv	1	67-64-1	
1,3-Butadiene	Not detected	2.0		ppbv	1	106-99-0	
Benzene	Not detected	0.2		ppbv	1	71-43-2	
Bromodichloromethane	Not detected	0.2		ppbv	1	75-27-4	
Bromoform	Not detected	0.2		ppbv	1	75-25-2	
Bromomethane	Not detected	0.2		ppbv	1	74-83-9	
Vinyl bromide	Not detected	0.2		ppbv	1	593-60-2	
Benzyl chloride	Not detected	0.2		ppbv	1	100-44-7	
Carbon disulfide	Not detected	2.0		ppbv	1	75-15-0	
Chlorobenzene	Not detected	0.2		ppbv	1	108-90-7	
Chloroethane	Not detected	2.0		ppbv	1	75-00-3	
Chloroform	Not detected	0.2		ppbv	1	67-66-3	
Chloromethane	Not detected	2.0		ppbv	1	74-87-3	
3-Chloropropene	Not detected	2.0		ppbv	1	107-05-1	
2-Chlorotoluene	Not detected	0.2		ppbv	1	95-49-8	
Carbon tetrachloride	0.3	0.2		ppbv	1	56-23-5	
Cyclohexane	Not detected	0.2		ppbv	1	110-82-7	
1,1-Dichloroethane	Not detected	0.2		ppbv	1	75-34-3	
1,1-Dichloroethene	Not detected	0.2		ppbv	1	75-35-4	
1,2-Dibromoethane	Not detected	0.01		ppbv	1	106-93-4	M
1,2-Dichloroethane	Not detected	0.2		ppbv	1	107-06-2	
1,2-Dichloropropane	Not detected	0.2		ppbv	1	78-87-5	
1,4-Dioxane	Not detected	2.5		ppbv	1	123-91-1	
Dichlorodifluoromethane	0.5	0.2		ppbv	1	75-71-8	
Dibromochloromethane	Not detected	0.2		ppbv	1	124-48-1	
trans-1,2-Dichloroethene	Not detected	0.2		ppbv	1	156-60-5	
cis-1,2-Dichloroethene	Not detected	0.2		ppbv	1	156-59-2	
cis-1,3-Dichloropropene	Not detected	0.2		ppbv	1	10061-01-5	
1,3-Dichlorobenzene	1.1	0.2		ppbv	1	541-73-1	
1,2-Dichlorobenzene	Not detected	0.2		ppbv	1	95-50-1	
1,4-Dichlorobenzene	Not detected	0.2		ppbv	1	106-46-7	
trans-1,3-Dichloropropene	Not detected	0.2		ppbv	1	10061-02-6	
Ethanol*	7.5	2.5		ppbv	1	64-17-5	
Ethylbenzene	Not detected	0.2		ppbv	1	100-41-4	
Ethyl Acetate*	Not detected	2.0		ppbv	1	141-78-6	
4-Ethyltoluene	Not detected	0.2		ppbv	1	622-96-8	
Freon 113	Not detected	0.2		ppbv	1	76-13-1	
Freon 114	Not detected	0.2		ppbv	1	76-14-2	
Heptane	Not detected	0.2		ppbv	1	142-82-5	
Hexachlorobutadiene	Not detected	0.2		ppbv	1	87-68-3	
Hexane	Not detected	0.2		ppbv	1	110-54-3	
2-Hexanone*	Not detected	0.5		ppbv	1	591-78-6	

M-Result reported to MDL not RDL

Lab Sample ID: S40706.05 (continued)
Sample Tag: VP-5

TO-15 (Replicate 01), Method: TO-15, Run Date: 10/20/22 19:32, Analyst: NDK (continued)

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Isopropyl Alcohol*	4.5	2.0		ppbv	1	67-63-0	
Methylene chloride	Not detected	0.5		ppbv	1	75-09-2	
2-Butanone (MEK)	Not detected	2.0		ppbv	1	78-93-3	
4-Methyl-2-pentanone (MIBK)	Not detected	0.5		ppbv	1	108-10-1	
tert-Methyl butyl ether (MTBE)	Not detected	0.2		ppbv	1	1634-04-4	
Methyl methacrylate	Not detected	0.2		ppbv	1	80-62-6	
Naphthalene	Not detected	0.2		ppbv	1	91-20-3	
Propylene*	Not detected	10		ppbv	1	115-07-1	
Styrene	Not detected	0.2		ppbv	1	100-42-5	
1,1,1-Trichloroethane	Not detected	0.2		ppbv	1	71-55-6	
1,1,2,2-Tetrachloroethane	Not detected	0.2		ppbv	1	79-34-5	
1,1,2-Trichloroethane	Not detected	0.2		ppbv	1	79-00-5	
1,2,4-Trichlorobenzene	Not detected	0.5		ppbv	1	120-82-1	
1,2,4-Trimethylbenzene	Not detected	0.2		ppbv	1	95-63-6	
1,3,5-Trimethylbenzene	Not detected	0.2		ppbv	1	108-67-8	
2,2,4-Trimethylpentane	Not detected	0.2		ppbv	1	540-84-1	
Tert-butyl Alcohol	Not detected	2.0		ppbv	1	75-65-0	
Tetrachloroethene	0.2	0.2		ppbv	1	127-18-4	
Tetrahydrofuran*	0.2	0.2		ppbv	1	109-99-9	
Toluene	0.2	0.2		ppbv	1	108-88-3	
Trichloroethene	Not detected	0.2		ppbv	1	79-01-6	
Trichlorofluoromethane	0.5	0.2		ppbv	1	75-69-4	
Vinyl chloride	Not detected	0.2		ppbv	1	75-01-4	
Vinyl acetate	Not detected	2.0		ppbv	1	108-05-4	
p,m-Xylene	Not detected	0.4		ppbv	1		
o-Xylene	Not detected	0.2		ppbv	1	95-47-6	
Total Xylenes	Not detected	0.6		ppbv	1	1330-20-7	

TO-15 (Replicate 01), Method: TO-15, Run Date: 10/20/22 19:32, Analyst: NDK

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Acetone	18	4.8		ug/m3	1	67-64-1	
1,3-Butadiene	Not detected	4.4		ug/m3	1	106-99-0	
Benzene	Not detected	0.64		ug/m3	1	71-43-2	
Bromodichloromethane	Not detected	1.3		ug/m3	1	75-27-4	
Bromoform	Not detected	2.1		ug/m3	1	75-25-2	
Bromomethane	Not detected	0.78		ug/m3	1	74-83-9	
Vinyl bromide	Not detected	0.87		ug/m3	1	593-60-2	
Benzyl chloride	Not detected	1.0		ug/m3	1	100-44-7	
Carbon disulfide	Not detected	6.2		ug/m3	1	75-15-0	
Chlorobenzene	Not detected	0.92		ug/m3	1	108-90-7	
Chloroethane	Not detected	5.3		ug/m3	1	75-00-3	
Chloroform	Not detected	0.98		ug/m3	1	67-66-3	
Chloromethane	Not detected	4.1		ug/m3	1	74-87-3	
3-Chloropropene	Not detected	6.3		ug/m3	1	107-05-1	
2-Chlorotoluene	Not detected	1.0		ug/m3	1	95-49-8	
Carbon tetrachloride	1.9	1.3		ug/m3	1	56-23-5	
Cyclohexane	Not detected	0.69		ug/m3	1	110-82-7	
1,1-Dichloroethane	Not detected	0.81		ug/m3	1	75-34-3	
1,1-Dichloroethene	Not detected	0.79		ug/m3	1	75-35-4	
1,2-Dibromoethane	Not detected	0.077		ug/m3	1	106-93-4	M

M-Result reported to MDL not RDL

Lab Sample ID: S40706.05 (continued)
Sample Tag: VP-5

TO-15 (Replicate 01), Method: TO-15, Run Date: 10/20/22 19:32, Analyst: NDK (continued)

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
1,2-Dichloroethane	Not detected	0.81		ug/m3	1	107-06-2	
1,2-Dichloropropane	Not detected	0.92		ug/m3	1	78-87-5	
1,4-Dioxane	Not detected	9.0		ug/m3	1	123-91-1	
Dichlorodifluoromethane	2.5	0.99		ug/m3	1	75-71-8	
Dibromochloromethane	Not detected	1.7		ug/m3	1	124-48-1	
trans-1,2-Dichloroethene	Not detected	0.79		ug/m3	1	156-60-5	
cis-1,2-Dichloroethene	Not detected	0.79		ug/m3	1	156-59-2	
cis-1,3-Dichloropropene	Not detected	0.91		ug/m3	1	10061-01-5	
1,3-Dichlorobenzene	6.6	1.2		ug/m3	1	541-73-1	
1,2-Dichlorobenzene	Not detected	1.2		ug/m3	1	95-50-1	
1,4-Dichlorobenzene	Not detected	1.2		ug/m3	1	106-46-7	
trans-1,3-Dichloropropene	Not detected	0.91		ug/m3	1	10061-02-6	
Ethanol*	14	4.7		ug/m3	1	64-17-5	
Ethylbenzene	Not detected	0.87		ug/m3	1	100-41-4	
Ethyl Acetate*	Not detected	7.2		ug/m3	1	141-78-6	
4-Ethyltoluene	Not detected	0.98		ug/m3	1	622-96-8	
Freon 113	Not detected	1.5		ug/m3	1	76-13-1	
Freon 114	Not detected	1.4		ug/m3	1	76-14-2	
Heptane	Not detected	0.82		ug/m3	1	142-82-5	
Hexachlorobutadiene	Not detected	2.1		ug/m3	1	87-68-3	
Hexane	Not detected	0.70		ug/m3	1	110-54-3	
2-Hexanone*	Not detected	2.0		ug/m3	1	591-78-6	
Isopropyl Alcohol*	11	4.9		ug/m3	1	67-63-0	
Methylene chloride	Not detected	1.7		ug/m3	1	75-09-2	
2-Butanone (MEK)	Not detected	5.9		ug/m3	1	78-93-3	
4-Methyl-2-pentanone (MIBK)	Not detected	2.0		ug/m3	1	108-10-1	
tert-Methyl butyl ether (MTBE)	Not detected	0.72		ug/m3	1	1634-04-4	
Methyl methacrylate	Not detected	0.82		ug/m3	1	80-62-6	
Naphthalene	Not detected	1.0		ug/m3	1	91-20-3	
Propylene*	Not detected	17		ug/m3	1	115-07-1	
Styrene	Not detected	0.85		ug/m3	1	100-42-5	
1,1,1-Trichloroethane	Not detected	1.1		ug/m3	1	71-55-6	
1,1,2,2-Tetrachloroethane	Not detected	1.4		ug/m3	1	79-34-5	
1,1,2-Trichloroethane	Not detected	1.1		ug/m3	1	79-00-5	
1,2,4-Trichlorobenzene	Not detected	3.7		ug/m3	1	120-82-1	
1,2,4-Trimethylbenzene	Not detected	0.98		ug/m3	1	95-63-6	
1,3,5-Trimethylbenzene	Not detected	0.98		ug/m3	1	108-67-8	
2,2,4-Trimethylpentane	Not detected	0.93		ug/m3	1	540-84-1	
Tert-butyl Alcohol	Not detected	6.1		ug/m3	1	75-65-0	
Tetrachloroethene	1.4	1.4		ug/m3	1	127-18-4	
Tetrahydrofuran*	0.59	0.59		ug/m3	1	109-99-9	
Toluene	0.75	0.75		ug/m3	1	108-88-3	
Trichloroethene	Not detected	1.1		ug/m3	1	79-01-6	
Trichlorofluoromethane	2.8	1.1		ug/m3	1	75-69-4	
Vinyl chloride	Not detected	0.51		ug/m3	1	75-01-4	
Vinyl acetate	Not detected	7.0		ug/m3	1	108-05-4	
p,m-Xylene	Not detected	1.7		ug/m3	1		
o-Xylene	Not detected	0.87		ug/m3	1	95-47-6	
Total Xylenes	Not detected	2.6		ug/m3	1	1330-20-7	

Lab Sample ID: S40706.06
Sample Tag: VP-6
Collected Date/Time: 09/22/2022 13:28 - 09/22/2022 13:33
Matrix: Air
COC Reference: A5764

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
1	Air Canister	None	No	RT	IR

Extraction / Prep.

Parameter	Result	Method	Run Date	Analyst	Flags
Pressure check for TO-15*	-2	N/A	09/27/22 18:00	BDO	

Organics - Volatiles

TO-15, Method: TO-15, Run Date: 10/07/22 00:39, Analyst: NDK

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Acetone	Not detected	20		ppbv	10	67-64-1	
1,3-Butadiene	Not detected	20		ppbv	10	106-99-0	
Benzene	Not detected	2		ppbv	10	71-43-2	
Bromodichloromethane	Not detected	2		ppbv	10	75-27-4	
Bromoform	Not detected	2		ppbv	10	75-25-2	
Bromomethane	Not detected	2		ppbv	10	74-83-9	
Vinyl bromide	Not detected	2		ppbv	10	593-60-2	
Benzyl chloride	Not detected	2		ppbv	10	100-44-7	
Carbon disulfide	Not detected	20		ppbv	10	75-15-0	
Chlorobenzene	Not detected	2		ppbv	10	108-90-7	
Chloroethane	Not detected	20		ppbv	10	75-00-3	
Chloroform	Not detected	2		ppbv	10	67-66-3	
Chloromethane	Not detected	20		ppbv	10	74-87-3	
3-Chloropropene	Not detected	20		ppbv	10	107-05-1	
2-Chlorotoluene	Not detected	2		ppbv	10	95-49-8	
Carbon tetrachloride	Not detected	2		ppbv	10	56-23-5	
Cyclohexane	Not detected	2		ppbv	10	110-82-7	
1,1-Dichloroethane	Not detected	2		ppbv	10	75-34-3	
1,1-Dichloroethene	Not detected	2		ppbv	10	75-35-4	
1,2-Dibromoethane	Not detected	2		ppbv	10	106-93-4	
1,2-Dichloroethane	Not detected	2		ppbv	10	107-06-2	
1,2-Dichloropropane	Not detected	2		ppbv	10	78-87-5	
1,4-Dioxane	Not detected	25		ppbv	10	123-91-1	
Dichlorodifluoromethane	Not detected	2		ppbv	10	75-71-8	
Dibromochloromethane	Not detected	2		ppbv	10	124-48-1	
trans-1,2-Dichloroethene	Not detected	2		ppbv	10	156-60-5	
cis-1,2-Dichloroethene	Not detected	2		ppbv	10	156-59-2	
cis-1,3-Dichloropropene	Not detected	2		ppbv	10	10061-01-5	
1,3-Dichlorobenzene	Not detected	2		ppbv	10	541-73-1	
1,2-Dichlorobenzene	Not detected	2		ppbv	10	95-50-1	
1,4-Dichlorobenzene	Not detected	2		ppbv	10	106-46-7	
trans-1,3-Dichloropropene	Not detected	2		ppbv	10	10061-02-6	
Ethanol*	Not detected	25		ppbv	10	64-17-5	
Ethylbenzene	Not detected	2		ppbv	10	100-41-4	
Ethyl Acetate*	Not detected	20		ppbv	10	141-78-6	
4-Ethyltoluene	Not detected	2		ppbv	10	622-96-8	
Freon 113	Not detected	2		ppbv	10	76-13-1	

Lab Sample ID: S40706.06 (continued)
Sample Tag: VP-6

TO-15, Method: TO-15, Run Date: 10/07/22 00:39, Analyst: NDK (continued)

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Freon 114	Not detected	2		ppbv	10	76-14-2	
Heptane	Not detected	2		ppbv	10	142-82-5	
Hexachlorobutadiene	Not detected	2		ppbv	10	87-68-3	
Hexane	Not detected	2		ppbv	10	110-54-3	
2-Hexanone*	Not detected	5		ppbv	10	591-78-6	
Isopropyl Alcohol*	Not detected	20		ppbv	10	67-63-0	
Methylene chloride	Not detected	5		ppbv	10	75-09-2	
2-Butanone (MEK)	Not detected	20		ppbv	10	78-93-3	
4-Methyl-2-pentanone (MIBK)	Not detected	5		ppbv	10	108-10-1	
tert-Methyl butyl ether (MTBE)	Not detected	2		ppbv	10	1634-04-4	
Methyl methacrylate	Not detected	2		ppbv	10	80-62-6	
Naphthalene	Not detected	2		ppbv	10	91-20-3	
Propylene*	Not detected	100		ppbv	10	115-07-1	
Styrene	Not detected	2		ppbv	10	100-42-5	
1,1,1-Trichloroethane	Not detected	2		ppbv	10	71-55-6	
1,1,2,2-Tetrachloroethane	Not detected	2		ppbv	10	79-34-5	
1,1,2-Trichloroethane	Not detected	2		ppbv	10	79-00-5	
1,2,4-Trichlorobenzene	Not detected	5		ppbv	10	120-82-1	
1,2,4-Trimethylbenzene	Not detected	2		ppbv	10	95-63-6	
1,3,5-Trimethylbenzene	Not detected	2		ppbv	10	108-67-8	
2,2,4-Trimethylpentane	Not detected	2		ppbv	10	540-84-1	
Tert-butyl Alcohol	Not detected	20		ppbv	10	75-65-0	
Tetrachloroethene	Not detected	2		ppbv	10	127-18-4	
Tetrahydrofuran*	Not detected	2		ppbv	10	109-99-9	
Toluene	Not detected	2		ppbv	10	108-88-3	
Trichloroethene	Not detected	2		ppbv	10	79-01-6	
Trichlorofluoromethane	Not detected	2		ppbv	10	75-69-4	
Vinyl chloride	Not detected	2		ppbv	10	75-01-4	
Vinyl acetate	Not detected	20		ppbv	10	108-05-4	
p,m-Xylene	Not detected	4		ppbv	10		
o-Xylene	Not detected	2		ppbv	10	95-47-6	
Total Xylenes	Not detected	6		ppbv	10	1330-20-7	

TO-15, Method: TO-15, Run Date: 10/07/22 00:39, Analyst: NDK

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Acetone	Not detected	48		ug/m3	10	67-64-1	
1,3-Butadiene	Not detected	44		ug/m3	10	106-99-0	
Benzene	Not detected	6.4		ug/m3	10	71-43-2	
Bromodichloromethane	Not detected	13		ug/m3	10	75-27-4	
Bromoform	Not detected	21		ug/m3	10	75-25-2	
Bromomethane	Not detected	7.8		ug/m3	10	74-83-9	
Vinyl bromide	Not detected	8.7		ug/m3	10	593-60-2	
Benzyl chloride	Not detected	10		ug/m3	10	100-44-7	
Carbon disulfide	Not detected	62		ug/m3	10	75-15-0	
Chlorobenzene	Not detected	9.2		ug/m3	10	108-90-7	
Chloroethane	Not detected	53		ug/m3	10	75-00-3	
Chloroform	Not detected	9.8		ug/m3	10	67-66-3	
Chloromethane	Not detected	41		ug/m3	10	74-87-3	
3-Chloropropene	Not detected	63		ug/m3	10	107-05-1	
2-Chlorotoluene	Not detected	10		ug/m3	10	95-49-8	

Lab Sample ID: S40706.06 (continued)
Sample Tag: VP-6

TO-15, Method: TO-15, Run Date: 10/07/22 00:39, Analyst: NDK (continued)

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Carbon tetrachloride	Not detected	13		ug/m3	10	56-23-5	
Cyclohexane	Not detected	6.9		ug/m3	10	110-82-7	
1,1-Dichloroethane	Not detected	8.1		ug/m3	10	75-34-3	
1,1-Dichloroethene	Not detected	7.9		ug/m3	10	75-35-4	
1,2-Dibromoethane	Not detected	15		ug/m3	10	106-93-4	
1,2-Dichloroethane	Not detected	8.1		ug/m3	10	107-06-2	
1,2-Dichloropropane	Not detected	9.2		ug/m3	10	78-87-5	
1,4-Dioxane	Not detected	90		ug/m3	10	123-91-1	
Dichlorodifluoromethane	Not detected	9.9		ug/m3	10	75-71-8	
Dibromochloromethane	Not detected	17		ug/m3	10	124-48-1	
trans-1,2-Dichloroethene	Not detected	7.9		ug/m3	10	156-60-5	
cis-1,2-Dichloroethene	Not detected	7.9		ug/m3	10	156-59-2	
cis-1,3-Dichloropropene	Not detected	9.1		ug/m3	10	10061-01-5	
1,3-Dichlorobenzene	Not detected	12		ug/m3	10	541-73-1	
1,2-Dichlorobenzene	Not detected	12		ug/m3	10	95-50-1	
1,4-Dichlorobenzene	Not detected	12		ug/m3	10	106-46-7	
trans-1,3-Dichloropropene	Not detected	9.1		ug/m3	10	10061-02-6	
Ethanol*	Not detected	47		ug/m3	10	64-17-5	
Ethylbenzene	Not detected	8.7		ug/m3	10	100-41-4	
Ethyl Acetate*	Not detected	72		ug/m3	10	141-78-6	
4-Ethyltoluene	Not detected	9.8		ug/m3	10	622-96-8	
Freon 113	Not detected	15		ug/m3	10	76-13-1	
Freon 114	Not detected	14		ug/m3	10	76-14-2	
Heptane	Not detected	8.2		ug/m3	10	142-82-5	
Hexachlorobutadiene	Not detected	21		ug/m3	10	87-68-3	
Hexane	Not detected	7.0		ug/m3	10	110-54-3	
2-Hexanone*	Not detected	20		ug/m3	10	591-78-6	
Isopropyl Alcohol*	Not detected	49		ug/m3	10	67-63-0	
Methylene chloride	Not detected	17		ug/m3	10	75-09-2	
2-Butanone (MEK)	Not detected	59		ug/m3	10	78-93-3	
4-Methyl-2-pentanone (MIBK)	Not detected	20		ug/m3	10	108-10-1	
tert-Methyl butyl ether (MTBE)	Not detected	7.2		ug/m3	10	1634-04-4	
Methyl methacrylate	Not detected	8.2		ug/m3	10	80-62-6	
Naphthalene	Not detected	10		ug/m3	10	91-20-3	
Propylene*	Not detected	170		ug/m3	10	115-07-1	
Styrene	Not detected	8.5		ug/m3	10	100-42-5	
1,1,1-Trichloroethane	Not detected	11		ug/m3	10	71-55-6	
1,1,2,2-Tetrachloroethane	Not detected	14		ug/m3	10	79-34-5	
1,1,2-Trichloroethane	Not detected	11		ug/m3	10	79-00-5	
1,2,4-Trichlorobenzene	Not detected	37		ug/m3	10	120-82-1	
1,2,4-Trimethylbenzene	Not detected	9.8		ug/m3	10	95-63-6	
1,3,5-Trimethylbenzene	Not detected	9.8		ug/m3	10	108-67-8	
2,2,4-Trimethylpentane	Not detected	9.3		ug/m3	10	540-84-1	
Tert-butyl Alcohol	Not detected	61		ug/m3	10	75-65-0	
Tetrachloroethene	Not detected	14		ug/m3	10	127-18-4	
Tetrahydrofuran*	Not detected	5.9		ug/m3	10	109-99-9	
Toluene	Not detected	7.5		ug/m3	10	108-88-3	
Trichloroethene	Not detected	11		ug/m3	10	79-01-6	
Trichlorofluoromethane	Not detected	11		ug/m3	10	75-69-4	
Vinyl chloride	Not detected	5.1		ug/m3	10	75-01-4	

Lab Sample ID: S40706.06 (continued)
Sample Tag: VP-6

TO-15, Method: TO-15, Run Date: 10/07/22 00:39, Analyst: NDK (continued)

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Vinyl acetate	Not detected	70		ug/m3	10	108-05-4	
p,m-Xylene	Not detected	17		ug/m3	10		
o-Xylene	Not detected	8.7		ug/m3	10	95-47-6	
Total Xylenes	Not detected	26		ug/m3	10	1330-20-7	

TO-15 (Replicate 01), Method: TO-15, Run Date: 10/20/22 22:34, Analyst: NDK

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Acetone	10.7	2.0		ppbv	1	67-64-1	
1,3-Butadiene	Not detected	2.0		ppbv	1	106-99-0	
Benzene	0.2	0.2		ppbv	1	71-43-2	
Bromodichloromethane	Not detected	0.2		ppbv	1	75-27-4	
Bromoform	Not detected	0.2		ppbv	1	75-25-2	
Bromomethane	Not detected	0.2		ppbv	1	74-83-9	
Vinyl bromide	Not detected	0.2		ppbv	1	593-60-2	
Benzyl chloride	Not detected	0.2		ppbv	1	100-44-7	
Carbon disulfide	Not detected	2.0		ppbv	1	75-15-0	
Chlorobenzene	Not detected	0.2		ppbv	1	108-90-7	
Chloroethane	Not detected	2.0		ppbv	1	75-00-3	
Chloroform	0.3	0.2		ppbv	1	67-66-3	
Chloromethane	Not detected	2.0		ppbv	1	74-87-3	
3-Chloropropene	Not detected	2.0		ppbv	1	107-05-1	
2-Chlorotoluene	Not detected	0.2		ppbv	1	95-49-8	
Carbon tetrachloride	Not detected	0.2		ppbv	1	56-23-5	
Cyclohexane	Not detected	0.2		ppbv	1	110-82-7	
1,1-Dichloroethane	Not detected	0.2		ppbv	1	75-34-3	
1,1-Dichloroethene	Not detected	0.2		ppbv	1	75-35-4	
1,2-Dibromoethane	Not detected	0.01		ppbv	1	106-93-4	M
1,2-Dichloroethane	Not detected	0.2		ppbv	1	107-06-2	
1,2-Dichloropropane	Not detected	0.2		ppbv	1	78-87-5	
1,4-Dioxane	Not detected	2.5		ppbv	1	123-91-1	
Dichlorodifluoromethane	0.6	0.2		ppbv	1	75-71-8	
Dibromochloromethane	Not detected	0.2		ppbv	1	124-48-1	
trans-1,2-Dichloroethene	Not detected	0.2		ppbv	1	156-60-5	
cis-1,2-Dichloroethene	Not detected	0.2		ppbv	1	156-59-2	
cis-1,3-Dichloropropene	Not detected	0.2		ppbv	1	10061-01-5	
1,3-Dichlorobenzene	0.7	0.2		ppbv	1	541-73-1	
1,2-Dichlorobenzene	Not detected	0.2		ppbv	1	95-50-1	
1,4-Dichlorobenzene	Not detected	0.2		ppbv	1	106-46-7	
trans-1,3-Dichloropropene	Not detected	0.2		ppbv	1	10061-02-6	
Ethanol*	15.7	2.5		ppbv	1	64-17-5	
Ethylbenzene	Not detected	0.2		ppbv	1	100-41-4	
Ethyl Acetate*	Not detected	2.0		ppbv	1	141-78-6	
4-Ethyltoluene	Not detected	0.2		ppbv	1	622-96-8	
Freon 113	Not detected	0.2		ppbv	1	76-13-1	
Freon 114	Not detected	0.2		ppbv	1	76-14-2	
Heptane	0.3	0.2		ppbv	1	142-82-5	
Hexachlorobutadiene	Not detected	0.2		ppbv	1	87-68-3	
Hexane	0.8	0.2		ppbv	1	110-54-3	
2-Hexanone*	Not detected	0.5		ppbv	1	591-78-6	

M-Result reported to MDL not RDL

Lab Sample ID: S40706.06 (continued)
Sample Tag: VP-6

TO-15 (Replicate 01), Method: TO-15, Run Date: 10/20/22 22:34, Analyst: NDK (continued)

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Isopropyl Alcohol*	4.8	2.0		ppbv	1	67-63-0	
Methylene chloride	1.1	0.5		ppbv	1	75-09-2	
2-Butanone (MEK)	Not detected	2.0		ppbv	1	78-93-3	
4-Methyl-2-pentanone (MIBK)	Not detected	0.5		ppbv	1	108-10-1	
tert-Methyl butyl ether (MTBE)	Not detected	0.2		ppbv	1	1634-04-4	
Methyl methacrylate	Not detected	0.2		ppbv	1	80-62-6	
Naphthalene	Not detected	0.2		ppbv	1	91-20-3	
Propylene*	Not detected	10		ppbv	1	115-07-1	
Styrene	Not detected	0.2		ppbv	1	100-42-5	
1,1,1-Trichloroethane	Not detected	0.2		ppbv	1	71-55-6	
1,1,2,2-Tetrachloroethane	Not detected	0.2		ppbv	1	79-34-5	
1,1,2-Trichloroethane	Not detected	0.2		ppbv	1	79-00-5	
1,2,4-Trichlorobenzene	Not detected	0.5		ppbv	1	120-82-1	
1,2,4-Trimethylbenzene	Not detected	0.2		ppbv	1	95-63-6	
1,3,5-Trimethylbenzene	Not detected	0.2		ppbv	1	108-67-8	
2,2,4-Trimethylpentane	Not detected	0.2		ppbv	1	540-84-1	
Tert-butyl Alcohol	6.5	2.0		ppbv	1	75-65-0	
Tetrachloroethene	Not detected	0.2		ppbv	1	127-18-4	
Tetrahydrofuran*	Not detected	0.2		ppbv	1	109-99-9	
Toluene	0.6	0.2		ppbv	1	108-88-3	
Trichloroethene	Not detected	0.2		ppbv	1	79-01-6	
Trichlorofluoromethane	0.6	0.2		ppbv	1	75-69-4	
Vinyl chloride	Not detected	0.2		ppbv	1	75-01-4	
Vinyl acetate	Not detected	2.0		ppbv	1	108-05-4	
p,m-Xylene	Not detected	0.4		ppbv	1		
o-Xylene	Not detected	0.2		ppbv	1	95-47-6	
Total Xylenes	Not detected	0.6		ppbv	1	1330-20-7	

TO-15 (Replicate 01), Method: TO-15, Run Date: 10/20/22 22:34, Analyst: NDK

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Acetone	25.4	4.8		ug/m3	1	67-64-1	
1,3-Butadiene	Not detected	4.4		ug/m3	1	106-99-0	
Benzene	0.64	0.64		ug/m3	1	71-43-2	
Bromodichloromethane	Not detected	1.3		ug/m3	1	75-27-4	
Bromoform	Not detected	2.1		ug/m3	1	75-25-2	
Bromomethane	Not detected	0.78		ug/m3	1	74-83-9	
Vinyl bromide	Not detected	0.87		ug/m3	1	593-60-2	
Benzyl chloride	Not detected	1.0		ug/m3	1	100-44-7	
Carbon disulfide	Not detected	6.2		ug/m3	1	75-15-0	
Chlorobenzene	Not detected	0.92		ug/m3	1	108-90-7	
Chloroethane	Not detected	5.3		ug/m3	1	75-00-3	
Chloroform	1.5	0.98		ug/m3	1	67-66-3	
Chloromethane	Not detected	4.1		ug/m3	1	74-87-3	
3-Chloropropene	Not detected	6.3		ug/m3	1	107-05-1	
2-Chlorotoluene	Not detected	1.0		ug/m3	1	95-49-8	
Carbon tetrachloride	Not detected	1.3		ug/m3	1	56-23-5	
Cyclohexane	Not detected	0.69		ug/m3	1	110-82-7	
1,1-Dichloroethane	Not detected	0.81		ug/m3	1	75-34-3	
1,1-Dichloroethene	Not detected	0.79		ug/m3	1	75-35-4	
1,2-Dibromoethane	Not detected	0.077		ug/m3	1	106-93-4	M

M-Result reported to MDL not RDL

Lab Sample ID: S40706.06 (continued)
Sample Tag: VP-6

TO-15 (Replicate 01), Method: TO-15, Run Date: 10/20/22 22:34, Analyst: NDK (continued)

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
1,2-Dichloroethane	Not detected	0.81		ug/m3	1	107-06-2	
1,2-Dichloropropane	Not detected	0.92		ug/m3	1	78-87-5	
1,4-Dioxane	Not detected	9.0		ug/m3	1	123-91-1	
Dichlorodifluoromethane	3.0	0.99		ug/m3	1	75-71-8	
Dibromochloromethane	Not detected	1.7		ug/m3	1	124-48-1	
trans-1,2-Dichloroethene	Not detected	0.79		ug/m3	1	156-60-5	
cis-1,2-Dichloroethene	Not detected	0.79		ug/m3	1	156-59-2	
cis-1,3-Dichloropropene	Not detected	0.91		ug/m3	1	10061-01-5	
1,3-Dichlorobenzene	4.2	1.2		ug/m3	1	541-73-1	
1,2-Dichlorobenzene	Not detected	1.2		ug/m3	1	95-50-1	
1,4-Dichlorobenzene	Not detected	1.2		ug/m3	1	106-46-7	
trans-1,3-Dichloropropene	Not detected	0.91		ug/m3	1	10061-02-6	
Ethanol*	29.6	4.7		ug/m3	1	64-17-5	
Ethylbenzene	Not detected	0.87		ug/m3	1	100-41-4	
Ethyl Acetate*	Not detected	7.2		ug/m3	1	141-78-6	
4-Ethyltoluene	Not detected	0.98		ug/m3	1	622-96-8	
Freon 113	Not detected	1.5		ug/m3	1	76-13-1	
Freon 114	Not detected	1.4		ug/m3	1	76-14-2	
Heptane	1.2	0.82		ug/m3	1	142-82-5	
Hexachlorobutadiene	Not detected	2.1		ug/m3	1	87-68-3	
Hexane	2.8	0.70		ug/m3	1	110-54-3	
2-Hexanone*	Not detected	2.0		ug/m3	1	591-78-6	
Isopropyl Alcohol*	12	4.9		ug/m3	1	67-63-0	
Methylene chloride	3.8	1.7		ug/m3	1	75-09-2	
2-Butanone (MEK)	Not detected	5.9		ug/m3	1	78-93-3	
4-Methyl-2-pentanone (MIBK)	Not detected	2.0		ug/m3	1	108-10-1	
tert-Methyl butyl ether (MTBE)	Not detected	0.72		ug/m3	1	1634-04-4	
Methyl methacrylate	Not detected	0.82		ug/m3	1	80-62-6	
Naphthalene	Not detected	1.0		ug/m3	1	91-20-3	
Propylene*	Not detected	17		ug/m3	1	115-07-1	
Styrene	Not detected	0.85		ug/m3	1	100-42-5	
1,1,1-Trichloroethane	Not detected	1.1		ug/m3	1	71-55-6	
1,1,2,2-Tetrachloroethane	Not detected	1.4		ug/m3	1	79-34-5	
1,1,2-Trichloroethane	Not detected	1.1		ug/m3	1	79-00-5	
1,2,4-Trichlorobenzene	Not detected	3.7		ug/m3	1	120-82-1	
1,2,4-Trimethylbenzene	Not detected	0.98		ug/m3	1	95-63-6	
1,3,5-Trimethylbenzene	Not detected	0.98		ug/m3	1	108-67-8	
2,2,4-Trimethylpentane	Not detected	0.93		ug/m3	1	540-84-1	
Tert-butyl Alcohol	20	6.1		ug/m3	1	75-65-0	
Tetrachloroethene	Not detected	1.4		ug/m3	1	127-18-4	
Tetrahydrofuran*	Not detected	0.59		ug/m3	1	109-99-9	
Toluene	2.3	0.75		ug/m3	1	108-88-3	
Trichloroethene	Not detected	1.1		ug/m3	1	79-01-6	
Trichlorofluoromethane	3.4	1.1		ug/m3	1	75-69-4	
Vinyl chloride	Not detected	0.51		ug/m3	1	75-01-4	
Vinyl acetate	Not detected	7.0		ug/m3	1	108-05-4	
p,m-Xylene	Not detected	1.7		ug/m3	1		
o-Xylene	Not detected	0.87		ug/m3	1	95-47-6	
Total Xylenes	Not detected	2.6		ug/m3	1	1330-20-7	

Lab Sample ID: S40706.07

Sample Tag: VP-7

Collected Date/Time: 09/22/2022 13:51 - 09/22/2022 13:56

Matrix: Air

COC Reference: A5764

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
1	Air Canister	None	No	RT	IR

Extraction / Prep.

Parameter	Result	Method	Run Date	Analyst	Flags
Pressure check for TO-15*	-6	N/A	09/27/22 18:00	BDO	

Organics - Volatiles

TO-15, Method: TO-15, Run Date: 10/07/22 01:09, Analyst: NDK

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Acetone	Not detected	20		ppbv	10	67-64-1	
1,3-Butadiene	Not detected	20		ppbv	10	106-99-0	
Benzene	4	2		ppbv	10	71-43-2	
Bromodichloromethane	Not detected	2		ppbv	10	75-27-4	
Bromoform	Not detected	2		ppbv	10	75-25-2	
Bromomethane	Not detected	2		ppbv	10	74-83-9	
Vinyl bromide	Not detected	2		ppbv	10	593-60-2	
Benzyl chloride	Not detected	2		ppbv	10	100-44-7	
Carbon disulfide	Not detected	20		ppbv	10	75-15-0	
Chlorobenzene	Not detected	2		ppbv	10	108-90-7	
Chloroethane	Not detected	20		ppbv	10	75-00-3	
Chloroform	Not detected	2		ppbv	10	67-66-3	
Chloromethane	Not detected	20		ppbv	10	74-87-3	
3-Chloropropene	Not detected	20		ppbv	10	107-05-1	
2-Chlorotoluene	Not detected	2		ppbv	10	95-49-8	
Carbon tetrachloride	Not detected	2		ppbv	10	56-23-5	
Cyclohexane	Not detected	2		ppbv	10	110-82-7	
1,1-Dichloroethane	Not detected	2		ppbv	10	75-34-3	
1,1-Dichloroethene	Not detected	2		ppbv	10	75-35-4	
1,2-Dibromoethane	Not detected	2		ppbv	10	106-93-4	
1,2-Dichloroethane	Not detected	2		ppbv	10	107-06-2	
1,2-Dichloropropane	Not detected	2		ppbv	10	78-87-5	
1,4-Dioxane	Not detected	25		ppbv	10	123-91-1	
Dichlorodifluoromethane	Not detected	2		ppbv	10	75-71-8	
Dibromochloromethane	Not detected	2		ppbv	10	124-48-1	
trans-1,2-Dichloroethene	Not detected	2		ppbv	10	156-60-5	
cis-1,2-Dichloroethene	Not detected	2		ppbv	10	156-59-2	
cis-1,3-Dichloropropene	Not detected	2		ppbv	10	10061-01-5	
1,3-Dichlorobenzene	Not detected	2		ppbv	10	541-73-1	
1,2-Dichlorobenzene	Not detected	2		ppbv	10	95-50-1	
1,4-Dichlorobenzene	Not detected	2		ppbv	10	106-46-7	
trans-1,3-Dichloropropene	Not detected	2		ppbv	10	10061-02-6	
Ethanol*	Not detected	25		ppbv	10	64-17-5	
Ethylbenzene	Not detected	2		ppbv	10	100-41-4	
Ethyl Acetate*	Not detected	20		ppbv	10	141-78-6	
4-Ethyltoluene	Not detected	2		ppbv	10	622-96-8	
Freon 113	Not detected	2		ppbv	10	76-13-1	

Lab Sample ID: S40706.07 (continued)
Sample Tag: VP-7

TO-15, Method: TO-15, Run Date: 10/07/22 01:09, Analyst: NDK (continued)

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Freon 114	Not detected	2		ppbv	10	76-14-2	
Heptane	Not detected	2		ppbv	10	142-82-5	
Hexachlorobutadiene	Not detected	2		ppbv	10	87-68-3	
Hexane	Not detected	2		ppbv	10	110-54-3	
2-Hexanone*	Not detected	5		ppbv	10	591-78-6	
Isopropyl Alcohol*	Not detected	20		ppbv	10	67-63-0	
Methylene chloride	Not detected	5		ppbv	10	75-09-2	
2-Butanone (MEK)	Not detected	20		ppbv	10	78-93-3	
4-Methyl-2-pentanone (MIBK)	Not detected	5		ppbv	10	108-10-1	
tert-Methyl butyl ether (MTBE)	Not detected	2		ppbv	10	1634-04-4	
Methyl methacrylate	Not detected	2		ppbv	10	80-62-6	
Naphthalene	Not detected	2		ppbv	10	91-20-3	
Propylene*	Not detected	100		ppbv	10	115-07-1	
Styrene	Not detected	2		ppbv	10	100-42-5	
1,1,1-Trichloroethane	Not detected	2		ppbv	10	71-55-6	
1,1,2,2-Tetrachloroethane	Not detected	2		ppbv	10	79-34-5	
1,1,2-Trichloroethane	Not detected	2		ppbv	10	79-00-5	
1,2,4-Trichlorobenzene	Not detected	5		ppbv	10	120-82-1	
1,2,4-Trimethylbenzene	Not detected	2		ppbv	10	95-63-6	
1,3,5-Trimethylbenzene	Not detected	2		ppbv	10	108-67-8	
2,2,4-Trimethylpentane	Not detected	2		ppbv	10	540-84-1	
Tert-butyl Alcohol	Not detected	20		ppbv	10	75-65-0	
Tetrachloroethene	Not detected	2		ppbv	10	127-18-4	
Tetrahydrofuran*	Not detected	2		ppbv	10	109-99-9	
Toluene	4	2		ppbv	10	108-88-3	
Trichloroethene	Not detected	2		ppbv	10	79-01-6	
Trichlorofluoromethane	Not detected	2		ppbv	10	75-69-4	
Vinyl chloride	Not detected	2		ppbv	10	75-01-4	
Vinyl acetate	Not detected	20		ppbv	10	108-05-4	
p,m-Xylene	Not detected	4		ppbv	10		
o-Xylene	Not detected	2		ppbv	10	95-47-6	
Total Xylenes	Not detected	6		ppbv	10	1330-20-7	

TO-15, Method: TO-15, Run Date: 10/07/22 01:09, Analyst: NDK

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Acetone	Not detected	48		ug/m3	10	67-64-1	
1,3-Butadiene	Not detected	44		ug/m3	10	106-99-0	
Benzene	13	6.4		ug/m3	10	71-43-2	
Bromodichloromethane	Not detected	13		ug/m3	10	75-27-4	
Bromoform	Not detected	21		ug/m3	10	75-25-2	
Bromomethane	Not detected	7.8		ug/m3	10	74-83-9	
Vinyl bromide	Not detected	8.7		ug/m3	10	593-60-2	
Benzyl chloride	Not detected	10		ug/m3	10	100-44-7	
Carbon disulfide	Not detected	62		ug/m3	10	75-15-0	
Chlorobenzene	Not detected	9.2		ug/m3	10	108-90-7	
Chloroethane	Not detected	53		ug/m3	10	75-00-3	
Chloroform	Not detected	9.8		ug/m3	10	67-66-3	
Chloromethane	Not detected	41		ug/m3	10	74-87-3	
3-Chloropropene	Not detected	63		ug/m3	10	107-05-1	
2-Chlorotoluene	Not detected	10		ug/m3	10	95-49-8	

Lab Sample ID: S40706.07 (continued)
Sample Tag: VP-7

TO-15, Method: TO-15, Run Date: 10/07/22 01:09, Analyst: NDK (continued)

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Carbon tetrachloride	Not detected	13		ug/m3	10	56-23-5	
Cyclohexane	Not detected	6.9		ug/m3	10	110-82-7	
1,1-Dichloroethane	Not detected	8.1		ug/m3	10	75-34-3	
1,1-Dichloroethene	Not detected	7.9		ug/m3	10	75-35-4	
1,2-Dibromoethane	Not detected	15		ug/m3	10	106-93-4	
1,2-Dichloroethane	Not detected	8.1		ug/m3	10	107-06-2	
1,2-Dichloropropane	Not detected	9.2		ug/m3	10	78-87-5	
1,4-Dioxane	Not detected	90		ug/m3	10	123-91-1	
Dichlorodifluoromethane	Not detected	9.9		ug/m3	10	75-71-8	
Dibromochloromethane	Not detected	17		ug/m3	10	124-48-1	
trans-1,2-Dichloroethene	Not detected	7.9		ug/m3	10	156-60-5	
cis-1,2-Dichloroethene	Not detected	7.9		ug/m3	10	156-59-2	
cis-1,3-Dichloropropene	Not detected	9.1		ug/m3	10	10061-01-5	
1,3-Dichlorobenzene	Not detected	12		ug/m3	10	541-73-1	
1,2-Dichlorobenzene	Not detected	12		ug/m3	10	95-50-1	
1,4-Dichlorobenzene	Not detected	12		ug/m3	10	106-46-7	
trans-1,3-Dichloropropene	Not detected	9.1		ug/m3	10	10061-02-6	
Ethanol*	Not detected	47		ug/m3	10	64-17-5	
Ethylbenzene	Not detected	8.7		ug/m3	10	100-41-4	
Ethyl Acetate*	Not detected	72		ug/m3	10	141-78-6	
4-Ethyltoluene	Not detected	9.8		ug/m3	10	622-96-8	
Freon 113	Not detected	15		ug/m3	10	76-13-1	
Freon 114	Not detected	14		ug/m3	10	76-14-2	
Heptane	Not detected	8.2		ug/m3	10	142-82-5	
Hexachlorobutadiene	Not detected	21		ug/m3	10	87-68-3	
Hexane	Not detected	7.0		ug/m3	10	110-54-3	
2-Hexanone*	Not detected	20		ug/m3	10	591-78-6	
Isopropyl Alcohol*	Not detected	49		ug/m3	10	67-63-0	
Methylene chloride	Not detected	17		ug/m3	10	75-09-2	
2-Butanone (MEK)	Not detected	59		ug/m3	10	78-93-3	
4-Methyl-2-pentanone (MIBK)	Not detected	20		ug/m3	10	108-10-1	
tert-Methyl butyl ether (MTBE)	Not detected	7.2		ug/m3	10	1634-04-4	
Methyl methacrylate	Not detected	8.2		ug/m3	10	80-62-6	
Naphthalene	Not detected	10		ug/m3	10	91-20-3	
Propylene*	Not detected	170		ug/m3	10	115-07-1	
Styrene	Not detected	8.5		ug/m3	10	100-42-5	
1,1,1-Trichloroethane	Not detected	11		ug/m3	10	71-55-6	
1,1,2,2-Tetrachloroethane	Not detected	14		ug/m3	10	79-34-5	
1,1,2-Trichloroethane	Not detected	11		ug/m3	10	79-00-5	
1,2,4-Trichlorobenzene	Not detected	37		ug/m3	10	120-82-1	
1,2,4-Trimethylbenzene	Not detected	9.8		ug/m3	10	95-63-6	
1,3,5-Trimethylbenzene	Not detected	9.8		ug/m3	10	108-67-8	
2,2,4-Trimethylpentane	Not detected	9.3		ug/m3	10	540-84-1	
Tert-butyl Alcohol	Not detected	61		ug/m3	10	75-65-0	
Tetrachloroethene	Not detected	14		ug/m3	10	127-18-4	
Tetrahydrofuran*	Not detected	5.9		ug/m3	10	109-99-9	
Toluene	15	7.5		ug/m3	10	108-88-3	
Trichloroethene	Not detected	11		ug/m3	10	79-01-6	
Trichlorofluoromethane	Not detected	11		ug/m3	10	75-69-4	
Vinyl chloride	Not detected	5.1		ug/m3	10	75-01-4	

Lab Sample ID: S40706.07 (continued)
Sample Tag: VP-7

TO-15, Method: TO-15, Run Date: 10/07/22 01:09, Analyst: NDK (continued)

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Vinyl acetate	Not detected	70		ug/m3	10	108-05-4	
p,m-Xylene	Not detected	17		ug/m3	10		
o-Xylene	Not detected	8.7		ug/m3	10	95-47-6	
Total Xylenes	Not detected	26		ug/m3	10	1330-20-7	

TO-15 (Replicate 01), Method: TO-15, Run Date: 10/20/22 23:06, Analyst: NDK

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Acetone	16.6	2.0		ppbv	1	67-64-1	
1,3-Butadiene	Not detected	2.0		ppbv	1	106-99-0	
Benzene	4.9	0.2		ppbv	1	71-43-2	
Bromodichloromethane	Not detected	0.2		ppbv	1	75-27-4	
Bromoform	Not detected	0.2		ppbv	1	75-25-2	
Bromomethane	Not detected	0.2		ppbv	1	74-83-9	
Vinyl bromide	Not detected	0.2		ppbv	1	593-60-2	
Benzyl chloride	Not detected	0.2		ppbv	1	100-44-7	
Carbon disulfide	Not detected	2.0		ppbv	1	75-15-0	
Chlorobenzene	Not detected	0.2		ppbv	1	108-90-7	
Chloroethane	Not detected	2.0		ppbv	1	75-00-3	
Chloroform	Not detected	0.2		ppbv	1	67-66-3	
Chloromethane	Not detected	2.0		ppbv	1	74-87-3	
3-Chloropropene	Not detected	2.0		ppbv	1	107-05-1	
2-Chlorotoluene	Not detected	0.2		ppbv	1	95-49-8	
Carbon tetrachloride	Not detected	0.2		ppbv	1	56-23-5	
Cyclohexane	Not detected	0.2		ppbv	1	110-82-7	
1,1-Dichloroethane	Not detected	0.2		ppbv	1	75-34-3	
1,1-Dichloroethene	Not detected	0.2		ppbv	1	75-35-4	
1,2-Dibromoethane	Not detected	0.01		ppbv	1	106-93-4	M
1,2-Dichloroethane	Not detected	0.2		ppbv	1	107-06-2	
1,2-Dichloropropane	Not detected	0.2		ppbv	1	78-87-5	
1,4-Dioxane	Not detected	2.5		ppbv	1	123-91-1	
Dichlorodifluoromethane	0.5	0.2		ppbv	1	75-71-8	
Dibromochloromethane	Not detected	0.2		ppbv	1	124-48-1	
trans-1,2-Dichloroethene	Not detected	0.2		ppbv	1	156-60-5	
cis-1,2-Dichloroethene	Not detected	0.2		ppbv	1	156-59-2	
cis-1,3-Dichloropropene	Not detected	0.2		ppbv	1	10061-01-5	
1,3-Dichlorobenzene	1.1	0.2		ppbv	1	541-73-1	
1,2-Dichlorobenzene	Not detected	0.2		ppbv	1	95-50-1	
1,4-Dichlorobenzene	Not detected	0.2		ppbv	1	106-46-7	
trans-1,3-Dichloropropene	Not detected	0.2		ppbv	1	10061-02-6	
Ethanol*	8.4	2.5		ppbv	1	64-17-5	
Ethylbenzene	Not detected	0.2		ppbv	1	100-41-4	
Ethyl Acetate*	Not detected	2.0		ppbv	1	141-78-6	
4-Ethyltoluene	Not detected	0.2		ppbv	1	622-96-8	
Freon 113	Not detected	0.2		ppbv	1	76-13-1	
Freon 114	Not detected	0.2		ppbv	1	76-14-2	
Heptane	Not detected	0.2		ppbv	1	142-82-5	
Hexachlorobutadiene	Not detected	0.2		ppbv	1	87-68-3	
Hexane	Not detected	0.2		ppbv	1	110-54-3	
2-Hexanone*	Not detected	0.5		ppbv	1	591-78-6	

M-Result reported to MDL not RDL

Lab Sample ID: S40706.07 (continued)
Sample Tag: VP-7

TO-15 (Replicate 01), Method: TO-15, Run Date: 10/20/22 23:06, Analyst: NDK (continued)

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Isopropyl Alcohol*	5.8	2.0		ppbv	1	67-63-0	
Methylene chloride	Not detected	0.5		ppbv	1	75-09-2	
2-Butanone (MEK)	Not detected	2.0		ppbv	1	78-93-3	
4-Methyl-2-pentanone (MIBK)	Not detected	0.5		ppbv	1	108-10-1	
tert-Methyl butyl ether (MTBE)	Not detected	0.2		ppbv	1	1634-04-4	
Methyl methacrylate	Not detected	0.2		ppbv	1	80-62-6	
Naphthalene	Not detected	0.2		ppbv	1	91-20-3	
Propylene*	Not detected	10		ppbv	1	115-07-1	
Styrene	Not detected	0.2		ppbv	1	100-42-5	
1,1,1-Trichloroethane	Not detected	0.2		ppbv	1	71-55-6	
1,1,2,2-Tetrachloroethane	Not detected	0.2		ppbv	1	79-34-5	
1,1,2-Trichloroethane	Not detected	0.2		ppbv	1	79-00-5	
1,2,4-Trichlorobenzene	Not detected	0.5		ppbv	1	120-82-1	
1,2,4-Trimethylbenzene	Not detected	0.2		ppbv	1	95-63-6	
1,3,5-Trimethylbenzene	Not detected	0.2		ppbv	1	108-67-8	
2,2,4-Trimethylpentane	Not detected	0.2		ppbv	1	540-84-1	
Tert-butyl Alcohol	Not detected	2.0		ppbv	1	75-65-0	
Tetrachloroethene	0.6	0.2		ppbv	1	127-18-4	
Tetrahydrofuran*	Not detected	0.2		ppbv	1	109-99-9	
Toluene	5.7	0.2		ppbv	1	108-88-3	
Trichloroethene	Not detected	0.2		ppbv	1	79-01-6	
Trichlorofluoromethane	0.6	0.2		ppbv	1	75-69-4	
Vinyl chloride	Not detected	0.2		ppbv	1	75-01-4	
Vinyl acetate	Not detected	2.0		ppbv	1	108-05-4	
p,m-Xylene	Not detected	0.4		ppbv	1		
o-Xylene	Not detected	0.2		ppbv	1	95-47-6	
Total Xylenes	Not detected	0.6		ppbv	1	1330-20-7	

TO-15 (Replicate 01), Method: TO-15, Run Date: 10/20/22 23:06, Analyst: NDK

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Acetone	39.4	4.8		ug/m3	1	67-64-1	
1,3-Butadiene	Not detected	4.4		ug/m3	1	106-99-0	
Benzene	16	0.64		ug/m3	1	71-43-2	
Bromodichloromethane	Not detected	1.3		ug/m3	1	75-27-4	
Bromoform	Not detected	2.1		ug/m3	1	75-25-2	
Bromomethane	Not detected	0.78		ug/m3	1	74-83-9	
Vinyl bromide	Not detected	0.87		ug/m3	1	593-60-2	
Benzyl chloride	Not detected	1.0		ug/m3	1	100-44-7	
Carbon disulfide	Not detected	6.2		ug/m3	1	75-15-0	
Chlorobenzene	Not detected	0.92		ug/m3	1	108-90-7	
Chloroethane	Not detected	5.3		ug/m3	1	75-00-3	
Chloroform	Not detected	0.98		ug/m3	1	67-66-3	
Chloromethane	Not detected	4.1		ug/m3	1	74-87-3	
3-Chloropropene	Not detected	6.3		ug/m3	1	107-05-1	
2-Chlorotoluene	Not detected	1.0		ug/m3	1	95-49-8	
Carbon tetrachloride	Not detected	1.3		ug/m3	1	56-23-5	
Cyclohexane	Not detected	0.69		ug/m3	1	110-82-7	
1,1-Dichloroethane	Not detected	0.81		ug/m3	1	75-34-3	
1,1-Dichloroethene	Not detected	0.79		ug/m3	1	75-35-4	
1,2-Dibromoethane	Not detected	0.077		ug/m3	1	106-93-4	M

M-Result reported to MDL not RDL

Lab Sample ID: S40706.07 (continued)
Sample Tag: VP-7

TO-15 (Replicate 01), Method: TO-15, Run Date: 10/20/22 23:06, Analyst: NDK (continued)

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
1,2-Dichloroethane	Not detected	0.81		ug/m3	1	107-06-2	
1,2-Dichloropropane	Not detected	0.92		ug/m3	1	78-87-5	
1,4-Dioxane	Not detected	9.0		ug/m3	1	123-91-1	
Dichlorodifluoromethane	2.5	0.99		ug/m3	1	75-71-8	
Dibromochloromethane	Not detected	1.7		ug/m3	1	124-48-1	
trans-1,2-Dichloroethene	Not detected	0.79		ug/m3	1	156-60-5	
cis-1,2-Dichloroethene	Not detected	0.79		ug/m3	1	156-59-2	
cis-1,3-Dichloropropene	Not detected	0.91		ug/m3	1	10061-01-5	
1,3-Dichlorobenzene	6.6	1.2		ug/m3	1	541-73-1	
1,2-Dichlorobenzene	Not detected	1.2		ug/m3	1	95-50-1	
1,4-Dichlorobenzene	Not detected	1.2		ug/m3	1	106-46-7	
trans-1,3-Dichloropropene	Not detected	0.91		ug/m3	1	10061-02-6	
Ethanol*	16	4.7		ug/m3	1	64-17-5	
Ethylbenzene	Not detected	0.87		ug/m3	1	100-41-4	
Ethyl Acetate*	Not detected	7.2		ug/m3	1	141-78-6	
4-Ethyltoluene	Not detected	0.98		ug/m3	1	622-96-8	
Freon 113	Not detected	1.5		ug/m3	1	76-13-1	
Freon 114	Not detected	1.4		ug/m3	1	76-14-2	
Heptane	Not detected	0.82		ug/m3	1	142-82-5	
Hexachlorobutadiene	Not detected	2.1		ug/m3	1	87-68-3	
Hexane	Not detected	0.70		ug/m3	1	110-54-3	
2-Hexanone*	Not detected	2.0		ug/m3	1	591-78-6	
Isopropyl Alcohol*	14	4.9		ug/m3	1	67-63-0	
Methylene chloride	Not detected	1.7		ug/m3	1	75-09-2	
2-Butanone (MEK)	Not detected	5.9		ug/m3	1	78-93-3	
4-Methyl-2-pentanone (MIBK)	Not detected	2.0		ug/m3	1	108-10-1	
tert-Methyl butyl ether (MTBE)	Not detected	0.72		ug/m3	1	1634-04-4	
Methyl methacrylate	Not detected	0.82		ug/m3	1	80-62-6	
Naphthalene	Not detected	1.0		ug/m3	1	91-20-3	
Propylene*	Not detected	17		ug/m3	1	115-07-1	
Styrene	Not detected	0.85		ug/m3	1	100-42-5	
1,1,1-Trichloroethane	Not detected	1.1		ug/m3	1	71-55-6	
1,1,2,2-Tetrachloroethane	Not detected	1.4		ug/m3	1	79-34-5	
1,1,2-Trichloroethane	Not detected	1.1		ug/m3	1	79-00-5	
1,2,4-Trichlorobenzene	Not detected	3.7		ug/m3	1	120-82-1	
1,2,4-Trimethylbenzene	Not detected	0.98		ug/m3	1	95-63-6	
1,3,5-Trimethylbenzene	Not detected	0.98		ug/m3	1	108-67-8	
2,2,4-Trimethylpentane	Not detected	0.93		ug/m3	1	540-84-1	
Tert-butyl Alcohol	Not detected	6.1		ug/m3	1	75-65-0	
Tetrachloroethene	4.1	1.4		ug/m3	1	127-18-4	
Tetrahydrofuran*	Not detected	0.59		ug/m3	1	109-99-9	
Toluene	21	0.75		ug/m3	1	108-88-3	
Trichloroethene	Not detected	1.1		ug/m3	1	79-01-6	
Trichlorofluoromethane	3.4	1.1		ug/m3	1	75-69-4	
Vinyl chloride	Not detected	0.51		ug/m3	1	75-01-4	
Vinyl acetate	Not detected	7.0		ug/m3	1	108-05-4	
p,m-Xylene	Not detected	1.7		ug/m3	1		
o-Xylene	Not detected	0.87		ug/m3	1	95-47-6	
Total Xylenes	Not detected	2.6		ug/m3	1	1330-20-7	

Lab Sample ID: S40706.08
Sample Tag: VP-8
Collected Date/Time: 09/22/2022 14:18 - 09/22/2022 14:23
Matrix: Air
COC Reference: A5764

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
1	Air Canister	None	No	RT	IR

Extraction / Prep.

Parameter	Result	Method	Run Date	Analyst	Flags
Pressure check for TO-15*	-5	N/A	09/27/22 18:00	BDO	

Organics - Volatiles

TO-15, Method: TO-15, Run Date: 10/07/22 01:39, Analyst: NDK

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Acetone	Not detected	20		ppbv	10	67-64-1	
1,3-Butadiene	Not detected	20		ppbv	10	106-99-0	
Benzene	Not detected	2		ppbv	10	71-43-2	
Bromodichloromethane	Not detected	2		ppbv	10	75-27-4	
Bromoform	Not detected	2		ppbv	10	75-25-2	
Bromomethane	Not detected	2		ppbv	10	74-83-9	
Vinyl bromide	Not detected	2		ppbv	10	593-60-2	
Benzyl chloride	Not detected	2		ppbv	10	100-44-7	
Carbon disulfide	Not detected	20		ppbv	10	75-15-0	
Chlorobenzene	Not detected	2		ppbv	10	108-90-7	
Chloroethane	Not detected	20		ppbv	10	75-00-3	
Chloroform	Not detected	2		ppbv	10	67-66-3	
Chloromethane	Not detected	20		ppbv	10	74-87-3	
3-Chloropropene	Not detected	20		ppbv	10	107-05-1	
2-Chlorotoluene	Not detected	2		ppbv	10	95-49-8	
Carbon tetrachloride	Not detected	2		ppbv	10	56-23-5	
Cyclohexane	Not detected	2		ppbv	10	110-82-7	
1,1-Dichloroethane	Not detected	2		ppbv	10	75-34-3	
1,1-Dichloroethene	Not detected	2		ppbv	10	75-35-4	
1,2-Dibromoethane	Not detected	2		ppbv	10	106-93-4	
1,2-Dichloroethane	Not detected	2		ppbv	10	107-06-2	
1,2-Dichloropropane	Not detected	2		ppbv	10	78-87-5	
1,4-Dioxane	Not detected	25		ppbv	10	123-91-1	
Dichlorodifluoromethane	Not detected	2		ppbv	10	75-71-8	
Dibromochloromethane	Not detected	2		ppbv	10	124-48-1	
trans-1,2-Dichloroethene	Not detected	2		ppbv	10	156-60-5	
cis-1,2-Dichloroethene	Not detected	2		ppbv	10	156-59-2	
cis-1,3-Dichloropropene	Not detected	2		ppbv	10	10061-01-5	
1,3-Dichlorobenzene	Not detected	2		ppbv	10	541-73-1	
1,2-Dichlorobenzene	Not detected	2		ppbv	10	95-50-1	
1,4-Dichlorobenzene	Not detected	2		ppbv	10	106-46-7	
trans-1,3-Dichloropropene	Not detected	2		ppbv	10	10061-02-6	
Ethanol*	Not detected	25		ppbv	10	64-17-5	
Ethylbenzene	Not detected	2		ppbv	10	100-41-4	
Ethyl Acetate*	Not detected	20		ppbv	10	141-78-6	
4-Ethyltoluene	Not detected	2		ppbv	10	622-96-8	
Freon 113	Not detected	2		ppbv	10	76-13-1	

Lab Sample ID: S40706.08 (continued)
Sample Tag: VP-8

TO-15, Method: TO-15, Run Date: 10/07/22 01:39, Analyst: NDK (continued)

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Freon 114	Not detected	2		ppbv	10	76-14-2	
Heptane	Not detected	2		ppbv	10	142-82-5	
Hexachlorobutadiene	Not detected	2		ppbv	10	87-68-3	
Hexane	Not detected	2		ppbv	10	110-54-3	
2-Hexanone*	Not detected	5		ppbv	10	591-78-6	
Isopropyl Alcohol*	Not detected	20		ppbv	10	67-63-0	
Methylene chloride	Not detected	5		ppbv	10	75-09-2	
2-Butanone (MEK)	Not detected	20		ppbv	10	78-93-3	
4-Methyl-2-pentanone (MIBK)	Not detected	5		ppbv	10	108-10-1	
tert-Methyl butyl ether (MTBE)	Not detected	2		ppbv	10	1634-04-4	
Methyl methacrylate	Not detected	2		ppbv	10	80-62-6	
Naphthalene	Not detected	2		ppbv	10	91-20-3	
Propylene*	Not detected	100		ppbv	10	115-07-1	
Styrene	Not detected	2		ppbv	10	100-42-5	
1,1,1-Trichloroethane	Not detected	2		ppbv	10	71-55-6	
1,1,2,2-Tetrachloroethane	Not detected	2		ppbv	10	79-34-5	
1,1,2-Trichloroethane	Not detected	2		ppbv	10	79-00-5	
1,2,4-Trichlorobenzene	Not detected	5		ppbv	10	120-82-1	
1,2,4-Trimethylbenzene	Not detected	2		ppbv	10	95-63-6	
1,3,5-Trimethylbenzene	Not detected	2		ppbv	10	108-67-8	
2,2,4-Trimethylpentane	Not detected	2		ppbv	10	540-84-1	
Tert-butyl Alcohol	Not detected	20		ppbv	10	75-65-0	
Tetrachloroethene	Not detected	2		ppbv	10	127-18-4	
Tetrahydrofuran*	Not detected	2		ppbv	10	109-99-9	
Toluene	Not detected	2		ppbv	10	108-88-3	
Trichloroethene	Not detected	2		ppbv	10	79-01-6	
Trichlorofluoromethane	Not detected	2		ppbv	10	75-69-4	
Vinyl chloride	Not detected	2		ppbv	10	75-01-4	
Vinyl acetate	Not detected	20		ppbv	10	108-05-4	
p,m-Xylene	Not detected	4		ppbv	10		
o-Xylene	Not detected	2		ppbv	10	95-47-6	
Total Xylenes	Not detected	6		ppbv	10	1330-20-7	

TO-15, Method: TO-15, Run Date: 10/07/22 01:39, Analyst: NDK

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Acetone	Not detected	48		ug/m3	10	67-64-1	
1,3-Butadiene	Not detected	44		ug/m3	10	106-99-0	
Benzene	Not detected	6.4		ug/m3	10	71-43-2	
Bromodichloromethane	Not detected	13		ug/m3	10	75-27-4	
Bromoform	Not detected	21		ug/m3	10	75-25-2	
Bromomethane	Not detected	7.8		ug/m3	10	74-83-9	
Vinyl bromide	Not detected	8.7		ug/m3	10	593-60-2	
Benzyl chloride	Not detected	10		ug/m3	10	100-44-7	
Carbon disulfide	Not detected	62		ug/m3	10	75-15-0	
Chlorobenzene	Not detected	9.2		ug/m3	10	108-90-7	
Chloroethane	Not detected	53		ug/m3	10	75-00-3	
Chloroform	Not detected	9.8		ug/m3	10	67-66-3	
Chloromethane	Not detected	41		ug/m3	10	74-87-3	
3-Chloropropene	Not detected	63		ug/m3	10	107-05-1	
2-Chlorotoluene	Not detected	10		ug/m3	10	95-49-8	

Lab Sample ID: S40706.08 (continued)
Sample Tag: VP-8

TO-15, Method: TO-15, Run Date: 10/07/22 01:39, Analyst: NDK (continued)

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Carbon tetrachloride	Not detected	13		ug/m3	10	56-23-5	
Cyclohexane	Not detected	6.9		ug/m3	10	110-82-7	
1,1-Dichloroethane	Not detected	8.1		ug/m3	10	75-34-3	
1,1-Dichloroethene	Not detected	7.9		ug/m3	10	75-35-4	
1,2-Dibromoethane	Not detected	15		ug/m3	10	106-93-4	
1,2-Dichloroethane	Not detected	8.1		ug/m3	10	107-06-2	
1,2-Dichloropropane	Not detected	9.2		ug/m3	10	78-87-5	
1,4-Dioxane	Not detected	90		ug/m3	10	123-91-1	
Dichlorodifluoromethane	Not detected	9.9		ug/m3	10	75-71-8	
Dibromochloromethane	Not detected	17		ug/m3	10	124-48-1	
trans-1,2-Dichloroethene	Not detected	7.9		ug/m3	10	156-60-5	
cis-1,2-Dichloroethene	Not detected	7.9		ug/m3	10	156-59-2	
cis-1,3-Dichloropropene	Not detected	9.1		ug/m3	10	10061-01-5	
1,3-Dichlorobenzene	Not detected	12		ug/m3	10	541-73-1	
1,2-Dichlorobenzene	Not detected	12		ug/m3	10	95-50-1	
1,4-Dichlorobenzene	Not detected	12		ug/m3	10	106-46-7	
trans-1,3-Dichloropropene	Not detected	9.1		ug/m3	10	10061-02-6	
Ethanol*	Not detected	47		ug/m3	10	64-17-5	
Ethylbenzene	Not detected	8.7		ug/m3	10	100-41-4	
Ethyl Acetate*	Not detected	72		ug/m3	10	141-78-6	
4-Ethyltoluene	Not detected	9.8		ug/m3	10	622-96-8	
Freon 113	Not detected	15		ug/m3	10	76-13-1	
Freon 114	Not detected	14		ug/m3	10	76-14-2	
Heptane	Not detected	8.2		ug/m3	10	142-82-5	
Hexachlorobutadiene	Not detected	21		ug/m3	10	87-68-3	
Hexane	Not detected	7.0		ug/m3	10	110-54-3	
2-Hexanone*	Not detected	20		ug/m3	10	591-78-6	
Isopropyl Alcohol*	Not detected	49		ug/m3	10	67-63-0	
Methylene chloride	Not detected	17		ug/m3	10	75-09-2	
2-Butanone (MEK)	Not detected	59		ug/m3	10	78-93-3	
4-Methyl-2-pentanone (MIBK)	Not detected	20		ug/m3	10	108-10-1	
tert-Methyl butyl ether (MTBE)	Not detected	7.2		ug/m3	10	1634-04-4	
Methyl methacrylate	Not detected	8.2		ug/m3	10	80-62-6	
Naphthalene	Not detected	10		ug/m3	10	91-20-3	
Propylene*	Not detected	170		ug/m3	10	115-07-1	
Styrene	Not detected	8.5		ug/m3	10	100-42-5	
1,1,1-Trichloroethane	Not detected	11		ug/m3	10	71-55-6	
1,1,2,2-Tetrachloroethane	Not detected	14		ug/m3	10	79-34-5	
1,1,2-Trichloroethane	Not detected	11		ug/m3	10	79-00-5	
1,2,4-Trichlorobenzene	Not detected	37		ug/m3	10	120-82-1	
1,2,4-Trimethylbenzene	Not detected	9.8		ug/m3	10	95-63-6	
1,3,5-Trimethylbenzene	Not detected	9.8		ug/m3	10	108-67-8	
2,2,4-Trimethylpentane	Not detected	9.3		ug/m3	10	540-84-1	
Tert-butyl Alcohol	Not detected	61		ug/m3	10	75-65-0	
Tetrachloroethene	Not detected	14		ug/m3	10	127-18-4	
Tetrahydrofuran*	Not detected	5.9		ug/m3	10	109-99-9	
Toluene	Not detected	7.5		ug/m3	10	108-88-3	
Trichloroethene	Not detected	11		ug/m3	10	79-01-6	
Trichlorofluoromethane	Not detected	11		ug/m3	10	75-69-4	
Vinyl chloride	Not detected	5.1		ug/m3	10	75-01-4	

Lab Sample ID: S40706.08 (continued)
Sample Tag: VP-8

TO-15, Method: TO-15, Run Date: 10/07/22 01:39, Analyst: NDK (continued)

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Vinyl acetate	Not detected	70		ug/m3	10	108-05-4	
p,m-Xylene	Not detected	17		ug/m3	10		
o-Xylene	Not detected	8.7		ug/m3	10	95-47-6	
Total Xylenes	Not detected	26		ug/m3	10	1330-20-7	

TO-15 (Replicate 01), Method: TO-15, Run Date: 10/20/22 23:37, Analyst: NDK

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Acetone	7.8	2.0		ppbv	1	67-64-1	
1,3-Butadiene	Not detected	2.0		ppbv	1	106-99-0	
Benzene	Not detected	0.2		ppbv	1	71-43-2	
Bromodichloromethane	Not detected	0.2		ppbv	1	75-27-4	
Bromoform	Not detected	0.2		ppbv	1	75-25-2	
Bromomethane	Not detected	0.2		ppbv	1	74-83-9	
Vinyl bromide	Not detected	0.2		ppbv	1	593-60-2	
Benzyl chloride	Not detected	0.2		ppbv	1	100-44-7	
Carbon disulfide	Not detected	2.0		ppbv	1	75-15-0	
Chlorobenzene	Not detected	0.2		ppbv	1	108-90-7	
Chloroethane	Not detected	2.0		ppbv	1	75-00-3	
Chloroform	Not detected	0.2		ppbv	1	67-66-3	
Chloromethane	Not detected	2.0		ppbv	1	74-87-3	
3-Chloropropene	Not detected	2.0		ppbv	1	107-05-1	
2-Chlorotoluene	Not detected	0.2		ppbv	1	95-49-8	
Carbon tetrachloride	Not detected	0.2		ppbv	1	56-23-5	
Cyclohexane	Not detected	0.2		ppbv	1	110-82-7	
1,1-Dichloroethane	Not detected	0.2		ppbv	1	75-34-3	
1,1-Dichloroethene	Not detected	0.2		ppbv	1	75-35-4	
1,2-Dibromoethane	Not detected	0.01		ppbv	1	106-93-4	M
1,2-Dichloroethane	Not detected	0.2		ppbv	1	107-06-2	
1,2-Dichloropropane	Not detected	0.2		ppbv	1	78-87-5	
1,4-Dioxane	Not detected	2.5		ppbv	1	123-91-1	
Dichlorodifluoromethane	0.5	0.2		ppbv	1	75-71-8	
Dibromochloromethane	Not detected	0.2		ppbv	1	124-48-1	
trans-1,2-Dichloroethene	Not detected	0.2		ppbv	1	156-60-5	
cis-1,2-Dichloroethene	Not detected	0.2		ppbv	1	156-59-2	
cis-1,3-Dichloropropene	Not detected	0.2		ppbv	1	10061-01-5	
1,3-Dichlorobenzene	1.1	0.2		ppbv	1	541-73-1	
1,2-Dichlorobenzene	Not detected	0.2		ppbv	1	95-50-1	
1,4-Dichlorobenzene	Not detected	0.2		ppbv	1	106-46-7	
trans-1,3-Dichloropropene	Not detected	0.2		ppbv	1	10061-02-6	
Ethanol*	10.2	2.5		ppbv	1	64-17-5	
Ethylbenzene	Not detected	0.2		ppbv	1	100-41-4	
Ethyl Acetate*	Not detected	2.0		ppbv	1	141-78-6	
4-Ethyltoluene	Not detected	0.2		ppbv	1	622-96-8	
Freon 113	Not detected	0.2		ppbv	1	76-13-1	
Freon 114	Not detected	0.2		ppbv	1	76-14-2	
Heptane	Not detected	0.2		ppbv	1	142-82-5	
Hexachlorobutadiene	Not detected	0.2		ppbv	1	87-68-3	
Hexane	0.4	0.2		ppbv	1	110-54-3	
2-Hexanone*	Not detected	0.5		ppbv	1	591-78-6	

M-Result reported to MDL not RDL

Lab Sample ID: S40706.08 (continued)
Sample Tag: VP-8

TO-15 (Replicate 01), Method: TO-15, Run Date: 10/20/22 23:37, Analyst: NDK (continued)

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Isopropyl Alcohol*	4.3	2.0		ppbv	1	67-63-0	
Methylene chloride	2.5	0.5		ppbv	1	75-09-2	
2-Butanone (MEK)	Not detected	2.0		ppbv	1	78-93-3	
4-Methyl-2-pentanone (MIBK)	Not detected	0.5		ppbv	1	108-10-1	
tert-Methyl butyl ether (MTBE)	Not detected	0.2		ppbv	1	1634-04-4	
Methyl methacrylate	Not detected	0.2		ppbv	1	80-62-6	
Naphthalene	Not detected	0.2		ppbv	1	91-20-3	
Propylene*	Not detected	10		ppbv	1	115-07-1	
Styrene	Not detected	0.2		ppbv	1	100-42-5	
1,1,1-Trichloroethane	0.3	0.2		ppbv	1	71-55-6	
1,1,2,2-Tetrachloroethane	Not detected	0.2		ppbv	1	79-34-5	
1,1,2-Trichloroethane	Not detected	0.2		ppbv	1	79-00-5	
1,2,4-Trichlorobenzene	Not detected	0.5		ppbv	1	120-82-1	
1,2,4-Trimethylbenzene	Not detected	0.2		ppbv	1	95-63-6	
1,3,5-Trimethylbenzene	Not detected	0.2		ppbv	1	108-67-8	
2,2,4-Trimethylpentane	Not detected	0.2		ppbv	1	540-84-1	
Tert-butyl Alcohol	2.7	2.0		ppbv	1	75-65-0	
Tetrachloroethene	Not detected	0.2		ppbv	1	127-18-4	
Tetrahydrofuran*	Not detected	0.2		ppbv	1	109-99-9	
Toluene	0.4	0.2		ppbv	1	108-88-3	
Trichloroethene	0.3	0.2		ppbv	1	79-01-6	
Trichlorofluoromethane	0.3	0.2		ppbv	1	75-69-4	
Vinyl chloride	Not detected	0.2		ppbv	1	75-01-4	
Vinyl acetate	Not detected	2.0		ppbv	1	108-05-4	
p,m-Xylene	Not detected	0.4		ppbv	1		
o-Xylene	Not detected	0.2		ppbv	1	95-47-6	
Total Xylenes	Not detected	0.6		ppbv	1	1330-20-7	

TO-15 (Replicate 01), Method: TO-15, Run Date: 10/20/22 23:37, Analyst: NDK

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Acetone	19	4.8		ug/m3	1	67-64-1	
1,3-Butadiene	Not detected	4.4		ug/m3	1	106-99-0	
Benzene	Not detected	0.64		ug/m3	1	71-43-2	
Bromodichloromethane	Not detected	1.3		ug/m3	1	75-27-4	
Bromoform	Not detected	2.1		ug/m3	1	75-25-2	
Bromomethane	Not detected	0.78		ug/m3	1	74-83-9	
Vinyl bromide	Not detected	0.87		ug/m3	1	593-60-2	
Benzyl chloride	Not detected	1.0		ug/m3	1	100-44-7	
Carbon disulfide	Not detected	6.2		ug/m3	1	75-15-0	
Chlorobenzene	Not detected	0.92		ug/m3	1	108-90-7	
Chloroethane	Not detected	5.3		ug/m3	1	75-00-3	
Chloroform	Not detected	0.98		ug/m3	1	67-66-3	
Chloromethane	Not detected	4.1		ug/m3	1	74-87-3	
3-Chloropropene	Not detected	6.3		ug/m3	1	107-05-1	
2-Chlorotoluene	Not detected	1.0		ug/m3	1	95-49-8	
Carbon tetrachloride	Not detected	1.3		ug/m3	1	56-23-5	
Cyclohexane	Not detected	0.69		ug/m3	1	110-82-7	
1,1-Dichloroethane	Not detected	0.81		ug/m3	1	75-34-3	
1,1-Dichloroethene	Not detected	0.79		ug/m3	1	75-35-4	
1,2-Dibromoethane	Not detected	0.077		ug/m3	1	106-93-4	M

M-Result reported to MDL not RDL

Lab Sample ID: S40706.08 (continued)
Sample Tag: VP-8

TO-15 (Replicate 01), Method: TO-15, Run Date: 10/20/22 23:37, Analyst: NDK (continued)

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
1,2-Dichloroethane	Not detected	0.81		ug/m3	1	107-06-2	
1,2-Dichloropropane	Not detected	0.92		ug/m3	1	78-87-5	
1,4-Dioxane	Not detected	9.0		ug/m3	1	123-91-1	
Dichlorodifluoromethane	2.5	0.99		ug/m3	1	75-71-8	
Dibromochloromethane	Not detected	1.7		ug/m3	1	124-48-1	
trans-1,2-Dichloroethene	Not detected	0.79		ug/m3	1	156-60-5	
cis-1,2-Dichloroethene	Not detected	0.79		ug/m3	1	156-59-2	
cis-1,3-Dichloropropene	Not detected	0.91		ug/m3	1	10061-01-5	
1,3-Dichlorobenzene	6.6	1.2		ug/m3	1	541-73-1	
1,2-Dichlorobenzene	Not detected	1.2		ug/m3	1	95-50-1	
1,4-Dichlorobenzene	Not detected	1.2		ug/m3	1	106-46-7	
trans-1,3-Dichloropropene	Not detected	0.91		ug/m3	1	10061-02-6	
Ethanol*	19.2	4.7		ug/m3	1	64-17-5	
Ethylbenzene	Not detected	0.87		ug/m3	1	100-41-4	
Ethyl Acetate*	Not detected	7.2		ug/m3	1	141-78-6	
4-Ethyltoluene	Not detected	0.98		ug/m3	1	622-96-8	
Freon 113	Not detected	1.5		ug/m3	1	76-13-1	
Freon 114	Not detected	1.4		ug/m3	1	76-14-2	
Heptane	Not detected	0.82		ug/m3	1	142-82-5	
Hexachlorobutadiene	Not detected	2.1		ug/m3	1	87-68-3	
Hexane	1.4	0.70		ug/m3	1	110-54-3	
2-Hexanone*	Not detected	2.0		ug/m3	1	591-78-6	
Isopropyl Alcohol*	11	4.9		ug/m3	1	67-63-0	
Methylene chloride	8.7	1.7		ug/m3	1	75-09-2	
2-Butanone (MEK)	Not detected	5.9		ug/m3	1	78-93-3	
4-Methyl-2-pentanone (MIBK)	Not detected	2.0		ug/m3	1	108-10-1	
tert-Methyl butyl ether (MTBE)	Not detected	0.72		ug/m3	1	1634-04-4	
Methyl methacrylate	Not detected	0.82		ug/m3	1	80-62-6	
Naphthalene	Not detected	1.0		ug/m3	1	91-20-3	
Propylene*	Not detected	17		ug/m3	1	115-07-1	
Styrene	Not detected	0.85		ug/m3	1	100-42-5	
1,1,1-Trichloroethane	1.6	1.1		ug/m3	1	71-55-6	
1,1,2,2-Tetrachloroethane	Not detected	1.4		ug/m3	1	79-34-5	
1,1,2-Trichloroethane	Not detected	1.1		ug/m3	1	79-00-5	
1,2,4-Trichlorobenzene	Not detected	3.7		ug/m3	1	120-82-1	
1,2,4-Trimethylbenzene	Not detected	0.98		ug/m3	1	95-63-6	
1,3,5-Trimethylbenzene	Not detected	0.98		ug/m3	1	108-67-8	
2,2,4-Trimethylpentane	Not detected	0.93		ug/m3	1	540-84-1	
Tert-butyl Alcohol	8.2	6.1		ug/m3	1	75-65-0	
Tetrachloroethene	Not detected	1.4		ug/m3	1	127-18-4	
Tetrahydrofuran*	Not detected	0.59		ug/m3	1	109-99-9	
Toluene	1.5	0.75		ug/m3	1	108-88-3	
Trichloroethene	1.6	1.1		ug/m3	1	79-01-6	
Trichlorofluoromethane	1.7	1.1		ug/m3	1	75-69-4	
Vinyl chloride	Not detected	0.51		ug/m3	1	75-01-4	
Vinyl acetate	Not detected	7.0		ug/m3	1	108-05-4	
p,m-Xylene	Not detected	1.7		ug/m3	1		
o-Xylene	Not detected	0.87		ug/m3	1	95-47-6	
Total Xylenes	Not detected	2.6		ug/m3	1	1330-20-7	

Lab Sample ID: S40706.09

Sample Tag: VP-9

Collected Date/Time: 09/22/2022 14:43 - 09/22/2022 14:48

Matrix: Air

COC Reference: A5764

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
1	Air Canister	None	No	RT	IR

Extraction / Prep.

Parameter	Result	Method	Run Date	Analyst	Flags
Pressure check for TO-15*	-5.5	N/A	09/27/22 18:00	BDO	

Organics - Volatiles

TO-15, Method: TO-15, Run Date: 10/07/22 02:09, Analyst: NDK

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Acetone	Not detected	20		ppbv	10	67-64-1	
1,3-Butadiene	Not detected	20		ppbv	10	106-99-0	
Benzene	Not detected	2		ppbv	10	71-43-2	
Bromodichloromethane	Not detected	2		ppbv	10	75-27-4	
Bromoform	Not detected	2		ppbv	10	75-25-2	
Bromomethane	Not detected	2		ppbv	10	74-83-9	
Vinyl bromide	Not detected	2		ppbv	10	593-60-2	
Benzyl chloride	Not detected	2		ppbv	10	100-44-7	
Carbon disulfide	Not detected	20		ppbv	10	75-15-0	
Chlorobenzene	Not detected	2		ppbv	10	108-90-7	
Chloroethane	Not detected	20		ppbv	10	75-00-3	
Chloroform	Not detected	2		ppbv	10	67-66-3	
Chloromethane	Not detected	20		ppbv	10	74-87-3	
3-Chloropropene	Not detected	20		ppbv	10	107-05-1	
2-Chlorotoluene	Not detected	2		ppbv	10	95-49-8	
Carbon tetrachloride	Not detected	2		ppbv	10	56-23-5	
Cyclohexane	Not detected	2		ppbv	10	110-82-7	
1,1-Dichloroethane	Not detected	2		ppbv	10	75-34-3	
1,1-Dichloroethene	Not detected	2		ppbv	10	75-35-4	
1,2-Dibromoethane	Not detected	2		ppbv	10	106-93-4	
1,2-Dichloroethane	Not detected	2		ppbv	10	107-06-2	
1,2-Dichloropropane	Not detected	2		ppbv	10	78-87-5	
1,4-Dioxane	Not detected	25		ppbv	10	123-91-1	
Dichlorodifluoromethane	Not detected	2		ppbv	10	75-71-8	
Dibromochloromethane	Not detected	2		ppbv	10	124-48-1	
trans-1,2-Dichloroethene	Not detected	2		ppbv	10	156-60-5	
cis-1,2-Dichloroethene	Not detected	2		ppbv	10	156-59-2	
cis-1,3-Dichloropropene	Not detected	2		ppbv	10	10061-01-5	
1,3-Dichlorobenzene	Not detected	2		ppbv	10	541-73-1	
1,2-Dichlorobenzene	Not detected	2		ppbv	10	95-50-1	
1,4-Dichlorobenzene	Not detected	2		ppbv	10	106-46-7	
trans-1,3-Dichloropropene	Not detected	2		ppbv	10	10061-02-6	
Ethanol*	Not detected	25		ppbv	10	64-17-5	
Ethylbenzene	Not detected	2		ppbv	10	100-41-4	
Ethyl Acetate*	Not detected	20		ppbv	10	141-78-6	
4-Ethyltoluene	Not detected	2		ppbv	10	622-96-8	
Freon 113	Not detected	2		ppbv	10	76-13-1	

Lab Sample ID: S40706.09 (continued)
Sample Tag: VP-9

TO-15, Method: TO-15, Run Date: 10/07/22 02:09, Analyst: NDK (continued)

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Freon 114	Not detected	2		ppbv	10	76-14-2	
Heptane	Not detected	2		ppbv	10	142-82-5	
Hexachlorobutadiene	Not detected	2		ppbv	10	87-68-3	
Hexane	Not detected	2		ppbv	10	110-54-3	
2-Hexanone*	Not detected	5		ppbv	10	591-78-6	
Isopropyl Alcohol*	90	20		ppbv	10	67-63-0	
Methylene chloride	Not detected	5		ppbv	10	75-09-2	
2-Butanone (MEK)	Not detected	20		ppbv	10	78-93-3	
4-Methyl-2-pentanone (MIBK)	Not detected	5		ppbv	10	108-10-1	
tert-Methyl butyl ether (MTBE)	Not detected	2		ppbv	10	1634-04-4	
Methyl methacrylate	Not detected	2		ppbv	10	80-62-6	
Naphthalene	Not detected	2		ppbv	10	91-20-3	
Propylene*	Not detected	100		ppbv	10	115-07-1	
Styrene	Not detected	2		ppbv	10	100-42-5	
1,1,1-Trichloroethane	Not detected	2		ppbv	10	71-55-6	
1,1,2,2-Tetrachloroethane	Not detected	2		ppbv	10	79-34-5	
1,1,2-Trichloroethane	Not detected	2		ppbv	10	79-00-5	
1,2,4-Trichlorobenzene	Not detected	5		ppbv	10	120-82-1	
1,2,4-Trimethylbenzene	Not detected	2		ppbv	10	95-63-6	
1,3,5-Trimethylbenzene	Not detected	2		ppbv	10	108-67-8	
2,2,4-Trimethylpentane	Not detected	2		ppbv	10	540-84-1	
Tert-butyl Alcohol	Not detected	20		ppbv	10	75-65-0	
Tetrachloroethene	Not detected	2		ppbv	10	127-18-4	
Tetrahydrofuran*	Not detected	2		ppbv	10	109-99-9	
Toluene	Not detected	2		ppbv	10	108-88-3	
Trichloroethene	Not detected	2		ppbv	10	79-01-6	
Trichlorofluoromethane	Not detected	2		ppbv	10	75-69-4	
Vinyl chloride	Not detected	2		ppbv	10	75-01-4	
Vinyl acetate	Not detected	20		ppbv	10	108-05-4	
p,m-Xylene	Not detected	4		ppbv	10		
o-Xylene	Not detected	2		ppbv	10	95-47-6	
Total Xylenes	Not detected	6		ppbv	10	1330-20-7	

TO-15, Method: TO-15, Run Date: 10/07/22 02:09, Analyst: NDK

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Acetone	Not detected	48		ug/m3	10	67-64-1	
1,3-Butadiene	Not detected	44		ug/m3	10	106-99-0	
Benzene	Not detected	6.4		ug/m3	10	71-43-2	
Bromodichloromethane	Not detected	13		ug/m3	10	75-27-4	
Bromoform	Not detected	21		ug/m3	10	75-25-2	
Bromomethane	Not detected	7.8		ug/m3	10	74-83-9	
Vinyl bromide	Not detected	8.7		ug/m3	10	593-60-2	
Benzyl chloride	Not detected	10		ug/m3	10	100-44-7	
Carbon disulfide	Not detected	62		ug/m3	10	75-15-0	
Chlorobenzene	Not detected	9.2		ug/m3	10	108-90-7	
Chloroethane	Not detected	53		ug/m3	10	75-00-3	
Chloroform	Not detected	9.8		ug/m3	10	67-66-3	
Chloromethane	Not detected	41		ug/m3	10	74-87-3	
3-Chloropropene	Not detected	63		ug/m3	10	107-05-1	
2-Chlorotoluene	Not detected	10		ug/m3	10	95-49-8	

Lab Sample ID: S40706.09 (continued)
Sample Tag: VP-9

TO-15, Method: TO-15, Run Date: 10/07/22 02:09, Analyst: NDK (continued)

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Carbon tetrachloride	Not detected	13		ug/m3	10	56-23-5	
Cyclohexane	Not detected	6.9		ug/m3	10	110-82-7	
1,1-Dichloroethane	Not detected	8.1		ug/m3	10	75-34-3	
1,1-Dichloroethene	Not detected	7.9		ug/m3	10	75-35-4	
1,2-Dibromoethane	Not detected	15		ug/m3	10	106-93-4	
1,2-Dichloroethane	Not detected	8.1		ug/m3	10	107-06-2	
1,2-Dichloropropane	Not detected	9.2		ug/m3	10	78-87-5	
1,4-Dioxane	Not detected	90		ug/m3	10	123-91-1	
Dichlorodifluoromethane	Not detected	9.9		ug/m3	10	75-71-8	
Dibromochloromethane	Not detected	17		ug/m3	10	124-48-1	
trans-1,2-Dichloroethene	Not detected	7.9		ug/m3	10	156-60-5	
cis-1,2-Dichloroethene	Not detected	7.9		ug/m3	10	156-59-2	
cis-1,3-Dichloropropene	Not detected	9.1		ug/m3	10	10061-01-5	
1,3-Dichlorobenzene	Not detected	12		ug/m3	10	541-73-1	
1,2-Dichlorobenzene	Not detected	12		ug/m3	10	95-50-1	
1,4-Dichlorobenzene	Not detected	12		ug/m3	10	106-46-7	
trans-1,3-Dichloropropene	Not detected	9.1		ug/m3	10	10061-02-6	
Ethanol*	Not detected	47		ug/m3	10	64-17-5	
Ethylbenzene	Not detected	8.7		ug/m3	10	100-41-4	
Ethyl Acetate*	Not detected	72		ug/m3	10	141-78-6	
4-Ethyltoluene	Not detected	9.8		ug/m3	10	622-96-8	
Freon 113	Not detected	15		ug/m3	10	76-13-1	
Freon 114	Not detected	14		ug/m3	10	76-14-2	
Heptane	Not detected	8.2		ug/m3	10	142-82-5	
Hexachlorobutadiene	Not detected	21		ug/m3	10	87-68-3	
Hexane	Not detected	7.0		ug/m3	10	110-54-3	
2-Hexanone*	Not detected	20		ug/m3	10	591-78-6	
Isopropyl Alcohol*	220	49		ug/m3	10	67-63-0	
Methylene chloride	Not detected	17		ug/m3	10	75-09-2	
2-Butanone (MEK)	Not detected	59		ug/m3	10	78-93-3	
4-Methyl-2-pentanone (MIBK)	Not detected	20		ug/m3	10	108-10-1	
tert-Methyl butyl ether (MTBE)	Not detected	7.2		ug/m3	10	1634-04-4	
Methyl methacrylate	Not detected	8.2		ug/m3	10	80-62-6	
Naphthalene	Not detected	10		ug/m3	10	91-20-3	
Propylene*	Not detected	170		ug/m3	10	115-07-1	
Styrene	Not detected	8.5		ug/m3	10	100-42-5	
1,1,1-Trichloroethane	Not detected	11		ug/m3	10	71-55-6	
1,1,2,2-Tetrachloroethane	Not detected	14		ug/m3	10	79-34-5	
1,1,2-Trichloroethane	Not detected	11		ug/m3	10	79-00-5	
1,2,4-Trichlorobenzene	Not detected	37		ug/m3	10	120-82-1	
1,2,4-Trimethylbenzene	Not detected	9.8		ug/m3	10	95-63-6	
1,3,5-Trimethylbenzene	Not detected	9.8		ug/m3	10	108-67-8	
2,2,4-Trimethylpentane	Not detected	9.3		ug/m3	10	540-84-1	
Tert-butyl Alcohol	Not detected	61		ug/m3	10	75-65-0	
Tetrachloroethene	Not detected	14		ug/m3	10	127-18-4	
Tetrahydrofuran*	Not detected	5.9		ug/m3	10	109-99-9	
Toluene	Not detected	7.5		ug/m3	10	108-88-3	
Trichloroethene	Not detected	11		ug/m3	10	79-01-6	
Trichlorofluoromethane	Not detected	11		ug/m3	10	75-69-4	
Vinyl chloride	Not detected	5.1		ug/m3	10	75-01-4	

Lab Sample ID: S40706.09 (continued)
Sample Tag: VP-9

TO-15, Method: TO-15, Run Date: 10/07/22 02:09, Analyst: NDK (continued)

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Vinyl acetate	Not detected	70		ug/m3	10	108-05-4	
p,m-Xylene	Not detected	17		ug/m3	10		
o-Xylene	Not detected	8.7		ug/m3	10	95-47-6	
Total Xylenes	Not detected	26		ug/m3	10	1330-20-7	

TO-15 (Replicate 01), Method: TO-15, Run Date: 10/21/22 00:08, Analyst: NDK

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Acetone	8.1	2.0		ppbv	1	67-64-1	
1,3-Butadiene	Not detected	2.0		ppbv	1	106-99-0	
Benzene	0.5	0.2		ppbv	1	71-43-2	
Bromodichloromethane	Not detected	0.2		ppbv	1	75-27-4	
Bromoform	Not detected	0.2		ppbv	1	75-25-2	
Bromomethane	Not detected	0.2		ppbv	1	74-83-9	
Vinyl bromide	Not detected	0.2		ppbv	1	593-60-2	
Benzyl chloride	Not detected	0.2		ppbv	1	100-44-7	
Carbon disulfide	5.1	2.0		ppbv	1	75-15-0	
Chlorobenzene	Not detected	0.2		ppbv	1	108-90-7	
Chloroethane	Not detected	2.0		ppbv	1	75-00-3	
Chloroform	0.6	0.2		ppbv	1	67-66-3	
Chloromethane	Not detected	2.0		ppbv	1	74-87-3	
3-Chloropropene	Not detected	2.0		ppbv	1	107-05-1	
2-Chlorotoluene	Not detected	0.2		ppbv	1	95-49-8	
Carbon tetrachloride	Not detected	0.2		ppbv	1	56-23-5	
Cyclohexane	Not detected	0.2		ppbv	1	110-82-7	
1,1-Dichloroethane	Not detected	0.2		ppbv	1	75-34-3	
1,1-Dichloroethene	Not detected	0.2		ppbv	1	75-35-4	
1,2-Dibromoethane	Not detected	0.01		ppbv	1	106-93-4	M
1,2-Dichloroethane	Not detected	0.2		ppbv	1	107-06-2	
1,2-Dichloropropane	Not detected	0.2		ppbv	1	78-87-5	
1,4-Dioxane	Not detected	2.5		ppbv	1	123-91-1	
Dichlorodifluoromethane	0.4	0.2		ppbv	1	75-71-8	
Dibromochloromethane	Not detected	0.2		ppbv	1	124-48-1	
trans-1,2-Dichloroethene	Not detected	0.2		ppbv	1	156-60-5	
cis-1,2-Dichloroethene	Not detected	0.2		ppbv	1	156-59-2	
cis-1,3-Dichloropropene	Not detected	0.2		ppbv	1	10061-01-5	
1,3-Dichlorobenzene	1.5	0.2		ppbv	1	541-73-1	
1,2-Dichlorobenzene	Not detected	0.2		ppbv	1	95-50-1	
1,4-Dichlorobenzene	Not detected	0.2		ppbv	1	106-46-7	
trans-1,3-Dichloropropene	Not detected	0.2		ppbv	1	10061-02-6	
Ethanol*	6.5	2.5		ppbv	1	64-17-5	
Ethylbenzene	Not detected	0.2		ppbv	1	100-41-4	
Ethyl Acetate*	Not detected	2.0		ppbv	1	141-78-6	
4-Ethyltoluene	Not detected	0.2		ppbv	1	622-96-8	
Freon 113	Not detected	0.2		ppbv	1	76-13-1	
Freon 114	Not detected	0.2		ppbv	1	76-14-2	
Heptane	Not detected	0.2		ppbv	1	142-82-5	
Hexachlorobutadiene	Not detected	0.2		ppbv	1	87-68-3	
Hexane	Not detected	0.2		ppbv	1	110-54-3	
2-Hexanone*	Not detected	0.5		ppbv	1	591-78-6	

M-Result reported to MDL not RDL

Lab Sample ID: S40706.09 (continued)
Sample Tag: VP-9

TO-15 (Replicate 01), Method: TO-15, Run Date: 10/21/22 00:08, Analyst: NDK (continued)

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Isopropyl Alcohol*	22.1	2.0		ppbv	1	67-63-0	
Methylene chloride	Not detected	0.5		ppbv	1	75-09-2	
2-Butanone (MEK)	Not detected	2.0		ppbv	1	78-93-3	
4-Methyl-2-pentanone (MIBK)	Not detected	0.5		ppbv	1	108-10-1	
tert-Methyl butyl ether (MTBE)	Not detected	0.2		ppbv	1	1634-04-4	
Methyl methacrylate	Not detected	0.2		ppbv	1	80-62-6	
Naphthalene	Not detected	0.2		ppbv	1	91-20-3	
Propylene*	Not detected	10		ppbv	1	115-07-1	
Styrene	Not detected	0.2		ppbv	1	100-42-5	
1,1,1-Trichloroethane	Not detected	0.2		ppbv	1	71-55-6	
1,1,2,2-Tetrachloroethane	Not detected	0.2		ppbv	1	79-34-5	
1,1,2-Trichloroethane	Not detected	0.2		ppbv	1	79-00-5	
1,2,4-Trichlorobenzene	Not detected	0.5		ppbv	1	120-82-1	
1,2,4-Trimethylbenzene	Not detected	0.2		ppbv	1	95-63-6	
1,3,5-Trimethylbenzene	Not detected	0.2		ppbv	1	108-67-8	
2,2,4-Trimethylpentane	Not detected	0.2		ppbv	1	540-84-1	
Tert-butyl Alcohol	Not detected	2.0		ppbv	1	75-65-0	
Tetrachloroethene	Not detected	0.2		ppbv	1	127-18-4	
Tetrahydrofuran*	Not detected	0.2		ppbv	1	109-99-9	
Toluene	0.5	0.2		ppbv	1	108-88-3	
Trichloroethene	Not detected	0.2		ppbv	1	79-01-6	
Trichlorofluoromethane	Not detected	0.2		ppbv	1	75-69-4	
Vinyl chloride	Not detected	0.2		ppbv	1	75-01-4	
Vinyl acetate	Not detected	2.0		ppbv	1	108-05-4	
p,m-Xylene	Not detected	0.4		ppbv	1		
o-Xylene	Not detected	0.2		ppbv	1	95-47-6	
Total Xylenes	Not detected	0.6		ppbv	1	1330-20-7	

TO-15 (Replicate 01), Method: TO-15, Run Date: 10/21/22 00:08, Analyst: NDK

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Acetone	19	4.8		ug/m3	1	67-64-1	
1,3-Butadiene	Not detected	4.4		ug/m3	1	106-99-0	
Benzene	1.6	0.64		ug/m3	1	71-43-2	
Bromodichloromethane	Not detected	1.3		ug/m3	1	75-27-4	
Bromoform	Not detected	2.1		ug/m3	1	75-25-2	
Bromomethane	Not detected	0.78		ug/m3	1	74-83-9	
Vinyl bromide	Not detected	0.87		ug/m3	1	593-60-2	
Benzyl chloride	Not detected	1.0		ug/m3	1	100-44-7	
Carbon disulfide	16	6.2		ug/m3	1	75-15-0	
Chlorobenzene	Not detected	0.92		ug/m3	1	108-90-7	
Chloroethane	Not detected	5.3		ug/m3	1	75-00-3	
Chloroform	2.9	0.98		ug/m3	1	67-66-3	
Chloromethane	Not detected	4.1		ug/m3	1	74-87-3	
3-Chloropropene	Not detected	6.3		ug/m3	1	107-05-1	
2-Chlorotoluene	Not detected	1.0		ug/m3	1	95-49-8	
Carbon tetrachloride	Not detected	1.3		ug/m3	1	56-23-5	
Cyclohexane	Not detected	0.69		ug/m3	1	110-82-7	
1,1-Dichloroethane	Not detected	0.81		ug/m3	1	75-34-3	
1,1-Dichloroethene	Not detected	0.79		ug/m3	1	75-35-4	
1,2-Dibromoethane	Not detected	0.077		ug/m3	1	106-93-4	M

M-Result reported to MDL not RDL

Lab Sample ID: S40706.09 (continued)
Sample Tag: VP-9

TO-15 (Replicate 01), Method: TO-15, Run Date: 10/21/22 00:08, Analyst: NDK (continued)

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
1,2-Dichloroethane	Not detected	0.81		ug/m3	1	107-06-2	
1,2-Dichloropropane	Not detected	0.92		ug/m3	1	78-87-5	
1,4-Dioxane	Not detected	9.0		ug/m3	1	123-91-1	
Dichlorodifluoromethane	2.0	0.99		ug/m3	1	75-71-8	
Dibromochloromethane	Not detected	1.7		ug/m3	1	124-48-1	
trans-1,2-Dichloroethene	Not detected	0.79		ug/m3	1	156-60-5	
cis-1,2-Dichloroethene	Not detected	0.79		ug/m3	1	156-59-2	
cis-1,3-Dichloropropene	Not detected	0.91		ug/m3	1	10061-01-5	
1,3-Dichlorobenzene	9.0	1.2		ug/m3	1	541-73-1	
1,2-Dichlorobenzene	Not detected	1.2		ug/m3	1	95-50-1	
1,4-Dichlorobenzene	Not detected	1.2		ug/m3	1	106-46-7	
trans-1,3-Dichloropropene	Not detected	0.91		ug/m3	1	10061-02-6	
Ethanol*	12	4.7		ug/m3	1	64-17-5	
Ethylbenzene	Not detected	0.87		ug/m3	1	100-41-4	
Ethyl Acetate*	Not detected	7.2		ug/m3	1	141-78-6	
4-Ethyltoluene	Not detected	0.98		ug/m3	1	622-96-8	
Freon 113	Not detected	1.5		ug/m3	1	76-13-1	
Freon 114	Not detected	1.4		ug/m3	1	76-14-2	
Heptane	Not detected	0.82		ug/m3	1	142-82-5	
Hexachlorobutadiene	Not detected	2.1		ug/m3	1	87-68-3	
Hexane	Not detected	0.70		ug/m3	1	110-54-3	
2-Hexanone*	Not detected	2.0		ug/m3	1	591-78-6	
Isopropyl Alcohol*	54.3	4.9		ug/m3	1	67-63-0	
Methylene chloride	Not detected	1.7		ug/m3	1	75-09-2	
2-Butanone (MEK)	Not detected	5.9		ug/m3	1	78-93-3	
4-Methyl-2-pentanone (MIBK)	Not detected	2.0		ug/m3	1	108-10-1	
tert-Methyl butyl ether (MTBE)	Not detected	0.72		ug/m3	1	1634-04-4	
Methyl methacrylate	Not detected	0.82		ug/m3	1	80-62-6	
Naphthalene	Not detected	1.0		ug/m3	1	91-20-3	
Propylene*	Not detected	17		ug/m3	1	115-07-1	
Styrene	Not detected	0.85		ug/m3	1	100-42-5	
1,1,1-Trichloroethane	Not detected	1.1		ug/m3	1	71-55-6	
1,1,2,2-Tetrachloroethane	Not detected	1.4		ug/m3	1	79-34-5	
1,1,2-Trichloroethane	Not detected	1.1		ug/m3	1	79-00-5	
1,2,4-Trichlorobenzene	Not detected	3.7		ug/m3	1	120-82-1	
1,2,4-Trimethylbenzene	Not detected	0.98		ug/m3	1	95-63-6	
1,3,5-Trimethylbenzene	Not detected	0.98		ug/m3	1	108-67-8	
2,2,4-Trimethylpentane	Not detected	0.93		ug/m3	1	540-84-1	
Tert-butyl Alcohol	Not detected	6.1		ug/m3	1	75-65-0	
Tetrachloroethene	Not detected	1.4		ug/m3	1	127-18-4	
Tetrahydrofuran*	Not detected	0.59		ug/m3	1	109-99-9	
Toluene	1.9	0.75		ug/m3	1	108-88-3	
Trichloroethene	Not detected	1.1		ug/m3	1	79-01-6	
Trichlorofluoromethane	Not detected	1.1		ug/m3	1	75-69-4	
Vinyl chloride	Not detected	0.51		ug/m3	1	75-01-4	
Vinyl acetate	Not detected	7.0		ug/m3	1	108-05-4	
p,m-Xylene	Not detected	1.7		ug/m3	1		
o-Xylene	Not detected	0.87		ug/m3	1	95-47-6	
Total Xylenes	Not detected	2.6		ug/m3	1	1330-20-7	

Lab Sample ID: S40706.10

Sample Tag: VP-10

Collected Date/Time: 09/22/2022 14:59 - 09/22/2022 15:04

Matrix: Air

COC Reference: A5764

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
1	Air Canister	None	No	RT	IR

Extraction / Prep.

Parameter	Result	Method	Run Date	Analyst	Flags
Pressure check for TO-15*	-5	N/A	09/27/22 18:00	BDO	

Organics - Volatiles

TO-15, Method: TO-15, Run Date: 10/07/22 02:39, Analyst: NDK

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Acetone	Not detected	20		ppbv	10	67-64-1	
1,3-Butadiene	Not detected	20		ppbv	10	106-99-0	
Benzene	Not detected	2		ppbv	10	71-43-2	
Bromodichloromethane	Not detected	2		ppbv	10	75-27-4	
Bromoform	Not detected	2		ppbv	10	75-25-2	
Bromomethane	Not detected	2		ppbv	10	74-83-9	
Vinyl bromide	Not detected	2		ppbv	10	593-60-2	
Benzyl chloride	Not detected	2		ppbv	10	100-44-7	
Carbon disulfide	Not detected	20		ppbv	10	75-15-0	
Chlorobenzene	Not detected	2		ppbv	10	108-90-7	
Chloroethane	Not detected	20		ppbv	10	75-00-3	
Chloroform	Not detected	2		ppbv	10	67-66-3	
Chloromethane	Not detected	20		ppbv	10	74-87-3	
3-Chloropropene	Not detected	20		ppbv	10	107-05-1	
2-Chlorotoluene	Not detected	2		ppbv	10	95-49-8	
Carbon tetrachloride	Not detected	2		ppbv	10	56-23-5	
Cyclohexane	Not detected	2		ppbv	10	110-82-7	
1,1-Dichloroethane	Not detected	2		ppbv	10	75-34-3	
1,1-Dichloroethene	Not detected	2		ppbv	10	75-35-4	
1,2-Dibromoethane	Not detected	2		ppbv	10	106-93-4	
1,2-Dichloroethane	Not detected	2		ppbv	10	107-06-2	
1,2-Dichloropropane	Not detected	2		ppbv	10	78-87-5	
1,4-Dioxane	Not detected	25		ppbv	10	123-91-1	
Dichlorodifluoromethane	Not detected	2		ppbv	10	75-71-8	
Dibromochloromethane	Not detected	2		ppbv	10	124-48-1	
trans-1,2-Dichloroethene	Not detected	2		ppbv	10	156-60-5	
cis-1,2-Dichloroethene	Not detected	2		ppbv	10	156-59-2	
cis-1,3-Dichloropropene	Not detected	2		ppbv	10	10061-01-5	
1,3-Dichlorobenzene	Not detected	2		ppbv	10	541-73-1	
1,2-Dichlorobenzene	Not detected	2		ppbv	10	95-50-1	
1,4-Dichlorobenzene	Not detected	2		ppbv	10	106-46-7	
trans-1,3-Dichloropropene	Not detected	2		ppbv	10	10061-02-6	
Ethanol*	Not detected	25		ppbv	10	64-17-5	
Ethylbenzene	Not detected	2		ppbv	10	100-41-4	
Ethyl Acetate*	Not detected	20		ppbv	10	141-78-6	
4-Ethyltoluene	Not detected	2		ppbv	10	622-96-8	
Freon 113	Not detected	2		ppbv	10	76-13-1	

Lab Sample ID: S40706.10 (continued)
Sample Tag: VP-10

TO-15, Method: TO-15, Run Date: 10/07/22 02:39, Analyst: NDK (continued)

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Freon 114	Not detected	2		ppbv	10	76-14-2	
Heptane	Not detected	2		ppbv	10	142-82-5	
Hexachlorobutadiene	Not detected	2		ppbv	10	87-68-3	
Hexane	Not detected	2		ppbv	10	110-54-3	
2-Hexanone*	Not detected	5		ppbv	10	591-78-6	
Isopropyl Alcohol*	Not detected	20		ppbv	10	67-63-0	
Methylene chloride	Not detected	5		ppbv	10	75-09-2	
2-Butanone (MEK)	Not detected	20		ppbv	10	78-93-3	
4-Methyl-2-pentanone (MIBK)	Not detected	5		ppbv	10	108-10-1	
tert-Methyl butyl ether (MTBE)	Not detected	2		ppbv	10	1634-04-4	
Methyl methacrylate	Not detected	2		ppbv	10	80-62-6	
Naphthalene	Not detected	2		ppbv	10	91-20-3	
Propylene*	Not detected	100		ppbv	10	115-07-1	
Styrene	Not detected	2		ppbv	10	100-42-5	
1,1,1-Trichloroethane	Not detected	2		ppbv	10	71-55-6	
1,1,2,2-Tetrachloroethane	Not detected	2		ppbv	10	79-34-5	
1,1,2-Trichloroethane	Not detected	2		ppbv	10	79-00-5	
1,2,4-Trichlorobenzene	Not detected	5		ppbv	10	120-82-1	
1,2,4-Trimethylbenzene	Not detected	2		ppbv	10	95-63-6	
1,3,5-Trimethylbenzene	Not detected	2		ppbv	10	108-67-8	
2,2,4-Trimethylpentane	Not detected	2		ppbv	10	540-84-1	
Tert-butyl Alcohol	Not detected	20		ppbv	10	75-65-0	
Tetrachloroethene	Not detected	2		ppbv	10	127-18-4	
Tetrahydrofuran*	Not detected	2		ppbv	10	109-99-9	
Toluene	Not detected	2		ppbv	10	108-88-3	
Trichloroethene	Not detected	2		ppbv	10	79-01-6	
Trichlorofluoromethane	Not detected	2		ppbv	10	75-69-4	
Vinyl chloride	Not detected	2		ppbv	10	75-01-4	
Vinyl acetate	Not detected	20		ppbv	10	108-05-4	
p,m-Xylene	Not detected	4		ppbv	10		
o-Xylene	Not detected	2		ppbv	10	95-47-6	
Total Xylenes	Not detected	6		ppbv	10	1330-20-7	

TO-15, Method: TO-15, Run Date: 10/07/22 02:39, Analyst: NDK

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Acetone	Not detected	48		ug/m3	10	67-64-1	
1,3-Butadiene	Not detected	44		ug/m3	10	106-99-0	
Benzene	Not detected	6.4		ug/m3	10	71-43-2	
Bromodichloromethane	Not detected	13		ug/m3	10	75-27-4	
Bromoform	Not detected	21		ug/m3	10	75-25-2	
Bromomethane	Not detected	7.8		ug/m3	10	74-83-9	
Vinyl bromide	Not detected	8.7		ug/m3	10	593-60-2	
Benzyl chloride	Not detected	10		ug/m3	10	100-44-7	
Carbon disulfide	Not detected	62		ug/m3	10	75-15-0	
Chlorobenzene	Not detected	9.2		ug/m3	10	108-90-7	
Chloroethane	Not detected	53		ug/m3	10	75-00-3	
Chloroform	Not detected	9.8		ug/m3	10	67-66-3	
Chloromethane	Not detected	41		ug/m3	10	74-87-3	
3-Chloropropene	Not detected	63		ug/m3	10	107-05-1	
2-Chlorotoluene	Not detected	10		ug/m3	10	95-49-8	

Lab Sample ID: S40706.10 (continued)
Sample Tag: VP-10

TO-15, Method: TO-15, Run Date: 10/07/22 02:39, Analyst: NDK (continued)

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Carbon tetrachloride	Not detected	13		ug/m3	10	56-23-5	
Cyclohexane	Not detected	6.9		ug/m3	10	110-82-7	
1,1-Dichloroethane	Not detected	8.1		ug/m3	10	75-34-3	
1,1-Dichloroethene	Not detected	7.9		ug/m3	10	75-35-4	
1,2-Dibromoethane	Not detected	15		ug/m3	10	106-93-4	
1,2-Dichloroethane	Not detected	8.1		ug/m3	10	107-06-2	
1,2-Dichloropropane	Not detected	9.2		ug/m3	10	78-87-5	
1,4-Dioxane	Not detected	90		ug/m3	10	123-91-1	
Dichlorodifluoromethane	Not detected	9.9		ug/m3	10	75-71-8	
Dibromochloromethane	Not detected	17		ug/m3	10	124-48-1	
trans-1,2-Dichloroethene	Not detected	7.9		ug/m3	10	156-60-5	
cis-1,2-Dichloroethene	Not detected	7.9		ug/m3	10	156-59-2	
cis-1,3-Dichloropropene	Not detected	9.1		ug/m3	10	10061-01-5	
1,3-Dichlorobenzene	Not detected	12		ug/m3	10	541-73-1	
1,2-Dichlorobenzene	Not detected	12		ug/m3	10	95-50-1	
1,4-Dichlorobenzene	Not detected	12		ug/m3	10	106-46-7	
trans-1,3-Dichloropropene	Not detected	9.1		ug/m3	10	10061-02-6	
Ethanol*	Not detected	47		ug/m3	10	64-17-5	
Ethylbenzene	Not detected	8.7		ug/m3	10	100-41-4	
Ethyl Acetate*	Not detected	72		ug/m3	10	141-78-6	
4-Ethyltoluene	Not detected	9.8		ug/m3	10	622-96-8	
Freon 113	Not detected	15		ug/m3	10	76-13-1	
Freon 114	Not detected	14		ug/m3	10	76-14-2	
Heptane	Not detected	8.2		ug/m3	10	142-82-5	
Hexachlorobutadiene	Not detected	21		ug/m3	10	87-68-3	
Hexane	Not detected	7.0		ug/m3	10	110-54-3	
2-Hexanone*	Not detected	20		ug/m3	10	591-78-6	
Isopropyl Alcohol*	Not detected	49		ug/m3	10	67-63-0	
Methylene chloride	Not detected	17		ug/m3	10	75-09-2	
2-Butanone (MEK)	Not detected	59		ug/m3	10	78-93-3	
4-Methyl-2-pentanone (MIBK)	Not detected	20		ug/m3	10	108-10-1	
tert-Methyl butyl ether (MTBE)	Not detected	7.2		ug/m3	10	1634-04-4	
Methyl methacrylate	Not detected	8.2		ug/m3	10	80-62-6	
Naphthalene	Not detected	10		ug/m3	10	91-20-3	
Propylene*	Not detected	170		ug/m3	10	115-07-1	
Styrene	Not detected	8.5		ug/m3	10	100-42-5	
1,1,1-Trichloroethane	Not detected	11		ug/m3	10	71-55-6	
1,1,2,2-Tetrachloroethane	Not detected	14		ug/m3	10	79-34-5	
1,1,2-Trichloroethane	Not detected	11		ug/m3	10	79-00-5	
1,2,4-Trichlorobenzene	Not detected	37		ug/m3	10	120-82-1	
1,2,4-Trimethylbenzene	Not detected	9.8		ug/m3	10	95-63-6	
1,3,5-Trimethylbenzene	Not detected	9.8		ug/m3	10	108-67-8	
2,2,4-Trimethylpentane	Not detected	9.3		ug/m3	10	540-84-1	
Tert-butyl Alcohol	Not detected	61		ug/m3	10	75-65-0	
Tetrachloroethene	Not detected	14		ug/m3	10	127-18-4	
Tetrahydrofuran*	Not detected	5.9		ug/m3	10	109-99-9	
Toluene	Not detected	7.5		ug/m3	10	108-88-3	
Trichloroethene	Not detected	11		ug/m3	10	79-01-6	
Trichlorofluoromethane	Not detected	11		ug/m3	10	75-69-4	
Vinyl chloride	Not detected	5.1		ug/m3	10	75-01-4	

Lab Sample ID: S40706.10 (continued)
Sample Tag: VP-10

TO-15, Method: TO-15, Run Date: 10/07/22 02:39, Analyst: NDK (continued)

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Vinyl acetate	Not detected	70		ug/m3	10	108-05-4	
p,m-Xylene	Not detected	17		ug/m3	10		
o-Xylene	Not detected	8.7		ug/m3	10	95-47-6	
Total Xylenes	Not detected	26		ug/m3	10	1330-20-7	

TO-15 (Replicate 01), Method: TO-15, Run Date: 10/21/22 02:09, Analyst: NDK

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Acetone	4.8	2.0		ppbv	1	67-64-1	
1,3-Butadiene	Not detected	2.0		ppbv	1	106-99-0	
Benzene	0.2	0.2		ppbv	1	71-43-2	
Bromodichloromethane	Not detected	0.2		ppbv	1	75-27-4	
Bromoform	Not detected	0.2		ppbv	1	75-25-2	
Bromomethane	Not detected	0.2		ppbv	1	74-83-9	
Vinyl bromide	Not detected	0.2		ppbv	1	593-60-2	
Benzyl chloride	Not detected	0.2		ppbv	1	100-44-7	
Carbon disulfide	Not detected	2.0		ppbv	1	75-15-0	
Chlorobenzene	Not detected	0.2		ppbv	1	108-90-7	
Chloroethane	Not detected	2.0		ppbv	1	75-00-3	
Chloroform	Not detected	0.2		ppbv	1	67-66-3	
Chloromethane	Not detected	2.0		ppbv	1	74-87-3	
3-Chloropropene	Not detected	2.0		ppbv	1	107-05-1	
2-Chlorotoluene	Not detected	0.2		ppbv	1	95-49-8	
Carbon tetrachloride	Not detected	0.2		ppbv	1	56-23-5	
Cyclohexane	Not detected	0.2		ppbv	1	110-82-7	
1,1-Dichloroethane	0.2	0.2		ppbv	1	75-34-3	
1,1-Dichloroethene	Not detected	0.2		ppbv	1	75-35-4	
1,2-Dibromoethane	Not detected	0.01		ppbv	1	106-93-4	M
1,2-Dichloroethane	Not detected	0.2		ppbv	1	107-06-2	
1,2-Dichloropropane	Not detected	0.2		ppbv	1	78-87-5	
1,4-Dioxane	Not detected	2.5		ppbv	1	123-91-1	
Dichlorodifluoromethane	0.5	0.2		ppbv	1	75-71-8	
Dibromochloromethane	Not detected	0.2		ppbv	1	124-48-1	
trans-1,2-Dichloroethene	Not detected	0.2		ppbv	1	156-60-5	
cis-1,2-Dichloroethene	0.2	0.2		ppbv	1	156-59-2	
cis-1,3-Dichloropropene	Not detected	0.2		ppbv	1	10061-01-5	
1,3-Dichlorobenzene	0.5	0.2		ppbv	1	541-73-1	
1,2-Dichlorobenzene	Not detected	0.2		ppbv	1	95-50-1	
1,4-Dichlorobenzene	Not detected	0.2		ppbv	1	106-46-7	
trans-1,3-Dichloropropene	Not detected	0.2		ppbv	1	10061-02-6	
Ethanol*	4.3	2.5		ppbv	1	64-17-5	
Ethylbenzene	Not detected	0.2		ppbv	1	100-41-4	
Ethyl Acetate*	Not detected	2.0		ppbv	1	141-78-6	
4-Ethyltoluene	Not detected	0.2		ppbv	1	622-96-8	
Freon 113	Not detected	0.2		ppbv	1	76-13-1	
Freon 114	Not detected	0.2		ppbv	1	76-14-2	
Heptane	Not detected	0.2		ppbv	1	142-82-5	
Hexachlorobutadiene	Not detected	0.2		ppbv	1	87-68-3	
Hexane	Not detected	0.2		ppbv	1	110-54-3	
2-Hexanone*	Not detected	0.5		ppbv	1	591-78-6	

M-Result reported to MDL not RDL

Lab Sample ID: S40706.10 (continued)
Sample Tag: VP-10

TO-15 (Replicate 01), Method: TO-15, Run Date: 10/21/22 02:09, Analyst: NDK (continued)

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Isopropyl Alcohol*	3.7	2.0		ppbv	1	67-63-0	
Methylene chloride	Not detected	0.5		ppbv	1	75-09-2	
2-Butanone (MEK)	Not detected	2.0		ppbv	1	78-93-3	
4-Methyl-2-pentanone (MIBK)	Not detected	0.5		ppbv	1	108-10-1	
tert-Methyl butyl ether (MTBE)	Not detected	0.2		ppbv	1	1634-04-4	
Methyl methacrylate	Not detected	0.2		ppbv	1	80-62-6	
Naphthalene	Not detected	0.2		ppbv	1	91-20-3	
Propylene*	Not detected	10		ppbv	1	115-07-1	
Styrene	Not detected	0.2		ppbv	1	100-42-5	
1,1,1-Trichloroethane	Not detected	0.2		ppbv	1	71-55-6	
1,1,2,2-Tetrachloroethane	Not detected	0.2		ppbv	1	79-34-5	
1,1,2-Trichloroethane	Not detected	0.2		ppbv	1	79-00-5	
1,2,4-Trichlorobenzene	Not detected	0.5		ppbv	1	120-82-1	
1,2,4-Trimethylbenzene	Not detected	0.2		ppbv	1	95-63-6	
1,3,5-Trimethylbenzene	Not detected	0.2		ppbv	1	108-67-8	
2,2,4-Trimethylpentane	Not detected	0.2		ppbv	1	540-84-1	
Tert-butyl Alcohol	Not detected	2.0		ppbv	1	75-65-0	
Tetrachloroethene	Not detected	0.2		ppbv	1	127-18-4	
Tetrahydrofuran*	Not detected	0.2		ppbv	1	109-99-9	
Toluene	0.3	0.2		ppbv	1	108-88-3	
Trichloroethene	0.7	0.2		ppbv	1	79-01-6	
Trichlorofluoromethane	0.2	0.2		ppbv	1	75-69-4	
Vinyl chloride	Not detected	0.2		ppbv	1	75-01-4	
Vinyl acetate	Not detected	2.0		ppbv	1	108-05-4	
p,m-Xylene	Not detected	0.4		ppbv	1		
o-Xylene	Not detected	0.2		ppbv	1	95-47-6	
Total Xylenes	Not detected	0.6		ppbv	1	1330-20-7	

TO-15 (Replicate 01), Method: TO-15, Run Date: 10/21/22 02:09, Analyst: NDK

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Acetone	11	4.8		ug/m3	1	67-64-1	
1,3-Butadiene	Not detected	4.4		ug/m3	1	106-99-0	
Benzene	0.64	0.64		ug/m3	1	71-43-2	
Bromodichloromethane	Not detected	1.3		ug/m3	1	75-27-4	
Bromoform	Not detected	2.1		ug/m3	1	75-25-2	
Bromomethane	Not detected	0.78		ug/m3	1	74-83-9	
Vinyl bromide	Not detected	0.87		ug/m3	1	593-60-2	
Benzyl chloride	Not detected	1.0		ug/m3	1	100-44-7	
Carbon disulfide	Not detected	6.2		ug/m3	1	75-15-0	
Chlorobenzene	Not detected	0.92		ug/m3	1	108-90-7	
Chloroethane	Not detected	5.3		ug/m3	1	75-00-3	
Chloroform	Not detected	0.98		ug/m3	1	67-66-3	
Chloromethane	Not detected	4.1		ug/m3	1	74-87-3	
3-Chloropropene	Not detected	6.3		ug/m3	1	107-05-1	
2-Chlorotoluene	Not detected	1.0		ug/m3	1	95-49-8	
Carbon tetrachloride	Not detected	1.3		ug/m3	1	56-23-5	
Cyclohexane	Not detected	0.69		ug/m3	1	110-82-7	
1,1-Dichloroethane	0.81	0.81		ug/m3	1	75-34-3	
1,1-Dichloroethene	Not detected	0.79		ug/m3	1	75-35-4	
1,2-Dibromoethane	Not detected	0.077		ug/m3	1	106-93-4	M

M-Result reported to MDL not RDL

Lab Sample ID: S40706.10 (continued)
Sample Tag: VP-10

TO-15 (Replicate 01), Method: TO-15, Run Date: 10/21/22 02:09, Analyst: NDK (continued)

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
1,2-Dichloroethane	Not detected	0.81		ug/m3	1	107-06-2	
1,2-Dichloropropane	Not detected	0.92		ug/m3	1	78-87-5	
1,4-Dioxane	Not detected	9.0		ug/m3	1	123-91-1	
Dichlorodifluoromethane	2.5	0.99		ug/m3	1	75-71-8	
Dibromochloromethane	Not detected	1.7		ug/m3	1	124-48-1	
trans-1,2-Dichloroethene	Not detected	0.79		ug/m3	1	156-60-5	
cis-1,2-Dichloroethene	0.79	0.79		ug/m3	1	156-59-2	
cis-1,3-Dichloropropene	Not detected	0.91		ug/m3	1	10061-01-5	
1,3-Dichlorobenzene	3.0	1.2		ug/m3	1	541-73-1	
1,2-Dichlorobenzene	Not detected	1.2		ug/m3	1	95-50-1	
1,4-Dichlorobenzene	Not detected	1.2		ug/m3	1	106-46-7	
trans-1,3-Dichloropropene	Not detected	0.91		ug/m3	1	10061-02-6	
Ethanol*	8.1	4.7		ug/m3	1	64-17-5	
Ethylbenzene	Not detected	0.87		ug/m3	1	100-41-4	
Ethyl Acetate*	Not detected	7.2		ug/m3	1	141-78-6	
4-Ethyltoluene	Not detected	0.98		ug/m3	1	622-96-8	
Freon 113	Not detected	1.5		ug/m3	1	76-13-1	
Freon 114	Not detected	1.4		ug/m3	1	76-14-2	
Heptane	Not detected	0.82		ug/m3	1	142-82-5	
Hexachlorobutadiene	Not detected	2.1		ug/m3	1	87-68-3	
Hexane	Not detected	0.70		ug/m3	1	110-54-3	
2-Hexanone*	Not detected	2.0		ug/m3	1	591-78-6	
Isopropyl Alcohol*	9.1	4.9		ug/m3	1	67-63-0	
Methylene chloride	Not detected	1.7		ug/m3	1	75-09-2	
2-Butanone (MEK)	Not detected	5.9		ug/m3	1	78-93-3	
4-Methyl-2-pentanone (MIBK)	Not detected	2.0		ug/m3	1	108-10-1	
tert-Methyl butyl ether (MTBE)	Not detected	0.72		ug/m3	1	1634-04-4	
Methyl methacrylate	Not detected	0.82		ug/m3	1	80-62-6	
Naphthalene	Not detected	1.0		ug/m3	1	91-20-3	
Propylene*	Not detected	17		ug/m3	1	115-07-1	
Styrene	Not detected	0.85		ug/m3	1	100-42-5	
1,1,1-Trichloroethane	Not detected	1.1		ug/m3	1	71-55-6	
1,1,2,2-Tetrachloroethane	Not detected	1.4		ug/m3	1	79-34-5	
1,1,2-Trichloroethane	Not detected	1.1		ug/m3	1	79-00-5	
1,2,4-Trichlorobenzene	Not detected	3.7		ug/m3	1	120-82-1	
1,2,4-Trimethylbenzene	Not detected	0.98		ug/m3	1	95-63-6	
1,3,5-Trimethylbenzene	Not detected	0.98		ug/m3	1	108-67-8	
2,2,4-Trimethylpentane	Not detected	0.93		ug/m3	1	540-84-1	
Tert-butyl Alcohol	Not detected	6.1		ug/m3	1	75-65-0	
Tetrachloroethene	Not detected	1.4		ug/m3	1	127-18-4	
Tetrahydrofuran*	Not detected	0.59		ug/m3	1	109-99-9	
Toluene	1.1	0.75		ug/m3	1	108-88-3	
Trichloroethene	3.8	1.1		ug/m3	1	79-01-6	
Trichlorofluoromethane	1.1	1.1		ug/m3	1	75-69-4	
Vinyl chloride	Not detected	0.51		ug/m3	1	75-01-4	
Vinyl acetate	Not detected	7.0		ug/m3	1	108-05-4	
p,m-Xylene	Not detected	1.7		ug/m3	1		
o-Xylene	Not detected	0.87		ug/m3	1	95-47-6	
Total Xylenes	Not detected	2.6		ug/m3	1	1330-20-7	

Lab Sample ID: S40706.11
Sample Tag: VP-12
Collected Date/Time: 09/23/2022 08:35 - 09/23/2022 08:40
Matrix: Air
COC Reference: A5765

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
1	Air Canister	None	No	RT	IR

Extraction / Prep.

Parameter	Result	Method	Run Date	Analyst	Flags
Pressure check for TO-15*	-4.5	N/A	09/27/22 18:00	BDO	

Organics - Volatiles

TO-15, Method: TO-15, Run Date: 10/07/22 03:09, Analyst: NDK

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Acetone	Not detected	20		ppbv	10	67-64-1	
1,3-Butadiene	Not detected	20		ppbv	10	106-99-0	
Benzene	Not detected	2		ppbv	10	71-43-2	
Bromodichloromethane	Not detected	2		ppbv	10	75-27-4	
Bromoform	Not detected	2		ppbv	10	75-25-2	
Bromomethane	Not detected	2		ppbv	10	74-83-9	
Vinyl bromide	Not detected	2		ppbv	10	593-60-2	
Benzyl chloride	Not detected	2		ppbv	10	100-44-7	
Carbon disulfide	Not detected	20		ppbv	10	75-15-0	
Chlorobenzene	Not detected	2		ppbv	10	108-90-7	
Chloroethane	Not detected	20		ppbv	10	75-00-3	
Chloroform	Not detected	2		ppbv	10	67-66-3	
Chloromethane	Not detected	20		ppbv	10	74-87-3	
3-Chloropropene	Not detected	20		ppbv	10	107-05-1	
2-Chlorotoluene	Not detected	2		ppbv	10	95-49-8	
Carbon tetrachloride	Not detected	2		ppbv	10	56-23-5	
Cyclohexane	Not detected	2		ppbv	10	110-82-7	
1,1-Dichloroethane	Not detected	2		ppbv	10	75-34-3	
1,1-Dichloroethene	Not detected	2		ppbv	10	75-35-4	
1,2-Dibromoethane	Not detected	2		ppbv	10	106-93-4	
1,2-Dichloroethane	Not detected	2		ppbv	10	107-06-2	
1,2-Dichloropropane	Not detected	2		ppbv	10	78-87-5	
1,4-Dioxane	Not detected	25		ppbv	10	123-91-1	
Dichlorodifluoromethane	Not detected	2		ppbv	10	75-71-8	
Dibromochloromethane	Not detected	2		ppbv	10	124-48-1	
trans-1,2-Dichloroethene	Not detected	2		ppbv	10	156-60-5	
cis-1,2-Dichloroethene	Not detected	2		ppbv	10	156-59-2	
cis-1,3-Dichloropropene	Not detected	2		ppbv	10	10061-01-5	
1,3-Dichlorobenzene	Not detected	2		ppbv	10	541-73-1	
1,2-Dichlorobenzene	Not detected	2		ppbv	10	95-50-1	
1,4-Dichlorobenzene	Not detected	2		ppbv	10	106-46-7	
trans-1,3-Dichloropropene	Not detected	2		ppbv	10	10061-02-6	
Ethanol*	Not detected	25		ppbv	10	64-17-5	
Ethylbenzene	Not detected	2		ppbv	10	100-41-4	
Ethyl Acetate*	Not detected	20		ppbv	10	141-78-6	
4-Ethyltoluene	Not detected	2		ppbv	10	622-96-8	
Freon 113	Not detected	2		ppbv	10	76-13-1	

Lab Sample ID: S40706.11 (continued)
Sample Tag: VP-12

TO-15, Method: TO-15, Run Date: 10/07/22 03:09, Analyst: NDK (continued)

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Freon 114	Not detected	2		ppbv	10	76-14-2	
Heptane	Not detected	2		ppbv	10	142-82-5	
Hexachlorobutadiene	Not detected	2		ppbv	10	87-68-3	
Hexane	Not detected	2		ppbv	10	110-54-3	
2-Hexanone*	Not detected	5		ppbv	10	591-78-6	
Isopropyl Alcohol*	Not detected	20		ppbv	10	67-63-0	
Methylene chloride	Not detected	5		ppbv	10	75-09-2	
2-Butanone (MEK)	Not detected	20		ppbv	10	78-93-3	
4-Methyl-2-pentanone (MIBK)	Not detected	5		ppbv	10	108-10-1	
tert-Methyl butyl ether (MTBE)	Not detected	2		ppbv	10	1634-04-4	
Methyl methacrylate	Not detected	2		ppbv	10	80-62-6	
Naphthalene	Not detected	2		ppbv	10	91-20-3	
Propylene*	Not detected	100		ppbv	10	115-07-1	
Styrene	Not detected	2		ppbv	10	100-42-5	
1,1,1-Trichloroethane	Not detected	2		ppbv	10	71-55-6	
1,1,2,2-Tetrachloroethane	Not detected	2		ppbv	10	79-34-5	
1,1,2-Trichloroethane	Not detected	2		ppbv	10	79-00-5	
1,2,4-Trichlorobenzene	Not detected	5		ppbv	10	120-82-1	
1,2,4-Trimethylbenzene	Not detected	2		ppbv	10	95-63-6	
1,3,5-Trimethylbenzene	Not detected	2		ppbv	10	108-67-8	
2,2,4-Trimethylpentane	Not detected	2		ppbv	10	540-84-1	
Tert-butyl Alcohol	Not detected	20		ppbv	10	75-65-0	
Tetrachloroethene	Not detected	2		ppbv	10	127-18-4	
Tetrahydrofuran*	Not detected	2		ppbv	10	109-99-9	
Toluene	Not detected	2		ppbv	10	108-88-3	
Trichloroethene	Not detected	2		ppbv	10	79-01-6	
Trichlorofluoromethane	Not detected	2		ppbv	10	75-69-4	
Vinyl chloride	Not detected	2		ppbv	10	75-01-4	
Vinyl acetate	Not detected	20		ppbv	10	108-05-4	
p,m-Xylene	Not detected	4		ppbv	10		
o-Xylene	Not detected	2		ppbv	10	95-47-6	
Total Xylenes	Not detected	6		ppbv	10	1330-20-7	

TO-15, Method: TO-15, Run Date: 10/07/22 03:09, Analyst: NDK

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Acetone	Not detected	48		ug/m3	10	67-64-1	
1,3-Butadiene	Not detected	44		ug/m3	10	106-99-0	
Benzene	Not detected	6.4		ug/m3	10	71-43-2	
Bromodichloromethane	Not detected	13		ug/m3	10	75-27-4	
Bromoform	Not detected	21		ug/m3	10	75-25-2	
Bromomethane	Not detected	7.8		ug/m3	10	74-83-9	
Vinyl bromide	Not detected	8.7		ug/m3	10	593-60-2	
Benzyl chloride	Not detected	10		ug/m3	10	100-44-7	
Carbon disulfide	Not detected	62		ug/m3	10	75-15-0	
Chlorobenzene	Not detected	9.2		ug/m3	10	108-90-7	
Chloroethane	Not detected	53		ug/m3	10	75-00-3	
Chloroform	Not detected	9.8		ug/m3	10	67-66-3	
Chloromethane	Not detected	41		ug/m3	10	74-87-3	
3-Chloropropene	Not detected	63		ug/m3	10	107-05-1	
2-Chlorotoluene	Not detected	10		ug/m3	10	95-49-8	

Lab Sample ID: S40706.11 (continued)
Sample Tag: VP-12

TO-15, Method: TO-15, Run Date: 10/07/22 03:09, Analyst: NDK (continued)

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Carbon tetrachloride	Not detected	13		ug/m3	10	56-23-5	
Cyclohexane	Not detected	6.9		ug/m3	10	110-82-7	
1,1-Dichloroethane	Not detected	8.1		ug/m3	10	75-34-3	
1,1-Dichloroethene	Not detected	7.9		ug/m3	10	75-35-4	
1,2-Dibromoethane	Not detected	15		ug/m3	10	106-93-4	
1,2-Dichloroethane	Not detected	8.1		ug/m3	10	107-06-2	
1,2-Dichloropropane	Not detected	9.2		ug/m3	10	78-87-5	
1,4-Dioxane	Not detected	90		ug/m3	10	123-91-1	
Dichlorodifluoromethane	Not detected	9.9		ug/m3	10	75-71-8	
Dibromochloromethane	Not detected	17		ug/m3	10	124-48-1	
trans-1,2-Dichloroethene	Not detected	7.9		ug/m3	10	156-60-5	
cis-1,2-Dichloroethene	Not detected	7.9		ug/m3	10	156-59-2	
cis-1,3-Dichloropropene	Not detected	9.1		ug/m3	10	10061-01-5	
1,3-Dichlorobenzene	Not detected	12		ug/m3	10	541-73-1	
1,2-Dichlorobenzene	Not detected	12		ug/m3	10	95-50-1	
1,4-Dichlorobenzene	Not detected	12		ug/m3	10	106-46-7	
trans-1,3-Dichloropropene	Not detected	9.1		ug/m3	10	10061-02-6	
Ethanol*	Not detected	47		ug/m3	10	64-17-5	
Ethylbenzene	Not detected	8.7		ug/m3	10	100-41-4	
Ethyl Acetate*	Not detected	72		ug/m3	10	141-78-6	
4-Ethyltoluene	Not detected	9.8		ug/m3	10	622-96-8	
Freon 113	Not detected	15		ug/m3	10	76-13-1	
Freon 114	Not detected	14		ug/m3	10	76-14-2	
Heptane	Not detected	8.2		ug/m3	10	142-82-5	
Hexachlorobutadiene	Not detected	21		ug/m3	10	87-68-3	
Hexane	Not detected	7.0		ug/m3	10	110-54-3	
2-Hexanone*	Not detected	20		ug/m3	10	591-78-6	
Isopropyl Alcohol*	Not detected	49		ug/m3	10	67-63-0	
Methylene chloride	Not detected	17		ug/m3	10	75-09-2	
2-Butanone (MEK)	Not detected	59		ug/m3	10	78-93-3	
4-Methyl-2-pentanone (MIBK)	Not detected	20		ug/m3	10	108-10-1	
tert-Methyl butyl ether (MTBE)	Not detected	7.2		ug/m3	10	1634-04-4	
Methyl methacrylate	Not detected	8.2		ug/m3	10	80-62-6	
Naphthalene	Not detected	10		ug/m3	10	91-20-3	
Propylene*	Not detected	170		ug/m3	10	115-07-1	
Styrene	Not detected	8.5		ug/m3	10	100-42-5	
1,1,1-Trichloroethane	Not detected	11		ug/m3	10	71-55-6	
1,1,2,2-Tetrachloroethane	Not detected	14		ug/m3	10	79-34-5	
1,1,2-Trichloroethane	Not detected	11		ug/m3	10	79-00-5	
1,2,4-Trichlorobenzene	Not detected	37		ug/m3	10	120-82-1	
1,2,4-Trimethylbenzene	Not detected	9.8		ug/m3	10	95-63-6	
1,3,5-Trimethylbenzene	Not detected	9.8		ug/m3	10	108-67-8	
2,2,4-Trimethylpentane	Not detected	9.3		ug/m3	10	540-84-1	
Tert-butyl Alcohol	Not detected	61		ug/m3	10	75-65-0	
Tetrachloroethene	Not detected	14		ug/m3	10	127-18-4	
Tetrahydrofuran*	Not detected	5.9		ug/m3	10	109-99-9	
Toluene	Not detected	7.5		ug/m3	10	108-88-3	
Trichloroethene	Not detected	11		ug/m3	10	79-01-6	
Trichlorofluoromethane	Not detected	11		ug/m3	10	75-69-4	
Vinyl chloride	Not detected	5.1		ug/m3	10	75-01-4	

Lab Sample ID: S40706.11 (continued)
Sample Tag: VP-12

TO-15, Method: TO-15, Run Date: 10/07/22 03:09, Analyst: NDK (continued)

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Vinyl acetate	Not detected	70		ug/m3	10	108-05-4	
p,m-Xylene	Not detected	17		ug/m3	10		
o-Xylene	Not detected	8.7		ug/m3	10	95-47-6	
Total Xylenes	Not detected	26		ug/m3	10	1330-20-7	

TO-15 (Replicate 01), Method: TO-15, Run Date: 10/21/22 02:41, Analyst: NDK

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Acetone	6.1	2.0		ppbv	1	67-64-1	
1,3-Butadiene	Not detected	2.0		ppbv	1	106-99-0	
Benzene	Not detected	0.2		ppbv	1	71-43-2	
Bromodichloromethane	Not detected	0.2		ppbv	1	75-27-4	
Bromoform	Not detected	0.2		ppbv	1	75-25-2	
Bromomethane	Not detected	0.2		ppbv	1	74-83-9	
Vinyl bromide	Not detected	0.2		ppbv	1	593-60-2	
Benzyl chloride	Not detected	0.2		ppbv	1	100-44-7	
Carbon disulfide	Not detected	2.0		ppbv	1	75-15-0	
Chlorobenzene	Not detected	0.2		ppbv	1	108-90-7	
Chloroethane	Not detected	2.0		ppbv	1	75-00-3	
Chloroform	Not detected	0.2		ppbv	1	67-66-3	
Chloromethane	Not detected	2.0		ppbv	1	74-87-3	
3-Chloropropene	Not detected	2.0		ppbv	1	107-05-1	
2-Chlorotoluene	Not detected	0.2		ppbv	1	95-49-8	
Carbon tetrachloride	Not detected	0.2		ppbv	1	56-23-5	
Cyclohexane	Not detected	0.2		ppbv	1	110-82-7	
1,1-Dichloroethane	Not detected	0.2		ppbv	1	75-34-3	
1,1-Dichloroethene	Not detected	0.2		ppbv	1	75-35-4	
1,2-Dibromoethane	Not detected	0.01		ppbv	1	106-93-4	M
1,2-Dichloroethane	Not detected	0.2		ppbv	1	107-06-2	
1,2-Dichloropropane	Not detected	0.2		ppbv	1	78-87-5	
1,4-Dioxane	Not detected	2.5		ppbv	1	123-91-1	
Dichlorodifluoromethane	0.5	0.2		ppbv	1	75-71-8	
Dibromochloromethane	Not detected	0.2		ppbv	1	124-48-1	
trans-1,2-Dichloroethene	Not detected	0.2		ppbv	1	156-60-5	
cis-1,2-Dichloroethene	Not detected	0.2		ppbv	1	156-59-2	
cis-1,3-Dichloropropene	Not detected	0.2		ppbv	1	10061-01-5	
1,3-Dichlorobenzene	0.3	0.2		ppbv	1	541-73-1	
1,2-Dichlorobenzene	Not detected	0.2		ppbv	1	95-50-1	
1,4-Dichlorobenzene	Not detected	0.2		ppbv	1	106-46-7	
trans-1,3-Dichloropropene	Not detected	0.2		ppbv	1	10061-02-6	
Ethanol*	6.8	2.5		ppbv	1	64-17-5	
Ethylbenzene	Not detected	0.2		ppbv	1	100-41-4	
Ethyl Acetate*	Not detected	2.0		ppbv	1	141-78-6	
4-Ethyltoluene	Not detected	0.2		ppbv	1	622-96-8	
Freon 113	Not detected	0.2		ppbv	1	76-13-1	
Freon 114	Not detected	0.2		ppbv	1	76-14-2	
Heptane	Not detected	0.2		ppbv	1	142-82-5	
Hexachlorobutadiene	Not detected	0.2		ppbv	1	87-68-3	
Hexane	Not detected	0.2		ppbv	1	110-54-3	
2-Hexanone*	Not detected	0.5		ppbv	1	591-78-6	

M-Result reported to MDL not RDL

Lab Sample ID: S40706.11 (continued)
Sample Tag: VP-12

TO-15 (Replicate 01), Method: TO-15, Run Date: 10/21/22 02:41, Analyst: NDK (continued)

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Isopropyl Alcohol*	6.8	2.0		ppbv	1	67-63-0	
Methylene chloride	Not detected	0.5		ppbv	1	75-09-2	
2-Butanone (MEK)	Not detected	2.0		ppbv	1	78-93-3	
4-Methyl-2-pentanone (MIBK)	Not detected	0.5		ppbv	1	108-10-1	
tert-Methyl butyl ether (MTBE)	Not detected	0.2		ppbv	1	1634-04-4	
Methyl methacrylate	Not detected	0.2		ppbv	1	80-62-6	
Naphthalene	Not detected	0.2		ppbv	1	91-20-3	
Propylene*	Not detected	10		ppbv	1	115-07-1	
Styrene	Not detected	0.2		ppbv	1	100-42-5	
1,1,1-Trichloroethane	Not detected	0.2		ppbv	1	71-55-6	
1,1,2,2-Tetrachloroethane	Not detected	0.2		ppbv	1	79-34-5	
1,1,2-Trichloroethane	Not detected	0.2		ppbv	1	79-00-5	
1,2,4-Trichlorobenzene	Not detected	0.5		ppbv	1	120-82-1	
1,2,4-Trimethylbenzene	Not detected	0.2		ppbv	1	95-63-6	
1,3,5-Trimethylbenzene	Not detected	0.2		ppbv	1	108-67-8	
2,2,4-Trimethylpentane	Not detected	0.2		ppbv	1	540-84-1	
Tert-butyl Alcohol	Not detected	2.0		ppbv	1	75-65-0	
Tetrachloroethene	Not detected	0.2		ppbv	1	127-18-4	
Tetrahydrofuran*	Not detected	0.2		ppbv	1	109-99-9	
Toluene	0.2	0.2		ppbv	1	108-88-3	
Trichloroethene	Not detected	0.2		ppbv	1	79-01-6	
Trichlorofluoromethane	Not detected	0.2		ppbv	1	75-69-4	
Vinyl chloride	Not detected	0.2		ppbv	1	75-01-4	
Vinyl acetate	Not detected	2.0		ppbv	1	108-05-4	
p,m-Xylene	Not detected	0.4		ppbv	1		
o-Xylene	Not detected	0.2		ppbv	1	95-47-6	
Total Xylenes	Not detected	0.6		ppbv	1	1330-20-7	

TO-15 (Replicate 01), Method: TO-15, Run Date: 10/21/22 02:41, Analyst: NDK

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Acetone	14	4.8		ug/m3	1	67-64-1	
1,3-Butadiene	Not detected	4.4		ug/m3	1	106-99-0	
Benzene	Not detected	0.64		ug/m3	1	71-43-2	
Bromodichloromethane	Not detected	1.3		ug/m3	1	75-27-4	
Bromoform	Not detected	2.1		ug/m3	1	75-25-2	
Bromomethane	Not detected	0.78		ug/m3	1	74-83-9	
Vinyl bromide	Not detected	0.87		ug/m3	1	593-60-2	
Benzyl chloride	Not detected	1.0		ug/m3	1	100-44-7	
Carbon disulfide	Not detected	6.2		ug/m3	1	75-15-0	
Chlorobenzene	Not detected	0.92		ug/m3	1	108-90-7	
Chloroethane	Not detected	5.3		ug/m3	1	75-00-3	
Chloroform	Not detected	0.98		ug/m3	1	67-66-3	
Chloromethane	Not detected	4.1		ug/m3	1	74-87-3	
3-Chloropropene	Not detected	6.3		ug/m3	1	107-05-1	
2-Chlorotoluene	Not detected	1.0		ug/m3	1	95-49-8	
Carbon tetrachloride	Not detected	1.3		ug/m3	1	56-23-5	
Cyclohexane	Not detected	0.69		ug/m3	1	110-82-7	
1,1-Dichloroethane	Not detected	0.81		ug/m3	1	75-34-3	
1,1-Dichloroethene	Not detected	0.79		ug/m3	1	75-35-4	
1,2-Dibromoethane	Not detected	0.077		ug/m3	1	106-93-4	M

M-Result reported to MDL not RDL

Lab Sample ID: S40706.11 (continued)
Sample Tag: VP-12

TO-15 (Replicate 01), Method: TO-15, Run Date: 10/21/22 02:41, Analyst: NDK (continued)

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
1,2-Dichloroethane	Not detected	0.81		ug/m3	1	107-06-2	
1,2-Dichloropropane	Not detected	0.92		ug/m3	1	78-87-5	
1,4-Dioxane	Not detected	9.0		ug/m3	1	123-91-1	
Dichlorodifluoromethane	2.5	0.99		ug/m3	1	75-71-8	
Dibromochloromethane	Not detected	1.7		ug/m3	1	124-48-1	
trans-1,2-Dichloroethene	Not detected	0.79		ug/m3	1	156-60-5	
cis-1,2-Dichloroethene	Not detected	0.79		ug/m3	1	156-59-2	
cis-1,3-Dichloropropene	Not detected	0.91		ug/m3	1	10061-01-5	
1,3-Dichlorobenzene	1.8	1.2		ug/m3	1	541-73-1	
1,2-Dichlorobenzene	Not detected	1.2		ug/m3	1	95-50-1	
1,4-Dichlorobenzene	Not detected	1.2		ug/m3	1	106-46-7	
trans-1,3-Dichloropropene	Not detected	0.91		ug/m3	1	10061-02-6	
Ethanol*	13	4.7		ug/m3	1	64-17-5	
Ethylbenzene	Not detected	0.87		ug/m3	1	100-41-4	
Ethyl Acetate*	Not detected	7.2		ug/m3	1	141-78-6	
4-Ethyltoluene	Not detected	0.98		ug/m3	1	622-96-8	
Freon 113	Not detected	1.5		ug/m3	1	76-13-1	
Freon 114	Not detected	1.4		ug/m3	1	76-14-2	
Heptane	Not detected	0.82		ug/m3	1	142-82-5	
Hexachlorobutadiene	Not detected	2.1		ug/m3	1	87-68-3	
Hexane	Not detected	0.70		ug/m3	1	110-54-3	
2-Hexanone*	Not detected	2.0		ug/m3	1	591-78-6	
Isopropyl Alcohol*	17	4.9		ug/m3	1	67-63-0	
Methylene chloride	Not detected	1.7		ug/m3	1	75-09-2	
2-Butanone (MEK)	Not detected	5.9		ug/m3	1	78-93-3	
4-Methyl-2-pentanone (MIBK)	Not detected	2.0		ug/m3	1	108-10-1	
tert-Methyl butyl ether (MTBE)	Not detected	0.72		ug/m3	1	1634-04-4	
Methyl methacrylate	Not detected	0.82		ug/m3	1	80-62-6	
Naphthalene	Not detected	1.0		ug/m3	1	91-20-3	
Propylene*	Not detected	17		ug/m3	1	115-07-1	
Styrene	Not detected	0.85		ug/m3	1	100-42-5	
1,1,1-Trichloroethane	Not detected	1.1		ug/m3	1	71-55-6	
1,1,2,2-Tetrachloroethane	Not detected	1.4		ug/m3	1	79-34-5	
1,1,2-Trichloroethane	Not detected	1.1		ug/m3	1	79-00-5	
1,2,4-Trichlorobenzene	Not detected	3.7		ug/m3	1	120-82-1	
1,2,4-Trimethylbenzene	Not detected	0.98		ug/m3	1	95-63-6	
1,3,5-Trimethylbenzene	Not detected	0.98		ug/m3	1	108-67-8	
2,2,4-Trimethylpentane	Not detected	0.93		ug/m3	1	540-84-1	
Tert-butyl Alcohol	Not detected	6.1		ug/m3	1	75-65-0	
Tetrachloroethene	Not detected	1.4		ug/m3	1	127-18-4	
Tetrahydrofuran*	Not detected	0.59		ug/m3	1	109-99-9	
Toluene	0.75	0.75		ug/m3	1	108-88-3	
Trichloroethene	Not detected	1.1		ug/m3	1	79-01-6	
Trichlorofluoromethane	Not detected	1.1		ug/m3	1	75-69-4	
Vinyl chloride	Not detected	0.51		ug/m3	1	75-01-4	
Vinyl acetate	Not detected	7.0		ug/m3	1	108-05-4	
p,m-Xylene	Not detected	1.7		ug/m3	1		
o-Xylene	Not detected	0.87		ug/m3	1	95-47-6	
Total Xylenes	Not detected	2.6		ug/m3	1	1330-20-7	

Lab Sample ID: S40706.12

Sample Tag: VP-11

Collected Date/Time: 09/22/2022 15:15 - 09/22/2022 15:25

Matrix: Air

COC Reference: A5765

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
1	Air Canister	None	No	RT	IR

Extraction / Prep.

Parameter	Result	Method	Run Date	Analyst	Flags
Pressure check for TO-15*	-6	N/A	09/27/22 18:00	BDO	

Organics - Volatiles

TO-15, Method: TO-15, Run Date: 10/07/22 03:38, Analyst: NDK

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Acetone	Not detected	20		ppbv	10	67-64-1	
1,3-Butadiene	Not detected	20		ppbv	10	106-99-0	
Benzene	Not detected	2		ppbv	10	71-43-2	
Bromodichloromethane	Not detected	2		ppbv	10	75-27-4	
Bromoform	Not detected	2		ppbv	10	75-25-2	
Bromomethane	Not detected	2		ppbv	10	74-83-9	
Vinyl bromide	Not detected	2		ppbv	10	593-60-2	
Benzyl chloride	Not detected	2		ppbv	10	100-44-7	
Carbon disulfide	Not detected	20		ppbv	10	75-15-0	
Chlorobenzene	Not detected	2		ppbv	10	108-90-7	
Chloroethane	Not detected	20		ppbv	10	75-00-3	
Chloroform	Not detected	2		ppbv	10	67-66-3	
Chloromethane	Not detected	20		ppbv	10	74-87-3	
3-Chloropropene	Not detected	20		ppbv	10	107-05-1	
2-Chlorotoluene	Not detected	2		ppbv	10	95-49-8	
Carbon tetrachloride	Not detected	2		ppbv	10	56-23-5	
Cyclohexane	Not detected	2		ppbv	10	110-82-7	
1,1-Dichloroethane	Not detected	2		ppbv	10	75-34-3	
1,1-Dichloroethene	Not detected	2		ppbv	10	75-35-4	
1,2-Dibromoethane	Not detected	2		ppbv	10	106-93-4	
1,2-Dichloroethane	Not detected	2		ppbv	10	107-06-2	
1,2-Dichloropropane	Not detected	2		ppbv	10	78-87-5	
1,4-Dioxane	Not detected	25		ppbv	10	123-91-1	
Dichlorodifluoromethane	Not detected	2		ppbv	10	75-71-8	
Dibromochloromethane	Not detected	2		ppbv	10	124-48-1	
trans-1,2-Dichloroethene	Not detected	2		ppbv	10	156-60-5	
cis-1,2-Dichloroethene	Not detected	2		ppbv	10	156-59-2	
cis-1,3-Dichloropropene	Not detected	2		ppbv	10	10061-01-5	
1,3-Dichlorobenzene	Not detected	2		ppbv	10	541-73-1	
1,2-Dichlorobenzene	Not detected	2		ppbv	10	95-50-1	
1,4-Dichlorobenzene	Not detected	2		ppbv	10	106-46-7	
trans-1,3-Dichloropropene	Not detected	2		ppbv	10	10061-02-6	
Ethanol*	Not detected	25		ppbv	10	64-17-5	
Ethylbenzene	Not detected	2		ppbv	10	100-41-4	
Ethyl Acetate*	Not detected	20		ppbv	10	141-78-6	
4-Ethyltoluene	Not detected	2		ppbv	10	622-96-8	
Freon 113	Not detected	2		ppbv	10	76-13-1	

Lab Sample ID: S40706.12 (continued)
Sample Tag: VP-11

TO-15, Method: TO-15, Run Date: 10/07/22 03:38, Analyst: NDK (continued)

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Freon 114	Not detected	2		ppbv	10	76-14-2	
Heptane	Not detected	2		ppbv	10	142-82-5	
Hexachlorobutadiene	Not detected	2		ppbv	10	87-68-3	
Hexane	Not detected	2		ppbv	10	110-54-3	
2-Hexanone*	Not detected	5		ppbv	10	591-78-6	
Isopropyl Alcohol*	Not detected	20		ppbv	10	67-63-0	
Methylene chloride	Not detected	5		ppbv	10	75-09-2	
2-Butanone (MEK)	Not detected	20		ppbv	10	78-93-3	
4-Methyl-2-pentanone (MIBK)	Not detected	5		ppbv	10	108-10-1	
tert-Methyl butyl ether (MTBE)	Not detected	2		ppbv	10	1634-04-4	
Methyl methacrylate	Not detected	2		ppbv	10	80-62-6	
Naphthalene	Not detected	2		ppbv	10	91-20-3	
Propylene*	Not detected	100		ppbv	10	115-07-1	
Styrene	Not detected	2		ppbv	10	100-42-5	
1,1,1-Trichloroethane	Not detected	2		ppbv	10	71-55-6	
1,1,2,2-Tetrachloroethane	Not detected	2		ppbv	10	79-34-5	
1,1,2-Trichloroethane	Not detected	2		ppbv	10	79-00-5	
1,2,4-Trichlorobenzene	Not detected	5		ppbv	10	120-82-1	
1,2,4-Trimethylbenzene	Not detected	2		ppbv	10	95-63-6	
1,3,5-Trimethylbenzene	Not detected	2		ppbv	10	108-67-8	
2,2,4-Trimethylpentane	Not detected	2		ppbv	10	540-84-1	
Tert-butyl Alcohol	Not detected	20		ppbv	10	75-65-0	
Tetrachloroethene	Not detected	2		ppbv	10	127-18-4	
Tetrahydrofuran*	Not detected	2		ppbv	10	109-99-9	
Toluene	Not detected	2		ppbv	10	108-88-3	
Trichloroethene	Not detected	2		ppbv	10	79-01-6	
Trichlorofluoromethane	Not detected	2		ppbv	10	75-69-4	
Vinyl chloride	Not detected	2		ppbv	10	75-01-4	
Vinyl acetate	Not detected	20		ppbv	10	108-05-4	
p,m-Xylene	Not detected	4		ppbv	10		
o-Xylene	Not detected	2		ppbv	10	95-47-6	
Total Xylenes	Not detected	6		ppbv	10	1330-20-7	

TO-15, Method: TO-15, Run Date: 10/07/22 03:38, Analyst: NDK

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Acetone	Not detected	48		ug/m3	10	67-64-1	
1,3-Butadiene	Not detected	44		ug/m3	10	106-99-0	
Benzene	Not detected	6.4		ug/m3	10	71-43-2	
Bromodichloromethane	Not detected	13		ug/m3	10	75-27-4	
Bromoform	Not detected	21		ug/m3	10	75-25-2	
Bromomethane	Not detected	7.8		ug/m3	10	74-83-9	
Vinyl bromide	Not detected	8.7		ug/m3	10	593-60-2	
Benzyl chloride	Not detected	10		ug/m3	10	100-44-7	
Carbon disulfide	Not detected	62		ug/m3	10	75-15-0	
Chlorobenzene	Not detected	9.2		ug/m3	10	108-90-7	
Chloroethane	Not detected	53		ug/m3	10	75-00-3	
Chloroform	Not detected	9.8		ug/m3	10	67-66-3	
Chloromethane	Not detected	41		ug/m3	10	74-87-3	
3-Chloropropene	Not detected	63		ug/m3	10	107-05-1	
2-Chlorotoluene	Not detected	10		ug/m3	10	95-49-8	

Lab Sample ID: S40706.12 (continued)
Sample Tag: VP-11

TO-15, Method: TO-15, Run Date: 10/07/22 03:38, Analyst: NDK (continued)

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Carbon tetrachloride	Not detected	13		ug/m3	10	56-23-5	
Cyclohexane	Not detected	6.9		ug/m3	10	110-82-7	
1,1-Dichloroethane	Not detected	8.1		ug/m3	10	75-34-3	
1,1-Dichloroethene	Not detected	7.9		ug/m3	10	75-35-4	
1,2-Dibromoethane	Not detected	15		ug/m3	10	106-93-4	
1,2-Dichloroethane	Not detected	8.1		ug/m3	10	107-06-2	
1,2-Dichloropropane	Not detected	9.2		ug/m3	10	78-87-5	
1,4-Dioxane	Not detected	90		ug/m3	10	123-91-1	
Dichlorodifluoromethane	Not detected	9.9		ug/m3	10	75-71-8	
Dibromochloromethane	Not detected	17		ug/m3	10	124-48-1	
trans-1,2-Dichloroethene	Not detected	7.9		ug/m3	10	156-60-5	
cis-1,2-Dichloroethene	Not detected	7.9		ug/m3	10	156-59-2	
cis-1,3-Dichloropropene	Not detected	9.1		ug/m3	10	10061-01-5	
1,3-Dichlorobenzene	Not detected	12		ug/m3	10	541-73-1	
1,2-Dichlorobenzene	Not detected	12		ug/m3	10	95-50-1	
1,4-Dichlorobenzene	Not detected	12		ug/m3	10	106-46-7	
trans-1,3-Dichloropropene	Not detected	9.1		ug/m3	10	10061-02-6	
Ethanol*	Not detected	47		ug/m3	10	64-17-5	
Ethylbenzene	Not detected	8.7		ug/m3	10	100-41-4	
Ethyl Acetate*	Not detected	72		ug/m3	10	141-78-6	
4-Ethyltoluene	Not detected	9.8		ug/m3	10	622-96-8	
Freon 113	Not detected	15		ug/m3	10	76-13-1	
Freon 114	Not detected	14		ug/m3	10	76-14-2	
Heptane	Not detected	8.2		ug/m3	10	142-82-5	
Hexachlorobutadiene	Not detected	21		ug/m3	10	87-68-3	
Hexane	Not detected	7.0		ug/m3	10	110-54-3	
2-Hexanone*	Not detected	20		ug/m3	10	591-78-6	
Isopropyl Alcohol*	Not detected	49		ug/m3	10	67-63-0	
Methylene chloride	Not detected	17		ug/m3	10	75-09-2	
2-Butanone (MEK)	Not detected	59		ug/m3	10	78-93-3	
4-Methyl-2-pentanone (MIBK)	Not detected	20		ug/m3	10	108-10-1	
tert-Methyl butyl ether (MTBE)	Not detected	7.2		ug/m3	10	1634-04-4	
Methyl methacrylate	Not detected	8.2		ug/m3	10	80-62-6	
Naphthalene	Not detected	10		ug/m3	10	91-20-3	
Propylene*	Not detected	170		ug/m3	10	115-07-1	
Styrene	Not detected	8.5		ug/m3	10	100-42-5	
1,1,1-Trichloroethane	Not detected	11		ug/m3	10	71-55-6	
1,1,2,2-Tetrachloroethane	Not detected	14		ug/m3	10	79-34-5	
1,1,2-Trichloroethane	Not detected	11		ug/m3	10	79-00-5	
1,2,4-Trichlorobenzene	Not detected	37		ug/m3	10	120-82-1	
1,2,4-Trimethylbenzene	Not detected	9.8		ug/m3	10	95-63-6	
1,3,5-Trimethylbenzene	Not detected	9.8		ug/m3	10	108-67-8	
2,2,4-Trimethylpentane	Not detected	9.3		ug/m3	10	540-84-1	
Tert-butyl Alcohol	Not detected	61		ug/m3	10	75-65-0	
Tetrachloroethene	Not detected	14		ug/m3	10	127-18-4	
Tetrahydrofuran*	Not detected	5.9		ug/m3	10	109-99-9	
Toluene	Not detected	7.5		ug/m3	10	108-88-3	
Trichloroethene	Not detected	11		ug/m3	10	79-01-6	
Trichlorofluoromethane	Not detected	11		ug/m3	10	75-69-4	
Vinyl chloride	Not detected	5.1		ug/m3	10	75-01-4	

Lab Sample ID: S40706.12 (continued)
Sample Tag: VP-11

TO-15, Method: TO-15, Run Date: 10/07/22 03:38, Analyst: NDK (continued)

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Vinyl acetate	Not detected	70		ug/m3	10	108-05-4	
p,m-Xylene	Not detected	17		ug/m3	10		
o-Xylene	Not detected	8.7		ug/m3	10	95-47-6	
Total Xylenes	Not detected	26		ug/m3	10	1330-20-7	

TO-15 (Replicate 01), Method: TO-15, Run Date: 10/21/22 03:12, Analyst: NDK

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Acetone	6.3	2.0		ppbv	1	67-64-1	
1,3-Butadiene	Not detected	2.0		ppbv	1	106-99-0	
Benzene	Not detected	0.2		ppbv	1	71-43-2	
Bromodichloromethane	Not detected	0.2		ppbv	1	75-27-4	
Bromoform	Not detected	0.2		ppbv	1	75-25-2	
Bromomethane	Not detected	0.2		ppbv	1	74-83-9	
Vinyl bromide	Not detected	0.2		ppbv	1	593-60-2	
Benzyl chloride	Not detected	0.2		ppbv	1	100-44-7	
Carbon disulfide	Not detected	2.0		ppbv	1	75-15-0	
Chlorobenzene	Not detected	0.2		ppbv	1	108-90-7	
Chloroethane	Not detected	2.0		ppbv	1	75-00-3	
Chloroform	0.5	0.2		ppbv	1	67-66-3	
Chloromethane	Not detected	2.0		ppbv	1	74-87-3	
3-Chloropropene	Not detected	2.0		ppbv	1	107-05-1	
2-Chlorotoluene	Not detected	0.2		ppbv	1	95-49-8	
Carbon tetrachloride	Not detected	0.2		ppbv	1	56-23-5	
Cyclohexane	Not detected	0.2		ppbv	1	110-82-7	
1,1-Dichloroethane	Not detected	0.2		ppbv	1	75-34-3	
1,1-Dichloroethene	Not detected	0.2		ppbv	1	75-35-4	
1,2-Dibromoethane	Not detected	0.01		ppbv	1	106-93-4	M
1,2-Dichloroethane	Not detected	0.2		ppbv	1	107-06-2	
1,2-Dichloropropane	Not detected	0.2		ppbv	1	78-87-5	
1,4-Dioxane	Not detected	2.5		ppbv	1	123-91-1	
Dichlorodifluoromethane	0.5	0.2		ppbv	1	75-71-8	
Dibromochloromethane	Not detected	0.2		ppbv	1	124-48-1	
trans-1,2-Dichloroethene	Not detected	0.2		ppbv	1	156-60-5	
cis-1,2-Dichloroethene	Not detected	0.2		ppbv	1	156-59-2	
cis-1,3-Dichloropropene	Not detected	0.2		ppbv	1	10061-01-5	
1,3-Dichlorobenzene	0.4	0.2		ppbv	1	541-73-1	
1,2-Dichlorobenzene	Not detected	0.2		ppbv	1	95-50-1	
1,4-Dichlorobenzene	Not detected	0.2		ppbv	1	106-46-7	
trans-1,3-Dichloropropene	Not detected	0.2		ppbv	1	10061-02-6	
Ethanol*	7.2	2.5		ppbv	1	64-17-5	
Ethylbenzene	Not detected	0.2		ppbv	1	100-41-4	
Ethyl Acetate*	Not detected	2.0		ppbv	1	141-78-6	
4-Ethyltoluene	Not detected	0.2		ppbv	1	622-96-8	
Freon 113	Not detected	0.2		ppbv	1	76-13-1	
Freon 114	Not detected	0.2		ppbv	1	76-14-2	
Heptane	Not detected	0.2		ppbv	1	142-82-5	
Hexachlorobutadiene	Not detected	0.2		ppbv	1	87-68-3	
Hexane	Not detected	0.2		ppbv	1	110-54-3	
2-Hexanone*	Not detected	0.5		ppbv	1	591-78-6	

M-Result reported to MDL not RDL

Lab Sample ID: S40706.12 (continued)
Sample Tag: VP-11

TO-15 (Replicate 01), Method: TO-15, Run Date: 10/21/22 03:12, Analyst: NDK (continued)

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Isopropyl Alcohol*	5.5	2.0		ppbv	1	67-63-0	
Methylene chloride	Not detected	0.5		ppbv	1	75-09-2	
2-Butanone (MEK)	Not detected	2.0		ppbv	1	78-93-3	
4-Methyl-2-pentanone (MIBK)	Not detected	0.5		ppbv	1	108-10-1	
tert-Methyl butyl ether (MTBE)	Not detected	0.2		ppbv	1	1634-04-4	
Methyl methacrylate	Not detected	0.2		ppbv	1	80-62-6	
Naphthalene	Not detected	0.2		ppbv	1	91-20-3	
Propylene*	Not detected	10		ppbv	1	115-07-1	
Styrene	Not detected	0.2		ppbv	1	100-42-5	
1,1,1-Trichloroethane	Not detected	0.2		ppbv	1	71-55-6	
1,1,2,2-Tetrachloroethane	Not detected	0.2		ppbv	1	79-34-5	
1,1,2-Trichloroethane	Not detected	0.2		ppbv	1	79-00-5	
1,2,4-Trichlorobenzene	Not detected	0.5		ppbv	1	120-82-1	
1,2,4-Trimethylbenzene	Not detected	0.2		ppbv	1	95-63-6	
1,3,5-Trimethylbenzene	Not detected	0.2		ppbv	1	108-67-8	
2,2,4-Trimethylpentane	Not detected	0.2		ppbv	1	540-84-1	
Tert-butyl Alcohol	Not detected	2.0		ppbv	1	75-65-0	
Tetrachloroethene	Not detected	0.2		ppbv	1	127-18-4	
Tetrahydrofuran*	Not detected	0.2		ppbv	1	109-99-9	
Toluene	Not detected	0.2		ppbv	1	108-88-3	
Trichloroethene	Not detected	0.2		ppbv	1	79-01-6	
Trichlorofluoromethane	Not detected	0.2		ppbv	1	75-69-4	
Vinyl chloride	Not detected	0.2		ppbv	1	75-01-4	
Vinyl acetate	Not detected	2.0		ppbv	1	108-05-4	
p,m-Xylene	Not detected	0.4		ppbv	1		
o-Xylene	Not detected	0.2		ppbv	1	95-47-6	
Total Xylenes	Not detected	0.6		ppbv	1	1330-20-7	

TO-15 (Replicate 01), Method: TO-15, Run Date: 10/21/22 03:12, Analyst: NDK

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Acetone	15	4.8		ug/m3	1	67-64-1	
1,3-Butadiene	Not detected	4.4		ug/m3	1	106-99-0	
Benzene	Not detected	0.64		ug/m3	1	71-43-2	
Bromodichloromethane	Not detected	1.3		ug/m3	1	75-27-4	
Bromoform	Not detected	2.1		ug/m3	1	75-25-2	
Bromomethane	Not detected	0.78		ug/m3	1	74-83-9	
Vinyl bromide	Not detected	0.87		ug/m3	1	593-60-2	
Benzyl chloride	Not detected	1.0		ug/m3	1	100-44-7	
Carbon disulfide	Not detected	6.2		ug/m3	1	75-15-0	
Chlorobenzene	Not detected	0.92		ug/m3	1	108-90-7	
Chloroethane	Not detected	5.3		ug/m3	1	75-00-3	
Chloroform	2.4	0.98		ug/m3	1	67-66-3	
Chloromethane	Not detected	4.1		ug/m3	1	74-87-3	
3-Chloropropene	Not detected	6.3		ug/m3	1	107-05-1	
2-Chlorotoluene	Not detected	1.0		ug/m3	1	95-49-8	
Carbon tetrachloride	Not detected	1.3		ug/m3	1	56-23-5	
Cyclohexane	Not detected	0.69		ug/m3	1	110-82-7	
1,1-Dichloroethane	Not detected	0.81		ug/m3	1	75-34-3	
1,1-Dichloroethene	Not detected	0.79		ug/m3	1	75-35-4	
1,2-Dibromoethane	Not detected	0.077		ug/m3	1	106-93-4	M

M-Result reported to MDL not RDL

Lab Sample ID: S40706.12 (continued)
Sample Tag: VP-11

TO-15 (Replicate 01), Method: TO-15, Run Date: 10/21/22 03:12, Analyst: NDK (continued)

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
1,2-Dichloroethane	Not detected	0.81		ug/m3	1	107-06-2	
1,2-Dichloropropane	Not detected	0.92		ug/m3	1	78-87-5	
1,4-Dioxane	Not detected	9.0		ug/m3	1	123-91-1	
Dichlorodifluoromethane	2.5	0.99		ug/m3	1	75-71-8	
Dibromochloromethane	Not detected	1.7		ug/m3	1	124-48-1	
trans-1,2-Dichloroethene	Not detected	0.79		ug/m3	1	156-60-5	
cis-1,2-Dichloroethene	Not detected	0.79		ug/m3	1	156-59-2	
cis-1,3-Dichloropropene	Not detected	0.91		ug/m3	1	10061-01-5	
1,3-Dichlorobenzene	2.4	1.2		ug/m3	1	541-73-1	
1,2-Dichlorobenzene	Not detected	1.2		ug/m3	1	95-50-1	
1,4-Dichlorobenzene	Not detected	1.2		ug/m3	1	106-46-7	
trans-1,3-Dichloropropene	Not detected	0.91		ug/m3	1	10061-02-6	
Ethanol*	14	4.7		ug/m3	1	64-17-5	
Ethylbenzene	Not detected	0.87		ug/m3	1	100-41-4	
Ethyl Acetate*	Not detected	7.2		ug/m3	1	141-78-6	
4-Ethyltoluene	Not detected	0.98		ug/m3	1	622-96-8	
Freon 113	Not detected	1.5		ug/m3	1	76-13-1	
Freon 114	Not detected	1.4		ug/m3	1	76-14-2	
Heptane	Not detected	0.82		ug/m3	1	142-82-5	
Hexachlorobutadiene	Not detected	2.1		ug/m3	1	87-68-3	
Hexane	Not detected	0.70		ug/m3	1	110-54-3	
2-Hexanone*	Not detected	2.0		ug/m3	1	591-78-6	
Isopropyl Alcohol*	14	4.9		ug/m3	1	67-63-0	
Methylene chloride	Not detected	1.7		ug/m3	1	75-09-2	
2-Butanone (MEK)	Not detected	5.9		ug/m3	1	78-93-3	
4-Methyl-2-pentanone (MIBK)	Not detected	2.0		ug/m3	1	108-10-1	
tert-Methyl butyl ether (MTBE)	Not detected	0.72		ug/m3	1	1634-04-4	
Methyl methacrylate	Not detected	0.82		ug/m3	1	80-62-6	
Naphthalene	Not detected	1.0		ug/m3	1	91-20-3	
Propylene*	Not detected	17		ug/m3	1	115-07-1	
Styrene	Not detected	0.85		ug/m3	1	100-42-5	
1,1,1-Trichloroethane	Not detected	1.1		ug/m3	1	71-55-6	
1,1,2,2-Tetrachloroethane	Not detected	1.4		ug/m3	1	79-34-5	
1,1,2-Trichloroethane	Not detected	1.1		ug/m3	1	79-00-5	
1,2,4-Trichlorobenzene	Not detected	3.7		ug/m3	1	120-82-1	
1,2,4-Trimethylbenzene	Not detected	0.98		ug/m3	1	95-63-6	
1,3,5-Trimethylbenzene	Not detected	0.98		ug/m3	1	108-67-8	
2,2,4-Trimethylpentane	Not detected	0.93		ug/m3	1	540-84-1	
Tert-butyl Alcohol	Not detected	6.1		ug/m3	1	75-65-0	
Tetrachloroethene	Not detected	1.4		ug/m3	1	127-18-4	
Tetrahydrofuran*	Not detected	0.59		ug/m3	1	109-99-9	
Toluene	Not detected	0.75		ug/m3	1	108-88-3	
Trichloroethene	Not detected	1.1		ug/m3	1	79-01-6	
Trichlorofluoromethane	Not detected	1.1		ug/m3	1	75-69-4	
Vinyl chloride	Not detected	0.51		ug/m3	1	75-01-4	
Vinyl acetate	Not detected	7.0		ug/m3	1	108-05-4	
p,m-Xylene	Not detected	1.7		ug/m3	1		
o-Xylene	Not detected	0.87		ug/m3	1	95-47-6	
Total Xylenes	Not detected	2.6		ug/m3	1	1330-20-7	

Lab Sample ID: S40706.13

Sample Tag: VP-13

Collected Date/Time: 09/23/2022 08:49 - 09/23/2022 08:54

Matrix: Air

COC Reference: A5765

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
1	Air Canister	None	No	RT	IR

Extraction / Prep.

Parameter	Result	Method	Run Date	Analyst	Flags
Pressure check for TO-15*	-4	N/A	09/27/22 18:00	BDO	

Organics - Volatiles

TO-15, Method: TO-15, Run Date: 10/07/22 04:08, Analyst: NDK

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Acetone	Not detected	20		ppbv	10	67-64-1	
1,3-Butadiene	Not detected	20		ppbv	10	106-99-0	
Benzene	Not detected	2		ppbv	10	71-43-2	
Bromodichloromethane	Not detected	2		ppbv	10	75-27-4	
Bromoform	Not detected	2		ppbv	10	75-25-2	
Bromomethane	Not detected	2		ppbv	10	74-83-9	
Vinyl bromide	Not detected	2		ppbv	10	593-60-2	
Benzyl chloride	Not detected	2		ppbv	10	100-44-7	
Carbon disulfide	Not detected	20		ppbv	10	75-15-0	
Chlorobenzene	Not detected	2		ppbv	10	108-90-7	
Chloroethane	Not detected	20		ppbv	10	75-00-3	
Chloroform	Not detected	2		ppbv	10	67-66-3	
Chloromethane	Not detected	20		ppbv	10	74-87-3	
3-Chloropropene	Not detected	20		ppbv	10	107-05-1	
2-Chlorotoluene	Not detected	2		ppbv	10	95-49-8	
Carbon tetrachloride	Not detected	2		ppbv	10	56-23-5	
Cyclohexane	Not detected	2		ppbv	10	110-82-7	
1,1-Dichloroethane	Not detected	2		ppbv	10	75-34-3	
1,1-Dichloroethene	Not detected	2		ppbv	10	75-35-4	
1,2-Dibromoethane	Not detected	2		ppbv	10	106-93-4	
1,2-Dichloroethane	Not detected	2		ppbv	10	107-06-2	
1,2-Dichloropropane	Not detected	2		ppbv	10	78-87-5	
1,4-Dioxane	Not detected	25		ppbv	10	123-91-1	
Dichlorodifluoromethane	Not detected	2		ppbv	10	75-71-8	
Dibromochloromethane	Not detected	2		ppbv	10	124-48-1	
trans-1,2-Dichloroethene	Not detected	2		ppbv	10	156-60-5	
cis-1,2-Dichloroethene	Not detected	2		ppbv	10	156-59-2	
cis-1,3-Dichloropropene	Not detected	2		ppbv	10	10061-01-5	
1,3-Dichlorobenzene	Not detected	2		ppbv	10	541-73-1	
1,2-Dichlorobenzene	Not detected	2		ppbv	10	95-50-1	
1,4-Dichlorobenzene	Not detected	2		ppbv	10	106-46-7	
trans-1,3-Dichloropropene	Not detected	2		ppbv	10	10061-02-6	
Ethanol*	Not detected	25		ppbv	10	64-17-5	
Ethylbenzene	Not detected	2		ppbv	10	100-41-4	
Ethyl Acetate*	Not detected	20		ppbv	10	141-78-6	
4-Ethyltoluene	Not detected	2		ppbv	10	622-96-8	
Freon 113	Not detected	2		ppbv	10	76-13-1	

Lab Sample ID: S40706.13 (continued)
Sample Tag: VP-13

TO-15, Method: TO-15, Run Date: 10/07/22 04:08, Analyst: NDK (continued)

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Freon 114	Not detected	2		ppbv	10	76-14-2	
Heptane	Not detected	2		ppbv	10	142-82-5	
Hexachlorobutadiene	Not detected	2		ppbv	10	87-68-3	
Hexane	Not detected	2		ppbv	10	110-54-3	
2-Hexanone*	Not detected	5		ppbv	10	591-78-6	
Isopropyl Alcohol*	Not detected	20		ppbv	10	67-63-0	
Methylene chloride	Not detected	5		ppbv	10	75-09-2	
2-Butanone (MEK)	Not detected	20		ppbv	10	78-93-3	
4-Methyl-2-pentanone (MIBK)	Not detected	5		ppbv	10	108-10-1	
tert-Methyl butyl ether (MTBE)	Not detected	2		ppbv	10	1634-04-4	
Methyl methacrylate	Not detected	2		ppbv	10	80-62-6	
Naphthalene	Not detected	2		ppbv	10	91-20-3	
Propylene*	Not detected	100		ppbv	10	115-07-1	
Styrene	Not detected	2		ppbv	10	100-42-5	
1,1,1-Trichloroethane	Not detected	2		ppbv	10	71-55-6	
1,1,2,2-Tetrachloroethane	Not detected	2		ppbv	10	79-34-5	
1,1,2-Trichloroethane	Not detected	2		ppbv	10	79-00-5	
1,2,4-Trichlorobenzene	Not detected	5		ppbv	10	120-82-1	
1,2,4-Trimethylbenzene	Not detected	2		ppbv	10	95-63-6	
1,3,5-Trimethylbenzene	Not detected	2		ppbv	10	108-67-8	
2,2,4-Trimethylpentane	Not detected	2		ppbv	10	540-84-1	
Tert-butyl Alcohol	Not detected	20		ppbv	10	75-65-0	
Tetrachloroethene	Not detected	2		ppbv	10	127-18-4	
Tetrahydrofuran*	Not detected	2		ppbv	10	109-99-9	
Toluene	Not detected	2		ppbv	10	108-88-3	
Trichloroethene	Not detected	2		ppbv	10	79-01-6	
Trichlorofluoromethane	Not detected	2		ppbv	10	75-69-4	
Vinyl chloride	Not detected	2		ppbv	10	75-01-4	
Vinyl acetate	Not detected	20		ppbv	10	108-05-4	
p,m-Xylene	Not detected	4		ppbv	10		
o-Xylene	Not detected	2		ppbv	10	95-47-6	
Total Xylenes	Not detected	6		ppbv	10	1330-20-7	

TO-15, Method: TO-15, Run Date: 10/07/22 04:08, Analyst: NDK

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Acetone	Not detected	48		ug/m3	10	67-64-1	
1,3-Butadiene	Not detected	44		ug/m3	10	106-99-0	
Benzene	Not detected	6.4		ug/m3	10	71-43-2	
Bromodichloromethane	Not detected	13		ug/m3	10	75-27-4	
Bromoform	Not detected	21		ug/m3	10	75-25-2	
Bromomethane	Not detected	7.8		ug/m3	10	74-83-9	
Vinyl bromide	Not detected	8.7		ug/m3	10	593-60-2	
Benzyl chloride	Not detected	10		ug/m3	10	100-44-7	
Carbon disulfide	Not detected	62		ug/m3	10	75-15-0	
Chlorobenzene	Not detected	9.2		ug/m3	10	108-90-7	
Chloroethane	Not detected	53		ug/m3	10	75-00-3	
Chloroform	Not detected	9.8		ug/m3	10	67-66-3	
Chloromethane	Not detected	41		ug/m3	10	74-87-3	
3-Chloropropene	Not detected	63		ug/m3	10	107-05-1	
2-Chlorotoluene	Not detected	10		ug/m3	10	95-49-8	

Lab Sample ID: S40706.13 (continued)
Sample Tag: VP-13

TO-15, Method: TO-15, Run Date: 10/07/22 04:08, Analyst: NDK (continued)

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Carbon tetrachloride	Not detected	13		ug/m3	10	56-23-5	
Cyclohexane	Not detected	6.9		ug/m3	10	110-82-7	
1,1-Dichloroethane	Not detected	8.1		ug/m3	10	75-34-3	
1,1-Dichloroethene	Not detected	7.9		ug/m3	10	75-35-4	
1,2-Dibromoethane	Not detected	15		ug/m3	10	106-93-4	
1,2-Dichloroethane	Not detected	8.1		ug/m3	10	107-06-2	
1,2-Dichloropropane	Not detected	9.2		ug/m3	10	78-87-5	
1,4-Dioxane	Not detected	90		ug/m3	10	123-91-1	
Dichlorodifluoromethane	Not detected	9.9		ug/m3	10	75-71-8	
Dibromochloromethane	Not detected	17		ug/m3	10	124-48-1	
trans-1,2-Dichloroethene	Not detected	7.9		ug/m3	10	156-60-5	
cis-1,2-Dichloroethene	Not detected	7.9		ug/m3	10	156-59-2	
cis-1,3-Dichloropropene	Not detected	9.1		ug/m3	10	10061-01-5	
1,3-Dichlorobenzene	Not detected	12		ug/m3	10	541-73-1	
1,2-Dichlorobenzene	Not detected	12		ug/m3	10	95-50-1	
1,4-Dichlorobenzene	Not detected	12		ug/m3	10	106-46-7	
trans-1,3-Dichloropropene	Not detected	9.1		ug/m3	10	10061-02-6	
Ethanol*	Not detected	47		ug/m3	10	64-17-5	
Ethylbenzene	Not detected	8.7		ug/m3	10	100-41-4	
Ethyl Acetate*	Not detected	72		ug/m3	10	141-78-6	
4-Ethyltoluene	Not detected	9.8		ug/m3	10	622-96-8	
Freon 113	Not detected	15		ug/m3	10	76-13-1	
Freon 114	Not detected	14		ug/m3	10	76-14-2	
Heptane	Not detected	8.2		ug/m3	10	142-82-5	
Hexachlorobutadiene	Not detected	21		ug/m3	10	87-68-3	
Hexane	Not detected	7.0		ug/m3	10	110-54-3	
2-Hexanone*	Not detected	20		ug/m3	10	591-78-6	
Isopropyl Alcohol*	Not detected	49		ug/m3	10	67-63-0	
Methylene chloride	Not detected	17		ug/m3	10	75-09-2	
2-Butanone (MEK)	Not detected	59		ug/m3	10	78-93-3	
4-Methyl-2-pentanone (MIBK)	Not detected	20		ug/m3	10	108-10-1	
tert-Methyl butyl ether (MTBE)	Not detected	7.2		ug/m3	10	1634-04-4	
Methyl methacrylate	Not detected	8.2		ug/m3	10	80-62-6	
Naphthalene	Not detected	10		ug/m3	10	91-20-3	
Propylene*	Not detected	170		ug/m3	10	115-07-1	
Styrene	Not detected	8.5		ug/m3	10	100-42-5	
1,1,1-Trichloroethane	Not detected	11		ug/m3	10	71-55-6	
1,1,2,2-Tetrachloroethane	Not detected	14		ug/m3	10	79-34-5	
1,1,2-Trichloroethane	Not detected	11		ug/m3	10	79-00-5	
1,2,4-Trichlorobenzene	Not detected	37		ug/m3	10	120-82-1	
1,2,4-Trimethylbenzene	Not detected	9.8		ug/m3	10	95-63-6	
1,3,5-Trimethylbenzene	Not detected	9.8		ug/m3	10	108-67-8	
2,2,4-Trimethylpentane	Not detected	9.3		ug/m3	10	540-84-1	
Tert-butyl Alcohol	Not detected	61		ug/m3	10	75-65-0	
Tetrachloroethene	Not detected	14		ug/m3	10	127-18-4	
Tetrahydrofuran*	Not detected	5.9		ug/m3	10	109-99-9	
Toluene	Not detected	7.5		ug/m3	10	108-88-3	
Trichloroethene	Not detected	11		ug/m3	10	79-01-6	
Trichlorofluoromethane	Not detected	11		ug/m3	10	75-69-4	
Vinyl chloride	Not detected	5.1		ug/m3	10	75-01-4	

Lab Sample ID: S40706.13 (continued)
Sample Tag: VP-13

TO-15, Method: TO-15, Run Date: 10/07/22 04:08, Analyst: NDK (continued)

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Vinyl acetate	Not detected	70		ug/m3	10	108-05-4	
p,m-Xylene	Not detected	17		ug/m3	10		
o-Xylene	Not detected	8.7		ug/m3	10	95-47-6	
Total Xylenes	Not detected	26		ug/m3	10	1330-20-7	

TO-15 (Replicate 01), Method: TO-15, Run Date: 10/21/22 03:43, Analyst: NDK

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Acetone	5.6	2.0		ppbv	1	67-64-1	
1,3-Butadiene	Not detected	2.0		ppbv	1	106-99-0	
Benzene	0.4	0.2		ppbv	1	71-43-2	
Bromodichloromethane	Not detected	0.2		ppbv	1	75-27-4	
Bromoform	Not detected	0.2		ppbv	1	75-25-2	
Bromomethane	Not detected	0.2		ppbv	1	74-83-9	
Vinyl bromide	Not detected	0.2		ppbv	1	593-60-2	
Benzyl chloride	Not detected	0.2		ppbv	1	100-44-7	
Carbon disulfide	Not detected	2.0		ppbv	1	75-15-0	
Chlorobenzene	Not detected	0.2		ppbv	1	108-90-7	
Chloroethane	Not detected	2.0		ppbv	1	75-00-3	
Chloroform	Not detected	0.2		ppbv	1	67-66-3	
Chloromethane	Not detected	2.0		ppbv	1	74-87-3	
3-Chloropropene	Not detected	2.0		ppbv	1	107-05-1	
2-Chlorotoluene	Not detected	0.2		ppbv	1	95-49-8	
Carbon tetrachloride	Not detected	0.2		ppbv	1	56-23-5	
Cyclohexane	Not detected	0.2		ppbv	1	110-82-7	
1,1-Dichloroethane	Not detected	0.2		ppbv	1	75-34-3	
1,1-Dichloroethene	Not detected	0.2		ppbv	1	75-35-4	
1,2-Dibromoethane	Not detected	0.01		ppbv	1	106-93-4	M
1,2-Dichloroethane	Not detected	0.2		ppbv	1	107-06-2	
1,2-Dichloropropane	Not detected	0.2		ppbv	1	78-87-5	
1,4-Dioxane	Not detected	2.5		ppbv	1	123-91-1	
Dichlorodifluoromethane	0.4	0.2		ppbv	1	75-71-8	
Dibromochloromethane	Not detected	0.2		ppbv	1	124-48-1	
trans-1,2-Dichloroethene	Not detected	0.2		ppbv	1	156-60-5	
cis-1,2-Dichloroethene	Not detected	0.2		ppbv	1	156-59-2	
cis-1,3-Dichloropropene	Not detected	0.2		ppbv	1	10061-01-5	
1,3-Dichlorobenzene	0.4	0.2		ppbv	1	541-73-1	
1,2-Dichlorobenzene	Not detected	0.2		ppbv	1	95-50-1	
1,4-Dichlorobenzene	Not detected	0.2		ppbv	1	106-46-7	
trans-1,3-Dichloropropene	Not detected	0.2		ppbv	1	10061-02-6	
Ethanol*	9.5	2.5		ppbv	1	64-17-5	
Ethylbenzene	Not detected	0.2		ppbv	1	100-41-4	
Ethyl Acetate*	Not detected	2.0		ppbv	1	141-78-6	
4-Ethyltoluene	Not detected	0.2		ppbv	1	622-96-8	
Freon 113	Not detected	0.2		ppbv	1	76-13-1	
Freon 114	Not detected	0.2		ppbv	1	76-14-2	
Heptane	Not detected	0.2		ppbv	1	142-82-5	
Hexachlorobutadiene	Not detected	0.2		ppbv	1	87-68-3	
Hexane	Not detected	0.2		ppbv	1	110-54-3	
2-Hexanone*	Not detected	0.5		ppbv	1	591-78-6	

M-Result reported to MDL not RDL

Lab Sample ID: S40706.13 (continued)
Sample Tag: VP-13

TO-15 (Replicate 01), Method: TO-15, Run Date: 10/21/22 03:43, Analyst: NDK (continued)

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Isopropyl Alcohol*	4.9	2.0		ppbv	1	67-63-0	
Methylene chloride	Not detected	0.5		ppbv	1	75-09-2	
2-Butanone (MEK)	Not detected	2.0		ppbv	1	78-93-3	
4-Methyl-2-pentanone (MIBK)	Not detected	0.5		ppbv	1	108-10-1	
tert-Methyl butyl ether (MTBE)	Not detected	0.2		ppbv	1	1634-04-4	
Methyl methacrylate	Not detected	0.2		ppbv	1	80-62-6	
Naphthalene	Not detected	0.2		ppbv	1	91-20-3	
Propylene*	Not detected	10		ppbv	1	115-07-1	
Styrene	Not detected	0.2		ppbv	1	100-42-5	
1,1,1-Trichloroethane	Not detected	0.2		ppbv	1	71-55-6	
1,1,2,2-Tetrachloroethane	Not detected	0.2		ppbv	1	79-34-5	
1,1,2-Trichloroethane	Not detected	0.2		ppbv	1	79-00-5	
1,2,4-Trichlorobenzene	Not detected	0.5		ppbv	1	120-82-1	
1,2,4-Trimethylbenzene	Not detected	0.2		ppbv	1	95-63-6	
1,3,5-Trimethylbenzene	Not detected	0.2		ppbv	1	108-67-8	
2,2,4-Trimethylpentane	Not detected	0.2		ppbv	1	540-84-1	
Tert-butyl Alcohol	Not detected	2.0		ppbv	1	75-65-0	
Tetrachloroethene	Not detected	0.2		ppbv	1	127-18-4	
Tetrahydrofuran*	Not detected	0.2		ppbv	1	109-99-9	
Toluene	0.8	0.2		ppbv	1	108-88-3	
Trichloroethene	Not detected	0.2		ppbv	1	79-01-6	
Trichlorofluoromethane	Not detected	0.2		ppbv	1	75-69-4	
Vinyl chloride	Not detected	0.2		ppbv	1	75-01-4	
Vinyl acetate	Not detected	2.0		ppbv	1	108-05-4	
p,m-Xylene	Not detected	0.4		ppbv	1		
o-Xylene	Not detected	0.2		ppbv	1	95-47-6	
Total Xylenes	Not detected	0.6		ppbv	1	1330-20-7	

TO-15 (Replicate 01), Method: TO-15, Run Date: 10/21/22 03:43, Analyst: NDK

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Acetone	13	4.8		ug/m3	1	67-64-1	
1,3-Butadiene	Not detected	4.4		ug/m3	1	106-99-0	
Benzene	1.3	0.64		ug/m3	1	71-43-2	
Bromodichloromethane	Not detected	1.3		ug/m3	1	75-27-4	
Bromoform	Not detected	2.1		ug/m3	1	75-25-2	
Bromomethane	Not detected	0.78		ug/m3	1	74-83-9	
Vinyl bromide	Not detected	0.87		ug/m3	1	593-60-2	
Benzyl chloride	Not detected	1.0		ug/m3	1	100-44-7	
Carbon disulfide	Not detected	6.2		ug/m3	1	75-15-0	
Chlorobenzene	Not detected	0.92		ug/m3	1	108-90-7	
Chloroethane	Not detected	5.3		ug/m3	1	75-00-3	
Chloroform	Not detected	0.98		ug/m3	1	67-66-3	
Chloromethane	Not detected	4.1		ug/m3	1	74-87-3	
3-Chloropropene	Not detected	6.3		ug/m3	1	107-05-1	
2-Chlorotoluene	Not detected	1.0		ug/m3	1	95-49-8	
Carbon tetrachloride	Not detected	1.3		ug/m3	1	56-23-5	
Cyclohexane	Not detected	0.69		ug/m3	1	110-82-7	
1,1-Dichloroethane	Not detected	0.81		ug/m3	1	75-34-3	
1,1-Dichloroethene	Not detected	0.79		ug/m3	1	75-35-4	
1,2-Dibromoethane	Not detected	0.077		ug/m3	1	106-93-4	M

M-Result reported to MDL not RDL

Lab Sample ID: S40706.13 (continued)
Sample Tag: VP-13

TO-15 (Replicate 01), Method: TO-15, Run Date: 10/21/22 03:43, Analyst: NDK (continued)

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
1,2-Dichloroethane	Not detected	0.81		ug/m3	1	107-06-2	
1,2-Dichloropropane	Not detected	0.92		ug/m3	1	78-87-5	
1,4-Dioxane	Not detected	9.0		ug/m3	1	123-91-1	
Dichlorodifluoromethane	2.0	0.99		ug/m3	1	75-71-8	
Dibromochloromethane	Not detected	1.7		ug/m3	1	124-48-1	
trans-1,2-Dichloroethene	Not detected	0.79		ug/m3	1	156-60-5	
cis-1,2-Dichloroethene	Not detected	0.79		ug/m3	1	156-59-2	
cis-1,3-Dichloropropene	Not detected	0.91		ug/m3	1	10061-01-5	
1,3-Dichlorobenzene	2.4	1.2		ug/m3	1	541-73-1	
1,2-Dichlorobenzene	Not detected	1.2		ug/m3	1	95-50-1	
1,4-Dichlorobenzene	Not detected	1.2		ug/m3	1	106-46-7	
trans-1,3-Dichloropropene	Not detected	0.91		ug/m3	1	10061-02-6	
Ethanol*	18	4.7		ug/m3	1	64-17-5	
Ethylbenzene	Not detected	0.87		ug/m3	1	100-41-4	
Ethyl Acetate*	Not detected	7.2		ug/m3	1	141-78-6	
4-Ethyltoluene	Not detected	0.98		ug/m3	1	622-96-8	
Freon 113	Not detected	1.5		ug/m3	1	76-13-1	
Freon 114	Not detected	1.4		ug/m3	1	76-14-2	
Heptane	Not detected	0.82		ug/m3	1	142-82-5	
Hexachlorobutadiene	Not detected	2.1		ug/m3	1	87-68-3	
Hexane	Not detected	0.70		ug/m3	1	110-54-3	
2-Hexanone*	Not detected	2.0		ug/m3	1	591-78-6	
Isopropyl Alcohol*	12	4.9		ug/m3	1	67-63-0	
Methylene chloride	Not detected	1.7		ug/m3	1	75-09-2	
2-Butanone (MEK)	Not detected	5.9		ug/m3	1	78-93-3	
4-Methyl-2-pentanone (MIBK)	Not detected	2.0		ug/m3	1	108-10-1	
tert-Methyl butyl ether (MTBE)	Not detected	0.72		ug/m3	1	1634-04-4	
Methyl methacrylate	Not detected	0.82		ug/m3	1	80-62-6	
Naphthalene	Not detected	1.0		ug/m3	1	91-20-3	
Propylene*	Not detected	17		ug/m3	1	115-07-1	
Styrene	Not detected	0.85		ug/m3	1	100-42-5	
1,1,1-Trichloroethane	Not detected	1.1		ug/m3	1	71-55-6	
1,1,2,2-Tetrachloroethane	Not detected	1.4		ug/m3	1	79-34-5	
1,1,2-Trichloroethane	Not detected	1.1		ug/m3	1	79-00-5	
1,2,4-Trichlorobenzene	Not detected	3.7		ug/m3	1	120-82-1	
1,2,4-Trimethylbenzene	Not detected	0.98		ug/m3	1	95-63-6	
1,3,5-Trimethylbenzene	Not detected	0.98		ug/m3	1	108-67-8	
2,2,4-Trimethylpentane	Not detected	0.93		ug/m3	1	540-84-1	
Tert-butyl Alcohol	Not detected	6.1		ug/m3	1	75-65-0	
Tetrachloroethene	Not detected	1.4		ug/m3	1	127-18-4	
Tetrahydrofuran*	Not detected	0.59		ug/m3	1	109-99-9	
Toluene	3.0	0.75		ug/m3	1	108-88-3	
Trichloroethene	Not detected	1.1		ug/m3	1	79-01-6	
Trichlorofluoromethane	Not detected	1.1		ug/m3	1	75-69-4	
Vinyl chloride	Not detected	0.51		ug/m3	1	75-01-4	
Vinyl acetate	Not detected	7.0		ug/m3	1	108-05-4	
p,m-Xylene	Not detected	1.7		ug/m3	1		
o-Xylene	Not detected	0.87		ug/m3	1	95-47-6	
Total Xylenes	Not detected	2.6		ug/m3	1	1330-20-7	

Lab Sample ID: S40706.14

Sample Tag: VP-14

Collected Date/Time: 09/23/2022 09:08 - 09/23/2022 09:14

Matrix: Air

COC Reference: A5765

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
1	Air Canister	None	No	RT	IR

Extraction / Prep.

Parameter	Result	Method	Run Date	Analyst	Flags
Pressure check for TO-15*	-3.5	N/A	09/27/22 18:00	BDO	

Organics - Volatiles

TO-15, Method: TO-15, Run Date: 10/07/22 04:38, Analyst: NDK

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Acetone	Not detected	20		ppbv	10	67-64-1	
1,3-Butadiene	Not detected	20		ppbv	10	106-99-0	
Benzene	Not detected	2		ppbv	10	71-43-2	
Bromodichloromethane	Not detected	2		ppbv	10	75-27-4	
Bromoform	Not detected	2		ppbv	10	75-25-2	
Bromomethane	Not detected	2		ppbv	10	74-83-9	
Vinyl bromide	Not detected	2		ppbv	10	593-60-2	
Benzyl chloride	Not detected	2		ppbv	10	100-44-7	
Carbon disulfide	Not detected	20		ppbv	10	75-15-0	
Chlorobenzene	Not detected	2		ppbv	10	108-90-7	
Chloroethane	Not detected	20		ppbv	10	75-00-3	
Chloroform	Not detected	2		ppbv	10	67-66-3	
Chloromethane	Not detected	20		ppbv	10	74-87-3	
3-Chloropropene	Not detected	20		ppbv	10	107-05-1	
2-Chlorotoluene	Not detected	2		ppbv	10	95-49-8	
Carbon tetrachloride	Not detected	2		ppbv	10	56-23-5	
Cyclohexane	Not detected	2		ppbv	10	110-82-7	
1,1-Dichloroethane	Not detected	2		ppbv	10	75-34-3	
1,1-Dichloroethene	Not detected	2		ppbv	10	75-35-4	
1,2-Dibromoethane	Not detected	2		ppbv	10	106-93-4	
1,2-Dichloroethane	Not detected	2		ppbv	10	107-06-2	
1,2-Dichloropropane	Not detected	2		ppbv	10	78-87-5	
1,4-Dioxane	Not detected	25		ppbv	10	123-91-1	
Dichlorodifluoromethane	Not detected	2		ppbv	10	75-71-8	
Dibromochloromethane	Not detected	2		ppbv	10	124-48-1	
trans-1,2-Dichloroethene	Not detected	2		ppbv	10	156-60-5	
cis-1,2-Dichloroethene	Not detected	2		ppbv	10	156-59-2	
cis-1,3-Dichloropropene	Not detected	2		ppbv	10	10061-01-5	
1,3-Dichlorobenzene	Not detected	2		ppbv	10	541-73-1	
1,2-Dichlorobenzene	Not detected	2		ppbv	10	95-50-1	
1,4-Dichlorobenzene	Not detected	2		ppbv	10	106-46-7	
trans-1,3-Dichloropropene	Not detected	2		ppbv	10	10061-02-6	
Ethanol*	Not detected	25		ppbv	10	64-17-5	
Ethylbenzene	Not detected	2		ppbv	10	100-41-4	
Ethyl Acetate*	Not detected	20		ppbv	10	141-78-6	
4-Ethyltoluene	Not detected	2		ppbv	10	622-96-8	
Freon 113	Not detected	2		ppbv	10	76-13-1	

Lab Sample ID: S40706.14 (continued)
Sample Tag: VP-14

TO-15, Method: TO-15, Run Date: 10/07/22 04:38, Analyst: NDK (continued)

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Freon 114	Not detected	2		ppbv	10	76-14-2	
Heptane	Not detected	2		ppbv	10	142-82-5	
Hexachlorobutadiene	Not detected	2		ppbv	10	87-68-3	
Hexane	Not detected	2		ppbv	10	110-54-3	
2-Hexanone*	Not detected	5		ppbv	10	591-78-6	
Isopropyl Alcohol*	Not detected	20		ppbv	10	67-63-0	
Methylene chloride	Not detected	5		ppbv	10	75-09-2	
2-Butanone (MEK)	Not detected	20		ppbv	10	78-93-3	
4-Methyl-2-pentanone (MIBK)	Not detected	5		ppbv	10	108-10-1	
tert-Methyl butyl ether (MTBE)	Not detected	2		ppbv	10	1634-04-4	
Methyl methacrylate	Not detected	2		ppbv	10	80-62-6	
Naphthalene	Not detected	2		ppbv	10	91-20-3	
Propylene*	Not detected	100		ppbv	10	115-07-1	
Styrene	Not detected	2		ppbv	10	100-42-5	
1,1,1-Trichloroethane	Not detected	2		ppbv	10	71-55-6	
1,1,2,2-Tetrachloroethane	Not detected	2		ppbv	10	79-34-5	
1,1,2-Trichloroethane	Not detected	2		ppbv	10	79-00-5	
1,2,4-Trichlorobenzene	Not detected	5		ppbv	10	120-82-1	
1,2,4-Trimethylbenzene	Not detected	2		ppbv	10	95-63-6	
1,3,5-Trimethylbenzene	Not detected	2		ppbv	10	108-67-8	
2,2,4-Trimethylpentane	Not detected	2		ppbv	10	540-84-1	
Tert-butyl Alcohol	Not detected	20		ppbv	10	75-65-0	
Tetrachloroethene	Not detected	2		ppbv	10	127-18-4	
Tetrahydrofuran*	Not detected	2		ppbv	10	109-99-9	
Toluene	Not detected	2		ppbv	10	108-88-3	
Trichloroethene	Not detected	2		ppbv	10	79-01-6	
Trichlorofluoromethane	Not detected	2		ppbv	10	75-69-4	
Vinyl chloride	Not detected	2		ppbv	10	75-01-4	
Vinyl acetate	Not detected	20		ppbv	10	108-05-4	
p,m-Xylene	Not detected	4		ppbv	10		
o-Xylene	Not detected	2		ppbv	10	95-47-6	
Total Xylenes	Not detected	6		ppbv	10	1330-20-7	

TO-15, Method: TO-15, Run Date: 10/07/22 04:38, Analyst: NDK

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Acetone	Not detected	48		ug/m3	10	67-64-1	
1,3-Butadiene	Not detected	44		ug/m3	10	106-99-0	
Benzene	Not detected	6.4		ug/m3	10	71-43-2	
Bromodichloromethane	Not detected	13		ug/m3	10	75-27-4	
Bromoform	Not detected	21		ug/m3	10	75-25-2	
Bromomethane	Not detected	7.8		ug/m3	10	74-83-9	
Vinyl bromide	Not detected	8.7		ug/m3	10	593-60-2	
Benzyl chloride	Not detected	10		ug/m3	10	100-44-7	
Carbon disulfide	Not detected	62		ug/m3	10	75-15-0	
Chlorobenzene	Not detected	9.2		ug/m3	10	108-90-7	
Chloroethane	Not detected	53		ug/m3	10	75-00-3	
Chloroform	Not detected	9.8		ug/m3	10	67-66-3	
Chloromethane	Not detected	41		ug/m3	10	74-87-3	
3-Chloropropene	Not detected	63		ug/m3	10	107-05-1	
2-Chlorotoluene	Not detected	10		ug/m3	10	95-49-8	

Lab Sample ID: S40706.14 (continued)
Sample Tag: VP-14

TO-15, Method: TO-15, Run Date: 10/07/22 04:38, Analyst: NDK (continued)

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Carbon tetrachloride	Not detected	13		ug/m3	10	56-23-5	
Cyclohexane	Not detected	6.9		ug/m3	10	110-82-7	
1,1-Dichloroethane	Not detected	8.1		ug/m3	10	75-34-3	
1,1-Dichloroethene	Not detected	7.9		ug/m3	10	75-35-4	
1,2-Dibromoethane	Not detected	15		ug/m3	10	106-93-4	
1,2-Dichloroethane	Not detected	8.1		ug/m3	10	107-06-2	
1,2-Dichloropropane	Not detected	9.2		ug/m3	10	78-87-5	
1,4-Dioxane	Not detected	90		ug/m3	10	123-91-1	
Dichlorodifluoromethane	Not detected	9.9		ug/m3	10	75-71-8	
Dibromochloromethane	Not detected	17		ug/m3	10	124-48-1	
trans-1,2-Dichloroethene	Not detected	7.9		ug/m3	10	156-60-5	
cis-1,2-Dichloroethene	Not detected	7.9		ug/m3	10	156-59-2	
cis-1,3-Dichloropropene	Not detected	9.1		ug/m3	10	10061-01-5	
1,3-Dichlorobenzene	Not detected	12		ug/m3	10	541-73-1	
1,2-Dichlorobenzene	Not detected	12		ug/m3	10	95-50-1	
1,4-Dichlorobenzene	Not detected	12		ug/m3	10	106-46-7	
trans-1,3-Dichloropropene	Not detected	9.1		ug/m3	10	10061-02-6	
Ethanol*	Not detected	47		ug/m3	10	64-17-5	
Ethylbenzene	Not detected	8.7		ug/m3	10	100-41-4	
Ethyl Acetate*	Not detected	72		ug/m3	10	141-78-6	
4-Ethyltoluene	Not detected	9.8		ug/m3	10	622-96-8	
Freon 113	Not detected	15		ug/m3	10	76-13-1	
Freon 114	Not detected	14		ug/m3	10	76-14-2	
Heptane	Not detected	8.2		ug/m3	10	142-82-5	
Hexachlorobutadiene	Not detected	21		ug/m3	10	87-68-3	
Hexane	Not detected	7.0		ug/m3	10	110-54-3	
2-Hexanone*	Not detected	20		ug/m3	10	591-78-6	
Isopropyl Alcohol*	Not detected	49		ug/m3	10	67-63-0	
Methylene chloride	Not detected	17		ug/m3	10	75-09-2	
2-Butanone (MEK)	Not detected	59		ug/m3	10	78-93-3	
4-Methyl-2-pentanone (MIBK)	Not detected	20		ug/m3	10	108-10-1	
tert-Methyl butyl ether (MTBE)	Not detected	7.2		ug/m3	10	1634-04-4	
Methyl methacrylate	Not detected	8.2		ug/m3	10	80-62-6	
Naphthalene	Not detected	10		ug/m3	10	91-20-3	
Propylene*	Not detected	170		ug/m3	10	115-07-1	
Styrene	Not detected	8.5		ug/m3	10	100-42-5	
1,1,1-Trichloroethane	Not detected	11		ug/m3	10	71-55-6	
1,1,2,2-Tetrachloroethane	Not detected	14		ug/m3	10	79-34-5	
1,1,2-Trichloroethane	Not detected	11		ug/m3	10	79-00-5	
1,2,4-Trichlorobenzene	Not detected	37		ug/m3	10	120-82-1	
1,2,4-Trimethylbenzene	Not detected	9.8		ug/m3	10	95-63-6	
1,3,5-Trimethylbenzene	Not detected	9.8		ug/m3	10	108-67-8	
2,2,4-Trimethylpentane	Not detected	9.3		ug/m3	10	540-84-1	
Tert-butyl Alcohol	Not detected	61		ug/m3	10	75-65-0	
Tetrachloroethene	Not detected	14		ug/m3	10	127-18-4	
Tetrahydrofuran*	Not detected	5.9		ug/m3	10	109-99-9	
Toluene	Not detected	7.5		ug/m3	10	108-88-3	
Trichloroethene	Not detected	11		ug/m3	10	79-01-6	
Trichlorofluoromethane	Not detected	11		ug/m3	10	75-69-4	
Vinyl chloride	Not detected	5.1		ug/m3	10	75-01-4	

Lab Sample ID: S40706.14 (continued)
Sample Tag: VP-14

TO-15, Method: TO-15, Run Date: 10/07/22 04:38, Analyst: NDK (continued)

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Vinyl acetate	Not detected	70		ug/m3	10	108-05-4	
p,m-Xylene	Not detected	17		ug/m3	10		
o-Xylene	Not detected	8.7		ug/m3	10	95-47-6	
Total Xylenes	Not detected	26		ug/m3	10	1330-20-7	

TO-15 (Replicate 01), Method: TO-15, Run Date: 10/21/22 04:14, Analyst: NDK

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Acetone	5.9	2.0		ppbv	1	67-64-1	
1,3-Butadiene	Not detected	2.0		ppbv	1	106-99-0	
Benzene	Not detected	0.2		ppbv	1	71-43-2	
Bromodichloromethane	Not detected	0.2		ppbv	1	75-27-4	
Bromoform	Not detected	0.2		ppbv	1	75-25-2	
Bromomethane	Not detected	0.2		ppbv	1	74-83-9	
Vinyl bromide	Not detected	0.2		ppbv	1	593-60-2	
Benzyl chloride	Not detected	0.2		ppbv	1	100-44-7	
Carbon disulfide	Not detected	2.0		ppbv	1	75-15-0	
Chlorobenzene	Not detected	0.2		ppbv	1	108-90-7	
Chloroethane	Not detected	2.0		ppbv	1	75-00-3	
Chloroform	0.4	0.2		ppbv	1	67-66-3	
Chloromethane	Not detected	2.0		ppbv	1	74-87-3	
3-Chloropropene	Not detected	2.0		ppbv	1	107-05-1	
2-Chlorotoluene	Not detected	0.2		ppbv	1	95-49-8	
Carbon tetrachloride	Not detected	0.2		ppbv	1	56-23-5	
Cyclohexane	Not detected	0.2		ppbv	1	110-82-7	
1,1-Dichloroethane	Not detected	0.2		ppbv	1	75-34-3	
1,1-Dichloroethene	Not detected	0.2		ppbv	1	75-35-4	
1,2-Dibromoethane	Not detected	0.01		ppbv	1	106-93-4	M
1,2-Dichloroethane	Not detected	0.2		ppbv	1	107-06-2	
1,2-Dichloropropane	Not detected	0.2		ppbv	1	78-87-5	
1,4-Dioxane	Not detected	2.5		ppbv	1	123-91-1	
Dichlorodifluoromethane	0.4	0.2		ppbv	1	75-71-8	
Dibromochloromethane	Not detected	0.2		ppbv	1	124-48-1	
trans-1,2-Dichloroethene	Not detected	0.2		ppbv	1	156-60-5	
cis-1,2-Dichloroethene	Not detected	0.2		ppbv	1	156-59-2	
cis-1,3-Dichloropropene	Not detected	0.2		ppbv	1	10061-01-5	
1,3-Dichlorobenzene	0.6	0.2		ppbv	1	541-73-1	
1,2-Dichlorobenzene	Not detected	0.2		ppbv	1	95-50-1	
1,4-Dichlorobenzene	Not detected	0.2		ppbv	1	106-46-7	
trans-1,3-Dichloropropene	Not detected	0.2		ppbv	1	10061-02-6	
Ethanol*	6.9	2.5		ppbv	1	64-17-5	
Ethylbenzene	Not detected	0.2		ppbv	1	100-41-4	
Ethyl Acetate*	Not detected	2.0		ppbv	1	141-78-6	
4-Ethyltoluene	Not detected	0.2		ppbv	1	622-96-8	
Freon 113	Not detected	0.2		ppbv	1	76-13-1	
Freon 114	Not detected	0.2		ppbv	1	76-14-2	
Heptane	Not detected	0.2		ppbv	1	142-82-5	
Hexachlorobutadiene	Not detected	0.2		ppbv	1	87-68-3	
Hexane	Not detected	0.2		ppbv	1	110-54-3	
2-Hexanone*	Not detected	0.5		ppbv	1	591-78-6	

M-Result reported to MDL not RDL

Lab Sample ID: S40706.14 (continued)
Sample Tag: VP-14

TO-15 (Replicate 01), Method: TO-15, Run Date: 10/21/22 04:14, Analyst: NDK (continued)

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Isopropyl Alcohol*	7.5	2.0		ppbv	1	67-63-0	
Methylene chloride	Not detected	0.5		ppbv	1	75-09-2	
2-Butanone (MEK)	Not detected	2.0		ppbv	1	78-93-3	
4-Methyl-2-pentanone (MIBK)	Not detected	0.5		ppbv	1	108-10-1	
tert-Methyl butyl ether (MTBE)	Not detected	0.2		ppbv	1	1634-04-4	
Methyl methacrylate	Not detected	0.2		ppbv	1	80-62-6	
Naphthalene	Not detected	0.2		ppbv	1	91-20-3	
Propylene*	Not detected	10		ppbv	1	115-07-1	
Styrene	Not detected	0.2		ppbv	1	100-42-5	
1,1,1-Trichloroethane	Not detected	0.2		ppbv	1	71-55-6	
1,1,2,2-Tetrachloroethane	Not detected	0.2		ppbv	1	79-34-5	
1,1,2-Trichloroethane	Not detected	0.2		ppbv	1	79-00-5	
1,2,4-Trichlorobenzene	Not detected	0.5		ppbv	1	120-82-1	
1,2,4-Trimethylbenzene	Not detected	0.2		ppbv	1	95-63-6	
1,3,5-Trimethylbenzene	Not detected	0.2		ppbv	1	108-67-8	
2,2,4-Trimethylpentane	Not detected	0.2		ppbv	1	540-84-1	
Tert-butyl Alcohol	Not detected	2.0		ppbv	1	75-65-0	
Tetrachloroethene	Not detected	0.2		ppbv	1	127-18-4	
Tetrahydrofuran*	Not detected	0.2		ppbv	1	109-99-9	
Toluene	Not detected	0.2		ppbv	1	108-88-3	
Trichloroethene	Not detected	0.2		ppbv	1	79-01-6	
Trichlorofluoromethane	Not detected	0.2		ppbv	1	75-69-4	
Vinyl chloride	Not detected	0.2		ppbv	1	75-01-4	
Vinyl acetate	Not detected	2.0		ppbv	1	108-05-4	
p,m-Xylene	Not detected	0.4		ppbv	1		
o-Xylene	Not detected	0.2		ppbv	1	95-47-6	
Total Xylenes	Not detected	0.6		ppbv	1	1330-20-7	

TO-15 (Replicate 01), Method: TO-15, Run Date: 10/21/22 04:14, Analyst: NDK

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Acetone	14	4.8		ug/m3	1	67-64-1	
1,3-Butadiene	Not detected	4.4		ug/m3	1	106-99-0	
Benzene	Not detected	0.64		ug/m3	1	71-43-2	
Bromodichloromethane	Not detected	1.3		ug/m3	1	75-27-4	
Bromoform	Not detected	2.1		ug/m3	1	75-25-2	
Bromomethane	Not detected	0.78		ug/m3	1	74-83-9	
Vinyl bromide	Not detected	0.87		ug/m3	1	593-60-2	
Benzyl chloride	Not detected	1.0		ug/m3	1	100-44-7	
Carbon disulfide	Not detected	6.2		ug/m3	1	75-15-0	
Chlorobenzene	Not detected	0.92		ug/m3	1	108-90-7	
Chloroethane	Not detected	5.3		ug/m3	1	75-00-3	
Chloroform	2.0	0.98		ug/m3	1	67-66-3	
Chloromethane	Not detected	4.1		ug/m3	1	74-87-3	
3-Chloropropene	Not detected	6.3		ug/m3	1	107-05-1	
2-Chlorotoluene	Not detected	1.0		ug/m3	1	95-49-8	
Carbon tetrachloride	Not detected	1.3		ug/m3	1	56-23-5	
Cyclohexane	Not detected	0.69		ug/m3	1	110-82-7	
1,1-Dichloroethane	Not detected	0.81		ug/m3	1	75-34-3	
1,1-Dichloroethene	Not detected	0.79		ug/m3	1	75-35-4	
1,2-Dibromoethane	Not detected	0.077		ug/m3	1	106-93-4	M

M-Result reported to MDL not RDL

Lab Sample ID: S40706.14 (continued)
Sample Tag: VP-14

TO-15 (Replicate 01), Method: TO-15, Run Date: 10/21/22 04:14, Analyst: NDK (continued)

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
1,2-Dichloroethane	Not detected	0.81		ug/m3	1	107-06-2	
1,2-Dichloropropane	Not detected	0.92		ug/m3	1	78-87-5	
1,4-Dioxane	Not detected	9.0		ug/m3	1	123-91-1	
Dichlorodifluoromethane	2.0	0.99		ug/m3	1	75-71-8	
Dibromochloromethane	Not detected	1.7		ug/m3	1	124-48-1	
trans-1,2-Dichloroethene	Not detected	0.79		ug/m3	1	156-60-5	
cis-1,2-Dichloroethene	Not detected	0.79		ug/m3	1	156-59-2	
cis-1,3-Dichloropropene	Not detected	0.91		ug/m3	1	10061-01-5	
1,3-Dichlorobenzene	3.6	1.2		ug/m3	1	541-73-1	
1,2-Dichlorobenzene	Not detected	1.2		ug/m3	1	95-50-1	
1,4-Dichlorobenzene	Not detected	1.2		ug/m3	1	106-46-7	
trans-1,3-Dichloropropene	Not detected	0.91		ug/m3	1	10061-02-6	
Ethanol*	13	4.7		ug/m3	1	64-17-5	
Ethylbenzene	Not detected	0.87		ug/m3	1	100-41-4	
Ethyl Acetate*	Not detected	7.2		ug/m3	1	141-78-6	
4-Ethyltoluene	Not detected	0.98		ug/m3	1	622-96-8	
Freon 113	Not detected	1.5		ug/m3	1	76-13-1	
Freon 114	Not detected	1.4		ug/m3	1	76-14-2	
Heptane	Not detected	0.82		ug/m3	1	142-82-5	
Hexachlorobutadiene	Not detected	2.1		ug/m3	1	87-68-3	
Hexane	Not detected	0.70		ug/m3	1	110-54-3	
2-Hexanone*	Not detected	2.0		ug/m3	1	591-78-6	
Isopropyl Alcohol*	18	4.9		ug/m3	1	67-63-0	
Methylene chloride	Not detected	1.7		ug/m3	1	75-09-2	
2-Butanone (MEK)	Not detected	5.9		ug/m3	1	78-93-3	
4-Methyl-2-pentanone (MIBK)	Not detected	2.0		ug/m3	1	108-10-1	
tert-Methyl butyl ether (MTBE)	Not detected	0.72		ug/m3	1	1634-04-4	
Methyl methacrylate	Not detected	0.82		ug/m3	1	80-62-6	
Naphthalene	Not detected	1.0		ug/m3	1	91-20-3	
Propylene*	Not detected	17		ug/m3	1	115-07-1	
Styrene	Not detected	0.85		ug/m3	1	100-42-5	
1,1,1-Trichloroethane	Not detected	1.1		ug/m3	1	71-55-6	
1,1,2,2-Tetrachloroethane	Not detected	1.4		ug/m3	1	79-34-5	
1,1,2-Trichloroethane	Not detected	1.1		ug/m3	1	79-00-5	
1,2,4-Trichlorobenzene	Not detected	3.7		ug/m3	1	120-82-1	
1,2,4-Trimethylbenzene	Not detected	0.98		ug/m3	1	95-63-6	
1,3,5-Trimethylbenzene	Not detected	0.98		ug/m3	1	108-67-8	
2,2,4-Trimethylpentane	Not detected	0.93		ug/m3	1	540-84-1	
Tert-butyl Alcohol	Not detected	6.1		ug/m3	1	75-65-0	
Tetrachloroethene	Not detected	1.4		ug/m3	1	127-18-4	
Tetrahydrofuran*	Not detected	0.59		ug/m3	1	109-99-9	
Toluene	Not detected	0.75		ug/m3	1	108-88-3	
Trichloroethene	Not detected	1.1		ug/m3	1	79-01-6	
Trichlorofluoromethane	Not detected	1.1		ug/m3	1	75-69-4	
Vinyl chloride	Not detected	0.51		ug/m3	1	75-01-4	
Vinyl acetate	Not detected	7.0		ug/m3	1	108-05-4	
p,m-Xylene	Not detected	1.7		ug/m3	1		
o-Xylene	Not detected	0.87		ug/m3	1	95-47-6	
Total Xylenes	Not detected	2.6		ug/m3	1	1330-20-7	

Lab Sample ID: S40706.15

Sample Tag: 18VP-3

Collected Date/Time: 09/23/2022 09:38 - 09/23/2022 09:43

Matrix: Air

COC Reference: A5765

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
1	Air Canister	None	No	RT	IR

Extraction / Prep.

Parameter	Result	Method	Run Date	Analyst	Flags
Pressure check for TO-15*	-3.5	N/A	09/27/22 18:00	BDO	

Organics - Volatiles

TO-15, Method: TO-15, Run Date: 10/07/22 05:08, Analyst: NDK

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Acetone	Not detected	20		ppbv	10	67-64-1	
1,3-Butadiene	Not detected	20		ppbv	10	106-99-0	
Benzene	Not detected	2		ppbv	10	71-43-2	
Bromodichloromethane	Not detected	2		ppbv	10	75-27-4	
Bromoform	Not detected	2		ppbv	10	75-25-2	
Bromomethane	Not detected	2		ppbv	10	74-83-9	
Vinyl bromide	Not detected	2		ppbv	10	593-60-2	
Benzyl chloride	Not detected	2		ppbv	10	100-44-7	
Carbon disulfide	Not detected	20		ppbv	10	75-15-0	
Chlorobenzene	Not detected	2		ppbv	10	108-90-7	
Chloroethane	Not detected	20		ppbv	10	75-00-3	
Chloroform	Not detected	2		ppbv	10	67-66-3	
Chloromethane	Not detected	20		ppbv	10	74-87-3	
3-Chloropropene	Not detected	20		ppbv	10	107-05-1	
2-Chlorotoluene	Not detected	2		ppbv	10	95-49-8	
Carbon tetrachloride	Not detected	2		ppbv	10	56-23-5	
Cyclohexane	Not detected	2		ppbv	10	110-82-7	
1,1-Dichloroethane	Not detected	2		ppbv	10	75-34-3	
1,1-Dichloroethene	Not detected	2		ppbv	10	75-35-4	
1,2-Dibromoethane	Not detected	2		ppbv	10	106-93-4	
1,2-Dichloroethane	Not detected	2		ppbv	10	107-06-2	
1,2-Dichloropropane	Not detected	2		ppbv	10	78-87-5	
1,4-Dioxane	Not detected	25		ppbv	10	123-91-1	
Dichlorodifluoromethane	Not detected	2		ppbv	10	75-71-8	
Dibromochloromethane	Not detected	2		ppbv	10	124-48-1	
trans-1,2-Dichloroethene	Not detected	2		ppbv	10	156-60-5	
cis-1,2-Dichloroethene	Not detected	2		ppbv	10	156-59-2	
cis-1,3-Dichloropropene	Not detected	2		ppbv	10	10061-01-5	
1,3-Dichlorobenzene	Not detected	2		ppbv	10	541-73-1	
1,2-Dichlorobenzene	Not detected	2		ppbv	10	95-50-1	
1,4-Dichlorobenzene	Not detected	2		ppbv	10	106-46-7	
trans-1,3-Dichloropropene	Not detected	2		ppbv	10	10061-02-6	
Ethanol*	Not detected	25		ppbv	10	64-17-5	
Ethylbenzene	Not detected	2		ppbv	10	100-41-4	
Ethyl Acetate*	Not detected	20		ppbv	10	141-78-6	
4-Ethyltoluene	Not detected	2		ppbv	10	622-96-8	
Freon 113	Not detected	2		ppbv	10	76-13-1	

Lab Sample ID: S40706.15 (continued)
Sample Tag: 18VP-3

TO-15, Method: TO-15, Run Date: 10/07/22 05:08, Analyst: NDK (continued)

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Freon 114	Not detected	2		ppbv	10	76-14-2	
Heptane	Not detected	2		ppbv	10	142-82-5	
Hexachlorobutadiene	Not detected	2		ppbv	10	87-68-3	
Hexane	Not detected	2		ppbv	10	110-54-3	
2-Hexanone*	Not detected	5		ppbv	10	591-78-6	
Isopropyl Alcohol*	Not detected	20		ppbv	10	67-63-0	
Methylene chloride	Not detected	5		ppbv	10	75-09-2	
2-Butanone (MEK)	Not detected	20		ppbv	10	78-93-3	
4-Methyl-2-pentanone (MIBK)	Not detected	5		ppbv	10	108-10-1	
tert-Methyl butyl ether (MTBE)	Not detected	2		ppbv	10	1634-04-4	
Methyl methacrylate	Not detected	2		ppbv	10	80-62-6	
Naphthalene	Not detected	2		ppbv	10	91-20-3	
Propylene*	Not detected	100		ppbv	10	115-07-1	
Styrene	Not detected	2		ppbv	10	100-42-5	
1,1,1-Trichloroethane	2	2		ppbv	10	71-55-6	
1,1,2,2-Tetrachloroethane	Not detected	2		ppbv	10	79-34-5	
1,1,2-Trichloroethane	Not detected	2		ppbv	10	79-00-5	
1,2,4-Trichlorobenzene	Not detected	5		ppbv	10	120-82-1	
1,2,4-Trimethylbenzene	Not detected	2		ppbv	10	95-63-6	
1,3,5-Trimethylbenzene	Not detected	2		ppbv	10	108-67-8	
2,2,4-Trimethylpentane	Not detected	2		ppbv	10	540-84-1	
Tert-butyl Alcohol	Not detected	20		ppbv	10	75-65-0	
Tetrachloroethene	Not detected	2		ppbv	10	127-18-4	
Tetrahydrofuran*	Not detected	2		ppbv	10	109-99-9	
Toluene	Not detected	2		ppbv	10	108-88-3	
Trichloroethene	18	2		ppbv	10	79-01-6	
Trichlorofluoromethane	8	2		ppbv	10	75-69-4	
Vinyl chloride	Not detected	2		ppbv	10	75-01-4	
Vinyl acetate	Not detected	20		ppbv	10	108-05-4	
p,m-Xylene	Not detected	4		ppbv	10		
o-Xylene	Not detected	2		ppbv	10	95-47-6	
Total Xylenes	Not detected	6		ppbv	10	1330-20-7	

TO-15, Method: TO-15, Run Date: 10/07/22 05:08, Analyst: NDK

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Acetone	Not detected	48		ug/m3	10	67-64-1	
1,3-Butadiene	Not detected	44		ug/m3	10	106-99-0	
Benzene	Not detected	6.4		ug/m3	10	71-43-2	
Bromodichloromethane	Not detected	13		ug/m3	10	75-27-4	
Bromoform	Not detected	21		ug/m3	10	75-25-2	
Bromomethane	Not detected	7.8		ug/m3	10	74-83-9	
Vinyl bromide	Not detected	8.7		ug/m3	10	593-60-2	
Benzyl chloride	Not detected	10		ug/m3	10	100-44-7	
Carbon disulfide	Not detected	62		ug/m3	10	75-15-0	
Chlorobenzene	Not detected	9.2		ug/m3	10	108-90-7	
Chloroethane	Not detected	53		ug/m3	10	75-00-3	
Chloroform	Not detected	9.8		ug/m3	10	67-66-3	
Chloromethane	Not detected	41		ug/m3	10	74-87-3	
3-Chloropropene	Not detected	63		ug/m3	10	107-05-1	
2-Chlorotoluene	Not detected	10		ug/m3	10	95-49-8	

Lab Sample ID: S40706.15 (continued)
Sample Tag: 18VP-3

TO-15, Method: TO-15, Run Date: 10/07/22 05:08, Analyst: NDK (continued)

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Carbon tetrachloride	Not detected	13		ug/m3	10	56-23-5	
Cyclohexane	Not detected	6.9		ug/m3	10	110-82-7	
1,1-Dichloroethane	Not detected	8.1		ug/m3	10	75-34-3	
1,1-Dichloroethene	Not detected	7.9		ug/m3	10	75-35-4	
1,2-Dibromoethane	Not detected	15		ug/m3	10	106-93-4	
1,2-Dichloroethane	Not detected	8.1		ug/m3	10	107-06-2	
1,2-Dichloropropane	Not detected	9.2		ug/m3	10	78-87-5	
1,4-Dioxane	Not detected	90		ug/m3	10	123-91-1	
Dichlorodifluoromethane	Not detected	9.9		ug/m3	10	75-71-8	
Dibromochloromethane	Not detected	17		ug/m3	10	124-48-1	
trans-1,2-Dichloroethene	Not detected	7.9		ug/m3	10	156-60-5	
cis-1,2-Dichloroethene	Not detected	7.9		ug/m3	10	156-59-2	
cis-1,3-Dichloropropene	Not detected	9.1		ug/m3	10	10061-01-5	
1,3-Dichlorobenzene	Not detected	12		ug/m3	10	541-73-1	
1,2-Dichlorobenzene	Not detected	12		ug/m3	10	95-50-1	
1,4-Dichlorobenzene	Not detected	12		ug/m3	10	106-46-7	
trans-1,3-Dichloropropene	Not detected	9.1		ug/m3	10	10061-02-6	
Ethanol*	Not detected	47		ug/m3	10	64-17-5	
Ethylbenzene	Not detected	8.7		ug/m3	10	100-41-4	
Ethyl Acetate*	Not detected	72		ug/m3	10	141-78-6	
4-Ethyltoluene	Not detected	9.8		ug/m3	10	622-96-8	
Freon 113	Not detected	15		ug/m3	10	76-13-1	
Freon 114	Not detected	14		ug/m3	10	76-14-2	
Heptane	Not detected	8.2		ug/m3	10	142-82-5	
Hexachlorobutadiene	Not detected	21		ug/m3	10	87-68-3	
Hexane	Not detected	7.0		ug/m3	10	110-54-3	
2-Hexanone*	Not detected	20		ug/m3	10	591-78-6	
Isopropyl Alcohol*	Not detected	49		ug/m3	10	67-63-0	
Methylene chloride	Not detected	17		ug/m3	10	75-09-2	
2-Butanone (MEK)	Not detected	59		ug/m3	10	78-93-3	
4-Methyl-2-pentanone (MIBK)	Not detected	20		ug/m3	10	108-10-1	
tert-Methyl butyl ether (MTBE)	Not detected	7.2		ug/m3	10	1634-04-4	
Methyl methacrylate	Not detected	8.2		ug/m3	10	80-62-6	
Naphthalene	Not detected	10		ug/m3	10	91-20-3	
Propylene*	Not detected	170		ug/m3	10	115-07-1	
Styrene	Not detected	8.5		ug/m3	10	100-42-5	
1,1,1-Trichloroethane	11	11		ug/m3	10	71-55-6	
1,1,2,2-Tetrachloroethane	Not detected	14		ug/m3	10	79-34-5	
1,1,2-Trichloroethane	Not detected	11		ug/m3	10	79-00-5	
1,2,4-Trichlorobenzene	Not detected	37		ug/m3	10	120-82-1	
1,2,4-Trimethylbenzene	Not detected	9.8		ug/m3	10	95-63-6	
1,3,5-Trimethylbenzene	Not detected	9.8		ug/m3	10	108-67-8	
2,2,4-Trimethylpentane	Not detected	9.3		ug/m3	10	540-84-1	
Tert-butyl Alcohol	Not detected	61		ug/m3	10	75-65-0	
Tetrachloroethene	Not detected	14		ug/m3	10	127-18-4	
Tetrahydrofuran*	Not detected	5.9		ug/m3	10	109-99-9	
Toluene	Not detected	7.5		ug/m3	10	108-88-3	
Trichloroethene	97	11		ug/m3	10	79-01-6	
Trichlorofluoromethane	45	11		ug/m3	10	75-69-4	
Vinyl chloride	Not detected	5.1		ug/m3	10	75-01-4	

Lab Sample ID: S40706.15 (continued)
Sample Tag: 18VP-3

TO-15, Method: TO-15, Run Date: 10/07/22 05:08, Analyst: NDK (continued)

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Vinyl acetate	Not detected	70		ug/m3	10	108-05-4	
p,m-Xylene	Not detected	17		ug/m3	10		
o-Xylene	Not detected	8.7		ug/m3	10	95-47-6	
Total Xylenes	Not detected	26		ug/m3	10	1330-20-7	

TO-15 (Replicate 01), Method: TO-15, Run Date: 10/21/22 04:45, Analyst: NDK

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Acetone	8.3	2.0		ppbv	1	67-64-1	
1,3-Butadiene	Not detected	2.0		ppbv	1	106-99-0	
Benzene	0.6	0.2		ppbv	1	71-43-2	
Bromodichloromethane	Not detected	0.2		ppbv	1	75-27-4	
Bromoform	Not detected	0.2		ppbv	1	75-25-2	
Bromomethane	Not detected	0.2		ppbv	1	74-83-9	
Vinyl bromide	Not detected	0.2		ppbv	1	593-60-2	
Benzyl chloride	Not detected	0.2		ppbv	1	100-44-7	
Carbon disulfide	Not detected	2.0		ppbv	1	75-15-0	
Chlorobenzene	Not detected	0.2		ppbv	1	108-90-7	
Chloroethane	Not detected	2.0		ppbv	1	75-00-3	
Chloroform	0.9	0.2		ppbv	1	67-66-3	
Chloromethane	Not detected	2.0		ppbv	1	74-87-3	
3-Chloropropene	Not detected	2.0		ppbv	1	107-05-1	
2-Chlorotoluene	Not detected	0.2		ppbv	1	95-49-8	
Carbon tetrachloride	Not detected	0.2		ppbv	1	56-23-5	
Cyclohexane	Not detected	0.2		ppbv	1	110-82-7	
1,1-Dichloroethane	Not detected	0.2		ppbv	1	75-34-3	
1,1-Dichloroethene	Not detected	0.2		ppbv	1	75-35-4	
1,2-Dibromoethane	Not detected	0.01		ppbv	1	106-93-4	M
1,2-Dichloroethane	Not detected	0.2		ppbv	1	107-06-2	
1,2-Dichloropropane	Not detected	0.2		ppbv	1	78-87-5	
1,4-Dioxane	Not detected	2.5		ppbv	1	123-91-1	
Dichlorodifluoromethane	0.5	0.2		ppbv	1	75-71-8	
Dibromochloromethane	Not detected	0.2		ppbv	1	124-48-1	
trans-1,2-Dichloroethene	Not detected	0.2		ppbv	1	156-60-5	
cis-1,2-Dichloroethene	Not detected	0.2		ppbv	1	156-59-2	
cis-1,3-Dichloropropene	Not detected	0.2		ppbv	1	10061-01-5	
1,3-Dichlorobenzene	0.8	0.2		ppbv	1	541-73-1	
1,2-Dichlorobenzene	Not detected	0.2		ppbv	1	95-50-1	
1,4-Dichlorobenzene	Not detected	0.2		ppbv	1	106-46-7	
trans-1,3-Dichloropropene	Not detected	0.2		ppbv	1	10061-02-6	
Ethanol*	6.9	2.5		ppbv	1	64-17-5	
Ethylbenzene	Not detected	0.2		ppbv	1	100-41-4	
Ethyl Acetate*	Not detected	2.0		ppbv	1	141-78-6	
4-Ethyltoluene	Not detected	0.2		ppbv	1	622-96-8	
Freon 113	Not detected	0.2		ppbv	1	76-13-1	
Freon 114	Not detected	0.2		ppbv	1	76-14-2	
Heptane	Not detected	0.3		ppbv	1	142-82-5	
Hexachlorobutadiene	Not detected	0.2		ppbv	1	87-68-3	
Hexane	Not detected	0.2		ppbv	1	110-54-3	
2-Hexanone*	Not detected	0.5		ppbv	1	591-78-6	

M-Result reported to MDL not RDL

Lab Sample ID: S40706.15 (continued)
Sample Tag: 18VP-3

TO-15 (Replicate 01), Method: TO-15, Run Date: 10/21/22 04:45, Analyst: NDK (continued)

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Isopropyl Alcohol*	14.2	2.0		ppbv	1	67-63-0	
Methylene chloride	Not detected	0.5		ppbv	1	75-09-2	
2-Butanone (MEK)	Not detected	2.0		ppbv	1	78-93-3	
4-Methyl-2-pentanone (MIBK)	Not detected	0.5		ppbv	1	108-10-1	
tert-Methyl butyl ether (MTBE)	Not detected	0.2		ppbv	1	1634-04-4	
Methyl methacrylate	Not detected	0.2		ppbv	1	80-62-6	
Naphthalene	Not detected	0.2		ppbv	1	91-20-3	
Propylene*	Not detected	10		ppbv	1	115-07-1	
Styrene	Not detected	0.2		ppbv	1	100-42-5	
1,1,1-Trichloroethane	2.4	0.2		ppbv	1	71-55-6	
1,1,2,2-Tetrachloroethane	Not detected	0.2		ppbv	1	79-34-5	
1,1,2-Trichloroethane	Not detected	0.2		ppbv	1	79-00-5	
1,2,4-Trichlorobenzene	Not detected	0.5		ppbv	1	120-82-1	
1,2,4-Trimethylbenzene	Not detected	0.2		ppbv	1	95-63-6	
1,3,5-Trimethylbenzene	Not detected	0.2		ppbv	1	108-67-8	
2,2,4-Trimethylpentane	Not detected	0.2		ppbv	1	540-84-1	
Tert-butyl Alcohol	Not detected	2.0		ppbv	1	75-65-0	
Tetrachloroethene	0.5	0.2		ppbv	1	127-18-4	
Tetrahydrofuran*	Not detected	0.2		ppbv	1	109-99-9	
Toluene	0.7	0.2		ppbv	1	108-88-3	
Trichloroethene	23.8	0.2		ppbv	1	79-01-6	
Trichlorofluoromethane	7.6	0.2		ppbv	1	75-69-4	
Vinyl chloride	Not detected	0.2		ppbv	1	75-01-4	
Vinyl acetate	Not detected	2.0		ppbv	1	108-05-4	
p,m-Xylene	Not detected	0.4		ppbv	1		
o-Xylene	Not detected	0.2		ppbv	1	95-47-6	
Total Xylenes	Not detected	0.6		ppbv	1	1330-20-7	

TO-15 (Replicate 01), Method: TO-15, Run Date: 10/21/22 04:45, Analyst: NDK

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Acetone	20	4.8		ug/m3	1	67-64-1	
1,3-Butadiene	Not detected	4.4		ug/m3	1	106-99-0	
Benzene	1.9	0.64		ug/m3	1	71-43-2	
Bromodichloromethane	Not detected	1.3		ug/m3	1	75-27-4	
Bromoform	Not detected	2.1		ug/m3	1	75-25-2	
Bromomethane	Not detected	0.78		ug/m3	1	74-83-9	
Vinyl bromide	Not detected	0.87		ug/m3	1	593-60-2	
Benzyl chloride	Not detected	1.0		ug/m3	1	100-44-7	
Carbon disulfide	Not detected	6.2		ug/m3	1	75-15-0	
Chlorobenzene	Not detected	0.92		ug/m3	1	108-90-7	
Chloroethane	Not detected	5.3		ug/m3	1	75-00-3	
Chloroform	4.4	0.98		ug/m3	1	67-66-3	
Chloromethane	Not detected	4.1		ug/m3	1	74-87-3	
3-Chloropropene	Not detected	6.3		ug/m3	1	107-05-1	
2-Chlorotoluene	Not detected	1.0		ug/m3	1	95-49-8	
Carbon tetrachloride	Not detected	1.3		ug/m3	1	56-23-5	
Cyclohexane	Not detected	0.69		ug/m3	1	110-82-7	
1,1-Dichloroethane	Not detected	0.81		ug/m3	1	75-34-3	
1,1-Dichloroethene	Not detected	0.79		ug/m3	1	75-35-4	
1,2-Dibromoethane	Not detected	0.077		ug/m3	1	106-93-4	M

M-Result reported to MDL not RDL

Lab Sample ID: S40706.15 (continued)
Sample Tag: 18VP-3

TO-15 (Replicate 01), Method: TO-15, Run Date: 10/21/22 04:45, Analyst: NDK (continued)

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
1,2-Dichloroethane	Not detected	0.81		ug/m3	1	107-06-2	
1,2-Dichloropropane	Not detected	0.92		ug/m3	1	78-87-5	
1,4-Dioxane	Not detected	9.0		ug/m3	1	123-91-1	
Dichlorodifluoromethane	2.5	0.99		ug/m3	1	75-71-8	
Dibromochloromethane	Not detected	1.7		ug/m3	1	124-48-1	
trans-1,2-Dichloroethene	Not detected	0.79		ug/m3	1	156-60-5	
cis-1,2-Dichloroethene	Not detected	0.79		ug/m3	1	156-59-2	
cis-1,3-Dichloropropene	Not detected	0.91		ug/m3	1	10061-01-5	
1,3-Dichlorobenzene	4.8	1.2		ug/m3	1	541-73-1	
1,2-Dichlorobenzene	Not detected	1.2		ug/m3	1	95-50-1	
1,4-Dichlorobenzene	Not detected	1.2		ug/m3	1	106-46-7	
trans-1,3-Dichloropropene	Not detected	0.91		ug/m3	1	10061-02-6	
Ethanol*	13	4.7		ug/m3	1	64-17-5	
Ethylbenzene	Not detected	0.87		ug/m3	1	100-41-4	
Ethyl Acetate*	Not detected	7.2		ug/m3	1	141-78-6	
4-Ethyltoluene	Not detected	0.98		ug/m3	1	622-96-8	
Freon 113	Not detected	1.5		ug/m3	1	76-13-1	
Freon 114	Not detected	1.4		ug/m3	1	76-14-2	
Heptane	Not detected	1.2		ug/m3	1	142-82-5	
Hexachlorobutadiene	Not detected	2.1		ug/m3	1	87-68-3	
Hexane	Not detected	0.70		ug/m3	1	110-54-3	
2-Hexanone*	Not detected	2.0		ug/m3	1	591-78-6	
Isopropyl Alcohol*	34.9	4.9		ug/m3	1	67-63-0	
Methylene chloride	Not detected	1.7		ug/m3	1	75-09-2	
2-Butanone (MEK)	Not detected	5.9		ug/m3	1	78-93-3	
4-Methyl-2-pentanone (MIBK)	Not detected	2.0		ug/m3	1	108-10-1	
tert-Methyl butyl ether (MTBE)	Not detected	0.72		ug/m3	1	1634-04-4	
Methyl methacrylate	Not detected	0.82		ug/m3	1	80-62-6	
Naphthalene	Not detected	1.0		ug/m3	1	91-20-3	
Propylene*	Not detected	17		ug/m3	1	115-07-1	
Styrene	Not detected	0.85		ug/m3	1	100-42-5	
1,1,1-Trichloroethane	13	1.1		ug/m3	1	71-55-6	
1,1,2,2-Tetrachloroethane	Not detected	1.4		ug/m3	1	79-34-5	
1,1,2-Trichloroethane	Not detected	1.1		ug/m3	1	79-00-5	
1,2,4-Trichlorobenzene	Not detected	3.7		ug/m3	1	120-82-1	
1,2,4-Trimethylbenzene	Not detected	0.98		ug/m3	1	95-63-6	
1,3,5-Trimethylbenzene	Not detected	0.98		ug/m3	1	108-67-8	
2,2,4-Trimethylpentane	Not detected	0.93		ug/m3	1	540-84-1	
Tert-butyl Alcohol	Not detected	6.1		ug/m3	1	75-65-0	
Tetrachloroethene	3.4	1.4		ug/m3	1	127-18-4	
Tetrahydrofuran*	Not detected	0.59		ug/m3	1	109-99-9	
Toluene	2.6	0.75		ug/m3	1	108-88-3	
Trichloroethene	128	1.1		ug/m3	1	79-01-6	
Trichlorofluoromethane	43	1.1		ug/m3	1	75-69-4	
Vinyl chloride	Not detected	0.51		ug/m3	1	75-01-4	
Vinyl acetate	Not detected	7.0		ug/m3	1	108-05-4	
p,m-Xylene	Not detected	1.7		ug/m3	1		
o-Xylene	Not detected	0.87		ug/m3	1	95-47-6	
Total Xylenes	Not detected	2.6		ug/m3	1	1330-20-7	

Lab Sample ID: S40706.16

Sample Tag: 18VP-4

Collected Date/Time: 09/23/2022 10:06 - 09/23/2022 10:11

Matrix: Air

COC Reference: A5765

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
1	Air Canister	None	No	RT	IR

Extraction / Prep.

Parameter	Result	Method	Run Date	Analyst	Flags
Pressure check for TO-15*	-5.5	N/A	09/27/22 18:00	BDO	

Organics - Volatiles

TO-15, Method: TO-15, Run Date: 10/07/22 05:38, Analyst: NDK

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Acetone	30	20		ppbv	10	67-64-1	
1,3-Butadiene	Not detected	20		ppbv	10	106-99-0	
Benzene	Not detected	2		ppbv	10	71-43-2	
Bromodichloromethane	Not detected	2		ppbv	10	75-27-4	
Bromoform	Not detected	2		ppbv	10	75-25-2	
Bromomethane	Not detected	2		ppbv	10	74-83-9	
Vinyl bromide	Not detected	2		ppbv	10	593-60-2	
Benzyl chloride	Not detected	2		ppbv	10	100-44-7	
Carbon disulfide	Not detected	20		ppbv	10	75-15-0	
Chlorobenzene	Not detected	2		ppbv	10	108-90-7	
Chloroethane	Not detected	20		ppbv	10	75-00-3	
Chloroform	Not detected	2		ppbv	10	67-66-3	
Chloromethane	Not detected	20		ppbv	10	74-87-3	
3-Chloropropene	Not detected	20		ppbv	10	107-05-1	
2-Chlorotoluene	Not detected	2		ppbv	10	95-49-8	
Carbon tetrachloride	Not detected	2		ppbv	10	56-23-5	
Cyclohexane	Not detected	2		ppbv	10	110-82-7	
1,1-Dichloroethane	Not detected	2		ppbv	10	75-34-3	
1,1-Dichloroethene	Not detected	2		ppbv	10	75-35-4	
1,2-Dibromoethane	Not detected	2		ppbv	10	106-93-4	
1,2-Dichloroethane	Not detected	2		ppbv	10	107-06-2	
1,2-Dichloropropane	Not detected	2		ppbv	10	78-87-5	
1,4-Dioxane	Not detected	25		ppbv	10	123-91-1	
Dichlorodifluoromethane	Not detected	2		ppbv	10	75-71-8	
Dibromochloromethane	Not detected	2		ppbv	10	124-48-1	
trans-1,2-Dichloroethene	Not detected	2		ppbv	10	156-60-5	
cis-1,2-Dichloroethene	Not detected	2		ppbv	10	156-59-2	
cis-1,3-Dichloropropene	Not detected	2		ppbv	10	10061-01-5	
1,3-Dichlorobenzene	Not detected	2		ppbv	10	541-73-1	
1,2-Dichlorobenzene	Not detected	2		ppbv	10	95-50-1	
1,4-Dichlorobenzene	Not detected	2		ppbv	10	106-46-7	
trans-1,3-Dichloropropene	Not detected	2		ppbv	10	10061-02-6	
Ethanol*	Not detected	25		ppbv	10	64-17-5	
Ethylbenzene	Not detected	2		ppbv	10	100-41-4	
Ethyl Acetate*	Not detected	20		ppbv	10	141-78-6	
4-Ethyltoluene	Not detected	2		ppbv	10	622-96-8	
Freon 113	Not detected	2		ppbv	10	76-13-1	

Lab Sample ID: S40706.16 (continued)
Sample Tag: 18VP-4

TO-15, Method: TO-15, Run Date: 10/07/22 05:38, Analyst: NDK (continued)

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Freon 114	Not detected	2		ppbv	10	76-14-2	
Heptane	Not detected	2		ppbv	10	142-82-5	
Hexachlorobutadiene	Not detected	2		ppbv	10	87-68-3	
Hexane	Not detected	2		ppbv	10	110-54-3	
2-Hexanone*	Not detected	5		ppbv	10	591-78-6	
Isopropyl Alcohol*	400	20		ppbv	10	67-63-0	
Methylene chloride	Not detected	5		ppbv	10	75-09-2	
2-Butanone (MEK)	Not detected	20		ppbv	10	78-93-3	
4-Methyl-2-pentanone (MIBK)	Not detected	5		ppbv	10	108-10-1	
tert-Methyl butyl ether (MTBE)	Not detected	2		ppbv	10	1634-04-4	
Methyl methacrylate	Not detected	2		ppbv	10	80-62-6	
Naphthalene	Not detected	2		ppbv	10	91-20-3	
Propylene*	Not detected	100		ppbv	10	115-07-1	
Styrene	Not detected	2		ppbv	10	100-42-5	
1,1,1-Trichloroethane	Not detected	2		ppbv	10	71-55-6	
1,1,2,2-Tetrachloroethane	Not detected	2		ppbv	10	79-34-5	
1,1,2-Trichloroethane	Not detected	2		ppbv	10	79-00-5	
1,2,4-Trichlorobenzene	Not detected	5		ppbv	10	120-82-1	
1,2,4-Trimethylbenzene	Not detected	2		ppbv	10	95-63-6	
1,3,5-Trimethylbenzene	Not detected	2		ppbv	10	108-67-8	
2,2,4-Trimethylpentane	Not detected	2		ppbv	10	540-84-1	
Tert-butyl Alcohol	Not detected	20		ppbv	10	75-65-0	
Tetrachloroethene	Not detected	2		ppbv	10	127-18-4	
Tetrahydrofuran*	Not detected	2		ppbv	10	109-99-9	
Toluene	Not detected	2		ppbv	10	108-88-3	
Trichloroethene	Not detected	2		ppbv	10	79-01-6	
Trichlorofluoromethane	Not detected	2		ppbv	10	75-69-4	
Vinyl chloride	Not detected	2		ppbv	10	75-01-4	
Vinyl acetate	Not detected	20		ppbv	10	108-05-4	
p,m-Xylene	Not detected	4		ppbv	10		
o-Xylene	Not detected	2		ppbv	10	95-47-6	
Total Xylenes	Not detected	6		ppbv	10	1330-20-7	

TO-15, Method: TO-15, Run Date: 10/07/22 05:38, Analyst: NDK

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Acetone	71	48		ug/m3	10	67-64-1	
1,3-Butadiene	Not detected	44		ug/m3	10	106-99-0	
Benzene	Not detected	6.4		ug/m3	10	71-43-2	
Bromodichloromethane	Not detected	13		ug/m3	10	75-27-4	
Bromoform	Not detected	21		ug/m3	10	75-25-2	
Bromomethane	Not detected	7.8		ug/m3	10	74-83-9	
Vinyl bromide	Not detected	8.7		ug/m3	10	593-60-2	
Benzyl chloride	Not detected	10		ug/m3	10	100-44-7	
Carbon disulfide	Not detected	62		ug/m3	10	75-15-0	
Chlorobenzene	Not detected	9.2		ug/m3	10	108-90-7	
Chloroethane	Not detected	53		ug/m3	10	75-00-3	
Chloroform	Not detected	9.8		ug/m3	10	67-66-3	
Chloromethane	Not detected	41		ug/m3	10	74-87-3	
3-Chloropropene	Not detected	63		ug/m3	10	107-05-1	
2-Chlorotoluene	Not detected	10		ug/m3	10	95-49-8	

Lab Sample ID: S40706.16 (continued)
Sample Tag: 18VP-4

TO-15, Method: TO-15, Run Date: 10/07/22 05:38, Analyst: NDK (continued)

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Carbon tetrachloride	Not detected	13		ug/m3	10	56-23-5	
Cyclohexane	Not detected	6.9		ug/m3	10	110-82-7	
1,1-Dichloroethane	Not detected	8.1		ug/m3	10	75-34-3	
1,1-Dichloroethene	Not detected	7.9		ug/m3	10	75-35-4	
1,2-Dibromoethane	Not detected	15		ug/m3	10	106-93-4	
1,2-Dichloroethane	Not detected	8.1		ug/m3	10	107-06-2	
1,2-Dichloropropane	Not detected	9.2		ug/m3	10	78-87-5	
1,4-Dioxane	Not detected	90		ug/m3	10	123-91-1	
Dichlorodifluoromethane	Not detected	9.9		ug/m3	10	75-71-8	
Dibromochloromethane	Not detected	17		ug/m3	10	124-48-1	
trans-1,2-Dichloroethene	Not detected	7.9		ug/m3	10	156-60-5	
cis-1,2-Dichloroethene	Not detected	7.9		ug/m3	10	156-59-2	
cis-1,3-Dichloropropene	Not detected	9.1		ug/m3	10	10061-01-5	
1,3-Dichlorobenzene	Not detected	12		ug/m3	10	541-73-1	
1,2-Dichlorobenzene	Not detected	12		ug/m3	10	95-50-1	
1,4-Dichlorobenzene	Not detected	12		ug/m3	10	106-46-7	
trans-1,3-Dichloropropene	Not detected	9.1		ug/m3	10	10061-02-6	
Ethanol*	Not detected	47		ug/m3	10	64-17-5	
Ethylbenzene	Not detected	8.7		ug/m3	10	100-41-4	
Ethyl Acetate*	Not detected	72		ug/m3	10	141-78-6	
4-Ethyltoluene	Not detected	9.8		ug/m3	10	622-96-8	
Freon 113	Not detected	15		ug/m3	10	76-13-1	
Freon 114	Not detected	14		ug/m3	10	76-14-2	
Heptane	Not detected	8.2		ug/m3	10	142-82-5	
Hexachlorobutadiene	Not detected	21		ug/m3	10	87-68-3	
Hexane	Not detected	7.0		ug/m3	10	110-54-3	
2-Hexanone*	Not detected	20		ug/m3	10	591-78-6	
Isopropyl Alcohol*	980	49		ug/m3	10	67-63-0	
Methylene chloride	Not detected	17		ug/m3	10	75-09-2	
2-Butanone (MEK)	Not detected	59		ug/m3	10	78-93-3	
4-Methyl-2-pentanone (MIBK)	Not detected	20		ug/m3	10	108-10-1	
tert-Methyl butyl ether (MTBE)	Not detected	7.2		ug/m3	10	1634-04-4	
Methyl methacrylate	Not detected	8.2		ug/m3	10	80-62-6	
Naphthalene	Not detected	10		ug/m3	10	91-20-3	
Propylene*	Not detected	170		ug/m3	10	115-07-1	
Styrene	Not detected	8.5		ug/m3	10	100-42-5	
1,1,1-Trichloroethane	Not detected	11		ug/m3	10	71-55-6	
1,1,2,2-Tetrachloroethane	Not detected	14		ug/m3	10	79-34-5	
1,1,2-Trichloroethane	Not detected	11		ug/m3	10	79-00-5	
1,2,4-Trichlorobenzene	Not detected	37		ug/m3	10	120-82-1	
1,2,4-Trimethylbenzene	Not detected	9.8		ug/m3	10	95-63-6	
1,3,5-Trimethylbenzene	Not detected	9.8		ug/m3	10	108-67-8	
2,2,4-Trimethylpentane	Not detected	9.3		ug/m3	10	540-84-1	
Tert-butyl Alcohol	Not detected	61		ug/m3	10	75-65-0	
Tetrachloroethene	Not detected	14		ug/m3	10	127-18-4	
Tetrahydrofuran*	Not detected	5.9		ug/m3	10	109-99-9	
Toluene	Not detected	7.5		ug/m3	10	108-88-3	
Trichloroethene	Not detected	11		ug/m3	10	79-01-6	
Trichlorofluoromethane	Not detected	11		ug/m3	10	75-69-4	
Vinyl chloride	Not detected	5.1		ug/m3	10	75-01-4	

Lab Sample ID: S40706.16 (continued)
Sample Tag: 18VP-4

TO-15, Method: TO-15, Run Date: 10/07/22 05:38, Analyst: NDK (continued)

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Vinyl acetate	Not detected	70		ug/m3	10	108-05-4	
p,m-Xylene	Not detected	17		ug/m3	10		
o-Xylene	Not detected	8.7		ug/m3	10	95-47-6	
Total Xylenes	Not detected	26		ug/m3	10	1330-20-7	

TO-15 (Replicate 01), Method: TO-15, Run Date: 10/21/22 05:16, Analyst: NDK

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Acetone	19.9	2.0		ppbv	1	67-64-1	
1,3-Butadiene	Not detected	2.0		ppbv	1	106-99-0	
Benzene	Not detected	0.2		ppbv	1	71-43-2	
Bromodichloromethane	Not detected	0.2		ppbv	1	75-27-4	
Bromoform	Not detected	0.2		ppbv	1	75-25-2	
Bromomethane	Not detected	0.2		ppbv	1	74-83-9	
Vinyl bromide	Not detected	0.2		ppbv	1	593-60-2	
Benzyl chloride	Not detected	0.2		ppbv	1	100-44-7	
Carbon disulfide	Not detected	2.0		ppbv	1	75-15-0	
Chlorobenzene	Not detected	0.2		ppbv	1	108-90-7	
Chloroethane	Not detected	2.0		ppbv	1	75-00-3	
Chloroform	Not detected	0.2		ppbv	1	67-66-3	
Chloromethane	Not detected	2.0		ppbv	1	74-87-3	
3-Chloropropene	Not detected	2.0		ppbv	1	107-05-1	
2-Chlorotoluene	Not detected	0.2		ppbv	1	95-49-8	
Carbon tetrachloride	Not detected	0.2		ppbv	1	56-23-5	
Cyclohexane	Not detected	0.2		ppbv	1	110-82-7	
1,1-Dichloroethane	Not detected	0.2		ppbv	1	75-34-3	
1,1-Dichloroethene	Not detected	0.2		ppbv	1	75-35-4	
1,2-Dibromoethane	Not detected	0.01		ppbv	1	106-93-4	M
1,2-Dichloroethane	Not detected	0.2		ppbv	1	107-06-2	
1,2-Dichloropropane	Not detected	0.2		ppbv	1	78-87-5	
1,4-Dioxane	Not detected	2.5		ppbv	1	123-91-1	
Dichlorodifluoromethane	0.5	0.2		ppbv	1	75-71-8	
Dibromochloromethane	Not detected	0.2		ppbv	1	124-48-1	
trans-1,2-Dichloroethene	Not detected	0.2		ppbv	1	156-60-5	
cis-1,2-Dichloroethene	Not detected	0.2		ppbv	1	156-59-2	
cis-1,3-Dichloropropene	Not detected	0.2		ppbv	1	10061-01-5	
1,3-Dichlorobenzene	1.0	0.2		ppbv	1	541-73-1	
1,2-Dichlorobenzene	Not detected	0.2		ppbv	1	95-50-1	
1,4-Dichlorobenzene	Not detected	0.2		ppbv	1	106-46-7	
trans-1,3-Dichloropropene	Not detected	0.2		ppbv	1	10061-02-6	
Ethanol*	5.9	2.5		ppbv	1	64-17-5	
Ethylbenzene	Not detected	0.2		ppbv	1	100-41-4	
Ethyl Acetate*	Not detected	2.0		ppbv	1	141-78-6	
4-Ethyltoluene	Not detected	0.2		ppbv	1	622-96-8	
Freon 113	Not detected	0.2		ppbv	1	76-13-1	
Freon 114	Not detected	0.2		ppbv	1	76-14-2	
Heptane	Not detected	0.8		ppbv	1	142-82-5	
Hexachlorobutadiene	Not detected	0.2		ppbv	1	87-68-3	
Hexane	Not detected	0.2		ppbv	1	110-54-3	
2-Hexanone*	Not detected	0.5		ppbv	1	591-78-6	

M-Result reported to MDL not RDL

Lab Sample ID: S40706.16 (continued)
Sample Tag: 18VP-4

TO-15 (Replicate 01), Method: TO-15, Run Date: 10/21/22 05:16, Analyst: NDK (continued)

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Isopropyl Alcohol*	35.8	2.0		ppbv	1	67-63-0	
Methylene chloride	Not detected	0.5		ppbv	1	75-09-2	
2-Butanone (MEK)	Not detected	2.0		ppbv	1	78-93-3	
4-Methyl-2-pentanone (MIBK)	Not detected	0.5		ppbv	1	108-10-1	
tert-Methyl butyl ether (MTBE)	Not detected	0.2		ppbv	1	1634-04-4	
Methyl methacrylate	Not detected	0.2		ppbv	1	80-62-6	
Naphthalene	Not detected	0.2		ppbv	1	91-20-3	
Propylene*	Not detected	10		ppbv	1	115-07-1	
Styrene	Not detected	0.2		ppbv	1	100-42-5	
1,1,1-Trichloroethane	Not detected	0.2		ppbv	1	71-55-6	
1,1,2,2-Tetrachloroethane	Not detected	0.2		ppbv	1	79-34-5	
1,1,2-Trichloroethane	Not detected	0.2		ppbv	1	79-00-5	
1,2,4-Trichlorobenzene	Not detected	0.5		ppbv	1	120-82-1	
1,2,4-Trimethylbenzene	Not detected	0.2		ppbv	1	95-63-6	
1,3,5-Trimethylbenzene	Not detected	0.2		ppbv	1	108-67-8	
2,2,4-Trimethylpentane	Not detected	0.2		ppbv	1	540-84-1	
Tert-butyl Alcohol	Not detected	2.0		ppbv	1	75-65-0	
Tetrachloroethene	0.3	0.2		ppbv	1	127-18-4	
Tetrahydrofuran*	Not detected	0.2		ppbv	1	109-99-9	
Toluene	0.3	0.2		ppbv	1	108-88-3	
Trichloroethene	Not detected	0.2		ppbv	1	79-01-6	
Trichlorofluoromethane	0.5	0.2		ppbv	1	75-69-4	
Vinyl chloride	Not detected	0.2		ppbv	1	75-01-4	
Vinyl acetate	Not detected	2.0		ppbv	1	108-05-4	
p,m-Xylene	Not detected	0.4		ppbv	1		
o-Xylene	Not detected	0.2		ppbv	1	95-47-6	
Total Xylenes	Not detected	0.6		ppbv	1	1330-20-7	

TO-15 (Replicate 01), Method: TO-15, Run Date: 10/21/22 05:16, Analyst: NDK

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Acetone	47.3	4.8		ug/m3	1	67-64-1	
1,3-Butadiene	Not detected	4.4		ug/m3	1	106-99-0	
Benzene	Not detected	0.64		ug/m3	1	71-43-2	
Bromodichloromethane	Not detected	1.3		ug/m3	1	75-27-4	
Bromoform	Not detected	2.1		ug/m3	1	75-25-2	
Bromomethane	Not detected	0.78		ug/m3	1	74-83-9	
Vinyl bromide	Not detected	0.87		ug/m3	1	593-60-2	
Benzyl chloride	Not detected	1.0		ug/m3	1	100-44-7	
Carbon disulfide	Not detected	6.2		ug/m3	1	75-15-0	
Chlorobenzene	Not detected	0.92		ug/m3	1	108-90-7	
Chloroethane	Not detected	5.3		ug/m3	1	75-00-3	
Chloroform	Not detected	0.98		ug/m3	1	67-66-3	
Chloromethane	Not detected	4.1		ug/m3	1	74-87-3	
3-Chloropropene	Not detected	6.3		ug/m3	1	107-05-1	
2-Chlorotoluene	Not detected	1.0		ug/m3	1	95-49-8	
Carbon tetrachloride	Not detected	1.3		ug/m3	1	56-23-5	
Cyclohexane	Not detected	0.69		ug/m3	1	110-82-7	
1,1-Dichloroethane	Not detected	0.81		ug/m3	1	75-34-3	
1,1-Dichloroethene	Not detected	0.79		ug/m3	1	75-35-4	
1,2-Dibromoethane	Not detected	0.077		ug/m3	1	106-93-4	M

M-Result reported to MDL not RDL

Lab Sample ID: S40706.16 (continued)
Sample Tag: 18VP-4

TO-15 (Replicate 01), Method: TO-15, Run Date: 10/21/22 05:16, Analyst: NDK (continued)

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
1,2-Dichloroethane	Not detected	0.81		ug/m3	1	107-06-2	
1,2-Dichloropropane	Not detected	0.92		ug/m3	1	78-87-5	
1,4-Dioxane	Not detected	9.0		ug/m3	1	123-91-1	
Dichlorodifluoromethane	2.5	0.99		ug/m3	1	75-71-8	
Dibromochloromethane	Not detected	1.7		ug/m3	1	124-48-1	
trans-1,2-Dichloroethene	Not detected	0.79		ug/m3	1	156-60-5	
cis-1,2-Dichloroethene	Not detected	0.79		ug/m3	1	156-59-2	
cis-1,3-Dichloropropene	Not detected	0.91		ug/m3	1	10061-01-5	
1,3-Dichlorobenzene	6.0	1.2		ug/m3	1	541-73-1	
1,2-Dichlorobenzene	Not detected	1.2		ug/m3	1	95-50-1	
1,4-Dichlorobenzene	Not detected	1.2		ug/m3	1	106-46-7	
trans-1,3-Dichloropropene	Not detected	0.91		ug/m3	1	10061-02-6	
Ethanol*	11	4.7		ug/m3	1	64-17-5	
Ethylbenzene	Not detected	0.87		ug/m3	1	100-41-4	
Ethyl Acetate*	Not detected	7.2		ug/m3	1	141-78-6	
4-Ethyltoluene	Not detected	0.98		ug/m3	1	622-96-8	
Freon 113	Not detected	1.5		ug/m3	1	76-13-1	
Freon 114	Not detected	1.4		ug/m3	1	76-14-2	
Heptane	Not detected	3.3		ug/m3	1	142-82-5	
Hexachlorobutadiene	Not detected	2.1		ug/m3	1	87-68-3	
Hexane	Not detected	0.70		ug/m3	1	110-54-3	
2-Hexanone*	Not detected	2.0		ug/m3	1	591-78-6	
Isopropyl Alcohol*	88.0	4.9		ug/m3	1	67-63-0	
Methylene chloride	Not detected	1.7		ug/m3	1	75-09-2	
2-Butanone (MEK)	Not detected	5.9		ug/m3	1	78-93-3	
4-Methyl-2-pentanone (MIBK)	Not detected	2.0		ug/m3	1	108-10-1	
tert-Methyl butyl ether (MTBE)	Not detected	0.72		ug/m3	1	1634-04-4	
Methyl methacrylate	Not detected	0.82		ug/m3	1	80-62-6	
Naphthalene	Not detected	1.0		ug/m3	1	91-20-3	
Propylene*	Not detected	17		ug/m3	1	115-07-1	
Styrene	Not detected	0.85		ug/m3	1	100-42-5	
1,1,1-Trichloroethane	Not detected	1.1		ug/m3	1	71-55-6	
1,1,2,2-Tetrachloroethane	Not detected	1.4		ug/m3	1	79-34-5	
1,1,2-Trichloroethane	Not detected	1.1		ug/m3	1	79-00-5	
1,2,4-Trichlorobenzene	Not detected	3.7		ug/m3	1	120-82-1	
1,2,4-Trimethylbenzene	Not detected	0.98		ug/m3	1	95-63-6	
1,3,5-Trimethylbenzene	Not detected	0.98		ug/m3	1	108-67-8	
2,2,4-Trimethylpentane	Not detected	0.93		ug/m3	1	540-84-1	
Tert-butyl Alcohol	Not detected	6.1		ug/m3	1	75-65-0	
Tetrachloroethene	2.0	1.4		ug/m3	1	127-18-4	
Tetrahydrofuran*	Not detected	0.59		ug/m3	1	109-99-9	
Toluene	1.1	0.75		ug/m3	1	108-88-3	
Trichloroethene	Not detected	1.1		ug/m3	1	79-01-6	
Trichlorofluoromethane	2.8	1.1		ug/m3	1	75-69-4	
Vinyl chloride	Not detected	0.51		ug/m3	1	75-01-4	
Vinyl acetate	Not detected	7.0		ug/m3	1	108-05-4	
p,m-Xylene	Not detected	1.7		ug/m3	1		
o-Xylene	Not detected	0.87		ug/m3	1	95-47-6	
Total Xylenes	Not detected	2.6		ug/m3	1	1330-20-7	

Lab Sample ID: S40706.17

Sample Tag: 18VP-6 5'

Collected Date/Time: 09/23/2022 10:52 - 09/23/2022 10:59

Matrix: Air

COC Reference: A5765

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
1	Air Canister	None	No	RT	IR

Extraction / Prep.

Parameter	Result	Method	Run Date	Analyst	Flags
Pressure check for TO-15*	-5.5	N/A	09/27/22 18:00	BDO	

Organics - Volatiles

TO-15, Method: TO-15, Run Date: 10/07/22 06:08, Analyst: NDK

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Acetone	Not detected	20		ppbv	10	67-64-1	
1,3-Butadiene	Not detected	20		ppbv	10	106-99-0	
Benzene	Not detected	2		ppbv	10	71-43-2	
Bromodichloromethane	Not detected	2		ppbv	10	75-27-4	
Bromoform	Not detected	2		ppbv	10	75-25-2	
Bromomethane	Not detected	2		ppbv	10	74-83-9	
Vinyl bromide	Not detected	2		ppbv	10	593-60-2	
Benzyl chloride	Not detected	2		ppbv	10	100-44-7	
Carbon disulfide	Not detected	20		ppbv	10	75-15-0	
Chlorobenzene	Not detected	2		ppbv	10	108-90-7	
Chloroethane	Not detected	20		ppbv	10	75-00-3	
Chloroform	Not detected	2		ppbv	10	67-66-3	
Chloromethane	Not detected	20		ppbv	10	74-87-3	
3-Chloropropene	Not detected	20		ppbv	10	107-05-1	
2-Chlorotoluene	Not detected	2		ppbv	10	95-49-8	
Carbon tetrachloride	Not detected	2		ppbv	10	56-23-5	
Cyclohexane	Not detected	2		ppbv	10	110-82-7	
1,1-Dichloroethane	Not detected	2		ppbv	10	75-34-3	
1,1-Dichloroethene	Not detected	2		ppbv	10	75-35-4	
1,2-Dibromoethane	Not detected	2		ppbv	10	106-93-4	
1,2-Dichloroethane	Not detected	2		ppbv	10	107-06-2	
1,2-Dichloropropane	Not detected	2		ppbv	10	78-87-5	
1,4-Dioxane	Not detected	25		ppbv	10	123-91-1	
Dichlorodifluoromethane	Not detected	2		ppbv	10	75-71-8	
Dibromochloromethane	Not detected	2		ppbv	10	124-48-1	
trans-1,2-Dichloroethene	Not detected	2		ppbv	10	156-60-5	
cis-1,2-Dichloroethene	Not detected	2		ppbv	10	156-59-2	
cis-1,3-Dichloropropene	Not detected	2		ppbv	10	10061-01-5	
1,3-Dichlorobenzene	Not detected	2		ppbv	10	541-73-1	
1,2-Dichlorobenzene	Not detected	2		ppbv	10	95-50-1	
1,4-Dichlorobenzene	Not detected	2		ppbv	10	106-46-7	
trans-1,3-Dichloropropene	Not detected	2		ppbv	10	10061-02-6	
Ethanol*	Not detected	25		ppbv	10	64-17-5	
Ethylbenzene	Not detected	2		ppbv	10	100-41-4	
Ethyl Acetate*	Not detected	20		ppbv	10	141-78-6	
4-Ethyltoluene	Not detected	2		ppbv	10	622-96-8	
Freon 113	Not detected	2		ppbv	10	76-13-1	

Lab Sample ID: S40706.17 (continued)
Sample Tag: 18VP-6 5'

TO-15, Method: TO-15, Run Date: 10/07/22 06:08, Analyst: NDK (continued)

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Freon 114	Not detected	2		ppbv	10	76-14-2	
Heptane	Not detected	2		ppbv	10	142-82-5	
Hexachlorobutadiene	Not detected	2		ppbv	10	87-68-3	
Hexane	Not detected	2		ppbv	10	110-54-3	
2-Hexanone*	Not detected	5		ppbv	10	591-78-6	
Isopropyl Alcohol*	Not detected	20		ppbv	10	67-63-0	
Methylene chloride	Not detected	5		ppbv	10	75-09-2	
2-Butanone (MEK)	Not detected	20		ppbv	10	78-93-3	
4-Methyl-2-pentanone (MIBK)	Not detected	5		ppbv	10	108-10-1	
tert-Methyl butyl ether (MTBE)	Not detected	2		ppbv	10	1634-04-4	
Methyl methacrylate	Not detected	2		ppbv	10	80-62-6	
Naphthalene	Not detected	2		ppbv	10	91-20-3	
Propylene*	Not detected	100		ppbv	10	115-07-1	
Styrene	Not detected	2		ppbv	10	100-42-5	
1,1,1-Trichloroethane	Not detected	2		ppbv	10	71-55-6	
1,1,2,2-Tetrachloroethane	Not detected	2		ppbv	10	79-34-5	
1,1,2-Trichloroethane	Not detected	2		ppbv	10	79-00-5	
1,2,4-Trichlorobenzene	Not detected	5		ppbv	10	120-82-1	
1,2,4-Trimethylbenzene	Not detected	2		ppbv	10	95-63-6	
1,3,5-Trimethylbenzene	Not detected	2		ppbv	10	108-67-8	
2,2,4-Trimethylpentane	Not detected	2		ppbv	10	540-84-1	
Tert-butyl Alcohol	Not detected	20		ppbv	10	75-65-0	
Tetrachloroethene	Not detected	2		ppbv	10	127-18-4	
Tetrahydrofuran*	Not detected	2		ppbv	10	109-99-9	
Toluene	Not detected	2		ppbv	10	108-88-3	
Trichloroethene	Not detected	2		ppbv	10	79-01-6	
Trichlorofluoromethane	Not detected	2		ppbv	10	75-69-4	
Vinyl chloride	Not detected	2		ppbv	10	75-01-4	
Vinyl acetate	Not detected	20		ppbv	10	108-05-4	
p,m-Xylene	Not detected	4		ppbv	10		
o-Xylene	Not detected	2		ppbv	10	95-47-6	
Total Xylenes	Not detected	6		ppbv	10	1330-20-7	

TO-15, Method: TO-15, Run Date: 10/07/22 06:08, Analyst: NDK

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Acetone	Not detected	48		ug/m3	10	67-64-1	
1,3-Butadiene	Not detected	44		ug/m3	10	106-99-0	
Benzene	Not detected	6.4		ug/m3	10	71-43-2	
Bromodichloromethane	Not detected	13		ug/m3	10	75-27-4	
Bromoform	Not detected	21		ug/m3	10	75-25-2	
Bromomethane	Not detected	7.8		ug/m3	10	74-83-9	
Vinyl bromide	Not detected	8.7		ug/m3	10	593-60-2	
Benzyl chloride	Not detected	10		ug/m3	10	100-44-7	
Carbon disulfide	Not detected	62		ug/m3	10	75-15-0	
Chlorobenzene	Not detected	9.2		ug/m3	10	108-90-7	
Chloroethane	Not detected	53		ug/m3	10	75-00-3	
Chloroform	Not detected	9.8		ug/m3	10	67-66-3	
Chloromethane	Not detected	41		ug/m3	10	74-87-3	
3-Chloropropene	Not detected	63		ug/m3	10	107-05-1	
2-Chlorotoluene	Not detected	10		ug/m3	10	95-49-8	

Lab Sample ID: S40706.17 (continued)
Sample Tag: 18VP-6 5'

TO-15, Method: TO-15, Run Date: 10/07/22 06:08, Analyst: NDK (continued)

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Carbon tetrachloride	Not detected	13		ug/m3	10	56-23-5	
Cyclohexane	Not detected	6.9		ug/m3	10	110-82-7	
1,1-Dichloroethane	Not detected	8.1		ug/m3	10	75-34-3	
1,1-Dichloroethene	Not detected	7.9		ug/m3	10	75-35-4	
1,2-Dibromoethane	Not detected	15		ug/m3	10	106-93-4	
1,2-Dichloroethane	Not detected	8.1		ug/m3	10	107-06-2	
1,2-Dichloropropane	Not detected	9.2		ug/m3	10	78-87-5	
1,4-Dioxane	Not detected	90		ug/m3	10	123-91-1	
Dichlorodifluoromethane	Not detected	9.9		ug/m3	10	75-71-8	
Dibromochloromethane	Not detected	17		ug/m3	10	124-48-1	
trans-1,2-Dichloroethene	Not detected	7.9		ug/m3	10	156-60-5	
cis-1,2-Dichloroethene	Not detected	7.9		ug/m3	10	156-59-2	
cis-1,3-Dichloropropene	Not detected	9.1		ug/m3	10	10061-01-5	
1,3-Dichlorobenzene	Not detected	12		ug/m3	10	541-73-1	
1,2-Dichlorobenzene	Not detected	12		ug/m3	10	95-50-1	
1,4-Dichlorobenzene	Not detected	12		ug/m3	10	106-46-7	
trans-1,3-Dichloropropene	Not detected	9.1		ug/m3	10	10061-02-6	
Ethanol*	Not detected	47		ug/m3	10	64-17-5	
Ethylbenzene	Not detected	8.7		ug/m3	10	100-41-4	
Ethyl Acetate*	Not detected	72		ug/m3	10	141-78-6	
4-Ethyltoluene	Not detected	9.8		ug/m3	10	622-96-8	
Freon 113	Not detected	15		ug/m3	10	76-13-1	
Freon 114	Not detected	14		ug/m3	10	76-14-2	
Heptane	Not detected	8.2		ug/m3	10	142-82-5	
Hexachlorobutadiene	Not detected	21		ug/m3	10	87-68-3	
Hexane	Not detected	7.0		ug/m3	10	110-54-3	
2-Hexanone*	Not detected	20		ug/m3	10	591-78-6	
Isopropyl Alcohol*	Not detected	49		ug/m3	10	67-63-0	
Methylene chloride	Not detected	17		ug/m3	10	75-09-2	
2-Butanone (MEK)	Not detected	59		ug/m3	10	78-93-3	
4-Methyl-2-pentanone (MIBK)	Not detected	20		ug/m3	10	108-10-1	
tert-Methyl butyl ether (MTBE)	Not detected	7.2		ug/m3	10	1634-04-4	
Methyl methacrylate	Not detected	8.2		ug/m3	10	80-62-6	
Naphthalene	Not detected	10		ug/m3	10	91-20-3	
Propylene*	Not detected	170		ug/m3	10	115-07-1	
Styrene	Not detected	8.5		ug/m3	10	100-42-5	
1,1,1-Trichloroethane	Not detected	11		ug/m3	10	71-55-6	
1,1,2,2-Tetrachloroethane	Not detected	14		ug/m3	10	79-34-5	
1,1,2-Trichloroethane	Not detected	11		ug/m3	10	79-00-5	
1,2,4-Trichlorobenzene	Not detected	37		ug/m3	10	120-82-1	
1,2,4-Trimethylbenzene	Not detected	9.8		ug/m3	10	95-63-6	
1,3,5-Trimethylbenzene	Not detected	9.8		ug/m3	10	108-67-8	
2,2,4-Trimethylpentane	Not detected	9.3		ug/m3	10	540-84-1	
Tert-butyl Alcohol	Not detected	61		ug/m3	10	75-65-0	
Tetrachloroethene	Not detected	14		ug/m3	10	127-18-4	
Tetrahydrofuran*	Not detected	5.9		ug/m3	10	109-99-9	
Toluene	Not detected	7.5		ug/m3	10	108-88-3	
Trichloroethene	Not detected	11		ug/m3	10	79-01-6	
Trichlorofluoromethane	Not detected	11		ug/m3	10	75-69-4	
Vinyl chloride	Not detected	5.1		ug/m3	10	75-01-4	

Lab Sample ID: S40706.17 (continued)
Sample Tag: 18VP-6 5'

TO-15, Method: TO-15, Run Date: 10/07/22 06:08, Analyst: NDK (continued)

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Vinyl acetate	Not detected	70		ug/m3	10	108-05-4	
p,m-Xylene	Not detected	17		ug/m3	10		
o-Xylene	Not detected	8.7		ug/m3	10	95-47-6	
Total Xylenes	Not detected	26		ug/m3	10	1330-20-7	

TO-15 (Replicate 01), Method: TO-15, Run Date: 10/21/22 05:47, Analyst: NDK

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Acetone	9.9	2.0		ppbv	1	67-64-1	
1,3-Butadiene	Not detected	2.0		ppbv	1	106-99-0	
Benzene	0.2	0.2		ppbv	1	71-43-2	
Bromodichloromethane	Not detected	0.2		ppbv	1	75-27-4	
Bromoform	Not detected	0.2		ppbv	1	75-25-2	
Bromomethane	Not detected	0.2		ppbv	1	74-83-9	
Vinyl bromide	Not detected	0.2		ppbv	1	593-60-2	
Benzyl chloride	Not detected	0.2		ppbv	1	100-44-7	
Carbon disulfide	Not detected	2.0		ppbv	1	75-15-0	
Chlorobenzene	Not detected	0.2		ppbv	1	108-90-7	
Chloroethane	Not detected	2.0		ppbv	1	75-00-3	
Chloroform	Not detected	0.2		ppbv	1	67-66-3	
Chloromethane	Not detected	2.0		ppbv	1	74-87-3	
3-Chloropropene	Not detected	2.0		ppbv	1	107-05-1	
2-Chlorotoluene	Not detected	0.2		ppbv	1	95-49-8	
Carbon tetrachloride	Not detected	0.2		ppbv	1	56-23-5	
Cyclohexane	Not detected	0.2		ppbv	1	110-82-7	
1,1-Dichloroethane	Not detected	0.2		ppbv	1	75-34-3	
1,1-Dichloroethene	Not detected	0.2		ppbv	1	75-35-4	
1,2-Dibromoethane	Not detected	0.01		ppbv	1	106-93-4	M
1,2-Dichloroethane	Not detected	0.2		ppbv	1	107-06-2	
1,2-Dichloropropane	Not detected	0.2		ppbv	1	78-87-5	
1,4-Dioxane	Not detected	2.5		ppbv	1	123-91-1	
Dichlorodifluoromethane	0.5	0.2		ppbv	1	75-71-8	
Dibromochloromethane	Not detected	0.2		ppbv	1	124-48-1	
trans-1,2-Dichloroethene	Not detected	0.2		ppbv	1	156-60-5	
cis-1,2-Dichloroethene	Not detected	0.2		ppbv	1	156-59-2	
cis-1,3-Dichloropropene	Not detected	0.2		ppbv	1	10061-01-5	
1,3-Dichlorobenzene	0.3	0.2		ppbv	1	541-73-1	
1,2-Dichlorobenzene	Not detected	0.2		ppbv	1	95-50-1	
1,4-Dichlorobenzene	Not detected	0.2		ppbv	1	106-46-7	
trans-1,3-Dichloropropene	Not detected	0.2		ppbv	1	10061-02-6	
Ethanol*	15.0	2.5		ppbv	1	64-17-5	
Ethylbenzene	Not detected	0.2		ppbv	1	100-41-4	
Ethyl Acetate*	Not detected	2.0		ppbv	1	141-78-6	
4-Ethyltoluene	Not detected	0.2		ppbv	1	622-96-8	
Freon 113	Not detected	0.2		ppbv	1	76-13-1	
Freon 114	Not detected	0.2		ppbv	1	76-14-2	
Heptane	0.4	0.2		ppbv	1	142-82-5	
Hexachlorobutadiene	Not detected	0.2		ppbv	1	87-68-3	
Hexane	2.6	0.2		ppbv	1	110-54-3	
2-Hexanone*	Not detected	0.5		ppbv	1	591-78-6	

M-Result reported to MDL not RDL

Lab Sample ID: S40706.17 (continued)
Sample Tag: 18VP-6 5'

TO-15 (Replicate 01), Method: TO-15, Run Date: 10/21/22 05:47, Analyst: NDK (continued)

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Isopropyl Alcohol*	6.2	2.0		ppbv	1	67-63-0	
Methylene chloride	2.6	0.5		ppbv	1	75-09-2	
2-Butanone (MEK)	Not detected	2.0		ppbv	1	78-93-3	
4-Methyl-2-pentanone (MIBK)	Not detected	0.5		ppbv	1	108-10-1	
tert-Methyl butyl ether (MTBE)	Not detected	0.2		ppbv	1	1634-04-4	
Methyl methacrylate	Not detected	0.2		ppbv	1	80-62-6	
Naphthalene	Not detected	0.2		ppbv	1	91-20-3	
Propylene*	Not detected	10		ppbv	1	115-07-1	
Styrene	Not detected	0.2		ppbv	1	100-42-5	
1,1,1-Trichloroethane	Not detected	0.2		ppbv	1	71-55-6	
1,1,2,2-Tetrachloroethane	Not detected	0.2		ppbv	1	79-34-5	
1,1,2-Trichloroethane	Not detected	0.2		ppbv	1	79-00-5	
1,2,4-Trichlorobenzene	Not detected	0.5		ppbv	1	120-82-1	
1,2,4-Trimethylbenzene	Not detected	0.2		ppbv	1	95-63-6	
1,3,5-Trimethylbenzene	Not detected	0.2		ppbv	1	108-67-8	
2,2,4-Trimethylpentane	Not detected	0.2		ppbv	1	540-84-1	
Tert-butyl Alcohol	4.2	2.0		ppbv	1	75-65-0	
Tetrachloroethene	Not detected	0.2		ppbv	1	127-18-4	
Tetrahydrofuran*	Not detected	0.3		ppbv	1	109-99-9	X
Toluene	0.7	0.2		ppbv	1	108-88-3	
Trichloroethene	Not detected	0.2		ppbv	1	79-01-6	
Trichlorofluoromethane	0.4	0.2		ppbv	1	75-69-4	
Vinyl chloride	Not detected	0.2		ppbv	1	75-01-4	
Vinyl acetate	Not detected	2.0		ppbv	1	108-05-4	
p,m-Xylene	Not detected	0.4		ppbv	1		
o-Xylene	Not detected	0.2		ppbv	1	95-47-6	
Total Xylenes	Not detected	0.6		ppbv	1	1330-20-7	

TO-15 (Replicate 01), Method: TO-15, Run Date: 10/21/22 05:47, Analyst: NDK

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Acetone	24	4.8		ug/m3	1	67-64-1	
1,3-Butadiene	Not detected	4.4		ug/m3	1	106-99-0	
Benzene	0.64	0.64		ug/m3	1	71-43-2	
Bromodichloromethane	Not detected	1.3		ug/m3	1	75-27-4	
Bromoform	Not detected	2.1		ug/m3	1	75-25-2	
Bromomethane	Not detected	0.78		ug/m3	1	74-83-9	
Vinyl bromide	Not detected	0.87		ug/m3	1	593-60-2	
Benzyl chloride	Not detected	1.0		ug/m3	1	100-44-7	
Carbon disulfide	Not detected	6.2		ug/m3	1	75-15-0	
Chlorobenzene	Not detected	0.92		ug/m3	1	108-90-7	
Chloroethane	Not detected	5.3		ug/m3	1	75-00-3	
Chloroform	Not detected	0.98		ug/m3	1	67-66-3	
Chloromethane	Not detected	4.1		ug/m3	1	74-87-3	
3-Chloropropene	Not detected	6.3		ug/m3	1	107-05-1	
2-Chlorotoluene	Not detected	1.0		ug/m3	1	95-49-8	
Carbon tetrachloride	Not detected	1.3		ug/m3	1	56-23-5	
Cyclohexane	Not detected	0.69		ug/m3	1	110-82-7	
1,1-Dichloroethane	Not detected	0.81		ug/m3	1	75-34-3	
1,1-Dichloroethene	Not detected	0.79		ug/m3	1	75-35-4	

X-Elevated reporting limit due to matrix interference

Lab Sample ID: S40706.17 (continued)
Sample Tag: 18VP-6 5'

TO-15 (Replicate 01), Method: TO-15, Run Date: 10/21/22 05:47, Analyst: NDK (continued)

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
1,2-Dibromoethane	Not detected	0.077		ug/m3	1	106-93-4	M
1,2-Dichloroethane	Not detected	0.81		ug/m3	1	107-06-2	
1,2-Dichloropropane	Not detected	0.92		ug/m3	1	78-87-5	
1,4-Dioxane	Not detected	9.0		ug/m3	1	123-91-1	
Dichlorodifluoromethane	2.5	0.99		ug/m3	1	75-71-8	
Dibromochloromethane	Not detected	1.7		ug/m3	1	124-48-1	
trans-1,2-Dichloroethene	Not detected	0.79		ug/m3	1	156-60-5	
cis-1,2-Dichloroethene	Not detected	0.79		ug/m3	1	156-59-2	
cis-1,3-Dichloropropene	Not detected	0.91		ug/m3	1	10061-01-5	
1,3-Dichlorobenzene	1.8	1.2		ug/m3	1	541-73-1	
1,2-Dichlorobenzene	Not detected	1.2		ug/m3	1	95-50-1	
1,4-Dichlorobenzene	Not detected	1.2		ug/m3	1	106-46-7	
trans-1,3-Dichloropropene	Not detected	0.91		ug/m3	1	10061-02-6	
Ethanol*	28.3	4.7		ug/m3	1	64-17-5	
Ethylbenzene	Not detected	0.87		ug/m3	1	100-41-4	
Ethyl Acetate*	Not detected	7.2		ug/m3	1	141-78-6	
4-Ethyltoluene	Not detected	0.98		ug/m3	1	622-96-8	
Freon 113	Not detected	1.5		ug/m3	1	76-13-1	
Freon 114	Not detected	1.4		ug/m3	1	76-14-2	
Heptane	1.6	0.82		ug/m3	1	142-82-5	
Hexachlorobutadiene	Not detected	2.1		ug/m3	1	87-68-3	
Hexane	9.2	0.70		ug/m3	1	110-54-3	
2-Hexanone*	Not detected	2.0		ug/m3	1	591-78-6	
Isopropyl Alcohol*	15	4.9		ug/m3	1	67-63-0	
Methylene chloride	9.0	1.7		ug/m3	1	75-09-2	
2-Butanone (MEK)	Not detected	5.9		ug/m3	1	78-93-3	
4-Methyl-2-pentanone (MIBK)	Not detected	2.0		ug/m3	1	108-10-1	
tert-Methyl butyl ether (MTBE)	Not detected	0.72		ug/m3	1	1634-04-4	
Methyl methacrylate	Not detected	0.82		ug/m3	1	80-62-6	
Naphthalene	Not detected	1.0		ug/m3	1	91-20-3	
Propylene*	Not detected	17		ug/m3	1	115-07-1	
Styrene	Not detected	0.85		ug/m3	1	100-42-5	
1,1,1-Trichloroethane	Not detected	1.1		ug/m3	1	71-55-6	
1,1,2,2-Tetrachloroethane	Not detected	1.4		ug/m3	1	79-34-5	
1,1,2-Trichloroethane	Not detected	1.1		ug/m3	1	79-00-5	
1,2,4-Trichlorobenzene	Not detected	3.7		ug/m3	1	120-82-1	
1,2,4-Trimethylbenzene	Not detected	0.98		ug/m3	1	95-63-6	
1,3,5-Trimethylbenzene	Not detected	0.98		ug/m3	1	108-67-8	
2,2,4-Trimethylpentane	Not detected	0.93		ug/m3	1	540-84-1	
Tert-butyl Alcohol	13	6.1		ug/m3	1	75-65-0	
Tetrachloroethene	Not detected	1.4		ug/m3	1	127-18-4	
Tetrahydrofuran*	Not detected	0.88		ug/m3	1	109-99-9	X
Toluene	2.6	0.75		ug/m3	1	108-88-3	
Trichloroethene	Not detected	1.1		ug/m3	1	79-01-6	
Trichlorofluoromethane	2.2	1.1		ug/m3	1	75-69-4	
Vinyl chloride	Not detected	0.51		ug/m3	1	75-01-4	
Vinyl acetate	Not detected	7.0		ug/m3	1	108-05-4	
p,m-Xylene	Not detected	1.7		ug/m3	1		

M-Result reported to MDL not RDL
X-Elevated reporting limit due to matrix interference

Lab Sample ID: S40706.17 (continued)

Sample Tag: 18VP-6 5'

TO-15 (Replicate 01), Method: TO-15, Run Date: 10/21/22 05:47, Analyst: NDK (continued)

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
o-Xylene	Not detected	0.87		ug/m3	1	95-47-6	
Total Xylenes	Not detected	2.6		ug/m3	1	1330-20-7	

Lab Sample ID: S40706.18

Sample Tag: 18VP-6 10'

Collected Date/Time: 09/23/2022 10:56 - 09/23/2022 11:04

Matrix: Air

COC Reference: A5765

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
1	Air Canister	None	No	RT	IR

Extraction / Prep.

Parameter	Result	Method	Run Date	Analyst	Flags
Pressure check for TO-15*	-5.5	N/A	09/27/22 18:00	BDO	

Organics - Volatiles

TO-15, Method: TO-15, Run Date: 10/07/22 06:38, Analyst: NDK

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Acetone	Not detected	20		ppbv	10	67-64-1	
1,3-Butadiene	Not detected	20		ppbv	10	106-99-0	
Benzene	Not detected	2		ppbv	10	71-43-2	
Bromodichloromethane	Not detected	2		ppbv	10	75-27-4	
Bromoform	Not detected	2		ppbv	10	75-25-2	
Bromomethane	Not detected	2		ppbv	10	74-83-9	
Vinyl bromide	Not detected	2		ppbv	10	593-60-2	
Benzyl chloride	Not detected	2		ppbv	10	100-44-7	
Carbon disulfide	Not detected	20		ppbv	10	75-15-0	
Chlorobenzene	Not detected	2		ppbv	10	108-90-7	
Chloroethane	Not detected	20		ppbv	10	75-00-3	
Chloroform	Not detected	2		ppbv	10	67-66-3	
Chloromethane	Not detected	20		ppbv	10	74-87-3	
3-Chloropropene	Not detected	20		ppbv	10	107-05-1	
2-Chlorotoluene	Not detected	2		ppbv	10	95-49-8	
Carbon tetrachloride	Not detected	2		ppbv	10	56-23-5	
Cyclohexane	Not detected	2		ppbv	10	110-82-7	
1,1-Dichloroethane	Not detected	2		ppbv	10	75-34-3	
1,1-Dichloroethene	Not detected	2		ppbv	10	75-35-4	
1,2-Dibromoethane	Not detected	2		ppbv	10	106-93-4	
1,2-Dichloroethane	Not detected	2		ppbv	10	107-06-2	
1,2-Dichloropropane	Not detected	2		ppbv	10	78-87-5	
1,4-Dioxane	Not detected	25		ppbv	10	123-91-1	
Dichlorodifluoromethane	Not detected	2		ppbv	10	75-71-8	
Dibromochloromethane	Not detected	2		ppbv	10	124-48-1	
trans-1,2-Dichloroethene	Not detected	2		ppbv	10	156-60-5	
cis-1,2-Dichloroethene	Not detected	2		ppbv	10	156-59-2	
cis-1,3-Dichloropropene	Not detected	2		ppbv	10	10061-01-5	
1,3-Dichlorobenzene	Not detected	2		ppbv	10	541-73-1	
1,2-Dichlorobenzene	Not detected	2		ppbv	10	95-50-1	
1,4-Dichlorobenzene	Not detected	2		ppbv	10	106-46-7	
trans-1,3-Dichloropropene	Not detected	2		ppbv	10	10061-02-6	
Ethanol*	Not detected	25		ppbv	10	64-17-5	
Ethylbenzene	Not detected	2		ppbv	10	100-41-4	
Ethyl Acetate*	Not detected	20		ppbv	10	141-78-6	
4-Ethyltoluene	Not detected	2		ppbv	10	622-96-8	
Freon 113	Not detected	2		ppbv	10	76-13-1	

Lab Sample ID: S40706.18 (continued)
Sample Tag: 18VP-6 10'

TO-15, Method: TO-15, Run Date: 10/07/22 06:38, Analyst: NDK (continued)

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Freon 114	Not detected	2		ppbv	10	76-14-2	
Heptane	Not detected	2		ppbv	10	142-82-5	
Hexachlorobutadiene	Not detected	2		ppbv	10	87-68-3	
Hexane	Not detected	2		ppbv	10	110-54-3	
2-Hexanone*	Not detected	5		ppbv	10	591-78-6	
Isopropyl Alcohol*	Not detected	20		ppbv	10	67-63-0	
Methylene chloride	Not detected	5		ppbv	10	75-09-2	
2-Butanone (MEK)	Not detected	20		ppbv	10	78-93-3	
4-Methyl-2-pentanone (MIBK)	Not detected	5		ppbv	10	108-10-1	
tert-Methyl butyl ether (MTBE)	Not detected	2		ppbv	10	1634-04-4	
Methyl methacrylate	Not detected	2		ppbv	10	80-62-6	
Naphthalene	Not detected	2		ppbv	10	91-20-3	
Propylene*	Not detected	100		ppbv	10	115-07-1	
Styrene	Not detected	2		ppbv	10	100-42-5	
1,1,1-Trichloroethane	Not detected	2		ppbv	10	71-55-6	
1,1,2,2-Tetrachloroethane	Not detected	2		ppbv	10	79-34-5	
1,1,2-Trichloroethane	Not detected	2		ppbv	10	79-00-5	
1,2,4-Trichlorobenzene	Not detected	5		ppbv	10	120-82-1	
1,2,4-Trimethylbenzene	Not detected	2		ppbv	10	95-63-6	
1,3,5-Trimethylbenzene	Not detected	2		ppbv	10	108-67-8	
2,2,4-Trimethylpentane	Not detected	2		ppbv	10	540-84-1	
Tert-butyl Alcohol	Not detected	20		ppbv	10	75-65-0	
Tetrachloroethene	Not detected	2		ppbv	10	127-18-4	
Tetrahydrofuran*	Not detected	2		ppbv	10	109-99-9	
Toluene	Not detected	2		ppbv	10	108-88-3	
Trichloroethene	Not detected	2		ppbv	10	79-01-6	
Trichlorofluoromethane	Not detected	2		ppbv	10	75-69-4	
Vinyl chloride	Not detected	2		ppbv	10	75-01-4	
Vinyl acetate	Not detected	20		ppbv	10	108-05-4	
p,m-Xylene	Not detected	4		ppbv	10		
o-Xylene	Not detected	2		ppbv	10	95-47-6	
Total Xylenes	Not detected	6		ppbv	10	1330-20-7	

TO-15, Method: TO-15, Run Date: 10/07/22 06:38, Analyst: NDK

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Acetone	Not detected	48		ug/m3	10	67-64-1	
1,3-Butadiene	Not detected	44		ug/m3	10	106-99-0	
Benzene	Not detected	6.4		ug/m3	10	71-43-2	
Bromodichloromethane	Not detected	13		ug/m3	10	75-27-4	
Bromoform	Not detected	21		ug/m3	10	75-25-2	
Bromomethane	Not detected	7.8		ug/m3	10	74-83-9	
Vinyl bromide	Not detected	8.7		ug/m3	10	593-60-2	
Benzyl chloride	Not detected	10		ug/m3	10	100-44-7	
Carbon disulfide	Not detected	62		ug/m3	10	75-15-0	
Chlorobenzene	Not detected	9.2		ug/m3	10	108-90-7	
Chloroethane	Not detected	53		ug/m3	10	75-00-3	
Chloroform	Not detected	9.8		ug/m3	10	67-66-3	
Chloromethane	Not detected	41		ug/m3	10	74-87-3	
3-Chloropropene	Not detected	63		ug/m3	10	107-05-1	
2-Chlorotoluene	Not detected	10		ug/m3	10	95-49-8	

Lab Sample ID: S40706.18 (continued)

Sample Tag: 18VP-6 10'

TO-15, Method: TO-15, Run Date: 10/07/22 06:38, Analyst: NDK (continued)

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Carbon tetrachloride	Not detected	13		ug/m3	10	56-23-5	
Cyclohexane	Not detected	6.9		ug/m3	10	110-82-7	
1,1-Dichloroethane	Not detected	8.1		ug/m3	10	75-34-3	
1,1-Dichloroethene	Not detected	7.9		ug/m3	10	75-35-4	
1,2-Dibromoethane	Not detected	15		ug/m3	10	106-93-4	
1,2-Dichloroethane	Not detected	8.1		ug/m3	10	107-06-2	
1,2-Dichloropropane	Not detected	9.2		ug/m3	10	78-87-5	
1,4-Dioxane	Not detected	90		ug/m3	10	123-91-1	
Dichlorodifluoromethane	Not detected	9.9		ug/m3	10	75-71-8	
Dibromochloromethane	Not detected	17		ug/m3	10	124-48-1	
trans-1,2-Dichloroethene	Not detected	7.9		ug/m3	10	156-60-5	
cis-1,2-Dichloroethene	Not detected	7.9		ug/m3	10	156-59-2	
cis-1,3-Dichloropropene	Not detected	9.1		ug/m3	10	10061-01-5	
1,3-Dichlorobenzene	Not detected	12		ug/m3	10	541-73-1	
1,2-Dichlorobenzene	Not detected	12		ug/m3	10	95-50-1	
1,4-Dichlorobenzene	Not detected	12		ug/m3	10	106-46-7	
trans-1,3-Dichloropropene	Not detected	9.1		ug/m3	10	10061-02-6	
Ethanol*	Not detected	47		ug/m3	10	64-17-5	
Ethylbenzene	Not detected	8.7		ug/m3	10	100-41-4	
Ethyl Acetate*	Not detected	72		ug/m3	10	141-78-6	
4-Ethyltoluene	Not detected	9.8		ug/m3	10	622-96-8	
Freon 113	Not detected	15		ug/m3	10	76-13-1	
Freon 114	Not detected	14		ug/m3	10	76-14-2	
Heptane	Not detected	8.2		ug/m3	10	142-82-5	
Hexachlorobutadiene	Not detected	21		ug/m3	10	87-68-3	
Hexane	Not detected	7.0		ug/m3	10	110-54-3	
2-Hexanone*	Not detected	20		ug/m3	10	591-78-6	
Isopropyl Alcohol*	Not detected	49		ug/m3	10	67-63-0	
Methylene chloride	Not detected	17		ug/m3	10	75-09-2	
2-Butanone (MEK)	Not detected	59		ug/m3	10	78-93-3	
4-Methyl-2-pentanone (MIBK)	Not detected	20		ug/m3	10	108-10-1	
tert-Methyl butyl ether (MTBE)	Not detected	7.2		ug/m3	10	1634-04-4	
Methyl methacrylate	Not detected	8.2		ug/m3	10	80-62-6	
Naphthalene	Not detected	10		ug/m3	10	91-20-3	
Propylene*	Not detected	170		ug/m3	10	115-07-1	
Styrene	Not detected	8.5		ug/m3	10	100-42-5	
1,1,1-Trichloroethane	Not detected	11		ug/m3	10	71-55-6	
1,1,2,2-Tetrachloroethane	Not detected	14		ug/m3	10	79-34-5	
1,1,2-Trichloroethane	Not detected	11		ug/m3	10	79-00-5	
1,2,4-Trichlorobenzene	Not detected	37		ug/m3	10	120-82-1	
1,2,4-Trimethylbenzene	Not detected	9.8		ug/m3	10	95-63-6	
1,3,5-Trimethylbenzene	Not detected	9.8		ug/m3	10	108-67-8	
2,2,4-Trimethylpentane	Not detected	9.3		ug/m3	10	540-84-1	
Tert-butyl Alcohol	Not detected	61		ug/m3	10	75-65-0	
Tetrachloroethene	Not detected	14		ug/m3	10	127-18-4	
Tetrahydrofuran*	Not detected	5.9		ug/m3	10	109-99-9	
Toluene	Not detected	7.5		ug/m3	10	108-88-3	
Trichloroethene	Not detected	11		ug/m3	10	79-01-6	
Trichlorofluoromethane	Not detected	11		ug/m3	10	75-69-4	
Vinyl chloride	Not detected	5.1		ug/m3	10	75-01-4	

Lab Sample ID: S40706.18 (continued)
Sample Tag: 18VP-6 10'

TO-15, Method: TO-15, Run Date: 10/07/22 06:38, Analyst: NDK (continued)

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Vinyl acetate	Not detected	70		ug/m3	10	108-05-4	
p,m-Xylene	Not detected	17		ug/m3	10		
o-Xylene	Not detected	8.7		ug/m3	10	95-47-6	
Total Xylenes	Not detected	26		ug/m3	10	1330-20-7	

TO-15 (Replicate 01), Method: TO-15, Run Date: 10/21/22 06:19, Analyst: NDK

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Acetone	10.6	2.0		ppbv	1	67-64-1	
1,3-Butadiene	Not detected	2.0		ppbv	1	106-99-0	
Benzene	0.3	0.2		ppbv	1	71-43-2	
Bromodichloromethane	Not detected	0.2		ppbv	1	75-27-4	
Bromoform	Not detected	0.2		ppbv	1	75-25-2	
Bromomethane	Not detected	0.2		ppbv	1	74-83-9	
Vinyl bromide	Not detected	0.2		ppbv	1	593-60-2	
Benzyl chloride	Not detected	0.2		ppbv	1	100-44-7	
Carbon disulfide	Not detected	2.0		ppbv	1	75-15-0	
Chlorobenzene	Not detected	0.2		ppbv	1	108-90-7	
Chloroethane	Not detected	2.0		ppbv	1	75-00-3	
Chloroform	Not detected	0.2		ppbv	1	67-66-3	
Chloromethane	Not detected	2.0		ppbv	1	74-87-3	
3-Chloropropene	Not detected	2.0		ppbv	1	107-05-1	
2-Chlorotoluene	Not detected	0.2		ppbv	1	95-49-8	
Carbon tetrachloride	Not detected	0.2		ppbv	1	56-23-5	
Cyclohexane	Not detected	0.2		ppbv	1	110-82-7	
1,1-Dichloroethane	Not detected	0.2		ppbv	1	75-34-3	
1,1-Dichloroethene	Not detected	0.2		ppbv	1	75-35-4	
1,2-Dibromoethane	Not detected	0.01		ppbv	1	106-93-4	M
1,2-Dichloroethane	Not detected	0.2		ppbv	1	107-06-2	
1,2-Dichloropropane	Not detected	0.2		ppbv	1	78-87-5	
1,4-Dioxane	Not detected	2.5		ppbv	1	123-91-1	
Dichlorodifluoromethane	0.5	0.2		ppbv	1	75-71-8	
Dibromochloromethane	Not detected	0.2		ppbv	1	124-48-1	
trans-1,2-Dichloroethene	Not detected	0.2		ppbv	1	156-60-5	
cis-1,2-Dichloroethene	Not detected	0.2		ppbv	1	156-59-2	
cis-1,3-Dichloropropene	Not detected	0.2		ppbv	1	10061-01-5	
1,3-Dichlorobenzene	0.6	0.2		ppbv	1	541-73-1	
1,2-Dichlorobenzene	Not detected	0.2		ppbv	1	95-50-1	
1,4-Dichlorobenzene	Not detected	0.2		ppbv	1	106-46-7	
trans-1,3-Dichloropropene	Not detected	0.2		ppbv	1	10061-02-6	
Ethanol*	16.9	2.5		ppbv	1	64-17-5	
Ethylbenzene	Not detected	0.2		ppbv	1	100-41-4	
Ethyl Acetate*	Not detected	2.0		ppbv	1	141-78-6	
4-Ethyltoluene	Not detected	0.2		ppbv	1	622-96-8	
Freon 113	Not detected	0.2		ppbv	1	76-13-1	
Freon 114	Not detected	0.2		ppbv	1	76-14-2	
Heptane	Not detected	0.3		ppbv	1	142-82-5	
Hexachlorobutadiene	Not detected	0.2		ppbv	1	87-68-3	
Hexane	Not detected	0.2		ppbv	1	110-54-3	
2-Hexanone*	Not detected	0.5		ppbv	1	591-78-6	

M-Result reported to MDL not RDL

Lab Sample ID: S40706.18 (continued)
Sample Tag: 18VP-6 10'

TO-15 (Replicate 01), Method: TO-15, Run Date: 10/21/22 06:19, Analyst: NDK (continued)

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Isopropyl Alcohol*	7.5	2.0		ppbv	1	67-63-0	
Methylene chloride	Not detected	0.5		ppbv	1	75-09-2	
2-Butanone (MEK)	Not detected	2.0		ppbv	1	78-93-3	
4-Methyl-2-pentanone (MIBK)	Not detected	0.5		ppbv	1	108-10-1	
tert-Methyl butyl ether (MTBE)	Not detected	0.2		ppbv	1	1634-04-4	
Methyl methacrylate	Not detected	0.2		ppbv	1	80-62-6	
Naphthalene	Not detected	0.2		ppbv	1	91-20-3	
Propylene*	Not detected	10		ppbv	1	115-07-1	
Styrene	Not detected	0.2		ppbv	1	100-42-5	
1,1,1-Trichloroethane	Not detected	0.2		ppbv	1	71-55-6	
1,1,2,2-Tetrachloroethane	Not detected	0.2		ppbv	1	79-34-5	
1,1,2-Trichloroethane	Not detected	0.2		ppbv	1	79-00-5	
1,2,4-Trichlorobenzene	Not detected	0.5		ppbv	1	120-82-1	
1,2,4-Trimethylbenzene	Not detected	0.2		ppbv	1	95-63-6	
1,3,5-Trimethylbenzene	Not detected	0.2		ppbv	1	108-67-8	
2,2,4-Trimethylpentane	Not detected	0.2		ppbv	1	540-84-1	
Tert-butyl Alcohol	Not detected	2.0		ppbv	1	75-65-0	
Tetrachloroethene	0.3	0.2		ppbv	1	127-18-4	
Tetrahydrofuran*	0.4	0.2		ppbv	1	109-99-9	
Toluene	0.6	0.2		ppbv	1	108-88-3	
Trichloroethene	Not detected	0.2		ppbv	1	79-01-6	
Trichlorofluoromethane	0.3	0.2		ppbv	1	75-69-4	
Vinyl chloride	Not detected	0.2		ppbv	1	75-01-4	
Vinyl acetate	Not detected	2.0		ppbv	1	108-05-4	
p,m-Xylene	Not detected	0.4		ppbv	1		
o-Xylene	Not detected	0.2		ppbv	1	95-47-6	
Total Xylenes	Not detected	0.6		ppbv	1	1330-20-7	

TO-15 (Replicate 01), Method: TO-15, Run Date: 10/21/22 06:19, Analyst: NDK

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Acetone	25.2	4.8		ug/m3	1	67-64-1	
1,3-Butadiene	Not detected	4.4		ug/m3	1	106-99-0	
Benzene	0.96	0.64		ug/m3	1	71-43-2	
Bromodichloromethane	Not detected	1.3		ug/m3	1	75-27-4	
Bromoform	Not detected	2.1		ug/m3	1	75-25-2	
Bromomethane	Not detected	0.78		ug/m3	1	74-83-9	
Vinyl bromide	Not detected	0.87		ug/m3	1	593-60-2	
Benzyl chloride	Not detected	1.0		ug/m3	1	100-44-7	
Carbon disulfide	Not detected	6.2		ug/m3	1	75-15-0	
Chlorobenzene	Not detected	0.92		ug/m3	1	108-90-7	
Chloroethane	Not detected	5.3		ug/m3	1	75-00-3	
Chloroform	Not detected	0.98		ug/m3	1	67-66-3	
Chloromethane	Not detected	4.1		ug/m3	1	74-87-3	
3-Chloropropene	Not detected	6.3		ug/m3	1	107-05-1	
2-Chlorotoluene	Not detected	1.0		ug/m3	1	95-49-8	
Carbon tetrachloride	Not detected	1.3		ug/m3	1	56-23-5	
Cyclohexane	Not detected	0.69		ug/m3	1	110-82-7	
1,1-Dichloroethane	Not detected	0.81		ug/m3	1	75-34-3	
1,1-Dichloroethene	Not detected	0.79		ug/m3	1	75-35-4	
1,2-Dibromoethane	Not detected	0.077		ug/m3	1	106-93-4	M

M-Result reported to MDL not RDL

Lab Sample ID: S40706.18 (continued)
Sample Tag: 18VP-6 10'

TO-15 (Replicate 01), Method: TO-15, Run Date: 10/21/22 06:19, Analyst: NDK (continued)

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
1,2-Dichloroethane	Not detected	0.81		ug/m3	1	107-06-2	
1,2-Dichloropropane	Not detected	0.92		ug/m3	1	78-87-5	
1,4-Dioxane	Not detected	9.0		ug/m3	1	123-91-1	
Dichlorodifluoromethane	2.5	0.99		ug/m3	1	75-71-8	
Dibromochloromethane	Not detected	1.7		ug/m3	1	124-48-1	
trans-1,2-Dichloroethene	Not detected	0.79		ug/m3	1	156-60-5	
cis-1,2-Dichloroethene	Not detected	0.79		ug/m3	1	156-59-2	
cis-1,3-Dichloropropene	Not detected	0.91		ug/m3	1	10061-01-5	
1,3-Dichlorobenzene	3.6	1.2		ug/m3	1	541-73-1	
1,2-Dichlorobenzene	Not detected	1.2		ug/m3	1	95-50-1	
1,4-Dichlorobenzene	Not detected	1.2		ug/m3	1	106-46-7	
trans-1,3-Dichloropropene	Not detected	0.91		ug/m3	1	10061-02-6	
Ethanol*	31.8	4.7		ug/m3	1	64-17-5	
Ethylbenzene	Not detected	0.87		ug/m3	1	100-41-4	
Ethyl Acetate*	Not detected	7.2		ug/m3	1	141-78-6	
4-Ethyltoluene	Not detected	0.98		ug/m3	1	622-96-8	
Freon 113	Not detected	1.5		ug/m3	1	76-13-1	
Freon 114	Not detected	1.4		ug/m3	1	76-14-2	
Heptane	Not detected	1.2		ug/m3	1	142-82-5	
Hexachlorobutadiene	Not detected	2.1		ug/m3	1	87-68-3	
Hexane	Not detected	0.70		ug/m3	1	110-54-3	
2-Hexanone*	Not detected	2.0		ug/m3	1	591-78-6	
Isopropyl Alcohol*	18	4.9		ug/m3	1	67-63-0	
Methylene chloride	Not detected	1.7		ug/m3	1	75-09-2	
2-Butanone (MEK)	Not detected	5.9		ug/m3	1	78-93-3	
4-Methyl-2-pentanone (MIBK)	Not detected	2.0		ug/m3	1	108-10-1	
tert-Methyl butyl ether (MTBE)	Not detected	0.72		ug/m3	1	1634-04-4	
Methyl methacrylate	Not detected	0.82		ug/m3	1	80-62-6	
Naphthalene	Not detected	1.0		ug/m3	1	91-20-3	
Propylene*	Not detected	17		ug/m3	1	115-07-1	
Styrene	Not detected	0.85		ug/m3	1	100-42-5	
1,1,1-Trichloroethane	Not detected	1.1		ug/m3	1	71-55-6	
1,1,2,2-Tetrachloroethane	Not detected	1.4		ug/m3	1	79-34-5	
1,1,2-Trichloroethane	Not detected	1.1		ug/m3	1	79-00-5	
1,2,4-Trichlorobenzene	Not detected	3.7		ug/m3	1	120-82-1	
1,2,4-Trimethylbenzene	Not detected	0.98		ug/m3	1	95-63-6	
1,3,5-Trimethylbenzene	Not detected	0.98		ug/m3	1	108-67-8	
2,2,4-Trimethylpentane	Not detected	0.93		ug/m3	1	540-84-1	
Tert-butyl Alcohol	Not detected	6.1		ug/m3	1	75-65-0	
Tetrachloroethene	2.0	1.4		ug/m3	1	127-18-4	
Tetrahydrofuran*	1.2	0.59		ug/m3	1	109-99-9	
Toluene	2.3	0.75		ug/m3	1	108-88-3	
Trichloroethene	Not detected	1.1		ug/m3	1	79-01-6	
Trichlorofluoromethane	1.7	1.1		ug/m3	1	75-69-4	
Vinyl chloride	Not detected	0.51		ug/m3	1	75-01-4	
Vinyl acetate	Not detected	7.0		ug/m3	1	108-05-4	
p,m-Xylene	Not detected	1.7		ug/m3	1		
o-Xylene	Not detected	0.87		ug/m3	1	95-47-6	
Total Xylenes	Not detected	2.6		ug/m3	1	1330-20-7	

Lab Sample ID: S40706.19

Sample Tag: 18VP-2

Collected Date/Time: 09/23/2022 11:23 - 09/23/2022 11:35

Matrix: Air

COC Reference: A5765

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
1	Air Canister	None	No	RT	IR

Extraction / Prep.

Parameter	Result	Method	Run Date	Analyst	Flags
Pressure check for TO-15*	-5.5	N/A	09/27/22 18:00	BDO	

Organics - Volatiles

TO-15, Method: TO-15, Run Date: 10/07/22 07:08, Analyst: NDK

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Acetone	Not detected	20		ppbv	10	67-64-1	
1,3-Butadiene	Not detected	20		ppbv	10	106-99-0	
Benzene	Not detected	2		ppbv	10	71-43-2	
Bromodichloromethane	Not detected	2		ppbv	10	75-27-4	
Bromoform	Not detected	2		ppbv	10	75-25-2	
Bromomethane	Not detected	2		ppbv	10	74-83-9	
Vinyl bromide	Not detected	2		ppbv	10	593-60-2	
Benzyl chloride	Not detected	2		ppbv	10	100-44-7	
Carbon disulfide	Not detected	20		ppbv	10	75-15-0	
Chlorobenzene	Not detected	2		ppbv	10	108-90-7	
Chloroethane	Not detected	20		ppbv	10	75-00-3	
Chloroform	Not detected	2		ppbv	10	67-66-3	
Chloromethane	Not detected	20		ppbv	10	74-87-3	
3-Chloropropene	Not detected	20		ppbv	10	107-05-1	
2-Chlorotoluene	Not detected	2		ppbv	10	95-49-8	
Carbon tetrachloride	Not detected	2		ppbv	10	56-23-5	
Cyclohexane	Not detected	2		ppbv	10	110-82-7	
1,1-Dichloroethane	Not detected	2		ppbv	10	75-34-3	
1,1-Dichloroethene	Not detected	2		ppbv	10	75-35-4	
1,2-Dibromoethane	Not detected	2		ppbv	10	106-93-4	
1,2-Dichloroethane	Not detected	2		ppbv	10	107-06-2	
1,2-Dichloropropane	Not detected	2		ppbv	10	78-87-5	
1,4-Dioxane	Not detected	25		ppbv	10	123-91-1	
Dichlorodifluoromethane	Not detected	2		ppbv	10	75-71-8	
Dibromochloromethane	Not detected	2		ppbv	10	124-48-1	
trans-1,2-Dichloroethene	Not detected	2		ppbv	10	156-60-5	
cis-1,2-Dichloroethene	Not detected	2		ppbv	10	156-59-2	
cis-1,3-Dichloropropene	Not detected	2		ppbv	10	10061-01-5	
1,3-Dichlorobenzene	Not detected	2		ppbv	10	541-73-1	
1,2-Dichlorobenzene	Not detected	2		ppbv	10	95-50-1	
1,4-Dichlorobenzene	Not detected	2		ppbv	10	106-46-7	
trans-1,3-Dichloropropene	Not detected	2		ppbv	10	10061-02-6	
Ethanol*	Not detected	25		ppbv	10	64-17-5	
Ethylbenzene	Not detected	2		ppbv	10	100-41-4	
Ethyl Acetate*	Not detected	20		ppbv	10	141-78-6	
4-Ethyltoluene	Not detected	2		ppbv	10	622-96-8	
Freon 113	Not detected	2		ppbv	10	76-13-1	

Lab Sample ID: S40706.19 (continued)
Sample Tag: 18VP-2

TO-15, Method: TO-15, Run Date: 10/07/22 07:08, Analyst: NDK (continued)

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Freon 114	Not detected	2		ppbv	10	76-14-2	
Heptane	Not detected	2		ppbv	10	142-82-5	
Hexachlorobutadiene	Not detected	2		ppbv	10	87-68-3	
Hexane	Not detected	2		ppbv	10	110-54-3	
2-Hexanone*	Not detected	5		ppbv	10	591-78-6	
Isopropyl Alcohol*	Not detected	20		ppbv	10	67-63-0	
Methylene chloride	Not detected	5		ppbv	10	75-09-2	
2-Butanone (MEK)	Not detected	20		ppbv	10	78-93-3	
4-Methyl-2-pentanone (MIBK)	Not detected	5		ppbv	10	108-10-1	
tert-Methyl butyl ether (MTBE)	Not detected	2		ppbv	10	1634-04-4	
Methyl methacrylate	Not detected	2		ppbv	10	80-62-6	
Naphthalene	Not detected	2		ppbv	10	91-20-3	
Propylene*	Not detected	100		ppbv	10	115-07-1	
Styrene	Not detected	2		ppbv	10	100-42-5	
1,1,1-Trichloroethane	Not detected	2		ppbv	10	71-55-6	
1,1,2,2-Tetrachloroethane	Not detected	2		ppbv	10	79-34-5	
1,1,2-Trichloroethane	Not detected	2		ppbv	10	79-00-5	
1,2,4-Trichlorobenzene	Not detected	5		ppbv	10	120-82-1	
1,2,4-Trimethylbenzene	Not detected	2		ppbv	10	95-63-6	
1,3,5-Trimethylbenzene	Not detected	2		ppbv	10	108-67-8	
2,2,4-Trimethylpentane	Not detected	2		ppbv	10	540-84-1	
Tert-butyl Alcohol	Not detected	20		ppbv	10	75-65-0	
Tetrachloroethene	Not detected	2		ppbv	10	127-18-4	
Tetrahydrofuran*	Not detected	2		ppbv	10	109-99-9	
Toluene	Not detected	2		ppbv	10	108-88-3	
Trichloroethene	Not detected	2		ppbv	10	79-01-6	
Trichlorofluoromethane	Not detected	2		ppbv	10	75-69-4	
Vinyl chloride	Not detected	2		ppbv	10	75-01-4	
Vinyl acetate	Not detected	20		ppbv	10	108-05-4	
p,m-Xylene	Not detected	4		ppbv	10		
o-Xylene	Not detected	2		ppbv	10	95-47-6	
Total Xylenes	Not detected	6		ppbv	10	1330-20-7	

TO-15, Method: TO-15, Run Date: 10/07/22 07:08, Analyst: NDK

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Acetone	Not detected	48		ug/m3	10	67-64-1	
1,3-Butadiene	Not detected	44		ug/m3	10	106-99-0	
Benzene	Not detected	6.4		ug/m3	10	71-43-2	
Bromodichloromethane	Not detected	13		ug/m3	10	75-27-4	
Bromoform	Not detected	21		ug/m3	10	75-25-2	
Bromomethane	Not detected	7.8		ug/m3	10	74-83-9	
Vinyl bromide	Not detected	8.7		ug/m3	10	593-60-2	
Benzyl chloride	Not detected	10		ug/m3	10	100-44-7	
Carbon disulfide	Not detected	62		ug/m3	10	75-15-0	
Chlorobenzene	Not detected	9.2		ug/m3	10	108-90-7	
Chloroethane	Not detected	53		ug/m3	10	75-00-3	
Chloroform	Not detected	9.8		ug/m3	10	67-66-3	
Chloromethane	Not detected	41		ug/m3	10	74-87-3	
3-Chloropropene	Not detected	63		ug/m3	10	107-05-1	
2-Chlorotoluene	Not detected	10		ug/m3	10	95-49-8	

Lab Sample ID: S40706.19 (continued)

Sample Tag: 18VP-2

TO-15, Method: TO-15, Run Date: 10/07/22 07:08, Analyst: NDK (continued)

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Carbon tetrachloride	Not detected	13		ug/m3	10	56-23-5	
Cyclohexane	Not detected	6.9		ug/m3	10	110-82-7	
1,1-Dichloroethane	Not detected	8.1		ug/m3	10	75-34-3	
1,1-Dichloroethene	Not detected	7.9		ug/m3	10	75-35-4	
1,2-Dibromoethane	Not detected	15		ug/m3	10	106-93-4	
1,2-Dichloroethane	Not detected	8.1		ug/m3	10	107-06-2	
1,2-Dichloropropane	Not detected	9.2		ug/m3	10	78-87-5	
1,4-Dioxane	Not detected	90		ug/m3	10	123-91-1	
Dichlorodifluoromethane	Not detected	9.9		ug/m3	10	75-71-8	
Dibromochloromethane	Not detected	17		ug/m3	10	124-48-1	
trans-1,2-Dichloroethene	Not detected	7.9		ug/m3	10	156-60-5	
cis-1,2-Dichloroethene	Not detected	7.9		ug/m3	10	156-59-2	
cis-1,3-Dichloropropene	Not detected	9.1		ug/m3	10	10061-01-5	
1,3-Dichlorobenzene	Not detected	12		ug/m3	10	541-73-1	
1,2-Dichlorobenzene	Not detected	12		ug/m3	10	95-50-1	
1,4-Dichlorobenzene	Not detected	12		ug/m3	10	106-46-7	
trans-1,3-Dichloropropene	Not detected	9.1		ug/m3	10	10061-02-6	
Ethanol*	Not detected	47		ug/m3	10	64-17-5	
Ethylbenzene	Not detected	8.7		ug/m3	10	100-41-4	
Ethyl Acetate*	Not detected	72		ug/m3	10	141-78-6	
4-Ethyltoluene	Not detected	9.8		ug/m3	10	622-96-8	
Freon 113	Not detected	15		ug/m3	10	76-13-1	
Freon 114	Not detected	14		ug/m3	10	76-14-2	
Heptane	Not detected	8.2		ug/m3	10	142-82-5	
Hexachlorobutadiene	Not detected	21		ug/m3	10	87-68-3	
Hexane	Not detected	7.0		ug/m3	10	110-54-3	
2-Hexanone*	Not detected	20		ug/m3	10	591-78-6	
Isopropyl Alcohol*	Not detected	49		ug/m3	10	67-63-0	
Methylene chloride	Not detected	17		ug/m3	10	75-09-2	
2-Butanone (MEK)	Not detected	59		ug/m3	10	78-93-3	
4-Methyl-2-pentanone (MIBK)	Not detected	20		ug/m3	10	108-10-1	
tert-Methyl butyl ether (MTBE)	Not detected	7.2		ug/m3	10	1634-04-4	
Methyl methacrylate	Not detected	8.2		ug/m3	10	80-62-6	
Naphthalene	Not detected	10		ug/m3	10	91-20-3	
Propylene*	Not detected	170		ug/m3	10	115-07-1	
Styrene	Not detected	8.5		ug/m3	10	100-42-5	
1,1,1-Trichloroethane	Not detected	11		ug/m3	10	71-55-6	
1,1,2,2-Tetrachloroethane	Not detected	14		ug/m3	10	79-34-5	
1,1,2-Trichloroethane	Not detected	11		ug/m3	10	79-00-5	
1,2,4-Trichlorobenzene	Not detected	37		ug/m3	10	120-82-1	
1,2,4-Trimethylbenzene	Not detected	9.8		ug/m3	10	95-63-6	
1,3,5-Trimethylbenzene	Not detected	9.8		ug/m3	10	108-67-8	
2,2,4-Trimethylpentane	Not detected	9.3		ug/m3	10	540-84-1	
Tert-butyl Alcohol	Not detected	61		ug/m3	10	75-65-0	
Tetrachloroethene	Not detected	14		ug/m3	10	127-18-4	
Tetrahydrofuran*	Not detected	5.9		ug/m3	10	109-99-9	
Toluene	Not detected	7.5		ug/m3	10	108-88-3	
Trichloroethene	Not detected	11		ug/m3	10	79-01-6	
Trichlorofluoromethane	Not detected	11		ug/m3	10	75-69-4	
Vinyl chloride	Not detected	5.1		ug/m3	10	75-01-4	

Lab Sample ID: S40706.19 (continued)
Sample Tag: 18VP-2

TO-15, Method: TO-15, Run Date: 10/07/22 07:08, Analyst: NDK (continued)

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Vinyl acetate	Not detected	70		ug/m3	10	108-05-4	
p,m-Xylene	Not detected	17		ug/m3	10		
o-Xylene	Not detected	8.7		ug/m3	10	95-47-6	
Total Xylenes	Not detected	26		ug/m3	10	1330-20-7	

TO-15 (Replicate 01), Method: TO-15, Run Date: 10/21/22 06:50, Analyst: NDK

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Acetone	7.9	2.0		ppbv	1	67-64-1	
1,3-Butadiene	Not detected	2.0		ppbv	1	106-99-0	
Benzene	Not detected	0.2		ppbv	1	71-43-2	
Bromodichloromethane	Not detected	0.2		ppbv	1	75-27-4	
Bromoform	Not detected	0.2		ppbv	1	75-25-2	
Bromomethane	Not detected	0.2		ppbv	1	74-83-9	
Vinyl bromide	Not detected	0.2		ppbv	1	593-60-2	
Benzyl chloride	Not detected	0.2		ppbv	1	100-44-7	
Carbon disulfide	Not detected	2.0		ppbv	1	75-15-0	
Chlorobenzene	Not detected	0.2		ppbv	1	108-90-7	
Chloroethane	Not detected	2.0		ppbv	1	75-00-3	
Chloroform	Not detected	0.2		ppbv	1	67-66-3	
Chloromethane	Not detected	2.0		ppbv	1	74-87-3	
3-Chloropropene	Not detected	2.0		ppbv	1	107-05-1	
2-Chlorotoluene	Not detected	0.2		ppbv	1	95-49-8	
Carbon tetrachloride	Not detected	0.2		ppbv	1	56-23-5	
Cyclohexane	Not detected	0.2		ppbv	1	110-82-7	
1,1-Dichloroethane	Not detected	0.2		ppbv	1	75-34-3	
1,1-Dichloroethene	Not detected	0.2		ppbv	1	75-35-4	
1,2-Dibromoethane	Not detected	0.01		ppbv	1	106-93-4	M
1,2-Dichloroethane	Not detected	0.2		ppbv	1	107-06-2	
1,2-Dichloropropane	Not detected	0.2		ppbv	1	78-87-5	
1,4-Dioxane	Not detected	2.5		ppbv	1	123-91-1	
Dichlorodifluoromethane	0.5	0.2		ppbv	1	75-71-8	
Dibromochloromethane	Not detected	0.2		ppbv	1	124-48-1	
trans-1,2-Dichloroethene	Not detected	0.2		ppbv	1	156-60-5	
cis-1,2-Dichloroethene	Not detected	0.2		ppbv	1	156-59-2	
cis-1,3-Dichloropropene	Not detected	0.2		ppbv	1	10061-01-5	
1,3-Dichlorobenzene	1.0	0.2		ppbv	1	541-73-1	
1,2-Dichlorobenzene	Not detected	0.2		ppbv	1	95-50-1	
1,4-Dichlorobenzene	Not detected	0.2		ppbv	1	106-46-7	
trans-1,3-Dichloropropene	Not detected	0.2		ppbv	1	10061-02-6	
Ethanol*	10.9	2.5		ppbv	1	64-17-5	
Ethylbenzene	Not detected	0.2		ppbv	1	100-41-4	
Ethyl Acetate*	Not detected	2.0		ppbv	1	141-78-6	
4-Ethyltoluene	Not detected	0.2		ppbv	1	622-96-8	
Freon 113	Not detected	0.2		ppbv	1	76-13-1	
Freon 114	Not detected	0.2		ppbv	1	76-14-2	
Heptane	0.2	0.2		ppbv	1	142-82-5	
Hexachlorobutadiene	Not detected	0.2		ppbv	1	87-68-3	
Hexane	Not detected	0.2		ppbv	1	110-54-3	
2-Hexanone*	Not detected	0.5		ppbv	1	591-78-6	

M-Result reported to MDL not RDL

Lab Sample ID: S40706.19 (continued)
Sample Tag: 18VP-2

TO-15 (Replicate 01), Method: TO-15, Run Date: 10/21/22 06:50, Analyst: NDK (continued)

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Isopropyl Alcohol*	9.5	2.0		ppbv	1	67-63-0	
Methylene chloride	Not detected	0.5		ppbv	1	75-09-2	
2-Butanone (MEK)	Not detected	2.0		ppbv	1	78-93-3	
4-Methyl-2-pentanone (MIBK)	Not detected	0.5		ppbv	1	108-10-1	
tert-Methyl butyl ether (MTBE)	Not detected	0.2		ppbv	1	1634-04-4	
Methyl methacrylate	Not detected	0.2		ppbv	1	80-62-6	
Naphthalene	Not detected	0.2		ppbv	1	91-20-3	
Propylene*	Not detected	10		ppbv	1	115-07-1	
Styrene	Not detected	0.2		ppbv	1	100-42-5	
1,1,1-Trichloroethane	Not detected	0.2		ppbv	1	71-55-6	
1,1,2,2-Tetrachloroethane	Not detected	0.2		ppbv	1	79-34-5	
1,1,2-Trichloroethane	Not detected	0.2		ppbv	1	79-00-5	
1,2,4-Trichlorobenzene	Not detected	0.5		ppbv	1	120-82-1	
1,2,4-Trimethylbenzene	Not detected	0.2		ppbv	1	95-63-6	
1,3,5-Trimethylbenzene	Not detected	0.2		ppbv	1	108-67-8	
2,2,4-Trimethylpentane	Not detected	0.2		ppbv	1	540-84-1	
Tert-butyl Alcohol	Not detected	2.0		ppbv	1	75-65-0	
Tetrachloroethene	Not detected	0.2		ppbv	1	127-18-4	
Tetrahydrofuran*	Not detected	0.2		ppbv	1	109-99-9	
Toluene	0.5	0.2		ppbv	1	108-88-3	
Trichloroethene	0.4	0.2		ppbv	1	79-01-6	
Trichlorofluoromethane	0.5	0.2		ppbv	1	75-69-4	
Vinyl chloride	Not detected	0.2		ppbv	1	75-01-4	
Vinyl acetate	Not detected	2.0		ppbv	1	108-05-4	
p,m-Xylene	Not detected	0.4		ppbv	1		
o-Xylene	Not detected	0.2		ppbv	1	95-47-6	
Total Xylenes	Not detected	0.6		ppbv	1	1330-20-7	

TO-15 (Replicate 01), Method: TO-15, Run Date: 10/21/22 06:50, Analyst: NDK

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Acetone	19	4.8		ug/m3	1	67-64-1	
1,3-Butadiene	Not detected	4.4		ug/m3	1	106-99-0	
Benzene	Not detected	0.64		ug/m3	1	71-43-2	
Bromodichloromethane	Not detected	1.3		ug/m3	1	75-27-4	
Bromoform	Not detected	2.1		ug/m3	1	75-25-2	
Bromomethane	Not detected	0.78		ug/m3	1	74-83-9	
Vinyl bromide	Not detected	0.87		ug/m3	1	593-60-2	
Benzyl chloride	Not detected	1.0		ug/m3	1	100-44-7	
Carbon disulfide	Not detected	6.2		ug/m3	1	75-15-0	
Chlorobenzene	Not detected	0.92		ug/m3	1	108-90-7	
Chloroethane	Not detected	5.3		ug/m3	1	75-00-3	
Chloroform	Not detected	0.98		ug/m3	1	67-66-3	
Chloromethane	Not detected	4.1		ug/m3	1	74-87-3	
3-Chloropropene	Not detected	6.3		ug/m3	1	107-05-1	
2-Chlorotoluene	Not detected	1.0		ug/m3	1	95-49-8	
Carbon tetrachloride	Not detected	1.3		ug/m3	1	56-23-5	
Cyclohexane	Not detected	0.69		ug/m3	1	110-82-7	
1,1-Dichloroethane	Not detected	0.81		ug/m3	1	75-34-3	
1,1-Dichloroethene	Not detected	0.79		ug/m3	1	75-35-4	
1,2-Dibromoethane	Not detected	0.077		ug/m3	1	106-93-4	M

M-Result reported to MDL not RDL

Lab Sample ID: S40706.19 (continued)
Sample Tag: 18VP-2

TO-15 (Replicate 01), Method: TO-15, Run Date: 10/21/22 06:50, Analyst: NDK (continued)

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
1,2-Dichloroethane	Not detected	0.81		ug/m3	1	107-06-2	
1,2-Dichloropropane	Not detected	0.92		ug/m3	1	78-87-5	
1,4-Dioxane	Not detected	9.0		ug/m3	1	123-91-1	
Dichlorodifluoromethane	2.5	0.99		ug/m3	1	75-71-8	
Dibromochloromethane	Not detected	1.7		ug/m3	1	124-48-1	
trans-1,2-Dichloroethene	Not detected	0.79		ug/m3	1	156-60-5	
cis-1,2-Dichloroethene	Not detected	0.79		ug/m3	1	156-59-2	
cis-1,3-Dichloropropene	Not detected	0.91		ug/m3	1	10061-01-5	
1,3-Dichlorobenzene	6.0	1.2		ug/m3	1	541-73-1	
1,2-Dichlorobenzene	Not detected	1.2		ug/m3	1	95-50-1	
1,4-Dichlorobenzene	Not detected	1.2		ug/m3	1	106-46-7	
trans-1,3-Dichloropropene	Not detected	0.91		ug/m3	1	10061-02-6	
Ethanol*	20.5	4.7		ug/m3	1	64-17-5	
Ethylbenzene	Not detected	0.87		ug/m3	1	100-41-4	
Ethyl Acetate*	Not detected	7.2		ug/m3	1	141-78-6	
4-Ethyltoluene	Not detected	0.98		ug/m3	1	622-96-8	
Freon 113	Not detected	1.5		ug/m3	1	76-13-1	
Freon 114	Not detected	1.4		ug/m3	1	76-14-2	
Heptane	0.82	0.82		ug/m3	1	142-82-5	
Hexachlorobutadiene	Not detected	2.1		ug/m3	1	87-68-3	
Hexane	Not detected	0.70		ug/m3	1	110-54-3	
2-Hexanone*	Not detected	2.0		ug/m3	1	591-78-6	
Isopropyl Alcohol*	23	4.9		ug/m3	1	67-63-0	
Methylene chloride	Not detected	1.7		ug/m3	1	75-09-2	
2-Butanone (MEK)	Not detected	5.9		ug/m3	1	78-93-3	
4-Methyl-2-pentanone (MIBK)	Not detected	2.0		ug/m3	1	108-10-1	
tert-Methyl butyl ether (MTBE)	Not detected	0.72		ug/m3	1	1634-04-4	
Methyl methacrylate	Not detected	0.82		ug/m3	1	80-62-6	
Naphthalene	Not detected	1.0		ug/m3	1	91-20-3	
Propylene*	Not detected	17		ug/m3	1	115-07-1	
Styrene	Not detected	0.85		ug/m3	1	100-42-5	
1,1,1-Trichloroethane	Not detected	1.1		ug/m3	1	71-55-6	
1,1,2,2-Tetrachloroethane	Not detected	1.4		ug/m3	1	79-34-5	
1,1,2-Trichloroethane	Not detected	1.1		ug/m3	1	79-00-5	
1,2,4-Trichlorobenzene	Not detected	3.7		ug/m3	1	120-82-1	
1,2,4-Trimethylbenzene	Not detected	0.98		ug/m3	1	95-63-6	
1,3,5-Trimethylbenzene	Not detected	0.98		ug/m3	1	108-67-8	
2,2,4-Trimethylpentane	Not detected	0.93		ug/m3	1	540-84-1	
Tert-butyl Alcohol	Not detected	6.1		ug/m3	1	75-65-0	
Tetrachloroethene	Not detected	1.4		ug/m3	1	127-18-4	
Tetrahydrofuran*	Not detected	0.59		ug/m3	1	109-99-9	
Toluene	1.9	0.75		ug/m3	1	108-88-3	
Trichloroethene	2.1	1.1		ug/m3	1	79-01-6	
Trichlorofluoromethane	2.8	1.1		ug/m3	1	75-69-4	
Vinyl chloride	Not detected	0.51		ug/m3	1	75-01-4	
Vinyl acetate	Not detected	7.0		ug/m3	1	108-05-4	
p,m-Xylene	Not detected	1.7		ug/m3	1		
o-Xylene	Not detected	0.87		ug/m3	1	95-47-6	
Total Xylenes	Not detected	2.6		ug/m3	1	1330-20-7	

Quality Control Report

Report ID: S40706.01(02)+QC02
Generated on 10/26/2022

Report to

Attention: Kelly Cratsenburg
TRC
1540 Eisenhower Place
Ann Arbor, MI 48108

Phone: 734-585-7829 C: 734-412-5424 FAX:

Report Produced by

Merit Laboratories
2680 East Lansing Drive
East Lansing, MI 48823

Phone: (517) 332-0167 FAX: (517) 332-6333

Report Summary

Lab Sample ID(s): S40706.01-S40706.19
Project: Detroit Axle Ferndale, MI
Submitted Date/Time: 09/26/2022 11:20
Sampled by: Jacob Krenz
P.O. #: 188681

QC Report Sections

Report Flag Descriptions

*: QC result is outside of indicated control limits
W: Surrogate result not applicable due to sample dilution

I certify that this data package is in compliance with the terms and conditions of the program, and project, and contractual requirements both technically and for completeness. Release of the data contained in this hardcopy data package and its computer-readable data submitted has been authorized by the Quality Assurance Manager and his/her designee, as verified by the following signature.

Barbara Ball
Quality Assurance Manager

QC Report - Analysis Summary

Lab Sample ID: S40706.01

Sample Tag: VP-1

Collected Date/Time: 09/22/2022 11:31 - 09/22/2022 11:36

Matrix: Air

COC Reference: A5764

Analysis	Method	Run Date/Time	Batch ID	Prep ID	Surr	QC Types
Organics - Volatiles						
TO-15	TO-15	10/06/22 22:09	221006A8	GV221006G1	Yes	BLK/LCS/LCSD
TO-15 (Replicate 01)	TO-15	10/20/22 17:28	221020A8	GV221020G1	Yes	BLK/LCS/LCSD

QC Report - Analysis Summary

Lab Sample ID: S40706.02

Sample Tag: VP-2

Collected Date/Time: 09/22/2022 12:07 - 09/22/2022 12:12

Matrix: Air

COC Reference: A5764

Analysis	Method	Run Date/Time	Batch ID	Prep ID	Surr	QC Types
Organics - Volatiles						
TO-15	TO-15	10/06/22 22:39	221006A8	GV221006G1	Yes	BLK/LCS/LCSD
TO-15 (Replicate 01)	TO-15	10/20/22 17:59	221020A8	GV221020G1	Yes	BLK/LCS/LCSD

Lab Sample ID: S40706.03

Sample Tag: VP-3

Collected Date/Time: 09/22/2022 12:28 - 09/22/2022 12:34

Matrix: Air

COC Reference: A5764

Analysis	Method	Run Date/Time	Batch ID	Prep ID	Surr	QC Types
Organics - Volatiles						
TO-15	TO-15	10/06/22 23:09	221006A8	GV221006G1	Yes	BLK/LCS/LCSD
TO-15 (Replicate 01)	TO-15	10/20/22 18:30	221020A8	GV221020G1	Yes	BLK/LCS/LCSD

QC Report - Analysis Summary

Lab Sample ID: S40706.04

Sample Tag: VP-4

Collected Date/Time: 09/22/2022 12:51 - 09/22/2022 12:58

Matrix: Air

COC Reference: A5764

Analysis	Method	Run Date/Time	Batch ID	Prep ID	Surr	QC Types
Organics - Volatiles						
TO-15	TO-15	10/06/22 23:39	221006A8	GV221006G1	Yes	BLK/LCS/LCSD
TO-15 (Replicate 01)	TO-15	10/20/22 19:01	221020A8	GV221020G1	Yes	BLK/LCS/LCSD

Lab Sample ID: S40706.05

Sample Tag: VP-5

Collected Date/Time: 09/22/2022 13:13 - 09/22/2022 13:22

Matrix: Air

COC Reference: A5764

Analysis	Method	Run Date/Time	Batch ID	Prep ID	Surr	QC Types
Organics - Volatiles						
TO-15	TO-15	10/07/22 00:09	221006A8	GV221006G1	Yes	BLK/LCS/LCSD
TO-15 (Replicate 01)	TO-15	10/20/22 19:32	221020A8	GV221020G1	Yes	BLK/LCS/LCSD

Lab Sample ID: S40706.06

Sample Tag: VP-6

Collected Date/Time: 09/22/2022 13:28 - 09/22/2022 13:33

Matrix: Air

COC Reference: A5764

Analysis	Method	Run Date/Time	Batch ID	Prep ID	Surr	QC Types
Organics - Volatiles						
TO-15	TO-15	10/07/22 00:39	221006A8	GV221006G1	Yes	BLK/LCS/LCSD
TO-15 (Replicate 01)	TO-15	10/20/22 22:34	221020A8	GV221020G1	Yes	BLK/LCS/LCSD

Lab Sample ID: S40706.07

Sample Tag: VP-7

Collected Date/Time: 09/22/2022 13:51 - 09/22/2022 13:56

Matrix: Air

COC Reference: A5764

Analysis	Method	Run Date/Time	Batch ID	Prep ID	Surr	QC Types
Organics - Volatiles						
TO-15	TO-15	10/07/22 01:09	221006A8	GV221006G1	Yes	BLK/LCS/LCSD
TO-15 (Replicate 01)	TO-15	10/20/22 23:06	221020A8	GV221020G1	Yes	BLK/LCS/LCSD

QC Report - Analysis Summary

Lab Sample ID: S40706.08

Sample Tag: VP-8

Collected Date/Time: 09/22/2022 14:18 - 09/22/2022 14:23

Matrix: Air

COC Reference: A5764

Analysis	Method	Run Date/Time	Batch ID	Prep ID	Surr	QC Types
Organics - Volatiles						
TO-15	TO-15	10/07/22 01:39	221006A8	GV221006G1	Yes	BLK/LCS/LCSD
TO-15 (Replicate 01)	TO-15	10/20/22 23:37	221020A8	GV221020G1	Yes	BLK/LCS/LCSD

QC Report - Analysis Summary

Lab Sample ID: S40706.09

Sample Tag: VP-9

Collected Date/Time: 09/22/2022 14:43 - 09/22/2022 14:48

Matrix: Air

COC Reference: A5764

Analysis	Method	Run Date/Time	Batch ID	Prep ID	Surr	QC Types
Organics - Volatiles						
TO-15	TO-15	10/07/22 02:09	221006A8	GV221006G1	Yes	BLK/LCS/LCSD
TO-15 (Replicate 01)	TO-15	10/21/22 00:08	221020A8	GV221020G1	Yes	BLK/LCS/LCSD

Lab Sample ID: S40706.10

Sample Tag: VP-10

Collected Date/Time: 09/22/2022 14:59 - 09/22/2022 15:04

Matrix: Air

COC Reference: A5764

Analysis	Method	Run Date/Time	Batch ID	Prep ID	Surr	QC Types
Organics - Volatiles						
TO-15	TO-15	10/07/22 02:39	221006A8	GV221006G1	Yes	BLK/LCS/LCSD
TO-15 (Replicate 01)	TO-15	10/21/22 02:09	221020A8	GV221020G2	Yes	BLK/LCS/LCSD

Lab Sample ID: S40706.11

Sample Tag: VP-12

Collected Date/Time: 09/23/2022 08:35 - 09/23/2022 08:40

Matrix: Air

COC Reference: A5765

Analysis	Method	Run Date/Time	Batch ID	Prep ID	Surr	QC Types
Organics - Volatiles						
TO-15	TO-15	10/07/22 03:09	221006A8	GV221006G1	Yes	BLK/LCS/LCSD
TO-15 (Replicate 01)	TO-15	10/21/22 02:41	221020A8	GV221020G2	Yes	BLK/LCS/LCSD

QC Report - Analysis Summary

Lab Sample ID: S40706.12

Sample Tag: VP-11

Collected Date/Time: 09/22/2022 15:15 - 09/22/2022 15:25

Matrix: Air

COC Reference: A5765

Analysis	Method	Run Date/Time	Batch ID	Prep ID	Surr	QC Types
Organics - Volatiles						
TO-15	TO-15	10/07/22 03:38	221006A8	GV221006G1	Yes	BLK/LCS/LCSD
TO-15 (Replicate 01)	TO-15	10/21/22 03:12	221020A8	GV221020G2	Yes	BLK/LCS/LCSD

QC Report - Analysis Summary

Lab Sample ID: S40706.13

Sample Tag: VP-13

Collected Date/Time: 09/23/2022 08:49 - 09/23/2022 08:54

Matrix: Air

COC Reference: A5765

Analysis	Method	Run Date/Time	Batch ID	Prep ID	Surr	QC Types
Organics - Volatiles						
TO-15	TO-15	10/07/22 04:08	221006A8	GV221006G1	Yes	BLK/LCS/LCSD
TO-15 (Replicate 01)	TO-15	10/21/22 03:43	221020A8	GV221020G2	Yes	BLK/LCS/LCSD

QC Report - Analysis Summary

Lab Sample ID: S40706.14

Sample Tag: VP-14

Collected Date/Time: 09/23/2022 09:08 - 09/23/2022 09:14

Matrix: Air

COC Reference: A5765

Analysis	Method	Run Date/Time	Batch ID	Prep ID	Surr	QC Types
Organics - Volatiles						
TO-15	TO-15	10/07/22 04:38	221006A8	GV221006G1	Yes	BLK/LCS/LCSD
TO-15 (Replicate 01)	TO-15	10/21/22 04:14	221020A8	GV221020G2	Yes	BLK/LCS/LCSD

QC Report - Analysis Summary

Lab Sample ID: S40706.15

Sample Tag: 18VP-3

Collected Date/Time: 09/23/2022 09:38 - 09/23/2022 09:43

Matrix: Air

COC Reference: A5765

Analysis	Method	Run Date/Time	Batch ID	Prep ID	Surr	QC Types
Organics - Volatiles						
TO-15	TO-15	10/07/22 05:08	221006A8	GV221006G1	Yes	BLK/LCS/LCSD
TO-15 (Replicate 01)	TO-15	10/21/22 04:45	221020A8	GV221020G2	Yes	BLK/LCS/LCSD

Lab Sample ID: S40706.16

Sample Tag: 18VP-4

Collected Date/Time: 09/23/2022 10:06 - 09/23/2022 10:11

Matrix: Air

COC Reference: A5765

Analysis	Method	Run Date/Time	Batch ID	Prep ID	Surr	QC Types
Organics - Volatiles						
TO-15	TO-15	10/07/22 05:38	221006A8	GV221006G1	Yes	BLK/LCS/LCSD
TO-15 (Replicate 01)	TO-15	10/21/22 05:16	221020A8	GV221020G2	Yes	BLK/LCS/LCSD

QC Report - Analysis Summary

Lab Sample ID: S40706.17

Sample Tag: 18VP-6 5'

Collected Date/Time: 09/23/2022 10:52 - 09/23/2022 10:59

Matrix: Air

COC Reference: A5765

Analysis	Method	Run Date/Time	Batch ID	Prep ID	Surr	QC Types
Organics - Volatiles						
TO-15	TO-15	10/07/22 06:08	221006A8	GV221006G1	Yes	BLK/LCS/LCSD
TO-15 (Replicate 01)	TO-15	10/21/22 05:47	221020A8	GV221020G2	Yes	BLK/LCS/LCSD

QC Report - Analysis Summary

Lab Sample ID: S40706.18

Sample Tag: 18VP-6 10'

Collected Date/Time: 09/23/2022 10:56 - 09/23/2022 11:04

Matrix: Air

COC Reference: A5765

Analysis	Method	Run Date/Time	Batch ID	Prep ID	Surr	QC Types
Organics - Volatiles						
TO-15	TO-15	10/07/22 06:38	221006A8	GV221006G1	Yes	BLK/LCS/LCSD
TO-15 (Replicate 01)	TO-15	10/21/22 06:19	221020A8	GV221020G2	Yes	BLK/LCS/LCSD

Lab Sample ID: S40706.19

Sample Tag: 18VP-2

Collected Date/Time: 09/23/2022 11:23 - 09/23/2022 11:35

Matrix: Air

COC Reference: A5765

Analysis	Method	Run Date/Time	Batch ID	Prep ID	Surr	QC Types
Organics - Volatiles						
TO-15	TO-15	10/07/22 07:08	221006A8	GV221006G1	Yes	BLK/LCS/LCSD
TO-15 (Replicate 01)	TO-15	10/21/22 06:50	221020A8	GV221020G2	Yes	BLK/LCS/LCSD

QC Report - Prep Batch Summary

Organics - Volatiles, Prep Batch ID: GV221006G1

Surrogates: Yes, QC Types: BLK/LCS/LCSD

Sample ID	Analysis	Method	Run Date/Time	Batch ID
S40706.01	TO-15	TO-15	10/06/22 22:09	221006A8
S40706.02	TO-15	TO-15	10/06/22 22:39	221006A8
S40706.03	TO-15	TO-15	10/06/22 23:09	221006A8
S40706.04	TO-15	TO-15	10/06/22 23:39	221006A8
S40706.05	TO-15	TO-15	10/07/22 00:09	221006A8
S40706.06	TO-15	TO-15	10/07/22 00:39	221006A8
S40706.07	TO-15	TO-15	10/07/22 01:09	221006A8
S40706.08	TO-15	TO-15	10/07/22 01:39	221006A8
S40706.09	TO-15	TO-15	10/07/22 02:09	221006A8
S40706.10	TO-15	TO-15	10/07/22 02:39	221006A8
S40706.11	TO-15	TO-15	10/07/22 03:09	221006A8
S40706.12	TO-15	TO-15	10/07/22 03:38	221006A8
S40706.13	TO-15	TO-15	10/07/22 04:08	221006A8
S40706.14	TO-15	TO-15	10/07/22 04:38	221006A8
S40706.15	TO-15	TO-15	10/07/22 05:08	221006A8
S40706.16	TO-15	TO-15	10/07/22 05:38	221006A8
S40706.17	TO-15	TO-15	10/07/22 06:08	221006A8
S40706.18	TO-15	TO-15	10/07/22 06:38	221006A8
S40706.19	TO-15	TO-15	10/07/22 07:08	221006A8

Organics - Volatiles, Prep Batch ID: GV221020G1

Surrogates: Yes, QC Types: BLK/LCS/LCSD

Sample ID	Analysis	Method	Run Date/Time	Batch ID
S40706.01	TO-15 (Replicate 01)	TO-15	10/20/22 17:28	221020A8
S40706.02	TO-15 (Replicate 01)	TO-15	10/20/22 17:59	221020A8
S40706.03	TO-15 (Replicate 01)	TO-15	10/20/22 18:30	221020A8
S40706.04	TO-15 (Replicate 01)	TO-15	10/20/22 19:01	221020A8
S40706.05	TO-15 (Replicate 01)	TO-15	10/20/22 19:32	221020A8
S40706.06	TO-15 (Replicate 01)	TO-15	10/20/22 22:34	221020A8
S40706.07	TO-15 (Replicate 01)	TO-15	10/20/22 23:06	221020A8
S40706.08	TO-15 (Replicate 01)	TO-15	10/20/22 23:37	221020A8
S40706.09	TO-15 (Replicate 01)	TO-15	10/21/22 00:08	221020A8

Organics - Volatiles, Prep Batch ID: GV221020G2

Surrogates: Yes, QC Types: BLK/LCS/LCSD

Sample ID	Analysis	Method	Run Date/Time	Batch ID
S40706.10	TO-15 (Replicate 01)	TO-15	10/21/22 02:09	221020A8
S40706.11	TO-15 (Replicate 01)	TO-15	10/21/22 02:41	221020A8
S40706.12	TO-15 (Replicate 01)	TO-15	10/21/22 03:12	221020A8
S40706.13	TO-15 (Replicate 01)	TO-15	10/21/22 03:43	221020A8
S40706.14	TO-15 (Replicate 01)	TO-15	10/21/22 04:14	221020A8
S40706.15	TO-15 (Replicate 01)	TO-15	10/21/22 04:45	221020A8
S40706.16	TO-15 (Replicate 01)	TO-15	10/21/22 05:16	221020A8
S40706.17	TO-15 (Replicate 01)	TO-15	10/21/22 05:47	221020A8
S40706.18	TO-15 (Replicate 01)	TO-15	10/21/22 06:19	221020A8
S40706.19	TO-15 (Replicate 01)	TO-15	10/21/22 06:50	221020A8

QC Report - Surrogates per Lab Sample

Lab Sample ID: S40706.01

Sample Tag: VP-1

Collected Date/Time: 09/22/2022 11:31 - 09/22/2022 11:36

Matrix: Air

COC Reference: A5764

Organics - Volatiles, Analysis: TO-15

Run in Batch: 221006A8, Run Date: 10/06/2022 22:09, Matrix: G, Dilution: 10

Surrogate	Flags	**%Rec**	LCL	UCL
4-Bromofluorobenzene		**83.8**	60	140

Organics - Volatiles, Analysis: TO-15 (Replicate 01)

Run in Batch: 221020A8, Run Date: 10/20/2022 17:28, Matrix: G, Dilution: 1

Surrogate	Flags	**%Rec**	LCL	UCL
4-Bromofluorobenzene		**85.3**	60	140

QC Report - Surrogates per Lab Sample

Lab Sample ID: S40706.02

Sample Tag: VP-2

Collected Date/Time: 09/22/2022 12:07 - 09/22/2022 12:12

Matrix: Air

COC Reference: A5764

Organics - Volatiles, Analysis: TO-15

Run in Batch: 221006A8, Run Date: 10/06/2022 22:39, Matrix: G, Dilution: 10

Surrogate	Flags	**%Rec**	LCL	UCL
4-Bromofluorobenzene		**84.4**	60	140

Organics - Volatiles, Analysis: TO-15 (Replicate 01)

Run in Batch: 221020A8, Run Date: 10/20/2022 17:59, Matrix: G, Dilution: 1

Surrogate	Flags	**%Rec**	LCL	UCL
4-Bromofluorobenzene		**84.8**	60	140

QC Report - Surrogates per Lab Sample

Lab Sample ID: S40706.03

Sample Tag: VP-3

Collected Date/Time: 09/22/2022 12:28 - 09/22/2022 12:34

Matrix: Air

COC Reference: A5764

Organics - Volatiles, Analysis: TO-15

Run in Batch: 221006A8, Run Date: 10/06/2022 23:09, Matrix: G, Dilution: 10

Surrogate	Flags	**%Rec**	LCL	UCL
4-Bromofluorobenzene		**84.7**	60	140

Organics - Volatiles, Analysis: TO-15 (Replicate 01)

Run in Batch: 221020A8, Run Date: 10/20/2022 18:30, Matrix: G, Dilution: 1

Surrogate	Flags	**%Rec**	LCL	UCL
4-Bromofluorobenzene		**83.5**	60	140

QC Report - Surrogates per Lab Sample

Lab Sample ID: S40706.04

Sample Tag: VP-4

Collected Date/Time: 09/22/2022 12:51 - 09/22/2022 12:58

Matrix: Air

COC Reference: A5764

Organics - Volatiles, Analysis: TO-15

Run in Batch: 221006A8, Run Date: 10/06/2022 23:39, Matrix: G, Dilution: 10

Surrogate	Flags	**%Rec**	LCL	UCL
4-Bromofluorobenzene		**84.8**	60	140

Organics - Volatiles, Analysis: TO-15 (Replicate 01)

Run in Batch: 221020A8, Run Date: 10/20/2022 19:01, Matrix: G, Dilution: 1

Surrogate	Flags	**%Rec**	LCL	UCL
4-Bromofluorobenzene		**85.1**	60	140

QC Report - Surrogates per Lab Sample

Lab Sample ID: S40706.05

Sample Tag: VP-5

Collected Date/Time: 09/22/2022 13:13 - 09/22/2022 13:22

Matrix: Air

COC Reference: A5764

Organics - Volatiles, Analysis: TO-15

Run in Batch: 221006A8, Run Date: 10/07/2022 00:09, Matrix: G, Dilution: 10

Surrogate	Flags	**%Rec**	LCL	UCL
4-Bromofluorobenzene		**86.0**	60	140

Organics - Volatiles, Analysis: TO-15 (Replicate 01)

Run in Batch: 221020A8, Run Date: 10/20/2022 19:32, Matrix: G, Dilution: 1

Surrogate	Flags	**%Rec**	LCL	UCL
4-Bromofluorobenzene		**86.0**	60	140

QC Report - Surrogates per Lab Sample

Lab Sample ID: S40706.06

Sample Tag: VP-6

Collected Date/Time: 09/22/2022 13:28 - 09/22/2022 13:33

Matrix: Air

COC Reference: A5764

Organics - Volatiles, Analysis: TO-15

Run in Batch: 221006A8, Run Date: 10/07/2022 00:39, Matrix: G, Dilution: 10

Surrogate	Flags	**%Rec**	LCL	UCL
4-Bromofluorobenzene		**84.2**	60	140

Organics - Volatiles, Analysis: TO-15 (Replicate 01)

Run in Batch: 221020A8, Run Date: 10/20/2022 22:34, Matrix: G, Dilution: 1

Surrogate	Flags	**%Rec**	LCL	UCL
4-Bromofluorobenzene		**80.4**	60	140

QC Report - Surrogates per Lab Sample

Lab Sample ID: S40706.07

Sample Tag: VP-7

Collected Date/Time: 09/22/2022 13:51 - 09/22/2022 13:56

Matrix: Air

COC Reference: A5764

Organics - Volatiles, Analysis: TO-15

Run in Batch: 221006A8, Run Date: 10/07/2022 01:09, Matrix: G, Dilution: 10

Surrogate	Flags	**%Rec**	LCL	UCL
4-Bromofluorobenzene		**86.9**	60	140

Organics - Volatiles, Analysis: TO-15 (Replicate 01)

Run in Batch: 221020A8, Run Date: 10/20/2022 23:06, Matrix: G, Dilution: 1

Surrogate	Flags	**%Rec**	LCL	UCL
4-Bromofluorobenzene		**84.9**	60	140

QC Report - Surrogates per Lab Sample

Lab Sample ID: S40706.08

Sample Tag: VP-8

Collected Date/Time: 09/22/2022 14:18 - 09/22/2022 14:23

Matrix: Air

COC Reference: A5764

Organics - Volatiles, Analysis: TO-15

Run in Batch: 221006A8, Run Date: 10/07/2022 01:39, Matrix: G, Dilution: 10

Surrogate	Flags	**%Rec**	LCL	UCL
4-Bromofluorobenzene		**84.7**	60	140

Organics - Volatiles, Analysis: TO-15 (Replicate 01)

Run in Batch: 221020A8, Run Date: 10/20/2022 23:37, Matrix: G, Dilution: 1

Surrogate	Flags	**%Rec**	LCL	UCL
4-Bromofluorobenzene		**81.5**	60	140

QC Report - Surrogates per Lab Sample

Lab Sample ID: S40706.09

Sample Tag: VP-9

Collected Date/Time: 09/22/2022 14:43 - 09/22/2022 14:48

Matrix: Air

COC Reference: A5764

Organics - Volatiles, Analysis: TO-15

Run in Batch: 221006A8, Run Date: 10/07/2022 02:09, Matrix: G, Dilution: 10

Surrogate	Flags	**%Rec**	LCL	UCL
4-Bromofluorobenzene		**86.8**	60	140

Organics - Volatiles, Analysis: TO-15 (Replicate 01)

Run in Batch: 221020A8, Run Date: 10/21/2022 00:08, Matrix: G, Dilution: 1

Surrogate	Flags	**%Rec**	LCL	UCL
4-Bromofluorobenzene		**87.9**	60	140

QC Report - Surrogates per Lab Sample

Lab Sample ID: S40706.10

Sample Tag: VP-10

Collected Date/Time: 09/22/2022 14:59 - 09/22/2022 15:04

Matrix: Air

COC Reference: A5764

Organics - Volatiles, Analysis: TO-15

Run in Batch: 221006A8, Run Date: 10/07/2022 02:39, Matrix: G, Dilution: 10

Surrogate	Flags	**%Rec**	LCL	UCL
4-Bromofluorobenzene		**84.2**	60	140

Organics - Volatiles, Analysis: TO-15 (Replicate 01)

Run in Batch: 221020A8, Run Date: 10/21/2022 02:09, Matrix: G, Dilution: 1

Surrogate	Flags	**%Rec**	LCL	UCL
4-Bromofluorobenzene		**87.2**	60	140

QC Report - Surrogates per Lab Sample

Lab Sample ID: S40706.11

Sample Tag: VP-12

Collected Date/Time: 09/23/2022 08:35 - 09/23/2022 08:40

Matrix: Air

COC Reference: A5765

Organics - Volatiles, Analysis: TO-15

Run in Batch: 221006A8, Run Date: 10/07/2022 03:09, Matrix: G, Dilution: 10

Surrogate	Flags	**%Rec**	LCL	UCL
4-Bromofluorobenzene		**86.1**	60	140

Organics - Volatiles, Analysis: TO-15 (Replicate 01)

Run in Batch: 221020A8, Run Date: 10/21/2022 02:41, Matrix: G, Dilution: 1

Surrogate	Flags	**%Rec**	LCL	UCL
4-Bromofluorobenzene		**82.9**	60	140

QC Report - Surrogates per Lab Sample

Lab Sample ID: S40706.12

Sample Tag: VP-11

Collected Date/Time: 09/22/2022 15:15 - 09/22/2022 15:25

Matrix: Air

COC Reference: A5765

Organics - Volatiles, Analysis: TO-15

Run in Batch: 221006A8, Run Date: 10/07/2022 03:38, Matrix: G, Dilution: 10

Surrogate	Flags	**%Rec**	LCL	UCL
4-Bromofluorobenzene		**85.3**	60	140

Organics - Volatiles, Analysis: TO-15 (Replicate 01)

Run in Batch: 221020A8, Run Date: 10/21/2022 03:12, Matrix: G, Dilution: 1

Surrogate	Flags	**%Rec**	LCL	UCL
4-Bromofluorobenzene		**86.3**	60	140

QC Report - Surrogates per Lab Sample

Lab Sample ID: S40706.13

Sample Tag: VP-13

Collected Date/Time: 09/23/2022 08:49 - 09/23/2022 08:54

Matrix: Air

COC Reference: A5765

Organics - Volatiles, Analysis: TO-15

Run in Batch: 221006A8, Run Date: 10/07/2022 04:08, Matrix: G, Dilution: 10

Surrogate	Flags	**%Rec**	LCL	UCL
4-Bromofluorobenzene		**85.8**	60	140

Organics - Volatiles, Analysis: TO-15 (Replicate 01)

Run in Batch: 221020A8, Run Date: 10/21/2022 03:43, Matrix: G, Dilution: 1

Surrogate	Flags	**%Rec**	LCL	UCL
4-Bromofluorobenzene		**83.9**	60	140

QC Report - Surrogates per Lab Sample

Lab Sample ID: S40706.14

Sample Tag: VP-14

Collected Date/Time: 09/23/2022 09:08 - 09/23/2022 09:14

Matrix: Air

COC Reference: A5765

Organics - Volatiles, Analysis: TO-15

Run in Batch: 221006A8, Run Date: 10/07/2022 04:38, Matrix: G, Dilution: 10

Surrogate	Flags	**%Rec**	LCL	UCL
4-Bromofluorobenzene		**86.4**	60	140

Organics - Volatiles, Analysis: TO-15 (Replicate 01)

Run in Batch: 221020A8, Run Date: 10/21/2022 04:14, Matrix: G, Dilution: 1

Surrogate	Flags	**%Rec**	LCL	UCL
4-Bromofluorobenzene		**85.4**	60	140

QC Report - Surrogates per Lab Sample

Lab Sample ID: S40706.15

Sample Tag: 18VP-3

Collected Date/Time: 09/23/2022 09:38 - 09/23/2022 09:43

Matrix: Air

COC Reference: A5765

Organics - Volatiles, Analysis: TO-15

Run in Batch: 221006A8, Run Date: 10/07/2022 05:08, Matrix: G, Dilution: 10

Surrogate	Flags	**%Rec**	LCL	UCL
4-Bromofluorobenzene		**85.3**	60	140

Organics - Volatiles, Analysis: TO-15 (Replicate 01)

Run in Batch: 221020A8, Run Date: 10/21/2022 04:45, Matrix: G, Dilution: 1

Surrogate	Flags	**%Rec**	LCL	UCL
4-Bromofluorobenzene		**84.7**	60	140

QC Report - Surrogates per Lab Sample

Lab Sample ID: S40706.16

Sample Tag: 18VP-4

Collected Date/Time: 09/23/2022 10:06 - 09/23/2022 10:11

Matrix: Air

COC Reference: A5765

Organics - Volatiles, Analysis: TO-15

Run in Batch: 221006A8, Run Date: 10/07/2022 05:38, Matrix: G, Dilution: 10

Surrogate	Flags	**%Rec**	LCL	UCL
4-Bromofluorobenzene		**86.9**	60	140

Organics - Volatiles, Analysis: TO-15 (Replicate 01)

Run in Batch: 221020A8, Run Date: 10/21/2022 05:16, Matrix: G, Dilution: 1

Surrogate	Flags	**%Rec**	LCL	UCL
4-Bromofluorobenzene		**83.6**	60	140

QC Report - Surrogates per Lab Sample

Lab Sample ID: S40706.17

Sample Tag: 18VP-6 5'

Collected Date/Time: 09/23/2022 10:52 - 09/23/2022 10:59

Matrix: Air

COC Reference: A5765

Organics - Volatiles, Analysis: TO-15

Run in Batch: 221006A8, Run Date: 10/07/2022 06:08, Matrix: G, Dilution: 10

Surrogate	Flags	**%Rec**	LCL	UCL
4-Bromofluorobenzene		**83.7**	60	140

Organics - Volatiles, Analysis: TO-15 (Replicate 01)

Run in Batch: 221020A8, Run Date: 10/21/2022 05:47, Matrix: G, Dilution: 1

Surrogate	Flags	**%Rec**	LCL	UCL
4-Bromofluorobenzene		**80.5**	60	140

QC Report - Surrogates per Lab Sample

Lab Sample ID: S40706.18

Sample Tag: 18VP-6 10'

Collected Date/Time: 09/23/2022 10:56 - 09/23/2022 11:04

Matrix: Air

COC Reference: A5765

Organics - Volatiles, Analysis: TO-15

Run in Batch: 221006A8, Run Date: 10/07/2022 06:38, Matrix: G, Dilution: 10

Surrogate	Flags	**%Rec**	LCL	UCL
4-Bromofluorobenzene		**86.0**	60	140

Organics - Volatiles, Analysis: TO-15 (Replicate 01)

Run in Batch: 221020A8, Run Date: 10/21/2022 06:19, Matrix: G, Dilution: 1

Surrogate	Flags	**%Rec**	LCL	UCL
4-Bromofluorobenzene		**83.4**	60	140

QC Report - Surrogates per Lab Sample

Lab Sample ID: S40706.19

Sample Tag: 18VP-2

Collected Date/Time: 09/23/2022 11:23 - 09/23/2022 11:35

Matrix: Air

COC Reference: A5765

Organics - Volatiles, Analysis: TO-15

Run in Batch: 221006A8, Run Date: 10/07/2022 07:08, Matrix: G, Dilution: 10

Surrogate	Flags	**%Rec**	LCL	UCL
4-Bromofluorobenzene		**85.2**	60	140

Organics - Volatiles, Analysis: TO-15 (Replicate 01)

Run in Batch: 221020A8, Run Date: 10/21/2022 06:50, Matrix: G, Dilution: 1

Surrogate	Flags	**%Rec**	LCL	UCL
4-Bromofluorobenzene		**84.5**	60	140

Organics - Volatiles, Prep Batch ID: GV221006G1

QC Types: BLK/LCS/LCSD

Blank (BLK)

Lab Sample ID: 221006A8.BLKG06A

Run in Batch: 221006A8, Run Date: 10/06/2022 21:39, Prep Date: 10/06/2022, Matrix: G, Dilution: 1

Surrogate	Flags	%Rec	LCL	UCL
4-Bromofluorobenzene		**85.9**	60	140

Laboratory Control Sample (LCS)

Lab Sample ID: 221006A8.LCSDG06A

Run in Batch: 221006A8, Run Date: 10/06/2022 21:09, Prep Date: 10/06/2022, Matrix: G, Dilution: 1

Surrogate	Flags	%Rec	LCL	UCL
4-Bromofluorobenzene		**100.5**	60	140

Laboratory Control Sample Duplicate (LCSD)

Lab Sample ID: 221006A8.LCSG06A, Parent Sample ID: 221006A8.LCSDG06A

Run in Batch: 221006A8, Run Date: 10/06/2022 21:09, Prep Date: 10/06/2022, Matrix: G, Dilution: 1

Surrogate	Flags	%Rec	LCL	UCL
4-Bromofluorobenzene		**100.5**	60	140

Organics - Volatiles, Prep Batch ID: GV221020G1

QC Types: BLK/LCS/LCSD

Blank (BLK)

Lab Sample ID: 221020A8.BLKG20A

Run in Batch: 221020A8, Run Date: 10/20/2022 13:46, Prep Date: 10/20/2022, Matrix: G, Dilution: 1

Surrogate	Flags	%Rec	LCL	UCL
4-Bromofluorobenzene		**78.6**	60	140

Laboratory Control Sample (LCS)

Lab Sample ID: 221020A8.LCSG20A

Run in Batch: 221020A8, Run Date: 10/20/2022 12:46, Prep Date: 10/20/2022, Matrix: G, Dilution: 1

Surrogate	Flags	%Rec	LCL	UCL
4-Bromofluorobenzene		**101.8**	60	140

Laboratory Control Sample Duplicate (LCSD)

Lab Sample ID: 221020A8.LCSDG20A, Parent Sample ID: 221020A8.LCSG20A

Run in Batch: 221020A8, Run Date: 10/20/2022 13:15, Prep Date: 10/20/2022, Matrix: G, Dilution: 1

Surrogate	Flags	%Rec	LCL	UCL
4-Bromofluorobenzene		**100.3**	60	140

Organics - Volatiles, Prep Batch ID: GV221020G2

QC Types: BLK/LCS/LCSD

Blank (BLK)

Lab Sample ID: 221020A8.BLKG20B

Run in Batch: 221020A8, Run Date: 10/21/2022 01:38, Prep Date: 10/20/2022, Matrix: G, Dilution: 1

Surrogate	Flags	%Rec	LCL	UCL
4-Bromofluorobenzene		**83.8**	60	140

Laboratory Control Sample (LCS)

Lab Sample ID: 221020A8.LCSG20B

Run in Batch: 221020A8, Run Date: 10/21/2022 00:38, Prep Date: 10/20/2022, Matrix: G, Dilution: 1

Surrogate	Flags	%Rec	LCL	UCL
4-Bromofluorobenzene		**96.1**	60	140

Laboratory Control Sample Duplicate (LCSD)

Lab Sample ID: 221020A8.LCSDG20B, Parent Sample ID: 221020A8.LCSG20B

Run in Batch: 221020A8, Run Date: 10/21/2022 01:07, Prep Date: 10/20/2022, Matrix: G, Dilution: 1

Surrogate	Flags	%Rec	LCL	UCL
4-Bromofluorobenzene		**97.8**	60	140

QC Report - Internal Standards per Lab Sample

Lab Sample ID: S40706.01

Sample Tag: VP-1

Collected Date/Time: 09/22/2022 11:31 - 09/22/2022 11:36

Matrix: Air

COC Reference: A5764

Organics - Volatiles, Analysis: TO-15

Run in Batch: 221006A8, Run Date: 10/06/2022 22:09, Matrix: G, Dilution: 10

Internal Standard	Flags	**%Rec**	LCL	UCL
Bromochloromethane		**93.8**	60.0	140.0
1,4-Difluorobenzene		**86.6**	60.0	140.0
Chlorobenzene-D5		**86.1**	60.0	140.0

Organics - Volatiles, Analysis: TO-15 (Replicate 01)

Run in Batch: 221020A8, Run Date: 10/20/2022 17:28, Matrix: G, Dilution: 1

Internal Standard	Flags	**%Rec**	LCL	UCL
Bromochloromethane		**94.4**	60.0	140.0
1,4-Difluorobenzene		**84.3**	60.0	140.0
Chlorobenzene-D5		**93.0**	60.0	140.0

QC Report - Internal Standards per Lab Sample

Lab Sample ID: S40706.02

Sample Tag: VP-2

Collected Date/Time: 09/22/2022 12:07 - 09/22/2022 12:12

Matrix: Air

COC Reference: A5764

Organics - Volatiles, Analysis: TO-15

Run in Batch: 221006A8, Run Date: 10/06/2022 22:39, Matrix: G, Dilution: 10

Internal Standard	Flags	**%Rec**	LCL	UCL
Bromochloromethane		**88.0**	60.0	140.0
1,4-Difluorobenzene		**79.0**	60.0	140.0
Chlorobenzene-D5		**76.8**	60.0	140.0

Organics - Volatiles, Analysis: TO-15 (Replicate 01)

Run in Batch: 221020A8, Run Date: 10/20/2022 17:59, Matrix: G, Dilution: 1

Internal Standard	Flags	**%Rec**	LCL	UCL
Bromochloromethane		**92.3**	60.0	140.0
1,4-Difluorobenzene		**82.8**	60.0	140.0
Chlorobenzene-D5		**91.6**	60.0	140.0

QC Report - Internal Standards per Lab Sample

Lab Sample ID: S40706.03

Sample Tag: VP-3

Collected Date/Time: 09/22/2022 12:28 - 09/22/2022 12:34

Matrix: Air

COC Reference: A5764

Organics - Volatiles, Analysis: TO-15

Run in Batch: 221006A8, Run Date: 10/06/2022 23:09, Matrix: G, Dilution: 10

Internal Standard	Flags	**%Rec**	LCL	UCL
Bromochloromethane		**91.3**	60.0	140.0
1,4-Difluorobenzene		**83.1**	60.0	140.0
Chlorobenzene-D5		**81.6**	60.0	140.0

Organics - Volatiles, Analysis: TO-15 (Replicate 01)

Run in Batch: 221020A8, Run Date: 10/20/2022 18:30, Matrix: G, Dilution: 1

Internal Standard	Flags	**%Rec**	LCL	UCL
Bromochloromethane		**95.5**	60.0	140.0
1,4-Difluorobenzene		**86.5**	60.0	140.0
Chlorobenzene-D5		**95.5**	60.0	140.0

QC Report - Internal Standards per Lab Sample

Lab Sample ID: S40706.04

Sample Tag: VP-4

Collected Date/Time: 09/22/2022 12:51 - 09/22/2022 12:58

Matrix: Air

COC Reference: A5764

Organics - Volatiles, Analysis: TO-15

Run in Batch: 221006A8, Run Date: 10/06/2022 23:39, Matrix: G, Dilution: 10

Internal Standard	Flags	**%Rec**	LCL	UCL
Bromochloromethane		**86.7**	60.0	140.0
1,4-Difluorobenzene		**78.8**	60.0	140.0
Chlorobenzene-D5		**76.1**	60.0	140.0

Organics - Volatiles, Analysis: TO-15 (Replicate 01)

Run in Batch: 221020A8, Run Date: 10/20/2022 19:01, Matrix: G, Dilution: 1

Internal Standard	Flags	**%Rec**	LCL	UCL
Bromochloromethane		**97.7**	60.0	140.0
1,4-Difluorobenzene		**87.8**	60.0	140.0
Chlorobenzene-D5		**97.8**	60.0	140.0

QC Report - Internal Standards per Lab Sample

Lab Sample ID: S40706.05

Sample Tag: VP-5

Collected Date/Time: 09/22/2022 13:13 - 09/22/2022 13:22

Matrix: Air

COC Reference: A5764

Organics - Volatiles, Analysis: TO-15

Run in Batch: 221006A8, Run Date: 10/07/2022 00:09, Matrix: G, Dilution: 10

Internal Standard	Flags	**%Rec**	LCL	UCL
Bromochloromethane		**91.8**	60.0	140.0
1,4-Difluorobenzene		**78.1**	60.0	140.0
Chlorobenzene-D5		**81.0**	60.0	140.0

Organics - Volatiles, Analysis: TO-15 (Replicate 01)

Run in Batch: 221020A8, Run Date: 10/20/2022 19:32, Matrix: G, Dilution: 1

Internal Standard	Flags	**%Rec**	LCL	UCL
Bromochloromethane		**94.7**	60.0	140.0
1,4-Difluorobenzene		**85.2**	60.0	140.0
Chlorobenzene-D5		**93.6**	60.0	140.0

Lab Sample ID: S40706.06

Sample Tag: VP-6

Collected Date/Time: 09/22/2022 13:28 - 09/22/2022 13:33

Matrix: Air

COC Reference: A5764

Organics - Volatiles, Analysis: TO-15

Run in Batch: 221006A8, Run Date: 10/07/2022 00:39, Matrix: G, Dilution: 10

Internal Standard	Flags	%Rec	LCL	UCL
Bromochloromethane		**93.5**	60.0	140.0
1,4-Difluorobenzene		**80.0**	60.0	140.0
Chlorobenzene-D5		**87.1**	60.0	140.0

Organics - Volatiles, Analysis: TO-15 (Replicate 01)

Run in Batch: 221020A8, Run Date: 10/20/2022 22:34, Matrix: G, Dilution: 1

Internal Standard	Flags	%Rec	LCL	UCL
Bromochloromethane		**99.6**	60.0	140.0
1,4-Difluorobenzene		**93.1**	60.0	140.0
Chlorobenzene-D5		**104.7**	60.0	140.0

QC Report - Internal Standards per Lab Sample

Lab Sample ID: S40706.07

Sample Tag: VP-7

Collected Date/Time: 09/22/2022 13:51 - 09/22/2022 13:56

Matrix: Air

COC Reference: A5764

Organics - Volatiles, Analysis: TO-15

Run in Batch: 221006A8, Run Date: 10/07/2022 01:09, Matrix: G, Dilution: 10

Internal Standard	Flags	**%Rec**	LCL	UCL
Bromochloromethane		**88.0**	60.0	140.0
1,4-Difluorobenzene		**74.6**	60.0	140.0
Chlorobenzene-D5		**80.1**	60.0	140.0

Organics - Volatiles, Analysis: TO-15 (Replicate 01)

Run in Batch: 221020A8, Run Date: 10/20/2022 23:06, Matrix: G, Dilution: 1

Internal Standard	Flags	**%Rec**	LCL	UCL
Bromochloromethane		**98.6**	60.0	140.0
1,4-Difluorobenzene		**90.5**	60.0	140.0
Chlorobenzene-D5		**98.4**	60.0	140.0

Lab Sample ID: S40706.08

Sample Tag: VP-8

Collected Date/Time: 09/22/2022 14:18 - 09/22/2022 14:23

Matrix: Air

COC Reference: A5764

Organics - Volatiles, Analysis: TO-15

Run in Batch: 221006A8, Run Date: 10/07/2022 01:39, Matrix: G, Dilution: 10

Internal Standard	Flags	**%Rec**	LCL	UCL
Bromochloromethane		**84.3**	60.0	140.0
1,4-Difluorobenzene		**70.2**	60.0	140.0
Chlorobenzene-D5		**75.3**	60.0	140.0

Organics - Volatiles, Analysis: TO-15 (Replicate 01)

Run in Batch: 221020A8, Run Date: 10/20/2022 23:37, Matrix: G, Dilution: 1

Internal Standard	Flags	**%Rec**	LCL	UCL
Bromochloromethane		**100.4**	60.0	140.0
1,4-Difluorobenzene		**92.3**	60.0	140.0
Chlorobenzene-D5		**104.8**	60.0	140.0

QC Report - Internal Standards per Lab Sample

Lab Sample ID: S40706.09

Sample Tag: VP-9

Collected Date/Time: 09/22/2022 14:43 - 09/22/2022 14:48

Matrix: Air

COC Reference: A5764

Organics - Volatiles, Analysis: TO-15

Run in Batch: 221006A8, Run Date: 10/07/2022 02:09, Matrix: G, Dilution: 10

Internal Standard	Flags	**%Rec**	LCL	UCL
Bromochloromethane		**89.3**	60.0	140.0
1,4-Difluorobenzene		**75.8**	60.0	140.0
Chlorobenzene-D5		**81.3**	60.0	140.0

Organics - Volatiles, Analysis: TO-15 (Replicate 01)

Run in Batch: 221020A8, Run Date: 10/21/2022 00:08, Matrix: G, Dilution: 1

Internal Standard	Flags	**%Rec**	LCL	UCL
Bromochloromethane		**100.2**	60.0	140.0
1,4-Difluorobenzene		**88.9**	60.0	140.0
Chlorobenzene-D5		**96.6**	60.0	140.0

QC Report - Internal Standards per Lab Sample

Lab Sample ID: S40706.10

Sample Tag: VP-10

Collected Date/Time: 09/22/2022 14:59 - 09/22/2022 15:04

Matrix: Air

COC Reference: A5764

Organics - Volatiles, Analysis: TO-15

Run in Batch: 221006A8, Run Date: 10/07/2022 02:39, Matrix: G, Dilution: 10

Internal Standard	Flags	**%Rec**	LCL	UCL
Bromochloromethane		**87.3**	60.0	140.0
1,4-Difluorobenzene		**74.2**	60.0	140.0
Chlorobenzene-D5		**80.6**	60.0	140.0

Organics - Volatiles, Analysis: TO-15 (Replicate 01)

Run in Batch: 221020A8, Run Date: 10/21/2022 02:09, Matrix: G, Dilution: 1

Internal Standard	Flags	**%Rec**	LCL	UCL
Bromochloromethane		**99.2**	60.0	140.0
1,4-Difluorobenzene		**90.6**	60.0	140.0
Chlorobenzene-D5		**97.2**	60.0	140.0

QC Report - Internal Standards per Lab Sample

Lab Sample ID: S40706.11

Sample Tag: VP-12

Collected Date/Time: 09/23/2022 08:35 - 09/23/2022 08:40

Matrix: Air

COC Reference: A5765

Organics - Volatiles, Analysis: TO-15

Run in Batch: 221006A8, Run Date: 10/07/2022 03:09, Matrix: G, Dilution: 10

Internal Standard	Flags	**%Rec**	LCL	UCL
Bromochloromethane		**89.2**	60.0	140.0
1,4-Difluorobenzene		**80.4**	60.0	140.0
Chlorobenzene-D5		**81.1**	60.0	140.0

Organics - Volatiles, Analysis: TO-15 (Replicate 01)

Run in Batch: 221020A8, Run Date: 10/21/2022 02:41, Matrix: G, Dilution: 1

Internal Standard	Flags	**%Rec**	LCL	UCL
Bromochloromethane		**94.4**	60.0	140.0
1,4-Difluorobenzene		**86.0**	60.0	140.0
Chlorobenzene-D5		**96.9**	60.0	140.0

QC Report - Internal Standards per Lab Sample

Lab Sample ID: S40706.12

Sample Tag: VP-11

Collected Date/Time: 09/22/2022 15:15 - 09/22/2022 15:25

Matrix: Air

COC Reference: A5765

Organics - Volatiles, Analysis: TO-15

Run in Batch: 221006A8, Run Date: 10/07/2022 03:38, Matrix: G, Dilution: 10

Internal Standard	Flags	**%Rec**	LCL	UCL
Bromochloromethane		**87.5**	60.0	140.0
1,4-Difluorobenzene		**74.1**	60.0	140.0
Chlorobenzene-D5		**80.6**	60.0	140.0

Organics - Volatiles, Analysis: TO-15 (Replicate 01)

Run in Batch: 221020A8, Run Date: 10/21/2022 03:12, Matrix: G, Dilution: 1

Internal Standard	Flags	**%Rec**	LCL	UCL
Bromochloromethane		**96.1**	60.0	140.0
1,4-Difluorobenzene		**87.0**	60.0	140.0
Chlorobenzene-D5		**94.2**	60.0	140.0

QC Report - Internal Standards per Lab Sample

Lab Sample ID: S40706.13

Sample Tag: VP-13

Collected Date/Time: 09/23/2022 08:49 - 09/23/2022 08:54

Matrix: Air

COC Reference: A5765

Organics - Volatiles, Analysis: TO-15

Run in Batch: 221006A8, Run Date: 10/07/2022 04:08, Matrix: G, Dilution: 10

Internal Standard	Flags	**%Rec**	LCL	UCL
Bromochloromethane		**87.3**	60.0	140.0
1,4-Difluorobenzene		**72.2**	60.0	140.0
Chlorobenzene-D5		**78.6**	60.0	140.0

Organics - Volatiles, Analysis: TO-15 (Replicate 01)

Run in Batch: 221020A8, Run Date: 10/21/2022 03:43, Matrix: G, Dilution: 1

Internal Standard	Flags	**%Rec**	LCL	UCL
Bromochloromethane		**97.2**	60.0	140.0
1,4-Difluorobenzene		**87.8**	60.0	140.0
Chlorobenzene-D5		**97.6**	60.0	140.0

QC Report - Internal Standards per Lab Sample

Lab Sample ID: S40706.14

Sample Tag: VP-14

Collected Date/Time: 09/23/2022 09:08 - 09/23/2022 09:14

Matrix: Air

COC Reference: A5765

Organics - Volatiles, Analysis: TO-15

Run in Batch: 221006A8, Run Date: 10/07/2022 04:38, Matrix: G, Dilution: 10

Internal Standard	Flags	**%Rec**	LCL	UCL
Bromochloromethane		**89.0**	60.0	140.0
1,4-Difluorobenzene		**75.9**	60.0	140.0
Chlorobenzene-D5		**81.6**	60.0	140.0

Organics - Volatiles, Analysis: TO-15 (Replicate 01)

Run in Batch: 221020A8, Run Date: 10/21/2022 04:14, Matrix: G, Dilution: 1

Internal Standard	Flags	**%Rec**	LCL	UCL
Bromochloromethane		**98.8**	60.0	140.0
1,4-Difluorobenzene		**88.0**	60.0	140.0
Chlorobenzene-D5		**95.6**	60.0	140.0

QC Report - Internal Standards per Lab Sample

Lab Sample ID: S40706.15

Sample Tag: 18VP-3

Collected Date/Time: 09/23/2022 09:38 - 09/23/2022 09:43

Matrix: Air

COC Reference: A5765

Organics - Volatiles, Analysis: TO-15

Run in Batch: 221006A8, Run Date: 10/07/2022 05:08, Matrix: G, Dilution: 10

Internal Standard	Flags	**%Rec**	LCL	UCL
Bromochloromethane		**88.4**	60.0	140.0
1,4-Difluorobenzene		**79.4**	60.0	140.0
Chlorobenzene-D5		**78.6**	60.0	140.0

Organics - Volatiles, Analysis: TO-15 (Replicate 01)

Run in Batch: 221020A8, Run Date: 10/21/2022 04:45, Matrix: G, Dilution: 1

Internal Standard	Flags	**%Rec**	LCL	UCL
Bromochloromethane		**97.3**	60.0	140.0
1,4-Difluorobenzene		**87.3**	60.0	140.0
Chlorobenzene-D5		**97.4**	60.0	140.0

QC Report - Internal Standards per Lab Sample

Lab Sample ID: S40706.16

Sample Tag: 18VP-4

Collected Date/Time: 09/23/2022 10:06 - 09/23/2022 10:11

Matrix: Air

COC Reference: A5765

Organics - Volatiles, Analysis: TO-15

Run in Batch: 221006A8, Run Date: 10/07/2022 05:38, Matrix: G, Dilution: 10

Internal Standard	Flags	**%Rec**	LCL	UCL
Bromochloromethane		**85.7**	60.0	140.0
1,4-Difluorobenzene		**73.0**	60.0	140.0
Chlorobenzene-D5		**80.5**	60.0	140.0

Organics - Volatiles, Analysis: TO-15 (Replicate 01)

Run in Batch: 221020A8, Run Date: 10/21/2022 05:16, Matrix: G, Dilution: 1

Internal Standard	Flags	**%Rec**	LCL	UCL
Bromochloromethane		**95.0**	60.0	140.0
1,4-Difluorobenzene		**84.4**	60.0	140.0
Chlorobenzene-D5		**95.2**	60.0	140.0

QC Report - Internal Standards per Lab Sample

Lab Sample ID: S40706.17

Sample Tag: 18VP-6 5'

Collected Date/Time: 09/23/2022 10:52 - 09/23/2022 10:59

Matrix: Air

COC Reference: A5765

Organics - Volatiles, Analysis: TO-15

Run in Batch: 221006A8, Run Date: 10/07/2022 06:08, Matrix: G, Dilution: 10

Internal Standard	Flags	**%Rec**	LCL	UCL
Bromochloromethane		**87.4**	60.0	140.0
1,4-Difluorobenzene		**73.2**	60.0	140.0
Chlorobenzene-D5		**80.9**	60.0	140.0

Organics - Volatiles, Analysis: TO-15 (Replicate 01)

Run in Batch: 221020A8, Run Date: 10/21/2022 05:47, Matrix: G, Dilution: 1

Internal Standard	Flags	**%Rec**	LCL	UCL
Bromochloromethane		**101.5**	60.0	140.0
1,4-Difluorobenzene		**94.7**	60.0	140.0
Chlorobenzene-D5		**106.7**	60.0	140.0

Lab Sample ID: S40706.18

Sample Tag: 18VP-6 10'

Collected Date/Time: 09/23/2022 10:56 - 09/23/2022 11:04

Matrix: Air

COC Reference: A5765

Organics - Volatiles, Analysis: TO-15

Run in Batch: 221006A8, Run Date: 10/07/2022 06:38, Matrix: G, Dilution: 10

Internal Standard	Flags	%Rec	LCL	UCL
Bromochloromethane		**90.8**	60.0	140.0
1,4-Difluorobenzene		**77.1**	60.0	140.0
Chlorobenzene-D5		**83.0**	60.0	140.0

Organics - Volatiles, Analysis: TO-15 (Replicate 01)

Run in Batch: 221020A8, Run Date: 10/21/2022 06:19, Matrix: G, Dilution: 1

Internal Standard	Flags	%Rec	LCL	UCL
Bromochloromethane		**98.2**	60.0	140.0
1,4-Difluorobenzene		**90.4**	60.0	140.0
Chlorobenzene-D5		**101.7**	60.0	140.0

QC Report - Internal Standards per Lab Sample

Lab Sample ID: S40706.19

Sample Tag: 18VP-2

Collected Date/Time: 09/23/2022 11:23 - 09/23/2022 11:35

Matrix: Air

COC Reference: A5765

Organics - Volatiles, Analysis: TO-15

Run in Batch: 221006A8, Run Date: 10/07/2022 07:08, Matrix: G, Dilution: 10

Internal Standard	Flags	**%Rec**	LCL	UCL
Bromochloromethane		**84.8**	60.0	140.0
1,4-Difluorobenzene		**71.1**	60.0	140.0
Chlorobenzene-D5		**76.1**	60.0	140.0

Organics - Volatiles, Analysis: TO-15 (Replicate 01)

Run in Batch: 221020A8, Run Date: 10/21/2022 06:50, Matrix: G, Dilution: 1

Internal Standard	Flags	**%Rec**	LCL	UCL
Bromochloromethane		**99.0**	60.0	140.0
1,4-Difluorobenzene		**89.7**	60.0	140.0
Chlorobenzene-D5		**98.7**	60.0	140.0

Organics - Volatiles, Prep Batch ID: GV221006G1

QC Types: BLK/LCS/LCSD

Blank (BLK)

Lab Sample ID: 221006A8.BLKG06A

Run in Batch: 221006A8, Run Date: 10/06/2022 21:39, Prep Date: 10/06/2022, Matrix: G, Dilution: 1

Internal Standard	Flags	%Rec	LCL	UCL
Bromochloromethane		**101.5**	60.0	140.0
1,4-Difluorobenzene		**96.1**	60.0	140.0
Chlorobenzene-D5		**95.7**	60.0	140.0

Laboratory Control Sample (LCS)

Lab Sample ID: 221006A8.LCSDG06A

Run in Batch: 221006A8, Run Date: 10/06/2022 21:09, Prep Date: 10/06/2022, Matrix: G, Dilution: 1

Internal Standard	Flags	%Rec	LCL	UCL
Bromochloromethane		**101.7**	60.0	140.0
1,4-Difluorobenzene		**102.2**	60.0	140.0
Chlorobenzene-D5		**104.6**	60.0	140.0

Laboratory Control Sample Duplicate (LCSD)

Lab Sample ID: 221006A8.LCSG06A, Parent Sample ID: 221006A8.LCSDG06A

Run in Batch: 221006A8, Run Date: 10/06/2022 21:09, Prep Date: 10/06/2022, Matrix: G, Dilution: 1

Internal Standard	Flags	%Rec	LCL	UCL
Bromochloromethane		**101.7**	60.0	140.0
1,4-Difluorobenzene		**102.2**	60.0	140.0
Chlorobenzene-D5		**104.6**	60.0	140.0

QC Report - Internal Standards per QC Sample

Organics - Volatiles, Prep Batch ID: GV221020G1

QC Types: BLK/LCS/LCSD

Blank (BLK)

Lab Sample ID: 221020A8.BLKG20A

Run in Batch: 221020A8, Run Date: 10/20/2022 13:46, Prep Date: 10/20/2022, Matrix: G, Dilution: 1

Internal Standard	Flags	%Rec	LCL	UCL
Bromochloromethane		**96.2**	60.0	140.0
1,4-Difluorobenzene		**91.0**	60.0	140.0
Chlorobenzene-D5		**94.8**	60.0	140.0

Laboratory Control Sample (LCS)

Lab Sample ID: 221020A8.LCSG20A

Run in Batch: 221020A8, Run Date: 10/20/2022 12:46, Prep Date: 10/20/2022, Matrix: G, Dilution: 1

Internal Standard	Flags	%Rec	LCL	UCL
Bromochloromethane		**100.0**	60.0	140.0
1,4-Difluorobenzene		**100.0**	60.0	140.0
Chlorobenzene-D5		**100.0**	60.0	140.0

Laboratory Control Sample Duplicate (LCSD)

Lab Sample ID: 221020A8.LCSDG20A, Parent Sample ID: 221020A8.LCSG20A

Run in Batch: 221020A8, Run Date: 10/20/2022 13:15, Prep Date: 10/20/2022, Matrix: G, Dilution: 1

Internal Standard	Flags	%Rec	LCL	UCL
Bromochloromethane		**99.5**	60.0	140.0
1,4-Difluorobenzene		**103.0**	60.0	140.0
Chlorobenzene-D5		**102.3**	60.0	140.0

Organics - Volatiles, Prep Batch ID: GV221020G2

QC Types: BLK/LCS/LCSD

Blank (BLK)

Lab Sample ID: 221020A8.BLKG20B

Run in Batch: 221020A8, Run Date: 10/21/2022 01:38, Prep Date: 10/20/2022, Matrix: G, Dilution: 1

Internal Standard	Flags	%Rec	LCL	UCL
Bromochloromethane		**94.3**	60.0	140.0
1,4-Difluorobenzene		**84.8**	60.0	140.0
Chlorobenzene-D5		**90.4**	60.0	140.0

Laboratory Control Sample (LCS)

Lab Sample ID: 221020A8.LCSG20B

Run in Batch: 221020A8, Run Date: 10/21/2022 00:38, Prep Date: 10/20/2022, Matrix: G, Dilution: 1

Internal Standard	Flags	%Rec	LCL	UCL
Bromochloromethane		**103.3**	60.0	140.0
1,4-Difluorobenzene		**105.5**	60.0	140.0
Chlorobenzene-D5		**107.3**	60.0	140.0

Laboratory Control Sample Duplicate (LCSD)

Lab Sample ID: 221020A8.LCSDG20B, Parent Sample ID: 221020A8.LCSG20B

Run in Batch: 221020A8, Run Date: 10/21/2022 01:07, Prep Date: 10/20/2022, Matrix: G, Dilution: 1

Internal Standard	Flags	%Rec	LCL	UCL
Bromochloromethane		**103.7**	60.0	140.0
1,4-Difluorobenzene		**107.6**	60.0	140.0
Chlorobenzene-D5		**107.7**	60.0	140.0

Organics - Volatiles, Prep Batch ID: GV221006G1

Surrogates: Yes, QC Types: BLK/LCS/LCSD

Blank (BLK)

Lab Sample ID: 221006A8.BLKG06A

Run in Batch: 221006A8, Run Date: 10/06/2022 21:39, Prep Date: 10/06/2022, Matrix: G, Dilution: 1

Analyte	Flags	Conc	RDL	Units
Acetone		ND	2.00	ppbv
1,3-Butadiene		ND	2.00	ppbv
Benzene		ND	0.20	ppbv
Bromodichloromethane		ND	0.20	ppbv
Bromoform		ND	0.20	ppbv
Bromomethane		ND	0.20	ppbv
Vinyl bromide		ND	0.20	ppbv
Benzyl chloride		ND	0.20	ppbv
Carbon disulfide		ND	2.00	ppbv
Chlorobenzene		ND	0.20	ppbv
Chloroethane		ND	2.00	ppbv
Chloroform		ND	0.20	ppbv
Chloromethane		ND	2.00	ppbv
3-Chloropropene		ND	2.00	ppbv
2-Chlorotoluene		ND	0.20	ppbv
Carbon tetrachloride		ND	0.20	ppbv
Cyclohexane		ND	0.20	ppbv
1,1-Dichloroethane		ND	0.20	ppbv
1,1-Dichloroethene		ND	0.20	ppbv
1,2-Dibromoethane		ND	0.20	ppbv
1,2-Dichloroethane		ND	0.20	ppbv
1,2-Dichloropropane		ND	0.20	ppbv
1,4-Dioxane		ND	2.00	ppbv
Dichlorodifluoromethane		ND	0.20	ppbv
Dibromochloromethane		ND	0.20	ppbv
trans-1,2-Dichloroethene		ND	0.20	ppbv
cis-1,2-Dichloroethene		ND	0.20	ppbv
cis-1,3-Dichloropropene		ND	0.20	ppbv
1,3-Dichlorobenzene		ND	0.20	ppbv
1,2-Dichlorobenzene		ND	0.20	ppbv
1,4-Dichlorobenzene		ND	0.20	ppbv
trans-1,3-Dichloropropene		ND	0.20	ppbv
Ethanol		ND	2.00	ppbv
Ethylbenzene		ND	0.20	ppbv
Ethyl Acetate		ND	2.00	ppbv
4-Ethyltoluene		ND	0.20	ppbv
Freon 113		ND	0.20	ppbv
Freon 114		ND	0.20	ppbv
Heptane		ND	0.20	ppbv
Hexachlorobutadiene		ND	0.20	ppbv
Hexane		ND	0.20	ppbv
2-Hexanone		ND	0.20	ppbv
Isopropyl Alcohol		ND	2.00	ppbv
Methylene chloride		ND	0.20	ppbv
2-Butanone (MEK)		ND	2.00	ppbv
4-Methyl-2-pentanone (MIBK)		ND	0.20	ppbv

Organics - Volatiles, Prep Batch ID: GV221006G1 (continued)

Surrogates: Yes, QC Types: BLK/LCS/LCSD

Blank (BLK) (continued)

Lab Sample ID: 221006A8.BLKG06A

Run in Batch: 221006A8, Run Date: 10/06/2022 21:39, Prep Date: 10/06/2022, Matrix: G, Dilution: 1

Analyte	Flags	Conc	RDL	Units
tert-Methyl butyl ether (MTBE)		ND	0.20	ppbv
Methyl methacrylate		ND	0.20	ppbv
Naphthalene		ND	0.20	ppbv
Propylene		ND	2.00	ppbv
Styrene		ND	0.20	ppbv
1,1,1-Trichloroethane		ND	0.20	ppbv
1,1,2,2-Tetrachloroethane		ND	0.20	ppbv
1,1,2-Trichloroethane		ND	0.20	ppbv
1,2,4-Trichlorobenzene		ND	0.20	ppbv
1,2,4-Trimethylbenzene		ND	0.20	ppbv
1,3,5-Trimethylbenzene		ND	0.20	ppbv
2,2,4-Trimethylpentane		ND	0.20	ppbv
Tert-butyl Alcohol		ND	2.00	ppbv
Tetrachloroethene		ND	0.20	ppbv
Tetrahydrofuran		ND	0.20	ppbv
Toluene		ND	0.20	ppbv
Trichloroethene		ND	0.20	ppbv
Trichlorofluoromethane		ND	0.20	ppbv
Vinyl chloride		ND	0.20	ppbv
Vinyl acetate		ND	2.00	ppbv
p,m-Xylene		ND	0.20	ppbv
o-Xylene		ND	0.20	ppbv

Laboratory Control Sample (LCS)

Lab Sample ID: 221006A8.LCSDG06A

Run in Batch: 221006A8, Run Date: 10/06/2022 21:09, Prep Date: 10/06/2022, Matrix: G, Dilution: 1

Analyte	Flags	% Rec	LCL	UCL
Acetone	*	148.1	70.0	130.0
1,3-Butadiene		120.7	70.0	130.0
Benzene		96.8	70.0	130.0
Bromodichloromethane		94.7	70.0	130.0
Bromoform		101.4	70.0	130.0
Bromomethane		110.4	70.0	130.0
Vinyl bromide		107.5	70.0	130.0
Benzyl chloride		118.9	70.0	130.0
Carbon disulfide		105.4	70.0	130.0
Chlorobenzene		94.6	70.0	130.0
Chloroethane		119.6	70.0	130.0
Chloroform		99.6	70.0	130.0
Chloromethane		113.3	70.0	130.0
3-Chloropropene		110.2	70.0	130.0
2-Chlorotoluene		99.2	70.0	130.0
Carbon tetrachloride		94.4	70.0	130.0
Cyclohexane		92.2	70.0	130.0
1,1-Dichloroethane		105.1	70.0	130.0
1,1-Dichloroethene		104.3	70.0	130.0

Organics - Volatiles, Prep Batch ID: GV221006G1 (continued)

Surrogates: Yes, QC Types: BLK/LCS/LCSD

Laboratory Control Sample (LCS) (continued)

Lab Sample ID: 221006A8.LCSDG06A

Run in Batch: 221006A8, Run Date: 10/06/2022 21:09, Prep Date: 10/06/2022, Matrix: G, Dilution: 1

Analyte	Flags	% Rec	LCL	UCL
1,2-Dibromoethane		95.4	70.0	130.0
1,2-Dichloroethane		102.2	70.0	130.0
1,2-Dichloropropane		99.2	70.0	130.0
1,4-Dioxane		105.3	70.0	130.0
Dichlorodifluoromethane		102.6	70.0	130.0
Dibromochloromethane		98.0	70.0	130.0
trans-1,2-Dichloroethene		100.4	70.0	130.0
cis-1,2-Dichloroethene		98.3	70.0	130.0
cis-1,3-Dichloropropene		95.2	70.0	130.0
1,3-Dichlorobenzene		104.2	70.0	130.0
1,2-Dichlorobenzene		106.9	70.0	130.0
1,4-Dichlorobenzene		107.2	70.0	130.0
trans-1,3-Dichloropropene		98.5	70.0	130.0
Ethanol	*	130.6	70.0	130.0
Ethylbenzene		98.9	70.0	130.0
Ethyl Acetate		104.8	70.0	130.0
4-Ethyltoluene		107.7	70.0	130.0
Freon 113		98.5	70.0	130.0
Freon 114		102.7	70.0	130.0
Heptane		100.2	70.0	130.0
Hexachlorobutadiene		110.3	70.0	130.0
Hexane		103.3	70.0	130.0
2-Hexanone		101.7	70.0	130.0
Isopropyl Alcohol	*	151.6	70.0	130.0
Methylene chloride		107.2	70.0	130.0
2-Butanone (MEK)		105.1	70.0	130.0
4-Methyl-2-pentanone (MIBK)		97.6	70.0	130.0
tert-Methyl butyl ether (MTBE)		101.2	70.0	130.0
Methyl methacrylate		107.4	70.0	130.0
Naphthalene		115.1	70.0	130.0
Propylene		116.1	70.0	130.0
Styrene		98.6	70.0	130.0
1,1,1-Trichloroethane		99.1	70.0	130.0
1,1,2,2-Tetrachloroethane		104.4	70.0	130.0
1,1,2-Trichloroethane		99.3	70.0	130.0
1,2,4-Trichlorobenzene		99.8	70.0	130.0
1,2,4-Trimethylbenzene		111.5	70.0	130.0
1,3,5-Trimethylbenzene		106.3	70.0	130.0
2,2,4-Trimethylpentane		100.5	70.0	130.0
Tert-butyl Alcohol		119.5	70.0	130.0
Tetrachloroethene		93.3	70.0	130.0
Tetrahydrofuran		107.7	70.0	130.0
Toluene		97.2	70.0	130.0
Trichloroethene		95.4	70.0	130.0
Trichlorofluoromethane		108.2	70.0	130.0
Vinyl chloride		115.1	70.0	130.0

Organics - Volatiles, Prep Batch ID: GV221006G1 (continued)

Surrogates: Yes, QC Types: BLK/LCS/LCSD

Laboratory Control Sample (LCS) (continued)

Lab Sample ID: 221006A8.LCSDG06A

Run in Batch: 221006A8, Run Date: 10/06/2022 21:09, Prep Date: 10/06/2022, Matrix: G, Dilution: 1

Analyte	Flags	% Rec	LCL	UCL
Vinyl acetate		109.5	70.0	130.0
p,m-Xylene		99.9	70.0	130.0
o-Xylene		102.5	70.0	130.0

Laboratory Control Sample Duplicate (LCSD)

Lab Sample ID: 221006A8.LCSG06A, Parent Sample ID: 221006A8.LCSDG06A

Run in Batch: 221006A8, Run Date: 10/06/2022 21:09, Prep Date: 10/06/2022, Matrix: G, Dilution: 1

Analyte	Flags	% Rec	LCL	UCL	RPD	RPD CL
Acetone	*	148.1	70.0	130.0	0.0	30.0
1,3-Butadiene		120.7	70.0	130.0	0.0	30.0
Benzene		96.8	70.0	130.0	0.0	30.0
Bromodichloromethane		94.7	70.0	130.0	0.0	30.0
Bromoform		101.4	70.0	130.0	0.0	30.0
Bromomethane		110.4	70.0	130.0	0.0	30.0
Vinyl bromide		107.5	70.0	130.0	0.0	30.0
Benzyl chloride		118.9	70.0	130.0	0.0	30.0
Carbon disulfide		105.4	70.0	130.0	0.0	30.0
Chlorobenzene		94.6	70.0	130.0	0.0	30.0
Chloroethane		119.6	70.0	130.0	0.0	30.0
Chloroform		99.6	70.0	130.0	0.0	30.0
Chloromethane		113.3	70.0	130.0	0.0	30.0
3-Chloropropene		110.2	70.0	130.0	0.0	30.0
2-Chlorotoluene		99.2	70.0	130.0	0.0	30.0
Carbon tetrachloride		94.4	70.0	130.0	0.0	30.0
Cyclohexane		92.2	70.0	130.0	0.0	30.0
1,1-Dichloroethane		105.1	70.0	130.0	0.0	30.0
1,1-Dichloroethene		104.3	70.0	130.0	0.0	30.0
1,2-Dibromoethane		95.4	70.0	130.0	0.0	30.0
1,2-Dichloroethane		102.2	70.0	130.0	0.0	30.0
1,2-Dichloropropane		99.2	70.0	130.0	0.0	30.0
1,4-Dioxane		105.3	70.0	130.0	0.0	30.0
Dichlorodifluoromethane		102.6	70.0	130.0	0.0	30.0
Dibromochloromethane		98.0	70.0	130.0	0.0	30.0
trans-1,2-Dichloroethene		100.4	70.0	130.0	0.0	30.0
cis-1,2-Dichloroethene		98.3	70.0	130.0	0.0	30.0
cis-1,3-Dichloropropene		95.2	70.0	130.0	0.0	30.0
1,3-Dichlorobenzene		104.2	70.0	130.0	0.0	30.0
1,2-Dichlorobenzene		106.9	70.0	130.0	0.0	30.0
1,4-Dichlorobenzene		107.2	70.0	130.0	0.0	30.0
trans-1,3-Dichloropropene		98.5	70.0	130.0	0.0	30.0
Ethanol	*	130.6	70.0	130.0	0.0	30.0
Ethylbenzene		98.9	70.0	130.0	0.0	30.0
Ethyl Acetate		104.8	70.0	130.0	0.0	30.0
4-Ethyltoluene		107.7	70.0	130.0	0.0	30.0
Freon 113		98.5	70.0	130.0	0.0	30.0
Freon 114		102.7	70.0	130.0	0.0	30.0

Organics - Volatiles, Prep Batch ID: GV221006G1 (continued)

Surrogates: Yes, QC Types: BLK/LCS/LCSD

Laboratory Control Sample Duplicate (LCSD) (continued)

Lab Sample ID: 221006A8.LCSG06A, Parent Sample ID: 221006A8.LCSDG06A

Run in Batch: 221006A8, Run Date: 10/06/2022 21:09, Prep Date: 10/06/2022, Matrix: G, Dilution: 1

Analyte	Flags	% Rec	LCL	UCL	RPD	RPD CL
Heptane		100.2	70.0	130.0	0.0	30.0
Hexachlorobutadiene		110.3	70.0	130.0	0.0	30.0
Hexane		103.3	70.0	130.0	0.0	30.0
2-Hexanone		101.7	70.0	130.0	0.0	30.0
Isopropyl Alcohol	*	151.6	70.0	130.0	0.0	30.0
Methylene chloride		107.2	70.0	130.0	0.0	30.0
2-Butanone (MEK)		105.1	70.0	130.0	0.0	30.0
4-Methyl-2-pentanone (MIBK)		97.6	70.0	130.0	0.0	30.0
tert-Methyl butyl ether (MTBE)		101.2	70.0	130.0	0.0	30.0
Methyl methacrylate		107.4	70.0	130.0	0.0	30.0
Naphthalene		115.1	70.0	130.0	0.0	30.0
Propylene		116.1	70.0	130.0	0.0	30.0
Styrene		98.6	70.0	130.0	0.0	30.0
1,1,1-Trichloroethane		99.1	70.0	130.0	0.0	30.0
1,1,2,2-Tetrachloroethane		104.4	70.0	130.0	0.0	30.0
1,1,2-Trichloroethane		99.3	70.0	130.0	0.0	30.0
1,2,4-Trichlorobenzene		99.8	70.0	130.0	0.0	30.0
1,2,4-Trimethylbenzene		111.5	70.0	130.0	0.0	30.0
1,3,5-Trimethylbenzene		106.3	70.0	130.0	0.0	30.0
2,2,4-Trimethylpentane		100.5	70.0	130.0	0.0	30.0
Tert-butyl Alcohol		119.5	70.0	130.0	0.0	30.0
Tetrachloroethene		93.3	70.0	130.0	0.0	30.0
Tetrahydrofuran		107.7	70.0	130.0	0.0	30.0
Toluene		97.2	70.0	130.0	0.0	30.0
Trichloroethene		95.4	70.0	130.0	0.0	30.0
Trichlorofluoromethane		108.2	70.0	130.0	0.0	30.0
Vinyl chloride		115.1	70.0	130.0	0.0	30.0
Vinyl acetate		109.5	70.0	130.0	0.0	30.0
p,m-Xylene		99.9	70.0	130.0	0.0	30.0
o-Xylene		102.5	70.0	130.0	0.0	30.0

Organics - Volatiles, Prep Batch ID: GV221020G1

Surrogates: Yes, QC Types: BLK/LCS/LCSD

Blank (BLK)

Lab Sample ID: 221020A8.BLKG20A

Run in Batch: 221020A8, Run Date: 10/20/2022 13:46, Prep Date: 10/20/2022, Matrix: G, Dilution: 1

Analyte	Flags	Conc	RDL	Units
Acetone		ND	2.00	ppbv
1,3-Butadiene		ND	2.00	ppbv
Benzene		ND	0.20	ppbv
Bromodichloromethane		ND	0.20	ppbv
Bromoform		ND	0.20	ppbv
Bromomethane		ND	0.20	ppbv
Vinyl bromide		ND	0.20	ppbv
Benzyl chloride		ND	0.20	ppbv
Carbon disulfide		ND	2.00	ppbv
Chlorobenzene		ND	0.20	ppbv
Chloroethane		ND	2.00	ppbv
Chloroform		ND	0.20	ppbv
Chloromethane		ND	2.00	ppbv
3-Chloropropene		ND	2.00	ppbv
2-Chlorotoluene		ND	0.20	ppbv
Carbon tetrachloride		ND	0.20	ppbv
Cyclohexane		ND	0.20	ppbv
1,1-Dichloroethane		ND	0.20	ppbv
1,1-Dichloroethene		ND	0.20	ppbv
1,2-Dibromoethane		ND	0.20	ppbv
1,2-Dichloroethane		ND	0.20	ppbv
1,2-Dichloropropane		ND	0.20	ppbv
1,4-Dioxane		ND	2.00	ppbv
Dichlorodifluoromethane		ND	0.20	ppbv
Dibromochloromethane		ND	0.20	ppbv
trans-1,2-Dichloroethene		ND	0.20	ppbv
cis-1,2-Dichloroethene		ND	0.20	ppbv
cis-1,3-Dichloropropene		ND	0.20	ppbv
1,3-Dichlorobenzene		ND	0.20	ppbv
1,2-Dichlorobenzene		ND	0.20	ppbv
1,4-Dichlorobenzene		ND	0.20	ppbv
trans-1,3-Dichloropropene		ND	0.20	ppbv
Ethanol		ND	2.00	ppbv
Ethylbenzene		ND	0.20	ppbv
Ethyl Acetate		ND	2.00	ppbv
4-Ethyltoluene		ND	0.20	ppbv
Freon 113		ND	0.20	ppbv
Freon 114		ND	0.20	ppbv
Heptane		ND	0.20	ppbv
Hexachlorobutadiene		ND	0.20	ppbv
Hexane		ND	0.20	ppbv
2-Hexanone		ND	0.20	ppbv
Isopropyl Alcohol		ND	2.00	ppbv
Methylene chloride		ND	0.20	ppbv
2-Butanone (MEK)		ND	2.00	ppbv
4-Methyl-2-pentanone (MIBK)		ND	0.20	ppbv

Organics - Volatiles, Prep Batch ID: GV221020G1 (continued)

Surrogates: Yes, QC Types: BLK/LCS/LCSD

Blank (BLK) (continued)

Lab Sample ID: 221020A8.BLKG20A

Run in Batch: 221020A8, Run Date: 10/20/2022 13:46, Prep Date: 10/20/2022, Matrix: G, Dilution: 1

Analyte	Flags	Conc	RDL	Units
tert-Methyl butyl ether (MTBE)		ND	0.20	ppbv
Methyl methacrylate		ND	0.20	ppbv
Naphthalene		ND	0.20	ppbv
Propylene		ND	2.00	ppbv
Styrene		ND	0.20	ppbv
1,1,1-Trichloroethane		ND	0.20	ppbv
1,1,2,2-Tetrachloroethane		ND	0.20	ppbv
1,1,2-Trichloroethane		ND	0.20	ppbv
1,2,4-Trichlorobenzene		ND	0.20	ppbv
1,2,4-Trimethylbenzene		ND	0.20	ppbv
1,3,5-Trimethylbenzene		ND	0.20	ppbv
2,2,4-Trimethylpentane		ND	0.20	ppbv
Tert-butyl Alcohol		ND	2.00	ppbv
Tetrachloroethene		ND	0.20	ppbv
Tetrahydrofuran		ND	0.20	ppbv
Toluene		ND	0.20	ppbv
Trichloroethene		ND	0.20	ppbv
Trichlorofluoromethane		ND	0.20	ppbv
Vinyl chloride		ND	0.20	ppbv
Vinyl acetate		ND	2.00	ppbv
p,m-Xylene		ND	0.20	ppbv
o-Xylene		ND	0.20	ppbv

Laboratory Control Sample (LCS)

Lab Sample ID: 221020A8.LCSG20A

Run in Batch: 221020A8, Run Date: 10/20/2022 12:46, Prep Date: 10/20/2022, Matrix: G, Dilution: 1

Analyte	Flags	% Rec	LCL	UCL
Acetone	*	131.4	70.0	130.0
1,3-Butadiene		109.6	70.0	130.0
Benzene		100.6	70.0	130.0
Bromodichloromethane		99.6	70.0	130.0
Bromoform		106.1	70.0	130.0
Bromomethane		98.1	70.0	130.0
Vinyl bromide		96.3	70.0	130.0
Benzyl chloride		120.9	70.0	130.0
Carbon disulfide		109.5	70.0	130.0
Chlorobenzene		98.1	70.0	130.0
Chloroethane		106.5	70.0	130.0
Chloroform		100.6	70.0	130.0
Chloromethane		109.8	70.0	130.0
3-Chloropropene		113.1	70.0	130.0
2-Chlorotoluene		100.0	70.0	130.0
Carbon tetrachloride		94.8	70.0	130.0
Cyclohexane		97.2	70.0	130.0
1,1-Dichloroethane		107.2	70.0	130.0
1,1-Dichloroethene		106.6	70.0	130.0

Organics - Volatiles, Prep Batch ID: GV221020G1 (continued)

Surrogates: Yes, QC Types: BLK/LCS/LCSD

Laboratory Control Sample (LCS) (continued)

Lab Sample ID: 221020A8.LCSG20A

Run in Batch: 221020A8, Run Date: 10/20/2022 12:46, Prep Date: 10/20/2022, Matrix: G, Dilution: 1

Analyte	Flags	% Rec	LCL	UCL
1,2-Dibromoethane		97.4	70.0	130.0
1,2-Dichloroethane		103.2	70.0	130.0
1,2-Dichloropropane		103.7	70.0	130.0
1,4-Dioxane		101.3	70.0	130.0
Dichlorodifluoromethane		101.1	70.0	130.0
Dibromochloromethane		103.2	70.0	130.0
trans-1,2-Dichloroethene		103.4	70.0	130.0
cis-1,2-Dichloroethene		99.7	70.0	130.0
cis-1,3-Dichloropropene		95.0	70.0	130.0
1,3-Dichlorobenzene		106.3	70.0	130.0
1,2-Dichlorobenzene		108.6	70.0	130.0
1,4-Dichlorobenzene		108.7	70.0	130.0
trans-1,3-Dichloropropene		97.1	70.0	130.0
Ethanol		105.6	70.0	130.0
Ethylbenzene		102.7	70.0	130.0
Ethyl Acetate		108.4	70.0	130.0
4-Ethyltoluene		112.9	70.0	130.0
Freon 113		98.9	70.0	130.0
Freon 114		96.3	70.0	130.0
Heptane		105.7	70.0	130.0
Hexachlorobutadiene		108.0	70.0	130.0
Hexane		107.2	70.0	130.0
2-Hexanone		106.1	70.0	130.0
Isopropyl Alcohol		125.8	70.0	130.0
Methylene chloride		110.0	70.0	130.0
2-Butanone (MEK)		111.1	70.0	130.0
4-Methyl-2-pentanone (MIBK)		103.2	70.0	130.0
tert-Methyl butyl ether (MTBE)		100.8	70.0	130.0
Methyl methacrylate		105.4	70.0	130.0
Naphthalene		109.0	70.0	130.0
Propylene		116.5	70.0	130.0
Styrene		101.6	70.0	130.0
1,1,1-Trichloroethane		99.3	70.0	130.0
1,1,2,2-Tetrachloroethane		107.4	70.0	130.0
1,1,2-Trichloroethane		100.9	70.0	130.0
1,2,4-Trichlorobenzene		93.0	70.0	130.0
1,2,4-Trimethylbenzene		114.1	70.0	130.0
1,3,5-Trimethylbenzene		108.8	70.0	130.0
2,2,4-Trimethylpentane		106.3	70.0	130.0
Tert-butyl Alcohol		111.6	70.0	130.0
Tetrachloroethene		94.1	70.0	130.0
Tetrahydrofuran		114.6	70.0	130.0
Toluene		98.3	70.0	130.0
Trichloroethene		97.9	70.0	130.0
Trichlorofluoromethane		95.2	70.0	130.0
Vinyl chloride		106.5	70.0	130.0

Organics - Volatiles, Prep Batch ID: GV221020G1 (continued)

Surrogates: Yes, QC Types: BLK/LCS/LCSD

Laboratory Control Sample (LCS) (continued)

Lab Sample ID: 221020A8.LCSG20A

Run in Batch: 221020A8, Run Date: 10/20/2022 12:46, Prep Date: 10/20/2022, Matrix: G, Dilution: 1

Analyte	Flags	% Rec	LCL	UCL
Vinyl acetate		109.9	70.0	130.0
p,m-Xylene		104.0	70.0	130.0
o-Xylene		107.2	70.0	130.0

Laboratory Control Sample Duplicate (LCSD)

Lab Sample ID: 221020A8.LCSDG20A, Parent Sample ID: 221020A8.LCSG20A

Run in Batch: 221020A8, Run Date: 10/20/2022 13:15, Prep Date: 10/20/2022, Matrix: G, Dilution: 1

Analyte	Flags	% Rec	LCL	UCL	RPD	RPD CL
Acetone	*	134.6	70.0	130.0	2.4	30.0
1,3-Butadiene		112.9	70.0	130.0	3.0	30.0
Benzene		100.4	70.0	130.0	0.2	30.0
Bromodichloromethane		99.5	70.0	130.0	0.1	30.0
Bromoform		106.9	70.0	130.0	0.8	30.0
Bromomethane		101.6	70.0	130.0	3.5	30.0
Vinyl bromide		100.5	70.0	130.0	4.3	30.0
Benzyl chloride		124.5	70.0	130.0	2.9	30.0
Carbon disulfide		112.6	70.0	130.0	2.8	30.0
Chlorobenzene		99.1	70.0	130.0	1.0	30.0
Chloroethane		109.5	70.0	130.0	2.8	30.0
Chloroform		103.8	70.0	130.0	3.1	30.0
Chloromethane		114.6	70.0	130.0	4.3	30.0
3-Chloropropene		118.1	70.0	130.0	4.3	30.0
2-Chlorotoluene		101.4	70.0	130.0	1.4	30.0
Carbon tetrachloride		95.3	70.0	130.0	0.5	30.0
Cyclohexane		97.4	70.0	130.0	0.2	30.0
1,1-Dichloroethane		111.4	70.0	130.0	3.8	30.0
1,1-Dichloroethene		111.2	70.0	130.0	4.2	30.0
1,2-Dibromoethane		98.7	70.0	130.0	1.3	30.0
1,2-Dichloroethane		106.6	70.0	130.0	3.2	30.0
1,2-Dichloropropane		103.1	70.0	130.0	0.6	30.0
1,4-Dioxane		101.6	70.0	130.0	0.3	30.0
Dichlorodifluoromethane		107.0	70.0	130.0	5.7	30.0
Dibromochloromethane		104.0	70.0	130.0	0.8	30.0
trans-1,2-Dichloroethene		108.6	70.0	130.0	4.9	30.0
cis-1,2-Dichloroethene		103.8	70.0	130.0	4.0	30.0
cis-1,3-Dichloropropene		96.9	70.0	130.0	2.0	30.0
1,3-Dichlorobenzene		107.2	70.0	130.0	0.8	30.0
1,2-Dichlorobenzene		110.0	70.0	130.0	1.3	30.0
1,4-Dichlorobenzene		109.1	70.0	130.0	0.4	30.0
trans-1,3-Dichloropropene		99.3	70.0	130.0	2.2	30.0
Ethanol		108.2	70.0	130.0	2.4	30.0
Ethylbenzene		103.6	70.0	130.0	0.9	30.0
Ethyl Acetate		114.1	70.0	130.0	5.1	30.0
4-Ethyltoluene		114.6	70.0	130.0	1.5	30.0
Freon 113		101.9	70.0	130.0	3.0	30.0
Freon 114		100.0	70.0	130.0	3.8	30.0

Organics - Volatiles, Prep Batch ID: GV221020G1 (continued)

Surrogates: Yes, QC Types: BLK/LCS/LCSD

Laboratory Control Sample Duplicate (LCSD) (continued)

Lab Sample ID: 221020A8.LCSDG20A, Parent Sample ID: 221020A8.LCSG20A

Run in Batch: 221020A8, Run Date: 10/20/2022 13:15, Prep Date: 10/20/2022, Matrix: G, Dilution: 1

Analyte	Flags	% Rec	LCL	UCL	RPD	RPD CL
Heptane		107.4	70.0	130.0	1.6	30.0
Hexachlorobutadiene		110.0	70.0	130.0	1.8	30.0
Hexane		112.6	70.0	130.0	4.9	30.0
2-Hexanone		108.7	70.0	130.0	2.4	30.0
Isopropyl Alcohol	*	130.3	70.0	130.0	3.5	30.0
Methylene chloride		112.7	70.0	130.0	2.4	30.0
2-Butanone (MEK)		111.9	70.0	130.0	0.7	30.0
4-Methyl-2-pentanone (MIBK)		104.9	70.0	130.0	1.6	30.0
tert-Methyl butyl ether (MTBE)		106.0	70.0	130.0	5.0	30.0
Methyl methacrylate		108.5	70.0	130.0	2.9	30.0
Naphthalene		116.9	70.0	130.0	7.0	30.0
Propylene		124.5	70.0	130.0	6.6	30.0
Styrene		103.3	70.0	130.0	1.7	30.0
1,1,1-Trichloroethane		103.0	70.0	130.0	3.7	30.0
1,1,2,2-Tetrachloroethane		108.4	70.0	130.0	0.9	30.0
1,1,2-Trichloroethane		101.3	70.0	130.0	0.4	30.0
1,2,4-Trichlorobenzene		99.0	70.0	130.0	6.2	30.0
1,2,4-Trimethylbenzene		114.6	70.0	130.0	0.4	30.0
1,3,5-Trimethylbenzene		109.3	70.0	130.0	0.5	30.0
2,2,4-Trimethylpentane		107.0	70.0	130.0	0.7	30.0
Tert-butyl Alcohol		117.2	70.0	130.0	4.9	30.0
Tetrachloroethene		94.9	70.0	130.0	0.8	30.0
Tetrahydrofuran		119.7	70.0	130.0	4.4	30.0
Toluene		99.6	70.0	130.0	1.3	30.0
Trichloroethene		97.3	70.0	130.0	0.6	30.0
Trichlorofluoromethane		97.3	70.0	130.0	2.2	30.0
Vinyl chloride		110.5	70.0	130.0	3.7	30.0
Vinyl acetate		115.8	70.0	130.0	5.2	30.0
p,m-Xylene		104.6	70.0	130.0	0.6	30.0
o-Xylene		107.8	70.0	130.0	0.6	30.0

Organics - Volatiles, Prep Batch ID: GV221020G2

Surrogates: Yes, QC Types: BLK/LCS/LCSD

Blank (BLK)

Lab Sample ID: 221020A8.BLKG20B

Run in Batch: 221020A8, Run Date: 10/21/2022 01:38, Prep Date: 10/20/2022, Matrix: G, Dilution: 1

Analyte	Flags	Conc	RDL	Units
Acetone		ND	2.00	ppbv
1,3-Butadiene		ND	2.00	ppbv
Benzene		ND	0.20	ppbv
Bromodichloromethane		ND	0.20	ppbv
Bromoform		ND	0.20	ppbv
Bromomethane		ND	0.20	ppbv
Vinyl bromide		ND	0.20	ppbv
Benzyl chloride		ND	0.20	ppbv
Carbon disulfide		ND	2.00	ppbv
Chlorobenzene		ND	0.20	ppbv
Chloroethane		ND	2.00	ppbv
Chloroform		ND	0.20	ppbv
Chloromethane		ND	2.00	ppbv
3-Chloropropene		ND	2.00	ppbv
2-Chlorotoluene		ND	0.20	ppbv
Carbon tetrachloride		ND	0.20	ppbv
Cyclohexane		ND	0.20	ppbv
1,1-Dichloroethane		ND	0.20	ppbv
1,1-Dichloroethene		ND	0.20	ppbv
1,2-Dibromoethane		ND	0.20	ppbv
1,2-Dichloroethane		ND	0.20	ppbv
1,2-Dichloropropane		ND	0.20	ppbv
1,4-Dioxane		ND	2.00	ppbv
Dichlorodifluoromethane		ND	0.20	ppbv
Dibromochloromethane		ND	0.20	ppbv
trans-1,2-Dichloroethene		ND	0.20	ppbv
cis-1,2-Dichloroethene		ND	0.20	ppbv
cis-1,3-Dichloropropene		ND	0.20	ppbv
1,3-Dichlorobenzene		ND	0.20	ppbv
1,2-Dichlorobenzene		ND	0.20	ppbv
1,4-Dichlorobenzene		ND	0.20	ppbv
trans-1,3-Dichloropropene		ND	0.20	ppbv
Ethanol		ND	2.00	ppbv
Ethylbenzene		ND	0.20	ppbv
Ethyl Acetate		ND	2.00	ppbv
4-Ethyltoluene		ND	0.20	ppbv
Freon 113		ND	0.20	ppbv
Freon 114		ND	0.20	ppbv
Heptane		ND	0.20	ppbv
Hexachlorobutadiene		ND	0.20	ppbv
Hexane		ND	0.20	ppbv
2-Hexanone		ND	0.20	ppbv
Isopropyl Alcohol		ND	2.00	ppbv
Methylene chloride		ND	0.20	ppbv
2-Butanone (MEK)		ND	2.00	ppbv
4-Methyl-2-pentanone (MIBK)		ND	0.20	ppbv

Organics - Volatiles, Prep Batch ID: GV221020G2 (continued)

Surrogates: Yes, QC Types: BLK/LCS/LCSD

Blank (BLK) (continued)

Lab Sample ID: 221020A8.BLKG20B

Run in Batch: 221020A8, Run Date: 10/21/2022 01:38, Prep Date: 10/20/2022, Matrix: G, Dilution: 1

Analyte	Flags	Conc	RDL	Units
tert-Methyl butyl ether (MTBE)		ND	0.20	ppbv
Methyl methacrylate		ND	0.20	ppbv
Naphthalene		ND	0.20	ppbv
Propylene		ND	2.00	ppbv
Styrene		ND	0.20	ppbv
1,1,1-Trichloroethane		ND	0.20	ppbv
1,1,2,2-Tetrachloroethane		ND	0.20	ppbv
1,1,2-Trichloroethane		ND	0.20	ppbv
1,2,4-Trichlorobenzene		ND	0.20	ppbv
1,2,4-Trimethylbenzene		ND	0.20	ppbv
1,3,5-Trimethylbenzene		ND	0.20	ppbv
2,2,4-Trimethylpentane		ND	0.20	ppbv
Tert-butyl Alcohol		ND	2.00	ppbv
Tetrachloroethene		ND	0.20	ppbv
Tetrahydrofuran		ND	0.20	ppbv
Toluene		ND	0.20	ppbv
Trichloroethene		ND	0.20	ppbv
Trichlorofluoromethane		ND	0.20	ppbv
Vinyl chloride		ND	0.20	ppbv
Vinyl acetate		ND	2.00	ppbv
p,m-Xylene		ND	0.20	ppbv
o-Xylene		ND	0.20	ppbv

Laboratory Control Sample (LCS)

Lab Sample ID: 221020A8.LCSG20B

Run in Batch: 221020A8, Run Date: 10/21/2022 00:38, Prep Date: 10/20/2022, Matrix: G, Dilution: 1

Analyte	Flags	% Rec	LCL	UCL
Acetone		129.2	70.0	130.0
1,3-Butadiene		112.1	70.0	130.0
Benzene		101.3	70.0	130.0
Bromodichloromethane		97.8	70.0	130.0
Bromoform		100.7	70.0	130.0
Bromomethane		97.8	70.0	130.0
Vinyl bromide		95.6	70.0	130.0
Benzyl chloride		118.6	70.0	130.0
Carbon disulfide		112.4	70.0	130.0
Chlorobenzene		95.9	70.0	130.0
Chloroethane		106.5	70.0	130.0
Chloroform		102.5	70.0	130.0
Chloromethane		111.7	70.0	130.0
3-Chloropropene		118.3	70.0	130.0
2-Chlorotoluene		97.9	70.0	130.0
Carbon tetrachloride		94.2	70.0	130.0
Cyclohexane		98.6	70.0	130.0
1,1-Dichloroethane		109.8	70.0	130.0
1,1-Dichloroethene		109.4	70.0	130.0

Organics - Volatiles, Prep Batch ID: GV221020G2 (continued)

Surrogates: Yes, QC Types: BLK/LCS/LCSD

Laboratory Control Sample (LCS) (continued)

Lab Sample ID: 221020A8.LCSG20B

Run in Batch: 221020A8, Run Date: 10/21/2022 00:38, Prep Date: 10/20/2022, Matrix: G, Dilution: 1

Analyte	Flags	% Rec	LCL	UCL
1,2-Dibromoethane		96.0	70.0	130.0
1,2-Dichloroethane		106.0	70.0	130.0
1,2-Dichloropropane		103.5	70.0	130.0
1,4-Dioxane		102.9	70.0	130.0
Dichlorodifluoromethane		103.1	70.0	130.0
Dibromochloromethane		100.0	70.0	130.0
trans-1,2-Dichloroethene		105.8	70.0	130.0
cis-1,2-Dichloroethene		102.1	70.0	130.0
cis-1,3-Dichloropropene		98.1	70.0	130.0
1,3-Dichlorobenzene		101.5	70.0	130.0
1,2-Dichlorobenzene		103.9	70.0	130.0
1,4-Dichlorobenzene		104.2	70.0	130.0
trans-1,3-Dichloropropene		100.4	70.0	130.0
Ethanol		109.4	70.0	130.0
Ethylbenzene		102.1	70.0	130.0
Ethyl Acetate		111.2	70.0	130.0
4-Ethyltoluene		110.6	70.0	130.0
Freon 113		100.1	70.0	130.0
Freon 114		98.5	70.0	130.0
Heptane		109.5	70.0	130.0
Hexachlorobutadiene		104.0	70.0	130.0
Hexane		112.2	70.0	130.0
2-Hexanone		109.6	70.0	130.0
Isopropyl Alcohol		128.4	70.0	130.0
Methylene chloride		111.2	70.0	130.0
2-Butanone (MEK)		111.4	70.0	130.0
4-Methyl-2-pentanone (MIBK)		106.2	70.0	130.0
tert-Methyl butyl ether (MTBE)		104.5	70.0	130.0
Methyl methacrylate		107.8	70.0	130.0
Naphthalene		107.7	70.0	130.0
Propylene		122.6	70.0	130.0
Styrene		100.2	70.0	130.0
1,1,1-Trichloroethane		101.8	70.0	130.0
1,1,2,2-Tetrachloroethane		104.4	70.0	130.0
1,1,2-Trichloroethane		99.6	70.0	130.0
1,2,4-Trichlorobenzene		92.3	70.0	130.0
1,2,4-Trimethylbenzene		111.4	70.0	130.0
1,3,5-Trimethylbenzene		105.3	70.0	130.0
2,2,4-Trimethylpentane		109.0	70.0	130.0
Tert-butyl Alcohol		115.3	70.0	130.0
Tetrachloroethene		91.6	70.0	130.0
Tetrahydrofuran		117.1	70.0	130.0
Toluene		99.8	70.0	130.0
Trichloroethene		97.7	70.0	130.0
Trichlorofluoromethane		93.6	70.0	130.0
Vinyl chloride		108.8	70.0	130.0

Organics - Volatiles, Prep Batch ID: GV221020G2 (continued)

Surrogates: Yes, QC Types: BLK/LCS/LCSD

Laboratory Control Sample (LCS) (continued)

Lab Sample ID: 221020A8.LCSG20B

Run in Batch: 221020A8, Run Date: 10/21/2022 00:38, Prep Date: 10/20/2022, Matrix: G, Dilution: 1

Analyte	Flags	% Rec	LCL	UCL
Vinyl acetate		112.9	70.0	130.0
p,m-Xylene		101.3	70.0	130.0
o-Xylene		104.6	70.0	130.0

Laboratory Control Sample Duplicate (LCSD)

Lab Sample ID: 221020A8.LCSDG20B, Parent Sample ID: 221020A8.LCSG20B

Run in Batch: 221020A8, Run Date: 10/21/2022 01:07, Prep Date: 10/20/2022, Matrix: G, Dilution: 1

Analyte	Flags	% Rec	LCL	UCL	RPD	RPD CL
Acetone		121.4	70.0	130.0	6.2	30.0
1,3-Butadiene		109.2	70.0	130.0	2.6	30.0
Benzene		100.3	70.0	130.0	1.0	30.0
Bromodichloromethane		97.8	70.0	130.0	0.0	30.0
Bromoform		102.9	70.0	130.0	2.2	30.0
Bromomethane		96.4	70.0	130.0	1.4	30.0
Vinyl bromide		95.4	70.0	130.0	0.2	30.0
Benzyl chloride		123.3	70.0	130.0	3.9	30.0
Carbon disulfide		113.1	70.0	130.0	0.6	30.0
Chlorobenzene		98.1	70.0	130.0	2.3	30.0
Chloroethane		104.5	70.0	130.0	1.9	30.0
Chloroform		103.3	70.0	130.0	0.8	30.0
Chloromethane		111.3	70.0	130.0	0.4	30.0
3-Chloropropene		119.8	70.0	130.0	1.3	30.0
2-Chlorotoluene		97.6	70.0	130.0	0.3	30.0
Carbon tetrachloride		94.1	70.0	130.0	0.1	30.0
Cyclohexane		97.7	70.0	130.0	0.9	30.0
1,1-Dichloroethane		111.3	70.0	130.0	1.4	30.0
1,1-Dichloroethene		110.0	70.0	130.0	0.5	30.0
1,2-Dibromoethane		97.7	70.0	130.0	1.8	30.0
1,2-Dichloroethane		105.5	70.0	130.0	0.5	30.0
1,2-Dichloropropane		102.4	70.0	130.0	1.1	30.0
1,4-Dioxane		102.6	70.0	130.0	0.3	30.0
Dichlorodifluoromethane		104.7	70.0	130.0	1.5	30.0
Dibromochloromethane		100.6	70.0	130.0	0.6	30.0
trans-1,2-Dichloroethene		107.4	70.0	130.0	1.5	30.0
cis-1,2-Dichloroethene		103.2	70.0	130.0	1.1	30.0
cis-1,3-Dichloropropene		98.8	70.0	130.0	0.7	30.0
1,3-Dichlorobenzene		104.4	70.0	130.0	2.8	30.0
1,2-Dichlorobenzene		106.6	70.0	130.0	2.6	30.0
1,4-Dichlorobenzene		106.0	70.0	130.0	1.7	30.0
trans-1,3-Dichloropropene		100.2	70.0	130.0	0.2	30.0
Ethanol		106.4	70.0	130.0	2.8	30.0
Ethylbenzene		103.7	70.0	130.0	1.6	30.0
Ethyl Acetate		113.5	70.0	130.0	2.0	30.0
4-Ethyltoluene		112.1	70.0	130.0	1.3	30.0
Freon 113		100.6	70.0	130.0	0.5	30.0
Freon 114		98.7	70.0	130.0	0.2	30.0

Organics - Volatiles, Prep Batch ID: GV221020G2 (continued)

Surrogates: Yes, QC Types: BLK/LCS/LCSD

Laboratory Control Sample Duplicate (LCSD) (continued)

Lab Sample ID: 221020A8.LCSDG20B, Parent Sample ID: 221020A8.LCSG20B

Run in Batch: 221020A8, Run Date: 10/21/2022 01:07, Prep Date: 10/20/2022, Matrix: G, Dilution: 1

Analyte	Flags	% Rec	LCL	UCL	RPD	RPD CL
Heptane		108.0	70.0	130.0	1.4	30.0
Hexachlorobutadiene		105.9	70.0	130.0	1.8	30.0
Hexane		115.1	70.0	130.0	2.6	30.0
2-Hexanone		111.1	70.0	130.0	1.4	30.0
Isopropyl Alcohol		128.4	70.0	130.0	0.0	30.0
Methylene chloride		111.6	70.0	130.0	0.4	30.0
2-Butanone (MEK)		112.8	70.0	130.0	1.2	30.0
4-Methyl-2-pentanone (MIBK)		107.5	70.0	130.0	1.2	30.0
tert-Methyl butyl ether (MTBE)		105.9	70.0	130.0	1.3	30.0
Methyl methacrylate		106.9	70.0	130.0	0.8	30.0
Naphthalene		116.4	70.0	130.0	7.8	30.0
Propylene		125.1	70.0	130.0	2.0	30.0
Styrene		103.4	70.0	130.0	3.1	30.0
1,1,1-Trichloroethane		102.3	70.0	130.0	0.5	30.0
1,1,2,2-Tetrachloroethane		105.3	70.0	130.0	0.9	30.0
1,1,2-Trichloroethane		99.3	70.0	130.0	0.3	30.0
1,2,4-Trichlorobenzene		98.5	70.0	130.0	6.5	30.0
1,2,4-Trimethylbenzene		113.2	70.0	130.0	1.6	30.0
1,3,5-Trimethylbenzene		107.9	70.0	130.0	2.4	30.0
2,2,4-Trimethylpentane		107.8	70.0	130.0	1.1	30.0
Tert-butyl Alcohol		117.9	70.0	130.0	2.2	30.0
Tetrachloroethene		93.6	70.0	130.0	2.2	30.0
Tetrahydrofuran		119.1	70.0	130.0	1.7	30.0
Toluene		100.0	70.0	130.0	0.2	30.0
Trichloroethene		96.5	70.0	130.0	1.2	30.0
Trichlorofluoromethane		93.2	70.0	130.0	0.4	30.0
Vinyl chloride		105.9	70.0	130.0	2.7	30.0
Vinyl acetate		115.4	70.0	130.0	2.2	30.0
p,m-Xylene		102.6	70.0	130.0	1.3	30.0
o-Xylene		106.6	70.0	130.0	1.9	30.0

Merit Laboratories Login Checklist

Lab Set ID: S40706
Client: TRC (TRC)
Project: Detroit Axle Ferndale, MI
Submitted: 09/26/2022 11:20 Login User: MMC

Attention: Kelly Cratsenburg
Address: TRC
1540 Eisenhower Place
Ann Arbor, MI 48108

Phone: 734-585-7829 C: FAX:
Email: KCratsenburg@trccompanies.com

Selection				Description	Note
Sample Receiving					
01.	☐ Yes	☐ No	☒ N/A	Samples are received at 4C +/- 2C Thermometer #	RT
02.	☐ Yes	☐ No	☒ N/A	Received on ice/ cooling process begun	
03.	☐ Yes	☒ No	☐ N/A	Samples shipped	
04.	☐ Yes	☒ No	☐ N/A	Samples left in 24 hr. drop box	
05.	☐ Yes	☐ No	☒ N/A	Are there custody seals/tape or is the drop box locked	
Chain of Custody					
06.	☒ Yes	☐ No	☐ N/A	COC adequately filled out	
07.	☒ Yes	☐ No	☐ N/A	COC signed and relinquished to the lab	
08.	☒ Yes	☐ No	☐ N/A	Sample tag on bottles match COC	
09.	☐ Yes	☒ No	☐ N/A	Subcontracting needed? Subcontacted to:	
Preservation					
10.	☒ Yes	☐ No	☐ N/A	Do sample have correct chemical preservation	
11.	☐ Yes	☐ No	☒ N/A	Completed pH checks on preserved samples? (no VOAs)	
12.	☐ Yes	☒ No	☐ N/A	Did any samples need to be preserved in the lab?	
Bottle Conditions					
13.	☒ Yes	☐ No	☐ N/A	All bottles intact	
14.	☒ Yes	☐ No	☐ N/A	Appropriate analytical bottles are used	
15.	☒ Yes	☐ No	☐ N/A	Merit bottles used	
16.	☒ Yes	☐ No	☐ N/A	Sufficient sample volume received	
17.	☐ Yes	☒ No	☐ N/A	Samples require laboratory filtration	
18.	☒ Yes	☐ No	☐ N/A	Samples submitted within holding time	
19.	☐ Yes	☐ No	☒ N/A	Do water VOC or TOX bottles contain headspace	

Corrective action for all exceptions is to call the client and to notify the project manager.

Client Review By: _____ Date: _____

Merit Laboratories, Inc.
2680 East Lansing Dr., East Lansing, MI 48823
Phone (517) 332-0167 Fax (517) 332-4034
www.meritlabs.com

C.O.C. PAGE # 1 OF 2

A5764

AIR/GAS SAMPLES CHAIN OF CUSTODY RECORD

REPORT TO

CONTACT NAME: Kelly Cratsenburg
COMPANY: TRC
ADDRESS: 1540 Eisenhower Place
CITY: Ann Arbor | STATE: MI | ZIP CODE: 48108
PHONE NO.: 734-412-5424 | FAX NO.: —
EMAIL ADDRESS: KCratsenburg@TRCcompanies.com
P.O. NO.: 188681
QUOTE NO.:

INVOICE TO

CONTACT NAME: | X SAME
COMPANY:
ADDRESS:
CITY: | STATE: | ZIP CODE:
PHONE NO.: | EMAIL ADDRESS:

PROJECT NO./NAME: Detroit Axle Ferndale, MI
SAMPLER(S) - PLEASE PRINT/SIGN NAME: Jacob Krenz

TURNAROUND TIME REQUIRED ☐ 1 DAY ☐ 2 DAYS ☐ 3 DAYS ☒ STANDARD ☐ OTHER

DELIVERABLES REQUIRED ☐ LEVEL II ☐ LEVEL III ☐ LEVEL IV ☐ EDD ☒ OTHER TRC EDD

Certifications ☐ DoD ☐ NELAP

ANALYSIS (ATTACH LIST IF MORE SPACE IS REQUIRED)

MERIT LAB NO. FOR LAB USE ONLY	SAMPLE TAG IDENTIFICATION-DESCRIPTION	Start Date	Start Time	Stop Date	Stop Time	Canister Vacuum in Field, "Hg (Start)	Canister Vacuum in Field, "Hg (Stop)	Flow Controller ID	Canister ID	Sample Type: Indoor Air	Ambient Air	Soil Gas	Landfill Gas	Other (specify in notes)	Analyses: TO-15	Other (specify in notes)
40706.01	VP-1	9-22-22	1131	9-22-22	1136	-28	-6	317	2010047240			X			X	
.02	VP-2	9-22-22	1207	9-22-22	1212	-27	-6	405	2010047407			X			X	
.03	VP-3	9-22-22	1228	9-22-22	1234	-30	-6	30	12424			X			X	
.04	VP-4	9-22-22	1251	9-22-22	1258	-30	-6	202	2010042808			X			X	
.05	VP-5	9-22-22	1313	9-22-22	1322	-30	-6	109	2010038953			X			X	
.06	VP-6	9-22-22	1328	9-22-22	1333	-27	-6	232	16840			X			X	
.07	VP-7	9-22-22	1351	9-22-22	1356	-29.5	-6	52	2010047307			X			X	
.08	VP-8	9-22-22	1418	9-22-22	1423	-26	-6	166	18353			X			X	
.09	VP-9	9-22-22	1443	9-22-22	1448	-28	-6	342	2010042337			X			X	
.10	VP-10	9-22-22	1459	9-22-22	1504	-28.5	-6	310	2010047309			X			X	

Temperature (Fahrenheit)	Interior	Ambient	Notes
Start			
Stop			

Pressure (inches of Hg)	Interior	Ambient	Notes
Start			
Stop			

Notes: Please use TRC EDD format

RELINQUISHED BY: SIGNATURE/ORGANIZATION	☒ Sampler	DATE 9-23-22	TIME 1335
RECEIVED BY: SIGNATURE/ORGANIZATION	TRC storage	DATE 9-23-22	TIME 1335
RELINQUISHED BY: SIGNATURE/ORGANIZATION	TRC	DATE 9/26/22	TIME 800
RECEIVED BY: SIGNATURE/ORGANIZATION		DATE 9/26/22	TIME 800

RELINQUISHED BY: SIGNATURE/ORGANIZATION		DATE 9/26/22	TIME 1120
RECEIVED BY: SIGNATURE/ORGANIZATION	M Dilcato	DATE 9/26/22	TIME 1120

SEAL NO. | SEAL INTACT YES ☐ NO ☐ | INITIALS
SEAL NO. | SEAL INTACT YES ☐ NO ☐ | INITIALS

TEMP. ON ARRIVAL: RT

PLEASE NOTE: SIGNING ACKNOWLEDGES ADHERENCE TO MERIT'S SAMPLE ACCEPTANCE POLICY ON REVERSE SIDE

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C.O.C. PAGE # 2 OF 2

A5765

AIR/GAS SAMPLES CHAIN OF CUSTODY RECORD

REPORT TO

CONTACT NAME: Kelly Cratsenburg
COMPANY: TRC
ADDRESS: 1540 Eisenhower Place
CITY: Ann Arbor STATE: MI ZIP CODE: 48108
PHONE NO.: 734-412-5424 FAX NO.: —
P.O. NO.: 188681
EMAIL ADDRESS: KCratsenburg@TRCcompanies.com
QUOTE NO.:

INVOICE TO

CONTACT NAME: ☐ SAME
COMPANY:
ADDRESS:
CITY: STATE: ZIP CODE:
PHONE NO.: EMAIL ADDRESS:

ANALYSIS (ATTACH LIST IF MORE SPACE IS REQUIRED)

PROJECT NO./NAME: Detroit Axle Ferndale, MI
SAMPLER(S) - PLEASE PRINT/SIGN NAME: Jacob Kranz
TURNAROUND TIME REQUIRED ☐ 1 DAY ☐ 2 DAYS ☐ 3 DAYS ☒ STANDARD ☐ OTHER
DELIVERABLES REQUIRED ☐ LEVEL II ☐ LEVEL III ☐ LEVEL IV ☐ EDD ☒ OTHER TRC EDD
Certifications ☐ DoD ☐ NELAP

MERIT LAB NO. FOR LAB USE ONLY	SAMPLE TAG IDENTIFICATION-DESCRIPTION	Start Date	Start Time	Stop Date	Stop Time	Canister Vacuum in Field, "Hg (Start)	Canister Vacuum in Field, "Hg (Stop)	Flow Controller ID	Canister ID	Sample Type: Indoor Air	Ambient Air	Soil Gas	Landfill Gas	Other (specify in notes)	Analyses: TO-15	Other (specify in notes)
40706.11	~~VP-11~~ VP-12	9-23-22	0835	9-23-22	0840	-29	-6	22	20100423 14			X			X	
.12	~~VP-12~~ VP-11	9-22-22	1515	9-22-22	1525	-30	-6	19	20100401 14			X			X	
.13	VP-13	9-23-22	0849	9-23-22	0854	-29	-6	344	20100336 95			X			X	
.14	VP-14	9-23-22	0908	9-23-22	0914	-30	-5	307	20100441 77			X			X	
.15	18VP-3	9-23-22	0938	9-23-22	0943	-29	-5	280	20100473 11			X			X	
.16	18VP-4	9-23-22	1006	9-23-22	1011	-30	-6	379	20100476 59			X			X	
.17	18VP-6 5'	9-23-22	1052	9-23-22	1059	-26	-6	102	28916			X			X	
.18	18VP-6 10'	9-23-22	1056	9-23-22	1104	-30	-6	23	20100422 78			X			X	
.19	18VP-2	9-23-22	1123	9-23-22	1135	-29.5	-6	129	20100422 62			X			X	

Temperature (Fahrenheit)	Interior	Ambient	Notes
Start			
Stop			

Pressure (inches of Hg)	Interior	Ambient	Notes
Start			
Stop			

Notes: Please use TRC EDD Format

RELINQUISHED BY: SIGNATURE/ORGANIZATION	☒ Sampler	DATE 9-23-22	TIME 1335
RECEIVED BY: SIGNATURE/ORGANIZATION TRC Storage		DATE 9-23-22	TIME 1335
RELINQUISHED BY: SIGNATURE/ORGANIZATION TRC		DATE 9/26	TIME 800
RECEIVED BY: SIGNATURE/ORGANIZATION		DATE 9/26	TIME 800

RELINQUISHED BY: SIGNATURE/ORGANIZATION		DATE 9/26/22	TIME 1120
RECEIVED BY: SIGNATURE/ORGANIZATION M Abbott		DATE 9/26/22	TIME 1120

SEAL NO. SEAL INTACT YES☐ NO☐ INITIALS
SEAL NO. SEAL INTACT YES☐ NO☐ INITIALS
TEMP. ON ARRIVAL RT

PLEASE NOTE: SIGNING ACKNOWLEDGES ADHERENCE TO MERIT'S SAMPLE ACCEPTANCE POLICY ON REVERSE SIDE

Analytical Laboratory Report

Revised Report

Report ID: S40860.01(02)+QC01
Generated on 11/16/2022
Replaces report S40860.01(01) generated on 10/11/2022

Report to

Attention: Kelly Cratsenburg
TRC
1540 Eisenhower Place
Ann Arbor, MI 48108

Phone: 734-585-7829 C: 734-412-5424 FAX:
Email: KCratsenburg@trccompanies.com

Addtional Contacts: Vince Buening

Report produced by

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Contacts for report questions:
John Laverty (johnlaverty@meritlabs.com)
Barbara Ball (bball@meritlabs.com)

Report Summary

Lab Sample ID(s): S40860.01-S40860.17
Project: OA - Eastern RCRA Assessment / 495430
Collected Date(s): 09/27/2022 - 09/28/2022
Submitted Date/Time: 09/29/2022 11:00
Sampled by: H. Schnaidt / J. Jasso
P.O. #: 189445

Table of Contents

Maya Murshak
Technical Director

General Report Notes

Analytical results relate only to the samples tested, in the condition received by the laboratory.
Methods may be modified for improved performance.
Results reported on a dry weight basis where applicable.
'Not detected' indicates that parameter was not found at a level equal to or greater than the reporting limit (RL).
When MDL results are provided, then 'Not detected' indicates that parameter was not found at a level equal to or greater than the MDL.
40 CFR Part 136 Table II Required Containers, Preservation Techniques and Holding Times for the Clean Water Act specify that samples for acrolein and acrylonitrile, and 2-chloroethylvinyl ether need to be preserved at a pH in the range of 4 to 5 or if not preserved, analyzed within 3 days of sampling.
QA/QC corresponding to this analytical report is a separate document with the same Merit ID reference and is available upon request.
Full accreditation certificates are available upon request. Starred (*) analytes are not NELAP accredited.
Samples are held by the lab for 30 days from the final report date unless a written request to hold longer is provided by the client.
Report shall not be reproduced except in full, without the written approval of Merit Laboratories, Inc.
Limits for drinking water samples, are listed as the MCL Limits (Maximum Contaminant Level Concentrations)
PFAS requirement: Section 9.3.8 of U.S. EPA Method 537.1 states "If the method analyte(s) found in the Field Sample is present in the FRB at a concentration greater than 1/3 the MRL, then all samples collected with that FRB are invalid and must be recollected and reanalyzed."
Samples submitted without an accompanying FRB may not be acceptable for compliance purposes.
Wisconsin PFAs analysis: MDL = LOD; RL = LOQ. LOD and LOQ are adjusted for dilution.

Report Narrative

Lower MDL per client request

Laboratory Certifications

Authority	Certification ID
Michigan DEQ	#9956
DOD ELAP/ISO 17025	#69699
WBENC	#2005110032
Ohio VAP	#CL0002
Indiana DOH	#C-MI-07
New York NELAC	#11814
North Carolina DENR	#680
North Carolina DOH	#26702
Alaska CSLAP	#17-001
Pennsylvania DEP	#68-05884
Wisconsin DNR	FID# 399147320

Qualifier Descriptions

Qualifier	Description
!	Result is outside of stated limit criteria
B	Compound also found in associated method blank
E	Concentration exceeds calibration range
F	Analysis run outside of holding time
G	Estimated result due to extraction run outside of holding time
H	Sample submitted and run outside of holding time
I	Matrix interference with internal standard
J	Estimated value less than reporting limit, but greater than MDL
L	Elevated reporting limit due to low sample amount
M	Result reported to MDL not RDL
O	Analysis performed by outside laboratory. See attached report.
R	Preliminary result
S	Surrogate recovery outside of control limits
T	No correction for total solids
X	Elevated reporting limit due to matrix interference
Y	Elevated reporting limit due to high target concentration
b	Value detected less than reporting limit, but greater than MDL
e	Reported value estimated due to interference
j	Analyte also found in associated method blank
p	Benzo(b)Fluoranthene and Benzo(k)Fluoranthene integrated as one peak.
x	Preserved from bulk sample

Glossary of Abbreviations

Abbreviation	Description
RL/RDL	Reporting Limit
MDL	Method Detection Limit
MS	Matrix Spike
MSD	Matrix Spike Duplicate
SW	EPA SW 846 (Soil and Wastewater) Methods
E	EPA Methods
SM	Standard Methods
LN	Linear
BR	Branched

Method Summary

Method	Version
E200.8	EPA Method 200.8 Revision 5.4
E245.1	EPA Method 245.1 Revision 3.0
N/A	Not Applicable
SW3015A	SW 846 Method 3015A Revision 1 February 2007
SW5030C/8260C	SW 846 Method 8260C Revision 3 August 2006 / 5030C Revision 3 May 2003

Sample Summary (17 samples)

Sample ID	Sample Tag	Matrix	Collected Date/Time
S40860.01	MW-120	Groundwater	09/27/22 09:30
S40860.02	MW-119	Groundwater	09/27/22 10:13
S40860.03	MW-113	Groundwater	09/27/22 11:27
S40860.04	MW-112	Groundwater	09/27/22 12:37
S40860.05	MW-111	Groundwater	09/27/22 13:17
S40860.06	MW-110	Groundwater	09/27/22 13:47
S40860.07	Dup-01	Groundwater	09/27/22 00:01
S40860.08	Trip Blank 1	Water	09/27/22 00:01
S40860.09	MW-109	Groundwater	09/28/22 09:25
S40860.10	MW-108	Groundwater	09/28/22 09:10
S40860.11	MW-107	Groundwater	09/28/22 10:23
S40860.12	MW-106	Groundwater	09/28/22 11:25
S40860.13	MW-121	Groundwater	09/28/22 12:32
S40860.14	MW-104	Groundwater	09/28/22 13:38
S40860.15	MW-105	Groundwater	09/28/22 14:23
S40860.16	Dup-02	Groundwater	09/28/22 00:01
S40860.17	Trip Blank 2	Water	09/28/22 00:01

Lab Sample ID: S40860.01
Sample Tag: MW-120
Collected Date/Time: 09/27/2022 09:30
Matrix: Groundwater
COC Reference: 154527

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
3	40ml Glass	None	Yes	2.4	IR
3	40ml Glass	HCL	Yes	2.4	IR
1	125ml Plastic	HNO3	Yes	2.4	IR

Extraction / Prep.

Parameter	Result	Method	Run Date	Analyst	Flags
Mercury Digestion	Completed	E245.1	10/05/22 13:36	CTV	
pH check for VOCs*	<2	N/A	10/05/22 15:00	BML	
Metal Digestion	Completed	SW3015A	10/06/22 09:30	CCM	

Metals

Method: E200.8, Run Date: 10/06/22 11:22, Analyst: CCM

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Aluminum	0.014	0.010		mg/L	5	7429-90-5	
Antimony*	Not detected	0.005		mg/L	5	7440-36-0	
Arsenic	Not detected	0.002		mg/L	5	7440-38-2	
Barium	0.016	0.005		mg/L	5	7440-39-3	
Beryllium	Not detected	0.001		mg/L	5	7440-41-7	
Boron	0.23	0.04		mg/L	5	7440-42-8	
Cadmium	0.0009	0.0005		mg/L	5	7440-43-9	
Chromium	Not detected	0.005		mg/L	5	7440-47-3	
Cobalt	Not detected	0.005		mg/L	5	7440-48-4	
Iron	0.02	0.02		mg/L	5	7439-89-6	
Lead	Not detected	0.003		mg/L	5	7439-92-1	
Manganese	0.013	0.005		mg/L	5	7439-96-5	
Molybdenum	0.007	0.005		mg/L	5	7439-98-7	
Nickel	Not detected	0.005		mg/L	5	7440-02-0	
Selenium	Not detected	0.005		mg/L	5	7782-49-2	
Silver	Not detected	0.0005		mg/L	5	7440-22-4	
Strontium	1.24	0.005		mg/L	5	7440-24-6	
Thallium	Not detected	0.002		mg/L	5	7440-28-0	
Titanium	Not detected	0.005		mg/L	5	7440-32-6	
Vanadium	Not detected	0.005		mg/L	5	7440-62-2	
Zinc	Not detected	0.005		mg/L	5	7440-66-6	

Method: E200.8, Run Date: 10/06/22 13:49, Analyst: CCM

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Calcium*	112	1.0		mg/L	5	7440-70-2	
Magnesium	60.3	0.50		mg/L	5	7439-95-4	
Potassium	1.69	0.50		mg/L	5	7440-09-7	
Sodium	11.1	0.50		mg/L	5	7440-23-5	

Method: E245.1, Run Date: 10/05/22 16:30, Analyst: CTV

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Mercury	Not detected	0.0002		mg/L	1	7439-97-6	

Lab Sample ID: S40860.01 (continued)
Sample Tag: MW-120

Organics - Volatiles

Method: SW5030C/8260C, Run Date: 10/10/22 14:20, Analyst: KAG

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Diisopropyl ether (DIPE)	Not detected	5		ug/L	1	108-20-3	

Volatile Organics, Method: SW5030C/8260C, Run Date: 10/05/22 03:57, Analyst: BML

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Acetone	Not detected	50		ug/L	1	67-64-1	
tert-Methyl butyl ether (MTBE)	Not detected	5		ug/L	1	1634-04-4	
Acrylonitrile	Not detected	2		ug/L	1	107-13-1	
2-Butanone (MEK)	Not detected	25		ug/L	1	78-93-3	
Dichlorodifluoromethane	Not detected	5		ug/L	1	75-71-8	
Chloromethane	Not detected	5		ug/L	1	74-87-3	
Vinyl chloride	Not detected	1		ug/L	1	75-01-4	
Bromomethane	Not detected	5		ug/L	1	74-83-9	
Chloroethane	Not detected	5		ug/L	1	75-00-3	
Trichlorofluoromethane	Not detected	1		ug/L	1	75-69-4	
1,1-Dichloroethene	Not detected	1		ug/L	1	75-35-4	
Methylene chloride	Not detected	5		ug/L	1	75-09-2	
trans-1,2-Dichloroethene	Not detected	1		ug/L	1	156-60-5	
1,1-Dichloroethane	Not detected	1		ug/L	1	75-34-3	
cis-1,2-Dichloroethene	Not detected	1		ug/L	1	156-59-2	
Chloroform	Not detected	1		ug/L	1	67-66-3	
1,1,1-Trichloroethane	Not detected	1		ug/L	1	71-55-6	
4-Methyl-2-pentanone (MIBK)	Not detected	50		ug/L	1	108-10-1	
Carbon tetrachloride	Not detected	1		ug/L	1	56-23-5	
Benzene	Not detected	1		ug/L	1	71-43-2	
1,2-Dichloroethane	Not detected	1		ug/L	1	107-06-2	
Trichloroethene	Not detected	1		ug/L	1	79-01-6	
1,2-Dichloropropane	Not detected	1		ug/L	1	78-87-5	
Bromodichloromethane	Not detected	1		ug/L	1	75-27-4	
Dibromomethane	Not detected	5		ug/L	1	74-95-3	
cis-1,3-Dichloropropene	Not detected	1		ug/L	1	10061-01-5	
Toluene	Not detected	1		ug/L	1	108-88-3	
trans-1,3-Dichloropropene	Not detected	1		ug/L	1	10061-02-6	
1,1,2-Trichloroethane	Not detected	1		ug/L	1	79-00-5	
Tetrachloroethene	Not detected	1		ug/L	1	127-18-4	
Dibromochloromethane	Not detected	5		ug/L	1	124-48-1	
1,2-Dibromoethane	Not detected	1		ug/L	1	106-93-4	
Chlorobenzene	Not detected	1		ug/L	1	108-90-7	
1,1,1,2-Tetrachloroethane	Not detected	1		ug/L	1	630-20-6	
Ethylbenzene	Not detected	1		ug/L	1	100-41-4	
p,m-Xylene*	Not detected	2		ug/L	1		
o-Xylene	Not detected	1		ug/L	1	95-47-6	
Styrene	Not detected	1		ug/L	1	100-42-5	
Isopropylbenzene	Not detected	5		ug/L	1	98-82-8	
Bromoform	Not detected	1		ug/L	1	75-25-2	
1,1,2,2-Tetrachloroethane	Not detected	1		ug/L	1	79-34-5	
1,2,3-Trichloropropane	Not detected	1		ug/L	1	96-18-4	
n-Propylbenzene	Not detected	1		ug/L	1	103-65-1	
Bromobenzene	Not detected	1		ug/L	1	108-86-1	
1,3,5-Trimethylbenzene	Not detected	1		ug/L	1	108-67-8	

Lab Sample ID: S40860.01 (continued)
Sample Tag: MW-120

Volatile Organics, Method: SW5030C/8260C, Run Date: 10/05/22 03:57, Analyst: BML (continued)

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
tert-Butylbenzene	Not detected	1		ug/L	1	98-06-6	
1,2,4-Trimethylbenzene	Not detected	1		ug/L	1	95-63-6	
sec-Butylbenzene	Not detected	1		ug/L	1	135-98-8	
p-Isopropyltoluene	Not detected	5		ug/L	1	99-87-6	
1,3-Dichlorobenzene	Not detected	1		ug/L	1	541-73-1	
1,4-Dichlorobenzene	Not detected	1		ug/L	1	106-46-7	
1,2-Dichlorobenzene	Not detected	1		ug/L	1	95-50-1	
1,2,3-Trimethylbenzene	Not detected	1		ug/L	1	526-73-8	
n-Butylbenzene	Not detected	1		ug/L	1	104-51-8	
1,2-Dibromo-3-chloropropane	Not detected	5		ug/L	1	96-12-8	
1,2,4-Trichlorobenzene	Not detected	5		ug/L	1	120-82-1	
1,2,3-Trichlorobenzene	Not detected	5		ug/L	1	87-61-6	
Naphthalene	Not detected	5		ug/L	1	91-20-3	
Acrolein	Not detected	1		ug/L	1	107-02-8	
2-Chlorotoluene	Not detected	1		ug/L	1	95-49-8	
4-Chlorotoluene	Not detected	1		ug/L	1	106-43-4	
1,3-Dichloropropane	Not detected	1		ug/L	1	142-28-9	
1,1-Dichloropropene	Not detected	1		ug/L	1	563-58-6	
2,2-Dichloropropane	Not detected	1		ug/L	1	594-20-7	
Hexachlorobutadiene	Not detected	1		ug/L	1	87-68-3	
1,1,2-Trichloro-1,2,2-trifluoroethane	Not detected	1		ug/L	1	76-13-1	

Other / Misc.

Method: , Run Date: 10/08/22 19:43, Analyst: TA

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Methanol*	Completed				1	67-56-1	O

O-Analysis performed by outside laboratory. See attached report.

Lab Sample ID: S40860.02
Sample Tag: MW-119
Collected Date/Time: 09/27/2022 10:13
Matrix: Groundwater
COC Reference: 154527

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
3	40ml Glass	None	Yes	2.4	IR
3	40ml Glass	HCL	Yes	2.4	IR
1	125ml Plastic	HNO3	Yes	2.4	IR

Extraction / Prep.

Parameter	Result	Method	Run Date	Analyst	Flags
Mercury Digestion	Completed	E245.1	10/05/22 13:36	CTV	
pH check for VOCs*	<2	N/A	10/05/22 15:00	BML	
Metal Digestion	Completed	SW3015A	10/06/22 09:30	CCM	

Metals

Method: E200.8, Run Date: 10/06/22 11:30, Analyst: CCM

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Aluminum	Not detected	0.010		mg/L	5	7429-90-5	
Antimony*	Not detected	0.005		mg/L	5	7440-36-0	
Arsenic	Not detected	0.002		mg/L	5	7440-38-2	
Barium	0.035	0.005		mg/L	5	7440-39-3	
Beryllium	Not detected	0.001		mg/L	5	7440-41-7	
Boron	0.16	0.04		mg/L	5	7440-42-8	
Cadmium	Not detected	0.0005		mg/L	5	7440-43-9	
Chromium	Not detected	0.005		mg/L	5	7440-47-3	
Cobalt	Not detected	0.005		mg/L	5	7440-48-4	
Iron	Not detected	0.02		mg/L	5	7439-89-6	
Lead	Not detected	0.003		mg/L	5	7439-92-1	
Manganese	Not detected	0.005		mg/L	5	7439-96-5	
Molybdenum	Not detected	0.005		mg/L	5	7439-98-7	
Nickel	Not detected	0.005		mg/L	5	7440-02-0	
Selenium	Not detected	0.005		mg/L	5	7782-49-2	
Silver	Not detected	0.0005		mg/L	5	7440-22-4	
Strontium	1.55	0.005		mg/L	5	7440-24-6	
Thallium	Not detected	0.002		mg/L	5	7440-28-0	
Titanium	Not detected	0.005		mg/L	5	7440-32-6	
Vanadium	Not detected	0.005		mg/L	5	7440-62-2	
Zinc	Not detected	0.005		mg/L	5	7440-66-6	

Method: E200.8, Run Date: 10/06/22 13:51, Analyst: CCM

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Calcium*	143	1.0		mg/L	5	7440-70-2	
Magnesium	25.3	0.50		mg/L	5	7439-95-4	
Potassium	4.38	0.50		mg/L	5	7440-09-7	
Sodium	4.82	0.50		mg/L	5	7440-23-5	

Method: E245.1, Run Date: 10/05/22 16:34, Analyst: CTV

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Mercury	Not detected	0.0002		mg/L	1	7439-97-6	

Lab Sample ID: S40860.02 (continued)
Sample Tag: MW-119

Organics - Volatiles

Method: SW5030C/8260C, Run Date: 10/10/22 14:45, Analyst: KAG

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Diisopropyl ether (DIPE)	Not detected	5		ug/L	1	108-20-3	

Volatile Organics, Method: SW5030C/8260C, Run Date: 10/05/22 04:20, Analyst: BML

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Acetone	Not detected	50		ug/L	1	67-64-1	
tert-Methyl butyl ether (MTBE)	Not detected	5		ug/L	1	1634-04-4	
Acrylonitrile	Not detected	2		ug/L	1	107-13-1	
2-Butanone (MEK)	Not detected	25		ug/L	1	78-93-3	
Dichlorodifluoromethane	Not detected	5		ug/L	1	75-71-8	
Chloromethane	Not detected	5		ug/L	1	74-87-3	
Vinyl chloride	Not detected	1		ug/L	1	75-01-4	
Bromomethane	Not detected	5		ug/L	1	74-83-9	
Chloroethane	Not detected	5		ug/L	1	75-00-3	
Trichlorofluoromethane	Not detected	1		ug/L	1	75-69-4	
1,1-Dichloroethene	Not detected	1		ug/L	1	75-35-4	
Methylene chloride	Not detected	5		ug/L	1	75-09-2	
trans-1,2-Dichloroethene	Not detected	1		ug/L	1	156-60-5	
1,1-Dichloroethane	Not detected	1		ug/L	1	75-34-3	
cis-1,2-Dichloroethene	Not detected	1		ug/L	1	156-59-2	
Chloroform	Not detected	1		ug/L	1	67-66-3	
1,1,1-Trichloroethane	Not detected	1		ug/L	1	71-55-6	
4-Methyl-2-pentanone (MIBK)	Not detected	50		ug/L	1	108-10-1	
Carbon tetrachloride	Not detected	1		ug/L	1	56-23-5	
Benzene	Not detected	1		ug/L	1	71-43-2	
1,2-Dichloroethane	Not detected	1		ug/L	1	107-06-2	
Trichloroethene	Not detected	1		ug/L	1	79-01-6	
1,2-Dichloropropane	Not detected	1		ug/L	1	78-87-5	
Bromodichloromethane	Not detected	1		ug/L	1	75-27-4	
Dibromomethane	Not detected	5		ug/L	1	74-95-3	
cis-1,3-Dichloropropene	Not detected	1		ug/L	1	10061-01-5	
Toluene	Not detected	1		ug/L	1	108-88-3	
trans-1,3-Dichloropropene	Not detected	1		ug/L	1	10061-02-6	
1,1,2-Trichloroethane	Not detected	1		ug/L	1	79-00-5	
Tetrachloroethene	Not detected	1		ug/L	1	127-18-4	
Dibromochloromethane	Not detected	5		ug/L	1	124-48-1	
1,2-Dibromoethane	Not detected	1		ug/L	1	106-93-4	
Chlorobenzene	Not detected	1		ug/L	1	108-90-7	
1,1,1,2-Tetrachloroethane	Not detected	1		ug/L	1	630-20-6	
Ethylbenzene	Not detected	1		ug/L	1	100-41-4	
p,m-Xylene*	Not detected	2		ug/L	1		
o-Xylene	Not detected	1		ug/L	1	95-47-6	
Styrene	Not detected	1		ug/L	1	100-42-5	
Isopropylbenzene	Not detected	5		ug/L	1	98-82-8	
Bromoform	Not detected	1		ug/L	1	75-25-2	
1,1,2,2-Tetrachloroethane	Not detected	1		ug/L	1	79-34-5	
1,2,3-Trichloropropane	Not detected	1		ug/L	1	96-18-4	
n-Propylbenzene	Not detected	1		ug/L	1	103-65-1	
Bromobenzene	Not detected	1		ug/L	1	108-86-1	
1,3,5-Trimethylbenzene	Not detected	1		ug/L	1	108-67-8	

Lab Sample ID: S40860.02 (continued)
Sample Tag: MW-119

Volatile Organics, Method: SW5030C/8260C, Run Date: 10/05/22 04:20, Analyst: BML (continued)

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
tert-Butylbenzene	Not detected	1		ug/L	1	98-06-6	
1,2,4-Trimethylbenzene	Not detected	1		ug/L	1	95-63-6	
sec-Butylbenzene	Not detected	1		ug/L	1	135-98-8	
p-Isopropyltoluene	Not detected	5		ug/L	1	99-87-6	
1,3-Dichlorobenzene	Not detected	1		ug/L	1	541-73-1	
1,4-Dichlorobenzene	Not detected	1		ug/L	1	106-46-7	
1,2-Dichlorobenzene	Not detected	1		ug/L	1	95-50-1	
1,2,3-Trimethylbenzene	Not detected	1		ug/L	1	526-73-8	
n-Butylbenzene	Not detected	1		ug/L	1	104-51-8	
1,2-Dibromo-3-chloropropane	Not detected	5		ug/L	1	96-12-8	
1,2,4-Trichlorobenzene	Not detected	5		ug/L	1	120-82-1	
1,2,3-Trichlorobenzene	Not detected	5		ug/L	1	87-61-6	
Naphthalene	Not detected	5		ug/L	1	91-20-3	
Acrolein	Not detected	1		ug/L	1	107-02-8	
2-Chlorotoluene	Not detected	1		ug/L	1	95-49-8	
4-Chlorotoluene	Not detected	1		ug/L	1	106-43-4	
1,3-Dichloropropane	Not detected	1		ug/L	1	142-28-9	
1,1-Dichloropropene	Not detected	1		ug/L	1	563-58-6	
2,2-Dichloropropane	Not detected	1		ug/L	1	594-20-7	
Hexachlorobutadiene	Not detected	1		ug/L	1	87-68-3	
1,1,2-Trichloro-1,2,2-trifluoroethane	Not detected	1		ug/L	1	76-13-1	

Other / Misc.

Method: , Run Date: 10/08/22 20:05, Analyst: TA

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Methanol*	Completed				1	67-56-1	O

O-Analysis performed by outside laboratory. See attached report.

Lab Sample ID: S40860.03
Sample Tag: MW-113
Collected Date/Time: 09/27/2022 11:27
Matrix: Groundwater
COC Reference: 154527

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
3	40ml Glass	None	Yes	2.4	IR
3	40ml Glass	HCL	Yes	2.4	IR
1	125ml Plastic	HNO3	Yes	2.4	IR

Extraction / Prep.

Parameter	Result	Method	Run Date	Analyst	Flags
Mercury Digestion	Completed	E245.1	10/05/22 13:36	CTV	
pH check for VOCs*	<2	N/A	10/05/22 15:00	BML	
Metal Digestion	Completed	SW3015A	10/06/22 09:30	CCM	

Metals

Method: E200.8, Run Date: 10/06/22 11:35, Analyst: CCM

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Aluminum	0.045	0.010		mg/L	5	7429-90-5	
Antimony*	Not detected	0.005		mg/L	5	7440-36-0	
Arsenic	Not detected	0.002		mg/L	5	7440-38-2	
Barium	0.030	0.005		mg/L	5	7440-39-3	
Beryllium	Not detected	0.001		mg/L	5	7440-41-7	
Boron	0.16	0.04		mg/L	5	7440-42-8	
Cadmium	Not detected	0.0005		mg/L	5	7440-43-9	
Chromium	Not detected	0.005		mg/L	5	7440-47-3	
Cobalt	Not detected	0.005		mg/L	5	7440-48-4	
Iron	0.68	0.02		mg/L	5	7439-89-6	
Lead	Not detected	0.003		mg/L	5	7439-92-1	
Manganese	0.020	0.005		mg/L	5	7439-96-5	
Molybdenum	Not detected	0.005		mg/L	5	7439-98-7	
Nickel	Not detected	0.005		mg/L	5	7440-02-0	
Selenium	Not detected	0.005		mg/L	5	7782-49-2	
Silver	Not detected	0.0005		mg/L	5	7440-22-4	
Strontium	0.746	0.005		mg/L	5	7440-24-6	
Thallium	Not detected	0.002		mg/L	5	7440-28-0	
Titanium	Not detected	0.005		mg/L	5	7440-32-6	
Vanadium	Not detected	0.005		mg/L	5	7440-62-2	
Zinc	Not detected	0.005		mg/L	5	7440-66-6	

Method: E200.8, Run Date: 10/06/22 13:53, Analyst: CCM

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Calcium*	134	1.0		mg/L	5	7440-70-2	
Magnesium	25.4	0.50		mg/L	5	7439-95-4	
Potassium	3.90	0.50		mg/L	5	7440-09-7	
Sodium	6.96	0.50		mg/L	5	7440-23-5	

Method: E245.1, Run Date: 10/05/22 16:37, Analyst: CTV

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Mercury	Not detected	0.0002		mg/L	1	7439-97-6	

Lab Sample ID: S40860.03 (continued)
Sample Tag: MW-113

Organics - Volatiles

Method: SW5030C/8260C, Run Date: 10/10/22 15:11, Analyst: KAG

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Diisopropyl ether (DIPE)	Not detected	5		ug/L	1	108-20-3	

Volatile Organics, Method: SW5030C/8260C, Run Date: 10/05/22 04:44, Analyst: BML

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Acetone	Not detected	50		ug/L	1	67-64-1	
tert-Methyl butyl ether (MTBE)	Not detected	5		ug/L	1	1634-04-4	
Acrylonitrile	Not detected	2		ug/L	1	107-13-1	
2-Butanone (MEK)	Not detected	25		ug/L	1	78-93-3	
Dichlorodifluoromethane	Not detected	5		ug/L	1	75-71-8	
Chloromethane	Not detected	5		ug/L	1	74-87-3	
Vinyl chloride	Not detected	1		ug/L	1	75-01-4	
Bromomethane	Not detected	5		ug/L	1	74-83-9	
Chloroethane	Not detected	5		ug/L	1	75-00-3	
Trichlorofluoromethane	Not detected	1		ug/L	1	75-69-4	
1,1-Dichloroethene	Not detected	1		ug/L	1	75-35-4	
Methylene chloride	Not detected	5		ug/L	1	75-09-2	
trans-1,2-Dichloroethene	Not detected	1		ug/L	1	156-60-5	
1,1-Dichloroethane	Not detected	1		ug/L	1	75-34-3	
cis-1,2-Dichloroethene	Not detected	1		ug/L	1	156-59-2	
Chloroform	Not detected	1		ug/L	1	67-66-3	
1,1,1-Trichloroethane	Not detected	1		ug/L	1	71-55-6	
4-Methyl-2-pentanone (MIBK)	Not detected	50		ug/L	1	108-10-1	
Carbon tetrachloride	Not detected	1		ug/L	1	56-23-5	
Benzene	Not detected	1		ug/L	1	71-43-2	
1,2-Dichloroethane	Not detected	1		ug/L	1	107-06-2	
Trichloroethene	Not detected	1		ug/L	1	79-01-6	
1,2-Dichloropropane	Not detected	1		ug/L	1	78-87-5	
Bromodichloromethane	Not detected	1		ug/L	1	75-27-4	
Dibromomethane	Not detected	5		ug/L	1	74-95-3	
cis-1,3-Dichloropropene	Not detected	1		ug/L	1	10061-01-5	
Toluene	Not detected	1		ug/L	1	108-88-3	
trans-1,3-Dichloropropene	Not detected	1		ug/L	1	10061-02-6	
1,1,2-Trichloroethane	Not detected	1		ug/L	1	79-00-5	
Tetrachloroethene	Not detected	1		ug/L	1	127-18-4	
Dibromochloromethane	Not detected	5		ug/L	1	124-48-1	
1,2-Dibromoethane	Not detected	1		ug/L	1	106-93-4	
Chlorobenzene	Not detected	1		ug/L	1	108-90-7	
1,1,1,2-Tetrachloroethane	Not detected	1		ug/L	1	630-20-6	
Ethylbenzene	Not detected	1		ug/L	1	100-41-4	
p,m-Xylene*	Not detected	2		ug/L	1		
o-Xylene	Not detected	1		ug/L	1	95-47-6	
Styrene	Not detected	1		ug/L	1	100-42-5	
Isopropylbenzene	Not detected	5		ug/L	1	98-82-8	
Bromoform	Not detected	1		ug/L	1	75-25-2	
1,1,2,2-Tetrachloroethane	Not detected	1		ug/L	1	79-34-5	
1,2,3-Trichloropropane	Not detected	1		ug/L	1	96-18-4	
n-Propylbenzene	Not detected	1		ug/L	1	103-65-1	
Bromobenzene	Not detected	1		ug/L	1	108-86-1	
1,3,5-Trimethylbenzene	Not detected	1		ug/L	1	108-67-8	

Lab Sample ID: S40860.03 (continued)
Sample Tag: MW-113

Volatile Organics, Method: SW5030C/8260C, Run Date: 10/05/22 04:44, Analyst: BML (continued)

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
tert-Butylbenzene	Not detected	1		ug/L	1	98-06-6	
1,2,4-Trimethylbenzene	Not detected	1		ug/L	1	95-63-6	
sec-Butylbenzene	Not detected	1		ug/L	1	135-98-8	
p-Isopropyltoluene	Not detected	5		ug/L	1	99-87-6	
1,3-Dichlorobenzene	Not detected	1		ug/L	1	541-73-1	
1,4-Dichlorobenzene	Not detected	1		ug/L	1	106-46-7	
1,2-Dichlorobenzene	Not detected	1		ug/L	1	95-50-1	
1,2,3-Trimethylbenzene	Not detected	1		ug/L	1	526-73-8	
n-Butylbenzene	Not detected	1		ug/L	1	104-51-8	
1,2-Dibromo-3-chloropropane	Not detected	5		ug/L	1	96-12-8	
1,2,4-Trichlorobenzene	Not detected	5		ug/L	1	120-82-1	
1,2,3-Trichlorobenzene	Not detected	5		ug/L	1	87-61-6	
Naphthalene	Not detected	5		ug/L	1	91-20-3	
Acrolein	Not detected	1		ug/L	1	107-02-8	
2-Chlorotoluene	Not detected	1		ug/L	1	95-49-8	
4-Chlorotoluene	Not detected	1		ug/L	1	106-43-4	
1,3-Dichloropropane	Not detected	1		ug/L	1	142-28-9	
1,1-Dichloropropene	Not detected	1		ug/L	1	563-58-6	
2,2-Dichloropropane	Not detected	1		ug/L	1	594-20-7	
Hexachlorobutadiene	Not detected	1		ug/L	1	87-68-3	
1,1,2-Trichloro-1,2,2-trifluoroethane	Not detected	1		ug/L	1	76-13-1	

Other / Misc.

Method: , Run Date: 10/08/22 20:27, Analyst: TA

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Methanol*	Completed				1	67-56-1	O

O-Analysis performed by outside laboratory. See attached report.

Lab Sample ID: S40860.04
Sample Tag: MW-112
Collected Date/Time: 09/27/2022 12:37
Matrix: Groundwater
COC Reference: 154527

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
3	40ml Glass	None	Yes	2.4	IR
3	40ml Glass	HCL	Yes	2.4	IR
1	125ml Plastic	HNO3	Yes	2.4	IR

Extraction / Prep.

Parameter	Result	Method	Run Date	Analyst	Flags
Mercury Digestion	Completed	E245.1	10/05/22 13:36	CTV	
pH check for VOCs*	<2	N/A	10/05/22 15:00	BML	
Metal Digestion	Completed	SW3015A	10/06/22 09:30	CCM	

Metals

Method: E200.8, Run Date: 10/06/22 11:38, Analyst: CCM

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Aluminum	2.61	0.010		mg/L	5	7429-90-5	
Antimony*	Not detected	0.005		mg/L	5	7440-36-0	
Arsenic	Not detected	0.002		mg/L	5	7440-38-2	
Barium	0.032	0.005		mg/L	5	7440-39-3	
Beryllium	Not detected	0.001		mg/L	5	7440-41-7	
Boron	0.09	0.04		mg/L	5	7440-42-8	
Cadmium	Not detected	0.0005		mg/L	5	7440-43-9	
Chromium	Not detected	0.005		mg/L	5	7440-47-3	
Cobalt	Not detected	0.005		mg/L	5	7440-48-4	
Iron	2.88	0.02		mg/L	5	7439-89-6	
Lead	0.007	0.003		mg/L	5	7439-92-1	
Manganese	0.487	0.005		mg/L	5	7439-96-5	
Molybdenum	0.010	0.005		mg/L	5	7439-98-7	
Nickel	0.006	0.005		mg/L	5	7440-02-0	
Selenium	Not detected	0.005		mg/L	5	7782-49-2	
Silver	Not detected	0.0005		mg/L	5	7440-22-4	
Strontium	0.334	0.005		mg/L	5	7440-24-6	
Thallium	Not detected	0.002		mg/L	5	7440-28-0	
Titanium	0.084	0.005		mg/L	5	7440-32-6	
Vanadium	0.008	0.005		mg/L	5	7440-62-2	
Zinc	0.016	0.005		mg/L	5	7440-66-6	

Method: E200.8, Run Date: 10/06/22 13:55, Analyst: CCM

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Calcium*	101	1.0		mg/L	5	7440-70-2	
Magnesium	28.1	0.50		mg/L	5	7439-95-4	
Potassium	1.52	0.50		mg/L	5	7440-09-7	
Sodium	19.5	0.50		mg/L	5	7440-23-5	

Method: E245.1, Run Date: 10/05/22 16:40, Analyst: CTV

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Mercury	Not detected	0.0002		mg/L	1	7439-97-6	

Lab Sample ID: S40860.04 (continued)
Sample Tag: MW-112

Organics - Volatiles

Method: SW5030C/8260C, Run Date: 10/10/22 15:36, Analyst: KAG

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Diisopropyl ether (DIPE)	Not detected	5		ug/L	1	108-20-3	

Volatile Organics, Method: SW5030C/8260C, Run Date: 10/05/22 05:07, Analyst: BML

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Acetone	Not detected	50		ug/L	1	67-64-1	
tert-Methyl butyl ether (MTBE)	Not detected	5		ug/L	1	1634-04-4	
Acrylonitrile	Not detected	2		ug/L	1	107-13-1	
2-Butanone (MEK)	Not detected	25		ug/L	1	78-93-3	
Dichlorodifluoromethane	Not detected	5		ug/L	1	75-71-8	
Chloromethane	Not detected	5		ug/L	1	74-87-3	
Vinyl chloride	Not detected	1		ug/L	1	75-01-4	
Bromomethane	Not detected	5		ug/L	1	74-83-9	
Chloroethane	Not detected	5		ug/L	1	75-00-3	
Trichlorofluoromethane	Not detected	1		ug/L	1	75-69-4	
1,1-Dichloroethene	Not detected	1		ug/L	1	75-35-4	
Methylene chloride	Not detected	5		ug/L	1	75-09-2	
trans-1,2-Dichloroethene	Not detected	1		ug/L	1	156-60-5	
1,1-Dichloroethane	Not detected	1		ug/L	1	75-34-3	
cis-1,2-Dichloroethene	1	1		ug/L	1	156-59-2	
Chloroform	Not detected	1		ug/L	1	67-66-3	
1,1,1-Trichloroethane	Not detected	1		ug/L	1	71-55-6	
4-Methyl-2-pentanone (MIBK)	Not detected	50		ug/L	1	108-10-1	
Carbon tetrachloride	Not detected	1		ug/L	1	56-23-5	
Benzene	Not detected	1		ug/L	1	71-43-2	
1,2-Dichloroethane	Not detected	1		ug/L	1	107-06-2	
Trichloroethene	Not detected	1		ug/L	1	79-01-6	
1,2-Dichloropropane	Not detected	1		ug/L	1	78-87-5	
Bromodichloromethane	Not detected	1		ug/L	1	75-27-4	
Dibromomethane	Not detected	5		ug/L	1	74-95-3	
cis-1,3-Dichloropropene	Not detected	1		ug/L	1	10061-01-5	
Toluene	Not detected	1		ug/L	1	108-88-3	
trans-1,3-Dichloropropene	Not detected	1		ug/L	1	10061-02-6	
1,1,2-Trichloroethane	Not detected	1		ug/L	1	79-00-5	
Tetrachloroethene	Not detected	1		ug/L	1	127-18-4	
Dibromochloromethane	Not detected	5		ug/L	1	124-48-1	
1,2-Dibromoethane	Not detected	1		ug/L	1	106-93-4	
Chlorobenzene	Not detected	1		ug/L	1	108-90-7	
1,1,1,2-Tetrachloroethane	Not detected	1		ug/L	1	630-20-6	
Ethylbenzene	Not detected	1		ug/L	1	100-41-4	
p,m-Xylene*	Not detected	2		ug/L	1		
o-Xylene	Not detected	1		ug/L	1	95-47-6	
Styrene	Not detected	1		ug/L	1	100-42-5	
Isopropylbenzene	Not detected	5		ug/L	1	98-82-8	
Bromoform	Not detected	1		ug/L	1	75-25-2	
1,1,2,2-Tetrachloroethane	Not detected	1		ug/L	1	79-34-5	
1,2,3-Trichloropropane	Not detected	1		ug/L	1	96-18-4	
n-Propylbenzene	Not detected	1		ug/L	1	103-65-1	
Bromobenzene	Not detected	1		ug/L	1	108-86-1	
1,3,5-Trimethylbenzene	Not detected	1		ug/L	1	108-67-8	

Lab Sample ID: S40860.04 (continued)
Sample Tag: MW-112

Volatile Organics, Method: SW5030C/8260C, Run Date: 10/05/22 05:07, Analyst: BML (continued)

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
tert-Butylbenzene	Not detected	1		ug/L	1	98-06-6	
1,2,4-Trimethylbenzene	Not detected	1		ug/L	1	95-63-6	
sec-Butylbenzene	Not detected	1		ug/L	1	135-98-8	
p-Isopropyltoluene	Not detected	5		ug/L	1	99-87-6	
1,3-Dichlorobenzene	Not detected	1		ug/L	1	541-73-1	
1,4-Dichlorobenzene	Not detected	1		ug/L	1	106-46-7	
1,2-Dichlorobenzene	Not detected	1		ug/L	1	95-50-1	
1,2,3-Trimethylbenzene	Not detected	1		ug/L	1	526-73-8	
n-Butylbenzene	Not detected	1		ug/L	1	104-51-8	
1,2-Dibromo-3-chloropropane	Not detected	5		ug/L	1	96-12-8	
1,2,4-Trichlorobenzene	Not detected	5		ug/L	1	120-82-1	
1,2,3-Trichlorobenzene	Not detected	5		ug/L	1	87-61-6	
Naphthalene	Not detected	5		ug/L	1	91-20-3	
Acrolein	Not detected	1		ug/L	1	107-02-8	
2-Chlorotoluene	Not detected	1		ug/L	1	95-49-8	
4-Chlorotoluene	Not detected	1		ug/L	1	106-43-4	
1,3-Dichloropropane	Not detected	1		ug/L	1	142-28-9	
1,1-Dichloropropene	Not detected	1		ug/L	1	563-58-6	
2,2-Dichloropropane	Not detected	1		ug/L	1	594-20-7	
Hexachlorobutadiene	Not detected	1		ug/L	1	87-68-3	
1,1,2-Trichloro-1,2,2-trifluoroethane	Not detected	1		ug/L	1	76-13-1	

Other / Misc.

Method: , Run Date: 10/08/22 20:49, Analyst: TA

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Methanol*	Completed				1	67-56-1	O

O-Analysis performed by outside laboratory. See attached report.

Lab Sample ID: S40860.05
Sample Tag: MW-111
Collected Date/Time: 09/27/2022 13:17
Matrix: Groundwater
COC Reference: 154527

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
3	40ml Glass	None	Yes	2.4	IR
3	40ml Glass	HCL	Yes	2.4	IR
1	125ml Plastic	HNO3	Yes	2.4	IR

Extraction / Prep.

Parameter	Result	Method	Run Date	Analyst	Flags
Mercury Digestion	Completed	E245.1	10/05/22 13:36	CTV	
pH check for VOCs*	<2	N/A	10/05/22 15:00	BML	
Metal Digestion	Completed	SW3015A	10/06/22 09:30	CCM	

Metals

Method: E200.8, Run Date: 10/06/22 11:42, Analyst: CCM

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Aluminum	Not detected	0.010		mg/L	5	7429-90-5	
Antimony*	Not detected	0.005		mg/L	5	7440-36-0	
Arsenic	Not detected	0.002		mg/L	5	7440-38-2	
Barium	0.012	0.005		mg/L	5	7440-39-3	
Beryllium	Not detected	0.001		mg/L	5	7440-41-7	
Boron	0.06	0.04		mg/L	5	7440-42-8	
Cadmium	Not detected	0.0005		mg/L	5	7440-43-9	
Chromium	Not detected	0.005		mg/L	5	7440-47-3	
Cobalt	Not detected	0.005		mg/L	5	7440-48-4	
Iron	0.52	0.02		mg/L	5	7439-89-6	
Lead	Not detected	0.003		mg/L	5	7439-92-1	
Manganese	0.946	0.005		mg/L	5	7439-96-5	
Molybdenum	Not detected	0.005		mg/L	5	7439-98-7	
Nickel	Not detected	0.005		mg/L	5	7440-02-0	
Selenium	Not detected	0.005		mg/L	5	7782-49-2	
Silver	Not detected	0.0005		mg/L	5	7440-22-4	
Strontium	0.387	0.005		mg/L	5	7440-24-6	
Thallium	Not detected	0.002		mg/L	5	7440-28-0	
Titanium	Not detected	0.005		mg/L	5	7440-32-6	
Vanadium	Not detected	0.005		mg/L	5	7440-62-2	
Zinc	Not detected	0.005		mg/L	5	7440-66-6	

Method: E200.8, Run Date: 10/06/22 13:56, Analyst: CCM

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Calcium*	76.1	1.0		mg/L	5	7440-70-2	
Magnesium	10.9	0.50		mg/L	5	7439-95-4	
Potassium	1.93	0.50		mg/L	5	7440-09-7	
Sodium	17.2	0.50		mg/L	5	7440-23-5	

Method: E245.1, Run Date: 10/05/22 16:44, Analyst: CTV

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Mercury	Not detected	0.0002		mg/L	1	7439-97-6	

Lab Sample ID: S40860.05 (continued)
Sample Tag: MW-111

Organics - Volatiles

Method: SW5030C/8260C, Run Date: 10/10/22 16:01, Analyst: KAG

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Diisopropyl ether (DIPE)	Not detected	5		ug/L	1	108-20-3	

Volatile Organics, Method: SW5030C/8260C, Run Date: 10/05/22 05:31, Analyst: BML

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Acetone	Not detected	50		ug/L	1	67-64-1	
tert-Methyl butyl ether (MTBE)	Not detected	5		ug/L	1	1634-04-4	
Acrylonitrile	Not detected	2		ug/L	1	107-13-1	
2-Butanone (MEK)	Not detected	25		ug/L	1	78-93-3	
Dichlorodifluoromethane	Not detected	5		ug/L	1	75-71-8	
Chloromethane	Not detected	5		ug/L	1	74-87-3	
Vinyl chloride	Not detected	1		ug/L	1	75-01-4	
Bromomethane	Not detected	5		ug/L	1	74-83-9	
Chloroethane	Not detected	5		ug/L	1	75-00-3	
Trichlorofluoromethane	Not detected	1		ug/L	1	75-69-4	
1,1-Dichloroethene	Not detected	1		ug/L	1	75-35-4	
Methylene chloride	Not detected	5		ug/L	1	75-09-2	
trans-1,2-Dichloroethene	Not detected	1		ug/L	1	156-60-5	
1,1-Dichloroethane	Not detected	1		ug/L	1	75-34-3	
cis-1,2-Dichloroethene	2	1		ug/L	1	156-59-2	
Chloroform	Not detected	1		ug/L	1	67-66-3	
1,1,1-Trichloroethane	Not detected	1		ug/L	1	71-55-6	
4-Methyl-2-pentanone (MIBK)	Not detected	50		ug/L	1	108-10-1	
Carbon tetrachloride	Not detected	1		ug/L	1	56-23-5	
Benzene	Not detected	1		ug/L	1	71-43-2	
1,2-Dichloroethane	Not detected	1		ug/L	1	107-06-2	
Trichloroethene	4	1		ug/L	1	79-01-6	
1,2-Dichloropropane	Not detected	1		ug/L	1	78-87-5	
Bromodichloromethane	Not detected	1		ug/L	1	75-27-4	
Dibromomethane	Not detected	5		ug/L	1	74-95-3	
cis-1,3-Dichloropropene	Not detected	1		ug/L	1	10061-01-5	
Toluene	Not detected	1		ug/L	1	108-88-3	
trans-1,3-Dichloropropene	Not detected	1		ug/L	1	10061-02-6	
1,1,2-Trichloroethane	Not detected	1		ug/L	1	79-00-5	
Tetrachloroethene	4	1		ug/L	1	127-18-4	
Dibromochloromethane	Not detected	5		ug/L	1	124-48-1	
1,2-Dibromoethane	Not detected	1		ug/L	1	106-93-4	
Chlorobenzene	3	1		ug/L	1	108-90-7	
1,1,1,2-Tetrachloroethane	Not detected	1		ug/L	1	630-20-6	
Ethylbenzene	Not detected	1		ug/L	1	100-41-4	
p,m-Xylene*	Not detected	2		ug/L	1		
o-Xylene	Not detected	1		ug/L	1	95-47-6	
Styrene	Not detected	1		ug/L	1	100-42-5	
Isopropylbenzene	Not detected	5		ug/L	1	98-82-8	
Bromoform	Not detected	1		ug/L	1	75-25-2	
1,1,2,2-Tetrachloroethane	2	1		ug/L	1	79-34-5	
1,2,3-Trichloropropane	Not detected	1		ug/L	1	96-18-4	
n-Propylbenzene	Not detected	1		ug/L	1	103-65-1	
Bromobenzene	Not detected	1		ug/L	1	108-86-1	
1,3,5-Trimethylbenzene	Not detected	1		ug/L	1	108-67-8	

Lab Sample ID: S40860.05 (continued)
Sample Tag: MW-111

Volatile Organics, Method: SW5030C/8260C, Run Date: 10/05/22 05:31, Analyst: BML (continued)

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
tert-Butylbenzene	Not detected	1		ug/L	1	98-06-6	
1,2,4-Trimethylbenzene	Not detected	1		ug/L	1	95-63-6	
sec-Butylbenzene	Not detected	1		ug/L	1	135-98-8	
p-Isopropyltoluene	Not detected	5		ug/L	1	99-87-6	
1,3-Dichlorobenzene	Not detected	1		ug/L	1	541-73-1	
1,4-Dichlorobenzene	Not detected	1		ug/L	1	106-46-7	
1,2-Dichlorobenzene	Not detected	1		ug/L	1	95-50-1	
1,2,3-Trimethylbenzene	Not detected	1		ug/L	1	526-73-8	
n-Butylbenzene	Not detected	1		ug/L	1	104-51-8	
1,2-Dibromo-3-chloropropane	Not detected	5		ug/L	1	96-12-8	
1,2,4-Trichlorobenzene	Not detected	5		ug/L	1	120-82-1	
1,2,3-Trichlorobenzene	Not detected	5		ug/L	1	87-61-6	
Naphthalene	Not detected	5		ug/L	1	91-20-3	
Acrolein	Not detected	1		ug/L	1	107-02-8	
2-Chlorotoluene	Not detected	1		ug/L	1	95-49-8	
4-Chlorotoluene	Not detected	1		ug/L	1	106-43-4	
1,3-Dichloropropane	Not detected	1		ug/L	1	142-28-9	
1,1-Dichloropropene	Not detected	1		ug/L	1	563-58-6	
2,2-Dichloropropane	Not detected	1		ug/L	1	594-20-7	
Hexachlorobutadiene	Not detected	1		ug/L	1	87-68-3	
1,1,2-Trichloro-1,2,2-trifluoroethane	Not detected	1		ug/L	1	76-13-1	

Other / Misc.

Method: , Run Date: 10/08/22 21:11, Analyst: TA

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Methanol*	Completed				1	67-56-1	O

O-Analysis performed by outside laboratory. See attached report.

Lab Sample ID: S40860.06
Sample Tag: MW-110
Collected Date/Time: 09/27/2022 13:47
Matrix: Groundwater
COC Reference: 154527

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
3	40ml Glass	None	Yes	2.4	IR
3	40ml Glass	HCL	Yes	2.4	IR
1	125ml Plastic	HNO3	Yes	2.4	IR

Extraction / Prep.

Parameter	Result	Method	Run Date	Analyst	Flags
Mercury Digestion	Completed	E245.1	10/05/22 13:36	CTV	
pH check for VOCs*	<2	N/A	10/05/22 15:00	BML	
Metal Digestion	Completed	SW3015A	10/06/22 09:30	CCM	

Metals

Method: E200.8, Run Date: 10/06/22 11:46, Analyst: CCM

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Aluminum	Not detected	0.010		mg/L	5	7429-90-5	
Antimony*	Not detected	0.005		mg/L	5	7440-36-0	
Arsenic	0.002	0.002		mg/L	5	7440-38-2	
Barium	0.013	0.005		mg/L	5	7440-39-3	
Beryllium	Not detected	0.001		mg/L	5	7440-41-7	
Boron	0.07	0.04		mg/L	5	7440-42-8	
Cadmium	Not detected	0.0005		mg/L	5	7440-43-9	
Chromium	Not detected	0.005		mg/L	5	7440-47-3	
Cobalt	Not detected	0.005		mg/L	5	7440-48-4	
Iron	1.29	0.02		mg/L	5	7439-89-6	
Lead	Not detected	0.003		mg/L	5	7439-92-1	
Manganese	0.748	0.005		mg/L	5	7439-96-5	
Molybdenum	Not detected	0.005		mg/L	5	7439-98-7	
Nickel	Not detected	0.005		mg/L	5	7440-02-0	
Selenium	Not detected	0.005		mg/L	5	7782-49-2	
Silver	Not detected	0.0005		mg/L	5	7440-22-4	
Strontium	0.273	0.005		mg/L	5	7440-24-6	
Thallium	Not detected	0.002		mg/L	5	7440-28-0	
Titanium	Not detected	0.005		mg/L	5	7440-32-6	
Vanadium	Not detected	0.005		mg/L	5	7440-62-2	
Zinc	Not detected	0.005		mg/L	5	7440-66-6	

Method: E200.8, Run Date: 10/06/22 13:58, Analyst: CCM

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Calcium*	72.0	1.0		mg/L	5	7440-70-2	
Magnesium	11.4	0.50		mg/L	5	7439-95-4	
Potassium	1.85	0.50		mg/L	5	7440-09-7	
Sodium	21.7	0.50		mg/L	5	7440-23-5	

Method: E245.1, Run Date: 10/05/22 17:00, Analyst: CTV

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Mercury	Not detected	0.0002		mg/L	1	7439-97-6	

Lab Sample ID: S40860.06 (continued)
Sample Tag: MW-110

Organics - Volatiles

Method: SW5030C/8260C, Run Date: 10/10/22 16:27, Analyst: KAG

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Diisopropyl ether (DIPE)	Not detected	5		ug/L	1	108-20-3	

Volatile Organics, Method: SW5030C/8260C, Run Date: 10/05/22 05:54, Analyst: BML

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Acetone	Not detected	50		ug/L	1	67-64-1	
tert-Methyl butyl ether (MTBE)	Not detected	5		ug/L	1	1634-04-4	
Acrylonitrile	Not detected	2		ug/L	1	107-13-1	
2-Butanone (MEK)	Not detected	25		ug/L	1	78-93-3	
Dichlorodifluoromethane	Not detected	5		ug/L	1	75-71-8	
Chloromethane	Not detected	5		ug/L	1	74-87-3	
Vinyl chloride	2	1		ug/L	1	75-01-4	
Bromomethane	Not detected	5		ug/L	1	74-83-9	
Chloroethane	Not detected	5		ug/L	1	75-00-3	
Trichlorofluoromethane	Not detected	1		ug/L	1	75-69-4	
1,1-Dichloroethene	Not detected	1		ug/L	1	75-35-4	
Methylene chloride	Not detected	5		ug/L	1	75-09-2	
trans-1,2-Dichloroethene	Not detected	1		ug/L	1	156-60-5	
1,1-Dichloroethane	Not detected	1		ug/L	1	75-34-3	
cis-1,2-Dichloroethene	Not detected	1		ug/L	1	156-59-2	
Chloroform	Not detected	1		ug/L	1	67-66-3	
1,1,1-Trichloroethane	Not detected	1		ug/L	1	71-55-6	
4-Methyl-2-pentanone (MIBK)	Not detected	50		ug/L	1	108-10-1	
Carbon tetrachloride	Not detected	1		ug/L	1	56-23-5	
Benzene	Not detected	1		ug/L	1	71-43-2	
1,2-Dichloroethane	Not detected	1		ug/L	1	107-06-2	
Trichloroethene	Not detected	1		ug/L	1	79-01-6	
1,2-Dichloropropane	Not detected	1		ug/L	1	78-87-5	
Bromodichloromethane	Not detected	1		ug/L	1	75-27-4	
Dibromomethane	Not detected	5		ug/L	1	74-95-3	
cis-1,3-Dichloropropene	Not detected	1		ug/L	1	10061-01-5	
Toluene	Not detected	1		ug/L	1	108-88-3	
trans-1,3-Dichloropropene	Not detected	1		ug/L	1	10061-02-6	
1,1,2-Trichloroethane	Not detected	1		ug/L	1	79-00-5	
Tetrachloroethene	Not detected	1		ug/L	1	127-18-4	
Dibromochloromethane	Not detected	5		ug/L	1	124-48-1	
1,2-Dibromoethane	Not detected	1		ug/L	1	106-93-4	
Chlorobenzene	4	1		ug/L	1	108-90-7	
1,1,1,2-Tetrachloroethane	Not detected	1		ug/L	1	630-20-6	
Ethylbenzene	Not detected	1		ug/L	1	100-41-4	
p,m-Xylene*	Not detected	2		ug/L	1		
o-Xylene	Not detected	1		ug/L	1	95-47-6	
Styrene	Not detected	1		ug/L	1	100-42-5	
Isopropylbenzene	Not detected	5		ug/L	1	98-82-8	
Bromoform	Not detected	1		ug/L	1	75-25-2	
1,1,2,2-Tetrachloroethane	Not detected	1		ug/L	1	79-34-5	
1,2,3-Trichloropropane	Not detected	1		ug/L	1	96-18-4	
n-Propylbenzene	Not detected	1		ug/L	1	103-65-1	
Bromobenzene	Not detected	1		ug/L	1	108-86-1	
1,3,5-Trimethylbenzene	Not detected	1		ug/L	1	108-67-8	

Lab Sample ID: S40860.06 (continued)
Sample Tag: MW-110

Volatile Organics, Method: SW5030C/8260C, Run Date: 10/05/22 05:54, Analyst: BML (continued)

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
tert-Butylbenzene	Not detected	1		ug/L	1	98-06-6	
1,2,4-Trimethylbenzene	Not detected	1		ug/L	1	95-63-6	
sec-Butylbenzene	Not detected	1		ug/L	1	135-98-8	
p-Isopropyltoluene	Not detected	5		ug/L	1	99-87-6	
1,3-Dichlorobenzene	Not detected	1		ug/L	1	541-73-1	
1,4-Dichlorobenzene	Not detected	1		ug/L	1	106-46-7	
1,2-Dichlorobenzene	Not detected	1		ug/L	1	95-50-1	
1,2,3-Trimethylbenzene	Not detected	1		ug/L	1	526-73-8	
n-Butylbenzene	Not detected	1		ug/L	1	104-51-8	
1,2-Dibromo-3-chloropropane	Not detected	5		ug/L	1	96-12-8	
1,2,4-Trichlorobenzene	Not detected	5		ug/L	1	120-82-1	
1,2,3-Trichlorobenzene	Not detected	5		ug/L	1	87-61-6	
Naphthalene	Not detected	5		ug/L	1	91-20-3	
Acrolein	Not detected	1		ug/L	1	107-02-8	
2-Chlorotoluene	Not detected	1		ug/L	1	95-49-8	
4-Chlorotoluene	Not detected	1		ug/L	1	106-43-4	
1,3-Dichloropropane	Not detected	1		ug/L	1	142-28-9	
1,1-Dichloropropene	Not detected	1		ug/L	1	563-58-6	
2,2-Dichloropropane	Not detected	1		ug/L	1	594-20-7	
Hexachlorobutadiene	Not detected	1		ug/L	1	87-68-3	
1,1,2-Trichloro-1,2,2-trifluoroethane	Not detected	1		ug/L	1	76-13-1	

Other / Misc.

Method: , Run Date: 10/08/22 21:33, Analyst: TA

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Methanol*	Completed				1	67-56-1	O

O-Analysis performed by outside laboratory. See attached report.

Lab Sample ID: S40860.07
Sample Tag: Dup-01
Collected Date/Time: 09/27/2022 00:01
Matrix: Groundwater
COC Reference: 154527

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
3	40ml Glass	None	Yes	2.4	IR
3	40ml Glass	HCL	Yes	2.4	IR
1	125ml Plastic	HNO3	Yes	2.4	IR

Extraction / Prep.

Parameter	Result	Method	Run Date	Analyst	Flags
Mercury Digestion	Completed	E245.1	10/05/22 13:36	CTV	
pH check for VOCs*	<2	N/A	10/05/22 15:00	BML	
Metal Digestion	Completed	SW3015A	10/06/22 09:30	CCM	

Metals

Method: E200.8, Run Date: 10/06/22 11:52, Analyst: CCM

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Aluminum	0.015	0.010		mg/L	5	7429-90-5	
Antimony*	Not detected	0.005		mg/L	5	7440-36-0	
Arsenic	Not detected	0.002		mg/L	5	7440-38-2	
Barium	0.016	0.005		mg/L	5	7440-39-3	
Beryllium	Not detected	0.001		mg/L	5	7440-41-7	
Boron	0.24	0.04		mg/L	5	7440-42-8	
Cadmium	Not detected	0.0005		mg/L	5	7440-43-9	
Chromium	Not detected	0.005		mg/L	5	7440-47-3	
Cobalt	Not detected	0.005		mg/L	5	7440-48-4	
Iron	0.03	0.02		mg/L	5	7439-89-6	
Lead	Not detected	0.003		mg/L	5	7439-92-1	
Manganese	0.012	0.005		mg/L	5	7439-96-5	
Molybdenum	0.007	0.005		mg/L	5	7439-98-7	
Nickel	Not detected	0.005		mg/L	5	7440-02-0	
Selenium	Not detected	0.005		mg/L	5	7782-49-2	
Silver	Not detected	0.0005		mg/L	5	7440-22-4	
Strontium	1.19	0.005		mg/L	5	7440-24-6	
Thallium	Not detected	0.002		mg/L	5	7440-28-0	
Titanium	Not detected	0.005		mg/L	5	7440-32-6	
Vanadium	Not detected	0.005		mg/L	5	7440-62-2	
Zinc	Not detected	0.005		mg/L	5	7440-66-6	

Method: E200.8, Run Date: 10/06/22 14:00, Analyst: CCM

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Calcium*	114	1.0		mg/L	5	7440-70-2	
Magnesium	59.0	0.50		mg/L	5	7439-95-4	
Potassium	1.71	0.50		mg/L	5	7440-09-7	
Sodium	11.5	0.50		mg/L	5	7440-23-5	

Method: E245.1, Run Date: 10/05/22 17:03, Analyst: CTV

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Mercury	Not detected	0.0002		mg/L	1	7439-97-6	

Lab Sample ID: S40860.07 (continued)
Sample Tag: Dup-01

Organics - Volatiles

Method: SW5030C/8260C, Run Date: 10/10/22 16:52, Analyst: KAG

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Diisopropyl ether (DIPE)	Not detected	5		ug/L	1	108-20-3	

Volatile Organics, Method: SW5030C/8260C, Run Date: 10/05/22 06:17, Analyst: BML

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Acetone	Not detected	50		ug/L	1	67-64-1	
tert-Methyl butyl ether (MTBE)	Not detected	5		ug/L	1	1634-04-4	
Acrylonitrile	Not detected	2		ug/L	1	107-13-1	
2-Butanone (MEK)	Not detected	25		ug/L	1	78-93-3	
Dichlorodifluoromethane	Not detected	5		ug/L	1	75-71-8	
Chloromethane	Not detected	5		ug/L	1	74-87-3	
Vinyl chloride	Not detected	1		ug/L	1	75-01-4	
Bromomethane	Not detected	5		ug/L	1	74-83-9	
Chloroethane	Not detected	5		ug/L	1	75-00-3	
Trichlorofluoromethane	Not detected	1		ug/L	1	75-69-4	
1,1-Dichloroethene	Not detected	1		ug/L	1	75-35-4	
Methylene chloride	Not detected	5		ug/L	1	75-09-2	
trans-1,2-Dichloroethene	Not detected	1		ug/L	1	156-60-5	
1,1-Dichloroethane	Not detected	1		ug/L	1	75-34-3	
cis-1,2-Dichloroethene	Not detected	1		ug/L	1	156-59-2	
Chloroform	Not detected	1		ug/L	1	67-66-3	
1,1,1-Trichloroethane	Not detected	1		ug/L	1	71-55-6	
4-Methyl-2-pentanone (MIBK)	Not detected	50		ug/L	1	108-10-1	
Carbon tetrachloride	Not detected	1		ug/L	1	56-23-5	
Benzene	Not detected	1		ug/L	1	71-43-2	
1,2-Dichloroethane	Not detected	1		ug/L	1	107-06-2	
Trichloroethene	Not detected	1		ug/L	1	79-01-6	
1,2-Dichloropropane	Not detected	1		ug/L	1	78-87-5	
Bromodichloromethane	Not detected	1		ug/L	1	75-27-4	
Dibromomethane	Not detected	5		ug/L	1	74-95-3	
cis-1,3-Dichloropropene	Not detected	1		ug/L	1	10061-01-5	
Toluene	Not detected	1		ug/L	1	108-88-3	
trans-1,3-Dichloropropene	Not detected	1		ug/L	1	10061-02-6	
1,1,2-Trichloroethane	Not detected	1		ug/L	1	79-00-5	
Tetrachloroethene	Not detected	1		ug/L	1	127-18-4	
Dibromochloromethane	Not detected	5		ug/L	1	124-48-1	
1,2-Dibromoethane	Not detected	1		ug/L	1	106-93-4	
Chlorobenzene	Not detected	1		ug/L	1	108-90-7	
1,1,1,2-Tetrachloroethane	Not detected	1		ug/L	1	630-20-6	
Ethylbenzene	Not detected	1		ug/L	1	100-41-4	
p,m-Xylene*	Not detected	2		ug/L	1		
o-Xylene	Not detected	1		ug/L	1	95-47-6	
Styrene	Not detected	1		ug/L	1	100-42-5	
Isopropylbenzene	Not detected	5		ug/L	1	98-82-8	
Bromoform	Not detected	1		ug/L	1	75-25-2	
1,1,2,2-Tetrachloroethane	Not detected	1		ug/L	1	79-34-5	
1,2,3-Trichloropropane	Not detected	1		ug/L	1	96-18-4	
n-Propylbenzene	Not detected	1		ug/L	1	103-65-1	
Bromobenzene	Not detected	1		ug/L	1	108-86-1	
1,3,5-Trimethylbenzene	Not detected	1		ug/L	1	108-67-8	

Lab Sample ID: S40860.07 (continued)

Sample Tag: Dup-01

Volatile Organics, Method: SW5030C/8260C, Run Date: 10/05/22 06:17, Analyst: BML (continued)

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
tert-Butylbenzene	Not detected	1		ug/L	1	98-06-6	
1,2,4-Trimethylbenzene	Not detected	1		ug/L	1	95-63-6	
sec-Butylbenzene	Not detected	1		ug/L	1	135-98-8	
p-Isopropyltoluene	Not detected	5		ug/L	1	99-87-6	
1,3-Dichlorobenzene	Not detected	1		ug/L	1	541-73-1	
1,4-Dichlorobenzene	Not detected	1		ug/L	1	106-46-7	
1,2-Dichlorobenzene	Not detected	1		ug/L	1	95-50-1	
1,2,3-Trimethylbenzene	Not detected	1		ug/L	1	526-73-8	
n-Butylbenzene	Not detected	1		ug/L	1	104-51-8	
1,2-Dibromo-3-chloropropane	Not detected	5		ug/L	1	96-12-8	
1,2,4-Trichlorobenzene	Not detected	5		ug/L	1	120-82-1	
1,2,3-Trichlorobenzene	Not detected	5		ug/L	1	87-61-6	
Naphthalene	Not detected	5		ug/L	1	91-20-3	
Acrolein	Not detected	1		ug/L	1	107-02-8	
2-Chlorotoluene	Not detected	1		ug/L	1	95-49-8	
4-Chlorotoluene	Not detected	1		ug/L	1	106-43-4	
1,3-Dichloropropane	Not detected	1		ug/L	1	142-28-9	
1,1-Dichloropropene	Not detected	1		ug/L	1	563-58-6	
2,2-Dichloropropane	Not detected	1		ug/L	1	594-20-7	
Hexachlorobutadiene	Not detected	1		ug/L	1	87-68-3	
1,1,2-Trichloro-1,2,2-trifluoroethane	Not detected	1		ug/L	1	76-13-1	

Other / Misc.

Method: , Run Date: 10/08/22 21:55, Analyst: TA

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Methanol*	Completed				1	67-56-1	O

O-Analysis performed by outside laboratory. See attached report.

Lab Sample ID: S40860.08
Sample Tag: Trip Blank 1
Collected Date/Time: 09/27/2022 00:01
Matrix: Water
COC Reference: 154527

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
1	40ml Glass	HCL	Yes	2.4	IR

Extraction / Prep.

Parameter	Result	Method	Run Date	Analyst	Flags
pH check for VOCs*	<2	N/A	10/05/22 15:00	BML	

Organics - Volatiles

Method: SW5030C/8260C, Run Date: 10/10/22 13:30, Analyst: KAG

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Diisopropyl ether (DIPE)	Not detected	5		ug/L	1	108-20-3	

Volatile Organics, Method: SW5030C/8260C, Run Date: 10/05/22 02:23, Analyst: BML

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Acetone	Not detected	50		ug/L	1	67-64-1	
tert-Methyl butyl ether (MTBE)	Not detected	5		ug/L	1	1634-04-4	
Acrylonitrile	Not detected	2		ug/L	1	107-13-1	
2-Butanone (MEK)	Not detected	25		ug/L	1	78-93-3	
Dichlorodifluoromethane	Not detected	5		ug/L	1	75-71-8	
Chloromethane	Not detected	5		ug/L	1	74-87-3	
Vinyl chloride	Not detected	1		ug/L	1	75-01-4	
Bromomethane	Not detected	5		ug/L	1	74-83-9	
Chloroethane	Not detected	5		ug/L	1	75-00-3	
Trichlorofluoromethane	Not detected	1		ug/L	1	75-69-4	
1,1-Dichloroethene	Not detected	1		ug/L	1	75-35-4	
Methylene chloride	Not detected	5		ug/L	1	75-09-2	
trans-1,2-Dichloroethene	Not detected	1		ug/L	1	156-60-5	
1,1-Dichloroethane	Not detected	1		ug/L	1	75-34-3	
cis-1,2-Dichloroethene	Not detected	1		ug/L	1	156-59-2	
Chloroform	Not detected	1		ug/L	1	67-66-3	
1,1,1-Trichloroethane	Not detected	1		ug/L	1	71-55-6	
4-Methyl-2-pentanone (MIBK)	Not detected	50		ug/L	1	108-10-1	
Carbon tetrachloride	Not detected	1		ug/L	1	56-23-5	
Benzene	Not detected	1		ug/L	1	71-43-2	
1,2-Dichloroethane	Not detected	1		ug/L	1	107-06-2	
Trichloroethene	Not detected	1		ug/L	1	79-01-6	
1,2-Dichloropropane	Not detected	1		ug/L	1	78-87-5	
Bromodichloromethane	Not detected	1		ug/L	1	75-27-4	
Dibromomethane	Not detected	5		ug/L	1	74-95-3	
cis-1,3-Dichloropropene	Not detected	1		ug/L	1	10061-01-5	
Toluene	Not detected	1		ug/L	1	108-88-3	
trans-1,3-Dichloropropene	Not detected	1		ug/L	1	10061-02-6	
1,1,2-Trichloroethane	Not detected	1		ug/L	1	79-00-5	
Tetrachloroethene	Not detected	1		ug/L	1	127-18-4	
Dibromochloromethane	Not detected	5		ug/L	1	124-48-1	
1,2-Dibromoethane	Not detected	1		ug/L	1	106-93-4	
Chlorobenzene	Not detected	1		ug/L	1	108-90-7	

Lab Sample ID: S40860.08 (continued)

Sample Tag: Trip Blank 1

Volatile Organics, Method: SW5030C/8260C, Run Date: 10/05/22 02:23, Analyst: BML (continued)

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
1,1,1,2-Tetrachloroethane	Not detected	1		ug/L	1	630-20-6	
Ethylbenzene	Not detected	1		ug/L	1	100-41-4	
p,m-Xylene*	Not detected	2		ug/L	1		
o-Xylene	Not detected	1		ug/L	1	95-47-6	
Styrene	Not detected	1		ug/L	1	100-42-5	
Isopropylbenzene	Not detected	5		ug/L	1	98-82-8	
Bromoform	Not detected	1		ug/L	1	75-25-2	
1,1,2,2-Tetrachloroethane	Not detected	1		ug/L	1	79-34-5	
1,2,3-Trichloropropane	Not detected	1		ug/L	1	96-18-4	
n-Propylbenzene	Not detected	1		ug/L	1	103-65-1	
Bromobenzene	Not detected	1		ug/L	1	108-86-1	
1,3,5-Trimethylbenzene	Not detected	1		ug/L	1	108-67-8	
tert-Butylbenzene	Not detected	1		ug/L	1	98-06-6	
1,2,4-Trimethylbenzene	Not detected	1		ug/L	1	95-63-6	
sec-Butylbenzene	Not detected	1		ug/L	1	135-98-8	
p-Isopropyltoluene	Not detected	5		ug/L	1	99-87-6	
1,3-Dichlorobenzene	Not detected	1		ug/L	1	541-73-1	
1,4-Dichlorobenzene	Not detected	1		ug/L	1	106-46-7	
1,2-Dichlorobenzene	Not detected	1		ug/L	1	95-50-1	
1,2,3-Trimethylbenzene	Not detected	1		ug/L	1	526-73-8	
n-Butylbenzene	Not detected	1		ug/L	1	104-51-8	
1,2-Dibromo-3-chloropropane	Not detected	5		ug/L	1	96-12-8	
1,2,4-Trichlorobenzene	Not detected	5		ug/L	1	120-82-1	
1,2,3-Trichlorobenzene	Not detected	5		ug/L	1	87-61-6	
Naphthalene	Not detected	5		ug/L	1	91-20-3	
Acrolein	Not detected	1		ug/L	1	107-02-8	
2-Chlorotoluene	Not detected	1		ug/L	1	95-49-8	
4-Chlorotoluene	Not detected	1		ug/L	1	106-43-4	
1,3-Dichloropropane	Not detected	1		ug/L	1	142-28-9	
1,1-Dichloropropene	Not detected	1		ug/L	1	563-58-6	
2,2-Dichloropropane	Not detected	1		ug/L	1	594-20-7	
Hexachlorobutadiene	Not detected	1		ug/L	1	87-68-3	
1,1,2-Trichloro-1,2,2-trifluoroethane	Not detected	1		ug/L	1	76-13-1	

Lab Sample ID: S40860.09
Sample Tag: MW-109
Collected Date/Time: 09/28/2022 09:25
Matrix: Groundwater
COC Reference: 154471

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
3	40ml Glass	None	Yes	2.4	IR
3	40ml Glass	HCL	Yes	2.4	IR
1	125ml Plastic	HNO3	Yes	2.4	IR

Extraction / Prep.

Parameter	Result	Method	Run Date	Analyst	Flags
Mercury Digestion	Completed	E245.1	10/05/22 13:36	CTV	
pH check for VOCs*	<2	N/A	10/05/22 15:00	BML	
Metal Digestion	Completed	SW3015A	10/06/22 09:30	CCM	

Metals

Method: E200.8, Run Date: 10/06/22 12:13, Analyst: CCM

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Aluminum	0.010	0.010		mg/L	5	7429-90-5	
Antimony*	Not detected	0.005		mg/L	5	7440-36-0	
Arsenic	0.008	0.002		mg/L	5	7440-38-2	
Barium	0.070	0.005		mg/L	5	7440-39-3	
Beryllium	Not detected	0.001		mg/L	5	7440-41-7	
Boron	0.15	0.04		mg/L	5	7440-42-8	
Cadmium	Not detected	0.0005		mg/L	5	7440-43-9	
Chromium	Not detected	0.005		mg/L	5	7440-47-3	
Cobalt	Not detected	0.005		mg/L	5	7440-48-4	
Iron	6.06	0.02		mg/L	5	7439-89-6	
Lead	Not detected	0.003		mg/L	5	7439-92-1	
Manganese	0.556	0.005		mg/L	5	7439-96-5	
Molybdenum	Not detected	0.005		mg/L	5	7439-98-7	
Nickel	Not detected	0.005		mg/L	5	7440-02-0	
Selenium	Not detected	0.005		mg/L	5	7782-49-2	
Silver	Not detected	0.0005		mg/L	5	7440-22-4	
Strontium	0.318	0.005		mg/L	5	7440-24-6	
Thallium	Not detected	0.002		mg/L	5	7440-28-0	
Titanium	Not detected	0.005		mg/L	5	7440-32-6	
Vanadium	Not detected	0.005		mg/L	5	7440-62-2	
Zinc	Not detected	0.005		mg/L	5	7440-66-6	

Method: E200.8, Run Date: 10/06/22 14:06, Analyst: CCM

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Calcium*	189	1.0		mg/L	5	7440-70-2	
Magnesium	39.6	0.50		mg/L	5	7439-95-4	
Potassium	4.82	0.50		mg/L	5	7440-09-7	
Sodium	54.7	0.50		mg/L	5	7440-23-5	

Method: E245.1, Run Date: 10/05/22 17:07, Analyst: CTV

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Mercury	Not detected	0.0002		mg/L	1	7439-97-6	

Lab Sample ID: S40860.09 (continued)
Sample Tag: MW-109

Organics - Volatiles

Method: SW5030C/8260C, Run Date: 10/10/22 17:17, Analyst: KAG

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Diisopropyl ether (DIPE)	Not detected	5		ug/L	1	108-20-3	

Volatile Organics, Method: SW5030C/8260C, Run Date: 10/05/22 06:40, Analyst: BML

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Acetone	Not detected	50		ug/L	1	67-64-1	
tert-Methyl butyl ether (MTBE)	Not detected	5		ug/L	1	1634-04-4	
Acrylonitrile	Not detected	2		ug/L	1	107-13-1	
2-Butanone (MEK)	Not detected	25		ug/L	1	78-93-3	
Dichlorodifluoromethane	Not detected	5		ug/L	1	75-71-8	
Chloromethane	Not detected	5		ug/L	1	74-87-3	
Vinyl chloride	Not detected	1		ug/L	1	75-01-4	
Bromomethane	Not detected	5		ug/L	1	74-83-9	
Chloroethane	Not detected	5		ug/L	1	75-00-3	
Trichlorofluoromethane	Not detected	1		ug/L	1	75-69-4	
1,1-Dichloroethene	Not detected	1		ug/L	1	75-35-4	
Methylene chloride	Not detected	5		ug/L	1	75-09-2	
trans-1,2-Dichloroethene	Not detected	1		ug/L	1	156-60-5	
1,1-Dichloroethane	Not detected	1		ug/L	1	75-34-3	
cis-1,2-Dichloroethene	Not detected	1		ug/L	1	156-59-2	
Chloroform	Not detected	1		ug/L	1	67-66-3	
1,1,1-Trichloroethane	Not detected	1		ug/L	1	71-55-6	
4-Methyl-2-pentanone (MIBK)	Not detected	50		ug/L	1	108-10-1	
Carbon tetrachloride	Not detected	1		ug/L	1	56-23-5	
Benzene	Not detected	1		ug/L	1	71-43-2	
1,2-Dichloroethane	Not detected	1		ug/L	1	107-06-2	
Trichloroethene	Not detected	1		ug/L	1	79-01-6	
1,2-Dichloropropane	Not detected	1		ug/L	1	78-87-5	
Bromodichloromethane	Not detected	1		ug/L	1	75-27-4	
Dibromomethane	Not detected	5		ug/L	1	74-95-3	
cis-1,3-Dichloropropene	Not detected	1		ug/L	1	10061-01-5	
Toluene	Not detected	1		ug/L	1	108-88-3	
trans-1,3-Dichloropropene	Not detected	1		ug/L	1	10061-02-6	
1,1,2-Trichloroethane	Not detected	1		ug/L	1	79-00-5	
Tetrachloroethene	Not detected	1		ug/L	1	127-18-4	
Dibromochloromethane	Not detected	5		ug/L	1	124-48-1	
1,2-Dibromoethane	Not detected	1		ug/L	1	106-93-4	
Chlorobenzene	Not detected	1		ug/L	1	108-90-7	
1,1,1,2-Tetrachloroethane	Not detected	1		ug/L	1	630-20-6	
Ethylbenzene	Not detected	1		ug/L	1	100-41-4	
p,m-Xylene*	Not detected	2		ug/L	1		
o-Xylene	Not detected	1		ug/L	1	95-47-6	
Styrene	Not detected	1		ug/L	1	100-42-5	
Isopropylbenzene	Not detected	5		ug/L	1	98-82-8	
Bromoform	Not detected	1		ug/L	1	75-25-2	
1,1,2,2-Tetrachloroethane	Not detected	1		ug/L	1	79-34-5	
1,2,3-Trichloropropane	Not detected	1		ug/L	1	96-18-4	
n-Propylbenzene	Not detected	1		ug/L	1	103-65-1	
Bromobenzene	Not detected	1		ug/L	1	108-86-1	
1,3,5-Trimethylbenzene	Not detected	1		ug/L	1	108-67-8	

Lab Sample ID: S40860.09 (continued)
Sample Tag: MW-109

Volatile Organics, Method: SW5030C/8260C, Run Date: 10/05/22 06:40, Analyst: BML (continued)

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
tert-Butylbenzene	Not detected	1		ug/L	1	98-06-6	
1,2,4-Trimethylbenzene	Not detected	1		ug/L	1	95-63-6	
sec-Butylbenzene	Not detected	1		ug/L	1	135-98-8	
p-Isopropyltoluene	Not detected	5		ug/L	1	99-87-6	
1,3-Dichlorobenzene	Not detected	1		ug/L	1	541-73-1	
1,4-Dichlorobenzene	10	1		ug/L	1	106-46-7	
1,2-Dichlorobenzene	31	1		ug/L	1	95-50-1	
1,2,3-Trimethylbenzene	Not detected	1		ug/L	1	526-73-8	
n-Butylbenzene	Not detected	1		ug/L	1	104-51-8	
1,2-Dibromo-3-chloropropane	Not detected	5		ug/L	1	96-12-8	
1,2,4-Trichlorobenzene	Not detected	5		ug/L	1	120-82-1	
1,2,3-Trichlorobenzene	Not detected	5		ug/L	1	87-61-6	
Naphthalene	Not detected	5		ug/L	1	91-20-3	
Acrolein	Not detected	1		ug/L	1	107-02-8	
2-Chlorotoluene	Not detected	1		ug/L	1	95-49-8	
4-Chlorotoluene	Not detected	1		ug/L	1	106-43-4	
1,3-Dichloropropane	Not detected	1		ug/L	1	142-28-9	
1,1-Dichloropropene	Not detected	1		ug/L	1	563-58-6	
2,2-Dichloropropane	Not detected	1		ug/L	1	594-20-7	
Hexachlorobutadiene	Not detected	1		ug/L	1	87-68-3	
1,1,2-Trichloro-1,2,2-trifluoroethane	Not detected	1		ug/L	1	76-13-1	

Other / Misc.

Method: , Run Date: 10/08/22 22:17, Analyst: TA

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Methanol*	Completed				1	67-56-1	O

O-Analysis performed by outside laboratory. See attached report.

Lab Sample ID: S40860.10
Sample Tag: MW-108
Collected Date/Time: 09/28/2022 09:10
Matrix: Groundwater
COC Reference: 154471

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
3	40ml Glass	None	Yes	2.4	IR
3	40ml Glass	HCL	Yes	2.4	IR
1	125ml Plastic	HNO3	Yes	2.4	IR

Extraction / Prep.

Parameter	Result	Method	Run Date	Analyst	Flags
Mercury Digestion	Completed	E245.1	10/05/22 13:36	CTV	
pH check for VOCs*	<2	N/A	10/05/22 15:00	BML	
Metal Digestion	Completed	SW3015A	10/06/22 09:30	CCM	

Metals

Method: E200.8, Run Date: 10/06/22 12:17, Analyst: CCM

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Aluminum	Not detected	0.010		mg/L	5	7429-90-5	
Antimony*	Not detected	0.005		mg/L	5	7440-36-0	
Arsenic	Not detected	0.002		mg/L	5	7440-38-2	
Barium	0.046	0.005		mg/L	5	7440-39-3	
Beryllium	Not detected	0.001		mg/L	5	7440-41-7	
Boron	0.14	0.04		mg/L	5	7440-42-8	
Cadmium	Not detected	0.0005		mg/L	5	7440-43-9	
Chromium	Not detected	0.005		mg/L	5	7440-47-3	
Cobalt	Not detected	0.005		mg/L	5	7440-48-4	
Iron	0.11	0.02		mg/L	5	7439-89-6	
Lead	Not detected	0.003		mg/L	5	7439-92-1	
Manganese	0.244	0.005		mg/L	5	7439-96-5	
Molybdenum	Not detected	0.005		mg/L	5	7439-98-7	
Nickel	Not detected	0.005		mg/L	5	7440-02-0	
Selenium	Not detected	0.005		mg/L	5	7782-49-2	
Silver	Not detected	0.0005		mg/L	5	7440-22-4	
Strontium	0.216	0.005		mg/L	5	7440-24-6	
Thallium	Not detected	0.002		mg/L	5	7440-28-0	
Titanium	Not detected	0.005		mg/L	5	7440-32-6	
Vanadium	Not detected	0.005		mg/L	5	7440-62-2	
Zinc	Not detected	0.005		mg/L	5	7440-66-6	

Method: E200.8, Run Date: 10/06/22 14:07, Analyst: CCM

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Calcium*	100	1.0		mg/L	5	7440-70-2	
Magnesium	18.8	0.50		mg/L	5	7439-95-4	
Potassium	5.25	0.50		mg/L	5	7440-09-7	
Sodium	37.9	0.50		mg/L	5	7440-23-5	

Method: E245.1, Run Date: 10/05/22 17:10, Analyst: CTV

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Mercury	Not detected	0.0002		mg/L	1	7439-97-6	

Lab Sample ID: S40860.10 (continued)
Sample Tag: MW-108

Organics - Volatiles

Method: SW5030C/8260C, Run Date: 10/10/22 17:42, Analyst: KAG

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Diisopropyl ether (DIPE)	Not detected	5		ug/L	1	108-20-3	

Volatile Organics, Method: SW5030C/8260C, Run Date: 10/05/22 07:03, Analyst: BML

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Acetone	Not detected	50		ug/L	1	67-64-1	
tert-Methyl butyl ether (MTBE)	Not detected	5		ug/L	1	1634-04-4	
Acrylonitrile	Not detected	2		ug/L	1	107-13-1	
2-Butanone (MEK)	Not detected	25		ug/L	1	78-93-3	
Dichlorodifluoromethane	Not detected	5		ug/L	1	75-71-8	
Chloromethane	Not detected	5		ug/L	1	74-87-3	
Vinyl chloride	Not detected	1		ug/L	1	75-01-4	
Bromomethane	Not detected	5		ug/L	1	74-83-9	
Chloroethane	Not detected	5		ug/L	1	75-00-3	
Trichlorofluoromethane	Not detected	1		ug/L	1	75-69-4	
1,1-Dichloroethene	Not detected	1		ug/L	1	75-35-4	
Methylene chloride	Not detected	5		ug/L	1	75-09-2	
trans-1,2-Dichloroethene	Not detected	1		ug/L	1	156-60-5	
1,1-Dichloroethane	Not detected	1		ug/L	1	75-34-3	
cis-1,2-Dichloroethene	Not detected	1		ug/L	1	156-59-2	
Chloroform	Not detected	1		ug/L	1	67-66-3	
1,1,1-Trichloroethane	Not detected	1		ug/L	1	71-55-6	
4-Methyl-2-pentanone (MIBK)	Not detected	50		ug/L	1	108-10-1	
Carbon tetrachloride	Not detected	1		ug/L	1	56-23-5	
Benzene	Not detected	1		ug/L	1	71-43-2	
1,2-Dichloroethane	Not detected	1		ug/L	1	107-06-2	
Trichloroethene	Not detected	1		ug/L	1	79-01-6	
1,2-Dichloropropane	Not detected	1		ug/L	1	78-87-5	
Bromodichloromethane	Not detected	1		ug/L	1	75-27-4	
Dibromomethane	Not detected	5		ug/L	1	74-95-3	
cis-1,3-Dichloropropene	Not detected	1		ug/L	1	10061-01-5	
Toluene	Not detected	1		ug/L	1	108-88-3	
trans-1,3-Dichloropropene	Not detected	1		ug/L	1	10061-02-6	
1,1,2-Trichloroethane	Not detected	1		ug/L	1	79-00-5	
Tetrachloroethene	Not detected	1		ug/L	1	127-18-4	
Dibromochloromethane	Not detected	5		ug/L	1	124-48-1	
1,2-Dibromoethane	Not detected	1		ug/L	1	106-93-4	
Chlorobenzene	Not detected	1		ug/L	1	108-90-7	
1,1,1,2-Tetrachloroethane	Not detected	1		ug/L	1	630-20-6	
Ethylbenzene	Not detected	1		ug/L	1	100-41-4	
p,m-Xylene*	Not detected	2		ug/L	1		
o-Xylene	Not detected	1		ug/L	1	95-47-6	
Styrene	Not detected	1		ug/L	1	100-42-5	
Isopropylbenzene	Not detected	5		ug/L	1	98-82-8	
Bromoform	Not detected	1		ug/L	1	75-25-2	
1,1,2,2-Tetrachloroethane	Not detected	1		ug/L	1	79-34-5	
1,2,3-Trichloropropane	Not detected	1		ug/L	1	96-18-4	
n-Propylbenzene	Not detected	1		ug/L	1	103-65-1	
Bromobenzene	Not detected	1		ug/L	1	108-86-1	
1,3,5-Trimethylbenzene	Not detected	1		ug/L	1	108-67-8	

Lab Sample ID: S40860.10 (continued)
Sample Tag: MW-108

Volatile Organics, Method: SW5030C/8260C, Run Date: 10/05/22 07:03, Analyst: BML (continued)

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
tert-Butylbenzene	Not detected	1		ug/L	1	98-06-6	
1,2,4-Trimethylbenzene	Not detected	1		ug/L	1	95-63-6	
sec-Butylbenzene	Not detected	1		ug/L	1	135-98-8	
p-Isopropyltoluene	Not detected	5		ug/L	1	99-87-6	
1,3-Dichlorobenzene	Not detected	1		ug/L	1	541-73-1	
1,4-Dichlorobenzene	Not detected	1		ug/L	1	106-46-7	
1,2-Dichlorobenzene	Not detected	1		ug/L	1	95-50-1	
1,2,3-Trimethylbenzene	Not detected	1		ug/L	1	526-73-8	
n-Butylbenzene	Not detected	1		ug/L	1	104-51-8	
1,2-Dibromo-3-chloropropane	Not detected	5		ug/L	1	96-12-8	
1,2,4-Trichlorobenzene	Not detected	5		ug/L	1	120-82-1	
1,2,3-Trichlorobenzene	Not detected	5		ug/L	1	87-61-6	
Naphthalene	Not detected	5		ug/L	1	91-20-3	
Acrolein	Not detected	1		ug/L	1	107-02-8	
2-Chlorotoluene	Not detected	1		ug/L	1	95-49-8	
4-Chlorotoluene	Not detected	1		ug/L	1	106-43-4	
1,3-Dichloropropane	Not detected	1		ug/L	1	142-28-9	
1,1-Dichloropropene	Not detected	1		ug/L	1	563-58-6	
2,2-Dichloropropane	Not detected	1		ug/L	1	594-20-7	
Hexachlorobutadiene	Not detected	1		ug/L	1	87-68-3	
1,1,2-Trichloro-1,2,2-trifluoroethane	Not detected	1		ug/L	1	76-13-1	

Other / Misc.

Method: , Run Date: 10/08/22 22:39, Analyst: TA

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Methanol*	Completed				1	67-56-1	O

O-Analysis performed by outside laboratory. See attached report.

Lab Sample ID: S40860.11
Sample Tag: MW-107
Collected Date/Time: 09/28/2022 10:23
Matrix: Groundwater
COC Reference: 154471

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
3	40ml Glass	None	Yes	2.4	IR
3	40ml Glass	HCL	Yes	2.4	IR
1	125ml Plastic	HNO3	Yes	2.4	IR

Extraction / Prep.

Parameter	Result	Method	Run Date	Analyst	Flags
Mercury Digestion	Completed	E245.1	10/05/22 13:36	CTV	
pH check for VOCs*	<2	N/A	10/05/22 15:00	BML	
Metal Digestion	Completed	SW3015A	10/06/22 09:30	CCM	

Metals

Method: E200.8, Run Date: 10/06/22 11:56, Analyst: CCM

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Aluminum	0.058	0.010		mg/L	5	7429-90-5	
Antimony*	0.012	0.005		mg/L	5	7440-36-0	
Arsenic	Not detected	0.002		mg/L	5	7440-38-2	
Barium	0.073	0.005		mg/L	5	7440-39-3	
Beryllium	Not detected	0.001		mg/L	5	7440-41-7	
Boron	0.12	0.04		mg/L	5	7440-42-8	
Cadmium	Not detected	0.0005		mg/L	5	7440-43-9	
Chromium	Not detected	0.005		mg/L	5	7440-47-3	
Cobalt	Not detected	0.005		mg/L	5	7440-48-4	
Iron	0.11	0.02		mg/L	5	7439-89-6	
Lead	Not detected	0.003		mg/L	5	7439-92-1	
Manganese	0.047	0.005		mg/L	5	7439-96-5	
Molybdenum	Not detected	0.005		mg/L	5	7439-98-7	
Nickel	Not detected	0.005		mg/L	5	7440-02-0	
Selenium	Not detected	0.005		mg/L	5	7782-49-2	
Silver	Not detected	0.0005		mg/L	5	7440-22-4	
Strontium	0.247	0.005		mg/L	5	7440-24-6	
Thallium	Not detected	0.002		mg/L	5	7440-28-0	
Titanium	Not detected	0.005		mg/L	5	7440-32-6	
Vanadium	Not detected	0.005		mg/L	5	7440-62-2	
Zinc	Not detected	0.005		mg/L	5	7440-66-6	

Method: E200.8, Run Date: 10/06/22 14:01, Analyst: CCM

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Calcium*	97.9	1.0		mg/L	5	7440-70-2	
Magnesium	17.8	0.50		mg/L	5	7439-95-4	
Potassium	12.5	0.50		mg/L	5	7440-09-7	
Sodium	29.9	0.50		mg/L	5	7440-23-5	

Method: E245.1, Run Date: 10/05/22 17:18, Analyst: CTV

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Mercury	Not detected	0.0002		mg/L	1	7439-97-6	

Lab Sample ID: S40860.11 (continued)
Sample Tag: MW-107

Organics - Volatiles

Method: SW5030C/8260C, Run Date: 10/10/22 18:07, Analyst: KAG

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Diisopropyl ether (DIPE)	Not detected	5		ug/L	1	108-20-3	

Volatile Organics, Method: SW5030C/8260C, Run Date: 10/05/22 07:27, Analyst: BML

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Acetone	Not detected	50		ug/L	1	67-64-1	
tert-Methyl butyl ether (MTBE)	Not detected	5		ug/L	1	1634-04-4	
Acrylonitrile	Not detected	2		ug/L	1	107-13-1	
2-Butanone (MEK)	Not detected	25		ug/L	1	78-93-3	
Dichlorodifluoromethane	Not detected	5		ug/L	1	75-71-8	
Chloromethane	Not detected	5		ug/L	1	74-87-3	
Vinyl chloride	Not detected	1		ug/L	1	75-01-4	
Bromomethane	Not detected	5		ug/L	1	74-83-9	
Chloroethane	Not detected	5		ug/L	1	75-00-3	
Trichlorofluoromethane	4	1		ug/L	1	75-69-4	
1,1-Dichloroethene	Not detected	1		ug/L	1	75-35-4	
Methylene chloride	Not detected	5		ug/L	1	75-09-2	
trans-1,2-Dichloroethene	Not detected	1		ug/L	1	156-60-5	
1,1-Dichloroethane	Not detected	1		ug/L	1	75-34-3	
cis-1,2-Dichloroethene	Not detected	1		ug/L	1	156-59-2	
Chloroform	Not detected	1		ug/L	1	67-66-3	
1,1,1-Trichloroethane	Not detected	1		ug/L	1	71-55-6	
4-Methyl-2-pentanone (MIBK)	Not detected	50		ug/L	1	108-10-1	
Carbon tetrachloride	Not detected	1		ug/L	1	56-23-5	
Benzene	Not detected	1		ug/L	1	71-43-2	
1,2-Dichloroethane	Not detected	1		ug/L	1	107-06-2	
Trichloroethene	14	1		ug/L	1	79-01-6	
1,2-Dichloropropane	Not detected	1		ug/L	1	78-87-5	
Bromodichloromethane	Not detected	1		ug/L	1	75-27-4	
Dibromomethane	Not detected	5		ug/L	1	74-95-3	
cis-1,3-Dichloropropene	Not detected	1		ug/L	1	10061-01-5	
Toluene	Not detected	1		ug/L	1	108-88-3	
trans-1,3-Dichloropropene	Not detected	1		ug/L	1	10061-02-6	
1,1,2-Trichloroethane	Not detected	1		ug/L	1	79-00-5	
Tetrachloroethene	Not detected	1		ug/L	1	127-18-4	
Dibromochloromethane	Not detected	5		ug/L	1	124-48-1	
1,2-Dibromoethane	Not detected	1		ug/L	1	106-93-4	
Chlorobenzene	Not detected	1		ug/L	1	108-90-7	
1,1,1,2-Tetrachloroethane	Not detected	1		ug/L	1	630-20-6	
Ethylbenzene	Not detected	1		ug/L	1	100-41-4	
p,m-Xylene*	Not detected	2		ug/L	1		
o-Xylene	Not detected	1		ug/L	1	95-47-6	
Styrene	Not detected	1		ug/L	1	100-42-5	
Isopropylbenzene	Not detected	5		ug/L	1	98-82-8	
Bromoform	Not detected	1		ug/L	1	75-25-2	
1,1,2,2-Tetrachloroethane	Not detected	1		ug/L	1	79-34-5	
1,2,3-Trichloropropane	Not detected	1		ug/L	1	96-18-4	
n-Propylbenzene	Not detected	1		ug/L	1	103-65-1	
Bromobenzene	Not detected	1		ug/L	1	108-86-1	
1,3,5-Trimethylbenzene	Not detected	1		ug/L	1	108-67-8	

Lab Sample ID: S40860.11 (continued)
Sample Tag: MW-107

Volatile Organics, Method: SW5030C/8260C, Run Date: 10/05/22 07:27, Analyst: BML (continued)

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
tert-Butylbenzene	Not detected	1		ug/L	1	98-06-6	
1,2,4-Trimethylbenzene	Not detected	1		ug/L	1	95-63-6	
sec-Butylbenzene	Not detected	1		ug/L	1	135-98-8	
p-Isopropyltoluene	Not detected	5		ug/L	1	99-87-6	
1,3-Dichlorobenzene	Not detected	1		ug/L	1	541-73-1	
1,4-Dichlorobenzene	Not detected	1		ug/L	1	106-46-7	
1,2-Dichlorobenzene	Not detected	1		ug/L	1	95-50-1	
1,2,3-Trimethylbenzene	Not detected	1		ug/L	1	526-73-8	
n-Butylbenzene	Not detected	1		ug/L	1	104-51-8	
1,2-Dibromo-3-chloropropane	Not detected	5		ug/L	1	96-12-8	
1,2,4-Trichlorobenzene	Not detected	5		ug/L	1	120-82-1	
1,2,3-Trichlorobenzene	Not detected	5		ug/L	1	87-61-6	
Naphthalene	Not detected	5		ug/L	1	91-20-3	
Acrolein	Not detected	1		ug/L	1	107-02-8	
2-Chlorotoluene	Not detected	1		ug/L	1	95-49-8	
4-Chlorotoluene	Not detected	1		ug/L	1	106-43-4	
1,3-Dichloropropane	Not detected	1		ug/L	1	142-28-9	
1,1-Dichloropropene	Not detected	1		ug/L	1	563-58-6	
2,2-Dichloropropane	Not detected	1		ug/L	1	594-20-7	
Hexachlorobutadiene	Not detected	1		ug/L	1	87-68-3	
1,1,2-Trichloro-1,2,2-trifluoroethane	Not detected	1		ug/L	1	76-13-1	

Other / Misc.

Method: , Run Date: 10/08/22 23:01, Analyst: TA

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Methanol*	Completed				1	67-56-1	O

O-Analysis performed by outside laboratory. See attached report.

Lab Sample ID: S40860.12
Sample Tag: MW-106
Collected Date/Time: 09/28/2022 11:25
Matrix: Groundwater
COC Reference: 154471

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
3	40ml Glass	None	Yes	2.4	IR
3	40ml Glass	HCL	Yes	2.4	IR
1	125ml Plastic	HNO3	Yes	2.4	IR

Extraction / Prep.

Parameter	Result	Method	Run Date	Analyst	Flags
Mercury Digestion	Completed	E245.1	10/05/22 13:36	CTV	
pH check for VOCs*	<2	N/A	10/05/22 15:00	BML	
Metal Digestion	Completed	SW3015A	10/06/22 09:30	CCM	

Metals

Method: E200.8, Run Date: 10/06/22 12:24, Analyst: CCM

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Aluminum	Not detected	0.010		mg/L	5	7429-90-5	
Antimony*	Not detected	0.005		mg/L	5	7440-36-0	
Arsenic	Not detected	0.002		mg/L	5	7440-38-2	
Barium	0.044	0.005		mg/L	5	7440-39-3	
Beryllium	Not detected	0.001		mg/L	5	7440-41-7	
Boron	0.35	0.04		mg/L	5	7440-42-8	
Cadmium	Not detected	0.0005		mg/L	5	7440-43-9	
Chromium	Not detected	0.005		mg/L	5	7440-47-3	
Cobalt	Not detected	0.005		mg/L	5	7440-48-4	
Iron	0.24	0.02		mg/L	5	7439-89-6	
Lead	Not detected	0.003		mg/L	5	7439-92-1	
Manganese	0.073	0.005		mg/L	5	7439-96-5	
Molybdenum	0.008	0.005		mg/L	5	7439-98-7	
Nickel	Not detected	0.005		mg/L	5	7440-02-0	
Selenium	Not detected	0.005		mg/L	5	7782-49-2	
Silver	Not detected	0.0005		mg/L	5	7440-22-4	
Strontium	0.315	0.005		mg/L	5	7440-24-6	
Thallium	Not detected	0.002		mg/L	5	7440-28-0	
Titanium	Not detected	0.005		mg/L	5	7440-32-6	
Vanadium	Not detected	0.005		mg/L	5	7440-62-2	
Zinc	Not detected	0.005		mg/L	5	7440-66-6	

Method: E200.8, Run Date: 10/06/22 14:09, Analyst: CCM

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Calcium*	111	1.0		mg/L	5	7440-70-2	
Magnesium	18.1	0.50		mg/L	5	7439-95-4	
Potassium	10.0	0.50		mg/L	5	7440-09-7	
Sodium	32.8	0.50		mg/L	5	7440-23-5	

Method: E245.1, Run Date: 10/05/22 17:22, Analyst: CTV

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Mercury	Not detected	0.0002		mg/L	1	7439-97-6	

Lab Sample ID: S40860.12 (continued)
Sample Tag: MW-106

Organics - Volatiles

Method: SW5030C/8260C, Run Date: 10/10/22 18:33, Analyst: KAG

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Diisopropyl ether (DIPE)	Not detected	5		ug/L	1	108-20-3	

Volatile Organics, Method: SW5030C/8260C, Run Date: 10/05/22 07:50, Analyst: BML

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Acetone	Not detected	50		ug/L	1	67-64-1	
tert-Methyl butyl ether (MTBE)	Not detected	5		ug/L	1	1634-04-4	
Acrylonitrile	Not detected	2		ug/L	1	107-13-1	
2-Butanone (MEK)	Not detected	25		ug/L	1	78-93-3	
Dichlorodifluoromethane	Not detected	5		ug/L	1	75-71-8	
Chloromethane	Not detected	5		ug/L	1	74-87-3	
Vinyl chloride	Not detected	1		ug/L	1	75-01-4	
Bromomethane	Not detected	5		ug/L	1	74-83-9	
Chloroethane	Not detected	5		ug/L	1	75-00-3	
Trichlorofluoromethane	Not detected	1		ug/L	1	75-69-4	
1,1-Dichloroethene	Not detected	1		ug/L	1	75-35-4	
Methylene chloride	Not detected	5		ug/L	1	75-09-2	
trans-1,2-Dichloroethene	Not detected	1		ug/L	1	156-60-5	
1,1-Dichloroethane	Not detected	1		ug/L	1	75-34-3	
cis-1,2-Dichloroethene	Not detected	1		ug/L	1	156-59-2	
Chloroform	Not detected	1		ug/L	1	67-66-3	
1,1,1-Trichloroethane	Not detected	1		ug/L	1	71-55-6	
4-Methyl-2-pentanone (MIBK)	Not detected	50		ug/L	1	108-10-1	
Carbon tetrachloride	Not detected	1		ug/L	1	56-23-5	
Benzene	Not detected	1		ug/L	1	71-43-2	
1,2-Dichloroethane	Not detected	1		ug/L	1	107-06-2	
Trichloroethene	2	1		ug/L	1	79-01-6	
1,2-Dichloropropane	Not detected	1		ug/L	1	78-87-5	
Bromodichloromethane	Not detected	1		ug/L	1	75-27-4	
Dibromomethane	Not detected	5		ug/L	1	74-95-3	
cis-1,3-Dichloropropene	Not detected	1		ug/L	1	10061-01-5	
Toluene	Not detected	1		ug/L	1	108-88-3	
trans-1,3-Dichloropropene	Not detected	1		ug/L	1	10061-02-6	
1,1,2-Trichloroethane	Not detected	1		ug/L	1	79-00-5	
Tetrachloroethene	Not detected	1		ug/L	1	127-18-4	
Dibromochloromethane	Not detected	5		ug/L	1	124-48-1	
1,2-Dibromoethane	Not detected	1		ug/L	1	106-93-4	
Chlorobenzene	Not detected	1		ug/L	1	108-90-7	
1,1,1,2-Tetrachloroethane	Not detected	1		ug/L	1	630-20-6	
Ethylbenzene	Not detected	1		ug/L	1	100-41-4	
p,m-Xylene*	Not detected	2		ug/L	1		
o-Xylene	Not detected	1		ug/L	1	95-47-6	
Styrene	Not detected	1		ug/L	1	100-42-5	
Isopropylbenzene	Not detected	5		ug/L	1	98-82-8	
Bromoform	Not detected	1		ug/L	1	75-25-2	
1,1,2,2-Tetrachloroethane	Not detected	1		ug/L	1	79-34-5	
1,2,3-Trichloropropane	Not detected	1		ug/L	1	96-18-4	
n-Propylbenzene	Not detected	1		ug/L	1	103-65-1	
Bromobenzene	Not detected	1		ug/L	1	108-86-1	
1,3,5-Trimethylbenzene	Not detected	1		ug/L	1	108-67-8	

Lab Sample ID: S40860.12 (continued)
Sample Tag: MW-106

Volatile Organics, Method: SW5030C/8260C, Run Date: 10/05/22 07:50, Analyst: BML (continued)

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
tert-Butylbenzene	Not detected	1		ug/L	1	98-06-6	
1,2,4-Trimethylbenzene	Not detected	1		ug/L	1	95-63-6	
sec-Butylbenzene	Not detected	1		ug/L	1	135-98-8	
p-Isopropyltoluene	Not detected	5		ug/L	1	99-87-6	
1,3-Dichlorobenzene	Not detected	1		ug/L	1	541-73-1	
1,4-Dichlorobenzene	Not detected	1		ug/L	1	106-46-7	
1,2-Dichlorobenzene	Not detected	1		ug/L	1	95-50-1	
1,2,3-Trimethylbenzene	Not detected	1		ug/L	1	526-73-8	
n-Butylbenzene	Not detected	1		ug/L	1	104-51-8	
1,2-Dibromo-3-chloropropane	Not detected	5		ug/L	1	96-12-8	
1,2,4-Trichlorobenzene	Not detected	5		ug/L	1	120-82-1	
1,2,3-Trichlorobenzene	Not detected	5		ug/L	1	87-61-6	
Naphthalene	Not detected	5		ug/L	1	91-20-3	
Acrolein	Not detected	1		ug/L	1	107-02-8	
2-Chlorotoluene	Not detected	1		ug/L	1	95-49-8	
4-Chlorotoluene	Not detected	1		ug/L	1	106-43-4	
1,3-Dichloropropane	Not detected	1		ug/L	1	142-28-9	
1,1-Dichloropropene	Not detected	1		ug/L	1	563-58-6	
2,2-Dichloropropane	Not detected	1		ug/L	1	594-20-7	
Hexachlorobutadiene	Not detected	1		ug/L	1	87-68-3	
1,1,2-Trichloro-1,2,2-trifluoroethane	Not detected	1		ug/L	1	76-13-1	

Other / Misc.

Method: , Run Date: 10/08/22 23:23, Analyst: TA

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Methanol*	Completed				1	67-56-1	O

O-Analysis performed by outside laboratory. See attached report.

Lab Sample ID: S40860.13
Sample Tag: MW-121
Collected Date/Time: 09/28/2022 12:32
Matrix: Groundwater
COC Reference: 154471

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
3	40ml Glass	None	Yes	2.4	IR
3	40ml Glass	HCL	Yes	2.4	IR
1	125ml Plastic	HNO3	Yes	2.4	IR

Extraction / Prep.

Parameter	Result	Method	Run Date	Analyst	Flags
Mercury Digestion	Completed	E245.1	10/05/22 13:36	CTV	
pH check for VOCs*	<2	N/A	10/05/22 15:00	BML	
Metal Digestion	Completed	SW3015A	10/06/22 09:30	CCM	

Metals

Method: E200.8, Run Date: 10/06/22 12:29, Analyst: CCM

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Aluminum	0.243	0.010		mg/L	5	7429-90-5	
Antimony*	Not detected	0.005		mg/L	5	7440-36-0	
Arsenic	Not detected	0.002		mg/L	5	7440-38-2	
Barium	0.040	0.005		mg/L	5	7440-39-3	
Beryllium	Not detected	0.001		mg/L	5	7440-41-7	
Boron	0.07	0.04		mg/L	5	7440-42-8	
Cadmium	Not detected	0.0005		mg/L	5	7440-43-9	
Chromium	Not detected	0.005		mg/L	5	7440-47-3	
Cobalt	Not detected	0.005		mg/L	5	7440-48-4	
Iron	0.22	0.02		mg/L	5	7439-89-6	
Lead	Not detected	0.003		mg/L	5	7439-92-1	
Manganese	0.078	0.005		mg/L	5	7439-96-5	
Molybdenum	Not detected	0.005		mg/L	5	7439-98-7	
Nickel	Not detected	0.005		mg/L	5	7440-02-0	
Selenium	Not detected	0.005		mg/L	5	7782-49-2	
Silver	Not detected	0.0005		mg/L	5	7440-22-4	
Strontium	0.259	0.005		mg/L	5	7440-24-6	
Thallium	Not detected	0.002		mg/L	5	7440-28-0	
Titanium	Not detected	0.005		mg/L	5	7440-32-6	
Vanadium	Not detected	0.005		mg/L	5	7440-62-2	
Zinc	Not detected	0.005		mg/L	5	7440-66-6	

Method: E200.8, Run Date: 10/06/22 14:10, Analyst: CCM

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Calcium*	91.6	1.0		mg/L	5	7440-70-2	
Magnesium	15.3	0.50		mg/L	5	7439-95-4	
Potassium	3.50	0.50		mg/L	5	7440-09-7	
Sodium	86.2	0.50		mg/L	5	7440-23-5	

Method: E245.1, Run Date: 10/05/22 17:25, Analyst: CTV

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Mercury	Not detected	0.0002		mg/L	1	7439-97-6	

Lab Sample ID: S40860.13 (continued)
Sample Tag: MW-121

Organics - Volatiles

Method: SW5030C/8260C, Run Date: 10/10/22 18:58, Analyst: KAG

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Diisopropyl ether (DIPE)	Not detected	5		ug/L	1	108-20-3	

Volatile Organics, Method: SW5030C/8260C, Run Date: 10/05/22 08:14, Analyst: BML

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Acetone	Not detected	50		ug/L	1	67-64-1	
tert-Methyl butyl ether (MTBE)	Not detected	5		ug/L	1	1634-04-4	
Acrylonitrile	Not detected	2		ug/L	1	107-13-1	
2-Butanone (MEK)	Not detected	25		ug/L	1	78-93-3	
Dichlorodifluoromethane	Not detected	5		ug/L	1	75-71-8	
Chloromethane	Not detected	5		ug/L	1	74-87-3	
Vinyl chloride	Not detected	1		ug/L	1	75-01-4	
Bromomethane	Not detected	5		ug/L	1	74-83-9	
Chloroethane	Not detected	5		ug/L	1	75-00-3	
Trichlorofluoromethane	Not detected	1		ug/L	1	75-69-4	
1,1-Dichloroethene	Not detected	1		ug/L	1	75-35-4	
Methylene chloride	Not detected	5		ug/L	1	75-09-2	
trans-1,2-Dichloroethene	Not detected	1		ug/L	1	156-60-5	
1,1-Dichloroethane	Not detected	1		ug/L	1	75-34-3	
cis-1,2-Dichloroethene	Not detected	1		ug/L	1	156-59-2	
Chloroform	Not detected	1		ug/L	1	67-66-3	
1,1,1-Trichloroethane	Not detected	1		ug/L	1	71-55-6	
4-Methyl-2-pentanone (MIBK)	Not detected	50		ug/L	1	108-10-1	
Carbon tetrachloride	Not detected	1		ug/L	1	56-23-5	
Benzene	Not detected	1		ug/L	1	71-43-2	
1,2-Dichloroethane	Not detected	1		ug/L	1	107-06-2	
Trichloroethene	Not detected	1		ug/L	1	79-01-6	
1,2-Dichloropropane	Not detected	1		ug/L	1	78-87-5	
Bromodichloromethane	Not detected	1		ug/L	1	75-27-4	
Dibromomethane	Not detected	5		ug/L	1	74-95-3	
cis-1,3-Dichloropropene	Not detected	1		ug/L	1	10061-01-5	
Toluene	Not detected	1		ug/L	1	108-88-3	
trans-1,3-Dichloropropene	Not detected	1		ug/L	1	10061-02-6	
1,1,2-Trichloroethane	Not detected	1		ug/L	1	79-00-5	
Tetrachloroethene	Not detected	1		ug/L	1	127-18-4	
Dibromochloromethane	Not detected	5		ug/L	1	124-48-1	
1,2-Dibromoethane	Not detected	1		ug/L	1	106-93-4	
Chlorobenzene	21	1		ug/L	1	108-90-7	
1,1,1,2-Tetrachloroethane	Not detected	1		ug/L	1	630-20-6	
Ethylbenzene	Not detected	1		ug/L	1	100-41-4	
p,m-Xylene*	Not detected	2		ug/L	1		
o-Xylene	Not detected	1		ug/L	1	95-47-6	
Styrene	Not detected	1		ug/L	1	100-42-5	
Isopropylbenzene	Not detected	5		ug/L	1	98-82-8	
Bromoform	Not detected	1		ug/L	1	75-25-2	
1,1,2,2-Tetrachloroethane	Not detected	1		ug/L	1	79-34-5	
1,2,3-Trichloropropane	Not detected	1		ug/L	1	96-18-4	
n-Propylbenzene	Not detected	1		ug/L	1	103-65-1	
Bromobenzene	Not detected	1		ug/L	1	108-86-1	
1,3,5-Trimethylbenzene	Not detected	1		ug/L	1	108-67-8	

Lab Sample ID: S40860.13 (continued)
Sample Tag: MW-121

Volatile Organics, Method: SW5030C/8260C, Run Date: 10/05/22 08:14, Analyst: BML (continued)

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
tert-Butylbenzene	Not detected	1		ug/L	1	98-06-6	
1,2,4-Trimethylbenzene	Not detected	1		ug/L	1	95-63-6	
sec-Butylbenzene	Not detected	1		ug/L	1	135-98-8	
p-Isopropyltoluene	Not detected	5		ug/L	1	99-87-6	
1,3-Dichlorobenzene	Not detected	1		ug/L	1	541-73-1	
1,4-Dichlorobenzene	Not detected	1		ug/L	1	106-46-7	
1,2-Dichlorobenzene	Not detected	1		ug/L	1	95-50-1	
1,2,3-Trimethylbenzene	Not detected	1		ug/L	1	526-73-8	
n-Butylbenzene	Not detected	1		ug/L	1	104-51-8	
1,2-Dibromo-3-chloropropane	Not detected	5		ug/L	1	96-12-8	
1,2,4-Trichlorobenzene	Not detected	5		ug/L	1	120-82-1	
1,2,3-Trichlorobenzene	Not detected	5		ug/L	1	87-61-6	
Naphthalene	Not detected	5		ug/L	1	91-20-3	
Acrolein	Not detected	1		ug/L	1	107-02-8	
2-Chlorotoluene	Not detected	1		ug/L	1	95-49-8	
4-Chlorotoluene	Not detected	1		ug/L	1	106-43-4	
1,3-Dichloropropane	Not detected	1		ug/L	1	142-28-9	
1,1-Dichloropropene	Not detected	1		ug/L	1	563-58-6	
2,2-Dichloropropane	Not detected	1		ug/L	1	594-20-7	
Hexachlorobutadiene	Not detected	1		ug/L	1	87-68-3	
1,1,2-Trichloro-1,2,2-trifluoroethane	Not detected	1		ug/L	1	76-13-1	

Other / Misc.

Method: , Run Date: 10/08/22 23:45, Analyst: TA

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Methanol*	Completed				1	67-56-1	O

O-Analysis performed by outside laboratory. See attached report.

Lab Sample ID: S40860.14
Sample Tag: MW-104
Collected Date/Time: 09/28/2022 13:38
Matrix: Groundwater
COC Reference: 154471

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
3	40ml Glass	None	Yes	2.4	IR
3	40ml Glass	HCL	Yes	2.4	IR
1	125ml Plastic	HNO3	Yes	2.4	IR

Extraction / Prep.

Parameter	Result	Method	Run Date	Analyst	Flags
Mercury Digestion	Completed	E245.1	10/05/22 13:36	CTV	
pH check for VOCs*	<2	N/A	10/05/22 15:00	BML	
Metal Digestion	Completed	SW3015A	10/06/22 09:30	CCM	

Metals

Method: E200.8, Run Date: 10/06/22 12:34, Analyst: CCM

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Aluminum	0.047	0.010		mg/L	5	7429-90-5	
Antimony*	Not detected	0.005		mg/L	5	7440-36-0	
Arsenic	Not detected	0.002		mg/L	5	7440-38-2	
Barium	0.066	0.005		mg/L	5	7440-39-3	
Beryllium	Not detected	0.001		mg/L	5	7440-41-7	
Boron	0.12	0.04		mg/L	5	7440-42-8	
Cadmium	0.0008	0.0005		mg/L	5	7440-43-9	
Chromium	Not detected	0.005		mg/L	5	7440-47-3	
Cobalt	Not detected	0.005		mg/L	5	7440-48-4	
Iron	0.13	0.02		mg/L	5	7439-89-6	
Lead	Not detected	0.003		mg/L	5	7439-92-1	
Manganese	0.058	0.005		mg/L	5	7439-96-5	
Molybdenum	0.010	0.005		mg/L	5	7439-98-7	
Nickel	Not detected	0.005		mg/L	5	7440-02-0	
Selenium	Not detected	0.005		mg/L	5	7782-49-2	
Silver	Not detected	0.0005		mg/L	5	7440-22-4	
Strontium	0.239	0.005		mg/L	5	7440-24-6	
Thallium	Not detected	0.002		mg/L	5	7440-28-0	
Titanium	Not detected	0.005		mg/L	5	7440-32-6	
Vanadium	Not detected	0.005		mg/L	5	7440-62-2	
Zinc	Not detected	0.005		mg/L	5	7440-66-6	

Method: E200.8, Run Date: 10/06/22 14:12, Analyst: CCM

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Calcium*	65.3	1.0		mg/L	5	7440-70-2	
Magnesium	10.5	0.50		mg/L	5	7439-95-4	
Potassium	8.24	0.50		mg/L	5	7440-09-7	
Sodium	184	0.50		mg/L	5	7440-23-5	

Method: E245.1, Run Date: 10/05/22 17:28, Analyst: CTV

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Mercury	Not detected	0.0002		mg/L	1	7439-97-6	

Lab Sample ID: S40860.14 (continued)
Sample Tag: MW-104

Organics - Volatiles

Method: SW5030C/8260C, Run Date: 10/10/22 19:23, Analyst: KAG

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Diisopropyl ether (DIPE)	Not detected	5		ug/L	1	108-20-3	

Volatile Organics, Method: SW5030C/8260C, Run Date: 10/05/22 08:38, Analyst: BML

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Acetone	Not detected	50		ug/L	1	67-64-1	
tert-Methyl butyl ether (MTBE)	Not detected	5		ug/L	1	1634-04-4	
Acrylonitrile	Not detected	2		ug/L	1	107-13-1	
2-Butanone (MEK)	Not detected	25		ug/L	1	78-93-3	
Dichlorodifluoromethane	Not detected	5		ug/L	1	75-71-8	
Chloromethane	Not detected	5		ug/L	1	74-87-3	
Vinyl chloride	Not detected	1		ug/L	1	75-01-4	
Bromomethane	Not detected	5		ug/L	1	74-83-9	
Chloroethane	Not detected	5		ug/L	1	75-00-3	
Trichlorofluoromethane	Not detected	1		ug/L	1	75-69-4	
1,1-Dichloroethene	Not detected	1		ug/L	1	75-35-4	
Methylene chloride	Not detected	5		ug/L	1	75-09-2	
trans-1,2-Dichloroethene	Not detected	1		ug/L	1	156-60-5	
1,1-Dichloroethane	Not detected	1		ug/L	1	75-34-3	
cis-1,2-Dichloroethene	Not detected	1		ug/L	1	156-59-2	
Chloroform	Not detected	1		ug/L	1	67-66-3	
1,1,1-Trichloroethane	Not detected	1		ug/L	1	71-55-6	
4-Methyl-2-pentanone (MIBK)	Not detected	50		ug/L	1	108-10-1	
Carbon tetrachloride	Not detected	1		ug/L	1	56-23-5	
Benzene	Not detected	1		ug/L	1	71-43-2	
1,2-Dichloroethane	Not detected	1		ug/L	1	107-06-2	
Trichloroethene	Not detected	1		ug/L	1	79-01-6	
1,2-Dichloropropane	Not detected	1		ug/L	1	78-87-5	
Bromodichloromethane	Not detected	1		ug/L	1	75-27-4	
Dibromomethane	Not detected	5		ug/L	1	74-95-3	
cis-1,3-Dichloropropene	Not detected	1		ug/L	1	10061-01-5	
Toluene	Not detected	1		ug/L	1	108-88-3	
trans-1,3-Dichloropropene	Not detected	1		ug/L	1	10061-02-6	
1,1,2-Trichloroethane	Not detected	1		ug/L	1	79-00-5	
Tetrachloroethene	Not detected	1		ug/L	1	127-18-4	
Dibromochloromethane	Not detected	5		ug/L	1	124-48-1	
1,2-Dibromoethane	Not detected	1		ug/L	1	106-93-4	
Chlorobenzene	Not detected	1		ug/L	1	108-90-7	
1,1,1,2-Tetrachloroethane	Not detected	1		ug/L	1	630-20-6	
Ethylbenzene	Not detected	1		ug/L	1	100-41-4	
p,m-Xylene*	Not detected	2		ug/L	1		
o-Xylene	Not detected	1		ug/L	1	95-47-6	
Styrene	Not detected	1		ug/L	1	100-42-5	
Isopropylbenzene	Not detected	5		ug/L	1	98-82-8	
Bromoform	Not detected	1		ug/L	1	75-25-2	
1,1,2,2-Tetrachloroethane	Not detected	1		ug/L	1	79-34-5	
1,2,3-Trichloropropane	Not detected	1		ug/L	1	96-18-4	
n-Propylbenzene	Not detected	1		ug/L	1	103-65-1	
Bromobenzene	Not detected	1		ug/L	1	108-86-1	
1,3,5-Trimethylbenzene	Not detected	1		ug/L	1	108-67-8	

Lab Sample ID: S40860.14 (continued)
Sample Tag: MW-104

Volatile Organics, Method: SW5030C/8260C, Run Date: 10/05/22 08:38, Analyst: BML (continued)

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
tert-Butylbenzene	Not detected	1		ug/L	1	98-06-6	
1,2,4-Trimethylbenzene	Not detected	1		ug/L	1	95-63-6	
sec-Butylbenzene	Not detected	1		ug/L	1	135-98-8	
p-Isopropyltoluene	Not detected	5		ug/L	1	99-87-6	
1,3-Dichlorobenzene	Not detected	1		ug/L	1	541-73-1	
1,4-Dichlorobenzene	Not detected	1		ug/L	1	106-46-7	
1,2-Dichlorobenzene	Not detected	1		ug/L	1	95-50-1	
1,2,3-Trimethylbenzene	Not detected	1		ug/L	1	526-73-8	
n-Butylbenzene	Not detected	1		ug/L	1	104-51-8	
1,2-Dibromo-3-chloropropane	Not detected	5		ug/L	1	96-12-8	
1,2,4-Trichlorobenzene	Not detected	5		ug/L	1	120-82-1	
1,2,3-Trichlorobenzene	Not detected	5		ug/L	1	87-61-6	
Naphthalene	Not detected	5		ug/L	1	91-20-3	
Acrolein	Not detected	1		ug/L	1	107-02-8	
2-Chlorotoluene	Not detected	1		ug/L	1	95-49-8	
4-Chlorotoluene	Not detected	1		ug/L	1	106-43-4	
1,3-Dichloropropane	Not detected	1		ug/L	1	142-28-9	
1,1-Dichloropropene	Not detected	1		ug/L	1	563-58-6	
2,2-Dichloropropane	Not detected	1		ug/L	1	594-20-7	
Hexachlorobutadiene	Not detected	1		ug/L	1	87-68-3	
1,1,2-Trichloro-1,2,2-trifluoroethane	Not detected	1		ug/L	1	76-13-1	

Other / Misc.

Method: , Run Date: 10/09/22 00:07, Analyst: TA

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Methanol*	Completed				1	67-56-1	O

O-Analysis performed by outside laboratory. See attached report.

Lab Sample ID: S40860.15
Sample Tag: MW-105
Collected Date/Time: 09/28/2022 14:23
Matrix: Groundwater
COC Reference: 154471

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
3	40ml Glass	None	Yes	2.4	IR
3	40ml Glass	HCL	Yes	2.4	IR
1	125ml Plastic	HNO3	Yes	2.4	IR

Extraction / Prep.

Parameter	Result	Method	Run Date	Analyst	Flags
Mercury Digestion	Completed	E245.1	10/05/22 13:36	CTV	
pH check for VOCs*	<2	N/A	10/05/22 15:00	BML	
Metal Digestion	Completed	SW3015A	10/06/22 09:30	CCM	

Metals

Method: E200.8, Run Date: 10/06/22 12:39, Analyst: CCM

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Aluminum	0.014	0.010		mg/L	5	7429-90-5	
Antimony*	Not detected	0.005		mg/L	5	7440-36-0	
Arsenic	Not detected	0.002		mg/L	5	7440-38-2	
Barium	0.069	0.005		mg/L	5	7440-39-3	
Beryllium	Not detected	0.001		mg/L	5	7440-41-7	
Boron	0.56	0.04		mg/L	5	7440-42-8	
Cadmium	Not detected	0.0005		mg/L	5	7440-43-9	
Chromium	Not detected	0.005		mg/L	5	7440-47-3	
Cobalt	Not detected	0.005		mg/L	5	7440-48-4	
Iron	0.02	0.02		mg/L	5	7439-89-6	
Lead	Not detected	0.003		mg/L	5	7439-92-1	
Manganese	Not detected	0.005		mg/L	5	7439-96-5	
Molybdenum	0.005	0.005		mg/L	5	7439-98-7	
Nickel	Not detected	0.005		mg/L	5	7440-02-0	
Selenium	Not detected	0.005		mg/L	5	7782-49-2	
Silver	Not detected	0.0005		mg/L	5	7440-22-4	
Strontium	0.489	0.005		mg/L	5	7440-24-6	
Thallium	Not detected	0.002		mg/L	5	7440-28-0	
Titanium	Not detected	0.005		mg/L	5	7440-32-6	
Vanadium	Not detected	0.005		mg/L	5	7440-62-2	
Zinc	Not detected	0.005		mg/L	5	7440-66-6	

Method: E200.8, Run Date: 10/06/22 14:14, Analyst: CCM

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Calcium*	175	1.0		mg/L	5	7440-70-2	
Magnesium	24.0	0.50		mg/L	5	7439-95-4	
Potassium	10.8	0.50		mg/L	5	7440-09-7	
Sodium	21.6	0.50		mg/L	5	7440-23-5	

Method: E245.1, Run Date: 10/05/22 17:31, Analyst: CTV

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Mercury	Not detected	0.0002		mg/L	1	7439-97-6	

Lab Sample ID: S40860.15 (continued)
Sample Tag: MW-105

Organics - Volatiles

Method: SW5030C/8260C, Run Date: 10/10/22 19:48, Analyst: KAG

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Diisopropyl ether (DIPE)	Not detected	5		ug/L	1	108-20-3	

Volatile Organics, Method: SW5030C/8260C, Run Date: 10/05/22 09:01, Analyst: BML

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Acetone	Not detected	50		ug/L	1	67-64-1	
tert-Methyl butyl ether (MTBE)	Not detected	5		ug/L	1	1634-04-4	
Acrylonitrile	Not detected	2		ug/L	1	107-13-1	
2-Butanone (MEK)	Not detected	25		ug/L	1	78-93-3	
Dichlorodifluoromethane	Not detected	5		ug/L	1	75-71-8	
Chloromethane	Not detected	5		ug/L	1	74-87-3	
Vinyl chloride	Not detected	1		ug/L	1	75-01-4	
Bromomethane	Not detected	5		ug/L	1	74-83-9	
Chloroethane	Not detected	5		ug/L	1	75-00-3	
Trichlorofluoromethane	Not detected	1		ug/L	1	75-69-4	
1,1-Dichloroethene	Not detected	1		ug/L	1	75-35-4	
Methylene chloride	Not detected	5		ug/L	1	75-09-2	
trans-1,2-Dichloroethene	Not detected	1		ug/L	1	156-60-5	
1,1-Dichloroethane	Not detected	1		ug/L	1	75-34-3	
cis-1,2-Dichloroethene	Not detected	1		ug/L	1	156-59-2	
Chloroform	Not detected	1		ug/L	1	67-66-3	
1,1,1-Trichloroethane	Not detected	1		ug/L	1	71-55-6	
4-Methyl-2-pentanone (MIBK)	Not detected	50		ug/L	1	108-10-1	
Carbon tetrachloride	Not detected	1		ug/L	1	56-23-5	
Benzene	Not detected	1		ug/L	1	71-43-2	
1,2-Dichloroethane	Not detected	1		ug/L	1	107-06-2	
Trichloroethene	Not detected	1		ug/L	1	79-01-6	
1,2-Dichloropropane	Not detected	1		ug/L	1	78-87-5	
Bromodichloromethane	Not detected	1		ug/L	1	75-27-4	
Dibromomethane	Not detected	5		ug/L	1	74-95-3	
cis-1,3-Dichloropropene	Not detected	1		ug/L	1	10061-01-5	
Toluene	Not detected	1		ug/L	1	108-88-3	
trans-1,3-Dichloropropene	Not detected	1		ug/L	1	10061-02-6	
1,1,2-Trichloroethane	Not detected	1		ug/L	1	79-00-5	
Tetrachloroethene	Not detected	1		ug/L	1	127-18-4	
Dibromochloromethane	Not detected	5		ug/L	1	124-48-1	
1,2-Dibromoethane	Not detected	1		ug/L	1	106-93-4	
Chlorobenzene	Not detected	1		ug/L	1	108-90-7	
1,1,1,2-Tetrachloroethane	Not detected	1		ug/L	1	630-20-6	
Ethylbenzene	Not detected	1		ug/L	1	100-41-4	
p,m-Xylene*	Not detected	2		ug/L	1		
o-Xylene	Not detected	1		ug/L	1	95-47-6	
Styrene	Not detected	1		ug/L	1	100-42-5	
Isopropylbenzene	Not detected	5		ug/L	1	98-82-8	
Bromoform	Not detected	1		ug/L	1	75-25-2	
1,1,2,2-Tetrachloroethane	Not detected	1		ug/L	1	79-34-5	
1,2,3-Trichloropropane	Not detected	1		ug/L	1	96-18-4	
n-Propylbenzene	Not detected	1		ug/L	1	103-65-1	
Bromobenzene	Not detected	1		ug/L	1	108-86-1	
1,3,5-Trimethylbenzene	Not detected	1		ug/L	1	108-67-8	

Lab Sample ID: S40860.15 (continued)
Sample Tag: MW-105

Volatile Organics, Method: SW5030C/8260C, Run Date: 10/05/22 09:01, Analyst: BML (continued)

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
tert-Butylbenzene	Not detected	1		ug/L	1	98-06-6	
1,2,4-Trimethylbenzene	Not detected	1		ug/L	1	95-63-6	
sec-Butylbenzene	Not detected	1		ug/L	1	135-98-8	
p-Isopropyltoluene	Not detected	5		ug/L	1	99-87-6	
1,3-Dichlorobenzene	Not detected	1		ug/L	1	541-73-1	
1,4-Dichlorobenzene	Not detected	1		ug/L	1	106-46-7	
1,2-Dichlorobenzene	Not detected	1		ug/L	1	95-50-1	
1,2,3-Trimethylbenzene	Not detected	1		ug/L	1	526-73-8	
n-Butylbenzene	Not detected	1		ug/L	1	104-51-8	
1,2-Dibromo-3-chloropropane	Not detected	5		ug/L	1	96-12-8	
1,2,4-Trichlorobenzene	Not detected	5		ug/L	1	120-82-1	
1,2,3-Trichlorobenzene	Not detected	5		ug/L	1	87-61-6	
Naphthalene	Not detected	5		ug/L	1	91-20-3	
Acrolein	Not detected	1		ug/L	1	107-02-8	
2-Chlorotoluene	Not detected	1		ug/L	1	95-49-8	
4-Chlorotoluene	Not detected	1		ug/L	1	106-43-4	
1,3-Dichloropropane	Not detected	1		ug/L	1	142-28-9	
1,1-Dichloropropene	Not detected	1		ug/L	1	563-58-6	
2,2-Dichloropropane	Not detected	1		ug/L	1	594-20-7	
Hexachlorobutadiene	Not detected	1		ug/L	1	87-68-3	
1,1,2-Trichloro-1,2,2-trifluoroethane	Not detected	1		ug/L	1	76-13-1	

Other / Misc.

Method: , Run Date: 10/09/22 00:29, Analyst: TA

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Methanol*	Completed				1	67-56-1	O

O-Analysis performed by outside laboratory. See attached report.

Lab Sample ID: S40860.16
Sample Tag: Dup-02
Collected Date/Time: 09/28/2022 00:01
Matrix: Groundwater
COC Reference: 154471

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
3	40ml Glass	None	Yes	2.4	IR
3	40ml Glass	HCL	Yes	2.4	IR
1	125ml Plastic	HNO3	Yes	2.4	IR

Extraction / Prep.

Parameter	Result	Method	Run Date	Analyst	Flags
Mercury Digestion	Completed	E245.1	10/05/22 13:36	CTV	
pH check for VOCs*	<2	N/A	10/05/22 15:00	BML	
Metal Digestion	Completed	SW3015A	10/06/22 09:30	CCM	

Metals

Method: E200.8, Run Date: 10/06/22 12:45, Analyst: CCM

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Aluminum	0.178	0.010		mg/L	5	7429-90-5	
Antimony*	Not detected	0.005		mg/L	5	7440-36-0	
Arsenic	Not detected	0.002		mg/L	5	7440-38-2	
Barium	0.040	0.005		mg/L	5	7440-39-3	
Beryllium	Not detected	0.001		mg/L	5	7440-41-7	
Boron	0.07	0.04		mg/L	5	7440-42-8	
Cadmium	Not detected	0.0005		mg/L	5	7440-43-9	
Chromium	Not detected	0.005		mg/L	5	7440-47-3	
Cobalt	Not detected	0.005		mg/L	5	7440-48-4	
Iron	0.15	0.02		mg/L	5	7439-89-6	
Lead	Not detected	0.003		mg/L	5	7439-92-1	
Manganese	0.073	0.005		mg/L	5	7439-96-5	
Molybdenum	Not detected	0.005		mg/L	5	7439-98-7	
Nickel	Not detected	0.005		mg/L	5	7440-02-0	
Selenium	Not detected	0.005		mg/L	5	7782-49-2	
Silver	Not detected	0.0005		mg/L	5	7440-22-4	
Strontium	0.256	0.005		mg/L	5	7440-24-6	
Thallium	Not detected	0.002		mg/L	5	7440-28-0	
Titanium	Not detected	0.005		mg/L	5	7440-32-6	
Vanadium	Not detected	0.005		mg/L	5	7440-62-2	
Zinc	Not detected	0.005		mg/L	5	7440-66-6	

Method: E200.8, Run Date: 10/06/22 14:15, Analyst: CCM

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Calcium*	90.6	1.0		mg/L	5	7440-70-2	
Magnesium	15.0	0.50		mg/L	5	7439-95-4	
Potassium	3.45	0.50		mg/L	5	7440-09-7	
Sodium	85.3	0.50		mg/L	5	7440-23-5	

Method: E245.1, Run Date: 10/05/22 17:41, Analyst: CTV

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Mercury	Not detected	0.0002		mg/L	1	7439-97-6	

Lab Sample ID: S40860.16 (continued)
Sample Tag: Dup-02

Organics - Volatiles

Method: SW5030C/8260C, Run Date: 10/10/22 20:14, Analyst: KAG

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Diisopropyl ether (DIPE)	Not detected	5		ug/L	1	108-20-3	

Volatile Organics, Method: SW5030C/8260C, Run Date: 10/05/22 09:25, Analyst: BML

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Acetone	Not detected	50		ug/L	1	67-64-1	
tert-Methyl butyl ether (MTBE)	Not detected	5		ug/L	1	1634-04-4	
Acrylonitrile	Not detected	2		ug/L	1	107-13-1	
2-Butanone (MEK)	Not detected	25		ug/L	1	78-93-3	
Dichlorodifluoromethane	Not detected	5		ug/L	1	75-71-8	
Chloromethane	Not detected	5		ug/L	1	74-87-3	
Vinyl chloride	Not detected	1		ug/L	1	75-01-4	
Bromomethane	Not detected	5		ug/L	1	74-83-9	
Chloroethane	Not detected	5		ug/L	1	75-00-3	
Trichlorofluoromethane	Not detected	1		ug/L	1	75-69-4	
1,1-Dichloroethene	Not detected	1		ug/L	1	75-35-4	
Methylene chloride	Not detected	5		ug/L	1	75-09-2	
trans-1,2-Dichloroethene	Not detected	1		ug/L	1	156-60-5	
1,1-Dichloroethane	Not detected	1		ug/L	1	75-34-3	
cis-1,2-Dichloroethene	Not detected	1		ug/L	1	156-59-2	
Chloroform	Not detected	1		ug/L	1	67-66-3	
1,1,1-Trichloroethane	Not detected	1		ug/L	1	71-55-6	
4-Methyl-2-pentanone (MIBK)	Not detected	50		ug/L	1	108-10-1	
Carbon tetrachloride	Not detected	1		ug/L	1	56-23-5	
Benzene	Not detected	1		ug/L	1	71-43-2	
1,2-Dichloroethane	Not detected	1		ug/L	1	107-06-2	
Trichloroethene	Not detected	1		ug/L	1	79-01-6	
1,2-Dichloropropane	Not detected	1		ug/L	1	78-87-5	
Bromodichloromethane	Not detected	1		ug/L	1	75-27-4	
Dibromomethane	Not detected	5		ug/L	1	74-95-3	
cis-1,3-Dichloropropene	Not detected	1		ug/L	1	10061-01-5	
Toluene	Not detected	1		ug/L	1	108-88-3	
trans-1,3-Dichloropropene	Not detected	1		ug/L	1	10061-02-6	
1,1,2-Trichloroethane	Not detected	1		ug/L	1	79-00-5	
Tetrachloroethene	Not detected	1		ug/L	1	127-18-4	
Dibromochloromethane	Not detected	5		ug/L	1	124-48-1	
1,2-Dibromoethane	Not detected	1		ug/L	1	106-93-4	
Chlorobenzene	23	1		ug/L	1	108-90-7	
1,1,1,2-Tetrachloroethane	Not detected	1		ug/L	1	630-20-6	
Ethylbenzene	Not detected	1		ug/L	1	100-41-4	
p,m-Xylene*	Not detected	2		ug/L	1		
o-Xylene	Not detected	1		ug/L	1	95-47-6	
Styrene	Not detected	1		ug/L	1	100-42-5	
Isopropylbenzene	Not detected	5		ug/L	1	98-82-8	
Bromoform	Not detected	1		ug/L	1	75-25-2	
1,1,2,2-Tetrachloroethane	Not detected	1		ug/L	1	79-34-5	
1,2,3-Trichloropropane	Not detected	1		ug/L	1	96-18-4	
n-Propylbenzene	Not detected	1		ug/L	1	103-65-1	
Bromobenzene	Not detected	1		ug/L	1	108-86-1	
1,3,5-Trimethylbenzene	Not detected	1		ug/L	1	108-67-8	

Lab Sample ID: S40860.16 (continued)

Sample Tag: Dup-02

Volatile Organics, Method: SW5030C/8260C, Run Date: 10/05/22 09:25, Analyst: BML (continued)

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
tert-Butylbenzene	Not detected	1		ug/L	1	98-06-6	
1,2,4-Trimethylbenzene	Not detected	1		ug/L	1	95-63-6	
sec-Butylbenzene	Not detected	1		ug/L	1	135-98-8	
p-Isopropyltoluene	Not detected	5		ug/L	1	99-87-6	
1,3-Dichlorobenzene	Not detected	1		ug/L	1	541-73-1	
1,4-Dichlorobenzene	Not detected	1		ug/L	1	106-46-7	
1,2-Dichlorobenzene	Not detected	1		ug/L	1	95-50-1	
1,2,3-Trimethylbenzene	Not detected	1		ug/L	1	526-73-8	
n-Butylbenzene	Not detected	1		ug/L	1	104-51-8	
1,2-Dibromo-3-chloropropane	Not detected	5		ug/L	1	96-12-8	
1,2,4-Trichlorobenzene	Not detected	5		ug/L	1	120-82-1	
1,2,3-Trichlorobenzene	Not detected	5		ug/L	1	87-61-6	
Naphthalene	Not detected	5		ug/L	1	91-20-3	
Acrolein	Not detected	1		ug/L	1	107-02-8	
2-Chlorotoluene	Not detected	1		ug/L	1	95-49-8	
4-Chlorotoluene	Not detected	1		ug/L	1	106-43-4	
1,3-Dichloropropane	Not detected	1		ug/L	1	142-28-9	
1,1-Dichloropropene	Not detected	1		ug/L	1	563-58-6	
2,2-Dichloropropane	Not detected	1		ug/L	1	594-20-7	
Hexachlorobutadiene	Not detected	1		ug/L	1	87-68-3	
1,1,2-Trichloro-1,2,2-trifluoroethane	Not detected	1		ug/L	1	76-13-1	

Other / Misc.

Method: , Run Date: 10/09/22 00:50, Analyst: TA

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Methanol*	Completed				1	67-56-1	O

O-Analysis performed by outside laboratory. See attached report.

Lab Sample ID: S40860.17
Sample Tag: Trip Blank 2
Collected Date/Time: 09/28/2022 00:01
Matrix: Water
COC Reference: 154471

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
1	40ml Glass	HCL	Yes	2.4	IR

Extraction / Prep.

Parameter	Result	Method	Run Date	Analyst	Flags
pH check for VOCs*	<2	N/A	10/05/22 15:00	BML	

Organics - Volatiles

Method: SW5030C/8260C, Run Date: 10/10/22 13:55, Analyst: KAG

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Diisopropyl ether (DIPE)	Not detected	5		ug/L	1	108-20-3	

Volatile Organics, Method: SW5030C/8260C, Run Date: 10/05/22 02:00, Analyst: BML

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Acetone	Not detected	50		ug/L	1	67-64-1	
tert-Methyl butyl ether (MTBE)	Not detected	5		ug/L	1	1634-04-4	
Acrylonitrile	Not detected	2		ug/L	1	107-13-1	
2-Butanone (MEK)	Not detected	25		ug/L	1	78-93-3	
Dichlorodifluoromethane	Not detected	5		ug/L	1	75-71-8	
Chloromethane	Not detected	5		ug/L	1	74-87-3	
Vinyl chloride	Not detected	1		ug/L	1	75-01-4	
Bromomethane	Not detected	5		ug/L	1	74-83-9	
Chloroethane	Not detected	5		ug/L	1	75-00-3	
Trichlorofluoromethane	Not detected	1		ug/L	1	75-69-4	
1,1-Dichloroethene	Not detected	1		ug/L	1	75-35-4	
Methylene chloride	Not detected	5		ug/L	1	75-09-2	
trans-1,2-Dichloroethene	Not detected	1		ug/L	1	156-60-5	
1,1-Dichloroethane	Not detected	1		ug/L	1	75-34-3	
cis-1,2-Dichloroethene	Not detected	1		ug/L	1	156-59-2	
Chloroform	Not detected	1		ug/L	1	67-66-3	
1,1,1-Trichloroethane	Not detected	1		ug/L	1	71-55-6	
4-Methyl-2-pentanone (MIBK)	Not detected	50		ug/L	1	108-10-1	
Carbon tetrachloride	Not detected	1		ug/L	1	56-23-5	
Benzene	Not detected	1		ug/L	1	71-43-2	
1,2-Dichloroethane	Not detected	1		ug/L	1	107-06-2	
Trichloroethene	Not detected	1		ug/L	1	79-01-6	
1,2-Dichloropropane	Not detected	1		ug/L	1	78-87-5	
Bromodichloromethane	Not detected	1		ug/L	1	75-27-4	
Dibromomethane	Not detected	5		ug/L	1	74-95-3	
cis-1,3-Dichloropropene	Not detected	1		ug/L	1	10061-01-5	
Toluene	Not detected	1		ug/L	1	108-88-3	
trans-1,3-Dichloropropene	Not detected	1		ug/L	1	10061-02-6	
1,1,2-Trichloroethane	Not detected	1		ug/L	1	79-00-5	
Tetrachloroethene	Not detected	1		ug/L	1	127-18-4	
Dibromochloromethane	Not detected	5		ug/L	1	124-48-1	
1,2-Dibromoethane	Not detected	1		ug/L	1	106-93-4	
Chlorobenzene	Not detected	1		ug/L	1	108-90-7	

Lab Sample ID: S40860.17 (continued)

Sample Tag: Trip Blank 2

Volatile Organics, Method: SW5030C/8260C, Run Date: 10/05/22 02:00, Analyst: BML (continued)

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
1,1,1,2-Tetrachloroethane	Not detected	1		ug/L	1	630-20-6	
Ethylbenzene	Not detected	1		ug/L	1	100-41-4	
p,m-Xylene*	Not detected	2		ug/L	1		
o-Xylene	Not detected	1		ug/L	1	95-47-6	
Styrene	Not detected	1		ug/L	1	100-42-5	
Isopropylbenzene	Not detected	5		ug/L	1	98-82-8	
Bromoform	Not detected	1		ug/L	1	75-25-2	
1,1,2,2-Tetrachloroethane	Not detected	1		ug/L	1	79-34-5	
1,2,3-Trichloropropane	Not detected	1		ug/L	1	96-18-4	
n-Propylbenzene	Not detected	1		ug/L	1	103-65-1	
Bromobenzene	Not detected	1		ug/L	1	108-86-1	
1,3,5-Trimethylbenzene	Not detected	1		ug/L	1	108-67-8	
tert-Butylbenzene	Not detected	1		ug/L	1	98-06-6	
1,2,4-Trimethylbenzene	Not detected	1		ug/L	1	95-63-6	
sec-Butylbenzene	Not detected	1		ug/L	1	135-98-8	
p-Isopropyltoluene	Not detected	5		ug/L	1	99-87-6	
1,3-Dichlorobenzene	Not detected	1		ug/L	1	541-73-1	
1,4-Dichlorobenzene	Not detected	1		ug/L	1	106-46-7	
1,2-Dichlorobenzene	Not detected	1		ug/L	1	95-50-1	
1,2,3-Trimethylbenzene	Not detected	1		ug/L	1	526-73-8	
n-Butylbenzene	Not detected	1		ug/L	1	104-51-8	
1,2-Dibromo-3-chloropropane	Not detected	5		ug/L	1	96-12-8	
1,2,4-Trichlorobenzene	Not detected	5		ug/L	1	120-82-1	
1,2,3-Trichlorobenzene	Not detected	5		ug/L	1	87-61-6	
Naphthalene	Not detected	5		ug/L	1	91-20-3	
Acrolein	Not detected	1		ug/L	1	107-02-8	
2-Chlorotoluene	Not detected	1		ug/L	1	95-49-8	
4-Chlorotoluene	Not detected	1		ug/L	1	106-43-4	
1,3-Dichloropropane	Not detected	1		ug/L	1	142-28-9	
1,1-Dichloropropene	Not detected	1		ug/L	1	563-58-6	
2,2-Dichloropropane	Not detected	1		ug/L	1	594-20-7	
Hexachlorobutadiene	Not detected	1		ug/L	1	87-68-3	
1,1,2-Trichloro-1,2,2-trifluoroethane	Not detected	1		ug/L	1	76-13-1	

Quality Control Report

Report ID: S40860.01(02)+QC01
Generated on 10/11/2022

Report to

Attention: Kelly Cratsenburg
TRC
1540 Eisenhower Place
Ann Arbor, MI 48108

Phone: 734-585-7829 C: 734-412-5424 FAX:

Report Produced by

Merit Laboratories
2680 East Lansing Drive
East Lansing, MI 48823

Phone: (517) 332-0167 FAX: (517) 332-6333

Report Summary

Lab Sample ID(s): S40860.01-S40860.17
Project: OA - Eastern RCRA Assessment / 495430
Submitted Date/Time: 09/29/2022 11:00
Sampled by: H. Schnaidt / J. Jasso
P.O. #: 189445

QC Report Sections

Report Flag Descriptions

*: QC result is outside of indicated control limits
W: Surrogate result not applicable due to sample dilution

I certify that this data package is in compliance with the terms and conditions of the program, and project, and contractual requirements both technically and for completeness. Release of the data contained in this hardcopy data package and its computer-readable data submitted has been authorized by the Quality Assurance Manager and his/her designee, as verified by the following signature.

Barbara Ball
Quality Assurance Manager

Lab Sample ID: S40860.01
Sample Tag: MW-120
Collected Date/Time: 09/27/2022 09:30
Matrix: Groundwater
COC Reference: 154527

Analysis	Method	Run Date/Time	Batch ID	Prep ID	Surr	QC Types
Metals						
Aluminum	E200.8	10/06/22 11:22	MT4-22-1006A	MTD-100622-1	No	BLK/LCS/MS/MSD
Antimony	E200.8	10/06/22 11:22	MT4-22-1006A	MTD-100622-1	No	BLK/LCS/MS/MSD
Arsenic	E200.8	10/06/22 11:22	MT4-22-1006A	MTD-100622-1	No	BLK/LCS/MS/MSD
Barium	E200.8	10/06/22 11:22	MT4-22-1006A	MTD-100622-1	No	BLK/LCS/MS/MSD
Beryllium	E200.8	10/06/22 11:22	MT4-22-1006A	MTD-100622-1	No	BLK/LCS/MS/MSD
Boron	E200.8	10/06/22 11:22	MT4-22-1006A	MTD-100622-1	No	BLK/LCS/MS/MSD
Cadmium	E200.8	10/06/22 11:22	MT4-22-1006A	MTD-100622-1	No	BLK/LCS/MS/MSD
Calcium	E200.8	10/06/22 13:49	MT4-22-1006B	MTD-100622-1	No	BLK/LCS/MS/MSD
Chromium	E200.8	10/06/22 11:22	MT4-22-1006A	MTD-100622-1	No	BLK/LCS/MS/MSD
Cobalt	E200.8	10/06/22 11:22	MT4-22-1006A	MTD-100622-1	No	BLK/LCS/MS/MSD
Iron	E200.8	10/06/22 11:22	MT4-22-1006A	MTD-100622-1	No	BLK/LCS/MS/MSD
Lead	E200.8	10/06/22 11:22	MT4-22-1006A	MTD-100622-1	No	BLK/LCS/MS/MSD
Magnesium	E200.8	10/06/22 13:49	MT4-22-1006B	MTD-100622-1	No	BLK/LCS/MS/MSD
Manganese	E200.8	10/06/22 11:22	MT4-22-1006A	MTD-100622-1	No	BLK/LCS/MS/MSD
Mercury	E245.1	10/05/22 16:30	HG-22-1005A	HGD-100522-3	No	BLK/LCS/MS/MSD
Molybdenum	E200.8	10/06/22 11:22	MT4-22-1006A	MTD-100622-1	No	BLK/LCS/MS/MSD
Nickel	E200.8	10/06/22 11:22	MT4-22-1006A	MTD-100622-1	No	BLK/LCS/MS/MSD
Potassium	E200.8	10/06/22 13:49	MT4-22-1006B	MTD-100622-1	No	BLK/LCS/MS/MSD
Selenium	E200.8	10/06/22 11:22	MT4-22-1006A	MTD-100622-1	No	BLK/LCS/MS/MSD
Silver	E200.8	10/06/22 11:22	MT4-22-1006A	MTD-100622-1	No	BLK/LCS/MS/MSD
Sodium	E200.8	10/06/22 13:49	MT4-22-1006B	MTD-100622-1	No	BLK/LCS/MS/MSD
Strontium	E200.8	10/06/22 11:22	MT4-22-1006A	MTD-100622-1	No	BLK/LCS/MS/MSD
Thallium	E200.8	10/06/22 11:22	MT4-22-1006A	MTD-100622-1	No	BLK/LCS/MS/MSD
Titanium	E200.8	10/06/22 11:22	MT4-22-1006A	MTD-100622-1	No	BLK/LCS/MS/MSD
Vanadium	E200.8	10/06/22 11:22	MT4-22-1006A	MTD-100622-1	No	BLK/LCS/MS/MSD
Zinc	E200.8	10/06/22 11:22	MT4-22-1006A	MTD-100622-1	No	BLK/LCS/MS/MSD
Organics - Volatiles						
Diisopropyl ether (DIPE)	SW5030C/8260C	10/10/22 14:20	221010A3	VO221010W1	Yes	BLK/LCS/LCSD
Volatile Organics	SW5030C/8260C	10/05/22 03:57	221004A7	VF221004W1	Yes	BLK/LCS/LCSD/MS/MS

Lab Sample ID: S40860.02
Sample Tag: MW-119
Collected Date/Time: 09/27/2022 10:13
Matrix: Groundwater
COC Reference: 154527

Analysis	Method	Run Date/Time	Batch ID	Prep ID	Surr	QC Types
Metals						
Aluminum	E200.8	10/06/22 11:30	MT4-22-1006A	MTD-100622-1	No	BLK/LCS/MS/MSD
Antimony	E200.8	10/06/22 11:30	MT4-22-1006A	MTD-100622-1	No	BLK/LCS/MS/MSD
Arsenic	E200.8	10/06/22 11:30	MT4-22-1006A	MTD-100622-1	No	BLK/LCS/MS/MSD
Barium	E200.8	10/06/22 11:30	MT4-22-1006A	MTD-100622-1	No	BLK/LCS/MS/MSD
Beryllium	E200.8	10/06/22 11:30	MT4-22-1006A	MTD-100622-1	No	BLK/LCS/MS/MSD
Boron	E200.8	10/06/22 11:30	MT4-22-1006A	MTD-100622-1	No	BLK/LCS/MS/MSD
Cadmium	E200.8	10/06/22 11:30	MT4-22-1006A	MTD-100622-1	No	BLK/LCS/MS/MSD
Calcium	E200.8	10/06/22 13:51	MT4-22-1006B	MTD-100622-1	No	BLK/LCS/MS/MSD
Chromium	E200.8	10/06/22 11:30	MT4-22-1006A	MTD-100622-1	No	BLK/LCS/MS/MSD
Cobalt	E200.8	10/06/22 11:30	MT4-22-1006A	MTD-100622-1	No	BLK/LCS/MS/MSD
Iron	E200.8	10/06/22 11:30	MT4-22-1006A	MTD-100622-1	No	BLK/LCS/MS/MSD
Lead	E200.8	10/06/22 11:30	MT4-22-1006A	MTD-100622-1	No	BLK/LCS/MS/MSD
Magnesium	E200.8	10/06/22 13:51	MT4-22-1006B	MTD-100622-1	No	BLK/LCS/MS/MSD
Manganese	E200.8	10/06/22 11:30	MT4-22-1006A	MTD-100622-1	No	BLK/LCS/MS/MSD
Mercury	E245.1	10/05/22 16:34	HG-22-1005A	HGD-100522-3	No	BLK/LCS/MS/MSD
Molybdenum	E200.8	10/06/22 11:30	MT4-22-1006A	MTD-100622-1	No	BLK/LCS/MS/MSD
Nickel	E200.8	10/06/22 11:30	MT4-22-1006A	MTD-100622-1	No	BLK/LCS/MS/MSD
Potassium	E200.8	10/06/22 13:51	MT4-22-1006B	MTD-100622-1	No	BLK/LCS/MS/MSD
Selenium	E200.8	10/06/22 11:30	MT4-22-1006A	MTD-100622-1	No	BLK/LCS/MS/MSD
Silver	E200.8	10/06/22 11:30	MT4-22-1006A	MTD-100622-1	No	BLK/LCS/MS/MSD
Sodium	E200.8	10/06/22 13:51	MT4-22-1006B	MTD-100622-1	No	BLK/LCS/MS/MSD
Strontium	E200.8	10/06/22 11:30	MT4-22-1006A	MTD-100622-1	No	BLK/LCS/MS/MSD
Thallium	E200.8	10/06/22 11:30	MT4-22-1006A	MTD-100622-1	No	BLK/LCS/MS/MSD
Titanium	E200.8	10/06/22 11:30	MT4-22-1006A	MTD-100622-1	No	BLK/LCS/MS/MSD
Vanadium	E200.8	10/06/22 11:30	MT4-22-1006A	MTD-100622-1	No	BLK/LCS/MS/MSD
Zinc	E200.8	10/06/22 11:30	MT4-22-1006A	MTD-100622-1	No	BLK/LCS/MS/MSD
Organics - Volatiles						
Diisopropyl ether (DIPE)	SW5030C/8260C	10/10/22 14:45	221010A3	VO221010W1	Yes	BLK/LCS/LCSD
Volatile Organics	SW5030C/8260C	10/05/22 04:20	221004A7	VF221004W1	Yes	BLK/LCS/LCSD/MS/MS

Lab Sample ID: S40860.03
Sample Tag: MW-113
Collected Date/Time: 09/27/2022 11:27
Matrix: Groundwater
COC Reference: 154527

Analysis	Method	Run Date/Time	Batch ID	Prep ID	Surr	QC Types
Metals						
Aluminum	E200.8	10/06/22 11:35	MT4-22-1006A	MTD-100622-1	No	BLK/LCS/MS/MSD
Antimony	E200.8	10/06/22 11:35	MT4-22-1006A	MTD-100622-1	No	BLK/LCS/MS/MSD
Arsenic	E200.8	10/06/22 11:35	MT4-22-1006A	MTD-100622-1	No	BLK/LCS/MS/MSD
Barium	E200.8	10/06/22 11:35	MT4-22-1006A	MTD-100622-1	No	BLK/LCS/MS/MSD
Beryllium	E200.8	10/06/22 11:35	MT4-22-1006A	MTD-100622-1	No	BLK/LCS/MS/MSD
Boron	E200.8	10/06/22 11:35	MT4-22-1006A	MTD-100622-1	No	BLK/LCS/MS/MSD
Cadmium	E200.8	10/06/22 11:35	MT4-22-1006A	MTD-100622-1	No	BLK/LCS/MS/MSD
Calcium	E200.8	10/06/22 13:53	MT4-22-1006B	MTD-100622-1	No	BLK/LCS/MS/MSD
Chromium	E200.8	10/06/22 11:35	MT4-22-1006A	MTD-100622-1	No	BLK/LCS/MS/MSD
Cobalt	E200.8	10/06/22 11:35	MT4-22-1006A	MTD-100622-1	No	BLK/LCS/MS/MSD
Iron	E200.8	10/06/22 11:35	MT4-22-1006A	MTD-100622-1	No	BLK/LCS/MS/MSD
Lead	E200.8	10/06/22 11:35	MT4-22-1006A	MTD-100622-1	No	BLK/LCS/MS/MSD
Magnesium	E200.8	10/06/22 13:53	MT4-22-1006B	MTD-100622-1	No	BLK/LCS/MS/MSD
Manganese	E200.8	10/06/22 11:35	MT4-22-1006A	MTD-100622-1	No	BLK/LCS/MS/MSD
Mercury	E245.1	10/05/22 16:37	HG-22-1005A	HGD-100522-3	No	BLK/LCS/MS/MSD
Molybdenum	E200.8	10/06/22 11:35	MT4-22-1006A	MTD-100622-1	No	BLK/LCS/MS/MSD
Nickel	E200.8	10/06/22 11:35	MT4-22-1006A	MTD-100622-1	No	BLK/LCS/MS/MSD
Potassium	E200.8	10/06/22 13:53	MT4-22-1006B	MTD-100622-1	No	BLK/LCS/MS/MSD
Selenium	E200.8	10/06/22 11:35	MT4-22-1006A	MTD-100622-1	No	BLK/LCS/MS/MSD
Silver	E200.8	10/06/22 11:35	MT4-22-1006A	MTD-100622-1	No	BLK/LCS/MS/MSD
Sodium	E200.8	10/06/22 13:53	MT4-22-1006B	MTD-100622-1	No	BLK/LCS/MS/MSD
Strontium	E200.8	10/06/22 11:35	MT4-22-1006A	MTD-100622-1	No	BLK/LCS/MS/MSD
Thallium	E200.8	10/06/22 11:35	MT4-22-1006A	MTD-100622-1	No	BLK/LCS/MS/MSD
Titanium	E200.8	10/06/22 11:35	MT4-22-1006A	MTD-100622-1	No	BLK/LCS/MS/MSD
Vanadium	E200.8	10/06/22 11:35	MT4-22-1006A	MTD-100622-1	No	BLK/LCS/MS/MSD
Zinc	E200.8	10/06/22 11:35	MT4-22-1006A	MTD-100622-1	No	BLK/LCS/MS/MSD
Organics - Volatiles						
Diisopropyl ether (DIPE)	SW5030C/8260C	10/10/22 15:11	221010A3	VO221010W1	Yes	BLK/LCS/LCSD
Volatile Organics	SW5030C/8260C	10/05/22 04:44	221004A7	VF221004W1	Yes	BLK/LCS/LCSD/MS/MS

Lab Sample ID: S40860.04
Sample Tag: MW-112
Collected Date/Time: 09/27/2022 12:37
Matrix: Groundwater
COC Reference: 154527

Analysis	Method	Run Date/Time	Batch ID	Prep ID	Surr	QC Types
Metals						
Aluminum	E200.8	10/06/22 11:38	MT4-22-1006A	MTD-100622-1	No	BLK/LCS/MS/MSD
Antimony	E200.8	10/06/22 11:38	MT4-22-1006A	MTD-100622-1	No	BLK/LCS/MS/MSD
Arsenic	E200.8	10/06/22 11:38	MT4-22-1006A	MTD-100622-1	No	BLK/LCS/MS/MSD
Barium	E200.8	10/06/22 11:38	MT4-22-1006A	MTD-100622-1	No	BLK/LCS/MS/MSD
Beryllium	E200.8	10/06/22 11:38	MT4-22-1006A	MTD-100622-1	No	BLK/LCS/MS/MSD
Boron	E200.8	10/06/22 11:38	MT4-22-1006A	MTD-100622-1	No	BLK/LCS/MS/MSD
Cadmium	E200.8	10/06/22 11:38	MT4-22-1006A	MTD-100622-1	No	BLK/LCS/MS/MSD
Calcium	E200.8	10/06/22 13:55	MT4-22-1006B	MTD-100622-1	No	BLK/LCS/MS/MSD
Chromium	E200.8	10/06/22 11:38	MT4-22-1006A	MTD-100622-1	No	BLK/LCS/MS/MSD
Cobalt	E200.8	10/06/22 11:38	MT4-22-1006A	MTD-100622-1	No	BLK/LCS/MS/MSD
Iron	E200.8	10/06/22 11:38	MT4-22-1006A	MTD-100622-1	No	BLK/LCS/MS/MSD
Lead	E200.8	10/06/22 11:38	MT4-22-1006A	MTD-100622-1	No	BLK/LCS/MS/MSD
Magnesium	E200.8	10/06/22 13:55	MT4-22-1006B	MTD-100622-1	No	BLK/LCS/MS/MSD
Manganese	E200.8	10/06/22 11:38	MT4-22-1006A	MTD-100622-1	No	BLK/LCS/MS/MSD
Mercury	E245.1	10/05/22 16:40	HG-22-1005A	HGD-100522-3	No	BLK/LCS/MS/MSD
Molybdenum	E200.8	10/06/22 11:38	MT4-22-1006A	MTD-100622-1	No	BLK/LCS/MS/MSD
Nickel	E200.8	10/06/22 11:38	MT4-22-1006A	MTD-100622-1	No	BLK/LCS/MS/MSD
Potassium	E200.8	10/06/22 13:55	MT4-22-1006B	MTD-100622-1	No	BLK/LCS/MS/MSD
Selenium	E200.8	10/06/22 11:38	MT4-22-1006A	MTD-100622-1	No	BLK/LCS/MS/MSD
Silver	E200.8	10/06/22 11:38	MT4-22-1006A	MTD-100622-1	No	BLK/LCS/MS/MSD
Sodium	E200.8	10/06/22 13:55	MT4-22-1006B	MTD-100622-1	No	BLK/LCS/MS/MSD
Strontium	E200.8	10/06/22 11:38	MT4-22-1006A	MTD-100622-1	No	BLK/LCS/MS/MSD
Thallium	E200.8	10/06/22 11:38	MT4-22-1006A	MTD-100622-1	No	BLK/LCS/MS/MSD
Titanium	E200.8	10/06/22 11:38	MT4-22-1006A	MTD-100622-1	No	BLK/LCS/MS/MSD
Vanadium	E200.8	10/06/22 11:38	MT4-22-1006A	MTD-100622-1	No	BLK/LCS/MS/MSD
Zinc	E200.8	10/06/22 11:38	MT4-22-1006A	MTD-100622-1	No	BLK/LCS/MS/MSD
Organics - Volatiles						
Diisopropyl ether (DIPE)	SW5030C/8260C	10/10/22 15:36	221010A3	VO221010W1	Yes	BLK/LCS/LCSD
Volatile Organics	SW5030C/8260C	10/05/22 05:07	221004A7	VF221004W1	Yes	BLK/LCS/LCSD/MS/MS

Lab Sample ID: S40860.05
Sample Tag: MW-111
Collected Date/Time: 09/27/2022 13:17
Matrix: Groundwater
COC Reference: 154527

Analysis	Method	Run Date/Time	Batch ID	Prep ID	Surr	QC Types
Metals						
Aluminum	E200.8	10/06/22 11:42	MT4-22-1006A	MTD-100622-1	No	BLK/LCS/MS/MSD
Antimony	E200.8	10/06/22 11:42	MT4-22-1006A	MTD-100622-1	No	BLK/LCS/MS/MSD
Arsenic	E200.8	10/06/22 11:42	MT4-22-1006A	MTD-100622-1	No	BLK/LCS/MS/MSD
Barium	E200.8	10/06/22 11:42	MT4-22-1006A	MTD-100622-1	No	BLK/LCS/MS/MSD
Beryllium	E200.8	10/06/22 11:42	MT4-22-1006A	MTD-100622-1	No	BLK/LCS/MS/MSD
Boron	E200.8	10/06/22 11:42	MT4-22-1006A	MTD-100622-1	No	BLK/LCS/MS/MSD
Cadmium	E200.8	10/06/22 11:42	MT4-22-1006A	MTD-100622-1	No	BLK/LCS/MS/MSD
Calcium	E200.8	10/06/22 13:56	MT4-22-1006B	MTD-100622-1	No	BLK/LCS/MS/MSD
Chromium	E200.8	10/06/22 11:42	MT4-22-1006A	MTD-100622-1	No	BLK/LCS/MS/MSD
Cobalt	E200.8	10/06/22 11:42	MT4-22-1006A	MTD-100622-1	No	BLK/LCS/MS/MSD
Iron	E200.8	10/06/22 11:42	MT4-22-1006A	MTD-100622-1	No	BLK/LCS/MS/MSD
Lead	E200.8	10/06/22 11:42	MT4-22-1006A	MTD-100622-1	No	BLK/LCS/MS/MSD
Magnesium	E200.8	10/06/22 13:56	MT4-22-1006B	MTD-100622-1	No	BLK/LCS/MS/MSD
Manganese	E200.8	10/06/22 11:42	MT4-22-1006A	MTD-100622-1	No	BLK/LCS/MS/MSD
Mercury	E245.1	10/05/22 16:44	HG-22-1005A	HGD-100522-3	No	BLK/LCS/MS/MSD
Molybdenum	E200.8	10/06/22 11:42	MT4-22-1006A	MTD-100622-1	No	BLK/LCS/MS/MSD
Nickel	E200.8	10/06/22 11:42	MT4-22-1006A	MTD-100622-1	No	BLK/LCS/MS/MSD
Potassium	E200.8	10/06/22 13:56	MT4-22-1006B	MTD-100622-1	No	BLK/LCS/MS/MSD
Selenium	E200.8	10/06/22 11:42	MT4-22-1006A	MTD-100622-1	No	BLK/LCS/MS/MSD
Silver	E200.8	10/06/22 11:42	MT4-22-1006A	MTD-100622-1	No	BLK/LCS/MS/MSD
Sodium	E200.8	10/06/22 13:56	MT4-22-1006B	MTD-100622-1	No	BLK/LCS/MS/MSD
Strontium	E200.8	10/06/22 11:42	MT4-22-1006A	MTD-100622-1	No	BLK/LCS/MS/MSD
Thallium	E200.8	10/06/22 11:42	MT4-22-1006A	MTD-100622-1	No	BLK/LCS/MS/MSD
Titanium	E200.8	10/06/22 11:42	MT4-22-1006A	MTD-100622-1	No	BLK/LCS/MS/MSD
Vanadium	E200.8	10/06/22 11:42	MT4-22-1006A	MTD-100622-1	No	BLK/LCS/MS/MSD
Zinc	E200.8	10/06/22 11:42	MT4-22-1006A	MTD-100622-1	No	BLK/LCS/MS/MSD
Organics - Volatiles						
Diisopropyl ether (DIPE)	SW5030C/8260C	10/10/22 16:01	221010A3	VO221010W1	Yes	BLK/LCS/LCSD
Volatile Organics	SW5030C/8260C	10/05/22 05:31	221004A7	VF221004W1	Yes	BLK/LCS/LCSD/MS/MS

Lab Sample ID: S40860.06
Sample Tag: MW-110
Collected Date/Time: 09/27/2022 13:47
Matrix: Groundwater
COC Reference: 154527

Analysis	Method	Run Date/Time	Batch ID	Prep ID	Surr	QC Types
Metals						
Aluminum	E200.8	10/06/22 11:46	MT4-22-1006A	MTD-100622-1	No	BLK/LCS/MS/MSD
Antimony	E200.8	10/06/22 11:46	MT4-22-1006A	MTD-100622-1	No	BLK/LCS/MS/MSD
Arsenic	E200.8	10/06/22 11:46	MT4-22-1006A	MTD-100622-1	No	BLK/LCS/MS/MSD
Barium	E200.8	10/06/22 11:46	MT4-22-1006A	MTD-100622-1	No	BLK/LCS/MS/MSD
Beryllium	E200.8	10/06/22 11:46	MT4-22-1006A	MTD-100622-1	No	BLK/LCS/MS/MSD
Boron	E200.8	10/06/22 11:46	MT4-22-1006A	MTD-100622-1	No	BLK/LCS/MS/MSD
Cadmium	E200.8	10/06/22 11:46	MT4-22-1006A	MTD-100622-1	No	BLK/LCS/MS/MSD
Calcium	E200.8	10/06/22 13:58	MT4-22-1006B	MTD-100622-1	No	BLK/LCS/MS/MSD
Chromium	E200.8	10/06/22 11:46	MT4-22-1006A	MTD-100622-1	No	BLK/LCS/MS/MSD
Cobalt	E200.8	10/06/22 11:46	MT4-22-1006A	MTD-100622-1	No	BLK/LCS/MS/MSD
Iron	E200.8	10/06/22 11:46	MT4-22-1006A	MTD-100622-1	No	BLK/LCS/MS/MSD
Lead	E200.8	10/06/22 11:46	MT4-22-1006A	MTD-100622-1	No	BLK/LCS/MS/MSD
Magnesium	E200.8	10/06/22 13:58	MT4-22-1006B	MTD-100622-1	No	BLK/LCS/MS/MSD
Manganese	E200.8	10/06/22 11:46	MT4-22-1006A	MTD-100622-1	No	BLK/LCS/MS/MSD
Mercury	E245.1	10/05/22 17:00	HG-22-1005A	HGD-100522-3	No	BLK/LCS/MS/MSD
Molybdenum	E200.8	10/06/22 11:46	MT4-22-1006A	MTD-100622-1	No	BLK/LCS/MS/MSD
Nickel	E200.8	10/06/22 11:46	MT4-22-1006A	MTD-100622-1	No	BLK/LCS/MS/MSD
Potassium	E200.8	10/06/22 13:58	MT4-22-1006B	MTD-100622-1	No	BLK/LCS/MS/MSD
Selenium	E200.8	10/06/22 11:46	MT4-22-1006A	MTD-100622-1	No	BLK/LCS/MS/MSD
Silver	E200.8	10/06/22 11:46	MT4-22-1006A	MTD-100622-1	No	BLK/LCS/MS/MSD
Sodium	E200.8	10/06/22 13:58	MT4-22-1006B	MTD-100622-1	No	BLK/LCS/MS/MSD
Strontium	E200.8	10/06/22 11:46	MT4-22-1006A	MTD-100622-1	No	BLK/LCS/MS/MSD
Thallium	E200.8	10/06/22 11:46	MT4-22-1006A	MTD-100622-1	No	BLK/LCS/MS/MSD
Titanium	E200.8	10/06/22 11:46	MT4-22-1006A	MTD-100622-1	No	BLK/LCS/MS/MSD
Vanadium	E200.8	10/06/22 11:46	MT4-22-1006A	MTD-100622-1	No	BLK/LCS/MS/MSD
Zinc	E200.8	10/06/22 11:46	MT4-22-1006A	MTD-100622-1	No	BLK/LCS/MS/MSD
Organics - Volatiles						
Diisopropyl ether (DIPE)	SW5030C/8260C	10/10/22 16:27	221010A3	VO221010W1	Yes	BLK/LCS/LCSD
Volatile Organics	SW5030C/8260C	10/05/22 05:54	221004A7	VF221004W1	Yes	BLK/LCS/LCSD/MS/MS

Lab Sample ID: S40860.07
Sample Tag: Dup-01
Collected Date/Time: 09/27/2022 00:01
Matrix: Groundwater
COC Reference: 154527

Analysis	Method	Run Date/Time	Batch ID	Prep ID	Surr	QC Types
Metals						
Aluminum	E200.8	10/06/22 11:52	MT4-22-1006A	MTD-100622-1	No	BLK/LCS/MS/MSD
Antimony	E200.8	10/06/22 11:52	MT4-22-1006A	MTD-100622-1	No	BLK/LCS/MS/MSD
Arsenic	E200.8	10/06/22 11:52	MT4-22-1006A	MTD-100622-1	No	BLK/LCS/MS/MSD
Barium	E200.8	10/06/22 11:52	MT4-22-1006A	MTD-100622-1	No	BLK/LCS/MS/MSD
Beryllium	E200.8	10/06/22 11:52	MT4-22-1006A	MTD-100622-1	No	BLK/LCS/MS/MSD
Boron	E200.8	10/06/22 11:52	MT4-22-1006A	MTD-100622-1	No	BLK/LCS/MS/MSD
Cadmium	E200.8	10/06/22 11:52	MT4-22-1006A	MTD-100622-1	No	BLK/LCS/MS/MSD
Calcium	E200.8	10/06/22 14:00	MT4-22-1006B	MTD-100622-1	No	BLK/LCS/MS/MSD
Chromium	E200.8	10/06/22 11:52	MT4-22-1006A	MTD-100622-1	No	BLK/LCS/MS/MSD
Cobalt	E200.8	10/06/22 11:52	MT4-22-1006A	MTD-100622-1	No	BLK/LCS/MS/MSD
Iron	E200.8	10/06/22 11:52	MT4-22-1006A	MTD-100622-1	No	BLK/LCS/MS/MSD
Lead	E200.8	10/06/22 11:52	MT4-22-1006A	MTD-100622-1	No	BLK/LCS/MS/MSD
Magnesium	E200.8	10/06/22 14:00	MT4-22-1006B	MTD-100622-1	No	BLK/LCS/MS/MSD
Manganese	E200.8	10/06/22 11:52	MT4-22-1006A	MTD-100622-1	No	BLK/LCS/MS/MSD
Mercury	E245.1	10/05/22 17:03	HG-22-1005A	HGD-100522-3	No	BLK/LCS/MS/MSD
Molybdenum	E200.8	10/06/22 11:52	MT4-22-1006A	MTD-100622-1	No	BLK/LCS/MS/MSD
Nickel	E200.8	10/06/22 11:52	MT4-22-1006A	MTD-100622-1	No	BLK/LCS/MS/MSD
Potassium	E200.8	10/06/22 14:00	MT4-22-1006B	MTD-100622-1	No	BLK/LCS/MS/MSD
Selenium	E200.8	10/06/22 11:52	MT4-22-1006A	MTD-100622-1	No	BLK/LCS/MS/MSD
Silver	E200.8	10/06/22 11:52	MT4-22-1006A	MTD-100622-1	No	BLK/LCS/MS/MSD
Sodium	E200.8	10/06/22 14:00	MT4-22-1006B	MTD-100622-1	No	BLK/LCS/MS/MSD
Strontium	E200.8	10/06/22 11:52	MT4-22-1006A	MTD-100622-1	No	BLK/LCS/MS/MSD
Thallium	E200.8	10/06/22 11:52	MT4-22-1006A	MTD-100622-1	No	BLK/LCS/MS/MSD
Titanium	E200.8	10/06/22 11:52	MT4-22-1006A	MTD-100622-1	No	BLK/LCS/MS/MSD
Vanadium	E200.8	10/06/22 11:52	MT4-22-1006A	MTD-100622-1	No	BLK/LCS/MS/MSD
Zinc	E200.8	10/06/22 11:52	MT4-22-1006A	MTD-100622-1	No	BLK/LCS/MS/MSD
Organics - Volatiles						
Diisopropyl ether (DIPE)	SW5030C/8260C	10/10/22 16:52	221010A3	VO221010W1	Yes	BLK/LCS/LCSD
Volatile Organics	SW5030C/8260C	10/05/22 06:17	221004A7	VF221004W1	Yes	BLK/LCS/LCSD/MS/MS

Lab Sample ID: S40860.08

Sample Tag: Trip Blank 1

Collected Date/Time: 09/27/2022 00:01

Matrix: Water

COC Reference: 154527

Analysis	Method	Run Date/Time	Batch ID	Prep ID	Surr	QC Types
Organics - Volatiles						
Diisopropyl ether (DIPE)	SW5030C/8260C	10/10/22 13:30	221010A3	VO221010W1	Yes	BLK/LCS/LCSD
Volatile Organics	SW5030C/8260C	10/05/22 02:23	221004A7	VF221004W1	Yes	BLK/LCS/LCSD/MS/MS

Lab Sample ID: S40860.09
Sample Tag: MW-109
Collected Date/Time: 09/28/2022 09:25
Matrix: Groundwater
COC Reference: 154471

Analysis	Method	Run Date/Time	Batch ID	Prep ID	Surr	QC Types
Metals						
Aluminum	E200.8	10/06/22 12:13	MT4-22-1006A	MTD-100622-1	No	BLK/LCS/MS/MSD
Antimony	E200.8	10/06/22 12:13	MT4-22-1006A	MTD-100622-1	No	BLK/LCS/MS/MSD
Arsenic	E200.8	10/06/22 12:13	MT4-22-1006A	MTD-100622-1	No	BLK/LCS/MS/MSD
Barium	E200.8	10/06/22 12:13	MT4-22-1006A	MTD-100622-1	No	BLK/LCS/MS/MSD
Beryllium	E200.8	10/06/22 12:13	MT4-22-1006A	MTD-100622-1	No	BLK/LCS/MS/MSD
Boron	E200.8	10/06/22 12:13	MT4-22-1006A	MTD-100622-1	No	BLK/LCS/MS/MSD
Cadmium	E200.8	10/06/22 12:13	MT4-22-1006A	MTD-100622-1	No	BLK/LCS/MS/MSD
Calcium	E200.8	10/06/22 14:06	MT4-22-1006B	MTD-100622-1	No	BLK/LCS/MS/MSD
Chromium	E200.8	10/06/22 12:13	MT4-22-1006A	MTD-100622-1	No	BLK/LCS/MS/MSD
Cobalt	E200.8	10/06/22 12:13	MT4-22-1006A	MTD-100622-1	No	BLK/LCS/MS/MSD
Iron	E200.8	10/06/22 12:13	MT4-22-1006A	MTD-100622-1	No	BLK/LCS/MS/MSD
Lead	E200.8	10/06/22 12:13	MT4-22-1006A	MTD-100622-1	No	BLK/LCS/MS/MSD
Magnesium	E200.8	10/06/22 14:06	MT4-22-1006B	MTD-100622-1	No	BLK/LCS/MS/MSD
Manganese	E200.8	10/06/22 12:13	MT4-22-1006A	MTD-100622-1	No	BLK/LCS/MS/MSD
Mercury	E245.1	10/05/22 17:07	HG-22-1005A	HGD-100522-3	No	BLK/LCS/MS/MSD
Molybdenum	E200.8	10/06/22 12:13	MT4-22-1006A	MTD-100622-1	No	BLK/LCS/MS/MSD
Nickel	E200.8	10/06/22 12:13	MT4-22-1006A	MTD-100622-1	No	BLK/LCS/MS/MSD
Potassium	E200.8	10/06/22 14:06	MT4-22-1006B	MTD-100622-1	No	BLK/LCS/MS/MSD
Selenium	E200.8	10/06/22 12:13	MT4-22-1006A	MTD-100622-1	No	BLK/LCS/MS/MSD
Silver	E200.8	10/06/22 12:13	MT4-22-1006A	MTD-100622-1	No	BLK/LCS/MS/MSD
Sodium	E200.8	10/06/22 14:06	MT4-22-1006B	MTD-100622-1	No	BLK/LCS/MS/MSD
Strontium	E200.8	10/06/22 12:13	MT4-22-1006A	MTD-100622-1	No	BLK/LCS/MS/MSD
Thallium	E200.8	10/06/22 12:13	MT4-22-1006A	MTD-100622-1	No	BLK/LCS/MS/MSD
Titanium	E200.8	10/06/22 12:13	MT4-22-1006A	MTD-100622-1	No	BLK/LCS/MS/MSD
Vanadium	E200.8	10/06/22 12:13	MT4-22-1006A	MTD-100622-1	No	BLK/LCS/MS/MSD
Zinc	E200.8	10/06/22 12:13	MT4-22-1006A	MTD-100622-1	No	BLK/LCS/MS/MSD
Organics - Volatiles						
Diisopropyl ether (DIPE)	SW5030C/8260C	10/10/22 17:17	221010A3	VO221010W1	Yes	BLK/LCS/LCSD
Volatile Organics	SW5030C/8260C	10/05/22 06:40	221004A7	VF221004W1	Yes	BLK/LCS/LCSD/MS/MS

Lab Sample ID: S40860.10
Sample Tag: MW-108
Collected Date/Time: 09/28/2022 09:10
Matrix: Groundwater
COC Reference: 154471

Analysis	Method	Run Date/Time	Batch ID	Prep ID	Surr	QC Types
Metals						
Aluminum	E200.8	10/06/22 12:17	MT4-22-1006A	MTD-100622-1	No	BLK/LCS/MS/MSD
Antimony	E200.8	10/06/22 12:17	MT4-22-1006A	MTD-100622-1	No	BLK/LCS/MS/MSD
Arsenic	E200.8	10/06/22 12:17	MT4-22-1006A	MTD-100622-1	No	BLK/LCS/MS/MSD
Barium	E200.8	10/06/22 12:17	MT4-22-1006A	MTD-100622-1	No	BLK/LCS/MS/MSD
Beryllium	E200.8	10/06/22 12:17	MT4-22-1006A	MTD-100622-1	No	BLK/LCS/MS/MSD
Boron	E200.8	10/06/22 12:17	MT4-22-1006A	MTD-100622-1	No	BLK/LCS/MS/MSD
Cadmium	E200.8	10/06/22 12:17	MT4-22-1006A	MTD-100622-1	No	BLK/LCS/MS/MSD
Calcium	E200.8	10/06/22 14:07	MT4-22-1006B	MTD-100622-1	No	BLK/LCS/MS/MSD
Chromium	E200.8	10/06/22 12:17	MT4-22-1006A	MTD-100622-1	No	BLK/LCS/MS/MSD
Cobalt	E200.8	10/06/22 12:17	MT4-22-1006A	MTD-100622-1	No	BLK/LCS/MS/MSD
Iron	E200.8	10/06/22 12:17	MT4-22-1006A	MTD-100622-1	No	BLK/LCS/MS/MSD
Lead	E200.8	10/06/22 12:17	MT4-22-1006A	MTD-100622-1	No	BLK/LCS/MS/MSD
Magnesium	E200.8	10/06/22 14:07	MT4-22-1006B	MTD-100622-1	No	BLK/LCS/MS/MSD
Manganese	E200.8	10/06/22 12:17	MT4-22-1006A	MTD-100622-1	No	BLK/LCS/MS/MSD
Mercury	E245.1	10/05/22 17:10	HG-22-1005A	HGD-100522-3	No	BLK/LCS/MS/MSD
Molybdenum	E200.8	10/06/22 12:17	MT4-22-1006A	MTD-100622-1	No	BLK/LCS/MS/MSD
Nickel	E200.8	10/06/22 12:17	MT4-22-1006A	MTD-100622-1	No	BLK/LCS/MS/MSD
Potassium	E200.8	10/06/22 14:07	MT4-22-1006B	MTD-100622-1	No	BLK/LCS/MS/MSD
Selenium	E200.8	10/06/22 12:17	MT4-22-1006A	MTD-100622-1	No	BLK/LCS/MS/MSD
Silver	E200.8	10/06/22 12:17	MT4-22-1006A	MTD-100622-1	No	BLK/LCS/MS/MSD
Sodium	E200.8	10/06/22 14:07	MT4-22-1006B	MTD-100622-1	No	BLK/LCS/MS/MSD
Strontium	E200.8	10/06/22 12:17	MT4-22-1006A	MTD-100622-1	No	BLK/LCS/MS/MSD
Thallium	E200.8	10/06/22 12:17	MT4-22-1006A	MTD-100622-1	No	BLK/LCS/MS/MSD
Titanium	E200.8	10/06/22 12:17	MT4-22-1006A	MTD-100622-1	No	BLK/LCS/MS/MSD
Vanadium	E200.8	10/06/22 12:17	MT4-22-1006A	MTD-100622-1	No	BLK/LCS/MS/MSD
Zinc	E200.8	10/06/22 12:17	MT4-22-1006A	MTD-100622-1	No	BLK/LCS/MS/MSD
Organics - Volatiles						
Diisopropyl ether (DIPE)	SW5030C/8260C	10/10/22 17:42	221010A3	VO221010W1	Yes	BLK/LCS/LCSD
Volatile Organics	SW5030C/8260C	10/05/22 07:03	221004A7	VF221004W1	Yes	BLK/LCS/LCSD/MS/MS

Lab Sample ID: S40860.11
Sample Tag: MW-107
Collected Date/Time: 09/28/2022 10:23
Matrix: Groundwater
COC Reference: 154471

Analysis	Method	Run Date/Time	Batch ID	Prep ID	Surr	QC Types
Metals						
Aluminum	E200.8	10/06/22 11:56	MT4-22-1006A	MTD-100622-1	No	BLK/LCS/MS/MSD
Antimony	E200.8	10/06/22 11:56	MT4-22-1006A	MTD-100622-1	No	BLK/LCS/MS/MSD
Arsenic	E200.8	10/06/22 11:56	MT4-22-1006A	MTD-100622-1	No	BLK/LCS/MS/MSD
Barium	E200.8	10/06/22 11:56	MT4-22-1006A	MTD-100622-1	No	BLK/LCS/MS/MSD
Beryllium	E200.8	10/06/22 11:56	MT4-22-1006A	MTD-100622-1	No	BLK/LCS/MS/MSD
Boron	E200.8	10/06/22 11:56	MT4-22-1006A	MTD-100622-1	No	BLK/LCS/MS/MSD
Cadmium	E200.8	10/06/22 11:56	MT4-22-1006A	MTD-100622-1	No	BLK/LCS/MS/MSD
Calcium	E200.8	10/06/22 14:01	MT4-22-1006B	MTD-100622-1	No	BLK/LCS/MS/MSD
Chromium	E200.8	10/06/22 11:56	MT4-22-1006A	MTD-100622-1	No	BLK/LCS/MS/MSD
Cobalt	E200.8	10/06/22 11:56	MT4-22-1006A	MTD-100622-1	No	BLK/LCS/MS/MSD
Iron	E200.8	10/06/22 11:56	MT4-22-1006A	MTD-100622-1	No	BLK/LCS/MS/MSD
Lead	E200.8	10/06/22 11:56	MT4-22-1006A	MTD-100622-1	No	BLK/LCS/MS/MSD
Magnesium	E200.8	10/06/22 14:01	MT4-22-1006B	MTD-100622-1	No	BLK/LCS/MS/MSD
Manganese	E200.8	10/06/22 11:56	MT4-22-1006A	MTD-100622-1	No	BLK/LCS/MS/MSD
Mercury	E245.1	10/05/22 17:18	HG-22-1005A	HGD-100522-3	No	BLK/LCS/MS/MSD
Molybdenum	E200.8	10/06/22 11:56	MT4-22-1006A	MTD-100622-1	No	BLK/LCS/MS/MSD
Nickel	E200.8	10/06/22 11:56	MT4-22-1006A	MTD-100622-1	No	BLK/LCS/MS/MSD
Potassium	E200.8	10/06/22 14:01	MT4-22-1006B	MTD-100622-1	No	BLK/LCS/MS/MSD
Selenium	E200.8	10/06/22 11:56	MT4-22-1006A	MTD-100622-1	No	BLK/LCS/MS/MSD
Silver	E200.8	10/06/22 11:56	MT4-22-1006A	MTD-100622-1	No	BLK/LCS/MS/MSD
Sodium	E200.8	10/06/22 14:01	MT4-22-1006B	MTD-100622-1	No	BLK/LCS/MS/MSD
Strontium	E200.8	10/06/22 11:56	MT4-22-1006A	MTD-100622-1	No	BLK/LCS/MS/MSD
Thallium	E200.8	10/06/22 11:56	MT4-22-1006A	MTD-100622-1	No	BLK/LCS/MS/MSD
Titanium	E200.8	10/06/22 11:56	MT4-22-1006A	MTD-100622-1	No	BLK/LCS/MS/MSD
Vanadium	E200.8	10/06/22 11:56	MT4-22-1006A	MTD-100622-1	No	BLK/LCS/MS/MSD
Zinc	E200.8	10/06/22 11:56	MT4-22-1006A	MTD-100622-1	No	BLK/LCS/MS/MSD
Organics - Volatiles						
Diisopropyl ether (DIPE)	SW5030C/8260C	10/10/22 18:07	221010A3	VO221010W1	Yes	BLK/LCS/LCSD
Volatile Organics	SW5030C/8260C	10/05/22 07:27	221004A7	VF221004W1	Yes	BLK/LCS/LCSD/MS/MS

Lab Sample ID: S40860.12

Sample Tag: MW-106

Collected Date/Time: 09/28/2022 11:25

Matrix: Groundwater

COC Reference: 154471

Analysis	Method	Run Date/Time	Batch ID	Prep ID	Surr	QC Types
Metals						
Aluminum	E200.8	10/06/22 12:24	MT4-22-1006A	MTD-100622-1	No	BLK/LCS/MS/MSD
Antimony	E200.8	10/06/22 12:24	MT4-22-1006A	MTD-100622-1	No	BLK/LCS/MS/MSD
Arsenic	E200.8	10/06/22 12:24	MT4-22-1006A	MTD-100622-1	No	BLK/LCS/MS/MSD
Barium	E200.8	10/06/22 12:24	MT4-22-1006A	MTD-100622-1	No	BLK/LCS/MS/MSD
Beryllium	E200.8	10/06/22 12:24	MT4-22-1006A	MTD-100622-1	No	BLK/LCS/MS/MSD
Boron	E200.8	10/06/22 12:24	MT4-22-1006A	MTD-100622-1	No	BLK/LCS/MS/MSD
Cadmium	E200.8	10/06/22 12:24	MT4-22-1006A	MTD-100622-1	No	BLK/LCS/MS/MSD
Calcium	E200.8	10/06/22 14:09	MT4-22-1006B	MTD-100622-1	No	BLK/LCS/MS/MSD
Chromium	E200.8	10/06/22 12:24	MT4-22-1006A	MTD-100622-1	No	BLK/LCS/MS/MSD
Cobalt	E200.8	10/06/22 12:24	MT4-22-1006A	MTD-100622-1	No	BLK/LCS/MS/MSD
Iron	E200.8	10/06/22 12:24	MT4-22-1006A	MTD-100622-1	No	BLK/LCS/MS/MSD
Lead	E200.8	10/06/22 12:24	MT4-22-1006A	MTD-100622-1	No	BLK/LCS/MS/MSD
Magnesium	E200.8	10/06/22 14:09	MT4-22-1006B	MTD-100622-1	No	BLK/LCS/MS/MSD
Manganese	E200.8	10/06/22 12:24	MT4-22-1006A	MTD-100622-1	No	BLK/LCS/MS/MSD
Mercury	E245.1	10/05/22 17:22	HG-22-1005A	HGD-100522-3	No	BLK/LCS/MS/MSD
Molybdenum	E200.8	10/06/22 12:24	MT4-22-1006A	MTD-100622-1	No	BLK/LCS/MS/MSD
Nickel	E200.8	10/06/22 12:24	MT4-22-1006A	MTD-100622-1	No	BLK/LCS/MS/MSD
Potassium	E200.8	10/06/22 14:09	MT4-22-1006B	MTD-100622-1	No	BLK/LCS/MS/MSD
Selenium	E200.8	10/06/22 12:24	MT4-22-1006A	MTD-100622-1	No	BLK/LCS/MS/MSD
Silver	E200.8	10/06/22 12:24	MT4-22-1006A	MTD-100622-1	No	BLK/LCS/MS/MSD
Sodium	E200.8	10/06/22 14:09	MT4-22-1006B	MTD-100622-1	No	BLK/LCS/MS/MSD
Strontium	E200.8	10/06/22 12:24	MT4-22-1006A	MTD-100622-1	No	BLK/LCS/MS/MSD
Thallium	E200.8	10/06/22 12:24	MT4-22-1006A	MTD-100622-1	No	BLK/LCS/MS/MSD
Titanium	E200.8	10/06/22 12:24	MT4-22-1006A	MTD-100622-1	No	BLK/LCS/MS/MSD
Vanadium	E200.8	10/06/22 12:24	MT4-22-1006A	MTD-100622-1	No	BLK/LCS/MS/MSD
Zinc	E200.8	10/06/22 12:24	MT4-22-1006A	MTD-100622-1	No	BLK/LCS/MS/MSD
Organics - Volatiles						
Diisopropyl ether (DIPE)	SW5030C/8260C	10/10/22 18:33	221010A3	VO221010W1	Yes	BLK/LCS/LCSD
Volatile Organics	SW5030C/8260C	10/05/22 07:50	221004A7	VF221004W1	Yes	BLK/LCS/LCSD/MS/MS

Lab Sample ID: S40860.13
Sample Tag: MW-121
Collected Date/Time: 09/28/2022 12:32
Matrix: Groundwater
COC Reference: 154471

Analysis	Method	Run Date/Time	Batch ID	Prep ID	Surr	QC Types
Metals						
Aluminum	E200.8	10/06/22 12:29	MT4-22-1006A	MTD-100622-1	No	BLK/LCS/MS/MSD
Antimony	E200.8	10/06/22 12:29	MT4-22-1006A	MTD-100622-1	No	BLK/LCS/MS/MSD
Arsenic	E200.8	10/06/22 12:29	MT4-22-1006A	MTD-100622-1	No	BLK/LCS/MS/MSD
Barium	E200.8	10/06/22 12:29	MT4-22-1006A	MTD-100622-1	No	BLK/LCS/MS/MSD
Beryllium	E200.8	10/06/22 12:29	MT4-22-1006A	MTD-100622-1	No	BLK/LCS/MS/MSD
Boron	E200.8	10/06/22 12:29	MT4-22-1006A	MTD-100622-1	No	BLK/LCS/MS/MSD
Cadmium	E200.8	10/06/22 12:29	MT4-22-1006A	MTD-100622-1	No	BLK/LCS/MS/MSD
Calcium	E200.8	10/06/22 14:10	MT4-22-1006B	MTD-100622-1	No	BLK/LCS/MS/MSD
Chromium	E200.8	10/06/22 12:29	MT4-22-1006A	MTD-100622-1	No	BLK/LCS/MS/MSD
Cobalt	E200.8	10/06/22 12:29	MT4-22-1006A	MTD-100622-1	No	BLK/LCS/MS/MSD
Iron	E200.8	10/06/22 12:29	MT4-22-1006A	MTD-100622-1	No	BLK/LCS/MS/MSD
Lead	E200.8	10/06/22 12:29	MT4-22-1006A	MTD-100622-1	No	BLK/LCS/MS/MSD
Magnesium	E200.8	10/06/22 14:10	MT4-22-1006B	MTD-100622-1	No	BLK/LCS/MS/MSD
Manganese	E200.8	10/06/22 12:29	MT4-22-1006A	MTD-100622-1	No	BLK/LCS/MS/MSD
Mercury	E245.1	10/05/22 17:25	HG-22-1005A	HGD-100522-3	No	BLK/LCS/MS/MSD
Molybdenum	E200.8	10/06/22 12:29	MT4-22-1006A	MTD-100622-1	No	BLK/LCS/MS/MSD
Nickel	E200.8	10/06/22 12:29	MT4-22-1006A	MTD-100622-1	No	BLK/LCS/MS/MSD
Potassium	E200.8	10/06/22 14:10	MT4-22-1006B	MTD-100622-1	No	BLK/LCS/MS/MSD
Selenium	E200.8	10/06/22 12:29	MT4-22-1006A	MTD-100622-1	No	BLK/LCS/MS/MSD
Silver	E200.8	10/06/22 12:29	MT4-22-1006A	MTD-100622-1	No	BLK/LCS/MS/MSD
Sodium	E200.8	10/06/22 14:10	MT4-22-1006B	MTD-100622-1	No	BLK/LCS/MS/MSD
Strontium	E200.8	10/06/22 12:29	MT4-22-1006A	MTD-100622-1	No	BLK/LCS/MS/MSD
Thallium	E200.8	10/06/22 12:29	MT4-22-1006A	MTD-100622-1	No	BLK/LCS/MS/MSD
Titanium	E200.8	10/06/22 12:29	MT4-22-1006A	MTD-100622-1	No	BLK/LCS/MS/MSD
Vanadium	E200.8	10/06/22 12:29	MT4-22-1006A	MTD-100622-1	No	BLK/LCS/MS/MSD
Zinc	E200.8	10/06/22 12:29	MT4-22-1006A	MTD-100622-1	No	BLK/LCS/MS/MSD
Organics - Volatiles						
Diisopropyl ether (DIPE)	SW5030C/8260C	10/10/22 18:58	221010A3	VO221010W1	Yes	BLK/LCS/LCSD
Volatile Organics	SW5030C/8260C	10/05/22 08:14	221004A7	VF221004W1	Yes	BLK/LCS/LCSD/MS/MS

Lab Sample ID: S40860.14
Sample Tag: MW-104
Collected Date/Time: 09/28/2022 13:38
Matrix: Groundwater
COC Reference: 154471

Analysis	Method	Run Date/Time	Batch ID	Prep ID	Surr	QC Types
Metals						
Aluminum	E200.8	10/06/22 12:34	MT4-22-1006A	MTD-100622-1	No	BLK/LCS/MS/MSD
Antimony	E200.8	10/06/22 12:34	MT4-22-1006A	MTD-100622-1	No	BLK/LCS/MS/MSD
Arsenic	E200.8	10/06/22 12:34	MT4-22-1006A	MTD-100622-1	No	BLK/LCS/MS/MSD
Barium	E200.8	10/06/22 12:34	MT4-22-1006A	MTD-100622-1	No	BLK/LCS/MS/MSD
Beryllium	E200.8	10/06/22 12:34	MT4-22-1006A	MTD-100622-1	No	BLK/LCS/MS/MSD
Boron	E200.8	10/06/22 12:34	MT4-22-1006A	MTD-100622-1	No	BLK/LCS/MS/MSD
Cadmium	E200.8	10/06/22 12:34	MT4-22-1006A	MTD-100622-1	No	BLK/LCS/MS/MSD
Calcium	E200.8	10/06/22 14:12	MT4-22-1006B	MTD-100622-1	No	BLK/LCS/MS/MSD
Chromium	E200.8	10/06/22 12:34	MT4-22-1006A	MTD-100622-1	No	BLK/LCS/MS/MSD
Cobalt	E200.8	10/06/22 12:34	MT4-22-1006A	MTD-100622-1	No	BLK/LCS/MS/MSD
Iron	E200.8	10/06/22 12:34	MT4-22-1006A	MTD-100622-1	No	BLK/LCS/MS/MSD
Lead	E200.8	10/06/22 12:34	MT4-22-1006A	MTD-100622-1	No	BLK/LCS/MS/MSD
Magnesium	E200.8	10/06/22 14:12	MT4-22-1006B	MTD-100622-1	No	BLK/LCS/MS/MSD
Manganese	E200.8	10/06/22 12:34	MT4-22-1006A	MTD-100622-1	No	BLK/LCS/MS/MSD
Mercury	E245.1	10/05/22 17:28	HG-22-1005A	HGD-100522-3	No	BLK/LCS/MS/MSD
Molybdenum	E200.8	10/06/22 12:34	MT4-22-1006A	MTD-100622-1	No	BLK/LCS/MS/MSD
Nickel	E200.8	10/06/22 12:34	MT4-22-1006A	MTD-100622-1	No	BLK/LCS/MS/MSD
Potassium	E200.8	10/06/22 14:12	MT4-22-1006B	MTD-100622-1	No	BLK/LCS/MS/MSD
Selenium	E200.8	10/06/22 12:34	MT4-22-1006A	MTD-100622-1	No	BLK/LCS/MS/MSD
Silver	E200.8	10/06/22 12:34	MT4-22-1006A	MTD-100622-1	No	BLK/LCS/MS/MSD
Sodium	E200.8	10/06/22 14:12	MT4-22-1006B	MTD-100622-1	No	BLK/LCS/MS/MSD
Strontium	E200.8	10/06/22 12:34	MT4-22-1006A	MTD-100622-1	No	BLK/LCS/MS/MSD
Thallium	E200.8	10/06/22 12:34	MT4-22-1006A	MTD-100622-1	No	BLK/LCS/MS/MSD
Titanium	E200.8	10/06/22 12:34	MT4-22-1006A	MTD-100622-1	No	BLK/LCS/MS/MSD
Vanadium	E200.8	10/06/22 12:34	MT4-22-1006A	MTD-100622-1	No	BLK/LCS/MS/MSD
Zinc	E200.8	10/06/22 12:34	MT4-22-1006A	MTD-100622-1	No	BLK/LCS/MS/MSD
Organics - Volatiles						
Diisopropyl ether (DIPE)	SW5030C/8260C	10/10/22 19:23	221010A3	VO221010W1	Yes	BLK/LCS/LCSD
Volatile Organics	SW5030C/8260C	10/05/22 08:38	221004A7	VF221004W1	Yes	BLK/LCS/LCSD/MS/MS

Lab Sample ID: S40860.15

Sample Tag: MW-105

Collected Date/Time: 09/28/2022 14:23

Matrix: Groundwater

COC Reference: 154471

Analysis	Method	Run Date/Time	Batch ID	Prep ID	Surr	QC Types
Metals						
Aluminum	E200.8	10/06/22 12:39	MT4-22-1006A	MTD-100622-1	No	BLK/LCS/MS/MSD
Antimony	E200.8	10/06/22 12:39	MT4-22-1006A	MTD-100622-1	No	BLK/LCS/MS/MSD
Arsenic	E200.8	10/06/22 12:39	MT4-22-1006A	MTD-100622-1	No	BLK/LCS/MS/MSD
Barium	E200.8	10/06/22 12:39	MT4-22-1006A	MTD-100622-1	No	BLK/LCS/MS/MSD
Beryllium	E200.8	10/06/22 12:39	MT4-22-1006A	MTD-100622-1	No	BLK/LCS/MS/MSD
Boron	E200.8	10/06/22 12:39	MT4-22-1006A	MTD-100622-1	No	BLK/LCS/MS/MSD
Cadmium	E200.8	10/06/22 12:39	MT4-22-1006A	MTD-100622-1	No	BLK/LCS/MS/MSD
Calcium	E200.8	10/06/22 14:14	MT4-22-1006B	MTD-100622-1	No	BLK/LCS/MS/MSD
Chromium	E200.8	10/06/22 12:39	MT4-22-1006A	MTD-100622-1	No	BLK/LCS/MS/MSD
Cobalt	E200.8	10/06/22 12:39	MT4-22-1006A	MTD-100622-1	No	BLK/LCS/MS/MSD
Iron	E200.8	10/06/22 12:39	MT4-22-1006A	MTD-100622-1	No	BLK/LCS/MS/MSD
Lead	E200.8	10/06/22 12:39	MT4-22-1006A	MTD-100622-1	No	BLK/LCS/MS/MSD
Magnesium	E200.8	10/06/22 14:14	MT4-22-1006B	MTD-100622-1	No	BLK/LCS/MS/MSD
Manganese	E200.8	10/06/22 12:39	MT4-22-1006A	MTD-100622-1	No	BLK/LCS/MS/MSD
Mercury	E245.1	10/05/22 17:31	HG-22-1005A	HGD-100522-3	No	BLK/LCS/MS/MSD
Molybdenum	E200.8	10/06/22 12:39	MT4-22-1006A	MTD-100622-1	No	BLK/LCS/MS/MSD
Nickel	E200.8	10/06/22 12:39	MT4-22-1006A	MTD-100622-1	No	BLK/LCS/MS/MSD
Potassium	E200.8	10/06/22 14:14	MT4-22-1006B	MTD-100622-1	No	BLK/LCS/MS/MSD
Selenium	E200.8	10/06/22 12:39	MT4-22-1006A	MTD-100622-1	No	BLK/LCS/MS/MSD
Silver	E200.8	10/06/22 12:39	MT4-22-1006A	MTD-100622-1	No	BLK/LCS/MS/MSD
Sodium	E200.8	10/06/22 14:14	MT4-22-1006B	MTD-100622-1	No	BLK/LCS/MS/MSD
Strontium	E200.8	10/06/22 12:39	MT4-22-1006A	MTD-100622-1	No	BLK/LCS/MS/MSD
Thallium	E200.8	10/06/22 12:39	MT4-22-1006A	MTD-100622-1	No	BLK/LCS/MS/MSD
Titanium	E200.8	10/06/22 12:39	MT4-22-1006A	MTD-100622-1	No	BLK/LCS/MS/MSD
Vanadium	E200.8	10/06/22 12:39	MT4-22-1006A	MTD-100622-1	No	BLK/LCS/MS/MSD
Zinc	E200.8	10/06/22 12:39	MT4-22-1006A	MTD-100622-1	No	BLK/LCS/MS/MSD
Organics - Volatiles						
Diisopropyl ether (DIPE)	SW5030C/8260C	10/10/22 19:48	221010A3	VO221010W1	Yes	BLK/LCS/LCSD
Volatile Organics	SW5030C/8260C	10/05/22 09:01	221004A7	VF221004W1	Yes	BLK/LCS/LCSD/MS/MS

Lab Sample ID: S40860.16

Sample Tag: Dup-02

Collected Date/Time: 09/28/2022 00:01

Matrix: Groundwater

COC Reference: 154471

Analysis	Method	Run Date/Time	Batch ID	Prep ID	Surr	QC Types
Metals						
Aluminum	E200.8	10/06/22 12:45	MT4-22-1006A	MTD-100622-1	No	BLK/LCS/MS/MSD
Antimony	E200.8	10/06/22 12:45	MT4-22-1006A	MTD-100622-1	No	BLK/LCS/MS/MSD
Arsenic	E200.8	10/06/22 12:45	MT4-22-1006A	MTD-100622-1	No	BLK/LCS/MS/MSD
Barium	E200.8	10/06/22 12:45	MT4-22-1006A	MTD-100622-1	No	BLK/LCS/MS/MSD
Beryllium	E200.8	10/06/22 12:45	MT4-22-1006A	MTD-100622-1	No	BLK/LCS/MS/MSD
Boron	E200.8	10/06/22 12:45	MT4-22-1006A	MTD-100622-1	No	BLK/LCS/MS/MSD
Cadmium	E200.8	10/06/22 12:45	MT4-22-1006A	MTD-100622-1	No	BLK/LCS/MS/MSD
Calcium	E200.8	10/06/22 14:15	MT4-22-1006B	MTD-100622-1	No	BLK/LCS/MS/MSD
Chromium	E200.8	10/06/22 12:45	MT4-22-1006A	MTD-100622-1	No	BLK/LCS/MS/MSD
Cobalt	E200.8	10/06/22 12:45	MT4-22-1006A	MTD-100622-1	No	BLK/LCS/MS/MSD
Iron	E200.8	10/06/22 12:45	MT4-22-1006A	MTD-100622-1	No	BLK/LCS/MS/MSD
Lead	E200.8	10/06/22 12:45	MT4-22-1006A	MTD-100622-1	No	BLK/LCS/MS/MSD
Magnesium	E200.8	10/06/22 14:15	MT4-22-1006B	MTD-100622-1	No	BLK/LCS/MS/MSD
Manganese	E200.8	10/06/22 12:45	MT4-22-1006A	MTD-100622-1	No	BLK/LCS/MS/MSD
Mercury	E245.1	10/05/22 17:41	HG-22-1005A	HGD-100522-3	No	BLK/LCS/MS/MSD
Molybdenum	E200.8	10/06/22 12:45	MT4-22-1006A	MTD-100622-1	No	BLK/LCS/MS/MSD
Nickel	E200.8	10/06/22 12:45	MT4-22-1006A	MTD-100622-1	No	BLK/LCS/MS/MSD
Potassium	E200.8	10/06/22 14:15	MT4-22-1006B	MTD-100622-1	No	BLK/LCS/MS/MSD
Selenium	E200.8	10/06/22 12:45	MT4-22-1006A	MTD-100622-1	No	BLK/LCS/MS/MSD
Silver	E200.8	10/06/22 12:45	MT4-22-1006A	MTD-100622-1	No	BLK/LCS/MS/MSD
Sodium	E200.8	10/06/22 14:15	MT4-22-1006B	MTD-100622-1	No	BLK/LCS/MS/MSD
Strontium	E200.8	10/06/22 12:45	MT4-22-1006A	MTD-100622-1	No	BLK/LCS/MS/MSD
Thallium	E200.8	10/06/22 12:45	MT4-22-1006A	MTD-100622-1	No	BLK/LCS/MS/MSD
Titanium	E200.8	10/06/22 12:45	MT4-22-1006A	MTD-100622-1	No	BLK/LCS/MS/MSD
Vanadium	E200.8	10/06/22 12:45	MT4-22-1006A	MTD-100622-1	No	BLK/LCS/MS/MSD
Zinc	E200.8	10/06/22 12:45	MT4-22-1006A	MTD-100622-1	No	BLK/LCS/MS/MSD
Organics - Volatiles						
Diisopropyl ether (DIPE)	SW5030C/8260C	10/10/22 20:14	221010A3	VO221010W1	Yes	BLK/LCS/LCSD
Volatile Organics	SW5030C/8260C	10/05/22 09:25	221004A7	VF221004W1	Yes	BLK/LCS/LCSD/MS/MS

Lab Sample ID: S40860.17

Sample Tag: Trip Blank 2

Collected Date/Time: 09/28/2022 00:01

Matrix: Water

COC Reference: 154471

Analysis	Method	Run Date/Time	Batch ID	Prep ID	Surr	QC Types
Organics - Volatiles						
Diisopropyl ether (DIPE)	SW5030C/8260C	10/10/22 13:55	221010A3	VO221010W1	Yes	BLK/LCS/LCSD
Volatile Organics	SW5030C/8260C	10/05/22 02:00	221004A7	VF221004W1	Yes	BLK/LCS/LCSD/MS/MS

Metals, Prep Batch ID: HGD-100522-3

Surrogates: No, QC Types: BLK/LCS/MS/MSD

Sample ID	Analysis	Method	Run Date/Time	Batch ID
S40860.01	Mercury	E245.1	10/05/22 16:30	HG-22-1005A
S40860.02	Mercury	E245.1	10/05/22 16:34	HG-22-1005A
S40860.03	Mercury	E245.1	10/05/22 16:37	HG-22-1005A
S40860.04	Mercury	E245.1	10/05/22 16:40	HG-22-1005A
S40860.05	Mercury	E245.1	10/05/22 16:44	HG-22-1005A
S40860.06	Mercury	E245.1	10/05/22 17:00	HG-22-1005A
S40860.07	Mercury	E245.1	10/05/22 17:03	HG-22-1005A
S40860.09	Mercury	E245.1	10/05/22 17:07	HG-22-1005A
S40860.10	Mercury	E245.1	10/05/22 17:10	HG-22-1005A
S40860.11	Mercury	E245.1	10/05/22 17:18	HG-22-1005A
S40860.12	Mercury	E245.1	10/05/22 17:22	HG-22-1005A
S40860.13	Mercury	E245.1	10/05/22 17:25	HG-22-1005A
S40860.14	Mercury	E245.1	10/05/22 17:28	HG-22-1005A
S40860.15	Mercury	E245.1	10/05/22 17:31	HG-22-1005A
S40860.16	Mercury	E245.1	10/05/22 17:41	HG-22-1005A

Metals, Prep Batch ID: MTD-100622-1

Surrogates: No, QC Types: BLK/LCS/MS/MSD

Sample ID	Analysis	Method	Run Date/Time	Batch ID
S40860.01	Aluminum	E200.8	10/06/22 11:22	MT4-22-1006A
S40860.01	Antimony	E200.8	10/06/22 11:22	MT4-22-1006A
S40860.01	Arsenic	E200.8	10/06/22 11:22	MT4-22-1006A
S40860.01	Barium	E200.8	10/06/22 11:22	MT4-22-1006A
S40860.01	Beryllium	E200.8	10/06/22 11:22	MT4-22-1006A
S40860.01	Boron	E200.8	10/06/22 11:22	MT4-22-1006A
S40860.01	Cadmium	E200.8	10/06/22 11:22	MT4-22-1006A
S40860.01	Calcium	E200.8	10/06/22 13:49	MT4-22-1006B
S40860.01	Chromium	E200.8	10/06/22 11:22	MT4-22-1006A
S40860.01	Cobalt	E200.8	10/06/22 11:22	MT4-22-1006A
S40860.01	Iron	E200.8	10/06/22 11:22	MT4-22-1006A
S40860.01	Lead	E200.8	10/06/22 11:22	MT4-22-1006A
S40860.01	Magnesium	E200.8	10/06/22 13:49	MT4-22-1006B
S40860.01	Manganese	E200.8	10/06/22 11:22	MT4-22-1006A
S40860.01	Molybdenum	E200.8	10/06/22 11:22	MT4-22-1006A
S40860.01	Nickel	E200.8	10/06/22 11:22	MT4-22-1006A
S40860.01	Potassium	E200.8	10/06/22 13:49	MT4-22-1006B
S40860.01	Selenium	E200.8	10/06/22 11:22	MT4-22-1006A
S40860.01	Silver	E200.8	10/06/22 11:22	MT4-22-1006A
S40860.01	Sodium	E200.8	10/06/22 13:49	MT4-22-1006B
S40860.01	Strontium	E200.8	10/06/22 11:22	MT4-22-1006A
S40860.01	Thallium	E200.8	10/06/22 11:22	MT4-22-1006A
S40860.01	Titanium	E200.8	10/06/22 11:22	MT4-22-1006A
S40860.01	Vanadium	E200.8	10/06/22 11:22	MT4-22-1006A
S40860.01	Zinc	E200.8	10/06/22 11:22	MT4-22-1006A
S40860.02	Aluminum	E200.8	10/06/22 11:30	MT4-22-1006A
S40860.02	Antimony	E200.8	10/06/22 11:30	MT4-22-1006A
S40860.02	Arsenic	E200.8	10/06/22 11:30	MT4-22-1006A
S40860.02	Barium	E200.8	10/06/22 11:30	MT4-22-1006A
S40860.02	Beryllium	E200.8	10/06/22 11:30	MT4-22-1006A
S40860.02	Boron	E200.8	10/06/22 11:30	MT4-22-1006A

Metals, Prep Batch ID: MTD-100622-1 (continued)

Surrogates: No, QC Types: BLK/LCS/MS/MSD

Sample ID	Analysis	Method	Run Date/Time	Batch ID
S40860.02	Cadmium	E200.8	10/06/22 11:30	MT4-22-1006A
S40860.02	Calcium	E200.8	10/06/22 13:51	MT4-22-1006B
S40860.02	Chromium	E200.8	10/06/22 11:30	MT4-22-1006A
S40860.02	Cobalt	E200.8	10/06/22 11:30	MT4-22-1006A
S40860.02	Iron	E200.8	10/06/22 11:30	MT4-22-1006A
S40860.02	Lead	E200.8	10/06/22 11:30	MT4-22-1006A
S40860.02	Magnesium	E200.8	10/06/22 13:51	MT4-22-1006B
S40860.02	Manganese	E200.8	10/06/22 11:30	MT4-22-1006A
S40860.02	Molybdenum	E200.8	10/06/22 11:30	MT4-22-1006A
S40860.02	Nickel	E200.8	10/06/22 11:30	MT4-22-1006A
S40860.02	Potassium	E200.8	10/06/22 13:51	MT4-22-1006B
S40860.02	Selenium	E200.8	10/06/22 11:30	MT4-22-1006A
S40860.02	Silver	E200.8	10/06/22 11:30	MT4-22-1006A
S40860.02	Sodium	E200.8	10/06/22 13:51	MT4-22-1006B
S40860.02	Strontium	E200.8	10/06/22 11:30	MT4-22-1006A
S40860.02	Thallium	E200.8	10/06/22 11:30	MT4-22-1006A
S40860.02	Titanium	E200.8	10/06/22 11:30	MT4-22-1006A
S40860.02	Vanadium	E200.8	10/06/22 11:30	MT4-22-1006A
S40860.02	Zinc	E200.8	10/06/22 11:30	MT4-22-1006A
S40860.03	Aluminum	E200.8	10/06/22 11:35	MT4-22-1006A
S40860.03	Antimony	E200.8	10/06/22 11:35	MT4-22-1006A
S40860.03	Arsenic	E200.8	10/06/22 11:35	MT4-22-1006A
S40860.03	Barium	E200.8	10/06/22 11:35	MT4-22-1006A
S40860.03	Beryllium	E200.8	10/06/22 11:35	MT4-22-1006A
S40860.03	Boron	E200.8	10/06/22 11:35	MT4-22-1006A
S40860.03	Cadmium	E200.8	10/06/22 11:35	MT4-22-1006A
S40860.03	Calcium	E200.8	10/06/22 13:53	MT4-22-1006B
S40860.03	Chromium	E200.8	10/06/22 11:35	MT4-22-1006A
S40860.03	Cobalt	E200.8	10/06/22 11:35	MT4-22-1006A
S40860.03	Iron	E200.8	10/06/22 11:35	MT4-22-1006A
S40860.03	Lead	E200.8	10/06/22 11:35	MT4-22-1006A
S40860.03	Magnesium	E200.8	10/06/22 13:53	MT4-22-1006B
S40860.03	Manganese	E200.8	10/06/22 11:35	MT4-22-1006A
S40860.03	Molybdenum	E200.8	10/06/22 11:35	MT4-22-1006A
S40860.03	Nickel	E200.8	10/06/22 11:35	MT4-22-1006A
S40860.03	Potassium	E200.8	10/06/22 13:53	MT4-22-1006B
S40860.03	Selenium	E200.8	10/06/22 11:35	MT4-22-1006A
S40860.03	Silver	E200.8	10/06/22 11:35	MT4-22-1006A
S40860.03	Sodium	E200.8	10/06/22 13:53	MT4-22-1006B
S40860.03	Strontium	E200.8	10/06/22 11:35	MT4-22-1006A
S40860.03	Thallium	E200.8	10/06/22 11:35	MT4-22-1006A
S40860.03	Titanium	E200.8	10/06/22 11:35	MT4-22-1006A
S40860.03	Vanadium	E200.8	10/06/22 11:35	MT4-22-1006A
S40860.03	Zinc	E200.8	10/06/22 11:35	MT4-22-1006A
S40860.04	Aluminum	E200.8	10/06/22 11:38	MT4-22-1006A
S40860.04	Antimony	E200.8	10/06/22 11:38	MT4-22-1006A
S40860.04	Arsenic	E200.8	10/06/22 11:38	MT4-22-1006A
S40860.04	Barium	E200.8	10/06/22 11:38	MT4-22-1006A
S40860.04	Beryllium	E200.8	10/06/22 11:38	MT4-22-1006A

Metals, Prep Batch ID: MTD-100622-1 (continued)

Surrogates: No, QC Types: BLK/LCS/MS/MSD

Sample ID	Analysis	Method	Run Date/Time	Batch ID
S40860.04	Boron	E200.8	10/06/22 11:38	MT4-22-1006A
S40860.04	Cadmium	E200.8	10/06/22 11:38	MT4-22-1006A
S40860.04	Calcium	E200.8	10/06/22 13:55	MT4-22-1006B
S40860.04	Chromium	E200.8	10/06/22 11:38	MT4-22-1006A
S40860.04	Cobalt	E200.8	10/06/22 11:38	MT4-22-1006A
S40860.04	Iron	E200.8	10/06/22 11:38	MT4-22-1006A
S40860.04	Lead	E200.8	10/06/22 11:38	MT4-22-1006A
S40860.04	Magnesium	E200.8	10/06/22 13:55	MT4-22-1006B
S40860.04	Manganese	E200.8	10/06/22 11:38	MT4-22-1006A
S40860.04	Molybdenum	E200.8	10/06/22 11:38	MT4-22-1006A
S40860.04	Nickel	E200.8	10/06/22 11:38	MT4-22-1006A
S40860.04	Potassium	E200.8	10/06/22 13:55	MT4-22-1006B
S40860.04	Selenium	E200.8	10/06/22 11:38	MT4-22-1006A
S40860.04	Silver	E200.8	10/06/22 11:38	MT4-22-1006A
S40860.04	Sodium	E200.8	10/06/22 13:55	MT4-22-1006B
S40860.04	Strontium	E200.8	10/06/22 11:38	MT4-22-1006A
S40860.04	Thallium	E200.8	10/06/22 11:38	MT4-22-1006A
S40860.04	Titanium	E200.8	10/06/22 11:38	MT4-22-1006A
S40860.04	Vanadium	E200.8	10/06/22 11:38	MT4-22-1006A
S40860.04	Zinc	E200.8	10/06/22 11:38	MT4-22-1006A
S40860.05	Aluminum	E200.8	10/06/22 11:42	MT4-22-1006A
S40860.05	Antimony	E200.8	10/06/22 11:42	MT4-22-1006A
S40860.05	Arsenic	E200.8	10/06/22 11:42	MT4-22-1006A
S40860.05	Barium	E200.8	10/06/22 11:42	MT4-22-1006A
S40860.05	Beryllium	E200.8	10/06/22 11:42	MT4-22-1006A
S40860.05	Boron	E200.8	10/06/22 11:42	MT4-22-1006A
S40860.05	Cadmium	E200.8	10/06/22 11:42	MT4-22-1006A
S40860.05	Calcium	E200.8	10/06/22 13:56	MT4-22-1006B
S40860.05	Chromium	E200.8	10/06/22 11:42	MT4-22-1006A
S40860.05	Cobalt	E200.8	10/06/22 11:42	MT4-22-1006A
S40860.05	Iron	E200.8	10/06/22 11:42	MT4-22-1006A
S40860.05	Lead	E200.8	10/06/22 11:42	MT4-22-1006A
S40860.05	Magnesium	E200.8	10/06/22 13:56	MT4-22-1006B
S40860.05	Manganese	E200.8	10/06/22 11:42	MT4-22-1006A
S40860.05	Molybdenum	E200.8	10/06/22 11:42	MT4-22-1006A
S40860.05	Nickel	E200.8	10/06/22 11:42	MT4-22-1006A
S40860.05	Potassium	E200.8	10/06/22 13:56	MT4-22-1006B
S40860.05	Selenium	E200.8	10/06/22 11:42	MT4-22-1006A
S40860.05	Silver	E200.8	10/06/22 11:42	MT4-22-1006A
S40860.05	Sodium	E200.8	10/06/22 13:56	MT4-22-1006B
S40860.05	Strontium	E200.8	10/06/22 11:42	MT4-22-1006A
S40860.05	Thallium	E200.8	10/06/22 11:42	MT4-22-1006A
S40860.05	Titanium	E200.8	10/06/22 11:42	MT4-22-1006A
S40860.05	Vanadium	E200.8	10/06/22 11:42	MT4-22-1006A
S40860.05	Zinc	E200.8	10/06/22 11:42	MT4-22-1006A
S40860.06	Aluminum	E200.8	10/06/22 11:46	MT4-22-1006A
S40860.06	Antimony	E200.8	10/06/22 11:46	MT4-22-1006A
S40860.06	Arsenic	E200.8	10/06/22 11:46	MT4-22-1006A
S40860.06	Barium	E200.8	10/06/22 11:46	MT4-22-1006A

Metals, Prep Batch ID: MTD-100622-1 (continued)

Surrogates: No, QC Types: BLK/LCS/MS/MSD

Sample ID	Analysis	Method	Run Date/Time	Batch ID
S40860.06	Beryllium	E200.8	10/06/22 11:46	MT4-22-1006A
S40860.06	Boron	E200.8	10/06/22 11:46	MT4-22-1006A
S40860.06	Cadmium	E200.8	10/06/22 11:46	MT4-22-1006A
S40860.06	Calcium	E200.8	10/06/22 13:58	MT4-22-1006B
S40860.06	Chromium	E200.8	10/06/22 11:46	MT4-22-1006A
S40860.06	Cobalt	E200.8	10/06/22 11:46	MT4-22-1006A
S40860.06	Iron	E200.8	10/06/22 11:46	MT4-22-1006A
S40860.06	Lead	E200.8	10/06/22 11:46	MT4-22-1006A
S40860.06	Magnesium	E200.8	10/06/22 13:58	MT4-22-1006B
S40860.06	Manganese	E200.8	10/06/22 11:46	MT4-22-1006A
S40860.06	Molybdenum	E200.8	10/06/22 11:46	MT4-22-1006A
S40860.06	Nickel	E200.8	10/06/22 11:46	MT4-22-1006A
S40860.06	Potassium	E200.8	10/06/22 13:58	MT4-22-1006B
S40860.06	Selenium	E200.8	10/06/22 11:46	MT4-22-1006A
S40860.06	Silver	E200.8	10/06/22 11:46	MT4-22-1006A
S40860.06	Sodium	E200.8	10/06/22 13:58	MT4-22-1006B
S40860.06	Strontium	E200.8	10/06/22 11:46	MT4-22-1006A
S40860.06	Thallium	E200.8	10/06/22 11:46	MT4-22-1006A
S40860.06	Titanium	E200.8	10/06/22 11:46	MT4-22-1006A
S40860.06	Vanadium	E200.8	10/06/22 11:46	MT4-22-1006A
S40860.06	Zinc	E200.8	10/06/22 11:46	MT4-22-1006A
S40860.07	Aluminum	E200.8	10/06/22 11:52	MT4-22-1006A
S40860.07	Antimony	E200.8	10/06/22 11:52	MT4-22-1006A
S40860.07	Arsenic	E200.8	10/06/22 11:52	MT4-22-1006A
S40860.07	Barium	E200.8	10/06/22 11:52	MT4-22-1006A
S40860.07	Beryllium	E200.8	10/06/22 11:52	MT4-22-1006A
S40860.07	Boron	E200.8	10/06/22 11:52	MT4-22-1006A
S40860.07	Cadmium	E200.8	10/06/22 11:52	MT4-22-1006A
S40860.07	Calcium	E200.8	10/06/22 14:00	MT4-22-1006B
S40860.07	Chromium	E200.8	10/06/22 11:52	MT4-22-1006A
S40860.07	Cobalt	E200.8	10/06/22 11:52	MT4-22-1006A
S40860.07	Iron	E200.8	10/06/22 11:52	MT4-22-1006A
S40860.07	Lead	E200.8	10/06/22 11:52	MT4-22-1006A
S40860.07	Magnesium	E200.8	10/06/22 14:00	MT4-22-1006B
S40860.07	Manganese	E200.8	10/06/22 11:52	MT4-22-1006A
S40860.07	Molybdenum	E200.8	10/06/22 11:52	MT4-22-1006A
S40860.07	Nickel	E200.8	10/06/22 11:52	MT4-22-1006A
S40860.07	Potassium	E200.8	10/06/22 14:00	MT4-22-1006B
S40860.07	Selenium	E200.8	10/06/22 11:52	MT4-22-1006A
S40860.07	Silver	E200.8	10/06/22 11:52	MT4-22-1006A
S40860.07	Sodium	E200.8	10/06/22 14:00	MT4-22-1006B
S40860.07	Strontium	E200.8	10/06/22 11:52	MT4-22-1006A
S40860.07	Thallium	E200.8	10/06/22 11:52	MT4-22-1006A
S40860.07	Titanium	E200.8	10/06/22 11:52	MT4-22-1006A
S40860.07	Vanadium	E200.8	10/06/22 11:52	MT4-22-1006A
S40860.07	Zinc	E200.8	10/06/22 11:52	MT4-22-1006A
S40860.09	Aluminum	E200.8	10/06/22 12:13	MT4-22-1006A
S40860.09	Antimony	E200.8	10/06/22 12:13	MT4-22-1006A
S40860.09	Arsenic	E200.8	10/06/22 12:13	MT4-22-1006A

Metals, Prep Batch ID: MTD-100622-1 (continued)

Surrogates: No, QC Types: BLK/LCS/MS/MSD

Sample ID	Analysis	Method	Run Date/Time	Batch ID
S40860.09	Barium	E200.8	10/06/22 12:13	MT4-22-1006A
S40860.09	Beryllium	E200.8	10/06/22 12:13	MT4-22-1006A
S40860.09	Boron	E200.8	10/06/22 12:13	MT4-22-1006A
S40860.09	Cadmium	E200.8	10/06/22 12:13	MT4-22-1006A
S40860.09	Calcium	E200.8	10/06/22 14:06	MT4-22-1006B
S40860.09	Chromium	E200.8	10/06/22 12:13	MT4-22-1006A
S40860.09	Cobalt	E200.8	10/06/22 12:13	MT4-22-1006A
S40860.09	Iron	E200.8	10/06/22 12:13	MT4-22-1006A
S40860.09	Lead	E200.8	10/06/22 12:13	MT4-22-1006A
S40860.09	Magnesium	E200.8	10/06/22 14:06	MT4-22-1006B
S40860.09	Manganese	E200.8	10/06/22 12:13	MT4-22-1006A
S40860.09	Molybdenum	E200.8	10/06/22 12:13	MT4-22-1006A
S40860.09	Nickel	E200.8	10/06/22 12:13	MT4-22-1006A
S40860.09	Potassium	E200.8	10/06/22 14:06	MT4-22-1006B
S40860.09	Selenium	E200.8	10/06/22 12:13	MT4-22-1006A
S40860.09	Silver	E200.8	10/06/22 12:13	MT4-22-1006A
S40860.09	Sodium	E200.8	10/06/22 14:06	MT4-22-1006B
S40860.09	Strontium	E200.8	10/06/22 12:13	MT4-22-1006A
S40860.09	Thallium	E200.8	10/06/22 12:13	MT4-22-1006A
S40860.09	Titanium	E200.8	10/06/22 12:13	MT4-22-1006A
S40860.09	Vanadium	E200.8	10/06/22 12:13	MT4-22-1006A
S40860.09	Zinc	E200.8	10/06/22 12:13	MT4-22-1006A
S40860.10	Aluminum	E200.8	10/06/22 12:17	MT4-22-1006A
S40860.10	Antimony	E200.8	10/06/22 12:17	MT4-22-1006A
S40860.10	Arsenic	E200.8	10/06/22 12:17	MT4-22-1006A
S40860.10	Barium	E200.8	10/06/22 12:17	MT4-22-1006A
S40860.10	Beryllium	E200.8	10/06/22 12:17	MT4-22-1006A
S40860.10	Boron	E200.8	10/06/22 12:17	MT4-22-1006A
S40860.10	Cadmium	E200.8	10/06/22 12:17	MT4-22-1006A
S40860.10	Calcium	E200.8	10/06/22 14:07	MT4-22-1006B
S40860.10	Chromium	E200.8	10/06/22 12:17	MT4-22-1006A
S40860.10	Cobalt	E200.8	10/06/22 12:17	MT4-22-1006A
S40860.10	Iron	E200.8	10/06/22 12:17	MT4-22-1006A
S40860.10	Lead	E200.8	10/06/22 12:17	MT4-22-1006A
S40860.10	Magnesium	E200.8	10/06/22 14:07	MT4-22-1006B
S40860.10	Manganese	E200.8	10/06/22 12:17	MT4-22-1006A
S40860.10	Molybdenum	E200.8	10/06/22 12:17	MT4-22-1006A
S40860.10	Nickel	E200.8	10/06/22 12:17	MT4-22-1006A
S40860.10	Potassium	E200.8	10/06/22 14:07	MT4-22-1006B
S40860.10	Selenium	E200.8	10/06/22 12:17	MT4-22-1006A
S40860.10	Silver	E200.8	10/06/22 12:17	MT4-22-1006A
S40860.10	Sodium	E200.8	10/06/22 14:07	MT4-22-1006B
S40860.10	Strontium	E200.8	10/06/22 12:17	MT4-22-1006A
S40860.10	Thallium	E200.8	10/06/22 12:17	MT4-22-1006A
S40860.10	Titanium	E200.8	10/06/22 12:17	MT4-22-1006A
S40860.10	Vanadium	E200.8	10/06/22 12:17	MT4-22-1006A
S40860.10	Zinc	E200.8	10/06/22 12:17	MT4-22-1006A
S40860.11	Aluminum	E200.8	10/06/22 11:56	MT4-22-1006A
S40860.11	Antimony	E200.8	10/06/22 11:56	MT4-22-1006A

Metals, Prep Batch ID: MTD-100622-1 (continued)

Surrogates: No, QC Types: BLK/LCS/MS/MSD

Sample ID	Analysis	Method	Run Date/Time	Batch ID
S40860.11	Arsenic	E200.8	10/06/22 11:56	MT4-22-1006A
S40860.11	Barium	E200.8	10/06/22 11:56	MT4-22-1006A
S40860.11	Beryllium	E200.8	10/06/22 11:56	MT4-22-1006A
S40860.11	Boron	E200.8	10/06/22 11:56	MT4-22-1006A
S40860.11	Cadmium	E200.8	10/06/22 11:56	MT4-22-1006A
S40860.11	Calcium	E200.8	10/06/22 14:01	MT4-22-1006B
S40860.11	Chromium	E200.8	10/06/22 11:56	MT4-22-1006A
S40860.11	Cobalt	E200.8	10/06/22 11:56	MT4-22-1006A
S40860.11	Iron	E200.8	10/06/22 11:56	MT4-22-1006A
S40860.11	Lead	E200.8	10/06/22 11:56	MT4-22-1006A
S40860.11	Magnesium	E200.8	10/06/22 14:01	MT4-22-1006B
S40860.11	Manganese	E200.8	10/06/22 11:56	MT4-22-1006A
S40860.11	Molybdenum	E200.8	10/06/22 11:56	MT4-22-1006A
S40860.11	Nickel	E200.8	10/06/22 11:56	MT4-22-1006A
S40860.11	Potassium	E200.8	10/06/22 14:01	MT4-22-1006B
S40860.11	Selenium	E200.8	10/06/22 11:56	MT4-22-1006A
S40860.11	Silver	E200.8	10/06/22 11:56	MT4-22-1006A
S40860.11	Sodium	E200.8	10/06/22 14:01	MT4-22-1006B
S40860.11	Strontium	E200.8	10/06/22 11:56	MT4-22-1006A
S40860.11	Thallium	E200.8	10/06/22 11:56	MT4-22-1006A
S40860.11	Titanium	E200.8	10/06/22 11:56	MT4-22-1006A
S40860.11	Vanadium	E200.8	10/06/22 11:56	MT4-22-1006A
S40860.11	Zinc	E200.8	10/06/22 11:56	MT4-22-1006A
S40860.12	Aluminum	E200.8	10/06/22 12:24	MT4-22-1006A
S40860.12	Antimony	E200.8	10/06/22 12:24	MT4-22-1006A
S40860.12	Arsenic	E200.8	10/06/22 12:24	MT4-22-1006A
S40860.12	Barium	E200.8	10/06/22 12:24	MT4-22-1006A
S40860.12	Beryllium	E200.8	10/06/22 12:24	MT4-22-1006A
S40860.12	Boron	E200.8	10/06/22 12:24	MT4-22-1006A
S40860.12	Cadmium	E200.8	10/06/22 12:24	MT4-22-1006A
S40860.12	Calcium	E200.8	10/06/22 14:09	MT4-22-1006B
S40860.12	Chromium	E200.8	10/06/22 12:24	MT4-22-1006A
S40860.12	Cobalt	E200.8	10/06/22 12:24	MT4-22-1006A
S40860.12	Iron	E200.8	10/06/22 12:24	MT4-22-1006A
S40860.12	Lead	E200.8	10/06/22 12:24	MT4-22-1006A
S40860.12	Magnesium	E200.8	10/06/22 14:09	MT4-22-1006B
S40860.12	Manganese	E200.8	10/06/22 12:24	MT4-22-1006A
S40860.12	Molybdenum	E200.8	10/06/22 12:24	MT4-22-1006A
S40860.12	Nickel	E200.8	10/06/22 12:24	MT4-22-1006A
S40860.12	Potassium	E200.8	10/06/22 14:09	MT4-22-1006B
S40860.12	Selenium	E200.8	10/06/22 12:24	MT4-22-1006A
S40860.12	Silver	E200.8	10/06/22 12:24	MT4-22-1006A
S40860.12	Sodium	E200.8	10/06/22 14:09	MT4-22-1006B
S40860.12	Strontium	E200.8	10/06/22 12:24	MT4-22-1006A
S40860.12	Thallium	E200.8	10/06/22 12:24	MT4-22-1006A
S40860.12	Titanium	E200.8	10/06/22 12:24	MT4-22-1006A
S40860.12	Vanadium	E200.8	10/06/22 12:24	MT4-22-1006A
S40860.12	Zinc	E200.8	10/06/22 12:24	MT4-22-1006A
S40860.13	Aluminum	E200.8	10/06/22 12:29	MT4-22-1006A

Metals, Prep Batch ID: MTD-100622-1 (continued)

Surrogates: No, QC Types: BLK/LCS/MS/MSD

Sample ID	Analysis	Method	Run Date/Time	Batch ID
S40860.13	Antimony	E200.8	10/06/22 12:29	MT4-22-1006A
S40860.13	Arsenic	E200.8	10/06/22 12:29	MT4-22-1006A
S40860.13	Barium	E200.8	10/06/22 12:29	MT4-22-1006A
S40860.13	Beryllium	E200.8	10/06/22 12:29	MT4-22-1006A
S40860.13	Boron	E200.8	10/06/22 12:29	MT4-22-1006A
S40860.13	Cadmium	E200.8	10/06/22 12:29	MT4-22-1006A
S40860.13	Calcium	E200.8	10/06/22 14:10	MT4-22-1006B
S40860.13	Chromium	E200.8	10/06/22 12:29	MT4-22-1006A
S40860.13	Cobalt	E200.8	10/06/22 12:29	MT4-22-1006A
S40860.13	Iron	E200.8	10/06/22 12:29	MT4-22-1006A
S40860.13	Lead	E200.8	10/06/22 12:29	MT4-22-1006A
S40860.13	Magnesium	E200.8	10/06/22 14:10	MT4-22-1006B
S40860.13	Manganese	E200.8	10/06/22 12:29	MT4-22-1006A
S40860.13	Molybdenum	E200.8	10/06/22 12:29	MT4-22-1006A
S40860.13	Nickel	E200.8	10/06/22 12:29	MT4-22-1006A
S40860.13	Potassium	E200.8	10/06/22 14:10	MT4-22-1006B
S40860.13	Selenium	E200.8	10/06/22 12:29	MT4-22-1006A
S40860.13	Silver	E200.8	10/06/22 12:29	MT4-22-1006A
S40860.13	Sodium	E200.8	10/06/22 14:10	MT4-22-1006B
S40860.13	Strontium	E200.8	10/06/22 12:29	MT4-22-1006A
S40860.13	Thallium	E200.8	10/06/22 12:29	MT4-22-1006A
S40860.13	Titanium	E200.8	10/06/22 12:29	MT4-22-1006A
S40860.13	Vanadium	E200.8	10/06/22 12:29	MT4-22-1006A
S40860.13	Zinc	E200.8	10/06/22 12:29	MT4-22-1006A
S40860.14	Aluminum	E200.8	10/06/22 12:34	MT4-22-1006A
S40860.14	Antimony	E200.8	10/06/22 12:34	MT4-22-1006A
S40860.14	Arsenic	E200.8	10/06/22 12:34	MT4-22-1006A
S40860.14	Barium	E200.8	10/06/22 12:34	MT4-22-1006A
S40860.14	Beryllium	E200.8	10/06/22 12:34	MT4-22-1006A
S40860.14	Boron	E200.8	10/06/22 12:34	MT4-22-1006A
S40860.14	Cadmium	E200.8	10/06/22 12:34	MT4-22-1006A
S40860.14	Calcium	E200.8	10/06/22 14:12	MT4-22-1006B
S40860.14	Chromium	E200.8	10/06/22 12:34	MT4-22-1006A
S40860.14	Cobalt	E200.8	10/06/22 12:34	MT4-22-1006A
S40860.14	Iron	E200.8	10/06/22 12:34	MT4-22-1006A
S40860.14	Lead	E200.8	10/06/22 12:34	MT4-22-1006A
S40860.14	Magnesium	E200.8	10/06/22 14:12	MT4-22-1006B
S40860.14	Manganese	E200.8	10/06/22 12:34	MT4-22-1006A
S40860.14	Molybdenum	E200.8	10/06/22 12:34	MT4-22-1006A
S40860.14	Nickel	E200.8	10/06/22 12:34	MT4-22-1006A
S40860.14	Potassium	E200.8	10/06/22 14:12	MT4-22-1006B
S40860.14	Selenium	E200.8	10/06/22 12:34	MT4-22-1006A
S40860.14	Silver	E200.8	10/06/22 12:34	MT4-22-1006A
S40860.14	Sodium	E200.8	10/06/22 14:12	MT4-22-1006B
S40860.14	Strontium	E200.8	10/06/22 12:34	MT4-22-1006A
S40860.14	Thallium	E200.8	10/06/22 12:34	MT4-22-1006A
S40860.14	Titanium	E200.8	10/06/22 12:34	MT4-22-1006A
S40860.14	Vanadium	E200.8	10/06/22 12:34	MT4-22-1006A
S40860.14	Zinc	E200.8	10/06/22 12:34	MT4-22-1006A

Metals, Prep Batch ID: MTD-100622-1 (continued)

Surrogates: No, QC Types: BLK/LCS/MS/MSD

Sample ID	Analysis	Method	Run Date/Time	Batch ID
S40860.15	Aluminum	E200.8	10/06/22 12:39	MT4-22-1006A
S40860.15	Antimony	E200.8	10/06/22 12:39	MT4-22-1006A
S40860.15	Arsenic	E200.8	10/06/22 12:39	MT4-22-1006A
S40860.15	Barium	E200.8	10/06/22 12:39	MT4-22-1006A
S40860.15	Beryllium	E200.8	10/06/22 12:39	MT4-22-1006A
S40860.15	Boron	E200.8	10/06/22 12:39	MT4-22-1006A
S40860.15	Cadmium	E200.8	10/06/22 12:39	MT4-22-1006A
S40860.15	Calcium	E200.8	10/06/22 14:14	MT4-22-1006B
S40860.15	Chromium	E200.8	10/06/22 12:39	MT4-22-1006A
S40860.15	Cobalt	E200.8	10/06/22 12:39	MT4-22-1006A
S40860.15	Iron	E200.8	10/06/22 12:39	MT4-22-1006A
S40860.15	Lead	E200.8	10/06/22 12:39	MT4-22-1006A
S40860.15	Magnesium	E200.8	10/06/22 14:14	MT4-22-1006B
S40860.15	Manganese	E200.8	10/06/22 12:39	MT4-22-1006A
S40860.15	Molybdenum	E200.8	10/06/22 12:39	MT4-22-1006A
S40860.15	Nickel	E200.8	10/06/22 12:39	MT4-22-1006A
S40860.15	Potassium	E200.8	10/06/22 14:14	MT4-22-1006B
S40860.15	Selenium	E200.8	10/06/22 12:39	MT4-22-1006A
S40860.15	Silver	E200.8	10/06/22 12:39	MT4-22-1006A
S40860.15	Sodium	E200.8	10/06/22 14:14	MT4-22-1006B
S40860.15	Strontium	E200.8	10/06/22 12:39	MT4-22-1006A
S40860.15	Thallium	E200.8	10/06/22 12:39	MT4-22-1006A
S40860.15	Titanium	E200.8	10/06/22 12:39	MT4-22-1006A
S40860.15	Vanadium	E200.8	10/06/22 12:39	MT4-22-1006A
S40860.15	Zinc	E200.8	10/06/22 12:39	MT4-22-1006A
S40860.16	Aluminum	E200.8	10/06/22 12:45	MT4-22-1006A
S40860.16	Antimony	E200.8	10/06/22 12:45	MT4-22-1006A
S40860.16	Arsenic	E200.8	10/06/22 12:45	MT4-22-1006A
S40860.16	Barium	E200.8	10/06/22 12:45	MT4-22-1006A
S40860.16	Beryllium	E200.8	10/06/22 12:45	MT4-22-1006A
S40860.16	Boron	E200.8	10/06/22 12:45	MT4-22-1006A
S40860.16	Cadmium	E200.8	10/06/22 12:45	MT4-22-1006A
S40860.16	Calcium	E200.8	10/06/22 14:15	MT4-22-1006B
S40860.16	Chromium	E200.8	10/06/22 12:45	MT4-22-1006A
S40860.16	Cobalt	E200.8	10/06/22 12:45	MT4-22-1006A
S40860.16	Iron	E200.8	10/06/22 12:45	MT4-22-1006A
S40860.16	Lead	E200.8	10/06/22 12:45	MT4-22-1006A
S40860.16	Magnesium	E200.8	10/06/22 14:15	MT4-22-1006B
S40860.16	Manganese	E200.8	10/06/22 12:45	MT4-22-1006A
S40860.16	Molybdenum	E200.8	10/06/22 12:45	MT4-22-1006A
S40860.16	Nickel	E200.8	10/06/22 12:45	MT4-22-1006A
S40860.16	Potassium	E200.8	10/06/22 14:15	MT4-22-1006B
S40860.16	Selenium	E200.8	10/06/22 12:45	MT4-22-1006A
S40860.16	Silver	E200.8	10/06/22 12:45	MT4-22-1006A
S40860.16	Sodium	E200.8	10/06/22 14:15	MT4-22-1006B
S40860.16	Strontium	E200.8	10/06/22 12:45	MT4-22-1006A
S40860.16	Thallium	E200.8	10/06/22 12:45	MT4-22-1006A
S40860.16	Titanium	E200.8	10/06/22 12:45	MT4-22-1006A
S40860.16	Vanadium	E200.8	10/06/22 12:45	MT4-22-1006A

Metals, Prep Batch ID: MTD-100622-1 (continued)

Surrogates: No, QC Types: BLK/LCS/MS/MSD

Sample ID	Analysis	Method	Run Date/Time	Batch ID
S40860.16	Zinc	E200.8	10/06/22 12:45	MT4-22-1006A

Organics - Volatiles, Prep Batch ID: VF221004W1

Surrogates: Yes, QC Types: BLK/LCS/LCSD/MS/MSD

Sample ID	Analysis	Method	Run Date/Time	Batch ID
S40860.01	Volatile Organics	SW5030C/8260C	10/05/22 03:57	221004A7
S40860.02	Volatile Organics	SW5030C/8260C	10/05/22 04:20	221004A7
S40860.03	Volatile Organics	SW5030C/8260C	10/05/22 04:44	221004A7
S40860.04	Volatile Organics	SW5030C/8260C	10/05/22 05:07	221004A7
S40860.05	Volatile Organics	SW5030C/8260C	10/05/22 05:31	221004A7
S40860.06	Volatile Organics	SW5030C/8260C	10/05/22 05:54	221004A7
S40860.07	Volatile Organics	SW5030C/8260C	10/05/22 06:17	221004A7
S40860.08	Volatile Organics	SW5030C/8260C	10/05/22 02:23	221004A7
S40860.09	Volatile Organics	SW5030C/8260C	10/05/22 06:40	221004A7
S40860.10	Volatile Organics	SW5030C/8260C	10/05/22 07:03	221004A7
S40860.11	Volatile Organics	SW5030C/8260C	10/05/22 07:27	221004A7
S40860.12	Volatile Organics	SW5030C/8260C	10/05/22 07:50	221004A7
S40860.13	Volatile Organics	SW5030C/8260C	10/05/22 08:14	221004A7
S40860.14	Volatile Organics	SW5030C/8260C	10/05/22 08:38	221004A7
S40860.15	Volatile Organics	SW5030C/8260C	10/05/22 09:01	221004A7
S40860.16	Volatile Organics	SW5030C/8260C	10/05/22 09:25	221004A7
S40860.17	Volatile Organics	SW5030C/8260C	10/05/22 02:00	221004A7

Organics - Volatiles, Prep Batch ID: VO221010W1

Surrogates: Yes, QC Types: BLK/LCS/LCSD

Sample ID	Analysis	Method	Run Date/Time	Batch ID
S40860.01	Diisopropyl ether (DIPE)	SW5030C/8260C	10/10/22 14:20	221010A3
S40860.02	Diisopropyl ether (DIPE)	SW5030C/8260C	10/10/22 14:45	221010A3
S40860.03	Diisopropyl ether (DIPE)	SW5030C/8260C	10/10/22 15:11	221010A3
S40860.04	Diisopropyl ether (DIPE)	SW5030C/8260C	10/10/22 15:36	221010A3
S40860.05	Diisopropyl ether (DIPE)	SW5030C/8260C	10/10/22 16:01	221010A3
S40860.06	Diisopropyl ether (DIPE)	SW5030C/8260C	10/10/22 16:27	221010A3
S40860.07	Diisopropyl ether (DIPE)	SW5030C/8260C	10/10/22 16:52	221010A3
S40860.08	Diisopropyl ether (DIPE)	SW5030C/8260C	10/10/22 13:30	221010A3
S40860.09	Diisopropyl ether (DIPE)	SW5030C/8260C	10/10/22 17:17	221010A3
S40860.10	Diisopropyl ether (DIPE)	SW5030C/8260C	10/10/22 17:42	221010A3
S40860.11	Diisopropyl ether (DIPE)	SW5030C/8260C	10/10/22 18:07	221010A3
S40860.12	Diisopropyl ether (DIPE)	SW5030C/8260C	10/10/22 18:33	221010A3
S40860.13	Diisopropyl ether (DIPE)	SW5030C/8260C	10/10/22 18:58	221010A3
S40860.14	Diisopropyl ether (DIPE)	SW5030C/8260C	10/10/22 19:23	221010A3
S40860.15	Diisopropyl ether (DIPE)	SW5030C/8260C	10/10/22 19:48	221010A3
S40860.16	Diisopropyl ether (DIPE)	SW5030C/8260C	10/10/22 20:14	221010A3
S40860.17	Diisopropyl ether (DIPE)	SW5030C/8260C	10/10/22 13:55	221010A3

QC Report - Surrogates per Lab Sample

Lab Sample ID: S40860.01

Sample Tag: MW-120

Collected Date/Time: 09/27/2022 09:30

Matrix: Groundwater

COC Reference: 154527

Organics - Volatiles, Analysis: Volatile Organics

Run in Batch: 221004A7, Run Date: 10/05/2022 03:57, Matrix: WW, Dilution: 1

Surrogate	Flags	**%Rec**	LCL	UCL
4-Bromofluorobenzene		**108.9**	80.0	124.0
1,2-Dichloroethane-D4		**87.1**	72.0	125.0
Toluene-D8		**99.9**	89.0	112.0

QC Report - Surrogates per Lab Sample

Lab Sample ID: S40860.02

Sample Tag: MW-119

Collected Date/Time: 09/27/2022 10:13

Matrix: Groundwater

COC Reference: 154527

Organics - Volatiles, Analysis: Volatile Organics

Run in Batch: 221004A7, Run Date: 10/05/2022 04:20, Matrix: WW, Dilution: 1

Surrogate	Flags	**%Rec**	LCL	UCL
4-Bromofluorobenzene		**109.3**	80.0	124.0
1,2-Dichloroethane-D4		**91.9**	72.0	125.0
Toluene-D8		**100.7**	89.0	112.0

QC Report - Surrogates per Lab Sample

Lab Sample ID: S40860.03

Sample Tag: MW-113

Collected Date/Time: 09/27/2022 11:27

Matrix: Groundwater

COC Reference: 154527

Organics - Volatiles, Analysis: Volatile Organics

Run in Batch: 221004A7, Run Date: 10/05/2022 04:44, Matrix: WW, Dilution: 1

Surrogate	Flags	**%Rec**	LCL	UCL
4-Bromofluorobenzene		**109.7**	80.0	124.0
1,2-Dichloroethane-D4		**90.5**	72.0	125.0
Toluene-D8		**100.3**	89.0	112.0

QC Report - Surrogates per Lab Sample

Lab Sample ID: S40860.04

Sample Tag: MW-112

Collected Date/Time: 09/27/2022 12:37

Matrix: Groundwater

COC Reference: 154527

Organics - Volatiles, Analysis: Volatile Organics

Run in Batch: 221004A7, Run Date: 10/05/2022 05:07, Matrix: WW, Dilution: 1

Surrogate	Flags	**%Rec**	LCL	UCL
4-Bromofluorobenzene		**110.8**	80.0	124.0
1,2-Dichloroethane-D4		**91.4**	72.0	125.0
Toluene-D8		**100.6**	89.0	112.0

QC Report - Surrogates per Lab Sample

Lab Sample ID: S40860.05

Sample Tag: MW-111

Collected Date/Time: 09/27/2022 13:17

Matrix: Groundwater

COC Reference: 154527

Organics - Volatiles, Analysis: Volatile Organics

Run in Batch: 221004A7, Run Date: 10/05/2022 05:31, Matrix: WW, Dilution: 1

Surrogate	Flags	**%Rec**	LCL	UCL
4-Bromofluorobenzene		**110.5**	80.0	124.0
1,2-Dichloroethane-D4		**95.1**	72.0	125.0
Toluene-D8		**100.3**	89.0	112.0

QC Report - Surrogates per Lab Sample

Lab Sample ID: S40860.06

Sample Tag: MW-110

Collected Date/Time: 09/27/2022 13:47

Matrix: Groundwater

COC Reference: 154527

Organics - Volatiles, Analysis: Volatile Organics

Run in Batch: 221004A7, Run Date: 10/05/2022 05:54, Matrix: WW, Dilution: 1

Surrogate	Flags	**%Rec**	LCL	UCL
4-Bromofluorobenzene		**111.2**	80.0	124.0
1,2-Dichloroethane-D4		**89.1**	72.0	125.0
Toluene-D8		**100.4**	89.0	112.0

QC Report - Surrogates per Lab Sample

Lab Sample ID: S40860.07

Sample Tag: Dup-01

Collected Date/Time: 09/27/2022 00:01

Matrix: Groundwater

COC Reference: 154527

Organics - Volatiles, Analysis: Volatile Organics

Run in Batch: 221004A7, Run Date: 10/05/2022 06:17, Matrix: WW, Dilution: 1

Surrogate	Flags	**%Rec**	LCL	UCL
4-Bromofluorobenzene		**110.9**	80.0	124.0
1,2-Dichloroethane-D4		**93.3**	72.0	125.0
Toluene-D8		**100.5**	89.0	112.0

QC Report - Surrogates per Lab Sample

Lab Sample ID: S40860.08

Sample Tag: Trip Blank 1

Collected Date/Time: 09/27/2022 00:01

Matrix: Water

COC Reference: 154527

Organics - Volatiles, Analysis: Volatile Organics

Run in Batch: 221004A7, Run Date: 10/05/2022 02:23, Matrix: WW, Dilution: 1

Surrogate	Flags	**%Rec**	LCL	UCL
4-Bromofluorobenzene		**110.5**	80.0	124.0
1,2-Dichloroethane-D4		**91.1**	72.0	125.0
Toluene-D8		**101.7**	89.0	112.0

QC Report - Surrogates per Lab Sample

Lab Sample ID: S40860.09

Sample Tag: MW-109

Collected Date/Time: 09/28/2022 09:25

Matrix: Groundwater

COC Reference: 154471

Organics - Volatiles, Analysis: Volatile Organics

Run in Batch: 221004A7, Run Date: 10/05/2022 06:40, Matrix: WW, Dilution: 1

Surrogate	Flags	**%Rec**	LCL	UCL
4-Bromofluorobenzene		**108.2**	80.0	124.0
1,2-Dichloroethane-D4		**84.9**	72.0	125.0
Toluene-D8		**99.8**	89.0	112.0

QC Report - Surrogates per Lab Sample

Lab Sample ID: S40860.10

Sample Tag: MW-108

Collected Date/Time: 09/28/2022 09:10

Matrix: Groundwater

COC Reference: 154471

Organics - Volatiles, Analysis: Volatile Organics

Run in Batch: 221004A7, Run Date: 10/05/2022 07:03, Matrix: WW, Dilution: 1

Surrogate	Flags	**%Rec**	LCL	UCL
4-Bromofluorobenzene		**110.0**	80.0	124.0
1,2-Dichloroethane-D4		**90.4**	72.0	125.0
Toluene-D8		**99.8**	89.0	112.0

QC Report - Surrogates per Lab Sample

Lab Sample ID: S40860.11

Sample Tag: MW-107

Collected Date/Time: 09/28/2022 10:23

Matrix: Groundwater

COC Reference: 154471

Organics - Volatiles, Analysis: Volatile Organics

Run in Batch: 221004A7, Run Date: 10/05/2022 07:27, Matrix: WW, Dilution: 1

Surrogate	Flags	**%Rec**	LCL	UCL
4-Bromofluorobenzene		**110.0**	80.0	124.0
1,2-Dichloroethane-D4		**85.5**	72.0	125.0
Toluene-D8		**100.0**	89.0	112.0

QC Report - Surrogates per Lab Sample

Lab Sample ID: S40860.12

Sample Tag: MW-106

Collected Date/Time: 09/28/2022 11:25

Matrix: Groundwater

COC Reference: 154471

Organics - Volatiles, Analysis: Volatile Organics

Run in Batch: 221004A7, Run Date: 10/05/2022 07:50, Matrix: WW, Dilution: 1

Surrogate	Flags	**%Rec**	LCL	UCL
4-Bromofluorobenzene		**108.9**	80.0	124.0
1,2-Dichloroethane-D4		**90.4**	72.0	125.0
Toluene-D8		**99.8**	89.0	112.0

QC Report - Surrogates per Lab Sample

Lab Sample ID: S40860.13

Sample Tag: MW-121

Collected Date/Time: 09/28/2022 12:32

Matrix: Groundwater

COC Reference: 154471

Organics - Volatiles, Analysis: Volatile Organics

Run in Batch: 221004A7, Run Date: 10/05/2022 08:14, Matrix: WW, Dilution: 1

Surrogate	Flags	**%Rec**	LCL	UCL
4-Bromofluorobenzene		**110.3**	80.0	124.0
1,2-Dichloroethane-D4		**87.2**	72.0	125.0
Toluene-D8		**100.6**	89.0	112.0

QC Report - Surrogates per Lab Sample

Lab Sample ID: S40860.14

Sample Tag: MW-104

Collected Date/Time: 09/28/2022 13:38

Matrix: Groundwater

COC Reference: 154471

Organics - Volatiles, Analysis: Volatile Organics

Run in Batch: 221004A7, Run Date: 10/05/2022 08:38, Matrix: WW, Dilution: 1

Surrogate	Flags	**%Rec**	LCL	UCL
4-Bromofluorobenzene		**108.8**	80.0	124.0
1,2-Dichloroethane-D4		**86.6**	72.0	125.0
Toluene-D8		**100.1**	89.0	112.0

QC Report - Surrogates per Lab Sample

Lab Sample ID: S40860.15

Sample Tag: MW-105

Collected Date/Time: 09/28/2022 14:23

Matrix: Groundwater

COC Reference: 154471

Organics - Volatiles, Analysis: Volatile Organics

Run in Batch: 221004A7, Run Date: 10/05/2022 09:01, Matrix: WW, Dilution: 1

Surrogate	Flags	**%Rec**	LCL	UCL
4-Bromofluorobenzene		**109.0**	80.0	124.0
1,2-Dichloroethane-D4		**88.6**	72.0	125.0
Toluene-D8		**101.1**	89.0	112.0

QC Report - Surrogates per Lab Sample

Lab Sample ID: S40860.16

Sample Tag: Dup-02

Collected Date/Time: 09/28/2022 00:01

Matrix: Groundwater

COC Reference: 154471

Organics - Volatiles, Analysis: Volatile Organics

Run in Batch: 221004A7, Run Date: 10/05/2022 09:25, Matrix: WW, Dilution: 1

Surrogate	Flags	**%Rec**	LCL	UCL
4-Bromofluorobenzene		**108.7**	80.0	124.0
1,2-Dichloroethane-D4		**87.6**	72.0	125.0
Toluene-D8		**100.2**	89.0	112.0

QC Report - Surrogates per Lab Sample

Lab Sample ID: S40860.17

Sample Tag: Trip Blank 2

Collected Date/Time: 09/28/2022 00:01

Matrix: Water

COC Reference: 154471

Organics - Volatiles, Analysis: Volatile Organics

Run in Batch: 221004A7, Run Date: 10/05/2022 02:00, Matrix: WW, Dilution: 1

Surrogate	Flags	**%Rec**	LCL	UCL
4-Bromofluorobenzene		**109.2**	80.0	124.0
1,2-Dichloroethane-D4		**88.9**	72.0	125.0
Toluene-D8		**100.4**	89.0	112.0

Organics - Volatiles, Prep Batch ID: VF221004W1

QC Types: BLK/LCS/LCSD/MS/MSD

Blank (BLK)

Lab Sample ID: 221004A7.BLKW04A

Run in Batch: 221004A7, Run Date: 10/05/2022 01:13, Prep Date: 10/04/2022, Matrix: WW, Dilution: 1

Surrogate	Flags	%Rec	LCL	UCL
4-Bromofluorobenzene		**108.9**	80.0	124.0
1,2-Dichloroethane-D4		**84.3**	72.0	125.0
Toluene-D8		**100.3**	89.0	112.0

Laboratory Control Sample (LCS)

Lab Sample ID: 221004A7.LCSW04A

Run in Batch: 221004A7, Run Date: 10/04/2022 22:51, Prep Date: 10/04/2022, Matrix: WW, Dilution: 1

Surrogate	Flags	%Rec	LCL	UCL
4-Bromofluorobenzene		**109.3**	80.0	124.0
1,2-Dichloroethane-D4		**94.3**	72.0	125.0
Toluene-D8		**100.4**	89.0	112.0

Laboratory Control Sample Duplicate (LCSD)

Lab Sample ID: 221004A7.LCSDW04A, Parent Sample ID: 221004A7.LCSW04A

Run in Batch: 221004A7, Run Date: 10/04/2022 23:15, Prep Date: 10/04/2022, Matrix: WW, Dilution: 1

Surrogate	Flags	%Rec	LCL	UCL
4-Bromofluorobenzene		**109.2**	80.0	124.0
1,2-Dichloroethane-D4		**95.5**	72.0	125.0
Toluene-D8		**99.4**	89.0	112.0

Matrix Spike (MS)

Lab Sample ID: 221004A7.4091402M, Parent Sample ID: S40914.01

Run in Batch: 221004A7, Run Date: 10/04/2022 23:38, Prep Date: 10/04/2022, Matrix: WW, Dilution: 1

Surrogate	Flags	%Rec	LCL	UCL
4-Bromofluorobenzene		**106.9**	80.0	124.0
1,2-Dichloroethane-D4		**83.4**	72.0	125.0
Toluene-D8		**99.7**	89.0	112.0

Matrix Spike Duplicate (MSD)

Lab Sample ID: 221004A7.4091403N, Parent Sample ID: 221004A7.4091402M

Run in Batch: 221004A7, Run Date: 10/05/2022 00:02, Prep Date: 10/04/2022, Matrix: WW, Dilution: 1

Surrogate	Flags	%Rec	LCL	UCL
4-Bromofluorobenzene		**108.5**	80.0	124.0
1,2-Dichloroethane-D4		**89.7**	72.0	125.0
Toluene-D8		**100.8**	89.0	112.0

Organics - Volatiles, Prep Batch ID: VO221010W1

QC Types: BLK/LCS/LCSD

Blank (BLK)

Lab Sample ID: 221010A3.BLKO10A

Run in Batch: 221010A3, Run Date: 10/10/2022 13:04, Prep Date: 10/10/2022, Matrix: WW, Dilution: 1

Surrogate	Flags	%Rec	LCL	UCL

No Surrogates

Laboratory Control Sample (LCS)

Lab Sample ID: 221010A3.LCSO10X

Run in Batch: 221010A3, Run Date: 10/10/2022 11:28, Prep Date: 10/10/2022, Matrix: WW, Dilution: 1

Surrogate	Flags	%Rec	LCL	UCL

No Surrogates

Laboratory Control Sample Duplicate (LCSD)

Lab Sample ID: 221010A3.LCSDO10X, Parent Sample ID: 221010A3.LCSO10X

Run in Batch: 221010A3, Run Date: 10/10/2022 12:16, Prep Date: 10/10/2022, Matrix: WW, Dilution: 1

Surrogate	Flags	%Rec	LCL	UCL

No Surrogates

Lab Sample ID: S40860.01

Sample Tag: MW-120

Collected Date/Time: 09/27/2022 09:30

Matrix: Groundwater

COC Reference: 154527

Organics - Volatiles, Analysis: Diisopropyl ether (DIPE)

Run in Batch: 221010A3, Run Date: 10/10/2022 14:20, Matrix: WW, Dilution: 1

Internal Standard	Flags	%Rec	LCL	UCL
Pentafluorobenzene		**93.2**	50.0	200.0
1,4-Difluorobenzene		**95.8**	50.0	200.0
Chlorobenzene-D5		**100.1**	50.0	200.0
1,4-Dichlorobenzene-D4		**103.5**	50.0	200.0

Organics - Volatiles, Analysis: Volatile Organics

Run in Batch: 221004A7, Run Date: 10/05/2022 03:57, Matrix: WW, Dilution: 1

Internal Standard	Flags	%Rec	LCL	UCL
Pentafluorobenzene		**103.0**	50.0	200.0
1,4-Difluorobenzene		**102.6**	50.0	200.0
Chlorobenzene-D5		**101.0**	50.0	200.0
1,4-Dichlorobenzene-D4		**102.2**	50.0	200.0

Lab Sample ID: S40860.02

Sample Tag: MW-119

Collected Date/Time: 09/27/2022 10:13

Matrix: Groundwater

COC Reference: 154527

Organics - Volatiles, Analysis: Diisopropyl ether (DIPE)

Run in Batch: 221010A3, Run Date: 10/10/2022 14:45, Matrix: WW, Dilution: 1

Internal Standard	Flags	%Rec	LCL	UCL
Pentafluorobenzene		**91.2**	50.0	200.0
1,4-Difluorobenzene		**93.5**	50.0	200.0
Chlorobenzene-D5		**97.9**	50.0	200.0
1,4-Dichlorobenzene-D4		**101.3**	50.0	200.0

Organics - Volatiles, Analysis: Volatile Organics

Run in Batch: 221004A7, Run Date: 10/05/2022 04:20, Matrix: WW, Dilution: 1

Internal Standard	Flags	%Rec	LCL	UCL
Pentafluorobenzene		**101.0**	50.0	200.0
1,4-Difluorobenzene		**101.4**	50.0	200.0
Chlorobenzene-D5		**103.4**	50.0	200.0
1,4-Dichlorobenzene-D4		**105.3**	50.0	200.0

Lab Sample ID: S40860.03

Sample Tag: MW-113

Collected Date/Time: 09/27/2022 11:27

Matrix: Groundwater

COC Reference: 154527

Organics - Volatiles, Analysis: Diisopropyl ether (DIPE)

Run in Batch: 221010A3, Run Date: 10/10/2022 15:11, Matrix: WW, Dilution: 1

Internal Standard	Flags	%Rec	LCL	UCL
Pentafluorobenzene		**85.1**	50.0	200.0
1,4-Difluorobenzene		**89.0**	50.0	200.0
Chlorobenzene-D5		**93.1**	50.0	200.0
1,4-Dichlorobenzene-D4		**94.3**	50.0	200.0

Organics - Volatiles, Analysis: Volatile Organics

Run in Batch: 221004A7, Run Date: 10/05/2022 04:44, Matrix: WW, Dilution: 1

Internal Standard	Flags	%Rec	LCL	UCL
Pentafluorobenzene		**99.9**	50.0	200.0
1,4-Difluorobenzene		**101.0**	50.0	200.0
Chlorobenzene-D5		**101.2**	50.0	200.0
1,4-Dichlorobenzene-D4		**102.5**	50.0	200.0

QC Report - Internal Standards per Lab Sample

Lab Sample ID: S40860.04

Sample Tag: MW-112

Collected Date/Time: 09/27/2022 12:37

Matrix: Groundwater

COC Reference: 154527

Organics - Volatiles, Analysis: Diisopropyl ether (DIPE)

Run in Batch: 221010A3, Run Date: 10/10/2022 15:36, Matrix: WW, Dilution: 1

Internal Standard	Flags	**%Rec**	LCL	UCL
Pentafluorobenzene		**87.9**	50.0	200.0
1,4-Difluorobenzene		**91.3**	50.0	200.0
Chlorobenzene-D5		**96.0**	50.0	200.0
1,4-Dichlorobenzene-D4		**99.9**	50.0	200.0

Organics - Volatiles, Analysis: Volatile Organics

Run in Batch: 221004A7, Run Date: 10/05/2022 05:07, Matrix: WW, Dilution: 1

Internal Standard	Flags	**%Rec**	LCL	UCL
Pentafluorobenzene		**97.7**	50.0	200.0
1,4-Difluorobenzene		**97.8**	50.0	200.0
Chlorobenzene-D5		**98.6**	50.0	200.0
1,4-Dichlorobenzene-D4		**102.3**	50.0	200.0

Lab Sample ID: S40860.05

Sample Tag: MW-111

Collected Date/Time: 09/27/2022 13:17

Matrix: Groundwater

COC Reference: 154527

Organics - Volatiles, Analysis: Diisopropyl ether (DIPE)

Run in Batch: 221010A3, Run Date: 10/10/2022 16:01, Matrix: WW, Dilution: 1

Internal Standard	Flags	%Rec	LCL	UCL
Pentafluorobenzene		**88.1**	50.0	200.0
1,4-Difluorobenzene		**91.0**	50.0	200.0
Chlorobenzene-D5		**94.9**	50.0	200.0
1,4-Dichlorobenzene-D4		**98.2**	50.0	200.0

Organics - Volatiles, Analysis: Volatile Organics

Run in Batch: 221004A7, Run Date: 10/05/2022 05:31, Matrix: WW, Dilution: 1

Internal Standard	Flags	%Rec	LCL	UCL
Pentafluorobenzene		**103.8**	50.0	200.0
1,4-Difluorobenzene		**105.5**	50.0	200.0
Chlorobenzene-D5		**107.3**	50.0	200.0
1,4-Dichlorobenzene-D4		**110.1**	50.0	200.0

Lab Sample ID: S40860.06

Sample Tag: MW-110

Collected Date/Time: 09/27/2022 13:47

Matrix: Groundwater

COC Reference: 154527

Organics - Volatiles, Analysis: Diisopropyl ether (DIPE)

Run in Batch: 221010A3, Run Date: 10/10/2022 16:27, Matrix: WW, Dilution: 1

Internal Standard	Flags	%Rec	LCL	UCL
Pentafluorobenzene		**92.7**	50.0	200.0
1,4-Difluorobenzene		**95.5**	50.0	200.0
Chlorobenzene-D5		**99.6**	50.0	200.0
1,4-Dichlorobenzene-D4		**103.6**	50.0	200.0

Organics - Volatiles, Analysis: Volatile Organics

Run in Batch: 221004A7, Run Date: 10/05/2022 05:54, Matrix: WW, Dilution: 1

Internal Standard	Flags	%Rec	LCL	UCL
Pentafluorobenzene		**101.8**	50.0	200.0
1,4-Difluorobenzene		**101.5**	50.0	200.0
Chlorobenzene-D5		**101.9**	50.0	200.0
1,4-Dichlorobenzene-D4		**105.1**	50.0	200.0

QC Report - Internal Standards per Lab Sample

Lab Sample ID: S40860.07

Sample Tag: Dup-01

Collected Date/Time: 09/27/2022 00:01

Matrix: Groundwater

COC Reference: 154527

Organics - Volatiles, Analysis: Diisopropyl ether (DIPE)

Run in Batch: 221010A3, Run Date: 10/10/2022 16:52, Matrix: WW, Dilution: 1

Internal Standard	Flags	**%Rec**	LCL	UCL
Pentafluorobenzene		**85.8**	50.0	200.0
1,4-Difluorobenzene		**89.4**	50.0	200.0
Chlorobenzene-D5		**92.3**	50.0	200.0
1,4-Dichlorobenzene-D4		**96.8**	50.0	200.0

Organics - Volatiles, Analysis: Volatile Organics

Run in Batch: 221004A7, Run Date: 10/05/2022 06:17, Matrix: WW, Dilution: 1

Internal Standard	Flags	**%Rec**	LCL	UCL
Pentafluorobenzene		**103.7**	50.0	200.0
1,4-Difluorobenzene		**104.7**	50.0	200.0
Chlorobenzene-D5		**106.4**	50.0	200.0
1,4-Dichlorobenzene-D4		**109.5**	50.0	200.0

QC Report - Internal Standards per Lab Sample

Lab Sample ID: S40860.08

Sample Tag: Trip Blank 1

Collected Date/Time: 09/27/2022 00:01

Matrix: Water

COC Reference: 154527

Organics - Volatiles, Analysis: Diisopropyl ether (DIPE)

Run in Batch: 221010A3, Run Date: 10/10/2022 13:30, Matrix: WW, Dilution: 1

Internal Standard	Flags	%Rec	LCL	UCL
Pentafluorobenzene		**93.8**	50.0	200.0
1,4-Difluorobenzene		**97.0**	50.0	200.0
Chlorobenzene-D5		**100.6**	50.0	200.0
1,4-Dichlorobenzene-D4		**105.3**	50.0	200.0

Organics - Volatiles, Analysis: Volatile Organics

Run in Batch: 221004A7, Run Date: 10/05/2022 02:23, Matrix: WW, Dilution: 1

Internal Standard	Flags	%Rec	LCL	UCL
Pentafluorobenzene		**103.9**	50.0	200.0
1,4-Difluorobenzene		**103.1**	50.0	200.0
Chlorobenzene-D5		**105.5**	50.0	200.0
1,4-Dichlorobenzene-D4		**109.6**	50.0	200.0

QC Report - Internal Standards per Lab Sample

Lab Sample ID: S40860.09

Sample Tag: MW-109

Collected Date/Time: 09/28/2022 09:25

Matrix: Groundwater

COC Reference: 154471

Organics - Volatiles, Analysis: Diisopropyl ether (DIPE)

Run in Batch: 221010A3, Run Date: 10/10/2022 17:17, Matrix: WW, Dilution: 1

Internal Standard	Flags	%Rec	LCL	UCL
Pentafluorobenzene		**87.7**	50.0	200.0
1,4-Difluorobenzene		**90.6**	50.0	200.0
Chlorobenzene-D5		**95.7**	50.0	200.0
1,4-Dichlorobenzene-D4		**98.1**	50.0	200.0

Organics - Volatiles, Analysis: Volatile Organics

Run in Batch: 221004A7, Run Date: 10/05/2022 06:40, Matrix: WW, Dilution: 1

Internal Standard	Flags	%Rec	LCL	UCL
Pentafluorobenzene		**99.5**	50.0	200.0
1,4-Difluorobenzene		**98.4**	50.0	200.0
Chlorobenzene-D5		**97.9**	50.0	200.0
1,4-Dichlorobenzene-D4		**99.4**	50.0	200.0

Lab Sample ID: S40860.10

Sample Tag: MW-108

Collected Date/Time: 09/28/2022 09:10

Matrix: Groundwater

COC Reference: 154471

Organics - Volatiles, Analysis: Diisopropyl ether (DIPE)

Run in Batch: 221010A3, Run Date: 10/10/2022 17:42, Matrix: WW, Dilution: 1

Internal Standard	Flags	%Rec	LCL	UCL
Pentafluorobenzene		**87.5**	50.0	200.0
1,4-Difluorobenzene		**91.0**	50.0	200.0
Chlorobenzene-D5		**94.9**	50.0	200.0
1,4-Dichlorobenzene-D4		**98.8**	50.0	200.0

Organics - Volatiles, Analysis: Volatile Organics

Run in Batch: 221004A7, Run Date: 10/05/2022 07:03, Matrix: WW, Dilution: 1

Internal Standard	Flags	%Rec	LCL	UCL
Pentafluorobenzene		**101.7**	50.0	200.0
1,4-Difluorobenzene		**101.5**	50.0	200.0
Chlorobenzene-D5		**102.0**	50.0	200.0
1,4-Dichlorobenzene-D4		**104.1**	50.0	200.0

Lab Sample ID: S40860.11

Sample Tag: MW-107

Collected Date/Time: 09/28/2022 10:23

Matrix: Groundwater

COC Reference: 154471

Organics - Volatiles, Analysis: Diisopropyl ether (DIPE)

Run in Batch: 221010A3, Run Date: 10/10/2022 18:07, Matrix: WW, Dilution: 1

Internal Standard	Flags	%Rec	LCL	UCL
Pentafluorobenzene		**89.5**	50.0	200.0
1,4-Difluorobenzene		**92.0**	50.0	200.0
Chlorobenzene-D5		**96.2**	50.0	200.0
1,4-Dichlorobenzene-D4		**99.4**	50.0	200.0

Organics - Volatiles, Analysis: Volatile Organics

Run in Batch: 221004A7, Run Date: 10/05/2022 07:27, Matrix: WW, Dilution: 1

Internal Standard	Flags	%Rec	LCL	UCL
Pentafluorobenzene		**102.5**	50.0	200.0
1,4-Difluorobenzene		**101.4**	50.0	200.0
Chlorobenzene-D5		**100.5**	50.0	200.0
1,4-Dichlorobenzene-D4		**102.8**	50.0	200.0

QC Report - Internal Standards per Lab Sample

Lab Sample ID: S40860.12

Sample Tag: MW-106

Collected Date/Time: 09/28/2022 11:25

Matrix: Groundwater

COC Reference: 154471

Organics - Volatiles, Analysis: Diisopropyl ether (DIPE)

Run in Batch: 221010A3, Run Date: 10/10/2022 18:33, Matrix: WW, Dilution: 1

Internal Standard	Flags	%Rec	LCL	UCL
Pentafluorobenzene		**87.1**	50.0	200.0
1,4-Difluorobenzene		**90.8**	50.0	200.0
Chlorobenzene-D5		**96.0**	50.0	200.0
1,4-Dichlorobenzene-D4		**98.9**	50.0	200.0

Organics - Volatiles, Analysis: Volatile Organics

Run in Batch: 221004A7, Run Date: 10/05/2022 07:50, Matrix: WW, Dilution: 1

Internal Standard	Flags	%Rec	LCL	UCL
Pentafluorobenzene		**100.9**	50.0	200.0
1,4-Difluorobenzene		**102.4**	50.0	200.0
Chlorobenzene-D5		**102.6**	50.0	200.0
1,4-Dichlorobenzene-D4		**104.5**	50.0	200.0

Lab Sample ID: S40860.13

Sample Tag: MW-121

Collected Date/Time: 09/28/2022 12:32

Matrix: Groundwater

COC Reference: 154471

Organics - Volatiles, Analysis: Diisopropyl ether (DIPE)

Run in Batch: 221010A3, Run Date: 10/10/2022 18:58, Matrix: WW, Dilution: 1

Internal Standard	Flags	%Rec	LCL	UCL
Pentafluorobenzene		**86.7**	50.0	200.0
1,4-Difluorobenzene		**90.2**	50.0	200.0
Chlorobenzene-D5		**94.7**	50.0	200.0
1,4-Dichlorobenzene-D4		**97.9**	50.0	200.0

Organics - Volatiles, Analysis: Volatile Organics

Run in Batch: 221004A7, Run Date: 10/05/2022 08:14, Matrix: WW, Dilution: 1

Internal Standard	Flags	%Rec	LCL	UCL
Pentafluorobenzene		**101.7**	50.0	200.0
1,4-Difluorobenzene		**101.2**	50.0	200.0
Chlorobenzene-D5		**100.9**	50.0	200.0
1,4-Dichlorobenzene-D4		**102.8**	50.0	200.0

Lab Sample ID: S40860.14

Sample Tag: MW-104

Collected Date/Time: 09/28/2022 13:38

Matrix: Groundwater

COC Reference: 154471

Organics - Volatiles, Analysis: Diisopropyl ether (DIPE)

Run in Batch: 221010A3, Run Date: 10/10/2022 19:23, Matrix: WW, Dilution: 1

Internal Standard	Flags	%Rec	LCL	UCL
Pentafluorobenzene		**84.4**	50.0	200.0
1,4-Difluorobenzene		**88.0**	50.0	200.0
Chlorobenzene-D5		**91.9**	50.0	200.0
1,4-Dichlorobenzene-D4		**94.1**	50.0	200.0

Organics - Volatiles, Analysis: Volatile Organics

Run in Batch: 221004A7, Run Date: 10/05/2022 08:38, Matrix: WW, Dilution: 1

Internal Standard	Flags	%Rec	LCL	UCL
Pentafluorobenzene		**99.6**	50.0	200.0
1,4-Difluorobenzene		**99.1**	50.0	200.0
Chlorobenzene-D5		**98.7**	50.0	200.0
1,4-Dichlorobenzene-D4		**101.1**	50.0	200.0

QC Report - Internal Standards per Lab Sample

Lab Sample ID: S40860.15

Sample Tag: MW-105

Collected Date/Time: 09/28/2022 14:23

Matrix: Groundwater

COC Reference: 154471

Organics - Volatiles, Analysis: Diisopropyl ether (DIPE)

Run in Batch: 221010A3, Run Date: 10/10/2022 19:48, Matrix: WW, Dilution: 1

Internal Standard	Flags	%Rec	LCL	UCL
Pentafluorobenzene		**84.9**	50.0	200.0
1,4-Difluorobenzene		**89.3**	50.0	200.0
Chlorobenzene-D5		**93.6**	50.0	200.0
1,4-Dichlorobenzene-D4		**96.8**	50.0	200.0

Organics - Volatiles, Analysis: Volatile Organics

Run in Batch: 221004A7, Run Date: 10/05/2022 09:01, Matrix: WW, Dilution: 1

Internal Standard	Flags	%Rec	LCL	UCL
Pentafluorobenzene		**101.0**	50.0	200.0
1,4-Difluorobenzene		**100.9**	50.0	200.0
Chlorobenzene-D5		**102.0**	50.0	200.0
1,4-Dichlorobenzene-D4		**104.6**	50.0	200.0

QC Report - Internal Standards per Lab Sample

Lab Sample ID: S40860.16

Sample Tag: Dup-02

Collected Date/Time: 09/28/2022 00:01

Matrix: Groundwater

COC Reference: 154471

Organics - Volatiles, Analysis: Diisopropyl ether (DIPE)

Run in Batch: 221010A3, Run Date: 10/10/2022 20:14, Matrix: WW, Dilution: 1

Internal Standard	Flags	%Rec	LCL	UCL
Pentafluorobenzene		**87.0**	50.0	200.0
1,4-Difluorobenzene		**90.5**	50.0	200.0
Chlorobenzene-D5		**94.9**	50.0	200.0
1,4-Dichlorobenzene-D4		**96.1**	50.0	200.0

Organics - Volatiles, Analysis: Volatile Organics

Run in Batch: 221004A7, Run Date: 10/05/2022 09:25, Matrix: WW, Dilution: 1

Internal Standard	Flags	%Rec	LCL	UCL
Pentafluorobenzene		**104.4**	50.0	200.0
1,4-Difluorobenzene		**104.0**	50.0	200.0
Chlorobenzene-D5		**104.7**	50.0	200.0
1,4-Dichlorobenzene-D4		**106.3**	50.0	200.0

Lab Sample ID: S40860.17

Sample Tag: Trip Blank 2

Collected Date/Time: 09/28/2022 00:01

Matrix: Water

COC Reference: 154471

Organics - Volatiles, Analysis: Diisopropyl ether (DIPE)

Run in Batch: 221010A3, Run Date: 10/10/2022 13:55, Matrix: WW, Dilution: 1

Internal Standard	Flags	**%Rec**	LCL	UCL
Pentafluorobenzene		**95.0**	50.0	200.0
1,4-Difluorobenzene		**98.0**	50.0	200.0
Chlorobenzene-D5		**102.7**	50.0	200.0
1,4-Dichlorobenzene-D4		**103.1**	50.0	200.0

Organics - Volatiles, Analysis: Volatile Organics

Run in Batch: 221004A7, Run Date: 10/05/2022 02:00, Matrix: WW, Dilution: 1

Internal Standard	Flags	**%Rec**	LCL	UCL
Pentafluorobenzene		**103.0**	50.0	200.0
1,4-Difluorobenzene		**101.6**	50.0	200.0
Chlorobenzene-D5		**101.3**	50.0	200.0
1,4-Dichlorobenzene-D4		**101.8**	50.0	200.0

Organics - Volatiles, Prep Batch ID: VF221004W1

QC Types: BLK/LCS/LCSD/MS/MSD

Blank (BLK)

Lab Sample ID: 221004A7.BLKW04A

Run in Batch: 221004A7, Run Date: 10/05/2022 01:13, Prep Date: 10/04/2022, Matrix: WW, Dilution: 1

Internal Standard	Flags	%Rec	LCL	UCL
Pentafluorobenzene		**100.6**	50.0	200.0
1,4-Difluorobenzene		**99.1**	50.0	200.0
Chlorobenzene-D5		**97.8**	50.0	200.0
1,4-Dichlorobenzene-D4		**99.4**	50.0	200.0

Laboratory Control Sample (LCS)

Lab Sample ID: 221004A7.LCSW04A

Run in Batch: 221004A7, Run Date: 10/04/2022 22:51, Prep Date: 10/04/2022, Matrix: WW, Dilution: 1

Internal Standard	Flags	%Rec	LCL	UCL
Pentafluorobenzene		**104.4**	50.0	200.0
1,4-Difluorobenzene		**103.8**	50.0	200.0
Chlorobenzene-D5		**104.8**	50.0	200.0
1,4-Dichlorobenzene-D4		**104.8**	50.0	200.0

Laboratory Control Sample Duplicate (LCSD)

Lab Sample ID: 221004A7.LCSDW04A, Parent Sample ID: 221004A7.LCSW04A

Run in Batch: 221004A7, Run Date: 10/04/2022 23:15, Prep Date: 10/04/2022, Matrix: WW, Dilution: 1

Internal Standard	Flags	%Rec	LCL	UCL
Pentafluorobenzene		**100.3**	50.0	200.0
1,4-Difluorobenzene		**100.4**	50.0	200.0
Chlorobenzene-D5		**100.2**	50.0	200.0
1,4-Dichlorobenzene-D4		**99.9**	50.0	200.0

Matrix Spike (MS)

Lab Sample ID: 221004A7.4091402M, Parent Sample ID: S40914.01

Run in Batch: 221004A7, Run Date: 10/04/2022 23:38, Prep Date: 10/04/2022, Matrix: WW, Dilution: 1

Internal Standard	Flags	%Rec	LCL	UCL
Pentafluorobenzene		**91.4**	50.0	200.0
1,4-Difluorobenzene		**90.9**	50.0	200.0
Chlorobenzene-D5		**89.3**	50.0	200.0
1,4-Dichlorobenzene-D4		**85.6**	50.0	200.0

Matrix Spike Duplicate (MSD)

Lab Sample ID: 221004A7.4091403N, Parent Sample ID: 221004A7.4091402M

Run in Batch: 221004A7, Run Date: 10/05/2022 00:02, Prep Date: 10/04/2022, Matrix: WW, Dilution: 1

Internal Standard	Flags	%Rec	LCL	UCL
Pentafluorobenzene		**95.7**	50.0	200.0
1,4-Difluorobenzene		**95.0**	50.0	200.0
Chlorobenzene-D5		**94.9**	50.0	200.0
1,4-Dichlorobenzene-D4		**94.0**	50.0	200.0

Organics - Volatiles, Prep Batch ID: VO221010W1

QC Types: BLK/LCS/LCSD

Blank (BLK)

Lab Sample ID: 221010A3.BLKO10A

Run in Batch: 221010A3, Run Date: 10/10/2022 13:04, Prep Date: 10/10/2022, Matrix: WW, Dilution: 1

Internal Standard	Flags	%Rec	LCL	UCL
Pentafluorobenzene		**98.2**	50.0	200.0
1,4-Difluorobenzene		**100.0**	50.0	200.0
Chlorobenzene-D5		**102.9**	50.0	200.0
1,4-Dichlorobenzene-D4		**104.3**	50.0	200.0

Laboratory Control Sample (LCS)

Lab Sample ID: 221010A3.LCSO10X

Run in Batch: 221010A3, Run Date: 10/10/2022 11:28, Prep Date: 10/10/2022, Matrix: WW, Dilution: 1

Internal Standard	Flags	%Rec	LCL	UCL
Pentafluorobenzene		**103.0**	50.0	200.0
1,4-Difluorobenzene		**103.0**	50.0	200.0
Chlorobenzene-D5		**104.5**	50.0	200.0
1,4-Dichlorobenzene-D4		**104.0**	50.0	200.0

Laboratory Control Sample Duplicate (LCSD)

Lab Sample ID: 221010A3.LCSDO10X, Parent Sample ID: 221010A3.LCSO10X

Run in Batch: 221010A3, Run Date: 10/10/2022 12:16, Prep Date: 10/10/2022, Matrix: WW, Dilution: 1

Internal Standard	Flags	%Rec	LCL	UCL
Pentafluorobenzene		**97.5**	50.0	200.0
1,4-Difluorobenzene		**98.8**	50.0	200.0
Chlorobenzene-D5		**99.7**	50.0	200.0
1,4-Dichlorobenzene-D4		**97.9**	50.0	200.0

Metals, Prep Batch ID: HGD-100522-3

Surrogates: No, QC Types: BLK/LCS/MS/MSD

Blank (BLK)

Lab Sample ID: HG-22-1005A.052.LRB

Run in Batch: HG-22-1005A, Run Date: 10/05/2022 15:01, Prep Date: 10/05/2022, Matrix: Liquid, Dilution: 1

Analyte	Flags	Conc	RDL	Units
Mercury		ND	0.20	ug/L

Laboratory Control Sample (LCS)

Lab Sample ID: HG-22-1005A.051.LCS

Run in Batch: HG-22-1005A, Run Date: 10/05/2022 14:58, Prep Date: 10/05/2022, Matrix: Liquid, Dilution: 1

Analyte	Flags	% Rec	LCL	UCL
Mercury		104	85	115

Matrix Spike (MS)

Lab Sample ID: HG-22-1005A.063.MS, Parent Sample ID: S40860.05

Run in Batch: HG-22-1005A, Run Date: 10/05/2022 16:47, Prep Date: 10/05/2022, Matrix: Liquid, Dilution: 1

Analyte	Flags	% Rec	LCL	UCL
Mercury		106	80	120

Matrix Spike (MS)

Lab Sample ID: HG-22-1005A.076.MS, Parent Sample ID: S40860.15

Run in Batch: HG-22-1005A, Run Date: 10/05/2022 17:35, Prep Date: 10/05/2022, Matrix: Liquid, Dilution: 1

Analyte	Flags	% Rec	LCL	UCL
Mercury		104	80	120

Matrix Spike Duplicate (MSD)

Lab Sample ID: HG-22-1005A.064.MSD, Parent Sample ID: HG-22-1005A.063.MS

Run in Batch: HG-22-1005A, Run Date: 10/05/2022 16:50, Prep Date: 10/05/2022, Matrix: Liquid, Dilution: 1

Analyte	Flags	% Rec	LCL	UCL	RPD	RPD CL
Mercury		106	80	120	0	20

Matrix Spike Duplicate (MSD)

Lab Sample ID: HG-22-1005A.077.MSD, Parent Sample ID: HG-22-1005A.076.MS

Run in Batch: HG-22-1005A, Run Date: 10/05/2022 17:38, Prep Date: 10/05/2022, Matrix: Liquid, Dilution: 1

Analyte	Flags	% Rec	LCL	UCL	RPD	RPD CL
Mercury		105	80	120	1	20

Metals, Prep Batch ID: MTD-100622-1

Surrogates: No, QC Types: BLK/LCS/MS/MSD

Blank (BLK)

Lab Sample ID: MT4-22-1006A.023.LRB

Run in Batch: MT4-22-1006A, Run Date: 10/06/2022 11:11, Prep Date: 10/06/2022, Matrix: Liquid, Dilution: 1

Analyte	Flags	Conc	RDL	Units
Aluminum		ND	0.002	mg/L
Antimony		ND	0.001	mg/L
Arsenic		ND	0.0004	mg/L
Barium		ND	0.001	mg/L
Beryllium		ND	0.0002	mg/L
Boron		ND	0.008	mg/L
Cadmium		ND	0.0001	mg/L
Chromium		ND	0.001	mg/L
Cobalt		ND	0.001	mg/L
Iron		ND	0.004	mg/L
Lead		ND	0.0006	mg/L
Manganese		ND	0.001	mg/L
Molybdenum		ND	0.001	mg/L
Nickel		ND	0.001	mg/L
Selenium		ND	0.001	mg/L
Silver		ND	0.0001	mg/L
Strontium		ND	0.001	mg/L
Thallium		ND	0.0004	mg/L
Titanium		ND	0.001	mg/L
Vanadium		ND	0.001	mg/L
Zinc		ND	0.001	mg/L

Blank (BLK)

Lab Sample ID: MT4-22-1006B.015.LRB

Run in Batch: MT4-22-1006B, Run Date: 10/06/2022 13:45, Prep Date: 10/06/2022, Matrix: Liquid, Dilution: 1

Analyte	Flags	Conc	RDL	Units
Calcium		ND	0.05	mg/L
Magnesium		ND	0.05	mg/L
Potassium		ND	0.05	mg/L
Sodium		ND	0.05	mg/L

Laboratory Control Sample (LCS)

Lab Sample ID: MT4-22-1006A.021.LCS

Run in Batch: MT4-22-1006A, Run Date: 10/06/2022 11:07, Prep Date: 10/06/2022, Matrix: Liquid, Dilution: 1

Analyte	Flags	% Rec	LCL	UCL
Aluminum		100	85	115
Antimony		103	85	115
Arsenic		100	85	115
Barium		103	85	115
Beryllium		99	85	115
Boron		101	85	115
Cadmium		102	85	115
Chromium		100	85	115
Cobalt		101	85	115
Iron		111	85	115
Lead		100	85	115

Metals, Prep Batch ID: MTD-100622-1 (continued)

Surrogates: No, QC Types: BLK/LCS/MS/MSD

Laboratory Control Sample (LCS) (continued)

Lab Sample ID: MT4-22-1006A.021.LCS

Run in Batch: MT4-22-1006A, Run Date: 10/06/2022 11:07, Prep Date: 10/06/2022, Matrix: Liquid, Dilution: 1

Analyte	Flags	% Rec	LCL	UCL
Manganese		105	85	115
Molybdenum		102	85	115
Nickel		103	85	115
Selenium		96	85	115
Silver		100	85	115
Strontium		103	85	115
Thallium		98	85	115
Titanium		102	85	115
Vanadium		99	85	115
Zinc		101	85	115

Laboratory Control Sample (LCS)

Lab Sample ID: MT4-22-1006B.014.LCS

Run in Batch: MT4-22-1006B, Run Date: 10/06/2022 13:45, Prep Date: 10/06/2022, Matrix: Liquid, Dilution: 1

Analyte	Flags	% Rec	LCL	UCL
Calcium		95	85	115
Magnesium		97	85	115
Potassium		98	85	115
Sodium		96	85	115

Matrix Spike (MS)

Lab Sample ID: MT4-22-1006A.042.MS, Parent Sample ID: S40860.11

Run in Batch: MT4-22-1006A, Run Date: 10/06/2022 12:01, Prep Date: 10/06/2022, Matrix: Liquid, Dilution: 5

Analyte	Flags	% Rec	LCL	UCL
Aluminum		96	75	125
Antimony		103	75	125
Arsenic		110	75	125
Barium		101	75	125
Beryllium		102	75	125
Boron		98	75	125
Cadmium		102	75	125
Chromium		106	75	125
Cobalt		103	75	125
Iron		109	75	125
Lead		94	75	125
Manganese		104	75	125
Molybdenum		98	75	125
Nickel		103	75	125
Selenium		108	75	125
Silver		97	75	125
Strontium		104	75	125
Thallium		96	75	125
Titanium		104	75	125
Vanadium		106	75	125
Zinc		106	75	125

Metals, Prep Batch ID: MTD-100622-1 (continued)

Surrogates: No, QC Types: BLK/LCS/MS/MSD

Matrix Spike (MS)

Lab Sample ID: MT4-22-1006A.064.MS, Parent Sample ID: S40860.16

Run in Batch: MT4-22-1006A, Run Date: 10/06/2022 12:59, Prep Date: 10/06/2022, Matrix: Liquid, Dilution: 5

Analyte	Flags	% Rec	LCL	UCL
Aluminum		100	75	125
Antimony		105	75	125
Arsenic		108	75	125
Barium		101	75	125
Beryllium		103	75	125
Boron		104	75	125
Cadmium		104	75	125
Chromium		107	75	125
Cobalt		103	75	125
Iron		106	75	125
Lead		92	75	125
Manganese		108	75	125
Molybdenum		101	75	125
Nickel		102	75	125
Selenium		104	75	125
Silver		99	75	125
Strontium		107	75	125
Thallium		94	75	125
Titanium		107	75	125
Vanadium		106	75	125
Zinc		108	75	125

Matrix Spike (MS)

Lab Sample ID: MT4-22-1006B.034.MS, Parent Sample ID: S40860.11

Run in Batch: MT4-22-1006B, Run Date: 10/06/2022 14:02, Prep Date: 10/06/2022, Matrix: Liquid, Dilution: 5

Analyte	Flags	% Rec	LCL	UCL
Calcium		101	75	125
Magnesium		101	75	125
Potassium		99	75	125
Sodium		97	75	125

Matrix Spike (MS)

Lab Sample ID: MT4-22-1006B.051.MS, Parent Sample ID: S40860.16

Run in Batch: MT4-22-1006B, Run Date: 10/06/2022 14:16, Prep Date: 10/06/2022, Matrix: Liquid, Dilution: 5

Analyte	Flags	% Rec	LCL	UCL
Calcium		104	75	125
Magnesium		102	75	125
Potassium		106	75	125
Sodium		107	75	125

Matrix Spike Duplicate (MSD)

Lab Sample ID: MT4-22-1006A.043.MSD, Parent Sample ID: MT4-22-1006A.042.MS

Run in Batch: MT4-22-1006A, Run Date: 10/06/2022 12:03, Prep Date: 10/06/2022, Matrix: Liquid, Dilution: 5

Analyte	Flags	% Rec	LCL	UCL	RPD	RPD CL
Aluminum		89	75	125	7	20
Antimony		104	75	125	1	20

Metals, Prep Batch ID: MTD-100622-1 (continued)

Surrogates: No, QC Types: BLK/LCS/MS/MSD

Matrix Spike Duplicate (MSD) (continued)

Lab Sample ID: MT4-22-1006A.043.MSD, Parent Sample ID: MT4-22-1006A.042.MS

Run in Batch: MT4-22-1006A, Run Date: 10/06/2022 12:03, Prep Date: 10/06/2022, Matrix: Liquid, Dilution: 5

Analyte	Flags	% Rec	LCL	UCL	RPD	RPD CL
Arsenic		109	75	125	1	20
Barium		104	75	125	2	20
Beryllium		101	75	125	1	20
Boron		94	75	125	3	20
Cadmium		102	75	125	0	20
Chromium		104	75	125	1	20
Cobalt		103	75	125	0	20
Iron		109	75	125	0	20
Lead		92	75	125	3	20
Manganese		107	75	125	2	20
Molybdenum		100	75	125	2	20
Nickel		104	75	125	1	20
Selenium		105	75	125	3	20
Silver		99	75	125	2	20
Strontium		105	75	125	1	20
Thallium		94	75	125	2	20
Titanium		102	75	125	2	20
Vanadium		107	75	125	1	20
Zinc		114	75	125	7	20

Matrix Spike Duplicate (MSD)

Lab Sample ID: MT4-22-1006A.065.MSD, Parent Sample ID: MT4-22-1006A.064.MS

Run in Batch: MT4-22-1006A, Run Date: 10/06/2022 13:01, Prep Date: 10/06/2022, Matrix: Liquid, Dilution: 5

Analyte	Flags	% Rec	LCL	UCL	RPD	RPD CL
Aluminum		97	75	125	2	20
Antimony		105	75	125	0	20
Arsenic		108	75	125	0	20
Barium		100	75	125	1	20
Beryllium		103	75	125	0	20
Boron		105	75	125	1	20
Cadmium		102	75	125	1	20
Chromium		109	75	125	2	20
Cobalt		103	75	125	0	20
Iron		105	75	125	1	20
Lead		93	75	125	1	20
Manganese		109	75	125	1	20
Molybdenum		102	75	125	1	20
Nickel		105	75	125	3	20
Selenium		103	75	125	1	20
Silver		99	75	125	0	20
Strontium		101	75	125	3	20
Thallium		92	75	125	3	20
Titanium		113	75	125	5	20
Vanadium		109	75	125	3	20
Zinc		105	75	125	3	20

Metals, Prep Batch ID: MTD-100622-1 (continued)

Surrogates: No, QC Types: BLK/LCS/MS/MSD

Matrix Spike Duplicate (MSD)

Lab Sample ID: MT4-22-1006B.035.MSD, Parent Sample ID: MT4-22-1006B.034.MS

Run in Batch: MT4-22-1006B, Run Date: 10/06/2022 14:03, Prep Date: 10/06/2022, Matrix: Liquid, Dilution: 5

Analyte	Flags	% Rec	LCL	UCL	RPD	RPD CL
Calcium		111	75	125	1	20
Magnesium		99	75	125	1	20
Potassium		105	75	125	3	20
Sodium		109	75	125	3	20

Matrix Spike Duplicate (MSD)

Lab Sample ID: MT4-22-1006B.052.MSD, Parent Sample ID: MT4-22-1006B.051.MS

Run in Batch: MT4-22-1006B, Run Date: 10/06/2022 14:17, Prep Date: 10/06/2022, Matrix: Liquid, Dilution: 5

Analyte	Flags	% Rec	LCL	UCL	RPD	RPD CL
Calcium		94	75	125	1	20
Magnesium		100	75	125	1	20
Potassium		101	75	125	4	20
Sodium		100	75	125	1	20

Organics - Volatiles, Prep Batch ID: VF221004W1

Surrogates: Yes, QC Types: BLK/LCS/LCSD/MS/MSD

Blank (BLK)

Lab Sample ID: 221004A7.BLKW04A

Run in Batch: 221004A7, Run Date: 10/05/2022 01:13, Prep Date: 10/04/2022, Matrix: WW, Dilution: 1

Analyte	Flags	Conc	RDL	Units
Acetone		ND	10.00	ug/l
tert-Methyl butyl ether (MTBE)		ND	1.00	ug/l
Acrylonitrile		ND	1.00	ug/l
2-Butanone (MEK)		ND	10.00	ug/l
Dichlorodifluoromethane		ND	1.00	ug/l
Chloromethane		ND	1.00	ug/l
Vinyl chloride		ND	1.00	ug/l
Bromomethane		ND	1.00	ug/l
Chloroethane		ND	1.00	ug/l
Trichlorofluoromethane		ND	1.00	ug/l
1,1-Dichloroethene		ND	1.00	ug/l
Methylene chloride		ND	1.00	ug/l
trans-1,2-Dichloroethene		ND	1.00	ug/l
1,1-Dichloroethane		ND	1.00	ug/l
cis-1,2-Dichloroethene		ND	1.00	ug/l
Chloroform		ND	1.00	ug/l
1,1,1-Trichloroethane		ND	1.00	ug/l
4-Methyl-2-pentanone (MIBK)		ND	10.00	ug/l
Carbon tetrachloride		ND	1.00	ug/l
Benzene		ND	1.00	ug/l
1,2-Dichloroethane		ND	1.00	ug/l
Trichloroethene		ND	1.00	ug/l
1,2-Dichloropropane		ND	1.00	ug/l
Bromodichloromethane		ND	1.00	ug/l
Dibromomethane		ND	1.00	ug/l
cis-1,3-Dichloropropene		ND	1.00	ug/l
Toluene		ND	1.00	ug/l
trans-1,3-Dichloropropene		ND	1.00	ug/l
1,1,2-Trichloroethane		ND	1.00	ug/l
Tetrachloroethene		ND	1.00	ug/l
Dibromochloromethane		ND	1.00	ug/l
1,2-Dibromoethane		ND	1.00	ug/l
Chlorobenzene		ND	1.00	ug/l
1,1,1,2-Tetrachloroethane		ND	1.00	ug/l
Ethylbenzene		ND	1.00	ug/l
p,m-Xylene		ND	1.00	ug/l
o-Xylene		ND	1.00	ug/l
Styrene		ND	1.00	ug/l
Isopropylbenzene		ND	1.00	ug/l
Bromoform		ND	1.00	ug/l
1,1,2,2-Tetrachloroethane		ND	1.00	ug/l
1,2,3-Trichloropropane		ND	1.00	ug/l
n-Propylbenzene		ND	1.00	ug/l
Bromobenzene		ND	1.00	ug/l
1,3,5-Trimethylbenzene		ND	1.00	ug/l
tert-Butylbenzene		ND	1.00	ug/l

Organics - Volatiles, Prep Batch ID: VF221004W1 (continued)

Surrogates: Yes, QC Types: BLK/LCS/LCSD/MS/MSD

Blank (BLK) (continued)

Lab Sample ID: 221004A7.BLKW04A

Run in Batch: 221004A7, Run Date: 10/05/2022 01:13, Prep Date: 10/04/2022, Matrix: WW, Dilution: 1

Analyte	Flags	Conc	RDL	Units
1,2,4-Trimethylbenzene		ND	1.00	ug/l
sec-Butylbenzene		ND	1.00	ug/l
p-Isopropyltoluene		ND	1.00	ug/l
1,3-Dichlorobenzene		ND	1.00	ug/l
1,4-Dichlorobenzene		ND	1.00	ug/l
1,2-Dichlorobenzene		ND	1.00	ug/l
1,2,3-Trimethylbenzene		ND	1.00	ug/l
n-Butylbenzene		ND	1.00	ug/l
1,2-Dibromo-3-chloropropane		ND	1.00	ug/l
1,2,4-Trichlorobenzene		ND	1.00	ug/l
1,2,3-Trichlorobenzene		ND	1.00	ug/l
Naphthalene		ND	1.00	ug/l
Acrolein		ND	10.00	ug/l
2-Chlorotoluene		ND	1.00	ug/l
4-Chlorotoluene		ND	1.00	ug/l
1,3-Dichloropropane		ND	1.00	ug/l
1,1-Dichloropropene		ND	1.00	ug/l
2,2-Dichloropropane		ND	1.00	ug/l
Hexachlorobutadiene		ND	1.00	ug/l
1,1,2-Trichloro-1,2,2-trifluoroethane		ND	1.00	ug/l

Laboratory Control Sample (LCS)

Lab Sample ID: 221004A7.LCSW04A

Run in Batch: 221004A7, Run Date: 10/04/2022 22:51, Prep Date: 10/04/2022, Matrix: WW, Dilution: 1

Analyte	Flags	% Rec	LCL	UCL
Acetone		95.4	29.9	161.5
tert-Methyl butyl ether (MTBE)		104.4	73.2	122.4
Acrylonitrile		97.4	69.9	128.9
2-Butanone (MEK)		100.3	44.0	134.4
Dichlorodifluoromethane		80.0	10.0	222.8
Chloromethane		93.9	23.8	166.5
Vinyl chloride		98.1	43.5	149.1
Bromomethane		101.4	56.8	151.3
Chloroethane		96.0	53.4	149.4
Trichlorofluoromethane		88.7	59.7	151.8
1,1-Dichloroethene		91.5	69.6	139.4
Methylene chloride		103.1	73.3	121.1
trans-1,2-Dichloroethene		96.7	73.6	129.3
1,1-Dichloroethane		98.6	71.5	126.2
cis-1,2-Dichloroethene		104.7	76.6	122.1
Chloroform		102.1	78.4	124.0
1,1,1-Trichloroethane		91.0	79.4	130.9
4-Methyl-2-pentanone (MIBK)		100.7	71.6	125.2
Carbon tetrachloride		87.1	72.6	133.0
Benzene		105.1	79.9	124.9
1,2-Dichloroethane		95.7	76.0	126.3

Organics - Volatiles, Prep Batch ID: VF221004W1 (continued)

Surrogates: Yes, QC Types: BLK/LCS/LCSD/MS/MSD

Laboratory Control Sample (LCS) (continued)

Lab Sample ID: 221004A7.LCSW04A

Run in Batch: 221004A7, Run Date: 10/04/2022 22:51, Prep Date: 10/04/2022, Matrix: WW, Dilution: 1

Analyte	Flags	% Rec	LCL	UCL
Trichloroethene		102.9	79.7	124.2
1,2-Dichloropropane		103.3	78.6	126.4
Bromodichloromethane		99.4	80.4	128.2
Dibromomethane		112.6	76.9	122.1
cis-1,3-Dichloropropene		101.2	79.8	129.9
Toluene		104.9	79.8	124.5
trans-1,3-Dichloropropene		98.5	74.0	131.3
1,1,2-Trichloroethane		107.8	78.7	123.1
Tetrachloroethene		106.6	74.5	124.5
Dibromochloromethane		101.8	74.6	127.2
1,2-Dibromoethane		107.9	70.3	133.7
Chlorobenzene		110.1	79.2	122.7
1,1,1,2-Tetrachloroethane		103.1	80.3	128.2
Ethylbenzene		106.9	79.5	129.1
p,m-Xylene		106.9	79.4	132.2
o-Xylene		106.8	80.2	131.0
Styrene		107.9	69.5	126.7
Isopropylbenzene		108.0	74.4	121.5
Bromoform		99.4	69.4	128.0
1,1,2,2-Tetrachloroethane		108.6	79.8	126.3
1,2,3-Trichloropropane		103.1	78.3	138.8
n-Propylbenzene		106.7	82.0	130.7
Bromobenzene		114.0	78.7	124.6
1,3,5-Trimethylbenzene		108.9	81.3	128.9
tert-Butylbenzene		104.7	80.7	128.9
1,2,4-Trimethylbenzene		110.5	81.4	130.8
sec-Butylbenzene		103.1	77.4	129.8
p-Isopropyltoluene		103.6	79.8	137.5
1,3-Dichlorobenzene		104.2	77.0	131.3
1,4-Dichlorobenzene		103.9	20.7	137.7
1,2-Dichlorobenzene		105.9	10.0	166.2
1,2,3-Trimethylbenzene		105.1	76.3	124.2
n-Butylbenzene		101.8	80.0	133.3
1,2-Dibromo-3-chloropropane		99.4	21.2	189.4
1,2,4-Trichlorobenzene		113.9	27.4	143.4
1,2,3-Trichlorobenzene		115.9	75.4	131.4
Naphthalene		108.0	32.9	135.8
Acrolein	*	47.4	70.0	130.0
2-Chlorotoluene		108.2	70.0	130.0
4-Chlorotoluene		109.6	70.0	130.0
2,2-Dichloropropane		82.0	70.0	130.0
1,1,2-Trichloro-1,2,2-trifluoroethane		93.2	75.1	135.9

Organics - Volatiles, Prep Batch ID: VF221004W1 (continued)

Surrogates: Yes, QC Types: BLK/LCS/LCSD/MS/MSD

Laboratory Control Sample Duplicate (LCSD)

Lab Sample ID: 221004A7.LCSDW04A, Parent Sample ID: 221004A7.LCSW04A

Run in Batch: 221004A7, Run Date: 10/04/2022 23:15, Prep Date: 10/04/2022, Matrix: WW, Dilution: 1

Analyte	Flags	% Rec	LCL	UCL	RPD	RPD CL
Acetone		92.0	29.9	161.5	3.6	30.0
tert-Methyl butyl ether (MTBE)		105.0	73.2	122.4	0.6	30.0
Acrylonitrile		94.2	69.9	128.9	3.4	30.0
2-Butanone (MEK)		88.0	44.0	134.4	13.0	30.0
Dichlorodifluoromethane		87.9	10.0	222.8	9.4	30.0
Chloromethane		100.7	23.8	166.5	6.9	30.0
Vinyl chloride		105.0	43.5	149.1	6.8	30.0
Bromomethane		106.8	56.8	151.3	5.2	30.0
Chloroethane		102.7	53.4	149.4	6.7	30.0
Trichlorofluoromethane		94.3	59.7	151.8	6.2	30.0
1,1-Dichloroethene		97.9	69.6	139.4	6.8	30.0
Methylene chloride		108.0	73.3	121.1	4.7	30.0
trans-1,2-Dichloroethene		101.9	73.6	129.3	5.3	30.0
1,1-Dichloroethane		103.9	71.5	126.2	5.2	30.0
cis-1,2-Dichloroethene		109.6	76.6	122.1	4.6	30.0
Chloroform		107.3	78.4	124.0	5.0	30.0
1,1,1-Trichloroethane		96.5	79.4	130.9	5.9	30.0
4-Methyl-2-pentanone (MIBK)		94.6	71.6	125.2	6.2	30.0
Carbon tetrachloride		92.4	72.6	133.0	5.9	30.0
Benzene		110.3	79.9	124.9	4.9	30.0
1,2-Dichloroethane		97.9	76.0	126.3	2.3	30.0
Trichloroethene		108.4	79.7	124.2	5.2	30.0
1,2-Dichloropropane		107.6	78.6	126.4	4.2	30.0
Bromodichloromethane		104.4	80.4	128.2	4.9	30.0
Dibromomethane		115.9	76.9	122.1	2.9	30.0
cis-1,3-Dichloropropene		105.2	79.8	129.9	3.9	30.0
Toluene		109.1	79.8	124.5	3.9	30.0
trans-1,3-Dichloropropene		101.7	74.0	131.3	3.2	30.0
1,1,2-Trichloroethane		109.3	78.7	123.1	1.4	30.0
Tetrachloroethene		111.4	74.5	124.5	4.4	30.0
Dibromochloromethane		104.4	74.6	127.2	2.6	30.0
1,2-Dibromoethane		109.7	70.3	133.7	1.6	30.0
Chlorobenzene		114.9	79.2	122.7	4.2	30.0
1,1,1,2-Tetrachloroethane		108.6	80.3	128.2	5.2	30.0
Ethylbenzene		112.0	79.5	129.1	4.6	30.0
p,m-Xylene		111.2	79.4	132.2	4.0	30.0
o-Xylene		111.4	80.2	131.0	4.2	30.0
Styrene		112.5	69.5	126.7	4.2	30.0
Isopropylbenzene		113.0	74.4	121.5	4.6	30.0
Bromoform		99.6	69.4	128.0	0.3	30.0
1,1,2,2-Tetrachloroethane		106.4	79.8	126.3	2.1	30.0
1,2,3-Trichloropropane		100.7	78.3	138.8	2.4	30.0
n-Propylbenzene		111.4	82.0	130.7	4.4	30.0
Bromobenzene		119.6	78.7	124.6	4.8	30.0
1,3,5-Trimethylbenzene		113.8	81.3	128.9	4.3	30.0
tert-Butylbenzene		110.2	80.7	128.9	5.1	30.0

Organics - Volatiles, Prep Batch ID: VF221004W1 (continued)

Surrogates: Yes, QC Types: BLK/LCS/LCSD/MS/MSD

Laboratory Control Sample Duplicate (LCSD) (continued)

Lab Sample ID: 221004A7.LCSDW04A, Parent Sample ID: 221004A7.LCSW04A

Run in Batch: 221004A7, Run Date: 10/04/2022 23:15, Prep Date: 10/04/2022, Matrix: WW, Dilution: 1

Analyte	Flags	% Rec	LCL	UCL	RPD	RPD CL
1,2,4-Trimethylbenzene		115.2	81.4	130.8	4.2	30.0
sec-Butylbenzene		110.1	77.4	129.8	6.6	30.0
p-Isopropyltoluene		109.3	79.8	137.5	5.3	30.0
1,3-Dichlorobenzene		108.2	77.0	131.3	3.7	30.0
1,4-Dichlorobenzene		109.1	20.7	137.7	5.0	30.0
1,2-Dichlorobenzene		110.6	10.0	166.2	4.3	30.0
1,2,3-Trimethylbenzene		110.1	76.3	124.2	4.7	30.0
n-Butylbenzene		107.9	80.0	133.3	5.8	30.0
1,2-Dibromo-3-chloropropane		94.5	21.2	189.4	5.0	30.0
1,2,4-Trichlorobenzene		119.8	27.4	143.4	5.0	30.0
1,2,3-Trichlorobenzene		121.4	75.4	131.4	4.6	30.0
Naphthalene		107.9	32.9	135.8	0.2	30.0
Acrolein	*	61.2	70.0	130.0	25.5	30.0
2-Chlorotoluene		112.7	70.0	130.0	4.1	30.0
4-Chlorotoluene		115.2	70.0	130.0	5.0	30.0
2,2-Dichloropropane		86.7	70.0	130.0	5.6	30.0
1,1,2-Trichloro-1,2,2-trifluoroethane		99.6	75.1	135.9	6.7	30.0

Matrix Spike (MS)

Lab Sample ID: 221004A7.4091402M, Parent Sample ID: S40914.01

Run in Batch: 221004A7, Run Date: 10/04/2022 23:38, Prep Date: 10/04/2022, Matrix: WW, Dilution: 1

Analyte	Flags	% Rec	LCL	UCL
Acetone		77.3	29.9	161.5
tert-Methyl butyl ether (MTBE)		96.2	73.2	122.4
Acrylonitrile		81.5	69.9	128.9
2-Butanone (MEK)		76.1	44.0	134.4
Dichlorodifluoromethane		96.9	10.0	222.8
Chloromethane		97.3	23.8	166.5
Vinyl chloride		105.2	43.5	149.1
Bromomethane		103.7	56.8	151.3
Chloroethane		100.7	53.4	149.4
Trichlorofluoromethane		92.4	59.7	151.8
1,1-Dichloroethene		92.4	69.6	139.4
Methylene chloride		100.1	73.3	121.1
trans-1,2-Dichloroethene		96.5	73.6	129.3
1,1-Dichloroethane		96.1	71.5	126.2
cis-1,2-Dichloroethene		102.4	76.6	122.1
Chloroform		98.8	78.4	124.0
1,1,1-Trichloroethane		91.3	79.4	130.9
4-Methyl-2-pentanone (MIBK)		84.0	71.6	125.2
Carbon tetrachloride		88.3	72.6	133.0
Benzene		104.7	79.9	124.9
1,2-Dichloroethane		90.7	76.0	126.3
Trichloroethene		101.8	79.7	124.2
1,2-Dichloropropane		99.9	78.6	126.4
Bromodichloromethane		96.9	80.4	128.2

Organics - Volatiles, Prep Batch ID: VF221004W1 (continued)

Surrogates: Yes, QC Types: BLK/LCS/LCSD/MS/MSD

Matrix Spike (MS) (continued)

Lab Sample ID: 221004A7.4091402M, Parent Sample ID: S40914.01

Run in Batch: 221004A7, Run Date: 10/04/2022 23:38, Prep Date: 10/04/2022, Matrix: WW, Dilution: 1

Analyte	Flags	% Rec	LCL	UCL
Dibromomethane		105.5	76.9	122.1
cis-1,3-Dichloropropene		99.1	79.8	129.9
Toluene		104.2	79.8	124.5
trans-1,3-Dichloropropene		94.5	74.0	131.3
1,1,2-Trichloroethane		100.4	78.7	123.1
Tetrachloroethene		105.9	74.5	124.5
Dibromochloromethane		99.0	74.6	127.2
1,2-Dibromoethane		103.2	70.3	133.7
Chlorobenzene		110.1	79.2	122.7
1,1,1,2-Tetrachloroethane		101.9	80.3	128.2
Ethylbenzene		107.6	79.5	129.1
p,m-Xylene		107.3	79.4	132.2
o-Xylene		106.4	80.2	131.0
Styrene		106.5	69.5	126.7
Isopropylbenzene		108.0	74.4	121.5
Bromoform		91.8	69.4	128.0
1,1,2,2-Tetrachloroethane		97.2	79.8	126.3
1,2,3-Trichloropropane		92.0	78.3	138.8
n-Propylbenzene		106.4	82.0	130.7
Bromobenzene		112.8	78.7	124.6
1,3,5-Trimethylbenzene		109.5	81.3	128.9
tert-Butylbenzene		106.0	80.7	128.9
1,2,4-Trimethylbenzene		110.5	81.4	130.8
sec-Butylbenzene		109.2	77.4	129.8
p-Isopropyltoluene		108.9	79.8	137.5
1,3-Dichlorobenzene		107.6	77.0	131.3
1,4-Dichlorobenzene		107.7	20.7	137.7
1,2-Dichlorobenzene		107.5	10.0	166.2
1,2,3-Trimethylbenzene		110.2	76.3	124.2
n-Butylbenzene		106.5	80.0	133.3
1,2-Dibromo-3-chloropropane		88.2	21.2	189.4
1,2,4-Trichlorobenzene		116.7	27.4	143.4
1,2,3-Trichlorobenzene		117.2	75.4	131.4
Naphthalene		101.7	32.9	135.8
Acrolein	*	0.0	70.0	130.0
2-Chlorotoluene		107.4	70.0	130.0
4-Chlorotoluene		110.1	70.0	130.0
2,2-Dichloropropane		82.8	70.0	130.0
1,1,2-Trichloro-1,2,2-trifluoroethane		97.5	75.1	135.9

Matrix Spike Duplicate (MSD)

Lab Sample ID: 221004A7.4091403N, Parent Sample ID: 221004A7.4091402M

Run in Batch: 221004A7, Run Date: 10/05/2022 00:02, Prep Date: 10/04/2022, Matrix: WW, Dilution: 1

Analyte	Flags	% Rec	LCL	UCL	RPD	RPD CL
Acetone		80.7	29.9	161.5	4.0	30.0
tert-Methyl butyl ether (MTBE)		93.3	73.2	122.4	3.0	30.0

Organics - Volatiles, Prep Batch ID: VF221004W1 (continued)

Surrogates: Yes, QC Types: BLK/LCS/LCSD/MS/MSD

Matrix Spike Duplicate (MSD) (continued)

Lab Sample ID: 221004A7.4091403N, Parent Sample ID: 221004A7.4091402M

Run in Batch: 221004A7, Run Date: 10/05/2022 00:02, Prep Date: 10/04/2022, Matrix: WW, Dilution: 1

Analyte	Flags	% Rec	LCL	UCL	RPD	RPD CL
Acrylonitrile		83.8	69.9	128.9	2.8	30.0
2-Butanone (MEK)		79.1	44.0	134.4	3.9	30.0
Dichlorodifluoromethane		91.2	10.0	222.8	6.1	30.0
Chloromethane		93.0	23.8	166.5	4.5	30.0
Vinyl chloride		100.1	43.5	149.1	4.8	30.0
Bromomethane		98.7	56.8	151.3	5.0	30.0
Chloroethane		94.0	53.4	149.4	6.8	30.0
Trichlorofluoromethane		88.3	59.7	151.8	4.4	30.0
1,1-Dichloroethene		87.5	69.6	139.4	5.4	30.0
Methylene chloride		94.4	73.3	121.1	5.9	30.0
trans-1,2-Dichloroethene		91.8	73.6	129.3	5.0	30.0
1,1-Dichloroethane		91.6	71.5	126.2	4.8	30.0
cis-1,2-Dichloroethene		96.5	76.6	122.1	5.9	30.0
Chloroform		93.3	78.4	124.0	5.8	30.0
1,1,1-Trichloroethane		86.0	79.4	130.9	5.9	30.0
4-Methyl-2-pentanone (MIBK)		85.6	71.6	125.2	1.9	30.0
Carbon tetrachloride		83.5	72.6	133.0	5.6	30.0
Benzene		99.0	79.9	124.9	5.7	30.0
1,2-Dichloroethane		85.5	76.0	126.3	5.9	30.0
Trichloroethene		96.3	79.7	124.2	5.6	30.0
1,2-Dichloropropane		94.4	78.6	126.4	5.6	30.0
Bromodichloromethane		91.1	80.4	128.2	6.2	30.0
Dibromomethane		100.7	76.9	122.1	4.6	30.0
cis-1,3-Dichloropropene		91.9	79.8	129.9	7.6	30.0
Toluene		98.1	79.8	124.5	6.0	30.0
trans-1,3-Dichloropropene		88.3	74.0	131.3	6.7	30.0
1,1,2-Trichloroethane		96.0	78.7	123.1	4.4	30.0
Tetrachloroethene		100.2	74.5	124.5	5.5	30.0
Dibromochloromethane		92.3	74.6	127.2	7.0	30.0
1,2-Dibromoethane		97.5	70.3	133.7	5.7	30.0
Chlorobenzene		102.3	79.2	122.7	7.4	30.0
1,1,1,2-Tetrachloroethane		95.9	80.3	128.2	6.1	30.0
Ethylbenzene		100.8	79.5	129.1	6.4	30.0
p,m-Xylene		100.4	79.4	132.2	6.6	30.0
o-Xylene		100.5	80.2	131.0	5.7	30.0
Styrene		99.3	69.5	126.7	7.0	30.0
Isopropylbenzene		102.2	74.4	121.5	5.4	30.0
Bromoform		87.6	69.4	128.0	4.7	30.0
1,1,2,2-Tetrachloroethane		96.2	79.8	126.3	1.1	30.0
1,2,3-Trichloropropane		90.1	78.3	138.8	2.1	30.0
n-Propylbenzene		101.0	82.0	130.7	5.2	30.0
Bromobenzene		104.9	78.7	124.6	7.3	30.0
1,3,5-Trimethylbenzene		102.8	81.3	128.9	6.3	30.0
tert-Butylbenzene		99.2	80.7	128.9	6.6	30.0
1,2,4-Trimethylbenzene		104.0	81.4	130.8	6.0	30.0
sec-Butylbenzene		99.5	77.4	129.8	9.3	30.0

Organics - Volatiles, Prep Batch ID: VF221004W1 (continued)

Surrogates: Yes, QC Types: BLK/LCS/LCSD/MS/MSD

Matrix Spike Duplicate (MSD) (continued)

Lab Sample ID: 221004A7.4091403N, Parent Sample ID: 221004A7.4091402M

Run in Batch: 221004A7, Run Date: 10/05/2022 00:02, Prep Date: 10/04/2022, Matrix: WW, Dilution: 1

Analyte	Flags	% Rec	LCL	UCL	RPD	RPD CL
p-Isopropyltoluene		99.3	79.8	137.5	9.2	30.0
1,3-Dichlorobenzene		99.3	77.0	131.3	8.0	30.0
1,4-Dichlorobenzene		98.1	20.7	137.7	9.3	30.0
1,2-Dichlorobenzene		98.7	10.0	166.2	8.5	30.0
1,2,3-Trimethylbenzene		99.8	76.3	124.2	9.9	30.0
n-Butylbenzene		97.3	80.0	133.3	9.0	30.0
1,2-Dibromo-3-chloropropane		85.8	21.2	189.4	2.8	30.0
1,2,4-Trichlorobenzene		105.0	27.4	143.4	10.6	30.0
1,2,3-Trichlorobenzene		105.8	75.4	131.4	10.2	30.0
Naphthalene		96.3	32.9	135.8	5.5	30.0
Acrolein	*	0.0	70.0	130.0	NC	30.0
2-Chlorotoluene		100.6	70.0	130.0	6.6	30.0
4-Chlorotoluene		103.8	70.0	130.0	5.9	30.0
2,2-Dichloropropane		77.9	70.0	130.0	6.1	30.0
1,1,2-Trichloro-1,2,2-trifluoroethane		90.6	75.1	135.9	7.3	30.0

Organics - Volatiles, Prep Batch ID: VO221010W1

Surrogates: Yes, QC Types: BLK/LCS/LCSD

Blank (BLK)

Lab Sample ID: 221010A3.BLKO10A

Run in Batch: 221010A3, Run Date: 10/10/2022 13:04, Prep Date: 10/10/2022, Matrix: WW, Dilution: 1

Analyte	Flags	Conc	RDL	Units
Diisopropyl ether (DIPE)		ND	1.00	ug/l

Laboratory Control Sample (LCS)

Lab Sample ID: 221010A3.LCSO10X

Run in Batch: 221010A3, Run Date: 10/10/2022 11:28, Prep Date: 10/10/2022, Matrix: WW, Dilution: 1

Analyte	Flags	% Rec	LCL	UCL
Diisopropyl ether (DIPE)		125.4	70.0	130.0

Laboratory Control Sample Duplicate (LCSD)

Lab Sample ID: 221010A3.LCSDO10X, Parent Sample ID: 221010A3.LCSO10X

Run in Batch: 221010A3, Run Date: 10/10/2022 12:16, Prep Date: 10/10/2022, Matrix: WW, Dilution: 1

Analyte	Flags	% Rec	LCL	UCL	RPD	RPD CL
Diisopropyl ether (DIPE)		129.3	70.0	130.0	3.1	30.0

Merit Laboratories Login Checklist

Lab Set ID: S40860
Client: TRC (TRC)
Project: OA - Eastern RCRA Assessment / 495430
Submitted: 09/29/2022 11:00 Login User: MMC

Attention: Kelly Cratsenburg
Address: TRC
1540 Eisenhower Place
Ann Arbor, MI 48108

Phone: 734-585-7829 C: FAX:
Email: KCratsenburg@trccompanies.com

Selection				Description	Note
Sample Receiving					
01.	[X] Yes	[ ] No	[ ] N/A	Samples are received at 4C +/- 2C Thermometer #	IR 2.4
02.	[X] Yes	[ ] No	[ ] N/A	Received on ice/ cooling process begun	
03.	[ ] Yes	[X] No	[ ] N/A	Samples shipped	
04.	[ ] Yes	[X] No	[ ] N/A	Samples left in 24 hr. drop box	
05.	[ ] Yes	[ ] No	[X] N/A	Are there custody seals/tape or is the drop box locked	
Chain of Custody					
06.	[ ] Yes	[X] No	[ ] N/A	COC adequately filled out	Metals not specified
07.	[X] Yes	[ ] No	[ ] N/A	COC signed and relinquished to the lab	
08.	[X] Yes	[ ] No	[ ] N/A	Sample tag on bottles match COC	
09.	[X] Yes	[ ] No	[ ] N/A	Subcontracting needed? Subcontacted to:	Eurofins
Preservation					
10.	[X] Yes	[ ] No	[ ] N/A	Do sample have correct chemical preservation	
11.	[X] Yes	[ ] No	[ ] N/A	Completed pH checks on preserved samples? (no VOAs)	
12.	[ ] Yes	[X] No	[ ] N/A	Did any samples need to be preserved in the lab?	
Bottle Conditions					
13.	[X] Yes	[ ] No	[ ] N/A	All bottles intact	
14.	[X] Yes	[ ] No	[ ] N/A	Appropriate analytical bottles are used	
15.	[X] Yes	[ ] No	[ ] N/A	Merit bottles used	
16.	[X] Yes	[ ] No	[ ] N/A	Sufficient sample volume received	
17.	[ ] Yes	[X] No	[ ] N/A	Samples require laboratory filtration	
18.	[X] Yes	[ ] No	[ ] N/A	Samples submitted within holding time	
19.	[ ] Yes	[X] No	[ ] N/A	Do water VOC or TOX bottles contain headspace	

Corrective action for all exceptions is to call the client and to notify the project manager.

Client Review By: _____ Date: _____

Merit Laboratories Bottle Preservation Check

Lab Set ID: S40860 Submitted: 09/29/2022 11:00

Client: TRC (TRC)

Project: OA - Eastern RCRA Assessment / 495430

Initial Preservation Check: 09/29/2022 11:57 MMC

Preservation Recheck (E200.8): N/A

Attention: Kelly Cratsenburg
Address: TRC
1540 Eisenhower Place
Ann Arbor, MI 48108

Phone: 734-585-7829 C: FAX:
Email: KCratsenburg@trccompanies.com

Sample ID	Bottle / Preservation	pH (Orig)	Add ml	pH (New)	Notes
S40860.01	125ml Plastic HNO3	<2			
S40860.02	125ml Plastic HNO3	<2			
S40860.03	125ml Plastic HNO3	<2			
S40860.04	125ml Plastic HNO3	<2			
S40860.05	125ml Plastic HNO3	<2			
S40860.06	125ml Plastic HNO3	<2			
S40860.07	125ml Plastic HNO3	<2			
S40860.09	125ml Plastic HNO3	<2			
S40860.10	125ml Plastic HNO3	<2			
S40860.11	125ml Plastic HNO3	<2			
S40860.12	125ml Plastic HNO3	<2			
S40860.13	125ml Plastic HNO3	<2			
S40860.14	125ml Plastic HNO3	<2			
S40860.15	125ml Plastic HNO3	<2			
S40860.16	125ml Plastic HNO3	<2			

Merit Laboratories, Inc.

2680 East Lansing Dr., East Lansing, MI 48823
Phone (517) 332-0167 Fax (517) 332-4034
www.meritlabs.com

C.O.C. PAGE # _____ OF _____ 154527

CHAIN OF CUSTODY RECORD

REPORT TO

CONTACT NAME: Kelly Cautsenburg
COMPANY: TRC
ADDRESS: 1540 Eisenhower Place
CITY: Ann Arbor STATE: MI ZIP CODE: 48108
PHONE NO.: CELL NO.: P.O. NO.: 189445
E-MAIL ADDRESS: kcautsenburg@trcsolutions.com QUOTE NO.:

INVOICE TO

CONTACT NAME: ☐ SAME
COMPANY:
ADDRESS:
CITY: STATE: ZIP CODE:
PHONE NO.: E-MAIL ADDRESS:

PROJECT NO./NAME: OA-Boeing RCRA Assessment / 495430
SAMPLER(S) - PLEASE PRINT/SIGN NAME: H. Schwandt

TURNAROUND TIME REQUIRED ☐ 1 DAY ☐ 2 DAYS ☐ 3 DAYS ☒ STANDARD ☐ OTHER _____

DELIVERABLES REQUIRED ☐ STD ☐ LEVEL II ☐ LEVEL III ☐ LEVEL IV ☐ EDD ☒ OTHER TRC EDD

MATRIX CODE: W=WATER GW=GROUNDWATER WW=WASTEWATER S=SOIL L=LIQUID SD=SOLID SL=SLUDGE DW=DRINKING WATER O=OIL WP=WIPE A=AIR WS=WASTE

ANALYSIS (ATTACH LIST IF MORE SPACE IS REQUIRED)

Certifications: ☐ OHIO VAP ☐ Drinking Water ☐ DoD ☐ NPDES
Project Locations: ☐ Detroit ☐ New York ☐ Other _____
Special Instructions

MERIT LAB NO. (FOR LAB USE ONLY)	COLLECTION DATE	COLLECTION TIME	SAMPLE TAG IDENTIFICATION-DESCRIPTION	MATRIX	# OF BOTTLES	# Containers & Preservatives: NONE	HCl	HNO_3	H_2SO_4	NaOH	MeOH	OTHER	☒ 8260 Full List Metals	☒ 8260 Full List VOCs	☒ Methanol	Special Instructions
40860.01	9/27/22	930/1041	MW-120	GW	7	3	3	1					X	X	X	☒ no TICs or 1,4-Dioxane SIMs needed
.02		1013	MW-119										X	X	X	
.03		1127/1220	MW-113										X	X	X	
.04		1237	MW-112										X	X	X	
.05		1317	MW-111										X	X	X	
.06		1347	MW-110										X	X	X	
.07		—	Dup-01										X	X	X	
.08	9/27/22	—	TRIP BLANK		1		1							X		

Note: Samples w/ split times were taken w/ peristaltic (PFAS+Metals) and bladder (VOCs + Methanol)

RELINQUISHED BY: SIGNATURE/ORGANIZATION		DATE	TIME
	Henry Schwandt ☒ Sampler	9/28/22	1730
RECEIVED BY: SIGNATURE/ORGANIZATION		DATE	TIME
	Ian Mc	9/29/22	800
RELINQUISHED BY: SIGNATURE/ORGANIZATION		DATE	TIME
RECEIVED BY: SIGNATURE/ORGANIZATION		DATE	TIME

RELINQUISHED BY: SIGNATURE/ORGANIZATION		DATE	TIME
	Ian Mc	9/29/22	1100
RECEIVED BY: SIGNATURE/ORGANIZATION		DATE	TIME
	M Chilcote	9/29/22	1100

SEAL NO. _____ SEAL INTACT YES ☐ NO ☐ INITIALS _____
SEAL NO. _____ SEAL INTACT YES ☐ NO ☐ INITIALS _____

NOTES: TEMP. ON ARRIVAL 2.4

PLEASE NOTE: SIGNING ACKNOWLEDGES ADHERENCE TO MERIT'S SAMPLE ACCEPTANCE POLICY ON REVERSE SIDE

Rev. 1.26.22

Merit Laboratories, Inc.
2680 East Lansing Dr., East Lansing, MI 48823
Phone (517) 332-0167 Fax (517) 332-4034
www.meritlabs.com

C.O.C. PAGE # ______ OF ______ 154471

CHAIN OF CUSTODY RECORD

REPORT TO

CONTACT NAME: Kelly Cvatsenburg
COMPANY: TRC
ADDRESS: 1540 Eisenhower Place
CITY: Ann Arbor STATE: MI ZIP CODE: 48108
PHONE NO.: CELL NO.: P.O. NO.: 189445
E-MAIL ADDRESS: kcvatsenburg, hschmidt, aeklund @ trccompanies.com
QUOTE NO.:

INVOICE TO

CONTACT NAME: ☐ SAME
COMPANY:
ADDRESS:
CITY: STATE: ZIP CODE:
PHONE NO.: E-MAIL ADDRESS:

PROJECT NO./NAME: OA-Eastern RCRA Assessment / 495430
SAMPLER(S) - PLEASE PRINT/SIGN NAME: H. Schmidt, J. Jackson

TURNAROUND TIME REQUIRED ☐ 1 DAY ☐ 2 DAYS ☐ 3 DAYS ☒ STANDARD ☐ OTHER

DELIVERABLES REQUIRED ☐ STD ☐ LEVEL II ☐ LEVEL III ☐ LEVEL IV ☐ EDD ☒ OTHER TRC EDD

MATRIX CODE: W=WATER GW=GROUNDWATER WW=WASTEWATER S=SOIL L=LIQUID SD=SOLID SL=SLUDGE DW=DRINKING WATER O=OIL WP=WIPE A=AIR WS=WASTE

ANALYSIS (ATTACH LIST IF MORE SPACE IS REQUIRED)

MERIT LAB NO. (FOR LAB USE ONLY)	COLLECTION DATE	COLLECTION TIME	SAMPLE TAG IDENTIFICATION-DESCRIPTION	MATRIX	# OF BOTTLES	NONE	HCl	HNO_3	H_2SO_4	NaOH	MeOH	OTHER	MI Part 201 Full List Metals	MI Part 201 Full List VOCs*	Methanol
40860.09	9/28/22	925	MW-109	GW	7	3	3	1					X	X	X
.10	↓	910	MW-108	↓	↓	↓	↓	↓					X	X	X
.11	↓	1023/1140	MW-107	↓	↓	↓	↓	↓					X	X	X
.12	↓	1125/1241	MW-106	↓	↓	↓	↓	↓					X	X	X
.13	↓	1232	MW-121	↓	↓	↓	↓	↓					X	X	X
.14	↓	1338/1530	MW-104	↓	↓	↓	↓	↓					X	X	X
.15	↓	1423	MW-105	↓	↓	↓	↓	↓					X	X	X
.16	↓	—	Dup-02	↓	↓	↓	↓	↓					X	X	X
.17	9/28/22	—	TRIP BLANK 2		1		1							X	

Certifications: ☐ OHIO VAP ☐ Drinking Water ☐ DoD ☐ NPDES

Project Locations: ☐ Detroit ☐ New York ☐ Other

Special Instructions:
* No TICs on 1,4-Dioxane SIMs needed

Note: Samples w/ split times were taken w/ peristaltic (PFAS + Metals) and bladder (VOCs + Methanol)

RELINQUISHED BY: SIGNATURE/ORGANIZATION	DATE	TIME	RELINQUISHED BY: SIGNATURE/ORGANIZATION	DATE	TIME
Henry Schmidt ☒ Sampler	9/28/22	1736	[signature]	9/29/22	1100
RECEIVED BY: [signature]	9/21/22	800	RECEIVED BY: M Chilcote	9/29/22	1100
RELINQUISHED BY:			SEAL NO. / SEAL INTACT YES ☐ NO ☐ / INITIALS		
RECEIVED BY:			SEAL NO. / SEAL INTACT YES ☐ NO ☐ / INITIALS		

NOTES: TEMP. ON ARRIVAL 2.4

eurofins | Environment Testing

1 2 3 4 5 6 7 8 9 10 11 12 13

ANALYTICAL REPORT

PREPARED FOR

Attn: Lab Results
Merit Laboratories
2680 E Lansing Drive
East Lansing Michigan 48823

JOB DESCRIPTION

S40860

JOB NUMBER

190-30030-1

Eurofins Michigan
10448 Citation Drive
Suite 200
Brighton MI48116

myEOL

Table of Contents

Sample Summary

Client: Merit Laboratories
Project/Site: S40860

Job ID: 190-30030-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
190-30030-1	S40860.01	Water	09/27/22 09:30	09/30/22 09:46
190-30030-2	S40860.02	Water	09/27/22 10:13	09/30/22 09:46
190-30030-3	S40860.03	Water	09/27/22 11:27	09/30/22 09:46
190-30030-4	S40860.04	Water	09/27/22 12:37	09/30/22 09:46
190-30030-5	S40860.05	Water	09/27/22 13:17	09/30/22 09:46
190-30030-6	S40860.06	Water	09/27/22 13:47	09/30/22 09:46
190-30030-7	S40860.07	Water	09/27/22 00:01	09/30/22 09:46
190-30030-8	S40860.09	Water	09/27/22 09:25	09/30/22 09:46
190-30030-9	S40860.10	Water	09/27/22 09:10	09/30/22 09:46
190-30030-10	S40860.11	Water	09/27/22 10:23	09/30/22 09:46
190-30030-11	S40860.12	Water	09/27/22 11:25	09/30/22 09:46
190-30030-12	S40860.13	Water	09/27/22 12:32	09/30/22 09:46
190-30030-13	S40860.14	Water	09/27/22 13:38	09/30/22 09:46
190-30030-14	S40860.15	Water	09/27/22 14:23	09/30/22 09:46
190-30030-15	S40860.16	Water	09/27/22 00:01	09/30/22 09:46

Job ID: 190-30030-1

Laboratory: Eurofins Michigan

Narrative

Job Narrative
190-30030-1

REVISION

The report being provided is a revision of the original report sent on 10/10/2022. The report (revision 1) is being revised due to Client wants data reported to the MDL in ug/L Needs <3700 ug/L.

Report revision history

Receipt
The samples were received on 9/30/2022 9:46 AM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 5.2°C

GC Semi VOA
No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

Client: Merit Laboratories
Project/Site: S40860

Job ID: 190-30030-1

Client Sample ID: S40860.01
Lab Sample ID: 190-30030-1
Date Collected: 09/27/22 09:30
Matrix: Water
Date Received: 09/30/22 09:46

Method: SW846 8015D - Nonhalogenated Organic Compounds - Direct Injection (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methanol	<2000		5000	2000	ug/L			10/08/22 19:43	1

Client Sample ID: S40860.02
Lab Sample ID: 190-30030-2
Date Collected: 09/27/22 10:13
Matrix: Water
Date Received: 09/30/22 09:46

Method: SW846 8015D - Nonhalogenated Organic Compounds - Direct Injection (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methanol	<2000		5000	2000	ug/L			10/08/22 20:05	1

Client Sample ID: S40860.03
Lab Sample ID: 190-30030-3
Date Collected: 09/27/22 11:27
Matrix: Water
Date Received: 09/30/22 09:46

Method: SW846 8015D - Nonhalogenated Organic Compounds - Direct Injection (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methanol	<2000		5000	2000	ug/L			10/08/22 20:27	1

Client Sample ID: S40860.04
Lab Sample ID: 190-30030-4
Date Collected: 09/27/22 12:37
Matrix: Water
Date Received: 09/30/22 09:46

Method: SW846 8015D - Nonhalogenated Organic Compounds - Direct Injection (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methanol	<2000		5000	2000	ug/L			10/08/22 20:49	1

Client Sample ID: S40860.05
Lab Sample ID: 190-30030-5
Date Collected: 09/27/22 13:17
Matrix: Water
Date Received: 09/30/22 09:46

Method: SW846 8015D - Nonhalogenated Organic Compounds - Direct Injection (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methanol	<2000		5000	2000	ug/L			10/08/22 21:11	1

Client Sample ID: S40860.06
Lab Sample ID: 190-30030-6
Date Collected: 09/27/22 13:47
Matrix: Water
Date Received: 09/30/22 09:46

Method: SW846 8015D - Nonhalogenated Organic Compounds - Direct Injection (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methanol	<2000		5000	2000	ug/L			10/08/22 21:33	1

Client Sample ID: S40860.07
Lab Sample ID: 190-30030-7
Date Collected: 09/27/22 00:01
Matrix: Water
Date Received: 09/30/22 09:46

Method: SW846 8015D - Nonhalogenated Organic Compounds - Direct Injection (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methanol	<2000		5000	2000	ug/L			10/08/22 21:55	1

Client Sample ID: S40860.09
Lab Sample ID: 190-30030-8
Date Collected: 09/27/22 09:25
Matrix: Water
Date Received: 09/30/22 09:46

Method: SW846 8015D - Nonhalogenated Organic Compounds - Direct Injection (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methanol	<2000		5000	2000	ug/L			10/08/22 22:17	1

Client Sample ID: S40860.10
Lab Sample ID: 190-30030-9
Date Collected: 09/27/22 09:10
Matrix: Water
Date Received: 09/30/22 09:46

Method: SW846 8015D - Nonhalogenated Organic Compounds - Direct Injection (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methanol	<2000		5000	2000	ug/L			10/08/22 22:39	1

Client Sample ID: S40860.11
Lab Sample ID: 190-30030-10
Date Collected: 09/27/22 10:23
Matrix: Water
Date Received: 09/30/22 09:46

Method: SW846 8015D - Nonhalogenated Organic Compounds - Direct Injection (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methanol	<2000		5000	2000	ug/L			10/08/22 23:01	1

Client Sample ID: S40860.12
Lab Sample ID: 190-30030-11
Date Collected: 09/27/22 11:25
Matrix: Water
Date Received: 09/30/22 09:46

Method: SW846 8015D - Nonhalogenated Organic Compounds - Direct Injection (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methanol	<2000		5000	2000	ug/L			10/08/22 23:23	1

Client Sample ID: S40860.13
Lab Sample ID: 190-30030-12
Date Collected: 09/27/22 12:32
Matrix: Water
Date Received: 09/30/22 09:46

Method: SW846 8015D - Nonhalogenated Organic Compounds - Direct Injection (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methanol	<2000		5000	2000	ug/L			10/08/22 23:45	1

Client Sample ID: S40860.14
Lab Sample ID: 190-30030-13
Date Collected: 09/27/22 13:38
Matrix: Water
Date Received: 09/30/22 09:46

Method: SW846 8015D - Nonhalogenated Organic Compounds - Direct Injection (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methanol	<2000		5000	2000	ug/L			10/09/22 00:07	1

Client Sample ID: S40860.15
Lab Sample ID: 190-30030-14
Date Collected: 09/27/22 14:23
Matrix: Water
Date Received: 09/30/22 09:46

Method: SW846 8015D - Nonhalogenated Organic Compounds - Direct Injection (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methanol	<2000		5000	2000	ug/L			10/09/22 00:29	1

Client Sample Results

Client: Merit Laboratories
Project/Site: S40860

Job ID: 190-30030-1

Client Sample ID: S40860.16
Date Collected: 09/27/22 00:01
Date Received: 09/30/22 09:46

Lab Sample ID: 190-30030-15
Matrix: Water

Method: SW846 8015D - Nonhalogenated Organic Compounds - Direct Injection (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methanol	<2000		5000	2000	ug/L			10/09/22 00:50	1

Method: 8015D - Nonhalogenated Organic Compounds - Direct Injection (GC)

Lab Sample ID: MB 680-744253/15
Matrix: Water
Analysis Batch: 744253

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methanol	<2000		5000	2000	ug/L			10/08/22 19:21	1

Lab Sample ID: LCS 680-744253/6
Matrix: Water
Analysis Batch: 744253

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Methanol			20000	19920		ug/L		100	43 - 143		

Lab Sample ID: LCSD 680-744253/7
Matrix: Water
Analysis Batch: 744253

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Methanol			20000	20140		ug/L		101	43 - 143	1	50

Lab Sample ID: 190-30030-1 MS
Matrix: Water
Analysis Batch: 744253

Client Sample ID: S40860.01
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Methanol	<2000		20000	14010		ug/L		70	43 - 143		

Lab Sample ID: 190-30030-1 MSD
Matrix: Water
Analysis Batch: 744253

Client Sample ID: S40860.01
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Methanol	<2000		20000	15370		ug/L		77	43 - 143	9	50

Definitions/Glossary

Client: Merit Laboratories
Project/Site: S40860

Job ID: 190-30030-1

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

QC Association Summary

Client: Merit Laboratories
Project/Site: S40860

Job ID: 190-30030-1

GC Semi VOA

Analysis Batch: 744253

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
190-30030-1	S40860.01	Total/NA	Water	8015D	
190-30030-2	S40860.02	Total/NA	Water	8015D	
190-30030-3	S40860.03	Total/NA	Water	8015D	
190-30030-4	S40860.04	Total/NA	Water	8015D	
190-30030-5	S40860.05	Total/NA	Water	8015D	
190-30030-6	S40860.06	Total/NA	Water	8015D	
190-30030-7	S40860.07	Total/NA	Water	8015D	
190-30030-8	S40860.09	Total/NA	Water	8015D	
190-30030-9	S40860.10	Total/NA	Water	8015D	
190-30030-10	S40860.11	Total/NA	Water	8015D	
190-30030-11	S40860.12	Total/NA	Water	8015D	
190-30030-12	S40860.13	Total/NA	Water	8015D	
190-30030-13	S40860.14	Total/NA	Water	8015D	
190-30030-14	S40860.15	Total/NA	Water	8015D	
190-30030-15	S40860.16	Total/NA	Water	8015D	
MB 680-744253/15	Method Blank	Total/NA	Water	8015D	
LCS 680-744253/6	Lab Control Sample	Total/NA	Water	8015D	
LCSD 680-744253/7	Lab Control Sample Dup	Total/NA	Water	8015D	
190-30030-1 MS	S40860.01	Total/NA	Water	8015D	
190-30030-1 MSD	S40860.01	Total/NA	Water	8015D	

Lab Chronicle

Client: Merit Laboratories
Project/Site: S40860

Job ID: 190-30030-1

Client Sample ID: S40860.01
Date Collected: 09/27/22 09:30
Date Received: 09/30/22 09:46

Lab Sample ID: 190-30030-1
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8015D		1	744253	JCK	EET SAV	10/08/22 19:43

Client Sample ID: S40860.02
Date Collected: 09/27/22 10:13
Date Received: 09/30/22 09:46

Lab Sample ID: 190-30030-2
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8015D		1	744253	JCK	EET SAV	10/08/22 20:05

Client Sample ID: S40860.03
Date Collected: 09/27/22 11:27
Date Received: 09/30/22 09:46

Lab Sample ID: 190-30030-3
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8015D		1	744253	JCK	EET SAV	10/08/22 20:27

Client Sample ID: S40860.04
Date Collected: 09/27/22 12:37
Date Received: 09/30/22 09:46

Lab Sample ID: 190-30030-4
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8015D		1	744253	JCK	EET SAV	10/08/22 20:49

Client Sample ID: S40860.05
Date Collected: 09/27/22 13:17
Date Received: 09/30/22 09:46

Lab Sample ID: 190-30030-5
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8015D		1	744253	JCK	EET SAV	10/08/22 21:11

Client Sample ID: S40860.06
Date Collected: 09/27/22 13:47
Date Received: 09/30/22 09:46

Lab Sample ID: 190-30030-6
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8015D		1	744253	JCK	EET SAV	10/08/22 21:33

Client Sample ID: S40860.07
Date Collected: 09/27/22 00:01
Date Received: 09/30/22 09:46

Lab Sample ID: 190-30030-7
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8015D		1	744253	JCK	EET SAV	10/08/22 21:55

Lab Chronicle

Client: Merit Laboratories
Project/Site: S40860

Job ID: 190-30030-1

Client Sample ID: S40860.09
Date Collected: 09/27/22 09:25
Date Received: 09/30/22 09:46

Lab Sample ID: 190-30030-8
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8015D		1	744253	JCK	EET SAV	10/08/22 22:17

Client Sample ID: S40860.10
Date Collected: 09/27/22 09:10
Date Received: 09/30/22 09:46

Lab Sample ID: 190-30030-9
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8015D		1	744253	JCK	EET SAV	10/08/22 22:39

Client Sample ID: S40860.11
Date Collected: 09/27/22 10:23
Date Received: 09/30/22 09:46

Lab Sample ID: 190-30030-10
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8015D		1	744253	JCK	EET SAV	10/08/22 23:01

Client Sample ID: S40860.12
Date Collected: 09/27/22 11:25
Date Received: 09/30/22 09:46

Lab Sample ID: 190-30030-11
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8015D		1	744253	JCK	EET SAV	10/08/22 23:23

Client Sample ID: S40860.13
Date Collected: 09/27/22 12:32
Date Received: 09/30/22 09:46

Lab Sample ID: 190-30030-12
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8015D		1	744253	JCK	EET SAV	10/08/22 23:45

Client Sample ID: S40860.14
Date Collected: 09/27/22 13:38
Date Received: 09/30/22 09:46

Lab Sample ID: 190-30030-13
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8015D		1	744253	JCK	EET SAV	10/09/22 00:07

Client Sample ID: S40860.15
Date Collected: 09/27/22 14:23
Date Received: 09/30/22 09:46

Lab Sample ID: 190-30030-14
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8015D		1	744253	JCK	EET SAV	10/09/22 00:29

Lab Chronicle

Client: Merit Laboratories
Project/Site: S40860

Job ID: 190-30030-1

Client Sample ID: S40860.16

Date Collected: 09/27/22 00:01
Date Received: 09/30/22 09:46

Lab Sample ID: 190-30030-15

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8015D		1	744253	JCK	EET SAV	10/09/22 00:50

Laboratory References:

EET SAV = Eurofins Savannah, 5102 LaRoche Avenue, Savannah, GA 31404, TEL (912)354-7858

Analyst References:

Lab: EET SAV

Batch Type: Analysis

JCK = Joshua Kellar

Accreditation/Certification Summary

Client: Merit Laboratories
Project/Site: S40860

Job ID: 190-30030-1

Laboratory: Eurofins Savannah

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
	AFCEE	SAVLAB	
Alabama	State	41450	06-30-23
ANAB	Dept. of Defense ELAP	L2463	09-22-24
Arkansas DEQ	State	19-015-0	02-01-23
California	State	2939	06-30-22 *
Connecticut	State	PH-0161	03-31-23
Florida	NELAP	E87052	06-23-23
Georgia	State	E87052	06-30-23
Georgia (DW)	State	803	06-30-23
Guam	State	19-007R	04-17-23
Hawaii	State	<cert No.>	06-30-23
Illinois	NELAP	200022	11-30-22
Indiana	State	C-GA-02	06-30-23
Iowa	State	353	07-01-23
Kentucky (UST)	State	NA	06-30-23
Louisiana	NELAP	30690	06-30-23
Louisiana (All)	NELAP	30690	06-30-23
Louisiana (DW)	State	LA009	12-31-22
Maine	State	GA00006	09-25-24
Maryland	State	250	12-31-22
Massachusetts	State	M-GA006	07-30-23
Michigan	State	9925	06-30-23
Mississippi	State	<cert No.>	06-30-23
Nebraska	State	NE-OS-7-04	06-30-23
New Jersey	NELAP	GA769	06-30-23
New Mexico	State	GA00006	06-30-23
New York	NELAP	10842	04-01-23
North Carolina (DW)	State	13701	07-31-23
North Carolina (WW/SW)	State	269	12-31-22
Pennsylvania	NELAP	68-00474	06-30-23
Puerto Rico	State	GA00006	01-01-23
South Carolina	State	98001	06-30-22 *
Tennessee	State	TN02961	06-30-23
Texas	NELAP	T1047004185-19-14	11-30-22
Texas	TCEQ Water Supply	T104704185	06-30-23
USDA	US Federal Programs	P330-18-00313	09-03-24
Virginia	NELAP	460161	06-14-23
Wisconsin	State	999819810	08-31-23
Wyoming	State	8TMS-L	06-30-23

* Accreditation/Certification renewal pending - accreditation/certification considered valid.

Method Summary

Client: Merit Laboratories
Project/Site: S40860

Job ID: 190-30030-1

Method	Method Description	Protocol	Laboratory
8015D	Nonhalogenated Organic Compounds - Direct Injection (GC)	SW846	EET SAV

Protocol References:

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

EET SAV = Eurofins Savannah, 5102 LaRoche Avenue, Savannah, GA 31404, TEL (912)354-7858

Merit Laboratories, Inc.
2680 East Lansing Dr., East Lansing, MI 48823
Phone (517) 332-0167 Fax (517) 332-4034
www.meritlabs.com

C.O.C. PAGE # 1 OF 2

CHAIN OF CUSTODY RECORD

REPORT TO

CONTACT NAME: Project Management Team
COMPANY: Merit Laboratories
ADDRESS: 2680 East Lansing Drive
CITY: East Lansing | STATE: MI | ZIP CODE: 48823
PHONE NO.: 517-332-0167 | FAX NO.: 517-332-4034 | P.O. NO.:
E-MAIL ADDRESS: results@meritlabs.com | QUOTE NO.:

INVOICE TO

CONTACT NAME: Julie Teague ☒ SAME
COMPANY: Merit Laboratories
ADDRESS: 2680 East Lansing Drive
CITY: East Lansing | STATE: MI | ZIP CODE: 48823
PHONE NO.: 517-332-0167 | E-MAIL ADDRESS: juliet@meritlabs.com

PROJECT NO./NAME: S40860 | SAMPLER(S) - PLEASE PRINT/SIGN NAME:

TURNAROUND TIME REQUIRED ☐ 1 DAY ☐ 2 DAYS ☐ 3 DAYS ☒ STANDARD ☐ OTHER

DELIVERABLES REQUIRED ☐ STD ☒ LEVEL II ☐ LEVEL III ☐ LEVEL IV ☐ EDD ☐ OTHER

MATRIX CODE: GW=GROUNDWATER WW=WASTEWATER S=SOIL L=LIQUID SD=SOLID SL=SLUDGE DW=DRINKING WATER O=OIL WP=WIPE A=AIR W=WASTE

ANALYSIS (ATTACH LIST IF MORE SPACE IS REQUIRED)

Certifications: ☐ OHIO VAP ☐ Drinking Water ☐ DoD ☐ NPDES
Project Locations: ☐ Detroit ☐ New York ☐ Other
Special Instructions

MERIT LAB NO. (FOR LAB USE ONLY)	YEAR DATE	YEAR TIME	SAMPLE TAG IDENTIFICATION-DESCRIPTION	MATRIX	# OF BOTTLES	# Containers & Preservatives: NONE	HCl	HNO_3	H_2SO_4	NaOH	MeOH	OTHER	Methanol
	9/27/22	0930	S40860.01	GW	3	3							✓
	9/27/22	1013	S40860.02	GW	3	3							✓
	9/27/22	1127	S40860.03	GW	3	3							✓
	9/27/22	1237	S40860.04	GW	3	3							✓
	9/27/22	1317	S40860.05	GW	3	3							✓
	9/27/22	1347	S40860.06	GW	3	3							✓
	9/27/22	0001	S40860.07	GW	3	3							✓
	9/27/22	0925	S40860.09	GW	3	3							✓
	9/27/22	0910	S40860.10	GW	3	3							✓
	9/27/22	1023	S40860.11	GW	3	3							✓
	9/27/22	1125	S40860.12	GW	3	3							✓
	9/27/22	1232	S40860.13	GW	3	3							✓

190-30030 Chain of Custody

** Subcontracted to Eurofins

RELINQUISHED BY: SIGNATURE/ORGANIZATION	☐ Sampler	DATE 9/27/22	TIME
RECEIVED BY: SIGNATURE/ORGANIZATION		DATE 9/27/22	TIME 1410
RELINQUISHED BY: SIGNATURE/ORGANIZATION		DATE 9/29/22	TIME 1515
RECEIVED BY: SIGNATURE/ORGANIZATION		DATE 9/29/22	TIME 1515

RELINQUISHED BY: SIGNATURE/ORGANIZATION		DATE 9/24/22	TIME 1520
RECEIVED BY: SIGNATURE/ORGANIZATION		DATE 9/30/22	TIME 9.46

SEAL NO. | SEAL INTACT YES☐ NO☐ | INITIALS
SEAL NO. | SEAL INTACT YES☐ NO☐ | INITIALS
NOTES: | TEMP. ON ARRIVAL

PLEASE NOTE: SIGNING ACKNOWLEDGES ADHERENCE TO MERIT'S SAMPLE ACCEPTANCE POLICY ON REVERSE SIDE

Rev. 5.18.12

Merit Laboratories, Inc.
2680 East Lansing Dr., East Lansing, MI 48823
Phone (517) 332-0167 Fax (517) 332-4034
www.meritlabs.com

C.O.C. PAGE # 2 OF 2

CHAIN OF CUSTODY RECORD

REPORT TO

CONTACT NAME: Project Management Team
COMPANY: Merit Laboratories
ADDRESS: 2680 East Lansing Drive
CITY: East Lansing STATE: MI ZIP CODE: 48823
PHONE NO.: 517-332-0167 FAX NO.: 517-332-4034 P.O. NO.:
E-MAIL ADDRESS: results@meritlabs.com QUOTE NO.:

INVOICE TO

CONTACT NAME: Julie Teague ☒ SAME
COMPANY: Merit Laboratories
ADDRESS: 2680 East Lansing Drive
CITY: East Lansing STATE: MI ZIP CODE: 48823
PHONE NO.: 517-332-0167 E-MAIL ADDRESS: juliet@meritlabs.com

PROJECT NO./NAME: S40860 SAMPLER(S) - PLEASE PRINT/SIGN NAME:

TURNAROUND TIME REQUIRED ☐ 1 DAY ☐ 2 DAYS ☐ 3 DAYS ☒ STANDARD ☐ OTHER

DELIVERABLES REQUIRED ☐ STD ☒ LEVEL II ☐ LEVEL III ☐ LEVEL IV ☐ EDD ☐ OTHER

MATRIX CODE: GW=GROUNDWATER WW=WASTEWATER S=SOIL L=LIQUID SD=SOLID SL=SLUDGE DW=DRINKING WATER O=OIL WP=WIPE A=AIR W=WASTE

ANALYSIS (ATTACH LIST IF MORE SPACE IS REQUIRED)

Certifications: ☐ OHIO VAP ☐ Drinking Water ☐ DoD ☐ NPDES
Project Locations: ☐ Detroit ☐ New York ☐ Other
Special Instructions

MERIT LAB NO. (FOR LAB USE ONLY)	YEAR DATE	YEAR TIME	SAMPLE TAG IDENTIFICATION-DESCRIPTION	MATRIX	# OF BOTTLES	# Containers & Preservatives: NONE	HCl	HNO_3	H_2SO_4	NaOH	MeOH	OTHER	Methanol	Special Instructions
	9/27/22	1338	S40860.14	GW	3	3							✓	
	9/27/22	1423	S40860.15	GW	3	3							✓	
	9/27/22	0001	S40860.16	GW	3	3							✓	
														** Subcontracted to
														Eurofins

RELINQUISHED BY: SIGNATURE/ORGANIZATION	Patrick D ☐ Sampler	DATE 9/28/22	TIME
RECEIVED BY: SIGNATURE/ORGANIZATION		DATE 9/29/22	TIME 9:00
RELINQUISHED BY: SIGNATURE/ORGANIZATION		DATE 9/29/22	TIME 17:1
RECEIVED BY: SIGNATURE/ORGANIZATION		DATE 9/29/22	TIME 15:5

RELINQUISHED BY: SIGNATURE/ORGANIZATION		DATE 9/29/22	TIME 15:20
RECEIVED BY: SIGNATURE/ORGANIZATION		DATE 9/30/22	TIME 9:46

SEAL NO. SEAL INTACT YES ☐ NO ☐ INITIALS
SEAL NO. SEAL INTACT YES ☐ NO ☐ INITIALS
NOTES: TEMP. ON ARRIVAL

PLEASE NOTE: SIGNING ACKNOWLEDGES ADHERENCE TO MERIT'S SAMPLE ACCEPTANCE POLICY ON REVERSE SIDE

Rev. 5.16.12

eurofins | Environment Testing TestAmerica

☐ SDS or Known Hazard Information Supplied by Client
☐ Discrepancies
☐ Short Hold
Client ID: Merit Laboratories
Work Oder #: 30030
☐ Rush ☐ 24 Hr ☐ 2-Day ☐ 3-Day ☐ 5-Day ☐ Other: _____
Receipt Evaluation Performed by: Initials: JH Date: 9/30 Time: 9:46

Cooler / Sample Receipt

After hours receipt: complete gray areas. Place cooler in walk-in, place form in Receiving box. Date: _____ Time: _____

~~Method of Shipment~~:
(Walk-In Client) Eurofins TA Field/Courier
Other Client / 3rd Party Courier: _____
Fed Ex Tracking #: _____
UPS Tracking #: _____
Other: _____

Shipping Container Type:
☑ Cooler ☐ Box
☐ None ☐ Other: _____

Custody Seals Intact:
☐ Yes ☐ No
☒ NA (not used or required)

Packing Materials:
☐ Plastic Bags ☑ Foam
☐ Bubble Wrap ☐ Paper
☐ Packing Peanuts ☐ None
☐ Other: _____

Cooling Materials:
☑ Ice (Solid) ☐ Ice (Melted)
☐ Blue Ice ☐ None
☐ Other: _____

Bacteriological Samples	Temp Corrected (°C)	Frozen? Yes	Frozen? No	Rec'd Within 2 Hrs? Yes	Rec'd Within 2 Hrs? No	Sample Flagged? Yes	Sample Flagged? No

Received on same day sampled? Yes (No)
Additional Sheets Required? Yes (No)

Receipt Temperatures

Thermometer ID	Observed (°C)	Corrected (°C)	Temp Blank	Sample Temp	Acceptable	Cooler ID	Affected Samples
CP313207	5.2	5.2		✓	✓Y _N		
					_Y _N		
					_Y _N		

Receipt Questions**	Y	N	NA	"No" answers require additional comment
CoC present and ETA receipt signature, date, and time properly documented?	✓			
Containers and Labels in good condition? *(unbroken, not leaking, appropriately filled, labels legible & attached)*	✓			
Appropriate containers used and adequate volume provided?	✓			Preserved bottles checked for pH?* Yes (No)
Number of sample containers match CoC?	✓			pH strip lot # _____
Samples received within hold?	✓			
Samples submitted for GRO and Volatiles analysis (8260, 624, 524) received without headspace?	✓			
Was a Trip Blank received with VOA samples?		✓		
Were the samples free of any questionable physical conformities? (i.e.; field duplicates or multiple bottles of the same sample do not significantly vary in appearance – color, solid proportions, etc.)	✓			
Were the CoC bottle labels and all other items free of all other discrepancies or issues that would need to be addressed with the Project Manager and/or Client?	✓			
**May not be applicable if samples are not for compliance testing				*Excludes FOG, VOAs, TOC Vials, HEM

Client Contact Record

Contact Via: ☐ Phone ☐ Email ☐ Other: _____ Person Contacted: _____ Date/Time: _____
☐ Discrepancy allowance agreement is on record in the client project file

Discussion / Resolution

Any additional documentation and clarification from the client must be noted in the narrative and/or scanned into the CoC directory.

Reviewed by _____ Date: 9/30/2022

WI-MI-010_020720

Eurofins Michigan
10448 Citation Drive Suite 200
Brighton, MI 48116
Phone. 810-229-2763 Fax: 810-229-0000

Chain of Custody Record

eurofins | Environment Testing America

Client Information (Sub Contract Lab)	Sampler	Lab PM: Schafer, Sue	Carrier Tracking No(s).	COC No: 190-34172.1
Client Contact: Shipping/Receiving	Phone:	E-Mail: Sue.Schafer@et.eurofinsus com	State of Origin: Michigan	Page: Page 1 of 2
Company: Eurofins Environment Testing Southeast,		Accreditations Required (See note):		Job #: 190-30030-1
Address: 5102 LaRoche Avenue, ,	Due Date Requested: 10/13/2022			
City: Savannah	TAT Requested (days):			
State, Zip: GA, 31404				
Phone: 912-354-7858(Tel) 912-352-0165(Fax)	PO #:			
Email:	WO #:			
Project Name: S40860	Project #: 19001249			
Site:	SSOW#:			

Analysis Requested

Preservation Codes:
A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Y - Trizma, Z - other (specify)
Other:

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8015D_DAU (MOD) CUSTOM LIST Alcohols	Total Number of containers	Special Instructions/Note:
			Preservation Code.						
S40860 01 (190-30030-1)	9/27/22	09:30 Eastern		Water			X	3	
S40860 02 (190-30030-2)	9/27/22	10 13 Eastern		Water			X	3	
S40860 03 (190-30030-3)	9/27/22	11.27 Eastern		Water			X	3	
S40860 04 (190-30030-4)	9/27/22	12.37 Eastern		Water			X	3	
S40860 05 (190-30030-5)	9/27/22	13 17 Eastern		Water			X	3	
S40860 06 (190-30030-6)	9/27/22	13.47 Eastern		Water			X	3	
S40860 07 (190-30030-7)	9/27/22	00:01 Eastern		Water			X	3	
S40860 09 (190-30030-8)	9/27/22	09:25 Eastern		Water			X	3	
S40860 10 (190-30030-9)	9/27/22	09:10 Eastern		Water			X	3	

Note: Since laboratory accreditations are subject to change, Eurofins Environment Testing North Central, LLC places the ownership of method, analyte & accreditation compliance upon out subcontract laboratories. This sample shipment is forwarded under chain-of-custody If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the Eurofins Environment Testing North Central, LLC laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins Environment Testing North Central LLC attention immediately If all requested accreditations are current to date, return the signed Chain of Custody attesting to said complicance to Eurofins Environment Testing North Central, LLC.

Possible Hazard Identification	Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
Unconfirmed	☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months
Deliverable Requested I II III IV Other (specify) Primary Deliverable Rank: 2	Special Instructions/QC Requirements.

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

	Relinquished by	Date/Time	Company	Received by	Date/Time	Company
1	[signature]	9/28/2022 10:12		[signature]	10-01-22	
2	Relinquished by:	Date/Time:	Company	Received by:	Date/Time: 11:15	Company
3	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No	Cooler Temperature(s) °C and Other Remarks: 2.5 - 2.4

Ver: 06/08/2021

Eurofins Michigan

Job Notes

The test results in this report meet all NELAP requirements for parameters for which accreditation is required or available. Any exceptions to the NELAP requirements are noted in this report. Pursuant to NELAP, this report may not be reproduced, except in full, without the written approval of the laboratory. This report is confidential and is intended for the sole use of Eurofins Environment Testing North Central, LLC and its client. All questions regarding this report should be directed to the Eurofins Environment Testing North Central, LLC Project Manager who has signed this report.

The test results in this report relate only to the samples as received by the laboratory and will meet all requirements of the methodology, with any exceptions noted. This report shall not be reproduced except in full, without the express written approval of the laboratory. All questions should be directed to the {0} Project Manager.

Authorization

Generated
11/15/2022 7:19:00 PM
Revision 1

Authorized for release by
Sue Schafer, Project Manager II
Sue.Schafer@et.eurofinsus.com
(810)229-2763

Analytical Laboratory Report

Report ID: S40861.01(01)+QC01
Generated on 10/20/2022

Report to

Attention: Kelly Cratsenburg
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Report Summary

Lab Sample ID(s): S40861.01-S40861.17
Project: OA - Eastern RCRA Assessment / 495430
Collected Date(s): 09/27/2022 - 09/28/2022
Submitted Date/Time: 09/29/2022 11:00
Sampled by: H. Schnaidt / J. Jasso
P.O. #: 189445

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Maya Murshak
Technical Director

General Report Notes

Analytical results relate only to the samples tested, in the condition received by the laboratory.
Methods may be modified for improved performance.
Results reported on a dry weight basis where applicable.
'Not detected' indicates that parameter was not found at a level equal to or greater than the reporting limit (RL).
When MDL results are provided, then 'Not detected' indicates that parameter was not found at a level equal to or greater than the MDL.
40 CFR Part 136 Table II Required Containers, Preservation Techniques and Holding Times for the Clean Water Act specify that samples for acrolein and acrylonitrile, and 2-chloroethylvinyl ether need to be preserved at a pH in the range of 4 to 5 or if not preserved, analyzed within 3 days of sampling.
QA/QC corresponding to this analytical report is a separate document with the same Merit ID reference and is available upon request.
Full accreditation certificates are available upon request. Starred (*) analytes are not NELAP accredited.
Samples are held by the lab for 30 days from the final report date unless a written request to hold longer is provided by the client.

Limits for drinking water samples, are listed as the MCL Limits (Maximum Contaminant Level Concentrations)
PFAS requirement: Section 9.3.8 of U.S. EPA Method 537.1 states "If the method analyte(s) found in the Field Sample is present in the FRB at a concentration greater than 1/3 the MRL, then all samples collected with that FRB are invalid and must be recollected and reanalyzed."
Samples submitted without an accompanying FRB may not be acceptable for compliance purposes.
Wisconsin PFAs analysis: MDL = LOD; RL = LOQ. LOD and LOQ are adjusted for dilution.

Report Narrative

There is no additional narrative for this analytical report

Laboratory Certifications

Authority	Certification ID
Michigan DEQ	#9956
DOD ELAP/ISO 17025	#69699
WBENC	#2005110032
Ohio VAP	#CL0002
Indiana DOH	#C-MI-07
New York NELAC	#11814
North Carolina DENR	#680
North Carolina DOH	#26702
Alaska CSLAP	#17-001
Pennsylvania DEP	#68-05884
Wisconsin DNR	FID# 399147320

Qualifier Descriptions

Qualifier	Description
!	Result is outside of stated limit criteria
B	Compound also found in associated method blank
E	Concentration exceeds calibration range
F	Analysis run outside of holding time
G	Estimated result due to extraction run outside of holding time
H	Sample submitted and run outside of holding time
I	Matrix interference with internal standard
J	Estimated value less than reporting limit, but greater than MDL
L	Elevated reporting limit due to low sample amount
M	Result reported to MDL not RDL
O	Analysis performed by outside laboratory. See attached report.
R	Preliminary result
S	Surrogate recovery outside of control limits
T	No correction for total solids
X	Elevated reporting limit due to matrix interference
Y	Elevated reporting limit due to high target concentration
b	Value detected less than reporting limit, but greater than MDL
e	Reported value estimated due to interference
j	Analyte also found in associated method blank
p	Benzo(b)Fluoranthene and Benzo(k)Fluoranthene integrated as one peak.
x	Preserved from bulk sample

Glossary of Abbreviations

Abbreviation	Description
RL/RDL	Reporting Limit
MDL	Method Detection Limit
MS	Matrix Spike
MSD	Matrix Spike Duplicate
SW	EPA SW 846 (Soil and Wastewater) Methods
E	EPA Methods
SM	Standard Methods
LN	Linear
BR	Branched

Method Summary

Method	Version
ASTMD7979-19M	ASTM Method D7979 - 19 Modified (Isotopic Dilution)

Parameter Summary

Parameter	Synonym	Cas #
PFBA	Perfluorobutanoic Acid	375-22-4
PFPeA	Perfluoropentanoic Acid	2706-90-3
4:2 FTSA	4:2 Fluorotelomer Sulfonic Acid	757124-72-4
PFHxA	Perfluorohexanoic Acid	307-24-4
PFBS	Perfluorobutane sulfonic Acid	375-73-5
PFHpA	Perfluoroheptanoic Acid	375-85-9
PFPeS	Perfluoropentane Sulfonic Acid	2706-91-4
6:2 FTSA	6:2 Fluorotelomer Sulfonic Acid	27619-97-2
PFOA	Perfluorooctanoic Acid	335-67-1
PFHxS	Perfluorohexane Sulfonic Acid	355-46-4
PFHxS-LN	Perfluorohexane Sulfonic Acid - LN	355-46-4-LN
PFHxS-BR	Perfluorohexane Sulfonic Acid - BR	355-46-4-BR
PFNA	Perfluorononanoic Acid	375-95-1
8:2 FTSA	8:2 Fluorotelomer Sulfonic Acid	39108-34-4
PFHpS	Perfluoroheptane Sulfonic Acid	375-92-8
PFDA	Perfluorodecanoic Acid	335-76-2
N-MeFOSAA	N-methyl perfluorooctanesulfonamidoacetic acid	2355-31-9
EtFOSAA	N-Ethyl Perfluorooctane Sulfonamidoacetic Acid	2991-50-6
PFOS	Perfluorooctane Sulfonic Acid	1763-23-1
PFOS-LN	Perfluorooctane Sulfonic Acid - LN	1763-23-1-LN
PFOS-BR	Perfluorooctane Sulfonic Acid - BR	1763-23-1-BR
PFUnDA	Perfluoroundecanoic Acid	2058-94-8
PFNS	Perfluorononane Sulfonic Acid	68259-12-1
PFDoDA	Perfluorododecanoic Acid	307-55-1
PFDS	Perfluorodecane Sulfonic Acid	335-77-3
PFTrDA	Perfluorotridecanoic Acid	72629-94-8
FOSA	Perfluorooctane Sulfonamide	754-91-6
PFTeDA	Perfluorotetradecanoic Acid	376-06-7
11Cl-PF3OUdS	11-chloroeicosafluoro-3-oxaundecane-1-sulfonic acid	763051-92-9
9Cl-PF3ONS	9-chlorohexadecafluoro-3-oxanone1-sulfonic acid	756426-58-1
ADONA	4,8-dioxa-3H-perfluorononanoic acid	919005-14-4
HFPO-DA	Hexafluoropropylene oxide dimer	13252-13-6
PFECHS	Perfluoro-4-ethylcyclohexanesulfonate	67584-42-3
PFBSA	Perfluorobutanesulfonamide	30334-69-1
PFHxSA	Perfluorohexanesulfonamide	41997-13-1

Sample Summary (17 samples)

Sample ID	Sample Tag	Matrix	Collected Date/Time
S40861.01	MW-120	Groundwater	09/27/22 09:30
S40861.02	MW-119	Groundwater	09/27/22 10:13
S40861.03	MW-113	Groundwater	09/27/22 11:27
S40861.04	MW-112	Groundwater	09/27/22 12:37
S40861.05	MW-111	Groundwater	09/27/22 13:17
S40861.06	MW-110	Groundwater	09/27/22 13:47
S40861.07	Dup-01	Groundwater	09/27/22 00:01
S40861.08	MW-109	Groundwater	09/28/22 09:25
S40861.09	MW-108	Groundwater	09/28/22 09:10
S40861.10	MW-107	Groundwater	09/28/22 10:23
S40861.11	MW-106	Groundwater	09/28/22 11:25
S40861.12	MW-121	Groundwater	09/28/22 12:32
S40861.13	MW-104	Groundwater	09/28/22 13:38
S40861.14	MW-105	Groundwater	09/28/22 14:23
S40861.15	Dup-02	Groundwater	09/28/22 00:01
S40861.16	FB-01	Water	09/28/22 14:41
S40861.17	EB-01	Water	09/28/22 14:41

Analytical Laboratory Report

Lab Sample ID: S40861.01
Sample Tag: MW-120
Collected Date/Time: 09/27/2022 09:30
Matrix: Groundwater
COC Reference: 154528

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
1	15ml Centrifuge Tube	None	Yes	2.4	IR

Extraction / Prep.

Parameter	Result	Method	Run Date	Analyst	Flags
Initial wt. (g) / Final wt. (g) / Volume (ml)*	11.31/6.56/9	ASTMD7979-19M	10/17/22 14:00	PTW	

Organics

31 PFAs, Method: ASTMD7979-19M, Run Date: 10/18/22 12:30, Analyst: KCV

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
PFBA*	24	9.5		ng/L	1.89	375-22-4	
PFPeA*	Not detected	3.8		ng/L	1.89	2706-90-3	
4:2 FTSA*	Not detected	1.9		ng/L	1.89	757124-72-4	
PFHxA*	Not detected	1.9		ng/L	1.89	307-24-4	
PFBS*	3.4	1.9		ng/L	1.89	375-73-5	
PFHpA*	Not detected	1.9		ng/L	1.89	375-85-9	
PFPeS*	Not detected	1.9		ng/L	1.89	2706-91-4	
6:2 FTSA*	Not detected	1.9		ng/L	1.89	27619-97-2	
PFOA*	47	1.9		ng/L	1.89	335-67-1	
PFHxS*	2.8	1.9		ng/L	1.89	355-46-4	
PFHxS-LN*	2.5	1.9		ng/L	1.89	355-46-4-LN	
PFHxS-BR*	Not detected	1.9		ng/L	1.89	355-46-4-BR	
PFNA*	Not detected	1.9		ng/L	1.89	375-95-1	
8:2 FTSA*	Not detected	1.9		ng/L	1.89	39108-34-4	
PFHpS*	Not detected	1.9		ng/L	1.89	375-92-8	
PFDA*	Not detected	1.9		ng/L	1.89	335-76-2	
N-MeFOSAA*	Not detected	1.9		ng/L	1.89	2355-31-9	
EtFOSAA*	Not detected	3.8		ng/L	1.89	2991-50-6	
PFOS*	Not detected	1.9		ng/L	1.89	1763-23-1	
PFOS-LN*	Not detected	1.9		ng/L	1.89	1763-23-1-LN	
PFOS-BR*	Not detected	1.9		ng/L	1.89	1763-23-1-BR	
PFUnDA*	Not detected	1.9		ng/L	1.89	2058-94-8	
PFNS*	Not detected	1.9		ng/L	1.89	68259-12-1	
PFDoDA*	Not detected	1.9		ng/L	1.89	307-55-1	
PFDS*	Not detected	1.9		ng/L	1.89	335-77-3	
PFTrDA*	Not detected	1.9		ng/L	1.89	72629-94-8	
FOSA*	Not detected	1.9		ng/L	1.89	754-91-6	
PFTeDA*	Not detected	3.8		ng/L	1.89	376-06-7	
11Cl-PF3OUdS*	Not detected	1.9		ng/L	1.89	763051-92-9	
9Cl-PF3ONS*	Not detected	1.9		ng/L	1.89	756426-58-1	
ADONA*	Not detected	1.9		ng/L	1.89	919005-14-4	
HFPO-DA*	Not detected	9.5		ng/L	1.89	13252-13-6	
PFECHS*	Not detected	1.9		ng/L	1.89	67584-42-3	
PFBSA*	Not detected	1.9		ng/L	1.89	30334-69-1	
PFHxSA*	Not detected	1.9		ng/L	1.89	41997-13-1	

Lab Sample ID: S40861.02
Sample Tag: MW-119
Collected Date/Time: 09/27/2022 10:13
Matrix: Groundwater
COC Reference: 154528

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
1	15ml Centrifuge Tube	None	Yes	2.4	IR

Extraction / Prep.

Parameter	Result	Method	Run Date	Analyst	Flags
Initial wt. (g) / Final wt. (g) / Volume (ml)*	11.40/6.55/10	ASTMD7979-19M	10/17/22 14:00	PTW	

Organics

31 PFAs, Method: ASTMD7979-19M, Run Date: 10/18/22 13:09, Analyst: KCV

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
PFBA*	Not detected	10		ng/L	2.06	375-22-4	
PFPeA*	Not detected	4.1		ng/L	2.06	2706-90-3	
4:2 FTSA*	Not detected	2.1		ng/L	2.06	757124-72-4	
PFHxA*	Not detected	2.1		ng/L	2.06	307-24-4	
PFBS*	Not detected	2.1		ng/L	2.06	375-73-5	
PFHpA*	Not detected	2.1		ng/L	2.06	375-85-9	
PFPeS*	Not detected	2.1		ng/L	2.06	2706-91-4	
6:2 FTSA*	Not detected	2.1		ng/L	2.06	27619-97-2	
PFOA*	Not detected	2.1		ng/L	2.06	335-67-1	
PFHxS*	Not detected	2.1		ng/L	2.06	355-46-4	
PFHxS-LN*	Not detected	2.1		ng/L	2.06	355-46-4-LN	
PFHxS-BR*	Not detected	2.1		ng/L	2.06	355-46-4-BR	
PFNA*	Not detected	2.1		ng/L	2.06	375-95-1	
8:2 FTSA*	Not detected	2.1		ng/L	2.06	39108-34-4	
PFHpS*	Not detected	2.1		ng/L	2.06	375-92-8	
PFDA*	Not detected	2.1		ng/L	2.06	335-76-2	
N-MeFOSAA*	Not detected	2.1		ng/L	2.06	2355-31-9	
EtFOSAA*	Not detected	4.1		ng/L	2.06	2991-50-6	
PFOS*	Not detected	2.1		ng/L	2.06	1763-23-1	
PFOS-LN*	Not detected	2.1		ng/L	2.06	1763-23-1-LN	
PFOS-BR*	Not detected	2.1		ng/L	2.06	1763-23-1-BR	
PFUnDA*	Not detected	2.1		ng/L	2.06	2058-94-8	
PFNS*	Not detected	2.1		ng/L	2.06	68259-12-1	
PFDoDA*	Not detected	2.1		ng/L	2.06	307-55-1	
PFDS*	Not detected	2.1		ng/L	2.06	335-77-3	
PFTrDA*	Not detected	2.1		ng/L	2.06	72629-94-8	
FOSA*	Not detected	2.1		ng/L	2.06	754-91-6	
PFTeDA*	Not detected	4.1		ng/L	2.06	376-06-7	
11Cl-PF3OUdS*	Not detected	2.1		ng/L	2.06	763051-92-9	
9Cl-PF3ONS*	Not detected	2.1		ng/L	2.06	756426-58-1	
ADONA*	Not detected	2.1		ng/L	2.06	919005-14-4	
HFPO-DA*	Not detected	10		ng/L	2.06	13252-13-6	
PFECHS*	Not detected	2.1		ng/L	2.06	67584-42-3	
PFBSA*	Not detected	2.1		ng/L	2.06	30334-69-1	
PFHxSA*	Not detected	2.1		ng/L	2.06	41997-13-1	

Lab Sample ID: S40861.03
Sample Tag: MW-113
Collected Date/Time: 09/27/2022 11:27
Matrix: Groundwater
COC Reference: 154528

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
1	15ml Centrifuge Tube	None	Yes	2.4	IR

Extraction / Prep.

Parameter	Result	Method	Run Date	Analyst	Flags
Initial wt. (g) / Final wt. (g) / Volume (ml)*	11.87/6.50/11	ASTMD7979-19M	10/17/22 14:00	PTW	

Organics

31 PFAs, Method: ASTMD7979-19M, Run Date: 10/18/22 13:48, Analyst: KCV

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
PFBA*	Not detected	10		ng/L	2.05	375-22-4	
PFPeA*	Not detected	4.1		ng/L	2.05	2706-90-3	
4:2 FTSA*	Not detected	2.1		ng/L	2.05	757124-72-4	
PFHxA*	Not detected	2.1		ng/L	2.05	307-24-4	
PFBS*	Not detected	2.1		ng/L	2.05	375-73-5	
PFHpA*	Not detected	2.1		ng/L	2.05	375-85-9	
PFPeS*	Not detected	2.1		ng/L	2.05	2706-91-4	
6:2 FTSA*	Not detected	2.1		ng/L	2.05	27619-97-2	
PFOA*	Not detected	2.1		ng/L	2.05	335-67-1	
PFHxS*	2.1	2.1		ng/L	2.05	355-46-4	
PFHxS-LN*	Not detected	2.1		ng/L	2.05	355-46-4-LN	
PFHxS-BR*	Not detected	2.1		ng/L	2.05	355-46-4-BR	
PFNA*	Not detected	2.1		ng/L	2.05	375-95-1	
8:2 FTSA*	Not detected	2.1		ng/L	2.05	39108-34-4	
PFHpS*	Not detected	2.1		ng/L	2.05	375-92-8	
PFDA*	Not detected	2.1		ng/L	2.05	335-76-2	
N-MeFOSAA*	Not detected	2.1		ng/L	2.05	2355-31-9	
EtFOSAA*	Not detected	4.1		ng/L	2.05	2991-50-6	
PFOS*	Not detected	2.1		ng/L	2.05	1763-23-1	
PFOS-LN*	Not detected	2.1		ng/L	2.05	1763-23-1-LN	
PFOS-BR*	Not detected	2.1		ng/L	2.05	1763-23-1-BR	
PFUnDA*	Not detected	2.1		ng/L	2.05	2058-94-8	
PFNS*	Not detected	2.1		ng/L	2.05	68259-12-1	
PFDoDA*	Not detected	2.1		ng/L	2.05	307-55-1	
PFDS*	Not detected	2.1		ng/L	2.05	335-77-3	
PFTrDA*	Not detected	2.1		ng/L	2.05	72629-94-8	
FOSA*	Not detected	2.1		ng/L	2.05	754-91-6	
PFTeDA*	Not detected	4.1		ng/L	2.05	376-06-7	
11Cl-PF3OUdS*	Not detected	2.1		ng/L	2.05	763051-92-9	
9Cl-PF3ONS*	Not detected	2.1		ng/L	2.05	756426-58-1	
ADONA*	Not detected	2.1		ng/L	2.05	919005-14-4	
HFPO-DA*	Not detected	10		ng/L	2.05	13252-13-6	
PFECHS*	Not detected	2.1		ng/L	2.05	67584-42-3	
PFBSA*	Not detected	2.1		ng/L	2.05	30334-69-1	
PFHxSA*	Not detected	2.1		ng/L	2.05	41997-13-1	

Lab Sample ID: S40861.04
Sample Tag: MW-112
Collected Date/Time: 09/27/2022 12:37
Matrix: Groundwater
COC Reference: 154528

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
1	15ml Centrifuge Tube	None	Yes	2.4	IR

Extraction / Prep.

Parameter	Result	Method	Run Date	Analyst	Flags
Initial wt. (g) / Final wt. (g) / Volume (ml)*	11.70/6..54/10	ASTMD7979-19M	10/17/22 14:00	PTW	

Organics

31 PFAs, Method: ASTMD7979-19M, Run Date: 10/18/22 14:07, Analyst: KCV

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
PFBA*	11	8.8		ng/L	1.75	375-22-4	
PFPeA*	Not detected	3.5		ng/L	1.75	2706-90-3	
4:2 FTSA*	Not detected	1.8		ng/L	1.75	757124-72-4	
PFHxA*	2.3	1.8		ng/L	1.75	307-24-4	
PFBS*	4.1	1.8		ng/L	1.75	375-73-5	
PFHpA*	1.8	1.8		ng/L	1.75	375-85-9	
PFPeS*	Not detected	1.8		ng/L	1.75	2706-91-4	
6:2 FTSA*	Not detected	1.8		ng/L	1.75	27619-97-2	
PFOA*	23	1.8		ng/L	1.75	335-67-1	
PFHxS*	3.5	1.8		ng/L	1.75	355-46-4	
PFHxS-LN*	2.8	1.8		ng/L	1.75	355-46-4-LN	
PFHxS-BR*	Not detected	1.8		ng/L	1.75	355-46-4-BR	
PFNA*	Not detected	1.8		ng/L	1.75	375-95-1	
8:2 FTSA*	Not detected	1.8		ng/L	1.75	39108-34-4	
PFHpS*	Not detected	1.8		ng/L	1.75	375-92-8	
PFDA*	Not detected	1.8		ng/L	1.75	335-76-2	
N-MeFOSAA*	Not detected	1.8		ng/L	1.75	2355-31-9	
EtFOSAA*	Not detected	3.5		ng/L	1.75	2991-50-6	
PFOS*	15	1.8		ng/L	1.75	1763-23-1	
PFOS-LN*	3.6	1.8		ng/L	1.75	1763-23-1-LN	
PFOS-BR*	11	1.8		ng/L	1.75	1763-23-1-BR	
PFUnDA*	Not detected	1.8		ng/L	1.75	2058-94-8	
PFNS*	Not detected	1.8		ng/L	1.75	68259-12-1	
PFDoDA*	Not detected	1.8		ng/L	1.75	307-55-1	
PFDS*	Not detected	1.8		ng/L	1.75	335-77-3	
PFTrDA*	Not detected	1.8		ng/L	1.75	72629-94-8	
FOSA*	Not detected	1.8		ng/L	1.75	754-91-6	
PFTeDA*	Not detected	3.5		ng/L	1.75	376-06-7	
11Cl-PF3OUdS*	Not detected	1.8		ng/L	1.75	763051-92-9	
9Cl-PF3ONS*	Not detected	1.8		ng/L	1.75	756426-58-1	
ADONA*	Not detected	1.8		ng/L	1.75	919005-14-4	
HFPO-DA*	Not detected	8.8		ng/L	1.75	13252-13-6	
PFECHS*	Not detected	1.8		ng/L	1.75	67584-42-3	
PFBSA*	Not detected	1.8		ng/L	1.75	30334-69-1	
PFHxSA*	Not detected	1.8		ng/L	1.75	41997-13-1	

Lab Sample ID: S40861.05
Sample Tag: MW-111
Collected Date/Time: 09/27/2022 13:17
Matrix: Groundwater
COC Reference: 154528

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
1	15ml Centrifuge Tube	None	Yes	2.4	IR

Extraction / Prep.

Parameter	Result	Method	Run Date	Analyst	Flags
Initial wt. (g) / Final wt. (g) / Volume (ml)*	11.52/6.99/10	ASTMD7979-19M	10/17/22 14:00	PTW	

Organics

31 PFAs, Method: ASTMD7979-19M, Run Date: 10/18/22 14:27, Analyst: KCV

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
PFBA*	11	11		ng/L	2.21	375-22-4	
PFPeA*	Not detected	4.4		ng/L	2.21	2706-90-3	
4:2 FTSA*	Not detected	2.2		ng/L	2.21	757124-72-4	
PFHxA*	6.3	2.2		ng/L	2.21	307-24-4	
PFBS*	5.5	2.2		ng/L	2.21	375-73-5	
PFHpA*	3.8	2.2		ng/L	2.21	375-85-9	
PFPeS*	Not detected	2.2		ng/L	2.21	2706-91-4	
6:2 FTSA*	Not detected	2.2		ng/L	2.21	27619-97-2	
PFOA*	19	2.2		ng/L	2.21	335-67-1	
PFHxS*	2.3	2.2		ng/L	2.21	355-46-4	
PFHxS-LN*	Not detected	2.2		ng/L	2.21	355-46-4-LN	
PFHxS-BR*	Not detected	2.2		ng/L	2.21	355-46-4-BR	
PFNA*	Not detected	2.2		ng/L	2.21	375-95-1	
8:2 FTSA*	Not detected	2.2		ng/L	2.21	39108-34-4	
PFHpS*	Not detected	2.2		ng/L	2.21	375-92-8	
PFDA*	Not detected	2.2		ng/L	2.21	335-76-2	
N-MeFOSAA*	Not detected	2.2		ng/L	2.21	2355-31-9	
EtFOSAA*	Not detected	4.4		ng/L	2.21	2991-50-6	
PFOS*	Not detected	2.2		ng/L	2.21	1763-23-1	
PFOS-LN*	Not detected	2.2		ng/L	2.21	1763-23-1-LN	
PFOS-BR*	Not detected	2.2		ng/L	2.21	1763-23-1-BR	
PFUnDA*	Not detected	2.2		ng/L	2.21	2058-94-8	
PFNS*	Not detected	2.2		ng/L	2.21	68259-12-1	
PFDoDA*	Not detected	2.2		ng/L	2.21	307-55-1	
PFDS*	Not detected	2.2		ng/L	2.21	335-77-3	
PFTrDA*	Not detected	2.2		ng/L	2.21	72629-94-8	
FOSA*	Not detected	2.2		ng/L	2.21	754-91-6	
PFTeDA*	Not detected	4.4		ng/L	2.21	376-06-7	
11Cl-PF3OUdS*	Not detected	2.2		ng/L	2.21	763051-92-9	
9Cl-PF3ONS*	Not detected	2.2		ng/L	2.21	756426-58-1	
ADONA*	Not detected	2.2		ng/L	2.21	919005-14-4	
HFPO-DA*	Not detected	11		ng/L	2.21	13252-13-6	
PFECHS*	Not detected	2.2		ng/L	2.21	67584-42-3	
PFBSA*	Not detected	2.2		ng/L	2.21	30334-69-1	
PFHxSA*	Not detected	2.2		ng/L	2.21	41997-13-1	

Analytical Laboratory Report

Lab Sample ID: S40861.06
Sample Tag: MW-110
Collected Date/Time: 09/27/2022 13:47
Matrix: Groundwater
COC Reference: 154528

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
1	15ml Centrifuge Tube	None	Yes	2.4	IR

Extraction / Prep.

Parameter	Result	Method	Run Date	Analyst	Flags
Initial wt. (g) / Final wt. (g) / Volume (ml)*	11.82/6.56/10	ASTMD7979-19M	10/17/22 14:00	PTW	

Organics

31 PFAs, Method: ASTMD7979-19M, Run Date: 10/18/22 14:46, Analyst: KCV

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
PFBA*	Not detected	9.5		ng/L	1.9	375-22-4	
PFPeA*	Not detected	3.8		ng/L	1.9	2706-90-3	
4:2 FTSA*	Not detected	1.9		ng/L	1.9	757124-72-4	
PFHxA*	3.3	1.9		ng/L	1.9	307-24-4	
PFBS*	4.2	1.9		ng/L	1.9	375-73-5	
PFHpA*	3.1	1.9		ng/L	1.9	375-85-9	
PFPeS*	Not detected	1.9		ng/L	1.9	2706-91-4	
6:2 FTSA*	Not detected	1.9		ng/L	1.9	27619-97-2	
PFOA*	11	1.9		ng/L	1.9	335-67-1	
PFHxS*	2.2	1.9		ng/L	1.9	355-46-4	
PFHxS-LN*	Not detected	1.9		ng/L	1.9	355-46-4-LN	
PFHxS-BR*	Not detected	1.9		ng/L	1.9	355-46-4-BR	
PFNA*	Not detected	1.9		ng/L	1.9	375-95-1	
8:2 FTSA*	Not detected	1.9		ng/L	1.9	39108-34-4	
PFHpS*	Not detected	1.9		ng/L	1.9	375-92-8	
PFDA*	Not detected	1.9		ng/L	1.9	335-76-2	
N-MeFOSAA*	Not detected	1.9		ng/L	1.9	2355-31-9	
EtFOSAA*	Not detected	3.8		ng/L	1.9	2991-50-6	
PFOS*	2.2	1.9		ng/L	1.9	1763-23-1	
PFOS-LN*	Not detected	1.9		ng/L	1.9	1763-23-1-LN	
PFOS-BR*	Not detected	1.9		ng/L	1.9	1763-23-1-BR	
PFUnDA*	Not detected	1.9		ng/L	1.9	2058-94-8	
PFNS*	Not detected	1.9		ng/L	1.9	68259-12-1	
PFDoDA*	Not detected	1.9		ng/L	1.9	307-55-1	
PFDS*	Not detected	1.9		ng/L	1.9	335-77-3	
PFTrDA*	Not detected	1.9		ng/L	1.9	72629-94-8	
FOSA*	Not detected	1.9		ng/L	1.9	754-91-6	
PFTeDA*	Not detected	3.8		ng/L	1.9	376-06-7	
11Cl-PF3OUdS*	Not detected	1.9		ng/L	1.9	763051-92-9	
9Cl-PF3ONS*	Not detected	1.9		ng/L	1.9	756426-58-1	
ADONA*	Not detected	1.9		ng/L	1.9	919005-14-4	
HFPO-DA*	Not detected	9.5		ng/L	1.9	13252-13-6	
PFECHS*	Not detected	1.9		ng/L	1.9	67584-42-3	
PFBSA*	Not detected	1.9		ng/L	1.9	30334-69-1	
PFHxSA*	Not detected	1.9		ng/L	1.9	41997-13-1	

Analytical Laboratory Report

Lab Sample ID: S40861.07
Sample Tag: Dup-01
Collected Date/Time: 09/27/2022 00:01
Matrix: Groundwater
COC Reference: 154528

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
1	15ml Centrifuge Tube	None	Yes	2.4	IR

Extraction / Prep.

Parameter	Result	Method	Run Date	Analyst	Flags
Initial wt. (g) / Final wt. (g) / Volume (ml)*	11.66/6.53/10	ASTMD7979-19M	10/17/22 14:00	PTW	

Organics

31 PFAs, Method: ASTMD7979-19M, Run Date: 10/18/22 15:06, Analyst: KCV

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
PFBA*	29	9.8		ng/L	1.95	375-22-4	
PFPeA*	Not detected	3.9		ng/L	1.95	2706-90-3	
4:2 FTSA*	Not detected	2.0		ng/L	1.95	757124-72-4	
PFHxA*	2.2	2.0		ng/L	1.95	307-24-4	
PFBS*	4.5	2.0		ng/L	1.95	375-73-5	
PFHpA*	Not detected	2.0		ng/L	1.95	375-85-9	
PFPeS*	Not detected	2.0		ng/L	1.95	2706-91-4	
6:2 FTSA*	Not detected	2.0		ng/L	1.95	27619-97-2	
PFOA*	49	2.0		ng/L	1.95	335-67-1	
PFHxS*	3.0	2.0		ng/L	1.95	355-46-4	
PFHxS-LN*	2.5	2.0		ng/L	1.95	355-46-4-LN	
PFHxS-BR*	Not detected	2.0		ng/L	1.95	355-46-4-BR	
PFNA*	Not detected	2.0		ng/L	1.95	375-95-1	
8:2 FTSA*	Not detected	2.0		ng/L	1.95	39108-34-4	
PFHpS*	Not detected	2.0		ng/L	1.95	375-92-8	
PFDA*	Not detected	2.0		ng/L	1.95	335-76-2	
N-MeFOSAA*	Not detected	2.0		ng/L	1.95	2355-31-9	
EtFOSAA*	Not detected	3.9		ng/L	1.95	2991-50-6	
PFOS*	Not detected	2.0		ng/L	1.95	1763-23-1	
PFOS-LN*	Not detected	2.0		ng/L	1.95	1763-23-1-LN	
PFOS-BR*	Not detected	2.0		ng/L	1.95	1763-23-1-BR	
PFUnDA*	Not detected	2.0		ng/L	1.95	2058-94-8	
PFNS*	Not detected	2.0		ng/L	1.95	68259-12-1	
PFDoDA*	Not detected	2.0		ng/L	1.95	307-55-1	
PFDS*	Not detected	2.0		ng/L	1.95	335-77-3	
PFTrDA*	Not detected	2.0		ng/L	1.95	72629-94-8	
FOSA*	Not detected	2.0		ng/L	1.95	754-91-6	
PFTeDA*	Not detected	3.9		ng/L	1.95	376-06-7	
11Cl-PF3OUdS*	Not detected	2.0		ng/L	1.95	763051-92-9	
9Cl-PF3ONS*	Not detected	2.0		ng/L	1.95	756426-58-1	
ADONA*	Not detected	2.0		ng/L	1.95	919005-14-4	
HFPO-DA*	Not detected	9.8		ng/L	1.95	13252-13-6	
PFECHS*	Not detected	2.0		ng/L	1.95	67584-42-3	
PFBSA*	Not detected	2.0		ng/L	1.95	30334-69-1	
PFHxSA*	Not detected	2.0		ng/L	1.95	41997-13-1	

Lab Sample ID: S40861.08
Sample Tag: MW-109
Collected Date/Time: 09/28/2022 09:25
Matrix: Groundwater
COC Reference: 154472

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
1	15ml Centrifuge Tube	None	Yes	2.4	IR

Extraction / Prep.

Parameter	Result	Method	Run Date	Analyst	Flags
Initial wt. (g) / Final wt. (g) / Volume (ml)*	12.15/6.54/11	ASTMD7979-19M	10/17/22 14:00	PTW	

Organics

31 PFAs, Method: ASTMD7979-19M, Run Date: 10/18/22 15:25, Analyst: KCV

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
PFBA*	22	9.8		ng/L	1.96	375-22-4	
PFPeA*	9.4	3.9		ng/L	1.96	2706-90-3	
4:2 FTSA*	Not detected	2.0		ng/L	1.96	757124-72-4	
PFHxA*	10	2.0		ng/L	1.96	307-24-4	
PFBS*	8.7	2.0		ng/L	1.96	375-73-5	
PFHpA*	4.0	2.0		ng/L	1.96	375-85-9	
PFPeS*	Not detected	2.0		ng/L	1.96	2706-91-4	
6:2 FTSA*	Not detected	2.0		ng/L	1.96	27619-97-2	
PFOA*	8.7	2.0		ng/L	1.96	335-67-1	
PFHxS*	3.2	2.0		ng/L	1.96	355-46-4	
PFHxS-LN*	2.4	2.0		ng/L	1.96	355-46-4-LN	
PFHxS-BR*	Not detected	2.0		ng/L	1.96	355-46-4-BR	
PFNA*	Not detected	2.0		ng/L	1.96	375-95-1	
8:2 FTSA*	Not detected	2.0		ng/L	1.96	39108-34-4	
PFHpS*	Not detected	2.0		ng/L	1.96	375-92-8	
PFDA*	Not detected	2.0		ng/L	1.96	335-76-2	
N-MeFOSAA*	Not detected	2.0		ng/L	1.96	2355-31-9	
EtFOSAA*	Not detected	3.9		ng/L	1.96	2991-50-6	
PFOS*	Not detected	2.0		ng/L	1.96	1763-23-1	
PFOS-LN*	Not detected	2.0		ng/L	1.96	1763-23-1-LN	
PFOS-BR*	Not detected	2.0		ng/L	1.96	1763-23-1-BR	
PFUnDA*	Not detected	2.0		ng/L	1.96	2058-94-8	
PFNS*	Not detected	2.0		ng/L	1.96	68259-12-1	
PFDoDA*	Not detected	2.0		ng/L	1.96	307-55-1	
PFDS*	Not detected	2.0		ng/L	1.96	335-77-3	
PFTrDA*	Not detected	2.0		ng/L	1.96	72629-94-8	
FOSA*	Not detected	2.0		ng/L	1.96	754-91-6	
PFTeDA*	Not detected	3.9		ng/L	1.96	376-06-7	
11Cl-PF3OUdS*	Not detected	2.0		ng/L	1.96	763051-92-9	
9Cl-PF3ONS*	Not detected	2.0		ng/L	1.96	756426-58-1	
ADONA*	Not detected	2.0		ng/L	1.96	919005-14-4	
HFPO-DA*	Not detected	9.8		ng/L	1.96	13252-13-6	
PFECHS*	Not detected	2.0		ng/L	1.96	67584-42-3	
PFBSA*	Not detected	2.0		ng/L	1.96	30334-69-1	
PFHxSA*	Not detected	2.0		ng/L	1.96	41997-13-1	

Analytical Laboratory Report

Lab Sample ID: S40861.09
Sample Tag: MW-108
Collected Date/Time: 09/28/2022 09:10
Matrix: Groundwater
COC Reference: 154472

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
1	15ml Centrifuge Tube	None	Yes	2.4	IR

Extraction / Prep.

Parameter	Result	Method	Run Date	Analyst	Flags
Initial wt. (g) / Final wt. (g) / Volume (ml)*	11.45/6.54/10	ASTMD7979-19M	10/17/22 14:00	PTW	

Organics

31 PFAs, Method: ASTMD7979-19M, Run Date: 10/18/22 15:45, Analyst: KCV

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
PFBA*	15	10		ng/L	2.04	375-22-4	
PFPeA*	Not detected	4.1		ng/L	2.04	2706-90-3	
4:2 FTSA*	Not detected	2.0		ng/L	2.04	757124-72-4	
PFHxA*	2.9	2.0		ng/L	2.04	307-24-4	
PFBS*	5.5	2.0		ng/L	2.04	375-73-5	
PFHpA*	2.7	2.0		ng/L	2.04	375-85-9	
PFPeS*	Not detected	2.0		ng/L	2.04	2706-91-4	
6:2 FTSA*	Not detected	2.0		ng/L	2.04	27619-97-2	
PFOA*	11	2.0		ng/L	2.04	335-67-1	
PFHxS*	2.8	2.0		ng/L	2.04	355-46-4	
PFHxS-LN*	2.2	2.0		ng/L	2.04	355-46-4-LN	
PFHxS-BR*	Not detected	2.0		ng/L	2.04	355-46-4-BR	
PFNA*	Not detected	2.0		ng/L	2.04	375-95-1	
8:2 FTSA*	Not detected	2.0		ng/L	2.04	39108-34-4	
PFHpS*	Not detected	2.0		ng/L	2.04	375-92-8	
PFDA*	Not detected	2.0		ng/L	2.04	335-76-2	
N-MeFOSAA*	Not detected	2.0		ng/L	2.04	2355-31-9	
EtFOSAA*	Not detected	4.1		ng/L	2.04	2991-50-6	
PFOS*	Not detected	2.0		ng/L	2.04	1763-23-1	
PFOS-LN*	Not detected	2.0		ng/L	2.04	1763-23-1-LN	
PFOS-BR*	Not detected	2.0		ng/L	2.04	1763-23-1-BR	
PFUnDA*	Not detected	2.0		ng/L	2.04	2058-94-8	
PFNS*	Not detected	2.0		ng/L	2.04	68259-12-1	
PFDoDA*	Not detected	2.0		ng/L	2.04	307-55-1	
PFDS*	Not detected	2.0		ng/L	2.04	335-77-3	
PFTrDA*	Not detected	2.0		ng/L	2.04	72629-94-8	
FOSA*	Not detected	2.0		ng/L	2.04	754-91-6	
PFTeDA*	Not detected	4.1		ng/L	2.04	376-06-7	
11Cl-PF3OUdS*	Not detected	2.0		ng/L	2.04	763051-92-9	
9Cl-PF3ONS*	Not detected	2.0		ng/L	2.04	756426-58-1	
ADONA*	Not detected	2.0		ng/L	2.04	919005-14-4	
HFPO-DA*	Not detected	10		ng/L	2.04	13252-13-6	
PFECHS*	Not detected	2.0		ng/L	2.04	67584-42-3	
PFBSA*	Not detected	2.0		ng/L	2.04	30334-69-1	
PFHxSA*	Not detected	2.0		ng/L	2.04	41997-13-1	

Analytical Laboratory Report

Lab Sample ID: S40861.10
Sample Tag: MW-107
Collected Date/Time: 09/28/2022 10:23
Matrix: Groundwater
COC Reference: 154472

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
1	15ml Centrifuge Tube	None	Yes	2.4	IR

Extraction / Prep.

Parameter	Result	Method	Run Date	Analyst	Flags
Initial wt. (g) / Final wt. (g) / Volume (ml)*	12.11/6.51/11	ASTMD7979-19M	10/17/22 14:00	PTW	

Organics

31 PFAs, Method: ASTMD7979-19M, Run Date: 10/18/22 16:04, Analyst: KCV

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
PFBA*	Not detected	9.8		ng/L	1.96	375-22-4	
PFPeA*	4.5	3.9		ng/L	1.96	2706-90-3	
4:2 FTSA*	Not detected	2.0		ng/L	1.96	757124-72-4	
PFHxA*	5.6	2.0		ng/L	1.96	307-24-4	
PFBS*	3.5	2.0		ng/L	1.96	375-73-5	
PFHpA*	3.2	2.0		ng/L	1.96	375-85-9	
PFPeS*	Not detected	2.0		ng/L	1.96	2706-91-4	
6:2 FTSA*	Not detected	2.0		ng/L	1.96	27619-97-2	
PFOA*	19	2.0		ng/L	1.96	335-67-1	
PFHxS*	4.5	2.0		ng/L	1.96	355-46-4	
PFHxS-LN*	3.4	2.0		ng/L	1.96	355-46-4-LN	
PFHxS-BR*	Not detected	2.0		ng/L	1.96	355-46-4-BR	
PFNA*	Not detected	2.0		ng/L	1.96	375-95-1	
8:2 FTSA*	Not detected	2.0		ng/L	1.96	39108-34-4	
PFHpS*	Not detected	2.0		ng/L	1.96	375-92-8	
PFDA*	Not detected	2.0		ng/L	1.96	335-76-2	
N-MeFOSAA*	Not detected	2.0		ng/L	1.96	2355-31-9	
EtFOSAA*	Not detected	3.9		ng/L	1.96	2991-50-6	
PFOS*	Not detected	2.0		ng/L	1.96	1763-23-1	
PFOS-LN*	Not detected	2.0		ng/L	1.96	1763-23-1-LN	
PFOS-BR*	Not detected	2.0		ng/L	1.96	1763-23-1-BR	
PFUnDA*	Not detected	2.0		ng/L	1.96	2058-94-8	
PFNS*	Not detected	2.0		ng/L	1.96	68259-12-1	
PFDoDA*	Not detected	2.0		ng/L	1.96	307-55-1	
PFDS*	Not detected	2.0		ng/L	1.96	335-77-3	
PFTrDA*	Not detected	2.0		ng/L	1.96	72629-94-8	
FOSA*	Not detected	2.0		ng/L	1.96	754-91-6	
PFTeDA*	Not detected	3.9		ng/L	1.96	376-06-7	
11Cl-PF3OUdS*	Not detected	2.0		ng/L	1.96	763051-92-9	
9Cl-PF3ONS*	Not detected	2.0		ng/L	1.96	756426-58-1	
ADONA*	Not detected	2.0		ng/L	1.96	919005-14-4	
HFPO-DA*	Not detected	9.8		ng/L	1.96	13252-13-6	
PFECHS*	Not detected	2.0		ng/L	1.96	67584-42-3	
PFBSA*	Not detected	2.0		ng/L	1.96	30334-69-1	
PFHxSA*	Not detected	2.0		ng/L	1.96	41997-13-1	

Lab Sample ID: S40861.11
Sample Tag: MW-106
Collected Date/Time: 09/28/2022 11:25
Matrix: Groundwater
COC Reference: 154472

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
1	15ml Centrifuge Tube	None	Yes	2.4	IR

Extraction / Prep.

Parameter	Result	Method	Run Date	Analyst	Flags
Initial wt. (g) / Final wt. (g) / Volume (ml)*	11.54/6.56/10	ASTMD7979-19M	10/17/22 14:00	PTW	

Organics

31 PFAs, Method: ASTMD7979-19M, Run Date: 10/18/22 16:24, Analyst: KCV

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
PFBA*	Not detected	10		ng/L	2.01	375-22-4	
PFPeA*	12	4.0		ng/L	2.01	2706-90-3	
4:2 FTSA*	Not detected	2.0		ng/L	2.01	757124-72-4	
PFHxA*	15	2.0		ng/L	2.01	307-24-4	
PFBS*	3.3	2.0		ng/L	2.01	375-73-5	
PFHpA*	13	2.0		ng/L	2.01	375-85-9	
PFPeS*	Not detected	2.0		ng/L	2.01	2706-91-4	
6:2 FTSA*	Not detected	2.0		ng/L	2.01	27619-97-2	
PFOA*	42	2.0		ng/L	2.01	335-67-1	
PFHxS*	8.0	2.0		ng/L	2.01	355-46-4	
PFHxS-LN*	6.4	2.0		ng/L	2.01	355-46-4-LN	
PFHxS-BR*	Not detected	2.0		ng/L	2.01	355-46-4-BR	
PFNA*	2.8	2.0		ng/L	2.01	375-95-1	
8:2 FTSA*	Not detected	2.0		ng/L	2.01	39108-34-4	
PFHpS*	Not detected	2.0		ng/L	2.01	375-92-8	
PFDA*	Not detected	2.0		ng/L	2.01	335-76-2	
N-MeFOSAA*	Not detected	2.0		ng/L	2.01	2355-31-9	
EtFOSAA*	Not detected	4.0		ng/L	2.01	2991-50-6	
PFOS*	4.3	2.0		ng/L	2.01	1763-23-1	
PFOS-LN*	Not detected	2.0		ng/L	2.01	1763-23-1-LN	
PFOS-BR*	3.9	2.0		ng/L	2.01	1763-23-1-BR	
PFUnDA*	Not detected	2.0		ng/L	2.01	2058-94-8	
PFNS*	Not detected	2.0		ng/L	2.01	68259-12-1	
PFDoDA*	Not detected	2.0		ng/L	2.01	307-55-1	
PFDS*	Not detected	2.0		ng/L	2.01	335-77-3	
PFTrDA*	Not detected	2.0		ng/L	2.01	72629-94-8	
FOSA*	Not detected	2.0		ng/L	2.01	754-91-6	
PFTeDA*	Not detected	4.0		ng/L	2.01	376-06-7	
11Cl-PF3OUdS*	Not detected	2.0		ng/L	2.01	763051-92-9	
9Cl-PF3ONS*	Not detected	2.0		ng/L	2.01	756426-58-1	
ADONA*	Not detected	2.0		ng/L	2.01	919005-14-4	
HFPO-DA*	Not detected	10		ng/L	2.01	13252-13-6	
PFECHS*	Not detected	2.0		ng/L	2.01	67584-42-3	
PFBSA*	Not detected	2.0		ng/L	2.01	30334-69-1	
PFHxSA*	Not detected	2.0		ng/L	2.01	41997-13-1	

Analytical Laboratory Report

Lab Sample ID: S40861.12
Sample Tag: MW-121
Collected Date/Time: 09/28/2022 12:32
Matrix: Groundwater
COC Reference: 154472

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
1	15ml Centrifuge Tube	None	Yes	2.4	IR

Extraction / Prep.

Parameter	Result	Method	Run Date	Analyst	Flags
Initial wt. (g) / Final wt. (g) / Volume (ml)*	11.86/6.54/11	ASTMD7979-19M	10/17/22 14:00	PTW	

Organics

31 PFAs, Method: ASTMD7979-19M, Run Date: 10/18/22 16:43, Analyst: KCV

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
PFBA*	Not detected	10		ng/L	2.07	375-22-4	
PFPeA*	Not detected	4.1		ng/L	2.07	2706-90-3	
4:2 FTSA*	Not detected	2.1		ng/L	2.07	757124-72-4	
PFHxA*	3.9	2.1		ng/L	2.07	307-24-4	
PFBS*	3.6	2.1		ng/L	2.07	375-73-5	
PFHpA*	3.2	2.1		ng/L	2.07	375-85-9	
PFPeS*	Not detected	2.1		ng/L	2.07	2706-91-4	
6:2 FTSA*	Not detected	2.1		ng/L	2.07	27619-97-2	
PFOA*	13	2.1		ng/L	2.07	335-67-1	
PFHxS*	20	2.1		ng/L	2.07	355-46-4	
PFHxS-LN*	17	2.1		ng/L	2.07	355-46-4-LN	
PFHxS-BR*	2.3	2.1		ng/L	2.07	355-46-4-BR	
PFNA*	Not detected	2.1		ng/L	2.07	375-95-1	
8:2 FTSA*	Not detected	2.1		ng/L	2.07	39108-34-4	
PFHpS*	Not detected	2.1		ng/L	2.07	375-92-8	
PFDA*	Not detected	2.1		ng/L	2.07	335-76-2	
N-MeFOSAA*	Not detected	2.1		ng/L	2.07	2355-31-9	
EtFOSAA*	Not detected	4.1		ng/L	2.07	2991-50-6	
PFOS*	2.6	2.1		ng/L	2.07	1763-23-1	
PFOS-LN*	Not detected	2.1		ng/L	2.07	1763-23-1-LN	
PFOS-BR*	Not detected	2.1		ng/L	2.07	1763-23-1-BR	
PFUnDA*	Not detected	2.1		ng/L	2.07	2058-94-8	
PFNS*	Not detected	2.1		ng/L	2.07	68259-12-1	
PFDoDA*	Not detected	2.1		ng/L	2.07	307-55-1	
PFDS*	Not detected	2.1		ng/L	2.07	335-77-3	
PFTrDA*	Not detected	2.1		ng/L	2.07	72629-94-8	
FOSA*	Not detected	2.1		ng/L	2.07	754-91-6	
PFTeDA*	Not detected	4.1		ng/L	2.07	376-06-7	
11Cl-PF3OUdS*	Not detected	2.1		ng/L	2.07	763051-92-9	
9Cl-PF3ONS*	Not detected	2.1		ng/L	2.07	756426-58-1	
ADONA*	Not detected	2.1		ng/L	2.07	919005-14-4	
HFPO-DA*	Not detected	10		ng/L	2.07	13252-13-6	
PFECHS*	Not detected	2.1		ng/L	2.07	67584-42-3	
PFBSA*	Not detected	2.1		ng/L	2.07	30334-69-1	
PFHxSA*	Not detected	2.1		ng/L	2.07	41997-13-1	

Lab Sample ID: S40861.13
Sample Tag: MW-104
Collected Date/Time: 09/28/2022 13:38
Matrix: Groundwater
COC Reference: 154472

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
1	15ml Centrifuge Tube	None	Yes	2.4	IR

Extraction / Prep.

Parameter	Result	Method	Run Date	Analyst	Flags
Initial wt. (g) / Final wt. (g) / Volume (ml)*	11.61/6.55/10	ASTMD7979-19M	10/17/22 14:00	PTW	

Organics

31 PFAs, Method: ASTMD7979-19M, Run Date: 10/18/22 17:03, Analyst: KCV

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
PFBA*	12	9.9		ng/L	1.98	375-22-4	
PFPeA*	Not detected	4.0		ng/L	1.98	2706-90-3	
4:2 FTSA*	Not detected	2.0		ng/L	1.98	757124-72-4	
PFHxA*	2.8	2.0		ng/L	1.98	307-24-4	
PFBS*	5.4	2.0		ng/L	1.98	375-73-5	
PFHpA*	2.5	2.0		ng/L	1.98	375-85-9	
PFPeS*	Not detected	2.0		ng/L	1.98	2706-91-4	
6:2 FTSA*	Not detected	2.0		ng/L	1.98	27619-97-2	
PFOA*	9.2	2.0		ng/L	1.98	335-67-1	
PFHxS*	10	2.0		ng/L	1.98	355-46-4	
PFHxS-LN*	7.7	2.0		ng/L	1.98	355-46-4-LN	
PFHxS-BR*	2.6	2.0		ng/L	1.98	355-46-4-BR	
PFNA*	Not detected	2.0		ng/L	1.98	375-95-1	
8:2 FTSA*	Not detected	2.0		ng/L	1.98	39108-34-4	
PFHpS*	Not detected	2.0		ng/L	1.98	375-92-8	
PFDA*	Not detected	2.0		ng/L	1.98	335-76-2	
N-MeFOSAA*	Not detected	2.0		ng/L	1.98	2355-31-9	
EtFOSAA*	Not detected	4.0		ng/L	1.98	2991-50-6	
PFOS*	3.5	2.0		ng/L	1.98	1763-23-1	
PFOS-LN*	Not detected	2.0		ng/L	1.98	1763-23-1-LN	
PFOS-BR*	2.9	2.0		ng/L	1.98	1763-23-1-BR	
PFUnDA*	Not detected	2.0		ng/L	1.98	2058-94-8	
PFNS*	Not detected	2.0		ng/L	1.98	68259-12-1	
PFDoDA*	Not detected	2.0		ng/L	1.98	307-55-1	
PFDS*	Not detected	2.0		ng/L	1.98	335-77-3	
PFTrDA*	Not detected	2.0		ng/L	1.98	72629-94-8	
FOSA*	Not detected	2.0		ng/L	1.98	754-91-6	
PFTeDA*	Not detected	4.0		ng/L	1.98	376-06-7	
11Cl-PF3OUdS*	Not detected	2.0		ng/L	1.98	763051-92-9	
9Cl-PF3ONS*	Not detected	2.0		ng/L	1.98	756426-58-1	
ADONA*	Not detected	2.0		ng/L	1.98	919005-14-4	
HFPO-DA*	Not detected	9.9		ng/L	1.98	13252-13-6	
PFECHS*	Not detected	2.0		ng/L	1.98	67584-42-3	
PFBSA*	Not detected	2.0		ng/L	1.98	30334-69-1	
PFHxSA*	Not detected	2.0		ng/L	1.98	41997-13-1	

Lab Sample ID: S40861.14
Sample Tag: MW-105
Collected Date/Time: 09/28/2022 14:23
Matrix: Groundwater
COC Reference: 154472

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
1	15ml Centrifuge Tube	None	Yes	2.4	IR

Extraction / Prep.

Parameter	Result	Method	Run Date	Analyst	Flags
Initial wt. (g) / Final wt. (g) / Volume (ml)*	12.32/6.50/12	ASTMD7979-19M	10/17/22 14:00	PTW	

Organics

31 PFAs, Method: ASTMD7979-19M, Run Date: 10/18/22 17:22, Analyst: KCV

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
PFBA*	Not detected	10		ng/L	2.06	375-22-4	
PFPeA*	7.7	4.1		ng/L	2.06	2706-90-3	
4:2 FTSA*	Not detected	2.1		ng/L	2.06	757124-72-4	
PFHxA*	9.8	2.1		ng/L	2.06	307-24-4	
PFBS*	4.5	2.1		ng/L	2.06	375-73-5	
PFHpA*	6.7	2.1		ng/L	2.06	375-85-9	
PFPeS*	3.2	2.1		ng/L	2.06	2706-91-4	
6:2 FTSA*	Not detected	2.1		ng/L	2.06	27619-97-2	
PFOA*	19	2.1		ng/L	2.06	335-67-1	
PFHxS*	10	2.1		ng/L	2.06	355-46-4	
PFHxS-LN*	7.9	2.1		ng/L	2.06	355-46-4-LN	
PFHxS-BR*	2.5	2.1		ng/L	2.06	355-46-4-BR	
PFNA*	Not detected	2.1		ng/L	2.06	375-95-1	
8:2 FTSA*	Not detected	2.1		ng/L	2.06	39108-34-4	
PFHpS*	Not detected	2.1		ng/L	2.06	375-92-8	
PFDA*	Not detected	2.1		ng/L	2.06	335-76-2	
N-MeFOSAA*	Not detected	2.1		ng/L	2.06	2355-31-9	
EtFOSAA*	Not detected	4.1		ng/L	2.06	2991-50-6	
PFOS*	3.1	2.1		ng/L	2.06	1763-23-1	
PFOS-LN*	Not detected	2.1		ng/L	2.06	1763-23-1-LN	
PFOS-BR*	Not detected	2.1		ng/L	2.06	1763-23-1-BR	
PFUnDA*	Not detected	2.1		ng/L	2.06	2058-94-8	
PFNS*	Not detected	2.1		ng/L	2.06	68259-12-1	
PFDoDA*	Not detected	2.1		ng/L	2.06	307-55-1	
PFDS*	Not detected	2.1		ng/L	2.06	335-77-3	
PFTrDA*	Not detected	2.1		ng/L	2.06	72629-94-8	
FOSA*	Not detected	2.1		ng/L	2.06	754-91-6	
PFTeDA*	Not detected	4.1		ng/L	2.06	376-06-7	
11Cl-PF3OUdS*	Not detected	2.1		ng/L	2.06	763051-92-9	
9Cl-PF3ONS*	Not detected	2.1		ng/L	2.06	756426-58-1	
ADONA*	Not detected	2.1		ng/L	2.06	919005-14-4	
HFPO-DA*	Not detected	10		ng/L	2.06	13252-13-6	
PFECHS*	Not detected	2.1		ng/L	2.06	67584-42-3	
PFBSA*	Not detected	2.1		ng/L	2.06	30334-69-1	
PFHxSA*	Not detected	2.1		ng/L	2.06	41997-13-1	

Lab Sample ID: S40861.15
Sample Tag: Dup-02
Collected Date/Time: 09/28/2022 00:01
Matrix: Groundwater
COC Reference: 154472

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
1	15ml Centrifuge Tube	None	Yes	2.4	IR

Extraction / Prep.

Parameter	Result	Method	Run Date	Analyst	Flags
Initial wt. (g) / Final wt. (g) / Volume (ml)*	11.11/6.49/9	ASTMD7979-19M	10/17/22 14:00	PTW	

Organics

31 PFAs, Method: ASTMD7979-19M, Run Date: 10/18/22 17:42, Analyst: KCV

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
PFBA*	Not detected	9.8		ng/L	1.95	375-22-4	
PFPeA*	Not detected	3.9		ng/L	1.95	2706-90-3	
4:2 FTSA*	Not detected	2.0		ng/L	1.95	757124-72-4	
PFHxA*	3.7	2.0		ng/L	1.95	307-24-4	
PFBS*	3.6	2.0		ng/L	1.95	375-73-5	
PFHpA*	3.5	2.0		ng/L	1.95	375-85-9	
PFPeS*	Not detected	2.0		ng/L	1.95	2706-91-4	
6:2 FTSA*	Not detected	2.0		ng/L	1.95	27619-97-2	
PFOA*	15	2.0		ng/L	1.95	335-67-1	
PFHxS*	25	2.0		ng/L	1.95	355-46-4	
PFHxS-LN*	21	2.0		ng/L	1.95	355-46-4-LN	
PFHxS-BR*	3.4	2.0		ng/L	1.95	355-46-4-BR	
PFNA*	Not detected	2.0		ng/L	1.95	375-95-1	
8:2 FTSA*	Not detected	2.0		ng/L	1.95	39108-34-4	
PFHpS*	Not detected	2.0		ng/L	1.95	375-92-8	
PFDA*	Not detected	2.0		ng/L	1.95	335-76-2	
N-MeFOSAA*	Not detected	2.0		ng/L	1.95	2355-31-9	
EtFOSAA*	Not detected	3.9		ng/L	1.95	2991-50-6	
PFOS*	3.0	2.0		ng/L	1.95	1763-23-1	
PFOS-LN*	Not detected	2.0		ng/L	1.95	1763-23-1-LN	
PFOS-BR*	Not detected	2.0		ng/L	1.95	1763-23-1-BR	
PFUnDA*	Not detected	2.0		ng/L	1.95	2058-94-8	
PFNS*	Not detected	2.0		ng/L	1.95	68259-12-1	
PFDoDA*	Not detected	2.0		ng/L	1.95	307-55-1	
PFDS*	Not detected	2.0		ng/L	1.95	335-77-3	
PFTrDA*	Not detected	2.0		ng/L	1.95	72629-94-8	
FOSA*	Not detected	2.0		ng/L	1.95	754-91-6	
PFTeDA*	Not detected	3.9		ng/L	1.95	376-06-7	
11Cl-PF3OUdS*	Not detected	2.0		ng/L	1.95	763051-92-9	
9Cl-PF3ONS*	Not detected	2.0		ng/L	1.95	756426-58-1	
ADONA*	Not detected	2.0		ng/L	1.95	919005-14-4	
HFPO-DA*	Not detected	9.8		ng/L	1.95	13252-13-6	
PFECHS*	Not detected	2.0		ng/L	1.95	67584-42-3	
PFBSA*	Not detected	2.0		ng/L	1.95	30334-69-1	
PFHxSA*	Not detected	2.0		ng/L	1.95	41997-13-1	

Lab Sample ID: S40861.16
Sample Tag: FB-01
Collected Date/Time: 09/28/2022 14:41
Matrix: Water
COC Reference: 154472

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
1	15ml Centrifuge Tube	None	Yes	2.4	IR

Extraction / Prep.

Parameter	Result	Method	Run Date	Analyst	Flags
Initial wt. (g) / Final wt. (g) / Volume (ml)*	11.30/6.99/9	ASTMD7979-19M	10/17/22 14:00	PTW	

Organics

31 PFAs, Method: ASTMD7979-19M, Run Date: 10/18/22 18:01, Analyst: KCV

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
PFBA*	Not detected	10		ng/L	2.09	375-22-4	
PFPeA*	Not detected	4.2		ng/L	2.09	2706-90-3	
4:2 FTSA*	Not detected	2.1		ng/L	2.09	757124-72-4	
PFHxA*	Not detected	2.1		ng/L	2.09	307-24-4	
PFBS*	Not detected	2.1		ng/L	2.09	375-73-5	
PFHpA*	Not detected	2.1		ng/L	2.09	375-85-9	
PFPeS*	Not detected	2.1		ng/L	2.09	2706-91-4	
6:2 FTSA*	Not detected	2.1		ng/L	2.09	27619-97-2	
PFOA*	Not detected	2.1		ng/L	2.09	335-67-1	
PFHxS*	Not detected	2.1		ng/L	2.09	355-46-4	
PFHxS-LN*	Not detected	2.1		ng/L	2.09	355-46-4-LN	
PFHxS-BR*	Not detected	2.1		ng/L	2.09	355-46-4-BR	
PFNA*	Not detected	2.1		ng/L	2.09	375-95-1	
8:2 FTSA*	Not detected	2.1		ng/L	2.09	39108-34-4	
PFHpS*	Not detected	2.1		ng/L	2.09	375-92-8	
PFDA*	Not detected	2.1		ng/L	2.09	335-76-2	
N-MeFOSAA*	Not detected	2.1		ng/L	2.09	2355-31-9	
EtFOSAA*	Not detected	4.2		ng/L	2.09	2991-50-6	
PFOS*	Not detected	2.1		ng/L	2.09	1763-23-1	
PFOS-LN*	Not detected	2.1		ng/L	2.09	1763-23-1-LN	
PFOS-BR*	Not detected	2.1		ng/L	2.09	1763-23-1-BR	
PFUnDA*	Not detected	2.1		ng/L	2.09	2058-94-8	
PFNS*	Not detected	2.1		ng/L	2.09	68259-12-1	
PFDoDA*	Not detected	2.1		ng/L	2.09	307-55-1	
PFDS*	Not detected	2.1		ng/L	2.09	335-77-3	
PFTrDA*	Not detected	2.1		ng/L	2.09	72629-94-8	
FOSA*	Not detected	2.1		ng/L	2.09	754-91-6	
PFTeDA*	Not detected	4.2		ng/L	2.09	376-06-7	
11Cl-PF3OUdS*	Not detected	2.1		ng/L	2.09	763051-92-9	
9Cl-PF3ONS*	Not detected	2.1		ng/L	2.09	756426-58-1	
ADONA*	Not detected	2.1		ng/L	2.09	919005-14-4	
HFPO-DA*	Not detected	10		ng/L	2.09	13252-13-6	
PFECHS*	Not detected	2.1		ng/L	2.09	67584-42-3	
PFBSA*	Not detected	2.1		ng/L	2.09	30334-69-1	
PFHxSA*	Not detected	2.1		ng/L	2.09	41997-13-1	

Lab Sample ID: S40861.17
Sample Tag: EB-01
Collected Date/Time: 09/28/2022 14:41
Matrix: Water
COC Reference: 154472

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
1	15ml Centrifuge Tube	None	Yes	2.4	IR

Extraction / Prep.

Parameter	Result	Method	Run Date	Analyst	Flags
Initial wt. (g) / Final wt. (g) / Volume (ml)*	11.78/6.53/10	ASTMD7979-19M	10/17/22 14:00	PTW	

Organics

31 PFAs, Method: ASTMD7979-19M, Run Date: 10/18/22 18:21, Analyst: KCV

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
PFBA*	Not detected	9.5		ng/L	1.9	375-22-4	
PFPeA*	Not detected	3.8		ng/L	1.9	2706-90-3	
4:2 FTSA*	Not detected	1.9		ng/L	1.9	757124-72-4	
PFHxA*	Not detected	1.9		ng/L	1.9	307-24-4	
PFBS*	Not detected	1.9		ng/L	1.9	375-73-5	
PFHpA*	Not detected	1.9		ng/L	1.9	375-85-9	
PFPeS*	Not detected	1.9		ng/L	1.9	2706-91-4	
6:2 FTSA*	Not detected	1.9		ng/L	1.9	27619-97-2	
PFOA*	Not detected	1.9		ng/L	1.9	335-67-1	
PFHxS*	Not detected	1.9		ng/L	1.9	355-46-4	
PFHxS-LN*	Not detected	1.9		ng/L	1.9	355-46-4-LN	
PFHxS-BR*	Not detected	1.9		ng/L	1.9	355-46-4-BR	
PFNA*	Not detected	1.9		ng/L	1.9	375-95-1	
8:2 FTSA*	Not detected	1.9		ng/L	1.9	39108-34-4	
PFHpS*	Not detected	1.9		ng/L	1.9	375-92-8	
PFDA*	Not detected	1.9		ng/L	1.9	335-76-2	
N-MeFOSAA*	Not detected	1.9		ng/L	1.9	2355-31-9	
EtFOSAA*	Not detected	3.8		ng/L	1.9	2991-50-6	
PFOS*	Not detected	1.9		ng/L	1.9	1763-23-1	
PFOS-LN*	Not detected	1.9		ng/L	1.9	1763-23-1-LN	
PFOS-BR*	Not detected	1.9		ng/L	1.9	1763-23-1-BR	
PFUnDA*	Not detected	1.9		ng/L	1.9	2058-94-8	
PFNS*	Not detected	1.9		ng/L	1.9	68259-12-1	
PFDoDA*	Not detected	1.9		ng/L	1.9	307-55-1	
PFDS*	Not detected	1.9		ng/L	1.9	335-77-3	
PFTrDA*	Not detected	1.9		ng/L	1.9	72629-94-8	
FOSA*	Not detected	1.9		ng/L	1.9	754-91-6	
PFTeDA*	Not detected	3.8		ng/L	1.9	376-06-7	
11Cl-PF3OUdS*	Not detected	1.9		ng/L	1.9	763051-92-9	
9Cl-PF3ONS*	Not detected	1.9		ng/L	1.9	756426-58-1	
ADONA*	Not detected	1.9		ng/L	1.9	919005-14-4	
HFPO-DA*	Not detected	9.5		ng/L	1.9	13252-13-6	
PFECHS*	Not detected	1.9		ng/L	1.9	67584-42-3	
PFBSA*	Not detected	1.9		ng/L	1.9	30334-69-1	
PFHxSA*	Not detected	1.9		ng/L	1.9	41997-13-1	

Quality Control Report

Report ID: S40861.01(01)+QC01
Generated on 10/20/2022

Report to

Attention: Kelly Cratsenburg
TRC
1540 Eisenhower Place
Ann Arbor, MI 48108

Phone: 734-585-7829 C: 734-412-5424 FAX:

Report Produced by

Merit Laboratories
2680 East Lansing Drive
East Lansing, MI 48823

Phone: (517) 332-0167 FAX: (517) 332-6333

Report Summary

Lab Sample ID(s): S40861.01-S40861.17
Project: OA - Eastern RCRA Assessment / 495430
Submitted Date/Time: 09/29/2022 11:00
Sampled by: H. Schnaidt / J. Jasso
P.O. #: 189445

QC Report Sections

Report Flag Descriptions

*: QC result is outside of indicated control limits
W: Surrogate result not applicable due to sample dilution

I certify that this data package is in compliance with the terms and conditions of the program, and project, and contractual requirements both technically and for completeness. Release of the data contained in this hardcopy data package and its computer-readable data submitted has been authorized by the Quality Assurance Manager and his/her designee, as verified by the following signature.

Barbara Ball
Quality Assurance Manager

Lab Sample ID: S40861.01
Sample Tag: MW-120
Collected Date/Time: 09/27/2022 09:30
Matrix: Groundwater
COC Reference: 154528

Analysis	Method	Run Date/Time	Batch ID	Prep ID	Surr	QC Types
Organics - Volatiles						
31 PFAs	ASTMD7979-19M	10/18/22 12:30	AK221018	PF221017W1	Yes	BLK/LCS/LCSD/MS/DU

Lab Sample ID: S40861.02
Sample Tag: MW-119
Collected Date/Time: 09/27/2022 10:13
Matrix: Groundwater
COC Reference: 154528

Analysis	Method	Run Date/Time	Batch ID	Prep ID	Surr	QC Types
Organics - Volatiles						
31 PFAs	ASTMD7979-19M	10/18/22 13:09	AK221018	PF221017W1	Yes	BLK/LCS/LCSD/MS/DU

Lab Sample ID: S40861.03
Sample Tag: MW-113
Collected Date/Time: 09/27/2022 11:27
Matrix: Groundwater
COC Reference: 154528

Analysis	Method	Run Date/Time	Batch ID	Prep ID	Surr	QC Types
Organics - Volatiles						
31 PFAs	ASTMD7979-19M	10/18/22 13:48	AK221018	PF221017W1	Yes	BLK/LCS/LCSD/MS/DU

Lab Sample ID: S40861.04
Sample Tag: MW-112
Collected Date/Time: 09/27/2022 12:37
Matrix: Groundwater
COC Reference: 154528

Analysis	Method	Run Date/Time	Batch ID	Prep ID	Surr	QC Types
Organics - Volatiles						
31 PFAs	ASTMD7979-19M	10/18/22 14:07	AK221018	PF221017W1	Yes	BLK/LCS/LCSD/MS/DU

Lab Sample ID: S40861.05
Sample Tag: MW-111
Collected Date/Time: 09/27/2022 13:17
Matrix: Groundwater
COC Reference: 154528

Analysis	Method	Run Date/Time	Batch ID	Prep ID	Surr	QC Types
Organics - Volatiles						
31 PFAs	ASTMD7979-19M	10/18/22 14:27	AK221018	PF221017W1	Yes	BLK/LCS/LCSD/MS/DU

Lab Sample ID: S40861.06
Sample Tag: MW-110
Collected Date/Time: 09/27/2022 13:47
Matrix: Groundwater
COC Reference: 154528

Analysis	Method	Run Date/Time	Batch ID	Prep ID	Surr	QC Types
Organics - Volatiles						
31 PFAs	ASTMD7979-19M	10/18/22 14:46	AK221018	PF221017W1	Yes	BLK/LCS/LCSD/MS/DU

Lab Sample ID: S40861.07
Sample Tag: Dup-01
Collected Date/Time: 09/27/2022 00:01
Matrix: Groundwater
COC Reference: 154528

Analysis	Method	Run Date/Time	Batch ID	Prep ID	Surr	QC Types
Organics - Volatiles						
31 PFAs	ASTMD7979-19M	10/18/22 15:06	AK221018	PF221017W1	Yes	BLK/LCS/LCSD/MS/DU

Lab Sample ID: S40861.08
Sample Tag: MW-109
Collected Date/Time: 09/28/2022 09:25
Matrix: Groundwater
COC Reference: 154472

Analysis	Method	Run Date/Time	Batch ID	Prep ID	Surr	QC Types
Organics - Volatiles						
31 PFAs	ASTMD7979-19M	10/18/22 15:25	AK221018	PF221017W1	Yes	BLK/LCS/LCSD/MS/DU

Lab Sample ID: S40861.09
Sample Tag: MW-108
Collected Date/Time: 09/28/2022 09:10
Matrix: Groundwater
COC Reference: 154472

Analysis	Method	Run Date/Time	Batch ID	Prep ID	Surr	QC Types
Organics - Volatiles						
31 PFAs	ASTMD7979-19M	10/18/22 15:45	AK221018	PF221017W1	Yes	BLK/LCS/LCSD/MS/DU

Lab Sample ID: S40861.10
Sample Tag: MW-107
Collected Date/Time: 09/28/2022 10:23
Matrix: Groundwater
COC Reference: 154472

Analysis	Method	Run Date/Time	Batch ID	Prep ID	Surr	QC Types
Organics - Volatiles						
31 PFAs	ASTMD7979-19M	10/18/22 16:04	AK221018	PF221017W1	Yes	BLK/LCS/LCSD/MS/DU

Lab Sample ID: S40861.11
Sample Tag: MW-106
Collected Date/Time: 09/28/2022 11:25
Matrix: Groundwater
COC Reference: 154472

Analysis	Method	Run Date/Time	Batch ID	Prep ID	Surr	QC Types
Organics - Volatiles						
31 PFAs	ASTMD7979-19M	10/18/22 16:24	AK221018	PF221017W1	Yes	BLK/LCS/LCSD/MS/DU

Lab Sample ID: S40861.12
Sample Tag: MW-121
Collected Date/Time: 09/28/2022 12:32
Matrix: Groundwater
COC Reference: 154472

Analysis	Method	Run Date/Time	Batch ID	Prep ID	Surr	QC Types
Organics - Volatiles						
31 PFAs	ASTMD7979-19M	10/18/22 16:43	AK221018	PF221017W1	Yes	BLK/LCS/LCSD/MS/DU

Lab Sample ID: S40861.13
Sample Tag: MW-104
Collected Date/Time: 09/28/2022 13:38
Matrix: Groundwater
COC Reference: 154472

Analysis	Method	Run Date/Time	Batch ID	Prep ID	Surr	QC Types
Organics - Volatiles						
31 PFAs	ASTMD7979-19M	10/18/22 17:03	AK221018	PF221017W1	Yes	BLK/LCS/LCSD/MS/DU

Lab Sample ID: S40861.14
Sample Tag: MW-105
Collected Date/Time: 09/28/2022 14:23
Matrix: Groundwater
COC Reference: 154472

Analysis	Method	Run Date/Time	Batch ID	Prep ID	Surr	QC Types
Organics - Volatiles						
31 PFAs	ASTMD7979-19M	10/18/22 17:22	AK221018	PF221017W1	Yes	BLK/LCS/LCSD/MS/DU

Lab Sample ID: S40861.15
Sample Tag: Dup-02
Collected Date/Time: 09/28/2022 00:01
Matrix: Groundwater
COC Reference: 154472

Analysis	Method	Run Date/Time	Batch ID	Prep ID	Surr	QC Types
Organics - Volatiles						
31 PFAs	ASTMD7979-19M	10/18/22 17:42	AK221018	PF221017W1	Yes	BLK/LCS/LCSD/MS/DU

Lab Sample ID: S40861.16
Sample Tag: FB-01
Collected Date/Time: 09/28/2022 14:41
Matrix: Water
COC Reference: 154472

Analysis	Method	Run Date/Time	Batch ID	Prep ID	Surr	QC Types
Organics - Volatiles						
31 PFAs	ASTMD7979-19M	10/18/22 18:01	AK221018	PF221017W1	Yes	BLK/LCS/LCSD/MS/DU

Lab Sample ID: S40861.17
Sample Tag: EB-01
Collected Date/Time: 09/28/2022 14:41
Matrix: Water
COC Reference: 154472

Analysis	Method	Run Date/Time	Batch ID	Prep ID	Surr	QC Types
Organics - Volatiles						
31 PFAs	ASTMD7979-19M	10/18/22 18:21	AK221018	PF221017W1	Yes	BLK/LCS/LCSD/MS/DU

Organics - Volatiles, Prep Batch ID: PF221017W1

Surrogates: Yes, QC Types: BLK/LCS/LCSD/MS/DUP

Sample ID	Analysis	Method	Run Date/Time	Batch ID
S40861.01	31 PFAs	ASTMD7979-19M	10/18/22 12:30	AK221018
S40861.02	31 PFAs	ASTMD7979-19M	10/18/22 13:09	AK221018
S40861.03	31 PFAs	ASTMD7979-19M	10/18/22 13:48	AK221018
S40861.04	31 PFAs	ASTMD7979-19M	10/18/22 14:07	AK221018
S40861.05	31 PFAs	ASTMD7979-19M	10/18/22 14:27	AK221018
S40861.06	31 PFAs	ASTMD7979-19M	10/18/22 14:46	AK221018
S40861.07	31 PFAs	ASTMD7979-19M	10/18/22 15:06	AK221018
S40861.08	31 PFAs	ASTMD7979-19M	10/18/22 15:25	AK221018
S40861.09	31 PFAs	ASTMD7979-19M	10/18/22 15:45	AK221018
S40861.10	31 PFAs	ASTMD7979-19M	10/18/22 16:04	AK221018
S40861.11	31 PFAs	ASTMD7979-19M	10/18/22 16:24	AK221018
S40861.12	31 PFAs	ASTMD7979-19M	10/18/22 16:43	AK221018
S40861.13	31 PFAs	ASTMD7979-19M	10/18/22 17:03	AK221018
S40861.14	31 PFAs	ASTMD7979-19M	10/18/22 17:22	AK221018
S40861.15	31 PFAs	ASTMD7979-19M	10/18/22 17:42	AK221018
S40861.16	31 PFAs	ASTMD7979-19M	10/18/22 18:01	AK221018
S40861.17	31 PFAs	ASTMD7979-19M	10/18/22 18:21	AK221018

Organics - Volatiles, Prep Batch ID: PF221017W1

QC Types: BLK/LCS/LCSD/MS/DUP

Blank (BLK)

Lab Sample ID: AK221018.BLK221017

Run in Batch: AK221018, Run Date: 10/18/2022 11:51, Prep Date: 10/17/2022, Matrix: WW, Dilution: 1

Surrogate	Flags	%Rec	LCL	UCL

No Surrogates

Laboratory Control Sample (LCS)

Lab Sample ID: AK221018.LCS221017

Run in Batch: AK221018, Run Date: 10/18/2022 11:12, Prep Date: 10/17/2022, Matrix: WW, Dilution: 1

Surrogate	Flags	%Rec	LCL	UCL

No Surrogates

Laboratory Control Sample Duplicate (LCSD)

Lab Sample ID: AK221018.LCSD221017, Parent Sample ID: AK221018.LCS221017

Run in Batch: AK221018, Run Date: 10/18/2022 11:31, Prep Date: 10/17/2022, Matrix: WW, Dilution: 1

Surrogate	Flags	%Rec	LCL	UCL

No Surrogates

Matrix Spike (MS)

Lab Sample ID: AK221018.4086101M, Parent Sample ID: S40861.01

Run in Batch: AK221018, Run Date: 10/18/2022 12:49, Prep Date: 10/17/2022, Matrix: WW, Dilution: 1.89

Surrogate	Flags	%Rec	LCL	UCL

No Surrogates

Duplicate (DUP)

Lab Sample ID: AK221018.4086102D, Parent Sample ID: S40861.02

Run in Batch: AK221018, Run Date: 10/18/2022 13:28, Prep Date: 10/17/2022, Matrix: WW, Dilution: 2.06

Surrogate	Flags	%Rec	LCL	UCL

No Surrogates

QC Report - Internal Standards per Lab Sample

Lab Sample ID: S40861.01

Sample Tag: MW-120

Collected Date/Time: 09/27/2022 09:30

Matrix: Groundwater

COC Reference: 154528

Organics - Volatiles, Analysis: 31 PFAs

Run in Batch: AK221018, Run Date: 10/18/2022 12:30, Matrix: WW, Dilution: 1.89

Internal Standard	Flags	%Rec	LCL	UCL
M2-4:2FTSA		**139.8**	50.0	150.0
M2-6:2FTSA		**113.0**	50.0	150.0
M2-8:2FTSA		**115.1**	50.0	150.0
M2PFTeDA		**84.5**	12.0	218.0
M3PFBS		**112.6**	50.0	150.0
M3PFHxS		**110.8**	50.0	150.0
M4PFHpA		**109.5**	50.0	150.0
M5PFHxA		**89.4**	50.0	150.0
M5PFPeA		**106.6**	50.0	150.0
M6PFDA		**83.1**	50.0	150.0
M7PFUnDA		**90.7**	50.0	150.0
M8FOSA		**102.3**	50.0	150.0
M8PFOA		**96.8**	50.0	150.0
M8PFOS		**98.6**	50.0	150.0
M9-PFNA		**95.0**	50.0	150.0
MPFBA		**105.0**	50.0	150.0
MPFDoDA		**92.6**	50.0	150.0
d3N-MeFOSAA		**94.7**	50.0	150.0
d5EtFOSAA		**100.5**	50.0	150.0
MHFPO-DA		**103.9**	50.0	150.0

QC Report - Internal Standards per Lab Sample

Lab Sample ID: S40861.02

Sample Tag: MW-119

Collected Date/Time: 09/27/2022 10:13

Matrix: Groundwater

COC Reference: 154528

Organics - Volatiles, Analysis: 31 PFAs

Run in Batch: AK221018, Run Date: 10/18/2022 13:09, Matrix: WW, Dilution: 2.06

Internal Standard	Flags	%Rec	LCL	UCL
M2-4:2FTSA		**133.0**	50.0	150.0
M2-6:2FTSA		**111.2**	50.0	150.0
M2-8:2FTSA		**122.0**	50.0	150.0
M2PFTeDA		**96.8**	12.0	218.0
M3PFBS		**109.4**	50.0	150.0
M3PFHxS		**98.7**	50.0	150.0
M4PFHpA		**116.8**	50.0	150.0
M5PFHxA		**104.8**	50.0	150.0
M5PFPeA		**104.3**	50.0	150.0
M6PFDA		**92.3**	50.0	150.0
M7PFUnDA		**104.1**	50.0	150.0
M8FOSA		**110.8**	50.0	150.0
M8PFOA		**101.9**	50.0	150.0
M8PFOS		**109.0**	50.0	150.0
M9-PFNA		**105.8**	50.0	150.0
MPFBA		**107.4**	50.0	150.0
MPFDoDA		**101.0**	50.0	150.0
d3N-MeFOSAA		**99.9**	50.0	150.0
d5EtFOSAA		**104.3**	50.0	150.0
MHFPO-DA		**111.5**	50.0	150.0

Lab Sample ID: S40861.03

Sample Tag: MW-113

Collected Date/Time: 09/27/2022 11:27

Matrix: Groundwater

COC Reference: 154528

Organics - Volatiles, Analysis: 31 PFAs

Run in Batch: AK221018, Run Date: 10/18/2022 13:48, Matrix: WW, Dilution: 2.05

Internal Standard	Flags	%Rec	LCL	UCL
M2-4:2FTSA		**125.9**	50.0	150.0
M2-6:2FTSA		**105.7**	50.0	150.0
M2-8:2FTSA		**105.4**	50.0	150.0
M2PFTeDA		**114.0**	12.0	218.0
M3PFBS		**100.6**	50.0	150.0
M3PFHxS		**106.3**	50.0	150.0
M4PFHpA		**102.2**	50.0	150.0
M5PFHxA		**95.4**	50.0	150.0
M5PFPeA		**105.0**	50.0	150.0
M6PFDA		**85.1**	50.0	150.0
M7PFUnDA		**100.2**	50.0	150.0
M8FOSA		**107.5**	50.0	150.0
M8PFOA		**99.4**	50.0	150.0
M8PFOS		**101.5**	50.0	150.0
M9-PFNA		**91.8**	50.0	150.0
MPFBA		**106.7**	50.0	150.0
MPFDoDA		**106.3**	50.0	150.0
d3N-MeFOSAA		**90.1**	50.0	150.0
d5EtFOSAA		**106.8**	50.0	150.0
MHFPO-DA		**109.8**	50.0	150.0

Lab Sample ID: S40861.04

Sample Tag: MW-112

Collected Date/Time: 09/27/2022 12:37

Matrix: Groundwater

COC Reference: 154528

Organics - Volatiles, Analysis: 31 PFAs

Run in Batch: AK221018, Run Date: 10/18/2022 14:07, Matrix: WW, Dilution: 1.75

Internal Standard	Flags	%Rec	LCL	UCL
M2-4:2FTSA		**136.7**	50.0	150.0
M2-6:2FTSA		**111.8**	50.0	150.0
M2-8:2FTSA		**105.5**	50.0	150.0
M2PFTeDA		**113.1**	12.0	218.0
M3PFBS		**110.2**	50.0	150.0
M3PFHxS		**108.2**	50.0	150.0
M4PFHpA		**116.4**	50.0	150.0
M5PFHxA		**94.1**	50.0	150.0
M5PFPeA		**111.9**	50.0	150.0
M6PFDA		**86.7**	50.0	150.0
M7PFUnDA		**101.6**	50.0	150.0
M8FOSA		**106.1**	50.0	150.0
M8PFOA		**100.3**	50.0	150.0
M8PFOS		**107.8**	50.0	150.0
M9-PFNA		**102.1**	50.0	150.0
MPFBA		**106.1**	50.0	150.0
MPFDoDA		**100.3**	50.0	150.0
d3N-MeFOSAA		**96.3**	50.0	150.0
d5EtFOSAA		**106.3**	50.0	150.0
MHFPO-DA		**109.8**	50.0	150.0

Lab Sample ID: S40861.05

Sample Tag: MW-111

Collected Date/Time: 09/27/2022 13:17

Matrix: Groundwater

COC Reference: 154528

Organics - Volatiles, Analysis: 31 PFAs

Run in Batch: AK221018, Run Date: 10/18/2022 14:27, Matrix: WW, Dilution: 2.21

Internal Standard	Flags	%Rec	LCL	UCL
M2-4:2FTSA		**118.8**	50.0	150.0
M2-6:2FTSA		**105.6**	50.0	150.0
M2-8:2FTSA		**105.4**	50.0	150.0
M2PFTeDA		**125.1**	12.0	218.0
M3PFBS		**109.4**	50.0	150.0
M3PFHxS		**102.0**	50.0	150.0
M4PFHpA		**108.7**	50.0	150.0
M5PFHxA		**90.3**	50.0	150.0
M5PFPeA		**103.4**	50.0	150.0
M6PFDA		**82.9**	50.0	150.0
M7PFUnDA		**98.1**	50.0	150.0
M8FOSA		**109.5**	50.0	150.0
M8PFOA		**98.2**	50.0	150.0
M8PFOS		**100.4**	50.0	150.0
M9-PFNA		**100.2**	50.0	150.0
MPFBA		**106.1**	50.0	150.0
MPFDoDA		**105.8**	50.0	150.0
d3N-MeFOSAA		**96.3**	50.0	150.0
d5EtFOSAA		**93.0**	50.0	150.0
MHFPO-DA		**108.8**	50.0	150.0

Lab Sample ID: S40861.06

Sample Tag: MW-110

Collected Date/Time: 09/27/2022 13:47

Matrix: Groundwater

COC Reference: 154528

Organics - Volatiles, Analysis: 31 PFAs

Run in Batch: AK221018, Run Date: 10/18/2022 14:46, Matrix: WW, Dilution: 1.9

Internal Standard	Flags	%Rec	LCL	UCL
M2-4:2FTSA		**121.2**	50.0	150.0
M2-6:2FTSA		**120.8**	50.0	150.0
M2-8:2FTSA		**96.6**	50.0	150.0
M2PFTeDA		**83.0**	12.0	218.0
M3PFBS		**108.2**	50.0	150.0
M3PFHxS		**106.2**	50.0	150.0
M4PFHpA		**98.1**	50.0	150.0
M5PFHxA		**95.5**	50.0	150.0
M5PFPeA		**101.5**	50.0	150.0
M6PFDA		**88.9**	50.0	150.0
M7PFUnDA		**89.5**	50.0	150.0
M8FOSA		**103.7**	50.0	150.0
M8PFOA		**95.8**	50.0	150.0
M8PFOS		**91.9**	50.0	150.0
M9-PFNA		**99.5**	50.0	150.0
MPFBA		**105.9**	50.0	150.0
MPFDoDA		**92.8**	50.0	150.0
d3N-MeFOSAA		**90.7**	50.0	150.0
d5EtFOSAA		**104.9**	50.0	150.0
MHFPO-DA		**97.1**	50.0	150.0

Lab Sample ID: S40861.07

Sample Tag: Dup-01

Collected Date/Time: 09/27/2022 00:01

Matrix: Groundwater

COC Reference: 154528

Organics - Volatiles, Analysis: 31 PFAs

Run in Batch: AK221018, Run Date: 10/18/2022 15:06, Matrix: WW, Dilution: 1.95

Internal Standard	Flags	%Rec	LCL	UCL
M2-4:2FTSA		**135.9**	50.0	150.0
M2-6:2FTSA		**114.1**	50.0	150.0
M2-8:2FTSA		**127.3**	50.0	150.0
M2PFTeDA		**68.6**	12.0	218.0
M3PFBS		**107.0**	50.0	150.0
M3PFHxS		**108.0**	50.0	150.0
M4PFHpA		**105.1**	50.0	150.0
M5PFHxA		**98.7**	50.0	150.0
M5PFPeA		**109.5**	50.0	150.0
M6PFDA		**86.1**	50.0	150.0
M7PFUnDA		**91.0**	50.0	150.0
M8FOSA		**105.3**	50.0	150.0
M8PFOA		**96.6**	50.0	150.0
M8PFOS		**96.7**	50.0	150.0
M9-PFNA		**99.6**	50.0	150.0
MPFBA		**104.8**	50.0	150.0
MPFDoDA		**86.7**	50.0	150.0
d3N-MeFOSAA		**96.2**	50.0	150.0
d5EtFOSAA		**109.3**	50.0	150.0
MHFPO-DA		**101.4**	50.0	150.0

QC Report - Internal Standards per Lab Sample

Lab Sample ID: S40861.08

Sample Tag: MW-109

Collected Date/Time: 09/28/2022 09:25

Matrix: Groundwater

COC Reference: 154472

Organics - Volatiles, Analysis: 31 PFAs

Run in Batch: AK221018, Run Date: 10/18/2022 15:25, Matrix: WW, Dilution: 1.96

Internal Standard	Flags	%Rec	LCL	UCL
M2-4:2FTSA		**135.1**	50.0	150.0
M2-6:2FTSA		**115.8**	50.0	150.0
M2-8:2FTSA		**114.2**	50.0	150.0
M2PFTeDA		**98.7**	12.0	218.0
M3PFBS		**126.5**	50.0	150.0
M3PFHxS		**110.3**	50.0	150.0
M4PFHpA		**116.6**	50.0	150.0
M5PFHxA		**98.0**	50.0	150.0
M5PFPeA		**107.3**	50.0	150.0
M6PFDA		**95.9**	50.0	150.0
M7PFUnDA		**97.3**	50.0	150.0
M8FOSA		**110.1**	50.0	150.0
M8PFOA		**107.4**	50.0	150.0
M8PFOS		**98.8**	50.0	150.0
M9-PFNA		**99.3**	50.0	150.0
MPFBA		**113.9**	50.0	150.0
MPFDoDA		**107.6**	50.0	150.0
d3N-MeFOSAA		**95.7**	50.0	150.0
d5EtFOSAA		**93.2**	50.0	150.0
MHFPO-DA		**112.3**	50.0	150.0

QC Report - Internal Standards per Lab Sample

Lab Sample ID: S40861.09

Sample Tag: MW-108

Collected Date/Time: 09/28/2022 09:10

Matrix: Groundwater

COC Reference: 154472

Organics - Volatiles, Analysis: 31 PFAs

Run in Batch: AK221018, Run Date: 10/18/2022 15:45, Matrix: WW, Dilution: 2.04

Internal Standard	Flags	%Rec	LCL	UCL
M2-4:2FTSA		**130.4**	50.0	150.0
M2-6:2FTSA		**113.2**	50.0	150.0
M2-8:2FTSA		**108.1**	50.0	150.0
M2PFTeDA		**124.0**	12.0	218.0
M3PFBS		**109.9**	50.0	150.0
M3PFHxS		**101.9**	50.0	150.0
M4PFHpA		**110.5**	50.0	150.0
M5PFHxA		**97.5**	50.0	150.0
M5PFPeA		**101.4**	50.0	150.0
M6PFDA		**88.8**	50.0	150.0
M7PFUnDA		**93.8**	50.0	150.0
M8FOSA		**104.0**	50.0	150.0
M8PFOA		**97.1**	50.0	150.0
M8PFOS		**97.1**	50.0	150.0
M9-PFNA		**97.4**	50.0	150.0
MPFBA		**106.7**	50.0	150.0
MPFDoDA		**112.0**	50.0	150.0
d3N-MeFOSAA		**84.3**	50.0	150.0
d5EtFOSAA		**105.8**	50.0	150.0
MHFPO-DA		**115.9**	50.0	150.0

QC Report - Internal Standards per Lab Sample

Lab Sample ID: S40861.10

Sample Tag: MW-107

Collected Date/Time: 09/28/2022 10:23

Matrix: Groundwater

COC Reference: 154472

Organics - Volatiles, Analysis: 31 PFAs

Run in Batch: AK221018, Run Date: 10/18/2022 16:04, Matrix: WW, Dilution: 1.96

Internal Standard	Flags	%Rec	LCL	UCL
M2-4:2FTSA		**148.0**	50.0	150.0
M2-6:2FTSA		**109.2**	50.0	150.0
M2-8:2FTSA		**104.2**	50.0	150.0
M2PFTeDA		**81.9**	12.0	218.0
M3PFBS		**111.7**	50.0	150.0
M3PFHxS		**117.7**	50.0	150.0
M4PFHpA		**104.7**	50.0	150.0
M5PFHxA		**103.6**	50.0	150.0
M5PFPeA		**104.3**	50.0	150.0
M6PFDA		**87.9**	50.0	150.0
M7PFUnDA		**94.2**	50.0	150.0
M8FOSA		**111.5**	50.0	150.0
M8PFOA		**98.5**	50.0	150.0
M8PFOS		**103.8**	50.0	150.0
M9-PFNA		**100.8**	50.0	150.0
MPFBA		**110.4**	50.0	150.0
MPFDoDA		**106.5**	50.0	150.0
d3N-MeFOSAA		**101.5**	50.0	150.0
d5EtFOSAA		**98.3**	50.0	150.0
MHFPO-DA		**103.8**	50.0	150.0

QC Report - Internal Standards per Lab Sample

Lab Sample ID: S40861.11

Sample Tag: MW-106

Collected Date/Time: 09/28/2022 11:25

Matrix: Groundwater

COC Reference: 154472

Organics - Volatiles, Analysis: 31 PFAs

Run in Batch: AK221018, Run Date: 10/18/2022 16:24, Matrix: WW, Dilution: 2.01

Internal Standard	Flags	%Rec	LCL	UCL
M2-4:2FTSA		**130.9**	50.0	150.0
M2-6:2FTSA		**111.2**	50.0	150.0
M2-8:2FTSA		**109.4**	50.0	150.0
M2PFTeDA		**116.9**	12.0	218.0
M3PFBS		**115.9**	50.0	150.0
M3PFHxS		**106.3**	50.0	150.0
M4PFHpA		**113.3**	50.0	150.0
M5PFHxA		**92.7**	50.0	150.0
M5PFPeA		**110.6**	50.0	150.0
M6PFDA		**90.5**	50.0	150.0
M7PFUnDA		**105.3**	50.0	150.0
M8FOSA		**107.2**	50.0	150.0
M8PFOA		**100.2**	50.0	150.0
M8PFOS		**95.6**	50.0	150.0
M9-PFNA		**94.4**	50.0	150.0
MPFBA		**109.8**	50.0	150.0
MPFDoDA		**103.8**	50.0	150.0
d3N-MeFOSAA		**105.2**	50.0	150.0
d5EtFOSAA		**98.4**	50.0	150.0
MHFPO-DA		**110.4**	50.0	150.0

QC Report - Internal Standards per Lab Sample

Lab Sample ID: S40861.12

Sample Tag: MW-121

Collected Date/Time: 09/28/2022 12:32

Matrix: Groundwater

COC Reference: 154472

Organics - Volatiles, Analysis: 31 PFAs

Run in Batch: AK221018, Run Date: 10/18/2022 16:43, Matrix: WW, Dilution: 2.07

Internal Standard	Flags	%Rec	LCL	UCL
M2-4:2FTSA		**143.3**	50.0	150.0
M2-6:2FTSA		**111.2**	50.0	150.0
M2-8:2FTSA		**120.3**	50.0	150.0
M2PFTeDA		**114.7**	12.0	218.0
M3PFBS		**121.3**	50.0	150.0
M3PFHxS		**118.5**	50.0	150.0
M4PFHpA		**120.8**	50.0	150.0
M5PFHxA		**100.5**	50.0	150.0
M5PFPeA		**112.2**	50.0	150.0
M6PFDA		**97.2**	50.0	150.0
M7PFUnDA		**110.0**	50.0	150.0
M8FOSA		**110.6**	50.0	150.0
M8PFOA		**105.4**	50.0	150.0
M8PFOS		**115.3**	50.0	150.0
M9-PFNA		**102.9**	50.0	150.0
MPFBA		**116.6**	50.0	150.0
MPFDoDA		**104.2**	50.0	150.0
d3N-MeFOSAA		**101.7**	50.0	150.0
d5EtFOSAA		**104.0**	50.0	150.0
MHFPO-DA		**113.6**	50.0	150.0

QC Report - Internal Standards per Lab Sample

Lab Sample ID: S40861.13

Sample Tag: MW-104

Collected Date/Time: 09/28/2022 13:38

Matrix: Groundwater

COC Reference: 154472

Organics - Volatiles, Analysis: 31 PFAs

Run in Batch: AK221018, Run Date: 10/18/2022 17:03, Matrix: WW, Dilution: 1.98

Internal Standard	Flags	%Rec	LCL	UCL
M2-4:2FTSA		**131.7**	50.0	150.0
M2-6:2FTSA		**115.0**	50.0	150.0
M2-8:2FTSA		**110.7**	50.0	150.0
M2PFTeDA		**106.2**	12.0	218.0
M3PFBS		**110.6**	50.0	150.0
M3PFHxS		**111.0**	50.0	150.0
M4PFHpA		**106.6**	50.0	150.0
M5PFHxA		**95.9**	50.0	150.0
M5PFPeA		**107.6**	50.0	150.0
M6PFDA		**93.0**	50.0	150.0
M7PFUnDA		**104.0**	50.0	150.0
M8FOSA		**110.0**	50.0	150.0
M8PFOA		**97.3**	50.0	150.0
M8PFOS		**103.3**	50.0	150.0
M9-PFNA		**95.9**	50.0	150.0
MPFBA		**110.2**	50.0	150.0
MPFDoDA		**106.6**	50.0	150.0
d3N-MeFOSAA		**94.6**	50.0	150.0
d5EtFOSAA		**98.6**	50.0	150.0
MHFPO-DA		**104.7**	50.0	150.0

QC Report - Internal Standards per Lab Sample

Lab Sample ID: S40861.14

Sample Tag: MW-105

Collected Date/Time: 09/28/2022 14:23

Matrix: Groundwater

COC Reference: 154472

Organics - Volatiles, Analysis: 31 PFAs

Run in Batch: AK221018, Run Date: 10/18/2022 17:22, Matrix: WW, Dilution: 2.06

Internal Standard	Flags	%Rec	LCL	UCL
M2-4:2FTSA		**129.1**	50.0	150.0
M2-6:2FTSA		**117.6**	50.0	150.0
M2-8:2FTSA		**124.1**	50.0	150.0
M2PFTeDA		**123.1**	12.0	218.0
M3PFBS		**118.6**	50.0	150.0
M3PFHxS		**107.3**	50.0	150.0
M4PFHpA		**118.6**	50.0	150.0
M5PFHxA		**100.5**	50.0	150.0
M5PFPeA		**120.1**	50.0	150.0
M6PFDA		**98.4**	50.0	150.0
M7PFUnDA		**111.4**	50.0	150.0
M8FOSA		**110.4**	50.0	150.0
M8PFOA		**108.4**	50.0	150.0
M8PFOS		**104.9**	50.0	150.0
M9-PFNA		**109.5**	50.0	150.0
MPFBA		**117.1**	50.0	150.0
MPFDoDA		**120.1**	50.0	150.0
d3N-MeFOSAA		**108.0**	50.0	150.0
d5EtFOSAA		**112.9**	50.0	150.0
MHFPO-DA		**113.3**	50.0	150.0

QC Report - Internal Standards per Lab Sample

Lab Sample ID: S40861.15

Sample Tag: Dup-02

Collected Date/Time: 09/28/2022 00:01

Matrix: Groundwater

COC Reference: 154472

Organics - Volatiles, Analysis: 31 PFAs

Run in Batch: AK221018, Run Date: 10/18/2022 17:42, Matrix: WW, Dilution: 1.95

Internal Standard	Flags	%Rec	LCL	UCL
M2-4:2FTSA		**138.8**	50.0	150.0
M2-6:2FTSA		**118.4**	50.0	150.0
M2-8:2FTSA		**102.7**	50.0	150.0
M2PFTeDA		**104.2**	12.0	218.0
M3PFBS		**111.7**	50.0	150.0
M3PFHxS		**107.8**	50.0	150.0
M4PFHpA		**112.5**	50.0	150.0
M5PFHxA		**97.2**	50.0	150.0
M5PFPeA		**108.7**	50.0	150.0
M6PFDA		**86.5**	50.0	150.0
M7PFUnDA		**101.3**	50.0	150.0
M8FOSA		**108.0**	50.0	150.0
M8PFOA		**100.2**	50.0	150.0
M8PFOS		**93.6**	50.0	150.0
M9-PFNA		**101.1**	50.0	150.0
MPFBA		**111.8**	50.0	150.0
MPFDoDA		**99.4**	50.0	150.0
d3N-MeFOSAA		**92.7**	50.0	150.0
d5EtFOSAA		**97.7**	50.0	150.0
MHFPO-DA		**100.5**	50.0	150.0

QC Report - Internal Standards per Lab Sample

Lab Sample ID: S40861.16

Sample Tag: FB-01

Collected Date/Time: 09/28/2022 14:41

Matrix: Water

COC Reference: 154472

Organics - Volatiles, Analysis: 31 PFAs

Run in Batch: AK221018, Run Date: 10/18/2022 18:01, Matrix: WW, Dilution: 2.09

Internal Standard	Flags	%Rec	LCL	UCL
M2-4:2FTSA		**105.8**	50.0	150.0
M2-6:2FTSA		**96.7**	50.0	150.0
M2-8:2FTSA		**100.3**	50.0	150.0
M2PFTeDA		**92.4**	12.0	218.0
M3PFBS		**113.2**	50.0	150.0
M3PFHxS		**102.3**	50.0	150.0
M4PFHpA		**125.7**	50.0	150.0
M5PFHxA		**95.0**	50.0	150.0
M5PFPeA		**105.8**	50.0	150.0
M6PFDA		**91.1**	50.0	150.0
M7PFUnDA		**98.0**	50.0	150.0
M8FOSA		**111.4**	50.0	150.0
M8PFOA		**89.3**	50.0	150.0
M8PFOS		**100.7**	50.0	150.0
M9-PFNA		**104.8**	50.0	150.0
MPFBA		**110.9**	50.0	150.0
MPFDoDA		**92.6**	50.0	150.0
d3N-MeFOSAA		**95.1**	50.0	150.0
d5EtFOSAA		**110.9**	50.0	150.0
MHFPO-DA		**112.2**	50.0	150.0

QC Report - Internal Standards per Lab Sample

Lab Sample ID: S40861.17

Sample Tag: EB-01

Collected Date/Time: 09/28/2022 14:41

Matrix: Water

COC Reference: 154472

Organics - Volatiles, Analysis: 31 PFAs

Run in Batch: AK221018, Run Date: 10/18/2022 18:21, Matrix: WW, Dilution: 1.9

Internal Standard	Flags	%Rec	LCL	UCL
M2-4:2FTSA		**107.0**	50.0	150.0
M2-6:2FTSA		**93.5**	50.0	150.0
M2-8:2FTSA		**102.9**	50.0	150.0
M2PFTeDA		**67.5**	12.0	218.0
M3PFBS		**112.4**	50.0	150.0
M3PFHxS		**111.4**	50.0	150.0
M4PFHpA		**109.8**	50.0	150.0
M5PFHxA		**92.8**	50.0	150.0
M5PFPeA		**108.6**	50.0	150.0
M6PFDA		**99.8**	50.0	150.0
M7PFUnDA		**102.7**	50.0	150.0
M8FOSA		**112.8**	50.0	150.0
M8PFOA		**104.0**	50.0	150.0
M8PFOS		**99.4**	50.0	150.0
M9-PFNA		**104.1**	50.0	150.0
MPFBA		**118.8**	50.0	150.0
MPFDoDA		**88.5**	50.0	150.0
d3N-MeFOSAA		**107.5**	50.0	150.0
d5EtFOSAA		**102.0**	50.0	150.0
MHFPO-DA		**112.1**	50.0	150.0

Organics - Volatiles, Prep Batch ID: PF221017W1

QC Types: BLK/LCS/LCSD/MS/DUP

Blank (BLK)

Lab Sample ID: AK221018.BLK221017

Run in Batch: AK221018, Run Date: 10/18/2022 11:51, Prep Date: 10/17/2022, Matrix: WW, Dilution: 1

Internal Standard	Flags	%Rec	LCL	UCL
M2-4:2FTSA		**102.9**	50.0	150.0
M2-6:2FTSA		**96.6**	50.0	150.0
M2-8:2FTSA		**97.6**	50.0	150.0
M2PFTeDA		**111.5**	12.0	218.0
M3PFBS		**109.9**	50.0	150.0
M3PFHxS		**105.2**	50.0	150.0
M4PFHpA		**110.1**	50.0	150.0
M5PFHxA		**94.4**	50.0	150.0
M5PFPeA		**103.2**	50.0	150.0
M6PFDA		**87.4**	50.0	150.0
M7PFUnDA		**105.1**	50.0	150.0
M8FOSA		**105.9**	50.0	150.0
M8PFOA		**97.5**	50.0	150.0
M8PFOS		**99.4**	50.0	150.0
M9-PFNA		**97.1**	50.0	150.0
MPFBA		**106.7**	50.0	150.0
MPFDoDA		**104.5**	50.0	150.0
d3N-MeFOSAA		**97.5**	50.0	150.0
d5EtFOSAA		**115.7**	50.0	150.0
MHFPO-DA		**102.4**	50.0	150.0

Laboratory Control Sample (LCS)

Lab Sample ID: AK221018.LCS221017

Run in Batch: AK221018, Run Date: 10/18/2022 11:12, Prep Date: 10/17/2022, Matrix: WW, Dilution: 1

Internal Standard	Flags	%Rec	LCL	UCL
M2-4:2FTSA		**97.7**	50.0	150.0
M2-6:2FTSA		**100.5**	50.0	150.0
M2-8:2FTSA		**99.3**	50.0	150.0
M2PFTeDA		**103.2**	12.0	218.0
M3PFBS		**101.8**	50.0	150.0
M3PFHxS		**97.6**	50.0	150.0
M4PFHpA		**102.1**	50.0	150.0
M5PFHxA		**87.0**	50.0	150.0
M5PFPeA		**103.0**	50.0	150.0
M6PFDA		**91.4**	50.0	150.0
M7PFUnDA		**92.3**	50.0	150.0
M8FOSA		**105.5**	50.0	150.0
M8PFOA		**92.9**	50.0	150.0
M8PFOS		**98.0**	50.0	150.0
M9-PFNA		**91.4**	50.0	150.0
MPFBA		**102.6**	50.0	150.0
MPFDoDA		**104.4**	50.0	150.0
d3N-MeFOSAA		**97.9**	50.0	150.0
d5EtFOSAA		**97.9**	50.0	150.0
MHFPO-DA		**94.1**	50.0	150.0

Laboratory Control Sample Duplicate (LCSD)

Lab Sample ID: AK221018.LCSD221017, Parent Sample ID: AK221018.LCS221017

Run in Batch: AK221018, Run Date: 10/18/2022 11:31, Prep Date: 10/17/2022, Matrix: WW, Dilution: 1

Internal Standard	Flags	%Rec	LCL	UCL
M2-4:2FTSA		**99.7**	50.0	150.0
M2-6:2FTSA		**102.0**	50.0	150.0
M2-8:2FTSA		**106.8**	50.0	150.0
M2PFTeDA		**107.5**	12.0	218.0
M3PFBS		**103.1**	50.0	150.0
M3PFHxS		**103.9**	50.0	150.0
M4PFHpA		**104.3**	50.0	150.0
M5PFHxA		**100.3**	50.0	150.0
M5PFPeA		**101.8**	50.0	150.0
M6PFDA		**85.9**	50.0	150.0
M7PFUnDA		**95.6**	50.0	150.0
M8FOSA		**105.4**	50.0	150.0
M8PFOA		**102.6**	50.0	150.0
M8PFOS		**101.9**	50.0	150.0
M9-PFNA		**100.5**	50.0	150.0
MPFBA		**107.1**	50.0	150.0
MPFDoDA		**104.8**	50.0	150.0
d3N-MeFOSAA		**93.1**	50.0	150.0
d5EtFOSAA		**104.6**	50.0	150.0
MHFPO-DA		**103.9**	50.0	150.0

Matrix Spike (MS)

Lab Sample ID: AK221018.4086101M, Parent Sample ID: S40861.01

Run in Batch: AK221018, Run Date: 10/18/2022 12:49, Prep Date: 10/17/2022, Matrix: WW, Dilution: 1.89

Internal Standard	Flags	%Rec	LCL	UCL
M2-4:2FTSA		**134.3**	50.0	150.0
M2-6:2FTSA		**114.6**	50.0	150.0
M2-8:2FTSA		**113.2**	50.0	150.0
M2PFTeDA		**89.0**	12.0	218.0
M3PFBS		**112.8**	50.0	150.0
M3PFHxS		**110.1**	50.0	150.0
M4PFHpA		**110.7**	50.0	150.0
M5PFHxA		**95.0**	50.0	150.0
M5PFPeA		**97.5**	50.0	150.0
M6PFDA		**80.8**	50.0	150.0
M7PFUnDA		**97.5**	50.0	150.0
M8FOSA		**103.2**	50.0	150.0
M8PFOA		**88.4**	50.0	150.0
M8PFOS		**104.3**	50.0	150.0
M9-PFNA		**90.6**	50.0	150.0
MPFBA		**102.2**	50.0	150.0
MPFDoDA		**96.6**	50.0	150.0
d3N-MeFOSAA		**96.0**	50.0	150.0
d5EtFOSAA		**102.0**	50.0	150.0
MHFPO-DA		**99.6**	50.0	150.0

Duplicate (DUP)

Lab Sample ID: AK221018.4086102D, Parent Sample ID: S40861.02

Run in Batch: AK221018, Run Date: 10/18/2022 13:28, Prep Date: 10/17/2022, Matrix: WW, Dilution: 2.06

Internal Standard	Flags	%Rec	LCL	UCL
M2-4:2FTSA		**134.1**	50.0	150.0
M2-6:2FTSA		**105.9**	50.0	150.0
M2-8:2FTSA		**114.1**	50.0	150.0
M2PFTeDA		**111.8**	12.0	218.0
M3PFBS		**104.7**	50.0	150.0
M3PFHxS		**97.3**	50.0	150.0
M4PFHpA		**103.8**	50.0	150.0
M5PFHxA		**97.2**	50.0	150.0
M5PFPeA		**103.2**	50.0	150.0
M6PFDA		**91.2**	50.0	150.0
M7PFUnDA		**91.5**	50.0	150.0
M8FOSA		**107.2**	50.0	150.0
M8PFOA		**94.3**	50.0	150.0
M8PFOS		**98.6**	50.0	150.0
M9-PFNA		**97.1**	50.0	150.0
MPFBA		**101.6**	50.0	150.0
MPFDoDA		**97.1**	50.0	150.0
d3N-MeFOSAA		**95.2**	50.0	150.0
d5EtFOSAA		**93.4**	50.0	150.0
MHFPO-DA		**109.2**	50.0	150.0

Organics - Volatiles, Prep Batch ID: PF221017W1

Surrogates: Yes, QC Types: BLK/LCS/LCSD/MS/DUP

Blank (BLK)

Lab Sample ID: AK221018.BLK221017

Run in Batch: AK221018, Run Date: 10/18/2022 11:51, Prep Date: 10/17/2022, Matrix: WW, Dilution: 1

Analyte	Flags	Conc	RDL	Units
PFBA		ND	10	ng/l
PFPeA		ND	4	ng/l
4:2 FTSA		ND	2	ng/l
PFHxA		ND	2	ng/l
PFBS		ND	2	ng/l
HFPO-DA		ND	10	ng/l
PFHpA		ND	2	ng/l
PFPeS		ND	2	ng/l
ADONA		ND	2	ng/l
PFBSA		ND	2	ng/l
6:2 FTSA		ND	2	ng/l
PFOA		ND	2	ng/l
PFHxS-BR		ND	2	ng/l
PFHxS		ND	2	ng/l
PFHxS-LN		ND	2	ng/l
PFNA		ND	2	ng/l
PFECHS		ND	2	ng/l
8:2 FTSA		ND	2	ng/l
PFHpS		ND	2	ng/l
N-MeFOSAA		ND	2	ng/l
PFDA		ND	2	ng/l
PFOS-BR		ND	2	ng/l
PFOS		ND	2	ng/l
EtFOSAA		ND	4	ng/l
PFHxSA		ND	2	ng/l
PFOS-LN		ND	2	ng/l
PFUnDA		ND	2	ng/l
9CL-PF3ONS		ND	2	ng/l
PFNS		ND	2	ng/l
PFDoDA		ND	2	ng/l
PFDS		ND	2	ng/l
PFTrDA		ND	2	ng/l
FOSA		ND	2	ng/l
11CL-PF3OUdS		ND	2	ng/l
PFTeDA		ND	4	ng/l

Laboratory Control Sample (LCS)

Lab Sample ID: AK221018.LCS221017

Run in Batch: AK221018, Run Date: 10/18/2022 11:12, Prep Date: 10/17/2022, Matrix: WW, Dilution: 1

Analyte	Flags	% Rec	LCL	UCL
PFBA		106.4	70.0	130.0
PFMPA		99.8	70.0	130.0
FPrPA (3:3 FTCA)		103.0	70.0	130.0
PFPrS		92.6	70.0	130.0
PFPeA		95.8	70.0	130.0
PFMBA		105.2	70.0	130.0

Organics - Volatiles, Prep Batch ID: PF221017W1 (continued)

Surrogates: Yes, QC Types: BLK/LCS/LCSD/MS/DUP

Laboratory Control Sample (LCS) (continued)

Lab Sample ID: AK221018.LCS221017

Run in Batch: AK221018, Run Date: 10/18/2022 11:12, Prep Date: 10/17/2022, Matrix: WW, Dilution: 1

Analyte	Flags	% Rec	LCL	UCL
4:2 FTSA		108.6	70.0	130.0
NFDHA		115.8	70.0	130.0
PFHxA		108.4	70.0	130.0
PFBS		100.2	70.0	130.0
HFPO-DA		103.2	70.0	130.0
FPePA (5:3 FTCA)		121.6	70.0	130.0
PFEESA		101.4	70.0	130.0
PFHpA		113.6	70.0	130.0
PFPeS		102.4	70.0	130.0
ADONA		109.8	70.0	130.0
PFBSA		90.8	70.0	130.0
6:2 FTSA		95.2	70.0	130.0
PFOA		100.4	70.0	130.0
PFHxS		100.2	70.0	130.0
FHpPA (7:3 FTCA)		124.4	70.0	130.0
PFNA		107.4	70.0	130.0
PFECHS		97.4	70.0	130.0
8:2 FTSA		111.0	70.0	130.0
PFHpS		113.6	70.0	130.0
N-MeFOSAA		113.8	70.0	130.0
PFDA		101.6	70.0	130.0
PFOS		103.0	70.0	130.0
EtFOSAA		115.0	70.0	130.0
PFHxSA		91.6	70.0	130.0
PFUnDA		102.4	70.0	130.0
9CL-PF3ONS		101.0	70.0	130.0
PFNS		111.6	70.0	130.0
PFDoDA		99.8	70.0	130.0
PFDS		111.2	70.0	130.0
PFTrDA		94.8	70.0	130.0
FOSA		100.6	70.0	130.0
11CL-PF3OUdS		100.6	70.0	130.0
PFTeDA		114.8	70.0	130.0

Laboratory Control Sample Duplicate (LCSD)

Lab Sample ID: AK221018.LCSD221017, Parent Sample ID: AK221018.LCS221017

Run in Batch: AK221018, Run Date: 10/18/2022 11:31, Prep Date: 10/17/2022, Matrix: WW, Dilution: 1

Analyte	Flags	% Rec	LCL	UCL	RPD	RPD CL
PFBA		100.0	70.0	130.0	6.2	30.0
PFMPA		96.4	70.0	130.0	3.5	30.0
FPrPA (3:3 FTCA)		98.4	70.0	130.0	4.6	30.0
PFPrS		93.0	70.0	130.0	0.4	30.0
PFPeA		96.8	70.0	130.0	1.0	30.0
PFMBA		99.0	70.0	130.0	6.1	30.0
4:2 FTSA		110.0	70.0	130.0	1.3	30.0
NFDHA		101.0	70.0	130.0	13.7	30.0

Organics - Volatiles, Prep Batch ID: PF221017W1 (continued)

Surrogates: Yes, QC Types: BLK/LCS/LCSD/MS/DUP

Laboratory Control Sample Duplicate (LCSD) (continued)

Lab Sample ID: AK221018.LCSD221017, Parent Sample ID: AK221018.LCS221017

Run in Batch: AK221018, Run Date: 10/18/2022 11:31, Prep Date: 10/17/2022, Matrix: WW, Dilution: 1

Analyte	Flags	% Rec	LCL	UCL	RPD	RPD CL
PFHxA		96.2	70.0	130.0	11.9	30.0
PFBS		108.8	70.0	130.0	8.2	30.0
HFPO-DA		108.8	70.0	130.0	5.3	30.0
FPePA (5:3 FTCA)		98.2	70.0	130.0	21.3	30.0
PFEESA		90.0	70.0	130.0	11.9	30.0
PFHpA		103.8	70.0	130.0	9.0	30.0
PFPeS		104.2	70.0	130.0	1.7	30.0
ADONA		94.2	70.0	130.0	15.3	30.0
PFBSA		92.4	70.0	130.0	1.7	30.0
6:2 FTSA		95.8	70.0	130.0	0.6	30.0
PFOA		95.6	70.0	130.0	4.9	30.0
PFHxS		96.0	70.0	130.0	4.3	30.0
FHpPA (7:3 FTCA)		114.8	70.0	130.0	8.0	30.0
PFNA		94.8	70.0	130.0	12.5	30.0
PFECHS		92.6	70.0	130.0	5.1	30.0
8:2 FTSA		107.6	70.0	130.0	3.1	30.0
PFHpS		101.4	70.0	130.0	11.3	30.0
N-MeFOSAA		107.6	70.0	130.0	5.6	30.0
PFDA		114.2	70.0	130.0	11.7	30.0
PFOS		102.8	70.0	130.0	0.2	30.0
EtFOSAA		112.4	70.0	130.0	2.3	30.0
PFHxSA		92.4	70.0	130.0	0.9	30.0
PFUnDA		89.0	70.0	130.0	14.0	30.0
9CL-PF3ONS		95.0	70.0	130.0	6.1	30.0
PFNS		103.0	70.0	130.0	8.0	30.0
PFDoDA		96.8	70.0	130.0	3.1	30.0
PFDS		108.6	70.0	130.0	2.4	30.0
PFTrDA		91.4	70.0	130.0	3.7	30.0
FOSA		100.6	70.0	130.0	0.0	30.0
11CL-PF3OUdS		96.2	70.0	130.0	4.5	30.0
PFTeDA		113.0	70.0	130.0	1.6	30.0

Matrix Spike (MS)

Lab Sample ID: AK221018.4086101M, Parent Sample ID: S40861.01

Run in Batch: AK221018, Run Date: 10/18/2022 12:49, Prep Date: 10/17/2022, Matrix: WW, Dilution: 1.89

Analyte	Flags	% Rec	LCL	UCL
PFBA		101.6	70.0	130.0
PFPeA		105.8	70.0	130.0
4:2 FTSA		105.8	70.0	130.0
PFHxA		101.6	70.0	130.0
PFBS		96.9	70.0	130.0
PFHpA		105.8	70.0	130.0
PFPeS		96.3	70.0	130.0
6:2 FTSA		102.6	70.0	130.0
PFOA	*	130.2	70.0	130.0
PFHxS		96.5	70.0	130.0

Organics - Volatiles, Prep Batch ID: PF221017W1 (continued)

Surrogates: Yes, QC Types: BLK/LCS/LCSD/MS/DUP

Matrix Spike (MS) (continued)

Lab Sample ID: AK221018.4086101M, Parent Sample ID: S40861.01

Run in Batch: AK221018, Run Date: 10/18/2022 12:49, Prep Date: 10/17/2022, Matrix: WW, Dilution: 1.89

Analyte	Flags	% Rec	LCL	UCL
PFNA		104.8	70.0	130.0
8:2 FTSA		105.8	70.0	130.0
PFHpS		102.6	70.0	130.0
PFDA		116.4	70.0	130.0
N-MeFOSAA		104.8	70.0	130.0
EtFOSAA		105.8	70.0	130.0
PFOS		102.6	70.0	130.0
PFUnDA		89.9	70.0	130.0
PFNS		105.8	70.0	130.0
PFDoDA		105.8	70.0	130.0
PFDS		105.8	70.0	130.0
PFTrDA		99.5	70.0	130.0
FOSA		105.8	70.0	130.0
PFTeDA		105.8	70.0	130.0
11CL-PF3OUdS		100.5	70.0	130.0
9CL-PF3ONS		98.4	70.0	130.0
ADONA		116.4	70.0	130.0
HFPO-DA		116.4	70.0	130.0
PFECHS		105.8	70.0	130.0
PFBSA		97.4	70.0	130.0
PFHxSA		93.1	70.0	130.0

Duplicate (DUP)

Lab Sample ID: AK221018.4086102D, Parent Sample ID: S40861.02

Run in Batch: AK221018, Run Date: 10/18/2022 13:28, Prep Date: 10/17/2022, Matrix: WW, Dilution: 2.06

Analyte	Flags	RPD	RPD CL
PFBA		NC	30.0
PFPeA		NC	30.0
4:2 FTSA		NC	30.0
PFHxA		NC	30.0
PFBS		NC	30.0
PFHpA		NC	30.0
PFPeS		NC	30.0
6:2 FTSA	*	200.0	30.0
PFOA		NC	30.0
PFHxS		NC	30.0
PFHxS-LN		NC	30.0
PFHxS-BR		NC	30.0
PFNA		NC	30.0
8:2 FTSA		NC	30.0
PFHpS		NC	30.0
PFDA		NC	30.0
N-MeFOSAA		NC	30.0
EtFOSAA		NC	30.0
PFOS		NC	30.0
PFOS-LN		NC	30.0

Organics - Volatiles, Prep Batch ID: PF221017W1 (continued)

Surrogates: Yes, QC Types: BLK/LCS/LCSD/MS/DUP

Duplicate (DUP) (continued)

Lab Sample ID: AK221018.4086102D, Parent Sample ID: S40861.02

Run in Batch: AK221018, Run Date: 10/18/2022 13:28, Prep Date: 10/17/2022, Matrix: WW, Dilution: 2.06

Analyte	Flags	RPD	RPD CL
PFOS-BR		NC	30.0
PFUnDA		NC	30.0
PFNS		NC	30.0
PFDoDA		NC	30.0
PFDS		NC	30.0
PFTrDA		NC	30.0
FOSA		NC	30.0
PFTeDA		NC	30.0
11CL-PF3OUdS		NC	30.0
9CL-PF3ONS		NC	30.0
ADONA		NC	30.0
HFPO-DA		NC	30.0
PFECHS		NC	30.0
PFBSA		NC	30.0
PFHxSA		NC	30.0

Merit Laboratories Login Checklist

Lab Set ID: S40861
Client: TRC (TRC)
Project: OA - Eastern RCRA Assessment / 495430
Submitted: 09/29/2022 11:00 Login User: MMC

Attention: Kelly Cratsenburg
Address: TRC
1540 Eisenhower Place
Ann Arbor, MI 48108

Phone: 734-585-7829 C: FAX:
Email: KCratsenburg@trccompanies.com

Selection				Description	Note
Sample Receiving					
01.	[X] Yes	[ ] No	[ ] N/A	Samples are received at 4C +/- 2C Thermometer #	IR 2.4
02.	[X] Yes	[ ] No	[ ] N/A	Received on ice/ cooling process begun	
03.	[ ] Yes	[X] No	[ ] N/A	Samples shipped	
04.	[ ] Yes	[X] No	[ ] N/A	Samples left in 24 hr. drop box	
05.	[ ] Yes	[ ] No	[X] N/A	Are there custody seals/tape or is the drop box locked	
Chain of Custody					
06.	[X] Yes	[ ] No	[ ] N/A	COC adequately filled out	
07.	[X] Yes	[ ] No	[ ] N/A	COC signed and relinquished to the lab	
08.	[X] Yes	[ ] No	[ ] N/A	Sample tag on bottles match COC	
09.	[ ] Yes	[X] No	[ ] N/A	Subcontracting needed? Subcontacted to:	
Preservation					
10.	[X] Yes	[ ] No	[ ] N/A	Do sample have correct chemical preservation	
11.	[ ] Yes	[ ] No	[X] N/A	Completed pH checks on preserved samples? (no VOAs)	
12.	[ ] Yes	[X] No	[ ] N/A	Did any samples need to be preserved in the lab?	
Bottle Conditions					
13.	[X] Yes	[ ] No	[ ] N/A	All bottles intact	
14.	[X] Yes	[ ] No	[ ] N/A	Appropriate analytical bottles are used	
15.	[X] Yes	[ ] No	[ ] N/A	Merit bottles used	
16.	[X] Yes	[ ] No	[ ] N/A	Sufficient sample volume received	
17.	[ ] Yes	[X] No	[ ] N/A	Samples require laboratory filtration	
18.	[X] Yes	[ ] No	[ ] N/A	Samples submitted within holding time	
19.	[ ] Yes	[ ] No	[X] N/A	Do water VOC or TOX bottles contain headspace	

Corrective action for all exceptions is to call the client and to notify the project manager.

Client Review By: _____ Date: _____

Merit Laboratories, Inc.

2680 East Lansing Dr., East Lansing, MI 48823
Phone (517) 332-0167 Fax (517) 332-4034
www.meritlabs.com

C.O.C. PAGE # ______ OF ______ 154528

CHAIN OF CUSTODY RECORD

REPORT TO

CONTACT NAME: Kelly Cratsenburg
COMPANY: TRC
ADDRESS: 1540 Eisenhower Place
CITY: Ann Arbor STATE: MI ZIP CODE: 48108
PHONE NO.: CELL NO.: P.O. NO.: 189445
E-MAIL ADDRESS: kcratsenburg, hschmidt, acklund@trccompanies.com QUOTE NO.:

INVOICE TO

CONTACT NAME: ☐ SAME
COMPANY:
ADDRESS:
CITY: STATE: ZIP CODE:
PHONE NO.: E-MAIL ADDRESS:

PROJECT NO./NAME: OA-Bottom RCRA Assessment / 495430
SAMPLER(S) - PLEASE PRINT/SIGN NAME: H. Schmidt J. Jasso

TURNAROUND TIME REQUIRED ☐ 1 DAY ☐ 2 DAYS ☐ 3 DAYS ☒ STANDARD ☐ OTHER ______

DELIVERABLES REQUIRED ☐ STD ☐ LEVEL II ☐ LEVEL III ☐ LEVEL IV ☐ EDD ☒ OTHER TRC EDD

MATRIX CODE: W=WATER GW=GROUNDWATER WW=WASTEWATER S=SOIL L=LIQUID SD=SOLID SL=SLUDGE DW=DRINKING WATER O=OIL WP=WIPE A=AIR WS=WASTE

ANALYSIS (ATTACH LIST IF MORE SPACE IS REQUIRED)

Certifications: ☐ OHIO VAP ☐ Drinking Water ☐ DoD ☐ NPDES

Project Locations: ☐ Detroit ☐ New York ☐ Other ______

Special Instructions

MERIT LAB NO. (FOR LAB USE ONLY)	COLLECTION DATE	COLLECTION TIME	SAMPLE TAG IDENTIFICATION-DESCRIPTION	MATRIX	# OF BOTTLES	NONE	HCl	HNO_3	H_2SO_4	NaOH	MeOH	OTHER	LIST 3/ PFAS
40861.01	9/27/22	930	MW-120	GW	3	3							X
.02	↓	1013	MW-119	↓	↓	↓							X
.03		1127	MW-113										X
.04		1237	MW-112										X
.05		1317	MW-111										X
.06		1347	MW-110										X
.07	↓	—	Dup-01	↓	↓	↓							X

RELINQUISHED BY: SIGNATURE/ORGANIZATION	Henry Schmidt ☒ Sampler	DATE 9/28/22	TIME 1730	
RECEIVED BY: SIGNATURE/ORGANIZATION	[signature]	DATE 9/29/22	TIME 800	
RELINQUISHED BY: SIGNATURE/ORGANIZATION		DATE	TIME	
RECEIVED BY: SIGNATURE/ORGANIZATION		DATE	TIME	

RELINQUISHED BY: SIGNATURE/ORGANIZATION	[signature]	DATE 9/29/22	TIME 1100
RECEIVED BY: SIGNATURE/ORGANIZATION	M Chilcote	DATE 9/29/22	TIME 1100

SEAL NO. SEAL INTACT YES ☐ NO ☐ INITIALS
SEAL NO. SEAL INTACT YES ☐ NO ☐ INITIALS

NOTES: TEMP. ON ARRIVAL 2.4

PLEASE NOTE: SIGNING ACKNOWLEDGES ADHERENCE TO MERIT'S SAMPLE ACCEPTANCE POLICY ON REVERSE SIDE

Rev. 1.26.22

Merit Laboratories, Inc.
2680 East Lansing Dr., East Lansing, MI 48823
Phone (517) 332-0167 Fax (517) 332-4034
www.meritlabs.com

C.O.C. PAGE # _____ OF _____ 154472

CHAIN OF CUSTODY RECORD

REPORT TO

CONTACT NAME: Kelly Cvetkenburg
COMPANY: TRC
ADDRESS: 1540 Eisenhower Place
CITY: Ann Arbor STATE: MI ZIP CODE: 48108
PHONE NO.: CELL NO.: P.O. NO.: 189445
E-MAIL ADDRESS: kcvetkenburg, hschmadt, aekland@trcompanies.com QUOTE NO.:

INVOICE TO

CONTACT NAME: ☐ SAME
COMPANY:
ADDRESS:
CITY: STATE: ZIP CODE:
PHONE NO.: E-MAIL ADDRESS:

PROJECT NO./NAME: AFB Loring RCRA Assessment / 495430
SAMPLER(S) - PLEASE PRINT/SIGN NAME: H. Schmadt J. Jasso

TURNAROUND TIME REQUIRED ☐ 1 DAY ☐ 2 DAYS ☐ 3 DAYS ☒ STANDARD ☐ OTHER _____

DELIVERABLES REQUIRED ☐ STD ☐ LEVEL II ☐ LEVEL III ☐ LEVEL IV ☐ EDD ☒ OTHER TRE EDD

MATRIX CODE: W=WATER GW=GROUNDWATER WW=WASTEWATER S=SOIL L=LIQUID SD=SOLID SL=SLUDGE DW=DRINKING WATER O=OIL WP=WIPE A=AIR WS=WASTE

ANALYSIS (ATTACH LIST IF MORE SPACE IS REQUIRED)

Certifications
☐ OHIO VAP ☐ Drinking Water
☐ DoD ☐ NPDES
Project Locations
☐ Detroit ☐ New York
☐ Other _____
Special Instructions

MERIT LAB NO. (FOR LAB USE ONLY)	COLLECTION DATE	COLLECTION TIME	SAMPLE TAG IDENTIFICATION-DESCRIPTION	MATRIX	# OF BOTTLES	# Containers & Preservatives: NONE	HCl	HNO_3	H_2SO_4	NaOH	MeOH	OTHER	List 31 PFAS
40861.08	9/28/22	925	MW-109	GW	3	3							X
.09		910	MW-108										X
.10		1023	MW-107										X
.11		1125	MW-106										X
.12		1232	MW-121										X
.13		1338	MW-104										X
.14		1423	MW-105										X
.15	↓	—	Dup-02		↓	V							X
.16		1441	FB-01		1	1							X
.17	↓	1491	EB-01	↓	3	3							X

RELINQUISHED BY: SIGNATURE/ORGANIZATION		DATE	TIME
	Henry Schmadt ☒ Sampler	9/28/22	1730
RECEIVED BY: SIGNATURE/ORGANIZATION		DATE	TIME
	Ian Lee	9/29/22	800
RELINQUISHED BY: SIGNATURE/ORGANIZATION		DATE	TIME
RECEIVED BY: SIGNATURE/ORGANIZATION		DATE	TIME

RELINQUISHED BY: SIGNATURE/ORGANIZATION		DATE	TIME
	Ian Lee	9/29/22	1100
RECEIVED BY: SIGNATURE/ORGANIZATION		DATE	TIME
	M Allcock	9/29/22	1100

SEAL NO. SEAL INTACT YES ☐ NO ☐ INITIALS
SEAL NO. SEAL INTACT YES ☐ NO ☐ INITIALS

NOTES: TEMP. ON ARRIVAL 2.4

PLEASE NOTE: SIGNING ACKNOWLEDGES ADHERENCE TO MERIT'S SAMPLE ACCEPTANCE POLICY ON REVERSE SIDE

Rev. 1.26.22

Analytical Laboratory Report

Report ID: S41718.01(01)+QC01
Generated on 10/28/2022

Report to

Attention: Kelly Cratsenburg
TRC
1540 Eisenhower Place
Ann Arbor, MI 48108

Phone: 734-585-7829 C: 734-412-5424 FAX:
Email: KCratsenburg@trccompanies.com

Addtional Contacts: Vince Buening

Report produced by

Merit Laboratories, Inc.
2680 East Lansing Drive
East Lansing, MI 48823

Phone: (517) 332-0167 FAX: (517) 332-6333

Contacts for report questions:
John Laverty (johnlaverty@meritlabs.com)
Barbara Ball (bball@meritlabs.com)

Report Summary

Lab Sample ID(s): S41718.01-S41718.08
Project: 495430.0000.0000 / Detroit Axle EB GW
Collected Date(s): 10/18/2022 - 10/20/2022
Submitted Date/Time: 10/21/2022 13:45
Sampled by: Henry Schnaidt
P.O. #: 189445

Table of Contents

Maya Murshak
Technical Director

General Report Notes

Analytical results relate only to the samples tested, in the condition received by the laboratory.
Methods may be modified for improved performance.
Results reported on a dry weight basis where applicable.
'Not detected' indicates that parameter was not found at a level equal to or greater than the reporting limit (RL).
When MDL results are provided, then 'Not detected' indicates that parameter was not found at a level equal to or greater than the MDL.
40 CFR Part 136 Table II Required Containers, Preservation Techniques and Holding Times for the Clean Water Act specify that samples for acrolein and acrylonitrile, and 2-chloroethylvinyl ether need to be preserved at a pH in the range of 4 to 5 or if not preserved, analyzed within 3 days of sampling.
QA/QC corresponding to this analytical report is a separate document with the same Merit ID reference and is available upon request.
Full accreditation certificates are available upon request. Starred (*) analytes are not NELAP accredited.
Samples are held by the lab for 30 days from the final report date unless a written request to hold longer is provided by the client.

Limits for drinking water samples, are listed as the MCL Limits (Maximum Contaminant Level Concentrations)
PFAS requirement: Section 9.3.8 of U.S. EPA Method 537.1 states "If the method analyte(s) found in the Field Sample is present in the FRB at a concentration greater than 1/3 the MRL, then all samples collected with that FRB are invalid and must be recollected and reanalyzed."
Samples submitted without an accompanying FRB may not be acceptable for compliance purposes.
Wisconsin PFAs analysis: MDL = LOD; RL = LOQ. LOD and LOQ are adjusted for dilution.

Report Narrative

There is no additional narrative for this analytical report

Laboratory Certifications

Authority	Certification ID
Michigan DEQ	#9956
DOD ELAP/ISO 17025	#69699
WBENC	#2005110032
Ohio VAP	#CL0002
Indiana DOH	#C-MI-07
New York NELAC	#11814
North Carolina DENR	#680
North Carolina DOH	#26702
Alaska CSLAP	#17-001
Pennsylvania DEP	#68-05884
Wisconsin DNR	FID# 399147320

Qualifier Descriptions

Qualifier	Description
!	Result is outside of stated limit criteria
B	Compound also found in associated method blank
E	Concentration exceeds calibration range
F	Analysis run outside of holding time
G	Estimated result due to extraction run outside of holding time
H	Sample submitted and run outside of holding time
I	Matrix interference with internal standard
J	Estimated value less than reporting limit, but greater than MDL
L	Elevated reporting limit due to low sample amount
M	Result reported to MDL not RDL
O	Analysis performed by outside laboratory. See attached report.
R	Preliminary result
S	Surrogate recovery outside of control limits
T	No correction for total solids
X	Elevated reporting limit due to matrix interference
Y	Elevated reporting limit due to high target concentration
b	Value detected less than reporting limit, but greater than MDL
e	Reported value estimated due to interference
j	Analyte also found in associated method blank
p	Benzo(b)Fluoranthene and Benzo(k)Fluoranthene integrated as one peak.
x	Preserved from bulk sample

Glossary of Abbreviations

Abbreviation	Description
RL/RDL	Reporting Limit
MDL	Method Detection Limit
MS	Matrix Spike
MSD	Matrix Spike Duplicate
SW	EPA SW 846 (Soil and Wastewater) Methods
E	EPA Methods
SM	Standard Methods
LN	Linear
BR	Branched

Method Summary

Method	Version
E200.8	EPA Method 200.8 Revision 5.4
E245.1	EPA Method 245.1 Revision 3.0
N/A	Not Applicable
SW3015A	SW 846 Method 3015A Revision 1 February 2007
SW5030C/8260C	SW 846 Method 8260C Revision 3 August 2006 / 5030C Revision 3 May 2003

Sample Summary (8 samples)

Sample ID	Sample Tag	Matrix	Collected Date/Time
S41718.01	MW-22-01	Groundwater	10/18/22 10:17
S41718.02	MW-22-02	Groundwater	10/18/22 12:05
S41718.03	MW-22-03	Groundwater	10/19/22 09:26
S41718.04	MW-22-04	Groundwater	10/20/22 10:43
S41718.05	MW-22-05	Groundwater	10/20/22 11:59
S41718.06	MW-22-06	Groundwater	10/20/22 12:58
S41718.07	Dup-01	Groundwater	10/18/22 00:01
S41718.08	Trip Blank	Water	10/20/22 00:01

Lab Sample ID: S41718.01
Sample Tag: MW-22-01
Collected Date/Time: 10/18/2022 10:17
Matrix: Groundwater
COC Reference: 154860

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
3	40ml Glass	None	Yes	3.4	IR
3	40ml Glass	HCL	Yes	3.4	IR
1	125ml Plastic	HNO3	Yes	3.4	IR

Extraction / Prep.

Parameter	Result	Method	Run Date	Analyst	Flags
Mercury Digestion	Completed	E245.1	10/27/22 23:07	CTV	
pH check for VOCs*	<2	N/A	10/27/22 11:00	BML	
Metal Digestion	Completed	SW3015A	10/24/22 11:35	JRH	

Metals

Method: E200.8, Run Date: 10/24/22 12:48, Analyst: JRH

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Aluminum	0.049	0.010		mg/L	5	7429-90-5	
Antimony*	Not detected	0.005		mg/L	5	7440-36-0	
Arsenic	Not detected	0.002		mg/L	5	7440-38-2	
Barium	0.091	0.005		mg/L	5	7440-39-3	
Beryllium	Not detected	0.001		mg/L	5	7440-41-7	
Boron	0.05	0.04		mg/L	5	7440-42-8	
Cadmium	Not detected	0.0005		mg/L	5	7440-43-9	
Chromium	Not detected	0.005		mg/L	5	7440-47-3	
Cobalt	Not detected	0.005		mg/L	5	7440-48-4	
Iron	0.08	0.02		mg/L	5	7439-89-6	
Lead	Not detected	0.003		mg/L	5	7439-92-1	
Manganese	0.020	0.005		mg/L	5	7439-96-5	
Molybdenum	0.010	0.005		mg/L	5	7439-98-7	
Nickel	Not detected	0.005		mg/L	5	7440-02-0	
Selenium	Not detected	0.005		mg/L	5	7782-49-2	
Silver	Not detected	0.0005		mg/L	5	7440-22-4	
Strontium	0.143	0.005		mg/L	5	7440-24-6	
Thallium	Not detected	0.002		mg/L	5	7440-28-0	
Titanium	Not detected	0.005		mg/L	5	7440-32-6	
Vanadium	Not detected	0.005		mg/L	5	7440-62-2	
Zinc	Not detected	0.005		mg/L	5	7440-66-6	

Method: E200.8, Run Date: 10/24/22 15:04, Analyst: JRH

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Calcium*	38.0	0.50		mg/L	5	7440-70-2	
Magnesium	6.76	0.50		mg/L	5	7439-95-4	
Potassium	4.97	0.50		mg/L	5	7440-09-7	
Sodium	168	0.50		mg/L	5	7440-23-5	

Method: E245.1, Run Date: 10/27/22 22:12, Analyst: CTV

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Mercury	Not detected	0.00002		mg/L	1	7439-97-6	

Lab Sample ID: S41718.01 (continued)
Sample Tag: MW-22-01

Organics - Volatiles

Method: SW5030C/8260C, Run Date: 10/27/22 00:04, Analyst: KAG

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Diisopropyl ether (DIPE)	Not detected	5		ug/L	1	108-20-3	

Volatile Organics, Method: SW5030C/8260C, Run Date: 10/27/22 16:27, Analyst: KAG

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Acetone	Not detected	50		ug/L	1	67-64-1	
tert-Methyl butyl ether (MTBE)	Not detected	5		ug/L	1	1634-04-4	
Acrylonitrile	Not detected	2		ug/L	1	107-13-1	
2-Butanone (MEK)	Not detected	25		ug/L	1	78-93-3	
Dichlorodifluoromethane	Not detected	5		ug/L	1	75-71-8	
Chloromethane	Not detected	5		ug/L	1	74-87-3	
Vinyl chloride	Not detected	1		ug/L	1	75-01-4	
Bromomethane	Not detected	5		ug/L	1	74-83-9	
Chloroethane	Not detected	5		ug/L	1	75-00-3	
Trichlorofluoromethane	Not detected	1		ug/L	1	75-69-4	
1,1-Dichloroethene	Not detected	1		ug/L	1	75-35-4	
Methylene chloride	Not detected	5		ug/L	1	75-09-2	
trans-1,2-Dichloroethene	Not detected	1		ug/L	1	156-60-5	
1,1-Dichloroethane	Not detected	1		ug/L	1	75-34-3	
cis-1,2-Dichloroethene	Not detected	1		ug/L	1	156-59-2	
Chloroform	Not detected	1		ug/L	1	67-66-3	
1,1,1-Trichloroethane	Not detected	1		ug/L	1	71-55-6	
4-Methyl-2-pentanone (MIBK)	Not detected	50		ug/L	1	108-10-1	
Carbon tetrachloride	Not detected	1		ug/L	1	56-23-5	
Benzene	Not detected	1		ug/L	1	71-43-2	
1,2-Dichloroethane	Not detected	1		ug/L	1	107-06-2	
Trichloroethene	Not detected	1		ug/L	1	79-01-6	
1,2-Dichloropropane	Not detected	1		ug/L	1	78-87-5	
Bromodichloromethane	Not detected	1		ug/L	1	75-27-4	
Dibromomethane	Not detected	5		ug/L	1	74-95-3	
cis-1,3-Dichloropropene	Not detected	1		ug/L	1	10061-01-5	
Toluene	Not detected	1		ug/L	1	108-88-3	
trans-1,3-Dichloropropene	Not detected	1		ug/L	1	10061-02-6	
1,1,2-Trichloroethane	Not detected	1		ug/L	1	79-00-5	
Tetrachloroethene	Not detected	1		ug/L	1	127-18-4	
Dibromochloromethane	Not detected	5		ug/L	1	124-48-1	
1,2-Dibromoethane	Not detected	1		ug/L	1	106-93-4	
Chlorobenzene	Not detected	1		ug/L	1	108-90-7	
1,1,1,2-Tetrachloroethane	Not detected	1		ug/L	1	630-20-6	
Ethylbenzene	Not detected	1		ug/L	1	100-41-4	
p,m-Xylene*	Not detected	2		ug/L	1		
o-Xylene	Not detected	1		ug/L	1	95-47-6	
Styrene	Not detected	1		ug/L	1	100-42-5	
Isopropylbenzene	Not detected	5		ug/L	1	98-82-8	
Bromoform	Not detected	1		ug/L	1	75-25-2	
1,1,2,2-Tetrachloroethane	Not detected	1		ug/L	1	79-34-5	
1,2,3-Trichloropropane	Not detected	1		ug/L	1	96-18-4	
n-Propylbenzene	Not detected	1		ug/L	1	103-65-1	
Bromobenzene	Not detected	1		ug/L	1	108-86-1	
1,3,5-Trimethylbenzene	Not detected	1		ug/L	1	108-67-8	

Lab Sample ID: S41718.01 (continued)
Sample Tag: MW-22-01

Volatile Organics, Method: SW5030C/8260C, Run Date: 10/27/22 16:27, Analyst: KAG (continued)

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
tert-Butylbenzene	Not detected	1		ug/L	1	98-06-6	
1,2,4-Trimethylbenzene	Not detected	1		ug/L	1	95-63-6	
sec-Butylbenzene	Not detected	1		ug/L	1	135-98-8	
p-Isopropyltoluene	Not detected	5		ug/L	1	99-87-6	
1,3-Dichlorobenzene	Not detected	1		ug/L	1	541-73-1	
1,4-Dichlorobenzene	Not detected	1		ug/L	1	106-46-7	
1,2-Dichlorobenzene	Not detected	1		ug/L	1	95-50-1	
1,2,3-Trimethylbenzene	Not detected	1		ug/L	1	526-73-8	
n-Butylbenzene	Not detected	1		ug/L	1	104-51-8	
1,2-Dibromo-3-chloropropane	Not detected	5		ug/L	1	96-12-8	
1,2,4-Trichlorobenzene	Not detected	5		ug/L	1	120-82-1	
1,2,3-Trichlorobenzene	Not detected	5		ug/L	1	87-61-6	
Naphthalene	Not detected	5		ug/L	1	91-20-3	
Acrolein	Not detected	1		ug/L	1	107-02-8	
2-Chlorotoluene	Not detected	1		ug/L	1	95-49-8	
4-Chlorotoluene	Not detected	1		ug/L	1	106-43-4	
1,3-Dichloropropane	Not detected	1		ug/L	1	142-28-9	
1,1-Dichloropropene	Not detected	1		ug/L	1	563-58-6	
2,2-Dichloropropane	Not detected	1		ug/L	1	594-20-7	
Hexachlorobutadiene	Not detected	1		ug/L	1	87-68-3	
1,1,2-Trichloro-1,2,2-trifluoroethane	Not detected	1		ug/L	1	76-13-1	

Other / Misc.

Method: , Run Date: 10/27/22 19:59, Analyst: EF

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Methanol*	Completed				1	67-56-1	O

O-Analysis performed by outside laboratory. See attached report.

Lab Sample ID: S41718.02
Sample Tag: MW-22-02
Collected Date/Time: 10/18/2022 12:05
Matrix: Groundwater
COC Reference: 154860

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
3	40ml Glass	None	Yes	3.4	IR
3	40ml Glass	HCL	Yes	3.4	IR
1	125ml Plastic	HNO3	Yes	3.4	IR

Extraction / Prep.

Parameter	Result	Method	Run Date	Analyst	Flags
Mercury Digestion	Completed	E245.1	10/27/22 23:07	CTV	
pH check for VOCs*	<2	N/A	10/27/22 11:00	BML	
Metal Digestion	Completed	SW3015A	10/24/22 11:35	JRH	

Metals

Method: E200.8, Run Date: 10/24/22 12:50, Analyst: JRH

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Aluminum	0.025	0.010		mg/L	5	7429-90-5	
Antimony*	Not detected	0.005		mg/L	5	7440-36-0	
Arsenic	Not detected	0.002		mg/L	5	7440-38-2	
Barium	0.142	0.005		mg/L	5	7440-39-3	
Beryllium	Not detected	0.001		mg/L	5	7440-41-7	
Boron	0.10	0.04		mg/L	5	7440-42-8	
Cadmium	Not detected	0.0005		mg/L	5	7440-43-9	
Chromium	Not detected	0.005		mg/L	5	7440-47-3	
Cobalt	Not detected	0.005		mg/L	5	7440-48-4	
Iron	0.04	0.02		mg/L	5	7439-89-6	
Lead	Not detected	0.003		mg/L	5	7439-92-1	
Manganese	0.188	0.005		mg/L	5	7439-96-5	
Molybdenum	Not detected	0.005		mg/L	5	7439-98-7	
Nickel	Not detected	0.005		mg/L	5	7440-02-0	
Selenium	Not detected	0.005		mg/L	5	7782-49-2	
Silver	Not detected	0.0005		mg/L	5	7440-22-4	
Strontium	0.436	0.005		mg/L	5	7440-24-6	
Thallium	Not detected	0.002		mg/L	5	7440-28-0	
Titanium	Not detected	0.005		mg/L	5	7440-32-6	
Vanadium	Not detected	0.005		mg/L	5	7440-62-2	
Zinc	Not detected	0.005		mg/L	5	7440-66-6	

Method: E200.8, Run Date: 10/24/22 15:08, Analyst: JRH

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Calcium*	91.0	0.50		mg/L	5	7440-70-2	
Magnesium	17.6	0.50		mg/L	5	7439-95-4	
Potassium	6.53	0.50		mg/L	5	7440-09-7	
Sodium	131	0.50		mg/L	5	7440-23-5	

Method: E245.1, Run Date: 10/27/22 22:16, Analyst: CTV

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Mercury	Not detected	0.00002		mg/L	1	7439-97-6	

Lab Sample ID: S41718.02 (continued)
Sample Tag: MW-22-02

Organics - Volatiles

Method: SW5030C/8260C, Run Date: 10/27/22 00:30, Analyst: KAG

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Diisopropyl ether (DIPE)	Not detected	5		ug/L	1	108-20-3	

Volatile Organics, Method: SW5030C/8260C, Run Date: 10/27/22 16:50, Analyst: KAG

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Acetone	Not detected	50		ug/L	1	67-64-1	
tert-Methyl butyl ether (MTBE)	Not detected	5		ug/L	1	1634-04-4	
Acrylonitrile	Not detected	2		ug/L	1	107-13-1	
2-Butanone (MEK)	Not detected	25		ug/L	1	78-93-3	
Dichlorodifluoromethane	Not detected	5		ug/L	1	75-71-8	
Chloromethane	Not detected	5		ug/L	1	74-87-3	
Vinyl chloride	Not detected	1		ug/L	1	75-01-4	
Bromomethane	Not detected	5		ug/L	1	74-83-9	
Chloroethane	Not detected	5		ug/L	1	75-00-3	
Trichlorofluoromethane	Not detected	1		ug/L	1	75-69-4	
1,1-Dichloroethene	Not detected	1		ug/L	1	75-35-4	
Methylene chloride	Not detected	5		ug/L	1	75-09-2	
trans-1,2-Dichloroethene	Not detected	1		ug/L	1	156-60-5	
1,1-Dichloroethane	Not detected	1		ug/L	1	75-34-3	
cis-1,2-Dichloroethene	2	1		ug/L	1	156-59-2	
Chloroform	Not detected	1		ug/L	1	67-66-3	
1,1,1-Trichloroethane	Not detected	1		ug/L	1	71-55-6	
4-Methyl-2-pentanone (MIBK)	Not detected	50		ug/L	1	108-10-1	
Carbon tetrachloride	Not detected	1		ug/L	1	56-23-5	
Benzene	Not detected	1		ug/L	1	71-43-2	
1,2-Dichloroethane	Not detected	1		ug/L	1	107-06-2	
Trichloroethene	3	1		ug/L	1	79-01-6	
1,2-Dichloropropane	Not detected	1		ug/L	1	78-87-5	
Bromodichloromethane	Not detected	1		ug/L	1	75-27-4	
Dibromomethane	Not detected	5		ug/L	1	74-95-3	
cis-1,3-Dichloropropene	Not detected	1		ug/L	1	10061-01-5	
Toluene	Not detected	1		ug/L	1	108-88-3	
trans-1,3-Dichloropropene	Not detected	1		ug/L	1	10061-02-6	
1,1,2-Trichloroethane	Not detected	1		ug/L	1	79-00-5	
Tetrachloroethene	Not detected	1		ug/L	1	127-18-4	
Dibromochloromethane	Not detected	5		ug/L	1	124-48-1	
1,2-Dibromoethane	Not detected	1		ug/L	1	106-93-4	
Chlorobenzene	45	1		ug/L	1	108-90-7	
1,1,1,2-Tetrachloroethane	Not detected	1		ug/L	1	630-20-6	
Ethylbenzene	Not detected	1		ug/L	1	100-41-4	
p,m-Xylene*	Not detected	2		ug/L	1		
o-Xylene	Not detected	1		ug/L	1	95-47-6	
Styrene	Not detected	1		ug/L	1	100-42-5	
Isopropylbenzene	Not detected	5		ug/L	1	98-82-8	
Bromoform	Not detected	1		ug/L	1	75-25-2	
1,1,2,2-Tetrachloroethane	Not detected	1		ug/L	1	79-34-5	
1,2,3-Trichloropropane	Not detected	1		ug/L	1	96-18-4	
n-Propylbenzene	Not detected	1		ug/L	1	103-65-1	
Bromobenzene	Not detected	1		ug/L	1	108-86-1	
1,3,5-Trimethylbenzene	Not detected	1		ug/L	1	108-67-8	

Lab Sample ID: S41718.02 (continued)
Sample Tag: MW-22-02

Volatile Organics, Method: SW5030C/8260C, Run Date: 10/27/22 16:50, Analyst: KAG (continued)

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
tert-Butylbenzene	Not detected	1		ug/L	1	98-06-6	
1,2,4-Trimethylbenzene	Not detected	1		ug/L	1	95-63-6	
sec-Butylbenzene	Not detected	1		ug/L	1	135-98-8	
p-Isopropyltoluene	Not detected	5		ug/L	1	99-87-6	
1,3-Dichlorobenzene	Not detected	1		ug/L	1	541-73-1	
1,4-Dichlorobenzene	Not detected	1		ug/L	1	106-46-7	
1,2-Dichlorobenzene	Not detected	1		ug/L	1	95-50-1	
1,2,3-Trimethylbenzene	Not detected	1		ug/L	1	526-73-8	
n-Butylbenzene	Not detected	1		ug/L	1	104-51-8	
1,2-Dibromo-3-chloropropane	Not detected	5		ug/L	1	96-12-8	
1,2,4-Trichlorobenzene	Not detected	5		ug/L	1	120-82-1	
1,2,3-Trichlorobenzene	Not detected	5		ug/L	1	87-61-6	
Naphthalene	Not detected	5		ug/L	1	91-20-3	
Acrolein	Not detected	1		ug/L	1	107-02-8	
2-Chlorotoluene	Not detected	1		ug/L	1	95-49-8	
4-Chlorotoluene	Not detected	1		ug/L	1	106-43-4	
1,3-Dichloropropane	Not detected	1		ug/L	1	142-28-9	
1,1-Dichloropropene	Not detected	1		ug/L	1	563-58-6	
2,2-Dichloropropane	Not detected	1		ug/L	1	594-20-7	
Hexachlorobutadiene	Not detected	1		ug/L	1	87-68-3	
1,1,2-Trichloro-1,2,2-trifluoroethane	Not detected	1		ug/L	1	76-13-1	

Other / Misc.

Method: , Run Date: 10/27/22 20:21, Analyst: EF

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Methanol*	Completed				1	67-56-1	O

O-Analysis performed by outside laboratory. See attached report.

Lab Sample ID: S41718.03
Sample Tag: MW-22-03
Collected Date/Time: 10/19/2022 09:26
Matrix: Groundwater
COC Reference: 154860

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
3	40ml Glass	None	Yes	3.4	IR
3	40ml Glass	HCL	Yes	3.4	IR
1	125ml Plastic	HNO3	Yes	3.4	IR

Extraction / Prep.

Parameter	Result	Method	Run Date	Analyst	Flags
Mercury Digestion	Completed	E245.1	10/27/22 23:07	CTV	
pH check for VOCs*	<2	N/A	10/27/22 11:00	BML	
Metal Digestion	Completed	SW3015A	10/24/22 11:35	JRH	

Metals

Method: E200.8, Run Date: 10/24/22 12:52, Analyst: JRH

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Aluminum	0.027	0.010		mg/L	5	7429-90-5	
Antimony*	Not detected	0.005		mg/L	5	7440-36-0	
Arsenic	Not detected	0.002		mg/L	5	7440-38-2	
Barium	0.101	0.005		mg/L	5	7440-39-3	
Beryllium	Not detected	0.001		mg/L	5	7440-41-7	
Boron	0.15	0.04		mg/L	5	7440-42-8	
Cadmium	Not detected	0.0005		mg/L	5	7440-43-9	
Chromium	Not detected	0.005		mg/L	5	7440-47-3	
Cobalt	Not detected	0.005		mg/L	5	7440-48-4	
Iron	0.03	0.02		mg/L	5	7439-89-6	
Lead	Not detected	0.003		mg/L	5	7439-92-1	
Manganese	0.188	0.005		mg/L	5	7439-96-5	
Molybdenum	0.005	0.005		mg/L	5	7439-98-7	
Nickel	Not detected	0.005		mg/L	5	7440-02-0	
Selenium	Not detected	0.005		mg/L	5	7782-49-2	
Silver	Not detected	0.0005		mg/L	5	7440-22-4	
Strontium	0.279	0.005		mg/L	5	7440-24-6	
Thallium	Not detected	0.002		mg/L	5	7440-28-0	
Titanium	Not detected	0.005		mg/L	5	7440-32-6	
Vanadium	Not detected	0.005		mg/L	5	7440-62-2	
Zinc	Not detected	0.005		mg/L	5	7440-66-6	

Method: E200.8, Run Date: 10/24/22 15:10, Analyst: JRH

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Calcium*	80.3	0.50		mg/L	5	7440-70-2	
Magnesium	15.4	0.50		mg/L	5	7439-95-4	
Potassium	7.21	0.50		mg/L	5	7440-09-7	
Sodium	43.7	0.50		mg/L	5	7440-23-5	

Method: E245.1, Run Date: 10/27/22 22:20, Analyst: CTV

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Mercury	Not detected	0.00002		mg/L	1	7439-97-6	

Lab Sample ID: S41718.03 (continued)
Sample Tag: MW-22-03

Organics - Volatiles

Method: SW5030C/8260C, Run Date: 10/27/22 00:55, Analyst: KAG

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Diisopropyl ether (DIPE)	Not detected	5		ug/L	1	108-20-3	

Volatile Organics, Method: SW5030C/8260C, Run Date: 10/27/22 17:13, Analyst: KAG

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Acetone	Not detected	50		ug/L	1	67-64-1	
tert-Methyl butyl ether (MTBE)	Not detected	5		ug/L	1	1634-04-4	
Acrylonitrile	Not detected	2		ug/L	1	107-13-1	
2-Butanone (MEK)	Not detected	25		ug/L	1	78-93-3	
Dichlorodifluoromethane	Not detected	5		ug/L	1	75-71-8	
Chloromethane	Not detected	5		ug/L	1	74-87-3	
Vinyl chloride	Not detected	1		ug/L	1	75-01-4	
Bromomethane	Not detected	5		ug/L	1	74-83-9	
Chloroethane	Not detected	5		ug/L	1	75-00-3	
Trichlorofluoromethane	Not detected	1		ug/L	1	75-69-4	
1,1-Dichloroethene	Not detected	1		ug/L	1	75-35-4	
Methylene chloride	Not detected	5		ug/L	1	75-09-2	
trans-1,2-Dichloroethene	Not detected	1		ug/L	1	156-60-5	
1,1-Dichloroethane	Not detected	1		ug/L	1	75-34-3	
cis-1,2-Dichloroethene	2	1		ug/L	1	156-59-2	
Chloroform	Not detected	1		ug/L	1	67-66-3	
1,1,1-Trichloroethane	Not detected	1		ug/L	1	71-55-6	
4-Methyl-2-pentanone (MIBK)	Not detected	50		ug/L	1	108-10-1	
Carbon tetrachloride	Not detected	1		ug/L	1	56-23-5	
Benzene	Not detected	1		ug/L	1	71-43-2	
1,2-Dichloroethane	Not detected	1		ug/L	1	107-06-2	
Trichloroethene	4	1		ug/L	1	79-01-6	
1,2-Dichloropropane	Not detected	1		ug/L	1	78-87-5	
Bromodichloromethane	Not detected	1		ug/L	1	75-27-4	
Dibromomethane	Not detected	5		ug/L	1	74-95-3	
cis-1,3-Dichloropropene	Not detected	1		ug/L	1	10061-01-5	
Toluene	Not detected	1		ug/L	1	108-88-3	
trans-1,3-Dichloropropene	Not detected	1		ug/L	1	10061-02-6	
1,1,2-Trichloroethane	Not detected	1		ug/L	1	79-00-5	
Tetrachloroethene	Not detected	1		ug/L	1	127-18-4	
Dibromochloromethane	Not detected	5		ug/L	1	124-48-1	
1,2-Dibromoethane	Not detected	1		ug/L	1	106-93-4	
Chlorobenzene	Not detected	1		ug/L	1	108-90-7	
1,1,1,2-Tetrachloroethane	Not detected	1		ug/L	1	630-20-6	
Ethylbenzene	Not detected	1		ug/L	1	100-41-4	
p,m-Xylene*	Not detected	2		ug/L	1		
o-Xylene	Not detected	1		ug/L	1	95-47-6	
Styrene	Not detected	1		ug/L	1	100-42-5	
Isopropylbenzene	Not detected	5		ug/L	1	98-82-8	
Bromoform	Not detected	1		ug/L	1	75-25-2	
1,1,2,2-Tetrachloroethane	Not detected	1		ug/L	1	79-34-5	
1,2,3-Trichloropropane	Not detected	1		ug/L	1	96-18-4	
n-Propylbenzene	Not detected	1		ug/L	1	103-65-1	
Bromobenzene	Not detected	1		ug/L	1	108-86-1	
1,3,5-Trimethylbenzene	Not detected	1		ug/L	1	108-67-8	

Lab Sample ID: S41718.03 (continued)
Sample Tag: MW-22-03

Volatile Organics, Method: SW5030C/8260C, Run Date: 10/27/22 17:13, Analyst: KAG (continued)

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
tert-Butylbenzene	Not detected	1		ug/L	1	98-06-6	
1,2,4-Trimethylbenzene	Not detected	1		ug/L	1	95-63-6	
sec-Butylbenzene	Not detected	1		ug/L	1	135-98-8	
p-Isopropyltoluene	Not detected	5		ug/L	1	99-87-6	
1,3-Dichlorobenzene	Not detected	1		ug/L	1	541-73-1	
1,4-Dichlorobenzene	Not detected	1		ug/L	1	106-46-7	
1,2-Dichlorobenzene	Not detected	1		ug/L	1	95-50-1	
1,2,3-Trimethylbenzene	Not detected	1		ug/L	1	526-73-8	
n-Butylbenzene	Not detected	1		ug/L	1	104-51-8	
1,2-Dibromo-3-chloropropane	Not detected	5		ug/L	1	96-12-8	
1,2,4-Trichlorobenzene	Not detected	5		ug/L	1	120-82-1	
1,2,3-Trichlorobenzene	Not detected	5		ug/L	1	87-61-6	
Naphthalene	Not detected	5		ug/L	1	91-20-3	
Acrolein	Not detected	1		ug/L	1	107-02-8	
2-Chlorotoluene	Not detected	1		ug/L	1	95-49-8	
4-Chlorotoluene	Not detected	1		ug/L	1	106-43-4	
1,3-Dichloropropane	Not detected	1		ug/L	1	142-28-9	
1,1-Dichloropropene	Not detected	1		ug/L	1	563-58-6	
2,2-Dichloropropane	Not detected	1		ug/L	1	594-20-7	
Hexachlorobutadiene	Not detected	1		ug/L	1	87-68-3	
1,1,2-Trichloro-1,2,2-trifluoroethane	Not detected	1		ug/L	1	76-13-1	

Other / Misc.

Method: , Run Date: 10/27/22 20:43, Analyst: EF

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Methanol*	Completed				1	67-56-1	O

O-Analysis performed by outside laboratory. See attached report.

Lab Sample ID: S41718.04
Sample Tag: MW-22-04
Collected Date/Time: 10/20/2022 10:43
Matrix: Groundwater
COC Reference: 154860

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
3	40ml Glass	None	Yes	3.4	IR
3	40ml Glass	HCL	Yes	3.4	IR
1	125ml Plastic	HNO3	Yes	3.4	IR

Extraction / Prep.

Parameter	Result	Method	Run Date	Analyst	Flags
Mercury Digestion	Completed	E245.1	10/27/22 23:07	CTV	
pH check for VOCs*	<2	N/A	10/27/22 11:00	BML	
Metal Digestion	Completed	SW3015A	10/24/22 11:35	JRH	

Metals

Method: E200.8, Run Date: 10/24/22 12:54, Analyst: JRH

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Aluminum	0.024	0.010		mg/L	5	7429-90-5	
Antimony*	Not detected	0.005		mg/L	5	7440-36-0	
Arsenic	Not detected	0.002		mg/L	5	7440-38-2	
Barium	0.068	0.005		mg/L	5	7440-39-3	
Beryllium	Not detected	0.001		mg/L	5	7440-41-7	
Boron	0.09	0.04		mg/L	5	7440-42-8	
Cadmium	Not detected	0.0005		mg/L	5	7440-43-9	
Chromium	Not detected	0.005		mg/L	5	7440-47-3	
Cobalt	Not detected	0.005		mg/L	5	7440-48-4	
Iron	0.03	0.02		mg/L	5	7439-89-6	
Lead	Not detected	0.003		mg/L	5	7439-92-1	
Manganese	0.153	0.005		mg/L	5	7439-96-5	
Molybdenum	0.007	0.005		mg/L	5	7439-98-7	
Nickel	Not detected	0.005		mg/L	5	7440-02-0	
Selenium	Not detected	0.005		mg/L	5	7782-49-2	
Silver	Not detected	0.0005		mg/L	5	7440-22-4	
Strontium	0.224	0.005		mg/L	5	7440-24-6	
Thallium	Not detected	0.002		mg/L	5	7440-28-0	
Titanium	Not detected	0.005		mg/L	5	7440-32-6	
Vanadium	Not detected	0.005		mg/L	5	7440-62-2	
Zinc	Not detected	0.005		mg/L	5	7440-66-6	

Method: E200.8, Run Date: 10/24/22 15:11, Analyst: JRH

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Calcium*	65.1	0.50		mg/L	5	7440-70-2	
Magnesium	10.5	0.50		mg/L	5	7439-95-4	
Potassium	4.04	0.50		mg/L	5	7440-09-7	
Sodium	32.6	0.50		mg/L	5	7440-23-5	

Method: E245.1, Run Date: 10/27/22 22:24, Analyst: CTV

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Mercury	Not detected	0.00002		mg/L	1	7439-97-6	

Lab Sample ID: S41718.04 (continued)
Sample Tag: MW-22-04

Organics - Volatiles

Method: SW5030C/8260C, Run Date: 10/27/22 01:21, Analyst: KAG

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Diisopropyl ether (DIPE)	Not detected	5		ug/L	1	108-20-3	

Volatile Organics, Method: SW5030C/8260C, Run Date: 10/27/22 17:37, Analyst: KAG

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Acetone	Not detected	50		ug/L	1	67-64-1	
tert-Methyl butyl ether (MTBE)	Not detected	5		ug/L	1	1634-04-4	
Acrylonitrile	Not detected	2		ug/L	1	107-13-1	
2-Butanone (MEK)	Not detected	25		ug/L	1	78-93-3	
Dichlorodifluoromethane	Not detected	5		ug/L	1	75-71-8	
Chloromethane	Not detected	5		ug/L	1	74-87-3	
Vinyl chloride	Not detected	1		ug/L	1	75-01-4	
Bromomethane	Not detected	5		ug/L	1	74-83-9	
Chloroethane	Not detected	5		ug/L	1	75-00-3	
Trichlorofluoromethane	Not detected	1		ug/L	1	75-69-4	
1,1-Dichloroethene	Not detected	1		ug/L	1	75-35-4	
Methylene chloride	Not detected	5		ug/L	1	75-09-2	
trans-1,2-Dichloroethene	Not detected	1		ug/L	1	156-60-5	
1,1-Dichloroethane	Not detected	1		ug/L	1	75-34-3	
cis-1,2-Dichloroethene	2	1		ug/L	1	156-59-2	
Chloroform	Not detected	1		ug/L	1	67-66-3	
1,1,1-Trichloroethane	Not detected	1		ug/L	1	71-55-6	
4-Methyl-2-pentanone (MIBK)	Not detected	50		ug/L	1	108-10-1	
Carbon tetrachloride	Not detected	1		ug/L	1	56-23-5	
Benzene	1	1		ug/L	1	71-43-2	
1,2-Dichloroethane	2	1		ug/L	1	107-06-2	
Trichloroethene	2	1		ug/L	1	79-01-6	
1,2-Dichloropropane	Not detected	1		ug/L	1	78-87-5	
Bromodichloromethane	Not detected	1		ug/L	1	75-27-4	
Dibromomethane	Not detected	5		ug/L	1	74-95-3	
cis-1,3-Dichloropropene	Not detected	1		ug/L	1	10061-01-5	
Toluene	Not detected	1		ug/L	1	108-88-3	
trans-1,3-Dichloropropene	Not detected	1		ug/L	1	10061-02-6	
1,1,2-Trichloroethane	Not detected	1		ug/L	1	79-00-5	
Tetrachloroethene	Not detected	1		ug/L	1	127-18-4	
Dibromochloromethane	Not detected	5		ug/L	1	124-48-1	
1,2-Dibromoethane	Not detected	1		ug/L	1	106-93-4	
Chlorobenzene	3	1		ug/L	1	108-90-7	
1,1,1,2-Tetrachloroethane	Not detected	1		ug/L	1	630-20-6	
Ethylbenzene	Not detected	1		ug/L	1	100-41-4	
p,m-Xylene*	Not detected	2		ug/L	1		
o-Xylene	Not detected	1		ug/L	1	95-47-6	
Styrene	Not detected	1		ug/L	1	100-42-5	
Isopropylbenzene	Not detected	5		ug/L	1	98-82-8	
Bromoform	Not detected	1		ug/L	1	75-25-2	
1,1,2,2-Tetrachloroethane	Not detected	1		ug/L	1	79-34-5	
1,2,3-Trichloropropane	Not detected	1		ug/L	1	96-18-4	
n-Propylbenzene	Not detected	1		ug/L	1	103-65-1	
Bromobenzene	Not detected	1		ug/L	1	108-86-1	
1,3,5-Trimethylbenzene	Not detected	1		ug/L	1	108-67-8	

Lab Sample ID: S41718.04 (continued)
Sample Tag: MW-22-04

Volatile Organics, Method: SW5030C/8260C, Run Date: 10/27/22 17:37, Analyst: KAG (continued)

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
tert-Butylbenzene	Not detected	1		ug/L	1	98-06-6	
1,2,4-Trimethylbenzene	Not detected	1		ug/L	1	95-63-6	
sec-Butylbenzene	Not detected	1		ug/L	1	135-98-8	
p-Isopropyltoluene	Not detected	5		ug/L	1	99-87-6	
1,3-Dichlorobenzene	Not detected	1		ug/L	1	541-73-1	
1,4-Dichlorobenzene	Not detected	1		ug/L	1	106-46-7	
1,2-Dichlorobenzene	Not detected	1		ug/L	1	95-50-1	
1,2,3-Trimethylbenzene	Not detected	1		ug/L	1	526-73-8	
n-Butylbenzene	Not detected	1		ug/L	1	104-51-8	
1,2-Dibromo-3-chloropropane	Not detected	5		ug/L	1	96-12-8	
1,2,4-Trichlorobenzene	Not detected	5		ug/L	1	120-82-1	
1,2,3-Trichlorobenzene	Not detected	5		ug/L	1	87-61-6	
Naphthalene	Not detected	5		ug/L	1	91-20-3	
Acrolein	Not detected	1		ug/L	1	107-02-8	
2-Chlorotoluene	Not detected	1		ug/L	1	95-49-8	
4-Chlorotoluene	Not detected	1		ug/L	1	106-43-4	
1,3-Dichloropropane	Not detected	1		ug/L	1	142-28-9	
1,1-Dichloropropene	Not detected	1		ug/L	1	563-58-6	
2,2-Dichloropropane	Not detected	1		ug/L	1	594-20-7	
Hexachlorobutadiene	Not detected	1		ug/L	1	87-68-3	
1,1,2-Trichloro-1,2,2-trifluoroethane	Not detected	1		ug/L	1	76-13-1	

Other / Misc.

Method: , Run Date: 10/27/22 21:04, Analyst: EF

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Methanol*	Completed				1	67-56-1	O

O-Analysis performed by outside laboratory. See attached report.

Lab Sample ID: S41718.05
Sample Tag: MW-22-05
Collected Date/Time: 10/20/2022 11:59
Matrix: Groundwater
COC Reference: 154860

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
3	40ml Glass	None	Yes	3.4	IR
3	40ml Glass	HCL	Yes	3.4	IR
1	125ml Plastic	HNO3	Yes	3.4	IR

Extraction / Prep.

Parameter	Result	Method	Run Date	Analyst	Flags
Mercury Digestion	Completed	E245.1	10/27/22 23:07	CTV	
pH check for VOCs*	<2	N/A	10/27/22 11:00	BML	
Metal Digestion	Completed	SW3015A	10/24/22 11:35	JRH	

Metals

Method: E200.8, Run Date: 10/24/22 12:56, Analyst: JRH

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Aluminum	0.010	0.010		mg/L	5	7429-90-5	
Antimony*	Not detected	0.005		mg/L	5	7440-36-0	
Arsenic	0.007	0.002		mg/L	5	7440-38-2	
Barium	0.211	0.005		mg/L	5	7440-39-3	
Beryllium	Not detected	0.001		mg/L	5	7440-41-7	
Boron	0.59	0.04		mg/L	5	7440-42-8	
Cadmium	Not detected	0.0005		mg/L	5	7440-43-9	
Chromium	Not detected	0.005		mg/L	5	7440-47-3	
Cobalt	Not detected	0.005		mg/L	5	7440-48-4	
Iron	0.83	0.02		mg/L	5	7439-89-6	
Lead	Not detected	0.003		mg/L	5	7439-92-1	
Manganese	0.168	0.005		mg/L	5	7439-96-5	
Molybdenum	0.006	0.005		mg/L	5	7439-98-7	
Nickel	Not detected	0.005		mg/L	5	7440-02-0	
Selenium	Not detected	0.005		mg/L	5	7782-49-2	
Silver	Not detected	0.0005		mg/L	5	7440-22-4	
Strontium	1.03	0.005		mg/L	5	7440-24-6	
Thallium	Not detected	0.002		mg/L	5	7440-28-0	
Titanium	Not detected	0.005		mg/L	5	7440-32-6	
Vanadium	Not detected	0.005		mg/L	5	7440-62-2	
Zinc	Not detected	0.005		mg/L	5	7440-66-6	

Method: E200.8, Run Date: 10/24/22 15:12, Analyst: JRH

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Calcium*	103	0.50		mg/L	5	7440-70-2	
Magnesium	48.7	0.50		mg/L	5	7439-95-4	
Potassium	12.6	0.50		mg/L	5	7440-09-7	
Sodium	31.1	0.50		mg/L	5	7440-23-5	

Method: E245.1, Run Date: 10/27/22 22:28, Analyst: CTV

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Mercury	Not detected	0.00002		mg/L	1	7439-97-6	

Lab Sample ID: S41718.05 (continued)
Sample Tag: MW-22-05

Organics - Volatiles

Method: SW5030C/8260C, Run Date: 10/27/22 01:46, Analyst: KAG

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Diisopropyl ether (DIPE)	Not detected	5		ug/L	1	108-20-3	

Volatile Organics, Method: SW5030C/8260C, Run Date: 10/27/22 18:00, Analyst: KAG

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Acetone	Not detected	50		ug/L	1	67-64-1	
tert-Methyl butyl ether (MTBE)	Not detected	5		ug/L	1	1634-04-4	
Acrylonitrile	Not detected	2		ug/L	1	107-13-1	
2-Butanone (MEK)	Not detected	25		ug/L	1	78-93-3	
Dichlorodifluoromethane	Not detected	5		ug/L	1	75-71-8	
Chloromethane	Not detected	5		ug/L	1	74-87-3	
Vinyl chloride	Not detected	1		ug/L	1	75-01-4	
Bromomethane	Not detected	5		ug/L	1	74-83-9	
Chloroethane	Not detected	5		ug/L	1	75-00-3	
Trichlorofluoromethane	Not detected	1		ug/L	1	75-69-4	
1,1-Dichloroethene	Not detected	1		ug/L	1	75-35-4	
Methylene chloride	Not detected	5		ug/L	1	75-09-2	
trans-1,2-Dichloroethene	Not detected	1		ug/L	1	156-60-5	
1,1-Dichloroethane	Not detected	1		ug/L	1	75-34-3	
cis-1,2-Dichloroethene	Not detected	1		ug/L	1	156-59-2	
Chloroform	Not detected	1		ug/L	1	67-66-3	
1,1,1-Trichloroethane	Not detected	1		ug/L	1	71-55-6	
4-Methyl-2-pentanone (MIBK)	Not detected	50		ug/L	1	108-10-1	
Carbon tetrachloride	Not detected	1		ug/L	1	56-23-5	
Benzene	1	1		ug/L	1	71-43-2	
1,2-Dichloroethane	Not detected	1		ug/L	1	107-06-2	
Trichloroethene	Not detected	1		ug/L	1	79-01-6	
1,2-Dichloropropane	Not detected	1		ug/L	1	78-87-5	
Bromodichloromethane	Not detected	1		ug/L	1	75-27-4	
Dibromomethane	Not detected	5		ug/L	1	74-95-3	
cis-1,3-Dichloropropene	Not detected	1		ug/L	1	10061-01-5	
Toluene	Not detected	1		ug/L	1	108-88-3	
trans-1,3-Dichloropropene	Not detected	1		ug/L	1	10061-02-6	
1,1,2-Trichloroethane	Not detected	1		ug/L	1	79-00-5	
Tetrachloroethene	Not detected	1		ug/L	1	127-18-4	
Dibromochloromethane	Not detected	5		ug/L	1	124-48-1	
1,2-Dibromoethane	Not detected	1		ug/L	1	106-93-4	
Chlorobenzene	54	1		ug/L	1	108-90-7	
1,1,1,2-Tetrachloroethane	Not detected	1		ug/L	1	630-20-6	
Ethylbenzene	Not detected	1		ug/L	1	100-41-4	
p,m-Xylene*	Not detected	2		ug/L	1		
o-Xylene	Not detected	1		ug/L	1	95-47-6	
Styrene	Not detected	1		ug/L	1	100-42-5	
Isopropylbenzene	Not detected	5		ug/L	1	98-82-8	
Bromoform	Not detected	1		ug/L	1	75-25-2	
1,1,2,2-Tetrachloroethane	Not detected	1		ug/L	1	79-34-5	
1,2,3-Trichloropropane	Not detected	1		ug/L	1	96-18-4	
n-Propylbenzene	Not detected	1		ug/L	1	103-65-1	
Bromobenzene	Not detected	1		ug/L	1	108-86-1	
1,3,5-Trimethylbenzene	Not detected	1		ug/L	1	108-67-8	

Lab Sample ID: S41718.05 (continued)
Sample Tag: MW-22-05

Volatile Organics, Method: SW5030C/8260C, Run Date: 10/27/22 18:00, Analyst: KAG (continued)

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
tert-Butylbenzene	Not detected	1		ug/L	1	98-06-6	
1,2,4-Trimethylbenzene	Not detected	1		ug/L	1	95-63-6	
sec-Butylbenzene	Not detected	1		ug/L	1	135-98-8	
p-Isopropyltoluene	Not detected	5		ug/L	1	99-87-6	
1,3-Dichlorobenzene	Not detected	1		ug/L	1	541-73-1	
1,4-Dichlorobenzene	Not detected	1		ug/L	1	106-46-7	
1,2-Dichlorobenzene	Not detected	1		ug/L	1	95-50-1	
1,2,3-Trimethylbenzene	Not detected	1		ug/L	1	526-73-8	
n-Butylbenzene	Not detected	1		ug/L	1	104-51-8	
1,2-Dibromo-3-chloropropane	Not detected	5		ug/L	1	96-12-8	
1,2,4-Trichlorobenzene	Not detected	5		ug/L	1	120-82-1	
1,2,3-Trichlorobenzene	Not detected	5		ug/L	1	87-61-6	
Naphthalene	Not detected	5		ug/L	1	91-20-3	
Acrolein	Not detected	1		ug/L	1	107-02-8	
2-Chlorotoluene	Not detected	1		ug/L	1	95-49-8	
4-Chlorotoluene	Not detected	1		ug/L	1	106-43-4	
1,3-Dichloropropane	Not detected	1		ug/L	1	142-28-9	
1,1-Dichloropropene	Not detected	1		ug/L	1	563-58-6	
2,2-Dichloropropane	Not detected	1		ug/L	1	594-20-7	
Hexachlorobutadiene	Not detected	1		ug/L	1	87-68-3	
1,1,2-Trichloro-1,2,2-trifluoroethane	Not detected	1		ug/L	1	76-13-1	

Other / Misc.

Method: , Run Date: 10/27/22 21:26, Analyst: EF

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Methanol*	Completed				1	67-56-1	O

O-Analysis performed by outside laboratory. See attached report.

Lab Sample ID: S41718.06
Sample Tag: MW-22-06
Collected Date/Time: 10/20/2022 12:58
Matrix: Groundwater
COC Reference: 154860

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
3	40ml Glass	None	Yes	3.4	IR
3	40ml Glass	HCL	Yes	3.4	IR
1	125ml Plastic	HNO3	Yes	3.4	IR

Extraction / Prep.

Parameter	Result	Method	Run Date	Analyst	Flags
Mercury Digestion	Completed	E245.1	10/27/22 23:07	CTV	
pH check for VOCs*	<2	N/A	10/27/22 11:00	BML	
Metal Digestion	Completed	SW3015A	10/24/22 11:35	JRH	

Metals

Method: E200.8, Run Date: 10/24/22 12:58, Analyst: JRH

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Aluminum	0.027	0.010		mg/L	5	7429-90-5	
Antimony*	Not detected	0.005		mg/L	5	7440-36-0	
Arsenic	0.003	0.002		mg/L	5	7440-38-2	
Barium	0.188	0.005		mg/L	5	7440-39-3	
Beryllium	Not detected	0.001		mg/L	5	7440-41-7	
Boron	0.49	0.04		mg/L	5	7440-42-8	
Cadmium	Not detected	0.0005		mg/L	5	7440-43-9	
Chromium	Not detected	0.005		mg/L	5	7440-47-3	
Cobalt	Not detected	0.005		mg/L	5	7440-48-4	
Iron	0.07	0.02		mg/L	5	7439-89-6	
Lead	Not detected	0.003		mg/L	5	7439-92-1	
Manganese	0.272	0.005		mg/L	5	7439-96-5	
Molybdenum	0.006	0.005		mg/L	5	7439-98-7	
Nickel	Not detected	0.005		mg/L	5	7440-02-0	
Selenium	Not detected	0.005		mg/L	5	7782-49-2	
Silver	Not detected	0.0005		mg/L	5	7440-22-4	
Strontium	0.989	0.005		mg/L	5	7440-24-6	
Thallium	Not detected	0.002		mg/L	5	7440-28-0	
Titanium	Not detected	0.005		mg/L	5	7440-32-6	
Vanadium	Not detected	0.005		mg/L	5	7440-62-2	
Zinc	Not detected	0.005		mg/L	5	7440-66-6	

Method: E200.8, Run Date: 10/24/22 15:13, Analyst: JRH

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Calcium*	115	0.50		mg/L	5	7440-70-2	
Magnesium	35.9	0.50		mg/L	5	7439-95-4	
Potassium	10.5	0.50		mg/L	5	7440-09-7	
Sodium	33.8	0.50		mg/L	5	7440-23-5	

Method: E245.1, Run Date: 10/27/22 22:32, Analyst: CTV

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Mercury	Not detected	0.00002		mg/L	1	7439-97-6	

Lab Sample ID: S41718.06 (continued)
Sample Tag: MW-22-06

Organics - Volatiles

Method: SW5030C/8260C, Run Date: 10/27/22 02:12, Analyst: KAG

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Diisopropyl ether (DIPE)	Not detected	5		ug/L	1	108-20-3	

Volatile Organics, Method: SW5030C/8260C, Run Date: 10/27/22 18:23, Analyst: KAG

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Acetone	Not detected	50		ug/L	1	67-64-1	
tert-Methyl butyl ether (MTBE)	Not detected	5		ug/L	1	1634-04-4	
Acrylonitrile	Not detected	2		ug/L	1	107-13-1	
2-Butanone (MEK)	Not detected	25		ug/L	1	78-93-3	
Dichlorodifluoromethane	Not detected	5		ug/L	1	75-71-8	
Chloromethane	Not detected	5		ug/L	1	74-87-3	
Vinyl chloride	1	1		ug/L	1	75-01-4	
Bromomethane	Not detected	5		ug/L	1	74-83-9	
Chloroethane	Not detected	5		ug/L	1	75-00-3	
Trichlorofluoromethane	Not detected	1		ug/L	1	75-69-4	
1,1-Dichloroethene	Not detected	1		ug/L	1	75-35-4	
Methylene chloride	Not detected	5		ug/L	1	75-09-2	
trans-1,2-Dichloroethene	Not detected	1		ug/L	1	156-60-5	
1,1-Dichloroethane	Not detected	1		ug/L	1	75-34-3	
cis-1,2-Dichloroethene	Not detected	1		ug/L	1	156-59-2	
Chloroform	Not detected	1		ug/L	1	67-66-3	
1,1,1-Trichloroethane	Not detected	1		ug/L	1	71-55-6	
4-Methyl-2-pentanone (MIBK)	Not detected	50		ug/L	1	108-10-1	
Carbon tetrachloride	Not detected	1		ug/L	1	56-23-5	
Benzene	Not detected	1		ug/L	1	71-43-2	
1,2-Dichloroethane	Not detected	1		ug/L	1	107-06-2	
Trichloroethene	Not detected	1		ug/L	1	79-01-6	
1,2-Dichloropropane	Not detected	1		ug/L	1	78-87-5	
Bromodichloromethane	Not detected	1		ug/L	1	75-27-4	
Dibromomethane	Not detected	5		ug/L	1	74-95-3	
cis-1,3-Dichloropropene	Not detected	1		ug/L	1	10061-01-5	
Toluene	Not detected	1		ug/L	1	108-88-3	
trans-1,3-Dichloropropene	Not detected	1		ug/L	1	10061-02-6	
1,1,2-Trichloroethane	Not detected	1		ug/L	1	79-00-5	
Tetrachloroethene	Not detected	1		ug/L	1	127-18-4	
Dibromochloromethane	Not detected	5		ug/L	1	124-48-1	
1,2-Dibromoethane	Not detected	1		ug/L	1	106-93-4	
Chlorobenzene	Not detected	1		ug/L	1	108-90-7	
1,1,1,2-Tetrachloroethane	Not detected	1		ug/L	1	630-20-6	
Ethylbenzene	Not detected	1		ug/L	1	100-41-4	
p,m-Xylene*	Not detected	2		ug/L	1		
o-Xylene	Not detected	1		ug/L	1	95-47-6	
Styrene	Not detected	1		ug/L	1	100-42-5	
Isopropylbenzene	Not detected	5		ug/L	1	98-82-8	
Bromoform	Not detected	1		ug/L	1	75-25-2	
1,1,2,2-Tetrachloroethane	Not detected	1		ug/L	1	79-34-5	
1,2,3-Trichloropropane	Not detected	1		ug/L	1	96-18-4	
n-Propylbenzene	Not detected	1		ug/L	1	103-65-1	
Bromobenzene	Not detected	1		ug/L	1	108-86-1	
1,3,5-Trimethylbenzene	Not detected	1		ug/L	1	108-67-8	

Lab Sample ID: S41718.06 (continued)
Sample Tag: MW-22-06

Volatile Organics, Method: SW5030C/8260C, Run Date: 10/27/22 18:23, Analyst: KAG (continued)

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
tert-Butylbenzene	Not detected	1		ug/L	1	98-06-6	
1,2,4-Trimethylbenzene	Not detected	1		ug/L	1	95-63-6	
sec-Butylbenzene	Not detected	1		ug/L	1	135-98-8	
p-Isopropyltoluene	Not detected	5		ug/L	1	99-87-6	
1,3-Dichlorobenzene	Not detected	1		ug/L	1	541-73-1	
1,4-Dichlorobenzene	Not detected	1		ug/L	1	106-46-7	
1,2-Dichlorobenzene	Not detected	1		ug/L	1	95-50-1	
1,2,3-Trimethylbenzene	Not detected	1		ug/L	1	526-73-8	
n-Butylbenzene	Not detected	1		ug/L	1	104-51-8	
1,2-Dibromo-3-chloropropane	Not detected	5		ug/L	1	96-12-8	
1,2,4-Trichlorobenzene	Not detected	5		ug/L	1	120-82-1	
1,2,3-Trichlorobenzene	Not detected	5		ug/L	1	87-61-6	
Naphthalene	Not detected	5		ug/L	1	91-20-3	
Acrolein	Not detected	1		ug/L	1	107-02-8	
2-Chlorotoluene	Not detected	1		ug/L	1	95-49-8	
4-Chlorotoluene	Not detected	1		ug/L	1	106-43-4	
1,3-Dichloropropane	Not detected	1		ug/L	1	142-28-9	
1,1-Dichloropropene	Not detected	1		ug/L	1	563-58-6	
2,2-Dichloropropane	Not detected	1		ug/L	1	594-20-7	
Hexachlorobutadiene	Not detected	1		ug/L	1	87-68-3	
1,1,2-Trichloro-1,2,2-trifluoroethane	Not detected	1		ug/L	1	76-13-1	

Other / Misc.

Method: , Run Date: 10/27/22 21:48, Analyst: EF

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Methanol*	Completed				1	67-56-1	O

O-Analysis performed by outside laboratory. See attached report.

Lab Sample ID: S41718.07
Sample Tag: Dup-01
Collected Date/Time: 10/18/2022 00:01
Matrix: Groundwater
COC Reference: 154860

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
3	40ml Glass	None	Yes	3.4	IR
3	40ml Glass	HCL	Yes	3.4	IR
1	125ml Plastic	HNO3	Yes	3.4	IR

Extraction / Prep.

Parameter	Result	Method	Run Date	Analyst	Flags
Mercury Digestion	Completed	E245.1	10/27/22 23:07	CTV	
pH check for VOCs*	<2	N/A	10/27/22 11:00	BML	
Metal Digestion	Completed	SW3015A	10/24/22 11:35	JRH	

Metals

Method: E200.8, Run Date: 10/24/22 13:00, Analyst: JRH

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Aluminum	0.039	0.010		mg/L	5	7429-90-5	
Antimony*	Not detected	0.005		mg/L	5	7440-36-0	
Arsenic	Not detected	0.002		mg/L	5	7440-38-2	
Barium	0.091	0.005		mg/L	5	7440-39-3	
Beryllium	Not detected	0.001		mg/L	5	7440-41-7	
Boron	0.05	0.04		mg/L	5	7440-42-8	
Cadmium	Not detected	0.0005		mg/L	5	7440-43-9	
Chromium	Not detected	0.005		mg/L	5	7440-47-3	
Cobalt	Not detected	0.005		mg/L	5	7440-48-4	
Iron	0.07	0.02		mg/L	5	7439-89-6	
Lead	Not detected	0.003		mg/L	5	7439-92-1	
Manganese	0.021	0.005		mg/L	5	7439-96-5	
Molybdenum	0.010	0.005		mg/L	5	7439-98-7	
Nickel	Not detected	0.005		mg/L	5	7440-02-0	
Selenium	Not detected	0.005		mg/L	5	7782-49-2	
Silver	Not detected	0.0005		mg/L	5	7440-22-4	
Strontium	0.145	0.005		mg/L	5	7440-24-6	
Thallium	Not detected	0.002		mg/L	5	7440-28-0	
Titanium	Not detected	0.005		mg/L	5	7440-32-6	
Vanadium	Not detected	0.005		mg/L	5	7440-62-2	
Zinc	0.014	0.005		mg/L	5	7440-66-6	

Method: E200.8, Run Date: 10/24/22 15:15, Analyst: JRH

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Calcium*	39.8	0.50		mg/L	5	7440-70-2	
Magnesium	7.00	0.50		mg/L	5	7439-95-4	
Potassium	5.20	0.50		mg/L	5	7440-09-7	
Sodium	173	0.50		mg/L	5	7440-23-5	

Method: E245.1, Run Date: 10/27/22 22:36, Analyst: CTV

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Mercury	Not detected	0.00002		mg/L	1	7439-97-6	

Lab Sample ID: S41718.07 (continued)
Sample Tag: Dup-01

Organics - Volatiles

Method: SW5030C/8260C, Run Date: 10/27/22 02:37, Analyst: KAG

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Diisopropyl ether (DIPE)	Not detected	5		ug/L	1	108-20-3	

Volatile Organics, Method: SW5030C/8260C, Run Date: 10/27/22 18:47, Analyst: KAG

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Acetone	Not detected	50		ug/L	1	67-64-1	
tert-Methyl butyl ether (MTBE)	Not detected	5		ug/L	1	1634-04-4	
Acrylonitrile	Not detected	2		ug/L	1	107-13-1	
2-Butanone (MEK)	Not detected	25		ug/L	1	78-93-3	
Dichlorodifluoromethane	Not detected	5		ug/L	1	75-71-8	
Chloromethane	Not detected	5		ug/L	1	74-87-3	
Vinyl chloride	Not detected	1		ug/L	1	75-01-4	
Bromomethane	Not detected	5		ug/L	1	74-83-9	
Chloroethane	Not detected	5		ug/L	1	75-00-3	
Trichlorofluoromethane	Not detected	1		ug/L	1	75-69-4	
1,1-Dichloroethene	Not detected	1		ug/L	1	75-35-4	
Methylene chloride	Not detected	5		ug/L	1	75-09-2	
trans-1,2-Dichloroethene	Not detected	1		ug/L	1	156-60-5	
1,1-Dichloroethane	Not detected	1		ug/L	1	75-34-3	
cis-1,2-Dichloroethene	Not detected	1		ug/L	1	156-59-2	
Chloroform	Not detected	1		ug/L	1	67-66-3	
1,1,1-Trichloroethane	Not detected	1		ug/L	1	71-55-6	
4-Methyl-2-pentanone (MIBK)	Not detected	50		ug/L	1	108-10-1	
Carbon tetrachloride	Not detected	1		ug/L	1	56-23-5	
Benzene	Not detected	1		ug/L	1	71-43-2	
1,2-Dichloroethane	Not detected	1		ug/L	1	107-06-2	
Trichloroethene	Not detected	1		ug/L	1	79-01-6	
1,2-Dichloropropane	Not detected	1		ug/L	1	78-87-5	
Bromodichloromethane	Not detected	1		ug/L	1	75-27-4	
Dibromomethane	Not detected	5		ug/L	1	74-95-3	
cis-1,3-Dichloropropene	Not detected	1		ug/L	1	10061-01-5	
Toluene	Not detected	1		ug/L	1	108-88-3	
trans-1,3-Dichloropropene	Not detected	1		ug/L	1	10061-02-6	
1,1,2-Trichloroethane	Not detected	1		ug/L	1	79-00-5	
Tetrachloroethene	Not detected	1		ug/L	1	127-18-4	
Dibromochloromethane	Not detected	5		ug/L	1	124-48-1	
1,2-Dibromoethane	Not detected	1		ug/L	1	106-93-4	
Chlorobenzene	Not detected	1		ug/L	1	108-90-7	
1,1,1,2-Tetrachloroethane	Not detected	1		ug/L	1	630-20-6	
Ethylbenzene	Not detected	1		ug/L	1	100-41-4	
p,m-Xylene*	Not detected	2		ug/L	1		
o-Xylene	Not detected	1		ug/L	1	95-47-6	
Styrene	Not detected	1		ug/L	1	100-42-5	
Isopropylbenzene	Not detected	5		ug/L	1	98-82-8	
Bromoform	Not detected	1		ug/L	1	75-25-2	
1,1,2,2-Tetrachloroethane	Not detected	1		ug/L	1	79-34-5	
1,2,3-Trichloropropane	Not detected	1		ug/L	1	96-18-4	
n-Propylbenzene	Not detected	1		ug/L	1	103-65-1	
Bromobenzene	Not detected	1		ug/L	1	108-86-1	
1,3,5-Trimethylbenzene	Not detected	1		ug/L	1	108-67-8	

Lab Sample ID: S41718.07 (continued)
Sample Tag: Dup-01

Volatile Organics, Method: SW5030C/8260C, Run Date: 10/27/22 18:47, Analyst: KAG (continued)

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
tert-Butylbenzene	Not detected	1		ug/L	1	98-06-6	
1,2,4-Trimethylbenzene	Not detected	1		ug/L	1	95-63-6	
sec-Butylbenzene	Not detected	1		ug/L	1	135-98-8	
p-Isopropyltoluene	Not detected	5		ug/L	1	99-87-6	
1,3-Dichlorobenzene	Not detected	1		ug/L	1	541-73-1	
1,4-Dichlorobenzene	Not detected	1		ug/L	1	106-46-7	
1,2-Dichlorobenzene	Not detected	1		ug/L	1	95-50-1	
1,2,3-Trimethylbenzene	Not detected	1		ug/L	1	526-73-8	
n-Butylbenzene	Not detected	1		ug/L	1	104-51-8	
1,2-Dibromo-3-chloropropane	Not detected	5		ug/L	1	96-12-8	
1,2,4-Trichlorobenzene	Not detected	5		ug/L	1	120-82-1	
1,2,3-Trichlorobenzene	Not detected	5		ug/L	1	87-61-6	
Naphthalene	Not detected	5		ug/L	1	91-20-3	
Acrolein	Not detected	1		ug/L	1	107-02-8	
2-Chlorotoluene	Not detected	1		ug/L	1	95-49-8	
4-Chlorotoluene	Not detected	1		ug/L	1	106-43-4	
1,3-Dichloropropane	Not detected	1		ug/L	1	142-28-9	
1,1-Dichloropropene	Not detected	1		ug/L	1	563-58-6	
2,2-Dichloropropane	Not detected	1		ug/L	1	594-20-7	
Hexachlorobutadiene	Not detected	1		ug/L	1	87-68-3	
1,1,2-Trichloro-1,2,2-trifluoroethane	Not detected	1		ug/L	1	76-13-1	

Other / Misc.

Method: , Run Date: 10/27/22 22:10, Analyst: EF

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Methanol*	Completed				1	67-56-1	O

O-Analysis performed by outside laboratory. See attached report.

Lab Sample ID: S41718.08
Sample Tag: Trip Blank
Collected Date/Time: 10/20/2022 00:01
Matrix: Water
COC Reference: 154860

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
1	40ml Glass	HCL	Yes	3.4	IR

Extraction / Prep.

Parameter	Result	Method	Run Date	Analyst	Flags
pH check for VOCs*	<2	N/A	10/27/22 11:00	BML	

Organics - Volatiles

Method: SW5030C/8260C, Run Date: 10/26/22 23:39, Analyst: KAG

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Diisopropyl ether (DIPE)	Not detected	5		ug/L	1	108-20-3	

Volatile Organics, Method: SW5030C/8260C, Run Date: 10/27/22 15:39, Analyst: KAG

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Acetone	Not detected	50		ug/L	1	67-64-1	
tert-Methyl butyl ether (MTBE)	Not detected	5		ug/L	1	1634-04-4	
Acrylonitrile	Not detected	2		ug/L	1	107-13-1	
2-Butanone (MEK)	Not detected	25		ug/L	1	78-93-3	
Dichlorodifluoromethane	Not detected	5		ug/L	1	75-71-8	
Chloromethane	Not detected	5		ug/L	1	74-87-3	
Vinyl chloride	Not detected	1		ug/L	1	75-01-4	
Bromomethane	Not detected	5		ug/L	1	74-83-9	
Chloroethane	Not detected	5		ug/L	1	75-00-3	
Trichlorofluoromethane	Not detected	1		ug/L	1	75-69-4	
1,1-Dichloroethene	Not detected	1		ug/L	1	75-35-4	
Methylene chloride	Not detected	5		ug/L	1	75-09-2	
trans-1,2-Dichloroethene	Not detected	1		ug/L	1	156-60-5	
1,1-Dichloroethane	Not detected	1		ug/L	1	75-34-3	
cis-1,2-Dichloroethene	Not detected	1		ug/L	1	156-59-2	
Chloroform	Not detected	1		ug/L	1	67-66-3	
1,1,1-Trichloroethane	Not detected	1		ug/L	1	71-55-6	
4-Methyl-2-pentanone (MIBK)	Not detected	50		ug/L	1	108-10-1	
Carbon tetrachloride	Not detected	1		ug/L	1	56-23-5	
Benzene	Not detected	1		ug/L	1	71-43-2	
1,2-Dichloroethane	Not detected	1		ug/L	1	107-06-2	
Trichloroethene	Not detected	1		ug/L	1	79-01-6	
1,2-Dichloropropane	Not detected	1		ug/L	1	78-87-5	
Bromodichloromethane	Not detected	1		ug/L	1	75-27-4	
Dibromomethane	Not detected	5		ug/L	1	74-95-3	
cis-1,3-Dichloropropene	Not detected	1		ug/L	1	10061-01-5	
Toluene	Not detected	1		ug/L	1	108-88-3	
trans-1,3-Dichloropropene	Not detected	1		ug/L	1	10061-02-6	
1,1,2-Trichloroethane	Not detected	1		ug/L	1	79-00-5	
Tetrachloroethene	Not detected	1		ug/L	1	127-18-4	
Dibromochloromethane	Not detected	5		ug/L	1	124-48-1	
1,2-Dibromoethane	Not detected	1		ug/L	1	106-93-4	
Chlorobenzene	Not detected	1		ug/L	1	108-90-7	

Lab Sample ID: S41718.08 (continued)
Sample Tag: Trip Blank

Volatile Organics, Method: SW5030C/8260C, Run Date: 10/27/22 15:39, Analyst: KAG (continued)

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
1,1,1,2-Tetrachloroethane	Not detected	1		ug/L	1	630-20-6	
Ethylbenzene	Not detected	1		ug/L	1	100-41-4	
p,m-Xylene*	Not detected	2		ug/L	1		
o-Xylene	Not detected	1		ug/L	1	95-47-6	
Styrene	Not detected	1		ug/L	1	100-42-5	
Isopropylbenzene	Not detected	5		ug/L	1	98-82-8	
Bromoform	Not detected	1		ug/L	1	75-25-2	
1,1,2,2-Tetrachloroethane	Not detected	1		ug/L	1	79-34-5	
1,2,3-Trichloropropane	Not detected	1		ug/L	1	96-18-4	
n-Propylbenzene	Not detected	1		ug/L	1	103-65-1	
Bromobenzene	Not detected	1		ug/L	1	108-86-1	
1,3,5-Trimethylbenzene	Not detected	1		ug/L	1	108-67-8	
tert-Butylbenzene	Not detected	1		ug/L	1	98-06-6	
1,2,4-Trimethylbenzene	Not detected	1		ug/L	1	95-63-6	
sec-Butylbenzene	Not detected	1		ug/L	1	135-98-8	
p-Isopropyltoluene	Not detected	5		ug/L	1	99-87-6	
1,3-Dichlorobenzene	Not detected	1		ug/L	1	541-73-1	
1,4-Dichlorobenzene	Not detected	1		ug/L	1	106-46-7	
1,2-Dichlorobenzene	Not detected	1		ug/L	1	95-50-1	
1,2,3-Trimethylbenzene	Not detected	1		ug/L	1	526-73-8	
n-Butylbenzene	Not detected	1		ug/L	1	104-51-8	
1,2-Dibromo-3-chloropropane	Not detected	5		ug/L	1	96-12-8	
1,2,4-Trichlorobenzene	Not detected	5		ug/L	1	120-82-1	
1,2,3-Trichlorobenzene	Not detected	5		ug/L	1	87-61-6	
Naphthalene	Not detected	5		ug/L	1	91-20-3	
Acrolein	Not detected	1		ug/L	1	107-02-8	
2-Chlorotoluene	Not detected	1		ug/L	1	95-49-8	
4-Chlorotoluene	Not detected	1		ug/L	1	106-43-4	
1,3-Dichloropropane	Not detected	1		ug/L	1	142-28-9	
1,1-Dichloropropene	Not detected	1		ug/L	1	563-58-6	
2,2-Dichloropropane	Not detected	1		ug/L	1	594-20-7	
Hexachlorobutadiene	Not detected	1		ug/L	1	87-68-3	
1,1,2-Trichloro-1,2,2-trifluoroethane	Not detected	1		ug/L	1	76-13-1	

Quality Control Report

Report ID: S41718.01(01)+QC01
Generated on 10/28/2022

Report to

Attention: Kelly Cratsenburg
TRC
1540 Eisenhower Place
Ann Arbor, MI 48108

Phone: 734-585-7829 C: 734-412-5424 FAX:

Report Produced by

Merit Laboratories
2680 East Lansing Drive
East Lansing, MI 48823

Phone: (517) 332-0167 FAX: (517) 332-6333

Report Summary

Lab Sample ID(s): S41718.01-S41718.08
Project: 495430.0000.0000 / Detroit Axle EB GW
Submitted Date/Time: 10/21/2022 13:45
Sampled by: Henry Schnaidt
P.O. #: 189445

QC Report Sections

Report Flag Descriptions

*: QC result is outside of indicated control limits
W: Surrogate result not applicable due to sample dilution

I certify that this data package is in compliance with the terms and conditions of the program, and project, and contractual requirements both technically and for completeness. Release of the data contained in this hardcopy data package and its computer-readable data submitted has been authorized by the Quality Assurance Manager and his/her designee, as verified by the following signature.

Barbara Ball
Quality Assurance Manager

Lab Sample ID: S41718.01
Sample Tag: MW-22-01
Collected Date/Time: 10/18/2022 10:17
Matrix: Groundwater
COC Reference: 154860

Analysis	Method	Run Date/Time	Batch ID	Prep ID	Surr	QC Types
Metals						
Aluminum	E200.8	10/24/22 12:48	MT5-22-1024A	MTD-102422-2	No	BLK/LCS/MS/MSD
Antimony	E200.8	10/24/22 12:48	MT5-22-1024A	MTD-102422-2	No	BLK/LCS/MS/MSD
Arsenic	E200.8	10/24/22 12:48	MT5-22-1024A	MTD-102422-2	No	BLK/LCS/MS/MSD
Barium	E200.8	10/24/22 12:48	MT5-22-1024A	MTD-102422-2	No	BLK/LCS/MS/MSD
Beryllium	E200.8	10/24/22 12:48	MT5-22-1024A	MTD-102422-2	No	BLK/LCS/MS/MSD
Boron	E200.8	10/24/22 12:48	MT5-22-1024A	MTD-102422-2	No	BLK/LCS/MS/MSD
Cadmium	E200.8	10/24/22 12:48	MT5-22-1024A	MTD-102422-2	No	BLK/LCS/MS/MSD
Calcium	E200.8	10/24/22 15:04	MT5-22-1024B	MTD-102422-2	No	BLK/LCS/MS/MSD
Chromium	E200.8	10/24/22 12:48	MT5-22-1024A	MTD-102422-2	No	BLK/LCS/MS/MSD
Cobalt	E200.8	10/24/22 12:48	MT5-22-1024A	MTD-102422-2	No	BLK/LCS/MS/MSD
Iron	E200.8	10/24/22 12:48	MT5-22-1024A	MTD-102422-2	No	BLK/LCS/MS/MSD
Lead	E200.8	10/24/22 12:48	MT5-22-1024A	MTD-102422-2	No	BLK/LCS/MS/MSD
Magnesium	E200.8	10/24/22 15:04	MT5-22-1024B	MTD-102422-2	No	BLK/LCS/MS/MSD
Manganese	E200.8	10/24/22 12:48	MT5-22-1024A	MTD-102422-2	No	BLK/LCS/MS/MSD
Mercury	E245.1	10/27/22 22:12	HG-22-1027A	HGD-102722-4	No	BLK/LCS/MS/MSD
Molybdenum	E200.8	10/24/22 12:48	MT5-22-1024A	MTD-102422-2	No	BLK/LCS/MS/MSD
Nickel	E200.8	10/24/22 12:48	MT5-22-1024A	MTD-102422-2	No	BLK/LCS/MS/MSD
Potassium	E200.8	10/24/22 15:04	MT5-22-1024B	MTD-102422-2	No	BLK/LCS/MS/MSD
Selenium	E200.8	10/24/22 12:48	MT5-22-1024A	MTD-102422-2	No	BLK/LCS/MS/MSD
Silver	E200.8	10/24/22 12:48	MT5-22-1024A	MTD-102422-2	No	BLK/LCS/MS/MSD
Sodium	E200.8	10/24/22 15:04	MT5-22-1024B	MTD-102422-2	No	BLK/LCS/MS/MSD
Strontium	E200.8	10/24/22 12:48	MT5-22-1024A	MTD-102422-2	No	BLK/LCS/MS/MSD
Thallium	E200.8	10/24/22 12:48	MT5-22-1024A	MTD-102422-2	No	BLK/LCS/MS/MSD
Titanium	E200.8	10/24/22 12:48	MT5-22-1024A	MTD-102422-2	No	BLK/LCS/MS/MSD
Vanadium	E200.8	10/24/22 12:48	MT5-22-1024A	MTD-102422-2	No	BLK/LCS/MS/MSD
Zinc	E200.8	10/24/22 12:48	MT5-22-1024A	MTD-102422-2	No	BLK/LCS/MS/MSD
Organics - Volatiles						
Volatile Organics	SW5030C/8260C	10/27/22 16:27	221027A7	VF221027W1	Yes	BLK/LCS/LCSD/MS/MS

Lab Sample ID: S41718.02

Sample Tag: MW-22-02

Collected Date/Time: 10/18/2022 12:05

Matrix: Groundwater

COC Reference: 154860

Analysis	Method	Run Date/Time	Batch ID	Prep ID	Surr	QC Types
Metals						
Aluminum	E200.8	10/24/22 12:50	MT5-22-1024A	MTD-102422-2	No	BLK/LCS/MS/MSD
Antimony	E200.8	10/24/22 12:50	MT5-22-1024A	MTD-102422-2	No	BLK/LCS/MS/MSD
Arsenic	E200.8	10/24/22 12:50	MT5-22-1024A	MTD-102422-2	No	BLK/LCS/MS/MSD
Barium	E200.8	10/24/22 12:50	MT5-22-1024A	MTD-102422-2	No	BLK/LCS/MS/MSD
Beryllium	E200.8	10/24/22 12:50	MT5-22-1024A	MTD-102422-2	No	BLK/LCS/MS/MSD
Boron	E200.8	10/24/22 12:50	MT5-22-1024A	MTD-102422-2	No	BLK/LCS/MS/MSD
Cadmium	E200.8	10/24/22 12:50	MT5-22-1024A	MTD-102422-2	No	BLK/LCS/MS/MSD
Calcium	E200.8	10/24/22 15:08	MT5-22-1024B	MTD-102422-2	No	BLK/LCS/MS/MSD
Chromium	E200.8	10/24/22 12:50	MT5-22-1024A	MTD-102422-2	No	BLK/LCS/MS/MSD
Cobalt	E200.8	10/24/22 12:50	MT5-22-1024A	MTD-102422-2	No	BLK/LCS/MS/MSD
Iron	E200.8	10/24/22 12:50	MT5-22-1024A	MTD-102422-2	No	BLK/LCS/MS/MSD
Lead	E200.8	10/24/22 12:50	MT5-22-1024A	MTD-102422-2	No	BLK/LCS/MS/MSD
Magnesium	E200.8	10/24/22 15:08	MT5-22-1024B	MTD-102422-2	No	BLK/LCS/MS/MSD
Manganese	E200.8	10/24/22 12:50	MT5-22-1024A	MTD-102422-2	No	BLK/LCS/MS/MSD
Mercury	E245.1	10/27/22 22:16	HG-22-1027A	HGD-102722-4	No	BLK/LCS/MS/MSD
Molybdenum	E200.8	10/24/22 12:50	MT5-22-1024A	MTD-102422-2	No	BLK/LCS/MS/MSD
Nickel	E200.8	10/24/22 12:50	MT5-22-1024A	MTD-102422-2	No	BLK/LCS/MS/MSD
Potassium	E200.8	10/24/22 15:08	MT5-22-1024B	MTD-102422-2	No	BLK/LCS/MS/MSD
Selenium	E200.8	10/24/22 12:50	MT5-22-1024A	MTD-102422-2	No	BLK/LCS/MS/MSD
Silver	E200.8	10/24/22 12:50	MT5-22-1024A	MTD-102422-2	No	BLK/LCS/MS/MSD
Sodium	E200.8	10/24/22 15:08	MT5-22-1024B	MTD-102422-2	No	BLK/LCS/MS/MSD
Strontium	E200.8	10/24/22 12:50	MT5-22-1024A	MTD-102422-2	No	BLK/LCS/MS/MSD
Thallium	E200.8	10/24/22 12:50	MT5-22-1024A	MTD-102422-2	No	BLK/LCS/MS/MSD
Titanium	E200.8	10/24/22 12:50	MT5-22-1024A	MTD-102422-2	No	BLK/LCS/MS/MSD
Vanadium	E200.8	10/24/22 12:50	MT5-22-1024A	MTD-102422-2	No	BLK/LCS/MS/MSD
Zinc	E200.8	10/24/22 12:50	MT5-22-1024A	MTD-102422-2	No	BLK/LCS/MS/MSD
Organics - Volatiles						
Volatile Organics	SW5030C/8260C	10/27/22 16:50	221027A7	VF221027W1	Yes	BLK/LCS/LCSD/MS/MS

Lab Sample ID: S41718.03
Sample Tag: MW-22-03
Collected Date/Time: 10/19/2022 09:26
Matrix: Groundwater
COC Reference: 154860

Analysis	Method	Run Date/Time	Batch ID	Prep ID	Surr	QC Types
Metals						
Aluminum	E200.8	10/24/22 12:52	MT5-22-1024A	MTD-102422-2	No	BLK/LCS/MS/MSD
Antimony	E200.8	10/24/22 12:52	MT5-22-1024A	MTD-102422-2	No	BLK/LCS/MS/MSD
Arsenic	E200.8	10/24/22 12:52	MT5-22-1024A	MTD-102422-2	No	BLK/LCS/MS/MSD
Barium	E200.8	10/24/22 12:52	MT5-22-1024A	MTD-102422-2	No	BLK/LCS/MS/MSD
Beryllium	E200.8	10/24/22 12:52	MT5-22-1024A	MTD-102422-2	No	BLK/LCS/MS/MSD
Boron	E200.8	10/24/22 12:52	MT5-22-1024A	MTD-102422-2	No	BLK/LCS/MS/MSD
Cadmium	E200.8	10/24/22 12:52	MT5-22-1024A	MTD-102422-2	No	BLK/LCS/MS/MSD
Calcium	E200.8	10/24/22 15:10	MT5-22-1024B	MTD-102422-2	No	BLK/LCS/MS/MSD
Chromium	E200.8	10/24/22 12:52	MT5-22-1024A	MTD-102422-2	No	BLK/LCS/MS/MSD
Cobalt	E200.8	10/24/22 12:52	MT5-22-1024A	MTD-102422-2	No	BLK/LCS/MS/MSD
Iron	E200.8	10/24/22 12:52	MT5-22-1024A	MTD-102422-2	No	BLK/LCS/MS/MSD
Lead	E200.8	10/24/22 12:52	MT5-22-1024A	MTD-102422-2	No	BLK/LCS/MS/MSD
Magnesium	E200.8	10/24/22 15:10	MT5-22-1024B	MTD-102422-2	No	BLK/LCS/MS/MSD
Manganese	E200.8	10/24/22 12:52	MT5-22-1024A	MTD-102422-2	No	BLK/LCS/MS/MSD
Mercury	E245.1	10/27/22 22:20	HG-22-1027A	HGD-102722-4	No	BLK/LCS/MS/MSD
Molybdenum	E200.8	10/24/22 12:52	MT5-22-1024A	MTD-102422-2	No	BLK/LCS/MS/MSD
Nickel	E200.8	10/24/22 12:52	MT5-22-1024A	MTD-102422-2	No	BLK/LCS/MS/MSD
Potassium	E200.8	10/24/22 15:10	MT5-22-1024B	MTD-102422-2	No	BLK/LCS/MS/MSD
Selenium	E200.8	10/24/22 12:52	MT5-22-1024A	MTD-102422-2	No	BLK/LCS/MS/MSD
Silver	E200.8	10/24/22 12:52	MT5-22-1024A	MTD-102422-2	No	BLK/LCS/MS/MSD
Sodium	E200.8	10/24/22 15:10	MT5-22-1024B	MTD-102422-2	No	BLK/LCS/MS/MSD
Strontium	E200.8	10/24/22 12:52	MT5-22-1024A	MTD-102422-2	No	BLK/LCS/MS/MSD
Thallium	E200.8	10/24/22 12:52	MT5-22-1024A	MTD-102422-2	No	BLK/LCS/MS/MSD
Titanium	E200.8	10/24/22 12:52	MT5-22-1024A	MTD-102422-2	No	BLK/LCS/MS/MSD
Vanadium	E200.8	10/24/22 12:52	MT5-22-1024A	MTD-102422-2	No	BLK/LCS/MS/MSD
Zinc	E200.8	10/24/22 12:52	MT5-22-1024A	MTD-102422-2	No	BLK/LCS/MS/MSD
Organics - Volatiles						
Volatile Organics	SW5030C/8260C	10/27/22 17:13	221027A7	VF221027W1	Yes	BLK/LCS/LCSD/MS/MS

Lab Sample ID: S41718.04
Sample Tag: MW-22-04
Collected Date/Time: 10/20/2022 10:43
Matrix: Groundwater
COC Reference: 154860

Analysis	Method	Run Date/Time	Batch ID	Prep ID	Surr	QC Types
Metals						
Aluminum	E200.8	10/24/22 12:54	MT5-22-1024A	MTD-102422-2	No	BLK/LCS/MS/MSD
Antimony	E200.8	10/24/22 12:54	MT5-22-1024A	MTD-102422-2	No	BLK/LCS/MS/MSD
Arsenic	E200.8	10/24/22 12:54	MT5-22-1024A	MTD-102422-2	No	BLK/LCS/MS/MSD
Barium	E200.8	10/24/22 12:54	MT5-22-1024A	MTD-102422-2	No	BLK/LCS/MS/MSD
Beryllium	E200.8	10/24/22 12:54	MT5-22-1024A	MTD-102422-2	No	BLK/LCS/MS/MSD
Boron	E200.8	10/24/22 12:54	MT5-22-1024A	MTD-102422-2	No	BLK/LCS/MS/MSD
Cadmium	E200.8	10/24/22 12:54	MT5-22-1024A	MTD-102422-2	No	BLK/LCS/MS/MSD
Calcium	E200.8	10/24/22 15:11	MT5-22-1024B	MTD-102422-2	No	BLK/LCS/MS/MSD
Chromium	E200.8	10/24/22 12:54	MT5-22-1024A	MTD-102422-2	No	BLK/LCS/MS/MSD
Cobalt	E200.8	10/24/22 12:54	MT5-22-1024A	MTD-102422-2	No	BLK/LCS/MS/MSD
Iron	E200.8	10/24/22 12:54	MT5-22-1024A	MTD-102422-2	No	BLK/LCS/MS/MSD
Lead	E200.8	10/24/22 12:54	MT5-22-1024A	MTD-102422-2	No	BLK/LCS/MS/MSD
Magnesium	E200.8	10/24/22 15:11	MT5-22-1024B	MTD-102422-2	No	BLK/LCS/MS/MSD
Manganese	E200.8	10/24/22 12:54	MT5-22-1024A	MTD-102422-2	No	BLK/LCS/MS/MSD
Mercury	E245.1	10/27/22 22:24	HG-22-1027A	HGD-102722-4	No	BLK/LCS/MS/MSD
Molybdenum	E200.8	10/24/22 12:54	MT5-22-1024A	MTD-102422-2	No	BLK/LCS/MS/MSD
Nickel	E200.8	10/24/22 12:54	MT5-22-1024A	MTD-102422-2	No	BLK/LCS/MS/MSD
Potassium	E200.8	10/24/22 15:11	MT5-22-1024B	MTD-102422-2	No	BLK/LCS/MS/MSD
Selenium	E200.8	10/24/22 12:54	MT5-22-1024A	MTD-102422-2	No	BLK/LCS/MS/MSD
Silver	E200.8	10/24/22 12:54	MT5-22-1024A	MTD-102422-2	No	BLK/LCS/MS/MSD
Sodium	E200.8	10/24/22 15:11	MT5-22-1024B	MTD-102422-2	No	BLK/LCS/MS/MSD
Strontium	E200.8	10/24/22 12:54	MT5-22-1024A	MTD-102422-2	No	BLK/LCS/MS/MSD
Thallium	E200.8	10/24/22 12:54	MT5-22-1024A	MTD-102422-2	No	BLK/LCS/MS/MSD
Titanium	E200.8	10/24/22 12:54	MT5-22-1024A	MTD-102422-2	No	BLK/LCS/MS/MSD
Vanadium	E200.8	10/24/22 12:54	MT5-22-1024A	MTD-102422-2	No	BLK/LCS/MS/MSD
Zinc	E200.8	10/24/22 12:54	MT5-22-1024A	MTD-102422-2	No	BLK/LCS/MS/MSD
Organics - Volatiles						
Volatile Organics	SW5030C/8260C	10/27/22 17:37	221027A7	VF221027W1	Yes	BLK/LCS/LCSD/MS/MS

Lab Sample ID: S41718.05
Sample Tag: MW-22-05
Collected Date/Time: 10/20/2022 11:59
Matrix: Groundwater
COC Reference: 154860

Analysis	Method	Run Date/Time	Batch ID	Prep ID	Surr	QC Types
Metals						
Aluminum	E200.8	10/24/22 12:56	MT5-22-1024A	MTD-102422-2	No	BLK/LCS/MS/MSD
Antimony	E200.8	10/24/22 12:56	MT5-22-1024A	MTD-102422-2	No	BLK/LCS/MS/MSD
Arsenic	E200.8	10/24/22 12:56	MT5-22-1024A	MTD-102422-2	No	BLK/LCS/MS/MSD
Barium	E200.8	10/24/22 12:56	MT5-22-1024A	MTD-102422-2	No	BLK/LCS/MS/MSD
Beryllium	E200.8	10/24/22 12:56	MT5-22-1024A	MTD-102422-2	No	BLK/LCS/MS/MSD
Boron	E200.8	10/24/22 12:56	MT5-22-1024A	MTD-102422-2	No	BLK/LCS/MS/MSD
Cadmium	E200.8	10/24/22 12:56	MT5-22-1024A	MTD-102422-2	No	BLK/LCS/MS/MSD
Calcium	E200.8	10/24/22 15:12	MT5-22-1024B	MTD-102422-2	No	BLK/LCS/MS/MSD
Chromium	E200.8	10/24/22 12:56	MT5-22-1024A	MTD-102422-2	No	BLK/LCS/MS/MSD
Cobalt	E200.8	10/24/22 12:56	MT5-22-1024A	MTD-102422-2	No	BLK/LCS/MS/MSD
Iron	E200.8	10/24/22 12:56	MT5-22-1024A	MTD-102422-2	No	BLK/LCS/MS/MSD
Lead	E200.8	10/24/22 12:56	MT5-22-1024A	MTD-102422-2	No	BLK/LCS/MS/MSD
Magnesium	E200.8	10/24/22 15:12	MT5-22-1024B	MTD-102422-2	No	BLK/LCS/MS/MSD
Manganese	E200.8	10/24/22 12:56	MT5-22-1024A	MTD-102422-2	No	BLK/LCS/MS/MSD
Mercury	E245.1	10/27/22 22:28	HG-22-1027A	HGD-102722-4	No	BLK/LCS/MS/MSD
Molybdenum	E200.8	10/24/22 12:56	MT5-22-1024A	MTD-102422-2	No	BLK/LCS/MS/MSD
Nickel	E200.8	10/24/22 12:56	MT5-22-1024A	MTD-102422-2	No	BLK/LCS/MS/MSD
Potassium	E200.8	10/24/22 15:12	MT5-22-1024B	MTD-102422-2	No	BLK/LCS/MS/MSD
Selenium	E200.8	10/24/22 12:56	MT5-22-1024A	MTD-102422-2	No	BLK/LCS/MS/MSD
Silver	E200.8	10/24/22 12:56	MT5-22-1024A	MTD-102422-2	No	BLK/LCS/MS/MSD
Sodium	E200.8	10/24/22 15:12	MT5-22-1024B	MTD-102422-2	No	BLK/LCS/MS/MSD
Strontium	E200.8	10/24/22 12:56	MT5-22-1024A	MTD-102422-2	No	BLK/LCS/MS/MSD
Thallium	E200.8	10/24/22 12:56	MT5-22-1024A	MTD-102422-2	No	BLK/LCS/MS/MSD
Titanium	E200.8	10/24/22 12:56	MT5-22-1024A	MTD-102422-2	No	BLK/LCS/MS/MSD
Vanadium	E200.8	10/24/22 12:56	MT5-22-1024A	MTD-102422-2	No	BLK/LCS/MS/MSD
Zinc	E200.8	10/24/22 12:56	MT5-22-1024A	MTD-102422-2	No	BLK/LCS/MS/MSD
Organics - Volatiles						
Volatile Organics	SW5030C/8260C	10/27/22 18:00	221027A7	VF221027W1	Yes	BLK/LCS/LCSD/MS/MS

Lab Sample ID: S41718.06

Sample Tag: MW-22-06

Collected Date/Time: 10/20/2022 12:58

Matrix: Groundwater

COC Reference: 154860

Analysis	Method	Run Date/Time	Batch ID	Prep ID	Surr	QC Types
Metals						
Aluminum	E200.8	10/24/22 12:58	MT5-22-1024A	MTD-102422-2	No	BLK/LCS/MS/MSD
Antimony	E200.8	10/24/22 12:58	MT5-22-1024A	MTD-102422-2	No	BLK/LCS/MS/MSD
Arsenic	E200.8	10/24/22 12:58	MT5-22-1024A	MTD-102422-2	No	BLK/LCS/MS/MSD
Barium	E200.8	10/24/22 12:58	MT5-22-1024A	MTD-102422-2	No	BLK/LCS/MS/MSD
Beryllium	E200.8	10/24/22 12:58	MT5-22-1024A	MTD-102422-2	No	BLK/LCS/MS/MSD
Boron	E200.8	10/24/22 12:58	MT5-22-1024A	MTD-102422-2	No	BLK/LCS/MS/MSD
Cadmium	E200.8	10/24/22 12:58	MT5-22-1024A	MTD-102422-2	No	BLK/LCS/MS/MSD
Calcium	E200.8	10/24/22 15:13	MT5-22-1024B	MTD-102422-2	No	BLK/LCS/MS/MSD
Chromium	E200.8	10/24/22 12:58	MT5-22-1024A	MTD-102422-2	No	BLK/LCS/MS/MSD
Cobalt	E200.8	10/24/22 12:58	MT5-22-1024A	MTD-102422-2	No	BLK/LCS/MS/MSD
Iron	E200.8	10/24/22 12:58	MT5-22-1024A	MTD-102422-2	No	BLK/LCS/MS/MSD
Lead	E200.8	10/24/22 12:58	MT5-22-1024A	MTD-102422-2	No	BLK/LCS/MS/MSD
Magnesium	E200.8	10/24/22 15:13	MT5-22-1024B	MTD-102422-2	No	BLK/LCS/MS/MSD
Manganese	E200.8	10/24/22 12:58	MT5-22-1024A	MTD-102422-2	No	BLK/LCS/MS/MSD
Mercury	E245.1	10/27/22 22:32	HG-22-1027A	HGD-102722-4	No	BLK/LCS/MS/MSD
Molybdenum	E200.8	10/24/22 12:58	MT5-22-1024A	MTD-102422-2	No	BLK/LCS/MS/MSD
Nickel	E200.8	10/24/22 12:58	MT5-22-1024A	MTD-102422-2	No	BLK/LCS/MS/MSD
Potassium	E200.8	10/24/22 15:13	MT5-22-1024B	MTD-102422-2	No	BLK/LCS/MS/MSD
Selenium	E200.8	10/24/22 12:58	MT5-22-1024A	MTD-102422-2	No	BLK/LCS/MS/MSD
Silver	E200.8	10/24/22 12:58	MT5-22-1024A	MTD-102422-2	No	BLK/LCS/MS/MSD
Sodium	E200.8	10/24/22 15:13	MT5-22-1024B	MTD-102422-2	No	BLK/LCS/MS/MSD
Strontium	E200.8	10/24/22 12:58	MT5-22-1024A	MTD-102422-2	No	BLK/LCS/MS/MSD
Thallium	E200.8	10/24/22 12:58	MT5-22-1024A	MTD-102422-2	No	BLK/LCS/MS/MSD
Titanium	E200.8	10/24/22 12:58	MT5-22-1024A	MTD-102422-2	No	BLK/LCS/MS/MSD
Vanadium	E200.8	10/24/22 12:58	MT5-22-1024A	MTD-102422-2	No	BLK/LCS/MS/MSD
Zinc	E200.8	10/24/22 12:58	MT5-22-1024A	MTD-102422-2	No	BLK/LCS/MS/MSD
Organics - Volatiles						
Volatile Organics	SW5030C/8260C	10/27/22 18:23	221027A7	VF221027W1	Yes	BLK/LCS/LCSD/MS/MS

Lab Sample ID: S41718.07

Sample Tag: Dup-01

Collected Date/Time: 10/18/2022 00:01

Matrix: Groundwater

COC Reference: 154860

Analysis	Method	Run Date/Time	Batch ID	Prep ID	Surr	QC Types
Metals						
Aluminum	E200.8	10/24/22 13:00	MT5-22-1024A	MTD-102422-2	No	BLK/LCS/MS/MSD
Antimony	E200.8	10/24/22 13:00	MT5-22-1024A	MTD-102422-2	No	BLK/LCS/MS/MSD
Arsenic	E200.8	10/24/22 13:00	MT5-22-1024A	MTD-102422-2	No	BLK/LCS/MS/MSD
Barium	E200.8	10/24/22 13:00	MT5-22-1024A	MTD-102422-2	No	BLK/LCS/MS/MSD
Beryllium	E200.8	10/24/22 13:00	MT5-22-1024A	MTD-102422-2	No	BLK/LCS/MS/MSD
Boron	E200.8	10/24/22 13:00	MT5-22-1024A	MTD-102422-2	No	BLK/LCS/MS/MSD
Cadmium	E200.8	10/24/22 13:00	MT5-22-1024A	MTD-102422-2	No	BLK/LCS/MS/MSD
Calcium	E200.8	10/24/22 15:15	MT5-22-1024B	MTD-102422-2	No	BLK/LCS/MS/MSD
Chromium	E200.8	10/24/22 13:00	MT5-22-1024A	MTD-102422-2	No	BLK/LCS/MS/MSD
Cobalt	E200.8	10/24/22 13:00	MT5-22-1024A	MTD-102422-2	No	BLK/LCS/MS/MSD
Iron	E200.8	10/24/22 13:00	MT5-22-1024A	MTD-102422-2	No	BLK/LCS/MS/MSD
Lead	E200.8	10/24/22 13:00	MT5-22-1024A	MTD-102422-2	No	BLK/LCS/MS/MSD
Magnesium	E200.8	10/24/22 15:15	MT5-22-1024B	MTD-102422-2	No	BLK/LCS/MS/MSD
Manganese	E200.8	10/24/22 13:00	MT5-22-1024A	MTD-102422-2	No	BLK/LCS/MS/MSD
Mercury	E245.1	10/27/22 22:36	HG-22-1027A	HGD-102722-4	No	BLK/LCS/MS/MSD
Molybdenum	E200.8	10/24/22 13:00	MT5-22-1024A	MTD-102422-2	No	BLK/LCS/MS/MSD
Nickel	E200.8	10/24/22 13:00	MT5-22-1024A	MTD-102422-2	No	BLK/LCS/MS/MSD
Potassium	E200.8	10/24/22 15:15	MT5-22-1024B	MTD-102422-2	No	BLK/LCS/MS/MSD
Selenium	E200.8	10/24/22 13:00	MT5-22-1024A	MTD-102422-2	No	BLK/LCS/MS/MSD
Silver	E200.8	10/24/22 13:00	MT5-22-1024A	MTD-102422-2	No	BLK/LCS/MS/MSD
Sodium	E200.8	10/24/22 15:15	MT5-22-1024B	MTD-102422-2	No	BLK/LCS/MS/MSD
Strontium	E200.8	10/24/22 13:00	MT5-22-1024A	MTD-102422-2	No	BLK/LCS/MS/MSD
Thallium	E200.8	10/24/22 13:00	MT5-22-1024A	MTD-102422-2	No	BLK/LCS/MS/MSD
Titanium	E200.8	10/24/22 13:00	MT5-22-1024A	MTD-102422-2	No	BLK/LCS/MS/MSD
Vanadium	E200.8	10/24/22 13:00	MT5-22-1024A	MTD-102422-2	No	BLK/LCS/MS/MSD
Zinc	E200.8	10/24/22 13:00	MT5-22-1024A	MTD-102422-2	No	BLK/LCS/MS/MSD
Organics - Volatiles						
Volatile Organics	SW5030C/8260C	10/27/22 18:47	221027A7	VF221027W1	Yes	BLK/LCS/LCSD/MS/MS

Lab Sample ID: S41718.08

Sample Tag: Trip Blank

Collected Date/Time: 10/20/2022 00:01

Matrix: Water

COC Reference: 154860

Analysis	Method	Run Date/Time	Batch ID	Prep ID	Surr	QC Types
Organics - Volatiles						
Volatile Organics	SW5030C/8260C	10/27/22 15:39	221027A7	VF221027W1	Yes	BLK/LCS/LCSD/MS/MS

Metals, Prep Batch ID: HGD-102722-4

Surrogates: No, QC Types: BLK/LCS/MS/MSD

Sample ID	Analysis	Method	Run Date/Time	Batch ID
S41718.01	Mercury	E245.1	10/27/22 22:12	HG-22-1027A
S41718.02	Mercury	E245.1	10/27/22 22:16	HG-22-1027A
S41718.03	Mercury	E245.1	10/27/22 22:20	HG-22-1027A
S41718.04	Mercury	E245.1	10/27/22 22:24	HG-22-1027A
S41718.05	Mercury	E245.1	10/27/22 22:28	HG-22-1027A
S41718.06	Mercury	E245.1	10/27/22 22:32	HG-22-1027A
S41718.07	Mercury	E245.1	10/27/22 22:36	HG-22-1027A

Metals, Prep Batch ID: MTD-102422-2

Surrogates: No, QC Types: BLK/LCS/MS/MSD

Sample ID	Analysis	Method	Run Date/Time	Batch ID
S41718.01	Aluminum	E200.8	10/24/22 12:48	MT5-22-1024A
S41718.01	Antimony	E200.8	10/24/22 12:48	MT5-22-1024A
S41718.01	Arsenic	E200.8	10/24/22 12:48	MT5-22-1024A
S41718.01	Barium	E200.8	10/24/22 12:48	MT5-22-1024A
S41718.01	Beryllium	E200.8	10/24/22 12:48	MT5-22-1024A
S41718.01	Boron	E200.8	10/24/22 12:48	MT5-22-1024A
S41718.01	Cadmium	E200.8	10/24/22 12:48	MT5-22-1024A
S41718.01	Calcium	E200.8	10/24/22 15:04	MT5-22-1024B
S41718.01	Chromium	E200.8	10/24/22 12:48	MT5-22-1024A
S41718.01	Cobalt	E200.8	10/24/22 12:48	MT5-22-1024A
S41718.01	Iron	E200.8	10/24/22 12:48	MT5-22-1024A
S41718.01	Lead	E200.8	10/24/22 12:48	MT5-22-1024A
S41718.01	Magnesium	E200.8	10/24/22 15:04	MT5-22-1024B
S41718.01	Manganese	E200.8	10/24/22 12:48	MT5-22-1024A
S41718.01	Molybdenum	E200.8	10/24/22 12:48	MT5-22-1024A
S41718.01	Nickel	E200.8	10/24/22 12:48	MT5-22-1024A
S41718.01	Potassium	E200.8	10/24/22 15:04	MT5-22-1024B
S41718.01	Selenium	E200.8	10/24/22 12:48	MT5-22-1024A
S41718.01	Silver	E200.8	10/24/22 12:48	MT5-22-1024A
S41718.01	Sodium	E200.8	10/24/22 15:04	MT5-22-1024B
S41718.01	Strontium	E200.8	10/24/22 12:48	MT5-22-1024A
S41718.01	Thallium	E200.8	10/24/22 12:48	MT5-22-1024A
S41718.01	Titanium	E200.8	10/24/22 12:48	MT5-22-1024A
S41718.01	Vanadium	E200.8	10/24/22 12:48	MT5-22-1024A
S41718.01	Zinc	E200.8	10/24/22 12:48	MT5-22-1024A
S41718.02	Aluminum	E200.8	10/24/22 12:50	MT5-22-1024A
S41718.02	Antimony	E200.8	10/24/22 12:50	MT5-22-1024A
S41718.02	Arsenic	E200.8	10/24/22 12:50	MT5-22-1024A
S41718.02	Barium	E200.8	10/24/22 12:50	MT5-22-1024A
S41718.02	Beryllium	E200.8	10/24/22 12:50	MT5-22-1024A
S41718.02	Boron	E200.8	10/24/22 12:50	MT5-22-1024A
S41718.02	Cadmium	E200.8	10/24/22 12:50	MT5-22-1024A
S41718.02	Calcium	E200.8	10/24/22 15:08	MT5-22-1024B
S41718.02	Chromium	E200.8	10/24/22 12:50	MT5-22-1024A
S41718.02	Cobalt	E200.8	10/24/22 12:50	MT5-22-1024A
S41718.02	Iron	E200.8	10/24/22 12:50	MT5-22-1024A
S41718.02	Lead	E200.8	10/24/22 12:50	MT5-22-1024A
S41718.02	Magnesium	E200.8	10/24/22 15:08	MT5-22-1024B
S41718.02	Manganese	E200.8	10/24/22 12:50	MT5-22-1024A

Metals, Prep Batch ID: MTD-102422-2 (continued)

Surrogates: No, QC Types: BLK/LCS/MS/MSD

Sample ID	Analysis	Method	Run Date/Time	Batch ID
S41718.02	Molybdenum	E200.8	10/24/22 12:50	MT5-22-1024A
S41718.02	Nickel	E200.8	10/24/22 12:50	MT5-22-1024A
S41718.02	Potassium	E200.8	10/24/22 15:08	MT5-22-1024B
S41718.02	Selenium	E200.8	10/24/22 12:50	MT5-22-1024A
S41718.02	Silver	E200.8	10/24/22 12:50	MT5-22-1024A
S41718.02	Sodium	E200.8	10/24/22 15:08	MT5-22-1024B
S41718.02	Strontium	E200.8	10/24/22 12:50	MT5-22-1024A
S41718.02	Thallium	E200.8	10/24/22 12:50	MT5-22-1024A
S41718.02	Titanium	E200.8	10/24/22 12:50	MT5-22-1024A
S41718.02	Vanadium	E200.8	10/24/22 12:50	MT5-22-1024A
S41718.02	Zinc	E200.8	10/24/22 12:50	MT5-22-1024A
S41718.03	Aluminum	E200.8	10/24/22 12:52	MT5-22-1024A
S41718.03	Antimony	E200.8	10/24/22 12:52	MT5-22-1024A
S41718.03	Arsenic	E200.8	10/24/22 12:52	MT5-22-1024A
S41718.03	Barium	E200.8	10/24/22 12:52	MT5-22-1024A
S41718.03	Beryllium	E200.8	10/24/22 12:52	MT5-22-1024A
S41718.03	Boron	E200.8	10/24/22 12:52	MT5-22-1024A
S41718.03	Cadmium	E200.8	10/24/22 12:52	MT5-22-1024A
S41718.03	Calcium	E200.8	10/24/22 15:10	MT5-22-1024B
S41718.03	Chromium	E200.8	10/24/22 12:52	MT5-22-1024A
S41718.03	Cobalt	E200.8	10/24/22 12:52	MT5-22-1024A
S41718.03	Iron	E200.8	10/24/22 12:52	MT5-22-1024A
S41718.03	Lead	E200.8	10/24/22 12:52	MT5-22-1024A
S41718.03	Magnesium	E200.8	10/24/22 15:10	MT5-22-1024B
S41718.03	Manganese	E200.8	10/24/22 12:52	MT5-22-1024A
S41718.03	Molybdenum	E200.8	10/24/22 12:52	MT5-22-1024A
S41718.03	Nickel	E200.8	10/24/22 12:52	MT5-22-1024A
S41718.03	Potassium	E200.8	10/24/22 15:10	MT5-22-1024B
S41718.03	Selenium	E200.8	10/24/22 12:52	MT5-22-1024A
S41718.03	Silver	E200.8	10/24/22 12:52	MT5-22-1024A
S41718.03	Sodium	E200.8	10/24/22 15:10	MT5-22-1024B
S41718.03	Strontium	E200.8	10/24/22 12:52	MT5-22-1024A
S41718.03	Thallium	E200.8	10/24/22 12:52	MT5-22-1024A
S41718.03	Titanium	E200.8	10/24/22 12:52	MT5-22-1024A
S41718.03	Vanadium	E200.8	10/24/22 12:52	MT5-22-1024A
S41718.03	Zinc	E200.8	10/24/22 12:52	MT5-22-1024A
S41718.04	Aluminum	E200.8	10/24/22 12:54	MT5-22-1024A
S41718.04	Antimony	E200.8	10/24/22 12:54	MT5-22-1024A
S41718.04	Arsenic	E200.8	10/24/22 12:54	MT5-22-1024A
S41718.04	Barium	E200.8	10/24/22 12:54	MT5-22-1024A
S41718.04	Beryllium	E200.8	10/24/22 12:54	MT5-22-1024A
S41718.04	Boron	E200.8	10/24/22 12:54	MT5-22-1024A
S41718.04	Cadmium	E200.8	10/24/22 12:54	MT5-22-1024A
S41718.04	Calcium	E200.8	10/24/22 15:11	MT5-22-1024B
S41718.04	Chromium	E200.8	10/24/22 12:54	MT5-22-1024A
S41718.04	Cobalt	E200.8	10/24/22 12:54	MT5-22-1024A
S41718.04	Iron	E200.8	10/24/22 12:54	MT5-22-1024A
S41718.04	Lead	E200.8	10/24/22 12:54	MT5-22-1024A
S41718.04	Magnesium	E200.8	10/24/22 15:11	MT5-22-1024B

Metals, Prep Batch ID: MTD-102422-2 (continued)

Surrogates: No, QC Types: BLK/LCS/MS/MSD

Sample ID	Analysis	Method	Run Date/Time	Batch ID
S41718.04	Manganese	E200.8	10/24/22 12:54	MT5-22-1024A
S41718.04	Molybdenum	E200.8	10/24/22 12:54	MT5-22-1024A
S41718.04	Nickel	E200.8	10/24/22 12:54	MT5-22-1024A
S41718.04	Potassium	E200.8	10/24/22 15:11	MT5-22-1024B
S41718.04	Selenium	E200.8	10/24/22 12:54	MT5-22-1024A
S41718.04	Silver	E200.8	10/24/22 12:54	MT5-22-1024A
S41718.04	Sodium	E200.8	10/24/22 15:11	MT5-22-1024B
S41718.04	Strontium	E200.8	10/24/22 12:54	MT5-22-1024A
S41718.04	Thallium	E200.8	10/24/22 12:54	MT5-22-1024A
S41718.04	Titanium	E200.8	10/24/22 12:54	MT5-22-1024A
S41718.04	Vanadium	E200.8	10/24/22 12:54	MT5-22-1024A
S41718.04	Zinc	E200.8	10/24/22 12:54	MT5-22-1024A
S41718.05	Aluminum	E200.8	10/24/22 12:56	MT5-22-1024A
S41718.05	Antimony	E200.8	10/24/22 12:56	MT5-22-1024A
S41718.05	Arsenic	E200.8	10/24/22 12:56	MT5-22-1024A
S41718.05	Barium	E200.8	10/24/22 12:56	MT5-22-1024A
S41718.05	Beryllium	E200.8	10/24/22 12:56	MT5-22-1024A
S41718.05	Boron	E200.8	10/24/22 12:56	MT5-22-1024A
S41718.05	Cadmium	E200.8	10/24/22 12:56	MT5-22-1024A
S41718.05	Calcium	E200.8	10/24/22 15:12	MT5-22-1024B
S41718.05	Chromium	E200.8	10/24/22 12:56	MT5-22-1024A
S41718.05	Cobalt	E200.8	10/24/22 12:56	MT5-22-1024A
S41718.05	Iron	E200.8	10/24/22 12:56	MT5-22-1024A
S41718.05	Lead	E200.8	10/24/22 12:56	MT5-22-1024A
S41718.05	Magnesium	E200.8	10/24/22 15:12	MT5-22-1024B
S41718.05	Manganese	E200.8	10/24/22 12:56	MT5-22-1024A
S41718.05	Molybdenum	E200.8	10/24/22 12:56	MT5-22-1024A
S41718.05	Nickel	E200.8	10/24/22 12:56	MT5-22-1024A
S41718.05	Potassium	E200.8	10/24/22 15:12	MT5-22-1024B
S41718.05	Selenium	E200.8	10/24/22 12:56	MT5-22-1024A
S41718.05	Silver	E200.8	10/24/22 12:56	MT5-22-1024A
S41718.05	Sodium	E200.8	10/24/22 15:12	MT5-22-1024B
S41718.05	Strontium	E200.8	10/24/22 12:56	MT5-22-1024A
S41718.05	Thallium	E200.8	10/24/22 12:56	MT5-22-1024A
S41718.05	Titanium	E200.8	10/24/22 12:56	MT5-22-1024A
S41718.05	Vanadium	E200.8	10/24/22 12:56	MT5-22-1024A
S41718.05	Zinc	E200.8	10/24/22 12:56	MT5-22-1024A
S41718.06	Aluminum	E200.8	10/24/22 12:58	MT5-22-1024A
S41718.06	Antimony	E200.8	10/24/22 12:58	MT5-22-1024A
S41718.06	Arsenic	E200.8	10/24/22 12:58	MT5-22-1024A
S41718.06	Barium	E200.8	10/24/22 12:58	MT5-22-1024A
S41718.06	Beryllium	E200.8	10/24/22 12:58	MT5-22-1024A
S41718.06	Boron	E200.8	10/24/22 12:58	MT5-22-1024A
S41718.06	Cadmium	E200.8	10/24/22 12:58	MT5-22-1024A
S41718.06	Calcium	E200.8	10/24/22 15:13	MT5-22-1024B
S41718.06	Chromium	E200.8	10/24/22 12:58	MT5-22-1024A
S41718.06	Cobalt	E200.8	10/24/22 12:58	MT5-22-1024A
S41718.06	Iron	E200.8	10/24/22 12:58	MT5-22-1024A
S41718.06	Lead	E200.8	10/24/22 12:58	MT5-22-1024A

Metals, Prep Batch ID: MTD-102422-2 (continued)

Surrogates: No, QC Types: BLK/LCS/MS/MSD

Sample ID	Analysis	Method	Run Date/Time	Batch ID
S41718.06	Magnesium	E200.8	10/24/22 15:13	MT5-22-1024B
S41718.06	Manganese	E200.8	10/24/22 12:58	MT5-22-1024A
S41718.06	Molybdenum	E200.8	10/24/22 12:58	MT5-22-1024A
S41718.06	Nickel	E200.8	10/24/22 12:58	MT5-22-1024A
S41718.06	Potassium	E200.8	10/24/22 15:13	MT5-22-1024B
S41718.06	Selenium	E200.8	10/24/22 12:58	MT5-22-1024A
S41718.06	Silver	E200.8	10/24/22 12:58	MT5-22-1024A
S41718.06	Sodium	E200.8	10/24/22 15:13	MT5-22-1024B
S41718.06	Strontium	E200.8	10/24/22 12:58	MT5-22-1024A
S41718.06	Thallium	E200.8	10/24/22 12:58	MT5-22-1024A
S41718.06	Titanium	E200.8	10/24/22 12:58	MT5-22-1024A
S41718.06	Vanadium	E200.8	10/24/22 12:58	MT5-22-1024A
S41718.06	Zinc	E200.8	10/24/22 12:58	MT5-22-1024A
S41718.07	Aluminum	E200.8	10/24/22 13:00	MT5-22-1024A
S41718.07	Antimony	E200.8	10/24/22 13:00	MT5-22-1024A
S41718.07	Arsenic	E200.8	10/24/22 13:00	MT5-22-1024A
S41718.07	Barium	E200.8	10/24/22 13:00	MT5-22-1024A
S41718.07	Beryllium	E200.8	10/24/22 13:00	MT5-22-1024A
S41718.07	Boron	E200.8	10/24/22 13:00	MT5-22-1024A
S41718.07	Cadmium	E200.8	10/24/22 13:00	MT5-22-1024A
S41718.07	Calcium	E200.8	10/24/22 15:15	MT5-22-1024B
S41718.07	Chromium	E200.8	10/24/22 13:00	MT5-22-1024A
S41718.07	Cobalt	E200.8	10/24/22 13:00	MT5-22-1024A
S41718.07	Iron	E200.8	10/24/22 13:00	MT5-22-1024A
S41718.07	Lead	E200.8	10/24/22 13:00	MT5-22-1024A
S41718.07	Magnesium	E200.8	10/24/22 15:15	MT5-22-1024B
S41718.07	Manganese	E200.8	10/24/22 13:00	MT5-22-1024A
S41718.07	Molybdenum	E200.8	10/24/22 13:00	MT5-22-1024A
S41718.07	Nickel	E200.8	10/24/22 13:00	MT5-22-1024A
S41718.07	Potassium	E200.8	10/24/22 15:15	MT5-22-1024B
S41718.07	Selenium	E200.8	10/24/22 13:00	MT5-22-1024A
S41718.07	Silver	E200.8	10/24/22 13:00	MT5-22-1024A
S41718.07	Sodium	E200.8	10/24/22 15:15	MT5-22-1024B
S41718.07	Strontium	E200.8	10/24/22 13:00	MT5-22-1024A
S41718.07	Thallium	E200.8	10/24/22 13:00	MT5-22-1024A
S41718.07	Titanium	E200.8	10/24/22 13:00	MT5-22-1024A
S41718.07	Vanadium	E200.8	10/24/22 13:00	MT5-22-1024A
S41718.07	Zinc	E200.8	10/24/22 13:00	MT5-22-1024A

Organics - Volatiles, Prep Batch ID: VF221027W1

Surrogates: Yes, QC Types: BLK/LCS/LCSD/MS/MSD

Sample ID	Analysis	Method	Run Date/Time	Batch ID
S41718.01	Volatile Organics	SW5030C/8260C	10/27/22 16:27	221027A7
S41718.02	Volatile Organics	SW5030C/8260C	10/27/22 16:50	221027A7
S41718.03	Volatile Organics	SW5030C/8260C	10/27/22 17:13	221027A7
S41718.04	Volatile Organics	SW5030C/8260C	10/27/22 17:37	221027A7
S41718.05	Volatile Organics	SW5030C/8260C	10/27/22 18:00	221027A7
S41718.06	Volatile Organics	SW5030C/8260C	10/27/22 18:23	221027A7
S41718.07	Volatile Organics	SW5030C/8260C	10/27/22 18:47	221027A7

Organics - Volatiles, Prep Batch ID: VF221027W1 (continued)

Surrogates: Yes, QC Types: BLK/LCS/LCSD/MS/MSD

Sample ID	Analysis	Method	Run Date/Time	Batch ID
S41718.08	Volatile Organics	SW5030C/8260C	10/27/22 15:39	221027A7

QC Report - Surrogates per Lab Sample

Lab Sample ID: S41718.01

Sample Tag: MW-22-01

Collected Date/Time: 10/18/2022 10:17

Matrix: Groundwater

COC Reference: 154860

Organics - Volatiles, Analysis: Volatile Organics

Run in Batch: 221027A7, Run Date: 10/27/2022 16:27, Matrix: WW, Dilution: 1

Surrogate	Flags	**%Rec**	LCL	UCL
4-Bromofluorobenzene		**97.7**	80.0	124.0
1,2-Dichloroethane-D4		**102.3**	72.0	125.0
Toluene-D8		**100.5**	89.0	112.0

QC Report - Surrogates per Lab Sample

Lab Sample ID: S41718.02

Sample Tag: MW-22-02

Collected Date/Time: 10/18/2022 12:05

Matrix: Groundwater

COC Reference: 154860

Organics - Volatiles, Analysis: Volatile Organics

Run in Batch: 221027A7, Run Date: 10/27/2022 16:50, Matrix: WW, Dilution: 1

Surrogate	Flags	**%Rec**	LCL	UCL
4-Bromofluorobenzene		**97.6**	80.0	124.0
1,2-Dichloroethane-D4		**93.8**	72.0	125.0
Toluene-D8		**101.3**	89.0	112.0

QC Report - Surrogates per Lab Sample

Lab Sample ID: S41718.03

Sample Tag: MW-22-03

Collected Date/Time: 10/19/2022 09:26

Matrix: Groundwater

COC Reference: 154860

Organics - Volatiles, Analysis: Volatile Organics

Run in Batch: 221027A7, Run Date: 10/27/2022 17:13, Matrix: WW, Dilution: 1

Surrogate	Flags	**%Rec**	LCL	UCL
4-Bromofluorobenzene		**95.8**	80.0	124.0
1,2-Dichloroethane-D4		**96.5**	72.0	125.0
Toluene-D8		**101.1**	89.0	112.0

QC Report - Surrogates per Lab Sample

Lab Sample ID: S41718.04

Sample Tag: MW-22-04

Collected Date/Time: 10/20/2022 10:43

Matrix: Groundwater

COC Reference: 154860

Organics - Volatiles, Analysis: Volatile Organics

Run in Batch: 221027A7, Run Date: 10/27/2022 17:37, Matrix: WW, Dilution: 1

Surrogate	Flags	**%Rec**	LCL	UCL
4-Bromofluorobenzene		**95.0**	80.0	124.0
1,2-Dichloroethane-D4		**90.2**	72.0	125.0
Toluene-D8		**100.5**	89.0	112.0

QC Report - Surrogates per Lab Sample

Lab Sample ID: S41718.05

Sample Tag: MW-22-05

Collected Date/Time: 10/20/2022 11:59

Matrix: Groundwater

COC Reference: 154860

Organics - Volatiles, Analysis: Volatile Organics

Run in Batch: 221027A7, Run Date: 10/27/2022 18:00, Matrix: WW, Dilution: 1

Surrogate	Flags	**%Rec**	LCL	UCL
4-Bromofluorobenzene		**96.5**	80.0	124.0
1,2-Dichloroethane-D4		**101.0**	72.0	125.0
Toluene-D8		**100.8**	89.0	112.0

QC Report - Surrogates per Lab Sample

Lab Sample ID: S41718.06

Sample Tag: MW-22-06

Collected Date/Time: 10/20/2022 12:58

Matrix: Groundwater

COC Reference: 154860

Organics - Volatiles, Analysis: Volatile Organics

Run in Batch: 221027A7, Run Date: 10/27/2022 18:23, Matrix: WW, Dilution: 1

Surrogate	Flags	**%Rec**	LCL	UCL
4-Bromofluorobenzene		**96.9**	80.0	124.0
1,2-Dichloroethane-D4		**97.6**	72.0	125.0
Toluene-D8		**100.3**	89.0	112.0

QC Report - Surrogates per Lab Sample

Lab Sample ID: S41718.07

Sample Tag: Dup-01

Collected Date/Time: 10/18/2022 00:01

Matrix: Groundwater

COC Reference: 154860

Organics - Volatiles, Analysis: Volatile Organics

Run in Batch: 221027A7, Run Date: 10/27/2022 18:47, Matrix: WW, Dilution: 1

Surrogate	Flags	**%Rec**	LCL	UCL
4-Bromofluorobenzene		**99.9**	80.0	124.0
1,2-Dichloroethane-D4		**98.9**	72.0	125.0
Toluene-D8		**101.2**	89.0	112.0

QC Report - Surrogates per Lab Sample

Lab Sample ID: S41718.08

Sample Tag: Trip Blank

Collected Date/Time: 10/20/2022 00:01

Matrix: Water

COC Reference: 154860

Organics - Volatiles, Analysis: Volatile Organics

Run in Batch: 221027A7, Run Date: 10/27/2022 15:39, Matrix: WW, Dilution: 1

Surrogate	Flags	**%Rec**	LCL	UCL
4-Bromofluorobenzene		**97.4**	80.0	124.0
1,2-Dichloroethane-D4		**105.4**	72.0	125.0
Toluene-D8		**101.7**	89.0	112.0

Organics - Volatiles, Prep Batch ID: VF221027W1

QC Types: BLK/LCS/LCSD/MS/MSD

Blank (BLK)

Lab Sample ID: 221027A7.BLKW27A

Run in Batch: 221027A7, Run Date: 10/27/2022 14:06, Prep Date: 10/27/2022, Matrix: WW, Dilution: 1

Surrogate	Flags	%Rec	LCL	UCL
4-Bromofluorobenzene		**97.9**	80.0	124.0
1,2-Dichloroethane-D4		**101.9**	72.0	125.0
Toluene-D8		**100.2**	89.0	112.0

Laboratory Control Sample (LCS)

Lab Sample ID: 221027A7.LCSW27A

Run in Batch: 221027A7, Run Date: 10/27/2022 11:45, Prep Date: 10/27/2022, Matrix: WW, Dilution: 1

Surrogate	Flags	%Rec	LCL	UCL
4-Bromofluorobenzene		**96.3**	80.0	124.0
1,2-Dichloroethane-D4		**93.5**	72.0	125.0
Toluene-D8		**101.1**	89.0	112.0

Laboratory Control Sample Duplicate (LCSD)

Lab Sample ID: 221027A7.LCSDW27A, Parent Sample ID: 221027A7.LCSW27A

Run in Batch: 221027A7, Run Date: 10/27/2022 12:08, Prep Date: 10/27/2022, Matrix: WW, Dilution: 1

Surrogate	Flags	%Rec	LCL	UCL
4-Bromofluorobenzene		**94.6**	80.0	124.0
1,2-Dichloroethane-D4		**91.9**	72.0	125.0
Toluene-D8		**100.4**	89.0	112.0

Matrix Spike (MS)

Lab Sample ID: 221027A7.4166703M, Parent Sample ID: S41667.02

Run in Batch: 221027A7, Run Date: 10/27/2022 12:31, Prep Date: 10/27/2022, Matrix: WW, Dilution: 1

Surrogate	Flags	%Rec	LCL	UCL
4-Bromofluorobenzene		**96.5**	80.0	124.0
1,2-Dichloroethane-D4		**99.7**	72.0	125.0
Toluene-D8		**102.1**	89.0	112.0

Matrix Spike Duplicate (MSD)

Lab Sample ID: 221027A7.4166704N, Parent Sample ID: 221027A7.4166703M

Run in Batch: 221027A7, Run Date: 10/27/2022 12:55, Prep Date: 10/27/2022, Matrix: WW, Dilution: 1

Surrogate	Flags	%Rec	LCL	UCL
4-Bromofluorobenzene		**97.2**	80.0	124.0
1,2-Dichloroethane-D4		**100.4**	72.0	125.0
Toluene-D8		**101.3**	89.0	112.0

QC Report - Internal Standards per Lab Sample

Lab Sample ID: S41718.01

Sample Tag: MW-22-01

Collected Date/Time: 10/18/2022 10:17

Matrix: Groundwater

COC Reference: 154860

Organics - Volatiles, Analysis: Volatile Organics

Run in Batch: 221027A7, Run Date: 10/27/2022 16:27, Matrix: WW, Dilution: 1

Internal Standard	Flags	**%Rec**	LCL	UCL
Pentafluorobenzene		**96.6**	50.0	200.0
1,4-Difluorobenzene		**99.6**	50.0	200.0
Chlorobenzene-D5		**100.9**	50.0	200.0
1,4-Dichlorobenzene-D4		**103.1**	50.0	200.0

QC Report - Internal Standards per Lab Sample

Lab Sample ID: S41718.02

Sample Tag: MW-22-02

Collected Date/Time: 10/18/2022 12:05

Matrix: Groundwater

COC Reference: 154860

Organics - Volatiles, Analysis: Volatile Organics

Run in Batch: 221027A7, Run Date: 10/27/2022 16:50, Matrix: WW, Dilution: 1

Internal Standard	Flags	**%Rec**	LCL	UCL
Pentafluorobenzene		**89.5**	50.0	200.0
1,4-Difluorobenzene		**90.0**	50.0	200.0
Chlorobenzene-D5		**89.4**	50.0	200.0
1,4-Dichlorobenzene-D4		**90.8**	50.0	200.0

QC Report - Internal Standards per Lab Sample

Lab Sample ID: S41718.03

Sample Tag: MW-22-03

Collected Date/Time: 10/19/2022 09:26

Matrix: Groundwater

COC Reference: 154860

Organics - Volatiles, Analysis: Volatile Organics

Run in Batch: 221027A7, Run Date: 10/27/2022 17:13, Matrix: WW, Dilution: 1

Internal Standard	Flags	**%Rec**	LCL	UCL
Pentafluorobenzene		**94.7**	50.0	200.0
1,4-Difluorobenzene		**96.2**	50.0	200.0
Chlorobenzene-D5		**96.4**	50.0	200.0
1,4-Dichlorobenzene-D4		**97.6**	50.0	200.0

QC Report - Internal Standards per Lab Sample

Lab Sample ID: S41718.04

Sample Tag: MW-22-04

Collected Date/Time: 10/20/2022 10:43

Matrix: Groundwater

COC Reference: 154860

Organics - Volatiles, Analysis: Volatile Organics

Run in Batch: 221027A7, Run Date: 10/27/2022 17:37, Matrix: WW, Dilution: 1

Internal Standard	Flags	**%Rec**	LCL	UCL
Pentafluorobenzene		**96.5**	50.0	200.0
1,4-Difluorobenzene		**97.3**	50.0	200.0
Chlorobenzene-D5		**95.0**	50.0	200.0
1,4-Dichlorobenzene-D4		**94.3**	50.0	200.0

QC Report - Internal Standards per Lab Sample

Lab Sample ID: S41718.05

Sample Tag: MW-22-05

Collected Date/Time: 10/20/2022 11:59

Matrix: Groundwater

COC Reference: 154860

Organics - Volatiles, Analysis: Volatile Organics

Run in Batch: 221027A7, Run Date: 10/27/2022 18:00, Matrix: WW, Dilution: 1

Internal Standard	Flags	**%Rec**	LCL	UCL
Pentafluorobenzene		**98.6**	50.0	200.0
1,4-Difluorobenzene		**100.6**	50.0	200.0
Chlorobenzene-D5		**102.3**	50.0	200.0
1,4-Dichlorobenzene-D4		**104.0**	50.0	200.0

QC Report - Internal Standards per Lab Sample

Lab Sample ID: S41718.06

Sample Tag: MW-22-06

Collected Date/Time: 10/20/2022 12:58

Matrix: Groundwater

COC Reference: 154860

Organics - Volatiles, Analysis: Volatile Organics

Run in Batch: 221027A7, Run Date: 10/27/2022 18:23, Matrix: WW, Dilution: 1

Internal Standard	Flags	**%Rec**	LCL	UCL
Pentafluorobenzene		**91.1**	50.0	200.0
1,4-Difluorobenzene		**92.4**	50.0	200.0
Chlorobenzene-D5		**92.3**	50.0	200.0
1,4-Dichlorobenzene-D4		**93.2**	50.0	200.0

QC Report - Internal Standards per Lab Sample

Lab Sample ID: S41718.07

Sample Tag: Dup-01

Collected Date/Time: 10/18/2022 00:01

Matrix: Groundwater

COC Reference: 154860

Organics - Volatiles, Analysis: Volatile Organics

Run in Batch: 221027A7, Run Date: 10/27/2022 18:47, Matrix: WW, Dilution: 1

Internal Standard	Flags	**%Rec**	LCL	UCL
Pentafluorobenzene		**94.1**	50.0	200.0
1,4-Difluorobenzene		**95.0**	50.0	200.0
Chlorobenzene-D5		**95.8**	50.0	200.0
1,4-Dichlorobenzene-D4		**100.0**	50.0	200.0

QC Report - Internal Standards per Lab Sample

Lab Sample ID: S41718.08

Sample Tag: Trip Blank

Collected Date/Time: 10/20/2022 00:01

Matrix: Water

COC Reference: 154860

Organics - Volatiles, Analysis: Volatile Organics

Run in Batch: 221027A7, Run Date: 10/27/2022 15:39, Matrix: WW, Dilution: 1

Internal Standard	Flags	**%Rec**	LCL	UCL
Pentafluorobenzene		**98.4**	50.0	200.0
1,4-Difluorobenzene		**100.5**	50.0	200.0
Chlorobenzene-D5		**102.9**	50.0	200.0
1,4-Dichlorobenzene-D4		**105.9**	50.0	200.0

Organics - Volatiles, Prep Batch ID: VF221027W1

QC Types: BLK/LCS/LCSD/MS/MSD

Blank (BLK)

Lab Sample ID: 221027A7.BLKW27A

Run in Batch: 221027A7, Run Date: 10/27/2022 14:06, Prep Date: 10/27/2022, Matrix: WW, Dilution: 1

Internal Standard	Flags	%Rec	LCL	UCL
Pentafluorobenzene		**98.9**	50.0	200.0
1,4-Difluorobenzene		**100.2**	50.0	200.0
Chlorobenzene-D5		**101.3**	50.0	200.0
1,4-Dichlorobenzene-D4		**103.4**	50.0	200.0

Laboratory Control Sample (LCS)

Lab Sample ID: 221027A7.LCSW27A

Run in Batch: 221027A7, Run Date: 10/27/2022 11:45, Prep Date: 10/27/2022, Matrix: WW, Dilution: 1

Internal Standard	Flags	%Rec	LCL	UCL
Pentafluorobenzene		**98.9**	50.0	200.0
1,4-Difluorobenzene		**97.8**	50.0	200.0
Chlorobenzene-D5		**96.2**	50.0	200.0
1,4-Dichlorobenzene-D4		**95.6**	50.0	200.0

Laboratory Control Sample Duplicate (LCSD)

Lab Sample ID: 221027A7.LCSDW27A, Parent Sample ID: 221027A7.LCSW27A

Run in Batch: 221027A7, Run Date: 10/27/2022 12:08, Prep Date: 10/27/2022, Matrix: WW, Dilution: 1

Internal Standard	Flags	%Rec	LCL	UCL
Pentafluorobenzene		**94.6**	50.0	200.0
1,4-Difluorobenzene		**93.6**	50.0	200.0
Chlorobenzene-D5		**92.8**	50.0	200.0
1,4-Dichlorobenzene-D4		**90.6**	50.0	200.0

Matrix Spike (MS)

Lab Sample ID: 221027A7.4166703M, Parent Sample ID: S41667.02

Run in Batch: 221027A7, Run Date: 10/27/2022 12:31, Prep Date: 10/27/2022, Matrix: WW, Dilution: 1

Internal Standard	Flags	%Rec	LCL	UCL
Pentafluorobenzene		**91.1**	50.0	200.0
1,4-Difluorobenzene		**91.0**	50.0	200.0
Chlorobenzene-D5		**91.9**	50.0	200.0
1,4-Dichlorobenzene-D4		**93.1**	50.0	200.0

Matrix Spike Duplicate (MSD)

Lab Sample ID: 221027A7.4166704N, Parent Sample ID: 221027A7.4166703M

Run in Batch: 221027A7, Run Date: 10/27/2022 12:55, Prep Date: 10/27/2022, Matrix: WW, Dilution: 1

Internal Standard	Flags	%Rec	LCL	UCL
Pentafluorobenzene		**92.9**	50.0	200.0
1,4-Difluorobenzene		**94.9**	50.0	200.0
Chlorobenzene-D5		**97.5**	50.0	200.0
1,4-Dichlorobenzene-D4		**99.5**	50.0	200.0

Metals, Prep Batch ID: HGD-102722-4

Surrogates: No, QC Types: BLK/LCS/MS/MSD

Blank (BLK)

Lab Sample ID: HG-22-1027A.015.LRB

Run in Batch: HG-22-1027A, Run Date: 10/27/2022 21:13, Prep Date: 10/27/2022, Matrix: Liquid, Dilution: 1

Analyte	Flags	Conc	RDL	Units
Mercury		ND	0.20	ug/L

Laboratory Control Sample (LCS)

Lab Sample ID: HG-22-1027A.014.LCS

Run in Batch: HG-22-1027A, Run Date: 10/27/2022 21:09, Prep Date: 10/27/2022, Matrix: Liquid, Dilution: 1

Analyte	Flags	% Rec	LCL	UCL
Mercury		114	85	115

Matrix Spike (MS)

Lab Sample ID: HG-22-1027A.025.MS, Parent Sample ID: S41709.03

Run in Batch: HG-22-1027A, Run Date: 10/27/2022 21:52, Prep Date: 10/27/2022, Matrix: Liquid, Dilution: 1

Analyte	Flags	% Rec	LCL	UCL
Mercury		113	80	120

Matrix Spike (MS)

Lab Sample ID: HG-22-1027A.037.MS, Parent Sample ID: S41718.07

Run in Batch: HG-22-1027A, Run Date: 10/27/2022 22:39, Prep Date: 10/27/2022, Matrix: Liquid, Dilution: 1

Analyte	Flags	% Rec	LCL	UCL
Mercury		115	80	120

Matrix Spike Duplicate (MSD)

Lab Sample ID: HG-22-1027A.026.MSD, Parent Sample ID: HG-22-1027A.025.MS

Run in Batch: HG-22-1027A, Run Date: 10/27/2022 21:56, Prep Date: 10/27/2022, Matrix: Liquid, Dilution: 1

Analyte	Flags	% Rec	LCL	UCL	RPD	RPD CL
Mercury		110	80	120	3	20

Matrix Spike Duplicate (MSD)

Lab Sample ID: HG-22-1027A.038.MSD, Parent Sample ID: HG-22-1027A.037.MS

Run in Batch: HG-22-1027A, Run Date: 10/27/2022 22:43, Prep Date: 10/27/2022, Matrix: Liquid, Dilution: 1

Analyte	Flags	% Rec	LCL	UCL	RPD	RPD CL
Mercury		114	80	120	1	20

Metals, Prep Batch ID: MTD-102422-2

Surrogates: No, QC Types: BLK/LCS/MS/MSD

Blank (BLK)

Lab Sample ID: MT5-22-1024A.025.LRB

Run in Batch: MT5-22-1024A, Run Date: 10/24/2022 12:35, Prep Date: 10/24/2022, Matrix: Liquid, Dilution: 1

Analyte	Flags	Conc	RDL	Units
Aluminum		ND	0.002	mg/L
Antimony		ND	0.001	mg/L
Arsenic		ND	0.0004	mg/L
Barium		ND	0.001	mg/L
Beryllium		ND	0.0002	mg/L
Boron		ND	0.008	mg/L
Cadmium		ND	0.0001	mg/L
Chromium		ND	0.001	mg/L
Cobalt		ND	0.001	mg/L
Iron		ND	0.004	mg/L
Lead		ND	0.0006	mg/L
Manganese		ND	0.001	mg/L
Molybdenum		ND	0.001	mg/L
Nickel		ND	0.001	mg/L
Selenium		ND	0.001	mg/L
Silver		ND	0.0001	mg/L
Strontium		ND	0.001	mg/L
Thallium		ND	0.0004	mg/L
Titanium		ND	0.001	mg/L
Vanadium		ND	0.001	mg/L
Zinc		ND	0.001	mg/L

Blank (BLK)

Lab Sample ID: MT5-22-1024B.013.LRB

Run in Batch: MT5-22-1024B, Run Date: 10/24/2022 14:51, Prep Date: 10/24/2022, Matrix: Liquid, Dilution: 1

Analyte	Flags	Conc	RDL	Units
Calcium		ND	0.05	mg/L
Magnesium		ND	0.05	mg/L
Potassium		ND	0.05	mg/L
Sodium		ND	0.05	mg/L

Laboratory Control Sample (LCS)

Lab Sample ID: MT5-22-1024A.023.LCS

Run in Batch: MT5-22-1024A, Run Date: 10/24/2022 12:31, Prep Date: 10/24/2022, Matrix: Liquid, Dilution: 1

Analyte	Flags	% Rec	LCL	UCL
Aluminum		100	85	115
Antimony		96	85	115
Arsenic		99	85	115
Barium		100	85	115
Beryllium		99	85	115
Boron		102	85	115
Cadmium		98	85	115
Chromium		99	85	115
Cobalt		100	85	115
Iron		105	85	115
Lead		99	85	115

Metals, Prep Batch ID: MTD-102422-2 (continued)

Surrogates: No, QC Types: BLK/LCS/MS/MSD

Laboratory Control Sample (LCS) (continued)

Lab Sample ID: MT5-22-1024A.023.LCS

Run in Batch: MT5-22-1024A, Run Date: 10/24/2022 12:31, Prep Date: 10/24/2022, Matrix: Liquid, Dilution: 1

Analyte	Flags	% Rec	LCL	UCL
Manganese		101	85	115
Molybdenum		92	85	115
Nickel		101	85	115
Selenium		97	85	115
Silver		99	85	115
Strontium		97	85	115
Thallium		102	85	115
Titanium		102	85	115
Vanadium		100	85	115
Zinc		99	85	115

Laboratory Control Sample (LCS)

Lab Sample ID: MT5-22-1024B.012.LCS

Run in Batch: MT5-22-1024B, Run Date: 10/24/2022 14:45, Prep Date: 10/24/2022, Matrix: Liquid, Dilution: 1

Analyte	Flags	% Rec	LCL	UCL
Calcium		99	85	115
Magnesium		93	85	115
Potassium		94	85	115
Sodium		93	85	115

Matrix Spike (MS)

Lab Sample ID: MT5-22-1024A.037.MS, Parent Sample ID: S41718.07

Run in Batch: MT5-22-1024A, Run Date: 10/24/2022 13:02, Prep Date: 10/24/2022, Matrix: Liquid, Dilution: 5

Analyte	Flags	% Rec	LCL	UCL
Aluminum		101	75	125
Antimony		101	75	125
Arsenic		96	75	125
Barium		103	75	125
Beryllium		102	75	125
Boron		104	75	125
Cadmium		104	75	125
Chromium		100	75	125
Cobalt		98	75	125
Iron		94	75	125
Lead		98	75	125
Manganese		98	75	125
Molybdenum		98	75	125
Nickel		99	75	125
Selenium		101	75	125
Silver		99	75	125
Strontium		99	75	125
Thallium		100	75	125
Titanium		106	75	125
Vanadium		103	75	125
Zinc		95	75	125

Metals, Prep Batch ID: MTD-102422-2 (continued)

Surrogates: No, QC Types: BLK/LCS/MS/MSD

Matrix Spike (MS)

Lab Sample ID: MT5-22-1024A.039.MS, Parent Sample ID: S41627.02

Run in Batch: MT5-22-1024A, Run Date: 10/24/2022 13:07, Prep Date: 10/24/2022, Matrix: Liquid, Dilution: 5

Analyte	Flags	% Rec	LCL	UCL
Aluminum		100	75	125
Antimony		102	75	125
Arsenic		103	75	125
Barium		103	75	125
Beryllium		105	75	125
Boron		112	75	125
Cadmium		103	75	125
Chromium		100	75	125
Cobalt		99	75	125
Iron		112	75	125
Lead		98	75	125
Manganese		99	75	125
Molybdenum		102	75	125
Nickel		98	75	125
Selenium		107	75	125
Silver		102	75	125
Strontium		104	75	125
Thallium		101	75	125
Titanium		108	75	125
Vanadium		102	75	125
Zinc		100	75	125

Matrix Spike (MS)

Lab Sample ID: MT5-22-1024B.025.MS, Parent Sample ID: S41718.07

Run in Batch: MT5-22-1024B, Run Date: 10/24/2022 15:21, Prep Date: 10/24/2022, Matrix: Liquid, Dilution: 5

Analyte	Flags	% Rec	LCL	UCL
Calcium		87	75	125
Magnesium		89	75	125
Potassium		93	75	125
Sodium	*	50	75	125

Matrix Spike (MS)

Lab Sample ID: MT5-22-1024B.027.MS, Parent Sample ID: S41718.07

Run in Batch: MT5-22-1024B, Run Date: 10/24/2022 15:25, Prep Date: 10/24/2022, Matrix: Liquid, Dilution: 50

Analyte	Flags	% Rec	LCL	UCL
Sodium		79	75	125

Matrix Spike (MS)

Lab Sample ID: MT5-22-1024B.029.MS, Parent Sample ID: S41627.02

Run in Batch: MT5-22-1024B, Run Date: 10/24/2022 15:29, Prep Date: 10/24/2022, Matrix: Liquid, Dilution: 5

Analyte	Flags	% Rec	LCL	UCL
Calcium		104	75	125
Magnesium		90	75	125
Potassium		94	75	125
Sodium		93	75	125

Metals, Prep Batch ID: MTD-102422-2 (continued)

Surrogates: No, QC Types: BLK/LCS/MS/MSD

Matrix Spike Duplicate (MSD)

Lab Sample ID: MT5-22-1024A.038.MSD, Parent Sample ID: MT5-22-1024A.037.MS

Run in Batch: MT5-22-1024A, Run Date: 10/24/2022 13:05, Prep Date: 10/24/2022, Matrix: Liquid, Dilution: 5

Analyte	Flags	% Rec	LCL	UCL	RPD	RPD CL
Aluminum		103	75	125	1	20
Antimony		102	75	125	1	20
Arsenic		101	75	125	5	20
Barium		105	75	125	2	20
Beryllium		104	75	125	2	20
Boron		105	75	125	1	20
Cadmium		102	75	125	1	20
Chromium		100	75	125	0	20
Cobalt		98	75	125	0	20
Iron		93	75	125	1	20
Lead		96	75	125	2	20
Manganese		100	75	125	1	20
Molybdenum		102	75	125	4	20
Nickel		101	75	125	2	20
Selenium		100	75	125	1	20
Silver		101	75	125	2	20
Strontium		99	75	125	0	20
Thallium		98	75	125	3	20
Titanium		105	75	125	1	20
Vanadium		103	75	125	0	20
Zinc		96	75	125	1	20

Matrix Spike Duplicate (MSD)

Lab Sample ID: MT5-22-1024A.040.MSD, Parent Sample ID: MT5-22-1024A.039.MS

Run in Batch: MT5-22-1024A, Run Date: 10/24/2022 13:09, Prep Date: 10/24/2022, Matrix: Liquid, Dilution: 5

Analyte	Flags	% Rec	LCL	UCL	RPD	RPD CL
Aluminum		97	75	125	3	20
Antimony		101	75	125	0	20
Arsenic		100	75	125	3	20
Barium		104	75	125	1	20
Beryllium		102	75	125	2	20
Boron		102	75	125	3	20
Cadmium		102	75	125	1	20
Chromium		103	75	125	2	20
Cobalt		101	75	125	2	20
Iron	*	132	75	125	2	20
Lead		98	75	125	0	20
Manganese		105	75	125	5	20
Molybdenum		100	75	125	2	20
Nickel		100	75	125	2	20
Selenium		106	75	125	0	20
Silver		102	75	125	0	20
Strontium		108	75	125	1	20
Thallium		102	75	125	0	20
Titanium		110	75	125	1	20
Vanadium		106	75	125	3	20

Metals, Prep Batch ID: MTD-102422-2 (continued)

Surrogates: No, QC Types: BLK/LCS/MS/MSD

Matrix Spike Duplicate (MSD) (continued)

Lab Sample ID: MT5-22-1024A.040.MSD, Parent Sample ID: MT5-22-1024A.039.MS

Run in Batch: MT5-22-1024A, Run Date: 10/24/2022 13:09, Prep Date: 10/24/2022, Matrix: Liquid, Dilution: 5

Analyte	Flags	% Rec	LCL	UCL	RPD	RPD CL
Zinc		106	75	125	5	20

Matrix Spike Duplicate (MSD)

Lab Sample ID: MT5-22-1024B.026.MSD, Parent Sample ID: MT5-22-1024B.025.MS

Run in Batch: MT5-22-1024B, Run Date: 10/24/2022 15:22, Prep Date: 10/24/2022, Matrix: Liquid, Dilution: 5

Analyte	Flags	% Rec	LCL	UCL	RPD	RPD CL
Calcium	*	70	75	125	4	20
Magnesium		85	75	125	3	20
Potassium		90	75	125	2	20
Sodium	*	20	75	125	2	20

Matrix Spike Duplicate (MSD)

Lab Sample ID: MT5-22-1024B.030.MSD, Parent Sample ID: MT5-22-1024B.029.MS

Run in Batch: MT5-22-1024B, Run Date: 10/24/2022 15:30, Prep Date: 10/24/2022, Matrix: Liquid, Dilution: 5

Analyte	Flags	% Rec	LCL	UCL	RPD	RPD CL
Calcium		89	75	125	2	20
Magnesium		86	75	125	1	20
Potassium		91	75	125	2	20
Sodium		90	75	125	1	20

Organics - Volatiles, Prep Batch ID: VF221027W1

Surrogates: Yes, QC Types: BLK/LCS/LCSD/MS/MSD

Blank (BLK)

Lab Sample ID: 221027A7.BLKW27A

Run in Batch: 221027A7, Run Date: 10/27/2022 14:06, Prep Date: 10/27/2022, Matrix: WW, Dilution: 1

Analyte	Flags	Conc	RDL	Units
Acetone		ND	10.00	ug/l
tert-Methyl butyl ether (MTBE)		ND	1.00	ug/l
Acrylonitrile		ND	1.00	ug/l
2-Butanone (MEK)		ND	10.00	ug/l
Dichlorodifluoromethane		ND	1.00	ug/l
Chloromethane		ND	1.00	ug/l
Vinyl chloride		ND	1.00	ug/l
Bromomethane		ND	1.00	ug/l
Chloroethane		ND	1.00	ug/l
Trichlorofluoromethane		ND	1.00	ug/l
1,1-Dichloroethene		ND	1.00	ug/l
Methylene chloride		ND	1.00	ug/l
trans-1,2-Dichloroethene		ND	1.00	ug/l
1,1-Dichloroethane		ND	1.00	ug/l
cis-1,2-Dichloroethene		ND	1.00	ug/l
Chloroform		ND	1.00	ug/l
1,1,1-Trichloroethane		ND	1.00	ug/l
4-Methyl-2-pentanone (MIBK)		ND	10.00	ug/l
Carbon tetrachloride		ND	1.00	ug/l
Benzene		ND	1.00	ug/l
1,2-Dichloroethane		ND	1.00	ug/l
Trichloroethene		ND	1.00	ug/l
1,2-Dichloropropane		ND	1.00	ug/l
Bromodichloromethane		ND	1.00	ug/l
Dibromomethane		ND	1.00	ug/l
cis-1,3-Dichloropropene		ND	1.00	ug/l
Toluene		ND	1.00	ug/l
trans-1,3-Dichloropropene		ND	1.00	ug/l
1,1,2-Trichloroethane		ND	1.00	ug/l
Tetrachloroethene		ND	1.00	ug/l
Dibromochloromethane		ND	1.00	ug/l
1,2-Dibromoethane		ND	1.00	ug/l
Chlorobenzene		ND	1.00	ug/l
1,1,1,2-Tetrachloroethane		ND	1.00	ug/l
Ethylbenzene		ND	1.00	ug/l
p,m-Xylene		ND	1.00	ug/l
o-Xylene		ND	1.00	ug/l
Styrene		ND	1.00	ug/l
Isopropylbenzene		ND	1.00	ug/l
Bromoform		ND	1.00	ug/l
1,1,2,2-Tetrachloroethane		ND	1.00	ug/l
1,2,3-Trichloropropane		ND	1.00	ug/l
n-Propylbenzene		ND	1.00	ug/l
Bromobenzene		ND	1.00	ug/l
1,3,5-Trimethylbenzene		ND	1.00	ug/l
tert-Butylbenzene		ND	1.00	ug/l

Organics - Volatiles, Prep Batch ID: VF221027W1 (continued)

Surrogates: Yes, QC Types: BLK/LCS/LCSD/MS/MSD

Blank (BLK) (continued)

Lab Sample ID: 221027A7.BLKW27A

Run in Batch: 221027A7, Run Date: 10/27/2022 14:06, Prep Date: 10/27/2022, Matrix: WW, Dilution: 1

Analyte	Flags	Conc	RDL	Units
1,2,4-Trimethylbenzene		ND	1.00	ug/l
sec-Butylbenzene		ND	1.00	ug/l
p-Isopropyltoluene		ND	1.00	ug/l
1,3-Dichlorobenzene		ND	1.00	ug/l
1,4-Dichlorobenzene		ND	1.00	ug/l
1,2-Dichlorobenzene		ND	1.00	ug/l
1,2,3-Trimethylbenzene		ND	1.00	ug/l
n-Butylbenzene		ND	1.00	ug/l
1,2-Dibromo-3-chloropropane		ND	1.00	ug/l
1,2,4-Trichlorobenzene		ND	1.00	ug/l
1,2,3-Trichlorobenzene		ND	1.00	ug/l
Naphthalene		ND	1.00	ug/l
Acrolein		ND	1.00	ug/l
2-Chlorotoluene		ND	1.00	ug/l
4-Chlorotoluene		ND	1.00	ug/l
2,2-Dichloropropane		ND	1.00	ug/l
1,1,2-Trichloro-1,2,2-trifluoroethane		ND	1.00	ug/l

Laboratory Control Sample (LCS)

Lab Sample ID: 221027A7.LCSW27A

Run in Batch: 221027A7, Run Date: 10/27/2022 11:45, Prep Date: 10/27/2022, Matrix: WW, Dilution: 1

Analyte	Flags	% Rec	LCL	UCL
Acetone		112.8	29.9	161.5
tert-Methyl butyl ether (MTBE)		105.2	73.2	122.4
Acrylonitrile		116.8	69.9	128.9
2-Butanone (MEK)		111.7	44.0	134.4
Dichlorodifluoromethane		80.5	10.0	222.8
Chloromethane		87.6	23.8	166.5
Vinyl chloride		87.8	43.5	149.1
Bromomethane		90.0	56.8	151.3
Chloroethane		89.4	53.4	149.4
Trichlorofluoromethane		86.6	59.7	151.8
1,1-Dichloroethene		99.7	69.6	139.4
Methylene chloride		100.3	73.3	121.1
trans-1,2-Dichloroethene		101.9	73.6	129.3
1,1-Dichloroethane		102.4	71.5	126.2
cis-1,2-Dichloroethene		101.3	76.6	122.1
Chloroform		104.0	78.4	124.0
1,1,1-Trichloroethane		101.3	79.4	130.9
4-Methyl-2-pentanone (MIBK)		115.1	71.6	125.2
Carbon tetrachloride		101.9	72.6	133.0
Benzene		101.6	79.9	124.9
1,2-Dichloroethane		107.4	76.0	126.3
Trichloroethene		101.4	79.7	124.2
1,2-Dichloropropane		103.8	78.6	126.4
Bromodichloromethane		108.2	80.4	128.2

Organics - Volatiles, Prep Batch ID: VF221027W1 (continued)

Surrogates: Yes, QC Types: BLK/LCS/LCSD/MS/MSD

Laboratory Control Sample (LCS) (continued)

Lab Sample ID: 221027A7.LCSW27A

Run in Batch: 221027A7, Run Date: 10/27/2022 11:45, Prep Date: 10/27/2022, Matrix: WW, Dilution: 1

Analyte	Flags	% Rec	LCL	UCL
Dibromomethane		103.1	76.9	122.1
cis-1,3-Dichloropropene		108.3	79.8	129.9
Toluene		102.0	79.8	124.5
trans-1,3-Dichloropropene		110.9	74.0	131.3
1,1,2-Trichloroethane		106.3	78.7	123.1
Tetrachloroethene		99.2	74.5	124.5
Dibromochloromethane		108.8	74.6	127.2
1,2-Dibromoethane		109.4	70.3	133.7
Chlorobenzene		103.9	79.2	122.7
1,1,1,2-Tetrachloroethane		105.2	80.3	128.2
Ethylbenzene		104.1	79.5	129.1
p,m-Xylene		103.7	79.4	132.2
o-Xylene		105.0	80.2	131.0
Styrene		104.4	69.5	126.7
Isopropylbenzene		102.1	74.4	121.5
Bromoform		111.0	69.4	128.0
1,1,2,2-Tetrachloroethane		112.8	79.8	126.3
1,2,3-Trichloropropane		112.2	78.3	138.8
n-Propylbenzene		103.3	82.0	130.7
Bromobenzene		101.7	78.7	124.6
1,3,5-Trimethylbenzene		103.4	81.3	128.9
tert-Butylbenzene		103.5	80.7	128.9
1,2,4-Trimethylbenzene		104.1	81.4	130.8
sec-Butylbenzene		108.0	77.4	129.8
p-Isopropyltoluene		108.5	79.8	137.5
1,3-Dichlorobenzene		109.2	77.0	131.3
1,4-Dichlorobenzene		108.6	20.7	137.7
1,2-Dichlorobenzene		108.8	10.0	166.2
1,2,3-Trimethylbenzene		110.3	76.3	124.2
n-Butylbenzene		110.3	80.0	133.3
1,2-Dibromo-3-chloropropane		123.8	21.2	189.4
1,2,4-Trichlorobenzene		109.4	27.4	143.4
1,2,3-Trichlorobenzene		110.1	75.4	131.4
Naphthalene		117.5	32.9	135.8
Acrolein	*	197.3	70.0	130.0
2-Chlorotoluene		103.7	70.0	130.0
4-Chlorotoluene		104.4	70.0	130.0
2,2-Dichloropropane		108.3	70.0	130.0
1,1,2-Trichloro-1,2,2-trifluoroethane		94.2	75.1	135.9

Laboratory Control Sample Duplicate (LCSD)

Lab Sample ID: 221027A7.LCSDW27A, Parent Sample ID: 221027A7.LCSW27A

Run in Batch: 221027A7, Run Date: 10/27/2022 12:08, Prep Date: 10/27/2022, Matrix: WW, Dilution: 1

Analyte	Flags	% Rec	LCL	UCL	RPD	RPD CL
Acetone		101.0	29.9	161.5	11.1	30.0
tert-Methyl butyl ether (MTBE)		100.7	73.2	122.4	4.4	30.0

Organics - Volatiles, Prep Batch ID: VF221027W1 (continued)

Surrogates: Yes, QC Types: BLK/LCS/LCSD/MS/MSD

Laboratory Control Sample Duplicate (LCSD) (continued)

Lab Sample ID: 221027A7.LCSDW27A, Parent Sample ID: 221027A7.LCSW27A

Run in Batch: 221027A7, Run Date: 10/27/2022 12:08, Prep Date: 10/27/2022, Matrix: WW, Dilution: 1

Analyte	Flags	% Rec	LCL	UCL	RPD	RPD CL
Acrylonitrile		106.6	69.9	128.9	9.1	30.0
2-Butanone (MEK)		99.2	44.0	134.4	11.9	30.0
Dichlorodifluoromethane		78.6	10.0	222.8	2.3	30.0
Chloromethane		85.3	23.8	166.5	2.6	30.0
Vinyl chloride		85.3	43.5	149.1	2.8	30.0
Bromomethane		87.8	56.8	151.3	2.4	30.0
Chloroethane		86.1	53.4	149.4	3.8	30.0
Trichlorofluoromethane		84.6	59.7	151.8	2.3	30.0
1,1-Dichloroethene		96.6	69.6	139.4	3.2	30.0
Methylene chloride		98.8	73.3	121.1	1.5	30.0
trans-1,2-Dichloroethene		99.0	73.6	129.3	2.9	30.0
1,1-Dichloroethane		99.5	71.5	126.2	2.8	30.0
cis-1,2-Dichloroethene		98.3	76.6	122.1	3.0	30.0
Chloroform		101.1	78.4	124.0	2.8	30.0
1,1,1-Trichloroethane		99.1	79.4	130.9	2.2	30.0
4-Methyl-2-pentanone (MIBK)		102.7	71.6	125.2	11.3	30.0
Carbon tetrachloride		99.2	72.6	133.0	2.7	30.0
Benzene		98.6	79.9	124.9	3.0	30.0
1,2-Dichloroethane		104.3	76.0	126.3	3.0	30.0
Trichloroethene		98.1	79.7	124.2	3.3	30.0
1,2-Dichloropropane		102.5	78.6	126.4	1.3	30.0
Bromodichloromethane		105.5	80.4	128.2	2.5	30.0
Dibromomethane		100.0	76.9	122.1	3.1	30.0
cis-1,3-Dichloropropene		106.2	79.8	129.9	1.9	30.0
Toluene		100.1	79.8	124.5	1.8	30.0
trans-1,3-Dichloropropene		108.3	74.0	131.3	2.4	30.0
1,1,2-Trichloroethane		103.5	78.7	123.1	2.6	30.0
Tetrachloroethene		96.2	74.5	124.5	3.0	30.0
Dibromochloromethane		105.2	74.6	127.2	3.4	30.0
1,2-Dibromoethane		105.7	70.3	133.7	3.5	30.0
Chlorobenzene		100.9	79.2	122.7	2.9	30.0
1,1,1,2-Tetrachloroethane		102.3	80.3	128.2	2.8	30.0
Ethylbenzene		100.7	79.5	129.1	3.3	30.0
p,m-Xylene		100.0	79.4	132.2	3.6	30.0
o-Xylene		100.8	80.2	131.0	4.1	30.0
Styrene		101.7	69.5	126.7	2.7	30.0
Isopropylbenzene		99.2	74.4	121.5	3.0	30.0
Bromoform		104.5	69.4	128.0	6.1	30.0
1,1,2,2-Tetrachloroethane		104.2	79.8	126.3	7.9	30.0
1,2,3-Trichloropropane		103.4	78.3	138.8	8.2	30.0
n-Propylbenzene		100.3	82.0	130.7	3.0	30.0
Bromobenzene		98.7	78.7	124.6	3.0	30.0
1,3,5-Trimethylbenzene		99.5	81.3	128.9	3.8	30.0
tert-Butylbenzene		99.7	80.7	128.9	3.7	30.0
1,2,4-Trimethylbenzene		100.1	81.4	130.8	3.9	30.0
sec-Butylbenzene		106.0	77.4	129.8	1.9	30.0

Organics - Volatiles, Prep Batch ID: VF221027W1 (continued)

Surrogates: Yes, QC Types: BLK/LCS/LCSD/MS/MSD

Laboratory Control Sample Duplicate (LCSD) (continued)

Lab Sample ID: 221027A7.LCSDW27A, Parent Sample ID: 221027A7.LCSW27A

Run in Batch: 221027A7, Run Date: 10/27/2022 12:08, Prep Date: 10/27/2022, Matrix: WW, Dilution: 1

Analyte	Flags	% Rec	LCL	UCL	RPD	RPD CL
p-Isopropyltoluene		106.3	79.8	137.5	2.0	30.0
1,3-Dichlorobenzene		107.2	77.0	131.3	1.8	30.0
1,4-Dichlorobenzene		106.0	20.7	137.7	2.4	30.0
1,2-Dichlorobenzene		105.8	10.0	166.2	2.8	30.0
1,2,3-Trimethylbenzene		107.5	76.3	124.2	2.6	30.0
n-Butylbenzene		107.0	80.0	133.3	3.0	30.0
1,2-Dibromo-3-chloropropane		111.7	21.2	189.4	10.3	30.0
1,2,4-Trichlorobenzene		107.7	27.4	143.4	1.6	30.0
1,2,3-Trichlorobenzene		109.0	75.4	131.4	1.0	30.0
Naphthalene		111.3	32.9	135.8	5.5	30.0
Acrolein	*	185.8	70.0	130.0	6.0	30.0
2-Chlorotoluene		100.6	70.0	130.0	3.0	30.0
4-Chlorotoluene		100.9	70.0	130.0	3.4	30.0
2,2-Dichloropropane		105.4	70.0	130.0	2.7	30.0
1,1,2-Trichloro-1,2,2-trifluoroethane		92.5	75.1	135.9	1.8	30.0

Matrix Spike (MS)

Lab Sample ID: 221027A7.4166703M, Parent Sample ID: S41667.02

Run in Batch: 221027A7, Run Date: 10/27/2022 12:31, Prep Date: 10/27/2022, Matrix: WW, Dilution: 1

Analyte	Flags	% Rec	LCL	UCL
Acetone		104.1	29.9	161.5
tert-Methyl butyl ether (MTBE)		106.0	73.2	122.4
Acrylonitrile		112.2	69.9	128.9
2-Butanone (MEK)		111.2	44.0	134.4
Dichlorodifluoromethane		75.9	10.0	222.8
Chloromethane		87.6	23.8	166.5
Vinyl chloride		87.2	43.5	149.1
Bromomethane		93.6	56.8	151.3
Chloroethane		90.6	53.4	149.4
Trichlorofluoromethane		85.6	59.7	151.8
1,1-Dichloroethene		98.3	69.6	139.4
Methylene chloride		103.3	73.3	121.1
trans-1,2-Dichloroethene		105.6	73.6	129.3
1,1-Dichloroethane		107.3	71.5	126.2
cis-1,2-Dichloroethene		105.2	76.6	122.1
Chloroform		107.9	78.4	124.0
1,1,1-Trichloroethane		104.5	79.4	130.9
4-Methyl-2-pentanone (MIBK)		108.0	71.6	125.2
Carbon tetrachloride		102.0	72.6	133.0
Benzene		103.8	79.9	124.9
1,2-Dichloroethane		108.1	76.0	126.3
Trichloroethene		103.8	79.7	124.2
1,2-Dichloropropane		106.4	78.6	126.4
Bromodichloromethane		110.4	80.4	128.2
Dibromomethane		102.2	76.9	122.1
cis-1,3-Dichloropropene		109.2	79.8	129.9

Organics - Volatiles, Prep Batch ID: VF221027W1 (continued)

Surrogates: Yes, QC Types: BLK/LCS/LCSD/MS/MSD

Matrix Spike (MS) (continued)

Lab Sample ID: 221027A7.4166703M, Parent Sample ID: S41667.02

Run in Batch: 221027A7, Run Date: 10/27/2022 12:31, Prep Date: 10/27/2022, Matrix: WW, Dilution: 1

Analyte	Flags	% Rec	LCL	UCL
Toluene		104.4	79.8	124.5
trans-1,3-Dichloropropene		111.3	74.0	131.3
1,1,2-Trichloroethane		106.3	78.7	123.1
Tetrachloroethene		99.3	74.5	124.5
Dibromochloromethane		106.3	74.6	127.2
1,2-Dibromoethane		105.5	70.3	133.7
Chlorobenzene		103.8	79.2	122.7
1,1,1,2-Tetrachloroethane		106.6	80.3	128.2
Ethylbenzene		103.7	79.5	129.1
p,m-Xylene		103.9	79.4	132.2
o-Xylene		106.6	80.2	131.0
Styrene		105.5	69.5	126.7
Isopropylbenzene		101.8	74.4	121.5
Bromoform		107.9	69.4	128.0
1,1,2,2-Tetrachloroethane		108.8	79.8	126.3
1,2,3-Trichloropropane		107.4	78.3	138.8
n-Propylbenzene		103.1	82.0	130.7
Bromobenzene		101.9	78.7	124.6
1,3,5-Trimethylbenzene		103.9	81.3	128.9
tert-Butylbenzene		103.2	80.7	128.9
1,2,4-Trimethylbenzene		104.8	81.4	130.8
sec-Butylbenzene		104.7	77.4	129.8
p-Isopropyltoluene		105.5	79.8	137.5
1,3-Dichlorobenzene		107.7	77.0	131.3
1,4-Dichlorobenzene		107.2	20.7	137.7
1,2-Dichlorobenzene		107.5	10.0	166.2
1,2,3-Trimethylbenzene		108.2	76.3	124.2
n-Butylbenzene		107.9	80.0	133.3
1,2-Dibromo-3-chloropropane		112.1	21.2	189.4
1,2,4-Trichlorobenzene		105.7	27.4	143.4
1,2,3-Trichlorobenzene		105.5	75.4	131.4
Naphthalene		109.0	32.9	135.8
Acrolein	*	138.2	70.0	130.0
2-Chlorotoluene		104.3	70.0	130.0
4-Chlorotoluene		105.1	70.0	130.0
2,2-Dichloropropane		111.3	70.0	130.0
1,1,2-Trichloro-1,2,2-trifluoroethane		92.6	75.1	135.9

Matrix Spike Duplicate (MSD)

Lab Sample ID: 221027A7.4166704N, Parent Sample ID: 221027A7.4166703M

Run in Batch: 221027A7, Run Date: 10/27/2022 12:55, Prep Date: 10/27/2022, Matrix: WW, Dilution: 1

Analyte	Flags	% Rec	LCL	UCL	RPD	RPD CL
Acetone		114.2	29.9	161.5	9.0	30.0
tert-Methyl butyl ether (MTBE)		104.8	73.2	122.4	1.2	30.0
Acrylonitrile		118.1	69.9	128.9	5.1	30.0
2-Butanone (MEK)		116.2	44.0	134.4	4.4	30.0

Organics - Volatiles, Prep Batch ID: VF221027W1 (continued)

Surrogates: Yes, QC Types: BLK/LCS/LCSD/MS/MSD

Matrix Spike Duplicate (MSD) (continued)

Lab Sample ID: 221027A7.4166704N, Parent Sample ID: 221027A7.4166703M

Run in Batch: 221027A7, Run Date: 10/27/2022 12:55, Prep Date: 10/27/2022, Matrix: WW, Dilution: 1

Analyte	Flags	% Rec	LCL	UCL	RPD	RPD CL
Dichlorodifluoromethane		70.6	10.0	222.8	7.2	30.0
Chloromethane		81.5	23.8	166.5	7.1	30.0
Vinyl chloride		78.6	43.5	149.1	10.3	30.0
Bromomethane		85.8	56.8	151.3	8.7	30.0
Chloroethane		83.8	53.4	149.4	7.8	30.0
Trichlorofluoromethane		79.4	59.7	151.8	7.5	30.0
1,1-Dichloroethene		93.2	69.6	139.4	5.3	30.0
Methylene chloride		97.7	73.3	121.1	5.6	30.0
trans-1,2-Dichloroethene		99.1	73.6	129.3	6.4	30.0
1,1-Dichloroethane		101.5	71.5	126.2	5.6	30.0
cis-1,2-Dichloroethene		98.7	76.6	122.1	6.4	30.0
Chloroform		102.2	78.4	124.0	5.4	30.0
1,1,1-Trichloroethane		96.5	79.4	130.9	7.9	30.0
4-Methyl-2-pentanone (MIBK)		114.8	71.6	125.2	6.1	30.0
Carbon tetrachloride		92.4	72.6	133.0	9.8	30.0
Benzene		96.4	79.9	124.9	7.4	30.0
1,2-Dichloroethane		103.0	76.0	126.3	4.8	30.0
Trichloroethene		97.1	79.7	124.2	6.7	30.0
1,2-Dichloropropane		99.6	78.6	126.4	6.6	30.0
Bromodichloromethane		104.4	80.4	128.2	5.6	30.0
Dibromomethane		99.8	76.9	122.1	2.4	30.0
cis-1,3-Dichloropropene		104.5	79.8	129.9	4.4	30.0
Toluene		97.3	79.8	124.5	7.1	30.0
trans-1,3-Dichloropropene		108.2	74.0	131.3	2.9	30.0
1,1,2-Trichloroethane		104.2	78.7	123.1	2.0	30.0
Tetrachloroethene		92.6	74.5	124.5	7.0	30.0
Dibromochloromethane		101.5	74.6	127.2	4.6	30.0
1,2-Dibromoethane		103.3	70.3	133.7	2.1	30.0
Chlorobenzene		96.2	79.2	122.7	7.6	30.0
1,1,1,2-Tetrachloroethane		96.9	80.3	128.2	9.6	30.0
Ethylbenzene		94.9	79.5	129.1	8.8	30.0
p,m-Xylene		95.2	79.4	132.2	8.7	30.0
o-Xylene		96.7	80.2	131.0	9.8	30.0
Styrene		97.2	69.5	126.7	8.1	30.0
Isopropylbenzene		92.5	74.4	121.5	9.6	30.0
Bromoform		104.4	69.4	128.0	3.3	30.0
1,1,2,2-Tetrachloroethane		107.4	79.8	126.3	1.3	30.0
1,2,3-Trichloropropane		106.6	78.3	138.8	0.7	30.0
n-Propylbenzene		94.9	82.0	130.7	8.3	30.0
Bromobenzene		95.2	78.7	124.6	6.8	30.0
1,3,5-Trimethylbenzene		94.1	81.3	128.9	9.9	30.0
tert-Butylbenzene		95.3	80.7	128.9	8.0	30.0
1,2,4-Trimethylbenzene		96.6	81.4	130.8	8.1	30.0
sec-Butylbenzene		95.5	77.4	129.8	9.2	30.0
p-Isopropyltoluene		96.0	79.8	137.5	9.4	30.0
1,3-Dichlorobenzene		100.2	77.0	131.3	7.2	30.0

Organics - Volatiles, Prep Batch ID: VF221027W1 (continued)

Surrogates: Yes, QC Types: BLK/LCS/LCSD/MS/MSD

Matrix Spike Duplicate (MSD) (continued)

Lab Sample ID: 221027A7.4166704N, Parent Sample ID: 221027A7.4166703M

Run in Batch: 221027A7, Run Date: 10/27/2022 12:55, Prep Date: 10/27/2022, Matrix: WW, Dilution: 1

Analyte	Flags	% Rec	LCL	UCL	RPD	RPD CL
1,4-Dichlorobenzene		98.5	20.7	137.7	8.4	30.0
1,2-Dichlorobenzene		99.8	10.0	166.2	7.5	30.0
1,2,3-Trimethylbenzene		98.7	76.3	124.2	9.1	30.0
n-Butylbenzene		98.0	80.0	133.3	9.7	30.0
1,2-Dibromo-3-chloropropane		116.2	21.2	189.4	3.6	30.0
1,2,4-Trichlorobenzene		99.0	27.4	143.4	6.5	30.0
1,2,3-Trichlorobenzene		100.1	75.4	131.4	5.3	30.0
Naphthalene		108.2	32.9	135.8	0.8	30.0
Acrolein	*	210.6	70.0	130.0	41.5	30.0
2-Chlorotoluene		96.2	70.0	130.0	8.1	30.0
4-Chlorotoluene		97.2	70.0	130.0	7.8	30.0
2,2-Dichloropropane		102.5	70.0	130.0	8.2	30.0
1,1,2-Trichloro-1,2,2-trifluoroethane		84.6	75.1	135.9	9.1	30.0

Merit Laboratories Login Checklist

Lab Set ID: S41718
Client: TRC (TRC)
Project: 495430.0000.0000 / Detroit Axle EB GW
Submitted: 10/21/2022 13:45 Login User: MMC

Attention: Kelly Cratsenburg
Address: TRC
1540 Eisenhower Place
Ann Arbor, MI 48108

Phone: 734-585-7829 C: FAX:
Email: KCratsenburg@trccompanies.com

Selection				Description	Note
Sample Receiving					
01.	[X] Yes	[ ] No	[ ] N/A	Samples are received at 4C +/- 2C Thermometer #	IR 3.4
02.	[X] Yes	[ ] No	[ ] N/A	Received on ice/ cooling process begun	
03.	[ ] Yes	[X] No	[ ] N/A	Samples shipped	
04.	[ ] Yes	[X] No	[ ] N/A	Samples left in 24 hr. drop box	
05.	[ ] Yes	[ ] No	[X] N/A	Are there custody seals/tape or is the drop box locked	
Chain of Custody					
06.	[X] Yes	[ ] No	[ ] N/A	COC adequately filled out	
07.	[X] Yes	[ ] No	[ ] N/A	COC signed and relinquished to the lab	
08.	[X] Yes	[ ] No	[ ] N/A	Sample tag on bottles match COC	
09.	[X] Yes	[ ] No	[ ] N/A	Subcontracting needed? Subcontacted to:	Eurofins
Preservation					
10.	[X] Yes	[ ] No	[ ] N/A	Do sample have correct chemical preservation	
11.	[X] Yes	[ ] No	[ ] N/A	Completed pH checks on preserved samples? (no VOAs)	
12.	[ ] Yes	[X] No	[ ] N/A	Did any samples need to be preserved in the lab?	
Bottle Conditions					
13.	[X] Yes	[ ] No	[ ] N/A	All bottles intact	
14.	[X] Yes	[ ] No	[ ] N/A	Appropriate analytical bottles are used	
15.	[X] Yes	[ ] No	[ ] N/A	Merit bottles used	
16.	[X] Yes	[ ] No	[ ] N/A	Sufficient sample volume received	
17.	[ ] Yes	[X] No	[ ] N/A	Samples require laboratory filtration	
18.	[X] Yes	[ ] No	[ ] N/A	Samples submitted within holding time	
19.	[ ] Yes	[X] No	[ ] N/A	Do water VOC or TOX bottles contain headspace	

Corrective action for all exceptions is to call the client and to notify the project manager.

Client Review By: _____ Date: _____

Merit Laboratories Bottle Preservation Check

Lab Set ID: S41718 Submitted: 10/21/2022 13:45

Client: TRC (TRC)

Project: 495430.0000.0000 / Detroit Axle EB GW

Initial Preservation Check: 10/21/2022 14:10 MMC

Preservation Recheck (E200.8): N/A

Attention: Kelly Cratsenburg
Address: TRC
1540 Eisenhower Place
Ann Arbor, MI 48108

Phone: 734-585-7829 C: FAX:
Email: KCratsenburg@trccompanies.com

Sample ID	Bottle / Preservation	pH (Orig)	Add ml	pH (New)	Notes
S41718.01	125ml Plastic HNO3	<2			
S41718.02	125ml Plastic HNO3	<2			
S41718.03	125ml Plastic HNO3	<2			
S41718.04	125ml Plastic HNO3	<2			
S41718.05	125ml Plastic HNO3	<2			
S41718.06	125ml Plastic HNO3	<2			
S41718.07	125ml Plastic HNO3	<2			

Merit Laboratories, Inc.
2680 East Lansing Dr., East Lansing, MI 48823
Phone (517) 332-0167 Fax (517) 332-4034
www.meritlabs.com

C.O.C. PAGE # 1 OF 1 154860

CHAIN OF CUSTODY RECORD

REPORT TO

CONTACT NAME: Kelly Cvetsenburg
COMPANY: TRC
ADDRESS: 1540 Eisenhower Place
CITY: Ann Arbor STATE: MI ZIP CODE: 48108
PHONE NO.: CELL NO.: P.O. NO.: 189445
E-MAIL ADDRESS: Kcvetsenburg@trcompanies.com QUOTE NO.:

INVOICE TO

CONTACT NAME: ☐ SAME
COMPANY:
ADDRESS:
CITY: STATE: ZIP CODE:
PHONE NO.: E-MAIL ADDRESS:

PROJECT NO./NAME: 495430.0000.0000 / Detroit Axle EB GW
SAMPLER(S) - PLEASE PRINT/SIGN NAME: Henry Schmidt

TURNAROUND TIME REQUIRED ☐ 1 DAY ☐ 2 DAYS ☐ 3 DAYS ☒ STANDARD ☐ OTHER

DELIVERABLES REQUIRED ☐ STD ☐ LEVEL II ☐ LEVEL III ☐ LEVEL IV ☐ EDD ☒ OTHER TRC EDD

MATRIX CODE: W=WATER GW=GROUNDWATER WW=WASTEWATER S=SOIL L=LIQUID SD=SOLID SL=SLUDGE DW=DRINKING WATER O=OIL WP=WIPE A=AIR WS=WASTE

ANALYSIS (ATTACH LIST IF MORE SPACE IS REQUIRED)

Certifications: ☐ OHIO VAP ☐ Drinking Water ☐ DoD ☐ NPDES
Project Locations: ☐ Detroit ☐ New York ☐ Other
Special Instructions

MERIT LAB NO. (FOR LAB USE ONLY)	COLLECTION DATE	COLLECTION TIME	SAMPLE TAG IDENTIFICATION-DESCRIPTION	MATRIX	# OF BOTTLES	# Containers & Preservatives: NONE	HCl	HNO_3	H_2SO_4	NaOH	MeOH	OTHER	Full List Part 201 Metals	Full List Part 201 VOCs	Methane
41718.01	10/18/22	1017	MW-22-01	GW	7	3	3	1					X	X	X
.02	10/18/22	1205	MW-22-02	GW	7	3	3	1					X	X	X
.03	10/19/22	926	MW-22-03	GW	7	3	3	1					X	X	X
.04	10/20/22	1043	MW-22-04	GW	7	3	3	1					X	X	X
.05	10/20/22	1159	MW-22-05	GW	7	3	3	1					X	X	X
.06	10/20/22	1258	MW-22-06	GW	7	3	3	1					X	X	X
.07	10/18/22	←	Dup-01	GW	7	3	3	1					X	X	X
.08															

RELINQUISHED BY: SIGNATURE/ORGANIZATION: Henry Schmidt ☒ Sampler DATE: 10/20/22 TIME: 1600
RECEIVED BY: SIGNATURE/ORGANIZATION: DATE: 10/21/22 TIME: 800
RELINQUISHED BY: SIGNATURE/ORGANIZATION: DATE: TIME:
RECEIVED BY: SIGNATURE/ORGANIZATION: DATE: TIME:

RELINQUISHED BY: SIGNATURE/ORGANIZATION: DATE: 10/21/22 TIME: 1345
RECEIVED BY: SIGNATURE/ORGANIZATION: DATE: 10/21/22 TIME: 1345

SEAL NO. SEAL INTACT YES ☐ NO ☐ INITIALS
SEAL NO. SEAL INTACT YES ☐ NO ☐ INITIALS

NOTES: TEMP. ON ARRIVAL 3.4

PLEASE NOTE: SIGNING ACKNOWLEDGES ADHERENCE TO MERIT'S SAMPLE ACCEPTANCE POLICY ON REVERSE SIDE

Rev. 1.26.22

eurofins | Environment Testing

ANALYTICAL REPORT

Eurofins Michigan
10448 Citation Drive
Suite 200
Brighton, MI 48116
Tel: (810)229-2763

Laboratory Job ID: 190-30258-1
Client Project/Site: S41718

For:
Merit Laboratories
2680 E Lansing Drive
East Lansing, Michigan 48823

Attn: Lab Results

Sue Schafer

Authorized for release by:
10/28/2022 3:31:38 PM

Sue Schafer, Project Manager II
(810)229-2763
Sue.Schafer@et.eurofinsus.com

Table of Contents

Sample Summary

Client: Merit Laboratories
Project/Site: S41718

Job ID: 190-30258-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
190-30258-1	S41718.01	Water	10/18/22 10:17	10/25/22 12:50
190-30258-2	S41718.02	Water	10/18/22 12:05	10/25/22 12:50
190-30258-3	S41718.03	Water	10/18/22 09:26	10/25/22 12:50
190-30258-4	S41718.04	Water	10/18/22 10:43	10/25/22 12:50
190-30258-5	S41718.05	Water	10/18/22 11:59	10/25/22 12:50
190-30258-6	S41718.06	Water	10/18/22 12:58	10/25/22 12:50
190-30258-7	S41708.07	Water	10/18/22 00:01	10/25/22 12:50

Case Narrative

Client: Merit Laboratories
Project/Site: S41718

Job ID: 190-30258-1

Job ID: 190-30258-1

Laboratory: Eurofins Michigan

Narrative

Job Narrative
190-30258-1

Receipt

The samples were received on 10/25/2022 12:50 PM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 4.8°C

GC Semi VOA

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

Client: Merit Laboratories
Project/Site: S41718

Job ID: 190-30258-1

Client Sample ID: S41718.01 — **Lab Sample ID: 190-30258-1**
Date Collected: 10/18/22 10:17 — **Matrix: Water**
Date Received: 10/25/22 12:50

Method: SW846 8015D - Nonhalogenated Organic Compounds - Direct Injection (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Methanol	<5.0		5.0		mg/L			10/27/22 19:59	1

Client Sample ID: S41718.02 — **Lab Sample ID: 190-30258-2**
Date Collected: 10/18/22 12:05 — **Matrix: Water**
Date Received: 10/25/22 12:50

Method: SW846 8015D - Nonhalogenated Organic Compounds - Direct Injection (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Methanol	<5.0		5.0		mg/L			10/27/22 20:21	1

Client Sample ID: S41718.03 — **Lab Sample ID: 190-30258-3**
Date Collected: 10/18/22 09:26 — **Matrix: Water**
Date Received: 10/25/22 12:50

Method: SW846 8015D - Nonhalogenated Organic Compounds - Direct Injection (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Methanol	<5.0		5.0		mg/L			10/27/22 20:43	1

Client Sample ID: S41718.04 — **Lab Sample ID: 190-30258-4**
Date Collected: 10/18/22 10:43 — **Matrix: Water**
Date Received: 10/25/22 12:50

Method: SW846 8015D - Nonhalogenated Organic Compounds - Direct Injection (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Methanol	<5.0		5.0		mg/L			10/27/22 21:04	1

Client Sample ID: S41718.05 — **Lab Sample ID: 190-30258-5**
Date Collected: 10/18/22 11:59 — **Matrix: Water**
Date Received: 10/25/22 12:50

Method: SW846 8015D - Nonhalogenated Organic Compounds - Direct Injection (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Methanol	<5.0		5.0		mg/L			10/27/22 21:26	1

Client Sample ID: S41718.06 — **Lab Sample ID: 190-30258-6**
Date Collected: 10/18/22 12:58 — **Matrix: Water**
Date Received: 10/25/22 12:50

Method: SW846 8015D - Nonhalogenated Organic Compounds - Direct Injection (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Methanol	<5.0		5.0		mg/L			10/27/22 21:48	1

Client Sample ID: S41708.07 — **Lab Sample ID: 190-30258-7**
Date Collected: 10/18/22 00:01 — **Matrix: Water**
Date Received: 10/25/22 12:50

Method: SW846 8015D - Nonhalogenated Organic Compounds - Direct Injection (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Methanol	<5.0		5.0		mg/L			10/27/22 22:10	1

Client: Merit Laboratories
Project/Site: S41718

Job ID: 190-30258-1

Method: 8015D - Nonhalogenated Organic Compounds - Direct Injection (GC)

Lab Sample ID: MB 680-747335/10
Matrix: Water
Analysis Batch: 747335

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Methanol	<5.0		5.0		mg/L			10/27/22 15:20	1

Lab Sample ID: LCS 680-747335/6
Matrix: Water
Analysis Batch: 747335

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Methanol			20.0	17.1		mg/L		86	43 - 143		

Lab Sample ID: LCSD 680-747335/7
Matrix: Water
Analysis Batch: 747335

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Methanol			20.0	15.2		mg/L		76	43 - 143	12	50

Definitions/Glossary

Client: Merit Laboratories
Project/Site: S41718

Job ID: 190-30258-1

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

QC Association Summary

Client: Merit Laboratories
Project/Site: S41718

Job ID: 190-30258-1

GC Semi VOA

Analysis Batch: 747335

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
190-30258-1	S41718.01	Total/NA	Water	8015D	
190-30258-2	S41718.02	Total/NA	Water	8015D	
190-30258-3	S41718.03	Total/NA	Water	8015D	
190-30258-4	S41718.04	Total/NA	Water	8015D	
190-30258-5	S41718.05	Total/NA	Water	8015D	
190-30258-6	S41718.06	Total/NA	Water	8015D	
190-30258-7	S41708.07	Total/NA	Water	8015D	
MB 680-747335/10	Method Blank	Total/NA	Water	8015D	
LCS 680-747335/6	Lab Control Sample	Total/NA	Water	8015D	
LCSD 680-747335/7	Lab Control Sample Dup	Total/NA	Water	8015D	

Lab Chronicle

Client: Merit Laboratories
Project/Site: S41718

Job ID: 190-30258-1

Client Sample ID: S41718.01
Lab Sample ID: 190-30258-1
Date Collected: 10/18/22 10:17
Matrix: Water
Date Received: 10/25/22 12:50

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8015D		1	747335	JCK	EET SAV	10/27/22 19:59

Client Sample ID: S41718.02
Lab Sample ID: 190-30258-2
Date Collected: 10/18/22 12:05
Matrix: Water
Date Received: 10/25/22 12:50

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8015D		1	747335	JCK	EET SAV	10/27/22 20:21

Client Sample ID: S41718.03
Lab Sample ID: 190-30258-3
Date Collected: 10/18/22 09:26
Matrix: Water
Date Received: 10/25/22 12:50

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8015D		1	747335	JCK	EET SAV	10/27/22 20:43

Client Sample ID: S41718.04
Lab Sample ID: 190-30258-4
Date Collected: 10/18/22 10:43
Matrix: Water
Date Received: 10/25/22 12:50

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8015D		1	747335	JCK	EET SAV	10/27/22 21:04

Client Sample ID: S41718.05
Lab Sample ID: 190-30258-5
Date Collected: 10/18/22 11:59
Matrix: Water
Date Received: 10/25/22 12:50

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8015D		1	747335	JCK	EET SAV	10/27/22 21:26

Client Sample ID: S41718.06
Lab Sample ID: 190-30258-6
Date Collected: 10/18/22 12:58
Matrix: Water
Date Received: 10/25/22 12:50

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8015D		1	747335	JCK	EET SAV	10/27/22 21:48

Client Sample ID: S41708.07
Lab Sample ID: 190-30258-7
Date Collected: 10/18/22 00:01
Matrix: Water
Date Received: 10/25/22 12:50

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8015D		1	747335	JCK	EET SAV	10/27/22 22:10

Laboratory References:

EET SAV = Eurofins Savannah, 5102 LaRoche Avenue, Savannah, GA 31404, TEL (912)354-7858

Client: Merit Laboratories
Project/Site: S41718

Job ID: 190-30258-1

Analyst References:

Lab: EET SAV

Batch Type: Analysis

JCK = Joshua Kellar

Accreditation/Certification Summary

Client: Merit Laboratories
Project/Site: S41718

Job ID: 190-30258-1

Laboratory: Eurofins Savannah

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
	AFCEE	SAVLAB	
Alabama	State	41450	06-30-23
ANAB	Dept. of Defense ELAP	L2463	09-22-24
Arkansas DEQ	State	19-015-0	02-01-23
California	State	2939	06-30-22 *
Connecticut	State	PH-0161	03-31-23
Florida	NELAP	E87052	06-23-23
Georgia	State	E87052	06-30-23
Georgia (DW)	State	803	06-30-23
Guam	State	19-007R	04-17-23
Hawaii	State	<cert No.>	06-30-23
Illinois	NELAP	200022	11-30-22
Indiana	State	C-GA-02	06-30-23
Iowa	State	353	07-01-23
Kentucky (UST)	State	NA	06-30-23
Louisiana	NELAP	30690	06-30-23
Louisiana (All)	NELAP	30690	06-30-23
Louisiana (DW)	State	LA009	12-31-22
Maine	State	GA00006	09-25-24
Maryland	State	250	12-31-22
Massachusetts	State	M-GA006	07-30-23
Michigan	State	9925	06-30-23
Mississippi	State	<cert No.>	06-30-23
Nebraska	State	NE-OS-7-04	06-30-23
New Jersey	NELAP	GA769	06-30-23
New Mexico	State	GA00006	06-30-23
New York	NELAP	10842	04-01-23
North Carolina (DW)	State	13701	07-31-23
North Carolina (WW/SW)	State	269	12-31-22
Pennsylvania	NELAP	68-00474	06-30-23
Puerto Rico	State	GA00006	01-01-23
South Carolina	State	98001	06-30-22 *
Tennessee	State	TN02961	06-30-23
Texas	NELAP	T1047004185-19-14	11-30-22
Texas	TCEQ Water Supply	T104704185	06-30-23
USDA	US Federal Programs	P330-18-00313	09-03-24
Virginia	NELAP	460161	06-14-23
Wisconsin	State	999819810	08-31-23
Wyoming	State	8TMS-L	06-30-23

* Accreditation/Certification renewal pending - accreditation/certification considered valid.

Method Summary

Client: Merit Laboratories
Project/Site: S41718

Job ID: 190-30258-1

Method	Method Description	Protocol	Laboratory
8015D	Nonhalogenated Organic Compounds - Direct Injection (GC)	SW846	EET SAV

Protocol References:

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

EET SAV = Eurofins Savannah, 5102 LaRoche Avenue, Savannah, GA 31404, TEL (912)354-7858

Merit Laboratories, Inc.
2680 East Lansing Dr., East Lansing, MI 48823
Phone (517) 332-0167 Fax (517) 332-4034
www.meritlabs.com

C.O.C. PAGE # 1 OF 1

CHAIN OF CUSTODY RECORD

REPORT TO

CONTACT NAME: Project Management Team
COMPANY: Merit Laboratories
ADDRESS: 2680 East Lansing Drive
CITY: East Lansing STATE: MI ZIP CODE: 48823
PHONE NO.: 517-332-0167 FAX NO.: P.O. NO.:
E-MAIL ADDRESS: results@meritlabs.com QUOTE NO.:

INVOICE TO

CONTACT NAME: Julie Teague ☒ SAME
COMPANY: Merit Laboratories
ADDRESS: 2680 East Lansing Drive
CITY: East Lansing STATE: MI ZIP CODE: 48823
PHONE NO: 517-332-0167 E-MAIL ADDRESS: juliet@meritlabs.com

PROJECT NO./NAME: S41718 SAMPLER(S) - PLEASE PRINT/SIGN NAME:

TURNAROUND TIME REQUIRED ☐ 1 DAY ☐ 2 DAYS ☐ 3 DAYS ☒ STANDARD ☐ OTHER

DELIVERABLES REQUIRED ☐ STD ☒ LEVEL II ☐ LEVEL III ☐ LEVEL IV ☐ EDD ☐ OTHER

MATRIX CODE: GW=GROUNDWATER WW=WASTEWATER S=SOIL L=LIQUID SD=SOLID SL=SLUDGE DW=DRINKING WATER O=OIL WP=WIPE A=AIR W=WASTE

ANALYSIS (ATTACH LIST IF MORE SPACE IS REQUIRED)

Certifications: ☐ OHIO VAP ☐ Drinking Water ☐ DoD ☐ NPDES

Project Locations: ☐ Detroit ☐ New York ☐ Other

Special Instructions

MERIT LAB NO. (FOR LAB USE ONLY)	DATE	TIME	SAMPLE TAG IDENTIFICATION-DESCRIPTION	MATRIX	# OF BOTTLES	# Containers & Preservatives: NONE	HCl	HNO_3	H_2SO_4	NaOH	MeOH	OTHER	Methanol
	10/18/22	1017	S41718.01	GW	3	3							✓
	10/18/22	1205	S41718.02	GW	3	3							✓
	10/18/22	0926	S41718.03	GW	3	3							✓
	10/18/22	1043	S41718.04	GW	3	3							✓
	10/18/22	1159	S41718.05	GW	3	3							✓
	10/18/22	1258	S41718.06	GW	3	3							✓
	10/18/22	0001	S41718.07	GW	3	3							✓

190-30258 Chain of Custody

** Subcontracted to Eurofins

RELINQUISHED BY: SIGNATURE/ORGANIZATION	☐ Sampler	DATE 10/24/22	TIME 1500
RECEIVED BY: SIGNATURE/ORGANIZATION		DATE 10/24/22	TIME 1500
RELINQUISHED BY: SIGNATURE/ORGANIZATION		DATE 10/25/22	TIME 8:24
RECEIVED BY: SIGNATURE/ORGANIZATION		DATE 10/26/22	TIME 0830

RELINQUISHED BY: SIGNATURE/ORGANIZATION		DATE 10/25/22	TIME 0900
RECEIVED BY: SIGNATURE/ORGANIZATION		DATE 10/25/22	TIME 12:50

SEAL NO. SEAL INTACT YES☐ NO☐ INITIALS

SEAL NO. SEAL INTACT YES☐ NO☐ INITIALS

NOTES: TEMP. ON ARRIVAL

PLEASE NOTE: SIGNING ACKNOWLEDGES ADHERENCE TO MERIT'S SAMPLE ACCEPTANCE POLICY ON REVERSE SIDE

Rev. 5.18.12

eurofins | Environment Testing TestAmerica

☐ SDS or Known Hazard Information Supplied by Client
☐ Discrepancies
☐ Short Hold
☐ Rush ☐ 24 Hr ☐ 2-Day ☐ 3-Day ☐ 5-Day ☐ Other: _____

Client ID: Merit Laboratories
Work Oder #: 30258
Receipt Evaluation Performed by: Initials: JP Date: 10/25 Time: 12:50

Cooler / Sample Receipt

After hours receipt: complete gray areas. Place cooler in walk-in, place form in Receiving box. Date: _____ Time: _____

Method of Shipment:
(Walk-In Client) Eurofins TA Field/Courier
Other Client / 3rd Party Courier: _____
Fed Ex Tracking #: _____
UPS Tracking #: _____
Other: _____

Shipping Container Type:
☑ Cooler ☐ Box
☐ None ☐ Other: _____

Packing Materials:
☐ Plastic Bags ☑ Foam
☐ Bubble Wrap ☐ Paper
☐ Packing Peanuts ☐ None
☐ Other: _____

Custody Seals Intact:
☐ Yes ☐ No
☒ NA (not used or required)

Cooling Materials:
☑ Ice (Solid) ☐ Ice (Melted)
☐ Blue Ice ☐ None
☐ Other: _____

Bacteriological Samples	Temp Corrected (°C)	Frozen? Yes	Frozen? No	Rec'd Within 2 Hrs? Yes	Rec'd Within 2 Hrs? No	Sample Flagged? Yes	Sample Flagged? No

Received on same day sampled? Yes (No)

Additional Sheets Required? Yes (No)

Receipt Temperatures

Thermometer ID	Observed (°C)	Corrected (°C)	Temp Blank	Sample Temp	Acceptable	Cooler ID	Affected Samples
CP313207	4.8	4.8	_____	✓	✓ Y _ N	_____	_____
_____	_____	_____	_____	_____	_ Y _ N	_____	_____
_____	_____	_____	_____	_____	_ Y _ N	_____	_____

Receipt Questions**	Y	N	NA	"No" answers require additional comment
CoC present and ETA receipt signature, date, and time properly documented?	✓			
Containers and Labels in good condition? *(unbroken, not leaking, appropriately filled, labels legible & attached)*	✓			
Appropriate containers used and adequate volume provided?	✓			Preserved bottles checked for pH?* Yes No
Number of sample containers match CoC?	✓			pH strip lot # _____
Samples received within hold?	✓			
Samples submitted for GRO and Volatiles analysis (8260, 624, 524) received without headspace?		✓		One VOA vial has headspace
Was a Trip Blank received with VOA samples?		✓		
Were the samples free of any questionable physical conformities? (i.e.; field duplicates or multiple bottles of the same sample do not significantly vary in appearance – color, solid proportions, etc.)	✓			
Were the CoC bottle labels and all other items free of all other discrepancies or issues that would need to be addressed with the Project Manager and/or Client?	✓			
**May not be applicable if samples are not for compliance testing				*Excludes FOG, VOAs, TOC Vials, HEM

Client Contact Record

Contact Via: ☐ Phone ☐ Email ☐ Other: _____ Person Contacted: _____ Date/Time: _____
☐ Discrepancy allowance agreement is on record in the client project file

Discussion / Resolution

Any additional documentation and clarification from the client must be noted in the narrative and/or scanned into the CoC directory.

Reviewed by _____ Date: 10/25/2022

WI-MI-010_020720

Eurofins Michigan
10448 Citation Drive Suite 200
Brighton MI 48116
Phone: 810-229-2763 Fax: 810-229-0000

Chain of Custody Record

eurofins | Environment Testing America

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Schafer, Sue	Carrier Tracking No(s):	COC No: 190-34468 1
Client Contact: Shipping/Receiving	Phone:	E-Mail: Sue.Schafer@et.eurofinsus.com	State of Origin: Michigan	Page: Page 1 of 1
Company: Eurofins Environment Testing Southeast,		Accreditations Required (See note):		Job #: 190-30258-1
Address: 5102 LaRoche Avenue,	Due Date Requested: 11/7/2022			
City: Savannah	TAT Requested (days):			
State, Zip: GA, 31404				
Phone: 912-354-7858(Tel) 912-352-0165(Fax)	PO #:			
Email:	WO #:			
Project Name: S41718	Project #: 19001249			
Site:	SSOW#:			

Analysis Requested

Preservation Codes.
A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Y - Trizma, Z - other (specify)
Other:

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8016D_DAI/ (MOD) CUSTOM LIST Alcohols	Total Number of containers	Special Instructions/Note:
			Preservation Code:						
S41718 01 (190-30258-1)	10/18/22	10 17 Eastern		Water			X	3	
S41718 02 (190-30258-2)	10/18/22	12.05 Eastern		Water			X	3	
S41718 03 (190-30258-3)	10/18/22	09:26 Eastern		Water			X	3	
S41718 04 (190-30258-4)	10/18/22	10:43 Eastern		Water			X	3	
S41718 05 (190-30258-5)	10/18/22	11.59 Eastern		Water			X	3	
S41718 06 (190-30258-6)	10/18/22	12.58 Eastern		Water			X	3	
S41708 07 (190-30258-7)	10/18/22	00 01 Eastern		Water			X	3	

Note: Since laboratory accreditations are subject to change, Eurofins Environment Testing North Central, LLC places the ownership of method, analyte & accreditation compliance upon out subcontract laboratories. This sample shipment is forwarded under chain-of-custody If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the Eurofins Environment Testing North Central, LLC laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins Environment Testing North Central, LLC attention immediately If all requested accreditations are current to date return the signed Chain of Custody attesting to said complicance to Eurofins Environment Testing North Central, LLC.

Possible Hazard Identification	Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
Unconfirmed	☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months
Deliverable Requested I, II III IV Other (specify) Primary Deliverable Rank: 2	Special Instructions/QC Requirements.

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
1	[signature]	10/25/22 13:05	EETA	[signature]	10/26/22	10:30
2	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
3	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No	Cooler Temperature(s) °C and Other Remarks: 4.9/4.9

Ver: 06/08/2021

Analytical Laboratory Report

Report ID: S41719.01(01)+QC01
Generated on 11/11/2022

Report to

Attention: Kelly Cratsenburg
TRC
1540 Eisenhower Place
Ann Arbor, MI 48108

Phone: 734-585-7829 C: 734-412-5424 FAX:
Email: KCratsenburg@trccompanies.com

Addtional Contacts: Vince Buening

Report produced by

Merit Laboratories, Inc.
2680 East Lansing Drive
East Lansing, MI 48823

Phone: (517) 332-0167 FAX: (517) 332-6333

Contacts for report questions:
John Laverty (johnlaverty@meritlabs.com)
Barbara Ball (bball@meritlabs.com)

Report Summary

Lab Sample ID(s): S41719.01-S41719.09
Project: 495430.0000.0000 / Detroit Axle EB GW
Collected Date(s): 10/18/2022 - 10/20/2022
Submitted Date/Time: 10/21/2022 13:45
Sampled by: Henry Schnaidt
P.O. #: 189445

Table of Contents

Maya Murshak
Technical Director

General Report Notes

Analytical results relate only to the samples tested, in the condition received by the laboratory.
Methods may be modified for improved performance.
Results reported on a dry weight basis where applicable.
'Not detected' indicates that parameter was not found at a level equal to or greater than the reporting limit (RL).
When MDL results are provided, then 'Not detected' indicates that parameter was not found at a level equal to or greater than the MDL.
40 CFR Part 136 Table II Required Containers, Preservation Techniques and Holding Times for the Clean Water Act specify that samples for acrolein and acrylonitrile, and 2-chloroethylvinyl ether need to be preserved at a pH in the range of 4 to 5 or if not preserved, analyzed within 3 days of sampling.
QA/QC corresponding to this analytical report is a separate document with the same Merit ID reference and is available upon request.
Full accreditation certificates are available upon request. Starred (*) analytes are not NELAP accredited.
Samples are held by the lab for 30 days from the final report date unless a written request to hold longer is provided by the client.
Report shall not be reproduced except in full, without the written approval of Merit Laboratories, Inc.
Limits for drinking water samples, are listed as the MCL Limits (Maximum Contaminant Level Concentrations)
PFAS requirement: Section 9.3.8 of U.S. EPA Method 537.1 states "If the method analyte(s) found in the Field Sample is present in the FRB at a concentration greater than 1/3 the MRL, then all samples collected with that FRB are invalid and must be recollected and reanalyzed."
Samples submitted without an accompanying FRB may not be acceptable for compliance purposes.
Wisconsin PFAs analysis: MDL = LOD; RL = LOQ. LOD and LOQ are adjusted for dilution.

Report Narrative

There is no additional narrative for this analytical report

Laboratory Certifications

Authority	Certification ID
Michigan DEQ	#9956
DOD ELAP/ISO 17025	#69699
WBENC	#2005110032
Ohio VAP	#CL0002
Indiana DOH	#C-MI-07
New York NELAC	#11814
North Carolina DENR	#680
North Carolina DOH	#26702
Alaska CSLAP	#17-001
Pennsylvania DEP	#68-05884
Wisconsin DNR	FID# 399147320

Qualifier Descriptions

Qualifier	Description
!	Result is outside of stated limit criteria
B	Compound also found in associated method blank
E	Concentration exceeds calibration range
F	Analysis run outside of holding time
G	Estimated result due to extraction run outside of holding time
H	Sample submitted and run outside of holding time
I	Matrix interference with internal standard
J	Estimated value less than reporting limit, but greater than MDL
L	Elevated reporting limit due to low sample amount
M	Result reported to MDL not RDL
O	Analysis performed by outside laboratory. See attached report.
R	Preliminary result
S	Surrogate recovery outside of control limits
T	No correction for total solids
X	Elevated reporting limit due to matrix interference
Y	Elevated reporting limit due to high target concentration
b	Value detected less than reporting limit, but greater than MDL
e	Reported value estimated due to interference
j	Analyte also found in associated method blank
p	Benzo(b)Fluoranthene and Benzo(k)Fluoranthene integrated as one peak.
x	Preserved from bulk sample

Glossary of Abbreviations

Abbreviation	Description
RL/RDL	Reporting Limit
MDL	Method Detection Limit
MS	Matrix Spike
MSD	Matrix Spike Duplicate
SW	EPA SW 846 (Soil and Wastewater) Methods
E	EPA Methods
SM	Standard Methods
LN	Linear
BR	Branched

Method Summary

Method	Version
ASTMD7979-19M	ASTM Method D7979 - 19 Modified (Isotopic Dilution)

Parameter Summary

Parameter	Synonym	Cas #
PFBA	Perfluorobutanoic Acid	375-22-4
PFPeA	Perfluoropentanoic Acid	2706-90-3
4:2 FTSA	4:2 Fluorotelomer Sulfonic Acid	757124-72-4
PFHxA	Perfluorohexanoic Acid	307-24-4
PFBS	Perfluorobutane sulfonic Acid	375-73-5
PFHpA	Perfluoroheptanoic Acid	375-85-9
PFPeS	Perfluoropentane Sulfonic Acid	2706-91-4
6:2 FTSA	6:2 Fluorotelomer Sulfonic Acid	27619-97-2
PFOA	Perfluorooctanoic Acid	335-67-1
PFHxS	Perfluorohexane Sulfonic Acid	355-46-4
PFHxS-LN	Perfluorohexane Sulfonic Acid - LN	355-46-4-LN
PFHxS-BR	Perfluorohexane Sulfonic Acid - BR	355-46-4-BR
PFNA	Perfluorononanoic Acid	375-95-1
8:2 FTSA	8:2 Fluorotelomer Sulfonic Acid	39108-34-4
PFHpS	Perfluoroheptane Sulfonic Acid	375-92-8
PFDA	Perfluorodecanoic Acid	335-76-2
N-MeFOSAA	N-methyl perfluorooctanesulfonamidoacetic acid	2355-31-9
EtFOSAA	N-Ethyl Perfluorooctane Sulfonamidoacetic Acid	2991-50-6
PFOS	Perfluorooctane Sulfonic Acid	1763-23-1
PFOS-LN	Perfluorooctane Sulfonic Acid - LN	1763-23-1-LN
PFOS-BR	Perfluorooctane Sulfonic Acid - BR	1763-23-1-BR
PFUnDA	Perfluoroundecanoic Acid	2058-94-8
PFNS	Perfluorononane Sulfonic Acid	68259-12-1
PFDoDA	Perfluorododecanoic Acid	307-55-1
PFDS	Perfluorodecane Sulfonic Acid	335-77-3
PFTrDA	Perfluorotridecanoic Acid	72629-94-8
FOSA	Perfluorooctane Sulfonamide	754-91-6
PFTeDA	Perfluorotetradecanoic Acid	376-06-7
11Cl-PF3OUdS	11-chloroeicosafluoro-3-oxaundecane-1-sulfonic acid	763051-92-9
9Cl-PF3ONS	9-chlorohexadecafluoro-3-oxanone1-sulfonic acid	756426-58-1
ADONA	4,8-dioxa-3H-perfluorononanoic acid	919005-14-4
HFPO-DA	Hexafluoropropylene oxide dimer	13252-13-6
PFECHS	Perfluoro-4-ethylcyclohexanesulfonate	67584-42-3
PFBSA	Perfluorobutanesulfonamide	30334-69-1
PFHxSA	Perfluorohexanesulfonamide	41997-13-1

Sample Summary (9 samples)

Sample ID	Sample Tag	Matrix	Collected Date/Time
S41719.01	MW-22-01	Groundwater	10/18/22 10:17
S41719.02	MW-22-02	Groundwater	10/18/22 12:05
S41719.03	MW-22-03	Groundwater	10/19/22 09:26
S41719.04	MW-22-04	Groundwater	10/20/22 10:43
S41719.05	MW-22-05	Groundwater	10/20/22 11:59
S41719.06	MW-22-06	Groundwater	10/20/22 12:58
S41719.07	Dup-01	Groundwater	10/18/22 00:01
S41719.08	EB-01	Water	10/19/22 10:09
S41719.09	FB-01	Water	10/19/22 10:09

Analytical Laboratory Report

Lab Sample ID: S41719.01
Sample Tag: MW-22-01
Collected Date/Time: 10/18/2022 10:17
Matrix: Groundwater
COC Reference: 154861

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
1	15ml Centrifuge Tube	None	Yes	3.4	IR

Extraction / Prep.

Parameter	Result	Method	Run Date	Analyst	Flags
Initial wt. (g) / Final wt. (g) / Volume (ml)*	11.87/6.50/11	ASTMD7979-19M	11/02/22 12:00	PTW	

Organics

31 PFAs, Method: ASTMD7979-19M, Run Date: 11/03/22 05:01, Analyst: KCV

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
PFBA*	16	10		ng/L	2.05	375-22-4	
PFPeA*	19	4.1		ng/L	2.05	2706-90-3	
4:2 FTSA*	Not detected	2.1		ng/L	2.05	757124-72-4	
PFHxA*	18	2.1		ng/L	2.05	307-24-4	
PFBS*	44	2.1		ng/L	2.05	375-73-5	
PFHpA*	12	2.1		ng/L	2.05	375-85-9	
PFPeS*	Not detected	2.1		ng/L	2.05	2706-91-4	
6:2 FTSA*	Not detected	2.1		ng/L	2.05	27619-97-2	
PFOA*	4.6	2.1		ng/L	2.05	335-67-1	
PFHxS*	6.4	2.1		ng/L	2.05	355-46-4	
PFHxS-LN*	4.4	2.1		ng/L	2.05	355-46-4-LN	
PFHxS-BR*	Not detected	2.1		ng/L	2.05	355-46-4-BR	
PFNA*	Not detected	2.1		ng/L	2.05	375-95-1	
8:2 FTSA*	Not detected	2.1		ng/L	2.05	39108-34-4	
PFHpS*	Not detected	2.1		ng/L	2.05	375-92-8	
PFDA*	Not detected	2.1		ng/L	2.05	335-76-2	
N-MeFOSAA*	Not detected	2.1		ng/L	2.05	2355-31-9	
EtFOSAA*	Not detected	4.1		ng/L	2.05	2991-50-6	
PFOS*	Not detected	2.1		ng/L	2.05	1763-23-1	
PFOS-LN*	Not detected	2.1		ng/L	2.05	1763-23-1-LN	
PFOS-BR*	Not detected	2.1		ng/L	2.05	1763-23-1-BR	
PFUnDA*	Not detected	2.1		ng/L	2.05	2058-94-8	
PFNS*	Not detected	2.1		ng/L	2.05	68259-12-1	
PFDoDA*	Not detected	2.1		ng/L	2.05	307-55-1	
PFDS*	Not detected	2.1		ng/L	2.05	335-77-3	
PFTrDA*	Not detected	2.1		ng/L	2.05	72629-94-8	
FOSA*	Not detected	2.1		ng/L	2.05	754-91-6	
PFTeDA*	Not detected	4.1		ng/L	2.05	376-06-7	
11Cl-PF3OUdS*	Not detected	2.1		ng/L	2.05	763051-92-9	
9Cl-PF3ONS*	Not detected	2.1		ng/L	2.05	756426-58-1	
ADONA*	Not detected	2.1		ng/L	2.05	919005-14-4	
HFPO-DA*	Not detected	10		ng/L	2.05	13252-13-6	
PFECHS*	Not detected	2.1		ng/L	2.05	67584-42-3	
PFBSA*	Not detected	2.1		ng/L	2.05	30334-69-1	
PFHxSA*	Not detected	2.1		ng/L	2.05	41997-13-1	

Lab Sample ID: S41719.02
Sample Tag: MW-22-02
Collected Date/Time: 10/18/2022 12:05
Matrix: Groundwater
COC Reference: 154861

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
1	15ml Centrifuge Tube	None	Yes	3.4	IR

Extraction / Prep.

Parameter	Result	Method	Run Date	Analyst	Flags
Initial wt. (g) / Final wt. (g) / Volume (ml)*	11.86/6.50/11	ASTMD7979-19M	11/02/22 12:00	PTW	

Organics

31 PFAs, Method: ASTMD7979-19M, Run Date: 11/03/22 05:40, Analyst: KCV

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
PFBA*	Not detected	10		ng/L	2.05	375-22-4	
PFPeA*	Not detected	4.1		ng/L	2.05	2706-90-3	
4:2 FTSA*	Not detected	2.1		ng/L	2.05	757124-72-4	
PFHxA*	2.7	2.1		ng/L	2.05	307-24-4	
PFBS*	4.1	2.1		ng/L	2.05	375-73-5	
PFHpA*	3.5	2.1		ng/L	2.05	375-85-9	
PFPeS*	Not detected	2.1		ng/L	2.05	2706-91-4	
6:2 FTSA*	Not detected	2.1		ng/L	2.05	27619-97-2	
PFOA*	15	2.1		ng/L	2.05	335-67-1	
PFHxS*	22	2.1		ng/L	2.05	355-46-4	
PFHxS-LN*	19	2.1		ng/L	2.05	355-46-4-LN	
PFHxS-BR*	2.8	2.1		ng/L	2.05	355-46-4-BR	
PFNA*	Not detected	2.1		ng/L	2.05	375-95-1	
8:2 FTSA*	Not detected	2.1		ng/L	2.05	39108-34-4	
PFHpS*	Not detected	2.1		ng/L	2.05	375-92-8	
PFDA*	Not detected	2.1		ng/L	2.05	335-76-2	
N-MeFOSAA*	Not detected	2.1		ng/L	2.05	2355-31-9	
EtFOSAA*	Not detected	4.1		ng/L	2.05	2991-50-6	
PFOS*	Not detected	2.1		ng/L	2.05	1763-23-1	
PFOS-LN*	Not detected	2.1		ng/L	2.05	1763-23-1-LN	
PFOS-BR*	Not detected	2.1		ng/L	2.05	1763-23-1-BR	
PFUnDA*	Not detected	2.1		ng/L	2.05	2058-94-8	
PFNS*	Not detected	2.1		ng/L	2.05	68259-12-1	
PFDoDA*	Not detected	2.1		ng/L	2.05	307-55-1	
PFDS*	Not detected	2.1		ng/L	2.05	335-77-3	
PFTrDA*	Not detected	2.1		ng/L	2.05	72629-94-8	
FOSA*	Not detected	2.1		ng/L	2.05	754-91-6	
PFTeDA*	Not detected	4.1		ng/L	2.05	376-06-7	
11Cl-PF3OUdS*	Not detected	2.1		ng/L	2.05	763051-92-9	
9Cl-PF3ONS*	Not detected	2.1		ng/L	2.05	756426-58-1	
ADONA*	Not detected	2.1		ng/L	2.05	919005-14-4	
HFPO-DA*	Not detected	10		ng/L	2.05	13252-13-6	
PFECHS*	Not detected	2.1		ng/L	2.05	67584-42-3	
PFBSA*	Not detected	2.1		ng/L	2.05	30334-69-1	
PFHxSA*	Not detected	2.1		ng/L	2.05	41997-13-1	

Lab Sample ID: S41719.03
Sample Tag: MW-22-03
Collected Date/Time: 10/19/2022 09:26
Matrix: Groundwater
COC Reference: 154861

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
1	15ml Centrifuge Tube	None	Yes	3.4	IR

Extraction / Prep.

Parameter	Result	Method	Run Date	Analyst	Flags
Initial wt. (g) / Final wt. (g) / Volume (ml)*	11.71/6.55/10	ASTMD7979-19M	11/02/22 12:00	PTW	

Organics

31 PFAs, Method: ASTMD7979-19M, Run Date: 11/03/22 06:19, Analyst: KCV

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
PFBA*	10	9.7		ng/L	1.94	375-22-4	
PFPeA*	4.1	3.9		ng/L	1.94	2706-90-3	
4:2 FTSA*	Not detected	1.9		ng/L	1.94	757124-72-4	
PFHxA*	4.8	1.9		ng/L	1.94	307-24-4	
PFBS*	6.2	1.9		ng/L	1.94	375-73-5	
PFHpA*	2.4	1.9		ng/L	1.94	375-85-9	
PFPeS*	Not detected	1.9		ng/L	1.94	2706-91-4	
6:2 FTSA*	Not detected	1.9		ng/L	1.94	27619-97-2	
PFOA*	7.2	1.9		ng/L	1.94	335-67-1	
PFHxS*	4.2	1.9		ng/L	1.94	355-46-4	
PFHxS-LN*	3.2	1.9		ng/L	1.94	355-46-4-LN	
PFHxS-BR*	Not detected	1.9		ng/L	1.94	355-46-4-BR	
PFNA*	Not detected	1.9		ng/L	1.94	375-95-1	
8:2 FTSA*	Not detected	1.9		ng/L	1.94	39108-34-4	
PFHpS*	Not detected	1.9		ng/L	1.94	375-92-8	
PFDA*	Not detected	1.9		ng/L	1.94	335-76-2	
N-MeFOSAA*	Not detected	1.9		ng/L	1.94	2355-31-9	
EtFOSAA*	Not detected	3.9		ng/L	1.94	2991-50-6	
PFOS*	Not detected	1.9		ng/L	1.94	1763-23-1	
PFOS-LN*	Not detected	1.9		ng/L	1.94	1763-23-1-LN	
PFOS-BR*	Not detected	1.9		ng/L	1.94	1763-23-1-BR	
PFUnDA*	Not detected	1.9		ng/L	1.94	2058-94-8	
PFNS*	Not detected	1.9		ng/L	1.94	68259-12-1	
PFDoDA*	Not detected	1.9		ng/L	1.94	307-55-1	
PFDS*	Not detected	1.9		ng/L	1.94	335-77-3	
PFTrDA*	Not detected	1.9		ng/L	1.94	72629-94-8	
FOSA*	Not detected	1.9		ng/L	1.94	754-91-6	
PFTeDA*	Not detected	3.9		ng/L	1.94	376-06-7	
11Cl-PF3OUdS*	Not detected	1.9		ng/L	1.94	763051-92-9	
9Cl-PF3ONS*	Not detected	1.9		ng/L	1.94	756426-58-1	
ADONA*	Not detected	1.9		ng/L	1.94	919005-14-4	
HFPO-DA*	Not detected	9.7		ng/L	1.94	13252-13-6	
PFECHS*	Not detected	1.9		ng/L	1.94	67584-42-3	
PFBSA*	Not detected	1.9		ng/L	1.94	30334-69-1	
PFHxSA*	Not detected	1.9		ng/L	1.94	41997-13-1	

Analytical Laboratory Report

Lab Sample ID: S41719.04
Sample Tag: MW-22-04
Collected Date/Time: 10/20/2022 10:43
Matrix: Groundwater
COC Reference: 154861

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
1	15ml Centrifuge Tube	None	Yes	3.4	IR

Extraction / Prep.

Parameter	Result	Method	Run Date	Analyst	Flags
Initial wt. (g) / Final wt. (g) / Volume (ml)*	11.99/6.59/11	ASTMD7979-19M	11/02/22 12:00	PTW	

Organics

31 PFAs, Method: ASTMD7979-19M, Run Date: 11/03/22 06:39, Analyst: KCV

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
PFBA*	Not detected	10		ng/L	2.04	375-22-4	
PFPeA*	Not detected	4.1		ng/L	2.04	2706-90-3	
4:2 FTSA*	Not detected	2.0		ng/L	2.04	757124-72-4	
PFHxA*	Not detected	2.0		ng/L	2.04	307-24-4	
PFBS*	5.3	2.0		ng/L	2.04	375-73-5	
PFHpA*	Not detected	2.0		ng/L	2.04	375-85-9	
PFPeS*	Not detected	2.0		ng/L	2.04	2706-91-4	
6:2 FTSA*	Not detected	2.0		ng/L	2.04	27619-97-2	
PFOA*	9.2	2.0		ng/L	2.04	335-67-1	
PFHxS*	3.0	2.0		ng/L	2.04	355-46-4	
PFHxS-LN*	Not detected	2.0		ng/L	2.04	355-46-4-LN	
PFHxS-BR*	Not detected	2.0		ng/L	2.04	355-46-4-BR	
PFNA*	Not detected	2.0		ng/L	2.04	375-95-1	
8:2 FTSA*	Not detected	2.0		ng/L	2.04	39108-34-4	
PFHpS*	Not detected	2.0		ng/L	2.04	375-92-8	
PFDA*	Not detected	2.0		ng/L	2.04	335-76-2	
N-MeFOSAA*	Not detected	2.0		ng/L	2.04	2355-31-9	
EtFOSAA*	Not detected	4.1		ng/L	2.04	2991-50-6	
PFOS*	Not detected	2.0		ng/L	2.04	1763-23-1	
PFOS-LN*	Not detected	2.0		ng/L	2.04	1763-23-1-LN	
PFOS-BR*	Not detected	2.0		ng/L	2.04	1763-23-1-BR	
PFUnDA*	Not detected	2.0		ng/L	2.04	2058-94-8	
PFNS*	Not detected	2.0		ng/L	2.04	68259-12-1	
PFDoDA*	Not detected	2.0		ng/L	2.04	307-55-1	
PFDS*	Not detected	2.0		ng/L	2.04	335-77-3	
PFTrDA*	Not detected	2.0		ng/L	2.04	72629-94-8	
FOSA*	Not detected	2.0		ng/L	2.04	754-91-6	
PFTeDA*	Not detected	4.1		ng/L	2.04	376-06-7	
11Cl-PF3OUdS*	Not detected	2.0		ng/L	2.04	763051-92-9	
9Cl-PF3ONS*	Not detected	2.0		ng/L	2.04	756426-58-1	
ADONA*	Not detected	2.0		ng/L	2.04	919005-14-4	
HFPO-DA*	Not detected	10		ng/L	2.04	13252-13-6	
PFECHS*	Not detected	2.0		ng/L	2.04	67584-42-3	
PFBSA*	Not detected	2.0		ng/L	2.04	30334-69-1	
PFHxSA*	Not detected	2.0		ng/L	2.04	41997-13-1	

Lab Sample ID: S41719.05
Sample Tag: MW-22-05
Collected Date/Time: 10/20/2022 11:59
Matrix: Groundwater
COC Reference: 154861

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
1	15ml Centrifuge Tube	None	Yes	3.4	IR

Extraction / Prep.

Parameter	Result	Method	Run Date	Analyst	Flags
Initial wt. (g) / Final wt. (g) / Volume (ml)*	11.90/6.55/11	ASTMD7979-19M	11/02/22 12:00	PTW	

Organics

31 PFAs, Method: ASTMD7979-19M, Run Date: 11/03/22 06:58, Analyst: KCV

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
PFBA*	Not detected	10		ng/L	2.06	375-22-4	
PFPeA*	Not detected	4.1		ng/L	2.06	2706-90-3	
4:2 FTSA*	Not detected	2.1		ng/L	2.06	757124-72-4	
PFHxA*	Not detected	2.1		ng/L	2.06	307-24-4	
PFBS*	Not detected	2.1		ng/L	2.06	375-73-5	
PFHpA*	Not detected	2.1		ng/L	2.06	375-85-9	
PFPeS*	Not detected	2.1		ng/L	2.06	2706-91-4	
6:2 FTSA*	Not detected	2.1		ng/L	2.06	27619-97-2	
PFOA*	5.9	2.1		ng/L	2.06	335-67-1	
PFHxS*	Not detected	2.1		ng/L	2.06	355-46-4	
PFHxS-LN*	Not detected	2.1		ng/L	2.06	355-46-4-LN	
PFHxS-BR*	Not detected	2.1		ng/L	2.06	355-46-4-BR	
PFNA*	Not detected	2.1		ng/L	2.06	375-95-1	
8:2 FTSA*	Not detected	2.1		ng/L	2.06	39108-34-4	
PFHpS*	Not detected	2.1		ng/L	2.06	375-92-8	
PFDA*	Not detected	2.1		ng/L	2.06	335-76-2	
N-MeFOSAA*	Not detected	2.1		ng/L	2.06	2355-31-9	
EtFOSAA*	Not detected	4.1		ng/L	2.06	2991-50-6	
PFOS*	Not detected	2.1		ng/L	2.06	1763-23-1	
PFOS-LN*	Not detected	2.1		ng/L	2.06	1763-23-1-LN	
PFOS-BR*	Not detected	2.1		ng/L	2.06	1763-23-1-BR	
PFUnDA*	Not detected	2.1		ng/L	2.06	2058-94-8	
PFNS*	Not detected	2.1		ng/L	2.06	68259-12-1	
PFDoDA*	Not detected	2.1		ng/L	2.06	307-55-1	
PFDS*	Not detected	2.1		ng/L	2.06	335-77-3	
PFTrDA*	Not detected	2.1		ng/L	2.06	72629-94-8	
FOSA*	Not detected	2.1		ng/L	2.06	754-91-6	
PFTeDA*	Not detected	4.1		ng/L	2.06	376-06-7	
11Cl-PF3OUdS*	Not detected	2.1		ng/L	2.06	763051-92-9	
9Cl-PF3ONS*	Not detected	2.1		ng/L	2.06	756426-58-1	
ADONA*	Not detected	2.1		ng/L	2.06	919005-14-4	
HFPO-DA*	Not detected	10		ng/L	2.06	13252-13-6	
PFECHS*	Not detected	2.1		ng/L	2.06	67584-42-3	
PFBSA*	Not detected	2.1		ng/L	2.06	30334-69-1	
PFHxSA*	Not detected	2.1		ng/L	2.06	41997-13-1	

Lab Sample ID: S41719.06
Sample Tag: MW-22-06
Collected Date/Time: 10/20/2022 12:58
Matrix: Groundwater
COC Reference: 154861

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
1	15ml Centrifuge Tube	None	Yes	3.4	IR

Extraction / Prep.

Parameter	Result	Method	Run Date	Analyst	Flags
Initial wt. (g) / Final wt. (g) / Volume (ml)*	11.82/6.52/10	ASTMD7979-19M	11/02/22 12:00	PTW	

Organics

31 PFAs, Method: ASTMD7979-19M, Run Date: 11/03/22 07:18, Analyst: KCV

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
PFBA*	Not detected	9.5		ng/L	1.89	375-22-4	
PFPeA*	Not detected	3.8		ng/L	1.89	2706-90-3	
4:2 FTSA*	Not detected	1.9		ng/L	1.89	757124-72-4	
PFHxA*	3.6	1.9		ng/L	1.89	307-24-4	
PFBS*	2.1	1.9		ng/L	1.89	375-73-5	
PFHpA*	Not detected	1.9		ng/L	1.89	375-85-9	
PFPeS*	Not detected	1.9		ng/L	1.89	2706-91-4	
6:2 FTSA*	Not detected	1.9		ng/L	1.89	27619-97-2	
PFOA*	3.1	1.9		ng/L	1.89	335-67-1	
PFHxS*	6.7	1.9		ng/L	1.89	355-46-4	
PFHxS-LN*	5.2	1.9		ng/L	1.89	355-46-4-LN	
PFHxS-BR*	Not detected	1.9		ng/L	1.89	355-46-4-BR	
PFNA*	Not detected	1.9		ng/L	1.89	375-95-1	
8:2 FTSA*	Not detected	1.9		ng/L	1.89	39108-34-4	
PFHpS*	Not detected	1.9		ng/L	1.89	375-92-8	
PFDA*	Not detected	1.9		ng/L	1.89	335-76-2	
N-MeFOSAA*	Not detected	1.9		ng/L	1.89	2355-31-9	
EtFOSAA*	Not detected	3.8		ng/L	1.89	2991-50-6	
PFOS*	Not detected	1.9		ng/L	1.89	1763-23-1	
PFOS-LN*	Not detected	1.9		ng/L	1.89	1763-23-1-LN	
PFOS-BR*	Not detected	1.9		ng/L	1.89	1763-23-1-BR	
PFUnDA*	Not detected	1.9		ng/L	1.89	2058-94-8	
PFNS*	Not detected	1.9		ng/L	1.89	68259-12-1	
PFDoDA*	Not detected	1.9		ng/L	1.89	307-55-1	
PFDS*	Not detected	1.9		ng/L	1.89	335-77-3	
PFTrDA*	Not detected	1.9		ng/L	1.89	72629-94-8	
FOSA*	Not detected	1.9		ng/L	1.89	754-91-6	
PFTeDA*	Not detected	3.8		ng/L	1.89	376-06-7	
11Cl-PF3OUdS*	Not detected	1.9		ng/L	1.89	763051-92-9	
9Cl-PF3ONS*	Not detected	1.9		ng/L	1.89	756426-58-1	
ADONA*	Not detected	1.9		ng/L	1.89	919005-14-4	
HFPO-DA*	Not detected	9.5		ng/L	1.89	13252-13-6	
PFECHS*	Not detected	1.9		ng/L	1.89	67584-42-3	
PFBSA*	Not detected	1.9		ng/L	1.89	30334-69-1	
PFHxSA*	Not detected	1.9		ng/L	1.89	41997-13-1	

Lab Sample ID: S41719.07
Sample Tag: Dup-01
Collected Date/Time: 10/18/2022 00:01
Matrix: Groundwater
COC Reference: 154861

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
1	15ml Centrifuge Tube	None	Yes	3.4	IR

Extraction / Prep.

Parameter	Result	Method	Run Date	Analyst	Flags
Initial wt. (g) / Final wt. (g) / Volume (ml)*	11.81/6.54/10	ASTMD7979-19M	11/02/22 12:00	PTW	

Organics

31 PFAs, Method: ASTMD7979-19M, Run Date: 11/03/22 07:37, Analyst: KCV

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
PFBA*	16	9.5		ng/L	1.9	375-22-4	
PFPeA*	19	3.8		ng/L	1.9	2706-90-3	
4:2 FTSA*	Not detected	1.9		ng/L	1.9	757124-72-4	
PFHxA*	18	1.9		ng/L	1.9	307-24-4	
PFBS*	39	1.9		ng/L	1.9	375-73-5	
PFHpA*	8.2	1.9		ng/L	1.9	375-85-9	
PFPeS*	Not detected	1.9		ng/L	1.9	2706-91-4	
6:2 FTSA*	Not detected	1.9		ng/L	1.9	27619-97-2	
PFOA*	5.8	1.9		ng/L	1.9	335-67-1	
PFHxS*	5.6	1.9		ng/L	1.9	355-46-4	
PFHxS-LN*	4.2	1.9		ng/L	1.9	355-46-4-LN	
PFHxS-BR*	Not detected	1.9		ng/L	1.9	355-46-4-BR	
PFNA*	Not detected	1.9		ng/L	1.9	375-95-1	
8:2 FTSA*	Not detected	1.9		ng/L	1.9	39108-34-4	
PFHpS*	Not detected	1.9		ng/L	1.9	375-92-8	
PFDA*	Not detected	1.9		ng/L	1.9	335-76-2	
N-MeFOSAA*	Not detected	1.9		ng/L	1.9	2355-31-9	
EtFOSAA*	Not detected	3.8		ng/L	1.9	2991-50-6	
PFOS*	Not detected	1.9		ng/L	1.9	1763-23-1	
PFOS-LN*	Not detected	1.9		ng/L	1.9	1763-23-1-LN	
PFOS-BR*	Not detected	1.9		ng/L	1.9	1763-23-1-BR	
PFUnDA*	Not detected	1.9		ng/L	1.9	2058-94-8	
PFNS*	Not detected	1.9		ng/L	1.9	68259-12-1	
PFDoDA*	Not detected	1.9		ng/L	1.9	307-55-1	
PFDS*	Not detected	1.9		ng/L	1.9	335-77-3	
PFTrDA*	Not detected	1.9		ng/L	1.9	72629-94-8	
FOSA*	Not detected	1.9		ng/L	1.9	754-91-6	
PFTeDA*	Not detected	3.8		ng/L	1.9	376-06-7	
11Cl-PF3OUdS*	Not detected	1.9		ng/L	1.9	763051-92-9	
9Cl-PF3ONS*	Not detected	1.9		ng/L	1.9	756426-58-1	
ADONA*	Not detected	1.9		ng/L	1.9	919005-14-4	
HFPO-DA*	Not detected	9.5		ng/L	1.9	13252-13-6	
PFECHS*	Not detected	1.9		ng/L	1.9	67584-42-3	
PFBSA*	Not detected	1.9		ng/L	1.9	30334-69-1	
PFHxSA*	Not detected	1.9		ng/L	1.9	41997-13-1	

Lab Sample ID: S41719.08
Sample Tag: EB-01
Collected Date/Time: 10/19/2022 10:09
Matrix: Water
COC Reference: 154861

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
1	15ml Centrifuge Tube	None	Yes	3.4	IR

Extraction / Prep.

Parameter	Result	Method	Run Date	Analyst	Flags
Initial wt. (g) / Final wt. (g) / Volume (ml)*	11.77/6.53/10	ASTMD7979-19M	11/02/22 12:00	PTW	

Organics

31 PFAs, Method: ASTMD7979-19M, Run Date: 11/03/22 07:57, Analyst: KCV

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
PFBA*	Not detected	9.6		ng/L	1.91	375-22-4	
PFPeA*	Not detected	3.8		ng/L	1.91	2706-90-3	
4:2 FTSA*	Not detected	1.9		ng/L	1.91	757124-72-4	
PFHxA*	Not detected	1.9		ng/L	1.91	307-24-4	
PFBS*	Not detected	1.9		ng/L	1.91	375-73-5	
PFHpA*	Not detected	1.9		ng/L	1.91	375-85-9	
PFPeS*	Not detected	1.9		ng/L	1.91	2706-91-4	
6:2 FTSA*	Not detected	1.9		ng/L	1.91	27619-97-2	
PFOA*	Not detected	1.9		ng/L	1.91	335-67-1	
PFHxS*	Not detected	1.9		ng/L	1.91	355-46-4	
PFHxS-LN*	Not detected	1.9		ng/L	1.91	355-46-4-LN	
PFHxS-BR*	Not detected	1.9		ng/L	1.91	355-46-4-BR	
PFNA*	Not detected	1.9		ng/L	1.91	375-95-1	
8:2 FTSA*	Not detected	1.9		ng/L	1.91	39108-34-4	
PFHpS*	Not detected	1.9		ng/L	1.91	375-92-8	
PFDA*	Not detected	1.9		ng/L	1.91	335-76-2	
N-MeFOSAA*	Not detected	1.9		ng/L	1.91	2355-31-9	
EtFOSAA*	Not detected	3.8		ng/L	1.91	2991-50-6	
PFOS*	Not detected	1.9		ng/L	1.91	1763-23-1	
PFOS-LN*	Not detected	1.9		ng/L	1.91	1763-23-1-LN	
PFOS-BR*	Not detected	1.9		ng/L	1.91	1763-23-1-BR	
PFUnDA*	Not detected	1.9		ng/L	1.91	2058-94-8	
PFNS*	Not detected	1.9		ng/L	1.91	68259-12-1	
PFDoDA*	Not detected	1.9		ng/L	1.91	307-55-1	
PFDS*	Not detected	1.9		ng/L	1.91	335-77-3	
PFTrDA*	Not detected	1.9		ng/L	1.91	72629-94-8	
FOSA*	Not detected	1.9		ng/L	1.91	754-91-6	
PFTeDA*	Not detected	3.8		ng/L	1.91	376-06-7	
11Cl-PF3OUdS*	Not detected	1.9		ng/L	1.91	763051-92-9	
9Cl-PF3ONS*	Not detected	1.9		ng/L	1.91	756426-58-1	
ADONA*	Not detected	1.9		ng/L	1.91	919005-14-4	
HFPO-DA*	Not detected	9.6		ng/L	1.91	13252-13-6	
PFECHS*	Not detected	1.9		ng/L	1.91	67584-42-3	
PFBSA*	Not detected	1.9		ng/L	1.91	30334-69-1	
PFHxSA*	Not detected	1.9		ng/L	1.91	41997-13-1	

Lab Sample ID: S41719.09
Sample Tag: FB-01
Collected Date/Time: 10/19/2022 10:09
Matrix: Water
COC Reference: 154861

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
1	15ml Centrifuge Tube	None	Yes	3.4	IR

Extraction / Prep.

Parameter	Result	Method	Run Date	Analyst	Flags
Initial wt. (g) / Final wt. (g) / Volume (ml)*	11.28/6.50/10	ASTMD7979-19M	11/02/22 12:00	PTW	

Organics

31 PFAs, Method: ASTMD7979-19M, Run Date: 11/03/22 08:16, Analyst: KCV

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
PFBA*	Not detected	10		ng/L	2.09	375-22-4	
PFPeA*	Not detected	4.2		ng/L	2.09	2706-90-3	
4:2 FTSA*	Not detected	2.1		ng/L	2.09	757124-72-4	
PFHxA*	Not detected	2.1		ng/L	2.09	307-24-4	
PFBS*	Not detected	2.1		ng/L	2.09	375-73-5	
PFHpA*	Not detected	2.1		ng/L	2.09	375-85-9	
PFPeS*	Not detected	2.1		ng/L	2.09	2706-91-4	
6:2 FTSA*	Not detected	2.1		ng/L	2.09	27619-97-2	
PFOA*	Not detected	2.1		ng/L	2.09	335-67-1	
PFHxS*	Not detected	2.1		ng/L	2.09	355-46-4	
PFHxS-LN*	Not detected	2.1		ng/L	2.09	355-46-4-LN	
PFHxS-BR*	Not detected	2.1		ng/L	2.09	355-46-4-BR	
PFNA*	Not detected	2.1		ng/L	2.09	375-95-1	
8:2 FTSA*	Not detected	2.1		ng/L	2.09	39108-34-4	
PFHpS*	Not detected	2.1		ng/L	2.09	375-92-8	
PFDA*	Not detected	2.1		ng/L	2.09	335-76-2	
N-MeFOSAA*	Not detected	2.1		ng/L	2.09	2355-31-9	
EtFOSAA*	Not detected	4.2		ng/L	2.09	2991-50-6	
PFOS*	Not detected	2.1		ng/L	2.09	1763-23-1	
PFOS-LN*	Not detected	2.1		ng/L	2.09	1763-23-1-LN	
PFOS-BR*	Not detected	2.1		ng/L	2.09	1763-23-1-BR	
PFUnDA*	Not detected	2.1		ng/L	2.09	2058-94-8	
PFNS*	Not detected	2.1		ng/L	2.09	68259-12-1	
PFDoDA*	Not detected	2.1		ng/L	2.09	307-55-1	
PFDS*	Not detected	2.1		ng/L	2.09	335-77-3	
PFTrDA*	Not detected	2.1		ng/L	2.09	72629-94-8	
FOSA*	Not detected	2.1		ng/L	2.09	754-91-6	
PFTeDA*	Not detected	4.2		ng/L	2.09	376-06-7	
11Cl-PF3OUdS*	Not detected	2.1		ng/L	2.09	763051-92-9	
9Cl-PF3ONS*	Not detected	2.1		ng/L	2.09	756426-58-1	
ADONA*	Not detected	2.1		ng/L	2.09	919005-14-4	
HFPO-DA*	Not detected	10		ng/L	2.09	13252-13-6	
PFECHS*	Not detected	2.1		ng/L	2.09	67584-42-3	
PFBSA*	Not detected	2.1		ng/L	2.09	30334-69-1	
PFHxSA*	Not detected	2.1		ng/L	2.09	41997-13-1	

Quality Control Report

Report ID: S41719.01(01)+QC01
Generated on 11/11/2022

Report to

Attention: Kelly Cratsenburg
TRC
1540 Eisenhower Place
Ann Arbor, MI 48108

Phone: 734-585-7829 C: 734-412-5424 FAX:

Report Produced by

Merit Laboratories
2680 East Lansing Drive
East Lansing, MI 48823

Phone: (517) 332-0167 FAX: (517) 332-6333

Report Summary

Lab Sample ID(s): S41719.01-S41719.09
Project: 495430.0000.0000 / Detroit Axle EB GW
Submitted Date/Time: 10/21/2022 13:45
Sampled by: Henry Schnaidt
P.O. #: 189445

QC Report Sections

Report Flag Descriptions

*: QC result is outside of indicated control limits
W: Surrogate result not applicable due to sample dilution

I certify that this data package is in compliance with the terms and conditions of the program, and project, and contractual requirements both technically and for completeness. Release of the data contained in this hardcopy data package and its computer-readable data submitted has been authorized by the Quality Assurance Manager and his/her designee, as verified by the following signature.

Barbara Ball
Quality Assurance Manager

Lab Sample ID: S41719.01
Sample Tag: MW-22-01
Collected Date/Time: 10/18/2022 10:17
Matrix: Groundwater
COC Reference: 154861

Analysis	Method	Run Date/Time	Batch ID	Prep ID	Surr	QC Types
Organics - Volatiles						
31 PFAs	ASTMD7979-19M	11/03/22 05:01	AK221102C	PF221102W2	Yes	BLK/LCS/LCSD/MS/DU

Lab Sample ID: S41719.02
Sample Tag: MW-22-02
Collected Date/Time: 10/18/2022 12:05
Matrix: Groundwater
COC Reference: 154861

Analysis	Method	Run Date/Time	Batch ID	Prep ID	Surr	QC Types
Organics - Volatiles						
31 PFAs	ASTMD7979-19M	11/03/22 05:40	AK221102C	PF221102W2	Yes	BLK/LCS/LCSD/MS/DU

Lab Sample ID: S41719.03
Sample Tag: MW-22-03
Collected Date/Time: 10/19/2022 09:26
Matrix: Groundwater
COC Reference: 154861

Analysis	Method	Run Date/Time	Batch ID	Prep ID	Surr	QC Types
Organics - Volatiles						
31 PFAs	ASTMD7979-19M	11/03/22 06:19	AK221102C	PF221102W2	Yes	BLK/LCS/LCSD/MS/DU

Lab Sample ID: S41719.04
Sample Tag: MW-22-04
Collected Date/Time: 10/20/2022 10:43
Matrix: Groundwater
COC Reference: 154861

Analysis	Method	Run Date/Time	Batch ID	Prep ID	Surr	QC Types
Organics - Volatiles						
31 PFAs	ASTMD7979-19M	11/03/22 06:39	AK221102C	PF221102W2	Yes	BLK/LCS/LCSD/MS/DU

Lab Sample ID: S41719.05
Sample Tag: MW-22-05
Collected Date/Time: 10/20/2022 11:59
Matrix: Groundwater
COC Reference: 154861

Analysis	Method	Run Date/Time	Batch ID	Prep ID	Surr	QC Types
Organics - Volatiles						
31 PFAs	ASTMD7979-19M	11/03/22 06:58	AK221102C	PF221102W2	Yes	BLK/LCS/LCSD/MS/DU

Lab Sample ID: S41719.06
Sample Tag: MW-22-06
Collected Date/Time: 10/20/2022 12:58
Matrix: Groundwater
COC Reference: 154861

Analysis	Method	Run Date/Time	Batch ID	Prep ID	Surr	QC Types
Organics - Volatiles						
31 PFAs	ASTMD7979-19M	11/03/22 07:18	AK221102C	PF221102W2	Yes	BLK/LCS/LCSD/MS/DU

Lab Sample ID: S41719.07
Sample Tag: Dup-01
Collected Date/Time: 10/18/2022 00:01
Matrix: Groundwater
COC Reference: 154861

Analysis	Method	Run Date/Time	Batch ID	Prep ID	Surr	QC Types
Organics - Volatiles						
31 PFAs	ASTMD7979-19M	11/03/22 07:37	AK221102C	PF221102W2	Yes	BLK/LCS/LCSD/MS/DU

Lab Sample ID: S41719.08
Sample Tag: EB-01
Collected Date/Time: 10/19/2022 10:09
Matrix: Water
COC Reference: 154861

Analysis	Method	Run Date/Time	Batch ID	Prep ID	Surr	QC Types
Organics - Volatiles						
31 PFAs	ASTMD7979-19M	11/03/22 07:57	AK221102C	PF221102W2	Yes	BLK/LCS/LCSD/MS/DU

Lab Sample ID: S41719.09
Sample Tag: FB-01
Collected Date/Time: 10/19/2022 10:09
Matrix: Water
COC Reference: 154861

Analysis	Method	Run Date/Time	Batch ID	Prep ID	Surr	QC Types
Organics - Volatiles						
31 PFAs	ASTMD7979-19M	11/03/22 08:16	AK221102C	PF221102W2	Yes	BLK/LCS/LCSD/MS/DU

Organics - Volatiles, Prep Batch ID: PF221102W2

Surrogates: Yes, QC Types: BLK/LCS/LCSD/MS/DUP

Sample ID	Analysis	Method	Run Date/Time	Batch ID
S41719.01	31 PFAs	ASTMD7979-19M	11/03/22 05:01	AK221102C
S41719.02	31 PFAs	ASTMD7979-19M	11/03/22 05:40	AK221102C
S41719.03	31 PFAs	ASTMD7979-19M	11/03/22 06:19	AK221102C
S41719.04	31 PFAs	ASTMD7979-19M	11/03/22 06:39	AK221102C
S41719.05	31 PFAs	ASTMD7979-19M	11/03/22 06:58	AK221102C
S41719.06	31 PFAs	ASTMD7979-19M	11/03/22 07:18	AK221102C
S41719.07	31 PFAs	ASTMD7979-19M	11/03/22 07:37	AK221102C
S41719.08	31 PFAs	ASTMD7979-19M	11/03/22 07:57	AK221102C
S41719.09	31 PFAs	ASTMD7979-19M	11/03/22 08:16	AK221102C

Organics - Volatiles, Prep Batch ID: PF221102W2

QC Types: BLK/LCS/LCSD/MS/DUP

Blank (BLK)

Lab Sample ID: AK221102C.BLK221102B

Run in Batch: AK221102C, Run Date: 11/03/2022 04:22, Prep Date: 11/02/2022, Matrix: WW, Dilution: 1

Surrogate	Flags	%Rec	LCL	UCL

No Surrogates

Blank (BLK)

Lab Sample ID: AK221103R.BLK221102B

Run in Batch: AK221103R, Run Date: 11/04/2022 10:09, Prep Date: 11/02/2022, Matrix: WW, Dilution: 1

Surrogate	Flags	%Rec	LCL	UCL

No Surrogates

Laboratory Control Sample (LCS)

Lab Sample ID: AK221102C.LCS221102B

Run in Batch: AK221102C, Run Date: 11/03/2022 03:43, Prep Date: 11/02/2022, Matrix: WW, Dilution: 1

Surrogate	Flags	%Rec	LCL	UCL

No Surrogates

Laboratory Control Sample (LCS)

Lab Sample ID: AK221103R.LCS221102B

Run in Batch: AK221103R, Run Date: 11/04/2022 09:30, Prep Date: 11/02/2022, Matrix: WW, Dilution: 1

Surrogate	Flags	%Rec	LCL	UCL

No Surrogates

Laboratory Control Sample Duplicate (LCSD)

Lab Sample ID: AK221102C.LCSD221102B, Parent Sample ID: AK221102C.LCS221102B

Run in Batch: AK221102C, Run Date: 11/03/2022 04:03, Prep Date: 11/02/2022, Matrix: WW, Dilution: 1

Surrogate	Flags	%Rec	LCL	UCL

No Surrogates

Laboratory Control Sample Duplicate (LCSD)

Lab Sample ID: AK221103R.LCSD221102B, Parent Sample ID: AK221103R.LCS221102B

Run in Batch: AK221103R, Run Date: 11/04/2022 09:50, Prep Date: 11/02/2022, Matrix: WW, Dilution: 1

Surrogate	Flags	%Rec	LCL	UCL

No Surrogates

Matrix Spike (MS)

Lab Sample ID: AK221102C.4171901M, Parent Sample ID: S41719.01

Run in Batch: AK221102C, Run Date: 11/03/2022 05:21, Prep Date: 11/02/2022, Matrix: WW, Dilution: 2.05

Surrogate	Flags	%Rec	LCL	UCL

No Surrogates

Duplicate (DUP)

Lab Sample ID: AK221102C.4171902D, Parent Sample ID: S41719.02

Run in Batch: AK221102C, Run Date: 11/03/2022 06:00, Prep Date: 11/02/2022, Matrix: WW, Dilution: 2.05

Surrogate	Flags	**%Rec**	LCL	UCL
No Surrogates				

QC Report - Internal Standards per Lab Sample

Lab Sample ID: S41719.01

Sample Tag: MW-22-01

Collected Date/Time: 10/18/2022 10:17

Matrix: Groundwater

COC Reference: 154861

Organics - Volatiles, Analysis: 31 PFAs

Run in Batch: AK221102C, Run Date: 11/03/2022 05:01, Matrix: WW, Dilution: 2.05

Internal Standard	Flags	%Rec	LCL	UCL
M2-4:2FTSA		**109.2**	50.0	150.0
M2-6:2FTSA		**98.8**	50.0	150.0
M2-8:2FTSA		**98.1**	50.0	150.0
M2PFTeDA		**156.1**	12.0	218.0
M3PFBS		**99.0**	50.0	150.0
M3PFHxS		**99.7**	50.0	150.0
M4PFHpA		**92.8**	50.0	150.0
M5PFHxA		**98.7**	50.0	150.0
M5PFPeA		**99.2**	50.0	150.0
M6PFDA		**106.9**	50.0	150.0
M7PFUnDA		**96.8**	50.0	150.0
M8FOSA		**99.5**	50.0	150.0
M8PFOA		**103.0**	50.0	150.0
M8PFOS		**101.2**	50.0	150.0
M9-PFNA		**117.3**	50.0	150.0
MPFBA		**100.6**	50.0	150.0
MPFDoDA		**111.9**	50.0	150.0
d3N-MeFOSAA		**93.5**	50.0	150.0
d5EtFOSAA		**96.6**	50.0	150.0
MHFPO-DA		**117.0**	50.0	150.0

QC Report - Internal Standards per Lab Sample

Lab Sample ID: S41719.02

Sample Tag: MW-22-02

Collected Date/Time: 10/18/2022 12:05

Matrix: Groundwater

COC Reference: 154861

Organics - Volatiles, Analysis: 31 PFAs

Run in Batch: AK221102C, Run Date: 11/03/2022 05:40, Matrix: WW, Dilution: 2.05

Internal Standard	Flags	%Rec	LCL	UCL
M2-4:2FTSA		**107.9**	50.0	150.0
M2-6:2FTSA		**93.4**	50.0	150.0
M2-8:2FTSA		**105.8**	50.0	150.0
M2PFTeDA		**204.3**	12.0	218.0
M3PFBS		**112.3**	50.0	150.0
M3PFHxS		**104.7**	50.0	150.0
M4PFHpA		**101.7**	50.0	150.0
M5PFHxA		**97.8**	50.0	150.0
M5PFPeA		**98.0**	50.0	150.0
M6PFDA		**109.0**	50.0	150.0
M7PFUnDA		**113.5**	50.0	150.0
M8FOSA		**108.7**	50.0	150.0
M8PFOA		**109.5**	50.0	150.0
M8PFOS		**92.6**	50.0	150.0
M9-PFNA		**130.9**	50.0	150.0
MPFBA		**104.4**	50.0	150.0
MPFDoDA		**137.3**	50.0	150.0
d3N-MeFOSAA		**107.5**	50.0	150.0
d5EtFOSAA		**112.2**	50.0	150.0
MHFPO-DA		**120.0**	50.0	150.0

QC Report - Internal Standards per Lab Sample

Lab Sample ID: S41719.03

Sample Tag: MW-22-03

Collected Date/Time: 10/19/2022 09:26

Matrix: Groundwater

COC Reference: 154861

Organics - Volatiles, Analysis: 31 PFAs

Run in Batch: AK221102C, Run Date: 11/03/2022 06:19, Matrix: WW, Dilution: 1.94

Internal Standard	Flags	%Rec	LCL	UCL
M2-4:2FTSA		**113.6**	50.0	150.0
M2-6:2FTSA		**110.0**	50.0	150.0
M2-8:2FTSA		**94.2**	50.0	150.0
M2PFTeDA		**134.2**	12.0	218.0
M3PFBS		**102.4**	50.0	150.0
M3PFHxS		**98.6**	50.0	150.0
M4PFHpA		**114.2**	50.0	150.0
M5PFHxA		**108.2**	50.0	150.0
M5PFPeA		**106.0**	50.0	150.0
M6PFDA		**108.6**	50.0	150.0
M7PFUnDA		**99.7**	50.0	150.0
M8FOSA		**98.7**	50.0	150.0
M8PFOA		**108.0**	50.0	150.0
M8PFOS		**100.9**	50.0	150.0
M9-PFNA		**112.9**	50.0	150.0
MPFBA		**105.9**	50.0	150.0
MPFDoDA		**104.3**	50.0	150.0
d3N-MeFOSAA		**96.3**	50.0	150.0
d5EtFOSAA		**104.6**	50.0	150.0
MHFPO-DA		**113.6**	50.0	150.0

Lab Sample ID: S41719.04

Sample Tag: MW-22-04

Collected Date/Time: 10/20/2022 10:43

Matrix: Groundwater

COC Reference: 154861

Organics - Volatiles, Analysis: 31 PFAs

Run in Batch: AK221102C, Run Date: 11/03/2022 06:39, Matrix: WW, Dilution: 2.04

Internal Standard	Flags	%Rec	LCL	UCL
M2-4:2FTSA		**110.1**	50.0	150.0
M2-6:2FTSA		**94.6**	50.0	150.0
M2-8:2FTSA		**108.5**	50.0	150.0
M2PFTeDA		**159.1**	12.0	218.0
M3PFBS		**105.5**	50.0	150.0
M3PFHxS		**106.1**	50.0	150.0
M4PFHpA		**99.1**	50.0	150.0
M5PFHxA		**106.4**	50.0	150.0
M5PFPeA		**103.8**	50.0	150.0
M6PFDA		**96.9**	50.0	150.0
M7PFUnDA		**109.4**	50.0	150.0
M8FOSA		**99.6**	50.0	150.0
M8PFOA		**112.3**	50.0	150.0
M8PFOS		**89.1**	50.0	150.0
M9-PFNA		**125.0**	50.0	150.0
MPFBA		**104.0**	50.0	150.0
MPFDoDA		**121.8**	50.0	150.0
d3N-MeFOSAA		**99.2**	50.0	150.0
d5EtFOSAA		**106.3**	50.0	150.0
MHFPO-DA		**114.5**	50.0	150.0

QC Report - Internal Standards per Lab Sample

Lab Sample ID: S41719.05

Sample Tag: MW-22-05

Collected Date/Time: 10/20/2022 11:59

Matrix: Groundwater

COC Reference: 154861

Organics - Volatiles, Analysis: 31 PFAs

Run in Batch: AK221102C, Run Date: 11/03/2022 06:58, Matrix: WW, Dilution: 2.06

Internal Standard	Flags	%Rec	LCL	UCL
M2-4:2FTSA		**132.1**	50.0	150.0
M2-6:2FTSA		**102.6**	50.0	150.0
M2-8:2FTSA		**117.9**	50.0	150.0
M2PFTeDA		**184.7**	12.0	218.0
M3PFBS		**103.6**	50.0	150.0
M3PFHxS		**102.5**	50.0	150.0
M4PFHpA		**116.0**	50.0	150.0
M5PFHxA		**105.8**	50.0	150.0
M5PFPeA		**102.5**	50.0	150.0
M6PFDA		**119.7**	50.0	150.0
M7PFUnDA		**97.3**	50.0	150.0
M8FOSA		**98.8**	50.0	150.0
M8PFOA		**113.8**	50.0	150.0
M8PFOS		**108.5**	50.0	150.0
M9-PFNA		**117.6**	50.0	150.0
MPFBA		**105.3**	50.0	150.0
MPFDoDA		**116.7**	50.0	150.0
d3N-MeFOSAA		**102.4**	50.0	150.0
d5EtFOSAA		**115.0**	50.0	150.0
MHFPO-DA		**109.5**	50.0	150.0

QC Report - Internal Standards per Lab Sample

Lab Sample ID: S41719.06

Sample Tag: MW-22-06

Collected Date/Time: 10/20/2022 12:58

Matrix: Groundwater

COC Reference: 154861

Organics - Volatiles, Analysis: 31 PFAs

Run in Batch: AK221102C, Run Date: 11/03/2022 07:18, Matrix: WW, Dilution: 1.89

Internal Standard	Flags	%Rec	LCL	UCL
M2-4:2FTSA		**116.0**	50.0	150.0
M2-6:2FTSA		**93.3**	50.0	150.0
M2-8:2FTSA		**103.6**	50.0	150.0
M2PFTeDA		**146.4**	12.0	218.0
M3PFBS		**106.6**	50.0	150.0
M3PFHxS		**104.1**	50.0	150.0
M4PFHpA		**91.6**	50.0	150.0
M5PFHxA		**96.7**	50.0	150.0
M5PFPeA		**103.2**	50.0	150.0
M6PFDA		**107.0**	50.0	150.0
M7PFUnDA		**97.7**	50.0	150.0
M8FOSA		**100.0**	50.0	150.0
M8PFOA		**111.2**	50.0	150.0
M8PFOS		**96.1**	50.0	150.0
M9-PFNA		**109.0**	50.0	150.0
MPFBA		**104.4**	50.0	150.0
MPFDoDA		**100.6**	50.0	150.0
d3N-MeFOSAA		**105.6**	50.0	150.0
d5EtFOSAA		**117.7**	50.0	150.0
MHFPO-DA		**129.6**	50.0	150.0

Lab Sample ID: S41719.07

Sample Tag: Dup-01

Collected Date/Time: 10/18/2022 00:01

Matrix: Groundwater

COC Reference: 154861

Organics - Volatiles, Analysis: 31 PFAs

Run in Batch: AK221102C, Run Date: 11/03/2022 07:37, Matrix: WW, Dilution: 1.9

Internal Standard	Flags	%Rec	LCL	UCL
M2-4:2FTSA		**105.7**	50.0	150.0
M2-6:2FTSA		**102.9**	50.0	150.0
M2-8:2FTSA		**113.4**	50.0	150.0
M2PFTeDA		**136.7**	12.0	218.0
M3PFBS		**104.9**	50.0	150.0
M3PFHxS		**108.3**	50.0	150.0
M4PFHpA		**111.7**	50.0	150.0
M5PFHxA		**108.8**	50.0	150.0
M5PFPeA		**103.7**	50.0	150.0
M6PFDA		**112.9**	50.0	150.0
M7PFUnDA		**94.9**	50.0	150.0
M8FOSA		**99.6**	50.0	150.0
M8PFOA		**114.0**	50.0	150.0
M8PFOS		**104.3**	50.0	150.0
M9-PFNA		**110.7**	50.0	150.0
MPFBA		**105.2**	50.0	150.0
MPFDoDA		**112.4**	50.0	150.0
d3N-MeFOSAA		**109.2**	50.0	150.0
d5EtFOSAA		**109.3**	50.0	150.0
MHFPO-DA		**114.1**	50.0	150.0

Lab Sample ID: S41719.08

Sample Tag: EB-01

Collected Date/Time: 10/19/2022 10:09

Matrix: Water

COC Reference: 154861

Organics - Volatiles, Analysis: 31 PFAs

Run in Batch: AK221102C, Run Date: 11/03/2022 07:57, Matrix: WW, Dilution: 1.91

Internal Standard	Flags	%Rec	LCL	UCL
M2-4:2FTSA		**107.1**	50.0	150.0
M2-6:2FTSA		**102.0**	50.0	150.0
M2-8:2FTSA		**99.9**	50.0	150.0
M2PFTeDA		**161.7**	12.0	218.0
M3PFBS		**107.5**	50.0	150.0
M3PFHxS		**102.3**	50.0	150.0
M4PFHpA		**102.8**	50.0	150.0
M5PFHxA		**110.9**	50.0	150.0
M5PFPeA		**101.2**	50.0	150.0
M6PFDA		**111.1**	50.0	150.0
M7PFUnDA		**96.9**	50.0	150.0
M8FOSA		**102.1**	50.0	150.0
M8PFOA		**113.9**	50.0	150.0
M8PFOS		**89.1**	50.0	150.0
M9-PFNA		**120.0**	50.0	150.0
MPFBA		**103.1**	50.0	150.0
MPFDoDA		**101.2**	50.0	150.0
d3N-MeFOSAA		**106.5**	50.0	150.0
d5EtFOSAA		**119.4**	50.0	150.0
MHFPO-DA		**112.5**	50.0	150.0

Lab Sample ID: S41719.09

Sample Tag: FB-01

Collected Date/Time: 10/19/2022 10:09

Matrix: Water

COC Reference: 154861

Organics - Volatiles, Analysis: 31 PFAs

Run in Batch: AK221102C, Run Date: 11/03/2022 08:16, Matrix: WW, Dilution: 2.09

Internal Standard	Flags	%Rec	LCL	UCL
M2-4:2FTSA		**114.6**	50.0	150.0
M2-6:2FTSA		**109.4**	50.0	150.0
M2-8:2FTSA		**121.9**	50.0	150.0
M2PFTeDA		**190.8**	12.0	218.0
M3PFBS		**116.6**	50.0	150.0
M3PFHxS		**102.6**	50.0	150.0
M4PFHpA		**110.1**	50.0	150.0
M5PFHxA		**113.5**	50.0	150.0
M5PFPeA		**105.3**	50.0	150.0
M6PFDA		**110.3**	50.0	150.0
M7PFUnDA		**108.3**	50.0	150.0
M8FOSA		**109.6**	50.0	150.0
M8PFOA		**122.0**	50.0	150.0
M8PFOS		**105.8**	50.0	150.0
M9-PFNA		**130.0**	50.0	150.0
MPFBA		**109.9**	50.0	150.0
MPFDoDA		**115.0**	50.0	150.0
d3N-MeFOSAA		**121.5**	50.0	150.0
d5EtFOSAA		**117.5**	50.0	150.0
MHFPO-DA		**121.7**	50.0	150.0

Organics - Volatiles, Prep Batch ID: PF221102W2

QC Types: BLK/LCS/LCSD/MS/DUP

Blank (BLK)

Lab Sample ID: AK221102C.BLK221102B

Run in Batch: AK221102C, Run Date: 11/03/2022 04:22, Prep Date: 11/02/2022, Matrix: WW, Dilution: 1

Internal Standard	Flags	%Rec	LCL	UCL
M2-4:2FTSA		**114.2**	50.0	150.0
M2-6:2FTSA		**115.5**	50.0	150.0
M2-8:2FTSA		**114.1**	50.0	150.0
M2PFTeDA		**161.8**	12.0	218.0
M3PFBS		**105.5**	50.0	150.0
M3PFHxS		**103.9**	50.0	150.0
M4PFHpA		**101.0**	50.0	150.0
M5PFHxA		**93.2**	50.0	150.0
M5PFPeA		**99.0**	50.0	150.0
M6PFDA		**99.3**	50.0	150.0
M7PFUnDA		**106.2**	50.0	150.0
M8FOSA		**109.9**	50.0	150.0
M8PFOA		**108.7**	50.0	150.0
M8PFOS		**95.2**	50.0	150.0
M9-PFNA		**110.1**	50.0	150.0
MPFBA		**100.3**	50.0	150.0
MPFDoDA		**123.3**	50.0	150.0
d3N-MeFOSAA		**103.3**	50.0	150.0
d5EtFOSAA		**96.1**	50.0	150.0
MHFPO-DA		**102.6**	50.0	150.0

Blank (BLK)

Lab Sample ID: AK221103R.BLK221102B

Run in Batch: AK221103R, Run Date: 11/04/2022 10:09, Prep Date: 11/02/2022, Matrix: WW, Dilution: 1

Internal Standard	Flags	%Rec	LCL	UCL
M2-4:2FTSA		**100.5**	50.0	150.0
M2-6:2FTSA		**85.6**	50.0	150.0
M2-8:2FTSA		**115.1**	50.0	150.0
M2PFTeDA		**98.6**	12.0	218.0
M3PFBS		**96.6**	50.0	150.0
M3PFHxS		**97.6**	50.0	150.0
M4PFHpA		**100.5**	50.0	150.0
M5PFHxA		**94.6**	50.0	150.0
M5PFPeA		**97.7**	50.0	150.0
M6PFDA		**97.7**	50.0	150.0
M7PFUnDA		**95.2**	50.0	150.0
M8FOSA		**101.5**	50.0	150.0
M8PFOA		**88.0**	50.0	150.0
M8PFOS		**85.4**	50.0	150.0
M9-PFNA		**75.7**	50.0	150.0
MPFBA		**95.5**	50.0	150.0
MPFDoDA		**100.9**	50.0	150.0
d3N-MeFOSAA		**101.5**	50.0	150.0
d5EtFOSAA		**104.9**	50.0	150.0
MHFPO-DA		**93.0**	50.0	150.0

Laboratory Control Sample (LCS)

Lab Sample ID: AK221102C.LCS221102B

Run in Batch: AK221102C, Run Date: 11/03/2022 03:43, Prep Date: 11/02/2022, Matrix: WW, Dilution: 1

Internal Standard	Flags	%Rec	LCL	UCL
M2-4:2FTSA		**106.6**	50.0	150.0
M2-6:2FTSA		**98.8**	50.0	150.0
M2-8:2FTSA		**113.7**	50.0	150.0
M2PFTeDA		**152.7**	12.0	218.0
M3PFBS		**102.3**	50.0	150.0
M3PFHxS		**99.0**	50.0	150.0
M4PFHpA		**111.9**	50.0	150.0
M5PFHxA		**95.6**	50.0	150.0
M5PFPeA		**101.5**	50.0	150.0
M6PFDA		**95.3**	50.0	150.0
M7PFUnDA		**98.2**	50.0	150.0
M8FOSA		**105.3**	50.0	150.0
M8PFOA		**116.4**	50.0	150.0
M8PFOS		**104.8**	50.0	150.0
M9-PFNA		**108.8**	50.0	150.0
MPFBA		**101.5**	50.0	150.0
MPFDoDA		**112.4**	50.0	150.0
d3N-MeFOSAA		**102.5**	50.0	150.0
d5EtFOSAA		**108.8**	50.0	150.0
MHFPO-DA		**117.5**	50.0	150.0

Laboratory Control Sample (LCS)

Lab Sample ID: AK221103R.LCS221102B

Run in Batch: AK221103R, Run Date: 11/04/2022 09:30, Prep Date: 11/02/2022, Matrix: WW, Dilution: 1

Internal Standard	Flags	%Rec	LCL	UCL
M2-4:2FTSA		**88.1**	50.0	150.0
M2-6:2FTSA		**89.7**	50.0	150.0
M2-8:2FTSA		**106.5**	50.0	150.0
M2PFTeDA		**100.7**	12.0	218.0
M3PFBS		**85.0**	50.0	150.0
M3PFHxS		**84.5**	50.0	150.0
M4PFHpA		**105.1**	50.0	150.0
M5PFHxA		**98.2**	50.0	150.0
M5PFPeA		**92.7**	50.0	150.0
M6PFDA		**95.7**	50.0	150.0
M7PFUnDA		**81.7**	50.0	150.0
M8FOSA		**100.5**	50.0	150.0
M8PFOA		**90.2**	50.0	150.0
M8PFOS		**96.9**	50.0	150.0
M9-PFNA		**75.3**	50.0	150.0
MPFBA		**93.7**	50.0	150.0
MPFDoDA		**89.5**	50.0	150.0
d3N-MeFOSAA		**92.7**	50.0	150.0
d5EtFOSAA		**106.1**	50.0	150.0
MHFPO-DA		**104.1**	50.0	150.0

Laboratory Control Sample Duplicate (LCSD)

Lab Sample ID: AK221102C.LCSD221102B, Parent Sample ID: AK221102C.LCS221102B

Run in Batch: AK221102C, Run Date: 11/03/2022 04:03, Prep Date: 11/02/2022, Matrix: WW, Dilution: 1

Internal Standard	Flags	%Rec	LCL	UCL
M2-4:2FTSA		**107.0**	50.0	150.0
M2-6:2FTSA		**109.3**	50.0	150.0
M2-8:2FTSA		**105.1**	50.0	150.0
M2PFTeDA		**153.4**	12.0	218.0
M3PFBS		**100.3**	50.0	150.0
M3PFHxS		**93.4**	50.0	150.0
M4PFHpA		**109.0**	50.0	150.0
M5PFHxA		**102.0**	50.0	150.0
M5PFPeA		**99.6**	50.0	150.0
M6PFDA		**100.1**	50.0	150.0
M7PFUnDA		**91.4**	50.0	150.0
M8FOSA		**99.6**	50.0	150.0
M8PFOA		**120.0**	50.0	150.0
M8PFOS		**101.2**	50.0	150.0
M9-PFNA		**132.4**	50.0	150.0
MPFBA		**100.8**	50.0	150.0
MPFDoDA		**110.3**	50.0	150.0
d3N-MeFOSAA		**97.4**	50.0	150.0
d5EtFOSAA		**110.2**	50.0	150.0
MHFPO-DA		**104.6**	50.0	150.0

Laboratory Control Sample Duplicate (LCSD)

Lab Sample ID: AK221103R.LCSD221102B, Parent Sample ID: AK221103R.LCS221102B

Run in Batch: AK221103R, Run Date: 11/04/2022 09:50, Prep Date: 11/02/2022, Matrix: WW, Dilution: 1

Internal Standard	Flags	%Rec	LCL	UCL
M2-4:2FTSA		**90.4**	50.0	150.0
M2-6:2FTSA		**86.3**	50.0	150.0
M2-8:2FTSA		**84.0**	50.0	150.0
M2PFTeDA		**86.8**	12.0	218.0
M3PFBS		**99.1**	50.0	150.0
M3PFHxS		**93.4**	50.0	150.0
M4PFHpA		**103.5**	50.0	150.0
M5PFHxA		**97.1**	50.0	150.0
M5PFPeA		**95.6**	50.0	150.0
M6PFDA		**97.3**	50.0	150.0
M7PFUnDA		**90.0**	50.0	150.0
M8FOSA		**91.1**	50.0	150.0
M8PFOA		**86.4**	50.0	150.0
M8PFOS		**92.7**	50.0	150.0
M9-PFNA		**81.6**	50.0	150.0
MPFBA		**93.6**	50.0	150.0
MPFDoDA		**92.6**	50.0	150.0
d3N-MeFOSAA		**89.9**	50.0	150.0
d5EtFOSAA		**107.2**	50.0	150.0
MHFPO-DA		**100.9**	50.0	150.0

Matrix Spike (MS)

Lab Sample ID: AK221102C.4171901M, Parent Sample ID: S41719.01

Run in Batch: AK221102C, Run Date: 11/03/2022 05:21, Prep Date: 11/02/2022, Matrix: WW, Dilution: 2.05

Internal Standard	Flags	%Rec	LCL	UCL
M2-4:2FTSA		**112.7**	50.0	150.0
M2-6:2FTSA		**102.2**	50.0	150.0
M2-8:2FTSA		**102.8**	50.0	150.0
M2PFTeDA		**145.2**	12.0	218.0
M3PFBS		**98.2**	50.0	150.0
M3PFHxS		**99.2**	50.0	150.0
M4PFHpA		**108.1**	50.0	150.0
M5PFHxA		**101.4**	50.0	150.0
M5PFPeA		**97.5**	50.0	150.0
M6PFDA		**110.5**	50.0	150.0
M7PFUnDA		**93.5**	50.0	150.0
M8FOSA		**97.6**	50.0	150.0
M8PFOA		**118.2**	50.0	150.0
M8PFOS		**95.3**	50.0	150.0
M9-PFNA		**116.4**	50.0	150.0
MPFBA		**100.3**	50.0	150.0
MPFDoDA		**96.4**	50.0	150.0
d3N-MeFOSAA		**103.8**	50.0	150.0
d5EtFOSAA		**104.7**	50.0	150.0
MHFPO-DA		**105.8**	50.0	150.0

Duplicate (DUP)

Lab Sample ID: AK221102C.4171902D, Parent Sample ID: S41719.02

Run in Batch: AK221102C, Run Date: 11/03/2022 06:00, Prep Date: 11/02/2022, Matrix: WW, Dilution: 2.05

Internal Standard	Flags	%Rec	LCL	UCL
M2-4:2FTSA		**113.9**	50.0	150.0
M2-6:2FTSA		**112.4**	50.0	150.0
M2-8:2FTSA		**101.4**	50.0	150.0
M2PFTeDA		**146.2**	12.0	218.0
M3PFBS		**104.4**	50.0	150.0
M3PFHxS		**102.8**	50.0	150.0
M4PFHpA		**107.0**	50.0	150.0
M5PFHxA		**101.6**	50.0	150.0
M5PFPeA		**105.5**	50.0	150.0
M6PFDA		**102.6**	50.0	150.0
M7PFUnDA		**95.7**	50.0	150.0
M8FOSA		**98.9**	50.0	150.0
M8PFOA		**111.3**	50.0	150.0
M8PFOS		**105.1**	50.0	150.0
M9-PFNA		**108.7**	50.0	150.0
MPFBA		**104.5**	50.0	150.0
MPFDoDA		**116.7**	50.0	150.0
d3N-MeFOSAA		**107.5**	50.0	150.0
d5EtFOSAA		**113.4**	50.0	150.0
MHFPO-DA		**113.2**	50.0	150.0

Organics - Volatiles, Prep Batch ID: PF221102W2

Surrogates: Yes, QC Types: BLK/LCS/LCSD/MS/DUP

Blank (BLK)

Lab Sample ID: AK221102C.BLK221102B

Run in Batch: AK221102C, Run Date: 11/03/2022 04:22, Prep Date: 11/02/2022, Matrix: WW, Dilution: 1

Analyte	Flags	Conc	RDL	Units
PFBA		ND	10	ng/l
PFPeA		ND	4	ng/l
4:2 FTSA		ND	2	ng/l
PFHxA		ND	2	ng/l
PFBS		ND	2	ng/l
HFPO-DA		ND	10	ng/l
PFHpA		ND	2	ng/l
PFPeS		ND	2	ng/l
ADONA		ND	2	ng/l
6:2 FTSA		ND	2	ng/l
PFBSA		ND	2	ng/l
PFOA		ND	2	ng/l
PFHxS-BR		ND	2	ng/l
PFHxS		ND	2	ng/l
PFHxS-LN		ND	2	ng/l
PFNA		ND	2	ng/l
PFECHS		ND	2	ng/l
8:2 FTSA		ND	2	ng/l
PFHpS		ND	2	ng/l
N-MeFOSAA		ND	2	ng/l
PFDA		ND	2	ng/l
PFOS		ND	2	ng/l
PFOS-BR		ND	2	ng/l
EtFOSAA		ND	4	ng/l
PFOS-LN		ND	2	ng/l
PFHxSA		ND	2	ng/l
PFUnDA		ND	2	ng/l
9CL-PF3ONS		ND	2	ng/l
PFNS		ND	2	ng/l
PFDoDA		ND	2	ng/l
PFDS		ND	2	ng/l
PFTrDA		ND	2	ng/l
11CL-PF3OUdS		ND	2	ng/l
FOSA		ND	2	ng/l
PFTeDA		ND	4	ng/l

Blank (BLK)

Lab Sample ID: AK221103R.BLK221102B

Run in Batch: AK221103R, Run Date: 11/04/2022 10:09, Prep Date: 11/02/2022, Matrix: WW, Dilution: 1

Analyte	Flags	Conc	RDL	Units
PFBA		ND	10	ng/l
PFPeA		ND	4	ng/l
4:2 FTSA		ND	2	ng/l
PFHxA		ND	2	ng/l
PFBS		ND	2	ng/l
HFPO-DA		ND	10	ng/l

Organics - Volatiles, Prep Batch ID: PF221102W2 (continued)

Surrogates: Yes, QC Types: BLK/LCS/LCSD/MS/DUP

Blank (BLK) (continued)

Lab Sample ID: AK221103R.BLK221102B

Run in Batch: AK221103R, Run Date: 11/04/2022 10:09, Prep Date: 11/02/2022, Matrix: WW, Dilution: 1

Analyte	Flags	Conc	RDL	Units
PFHpA		ND	2	ng/l
PFPeS		ND	2	ng/l
ADONA		ND	2	ng/l
6:2 FTSA		ND	2	ng/l
PFBSA		ND	2	ng/l
PFOA		ND	2	ng/l
PFHxS-BR		ND	2	ng/l
PFHxS		ND	2	ng/l
PFHxS-LN		ND	2	ng/l
PFNA		ND	2	ng/l
PFECHS		ND	2	ng/l
8:2 FTSA		ND	2	ng/l
PFHpS		ND	2	ng/l
N-MeFOSAA		ND	2	ng/l
PFDA		ND	2	ng/l
PFOS-BR		ND	2	ng/l
PFOS		ND	2	ng/l
EtFOSAA		ND	4	ng/l
PFOS-LN		ND	2	ng/l
PFHxSA		ND	2	ng/l
PFUnDA		ND	2	ng/l
9CL-PF3ONS		ND	2	ng/l
PFNS		ND	2	ng/l
PFDoDA		ND	2	ng/l
PFDS		ND	2	ng/l
PFTrDA		ND	2	ng/l
11CL-PF3OUdS		ND	2	ng/l
FOSA		ND	2	ng/l
PFTeDA		ND	4	ng/l

Laboratory Control Sample (LCS)

Lab Sample ID: AK221102C.LCS221102B

Run in Batch: AK221102C, Run Date: 11/03/2022 03:43, Prep Date: 11/02/2022, Matrix: WW, Dilution: 1

Analyte	Flags	% Rec	LCL	UCL
PFBA		107.2	70.0	130.0
PFMPA		97.0	70.0	130.0
FPrPA (3:3 FTCA)		107.6	70.0	130.0
PFPrS		94.4	70.0	130.0
PFPeA		106.2	70.0	130.0
PFMBA		98.8	70.0	130.0
4:2 FTSA		112.8	70.0	130.0
NFDHA		112.0	70.0	130.0
PFHxA		108.2	70.0	130.0
PFBS		101.6	70.0	130.0
HFPO-DA		96.6	70.0	130.0
FPePA (5:3 FTCA)		115.0	70.0	130.0

Organics - Volatiles, Prep Batch ID: PF221102W2 (continued)

Surrogates: Yes, QC Types: BLK/LCS/LCSD/MS/DUP

Laboratory Control Sample (LCS) (continued)

Lab Sample ID: AK221102C.LCS221102B

Run in Batch: AK221102C, Run Date: 11/03/2022 03:43, Prep Date: 11/02/2022, Matrix: WW, Dilution: 1

Analyte	Flags	% Rec	LCL	UCL
PFEESA		95.2	70.0	130.0
PFHpA		100.4	70.0	130.0
PFPeS		109.8	70.0	130.0
ADONA		108.8	70.0	130.0
6:2 FTSA		112.6	70.0	130.0
PFBSA		85.8	70.0	130.0
PFOA		100.4	70.0	130.0
PFHxS		108.6	70.0	130.0
FHpPA (7:3 FTCA)		116.6	70.0	130.0
PFNA		112.4	70.0	130.0
PFECHS		105.2	70.0	130.0
8:2 FTSA		98.2	70.0	130.0
PFHpS		105.8	70.0	130.0
N-MeFOSAA		127.4	70.0	130.0
PFDA	*	133.6	70.0	130.0
PFOS		108.4	70.0	130.0
EtFOSAA		108.4	70.0	130.0
PFHxSA		93.6	70.0	130.0
PFUnDA		98.0	70.0	130.0
9CL-PF3ONS		100.8	70.0	130.0
PFNS		109.0	70.0	130.0
PFDoDA		108.8	70.0	130.0
PFDS		110.8	70.0	130.0
PFTrDA		109.8	70.0	130.0
11CL-PF3OUdS		97.4	70.0	130.0
FOSA		100.6	70.0	130.0
PFTeDA		111.8	70.0	130.0

Laboratory Control Sample (LCS)

Lab Sample ID: AK221103R.LCS221102B

Run in Batch: AK221103R, Run Date: 11/04/2022 09:30, Prep Date: 11/02/2022, Matrix: WW, Dilution: 1

Analyte	Flags	% Rec	LCL	UCL
PFBA		109.4	70.0	130.0
PFMPA		90.2	70.0	130.0
FPrPA (3:3 FTCA)		98.2	70.0	130.0
PFPrS		100.6	70.0	130.0
PFPeA		103.6	70.0	130.0
PFMBA		92.8	70.0	130.0
4:2 FTSA		110.8	70.0	130.0
NFDHA		95.2	70.0	130.0
PFHxA		100.6	70.0	130.0
PFBS		115.4	70.0	130.0
HFPO-DA		107.2	70.0	130.0
FPePA (5:3 FTCA)		81.6	70.0	130.0
PFEESA		95.4	70.0	130.0
PFHpA		118.8	70.0	130.0

Organics - Volatiles, Prep Batch ID: PF221102W2 (continued)

Surrogates: Yes, QC Types: BLK/LCS/LCSD/MS/DUP

Laboratory Control Sample (LCS) (continued)

Lab Sample ID: AK221103R.LCS221102B

Run in Batch: AK221103R, Run Date: 11/04/2022 09:30, Prep Date: 11/02/2022, Matrix: WW, Dilution: 1

Analyte	Flags	% Rec	LCL	UCL
PFPeS		121.0	70.0	130.0
ADONA		111.0	70.0	130.0
6:2 FTSA		100.4	70.0	130.0
PFBSA		86.2	70.0	130.0
PFOA		110.2	70.0	130.0
PFHxS		122.4	70.0	130.0
FHpPA (7:3 FTCA)		92.8	70.0	130.0
PFNA		116.4	70.0	130.0
PFECHS		86.8	70.0	130.0
8:2 FTSA		106.4	70.0	130.0
PFHpS		116.6	70.0	130.0
N-MeFOSAA		121.6	70.0	130.0
PFDA		121.0	70.0	130.0
PFOS		98.0	70.0	130.0
EtFOSAA		110.2	70.0	130.0
PFHxSA		92.0	70.0	130.0
PFUnDA		103.4	70.0	130.0
9CL-PF3ONS		95.4	70.0	130.0
PFNS		98.2	70.0	130.0
PFDoDA		111.2	70.0	130.0
PFDS		107.2	70.0	130.0
PFTrDA		101.8	70.0	130.0
11CL-PF3OUdS		99.0	70.0	130.0
FOSA		93.2	70.0	130.0
PFTeDA		107.6	70.0	130.0

Laboratory Control Sample Duplicate (LCSD)

Lab Sample ID: AK221102C.LCSD221102B, Parent Sample ID: AK221102C.LCS221102B

Run in Batch: AK221102C, Run Date: 11/03/2022 04:03, Prep Date: 11/02/2022, Matrix: WW, Dilution: 1

Analyte	Flags	% Rec	LCL	UCL	RPD	RPD CL
PFBA		107.4	70.0	130.0	0.2	30.0
PFMPA		97.8	70.0	130.0	0.8	30.0
FPrPA (3:3 FTCA)		104.4	70.0	130.0	3.0	30.0
PFPrS		70.6	70.0	130.0	28.8	30.0
PFPeA		106.0	70.0	130.0	0.2	30.0
PFMBA		96.6	70.0	130.0	2.3	30.0
4:2 FTSA		112.6	70.0	130.0	0.2	30.0
NFDHA		112.8	70.0	130.0	0.7	30.0
PFHxA		96.2	70.0	130.0	11.7	30.0
PFBS		105.0	70.0	130.0	3.3	30.0
HFPO-DA		112.8	70.0	130.0	15.5	30.0
FPePA (5:3 FTCA)		106.0	70.0	130.0	8.1	30.0
PFEESA		110.4	70.0	130.0	14.8	30.0
PFHpA		109.2	70.0	130.0	8.4	30.0
PFPeS		107.6	70.0	130.0	2.0	30.0
ADONA		104.8	70.0	130.0	3.7	30.0

Organics - Volatiles, Prep Batch ID: PF221102W2 (continued)

Surrogates: Yes, QC Types: BLK/LCS/LCSD/MS/DUP

Laboratory Control Sample Duplicate (LCSD) (continued)

Lab Sample ID: AK221102C.LCSD221102B, Parent Sample ID: AK221102C.LCS221102B

Run in Batch: AK221102C, Run Date: 11/03/2022 04:03, Prep Date: 11/02/2022, Matrix: WW, Dilution: 1

Analyte	Flags	% Rec	LCL	UCL	RPD	RPD CL
6:2 FTSA		96.4	70.0	130.0	15.5	30.0
PFBSA		94.4	70.0	130.0	9.5	30.0
PFOA		97.4	70.0	130.0	3.0	30.0
PFHxS		108.8	70.0	130.0	0.2	30.0
FHpPA (7:3 FTCA)		100.6	70.0	130.0	14.7	30.0
PFNA		102.2	70.0	130.0	9.5	30.0
PFECHS		103.0	70.0	130.0	2.1	30.0
8:2 FTSA		97.6	70.0	130.0	0.6	30.0
PFHpS		113.8	70.0	130.0	7.3	30.0
N-MeFOSAA		116.8	70.0	130.0	8.7	30.0
PFDA	*	146.8	70.0	130.0	9.4	30.0
PFOS		105.8	70.0	130.0	2.4	30.0
EtFOSAA		100.0	70.0	130.0	8.1	30.0
PFHxSA		91.4	70.0	130.0	2.4	30.0
PFUnDA		106.0	70.0	130.0	7.8	30.0
9CL-PF3ONS		96.6	70.0	130.0	4.3	30.0
PFNS		114.4	70.0	130.0	4.8	30.0
PFDoDA		118.8	70.0	130.0	8.8	30.0
PFDS		119.8	70.0	130.0	7.8	30.0
PFTrDA		102.4	70.0	130.0	7.0	30.0
11CL-PF3OUdS		102.2	70.0	130.0	4.8	30.0
FOSA		107.8	70.0	130.0	6.9	30.0
PFTeDA		111.2	70.0	130.0	0.5	30.0

Laboratory Control Sample Duplicate (LCSD)

Lab Sample ID: AK221103R.LCSD221102B, Parent Sample ID: AK221103R.LCS221102B

Run in Batch: AK221103R, Run Date: 11/04/2022 09:50, Prep Date: 11/02/2022, Matrix: WW, Dilution: 1

Analyte	Flags	% Rec	LCL	UCL	RPD	RPD CL
PFBA		110.0	70.0	130.0	0.5	30.0
PFMPA		95.0	70.0	130.0	5.2	30.0
FPrPA (3:3 FTCA)		103.2	70.0	130.0	5.0	30.0
PFPrS		92.0	70.0	130.0	8.9	30.0
PFPeA		103.0	70.0	130.0	0.6	30.0
PFMBA		101.4	70.0	130.0	8.9	30.0
4:2 FTSA		105.8	70.0	130.0	4.6	30.0
NFDHA		106.0	70.0	130.0	10.7	30.0
PFHxA		102.6	70.0	130.0	2.0	30.0
PFBS		103.4	70.0	130.0	11.0	30.0
HFPO-DA		115.0	70.0	130.0	7.0	30.0
FPePA (5:3 FTCA)		102.0	70.0	130.0	22.2	30.0
PFEESA		93.8	70.0	130.0	1.7	30.0
PFHpA		123.8	70.0	130.0	4.1	30.0
PFPeS		96.0	70.0	130.0	23.0	30.0
ADONA		110.8	70.0	130.0	0.2	30.0
6:2 FTSA		104.8	70.0	130.0	4.3	30.0
PFBSA		93.0	70.0	130.0	7.6	30.0

Organics - Volatiles, Prep Batch ID: PF221102W2 (continued)

Surrogates: Yes, QC Types: BLK/LCS/LCSD/MS/DUP

Laboratory Control Sample Duplicate (LCSD) (continued)

Lab Sample ID: AK221103R.LCSD221102B, Parent Sample ID: AK221103R.LCS221102B

Run in Batch: AK221103R, Run Date: 11/04/2022 09:50, Prep Date: 11/02/2022, Matrix: WW, Dilution: 1

Analyte	Flags	% Rec	LCL	UCL	RPD	RPD CL
PFOA		100.4	70.0	130.0	9.3	30.0
PFHxS		117.0	70.0	130.0	4.5	30.0
FHpPA (7:3 FTCA)		114.0	70.0	130.0	20.5	30.0
PFNA		99.8	70.0	130.0	15.4	30.0
PFECHS		103.8	70.0	130.0	17.8	30.0
8:2 FTSA	*	145.6	70.0	130.0	31.1	30.0
PFHpS		118.2	70.0	130.0	1.4	30.0
N-MeFOSAA		119.6	70.0	130.0	1.7	30.0
PFDA	*	137.2	70.0	130.0	12.5	30.0
PFOS		113.0	70.0	130.0	14.2	30.0
EtFOSAA		101.8	70.0	130.0	7.9	30.0
PFHxSA		100.0	70.0	130.0	8.3	30.0
PFUnDA		93.6	70.0	130.0	9.9	30.0
9CL-PF3ONS		95.2	70.0	130.0	0.2	30.0
PFNS		100.4	70.0	130.0	2.2	30.0
PFDoDA		110.6	70.0	130.0	0.5	30.0
PFDS		104.6	70.0	130.0	2.5	30.0
PFTrDA		100.6	70.0	130.0	1.2	30.0
11CL-PF3OUdS		100.6	70.0	130.0	1.6	30.0
FOSA		108.4	70.0	130.0	15.1	30.0
PFTeDA		106.8	70.0	130.0	0.7	30.0

Matrix Spike (MS)

Lab Sample ID: AK221102C.4171901M, Parent Sample ID: S41719.01

Run in Batch: AK221102C, Run Date: 11/03/2022 05:21, Prep Date: 11/02/2022, Matrix: WW, Dilution: 2.05

Analyte	Flags	% Rec	LCL	UCL
PFBA		110.7	70.0	130.0
PFPeA		107.8	70.0	130.0
4:2 FTSA		97.1	70.0	130.0
PFHxA		99.0	70.0	130.0
PFBS		112.6	70.0	130.0
PFHpA		114.6	70.0	130.0
PFPeS		106.8	70.0	130.0
6:2 FTSA		106.8	70.0	130.0
PFOA		92.6	70.0	130.0
PFHxS		110.3	70.0	130.0
PFNA		97.1	70.0	130.0
8:2 FTSA		116.5	70.0	130.0
PFHpS		97.1	70.0	130.0
PFDA		116.5	70.0	130.0
N-MeFOSAA		106.8	70.0	130.0
EtFOSAA		106.8	70.0	130.0
PFOS		116.5	70.0	130.0
PFUnDA		106.8	70.0	130.0
PFNS		106.8	70.0	130.0
PFDoDA		106.8	70.0	130.0

Organics - Volatiles, Prep Batch ID: PF221102W2 (continued)

Surrogates: Yes, QC Types: BLK/LCS/LCSD/MS/DUP

Matrix Spike (MS) (continued)

Lab Sample ID: AK221102C.4171901M, Parent Sample ID: S41719.01

Run in Batch: AK221102C, Run Date: 11/03/2022 05:21, Prep Date: 11/02/2022, Matrix: WW, Dilution: 2.05

Analyte	Flags	% Rec	LCL	UCL
PFDS		106.8	70.0	130.0
PFTrDA		106.8	70.0	130.0
FOSA		106.8	70.0	130.0
PFTeDA		96.1	70.0	130.0
11CL-PF3OUdS		106.8	70.0	130.0
9CL-PF3ONS		106.8	70.0	130.0
ADONA		97.1	70.0	130.0
HFPO-DA		106.8	70.0	130.0
PFECHS		95.1	70.0	130.0
PFBSA		97.1	70.0	130.0
PFHxSA		91.3	70.0	130.0

Duplicate (DUP)

Lab Sample ID: AK221102C.4171902D, Parent Sample ID: S41719.02

Run in Batch: AK221102C, Run Date: 11/03/2022 06:00, Prep Date: 11/02/2022, Matrix: WW, Dilution: 2.05

Analyte	Flags	RPD	RPD CL
PFBA		NC	30.0
PFPeA		NC	30.0
4:2 FTSA		NC	30.0
PFHxA		3.8	30.0
PFBS		15.7	30.0
PFHpA		5.6	30.0
PFPeS		NC	30.0
6:2 FTSA		NC	30.0
PFOA		6.5	30.0
PFHxS		8.7	30.0
PFHxS-LN		5.1	30.0
PFHxS-BR	*	30.3	30.0
PFNA		NC	30.0
8:2 FTSA		NC	30.0
PFHpS		NC	30.0
PFDA		NC	30.0
N-MeFOSAA		NC	30.0
EtFOSAA		NC	30.0
PFOS		NC	30.0
PFOS-LN		NC	30.0
PFOS-BR		NC	30.0
PFUnDA		NC	30.0
PFNS		NC	30.0
PFDoDA		NC	30.0
PFDS		NC	30.0
PFTrDA		NC	30.0
FOSA		NC	30.0
PFTeDA		NC	30.0
11CL-PF3OUdS		NC	30.0
9CL-PF3ONS		NC	30.0

Organics - Volatiles, Prep Batch ID: PF221102W2 (continued)

Surrogates: Yes, QC Types: BLK/LCS/LCSD/MS/DUP

Duplicate (DUP) (continued)

Lab Sample ID: AK221102C.4171902D, Parent Sample ID: S41719.02

Run in Batch: AK221102C, Run Date: 11/03/2022 06:00, Prep Date: 11/02/2022, Matrix: WW, Dilution: 2.05

Analyte	Flags	RPD	RPD CL
ADONA		NC	30.0
HFPO-DA		NC	30.0
PFECHS		NC	30.0
PFBSA		NC	30.0
PFHxSA		NC	30.0

Merit Laboratories Login Checklist

Lab Set ID: S41719
Client: TRC (TRC)
Project: 495430.0000.0000 / Detroit Axle EB GW
Submitted: 10/21/2022 13:45 Login User: MMC

Attention: Kelly Cratsenburg
Address: TRC
1540 Eisenhower Place
Ann Arbor, MI 48108

Phone: 734-585-7829 C: FAX:
Email: KCratsenburg@trccompanies.com

Selection				Description	Note
Sample Receiving					
01.	[X] Yes	[ ] No	[ ] N/A	Samples are received at 4C +/- 2C Thermometer #	IR 3.4
02.	[X] Yes	[ ] No	[ ] N/A	Received on ice/ cooling process begun	
03.	[ ] Yes	[X] No	[ ] N/A	Samples shipped	
04.	[ ] Yes	[X] No	[ ] N/A	Samples left in 24 hr. drop box	
05.	[ ] Yes	[ ] No	[X] N/A	Are there custody seals/tape or is the drop box locked	
Chain of Custody					
06.	[X] Yes	[ ] No	[ ] N/A	COC adequately filled out	
07.	[X] Yes	[ ] No	[ ] N/A	COC signed and relinquished to the lab	
08.	[X] Yes	[ ] No	[ ] N/A	Sample tag on bottles match COC	
09.	[ ] Yes	[X] No	[ ] N/A	Subcontracting needed? Subcontacted to:	
Preservation					
10.	[X] Yes	[ ] No	[ ] N/A	Do sample have correct chemical preservation	
11.	[ ] Yes	[ ] No	[X] N/A	Completed pH checks on preserved samples? (no VOAs)	
12.	[ ] Yes	[X] No	[ ] N/A	Did any samples need to be preserved in the lab?	
Bottle Conditions					
13.	[X] Yes	[ ] No	[ ] N/A	All bottles intact	
14.	[X] Yes	[ ] No	[ ] N/A	Appropriate analytical bottles are used	
15.	[X] Yes	[ ] No	[ ] N/A	Merit bottles used	
16.	[X] Yes	[ ] No	[ ] N/A	Sufficient sample volume received	
17.	[ ] Yes	[X] No	[ ] N/A	Samples require laboratory filtration	
18.	[X] Yes	[ ] No	[ ] N/A	Samples submitted within holding time	
19.	[ ] Yes	[ ] No	[X] N/A	Do water VOC or TOX bottles contain headspace	

Corrective action for all exceptions is to call the client and to notify the project manager.

Client Review By: _____ Date: _____

Merit Laboratories, Inc.
2680 East Lansing Dr., East Lansing, MI 48823
Phone (517) 332-0167 Fax (517) 332-4034
www.meritlabs.com

C.O.C. PAGE # 1 OF 1

154861

CHAIN OF CUSTODY RECORD

REPORT TO

CONTACT NAME: Kelly Crittsenburg
COMPANY: TAC
ADDRESS: 1580 Eisenhower Place
CITY: Ann Arbor
STATE: MI
ZIP CODE: 48108
PHONE NO.:
CELL NO.:
P.O. NO.: 189445
E-MAIL ADDRESS: Kcrittsenburg@tacompanies.com
QUOTE NO.:

INVOICE TO

CONTACT NAME:
☐ SAME
COMPANY:
ADDRESS:
CITY:
STATE:
ZIP CODE:
PHONE NO.:
E-MAIL ADDRESS:

PROJECT NO./NAME: 495430.0000.0000 / Detroit Axle EB GW
SAMPLER(S) - PLEASE PRINT/SIGN NAME: Henry Schmaidt

TURNAROUND TIME REQUIRED ☐ 1 DAY ☐ 2 DAYS ☐ 3 DAYS ☒ STANDARD ☐ OTHER

DELIVERABLES REQUIRED ☐ STD ☐ LEVEL II ☐ LEVEL III ☐ LEVEL IV ☐ EDD ☒ OTHER TAC EDD

MATRIX CODE: W=WATER GW=GROUNDWATER WW=WASTEWATER S=SOIL L=LIQUID SD=SOLID SL=SLUDGE DW=DRINKING WATER O=OIL WP=WIPE A=AIR WS=WASTE

ANALYSIS (ATTACH LIST IF MORE SPACE IS REQUIRED)

Certifications
☐ OHIO VAP ☐ Drinking Water
☐ DoD ☐ NPDES

Project Locations
☐ Detroit ☐ New York
☐ Other

Special Instructions

MERIT LAB NO. (FOR LAB USE ONLY)	COLLECTION DATE	COLLECTION TIME	SAMPLE TAG. IDENTIFICATION-DESCRIPTION	MATRIX	# OF BOTTLES	# Containers & Preservatives: NONE	HCl	HNO_3	H_2SO_4	NaOH	MeOH	OTHER	8260 BTEX
41719.01	10/18/22	1017	MW-22-01	GW	3	3							X
.02	10/18/22	1205	MW-22-02	GW	3	3							X
.03	10/19/22	926	MW-22-03	GW	3	3							X
.04	10/20/22	1043	MW-22-04	GW	3	3							X
.05	10/20/22	1159	MW-22-05	GW	3	3							X
.06	10/20/22	1258	MW-22-06	GW	3	3							X
.07	10/18/22	—	Dup-01	GW	3	3							X
.08	10/19/22	1009	EB-01	W	3	3							X
.09	10/19/22	1009	FB-01	W	1	1							X

RELINQUISHED BY: SIGNATURE/ORGANIZATION	Henry Schmaidt ☒ Sampler	DATE 10/20/22	TIME 1600
RECEIVED BY: SIGNATURE/ORGANIZATION	Ian Mee	DATE 10/21/22	TIME 800
RELINQUISHED BY: SIGNATURE/ORGANIZATION		DATE	TIME
RECEIVED BY: SIGNATURE/ORGANIZATION		DATE	TIME

RELINQUISHED BY: SIGNATURE/ORGANIZATION	Ian Mee	DATE 10/21/22	TIME 1345
RECEIVED BY: SIGNATURE/ORGANIZATION	M Chilcote	DATE 10/21/22	TIME 1345

SEAL NO.: SEAL INTACT YES ☐ NO ☐ INITIALS:
SEAL NO.: SEAL INTACT YES ☐ NO ☐ INITIALS:

NOTES: TEMP. ON ARRIVAL 3.4

PLEASE NOTE: SIGNING ACKNOWLEDGES ADHERENCE TO MERIT'S SAMPLE ACCEPTANCE POLICY ON REVERSE SIDE

Rev. 1.26.22

Analytical Laboratory Report

Final Report

Report ID: S43386.01(03)
Generated on 01/30/2023
Replaces report S43386.01(02) generated on 01/30/2023

Report to

Attention: Kelly Cratsenburg
TRC
1540 Eisenhower Place
Ann Arbor, MI 48108

Phone: 734-585-7829 C: 734-412-5424 FAX:
Email: KCratsenburg@trccompanies.com

Addtional Contacts: Vince Buening

Report produced by

Merit Laboratories, Inc.
2680 East Lansing Drive
East Lansing, MI 48823

Phone: (517) 332-0167 FAX: (517) 332-6333

Contacts for report questions:
John Laverty (johnlaverty@meritlabs.com)
Barbara Ball (bball@meritlabs.com)

Report Summary

Lab Sample ID(s): S43386.01-S43386.06
Project: Detroit Axle East Investigation
Collected Date(s): 12/12/2022
Submitted Date/Time: 12/13/2022 15:10
Sampled by: A. Whaley
P.O. #: 189455

Table of Contents

Maya Murshak
Technical Director

General Report Notes

Analytical results relate only to the samples tested, in the condition received by the laboratory.
Methods may be modified for improved performance.
Results reported on a dry weight basis where applicable.
'Not detected' indicates that parameter was not found at a level equal to or greater than the reporting limit (RL).
When MDL results are provided, then 'Not detected' indicates that parameter was not found at a level equal to or greater than the MDL.
40 CFR Part 136 Table II Required Containers, Preservation Techniques and Holding Times for the Clean Water Act specify that samples for acrolein and acrylonitrile, and 2-chloroethylvinyl ether need to be preserved at a pH in the range of 4 to 5 or if not preserved, analyzed within 3 days of sampling.
QA/QC corresponding to this analytical report is a separate document with the same Merit ID reference and is available upon request.
Full accreditation certificates are available upon request. Starred (*) analytes are not NELAP accredited.
Samples are held by the lab for 30 days from the final report date unless a written request to hold longer is provided by the client.

Limits for drinking water samples, are listed as the MCL Limits (Maximum Contaminant Level Concentrations)
PFAS requirement: Section 9.3.8 of U.S. EPA Method 537.1 states "If the method analyte(s) found in the Field Sample is present in the FRB at a concentration greater than 1/3 the MRL, then all samples collected with that FRB are invalid and must be recollected and reanalyzed."
Samples submitted without an accompanying FRB may not be acceptable for compliance purposes.
Wisconsin PFAs analysis: MDL = LOD; RL = LOQ. LOD and LOQ are adjusted for dilution.

Report Narrative

All analyses completed

Laboratory Certifications

Authority	Certification ID
Michigan DEQ	#9956
DOD ELAP/ISO 17025	#69699
WBENC	#2005110032
Ohio VAP	#CL0002
Indiana DOH	#C-MI-07
New York NELAC	#11814
North Carolina DENR	#680
North Carolina DOH	#26702
Alaska CSLAP	#17-001
Pennsylvania DEP	#68-05884
Wisconsin DNR	FID# 399147320

Qualifier Descriptions

Qualifier	Description
!	Result is outside of stated limit criteria
B	Compound also found in associated method blank
E	Concentration exceeds calibration range
F	Analysis run outside of holding time
G	Estimated result due to extraction run outside of holding time
H	Sample submitted and run outside of holding time
I	Matrix interference with internal standard
J	Estimated value less than reporting limit, but greater than MDL
L	Elevated reporting limit due to low sample amount
M	Result reported to MDL not RDL
O	Analysis performed by outside laboratory. See attached report.
R	Preliminary result
S	Surrogate recovery outside of control limits
T	No correction for total solids
X	Elevated reporting limit due to matrix interference
Y	Elevated reporting limit due to high target concentration
b	Value detected less than reporting limit, but greater than MDL
e	Reported value estimated due to interference
j	Analyte also found in associated method blank
p	Benzo(b)Fluoranthene and Benzo(k)Fluoranthene integrated as one peak.
x	Preserved from bulk sample

Glossary of Abbreviations

Abbreviation	Description
RL/RDL	Reporting Limit
MDL	Method Detection Limit
MS	Matrix Spike
MSD	Matrix Spike Duplicate
SW	EPA SW 846 (Soil and Wastewater) Methods
E	EPA Methods
SM	Standard Methods
LN	Linear
BR	Branched

Method Summary

Method	Version
E200.8	EPA Method 200.8 Revision 5.4
E245.1	EPA Method 245.1 Revision 3.0
N/A	Not Applicable
SW3015A	SW 846 Method 3015A Revision 1 February 2007
SW5030C/8260C	SW 846 Method 8260C Revision 3 August 2006 / 5030C Revision 3 May 2003
SW8260B - SIM	SW 846 Method 8260B Revision 2 December 1996 SIMs

Sample Summary (6 samples)

Sample ID	Sample Tag	Matrix	Collected Date/Time
S43386.01	MW-104	Groundwater	12/12/22 13:30
S43386.02	MW-22-01	Groundwater	12/12/22 14:10
S43386.03	MW-22-02	Groundwater	12/12/22 15:00
S43386.04	DUP-01W	Groundwater	12/12/22 00:01
S43386.05	MW-22-03	Groundwater	12/12/22 15:50
S43386.06	TB-01	Water	12/12/22 00:01

Lab Sample ID: S43386.01
Sample Tag: MW-104
Collected Date/Time: 12/12/2022 13:30
Matrix: Groundwater
COC Reference: 158666

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
3	40ml Glass	HCL	Yes	3.6	IR
3	40ml Glass	None	Yes	3.6	IR
2	125ml Plastic	HNO3	Yes	3.6	IR

Extraction / Prep.

Parameter	Result	Method	Run Date	Analyst	Flags
Mercury Digestion	Completed	E245.1	12/15/22 22:16	CTV	
pH check for VOCs*	<2	N/A	12/19/22 11:40	JKJ	
Metal Digestion	Completed	SW3015A	12/14/22 10:10	CCM	

Metals

Method: E200.8, Run Date: 12/14/22 13:27, Analyst: CCM

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags	Limits
Selenium	Not detected	0.005		mg/L	5	7782-49-2		

Method: E200.8, Run Date: 12/14/22 11:36, Analyst: CCM

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags	Limits
Aluminum	0.113	0.010		mg/L	5	7429-90-5		
Antimony*	Not detected	0.005		mg/L	5	7440-36-0		
Arsenic	Not detected	0.002		mg/L	5	7440-38-2		
Barium	0.061	0.005		mg/L	5	7440-39-3		
Beryllium	Not detected	0.001		mg/L	5	7440-41-7		
Boron	0.12	0.04		mg/L	5	7440-42-8		
Cadmium	Not detected	0.0005		mg/L	5	7440-43-9		
Chromium	Not detected	0.005		mg/L	5	7440-47-3		
Cobalt	Not detected	0.005		mg/L	5	7440-48-4		
Copper	0.007	0.005		mg/L	5	7440-50-8		
Iron	0.23	0.02		mg/L	5	7439-89-6		
Lead	Not detected	0.003		mg/L	5	7439-92-1		
Manganese	0.042	0.005		mg/L	5	7439-96-5		
Molybdenum	0.014	0.005		mg/L	5	7439-98-7		
Nickel	Not detected	0.005		mg/L	5	7440-02-0		
Silver	Not detected	0.0005		mg/L	5	7440-22-4		
Strontium	0.214	0.005		mg/L	5	7440-24-6		
Thallium	Not detected	0.002		mg/L	5	7440-28-0		
Tin	Not detected	0.02		mg/L	5	7440-31-5		
Titanium	Not detected	0.005		mg/L	5	7440-32-6		
Vanadium	Not detected	0.005		mg/L	5	7440-62-2		
Zinc	Not detected	0.005		mg/L	5	7440-66-6		

Method: E200.8, Run Date: 12/14/22 14:21, Analyst: CCM

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags	Limits
Calcium*	60.2	0.50		mg/L	5	7440-70-2		
Magnesium	9.96	0.50		mg/L	5	7439-95-4		
Potassium	9.06	0.50		mg/L	5	7440-09-7		
Sodium	168	1.0		mg/L	5	7440-23-5		

Lab Sample ID: S43386.01 (continued)
Sample Tag: MW-104

Method: E245.1, Run Date: 12/15/22 21:58, Analyst: CTV

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags	Limits
Mercury	Not detected	0.0002		mg/L	1	7439-97-6		

Organics - Volatiles

Method: SW5030C/8260C, Run Date: 12/25/22 11:45, Analyst: KAG

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags	Limits
Diisopropyl ether (DIPE)	Not detected	5		ug/L	1	108-20-3		

Method: SW8260B - SIM, Run Date: 12/15/22 21:53, Analyst: KAG

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags	Limits
1,2-Dibromo-3-chloropropane*	Not detected	0.05		ug/L	1	96-12-8		

Volatile Organics, Method: SW5030C/8260C, Run Date: 12/18/22 16:31, Analyst: KAG

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags	Limits
Acetone	Not detected	50		ug/L	1	67-64-1		
tert-Methyl butyl ether (MTBE)	Not detected	5		ug/L	1	1634-04-4		
Acrylonitrile	Not detected	2		ug/L	1	107-13-1		
2-Butanone (MEK)	Not detected	25		ug/L	1	78-93-3		200,000
Dichlorodifluoromethane	Not detected	5		ug/L	1	75-71-8		
Chloromethane	Not detected	5		ug/L	1	74-87-3		
Vinyl chloride	Not detected	1		ug/L	1	75-01-4		200
Bromomethane	Not detected	5		ug/L	1	74-83-9		
Chloroethane	Not detected	5		ug/L	1	75-00-3		
Trichlorofluoromethane	Not detected	1		ug/L	1	75-69-4		
1,1-Dichloroethene	Not detected	1		ug/L	1	75-35-4		700
Methylene chloride	Not detected	5		ug/L	1	75-09-2		
trans-1,2-Dichloroethene	Not detected	1		ug/L	1	156-60-5		
1,1-Dichloroethane	Not detected	1		ug/L	1	75-34-3		
cis-1,2-Dichloroethene	Not detected	1		ug/L	1	156-59-2		
Chloroform	Not detected	1		ug/L	1	67-66-3		6,000
1,1,1-Trichloroethane	Not detected	1		ug/L	1	71-55-6		
4-Methyl-2-pentanone (MIBK)	Not detected	50		ug/L	1	108-10-1		
Carbon tetrachloride	Not detected	1		ug/L	1	56-23-5		500
Benzene	Not detected	1		ug/L	1	71-43-2		500
1,2-Dichloroethane	Not detected	1		ug/L	1	107-06-2		500
Trichloroethene	Not detected	1		ug/L	1	79-01-6		500
1,2-Dichloropropane	Not detected	1		ug/L	1	78-87-5		
Bromodichloromethane	Not detected	1		ug/L	1	75-27-4		
Dibromomethane	Not detected	5		ug/L	1	74-95-3		
cis-1,3-Dichloropropene	Not detected	1		ug/L	1	10061-01-5		
Toluene	Not detected	1		ug/L	1	108-88-3		
trans-1,3-Dichloropropene	Not detected	1		ug/L	1	10061-02-6		
1,1,2-Trichloroethane	Not detected	1		ug/L	1	79-00-5		
Tetrachloroethene	Not detected	1		ug/L	1	127-18-4		700
Dibromochloromethane	Not detected	5		ug/L	1	124-48-1		
1,2-Dibromoethane	Not detected	1		ug/L	1	106-93-4		
Chlorobenzene	Not detected	1		ug/L	1	108-90-7		100,000
1,1,1,2-Tetrachloroethane	Not detected	1		ug/L	1	630-20-6		
Ethylbenzene	Not detected	1		ug/L	1	100-41-4		
p,m-Xylene*	Not detected	2		ug/L	1			
o-Xylene	Not detected	1		ug/L	1	95-47-6		

Lab Sample ID: S43386.01 (continued)
Sample Tag: MW-104

Volatile Organics, Method: SW5030C/8260C, Run Date: 12/18/22 16:31, Analyst: KAG (continued)

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags	Limits
Styrene	Not detected	1		ug/L	1	100-42-5		
Isopropylbenzene	Not detected	5		ug/L	1	98-82-8		
Bromoform	Not detected	1		ug/L	1	75-25-2		
1,1,2,2-Tetrachloroethane	Not detected	1		ug/L	1	79-34-5		
1,2,3-Trichloropropane	Not detected	1		ug/L	1	96-18-4		
n-Propylbenzene	Not detected	1		ug/L	1	103-65-1		
Bromobenzene	Not detected	1		ug/L	1	108-86-1		
1,3,5-Trimethylbenzene	Not detected	1		ug/L	1	108-67-8		
tert-Butylbenzene	Not detected	1		ug/L	1	98-06-6		
1,2,4-Trimethylbenzene	Not detected	1		ug/L	1	95-63-6		
sec-Butylbenzene	Not detected	1		ug/L	1	135-98-8		
p-Isopropyltoluene	Not detected	5		ug/L	1	99-87-6		
1,3-Dichlorobenzene	Not detected	1		ug/L	1	541-73-1		
1,4-Dichlorobenzene	Not detected	1		ug/L	1	106-46-7		7,500
1,2-Dichlorobenzene	Not detected	1		ug/L	1	95-50-1		
1,2,3-Trimethylbenzene	Not detected	1		ug/L	1	526-73-8		
n-Butylbenzene	Not detected	1		ug/L	1	104-51-8		
1,2,4-Trichlorobenzene	Not detected	5		ug/L	1	120-82-1		
1,2,3-Trichlorobenzene	Not detected	5		ug/L	1	87-61-6		
Naphthalene	Not detected	5		ug/L	1	91-20-3		
Acrolein	Not detected	1		ug/L	1	107-02-8		
2-Chlorotoluene	Not detected	1		ug/L	1	95-49-8		
4-Chlorotoluene	Not detected	1		ug/L	1	106-43-4		
1,3-Dichloropropane	Not detected	1		ug/L	1	142-28-9		
1,1-Dichloropropene	Not detected	1		ug/L	1	563-58-6		
2,2-Dichloropropane	Not detected	1		ug/L	1	594-20-7		
Hexachlorobutadiene	Not detected	1		ug/L	1	87-68-3		500
1,1,2-Trichloro-1,2,2-trifluoroethane	Not detected	1		ug/L	1	76-13-1		

Other / Misc.

Method: , Run Date: 12/17/22 20:44, Analyst: EURO

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags	Limits
Alcohols*	Completed				1		O	

Method: , Run Date: 12/21/22 20:38, Analyst: EURO

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags	Limits
Misc. Special Project*	Completed				1		O	

O-Analysis performed by outside laboratory. See attached report.

Lab Sample ID: S43386.02
Sample Tag: MW-22-01
Collected Date/Time: 12/12/2022 14:10
Matrix: Groundwater
COC Reference: 158666

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
3	40ml Glass	HCL	Yes	3.6	IR
3	40ml Glass	None	Yes	3.6	IR
2	125ml Plastic	HNO3	Yes	3.6	IR

Extraction / Prep.

Parameter	Result	Method	Run Date	Analyst	Flags
Mercury Digestion	Completed	E245.1	12/15/22 22:16	CTV	
pH check for VOCs*	<2	N/A	12/19/22 11:40	JKJ	
Metal Digestion	Completed	SW3015A	12/14/22 10:10	CCM	

Metals

Method: E200.8, Run Date: 12/14/22 13:28, Analyst: CCM

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags	Limits
Selenium	0.012	0.005		mg/L	5	7782-49-2		

Method: E200.8, Run Date: 12/14/22 11:40, Analyst: CCM

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags	Limits
Aluminum	0.015	0.010		mg/L	5	7429-90-5		
Antimony*	Not detected	0.005		mg/L	5	7440-36-0		
Arsenic	0.002	0.002		mg/L	5	7440-38-2		
Barium	0.084	0.005		mg/L	5	7440-39-3		
Beryllium	Not detected	0.001		mg/L	5	7440-41-7		
Boron	0.05	0.04		mg/L	5	7440-42-8		
Cadmium	Not detected	0.0005		mg/L	5	7440-43-9		
Chromium	Not detected	0.005		mg/L	5	7440-47-3		
Cobalt	Not detected	0.005		mg/L	5	7440-48-4		
Copper	Not detected	0.005		mg/L	5	7440-50-8		
Iron	Not detected	0.02		mg/L	5	7439-89-6		
Lead	Not detected	0.003		mg/L	5	7439-92-1		
Manganese	0.055	0.005		mg/L	5	7439-96-5		
Molybdenum	0.007	0.005		mg/L	5	7439-98-7		
Nickel	Not detected	0.005		mg/L	5	7440-02-0		
Silver	Not detected	0.0005		mg/L	5	7440-22-4		
Strontium	0.388	0.005		mg/L	5	7440-24-6		
Thallium	Not detected	0.002		mg/L	5	7440-28-0		
Tin	Not detected	0.02		mg/L	5	7440-31-5		
Titanium	Not detected	0.005		mg/L	5	7440-32-6		
Vanadium	Not detected	0.005		mg/L	5	7440-62-2		
Zinc	Not detected	0.005		mg/L	5	7440-66-6		

Method: E200.8, Run Date: 12/14/22 14:22, Analyst: CCM

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags	Limits
Calcium*	114	0.50		mg/L	5	7440-70-2		
Magnesium	20.3	0.50		mg/L	5	7439-95-4		
Potassium	9.01	0.50		mg/L	5	7440-09-7		
Sodium	479	1.0		mg/L	5	7440-23-5		

Lab Sample ID: S43386.02 (continued)
Sample Tag: MW-22-01

Method: E245.1, Run Date: 12/15/22 22:02, Analyst: CTV

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags	Limits
Mercury	Not detected	0.0002		mg/L	1	7439-97-6		

Organics - Volatiles

Method: SW5030C/8260C, Run Date: 12/25/22 12:09, Analyst: KAG

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags	Limits
Diisopropyl ether (DIPE)	Not detected	5		ug/L	1	108-20-3		

Method: SW8260B - SIM, Run Date: 12/15/22 22:14, Analyst: KAG

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags	Limits
1,2-Dibromo-3-chloropropane*	Not detected	0.05		ug/L	1	96-12-8		

Volatile Organics, Method: SW5030C/8260C, Run Date: 12/18/22 16:50, Analyst: KAG

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags	Limits
Acetone	Not detected	50		ug/L	1	67-64-1		
tert-Methyl butyl ether (MTBE)	Not detected	5		ug/L	1	1634-04-4		
Acrylonitrile	Not detected	2		ug/L	1	107-13-1		
2-Butanone (MEK)	Not detected	25		ug/L	1	78-93-3		200,000
Dichlorodifluoromethane	Not detected	5		ug/L	1	75-71-8		
Chloromethane	Not detected	5		ug/L	1	74-87-3		
Vinyl chloride	Not detected	1		ug/L	1	75-01-4		200
Bromomethane	Not detected	5		ug/L	1	74-83-9		
Chloroethane	Not detected	5		ug/L	1	75-00-3		
Trichlorofluoromethane	Not detected	1		ug/L	1	75-69-4		
1,1-Dichloroethene	Not detected	1		ug/L	1	75-35-4		700
Methylene chloride	Not detected	5		ug/L	1	75-09-2		
trans-1,2-Dichloroethene	Not detected	1		ug/L	1	156-60-5		
1,1-Dichloroethane	Not detected	1		ug/L	1	75-34-3		
cis-1,2-Dichloroethene	Not detected	1		ug/L	1	156-59-2		
Chloroform	Not detected	1		ug/L	1	67-66-3		6,000
1,1,1-Trichloroethane	Not detected	1		ug/L	1	71-55-6		
4-Methyl-2-pentanone (MIBK)	Not detected	50		ug/L	1	108-10-1		
Carbon tetrachloride	Not detected	1		ug/L	1	56-23-5		500
Benzene	Not detected	1		ug/L	1	71-43-2		500
1,2-Dichloroethane	Not detected	1		ug/L	1	107-06-2		500
Trichloroethene	Not detected	1		ug/L	1	79-01-6		500
1,2-Dichloropropane	Not detected	1		ug/L	1	78-87-5		
Bromodichloromethane	Not detected	1		ug/L	1	75-27-4		
Dibromomethane	Not detected	5		ug/L	1	74-95-3		
cis-1,3-Dichloropropene	Not detected	1		ug/L	1	10061-01-5		
Toluene	Not detected	1		ug/L	1	108-88-3		
trans-1,3-Dichloropropene	Not detected	1		ug/L	1	10061-02-6		
1,1,2-Trichloroethane	Not detected	1		ug/L	1	79-00-5		
Tetrachloroethene	Not detected	1		ug/L	1	127-18-4		700
Dibromochloromethane	Not detected	5		ug/L	1	124-48-1		
1,2-Dibromoethane	Not detected	1		ug/L	1	106-93-4		
Chlorobenzene	Not detected	1		ug/L	1	108-90-7		100,000
1,1,1,2-Tetrachloroethane	Not detected	1		ug/L	1	630-20-6		
Ethylbenzene	Not detected	1		ug/L	1	100-41-4		
p,m-Xylene*	Not detected	2		ug/L	1			
o-Xylene	Not detected	1		ug/L	1	95-47-6		

Lab Sample ID: S43386.02 (continued)
Sample Tag: MW-22-01

Volatile Organics, Method: SW5030C/8260C, Run Date: 12/18/22 16:50, Analyst: KAG (continued)

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags	Limits
Styrene	Not detected	1		ug/L	1	100-42-5		
Isopropylbenzene	Not detected	5		ug/L	1	98-82-8		
Bromoform	Not detected	1		ug/L	1	75-25-2		
1,1,2,2-Tetrachloroethane	Not detected	1		ug/L	1	79-34-5		
1,2,3-Trichloropropane	Not detected	1		ug/L	1	96-18-4		
n-Propylbenzene	Not detected	1		ug/L	1	103-65-1		
Bromobenzene	Not detected	1		ug/L	1	108-86-1		
1,3,5-Trimethylbenzene	Not detected	1		ug/L	1	108-67-8		
tert-Butylbenzene	Not detected	1		ug/L	1	98-06-6		
1,2,4-Trimethylbenzene	Not detected	1		ug/L	1	95-63-6		
sec-Butylbenzene	Not detected	1		ug/L	1	135-98-8		
p-Isopropyltoluene	Not detected	5		ug/L	1	99-87-6		
1,3-Dichlorobenzene	Not detected	1		ug/L	1	541-73-1		
1,4-Dichlorobenzene	Not detected	1		ug/L	1	106-46-7		7,500
1,2-Dichlorobenzene	Not detected	1		ug/L	1	95-50-1		
1,2,3-Trimethylbenzene	Not detected	1		ug/L	1	526-73-8		
n-Butylbenzene	Not detected	1		ug/L	1	104-51-8		
1,2,4-Trichlorobenzene	Not detected	5		ug/L	1	120-82-1		
1,2,3-Trichlorobenzene	Not detected	5		ug/L	1	87-61-6		
Naphthalene	Not detected	5		ug/L	1	91-20-3		
Acrolein	Not detected	1		ug/L	1	107-02-8		
2-Chlorotoluene	Not detected	1		ug/L	1	95-49-8		
4-Chlorotoluene	Not detected	1		ug/L	1	106-43-4		
1,3-Dichloropropane	Not detected	1		ug/L	1	142-28-9		
1,1-Dichloropropene	Not detected	1		ug/L	1	563-58-6		
2,2-Dichloropropane	Not detected	1		ug/L	1	594-20-7		
Hexachlorobutadiene	Not detected	1		ug/L	1	87-68-3		500
1,1,2-Trichloro-1,2,2-trifluoroethane	Not detected	1		ug/L	1	76-13-1		

Other / Misc.

Method: , Run Date: 12/17/22 21:05, Analyst: EURO

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags	Limits
Alcohols*	Completed				1		O	

Method: , Run Date: 12/21/22 20:41, Analyst: EURO

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags	Limits
Misc. Special Project*	Completed				1		O	

O-Analysis performed by outside laboratory. See attached report.

Lab Sample ID: S43386.03
Sample Tag: MW-22-02
Collected Date/Time: 12/12/2022 15:00
Matrix: Groundwater
COC Reference: 158666

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
3	40ml Glass	HCL	Yes	3.6	IR
3	40ml Glass	None	Yes	3.6	IR
2	125ml Plastic	HNO3	Yes	3.6	IR

Extraction / Prep.

Parameter	Result	Method	Run Date	Analyst	Flags
Mercury Digestion	Completed	E245.1	12/15/22 22:16	CTV	
pH check for VOCs*	<2	N/A	12/19/22 11:40	JKJ	
Metal Digestion	Completed	SW3015A	12/14/22 10:10	CCM	

Metals

Method: E200.8, Run Date: 12/14/22 13:30, Analyst: CCM

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags	Limits
Selenium	Not detected	0.005		mg/L	5	7782-49-2		

Method: E200.8, Run Date: 12/14/22 11:44, Analyst: CCM

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags	Limits
Aluminum	Not detected	0.010		mg/L	5	7429-90-5		
Antimony*	Not detected	0.005		mg/L	5	7440-36-0		
Arsenic	0.002	0.002		mg/L	5	7440-38-2		
Barium	0.139	0.005		mg/L	5	7440-39-3		
Beryllium	Not detected	0.001		mg/L	5	7440-41-7		
Boron	0.08	0.04		mg/L	5	7440-42-8		
Cadmium	Not detected	0.0005		mg/L	5	7440-43-9		
Chromium	Not detected	0.005		mg/L	5	7440-47-3		
Cobalt	Not detected	0.005		mg/L	5	7440-48-4		
Copper	Not detected	0.005		mg/L	5	7440-50-8		
Iron	0.03	0.02		mg/L	5	7439-89-6		
Lead	Not detected	0.003		mg/L	5	7439-92-1		
Manganese	0.150	0.005		mg/L	5	7439-96-5		
Molybdenum	Not detected	0.005		mg/L	5	7439-98-7		
Nickel	Not detected	0.005		mg/L	5	7440-02-0		
Silver	Not detected	0.0005		mg/L	5	7440-22-4		
Strontium	0.337	0.005		mg/L	5	7440-24-6		
Thallium	Not detected	0.002		mg/L	5	7440-28-0		
Tin	Not detected	0.02		mg/L	5	7440-31-5		
Titanium	Not detected	0.005		mg/L	5	7440-32-6		
Vanadium	Not detected	0.005		mg/L	5	7440-62-2		
Zinc	Not detected	0.005		mg/L	5	7440-66-6		

Method: E200.8, Run Date: 12/14/22 14:24, Analyst: CCM

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags	Limits
Calcium*	89.7	0.50		mg/L	5	7440-70-2		
Magnesium	16.7	0.50		mg/L	5	7439-95-4		
Potassium	3.11	0.50		mg/L	5	7440-09-7		
Sodium	139	1.0		mg/L	5	7440-23-5		

Lab Sample ID: S43386.03 (continued)
Sample Tag: MW-22-02

Method: E245.1, Run Date: 12/15/22 22:06, Analyst: CTV

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags	Limits
Mercury	Not detected	0.0002		mg/L	1	7439-97-6		

Organics - Volatiles

Method: SW5030C/8260C, Run Date: 12/25/22 12:34, Analyst: KAG

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags	Limits
Diisopropyl ether (DIPE)	Not detected	5		ug/L	1	108-20-3		

Method: SW8260B - SIM, Run Date: 12/15/22 22:34, Analyst: KAG

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags	Limits
1,2-Dibromo-3-chloropropane*	Not detected	0.05		ug/L	1	96-12-8		

Volatile Organics, Method: SW5030C/8260C, Run Date: 12/18/22 17:10, Analyst: KAG

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags	Limits
Acetone	Not detected	50		ug/L	1	67-64-1		
tert-Methyl butyl ether (MTBE)	Not detected	5		ug/L	1	1634-04-4		
Acrylonitrile	Not detected	2		ug/L	1	107-13-1		
2-Butanone (MEK)	Not detected	25		ug/L	1	78-93-3		200,000
Dichlorodifluoromethane	Not detected	5		ug/L	1	75-71-8		
Chloromethane	Not detected	5		ug/L	1	74-87-3		
Vinyl chloride	Not detected	1		ug/L	1	75-01-4		200
Bromomethane	Not detected	5		ug/L	1	74-83-9		
Chloroethane	Not detected	5		ug/L	1	75-00-3		
Trichlorofluoromethane	Not detected	1		ug/L	1	75-69-4		
1,1-Dichloroethene	Not detected	1		ug/L	1	75-35-4		700
Methylene chloride	Not detected	5		ug/L	1	75-09-2		
trans-1,2-Dichloroethene	Not detected	1		ug/L	1	156-60-5		
1,1-Dichloroethane	Not detected	1		ug/L	1	75-34-3		
cis-1,2-Dichloroethene	1	1		ug/L	1	156-59-2		
Chloroform	Not detected	1		ug/L	1	67-66-3		6,000
1,1,1-Trichloroethane	Not detected	1		ug/L	1	71-55-6		
4-Methyl-2-pentanone (MIBK)	Not detected	50		ug/L	1	108-10-1		
Carbon tetrachloride	Not detected	1		ug/L	1	56-23-5		500
Benzene	Not detected	1		ug/L	1	71-43-2		500
1,2-Dichloroethane	Not detected	1		ug/L	1	107-06-2		500
Trichloroethene	3	1		ug/L	1	79-01-6		500
1,2-Dichloropropane	Not detected	1		ug/L	1	78-87-5		
Bromodichloromethane	Not detected	1		ug/L	1	75-27-4		
Dibromomethane	Not detected	5		ug/L	1	74-95-3		
cis-1,3-Dichloropropene	Not detected	1		ug/L	1	10061-01-5		
Toluene	Not detected	1		ug/L	1	108-88-3		
trans-1,3-Dichloropropene	Not detected	1		ug/L	1	10061-02-6		
1,1,2-Trichloroethane	Not detected	1		ug/L	1	79-00-5		
Tetrachloroethene	Not detected	1		ug/L	1	127-18-4		700
Dibromochloromethane	Not detected	5		ug/L	1	124-48-1		
1,2-Dibromoethane	Not detected	1		ug/L	1	106-93-4		
Chlorobenzene	58	1		ug/L	1	108-90-7		100,000
1,1,1,2-Tetrachloroethane	Not detected	1		ug/L	1	630-20-6		
Ethylbenzene	Not detected	1		ug/L	1	100-41-4		
p,m-Xylene*	Not detected	2		ug/L	1			
o-Xylene	Not detected	1		ug/L	1	95-47-6		

Lab Sample ID: S43386.03 (continued)
Sample Tag: MW-22-02

Volatile Organics, Method: SW5030C/8260C, Run Date: 12/18/22 17:10, Analyst: KAG (continued)

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags	Limits
Styrene	Not detected	1		ug/L	1	100-42-5		
Isopropylbenzene	Not detected	5		ug/L	1	98-82-8		
Bromoform	Not detected	1		ug/L	1	75-25-2		
1,1,2,2-Tetrachloroethane	Not detected	1		ug/L	1	79-34-5		
1,2,3-Trichloropropane	Not detected	1		ug/L	1	96-18-4		
n-Propylbenzene	Not detected	1		ug/L	1	103-65-1		
Bromobenzene	Not detected	1		ug/L	1	108-86-1		
1,3,5-Trimethylbenzene	Not detected	1		ug/L	1	108-67-8		
tert-Butylbenzene	Not detected	1		ug/L	1	98-06-6		
1,2,4-Trimethylbenzene	Not detected	1		ug/L	1	95-63-6		
sec-Butylbenzene	Not detected	1		ug/L	1	135-98-8		
p-Isopropyltoluene	Not detected	5		ug/L	1	99-87-6		
1,3-Dichlorobenzene	Not detected	1		ug/L	1	541-73-1		
1,4-Dichlorobenzene	Not detected	1		ug/L	1	106-46-7		7,500
1,2-Dichlorobenzene	Not detected	1		ug/L	1	95-50-1		
1,2,3-Trimethylbenzene	Not detected	1		ug/L	1	526-73-8		
n-Butylbenzene	Not detected	1		ug/L	1	104-51-8		
1,2,4-Trichlorobenzene	Not detected	5		ug/L	1	120-82-1		
1,2,3-Trichlorobenzene	Not detected	5		ug/L	1	87-61-6		
Naphthalene	Not detected	5		ug/L	1	91-20-3		
Acrolein	Not detected	1		ug/L	1	107-02-8		
2-Chlorotoluene	Not detected	1		ug/L	1	95-49-8		
4-Chlorotoluene	Not detected	1		ug/L	1	106-43-4		
1,3-Dichloropropane	Not detected	1		ug/L	1	142-28-9		
1,1-Dichloropropene	Not detected	1		ug/L	1	563-58-6		
2,2-Dichloropropane	Not detected	1		ug/L	1	594-20-7		
Hexachlorobutadiene	Not detected	1		ug/L	1	87-68-3		500
1,1,2-Trichloro-1,2,2-trifluoroethane	Not detected	1		ug/L	1	76-13-1		

Other / Misc.

Method: , Run Date: 12/17/22 21:27, Analyst: EURO

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags	Limits
Alcohols*	Completed				1		O	

Method: , Run Date: 12/21/22 20:44, Analyst: EURO

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags	Limits
Misc. Special Project*	Completed				1		O	

O-Analysis performed by outside laboratory. See attached report.

Lab Sample ID: S43386.04
Sample Tag: DUP-01W
Collected Date/Time: 12/12/2022 00:01
Matrix: Groundwater
COC Reference: 158666

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
3	40ml Glass	HCL	Yes	3.6	IR
3	40ml Glass	None	Yes	3.6	IR
2	125ml Plastic	HNO3	Yes	3.6	IR

Extraction / Prep.

Parameter	Result	Method	Run Date	Analyst	Flags
Mercury Digestion	Completed	E245.1	12/15/22 22:16	CTV	
pH check for VOCs*	<2	N/A	12/19/22 11:40	JKJ	
Metal Digestion	Completed	SW3015A	12/14/22 10:10	CCM	

Metals

Method: E200.8, Run Date: 12/14/22 13:31, Analyst: CCM

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags	Limits
Selenium	Not detected	0.005		mg/L	5	7782-49-2		

Method: E200.8, Run Date: 12/14/22 11:46, Analyst: CCM

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags	Limits
Aluminum	Not detected	0.010		mg/L	5	7429-90-5		
Antimony*	Not detected	0.005		mg/L	5	7440-36-0		
Arsenic	0.002	0.002		mg/L	5	7440-38-2		
Barium	0.137	0.005		mg/L	5	7440-39-3		
Beryllium	Not detected	0.001		mg/L	5	7440-41-7		
Boron	0.08	0.04		mg/L	5	7440-42-8		
Cadmium	Not detected	0.0005		mg/L	5	7440-43-9		
Chromium	Not detected	0.005		mg/L	5	7440-47-3		
Cobalt	Not detected	0.005		mg/L	5	7440-48-4		
Copper	Not detected	0.005		mg/L	5	7440-50-8		
Iron	0.03	0.02		mg/L	5	7439-89-6		
Lead	Not detected	0.003		mg/L	5	7439-92-1		
Manganese	0.150	0.005		mg/L	5	7439-96-5		
Molybdenum	Not detected	0.005		mg/L	5	7439-98-7		
Nickel	Not detected	0.005		mg/L	5	7440-02-0		
Silver	Not detected	0.0005		mg/L	5	7440-22-4		
Strontium	0.343	0.005		mg/L	5	7440-24-6		
Thallium	Not detected	0.002		mg/L	5	7440-28-0		
Tin	Not detected	0.02		mg/L	5	7440-31-5		
Titanium	Not detected	0.005		mg/L	5	7440-32-6		
Vanadium	Not detected	0.005		mg/L	5	7440-62-2		
Zinc	Not detected	0.005		mg/L	5	7440-66-6		

Method: E200.8, Run Date: 12/14/22 14:26, Analyst: CCM

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags	Limits
Calcium*	93.0	0.50		mg/L	5	7440-70-2		
Magnesium	16.8	0.50		mg/L	5	7439-95-4		
Potassium	3.19	0.50		mg/L	5	7440-09-7		
Sodium	144	1.0		mg/L	5	7440-23-5		

Lab Sample ID: S43386.04 (continued)
Sample Tag: DUP-01W

Method: E245.1, Run Date: 12/15/22 22:10, Analyst: CTV

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags	Limits
Mercury	Not detected	0.0002		mg/L	1	7439-97-6		

Organics - Volatiles

Method: SW5030C/8260C, Run Date: 12/25/22 12:58, Analyst: KAG

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags	Limits
Diisopropyl ether (DIPE)	Not detected	5		ug/L	1	108-20-3		

Method: SW8260B - SIM, Run Date: 12/15/22 22:55, Analyst: KAG

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags	Limits
1,2-Dibromo-3-chloropropane*	Not detected	0.05		ug/L	1	96-12-8		

Volatile Organics, Method: SW5030C/8260C, Run Date: 12/18/22 17:30, Analyst: KAG

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags	Limits
Acetone	Not detected	50		ug/L	1	67-64-1		
tert-Methyl butyl ether (MTBE)	Not detected	5		ug/L	1	1634-04-4		
Acrylonitrile	Not detected	2		ug/L	1	107-13-1		
2-Butanone (MEK)	Not detected	25		ug/L	1	78-93-3		200,000
Dichlorodifluoromethane	Not detected	5		ug/L	1	75-71-8		
Chloromethane	Not detected	5		ug/L	1	74-87-3		
Vinyl chloride	Not detected	1		ug/L	1	75-01-4		200
Bromomethane	Not detected	5		ug/L	1	74-83-9		
Chloroethane	Not detected	5		ug/L	1	75-00-3		
Trichlorofluoromethane	Not detected	1		ug/L	1	75-69-4		
1,1-Dichloroethene	Not detected	1		ug/L	1	75-35-4		700
Methylene chloride	Not detected	5		ug/L	1	75-09-2		
trans-1,2-Dichloroethene	Not detected	1		ug/L	1	156-60-5		
1,1-Dichloroethane	Not detected	1		ug/L	1	75-34-3		
cis-1,2-Dichloroethene	1	1		ug/L	1	156-59-2		
Chloroform	Not detected	1		ug/L	1	67-66-3		6,000
1,1,1-Trichloroethane	Not detected	1		ug/L	1	71-55-6		
4-Methyl-2-pentanone (MIBK)	Not detected	50		ug/L	1	108-10-1		
Carbon tetrachloride	Not detected	1		ug/L	1	56-23-5		500
Benzene	Not detected	1		ug/L	1	71-43-2		500
1,2-Dichloroethane	Not detected	1		ug/L	1	107-06-2		500
Trichloroethene	3	1		ug/L	1	79-01-6		500
1,2-Dichloropropane	Not detected	1		ug/L	1	78-87-5		
Bromodichloromethane	Not detected	1		ug/L	1	75-27-4		
Dibromomethane	Not detected	5		ug/L	1	74-95-3		
cis-1,3-Dichloropropene	Not detected	1		ug/L	1	10061-01-5		
Toluene	Not detected	1		ug/L	1	108-88-3		
trans-1,3-Dichloropropene	Not detected	1		ug/L	1	10061-02-6		
1,1,2-Trichloroethane	Not detected	1		ug/L	1	79-00-5		
Tetrachloroethene	Not detected	1		ug/L	1	127-18-4		700
Dibromochloromethane	Not detected	5		ug/L	1	124-48-1		
1,2-Dibromoethane	Not detected	1		ug/L	1	106-93-4		
Chlorobenzene	60	1		ug/L	1	108-90-7		100,000
1,1,1,2-Tetrachloroethane	Not detected	1		ug/L	1	630-20-6		
Ethylbenzene	Not detected	1		ug/L	1	100-41-4		
p,m-Xylene*	Not detected	2		ug/L	1			
o-Xylene	Not detected	1		ug/L	1	95-47-6		

Lab Sample ID: S43386.04 (continued)
Sample Tag: DUP-01W

Volatile Organics, Method: SW5030C/8260C, Run Date: 12/18/22 17:30, Analyst: KAG (continued)

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags	Limits
Styrene	Not detected	1		ug/L	1	100-42-5		
Isopropylbenzene	Not detected	5		ug/L	1	98-82-8		
Bromoform	Not detected	1		ug/L	1	75-25-2		
1,1,2,2-Tetrachloroethane	Not detected	1		ug/L	1	79-34-5		
1,2,3-Trichloropropane	Not detected	1		ug/L	1	96-18-4		
n-Propylbenzene	Not detected	1		ug/L	1	103-65-1		
Bromobenzene	Not detected	1		ug/L	1	108-86-1		
1,3,5-Trimethylbenzene	Not detected	1		ug/L	1	108-67-8		
tert-Butylbenzene	Not detected	1		ug/L	1	98-06-6		
1,2,4-Trimethylbenzene	Not detected	1		ug/L	1	95-63-6		
sec-Butylbenzene	Not detected	1		ug/L	1	135-98-8		
p-Isopropyltoluene	Not detected	5		ug/L	1	99-87-6		
1,3-Dichlorobenzene	Not detected	1		ug/L	1	541-73-1		
1,4-Dichlorobenzene	Not detected	1		ug/L	1	106-46-7		7,500
1,2-Dichlorobenzene	Not detected	1		ug/L	1	95-50-1		
1,2,3-Trimethylbenzene	Not detected	1		ug/L	1	526-73-8		
n-Butylbenzene	Not detected	1		ug/L	1	104-51-8		
1,2,4-Trichlorobenzene	Not detected	5		ug/L	1	120-82-1		
1,2,3-Trichlorobenzene	Not detected	5		ug/L	1	87-61-6		
Naphthalene	Not detected	5		ug/L	1	91-20-3		
Acrolein	Not detected	1		ug/L	1	107-02-8		
2-Chlorotoluene	Not detected	1		ug/L	1	95-49-8		
4-Chlorotoluene	Not detected	1		ug/L	1	106-43-4		
1,3-Dichloropropane	Not detected	1		ug/L	1	142-28-9		
1,1-Dichloropropene	Not detected	1		ug/L	1	563-58-6		
2,2-Dichloropropane	Not detected	1		ug/L	1	594-20-7		
Hexachlorobutadiene	Not detected	1		ug/L	1	87-68-3		500
1,1,2-Trichloro-1,2,2-trifluoroethane	Not detected	1		ug/L	1	76-13-1		

Other / Misc.

Method: , Run Date: 12/17/22 21:48, Analyst: EURO

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags	Limits
Alcohols*	Completed				1		O	

Method: , Run Date: 12/21/22 20:48, Analyst: EURO

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags	Limits
Misc. Special Project*	Completed				1		O	

O-Analysis performed by outside laboratory. See attached report.

Lab Sample ID: S43386.05
Sample Tag: MW-22-03
Collected Date/Time: 12/12/2022 15:50
Matrix: Groundwater
COC Reference: 158666

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
3	40ml Glass	HCL	Yes	3.6	IR
3	40ml Glass	None	Yes	3.6	IR
2	125ml Plastic	HNO3	Yes	3.6	IR

Extraction / Prep.

Parameter	Result	Method	Run Date	Analyst	Flags
Mercury Digestion	Completed	E245.1	12/15/22 22:16	CTV	
pH check for VOCs*	<2	N/A	12/19/22 11:40	JKJ	
Metal Digestion	Completed	SW3015A	12/14/22 10:10	CCM	

Metals

Method: E200.8, Run Date: 12/14/22 13:32, Analyst: CCM

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags	Limits
Selenium	Not detected	0.005		mg/L	5	7782-49-2		

Method: E200.8, Run Date: 12/14/22 11:48, Analyst: CCM

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags	Limits
Aluminum	0.013	0.010		mg/L	5	7429-90-5		
Antimony*	Not detected	0.005		mg/L	5	7440-36-0		
Arsenic	Not detected	0.002		mg/L	5	7440-38-2		
Barium	0.133	0.005		mg/L	5	7440-39-3		
Beryllium	Not detected	0.001		mg/L	5	7440-41-7		
Boron	0.18	0.04		mg/L	5	7440-42-8		
Cadmium	Not detected	0.0005		mg/L	5	7440-43-9		
Chromium	Not detected	0.005		mg/L	5	7440-47-3		
Cobalt	Not detected	0.005		mg/L	5	7440-48-4		
Copper	Not detected	0.005		mg/L	5	7440-50-8		
Iron	0.02	0.02		mg/L	5	7439-89-6		
Lead	Not detected	0.003		mg/L	5	7439-92-1		
Manganese	0.174	0.005		mg/L	5	7439-96-5		
Molybdenum	Not detected	0.005		mg/L	5	7439-98-7		
Nickel	Not detected	0.005		mg/L	5	7440-02-0		
Silver	Not detected	0.0005		mg/L	5	7440-22-4		
Strontium	0.261	0.005		mg/L	5	7440-24-6		
Thallium	Not detected	0.002		mg/L	5	7440-28-0		
Tin	Not detected	0.02		mg/L	5	7440-31-5		
Titanium	Not detected	0.005		mg/L	5	7440-32-6		
Vanadium	Not detected	0.005		mg/L	5	7440-62-2		
Zinc	Not detected	0.005		mg/L	5	7440-66-6		

Method: E200.8, Run Date: 12/14/22 14:27, Analyst: CCM

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags	Limits
Calcium*	104	0.50		mg/L	5	7440-70-2		
Magnesium	19.1	0.50		mg/L	5	7439-95-4		
Potassium	9.08	0.50		mg/L	5	7440-09-7		
Sodium	42.5	1.0		mg/L	5	7440-23-5		

Lab Sample ID: S43386.05 (continued)
Sample Tag: MW-22-03

Method: E245.1, Run Date: 12/15/22 22:14, Analyst: CTV

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags	Limits
Mercury	Not detected	0.0002		mg/L	1	7439-97-6		

Organics - Volatiles

Method: SW5030C/8260C, Run Date: 12/25/22 13:22, Analyst: KAG

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags	Limits
Diisopropyl ether (DIPE)	Not detected	5		ug/L	1	108-20-3		

Method: SW8260B - SIM, Run Date: 12/15/22 23:15, Analyst: KAG

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags	Limits
1,2-Dibromo-3-chloropropane*	Not detected	0.05		ug/L	1	96-12-8		

Volatile Organics, Method: SW5030C/8260C, Run Date: 12/18/22 17:49, Analyst: KAG

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags	Limits
Acetone	Not detected	50		ug/L	1	67-64-1		
tert-Methyl butyl ether (MTBE)	Not detected	5		ug/L	1	1634-04-4		
Acrylonitrile	Not detected	2		ug/L	1	107-13-1		
2-Butanone (MEK)	Not detected	25		ug/L	1	78-93-3		200,000
Dichlorodifluoromethane	Not detected	5		ug/L	1	75-71-8		
Chloromethane	Not detected	5		ug/L	1	74-87-3		
Vinyl chloride	Not detected	1		ug/L	1	75-01-4		200
Bromomethane	Not detected	5		ug/L	1	74-83-9		
Chloroethane	Not detected	5		ug/L	1	75-00-3		
Trichlorofluoromethane	2	1		ug/L	1	75-69-4		
1,1-Dichloroethene	Not detected	1		ug/L	1	75-35-4		700
Methylene chloride	Not detected	5		ug/L	1	75-09-2		
trans-1,2-Dichloroethene	Not detected	1		ug/L	1	156-60-5		
1,1-Dichloroethane	Not detected	1		ug/L	1	75-34-3		
cis-1,2-Dichloroethene	1	1		ug/L	1	156-59-2		
Chloroform	Not detected	1		ug/L	1	67-66-3		6,000
1,1,1-Trichloroethane	Not detected	1		ug/L	1	71-55-6		
4-Methyl-2-pentanone (MIBK)	Not detected	50		ug/L	1	108-10-1		
Carbon tetrachloride	Not detected	1		ug/L	1	56-23-5		500
Benzene	Not detected	1		ug/L	1	71-43-2		500
1,2-Dichloroethane	Not detected	1		ug/L	1	107-06-2		500
Trichloroethene	3	1		ug/L	1	79-01-6		500
1,2-Dichloropropane	Not detected	1		ug/L	1	78-87-5		
Bromodichloromethane	Not detected	1		ug/L	1	75-27-4		
Dibromomethane	Not detected	5		ug/L	1	74-95-3		
cis-1,3-Dichloropropene	Not detected	1		ug/L	1	10061-01-5		
Toluene	Not detected	1		ug/L	1	108-88-3		
trans-1,3-Dichloropropene	Not detected	1		ug/L	1	10061-02-6		
1,1,2-Trichloroethane	Not detected	1		ug/L	1	79-00-5		
Tetrachloroethene	Not detected	1		ug/L	1	127-18-4		700
Dibromochloromethane	Not detected	5		ug/L	1	124-48-1		
1,2-Dibromoethane	Not detected	1		ug/L	1	106-93-4		
Chlorobenzene	Not detected	1		ug/L	1	108-90-7		100,000
1,1,1,2-Tetrachloroethane	Not detected	1		ug/L	1	630-20-6		
Ethylbenzene	Not detected	1		ug/L	1	100-41-4		
p,m-Xylene*	Not detected	2		ug/L	1			
o-Xylene	Not detected	1		ug/L	1	95-47-6		

Lab Sample ID: S43386.05 (continued)
Sample Tag: MW-22-03

Volatile Organics, Method: SW5030C/8260C, Run Date: 12/18/22 17:49, Analyst: KAG (continued)

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags	Limits
Styrene	Not detected	1		ug/L	1	100-42-5		
Isopropylbenzene	Not detected	5		ug/L	1	98-82-8		
Bromoform	Not detected	1		ug/L	1	75-25-2		
1,1,2,2-Tetrachloroethane	Not detected	1		ug/L	1	79-34-5		
1,2,3-Trichloropropane	Not detected	1		ug/L	1	96-18-4		
n-Propylbenzene	Not detected	1		ug/L	1	103-65-1		
Bromobenzene	Not detected	1		ug/L	1	108-86-1		
1,3,5-Trimethylbenzene	Not detected	1		ug/L	1	108-67-8		
tert-Butylbenzene	Not detected	1		ug/L	1	98-06-6		
1,2,4-Trimethylbenzene	Not detected	1		ug/L	1	95-63-6		
sec-Butylbenzene	Not detected	1		ug/L	1	135-98-8		
p-Isopropyltoluene	Not detected	5		ug/L	1	99-87-6		
1,3-Dichlorobenzene	Not detected	1		ug/L	1	541-73-1		
1,4-Dichlorobenzene	Not detected	1		ug/L	1	106-46-7		7,500
1,2-Dichlorobenzene	Not detected	1		ug/L	1	95-50-1		
1,2,3-Trimethylbenzene	Not detected	1		ug/L	1	526-73-8		
n-Butylbenzene	Not detected	1		ug/L	1	104-51-8		
1,2,4-Trichlorobenzene	Not detected	5		ug/L	1	120-82-1		
1,2,3-Trichlorobenzene	Not detected	5		ug/L	1	87-61-6		
Naphthalene	Not detected	5		ug/L	1	91-20-3		
Acrolein	Not detected	1		ug/L	1	107-02-8		
2-Chlorotoluene	Not detected	1		ug/L	1	95-49-8		
4-Chlorotoluene	Not detected	1		ug/L	1	106-43-4		
1,3-Dichloropropane	Not detected	1		ug/L	1	142-28-9		
1,1-Dichloropropene	Not detected	1		ug/L	1	563-58-6		
2,2-Dichloropropane	Not detected	1		ug/L	1	594-20-7		
Hexachlorobutadiene	Not detected	1		ug/L	1	87-68-3		500
1,1,2-Trichloro-1,2,2-trifluoroethane	Not detected	1		ug/L	1	76-13-1		

Other / Misc.

Method: , Run Date: 12/17/22 22:09, Analyst: EURO

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags	Limits
Alcohols*	Completed				1		O	

Method: , Run Date: 12/21/22 20:51, Analyst: EURO

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags	Limits
Misc. Special Project*	Completed				1		O	

O-Analysis performed by outside laboratory. See attached report.

Lab Sample ID: S43386.06
Sample Tag: TB-01
Collected Date/Time: 12/12/2022 00:01
Matrix: Water
COC Reference: 158666

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
1	40ml Glass	HCL	Yes	3.6	IR

Extraction / Prep.

Parameter	Result	Method	Run Date	Analyst	Flags
pH check for VOCs*	<2	N/A	12/16/22 11:00	BML	

Organics - Volatiles

Method: SW5030C/8260C, Run Date: 12/25/22 13:47, Analyst: KAG

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags	Limits
Diisopropyl ether (DIPE)	Not detected	5		ug/L	1	108-20-3		

Method: SW8260B - SIM, Run Date: 12/15/22 16:24, Analyst: KAG

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags	Limits
1,2-Dibromo-3-chloropropane*	Not detected	0.05		ug/L	1	96-12-8		

Volatile Organics, Method: SW5030C/8260C, Run Date: 12/15/22 14:44, Analyst: KAG

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags	Limits
Acetone	Not detected	50		ug/L	1	67-64-1		
tert-Methyl butyl ether (MTBE)	Not detected	5		ug/L	1	1634-04-4		
Acrylonitrile	Not detected	2		ug/L	1	107-13-1		
2-Butanone (MEK)	Not detected	25		ug/L	1	78-93-3		200,000
Dichlorodifluoromethane	Not detected	5		ug/L	1	75-71-8		
Chloromethane	Not detected	5		ug/L	1	74-87-3		
Vinyl chloride	Not detected	1		ug/L	1	75-01-4		200
Bromomethane	Not detected	5		ug/L	1	74-83-9		
Chloroethane	Not detected	5		ug/L	1	75-00-3		
Trichlorofluoromethane	Not detected	1		ug/L	1	75-69-4		
1,1-Dichloroethene	Not detected	1		ug/L	1	75-35-4		700
Methylene chloride	Not detected	5		ug/L	1	75-09-2		
trans-1,2-Dichloroethene	Not detected	1		ug/L	1	156-60-5		
1,1-Dichloroethane	Not detected	1		ug/L	1	75-34-3		
cis-1,2-Dichloroethene	Not detected	1		ug/L	1	156-59-2		
Chloroform	Not detected	1		ug/L	1	67-66-3		6,000
1,1,1-Trichloroethane	Not detected	1		ug/L	1	71-55-6		
4-Methyl-2-pentanone (MIBK)	Not detected	50		ug/L	1	108-10-1		
Carbon tetrachloride	Not detected	1		ug/L	1	56-23-5		500
Benzene	Not detected	1		ug/L	1	71-43-2		500
1,2-Dichloroethane	Not detected	1		ug/L	1	107-06-2		500
Trichloroethene	Not detected	1		ug/L	1	79-01-6		500
1,2-Dichloropropane	Not detected	1		ug/L	1	78-87-5		
Bromodichloromethane	Not detected	1		ug/L	1	75-27-4		
Dibromomethane	Not detected	5		ug/L	1	74-95-3		
cis-1,3-Dichloropropene	Not detected	1		ug/L	1	10061-01-5		
Toluene	Not detected	1		ug/L	1	108-88-3		
trans-1,3-Dichloropropene	Not detected	1		ug/L	1	10061-02-6		
1,1,2-Trichloroethane	Not detected	1		ug/L	1	79-00-5		

Lab Sample ID: S43386.06 (continued)
Sample Tag: TB-01

Volatile Organics, Method: SW5030C/8260C, Run Date: 12/15/22 14:44, Analyst: KAG (continued)

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags	Limits
Tetrachloroethene	Not detected	1		ug/L	1	127-18-4		700
Dibromochloromethane	Not detected	5		ug/L	1	124-48-1		
1,2-Dibromoethane	Not detected	1		ug/L	1	106-93-4		
Chlorobenzene	Not detected	1		ug/L	1	108-90-7		100,000
1,1,1,2-Tetrachloroethane	Not detected	1		ug/L	1	630-20-6		
Ethylbenzene	Not detected	1		ug/L	1	100-41-4		
p,m-Xylene*	Not detected	2		ug/L	1			
o-Xylene	Not detected	1		ug/L	1	95-47-6		
Styrene	Not detected	1		ug/L	1	100-42-5		
Isopropylbenzene	Not detected	5		ug/L	1	98-82-8		
Bromoform	Not detected	1		ug/L	1	75-25-2		
1,1,2,2-Tetrachloroethane	Not detected	1		ug/L	1	79-34-5		
1,2,3-Trichloropropane	Not detected	1		ug/L	1	96-18-4		
n-Propylbenzene	Not detected	1		ug/L	1	103-65-1		
Bromobenzene	Not detected	1		ug/L	1	108-86-1		
1,3,5-Trimethylbenzene	Not detected	1		ug/L	1	108-67-8		
tert-Butylbenzene	Not detected	1		ug/L	1	98-06-6		
1,2,4-Trimethylbenzene	Not detected	1		ug/L	1	95-63-6		
sec-Butylbenzene	Not detected	1		ug/L	1	135-98-8		
p-Isopropyltoluene	Not detected	5		ug/L	1	99-87-6		
1,3-Dichlorobenzene	Not detected	1		ug/L	1	541-73-1		
1,4-Dichlorobenzene	Not detected	1		ug/L	1	106-46-7		7,500
1,2-Dichlorobenzene	Not detected	1		ug/L	1	95-50-1		
1,2,3-Trimethylbenzene	Not detected	1		ug/L	1	526-73-8		
n-Butylbenzene	Not detected	1		ug/L	1	104-51-8		
1,2,4-Trichlorobenzene	Not detected	5		ug/L	1	120-82-1		
1,2,3-Trichlorobenzene	Not detected	5		ug/L	1	87-61-6		
Naphthalene	Not detected	5		ug/L	1	91-20-3		
Acrolein	Not detected	1		ug/L	1	107-02-8		
2-Chlorotoluene	Not detected	1		ug/L	1	95-49-8		
4-Chlorotoluene	Not detected	1		ug/L	1	106-43-4		
1,3-Dichloropropane	Not detected	1		ug/L	1	142-28-9		
1,1-Dichloropropene	Not detected	1		ug/L	1	563-58-6		
2,2-Dichloropropane	Not detected	1		ug/L	1	594-20-7		
Hexachlorobutadiene	Not detected	1		ug/L	1	87-68-3		500
1,1,2-Trichloro-1,2,2-trifluoroethane	Not detected	1		ug/L	1	76-13-1		

Merit Laboratories Login Checklist

Lab Set ID: S43386
Client: TRC (TRC)
Project: Detroit Axle East Investigation
Submitted: 12/13/2022 15:10 Login User: MMC

Attention: Kelly Cratsenburg
Address: TRC
1540 Eisenhower Place
Ann Arbor, MI 48108

Phone: 734-585-7829 C: FAX:
Email: KCratsenburg@trccompanies.com

Selection				Description	Note
Sample Receiving					
01.	[X] Yes	[ ] No	[ ] N/A	Samples are received at 4C +/- 2C Thermometer #	IR 3.6
02.	[X] Yes	[ ] No	[ ] N/A	Received on ice/ cooling process begun	
03.	[ ] Yes	[X] No	[ ] N/A	Samples shipped	
04.	[ ] Yes	[X] No	[ ] N/A	Samples left in 24 hr. drop box	
05.	[ ] Yes	[ ] No	[X] N/A	Are there custody seals/tape or is the drop box locked	
Chain of Custody					
06.	[X] Yes	[ ] No	[ ] N/A	COC adequately filled out	
07.	[X] Yes	[ ] No	[ ] N/A	COC signed and relinquished to the lab	
08.	[ ] Yes	[X] No	[ ] N/A	Sample tag on bottles match COC	Non preserved VOAs not labeled individually
09.	[X] Yes	[ ] No	[ ] N/A	Subcontracting needed? Subcontacted to:	Eurofins
Preservation					
10.	[X] Yes	[ ] No	[ ] N/A	Do sample have correct chemical preservation	
11.	[X] Yes	[ ] No	[ ] N/A	Completed pH checks on preserved samples? (no VOAs)	
12.	[ ] Yes	[X] No	[ ] N/A	Did any samples need to be preserved in the lab?	
Bottle Conditions					
13.	[X] Yes	[ ] No	[ ] N/A	All bottles intact	
14.	[X] Yes	[ ] No	[ ] N/A	Appropriate analytical bottles are used	
15.	[X] Yes	[ ] No	[ ] N/A	Merit bottles used	
16.	[X] Yes	[ ] No	[ ] N/A	Sufficient sample volume received	
17.	[ ] Yes	[X] No	[ ] N/A	Samples require laboratory filtration	
18.	[X] Yes	[ ] No	[ ] N/A	Samples submitted within holding time	
19.	[ ] Yes	[X] No	[ ] N/A	Do water VOC or TOX bottles contain headspace	

Corrective action for all exceptions is to call the client and to notify the project manager.

Client Review By: _____ Date: _____

Merit Laboratories Bottle Preservation Check

Lab Set ID: S43386 Submitted: 12/13/2022 15:10

Client: TRC (TRC)

Project: Detroit Axle East Investigation

Initial Preservation Check: 12/13/2022 15:59 MMC

Preservation Recheck (E200.8): N/A

Attention: Kelly Cratsenburg
Address: TRC
1540 Eisenhower Place
Ann Arbor, MI 48108

Phone: 734-585-7829 C: FAX:
Email: KCratsenburg@trccompanies.com

Sample ID	Bottle / Preservation	pH (Orig)	Add ml	pH (New)	Notes
S43386.01	125ml Plastic HNO3	<2			
S43386.02	125ml Plastic HNO3	<2			
S43386.03	125ml Plastic HNO3	<2			
S43386.04	125ml Plastic HNO3	<2			
S43386.05	125ml Plastic HNO3	<2			

Merit Laboratories, Inc.
2680 East Lansing Dr., East Lansing, MI 48823
Phone (517) 332-0167 Fax (517) 332-4034
www.meritlabs.com

C.O.C. PAGE # 1 OF 1 158666

CHAIN OF CUSTODY RECORD

REPORT TO

CONTACT NAME: Kelly Cratsenburg
COMPANY: TRC
ADDRESS: 1540 Eisenhower Place
CITY: Ann Arbor STATE: MI ZIP CODE: 48108
PHONE NO.: 734-585-7829 CELL NO.: P.O. NO.:
E-MAIL ADDRESS: kcratsenburg@trcompanies.com QUOTE NO: 495430.0000

INVOICE TO

CONTACT NAME: ☐ SAME
COMPANY:
ADDRESS:
CITY: STATE: ZIP CODE:
PHONE NO.: E-MAIL ADDRESS:

PROJECT NO./NAME: Detroit Axle ~~South~~ EAST Investigation
SAMPLER(S) – PLEASE PRINT/SIGN NAME: A. Whaley
TURNAROUND TIME REQUIRED ☐ 1 DAY ☐ 2 DAYS ☐ 3 DAYS ☒ STANDARD ☐ OTHER
DELIVERABLES REQUIRED ☐ STD ☐ LEVEL II ☐ LEVEL III ☐ LEVEL IV ☒ EDD ☐ OTHER TRC EDD

MATRIX CODE: W=WATER GW=GROUNDWATER WW=WASTEWATER S=SOIL L=LIQUID SD=SOLID SL=SLUDGE DW=DRINKING WATER O=OIL WP=WIPE A=AIR WS=WASTE

MERIT LAB NO. (FOR LAB USE ONLY)	COLLECTION DATE	COLLECTION TIME	SAMPLE TAG IDENTIFICATION-DESCRIPTION	MATRIX	# OF BOTTLES	# Containers & Preservatives: NONE	HCl	HNO_3	H_2SO_4	NaOH	MeOH	OTHER	ANALYSIS: Metals	PFAS 31	VOCs	3 Alcohols
43386/43387.01	12.12.22	1330	MW-104	GW	10	6	3	1					X	X	X	X
.02		1410	MW-22-01	GW	10	6	3	1					X	X	X	X
.03		1500	MW-22-02	GW	10	6	3	1					X	X	X	X
.04		—	DUP-01W	GW	10	6	3	1					X	X	X	X
.05	↓	1550	MW-22-03	GW	10	6	3	1					X	X	X	X
43386.06	12.12.22	—	TB-01	GW	1		1								X	

Certifications: ☐ OHIO VAP ☐ Drinking Water ☐ DoD ☐ NPDES
Project Locations: ☒ Detroit ☐ New York ☐ Other
Special Instructions: Detroit Axle Eastern Boundary PN: 495430.0000

RELINQUISHED BY: SIGNATURE/ORGANIZATION	☐ Sampler TRC	DATE 12.B.22	TIME 1242
RECEIVED BY: SIGNATURE/ORGANIZATION		DATE 12/13/22	TIME 1242
RELINQUISHED BY: SIGNATURE/ORGANIZATION		DATE	TIME
RECEIVED BY: SIGNATURE/ORGANIZATION		DATE	TIME

RELINQUISHED BY: SIGNATURE/ORGANIZATION		12/13/22 DATE	15:10 TIME
RECEIVED BY: SIGNATURE/ORGANIZATION		12/13/22 DATE	1510 TIME
SEAL NO.	SEAL INTACT YES ☐ NO ☐	INITIALS	
SEAL NO.	SEAL INTACT YES ☐ NO ☐	INITIALS	

NOTES: TEMP. ON ARRIVAL 3.6

PLEASE NOTE: SIGNING ACKNOWLEDGES ADHERENCE TO MERIT'S SAMPLE ACCEPTANCE POLICY ON REVERSE SIDE

Rev. 1.26.22

eurofins | Environment Testing

ANALYTICAL REPORT

PREPARED FOR

Attn: Lab Results
Merit Laboratories
2680 E Lansing Drive
East Lansing, Michigan 48823

Generated 12/30/2022 8:39:48 AM

JOB DESCRIPTION

S43386

JOB NUMBER

190-30636-1

Eurofins Michigan
10448 Citation Drive
Suite 200
Brighton MI 48116

See page two for job notes and contact information.

Job Notes

The test results in this report meet all NELAP requirements for parameters for which accreditation is required or available. Any exceptions to the NELAP requirements are noted in this report. Pursuant to NELAP, this report may not be reproduced, except in full, without the written approval of the laboratory. This report is confidential and is intended for the sole use of Eurofins Environment Testing North Central, LLC and its client. All questions regarding this report should be directed to the Eurofins Environment Testing North Central, LLC Project Manager who has signed this report.

The test results in this report relate only to the samples as received by the laboratory and will meet all requirements of the methodology, with any exceptions noted. This report shall not be reproduced except in full, without the express written approval of the laboratory. All questions should be directed to the Eurofins Environment Testing North Central, LLC Project Manager.

Authorization

Generated
12/30/2022 8:39:48 AM

Authorized for release by
Nicole Kalis, Project Manager I
Nicole.Kalis@et.eurofinsus.com
Designee for
Sue Schafer, Project Manager II
Sue.Schafer@et.eurofinsus.com
(810)229-2763

Table of Contents

Sample Summary

Client: Merit Laboratories
Project/Site: S43386

Job ID: 190-30636-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
190-30636-1	S43386.01	Water	12/12/22 13:30	12/14/22 15:09
190-30636-2	S43386.02	Water	12/12/22 14:10	12/14/22 15:09
190-30636-3	S43386.03	Water	12/12/22 15:00	12/14/22 15:09
190-30636-4	S43386.04	Water	12/12/22 00:01	12/14/22 15:09
190-30636-5	S43386.05	Water	12/12/22 15:50	12/14/22 15:09

Case Narrative

Client: Merit Laboratories
Project/Site: S43386

Job ID: 190-30636-1

Job ID: 190-30636-1

Laboratory: Eurofins Michigan

Narrative

Job Narrative
190-30636-1

Receipt
The samples were received on 12/14/2022 3:09 PM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 2.9°C

GC Semi VOA
No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

Metals
Method 6020B: preparation batch 160-594383 Elevated reporting limits are provided for the following samples due to insufficient sample provided preparation: S43386.01 (190-30636-1), S43386.02 (190-30636-2), S43386.03 (190-30636-3), S43386.04 (190-30636-4) and S43386.05 (190-30636-5).

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

Client Sample ID: S43386.01

Lab Sample ID: 190-30636-1
Matrix: Water
Date Collected: 12/12/22 13:30
Date Received: 12/14/22 15:09

Method: SW846 8015D - Nonhalogenated Organic Compounds - Direct Injection (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Methanol	<5.0		5.0		mg/L			12/17/22 20:44	1

Method: SW846 6020B - Metals (ICP/MS)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Thorium	<4.0		4.0		ug/L		12/20/22 13:34	12/21/22 20:38	2

Client Sample ID: S43386.02

Lab Sample ID: 190-30636-2
Matrix: Water
Date Collected: 12/12/22 14:10
Date Received: 12/14/22 15:09

Method: SW846 8015D - Nonhalogenated Organic Compounds - Direct Injection (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Methanol	<5.0		5.0		mg/L			12/17/22 21:05	1

Method: SW846 6020B - Metals (ICP/MS)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Thorium	<4.0		4.0		ug/L		12/20/22 13:34	12/21/22 20:41	2

Client Sample ID: S43386.03

Lab Sample ID: 190-30636-3
Matrix: Water
Date Collected: 12/12/22 15:00
Date Received: 12/14/22 15:09

Method: SW846 8015D - Nonhalogenated Organic Compounds - Direct Injection (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Methanol	<5.0		5.0		mg/L			12/17/22 21:27	1

Method: SW846 6020B - Metals (ICP/MS)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Thorium	<4.0		4.0		ug/L		12/20/22 13:34	12/21/22 20:44	2

Client Sample ID: S43386.04

Lab Sample ID: 190-30636-4
Matrix: Water
Date Collected: 12/12/22 00:01
Date Received: 12/14/22 15:09

Method: SW846 8015D - Nonhalogenated Organic Compounds - Direct Injection (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Methanol	<5.0		5.0		mg/L			12/17/22 21:48	1

Method: SW846 6020B - Metals (ICP/MS)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Thorium	<4.0		4.0		ug/L		12/20/22 13:34	12/21/22 20:48	2

Client Sample ID: S43386.05

Lab Sample ID: 190-30636-5
Matrix: Water
Date Collected: 12/12/22 15:50
Date Received: 12/14/22 15:09

Method: SW846 8015D - Nonhalogenated Organic Compounds - Direct Injection (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Methanol	<5.0		5.0		mg/L			12/17/22 22:09	1

Method: SW846 6020B - Metals (ICP/MS)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Thorium	<4.0		4.0		ug/L		12/20/22 13:34	12/21/22 20:51	2

Method: 8015D - Nonhalogenated Organic Compounds - Direct Injection (GC)

Lab Sample ID: MB 680-755688/10
Matrix: Water
Analysis Batch: 755688

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Methanol	<5.0		5.0		mg/L			12/17/22 19:47	1

Lab Sample ID: LCS 680-755688/6
Matrix: Water
Analysis Batch: 755688

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Methanol			20.0	23.1		mg/L		115	43 - 143		

Lab Sample ID: LCSD 680-755688/7
Matrix: Water
Analysis Batch: 755688

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Methanol			20.0	20.9		mg/L		104	43 - 143	10	50

Method: 6020B - Metals (ICP/MS)

Lab Sample ID: MB 160-594383/1-A
Matrix: Water
Analysis Batch: 594602

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 594383

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Thorium	<2.0		2.0		ug/L		12/20/22 13:34	12/21/22 20:20	2

Lab Sample ID: LCS 160-594383/2-A
Matrix: Water
Analysis Batch: 594602

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 594383

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Thorium			995	977		ug/L		98	80 - 120		

Definitions/Glossary

Client: Merit Laboratories
Project/Site: S43386

Job ID: 190-30636-1

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

QC Association Summary

Client: Merit Laboratories
Project/Site: S43386

Job ID: 190-30636-1

GC Semi VOA

Analysis Batch: 755688

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
190-30636-1	S43386.01	Total/NA	Water	8015D	
190-30636-2	S43386.02	Total/NA	Water	8015D	
190-30636-3	S43386.03	Total/NA	Water	8015D	
190-30636-4	S43386.04	Total/NA	Water	8015D	
190-30636-5	S43386.05	Total/NA	Water	8015D	
MB 680-755688/10	Method Blank	Total/NA	Water	8015D	
LCS 680-755688/6	Lab Control Sample	Total/NA	Water	8015D	
LCSD 680-755688/7	Lab Control Sample Dup	Total/NA	Water	8015D	

Metals

Prep Batch: 594383

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
190-30636-1	S43386.01	Total/NA	Water	3010A	
190-30636-2	S43386.02	Total/NA	Water	3010A	
190-30636-3	S43386.03	Total/NA	Water	3010A	
190-30636-4	S43386.04	Total/NA	Water	3010A	
190-30636-5	S43386.05	Total/NA	Water	3010A	
MB 160-594383/1-A	Method Blank	Total/NA	Water	3010A	
LCS 160-594383/2-A	Lab Control Sample	Total/NA	Water	3010A	

Analysis Batch: 594602

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
190-30636-1	S43386.01	Total/NA	Water	6020B	594383
190-30636-2	S43386.02	Total/NA	Water	6020B	594383
190-30636-3	S43386.03	Total/NA	Water	6020B	594383
190-30636-4	S43386.04	Total/NA	Water	6020B	594383
190-30636-5	S43386.05	Total/NA	Water	6020B	594383
MB 160-594383/1-A	Method Blank	Total/NA	Water	6020B	594383
LCS 160-594383/2-A	Lab Control Sample	Total/NA	Water	6020B	594383

Lab Chronicle

Client: Merit Laboratories
Project/Site: S43386

Job ID: 190-30636-1

Client Sample ID: S43386.01
Date Collected: 12/12/22 13:30
Date Received: 12/14/22 15:09

Lab Sample ID: 190-30636-1
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8015D		1	755688	JCK	EET SAV	12/17/22 20:44
Total/NA	Prep	3010A			594383	LKP	EET SL	12/20/22 13:34
Total/NA	Analysis	6020B		2	594602	CGB	EET SL	12/21/22 20:38

Client Sample ID: S43386.02
Date Collected: 12/12/22 14:10
Date Received: 12/14/22 15:09

Lab Sample ID: 190-30636-2
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8015D		1	755688	JCK	EET SAV	12/17/22 21:05
Total/NA	Prep	3010A			594383	LKP	EET SL	12/20/22 13:34
Total/NA	Analysis	6020B		2	594602	CGB	EET SL	12/21/22 20:41

Client Sample ID: S43386.03
Date Collected: 12/12/22 15:00
Date Received: 12/14/22 15:09

Lab Sample ID: 190-30636-3
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8015D		1	755688	JCK	EET SAV	12/17/22 21:27
Total/NA	Prep	3010A			594383	LKP	EET SL	12/20/22 13:34
Total/NA	Analysis	6020B		2	594602	CGB	EET SL	12/21/22 20:44

Client Sample ID: S43386.04
Date Collected: 12/12/22 00:01
Date Received: 12/14/22 15:09

Lab Sample ID: 190-30636-4
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8015D		1	755688	JCK	EET SAV	12/17/22 21:48
Total/NA	Prep	3010A			594383	LKP	EET SL	12/20/22 13:34
Total/NA	Analysis	6020B		2	594602	CGB	EET SL	12/21/22 20:48

Client Sample ID: S43386.05
Date Collected: 12/12/22 15:50
Date Received: 12/14/22 15:09

Lab Sample ID: 190-30636-5
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8015D		1	755688	JCK	EET SAV	12/17/22 22:09
Total/NA	Prep	3010A			594383	LKP	EET SL	12/20/22 13:34
Total/NA	Analysis	6020B		2	594602	CGB	EET SL	12/21/22 20:51

Laboratory References:

EET SAV = Eurofins Savannah, 5102 LaRoche Avenue, Savannah, GA 31404, TEL (912)354-7858

EET SL = Eurofins St. Louis, 13715 Rider Trail North, Earth City, MO 63045, TEL (314)298-8566

Lab Chronicle

Client: Merit Laboratories
Project/Site: S43386

Job ID: 190-30636-1

Analyst References:

Lab: EET SAV

Batch Type: Analysis

JCK = Joshua Kellar

Lab: EET SL

Batch Type: Prep

LKP = Laura Pemberton

Batch Type: Analysis

CGB = Cory Buffington

Accreditation/Certification Summary

Client: Merit Laboratories
Project/Site: S43386

Job ID: 190-30636-1

Laboratory: Eurofins Savannah

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
	AFCEE	SAVLAB	
Alabama	State	41450	06-30-23
ANAB	Dept. of Defense ELAP	L2463	09-22-24
Arkansas DEQ	State	19-015-0	02-01-23
California	State	2939	06-30-22 *
Connecticut	State	PH-0161	03-31-23
Florida	NELAP	E87052	06-23-23
Georgia	State	E87052	06-30-23
Georgia (DW)	State	803	06-30-23
Guam	State	19-007R	04-17-23
Hawaii	State	<cert No.>	06-30-23
Illinois	NELAP	200022	11-30-22 *
Indiana	State	C-GA-02	06-30-23
Iowa	State	353	07-01-23
Kentucky (UST)	State	NA	06-30-23
Louisiana	NELAP	30690	06-30-23
Louisiana (All)	NELAP	30690	06-30-23
Louisiana (DW)	State	LA009	12-31-22
Maine	State	GA00006	12-27-22
Maryland	State	250	12-31-23
Massachusetts	State	M-GA006	07-30-23
Michigan	State	9925	06-30-23
Mississippi	State	<cert No.>	06-30-23
Nebraska	State	NE-OS-7-04	06-30-23
New Jersey	NELAP	GA769	06-30-23
New Mexico	State	GA00006	06-30-23
New York	NELAP	10842	04-01-23
North Carolina (DW)	State	13701	07-31-23
North Carolina (WW/SW)	State	269	12-31-22
Pennsylvania	NELAP	68-00474	06-30-23
Puerto Rico	State	GA00006	12-30-22
South Carolina	State	98001	06-30-23
Tennessee	State	TN02961	06-30-23
Texas	NELAP	T1047004185-19-14	11-30-23
Texas	TCEQ Water Supply	T104704185	06-30-23
USDA	US Federal Programs	P330-18-00313	09-03-24
Virginia	NELAP	460161	06-14-23
Wisconsin	State	999819810	08-31-23
Wyoming	State	8TMS-L	06-30-23

Laboratory: Eurofins St. Louis

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Alaska (UST)	State	20-001	05-06-25
ANAB	Dept. of Defense ELAP	L2305	04-06-25
ANAB	Dept. of Energy	L2305.01	04-06-25
ANAB	ISO/IEC 17025	L2305	04-06-25
Arizona	State	AZ0813	12-08-23
California	Los Angeles County Sanitation Districts	10259	06-30-22 *

* Accreditation/Certification renewal pending - accreditation/certification considered valid.

Accreditation/Certification Summary

Client: Merit Laboratories
Project/Site: S43386

Job ID: 190-30636-1

Laboratory: Eurofins St. Louis (Continued)

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
California	State	2886	06-30-23
Connecticut	State	PH-0241	03-31-23
Florida	NELAP	E87689	06-30-23
HI - RadChem Recognition	State	n/a	06-30-23
Illinois	NELAP	200023	11-30-23
Iowa	State	373	12-01-24
Kansas	NELAP	E-10236	10-31-23
Kentucky (DW)	State	KY90125	12-31-22
Kentucky (WW)	State	KY90125 (Permit KY0004049)	12-31-22
Louisiana (All)	NELAP	04080	06-30-23
Louisiana (DW)	State	LA011	12-31-22
Maryland	State	310	09-30-23
MI - RadChem Recognition	State	9005	06-30-23
Missouri	State	780	06-30-25
Nevada	State	MO000542020-1	07-31-23
New Jersey	NELAP	MO002	06-30-23
New York	NELAP	11616	04-01-23
North Dakota	State	R-207	06-30-23
NRC	NRC	24-24817-01	12-31-22
Oklahoma	NELAP	9997	08-31-23
Oregon	NELAP	4157	09-01-23
Pennsylvania	NELAP	68-00540	02-28-23
South Carolina	State	85002001	06-30-23
Texas	NELAP	T104704193	07-31-23
US Fish & Wildlife	US Federal Programs	058448	07-31-23
USDA	US Federal Programs	P330-17-00028	03-11-23
Utah	NELAP	MO000542021-14	07-31-23
Virginia	NELAP	10310	06-14-24
Washington	State	C592	08-30-23
West Virginia DEP	State	381	12-31-22

Method Summary

Client: Merit Laboratories
Project/Site: S43386

Job ID: 190-30636-1

Method	Method Description	Protocol	Laboratory
8015D	Nonhalogenated Organic Compounds - Direct Injection (GC)	SW846	EET SAV
6020B	Metals (ICP/MS)	SW846	EET SL
3010A	Preparation, Total Metals	SW846	EET SL

Protocol References:

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

EET SAV = Eurofins Savannah, 5102 LaRoche Avenue, Savannah, GA 31404, TEL (912)354-7858

EET SL = Eurofins St. Louis, 13715 Rider Trail North, Earth City, MO 63045, TEL (314)298-8566

Merit Laboratories, Inc.
2680 East Lansing Dr., East Lansing, MI 48823
Phone (517) 332-0167 Fax (517) 332-4034
www.meritlabs.com

C.O.C. PAGE # 1 OF 1

CHAIN OF CUSTODY RECORD

REPORT TO

CONTACT NAME: Project Management Team
COMPANY: Merit Laboratories
ADDRESS: 2680 East Lansing Drive
CITY: East Lansing | STATE: MI | ZIP CODE: 48823
PHONE NO.: 517-332-0167 | FAX NO.: | P.O. NO.:
E-MAIL ADDRESS: results@meritlabs.com | QUOTE NO.:

INVOICE TO

CONTACT NAME: Julie Teague ☒ SAME
COMPANY: Merit Laboratories
ADDRESS: 2680 East Lansing Drive
CITY: East Lansing | STATE: MI | ZIP CODE: 48823
PHONE NO.: 517-332-0167 | E-MAIL ADDRESS: juliet@meritlabs.com

PROJECT NO./NAME: S43386 | SAMPLER(S) - PLEASE PRINT/SIGN NAME:

TURNAROUND TIME REQUIRED ☐ 1 DAY ☐ 2 DAYS ☐ 3 DAYS ☒ STANDARD ☐ OTHER _____

DELIVERABLES REQUIRED ☐ STD ☒ LEVEL II ☐ LEVEL III ☐ LEVEL IV ☐ EDD ☐ OTHER _____

MATRIX CODE: GW=GROUNDWATER WW=WASTEWATER S=SOIL L=LIQUID SD=SOLID SL=SLUDGE DW=DRINKING WATER O=OIL WP=WIPE A=AIR W=WASTE

ANALYSIS (ATTACH LIST IF MORE SPACE IS REQUIRED)

Certifications
☐ OHIO VAP ☐ Drinking Water
☐ DoD ☐ NPDES

Project Locations
☐ Detroit ☐ New York
☐ Other _____

MERIT LAB NO. (FOR LAB USE ONLY)	YEAR DATE	YEAR TIME	SAMPLE TAG IDENTIFICATION-DESCRIPTION	MATRIX	# OF BOTTLES	# Containers & Preservatives: NONE	HCl	HNO_3	H_2SO_4	NaOH	MeOH	OTHER	Alcohols*	Thorium
	12/12/22	1330	S43386.01	GW	4	3		1					✓	✓
	12/12/22	1410	S43386.02	GW	4	3		1					✓	✓
	12/12/22	1500	S43386.03	GW	4	3		1					✓	✓
	12/12/22	0001	S43386.04	GW	4	3		1					✓	✓
	12/12/22	1550	S43386.05	GW	4	3		1					✓	✓

Special Instructions
*Methanol RL 3,700ppb

Subcontracted to
Eurofins

190-30636 Chain of Custody

RELINQUISHED BY: SIGNATURE/ORGANIZATION	☐ Sampler	DATE	TIME
RECEIVED BY: SIGNATURE/ORGANIZATION		DATE	TIME
RELINQUISHED BY: SIGNATURE/ORGANIZATION		DATE	TIME
RECEIVED BY: SIGNATURE/ORGANIZATION		DATE	TIME

RELINQUISHED BY: SIGNATURE/ORGANIZATION	DATE	TIME
RECEIVED BY: SIGNATURE/ORGANIZATION	DATE	TIME

SEAL NO.	SEAL INTACT YES☐ NO☐	INITIALS
SEAL NO.	SEAL INTACT YES☐ NO☐	INITIALS

NOTES: TEMP. ON ARRIVAL _____

PLEASE NOTE: SIGNING ACKNOWLEDGES ADHERENCE TO MERIT'S SAMPLE ACCEPTANCE POLICY ON REVERSE SIDE

Rev. 5.18.12

12/30/2022

eurofins | Environment Testing TestAmerica

☐ SDS or Known Hazard Information Supplied by Client
☐ Discrepancies
☐ Short Hold
☐ Rush ☐ 24 Hr ☐ 2-Day ☐ 3-Day ☐ 5-Day ☐ Other: _____

Client ID: Merit Laboratories
Work Oder #: 30636
Receipt Evaluation Performed by: Initials: AV Date: 12/14 Time: 15:09

Cooler / Sample Receipt

After hours receipt: complete gray areas. Place cooler in walk-in, place form in Receiving box. Date: _____ Time: _____

Method of Shipment:
(Walk-In Client) Eurofins TA Field/Courier
Other Client / 3rd Party Courier: _____
Fed Ex Tracking #: _____
UPS Tracking #: _____
Other: _____

Shipping Container Type:
☑ Cooler ☐ Box
☐ None ☐ Other: _____

Packing Materials:
☑ Plastic Bags ☐ Foam
☑ Bubble Wrap ☐ Paper
☐ Packing Peanuts ☐ None
☐ Other: _____

Custody Seals Intact:
☐ Yes ☐ No
☒ NA (not used or required)

Cooling Materials:
☑ Ice (Solid) ☐ Ice (Melted)
☐ Blue Ice ☐ None
☐ Other: _____

Bacteriological Samples	Temp Corrected (°C)	Frozen? Yes	Frozen? No	Rec'd Within 2 Hrs? Yes	Rec'd Within 2 Hrs? No	Sample Flagged? Yes	Sample Flagged? No

Received on same day sampled? Yes (No)

Additional Sheets Required? Yes (No)

Receipt Temperatures

Thermometer ID	Observed (°C)	Corrected (°C)	Temp Blank	Sample Temp	Acceptable	Cooler ID	Affected Samples
CP313209	2.9	2.9		✓	✓Y _N		
					_Y _N		
					_Y _N		

Receipt Questions**	Y	N	NA	"No" answers require additional comment
CoC present and ETA receipt signature, date, and time properly documented?	✓			
Containers and Labels in good condition? *(unbroken, not leaking, appropriately filled, labels legible & attached)*	✓			
Appropriate containers used and adequate volume provided?	✓			Preserved bottles checked for pH?* Yes (No)
Number of sample containers match CoC?	✓			pH strip lot # _____
Samples received within hold?	✓			
Samples submitted for GRO and Volatiles analysis (8260, 624, 524) received without headspace?			✓	
Was a Trip Blank received with VOA samples?			✓	
Were the samples free of any questionable physical conformities? (i.e.; field duplicates or multiple bottles of the same sample do not significantly vary in appearance – color, solid proportions, etc.)	✓			
Were the CoC bottle labels and all other items free of all other discrepancies or issues that would need to be addressed with the Project Manager and/or Client?	✓			
**May not be applicable if samples are not for compliance testing				*Excludes FOG, VOAs, TOC Vials, HEM

Client Contact Record

Contact Via: ☐ Phone ☐ Email ☐ Other: _____ Person Contacted: _____ Date/Time: _____
☐ Discrepancy allowance agreement is on record in the client project file

Discussion / Resolution

Any additional documentation and clarification from the client must be noted in the narrative and/or scanned into the CoC directory.

Reviewed by _____ Date: 12/14/22

WI-MI-010_020720

Merit Laboratories, Inc.
2680 East Lansing Dr., East Lansing, MI 48823
Phone (517) 332-0167 Fax (517) 332-4034
www.meritlabs.com

CHAIN OF CUSTODY RECORD

REPORT TO

CONTACT NAME: Project Management Team
COMPANY: Merit Laboratories
ADDRESS: 2680 East Lansing Drive
CITY: East Lansing STATE: MI ZIP CODE: 48823
PHONE NO.: 517-332-0167 FAX NO.: P.O. NO.:
E-MAIL ADDRESS: results@meritlabs.com QUOTE NO.:

INVOICE TO

CONTACT NAME: Julie Teague ☒ SAME
COMPANY: Merit Laboratories
ADDRESS: 2680 East Lansing Drive
CITY: East Lansing STATE: MI ZIP CODE: 48823
PHONE NO.: 517-332-0167 E-MAIL ADDRESS: juliet@meritlabs.com

PROJECT NO./NAME: S43386 SAMPLER(S) - PLEASE PRINT/SIGN NAME:

TURNAROUND TIME REQUIRED ☐ 1 DAY ☐ 2 DAYS ☐ 3 DAYS ☒ STANDARD ☐ OTHER

DELIVERABLES REQUIRED ☐ STD ☒ LEVEL II ☐ LEVEL III ☐ LEVEL IV ☐ EDD ☐ OTHER

MATRIX CODE: GW=GROUNDWATER WW=WASTEWATER S=SOIL L=LIQUID SD=SOLID SL=SLUDGE DW=DRINKING WATER O=OIL WP=WIPE A=AIR W=WASTE

ANALYSIS (ATTACH LIST IF MORE SPACE IS REQUIRED)

Certifications: ☐ OHIO VAP ☐ Drinking Water ☐ DoD ☐ NPDES

Project Locations: ☐ Detroit ☐ New York ☐ Other

MERIT LAB NO. (FOR LAB USE ONLY)	YEAR DATE	YEAR TIME	SAMPLE TAG IDENTIFICATION-DESCRIPTION	MATRIX	# OF BOTTLES	# Containers & Preservatives: NONE	HCl	HNO_3	H_2SO_4	NaOH	MeOH	OTHER	Alcohols*	Thorium	Special Instructions
	12/12/22	1330	S43386.01	GW	4	3		1					✓	✓	* Ethanol, Methanol, N-Butanol
	12/12/22	1410	S43386.02	GW	4	3		1					✓	✓	
	12/12/22	1500	S43386.03	GW	4	3		1					✓	✓	
	12/12/22	0001	S43386.04	GW	4	3		1					✓	✓	
	12/12/22	1550	S43386.05	GW	4	3		1					✓	✓	

Subcontracted to Eurofins

190-30636 Chain of Custody

RELINQUISHED BY: SIGNATURE/ORGANIZATION	☐ Sampler	DATE 12/14/22	TIME
RECEIVED BY: SIGNATURE/ORGANIZATION		DATE 12/14/22	TIME 13:20
RELINQUISHED BY: SIGNATURE/ORGANIZATION		DATE 12/14/22	TIME
RECEIVED BY: SIGNATURE/ORGANIZATION		DATE 12/14/22	TIME 15:09

RELINQUISHED BY: SIGNATURE/ORGANIZATION		DATE 12/14/22	TIME 15:50
RECEIVED BY: SIGNATURE/ORGANIZATION		DATE 12/14/22	TIME 8:47

SEAL NO. SEAL INTACT YES ☐ NO ☐ INITIALS
SEAL NO. SEAL INTACT YES ☐ NO ☐ INITIALS

NOTES: TEMP. ON ARRIVAL

PLEASE NOTE: SIGNING ACKNOWLEDGES ADHERENCE TO MERIT'S SAMPLE ACCEPTANCE POLICY ON REVERSE SIDE

Rev. 5.18.12

12/30/2022

Eurofins Michigan
10448 Citation Drive Suite 200
Brighton, MI 48116
Phone: 810-229-2763 Fax: 810-229-0000

Chain of Custody Record

eurofins | Environment Testing

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Schafer, Sue	Carrier Tracking No(s):	COC No: 190-34900.1
Client Contact: Shipping/Receiving	Phone:	E-Mail: Sue.Schafer@et.eurofinsus.com	State of Origin: Michigan	Page: Page 1 of 1
Company: TestAmerica Laboratories, Inc.		Accreditations Required (See note):		Job #: 190-30636-1
Address: 13715 Rider Trail North, ,	Due Date Requested: 12/29/2022			
City: Earth City	TAT Requested (days):			
State, Zip: MO, 63045				
Phone: 314-298-8566(Tel) 314-298-8757(Fax)	PO #:			
Email:	WO #:			
Project Name: S43386	Project #: 19001249			
Site:	SSOW#:			

Analysis Requested

Preservation Codes:
A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Y - Trizma, Z - other (specify)
Other:

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	6020B/3010A_2% THORIUM ONLY	Total Number of containers	Special Instructions/Note:
			Preservation Code:						
S43386.01 (190-30636-1)	12/12/22	13:30 Eastern		Water			X	1	
S43386.02 (190-30636-2)	12/12/22	14:10 Eastern		Water			X	1	
S43386.03 (190-30636-3)	12/12/22	15:00 Eastern		Water			X	1	
S43386.04 (190-30636-4)	12/12/22	00:01 Eastern		Water			X	1	
S43386.05 (190-30636-5)	12/12/22	15:50 Eastern		Water			X	1	

Note: Since laboratory accreditations are subject to change, Eurofins Environment Testing North Central, LLC places the ownership of method, analyte & accreditation compliance upon our subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the Eurofins Environment Testing North Central, LLC laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins Environment Testing North Central, LLC attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said compliance to Eurofins Environment Testing North Central, LLC.

Possible Hazard Identification *Unconfirmed*	***Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)*** ☐ *Return To Client* ☐ *Disposal By Lab* ☐ *Archive For* _____ *Months*
Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 2	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

Relinquished by	Date/Time	Company	Received by	Date/Time	Company
FED EX	12/15/22 1530	ECTA	FED EX		
Relinquished by:	Date/Time: 12/15/22	Company	Received by:	Date/Time: DEC 16 2022 0830	Company: ESASL
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks:

Ver: 06/08/2021

Analytical Laboratory Report

Report ID: S43387.01(01)
Generated on 01/17/2023

Report to

Attention: Kelly Cratsenburg
TRC
1540 Eisenhower Place
Ann Arbor, MI 48108

Phone: 734-585-7829 C: 734-412-5424 FAX:
Email: KCratsenburg@trccompanies.com

Addtional Contacts: Vince Buening

Report produced by

Merit Laboratories, Inc.
2680 East Lansing Drive
East Lansing, MI 48823

Phone: (517) 332-0167 FAX: (517) 332-6333

Contacts for report questions:
John Laverty (johnlaverty@meritlabs.com)
Barbara Ball (bball@meritlabs.com)

Report Summary

Lab Sample ID(s): S43387.01-S43387.05
Project: Detroit Axle East Investigation
Collected Date(s): 12/12/2022
Submitted Date/Time: 12/13/2022 15:10
Sampled by: A. Whaley
P.O. #: 189455

Table of Contents

Maya Murshak
Technical Director

General Report Notes

Analytical results relate only to the samples tested, in the condition received by the laboratory.
Methods may be modified for improved performance.
Results reported on a dry weight basis where applicable.
'Not detected' indicates that parameter was not found at a level equal to or greater than the reporting limit (RL).
When MDL results are provided, then 'Not detected' indicates that parameter was not found at a level equal to or greater than the MDL.
40 CFR Part 136 Table II Required Containers, Preservation Techniques and Holding Times for the Clean Water Act specify that samples for acrolein and acrylonitrile, and 2-chloroethylvinyl ether need to be preserved at a pH in the range of 4 to 5 or if not preserved, analyzed within 3 days of sampling.
QA/QC corresponding to this analytical report is a separate document with the same Merit ID reference and is available upon request.
Full accreditation certificates are available upon request. Starred (*) analytes are not NELAP accredited.
Samples are held by the lab for 30 days from the final report date unless a written request to hold longer is provided by the client.
Report shall not be reproduced except in full, without the written approval of Merit Laboratories, Inc.
Limits for drinking water samples, are listed as the MCL Limits (Maximum Contaminant Level Concentrations)
PFAS requirement: Section 9.3.8 of U.S. EPA Method 537.1 states "If the method analyte(s) found in the Field Sample is present in the FRB at a concentration greater than 1/3 the MRL, then all samples collected with that FRB are invalid and must be recollected and reanalyzed."
Samples submitted without an accompanying FRB may not be acceptable for compliance purposes.
Wisconsin PFAs analysis: MDL = LOD; RL = LOQ. LOD and LOQ are adjusted for dilution.

Report Narrative

There is no additional narrative for this analytical report

Laboratory Certifications

Authority	Certification ID
Michigan DEQ	#9956
DOD ELAP/ISO 17025	#69699
WBENC	#2005110032
Ohio VAP	#CL0002
Indiana DOH	#C-MI-07
New York NELAC	#11814
North Carolina DENR	#680
North Carolina DOH	#26702
Alaska CSLAP	#17-001
Pennsylvania DEP	#68-05884
Wisconsin DNR	FID# 399147320

Qualifier Descriptions

Qualifier	Description
!	Result is outside of stated limit criteria
B	Compound also found in associated method blank
E	Concentration exceeds calibration range
F	Analysis run outside of holding time
G	Estimated result due to extraction run outside of holding time
H	Sample submitted and run outside of holding time
I	Matrix interference with internal standard
J	Estimated value less than reporting limit, but greater than MDL
L	Elevated reporting limit due to low sample amount
M	Result reported to MDL not RDL
O	Analysis performed by outside laboratory. See attached report.
R	Preliminary result
S	Surrogate recovery outside of control limits
T	No correction for total solids
X	Elevated reporting limit due to matrix interference
Y	Elevated reporting limit due to high target concentration
b	Value detected less than reporting limit, but greater than MDL
e	Reported value estimated due to interference
j	Analyte also found in associated method blank
p	Benzo(b)Fluoranthene and Benzo(k)Fluoranthene integrated as one peak.
x	Preserved from bulk sample

Glossary of Abbreviations

Abbreviation	Description
RL/RDL	Reporting Limit
MDL	Method Detection Limit
MS	Matrix Spike
MSD	Matrix Spike Duplicate
SW	EPA SW 846 (Soil and Wastewater) Methods
E	EPA Methods
SM	Standard Methods
LN	Linear
BR	Branched

Method Summary

Method	Version
ASTMD7979-19M	ASTM Method D7979 - 19 Modified (Isotopic Dilution)

Parameter Summary

Parameter	Synonym	Cas #
PFBA	Perfluorobutanoic Acid	375-22-4
PFPeA	Perfluoropentanoic Acid	2706-90-3
4:2 FTSA	4:2 Fluorotelomer Sulfonic Acid	757124-72-4
PFHxA	Perfluorohexanoic Acid	307-24-4
PFBS	Perfluorobutane sulfonic Acid	375-73-5
PFHpA	Perfluoroheptanoic Acid	375-85-9
PFPeS	Perfluoropentane Sulfonic Acid	2706-91-4
6:2 FTSA	6:2 Fluorotelomer Sulfonic Acid	27619-97-2
PFOA	Perfluorooctanoic Acid	335-67-1
PFHxS	Perfluorohexane Sulfonic Acid	355-46-4
PFHxS-LN	Perfluorohexane Sulfonic Acid - LN	355-46-4-LN
PFHxS-BR	Perfluorohexane Sulfonic Acid - BR	355-46-4-BR
PFNA	Perfluorononanoic Acid	375-95-1
8:2 FTSA	8:2 Fluorotelomer Sulfonic Acid	39108-34-4
PFHpS	Perfluoroheptane Sulfonic Acid	375-92-8
PFDA	Perfluorodecanoic Acid	335-76-2
N-MeFOSAA	N-methyl perfluorooctanesulfonamidoacetic acid	2355-31-9
EtFOSAA	N-Ethyl Perfluorooctane Sulfonamidoacetic Acid	2991-50-6
PFOS	Perfluorooctane Sulfonic Acid	1763-23-1
PFOS-LN	Perfluorooctane Sulfonic Acid - LN	1763-23-1-LN
PFOS-BR	Perfluorooctane Sulfonic Acid - BR	1763-23-1-BR
PFUnDA	Perfluoroundecanoic Acid	2058-94-8
PFNS	Perfluorononane Sulfonic Acid	68259-12-1
PFDoDA	Perfluorododecanoic Acid	307-55-1
PFDS	Perfluorodecane Sulfonic Acid	335-77-3
PFTrDA	Perfluorotridecanoic Acid	72629-94-8
FOSA	Perfluorooctane Sulfonamide	754-91-6
PFTeDA	Perfluorotetradecanoic Acid	376-06-7
11Cl-PF3OUdS	11-chloroeicosafluoro-3-oxaundecane-1-sulfonic acid	763051-92-9
9Cl-PF3ONS	9-chlorohexadecafluoro-3-oxanone1-sulfonic acid	756426-58-1
ADONA	4,8-dioxa-3H-perfluorononanoic acid	919005-14-4
HFPO-DA	Hexafluoropropylene oxide dimer	13252-13-6
PFECHS	Perfluoro-4-ethylcyclohexanesulfonate	67584-42-3
PFBSA	Perfluorobutanesulfonamide	30334-69-1
PFHxSA	Perfluorohexanesulfonamide	41997-13-1

Analytical Laboratory Report

Sample Summary (5 samples)

Sample ID	Sample Tag	Matrix	Collected Date/Time
S43387.01	MW-104	Groundwater	12/12/22 13:30
S43387.02	MW-22-01	Groundwater	12/12/22 14:10
S43387.03	MW-22-02	Groundwater	12/12/22 15:00
S43387.04	DUP-01W	Groundwater	12/12/22 00:01
S43387.05	MW-22-03	Groundwater	12/12/22 15:50

Analytical Laboratory Report

Lab Sample ID: S43387.01
Sample Tag: MW-104
Collected Date/Time: 12/12/2022 13:30
Matrix: Groundwater
COC Reference: 158666

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
1	15ml Centrifuge Tube	None	Yes	3.6	IR

Extraction / Prep.

Parameter	Result	Method	Run Date	Analyst	Flags
Initial wt. (g) / Final wt. (g) / Volume (ml)*	10.98/6.48/9	ASTMD7979-19M	01/03/23 10:00	PTW	

Organics

31 PFAs, Method: ASTMD7979-19M, Run Date: 01/03/23 17:38, Analyst: KCV

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags	Limits
PFBA*	10	10		ng/L	2	375-22-4		
PFPeA*	Not detected	4.0		ng/L	2	2706-90-3		
4:2 FTSA*	Not detected	2.0		ng/L	2	757124-72-4		
PFHxA*	4.7	2.0		ng/L	2	307-24-4		
PFBS*	6.2	2.0		ng/L	2	375-73-5		
PFHpA*	2.3	2.0		ng/L	2	375-85-9		
PFPeS*	Not detected	2.0		ng/L	2	2706-91-4		
6:2 FTSA*	Not detected	2.0		ng/L	2	27619-97-2		
PFOA*	5.6	2.0		ng/L	2	335-67-1		
PFHxS*	11	2.0		ng/L	2	355-46-4		
PFHxS-LN*	7.5	2.0		ng/L	2	355-46-4-LN		
PFHxS-BR*	3.4	2.0		ng/L	2	355-46-4-BR		
PFNA*	Not detected	2.0		ng/L	2	375-95-1		
8:2 FTSA*	Not detected	2.0		ng/L	2	39108-34-4		
PFHpS*	Not detected	2.0		ng/L	2	375-92-8		
PFDA*	Not detected	2.0		ng/L	2	335-76-2		
N-MeFOSAA*	Not detected	2.0		ng/L	2	2355-31-9		
EtFOSAA*	Not detected	4.0		ng/L	2	2991-50-6		
PFOS*	3.1	2.0		ng/L	2	1763-23-1		
PFOS-LN*	Not detected	2.0		ng/L	2	1763-23-1-LN		
PFOS-BR*	2.7	2.0		ng/L	2	1763-23-1-BR		
PFUnDA*	Not detected	2.0		ng/L	2	2058-94-8		
PFNS*	Not detected	2.0		ng/L	2	68259-12-1		
PFDoDA*	Not detected	2.0		ng/L	2	307-55-1		
PFDS*	Not detected	2.0		ng/L	2	335-77-3		
PFTrDA*	Not detected	2.0		ng/L	2	72629-94-8		
FOSA*	Not detected	2.0		ng/L	2	754-91-6		
PFTeDA*	Not detected	4.0		ng/L	2	376-06-7		
11Cl-PF3OUdS*	Not detected	2.0		ng/L	2	763051-92-9		
9Cl-PF3ONS*	Not detected	2.0		ng/L	2	756426-58-1		
ADONA*	Not detected	2.0		ng/L	2	919005-14-4		
HFPO-DA*	Not detected	10		ng/L	2	13252-13-6		
PFECHS*	Not detected	2.0		ng/L	2	67584-42-3		
PFBSA*	Not detected	2.0		ng/L	2	30334-69-1		
PFHxSA*	Not detected	2.0		ng/L	2	41997-13-1		

Lab Sample ID: S43387.02
Sample Tag: MW-22-01
Collected Date/Time: 12/12/2022 14:10
Matrix: Groundwater
COC Reference: 158666

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
1	15ml Centrifuge Tube	None	Yes	3.6	IR

Extraction / Prep.

Parameter	Result	Method	Run Date	Analyst	Flags
Initial wt. (g) / Final wt. (g) / Volume (ml)*	11.49/6.46/10	ASTMD7979-19M	01/03/23 10:00	PTW	

Organics

31 PFAs, Method: ASTMD7979-19M, Run Date: 01/03/23 18:17, Analyst: KCV

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags	Limits
PFBA*	18	10.0		ng/L	1.99	375-22-4		
PFPeA*	5.8	4.0		ng/L	1.99	2706-90-3		
4:2 FTSA*	Not detected	2.0		ng/L	1.99	757124-72-4		
PFHxA*	8.2	2.0		ng/L	1.99	307-24-4		
PFBS*	74	2.0		ng/L	1.99	375-73-5		
PFHpA*	4.6	2.0		ng/L	1.99	375-85-9		
PFPeS*	Not detected	2.0		ng/L	1.99	2706-91-4		
6:2 FTSA*	Not detected	2.0		ng/L	1.99	27619-97-2		
PFOA*	4.1	2.0		ng/L	1.99	335-67-1		
PFHxS*	5.6	2.0		ng/L	1.99	355-46-4		
PFHxS-LN*	3.7	2.0		ng/L	1.99	355-46-4-LN		
PFHxS-BR*	2.0	2.0		ng/L	1.99	355-46-4-BR		
PFNA*	Not detected	2.0		ng/L	1.99	375-95-1		
8:2 FTSA*	Not detected	2.0		ng/L	1.99	39108-34-4		
PFHpS*	Not detected	2.0		ng/L	1.99	375-92-8		
PFDA*	Not detected	2.0		ng/L	1.99	335-76-2		
N-MeFOSAA*	Not detected	2.0		ng/L	1.99	2355-31-9		
EtFOSAA*	Not detected	4.0		ng/L	1.99	2991-50-6		
PFOS*	Not detected	2.0		ng/L	1.99	1763-23-1		
PFOS-LN*	Not detected	2.0		ng/L	1.99	1763-23-1-LN		
PFOS-BR*	Not detected	2.0		ng/L	1.99	1763-23-1-BR		
PFUnDA*	Not detected	2.0		ng/L	1.99	2058-94-8		
PFNS*	Not detected	2.0		ng/L	1.99	68259-12-1		
PFDoDA*	Not detected	2.0		ng/L	1.99	307-55-1		
PFDS*	Not detected	2.0		ng/L	1.99	335-77-3		
PFTrDA*	Not detected	2.0		ng/L	1.99	72629-94-8		
FOSA*	Not detected	2.0		ng/L	1.99	754-91-6		
PFTeDA*	Not detected	4.0		ng/L	1.99	376-06-7		
11Cl-PF3OUdS*	Not detected	2.0		ng/L	1.99	763051-92-9		
9Cl-PF3ONS*	Not detected	2.0		ng/L	1.99	756426-58-1		
ADONA*	Not detected	2.0		ng/L	1.99	919005-14-4		
HFPO-DA*	Not detected	10.0		ng/L	1.99	13252-13-6		
PFECHS*	Not detected	2.0		ng/L	1.99	67584-42-3		
PFBSA*	Not detected	2.0		ng/L	1.99	30334-69-1		
PFHxSA*	Not detected	2.0		ng/L	1.99	41997-13-1		

Lab Sample ID: S43387.03
Sample Tag: MW-22-02
Collected Date/Time: 12/12/2022 15:00
Matrix: Groundwater
COC Reference: 158666

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
1	15ml Centrifuge Tube	None	Yes	3.6	IR

Extraction / Prep.

Parameter	Result	Method	Run Date	Analyst	Flags
Initial wt. (g) / Final wt. (g) / Volume (ml)*	11.47/6.54/10	ASTMD7979-19M	01/03/23 10:00	PTW	

Organics

31 PFAs, Method: ASTMD7979-19M, Run Date: 01/03/23 18:56, Analyst: KCV

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags	Limits
PFBA*	Not detected	10		ng/L	2.03	375-22-4		
PFPeA*	Not detected	4.1		ng/L	2.03	2706-90-3		
4:2 FTSA*	Not detected	2.0		ng/L	2.03	757124-72-4		
PFHxA*	3.2	2.0		ng/L	2.03	307-24-4		
PFBS*	4.9	2.0		ng/L	2.03	375-73-5		
PFHpA*	2.6	2.0		ng/L	2.03	375-85-9		
PFPeS*	Not detected	2.0		ng/L	2.03	2706-91-4		
6:2 FTSA*	Not detected	2.0		ng/L	2.03	27619-97-2		
PFOA*	9.0	2.0		ng/L	2.03	335-67-1		
PFHxS*	16	2.0		ng/L	2.03	355-46-4		
PFHxS-LN*	13	2.0		ng/L	2.03	355-46-4-LN		
PFHxS-BR*	2.6	2.0		ng/L	2.03	355-46-4-BR		
PFNA*	Not detected	2.0		ng/L	2.03	375-95-1		
8:2 FTSA*	Not detected	2.0		ng/L	2.03	39108-34-4		
PFHpS*	Not detected	2.0		ng/L	2.03	375-92-8		
PFDA*	Not detected	2.0		ng/L	2.03	335-76-2		
N-MeFOSAA*	Not detected	2.0		ng/L	2.03	2355-31-9		
EtFOSAA*	Not detected	4.1		ng/L	2.03	2991-50-6		
PFOS*	Not detected	2.0		ng/L	2.03	1763-23-1		
PFOS-LN*	Not detected	2.0		ng/L	2.03	1763-23-1-LN		
PFOS-BR*	Not detected	2.0		ng/L	2.03	1763-23-1-BR		
PFUnDA*	Not detected	2.0		ng/L	2.03	2058-94-8		
PFNS*	Not detected	2.0		ng/L	2.03	68259-12-1		
PFDoDA*	Not detected	2.0		ng/L	2.03	307-55-1		
PFDS*	Not detected	2.0		ng/L	2.03	335-77-3		
PFTrDA*	Not detected	2.0		ng/L	2.03	72629-94-8		
FOSA*	Not detected	2.0		ng/L	2.03	754-91-6		
PFTeDA*	Not detected	4.1		ng/L	2.03	376-06-7		
11Cl-PF3OUdS*	Not detected	2.0		ng/L	2.03	763051-92-9		
9Cl-PF3ONS*	Not detected	2.0		ng/L	2.03	756426-58-1		
ADONA*	Not detected	2.0		ng/L	2.03	919005-14-4		
HFPO-DA*	Not detected	10		ng/L	2.03	13252-13-6		
PFECHS*	Not detected	2.0		ng/L	2.03	67584-42-3		
PFBSA*	Not detected	2.0		ng/L	2.03	30334-69-1		
PFHxSA*	Not detected	2.0		ng/L	2.03	41997-13-1		

Lab Sample ID: S43387.04
Sample Tag: DUP-01W
Collected Date/Time: 12/12/2022 00:01
Matrix: Groundwater
COC Reference: 158666

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
1	15ml Centrifuge Tube	None	Yes	3.6	IR

Extraction / Prep.

Parameter	Result	Method	Run Date	Analyst	Flags
Initial wt. (g) / Final wt. (g) / Volume (ml)*	11.40/6.51/10	ASTMD7979-19M	01/03/23 10:00	PTW	

Organics

31 PFAs, Method: ASTMD7979-19M, Run Date: 01/03/23 19:16, Analyst: KCV

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags	Limits
PFBA*	Not detected	10		ng/L	2.04	375-22-4		
PFPeA*	Not detected	4.1		ng/L	2.04	2706-90-3		
4:2 FTSA*	Not detected	2.0		ng/L	2.04	757124-72-4		
PFHxA*	3.2	2.0		ng/L	2.04	307-24-4		
PFBS*	4.5	2.0		ng/L	2.04	375-73-5		
PFHpA*	3.5	2.0		ng/L	2.04	375-85-9		
PFPeS*	Not detected	2.0		ng/L	2.04	2706-91-4		
6:2 FTSA*	Not detected	2.0		ng/L	2.04	27619-97-2		
PFOA*	11	2.0		ng/L	2.04	335-67-1		
PFHxS*	21	2.0		ng/L	2.04	355-46-4		
PFHxS-LN*	18	2.0		ng/L	2.04	355-46-4-LN		
PFHxS-BR*	2.8	2.0		ng/L	2.04	355-46-4-BR		
PFNA*	Not detected	2.0		ng/L	2.04	375-95-1		
8:2 FTSA*	Not detected	2.0		ng/L	2.04	39108-34-4		
PFHpS*	Not detected	2.0		ng/L	2.04	375-92-8		
PFDA*	Not detected	2.0		ng/L	2.04	335-76-2		
N-MeFOSAA*	Not detected	2.0		ng/L	2.04	2355-31-9		
EtFOSAA*	Not detected	4.1		ng/L	2.04	2991-50-6		
PFOS*	Not detected	2.0		ng/L	2.04	1763-23-1		
PFOS-LN*	Not detected	2.0		ng/L	2.04	1763-23-1-LN		
PFOS-BR*	Not detected	2.0		ng/L	2.04	1763-23-1-BR		
PFUnDA*	Not detected	2.0		ng/L	2.04	2058-94-8		
PFNS*	Not detected	2.0		ng/L	2.04	68259-12-1		
PFDoDA*	Not detected	2.0		ng/L	2.04	307-55-1		
PFDS*	Not detected	2.0		ng/L	2.04	335-77-3		
PFTrDA*	Not detected	2.0		ng/L	2.04	72629-94-8		
FOSA*	Not detected	2.0		ng/L	2.04	754-91-6		
PFTeDA*	Not detected	4.1		ng/L	2.04	376-06-7		
11Cl-PF3OUdS*	Not detected	2.0		ng/L	2.04	763051-92-9		
9Cl-PF3ONS*	Not detected	2.0		ng/L	2.04	756426-58-1		
ADONA*	Not detected	2.0		ng/L	2.04	919005-14-4		
HFPO-DA*	Not detected	10		ng/L	2.04	13252-13-6		
PFECHS*	Not detected	2.0		ng/L	2.04	67584-42-3		
PFBSA*	Not detected	2.0		ng/L	2.04	30334-69-1		
PFHxSA*	Not detected	2.0		ng/L	2.04	41997-13-1		

Analytical Laboratory Report

Lab Sample ID: S43387.05
Sample Tag: MW-22-03
Collected Date/Time: 12/12/2022 15:50
Matrix: Groundwater
COC Reference: 158666

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
1	15ml Centrifuge Tube	None	Yes	3.6	IR

Extraction / Prep.

Parameter	Result	Method	Run Date	Analyst	Flags
Initial wt. (g) / Final wt. (g) / Volume (ml)*	10.69/6.54/10	ASTMD7979-19M	01/03/23 10:00	PTW	

Organics

31 PFAs, Method: ASTMD7979-19M, Run Date: 01/03/23 19:35, Analyst: KCV

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags	Limits
PFBA*	13	12		ng/L	2.41	375-22-4		
PFPeA*	Not detected	4.8		ng/L	2.41	2706-90-3		
4:2 FTSA*	Not detected	2.4		ng/L	2.41	757124-72-4		
PFHxA*	3.3	2.4		ng/L	2.41	307-24-4		
PFBS*	5.2	2.4		ng/L	2.41	375-73-5		
PFHpA*	Not detected	2.4		ng/L	2.41	375-85-9		
PFPeS*	Not detected	2.4		ng/L	2.41	2706-91-4		
6:2 FTSA*	Not detected	2.4		ng/L	2.41	27619-97-2		
PFOA*	6.4	2.4		ng/L	2.41	335-67-1		
PFHxS*	3.6	2.4		ng/L	2.41	355-46-4		
PFHxS-LN*	2.7	2.4		ng/L	2.41	355-46-4-LN		
PFHxS-BR*	Not detected	2.4		ng/L	2.41	355-46-4-BR		
PFNA*	Not detected	2.4		ng/L	2.41	375-95-1		
8:2 FTSA*	Not detected	2.4		ng/L	2.41	39108-34-4		
PFHpS*	Not detected	2.4		ng/L	2.41	375-92-8		
PFDA*	Not detected	2.4		ng/L	2.41	335-76-2		
N-MeFOSAA*	Not detected	2.4		ng/L	2.41	2355-31-9		
EtFOSAA*	Not detected	4.8		ng/L	2.41	2991-50-6		
PFOS*	Not detected	2.4		ng/L	2.41	1763-23-1		
PFOS-LN*	Not detected	2.4		ng/L	2.41	1763-23-1-LN		
PFOS-BR*	Not detected	2.4		ng/L	2.41	1763-23-1-BR		
PFUnDA*	Not detected	2.4		ng/L	2.41	2058-94-8		
PFNS*	Not detected	2.4		ng/L	2.41	68259-12-1		
PFDoDA*	Not detected	2.4		ng/L	2.41	307-55-1		
PFDS*	Not detected	2.4		ng/L	2.41	335-77-3		
PFTrDA*	Not detected	2.4		ng/L	2.41	72629-94-8		
FOSA*	Not detected	2.4		ng/L	2.41	754-91-6		
PFTeDA*	Not detected	4.8		ng/L	2.41	376-06-7		
11Cl-PF3OUdS*	Not detected	2.4		ng/L	2.41	763051-92-9		
9Cl-PF3ONS*	Not detected	2.4		ng/L	2.41	756426-58-1		
ADONA*	Not detected	2.4		ng/L	2.41	919005-14-4		
HFPO-DA*	Not detected	12		ng/L	2.41	13252-13-6		
PFECHS*	Not detected	2.4		ng/L	2.41	67584-42-3		
PFBSA*	Not detected	2.4		ng/L	2.41	30334-69-1		
PFHxSA*	Not detected	2.4		ng/L	2.41	41997-13-1		

Merit Laboratories Login Checklist

Lab Set ID: S43387
Client: TRC (TRC)
Project: Detroit Axle East Investigation
Submitted: 12/13/2022 15:10 Login User: MMC

Attention: Kelly Cratsenburg
Address: TRC
1540 Eisenhower Place
Ann Arbor, MI 48108

Phone: 734-585-7829 C: FAX:
Email: KCratsenburg@trccompanies.com

Selection				Description	Note
Sample Receiving					
01.	[X] Yes	[ ] No	[ ] N/A	Samples are received at 4C +/- 2C Thermometer #	IR 3.6
02.	[X] Yes	[ ] No	[ ] N/A	Received on ice/ cooling process begun	
03.	[ ] Yes	[X] No	[ ] N/A	Samples shipped	
04.	[ ] Yes	[X] No	[ ] N/A	Samples left in 24 hr. drop box	
05.	[ ] Yes	[ ] No	[X] N/A	Are there custody seals/tape or is the drop box locked	
Chain of Custody					
06.	[X] Yes	[ ] No	[ ] N/A	COC adequately filled out	
07.	[X] Yes	[ ] No	[ ] N/A	COC signed and relinquished to the lab	
08.	[X] Yes	[ ] No	[ ] N/A	Sample tag on bottles match COC	
09.	[ ] Yes	[X] No	[ ] N/A	Subcontracting needed? Subcontacted to:	
Preservation					
10.	[X] Yes	[ ] No	[ ] N/A	Do sample have correct chemical preservation	
11.	[ ] Yes	[ ] No	[X] N/A	Completed pH checks on preserved samples? (no VOAs)	
12.	[ ] Yes	[X] No	[ ] N/A	Did any samples need to be preserved in the lab?	
Bottle Conditions					
13.	[X] Yes	[ ] No	[ ] N/A	All bottles intact	
14.	[X] Yes	[ ] No	[ ] N/A	Appropriate analytical bottles are used	
15.	[X] Yes	[ ] No	[ ] N/A	Merit bottles used	
16.	[X] Yes	[ ] No	[ ] N/A	Sufficient sample volume received	
17.	[ ] Yes	[X] No	[ ] N/A	Samples require laboratory filtration	
18.	[X] Yes	[ ] No	[ ] N/A	Samples submitted within holding time	
19.	[ ] Yes	[ ] No	[X] N/A	Do water VOC or TOX bottles contain headspace	

Corrective action for all exceptions is to call the client and to notify the project manager.

Client Review By: _____ Date: _____

Merit Laboratories, Inc.
2680 East Lansing Dr., East Lansing, MI 48823
Phone (517) 332-0167 Fax (517) 332-4034
www.meritlabs.com

C.O.C. PAGE # 1 OF 1 158666

CHAIN OF CUSTODY RECORD

REPORT TO

CONTACT NAME: Kelly Cratsenburg
COMPANY: TRC
ADDRESS: 1540 Eisenhower Place
CITY: Ann Arbor STATE: MI ZIP CODE: 48108
PHONE NO.: 734-585-7829 CELL NO.: P.O. NO.:
E-MAIL ADDRESS: kcratsenburg@trcompanies.com QUOTE NO: 495430.0000

INVOICE TO

CONTACT NAME: ☐ SAME
COMPANY:
ADDRESS:
CITY: STATE: ZIP CODE:
PHONE NO.: E-MAIL ADDRESS:

PROJECT NO./NAME: Detroit Axle ~~South~~ EAST Investigation
SAMPLER(S) – PLEASE PRINT/SIGN NAME: A. Whaley
TURNAROUND TIME REQUIRED ☐ 1 DAY ☐ 2 DAYS ☐ 3 DAYS ☒ STANDARD ☐ OTHER
DELIVERABLES REQUIRED ☐ STD ☐ LEVEL II ☐ LEVEL III ☐ LEVEL IV ☒ EDD ☐ OTHER TRC EDD

MATRIX CODE: W=WATER GW=GROUNDWATER WW=WASTEWATER S=SOIL L=LIQUID SD=SOLID SL=SLUDGE DW=DRINKING WATER O=OIL WP=WIPE A=AIR WS=WASTE

ANALYSIS (ATTACH LIST IF MORE SPACE IS REQUIRED)

Certifications: ☐ OHIO VAP ☐ Drinking Water ☐ DoD ☐ NPDES
Project Locations: ☒ Detroit ☐ New York ☐ Other
Special Instructions

MERIT LAB NO. (FOR LAB USE ONLY)	COLLECTION DATE	COLLECTION TIME	SAMPLE TAG IDENTIFICATION-DESCRIPTION	MATRIX	# OF BOTTLES	# Containers & Preservatives: NONE	HCl	HNO_3	H_2SO_4	NaOH	MeOH	OTHER	Metals	PFAS 31	VOCs	3 Alcohols	Special Instructions
43386/43387.01	12.12.22	1330	MW-104	GW	10	6	3	1					X	X	X	X	Detroit Axle
.02		1410	MW-22-01	GW	10	6	3	1					X	X	X	X	Eastern Boundary
.03		1500	MW-22-02	GW	10	6	3	1					X	X	X	X	PN: 495430.0000
.04		—	DUP-01W	GW	10	6	3	1					X	X	X	X	
.05	↓	1550	MW-22-03	GW	10	6	3	1					X	X	X	X	
43386.06	12.12.22	—	TB-01	GW	1		1								X		

RELINQUISHED BY: SIGNATURE/ORGANIZATION	☐ Sampler TRC	DATE 12.B.22	TIME 1242
RECEIVED BY: SIGNATURE/ORGANIZATION		DATE 12/13/22	TIME 1242
RELINQUISHED BY: SIGNATURE/ORGANIZATION		DATE	TIME
RECEIVED BY: SIGNATURE/ORGANIZATION		DATE	TIME

RELINQUISHED BY: SIGNATURE/ORGANIZATION		12/13/22	15:10
RECEIVED BY: SIGNATURE/ORGANIZATION	M Dilcato	12/13/22	1510

SEAL NO. SEAL INTACT YES ☐ NO ☐ INITIALS
SEAL NO. SEAL INTACT YES ☐ NO ☐ INITIALS

NOTES: TEMP. ON ARRIVAL 3.6

PLEASE NOTE: SIGNING ACKNOWLEDGES ADHERENCE TO MERIT'S SAMPLE ACCEPTANCE POLICY ON REVERSE SIDE

Rev. 1.26.22

Analytical Laboratory Report

Report ID: S43480.01(01)
Generated on 01/03/2023

Report to

Attention: Kelly Cratsenburg
TRC
1540 Eisenhower Place
Ann Arbor, MI 48108

Phone: 734-585-7829 C: 734-412-5424 FAX:
Email: KCratsenburg@trccompanies.com

Addtional Contacts: Vince Buening

Report produced by

Merit Laboratories, Inc.
2680 East Lansing Drive
East Lansing, MI 48823

Phone: (517) 332-0167 FAX: (517) 332-6333

Contacts for report questions:
John Laverty (johnlaverty@meritlabs.com)
Barbara Ball (bball@meritlabs.com)

Report Summary

Lab Sample ID(s): S43480.01-S43480.08
Project: Detroit Axle - Eastern
Collected Date(s): 12/14/2022
Submitted Date/Time: 12/15/2022 10:55
Sampled by: Javier Jasso
P.O. #: 189455

Table of Contents

Maya Murshak
Technical Director

General Report Notes

Analytical results relate only to the samples tested, in the condition received by the laboratory.
Methods may be modified for improved performance.
Results reported on a dry weight basis where applicable.
'Not detected' indicates that parameter was not found at a level equal to or greater than the reporting limit (RL).
When MDL results are provided, then 'Not detected' indicates that parameter was not found at a level equal to or greater than the MDL.
40 CFR Part 136 Table II Required Containers, Preservation Techniques and Holding Times for the Clean Water Act specify that samples for acrolein and acrylonitrile, and 2-chloroethylvinyl ether need to be preserved at a pH in the range of 4 to 5 or if not preserved, analyzed within 3 days of sampling.
QA/QC corresponding to this analytical report is a separate document with the same Merit ID reference and is available upon request.
Full accreditation certificates are available upon request. Starred (*) analytes are not NELAP accredited.
Samples are held by the lab for 30 days from the final report date unless a written request to hold longer is provided by the client.
Report shall not be reproduced except in full, without the written approval of Merit Laboratories, Inc.
Limits for drinking water samples, are listed as the MCL Limits (Maximum Contaminant Level Concentrations)
PFAS requirement: Section 9.3.8 of U.S. EPA Method 537.1 states "If the method analyte(s) found in the Field Sample is present in the FRB at a concentration greater than 1/3 the MRL, then all samples collected with that FRB are invalid and must be recollected and reanalyzed."
Samples submitted without an accompanying FRB may not be acceptable for compliance purposes.
Wisconsin PFAs analysis: MDL = LOD; RL = LOQ. LOD and LOQ are adjusted for dilution.

Report Narrative

There is no additional narrative for this analytical report

Laboratory Certifications

Authority	Certification ID
Michigan DEQ	#9956
DOD ELAP/ISO 17025	#69699
WBENC	#2005110032
Ohio VAP	#CL0002
Indiana DOH	#C-MI-07
New York NELAC	#11814
North Carolina DENR	#680
North Carolina DOH	#26702
Alaska CSLAP	#17-001
Pennsylvania DEP	#68-05884
Wisconsin DNR	FID# 399147320

Qualifier Descriptions

Qualifier	Description
!	Result is outside of stated limit criteria
B	Compound also found in associated method blank
E	Concentration exceeds calibration range
F	Analysis run outside of holding time
G	Estimated result due to extraction run outside of holding time
H	Sample submitted and run outside of holding time
I	Matrix interference with internal standard
J	Estimated value less than reporting limit, but greater than MDL
L	Elevated reporting limit due to low sample amount
M	Result reported to MDL not RDL
O	Analysis performed by outside laboratory. See attached report.
R	Preliminary result
S	Surrogate recovery outside of control limits
T	No correction for total solids
X	Elevated reporting limit due to matrix interference
Y	Elevated reporting limit due to high target concentration
b	Value detected less than reporting limit, but greater than MDL
e	Reported value estimated due to interference
j	Analyte also found in associated method blank
p	Benzo(b)Fluoranthene and Benzo(k)Fluoranthene integrated as one peak.
x	Preserved from bulk sample

Glossary of Abbreviations

Abbreviation	Description
RL/RDL	Reporting Limit
MDL	Method Detection Limit
MS	Matrix Spike
MSD	Matrix Spike Duplicate
SW	EPA SW 846 (Soil and Wastewater) Methods
E	EPA Methods
SM	Standard Methods
LN	Linear
BR	Branched

Method Summary

Method	Version
E200.8	EPA Method 200.8 Revision 5.4
E245.1	EPA Method 245.1 Revision 3.0
N/A	Not Applicable
SW3015A	SW 846 Method 3015A Revision 1 February 2007
SW5030C/8260C	SW 846 Method 8260C Revision 3 August 2006 / 5030C Revision 3 May 2003
SW8260B - SIM	SW 846 Method 8260B Revision 2 December 1996 SIMs

Sample Summary (8 samples)

Sample ID	Sample Tag	Matrix	Collected Date/Time
S43480.01	DUP #2	Water	12/14/22 00:01
S43480.02	MW 119	Water	12/14/22 09:30
S43480.03	MW 120	Water	12/14/22 10:30
S43480.04	MW 112	Water	12/14/22 11:25
S43480.05	MW 111	Water	12/14/22 12:31
S43480.06	MW 110	Water	12/14/22 13:21
S43480.07	MW 109	Water	12/14/22 14:15
S43480.08	MW 108	Water	12/14/22 14:58

Lab Sample ID: S43480.01
Sample Tag: DUP #2
Collected Date/Time: 12/14/2022 00:01
Matrix: Water
COC Reference: 158653

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
3	40ml Glass	HCL	Yes	4.3	IR
3	40ml Glass	None	Yes	4.3	IR
2	125ml Plastic	HNO3	Yes	4.3	IR

Extraction / Prep.

Parameter	Result	Method	Run Date	Analyst	Flags
Mercury Digestion	Completed	E245.1	12/16/22 13:13	CTV	
pH check for VOCs*	<2	N/A	12/19/22 11:40	JKJ	
Metal Digestion	Completed	SW3015A	12/19/22 09:45	CCM	

Metals

Method: E200.8, Run Date: 12/19/22 11:39, Analyst: CCM

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags	Limits
Aluminum	0.059	0.010		mg/L	2	7429-90-5		
Antimony*	Not detected	0.001		mg/L	2	7440-36-0		
Arsenic	Not detected	0.002		mg/L	2	7440-38-2		
Barium	0.014	0.005		mg/L	2	7440-39-3		
Beryllium	Not detected	0.001		mg/L	2	7440-41-7		
Boron	0.08	0.04		mg/L	2	7440-42-8		
Cadmium	Not detected	0.0005		mg/L	2	7440-43-9		
Chromium	Not detected	0.005		mg/L	2	7440-47-3		
Cobalt	Not detected	0.005		mg/L	2	7440-48-4		
Iron	0.23	0.02		mg/L	2	7439-89-6		
Lead	Not detected	0.003		mg/L	2	7439-92-1		
Manganese	0.384	0.005		mg/L	2	7439-96-5		
Molybdenum	0.013	0.005		mg/L	2	7439-98-7		
Nickel	Not detected	0.005		mg/L	2	7440-02-0		
Selenium	Not detected	0.005		mg/L	2	7782-49-2		
Silver	Not detected	0.0002		mg/L	2	7440-22-4		
Strontium	0.271	0.005		mg/L	2	7440-24-6		
Thallium	Not detected	0.002		mg/L	2	7440-28-0		
Tin	Not detected	0.02		mg/L	2	7440-31-5		
Titanium	Not detected	0.005		mg/L	2	7440-32-6		
Vanadium	Not detected	0.002		mg/L	2	7440-62-2		
Zinc	Not detected	0.005		mg/L	2	7440-66-6		

Method: E200.8, Run Date: 12/19/22 14:47, Analyst: CCM

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags	Limits
Calcium*	88.9	0.50		mg/L	2	7440-70-2		
Magnesium	24.7	0.50		mg/L	2	7439-95-4		
Potassium	1.31	0.50		mg/L	2	7440-09-7		
Sodium	18.3	0.50		mg/L	2	7440-23-5		

Lab Sample ID: S43480.01 (continued)
Sample Tag: DUP #2

Method: E245.1, Run Date: 12/16/22 15:07, Analyst: CTV

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags	Limits
Mercury	Not detected	0.0002		mg/L	1	7439-97-6		

Organics - Volatiles

Method: SW5030C/8260C, Run Date: 12/25/22 17:01, Analyst: KAG

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags	Limits
Diisopropyl ether (DIPE)	Not detected	5		ug/L	1	108-20-3		

Method: SW8260B - SIM, Run Date: 12/21/22 14:46, Analyst: KAG

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags	Limits
1,2-Dibromo-3-chloropropane*	Not detected	0.05		ug/L	1	96-12-8		

Volatile Organics, Method: SW5030C/8260C, Run Date: 12/18/22 20:05, Analyst: KAG

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags	Limits
Acetone	Not detected	50		ug/L	1	67-64-1		
tert-Methyl butyl ether (MTBE)	Not detected	5		ug/L	1	1634-04-4		
Acrylonitrile	Not detected	2		ug/L	1	107-13-1		
2-Butanone (MEK)	Not detected	25		ug/L	1	78-93-3		200,000
Dichlorodifluoromethane	Not detected	5		ug/L	1	75-71-8		
Chloromethane	Not detected	5		ug/L	1	74-87-3		
Vinyl chloride	Not detected	1		ug/L	1	75-01-4		200
Bromomethane	Not detected	5		ug/L	1	74-83-9		
Chloroethane	Not detected	5		ug/L	1	75-00-3		
Trichlorofluoromethane	Not detected	1		ug/L	1	75-69-4		
1,1-Dichloroethene	Not detected	1		ug/L	1	75-35-4		700
Methylene chloride	Not detected	5		ug/L	1	75-09-2		
trans-1,2-Dichloroethene	Not detected	1		ug/L	1	156-60-5		
1,1-Dichloroethane	Not detected	1		ug/L	1	75-34-3		
cis-1,2-Dichloroethene	Not detected	1		ug/L	1	156-59-2		
Chloroform	Not detected	1		ug/L	1	67-66-3		6,000
1,1,1-Trichloroethane	Not detected	1		ug/L	1	71-55-6		
4-Methyl-2-pentanone (MIBK)	Not detected	50		ug/L	1	108-10-1		
Carbon tetrachloride	Not detected	1		ug/L	1	56-23-5		500
Benzene	Not detected	1		ug/L	1	71-43-2		500
1,2-Dichloroethane	Not detected	1		ug/L	1	107-06-2		500
Trichloroethene	Not detected	1		ug/L	1	79-01-6		500
1,2-Dichloropropane	Not detected	1		ug/L	1	78-87-5		
Bromodichloromethane	Not detected	1		ug/L	1	75-27-4		
Dibromomethane	Not detected	5		ug/L	1	74-95-3		
cis-1,3-Dichloropropene	Not detected	1		ug/L	1	10061-01-5		
Toluene	Not detected	1		ug/L	1	108-88-3		
trans-1,3-Dichloropropene	Not detected	1		ug/L	1	10061-02-6		
1,1,2-Trichloroethane	Not detected	1		ug/L	1	79-00-5		
Tetrachloroethene	Not detected	1		ug/L	1	127-18-4		700
Dibromochloromethane	Not detected	5		ug/L	1	124-48-1		
1,2-Dibromoethane	Not detected	1		ug/L	1	106-93-4		
Chlorobenzene	Not detected	1		ug/L	1	108-90-7		100,000
1,1,1,2-Tetrachloroethane	Not detected	1		ug/L	1	630-20-6		
Ethylbenzene	Not detected	1		ug/L	1	100-41-4		
p,m-Xylene*	Not detected	2		ug/L	1			
o-Xylene	Not detected	1		ug/L	1	95-47-6		

Lab Sample ID: S43480.01 (continued)
Sample Tag: DUP #2

Volatile Organics, Method: SW5030C/8260C, Run Date: 12/18/22 20:05, Analyst: KAG (continued)

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags	Limits
Styrene	Not detected	1		ug/L	1	100-42-5		
Isopropylbenzene	Not detected	5		ug/L	1	98-82-8		
Bromoform	Not detected	1		ug/L	1	75-25-2		
1,1,2,2-Tetrachloroethane	Not detected	1		ug/L	1	79-34-5		
1,2,3-Trichloropropane	Not detected	1		ug/L	1	96-18-4		
n-Propylbenzene	Not detected	1		ug/L	1	103-65-1		
Bromobenzene	Not detected	1		ug/L	1	108-86-1		
1,3,5-Trimethylbenzene	Not detected	1		ug/L	1	108-67-8		
tert-Butylbenzene	Not detected	1		ug/L	1	98-06-6		
1,2,4-Trimethylbenzene	Not detected	1		ug/L	1	95-63-6		
sec-Butylbenzene	Not detected	1		ug/L	1	135-98-8		
p-Isopropyltoluene	Not detected	5		ug/L	1	99-87-6		
1,3-Dichlorobenzene	Not detected	1		ug/L	1	541-73-1		
1,4-Dichlorobenzene	Not detected	1		ug/L	1	106-46-7		7,500
1,2-Dichlorobenzene	Not detected	1		ug/L	1	95-50-1		
1,2,3-Trimethylbenzene	Not detected	1		ug/L	1	526-73-8		
n-Butylbenzene	Not detected	1		ug/L	1	104-51-8		
1,2,4-Trichlorobenzene	Not detected	5		ug/L	1	120-82-1		
1,2,3-Trichlorobenzene	Not detected	5		ug/L	1	87-61-6		
Naphthalene	Not detected	5		ug/L	1	91-20-3		
Acrolein	Not detected	1		ug/L	1	107-02-8		
2-Chlorotoluene	Not detected	1		ug/L	1	95-49-8		
4-Chlorotoluene	Not detected	1		ug/L	1	106-43-4		
1,3-Dichloropropane	Not detected	1		ug/L	1	142-28-9		
1,1-Dichloropropene	Not detected	1		ug/L	1	563-58-6		
2,2-Dichloropropane	Not detected	1		ug/L	1	594-20-7		
Hexachlorobutadiene	Not detected	1		ug/L	1	87-68-3		500
1,1,2-Trichloro-1,2,2-trifluoroethane	Not detected	1		ug/L	1	76-13-1		

Other / Misc.

Method: , Run Date: 12/18/22 03:06, Analyst: EF

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags	Limits
Alcohols*	Completed				1		O	

Method: , Run Date: 12/21/22 21:39, Analyst: EF

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags	Limits
Misc. Special Project*	Completed				1		O	

O-Analysis performed by outside laboratory. See attached report.

Lab Sample ID: S43480.02
Sample Tag: MW 119
Collected Date/Time: 12/14/2022 09:30
Matrix: Water
COC Reference: 158653

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
3	40ml Glass	HCL	Yes	4.3	IR
3	40ml Glass	None	Yes	4.3	IR
2	125ml Plastic	HNO3	Yes	4.3	IR

Extraction / Prep.

Parameter	Result	Method	Run Date	Analyst	Flags
Mercury Digestion	Completed	E245.1	12/16/22 13:13	CTV	
pH check for VOCs*	<2	N/A	12/19/22 11:40	JKJ	
Metal Digestion	Completed	SW3015A	12/19/22 09:45	CCM	

Metals

Method: E200.8, Run Date: 12/19/22 11:40, Analyst: CCM

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags	Limits
Aluminum	0.018	0.010		mg/L	2	7429-90-5		
Antimony*	Not detected	0.001		mg/L	2	7440-36-0		
Arsenic	Not detected	0.002		mg/L	2	7440-38-2		
Barium	0.033	0.005		mg/L	2	7440-39-3		
Beryllium	Not detected	0.001		mg/L	2	7440-41-7		
Boron	0.17	0.04		mg/L	2	7440-42-8		
Cadmium	Not detected	0.0005		mg/L	2	7440-43-9		
Chromium	Not detected	0.005		mg/L	2	7440-47-3		
Cobalt	Not detected	0.005		mg/L	2	7440-48-4		
Iron	0.04	0.02		mg/L	2	7439-89-6		
Lead	Not detected	0.003		mg/L	2	7439-92-1		
Manganese	Not detected	0.005		mg/L	2	7439-96-5		
Molybdenum	Not detected	0.005		mg/L	2	7439-98-7		
Nickel	Not detected	0.005		mg/L	2	7440-02-0		
Selenium	0.008	0.005		mg/L	2	7782-49-2		
Silver	Not detected	0.0002		mg/L	2	7440-22-4		
Strontium	1.38	0.005		mg/L	2	7440-24-6		
Thallium	Not detected	0.002		mg/L	2	7440-28-0		
Tin	Not detected	0.02		mg/L	2	7440-31-5		
Titanium	Not detected	0.005		mg/L	2	7440-32-6		
Vanadium	Not detected	0.002		mg/L	2	7440-62-2		
Zinc	Not detected	0.005		mg/L	2	7440-66-6		

Method: E200.8, Run Date: 12/19/22 14:49, Analyst: CCM

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags	Limits
Calcium*	148	0.50		mg/L	2	7440-70-2		
Magnesium	27.4	0.50		mg/L	2	7439-95-4		
Potassium	4.55	0.50		mg/L	2	7440-09-7		
Sodium	6.19	0.50		mg/L	2	7440-23-5		

Lab Sample ID: S43480.02 (continued)
Sample Tag: MW 119

Method: E245.1, Run Date: 12/16/22 15:10, Analyst: CTV

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags	Limits
Mercury	Not detected	0.0002		mg/L	1	7439-97-6		

Organics - Volatiles

Method: SW5030C/8260C, Run Date: 12/25/22 17:25, Analyst: KAG

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags	Limits
Diisopropyl ether (DIPE)	Not detected	5		ug/L	1	108-20-3		

Method: SW8260B - SIM, Run Date: 12/21/22 15:06, Analyst: KAG

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags	Limits
1,2-Dibromo-3-chloropropane*	Not detected	0.05		ug/L	1	96-12-8		

Volatile Organics, Method: SW5030C/8260C, Run Date: 12/18/22 20:24, Analyst: KAG

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags	Limits
Acetone	Not detected	50		ug/L	1	67-64-1		
tert-Methyl butyl ether (MTBE)	Not detected	5		ug/L	1	1634-04-4		
Acrylonitrile	Not detected	2		ug/L	1	107-13-1		
2-Butanone (MEK)	Not detected	25		ug/L	1	78-93-3		200,000
Dichlorodifluoromethane	Not detected	5		ug/L	1	75-71-8		
Chloromethane	Not detected	5		ug/L	1	74-87-3		
Vinyl chloride	Not detected	1		ug/L	1	75-01-4		200
Bromomethane	Not detected	5		ug/L	1	74-83-9		
Chloroethane	Not detected	5		ug/L	1	75-00-3		
Trichlorofluoromethane	Not detected	1		ug/L	1	75-69-4		
1,1-Dichloroethene	Not detected	1		ug/L	1	75-35-4		700
Methylene chloride	Not detected	5		ug/L	1	75-09-2		
trans-1,2-Dichloroethene	Not detected	1		ug/L	1	156-60-5		
1,1-Dichloroethane	Not detected	1		ug/L	1	75-34-3		
cis-1,2-Dichloroethene	Not detected	1		ug/L	1	156-59-2		
Chloroform	Not detected	1		ug/L	1	67-66-3		6,000
1,1,1-Trichloroethane	Not detected	1		ug/L	1	71-55-6		
4-Methyl-2-pentanone (MIBK)	Not detected	50		ug/L	1	108-10-1		
Carbon tetrachloride	Not detected	1		ug/L	1	56-23-5		500
Benzene	Not detected	1		ug/L	1	71-43-2		500
1,2-Dichloroethane	Not detected	1		ug/L	1	107-06-2		500
Trichloroethene	Not detected	1		ug/L	1	79-01-6		500
1,2-Dichloropropane	Not detected	1		ug/L	1	78-87-5		
Bromodichloromethane	Not detected	1		ug/L	1	75-27-4		
Dibromomethane	Not detected	5		ug/L	1	74-95-3		
cis-1,3-Dichloropropene	Not detected	1		ug/L	1	10061-01-5		
Toluene	Not detected	1		ug/L	1	108-88-3		
trans-1,3-Dichloropropene	Not detected	1		ug/L	1	10061-02-6		
1,1,2-Trichloroethane	Not detected	1		ug/L	1	79-00-5		
Tetrachloroethene	Not detected	1		ug/L	1	127-18-4		700
Dibromochloromethane	Not detected	5		ug/L	1	124-48-1		
1,2-Dibromoethane	Not detected	1		ug/L	1	106-93-4		
Chlorobenzene	Not detected	1		ug/L	1	108-90-7		100,000
1,1,1,2-Tetrachloroethane	Not detected	1		ug/L	1	630-20-6		
Ethylbenzene	Not detected	1		ug/L	1	100-41-4		
p,m-Xylene*	Not detected	2		ug/L	1			
o-Xylene	Not detected	1		ug/L	1	95-47-6		

Lab Sample ID: S43480.02 (continued)
Sample Tag: MW 119

Volatile Organics, Method: SW5030C/8260C, Run Date: 12/18/22 20:24, Analyst: KAG (continued)

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags	Limits
Styrene	Not detected	1		ug/L	1	100-42-5		
Isopropylbenzene	Not detected	5		ug/L	1	98-82-8		
Bromoform	Not detected	1		ug/L	1	75-25-2		
1,1,2,2-Tetrachloroethane	Not detected	1		ug/L	1	79-34-5		
1,2,3-Trichloropropane	Not detected	1		ug/L	1	96-18-4		
n-Propylbenzene	Not detected	1		ug/L	1	103-65-1		
Bromobenzene	Not detected	1		ug/L	1	108-86-1		
1,3,5-Trimethylbenzene	Not detected	1		ug/L	1	108-67-8		
tert-Butylbenzene	Not detected	1		ug/L	1	98-06-6		
1,2,4-Trimethylbenzene	Not detected	1		ug/L	1	95-63-6		
sec-Butylbenzene	Not detected	1		ug/L	1	135-98-8		
p-Isopropyltoluene	Not detected	5		ug/L	1	99-87-6		
1,3-Dichlorobenzene	Not detected	1		ug/L	1	541-73-1		
1,4-Dichlorobenzene	Not detected	1		ug/L	1	106-46-7		7,500
1,2-Dichlorobenzene	Not detected	1		ug/L	1	95-50-1		
1,2,3-Trimethylbenzene	Not detected	1		ug/L	1	526-73-8		
n-Butylbenzene	Not detected	1		ug/L	1	104-51-8		
1,2,4-Trichlorobenzene	Not detected	5		ug/L	1	120-82-1		
1,2,3-Trichlorobenzene	Not detected	5		ug/L	1	87-61-6		
Naphthalene	Not detected	5		ug/L	1	91-20-3		
Acrolein	Not detected	1		ug/L	1	107-02-8		
2-Chlorotoluene	Not detected	1		ug/L	1	95-49-8		
4-Chlorotoluene	Not detected	1		ug/L	1	106-43-4		
1,3-Dichloropropane	Not detected	1		ug/L	1	142-28-9		
1,1-Dichloropropene	Not detected	1		ug/L	1	563-58-6		
2,2-Dichloropropane	Not detected	1		ug/L	1	594-20-7		
Hexachlorobutadiene	Not detected	1		ug/L	1	87-68-3		500
1,1,2-Trichloro-1,2,2-trifluoroethane	Not detected	1		ug/L	1	76-13-1		

Other / Misc.

Method: , Run Date: 12/18/22 19:20, Analyst: EF

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags	Limits
Alcohols*	Completed				1		O	

Method: , Run Date: 12/21/22 21:43, Analyst: EF

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags	Limits
Misc. Special Project*	Completed				1		O	

O-Analysis performed by outside laboratory. See attached report.

Lab Sample ID: S43480.03
Sample Tag: MW 120
Collected Date/Time: 12/14/2022 10:30
Matrix: Water
COC Reference: 158653

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
3	40ml Glass	HCL	Yes	4.3	IR
3	40ml Glass	None	Yes	4.3	IR
2	125ml Plastic	HNO3	Yes	4.3	IR

Extraction / Prep.

Parameter	Result	Method	Run Date	Analyst	Flags
Mercury Digestion	Completed	E245.1	12/16/22 13:13	CTV	
pH check for VOCs*	<2	N/A	12/19/22 11:40	JKJ	
Metal Digestion	Completed	SW3015A	12/19/22 09:45	CCM	

Metals

Method: E200.8, Run Date: 12/19/22 11:46, Analyst: CCM

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags	Limits
Aluminum	0.013	0.010		mg/L	2	7429-90-5		
Antimony*	Not detected	0.001		mg/L	2	7440-36-0		
Arsenic	Not detected	0.002		mg/L	2	7440-38-2		
Barium	0.026	0.005		mg/L	2	7440-39-3		
Beryllium	Not detected	0.001		mg/L	2	7440-41-7		
Boron	0.29	0.04		mg/L	2	7440-42-8		
Cadmium	0.0008	0.0005		mg/L	2	7440-43-9		
Chromium	Not detected	0.005		mg/L	2	7440-47-3		
Cobalt	Not detected	0.005		mg/L	2	7440-48-4		
Iron	0.03	0.02		mg/L	2	7439-89-6		
Lead	Not detected	0.003		mg/L	2	7439-92-1		
Manganese	0.021	0.005		mg/L	2	7439-96-5		
Molybdenum	0.011	0.005		mg/L	2	7439-98-7		
Nickel	Not detected	0.005		mg/L	2	7440-02-0		
Selenium	Not detected	0.005		mg/L	2	7782-49-2		
Silver	Not detected	0.0002		mg/L	2	7440-22-4		
Strontium	1.86	0.005		mg/L	2	7440-24-6		
Thallium	Not detected	0.002		mg/L	2	7440-28-0		
Tin	Not detected	0.02		mg/L	2	7440-31-5		
Titanium	Not detected	0.005		mg/L	2	7440-32-6		
Vanadium	Not detected	0.002		mg/L	2	7440-62-2		
Zinc	Not detected	0.005		mg/L	2	7440-66-6		

Method: E200.8, Run Date: 12/19/22 14:50, Analyst: CCM

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags	Limits
Calcium*	191	0.50		mg/L	2	7440-70-2		
Magnesium	92.2	0.50		mg/L	2	7439-95-4		
Potassium	2.27	0.50		mg/L	2	7440-09-7		
Sodium	16.7	0.50		mg/L	2	7440-23-5		

Lab Sample ID: S43480.03 (continued)
Sample Tag: MW 120

Method: E245.1, Run Date: 12/16/22 15:13, Analyst: CTV

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags	Limits
Mercury	Not detected	0.0002		mg/L	1	7439-97-6		

Organics - Volatiles

Method: SW5030C/8260C, Run Date: 12/25/22 17:49, Analyst: KAG

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags	Limits
Diisopropyl ether (DIPE)	Not detected	5		ug/L	1	108-20-3		

Method: SW8260B - SIM, Run Date: 12/21/22 15:27, Analyst: KAG

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags	Limits
1,2-Dibromo-3-chloropropane*	Not detected	0.05		ug/L	1	96-12-8		

Volatile Organics, Method: SW5030C/8260C, Run Date: 12/18/22 20:43, Analyst: KAG

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags	Limits
Acetone	Not detected	50		ug/L	1	67-64-1		
tert-Methyl butyl ether (MTBE)	Not detected	5		ug/L	1	1634-04-4		
Acrylonitrile	Not detected	2		ug/L	1	107-13-1		
2-Butanone (MEK)	Not detected	25		ug/L	1	78-93-3		200,000
Dichlorodifluoromethane	Not detected	5		ug/L	1	75-71-8		
Chloromethane	Not detected	5		ug/L	1	74-87-3		
Vinyl chloride	Not detected	1		ug/L	1	75-01-4		200
Bromomethane	Not detected	5		ug/L	1	74-83-9		
Chloroethane	Not detected	5		ug/L	1	75-00-3		
Trichlorofluoromethane	Not detected	1		ug/L	1	75-69-4		
1,1-Dichloroethene	Not detected	1		ug/L	1	75-35-4		700
Methylene chloride	Not detected	5		ug/L	1	75-09-2		
trans-1,2-Dichloroethene	Not detected	1		ug/L	1	156-60-5		
1,1-Dichloroethane	Not detected	1		ug/L	1	75-34-3		
cis-1,2-Dichloroethene	Not detected	1		ug/L	1	156-59-2		
Chloroform	Not detected	1		ug/L	1	67-66-3		6,000
1,1,1-Trichloroethane	Not detected	1		ug/L	1	71-55-6		
4-Methyl-2-pentanone (MIBK)	Not detected	50		ug/L	1	108-10-1		
Carbon tetrachloride	Not detected	1		ug/L	1	56-23-5		500
Benzene	Not detected	1		ug/L	1	71-43-2		500
1,2-Dichloroethane	Not detected	1		ug/L	1	107-06-2		500
Trichloroethene	Not detected	1		ug/L	1	79-01-6		500
1,2-Dichloropropane	Not detected	1		ug/L	1	78-87-5		
Bromodichloromethane	Not detected	1		ug/L	1	75-27-4		
Dibromomethane	Not detected	5		ug/L	1	74-95-3		
cis-1,3-Dichloropropene	Not detected	1		ug/L	1	10061-01-5		
Toluene	Not detected	1		ug/L	1	108-88-3		
trans-1,3-Dichloropropene	Not detected	1		ug/L	1	10061-02-6		
1,1,2-Trichloroethane	Not detected	1		ug/L	1	79-00-5		
Tetrachloroethene	Not detected	1		ug/L	1	127-18-4		700
Dibromochloromethane	Not detected	5		ug/L	1	124-48-1		
1,2-Dibromoethane	Not detected	1		ug/L	1	106-93-4		
Chlorobenzene	Not detected	1		ug/L	1	108-90-7		100,000
1,1,1,2-Tetrachloroethane	Not detected	1		ug/L	1	630-20-6		
Ethylbenzene	Not detected	1		ug/L	1	100-41-4		
p,m-Xylene*	Not detected	2		ug/L	1			
o-Xylene	Not detected	1		ug/L	1	95-47-6		

Lab Sample ID: S43480.03 (continued)
Sample Tag: MW 120

Volatile Organics, Method: SW5030C/8260C, Run Date: 12/18/22 20:43, Analyst: KAG (continued)

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags	Limits
Styrene	Not detected	1		ug/L	1	100-42-5		
Isopropylbenzene	Not detected	5		ug/L	1	98-82-8		
Bromoform	Not detected	1		ug/L	1	75-25-2		
1,1,2,2-Tetrachloroethane	Not detected	1		ug/L	1	79-34-5		
1,2,3-Trichloropropane	Not detected	1		ug/L	1	96-18-4		
n-Propylbenzene	Not detected	1		ug/L	1	103-65-1		
Bromobenzene	Not detected	1		ug/L	1	108-86-1		
1,3,5-Trimethylbenzene	Not detected	1		ug/L	1	108-67-8		
tert-Butylbenzene	Not detected	1		ug/L	1	98-06-6		
1,2,4-Trimethylbenzene	Not detected	1		ug/L	1	95-63-6		
sec-Butylbenzene	Not detected	1		ug/L	1	135-98-8		
p-Isopropyltoluene	Not detected	5		ug/L	1	99-87-6		
1,3-Dichlorobenzene	Not detected	1		ug/L	1	541-73-1		
1,4-Dichlorobenzene	Not detected	1		ug/L	1	106-46-7		7,500
1,2-Dichlorobenzene	Not detected	1		ug/L	1	95-50-1		
1,2,3-Trimethylbenzene	Not detected	1		ug/L	1	526-73-8		
n-Butylbenzene	Not detected	1		ug/L	1	104-51-8		
1,2,4-Trichlorobenzene	Not detected	5		ug/L	1	120-82-1		
1,2,3-Trichlorobenzene	Not detected	5		ug/L	1	87-61-6		
Naphthalene	Not detected	5		ug/L	1	91-20-3		
Acrolein	Not detected	1		ug/L	1	107-02-8		
2-Chlorotoluene	Not detected	1		ug/L	1	95-49-8		
4-Chlorotoluene	Not detected	1		ug/L	1	106-43-4		
1,3-Dichloropropane	Not detected	1		ug/L	1	142-28-9		
1,1-Dichloropropene	Not detected	1		ug/L	1	563-58-6		
2,2-Dichloropropane	Not detected	1		ug/L	1	594-20-7		
Hexachlorobutadiene	Not detected	1		ug/L	1	87-68-3		500
1,1,2-Trichloro-1,2,2-trifluoroethane	Not detected	1		ug/L	1	76-13-1		

Other / Misc.

Method: , Run Date: 12/18/22 19:41, Analyst: EF

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags	Limits
Alcohols*	Completed				1		O	

Method: , Run Date: 12/21/22 21:46, Analyst: EF

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags	Limits
Misc. Special Project*	Completed				1		O	

O-Analysis performed by outside laboratory. See attached report.

Lab Sample ID: S43480.04
Sample Tag: MW 112
Collected Date/Time: 12/14/2022 11:25
Matrix: Water
COC Reference: 158653

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
3	40ml Glass	HCL	Yes	4.3	IR
3	40ml Glass	None	Yes	4.3	IR
2	125ml Plastic	HNO3	Yes	4.3	IR

Extraction / Prep.

Parameter	Result	Method	Run Date	Analyst	Flags
Mercury Digestion	Completed	E245.1	12/16/22 13:13	CTV	
pH check for VOCs*	<2	N/A	12/19/22 11:40	JKJ	
Metal Digestion	Completed	SW3015A	12/19/22 09:45	CCM	

Metals

Method: E200.8, Run Date: 12/19/22 11:49, Analyst: CCM

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags	Limits
Aluminum	0.051	0.010		mg/L	2	7429-90-5		
Antimony*	Not detected	0.001		mg/L	2	7440-36-0		
Arsenic	Not detected	0.002		mg/L	2	7440-38-2		
Barium	0.013	0.005		mg/L	2	7440-39-3		
Beryllium	Not detected	0.001		mg/L	2	7440-41-7		
Boron	0.08	0.04		mg/L	2	7440-42-8		
Cadmium	Not detected	0.0005		mg/L	2	7440-43-9		
Chromium	Not detected	0.005		mg/L	2	7440-47-3		
Cobalt	Not detected	0.005		mg/L	2	7440-48-4		
Iron	0.23	0.02		mg/L	2	7439-89-6		
Lead	Not detected	0.003		mg/L	2	7439-92-1		
Manganese	0.398	0.005		mg/L	2	7439-96-5		
Molybdenum	0.013	0.005		mg/L	2	7439-98-7		
Nickel	Not detected	0.005		mg/L	2	7440-02-0		
Selenium	Not detected	0.005		mg/L	2	7782-49-2		
Silver	Not detected	0.0002		mg/L	2	7440-22-4		
Strontium	0.277	0.005		mg/L	2	7440-24-6		
Thallium	Not detected	0.002		mg/L	2	7440-28-0		
Tin	Not detected	0.02		mg/L	2	7440-31-5		
Titanium	Not detected	0.005		mg/L	2	7440-32-6		
Vanadium	Not detected	0.002		mg/L	2	7440-62-2		
Zinc	Not detected	0.005		mg/L	2	7440-66-6		

Method: E200.8, Run Date: 12/19/22 14:52, Analyst: CCM

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags	Limits
Calcium*	90.1	0.50		mg/L	2	7440-70-2		
Magnesium	25.1	0.50		mg/L	2	7439-95-4		
Potassium	1.33	0.50		mg/L	2	7440-09-7		
Sodium	18.9	0.50		mg/L	2	7440-23-5		

Lab Sample ID: S43480.04 (continued)
Sample Tag: MW 112

Method: E245.1, Run Date: 12/16/22 15:17, Analyst: CTV

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags	Limits
Mercury	Not detected	0.0002		mg/L	1	7439-97-6		

Organics - Volatiles

Method: SW5030C/8260C, Run Date: 12/25/22 18:13, Analyst: KAG

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags	Limits
Diisopropyl ether (DIPE)	Not detected	5		ug/L	1	108-20-3		

Method: SW8260B - SIM, Run Date: 12/21/22 15:47, Analyst: KAG

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags	Limits
1,2-Dibromo-3-chloropropane*	Not detected	0.05		ug/L	1	96-12-8		

Volatile Organics, Method: SW5030C/8260C, Run Date: 12/18/22 21:03, Analyst: KAG

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags	Limits
Acetone	Not detected	50		ug/L	1	67-64-1		
tert-Methyl butyl ether (MTBE)	Not detected	5		ug/L	1	1634-04-4		
Acrylonitrile	Not detected	2		ug/L	1	107-13-1		
2-Butanone (MEK)	Not detected	25		ug/L	1	78-93-3		200,000
Dichlorodifluoromethane	Not detected	5		ug/L	1	75-71-8		
Chloromethane	Not detected	5		ug/L	1	74-87-3		
Vinyl chloride	Not detected	1		ug/L	1	75-01-4		200
Bromomethane	Not detected	5		ug/L	1	74-83-9		
Chloroethane	Not detected	5		ug/L	1	75-00-3		
Trichlorofluoromethane	Not detected	1		ug/L	1	75-69-4		
1,1-Dichloroethene	Not detected	1		ug/L	1	75-35-4		700
Methylene chloride	Not detected	5		ug/L	1	75-09-2		
trans-1,2-Dichloroethene	Not detected	1		ug/L	1	156-60-5		
1,1-Dichloroethane	Not detected	1		ug/L	1	75-34-3		
cis-1,2-Dichloroethene	Not detected	1		ug/L	1	156-59-2		
Chloroform	Not detected	1		ug/L	1	67-66-3		6,000
1,1,1-Trichloroethane	Not detected	1		ug/L	1	71-55-6		
4-Methyl-2-pentanone (MIBK)	Not detected	50		ug/L	1	108-10-1		
Carbon tetrachloride	Not detected	1		ug/L	1	56-23-5		500
Benzene	Not detected	1		ug/L	1	71-43-2		500
1,2-Dichloroethane	Not detected	1		ug/L	1	107-06-2		500
Trichloroethene	Not detected	1		ug/L	1	79-01-6		500
1,2-Dichloropropane	Not detected	1		ug/L	1	78-87-5		
Bromodichloromethane	Not detected	1		ug/L	1	75-27-4		
Dibromomethane	Not detected	5		ug/L	1	74-95-3		
cis-1,3-Dichloropropene	Not detected	1		ug/L	1	10061-01-5		
Toluene	Not detected	1		ug/L	1	108-88-3		
trans-1,3-Dichloropropene	Not detected	1		ug/L	1	10061-02-6		
1,1,2-Trichloroethane	Not detected	1		ug/L	1	79-00-5		
Tetrachloroethene	Not detected	1		ug/L	1	127-18-4		700
Dibromochloromethane	Not detected	5		ug/L	1	124-48-1		
1,2-Dibromoethane	Not detected	1		ug/L	1	106-93-4		
Chlorobenzene	Not detected	1		ug/L	1	108-90-7		100,000
1,1,1,2-Tetrachloroethane	Not detected	1		ug/L	1	630-20-6		
Ethylbenzene	Not detected	1		ug/L	1	100-41-4		
p,m-Xylene*	Not detected	2		ug/L	1			
o-Xylene	Not detected	1		ug/L	1	95-47-6		

Lab Sample ID: S43480.04 (continued)
Sample Tag: MW 112

Volatile Organics, Method: SW5030C/8260C, Run Date: 12/18/22 21:03, Analyst: KAG (continued)

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags	Limits
Styrene	Not detected	1		ug/L	1	100-42-5		
Isopropylbenzene	Not detected	5		ug/L	1	98-82-8		
Bromoform	Not detected	1		ug/L	1	75-25-2		
1,1,2,2-Tetrachloroethane	Not detected	1		ug/L	1	79-34-5		
1,2,3-Trichloropropane	Not detected	1		ug/L	1	96-18-4		
n-Propylbenzene	Not detected	1		ug/L	1	103-65-1		
Bromobenzene	Not detected	1		ug/L	1	108-86-1		
1,3,5-Trimethylbenzene	Not detected	1		ug/L	1	108-67-8		
tert-Butylbenzene	Not detected	1		ug/L	1	98-06-6		
1,2,4-Trimethylbenzene	Not detected	1		ug/L	1	95-63-6		
sec-Butylbenzene	Not detected	1		ug/L	1	135-98-8		
p-Isopropyltoluene	Not detected	5		ug/L	1	99-87-6		
1,3-Dichlorobenzene	Not detected	1		ug/L	1	541-73-1		
1,4-Dichlorobenzene	Not detected	1		ug/L	1	106-46-7		7,500
1,2-Dichlorobenzene	Not detected	1		ug/L	1	95-50-1		
1,2,3-Trimethylbenzene	Not detected	1		ug/L	1	526-73-8		
n-Butylbenzene	Not detected	1		ug/L	1	104-51-8		
1,2,4-Trichlorobenzene	Not detected	5		ug/L	1	120-82-1		
1,2,3-Trichlorobenzene	Not detected	5		ug/L	1	87-61-6		
Naphthalene	Not detected	5		ug/L	1	91-20-3		
Acrolein	Not detected	1		ug/L	1	107-02-8		
2-Chlorotoluene	Not detected	1		ug/L	1	95-49-8		
4-Chlorotoluene	Not detected	1		ug/L	1	106-43-4		
1,3-Dichloropropane	Not detected	1		ug/L	1	142-28-9		
1,1-Dichloropropene	Not detected	1		ug/L	1	563-58-6		
2,2-Dichloropropane	Not detected	1		ug/L	1	594-20-7		
Hexachlorobutadiene	Not detected	1		ug/L	1	87-68-3		500
1,1,2-Trichloro-1,2,2-trifluoroethane	Not detected	1		ug/L	1	76-13-1		

Other / Misc.

Method: , Run Date: 12/18/22 20:02, Analyst: EF

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags	Limits
Alcohols*	Completed				1		O	

Method: , Run Date: 12/21/22 21:50, Analyst: EF

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags	Limits
Misc. Special Project*	Completed				1		O	

O-Analysis performed by outside laboratory. See attached report.

Lab Sample ID: S43480.05
Sample Tag: MW 111
Collected Date/Time: 12/14/2022 12:31
Matrix: Water
COC Reference: 158653

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
3	40ml Glass	HCL	Yes	4.3	IR
3	40ml Glass	None	Yes	4.3	IR
2	125ml Plastic	HNO3	Yes	4.3	IR

Extraction / Prep.

Parameter	Result	Method	Run Date	Analyst	Flags
Mercury Digestion	Completed	E245.1	12/16/22 13:13	CTV	
pH check for VOCs*	<2	N/A	12/19/22 11:40	JKJ	
Metal Digestion	Completed	SW3015A	12/19/22 09:45	CCM	

Metals

Method: E200.8, Run Date: 12/19/22 12:03, Analyst: CCM

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags	Limits
Aluminum	Not detected	0.010		mg/L	2	7429-90-5		
Antimony*	Not detected	0.001		mg/L	2	7440-36-0		
Arsenic	Not detected	0.002		mg/L	2	7440-38-2		
Barium	0.010	0.005		mg/L	2	7440-39-3		
Beryllium	Not detected	0.001		mg/L	2	7440-41-7		
Boron	0.06	0.04		mg/L	2	7440-42-8		
Cadmium	Not detected	0.0005		mg/L	2	7440-43-9		
Chromium	Not detected	0.005		mg/L	2	7440-47-3		
Cobalt	Not detected	0.005		mg/L	2	7440-48-4		
Iron	0.14	0.02		mg/L	2	7439-89-6		
Lead	Not detected	0.003		mg/L	2	7439-92-1		
Manganese	0.674	0.005		mg/L	2	7439-96-5		
Molybdenum	Not detected	0.005		mg/L	2	7439-98-7		
Nickel	Not detected	0.005		mg/L	2	7440-02-0		
Selenium	Not detected	0.005		mg/L	2	7782-49-2		
Silver	Not detected	0.0002		mg/L	2	7440-22-4		
Strontium	0.303	0.005		mg/L	2	7440-24-6		
Thallium	Not detected	0.002		mg/L	2	7440-28-0		
Tin	Not detected	0.02		mg/L	2	7440-31-5		
Titanium	Not detected	0.005		mg/L	2	7440-32-6		
Vanadium	Not detected	0.002		mg/L	2	7440-62-2		
Zinc	Not detected	0.005		mg/L	2	7440-66-6		

Method: E200.8, Run Date: 12/19/22 15:03, Analyst: CCM

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags	Limits
Calcium*	65.5	0.50		mg/L	2	7440-70-2		
Magnesium	9.71	0.50		mg/L	2	7439-95-4		
Potassium	1.55	0.50		mg/L	2	7440-09-7		
Sodium	15.2	0.50		mg/L	2	7440-23-5		

Lab Sample ID: S43480.05 (continued)
Sample Tag: MW 111

Method: E245.1, Run Date: 12/16/22 15:20, Analyst: CTV

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags	Limits
Mercury	Not detected	0.0002		mg/L	1	7439-97-6		

Organics - Volatiles

Method: SW5030C/8260C, Run Date: 12/25/22 18:37, Analyst: KAG

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags	Limits
Diisopropyl ether (DIPE)	Not detected	5		ug/L	1	108-20-3		

Method: SW8260B - SIM, Run Date: 12/21/22 16:08, Analyst: KAG

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags	Limits
1,2-Dibromo-3-chloropropane*	Not detected	0.05		ug/L	1	96-12-8		

Volatile Organics, Method: SW5030C/8260C, Run Date: 12/18/22 21:22, Analyst: KAG

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags	Limits
Acetone	Not detected	50		ug/L	1	67-64-1		
tert-Methyl butyl ether (MTBE)	Not detected	5		ug/L	1	1634-04-4		
Acrylonitrile	Not detected	2		ug/L	1	107-13-1		
2-Butanone (MEK)	Not detected	25		ug/L	1	78-93-3		200,000
Dichlorodifluoromethane	Not detected	5		ug/L	1	75-71-8		
Chloromethane	Not detected	5		ug/L	1	74-87-3		
Vinyl chloride	Not detected	1		ug/L	1	75-01-4		200
Bromomethane	Not detected	5		ug/L	1	74-83-9		
Chloroethane	Not detected	5		ug/L	1	75-00-3		
Trichlorofluoromethane	Not detected	1		ug/L	1	75-69-4		
1,1-Dichloroethene	Not detected	1		ug/L	1	75-35-4		700
Methylene chloride	Not detected	5		ug/L	1	75-09-2		
trans-1,2-Dichloroethene	Not detected	1		ug/L	1	156-60-5		
1,1-Dichloroethane	Not detected	1		ug/L	1	75-34-3		
cis-1,2-Dichloroethene	2	1		ug/L	1	156-59-2		
Chloroform	Not detected	1		ug/L	1	67-66-3		6,000
1,1,1-Trichloroethane	Not detected	1		ug/L	1	71-55-6		
4-Methyl-2-pentanone (MIBK)	Not detected	50		ug/L	1	108-10-1		
Carbon tetrachloride	Not detected	1		ug/L	1	56-23-5		500
Benzene	Not detected	1		ug/L	1	71-43-2		500
1,2-Dichloroethane	Not detected	1		ug/L	1	107-06-2		500
Trichloroethene	3	1		ug/L	1	79-01-6		500
1,2-Dichloropropane	Not detected	1		ug/L	1	78-87-5		
Bromodichloromethane	Not detected	1		ug/L	1	75-27-4		
Dibromomethane	Not detected	5		ug/L	1	74-95-3		
cis-1,3-Dichloropropene	Not detected	1		ug/L	1	10061-01-5		
Toluene	Not detected	1		ug/L	1	108-88-3		
trans-1,3-Dichloropropene	Not detected	1		ug/L	1	10061-02-6		
1,1,2-Trichloroethane	Not detected	1		ug/L	1	79-00-5		
Tetrachloroethene	3	1		ug/L	1	127-18-4		700
Dibromochloromethane	Not detected	5		ug/L	1	124-48-1		
1,2-Dibromoethane	Not detected	1		ug/L	1	106-93-4		
Chlorobenzene	2	1		ug/L	1	108-90-7		100,000
1,1,1,2-Tetrachloroethane	Not detected	1		ug/L	1	630-20-6		
Ethylbenzene	Not detected	1		ug/L	1	100-41-4		
p,m-Xylene*	Not detected	2		ug/L	1			
o-Xylene	Not detected	1		ug/L	1	95-47-6		

Lab Sample ID: S43480.05 (continued)
Sample Tag: MW 111

Volatile Organics, Method: SW5030C/8260C, Run Date: 12/18/22 21:22, Analyst: KAG (continued)

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags	Limits
Styrene	Not detected	1		ug/L	1	100-42-5		
Isopropylbenzene	Not detected	5		ug/L	1	98-82-8		
Bromoform	Not detected	1		ug/L	1	75-25-2		
1,1,2,2-Tetrachloroethane	1	1		ug/L	1	79-34-5		
1,2,3-Trichloropropane	Not detected	1		ug/L	1	96-18-4		
n-Propylbenzene	Not detected	1		ug/L	1	103-65-1		
Bromobenzene	Not detected	1		ug/L	1	108-86-1		
1,3,5-Trimethylbenzene	Not detected	1		ug/L	1	108-67-8		
tert-Butylbenzene	Not detected	1		ug/L	1	98-06-6		
1,2,4-Trimethylbenzene	Not detected	1		ug/L	1	95-63-6		
sec-Butylbenzene	Not detected	1		ug/L	1	135-98-8		
p-Isopropyltoluene	Not detected	5		ug/L	1	99-87-6		
1,3-Dichlorobenzene	Not detected	1		ug/L	1	541-73-1		
1,4-Dichlorobenzene	Not detected	1		ug/L	1	106-46-7		7,500
1,2-Dichlorobenzene	Not detected	1		ug/L	1	95-50-1		
1,2,3-Trimethylbenzene	Not detected	1		ug/L	1	526-73-8		
n-Butylbenzene	Not detected	1		ug/L	1	104-51-8		
1,2,4-Trichlorobenzene	Not detected	5		ug/L	1	120-82-1		
1,2,3-Trichlorobenzene	Not detected	5		ug/L	1	87-61-6		
Naphthalene	Not detected	5		ug/L	1	91-20-3		
Acrolein	Not detected	1		ug/L	1	107-02-8		
2-Chlorotoluene	Not detected	1		ug/L	1	95-49-8		
4-Chlorotoluene	Not detected	1		ug/L	1	106-43-4		
1,3-Dichloropropane	Not detected	1		ug/L	1	142-28-9		
1,1-Dichloropropene	Not detected	1		ug/L	1	563-58-6		
2,2-Dichloropropane	Not detected	1		ug/L	1	594-20-7		
Hexachlorobutadiene	Not detected	1		ug/L	1	87-68-3		500
1,1,2-Trichloro-1,2,2-trifluoroethane	Not detected	1		ug/L	1	76-13-1		

Other / Misc.

Method: , Run Date: 12/18/22 20:23, Analyst: EF

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags	Limits
Alcohols*	Completed				1		O	

Method: , Run Date: 12/21/22 22:03, Analyst: EF

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags	Limits
Misc. Special Project*	Completed				1		O	

O-Analysis performed by outside laboratory. See attached report.

Lab Sample ID: S43480.06
Sample Tag: MW 110
Collected Date/Time: 12/14/2022 13:21
Matrix: Water
COC Reference: 158653

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
3	40ml Glass	HCL	Yes	4.3	IR
3	40ml Glass	None	Yes	4.3	IR
2	125ml Plastic	HNO3	Yes	4.3	IR

Extraction / Prep.

Parameter	Result	Method	Run Date	Analyst	Flags
Mercury Digestion	Completed	E245.1	12/16/22 13:13	CTV	
pH check for VOCs*	<2	N/A	12/19/22 11:40	JKJ	
Metal Digestion	Completed	SW3015A	12/19/22 09:45	CCM	

Metals

Method: E200.8, Run Date: 12/19/22 12:05, Analyst: CCM

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags	Limits
Aluminum	Not detected	0.010		mg/L	2	7429-90-5		
Antimony*	Not detected	0.001		mg/L	2	7440-36-0		
Arsenic	Not detected	0.002		mg/L	2	7440-38-2		
Barium	0.011	0.005		mg/L	2	7440-39-3		
Beryllium	Not detected	0.001		mg/L	2	7440-41-7		
Boron	0.08	0.04		mg/L	2	7440-42-8		
Cadmium	Not detected	0.0005		mg/L	2	7440-43-9		
Chromium	Not detected	0.005		mg/L	2	7440-47-3		
Cobalt	Not detected	0.005		mg/L	2	7440-48-4		
Iron	0.87	0.02		mg/L	2	7439-89-6		
Lead	Not detected	0.003		mg/L	2	7439-92-1		
Manganese	0.626	0.005		mg/L	2	7439-96-5		
Molybdenum	Not detected	0.005		mg/L	2	7439-98-7		
Nickel	Not detected	0.005		mg/L	2	7440-02-0		
Selenium	Not detected	0.005		mg/L	2	7782-49-2		
Silver	Not detected	0.0002		mg/L	2	7440-22-4		
Strontium	0.240	0.005		mg/L	2	7440-24-6		
Thallium	Not detected	0.002		mg/L	2	7440-28-0		
Tin	Not detected	0.02		mg/L	2	7440-31-5		
Titanium	Not detected	0.005		mg/L	2	7440-32-6		
Vanadium	Not detected	0.002		mg/L	2	7440-62-2		
Zinc	Not detected	0.005		mg/L	2	7440-66-6		

Method: E200.8, Run Date: 12/19/22 15:04, Analyst: CCM

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags	Limits
Calcium*	68.8	0.50		mg/L	2	7440-70-2		
Magnesium	10.9	0.50		mg/L	2	7439-95-4		
Potassium	1.60	0.50		mg/L	2	7440-09-7		
Sodium	14.8	0.50		mg/L	2	7440-23-5		

Lab Sample ID: S43480.06 (continued)
Sample Tag: MW 110

Method: E245.1, Run Date: 12/16/22 15:23, Analyst: CTV

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags	Limits
Mercury	Not detected	0.0002		mg/L	1	7439-97-6		

Organics - Volatiles

Method: SW5030C/8260C, Run Date: 12/25/22 19:01, Analyst: KAG

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags	Limits
Diisopropyl ether (DIPE)	Not detected	5		ug/L	1	108-20-3		

Method: SW8260B - SIM, Run Date: 12/21/22 16:29, Analyst: KAG

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags	Limits
1,2-Dibromo-3-chloropropane*	Not detected	0.05		ug/L	1	96-12-8		

Volatile Organics, Method: SW5030C/8260C, Run Date: 12/18/22 21:41, Analyst: KAG

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags	Limits
Acetone	Not detected	50		ug/L	1	67-64-1		
tert-Methyl butyl ether (MTBE)	Not detected	5		ug/L	1	1634-04-4		
Acrylonitrile	Not detected	2		ug/L	1	107-13-1		
2-Butanone (MEK)	Not detected	25		ug/L	1	78-93-3		200,000
Dichlorodifluoromethane	Not detected	5		ug/L	1	75-71-8		
Chloromethane	Not detected	5		ug/L	1	74-87-3		
Vinyl chloride	3	1		ug/L	1	75-01-4		200
Bromomethane	Not detected	5		ug/L	1	74-83-9		
Chloroethane	Not detected	5		ug/L	1	75-00-3		
Trichlorofluoromethane	Not detected	1		ug/L	1	75-69-4		
1,1-Dichloroethene	Not detected	1		ug/L	1	75-35-4		700
Methylene chloride	Not detected	5		ug/L	1	75-09-2		
trans-1,2-Dichloroethene	Not detected	1		ug/L	1	156-60-5		
1,1-Dichloroethane	Not detected	1		ug/L	1	75-34-3		
cis-1,2-Dichloroethene	Not detected	1		ug/L	1	156-59-2		
Chloroform	Not detected	1		ug/L	1	67-66-3		6,000
1,1,1-Trichloroethane	Not detected	1		ug/L	1	71-55-6		
4-Methyl-2-pentanone (MIBK)	Not detected	50		ug/L	1	108-10-1		
Carbon tetrachloride	Not detected	1		ug/L	1	56-23-5		500
Benzene	Not detected	1		ug/L	1	71-43-2		500
1,2-Dichloroethane	Not detected	1		ug/L	1	107-06-2		500
Trichloroethene	Not detected	1		ug/L	1	79-01-6		500
1,2-Dichloropropane	Not detected	1		ug/L	1	78-87-5		
Bromodichloromethane	Not detected	1		ug/L	1	75-27-4		
Dibromomethane	Not detected	5		ug/L	1	74-95-3		
cis-1,3-Dichloropropene	Not detected	1		ug/L	1	10061-01-5		
Toluene	Not detected	1		ug/L	1	108-88-3		
trans-1,3-Dichloropropene	Not detected	1		ug/L	1	10061-02-6		
1,1,2-Trichloroethane	Not detected	1		ug/L	1	79-00-5		
Tetrachloroethene	Not detected	1		ug/L	1	127-18-4		700
Dibromochloromethane	Not detected	5		ug/L	1	124-48-1		
1,2-Dibromoethane	Not detected	1		ug/L	1	106-93-4		
Chlorobenzene	4	1		ug/L	1	108-90-7		100,000
1,1,1,2-Tetrachloroethane	Not detected	1		ug/L	1	630-20-6		
Ethylbenzene	Not detected	1		ug/L	1	100-41-4		
p,m-Xylene*	Not detected	2		ug/L	1			
o-Xylene	Not detected	1		ug/L	1	95-47-6		

Lab Sample ID: S43480.06 (continued)
Sample Tag: MW 110

Volatile Organics, Method: SW5030C/8260C, Run Date: 12/18/22 21:41, Analyst: KAG (continued)

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags	Limits
Styrene	Not detected	1		ug/L	1	100-42-5		
Isopropylbenzene	Not detected	5		ug/L	1	98-82-8		
Bromoform	Not detected	1		ug/L	1	75-25-2		
1,1,2,2-Tetrachloroethane	Not detected	1		ug/L	1	79-34-5		
1,2,3-Trichloropropane	Not detected	1		ug/L	1	96-18-4		
n-Propylbenzene	Not detected	1		ug/L	1	103-65-1		
Bromobenzene	Not detected	1		ug/L	1	108-86-1		
1,3,5-Trimethylbenzene	Not detected	1		ug/L	1	108-67-8		
tert-Butylbenzene	Not detected	1		ug/L	1	98-06-6		
1,2,4-Trimethylbenzene	Not detected	1		ug/L	1	95-63-6		
sec-Butylbenzene	Not detected	1		ug/L	1	135-98-8		
p-Isopropyltoluene	Not detected	5		ug/L	1	99-87-6		
1,3-Dichlorobenzene	Not detected	1		ug/L	1	541-73-1		
1,4-Dichlorobenzene	Not detected	1		ug/L	1	106-46-7		7,500
1,2-Dichlorobenzene	Not detected	1		ug/L	1	95-50-1		
1,2,3-Trimethylbenzene	Not detected	1		ug/L	1	526-73-8		
n-Butylbenzene	Not detected	1		ug/L	1	104-51-8		
1,2,4-Trichlorobenzene	Not detected	5		ug/L	1	120-82-1		
1,2,3-Trichlorobenzene	Not detected	5		ug/L	1	87-61-6		
Naphthalene	Not detected	5		ug/L	1	91-20-3		
Acrolein	Not detected	1		ug/L	1	107-02-8		
2-Chlorotoluene	Not detected	1		ug/L	1	95-49-8		
4-Chlorotoluene	Not detected	1		ug/L	1	106-43-4		
1,3-Dichloropropane	Not detected	1		ug/L	1	142-28-9		
1,1-Dichloropropene	Not detected	1		ug/L	1	563-58-6		
2,2-Dichloropropane	Not detected	1		ug/L	1	594-20-7		
Hexachlorobutadiene	Not detected	1		ug/L	1	87-68-3		500
1,1,2-Trichloro-1,2,2-trifluoroethane	Not detected	1		ug/L	1	76-13-1		

Other / Misc.

Method: , Run Date: 12/18/22 20:43, Analyst: EF

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags	Limits
Alcohols*	Completed				1		O	

Method: , Run Date: 12/21/22 22:07, Analyst: EF

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags	Limits
Misc. Special Project*	Completed				1		O	

O-Analysis performed by outside laboratory. See attached report.

Lab Sample ID: S43480.07
Sample Tag: MW 109
Collected Date/Time: 12/14/2022 14:15
Matrix: Water
COC Reference: 158653

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
3	40ml Glass	HCL	Yes	4.3	IR
3	40ml Glass	None	Yes	4.3	IR
2	125ml Plastic	HNO3	Yes	4.3	IR

Extraction / Prep.

Parameter	Result	Method	Run Date	Analyst	Flags
Mercury Digestion	Completed	E245.1	12/16/22 13:13	CTV	
pH check for VOCs*	<2	N/A	12/19/22 11:40	JKJ	
Metal Digestion	Completed	SW3015A	12/19/22 09:45	CCM	

Metals

Method: E200.8, Run Date: 12/19/22 12:07, Analyst: CCM

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags	Limits
Aluminum	Not detected	0.010		mg/L	2	7429-90-5		
Antimony*	Not detected	0.001		mg/L	2	7440-36-0		
Arsenic	0.007	0.002		mg/L	2	7440-38-2		
Barium	0.057	0.005		mg/L	2	7440-39-3		
Beryllium	Not detected	0.001		mg/L	2	7440-41-7		
Boron	0.12	0.04		mg/L	2	7440-42-8		
Cadmium	Not detected	0.0005		mg/L	2	7440-43-9		
Chromium	Not detected	0.005		mg/L	2	7440-47-3		
Cobalt	Not detected	0.005		mg/L	2	7440-48-4		
Iron	4.96	0.02		mg/L	2	7439-89-6		
Lead	Not detected	0.003		mg/L	2	7439-92-1		
Manganese	0.390	0.005		mg/L	2	7439-96-5		
Molybdenum	Not detected	0.005		mg/L	2	7439-98-7		
Nickel	Not detected	0.005		mg/L	2	7440-02-0		
Selenium	Not detected	0.005		mg/L	2	7782-49-2		
Silver	Not detected	0.0002		mg/L	2	7440-22-4		
Strontium	0.257	0.005		mg/L	2	7440-24-6		
Thallium	Not detected	0.002		mg/L	2	7440-28-0		
Tin	Not detected	0.02		mg/L	2	7440-31-5		
Titanium	Not detected	0.005		mg/L	2	7440-32-6		
Vanadium	Not detected	0.002		mg/L	2	7440-62-2		
Zinc	Not detected	0.005		mg/L	2	7440-66-6		

Method: E200.8, Run Date: 12/19/22 15:06, Analyst: CCM

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags	Limits
Calcium*	155	0.50		mg/L	2	7440-70-2		
Magnesium	31.6	0.50		mg/L	2	7439-95-4		
Potassium	3.98	0.50		mg/L	2	7440-09-7		
Sodium	59.5	0.50		mg/L	2	7440-23-5		

Lab Sample ID: S43480.07 (continued)
Sample Tag: MW 109

Method: E245.1, Run Date: 12/16/22 15:26, Analyst: CTV

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags	Limits
Mercury	Not detected	0.0002		mg/L	1	7439-97-6		

Organics - Volatiles

Method: SW5030C/8260C, Run Date: 12/25/22 19:25, Analyst: KAG

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags	Limits
Diisopropyl ether (DIPE)	Not detected	5		ug/L	1	108-20-3		

Method: SW8260B - SIM, Run Date: 12/21/22 16:50, Analyst: KAG

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags	Limits
1,2-Dibromo-3-chloropropane*	Not detected	0.05		ug/L	1	96-12-8		

Volatile Organics, Method: SW5030C/8260C, Run Date: 12/18/22 22:00, Analyst: KAG

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags	Limits
Acetone	Not detected	50		ug/L	1	67-64-1		
tert-Methyl butyl ether (MTBE)	Not detected	5		ug/L	1	1634-04-4		
Acrylonitrile	Not detected	2		ug/L	1	107-13-1		
2-Butanone (MEK)	Not detected	25		ug/L	1	78-93-3		200,000
Dichlorodifluoromethane	Not detected	5		ug/L	1	75-71-8		
Chloromethane	Not detected	5		ug/L	1	74-87-3		
Vinyl chloride	Not detected	1		ug/L	1	75-01-4		200
Bromomethane	Not detected	5		ug/L	1	74-83-9		
Chloroethane	Not detected	5		ug/L	1	75-00-3		
Trichlorofluoromethane	Not detected	1		ug/L	1	75-69-4		
1,1-Dichloroethene	Not detected	1		ug/L	1	75-35-4		700
Methylene chloride	Not detected	5		ug/L	1	75-09-2		
trans-1,2-Dichloroethene	Not detected	1		ug/L	1	156-60-5		
1,1-Dichloroethane	Not detected	1		ug/L	1	75-34-3		
cis-1,2-Dichloroethene	Not detected	1		ug/L	1	156-59-2		
Chloroform	Not detected	1		ug/L	1	67-66-3		6,000
1,1,1-Trichloroethane	Not detected	1		ug/L	1	71-55-6		
4-Methyl-2-pentanone (MIBK)	Not detected	50		ug/L	1	108-10-1		
Carbon tetrachloride	Not detected	1		ug/L	1	56-23-5		500
Benzene	Not detected	1		ug/L	1	71-43-2		500
1,2-Dichloroethane	Not detected	1		ug/L	1	107-06-2		500
Trichloroethene	Not detected	1		ug/L	1	79-01-6		500
1,2-Dichloropropane	Not detected	1		ug/L	1	78-87-5		
Bromodichloromethane	Not detected	1		ug/L	1	75-27-4		
Dibromomethane	Not detected	5		ug/L	1	74-95-3		
cis-1,3-Dichloropropene	Not detected	1		ug/L	1	10061-01-5		
Toluene	Not detected	1		ug/L	1	108-88-3		
trans-1,3-Dichloropropene	Not detected	1		ug/L	1	10061-02-6		
1,1,2-Trichloroethane	Not detected	1		ug/L	1	79-00-5		
Tetrachloroethene	Not detected	1		ug/L	1	127-18-4		700
Dibromochloromethane	Not detected	5		ug/L	1	124-48-1		
1,2-Dibromoethane	Not detected	1		ug/L	1	106-93-4		
Chlorobenzene	Not detected	1		ug/L	1	108-90-7		100,000
1,1,1,2-Tetrachloroethane	Not detected	1		ug/L	1	630-20-6		
Ethylbenzene	Not detected	1		ug/L	1	100-41-4		
p,m-Xylene*	Not detected	2		ug/L	1			
o-Xylene	Not detected	1		ug/L	1	95-47-6		

Lab Sample ID: S43480.07 (continued)
Sample Tag: MW 109

Volatile Organics, Method: SW5030C/8260C, Run Date: 12/18/22 22:00, Analyst: KAG (continued)

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags	Limits
Styrene	Not detected	1		ug/L	1	100-42-5		
Isopropylbenzene	Not detected	5		ug/L	1	98-82-8		
Bromoform	Not detected	1		ug/L	1	75-25-2		
1,1,2,2-Tetrachloroethane	Not detected	1		ug/L	1	79-34-5		
1,2,3-Trichloropropane	Not detected	1		ug/L	1	96-18-4		
n-Propylbenzene	Not detected	1		ug/L	1	103-65-1		
Bromobenzene	Not detected	1		ug/L	1	108-86-1		
1,3,5-Trimethylbenzene	Not detected	1		ug/L	1	108-67-8		
tert-Butylbenzene	Not detected	1		ug/L	1	98-06-6		
1,2,4-Trimethylbenzene	Not detected	1		ug/L	1	95-63-6		
sec-Butylbenzene	Not detected	1		ug/L	1	135-98-8		
p-Isopropyltoluene	Not detected	5		ug/L	1	99-87-6		
1,3-Dichlorobenzene	Not detected	1		ug/L	1	541-73-1		
1,4-Dichlorobenzene	10	1		ug/L	1	106-46-7		7,500
1,2-Dichlorobenzene	33	1		ug/L	1	95-50-1		
1,2,3-Trimethylbenzene	Not detected	1		ug/L	1	526-73-8		
n-Butylbenzene	Not detected	1		ug/L	1	104-51-8		
1,2,4-Trichlorobenzene	Not detected	5		ug/L	1	120-82-1		
1,2,3-Trichlorobenzene	Not detected	5		ug/L	1	87-61-6		
Naphthalene	Not detected	5		ug/L	1	91-20-3		
Acrolein	Not detected	1		ug/L	1	107-02-8		
2-Chlorotoluene	Not detected	1		ug/L	1	95-49-8		
4-Chlorotoluene	Not detected	1		ug/L	1	106-43-4		
1,3-Dichloropropane	Not detected	1		ug/L	1	142-28-9		
1,1-Dichloropropene	Not detected	1		ug/L	1	563-58-6		
2,2-Dichloropropane	Not detected	1		ug/L	1	594-20-7		
Hexachlorobutadiene	Not detected	1		ug/L	1	87-68-3		500
1,1,2-Trichloro-1,2,2-trifluoroethane	Not detected	1		ug/L	1	76-13-1		

Other / Misc.

Method: , Run Date: 12/18/22 21:04, Analyst: EF

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags	Limits
Alcohols*	Completed				1		O	

Method: , Run Date: 12/21/22 22:10, Analyst: EF

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags	Limits
Misc. Special Project*	Completed				1		O	

O-Analysis performed by outside laboratory. See attached report.

Lab Sample ID: S43480.08
Sample Tag: MW 108
Collected Date/Time: 12/14/2022 14:58
Matrix: Water
COC Reference: 158653

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
3	40ml Glass	HCL	Yes	4.3	IR
3	40ml Glass	None	Yes	4.3	IR
2	125ml Plastic	HNO3	Yes	4.3	IR

Extraction / Prep.

Parameter	Result	Method	Run Date	Analyst	Flags
Mercury Digestion	Completed	E245.1	12/16/22 13:13	CTV	
pH check for VOCs*	<2	N/A	12/19/22 11:40	JKJ	
Metal Digestion	Completed	SW3015A	12/19/22 09:45	CCM	

Metals

Method: E200.8, Run Date: 12/19/22 12:11, Analyst: CCM

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags	Limits
Aluminum	0.147	0.010		mg/L	2	7429-90-5		
Antimony*	Not detected	0.001		mg/L	2	7440-36-0		
Arsenic	Not detected	0.002		mg/L	2	7440-38-2		
Barium	0.044	0.005		mg/L	2	7440-39-3		
Beryllium	Not detected	0.001		mg/L	2	7440-41-7		
Boron	0.08	0.04		mg/L	2	7440-42-8		
Cadmium	Not detected	0.0005		mg/L	2	7440-43-9		
Chromium	Not detected	0.005		mg/L	2	7440-47-3		
Cobalt	Not detected	0.005		mg/L	2	7440-48-4		
Iron	0.39	0.02		mg/L	2	7439-89-6		
Lead	Not detected	0.003		mg/L	2	7439-92-1		
Manganese	0.348	0.005		mg/L	2	7439-96-5		
Molybdenum	Not detected	0.005		mg/L	2	7439-98-7		
Nickel	Not detected	0.005		mg/L	2	7440-02-0		
Selenium	Not detected	0.005		mg/L	2	7782-49-2		
Silver	Not detected	0.0002		mg/L	2	7440-22-4		
Strontium	0.198	0.005		mg/L	2	7440-24-6		
Thallium	Not detected	0.002		mg/L	2	7440-28-0		
Tin	Not detected	0.02		mg/L	2	7440-31-5		
Titanium	0.009	0.005		mg/L	2	7440-32-6		
Vanadium	Not detected	0.002		mg/L	2	7440-62-2		
Zinc	0.005	0.005		mg/L	2	7440-66-6		

Method: E200.8, Run Date: 12/19/22 15:07, Analyst: CCM

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags	Limits
Calcium*	102	0.50		mg/L	2	7440-70-2		
Magnesium	19.3	0.50		mg/L	2	7439-95-4		
Potassium	5.39	0.50		mg/L	2	7440-09-7		
Sodium	61.0	0.50		mg/L	2	7440-23-5		

Lab Sample ID: S43480.08 (continued)
Sample Tag: MW 108

Method: E245.1, Run Date: 12/16/22 15:30, Analyst: CTV

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags	Limits
Mercury	Not detected	0.0002		mg/L	1	7439-97-6		

Organics - Volatiles

Method: SW5030C/8260C, Run Date: 12/25/22 19:49, Analyst: KAG

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags	Limits
Diisopropyl ether (DIPE)	Not detected	5		ug/L	1	108-20-3		

Method: SW8260B - SIM, Run Date: 12/21/22 17:10, Analyst: KAG

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags	Limits
1,2-Dibromo-3-chloropropane*	Not detected	0.05		ug/L	1	96-12-8		

Volatile Organics, Method: SW5030C/8260C, Run Date: 12/18/22 22:20, Analyst: KAG

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags	Limits
Acetone	Not detected	50		ug/L	1	67-64-1		
tert-Methyl butyl ether (MTBE)	Not detected	5		ug/L	1	1634-04-4		
Acrylonitrile	Not detected	2		ug/L	1	107-13-1		
2-Butanone (MEK)	Not detected	25		ug/L	1	78-93-3		200,000
Dichlorodifluoromethane	Not detected	5		ug/L	1	75-71-8		
Chloromethane	Not detected	5		ug/L	1	74-87-3		
Vinyl chloride	Not detected	1		ug/L	1	75-01-4		200
Bromomethane	Not detected	5		ug/L	1	74-83-9		
Chloroethane	Not detected	5		ug/L	1	75-00-3		
Trichlorofluoromethane	Not detected	1		ug/L	1	75-69-4		
1,1-Dichloroethene	Not detected	1		ug/L	1	75-35-4		700
Methylene chloride	Not detected	5		ug/L	1	75-09-2		
trans-1,2-Dichloroethene	Not detected	1		ug/L	1	156-60-5		
1,1-Dichloroethane	Not detected	1		ug/L	1	75-34-3		
cis-1,2-Dichloroethene	Not detected	1		ug/L	1	156-59-2		
Chloroform	Not detected	1		ug/L	1	67-66-3		6,000
1,1,1-Trichloroethane	Not detected	1		ug/L	1	71-55-6		
4-Methyl-2-pentanone (MIBK)	Not detected	50		ug/L	1	108-10-1		
Carbon tetrachloride	Not detected	1		ug/L	1	56-23-5		500
Benzene	Not detected	1		ug/L	1	71-43-2		500
1,2-Dichloroethane	Not detected	1		ug/L	1	107-06-2		500
Trichloroethene	Not detected	1		ug/L	1	79-01-6		500
1,2-Dichloropropane	1	1		ug/L	1	78-87-5		
Bromodichloromethane	Not detected	1		ug/L	1	75-27-4		
Dibromomethane	Not detected	5		ug/L	1	74-95-3		
cis-1,3-Dichloropropene	Not detected	1		ug/L	1	10061-01-5		
Toluene	Not detected	1		ug/L	1	108-88-3		
trans-1,3-Dichloropropene	Not detected	1		ug/L	1	10061-02-6		
1,1,2-Trichloroethane	Not detected	1		ug/L	1	79-00-5		
Tetrachloroethene	Not detected	1		ug/L	1	127-18-4		700
Dibromochloromethane	Not detected	5		ug/L	1	124-48-1		
1,2-Dibromoethane	Not detected	1		ug/L	1	106-93-4		
Chlorobenzene	Not detected	1		ug/L	1	108-90-7		100,000
1,1,1,2-Tetrachloroethane	Not detected	1		ug/L	1	630-20-6		
Ethylbenzene	Not detected	1		ug/L	1	100-41-4		
p,m-Xylene*	Not detected	2		ug/L	1			
o-Xylene	Not detected	1		ug/L	1	95-47-6		

Lab Sample ID: S43480.08 (continued)
Sample Tag: MW 108

Volatile Organics, Method: SW5030C/8260C, Run Date: 12/18/22 22:20, Analyst: KAG (continued)

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags	Limits
Styrene	Not detected	1		ug/L	1	100-42-5		
Isopropylbenzene	Not detected	5		ug/L	1	98-82-8		
Bromoform	Not detected	1		ug/L	1	75-25-2		
1,1,2,2-Tetrachloroethane	Not detected	1		ug/L	1	79-34-5		
1,2,3-Trichloropropane	Not detected	1		ug/L	1	96-18-4		
n-Propylbenzene	Not detected	1		ug/L	1	103-65-1		
Bromobenzene	Not detected	1		ug/L	1	108-86-1		
1,3,5-Trimethylbenzene	Not detected	1		ug/L	1	108-67-8		
tert-Butylbenzene	Not detected	1		ug/L	1	98-06-6		
1,2,4-Trimethylbenzene	Not detected	1		ug/L	1	95-63-6		
sec-Butylbenzene	Not detected	1		ug/L	1	135-98-8		
p-Isopropyltoluene	Not detected	5		ug/L	1	99-87-6		
1,3-Dichlorobenzene	Not detected	1		ug/L	1	541-73-1		
1,4-Dichlorobenzene	Not detected	1		ug/L	1	106-46-7		7,500
1,2-Dichlorobenzene	Not detected	1		ug/L	1	95-50-1		
1,2,3-Trimethylbenzene	Not detected	1		ug/L	1	526-73-8		
n-Butylbenzene	Not detected	1		ug/L	1	104-51-8		
1,2,4-Trichlorobenzene	Not detected	5		ug/L	1	120-82-1		
1,2,3-Trichlorobenzene	Not detected	5		ug/L	1	87-61-6		
Naphthalene	Not detected	5		ug/L	1	91-20-3		
Acrolein	Not detected	1		ug/L	1	107-02-8		
2-Chlorotoluene	Not detected	1		ug/L	1	95-49-8		
4-Chlorotoluene	Not detected	1		ug/L	1	106-43-4		
1,3-Dichloropropane	Not detected	1		ug/L	1	142-28-9		
1,1-Dichloropropene	Not detected	1		ug/L	1	563-58-6		
2,2-Dichloropropane	Not detected	1		ug/L	1	594-20-7		
Hexachlorobutadiene	Not detected	1		ug/L	1	87-68-3		500
1,1,2-Trichloro-1,2,2-trifluoroethane	Not detected	1		ug/L	1	76-13-1		

Other / Misc.

Method: , Run Date: 12/18/22 21:25, Analyst: EF

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags	Limits
Alcohols*	Completed				1		O	

Method: , Run Date: 12/21/22 22:14, Analyst: EF

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags	Limits
Misc. Special Project*	Completed				1		O	

O-Analysis performed by outside laboratory. See attached report.

Merit Laboratories Login Checklist

Lab Set ID: S43480
Client: TRC (TRC)
Project: Detroit Axle - Eastern
Submitted: 12/15/2022 10:55 Login User: MMC

Attention: Kelly Cratsenburg
Address: TRC
1540 Eisenhower Place
Ann Arbor, MI 48108

Phone: 734-585-7829 C: FAX:
Email: KCratsenburg@trccompanies.com

Selection				Description	Note
Sample Receiving					
01.	[X] Yes	[ ] No	[ ] N/A	Samples are received at 4C +/- 2C Thermometer #	IR 4.3
02.	[X] Yes	[ ] No	[ ] N/A	Received on ice/ cooling process begun	
03.	[ ] Yes	[X] No	[ ] N/A	Samples shipped	
04.	[ ] Yes	[X] No	[ ] N/A	Samples left in 24 hr. drop box	
05.	[ ] Yes	[ ] No	[X] N/A	Are there custody seals/tape or is the drop box locked	
Chain of Custody					
06.	[ ] Yes	[X] No	[ ] N/A	COC adequately filled out	Analyses incorrect
07.	[X] Yes	[ ] No	[ ] N/A	COC signed and relinquished to the lab	
08.	[X] Yes	[ ] No	[ ] N/A	Sample tag on bottles match COC	
09.	[X] Yes	[ ] No	[ ] N/A	Subcontracting needed? Subcontacted to:	Eurofins
Preservation					
10.	[X] Yes	[ ] No	[ ] N/A	Do sample have correct chemical preservation	
11.	[X] Yes	[ ] No	[ ] N/A	Completed pH checks on preserved samples? (no VOAs)	
12.	[ ] Yes	[X] No	[ ] N/A	Did any samples need to be preserved in the lab?	
Bottle Conditions					
13.	[X] Yes	[ ] No	[ ] N/A	All bottles intact	
14.	[X] Yes	[ ] No	[ ] N/A	Appropriate analytical bottles are used	
15.	[X] Yes	[ ] No	[ ] N/A	Merit bottles used	
16.	[X] Yes	[ ] No	[ ] N/A	Sufficient sample volume received	
17.	[ ] Yes	[X] No	[ ] N/A	Samples require laboratory filtration	
18.	[X] Yes	[ ] No	[ ] N/A	Samples submitted within holding time	
19.	[ ] Yes	[X] No	[ ] N/A	Do water VOC or TOX bottles contain headspace	

Corrective action for all exceptions is to call the client and to notify the project manager.

Client Review By: _____ Date: _____

Merit Laboratories Bottle Preservation Check

Lab Set ID: S43480 Submitted: 12/15/2022 10:55

Client: TRC (TRC)

Project: Detroit Axle - Eastern

Initial Preservation Check: 12/15/2022 13:25 MMC

Preservation Recheck (E200.8): N/A

Attention: Kelly Cratsenburg
Address: TRC
1540 Eisenhower Place
Ann Arbor, MI 48108

Phone: 734-585-7829 C: FAX:
Email: KCratsenburg@trccompanies.com

Sample ID	Bottle / Preservation	pH (Orig)	Add ml	pH (New)	Notes
S43480.01	125ml Plastic HNO3	<2			
S43480.02	125ml Plastic HNO3	<2			
S43480.03	125ml Plastic HNO3	<2			
S43480.04	125ml Plastic HNO3	<2			
S43480.05	125ml Plastic HNO3	<2			
S43480.06	125ml Plastic HNO3	<2			
S43480.07	125ml Plastic HNO3	<2			
S43480.08	125ml Plastic HNO3	<2			

Merit Laboratories, Inc.

2680 East Lansing Dr., East Lansing, MI 48823
Phone (517) 332-0167 Fax (517) 332-4034
www.meritlabs.com

C.O.C. PAGE # _____ OF _____ 158653

CHAIN OF CUSTODY RECORD

REPORT TO

CONTACT NAME: Kelly Cratsenburg
COMPANY: TRC
ADDRESS: 1540 Eisenhower Place
CITY: Ann Arbor STATE: MI ZIP CODE: 48108
PHONE NO. | CELL NO. | P.O. NO.: 189451
E-MAIL ADDRESS | QUOTE NO.

INVOICE TO

CONTACT NAME ☐ SAME
COMPANY
ADDRESS
CITY STATE ZIP CODE
PHONE NO. | E-MAIL ADDRESS

PROJECT NO./NAME: Detroit Axle
SAMPLER(S) - PLEASE PRINT/SIGN NAME

TURNAROUND TIME REQUIRED ☐ 1 DAY ☐ 2 DAYS ☐ 3 DAYS ☐ STANDARD ☐ OTHER _____

DELIVERABLES REQUIRED ☐ STD ☐ LEVEL II ☐ LEVEL III ☐ LEVEL IV ☐ EDD ☐ OTHER _____

MATRIX CODE: W=WATER GW=GROUNDWATER WW=WASTEWATER S=SOIL L=LIQUID SD=SOLID SL=SLUDGE DW=DRINKING WATER O=OIL WP=WIPE A=AIR WS=WASTE

ANALYSIS (ATTACH LIST IF MORE SPACE IS REQUIRED)

Certifications
☐ OHIO VAP ☐ Drinking Water
☐ DoD ☐ NPDES
Project Locations
☐ Detroit ☐ New York
☐ Other _____
Special Instructions

MERIT LAB NO. (FOR LAB USE ONLY)	COLLECTION DATE	COLLECTION TIME	SAMPLE TAG IDENTIFICATION-DESCRIPTION	MATRIX	# OF BOTTLES	# Containers & Preservatives: NONE	HCl	HNO_3	H_2SO_4	NaOH	MeOH	OTHER	VOC, 1,4-Dioxane, IPA	Metals (Hardness)	Alcohols, Glycols
	12/14/22	0847	~~MW-118~~	W	7	X	X	X					X	X	X
43480.01	"	—	Dup #2	W	7	X	X	X					X	X	X
.02	"	0932	MW 119	W	7	X	X	X					X	X	X
.03	"	1032	MW 120	W	7	X	X	X					X	X	X
.04	"	1131	MW 113	W	7	X	X	X					X	X	X
.05	"	1231	MW 111	W	7	X	X	X					X	X	X
.06	"	1331	MW 110	W	7	X	X	X					X	X	X
.07	"	1431	MW 109	W	7	X	X	X					X	X	X
.08	"	1458	MW-108	W	7	X	X	X					X	X	X

RELINQUISHED BY: SIGNATURE/ORGANIZATION: TRC ☐ Sampler DATE: 12/14/22 TIME: 1432
RECEIVED BY: SIGNATURE/ORGANIZATION: ~~TRC~~ Irmen DATE: 12/15/22 TIME: 1055

RELINQUISHED BY: SIGNATURE/ORGANIZATION: TRC DATE: 12/15 TIME: 800
RECEIVED BY: SIGNATURE/ORGANIZATION: M Ailcato DATE: 12/15/22 TIME: 1055

SEAL NO. | SEAL INTACT YES ☐ NO ☐ | INITIALS
SEAL NO. | SEAL INTACT YES ☐ NO ☐ | INITIALS

NOTES: TEMP. ON ARRIVAL 4.3

PLEASE NOTE: SIGNING ACKNOWLEDGES ADHERENCE TO MERIT'S SAMPLE ACCEPTANCE POLICY ON REVERSE SIDE

Rev. 1.26.22

eurofins | Environment Testing

ANALYTICAL REPORT

PREPARED FOR

Attn: Lab Results
Merit Laboratories
2680 E Lansing Drive
East Lansing, Michigan 48823

Generated 12/29/2022 2:50:09 PM

JOB DESCRIPTION

S43480

JOB NUMBER

190-30653-1

Eurofins Michigan
10448 Citation Drive
Suite 200
Brighton MI 48116

See page two for job notes and contact information.

Job Notes

The test results in this report meet all NELAP requirements for parameters for which accreditation is required or available. Any exceptions to the NELAP requirements are noted in this report. Pursuant to NELAP, this report may not be reproduced, except in full, without the written approval of the laboratory. This report is confidential and is intended for the sole use of Eurofins Environment Testing North Central, LLC and its client. All questions regarding this report should be directed to the Eurofins Environment Testing North Central, LLC Project Manager who has signed this report.

The test results in this report relate only to the samples as received by the laboratory and will meet all requirements of the methodology, with any exceptions noted. This report shall not be reproduced except in full, without the express written approval of the laboratory. All questions should be directed to the Eurofins Environment Testing North Central, LLC Project Manager.

Authorization

Generated
12/29/2022 2:50:09 PM

Authorized for release by
Nicole Kalis, Project Manager I
Nicole.Kalis@et.eurofinsus.com
Designee for
Sue Schafer, Project Manager II
Sue.Schafer@et.eurofinsus.com
(810)229-2763

Table of Contents

Sample Summary

Client: Merit Laboratories
Project/Site: S43480

Job ID: 190-30653-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
190-30653-1	S43480.01	Water	12/14/22 00:01	12/16/22 10:38
190-30653-2	S43480.02	Water	12/14/22 09:30	12/16/22 10:38
190-30653-3	S43480.03	Water	12/14/22 10:30	12/16/22 10:38
190-30653-4	S43480.04	Water	12/14/22 11:25	12/16/22 10:38
190-30653-5	S43480.05	Water	12/14/22 12:31	12/16/22 10:38
190-30653-6	S43480.06	Water	12/14/22 13:21	12/16/22 10:38
190-30653-7	S43480.07	Water	12/14/22 14:15	12/16/22 10:38
190-30653-8	S43480.08	Water	12/14/22 14:58	12/16/22 10:38

Job ID: 190-30653-1

Laboratory: Eurofins Michigan

Narrative

Job Narrative
190-30653-1

Receipt
The samples were received on 12/16/2022 10:38 AM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 5.2°C

GC Semi VOA
Method 8015D_DAI: Internal standard (ISTD) response for the following samples were outside of acceptance limits: (190-30653-B-8 MS) and (190-30653-B-8 MSD). The analyst double spiked the ISTD in the extracts. The calculations are correct even though the response of the ISTD shows it is outside of criteria.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

Metals
Method 6020B: preparation batch 160-594383 Elevated reporting limits are provided for the following samples due to insufficient sample provided preparation: S43480.01 (190-30653-1), S43480.02 (190-30653-2), S43480.03 (190-30653-3), S43480.04 (190-30653-4), S43480.05 (190-30653-5), S43480.06 (190-30653-6), S43480.07 (190-30653-7) and S43480.08 (190-30653-8).

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

Client Sample ID: S43480.01

Lab Sample ID: 190-30653-1
Matrix: Water
Date Collected: 12/14/22 00:01
Date Received: 12/16/22 10:38

Method: SW846 8015D - Nonhalogenated Organic Compounds - Direct Injection (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Methanol	<3.7		3.7		mg/L			12/18/22 03:06	1

Method: SW846 6020B - Metals (ICP/MS)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Thorium	<2.0		2.0		ug/L		12/20/22 13:34	12/21/22 21:39	2

Client Sample ID: S43480.02

Lab Sample ID: 190-30653-2
Matrix: Water
Date Collected: 12/14/22 09:30
Date Received: 12/16/22 10:38

Method: SW846 8015D - Nonhalogenated Organic Compounds - Direct Injection (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Methanol	<3.7		3.7		mg/L			12/18/22 19:20	1

Method: SW846 6020B - Metals (ICP/MS)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Thorium	<4.0		4.0		ug/L		12/20/22 13:34	12/21/22 21:43	2

Client Sample ID: S43480.03

Lab Sample ID: 190-30653-3
Matrix: Water
Date Collected: 12/14/22 10:30
Date Received: 12/16/22 10:38

Method: SW846 8015D - Nonhalogenated Organic Compounds - Direct Injection (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Methanol	<3.7		3.7		mg/L			12/18/22 19:41	1

Method: SW846 6020B - Metals (ICP/MS)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Thorium	<4.0		4.0		ug/L		12/20/22 13:34	12/21/22 21:46	2

Client Sample ID: S43480.04

Lab Sample ID: 190-30653-4
Matrix: Water
Date Collected: 12/14/22 11:25
Date Received: 12/16/22 10:38

Method: SW846 8015D - Nonhalogenated Organic Compounds - Direct Injection (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Methanol	<3.7		3.7		mg/L			12/18/22 20:02	1

Method: SW846 6020B - Metals (ICP/MS)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Thorium	<4.0		4.0		ug/L		12/20/22 13:34	12/21/22 21:50	2

Client Sample ID: S43480.05

Lab Sample ID: 190-30653-5
Matrix: Water
Date Collected: 12/14/22 12:31
Date Received: 12/16/22 10:38

Method: SW846 8015D - Nonhalogenated Organic Compounds - Direct Injection (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Methanol	<3.7		3.7		mg/L			12/18/22 20:23	1

Method: SW846 6020B - Metals (ICP/MS)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Thorium	<4.0		4.0		ug/L		12/20/22 13:34	12/21/22 22:03	2

Client Sample Results

Client: Merit Laboratories
Project/Site: S43480

Job ID: 190-30653-1

Client Sample ID: S43480.06

Lab Sample ID: 190-30653-6
Date Collected: 12/14/22 13:21
Matrix: Water
Date Received: 12/16/22 10:38

Method: SW846 8015D - Nonhalogenated Organic Compounds - Direct Injection (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Methanol	<3.7		3.7		mg/L			12/18/22 20:43	1

Method: SW846 6020B - Metals (ICP/MS)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Thorium	<4.0		4.0		ug/L		12/20/22 13:34	12/21/22 22:07	2

Client Sample ID: S43480.07

Lab Sample ID: 190-30653-7
Date Collected: 12/14/22 14:15
Matrix: Water
Date Received: 12/16/22 10:38

Method: SW846 8015D - Nonhalogenated Organic Compounds - Direct Injection (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Methanol	<3.7		3.7		mg/L			12/18/22 21:04	1

Method: SW846 6020B - Metals (ICP/MS)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Thorium	<4.0		4.0		ug/L		12/20/22 13:34	12/21/22 22:10	2

Client Sample ID: S43480.08

Lab Sample ID: 190-30653-8
Date Collected: 12/14/22 14:58
Matrix: Water
Date Received: 12/16/22 10:38

Method: SW846 8015D - Nonhalogenated Organic Compounds - Direct Injection (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Methanol	<3.7		3.7		mg/L			12/18/22 21:25	1

Method: SW846 6020B - Metals (ICP/MS)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Thorium	<4.0		4.0		ug/L		12/20/22 13:34	12/21/22 22:14	2

Method: 8015D - Nonhalogenated Organic Compounds - Direct Injection (GC)

Lab Sample ID: MB 680-755688/10
Matrix: Water
Analysis Batch: 755688

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Methanol	<3.7		3.7		mg/L			12/17/22 19:47	1

Lab Sample ID: LCS 680-755688/6
Matrix: Water
Analysis Batch: 755688

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Methanol			20.0	23.1		mg/L		115	43 - 143		

Lab Sample ID: LCSD 680-755688/7
Matrix: Water
Analysis Batch: 755688

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Methanol			20.0	20.9		mg/L		104	43 - 143	10	50

Lab Sample ID: 190-30653-1 MS
Matrix: Water
Analysis Batch: 755688

Client Sample ID: S43480.01
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Methanol	<3.7		20.0	21.3		mg/L		107	43 - 143		

Lab Sample ID: 190-30653-1 MSD
Matrix: Water
Analysis Batch: 755688

Client Sample ID: S43480.01
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Methanol	<3.7		20.0	22.2		mg/L		111	43 - 143	4	50

Lab Sample ID: MB 680-755745/10
Matrix: Water
Analysis Batch: 755745

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Methanol	<3.7		3.7		mg/L			12/18/22 16:10	1

Lab Sample ID: LCS 680-755745/6
Matrix: Water
Analysis Batch: 755745

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Methanol			20.0	21.9		mg/L		109	43 - 143		

Lab Sample ID: LCSD 680-755745/7
Matrix: Water
Analysis Batch: 755745

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Methanol			20.0	21.9		mg/L		110	43 - 143	0	50

QC Sample Results

Client: Merit Laboratories
Project/Site: S43480

Job ID: 190-30653-1

Method: 8015D - Nonhalogenated Organic Compounds - Direct Injection (GC)

Lab Sample ID: 190-30653-8 MS
Matrix: Water
Analysis Batch: 755745

Client Sample ID: S43480.08
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Methanol	<3.7		20.0	18.6	*3	mg/L		93	43 - 143		

Lab Sample ID: 190-30653-8 MSD
Matrix: Water
Analysis Batch: 755745

Client Sample ID: S43480.08
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Methanol	<3.7		20.0	20.8	*3	mg/L		104	43 - 143	11	50

Method: 6020B - Metals (ICP/MS)

Lab Sample ID: MB 160-594383/1-A
Matrix: Water
Analysis Batch: 594602

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 594383

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Thorium	<2.0		2.0		ug/L		12/20/22 13:34	12/21/22 20:20	2

Lab Sample ID: LCS 160-594383/2-A
Matrix: Water
Analysis Batch: 594602

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 594383

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Thorium			995	977		ug/L		98	80 - 120		

Definitions/Glossary

Client: Merit Laboratories
Project/Site: S43480

Job ID: 190-30653-1

Qualifiers

GC Semi VOA

Qualifier	Qualifier Description
*3	ISTD response or retention time outside acceptable limits.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

QC Association Summary

Client: Merit Laboratories
Project/Site: S43480

Job ID: 190-30653-1

GC Semi VOA

Analysis Batch: 755688

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
190-30653-1	S43480.01	Total/NA	Water	8015D	
MB 680-755688/10	Method Blank	Total/NA	Water	8015D	
LCS 680-755688/6	Lab Control Sample	Total/NA	Water	8015D	
LCSD 680-755688/7	Lab Control Sample Dup	Total/NA	Water	8015D	
190-30653-1 MS	S43480.01	Total/NA	Water	8015D	
190-30653-1 MSD	S43480.01	Total/NA	Water	8015D	

Analysis Batch: 755745

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
190-30653-2	S43480.02	Total/NA	Water	8015D	
190-30653-3	S43480.03	Total/NA	Water	8015D	
190-30653-4	S43480.04	Total/NA	Water	8015D	
190-30653-5	S43480.05	Total/NA	Water	8015D	
190-30653-6	S43480.06	Total/NA	Water	8015D	
190-30653-7	S43480.07	Total/NA	Water	8015D	
190-30653-8	S43480.08	Total/NA	Water	8015D	
MB 680-755745/10	Method Blank	Total/NA	Water	8015D	
LCS 680-755745/6	Lab Control Sample	Total/NA	Water	8015D	
LCSD 680-755745/7	Lab Control Sample Dup	Total/NA	Water	8015D	
190-30653-8 MS	S43480.08	Total/NA	Water	8015D	
190-30653-8 MSD	S43480.08	Total/NA	Water	8015D	

Metals

Prep Batch: 594383

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
190-30653-1	S43480.01	Total/NA	Water	3010A	
190-30653-2	S43480.02	Total/NA	Water	3010A	
190-30653-3	S43480.03	Total/NA	Water	3010A	
190-30653-4	S43480.04	Total/NA	Water	3010A	
190-30653-5	S43480.05	Total/NA	Water	3010A	
190-30653-6	S43480.06	Total/NA	Water	3010A	
190-30653-7	S43480.07	Total/NA	Water	3010A	
190-30653-8	S43480.08	Total/NA	Water	3010A	
MB 160-594383/1-A	Method Blank	Total/NA	Water	3010A	
LCS 160-594383/2-A	Lab Control Sample	Total/NA	Water	3010A	

Analysis Batch: 594602

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
190-30653-1	S43480.01	Total/NA	Water	6020B	594383
190-30653-2	S43480.02	Total/NA	Water	6020B	594383
190-30653-3	S43480.03	Total/NA	Water	6020B	594383
190-30653-4	S43480.04	Total/NA	Water	6020B	594383
190-30653-5	S43480.05	Total/NA	Water	6020B	594383
190-30653-6	S43480.06	Total/NA	Water	6020B	594383
190-30653-7	S43480.07	Total/NA	Water	6020B	594383
190-30653-8	S43480.08	Total/NA	Water	6020B	594383
MB 160-594383/1-A	Method Blank	Total/NA	Water	6020B	594383
LCS 160-594383/2-A	Lab Control Sample	Total/NA	Water	6020B	594383

Lab Chronicle

Client: Merit Laboratories
Project/Site: S43480

Job ID: 190-30653-1

Client Sample ID: S43480.01
Date Collected: 12/14/22 00:01
Date Received: 12/16/22 10:38

Lab Sample ID: 190-30653-1
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8015D		1	755688	JCK	EET SAV	12/18/22 03:06
Total/NA	Prep	3010A			594383	LKP	EET SL	12/20/22 13:34
Total/NA	Analysis	6020B		2	594602	CGB	EET SL	12/21/22 21:39

Client Sample ID: S43480.02
Date Collected: 12/14/22 09:30
Date Received: 12/16/22 10:38

Lab Sample ID: 190-30653-2
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8015D		1	755745	JCK	EET SAV	12/18/22 19:20
Total/NA	Prep	3010A			594383	LKP	EET SL	12/20/22 13:34
Total/NA	Analysis	6020B		2	594602	CGB	EET SL	12/21/22 21:43

Client Sample ID: S43480.03
Date Collected: 12/14/22 10:30
Date Received: 12/16/22 10:38

Lab Sample ID: 190-30653-3
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8015D		1	755745	JCK	EET SAV	12/18/22 19:41
Total/NA	Prep	3010A			594383	LKP	EET SL	12/20/22 13:34
Total/NA	Analysis	6020B		2	594602	CGB	EET SL	12/21/22 21:46

Client Sample ID: S43480.04
Date Collected: 12/14/22 11:25
Date Received: 12/16/22 10:38

Lab Sample ID: 190-30653-4
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8015D		1	755745	JCK	EET SAV	12/18/22 20:02
Total/NA	Prep	3010A			594383	LKP	EET SL	12/20/22 13:34
Total/NA	Analysis	6020B		2	594602	CGB	EET SL	12/21/22 21:50

Client Sample ID: S43480.05
Date Collected: 12/14/22 12:31
Date Received: 12/16/22 10:38

Lab Sample ID: 190-30653-5
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8015D		1	755745	JCK	EET SAV	12/18/22 20:23
Total/NA	Prep	3010A			594383	LKP	EET SL	12/20/22 13:34
Total/NA	Analysis	6020B		2	594602	CGB	EET SL	12/21/22 22:03

Client Sample ID: S43480.06
Date Collected: 12/14/22 13:21
Date Received: 12/16/22 10:38

Lab Sample ID: 190-30653-6
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8015D		1	755745	JCK	EET SAV	12/18/22 20:43

Lab Chronicle

Client: Merit Laboratories
Project/Site: S43480

Job ID: 190-30653-1

Client Sample ID: S43480.06

Lab Sample ID: 190-30653-6

Date Collected: 12/14/22 13:21

Matrix: Water

Date Received: 12/16/22 10:38

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	3010A			594383	LKP	EET SL	12/20/22 13:34
Total/NA	Analysis	6020B		2	594602	CGB	EET SL	12/21/22 22:07

Client Sample ID: S43480.07

Lab Sample ID: 190-30653-7

Date Collected: 12/14/22 14:15

Matrix: Water

Date Received: 12/16/22 10:38

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8015D		1	755745	JCK	EET SAV	12/18/22 21:04
Total/NA	Prep	3010A			594383	LKP	EET SL	12/20/22 13:34
Total/NA	Analysis	6020B		2	594602	CGB	EET SL	12/21/22 22:10

Client Sample ID: S43480.08

Lab Sample ID: 190-30653-8

Date Collected: 12/14/22 14:58

Matrix: Water

Date Received: 12/16/22 10:38

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8015D		1	755745	JCK	EET SAV	12/18/22 21:25
Total/NA	Prep	3010A			594383	LKP	EET SL	12/20/22 13:34
Total/NA	Analysis	6020B		2	594602	CGB	EET SL	12/21/22 22:14

Laboratory References:

EET SAV = Eurofins Savannah, 5102 LaRoche Avenue, Savannah, GA 31404, TEL (912)354-7858

EET SL = Eurofins St. Louis, 13715 Rider Trail North, Earth City, MO 63045, TEL (314)298-8566

Analyst References:

Lab: EET SAV

Batch Type: Analysis

JCK = Joshua Kellar

Lab: EET SL

Batch Type: Prep

LKP = Laura Pemberton

Batch Type: Analysis

CGB = Cory Buffington

Accreditation/Certification Summary

Client: Merit Laboratories
Project/Site: S43480

Job ID: 190-30653-1

Laboratory: Eurofins Savannah

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
	AFCEE	SAVLAB	
Alabama	State	41450	06-30-23
ANAB	Dept. of Defense ELAP	L2463	09-22-24
Arkansas DEQ	State	19-015-0	02-01-23
California	State	2939	06-30-22 *
Connecticut	State	PH-0161	03-31-23
Florida	NELAP	E87052	06-23-23
Georgia	State	E87052	06-30-23
Georgia (DW)	State	803	06-30-23
Guam	State	19-007R	04-17-23
Hawaii	State	<cert No.>	06-30-23
Illinois	NELAP	200022	11-30-22 *
Indiana	State	C-GA-02	06-30-23
Iowa	State	353	07-01-23
Kentucky (UST)	State	NA	06-30-23
Louisiana	NELAP	30690	06-30-23
Louisiana (All)	NELAP	30690	06-30-23
Louisiana (DW)	State	LA009	12-31-22
Maine	State	GA00006	12-27-22
Maryland	State	250	12-31-23
Massachusetts	State	M-GA006	07-30-23
Michigan	State	9925	06-30-23
Mississippi	State	<cert No.>	06-30-23
Nebraska	State	NE-OS-7-04	06-30-23
New Jersey	NELAP	GA769	06-30-23
New Mexico	State	GA00006	06-30-23
New York	NELAP	10842	04-01-23
North Carolina (DW)	State	13701	07-31-23
North Carolina (WW/SW)	State	269	12-31-22
Pennsylvania	NELAP	68-00474	06-30-23
Puerto Rico	State	GA00006	12-30-22
South Carolina	State	98001	06-30-23
Tennessee	State	TN02961	06-30-23
Texas	NELAP	T1047004185-19-14	11-30-23
Texas	TCEQ Water Supply	T104704185	06-30-23
USDA	US Federal Programs	P330-18-00313	09-03-24
Virginia	NELAP	460161	06-14-23
Wisconsin	State	999819810	08-31-23
Wyoming	State	8TMS-L	06-30-23

Laboratory: Eurofins St. Louis

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Alaska (UST)	State	20-001	05-06-25
ANAB	Dept. of Defense ELAP	L2305	04-06-25
ANAB	Dept. of Energy	L2305.01	04-06-25
ANAB	ISO/IEC 17025	L2305	04-06-25
Arizona	State	AZ0813	12-08-23
California	Los Angeles County Sanitation Districts	10259	06-30-22 *

* Accreditation/Certification renewal pending - accreditation/certification considered valid.

Accreditation/Certification Summary

Client: Merit Laboratories
Project/Site: S43480

Job ID: 190-30653-1

Laboratory: Eurofins St. Louis (Continued)

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
California	State	2886	06-30-23
Connecticut	State	PH-0241	03-31-23
Florida	NELAP	E87689	06-30-23
HI - RadChem Recognition	State	n/a	06-30-23
Illinois	NELAP	200023	11-30-23
Iowa	State	373	12-01-24
Kansas	NELAP	E-10236	10-31-23
Kentucky (DW)	State	KY90125	12-31-22
Kentucky (WW)	State	KY90125 (Permit KY0004049)	12-31-22
Louisiana (All)	NELAP	04080	06-30-23
Louisiana (DW)	State	LA011	12-31-22
Maryland	State	310	09-30-23
MI - RadChem Recognition	State	9005	06-30-23
Missouri	State	780	06-30-25
Nevada	State	MO000542020-1	07-31-23
New Jersey	NELAP	MO002	06-30-23
New York	NELAP	11616	04-01-23
North Dakota	State	R-207	06-30-23
NRC	NRC	24-24817-01	12-31-22
Oklahoma	NELAP	9997	08-31-23
Oregon	NELAP	4157	09-01-23
Pennsylvania	NELAP	68-00540	02-28-23
South Carolina	State	85002001	06-30-23
Texas	NELAP	T104704193	07-31-23
US Fish & Wildlife	US Federal Programs	058448	07-31-23
USDA	US Federal Programs	P330-17-00028	03-11-23
Utah	NELAP	MO000542021-14	07-31-23
Virginia	NELAP	10310	06-14-24
Washington	State	C592	08-30-23
West Virginia DEP	State	381	12-31-22

Method Summary

Client: Merit Laboratories
Project/Site: S43480

Job ID: 190-30653-1

Method	Method Description	Protocol	Laboratory
8015D	Nonhalogenated Organic Compounds - Direct Injection (GC)	SW846	EET SAV
6020B	Metals (ICP/MS)	SW846	EET SL
3010A	Preparation, Total Metals	SW846	EET SL

Protocol References:

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

EET SAV = Eurofins Savannah, 5102 LaRoche Avenue, Savannah, GA 31404, TEL (912)354-7858

EET SL = Eurofins St. Louis, 13715 Rider Trail North, Earth City, MO 63045, TEL (314)298-8566

Merit Laboratories, Inc.
2680 East Lansing Dr., East Lansing, MI 48823
Phone (517) 332-0167 Fax (517) 332-4034
www.meritlabs.com

CHAIN OF CUSTODY RECORD

REPORT TO

CONTACT NAME: Project Management Team
COMPANY: Merit Laboratories
ADDRESS: 2680 East Lansing Drive
CITY: East Lansing STATE: MI ZIP CODE: 48823
PHONE NO.: 517-332-0167 FAX NO.: P.O. NO.:
E-MAIL ADDRESS: results@meritlabs.com QUOTE NO.:

INVOICE TO

CONTACT NAME: Julie Teague ☒ SAME
COMPANY: Merit Laboratories
ADDRESS: 2680 East Lansing Drive
CITY: East Lansing STATE: MI ZIP CODE: 48823
PHONE NO.: 517-332-0167 E-MAIL ADDRESS: juliet@meritlabs.com

PROJECT NO./NAME: S43480 SAMPLER(S) - PLEASE PRINT/SIGN NAME:

TURNAROUND TIME REQUIRED ☐ 1 DAY ☐ 2 DAYS ☐ 3 DAYS ☒ STANDARD ☐ OTHER

DELIVERABLES REQUIRED ☐ STD ☒ LEVEL II ☐ LEVEL III ☐ LEVEL IV ☐ EDD ☐ OTHER

MATRIX CODE: GW=GROUNDWATER WW=WASTEWATER S=SOIL L=LIQUID SD=SOLID SL=SLUDGE DW=DRINKING WATER O=OIL WP=WIPE A=AIR W=WASTE

ANALYSIS (ATTACH LIST IF MORE SPACE IS REQUIRED)

Certifications: ☐ OHIO VAP ☐ Drinking Water ☐ DoD ☐ NPDES

Project Locations: ☐ Detroit ☐ New York ☐ Other

MERIT LAB NO. (FOR LAB USE ONLY)	YEAR DATE	YEAR TIME	SAMPLE TAG IDENTIFICATION-DESCRIPTION	MATRIX	# OF BOTTLES	# Containers & Preservatives: NONE	HCl	HNO_3	H_2SO_4	NaOH	MeOH	OTHER	Alcohols*	Thorium
	12/14/22	0001	S43480.01	W	4	3		1					✓	✓
	12/14/22	0930	S43480.02	W	4	3		1					✓	✓
	12/14/22	1030	S43480.03	W	4	3		1					✓	✓
	12/14/22	1125	S43480.04	W	4	3		1					✓	✓
	12/14/22	1231	S43480.05	W	4	3		1					✓	✓
	12/14/22	1321	S43480.06	W	4	3		1					✓	✓
	12/14/22	1415	S43480.07	W	4	3		1					✓	✓
	12/14/22	1458	S43480.08	W	4	3		1					✓	✓

Special Instructions: *Methanol RL 3,700ppb

190-30653 Chain of Custody

Subcontracted to Eurofins

RELINQUISHED BY: SIGNATURE/ORGANIZATION: Pat W ☐ Sampler DATE: 12/15/22 TIME:
RECEIVED BY: SIGNATURE/ORGANIZATION: Isaiah McCashen DATE: 12/15/22 TIME: 14:30
RELINQUISHED BY: SIGNATURE/ORGANIZATION: DATE: 12/15/22 TIME: 1800
RECEIVED BY: SIGNATURE/ORGANIZATION: 190 COW Storage DATE: 12/18/22 TIME: 10h

RELINQUISHED BY: SIGNATURE/ORGANIZATION: Isaiah McCashen DATE: 12/15/22 TIME: 15:45
RECEIVED BY: SIGNATURE/ORGANIZATION: DATE: 12/15/22 TIME: 1845

SEAL NO. SEAL INTACT YES ☐ NO ☐ INITIALS
SEAL NO. SEAL INTACT YES ☐ NO ☐ INITIALS

NOTES: TEMP. ON ARRIVAL

PLEASE NOTE: SIGNING ACKNOWLEDGES ADHERENCE TO MERIT'S SAMPLE ACCEPTANCE POLICY ON REVERSE SIDE

Rev. 5.18.12

Received by 12/16/2022 10:38

12/29/2022

eurofins | Environment Testing TestAmerica

☐ SDS or Known Hazard Information Supplied by Client
☐ Discrepancies
☐ Short Hold
☐ Rush ☐ 24 Hr ☐ 2-Day ☐ 3-Day ☐ 5-Day ☐ Other: _____

Client ID: Merit Laboratories
Work Oder #: 30653

Receipt Evaluation Performed by: Initials: JH Date: 12/16 Time: 10:38

Cooler / Sample Receipt

After hours receipt: complete gray areas. Place cooler in walk-in, place form in Receiving box. Date: _____ Time: _____

Method of Shipment:
(Walk-In Client) Eurofins TA Field/Courier
Other Client / 3rd Party Courier: _____
Fed Ex Tracking #: _____
UPS Tracking #: _____
Other: _____

Shipping Container Type:
☑ Cooler ☐ Box
☐ None ☐ Other: _____

Packing Materials:
☐ Plastic Bags ☐ Foam
☑ Bubble Wrap ☐ Paper
☐ Packing Peanuts ☐ None
☐ Other: _____

Custody Seals Intact:
☐ Yes ☐ No
☑ NA (not used or required)

Cooling Materials:
☐ Ice (Solid) ☑ Ice (Melted)
☐ Blue Ice ☐ None
☐ Other: _____

Bacteriological Samples	Temp Corrected (°C)	Frozen? Yes	Frozen? No	Rec'd Within 2 Hrs? Yes	Rec'd Within 2 Hrs? No	Sample Flagged? Yes	Sample Flagged? No

Received on same day sampled? Yes (No)

Additional Sheets Required? Yes (No)

Receipt Temperatures

Thermometer ID	Observed (°C)	Corrected (°C)	Temp Blank	Sample Temp	Acceptable	Cooler ID	Affected Samples
CP313209	5.2	5.2		X	X Y _ N		
					_ Y _ N		
					_ Y _ N		

Receipt Questions**	Y	N	NA	"No" answers require additional comment
CoC present and ETA receipt signature, date, and time properly documented?	✓			
Containers and Labels in good condition? *(unbroken, not leaking, appropriately filled, labels legible & attached)*	✓			
Appropriate containers used and adequate volume provided?	✓			Preserved bottles checked for pH?* Yes (No)
Number of sample containers match CoC?	✓			pH strip lot # _____
Samples received within hold?	✓			
Samples submitted for GRO and Volatiles analysis (8260, 624, 524) received without headspace?	✓			
Was a Trip Blank received with VOA samples?		✓		
Were the samples free of any questionable physical conformities? (i.e.; field duplicates or multiple bottles of the same sample do not significantly vary in appearance – color, solid proportions, etc.)	✓			
Were the CoC bottle labels and all other items free of all other discrepancies or issues that would need to be addressed with the Project Manager and/or Client?	✓			
**May not be applicable if samples are not for compliance testing				*Excludes FOG, VOAs, TOC Vials, HEM

Client Contact Record

Contact Via: ☐ Phone ☐ Email ☐ Other: _____ Person Contacted: _____ Date/Time: _____
☐ Discrepancy allowance agreement is on record in the client project file

Discussion / Resolution

Any additional documentation and clarification from the client must be noted in the narrative and/or scanned into the CoC directory.

Reviewed by _____ Date: 12/16/22

WI-MI-010_020720

Eurofins Michigan
10448 Citation Drive Suite 200
Brighton, MI 48116
Phone: 810-229-2763 Fax: 810-229-0000

Chain of Custody Record

eurofins | Environment Testing

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Schafer, Sue	Carrier Tracking No(s):	COC No: 190-34924.1
Client Contact: Shipping/Receiving	Phone:	E-Mail: Sue.Schafer@et.eurofinsus.com	State of Origin: Michigan	Page: Page 1 of 1
Company: TestAmerica Laboratories, Inc.		Accreditations Required (See note):		Job #: 190-30653-1
Address: 13715 Rider Trail North, ,	Due Date Requested: 1/3/2023			
City: Earth City	TAT Requested (days):			
State, Zip: MO, 63045				
Phone: 314-298-8566(Tel) 314-298-8757(Fax)	PO #:			
Email:	WO #:			
Project Name: S43480	Project #: 19001249			
Site:	SSOW#:			

Analysis Requested

Preservation Codes:
A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Y - Trizma, Z - other (specify)
Other:

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	6020B/3010A_2% THORIUM ONLY	Total Number of containers	Special Instructions/Note:
			Preservation Code:						
S43480.01 (190-30653-1)	12/14/22	00:01 Eastern		Water			X	1	
S43480.02 (190-30653-2)	12/14/22	09:30 Eastern		Water			X	1	
S43480.03 (190-30653-3)	12/14/22	10:30 Eastern		Water			X	1	
S43480.04 (190-30653-4)	12/14/22	11:25 Eastern		Water			X	1	
S43480.05 (190-30653-5)	12/14/22	12:31 Eastern		Water			X	1	
S43480.06 (190-30653-6)	12/14/22	13:21 Eastern		Water			X	1	
S43480.07 (190-30653-7)	12/14/22	14:15 Eastern		Water			X	1	
S43480.08 (190-30653-8)	12/14/22	14:58 Eastern		Water			X	1	

Note: Since laboratory accreditations are subject to change, Eurofins Environment Testing North Central, LLC places the ownership of method, analyte & accreditation compliance upon our subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the Eurofins Environment Testing North Central, LLC laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins Environment Testing North Central, LLC attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said compliance to Eurofins Environment Testing North Central, LLC.

Possible Hazard Identification: Unconfirmed	Sample Disposal (A fee may be assessed if samples are retained longer than 1 month): ☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months
Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 2	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
[signature]	12/16/22 11:30	ET-PA	FE	12/19/22 8:19 AM	
Relinquished by: FE	Date/Time:	Company	Received by: [signature]	Date/Time: 12/19/22 8:19 AM	Company ETASTL
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks:

Ver: 06/08/2021

ICOC No:
190-34924

Containers

Count	Container Type	Preservative
8	Other Client Container - HNO3	Nitric Acid

ICOC No:
190-34924

Containers

Count	Container Type	Preservative
8	Other Client Container - HNO3	Nitric Acid

Analytical Laboratory Report

Report ID: S43481.01(01)
Generated on 01/13/2023

Report to

Attention: Kelly Cratsenburg
TRC
1540 Eisenhower Place
Ann Arbor, MI 48108

Phone: 734-585-7829 C: 734-412-5424 FAX:
Email: KCratsenburg@trccompanies.com

Addtional Contacts: Vince Buening

Report produced by

Merit Laboratories, Inc.
2680 East Lansing Drive
East Lansing, MI 48823

Phone: (517) 332-0167 FAX: (517) 332-6333

Contacts for report questions:
John Laverty (johnlaverty@meritlabs.com)
Barbara Ball (bball@meritlabs.com)

Report Summary

Lab Sample ID(s): S43481.01-S43481.08
Project: Detroit Axle - Eastern
Collected Date(s): 12/14/2022
Submitted Date/Time: 12/15/2022 10:55
Sampled by: Unknown
P.O. #: 189455

Table of Contents

Maya Murshak
Technical Director

General Report Notes

Analytical results relate only to the samples tested, in the condition received by the laboratory.
Methods may be modified for improved performance.
Results reported on a dry weight basis where applicable.
'Not detected' indicates that parameter was not found at a level equal to or greater than the reporting limit (RL).
When MDL results are provided, then 'Not detected' indicates that parameter was not found at a level equal to or greater than the MDL.
40 CFR Part 136 Table II Required Containers, Preservation Techniques and Holding Times for the Clean Water Act specify that samples for acrolein and acrylonitrile, and 2-chloroethylvinyl ether need to be preserved at a pH in the range of 4 to 5 or if not preserved, analyzed within 3 days of sampling.
QA/QC corresponding to this analytical report is a separate document with the same Merit ID reference and is available upon request.
Full accreditation certificates are available upon request. Starred (*) analytes are not NELAP accredited.
Samples are held by the lab for 30 days from the final report date unless a written request to hold longer is provided by the client.

Limits for drinking water samples, are listed as the MCL Limits (Maximum Contaminant Level Concentrations)
PFAS requirement: Section 9.3.8 of U.S. EPA Method 537.1 states "If the method analyte(s) found in the Field Sample is present in the FRB at a concentration greater than 1/3 the MRL, then all samples collected with that FRB are invalid and must be recollected and reanalyzed."
Samples submitted without an accompanying FRB may not be acceptable for compliance purposes.
Wisconsin PFAs analysis: MDL = LOD; RL = LOQ. LOD and LOQ are adjusted for dilution.

Report Narrative

There is no additional narrative for this analytical report

Laboratory Certifications

Authority	Certification ID
Michigan DEQ	#9956
DOD ELAP/ISO 17025	#69699
WBENC	#2005110032
Ohio VAP	#CL0002
Indiana DOH	#C-MI-07
New York NELAC	#11814
North Carolina DENR	#680
North Carolina DOH	#26702
Alaska CSLAP	#17-001
Pennsylvania DEP	#68-05884
Wisconsin DNR	FID# 399147320

Qualifier Descriptions

Qualifier	Description
!	Result is outside of stated limit criteria
B	Compound also found in associated method blank
E	Concentration exceeds calibration range
F	Analysis run outside of holding time
G	Estimated result due to extraction run outside of holding time
H	Sample submitted and run outside of holding time
I	Matrix interference with internal standard
J	Estimated value less than reporting limit, but greater than MDL
L	Elevated reporting limit due to low sample amount
M	Result reported to MDL not RDL
O	Analysis performed by outside laboratory. See attached report.
R	Preliminary result
S	Surrogate recovery outside of control limits
T	No correction for total solids
X	Elevated reporting limit due to matrix interference
Y	Elevated reporting limit due to high target concentration
b	Value detected less than reporting limit, but greater than MDL
e	Reported value estimated due to interference
j	Analyte also found in associated method blank
p	Benzo(b)Fluoranthene and Benzo(k)Fluoranthene integrated as one peak.
x	Preserved from bulk sample

Glossary of Abbreviations

Abbreviation	Description
RL/RDL	Reporting Limit
MDL	Method Detection Limit
MS	Matrix Spike
MSD	Matrix Spike Duplicate
SW	EPA SW 846 (Soil and Wastewater) Methods
E	EPA Methods
SM	Standard Methods
LN	Linear
BR	Branched

Method Summary

Method	Version
ASTMD7979-19M	ASTM Method D7979 - 19 Modified (Isotopic Dilution)

Parameter Summary

Parameter	Synonym	Cas #
PFBA	Perfluorobutanoic Acid	375-22-4
PFPeA	Perfluoropentanoic Acid	2706-90-3
4:2 FTSA	4:2 Fluorotelomer Sulfonic Acid	757124-72-4
PFHxA	Perfluorohexanoic Acid	307-24-4
PFBS	Perfluorobutane sulfonic Acid	375-73-5
PFHpA	Perfluoroheptanoic Acid	375-85-9
PFPeS	Perfluoropentane Sulfonic Acid	2706-91-4
6:2 FTSA	6:2 Fluorotelomer Sulfonic Acid	27619-97-2
PFOA	Perfluorooctanoic Acid	335-67-1
PFHxS	Perfluorohexane Sulfonic Acid	355-46-4
PFHxS-LN	Perfluorohexane Sulfonic Acid - LN	355-46-4-LN
PFHxS-BR	Perfluorohexane Sulfonic Acid - BR	355-46-4-BR
PFNA	Perfluorononanoic Acid	375-95-1
8:2 FTSA	8:2 Fluorotelomer Sulfonic Acid	39108-34-4
PFHpS	Perfluoroheptane Sulfonic Acid	375-92-8
PFDA	Perfluorodecanoic Acid	335-76-2
N-MeFOSAA	N-methyl perfluorooctanesulfonamidoacetic acid	2355-31-9
EtFOSAA	N-Ethyl Perfluorooctane Sulfonamidoacetic Acid	2991-50-6
PFOS	Perfluorooctane Sulfonic Acid	1763-23-1
PFOS-LN	Perfluorooctane Sulfonic Acid - LN	1763-23-1-LN
PFOS-BR	Perfluorooctane Sulfonic Acid - BR	1763-23-1-BR
PFUnDA	Perfluoroundecanoic Acid	2058-94-8
PFNS	Perfluorononane Sulfonic Acid	68259-12-1
PFDoDA	Perfluorododecanoic Acid	307-55-1
PFDS	Perfluorodecane Sulfonic Acid	335-77-3
PFTrDA	Perfluorotridecanoic Acid	72629-94-8
FOSA	Perfluorooctane Sulfonamide	754-91-6
PFTeDA	Perfluorotetradecanoic Acid	376-06-7
11Cl-PF3OUdS	11-chloroeicosafluoro-3-oxaundecane-1-sulfonic acid	763051-92-9
9Cl-PF3ONS	9-chlorohexadecafluoro-3-oxanone1-sulfonic acid	756426-58-1
ADONA	4,8-dioxa-3H-perfluorononanoic acid	919005-14-4
HFPO-DA	Hexafluoropropylene oxide dimer	13252-13-6
PFECHS	Perfluoro-4-ethylcyclohexanesulfonate	67584-42-3
PFBSA	Perfluorobutanesulfonamide	30334-69-1
PFHxSA	Perfluorohexanesulfonamide	41997-13-1

Sample Summary (8 samples)

Sample ID	Sample Tag	Matrix	Collected Date/Time
S43481.01	DUP #2	Water	12/14/22 00:01
S43481.02	MW 119	Water	12/14/22 09:30
S43481.03	MW 120	Water	12/14/22 10:30
S43481.04	MW 112	Water	12/14/22 11:25
S43481.05	MW 111	Water	12/14/22 12:31
S43481.06	MW 110	Water	12/14/22 13:25
S43481.07	MW 109	Water	12/14/22 14:15
S43481.08	MW 108	Water	12/14/22 14:58

Analytical Laboratory Report

Lab Sample ID: S43481.01
Sample Tag: DUP #2
Collected Date/Time: 12/14/2022 00:01
Matrix: Water
COC Reference: 158657

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
1	15ml Centrifuge Tube	None	Yes	4.3	IR

Extraction / Prep.

Parameter	Result	Method	Run Date	Analyst	Flags
Initial wt. (g) / Final wt. (g) / Volume (ml)*	11.69/6.48/10	ASTMD7979-19M	01/04/23 18:00	PTW	

Organics

31 PFAs, Method: ASTMD7979-19M, Run Date: 01/05/23 16:59, Analyst: KCV

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
PFBA*	11	9.6		ng/L	1.92	375-22-4	
PFPeA*	Not detected	3.8		ng/L	1.92	2706-90-3	
4:2 FTSA*	Not detected	1.9		ng/L	1.92	757124-72-4	
PFHxA*	2.3	1.9		ng/L	1.92	307-24-4	
PFBS*	4.7	1.9		ng/L	1.92	375-73-5	
PFHpA*	Not detected	1.9		ng/L	1.92	375-85-9	
PFPeS*	Not detected	1.9		ng/L	1.92	2706-91-4	
6:2 FTSA*	Not detected	1.9		ng/L	1.92	27619-97-2	
PFOA*	21	1.9		ng/L	1.92	335-67-1	
PFHxS*	4.0	1.9		ng/L	1.92	355-46-4	
PFHxS-LN*	3.3	1.9		ng/L	1.92	355-46-4-LN	
PFHxS-BR*	Not detected	1.9		ng/L	1.92	355-46-4-BR	
PFNA*	Not detected	1.9		ng/L	1.92	375-95-1	
8:2 FTSA*	Not detected	1.9		ng/L	1.92	39108-34-4	
PFHpS*	Not detected	1.9		ng/L	1.92	375-92-8	
PFDA*	Not detected	1.9		ng/L	1.92	335-76-2	
N-MeFOSAA*	Not detected	1.9		ng/L	1.92	2355-31-9	
EtFOSAA*	Not detected	3.8		ng/L	1.92	2991-50-6	
PFOS*	14	1.9		ng/L	1.92	1763-23-1	
PFOS-LN*	2.4	1.9		ng/L	1.92	1763-23-1-LN	
PFOS-BR*	11	1.9		ng/L	1.92	1763-23-1-BR	
PFUnDA*	Not detected	1.9		ng/L	1.92	2058-94-8	
PFNS*	Not detected	1.9		ng/L	1.92	68259-12-1	
PFDoDA*	Not detected	1.9		ng/L	1.92	307-55-1	
PFDS*	Not detected	1.9		ng/L	1.92	335-77-3	
PFTrDA*	Not detected	1.9		ng/L	1.92	72629-94-8	
FOSA*	Not detected	1.9		ng/L	1.92	754-91-6	
PFTeDA*	Not detected	3.8		ng/L	1.92	376-06-7	
11Cl-PF3OUdS*	Not detected	1.9		ng/L	1.92	763051-92-9	
9Cl-PF3ONS*	Not detected	1.9		ng/L	1.92	756426-58-1	
ADONA*	Not detected	1.9		ng/L	1.92	919005-14-4	
HFPO-DA*	Not detected	1.9		ng/L	1.92	13252-13-6	
PFECHS*	Not detected	1.9		ng/L	1.92	67584-42-3	
PFBSA*	Not detected	1.9		ng/L	1.92	30334-69-1	
PFHxSA*	Not detected	1.9		ng/L	1.92	41997-13-1	

Lab Sample ID: S43481.02
Sample Tag: MW 119
Collected Date/Time: 12/14/2022 09:30
Matrix: Water
COC Reference: 158657

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
1	15ml Centrifuge Tube	None	Yes	4.3	IR

Extraction / Prep.

Parameter	Result	Method	Run Date	Analyst	Flags
Initial wt. (g) / Final wt. (g) / Volume (ml)*	11.41/6.49/10	ASTMD7979-19M	01/04/23 18:00	PTW	

Organics

31 PFAs, Method: ASTMD7979-19M, Run Date: 01/05/23 17:19, Analyst: KCV

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
PFBA*	Not detected	10		ng/L	2.03	375-22-4	
PFPeA*	Not detected	4.1		ng/L	2.03	2706-90-3	
4:2 FTSA*	Not detected	2.0		ng/L	2.03	757124-72-4	
PFHxA*	Not detected	2.0		ng/L	2.03	307-24-4	
PFBS*	Not detected	2.0		ng/L	2.03	375-73-5	
PFHpA*	Not detected	2.0		ng/L	2.03	375-85-9	
PFPeS*	Not detected	2.0		ng/L	2.03	2706-91-4	
6:2 FTSA*	Not detected	2.0		ng/L	2.03	27619-97-2	
PFOA*	Not detected	2.0		ng/L	2.03	335-67-1	
PFHxS*	Not detected	2.0		ng/L	2.03	355-46-4	
PFHxS-LN*	Not detected	2.0		ng/L	2.03	355-46-4-LN	
PFHxS-BR*	Not detected	2.0		ng/L	2.03	355-46-4-BR	
PFNA*	Not detected	2.0		ng/L	2.03	375-95-1	
8:2 FTSA*	Not detected	2.0		ng/L	2.03	39108-34-4	
PFHpS*	Not detected	2.0		ng/L	2.03	375-92-8	
PFDA*	Not detected	2.0		ng/L	2.03	335-76-2	
N-MeFOSAA*	Not detected	2.0		ng/L	2.03	2355-31-9	
EtFOSAA*	Not detected	4.1		ng/L	2.03	2991-50-6	
PFOS*	Not detected	2.0		ng/L	2.03	1763-23-1	
PFOS-LN*	Not detected	2.0		ng/L	2.03	1763-23-1-LN	
PFOS-BR*	Not detected	2.0		ng/L	2.03	1763-23-1-BR	
PFUnDA*	Not detected	2.0		ng/L	2.03	2058-94-8	
PFNS*	Not detected	2.0		ng/L	2.03	68259-12-1	
PFDoDA*	Not detected	2.0		ng/L	2.03	307-55-1	
PFDS*	Not detected	2.0		ng/L	2.03	335-77-3	
PFTrDA*	Not detected	2.0		ng/L	2.03	72629-94-8	
FOSA*	Not detected	2.0		ng/L	2.03	754-91-6	
PFTeDA*	Not detected	4.1		ng/L	2.03	376-06-7	
11Cl-PF3OUdS*	Not detected	2.0		ng/L	2.03	763051-92-9	
9Cl-PF3ONS*	Not detected	2.0		ng/L	2.03	756426-58-1	
ADONA*	Not detected	2.0		ng/L	2.03	919005-14-4	
HFPO-DA*	Not detected	2.0		ng/L	2.03	13252-13-6	
PFECHS*	Not detected	2.0		ng/L	2.03	67584-42-3	
PFBSA*	Not detected	2.0		ng/L	2.03	30334-69-1	
PFHxSA*	Not detected	2.0		ng/L	2.03	41997-13-1	

Analytical Laboratory Report

Lab Sample ID: S43481.03
Sample Tag: MW 120
Collected Date/Time: 12/14/2022 10:30
Matrix: Water
COC Reference: 158657

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
1	15ml Centrifuge Tube	None	Yes	4.3	IR

Extraction / Prep.

Parameter	Result	Method	Run Date	Analyst	Flags
Initial wt. (g) / Final wt. (g) / Volume (ml)*	11.65/6.48/10	ASTMD7979-19M	01/04/23 18:00	PTW	

Organics

31 PFAs, Method: ASTMD7979-19M, Run Date: 01/05/23 17:38, Analyst: KCV

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
PFBA*	27	9.7		ng/L	1.93	375-22-4	
PFPeA*	5.9	3.9		ng/L	1.93	2706-90-3	
4:2 FTSA*	Not detected	1.9		ng/L	1.93	757124-72-4	
PFHxA*	5.6	1.9		ng/L	1.93	307-24-4	
PFBS*	8.9	1.9		ng/L	1.93	375-73-5	
PFHpA*	2.8	1.9		ng/L	1.93	375-85-9	
PFPeS*	Not detected	1.9		ng/L	1.93	2706-91-4	
6:2 FTSA*	Not detected	1.9		ng/L	1.93	27619-97-2	
PFOA*	48	1.9		ng/L	1.93	335-67-1	
PFHxS*	2.6	1.9		ng/L	1.93	355-46-4	
PFHxS-LN*	2.1	1.9		ng/L	1.93	355-46-4-LN	
PFHxS-BR*	Not detected	1.9		ng/L	1.93	355-46-4-BR	
PFNA*	Not detected	1.9		ng/L	1.93	375-95-1	
8:2 FTSA*	Not detected	1.9		ng/L	1.93	39108-34-4	
PFHpS*	Not detected	1.9		ng/L	1.93	375-92-8	
PFDA*	Not detected	1.9		ng/L	1.93	335-76-2	
N-MeFOSAA*	Not detected	1.9		ng/L	1.93	2355-31-9	
EtFOSAA*	Not detected	3.9		ng/L	1.93	2991-50-6	
PFOS*	Not detected	1.9		ng/L	1.93	1763-23-1	
PFOS-LN*	Not detected	1.9		ng/L	1.93	1763-23-1-LN	
PFOS-BR*	Not detected	1.9		ng/L	1.93	1763-23-1-BR	
PFUnDA*	Not detected	1.9		ng/L	1.93	2058-94-8	
PFNS*	Not detected	1.9		ng/L	1.93	68259-12-1	
PFDoDA*	Not detected	1.9		ng/L	1.93	307-55-1	
PFDS*	Not detected	1.9		ng/L	1.93	335-77-3	
PFTrDA*	Not detected	1.9		ng/L	1.93	72629-94-8	
FOSA*	Not detected	1.9		ng/L	1.93	754-91-6	
PFTeDA*	Not detected	3.9		ng/L	1.93	376-06-7	
11Cl-PF3OUdS*	Not detected	1.9		ng/L	1.93	763051-92-9	
9Cl-PF3ONS*	Not detected	1.9		ng/L	1.93	756426-58-1	
ADONA*	Not detected	1.9		ng/L	1.93	919005-14-4	
HFPO-DA*	Not detected	1.9		ng/L	1.93	13252-13-6	
PFECHS*	1.9	1.9		ng/L	1.93	67584-42-3	
PFBSA*	Not detected	1.9		ng/L	1.93	30334-69-1	
PFHxSA*	Not detected	1.9		ng/L	1.93	41997-13-1	

Lab Sample ID: S43481.04
Sample Tag: MW 112
Collected Date/Time: 12/14/2022 11:25
Matrix: Water
COC Reference: 158657

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
1	15ml Centrifuge Tube	None	Yes	4.3	IR

Extraction / Prep.

Parameter	Result	Method	Run Date	Analyst	Flags
Initial wt. (g) / Final wt. (g) / Volume (ml)*	11.97/6.53/11	ASTMD7979-19M	01/04/23 18:00	PTW	

Organics

31 PFAs, Method: ASTMD7979-19M, Run Date: 01/05/23 17:58, Analyst: KCV

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
PFBA*	12	10		ng/L	2.02	375-22-4	
PFPeA*	Not detected	4.0		ng/L	2.02	2706-90-3	
4:2 FTSA*	Not detected	2.0		ng/L	2.02	757124-72-4	
PFHxA*	2.7	2.0		ng/L	2.02	307-24-4	
PFBS*	4.8	2.0		ng/L	2.02	375-73-5	
PFHpA*	Not detected	2.0		ng/L	2.02	375-85-9	
PFPeS*	Not detected	2.0		ng/L	2.02	2706-91-4	
6:2 FTSA*	Not detected	2.0		ng/L	2.02	27619-97-2	
PFOA*	24	2.0		ng/L	2.02	335-67-1	
PFHxS*	3.9	2.0		ng/L	2.02	355-46-4	
PFHxS-LN*	3.2	2.0		ng/L	2.02	355-46-4-LN	
PFHxS-BR*	Not detected	2.0		ng/L	2.02	355-46-4-BR	
PFNA*	Not detected	2.0		ng/L	2.02	375-95-1	
8:2 FTSA*	Not detected	2.0		ng/L	2.02	39108-34-4	
PFHpS*	Not detected	2.0		ng/L	2.02	375-92-8	
PFDA*	Not detected	2.0		ng/L	2.02	335-76-2	
N-MeFOSAA*	Not detected	2.0		ng/L	2.02	2355-31-9	
EtFOSAA*	Not detected	4.0		ng/L	2.02	2991-50-6	
PFOS*	16	2.0		ng/L	2.02	1763-23-1	
PFOS-LN*	3.1	2.0		ng/L	2.02	1763-23-1-LN	
PFOS-BR*	12	2.0		ng/L	2.02	1763-23-1-BR	
PFUnDA*	Not detected	2.0		ng/L	2.02	2058-94-8	
PFNS*	Not detected	2.0		ng/L	2.02	68259-12-1	
PFDoDA*	Not detected	2.0		ng/L	2.02	307-55-1	
PFDS*	Not detected	2.0		ng/L	2.02	335-77-3	
PFTrDA*	Not detected	2.0		ng/L	2.02	72629-94-8	
FOSA*	Not detected	2.0		ng/L	2.02	754-91-6	
PFTeDA*	Not detected	4.0		ng/L	2.02	376-06-7	
11Cl-PF3OUdS*	Not detected	2.0		ng/L	2.02	763051-92-9	
9Cl-PF3ONS*	Not detected	2.0		ng/L	2.02	756426-58-1	
ADONA*	Not detected	2.0		ng/L	2.02	919005-14-4	
HFPO-DA*	Not detected	2.0		ng/L	2.02	13252-13-6	
PFECHS*	Not detected	2.0		ng/L	2.02	67584-42-3	
PFBSA*	Not detected	2.0		ng/L	2.02	30334-69-1	
PFHxSA*	Not detected	2.0		ng/L	2.02	41997-13-1	

Analytical Laboratory Report

Lab Sample ID: S43481.05
Sample Tag: MW 111
Collected Date/Time: 12/14/2022 12:31
Matrix: Water
COC Reference: 158657

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
1	15ml Centrifuge Tube	None	Yes	4.3	IR

Extraction / Prep.

Parameter	Result	Method	Run Date	Analyst	Flags
Initial wt. (g) / Final wt. (g) / Volume (ml)*	11.29/6.49/9	ASTMD7979-19M	01/04/23 18:00	PTW	

Organics

31 PFAs, Method: ASTMD7979-19M, Run Date: 01/05/23 18:17, Analyst: KCV

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
PFBA*	Not detected	9.4		ng/L	1.88	375-22-4	
PFPeA*	Not detected	3.8		ng/L	1.88	2706-90-3	
4:2 FTSA*	Not detected	1.9		ng/L	1.88	757124-72-4	
PFHxA*	3.8	1.9		ng/L	1.88	307-24-4	
PFBS*	3.0	1.9		ng/L	1.88	375-73-5	
PFHpA*	2.5	1.9		ng/L	1.88	375-85-9	
PFPeS*	Not detected	1.9		ng/L	1.88	2706-91-4	
6:2 FTSA*	Not detected	1.9		ng/L	1.88	27619-97-2	
PFOA*	12	1.9		ng/L	1.88	335-67-1	
PFHxS*	Not detected	1.9		ng/L	1.88	355-46-4	
PFHxS-LN*	Not detected	1.9		ng/L	1.88	355-46-4-LN	
PFHxS-BR*	Not detected	1.9		ng/L	1.88	355-46-4-BR	
PFNA*	Not detected	1.9		ng/L	1.88	375-95-1	
8:2 FTSA*	Not detected	1.9		ng/L	1.88	39108-34-4	
PFHpS*	Not detected	1.9		ng/L	1.88	375-92-8	
PFDA*	Not detected	1.9		ng/L	1.88	335-76-2	
N-MeFOSAA*	Not detected	1.9		ng/L	1.88	2355-31-9	
EtFOSAA*	Not detected	3.8		ng/L	1.88	2991-50-6	
PFOS*	Not detected	1.9		ng/L	1.88	1763-23-1	
PFOS-LN*	Not detected	1.9		ng/L	1.88	1763-23-1-LN	
PFOS-BR*	Not detected	1.9		ng/L	1.88	1763-23-1-BR	
PFUnDA*	Not detected	1.9		ng/L	1.88	2058-94-8	
PFNS*	Not detected	1.9		ng/L	1.88	68259-12-1	
PFDoDA*	Not detected	1.9		ng/L	1.88	307-55-1	
PFDS*	Not detected	1.9		ng/L	1.88	335-77-3	
PFTrDA*	Not detected	1.9		ng/L	1.88	72629-94-8	
FOSA*	Not detected	1.9		ng/L	1.88	754-91-6	
PFTeDA*	Not detected	3.8		ng/L	1.88	376-06-7	
11Cl-PF3OUdS*	Not detected	1.9		ng/L	1.88	763051-92-9	
9Cl-PF3ONS*	Not detected	1.9		ng/L	1.88	756426-58-1	
ADONA*	Not detected	1.9		ng/L	1.88	919005-14-4	
HFPO-DA*	Not detected	1.9		ng/L	1.88	13252-13-6	
PFECHS*	Not detected	1.9		ng/L	1.88	67584-42-3	
PFBSA*	Not detected	1.9		ng/L	1.88	30334-69-1	
PFHxSA*	Not detected	1.9		ng/L	1.88	41997-13-1	

Analytical Laboratory Report

Lab Sample ID: S43481.06
Sample Tag: MW 110
Collected Date/Time: 12/14/2022 13:25
Matrix: Water
COC Reference: 158657

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
1	15ml Centrifuge Tube	None	Yes	4.3	IR

Extraction / Prep.

Parameter	Result	Method	Run Date	Analyst	Flags
Initial wt. (g) / Final wt. (g) / Volume (ml)*	11.14/6.46/9	ASTMD7979-19M	01/04/23 18:00	PTW	

Organics

31 PFAs, Method: ASTMD7979-19M, Run Date: 01/05/23 18:37, Analyst: KCV

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
PFBA*	Not detected	9.6		ng/L	1.92	375-22-4	
PFPeA*	Not detected	3.8		ng/L	1.92	2706-90-3	
4:2 FTSA*	Not detected	1.9		ng/L	1.92	757124-72-4	
PFHxA*	2.6	1.9		ng/L	1.92	307-24-4	
PFBS*	3.5	1.9		ng/L	1.92	375-73-5	
PFHpA*	2.9	1.9		ng/L	1.92	375-85-9	
PFPeS*	Not detected	1.9		ng/L	1.92	2706-91-4	
6:2 FTSA*	Not detected	1.9		ng/L	1.92	27619-97-2	
PFOA*	9.8	1.9		ng/L	1.92	335-67-1	
PFHxS*	Not detected	1.9		ng/L	1.92	355-46-4	
PFHxS-LN*	Not detected	1.9		ng/L	1.92	355-46-4-LN	
PFHxS-BR*	Not detected	1.9		ng/L	1.92	355-46-4-BR	
PFNA*	Not detected	1.9		ng/L	1.92	375-95-1	
8:2 FTSA*	Not detected	1.9		ng/L	1.92	39108-34-4	
PFHpS*	Not detected	1.9		ng/L	1.92	375-92-8	
PFDA*	Not detected	1.9		ng/L	1.92	335-76-2	
N-MeFOSAA*	Not detected	1.9		ng/L	1.92	2355-31-9	
EtFOSAA*	Not detected	3.8		ng/L	1.92	2991-50-6	
PFOS*	Not detected	1.9		ng/L	1.92	1763-23-1	
PFOS-LN*	Not detected	1.9		ng/L	1.92	1763-23-1-LN	
PFOS-BR*	Not detected	1.9		ng/L	1.92	1763-23-1-BR	
PFUnDA*	Not detected	1.9		ng/L	1.92	2058-94-8	
PFNS*	Not detected	1.9		ng/L	1.92	68259-12-1	
PFDoDA*	Not detected	1.9		ng/L	1.92	307-55-1	
PFDS*	Not detected	1.9		ng/L	1.92	335-77-3	
PFTrDA*	Not detected	1.9		ng/L	1.92	72629-94-8	
FOSA*	Not detected	1.9		ng/L	1.92	754-91-6	
PFTeDA*	Not detected	3.8		ng/L	1.92	376-06-7	
11Cl-PF3OUdS*	Not detected	1.9		ng/L	1.92	763051-92-9	
9Cl-PF3ONS*	Not detected	1.9		ng/L	1.92	756426-58-1	
ADONA*	Not detected	1.9		ng/L	1.92	919005-14-4	
HFPO-DA*	Not detected	1.9		ng/L	1.92	13252-13-6	
PFECHS*	Not detected	1.9		ng/L	1.92	67584-42-3	
PFBSA*	Not detected	1.9		ng/L	1.92	30334-69-1	
PFHxSA*	Not detected	1.9		ng/L	1.92	41997-13-1	

Analytical Laboratory Report

Lab Sample ID: S43481.07
Sample Tag: MW 109
Collected Date/Time: 12/14/2022 14:15
Matrix: Water
COC Reference: 158657

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
1	15ml Centrifuge Tube	None	Yes	4.3	IR

Extraction / Prep.

Parameter	Result	Method	Run Date	Analyst	Flags
Initial wt. (g) / Final wt. (g) / Volume (ml)*	11.31/6.51/9	ASTMD7979-19M	01/04/23 18:00	PTW	

Organics

31 PFAs, Method: ASTMD7979-19M, Run Date: 01/05/23 18:56, Analyst: KCV

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
PFBA*	13	9.4		ng/L	1.88	375-22-4	
PFPeA*	9.0	3.8		ng/L	1.88	2706-90-3	
4:2 FTSA*	Not detected	1.9		ng/L	1.88	757124-72-4	
PFHxA*	9.2	1.9		ng/L	1.88	307-24-4	
PFBS*	8.2	1.9		ng/L	1.88	375-73-5	
PFHpA*	5.6	1.9		ng/L	1.88	375-85-9	
PFPeS*	Not detected	1.9		ng/L	1.88	2706-91-4	
6:2 FTSA*	Not detected	1.9		ng/L	1.88	27619-97-2	
PFOA*	8.9	1.9		ng/L	1.88	335-67-1	
PFHxS*	2.9	1.9		ng/L	1.88	355-46-4	
PFHxS-LN*	2.1	1.9		ng/L	1.88	355-46-4-LN	
PFHxS-BR*	Not detected	1.9		ng/L	1.88	355-46-4-BR	
PFNA*	Not detected	1.9		ng/L	1.88	375-95-1	
8:2 FTSA*	Not detected	1.9		ng/L	1.88	39108-34-4	
PFHpS*	Not detected	1.9		ng/L	1.88	375-92-8	
PFDA*	Not detected	1.9		ng/L	1.88	335-76-2	
N-MeFOSAA*	Not detected	1.9		ng/L	1.88	2355-31-9	
EtFOSAA*	Not detected	3.8		ng/L	1.88	2991-50-6	
PFOS*	Not detected	1.9		ng/L	1.88	1763-23-1	
PFOS-LN*	Not detected	1.9		ng/L	1.88	1763-23-1-LN	
PFOS-BR*	Not detected	1.9		ng/L	1.88	1763-23-1-BR	
PFUnDA*	Not detected	1.9		ng/L	1.88	2058-94-8	
PFNS*	Not detected	1.9		ng/L	1.88	68259-12-1	
PFDoDA*	Not detected	1.9		ng/L	1.88	307-55-1	
PFDS*	Not detected	1.9		ng/L	1.88	335-77-3	
PFTrDA*	Not detected	1.9		ng/L	1.88	72629-94-8	
FOSA*	Not detected	1.9		ng/L	1.88	754-91-6	
PFTeDA*	Not detected	3.8		ng/L	1.88	376-06-7	
11Cl-PF3OUdS*	Not detected	1.9		ng/L	1.88	763051-92-9	
9Cl-PF3ONS*	Not detected	1.9		ng/L	1.88	756426-58-1	
ADONA*	Not detected	1.9		ng/L	1.88	919005-14-4	
HFPO-DA*	Not detected	1.9		ng/L	1.88	13252-13-6	
PFECHS*	Not detected	1.9		ng/L	1.88	67584-42-3	
PFBSA*	Not detected	1.9		ng/L	1.88	30334-69-1	
PFHxSA*	Not detected	1.9		ng/L	1.88	41997-13-1	

Analytical Laboratory Report

Lab Sample ID: S43481.08
Sample Tag: MW 108
Collected Date/Time: 12/14/2022 14:58
Matrix: Water
COC Reference: 158657

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
1	15ml Centrifuge Tube	None	Yes	4.3	IR

Extraction / Prep.

Parameter	Result	Method	Run Date	Analyst	Flags
Initial wt. (g) / Final wt. (g) / Volume (ml)*	11.45/6.52/9	ASTMD7979-19M	01/04/23 18:00	PTW	

Organics

31 PFAs, Method: ASTMD7979-19M, Run Date: 01/05/23 19:16, Analyst: KCV

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
PFBA*	9.8	9.2		ng/L	1.83	375-22-4	
PFPeA*	Not detected	3.7		ng/L	1.83	2706-90-3	
4:2 FTSA*	Not detected	1.8		ng/L	1.83	757124-72-4	
PFHxA*	2.9	1.8		ng/L	1.83	307-24-4	
PFBS*	5.2	1.8		ng/L	1.83	375-73-5	
PFHpA*	Not detected	1.8		ng/L	1.83	375-85-9	
PFPeS*	Not detected	1.8		ng/L	1.83	2706-91-4	
6:2 FTSA*	Not detected	1.8		ng/L	1.83	27619-97-2	
PFOA*	5.4	1.8		ng/L	1.83	335-67-1	
PFHxS*	3.4	1.8		ng/L	1.83	355-46-4	
PFHxS-LN*	2.3	1.8		ng/L	1.83	355-46-4-LN	
PFHxS-BR*	Not detected	1.8		ng/L	1.83	355-46-4-BR	
PFNA*	Not detected	1.8		ng/L	1.83	375-95-1	
8:2 FTSA*	Not detected	1.8		ng/L	1.83	39108-34-4	
PFHpS*	Not detected	1.8		ng/L	1.83	375-92-8	
PFDA*	Not detected	1.8		ng/L	1.83	335-76-2	
N-MeFOSAA*	Not detected	1.8		ng/L	1.83	2355-31-9	
EtFOSAA*	Not detected	3.7		ng/L	1.83	2991-50-6	
PFOS*	Not detected	1.8		ng/L	1.83	1763-23-1	
PFOS-LN*	Not detected	1.8		ng/L	1.83	1763-23-1-LN	
PFOS-BR*	Not detected	1.8		ng/L	1.83	1763-23-1-BR	
PFUnDA*	Not detected	1.8		ng/L	1.83	2058-94-8	
PFNS*	Not detected	1.8		ng/L	1.83	68259-12-1	
PFDoDA*	Not detected	1.8		ng/L	1.83	307-55-1	
PFDS*	Not detected	1.8		ng/L	1.83	335-77-3	
PFTrDA*	Not detected	1.8		ng/L	1.83	72629-94-8	
FOSA*	Not detected	1.8		ng/L	1.83	754-91-6	
PFTeDA*	Not detected	3.7		ng/L	1.83	376-06-7	
11Cl-PF3OUdS*	Not detected	1.8		ng/L	1.83	763051-92-9	
9Cl-PF3ONS*	Not detected	1.8		ng/L	1.83	756426-58-1	
ADONA*	Not detected	1.8		ng/L	1.83	919005-14-4	
HFPO-DA*	Not detected	1.8		ng/L	1.83	13252-13-6	
PFECHS*	Not detected	1.8		ng/L	1.83	67584-42-3	
PFBSA*	Not detected	1.8		ng/L	1.83	30334-69-1	
PFHxSA*	Not detected	1.8		ng/L	1.83	41997-13-1	

Merit Laboratories Login Checklist

Lab Set ID: S43481
Client: TRC (TRC)
Project: Detroit Axle - Eastern
Submitted: 12/15/2022 10:55 Login User: MMC

Attention: Kelly Cratsenburg
Address: TRC
1540 Eisenhower Place
Ann Arbor, MI 48108

Phone: 734-585-7829 C: FAX:
Email: KCratsenburg@trccompanies.com

Selection				Description	Note
Sample Receiving					
01.	[X] Yes	[ ] No	[ ] N/A	Samples are received at 4C +/- 2C Thermometer #	IR 4.3
02.	[X] Yes	[ ] No	[ ] N/A	Received on ice/ cooling process begun	
03.	[ ] Yes	[X] No	[ ] N/A	Samples shipped	
04.	[ ] Yes	[X] No	[ ] N/A	Samples left in 24 hr. drop box	
05.	[ ] Yes	[ ] No	[X] N/A	Are there custody seals/tape or is the drop box locked	
Chain of Custody					
06.	[X] Yes	[ ] No	[ ] N/A	COC adequately filled out	
07.	[X] Yes	[ ] No	[ ] N/A	COC signed and relinquished to the lab	
08.	[X] Yes	[ ] No	[ ] N/A	Sample tag on bottles match COC	
09.	[ ] Yes	[X] No	[ ] N/A	Subcontracting needed? Subcontacted to:	
Preservation					
10.	[X] Yes	[ ] No	[ ] N/A	Do sample have correct chemical preservation	
11.	[ ] Yes	[ ] No	[X] N/A	Completed pH checks on preserved samples? (no VOAs)	
12.	[ ] Yes	[X] No	[ ] N/A	Did any samples need to be preserved in the lab?	
Bottle Conditions					
13.	[X] Yes	[ ] No	[ ] N/A	All bottles intact	
14.	[X] Yes	[ ] No	[ ] N/A	Appropriate analytical bottles are used	
15.	[X] Yes	[ ] No	[ ] N/A	Merit bottles used	
16.	[X] Yes	[ ] No	[ ] N/A	Sufficient sample volume received	
17.	[ ] Yes	[X] No	[ ] N/A	Samples require laboratory filtration	
18.	[X] Yes	[ ] No	[ ] N/A	Samples submitted within holding time	
19.	[ ] Yes	[ ] No	[X] N/A	Do water VOC or TOX bottles contain headspace	

Corrective action for all exceptions is to call the client and to notify the project manager.

Client Review By: _____ Date: _____

Merit Laboratories, Inc.
2680 East Lansing Dr., East Lansing, MI 48823
Phone (517) 332-0167 Fax (517) 332-4034
www.meritlabs.com

C.O.C. PAGE # _____ OF _____ 158657

CHAIN OF CUSTODY RECORD

REPORT TO

CONTACT NAME: Kelly Cretsenberg
COMPANY: TRC
ADDRESS: 1540 Eisenhower Place
CITY: Ann Arbor STATE: MI ZIP CODE: 48108
PHONE NO. | CELL NO. | P.O. NO.: 189455
E-MAIL ADDRESS | QUOTE NO.

INVOICE TO

CONTACT NAME ☐ SAME
COMPANY
ADDRESS
CITY | STATE | ZIP CODE
PHONE NO. | E-MAIL ADDRESS

PROJECT NO./NAME | SAMPLER(S) - PLEASE PRINT/SIGN NAME

TURNAROUND TIME REQUIRED ☐ 1 DAY ☐ 2 DAYS ☐ 3 DAYS ☐ STANDARD ☐ OTHER _____

DELIVERABLES REQUIRED ☐ STD ☐ LEVEL II ☐ LEVEL III ☐ LEVEL IV ☐ EDD ☐ OTHER _____

MATRIX CODE: W=WATER GW=GROUNDWATER WW=WASTEWATER S=SOIL L=LIQUID SD=SOLID SL=SLUDGE DW=DRINKING WATER O=OIL WP=WIPE A=AIR WS=WASTE

ANALYSIS (ATTACH LIST IF MORE SPACE IS REQUIRED)

Certifications
☐ OHIO VAP ☐ Drinking Water
☐ DoD ☐ NPDES
Project Locations
☐ Detroit ☐ New York
☐ Other _____
Special Instructions

MERIT LAB NO. (FOR LAB USE ONLY)	COLLECTION DATE	COLLECTION TIME	SAMPLE TAG IDENTIFICATION-DESCRIPTION	MATRIX	# OF BOTTLES	# Containers & Preservatives: NONE	HCl	HNO_3	H_2SO_4	NaOH	MeOH	OTHER	PFC
	12/14/22	0847	~~MW 115~~	W	3	X							4
43481.01	"	—	DUP #3	W	3	X							1
.02	"	0913	MW 119	W	3	X							X
.03	"	1032	MW 120	W	3	X							X
.04	"	1107	MW 113	W	3	X							X
.05	"	1231	MW 111	W	3	X							X
.06	"	1331	MW 110	W	3	X							X
.07	"	1415	MW 109	W	3	X							X
.08	"	1458	MW-108	W	3	X							X

RELINQUISHED BY: SIGNATURE/ORGANIZATION ☐ Sampler		DATE 12/14/22	TIME 1430
RECEIVED BY: SIGNATURE/ORGANIZATION	TRC	DATE 12/14/22	TIME
RELINQUISHED BY: SIGNATURE/ORGANIZATION	TRC	DATE 12/15	TIME 800
RECEIVED BY: SIGNATURE/ORGANIZATION		DATE 12/15	TIME 800

RELINQUISHED BY: SIGNATURE/ORGANIZATION		DATE 12/14/22	TIME 1430
RECEIVED BY: SIGNATURE/ORGANIZATION	M Chilcote	DATE 12/15/22	TIME 1055

12/15/22 1055

SEAL NO.	SEAL INTACT YES ☐ NO ☐	INITIALS	NOTES: TEMP. ON ARRIVAL 4.3
SEAL NO.	SEAL INTACT YES ☐ NO ☐	INITIALS	

PLEASE NOTE: SIGNING ACKNOWLEDGES ADHERENCE TO MERIT'S SAMPLE ACCEPTANCE POLICY ON REVERSE SIDE

Rev. 1.26.22

Analytical Laboratory Report

Report ID: S43550.01(01)
Generated on 01/19/2023

Report to

Attention: Kelly Cratsenburg
TRC
1540 Eisenhower Place
Ann Arbor, MI 48108

Phone: 734-585-7829 C: 734-412-5424 FAX:
Email: KCratsenburg@trccompanies.com

Addtional Contacts: Vince Buening

Report produced by

Merit Laboratories, Inc.
2680 East Lansing Drive
East Lansing, MI 48823

Phone: (517) 332-0167 FAX: (517) 332-6333

Contacts for report questions:
John Laverty (johnlaverty@meritlabs.com)
Barbara Ball (bball@meritlabs.com)

Report Summary

Lab Sample ID(s): S43550.01-S43550.07
Project: Eastern Boundary D.A.
Collected Date(s): 12/15/2022
Submitted Date/Time: 12/16/2022 10:32
Sampled by: Unknown
P.O. #: 189455

Table of Contents

Maya Murshak
Technical Director

General Report Notes

Analytical results relate only to the samples tested, in the condition received by the laboratory.
Methods may be modified for improved performance.
Results reported on a dry weight basis where applicable.
'Not detected' indicates that parameter was not found at a level equal to or greater than the reporting limit (RL).
When MDL results are provided, then 'Not detected' indicates that parameter was not found at a level equal to or greater than the MDL.
40 CFR Part 136 Table II Required Containers, Preservation Techniques and Holding Times for the Clean Water Act specify that samples for acrolein and acrylonitrile, and 2-chloroethylvinyl ether need to be preserved at a pH in the range of 4 to 5 or if not preserved, analyzed within 3 days of sampling.
QA/QC corresponding to this analytical report is a separate document with the same Merit ID reference and is available upon request.
Full accreditation certificates are available upon request. Starred (*) analytes are not NELAP accredited.
Samples are held by the lab for 30 days from the final report date unless a written request to hold longer is provided by the client.

Limits for drinking water samples, are listed as the MCL Limits (Maximum Contaminant Level Concentrations)
PFAS requirement: Section 9.3.8 of U.S. EPA Method 537.1 states "If the method analyte(s) found in the Field Sample is present in the FRB at a concentration greater than 1/3 the MRL, then all samples collected with that FRB are invalid and must be recollected and reanalyzed."
Samples submitted without an accompanying FRB may not be acceptable for compliance purposes.
Wisconsin PFAs analysis: MDL = LOD; RL = LOQ. LOD and LOQ are adjusted for dilution.

Report Narrative

There is no additional narrative for this analytical report

Laboratory Certifications

Authority	Certification ID
Michigan DEQ	#9956
DOD ELAP/ISO 17025	#69699
WBENC	#2005110032
Ohio VAP	#CL0002
Indiana DOH	#C-MI-07
New York NELAC	#11814
North Carolina DENR	#680
North Carolina DOH	#26702
Alaska CSLAP	#17-001
Pennsylvania DEP	#68-05884
Wisconsin DNR	FID# 399147320

Qualifier Descriptions

Qualifier	Description
!	Result is outside of stated limit criteria
B	Compound also found in associated method blank
E	Concentration exceeds calibration range
F	Analysis run outside of holding time
G	Estimated result due to extraction run outside of holding time
H	Sample submitted and run outside of holding time
I	Matrix interference with internal standard
J	Estimated value less than reporting limit, but greater than MDL
L	Elevated reporting limit due to low sample amount
M	Result reported to MDL not RDL
O	Analysis performed by outside laboratory. See attached report.
R	Preliminary result
S	Surrogate recovery outside of control limits
T	No correction for total solids
X	Elevated reporting limit due to matrix interference
Y	Elevated reporting limit due to high target concentration
b	Value detected less than reporting limit, but greater than MDL
e	Reported value estimated due to interference
j	Analyte also found in associated method blank
p	Benzo(b)Fluoranthene and Benzo(k)Fluoranthene integrated as one peak.
x	Preserved from bulk sample

Glossary of Abbreviations

Abbreviation	Description
RL/RDL	Reporting Limit
MDL	Method Detection Limit
MS	Matrix Spike
MSD	Matrix Spike Duplicate
SW	EPA SW 846 (Soil and Wastewater) Methods
E	EPA Methods
SM	Standard Methods
LN	Linear
BR	Branched

Method Summary

Method	Version
E200.8	EPA Method 200.8 Revision 5.4
E245.1	EPA Method 245.1 Revision 3.0
N/A	Not Applicable
SW3015A	SW 846 Method 3015A Revision 1 February 2007
SW5030C/8260C	SW 846 Method 8260C Revision 3 August 2006 / 5030C Revision 3 May 2003
SW8260B - SIM	SW 846 Method 8260B Revision 2 December 1996 SIMs

Analytical Laboratory Report

Sample Summary (7 samples)

Sample ID	Sample Tag	Matrix	Collected Date/Time
S43550.01	MW-107	Water	12/15/22 08:07
S43550.02	MW-106	Water	12/15/22 09:23
S43550.03	MW-121	Water	12/15/22 10:15
S43550.04	MW-113	Water	12/15/22 11:15
S43550.05	MW-22-04	Water	12/15/22 12:00
S43550.06	MW-22-05	Water	12/15/22 13:18
S43550.07	MW-22-06	Water	12/15/22 13:55

Analytical Laboratory Report

Lab Sample ID: S43550.01
Sample Tag: MW-107
Collected Date/Time: 12/15/2022 08:07
Matrix: Water
COC Reference: 158654

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
3	40ml Glass	HCL	Yes	4.4	IR
3	40ml Glass	None	Yes	4.4	IR
2	125ml Plastic	HNO3	Yes	4.4	IR

Extraction / Prep.

Parameter	Result	Method	Run Date	Analyst	Flags
Mercury Digestion	Completed	E245.1	12/21/22 02:37	CTV	
pH check for VOCs*	<2	N/A	12/19/22 11:40	JKJ	
Metal Digestion	Completed	SW3015A	12/19/22 09:45	CCM	

Metals

Method: E200.8, Run Date: 12/19/22 12:12, Analyst: CCM

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags	Limits
Aluminum	0.097	0.010		mg/L	2	7429-90-5		
Antimony*	0.011	0.001		mg/L	2	7440-36-0		
Arsenic	Not detected	0.002		mg/L	2	7440-38-2		
Barium	0.091	0.005		mg/L	2	7440-39-3		
Beryllium	Not detected	0.001		mg/L	2	7440-41-7		
Boron	0.11	0.04		mg/L	2	7440-42-8		
Cadmium	Not detected	0.0005		mg/L	2	7440-43-9		
Chromium	Not detected	0.005		mg/L	2	7440-47-3		
Cobalt	Not detected	0.005		mg/L	2	7440-48-4		
Iron	0.07	0.02		mg/L	2	7439-89-6		
Lead	Not detected	0.003		mg/L	2	7439-92-1		
Manganese	0.035	0.005		mg/L	2	7439-96-5		
Molybdenum	Not detected	0.005		mg/L	2	7439-98-7		
Nickel	Not detected	0.005		mg/L	2	7440-02-0		
Selenium	Not detected	0.005		mg/L	2	7782-49-2		
Silver	Not detected	0.0002		mg/L	2	7440-22-4		
Strontium	0.250	0.005		mg/L	2	7440-24-6		
Thallium	Not detected	0.002		mg/L	2	7440-28-0		
Titanium	Not detected	0.005		mg/L	2	7440-32-6		
Vanadium	Not detected	0.002		mg/L	2	7440-62-2		
Zinc	Not detected	0.005		mg/L	2	7440-66-6		

Method: E200.8, Run Date: 12/19/22 15:09, Analyst: CCM

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags	Limits
Calcium*	102	0.50		mg/L	2	7440-70-2		
Magnesium	17.7	0.50		mg/L	2	7439-95-4		
Potassium	12.9	0.50		mg/L	2	7440-09-7		
Sodium	27.7	0.50		mg/L	2	7440-23-5		

Method: E245.1, Run Date: 12/21/22 01:30, Analyst: CTV

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags	Limits
Mercury	Not detected	0.0002		mg/L	1	7439-97-6		

Lab Sample ID: S43550.01 (continued)
Sample Tag: MW-107

Organics - Volatiles

Method: SW5030C/8260C, Run Date: 12/27/22 00:06, Analyst: KAG

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags	Limits
Diisopropyl ether (DIPE)	Not detected	5		ug/L	1	108-20-3		

Method: SW8260B - SIM, Run Date: 12/21/22 21:37, Analyst: KAG

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags	Limits
1,2-Dibromo-3-chloropropane*	Not detected	0.05		ug/L	1	96-12-8		

Volatile Organics, Method: SW5030C/8260C, Run Date: 12/18/22 22:39, Analyst: KAG

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags	Limits
Acetone	Not detected	50		ug/L	1	67-64-1		
tert-Methyl butyl ether (MTBE)	Not detected	5		ug/L	1	1634-04-4		
Acrylonitrile	Not detected	2		ug/L	1	107-13-1		
2-Butanone (MEK)	Not detected	25		ug/L	1	78-93-3		200,000
Dichlorodifluoromethane	Not detected	5		ug/L	1	75-71-8		
Chloromethane	Not detected	5		ug/L	1	74-87-3		
Vinyl chloride	Not detected	1		ug/L	1	75-01-4		200
Bromomethane	Not detected	5		ug/L	1	74-83-9		
Chloroethane	Not detected	5		ug/L	1	75-00-3		
Trichlorofluoromethane	4	1		ug/L	1	75-69-4		
1,1-Dichloroethene	Not detected	1		ug/L	1	75-35-4		700
Methylene chloride	Not detected	5		ug/L	1	75-09-2		
trans-1,2-Dichloroethene	Not detected	1		ug/L	1	156-60-5		
1,1-Dichloroethane	Not detected	1		ug/L	1	75-34-3		
cis-1,2-Dichloroethene	Not detected	1		ug/L	1	156-59-2		
Chloroform	Not detected	1		ug/L	1	67-66-3		6,000
1,1,1-Trichloroethane	Not detected	1		ug/L	1	71-55-6		
4-Methyl-2-pentanone (MIBK)	Not detected	50		ug/L	1	108-10-1		
Carbon tetrachloride	Not detected	1		ug/L	1	56-23-5		500
Benzene	Not detected	1		ug/L	1	71-43-2		500
1,2-Dichloroethane	Not detected	1		ug/L	1	107-06-2		500
Trichloroethene	14	1		ug/L	1	79-01-6		500
1,2-Dichloropropane	Not detected	1		ug/L	1	78-87-5		
Bromodichloromethane	Not detected	1		ug/L	1	75-27-4		
Dibromomethane	Not detected	5		ug/L	1	74-95-3		
cis-1,3-Dichloropropene	Not detected	1		ug/L	1	10061-01-5		
Toluene	Not detected	1		ug/L	1	108-88-3		
trans-1,3-Dichloropropene	Not detected	1		ug/L	1	10061-02-6		
1,1,2-Trichloroethane	Not detected	1		ug/L	1	79-00-5		
Tetrachloroethene	Not detected	1		ug/L	1	127-18-4		700
Dibromochloromethane	Not detected	5		ug/L	1	124-48-1		
1,2-Dibromoethane	Not detected	1		ug/L	1	106-93-4		
Chlorobenzene	Not detected	1		ug/L	1	108-90-7		100,000
1,1,1,2-Tetrachloroethane	Not detected	1		ug/L	1	630-20-6		
Ethylbenzene	Not detected	1		ug/L	1	100-41-4		
p,m-Xylene*	Not detected	2		ug/L	1			
o-Xylene	Not detected	1		ug/L	1	95-47-6		
Styrene	Not detected	1		ug/L	1	100-42-5		
Isopropylbenzene	Not detected	5		ug/L	1	98-82-8		
Bromoform	Not detected	1		ug/L	1	75-25-2		
1,1,2,2-Tetrachloroethane	Not detected	1		ug/L	1	79-34-5		

Lab Sample ID: S43550.01 (continued)
Sample Tag: MW-107

Volatile Organics, Method: SW5030C/8260C, Run Date: 12/18/22 22:39, Analyst: KAG (continued)

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags	Limits
1,2,3-Trichloropropane	Not detected	1		ug/L	1	96-18-4		
n-Propylbenzene	Not detected	1		ug/L	1	103-65-1		
Bromobenzene	Not detected	1		ug/L	1	108-86-1		
1,3,5-Trimethylbenzene	Not detected	1		ug/L	1	108-67-8		
tert-Butylbenzene	Not detected	1		ug/L	1	98-06-6		
1,2,4-Trimethylbenzene	Not detected	1		ug/L	1	95-63-6		
sec-Butylbenzene	Not detected	1		ug/L	1	135-98-8		
p-Isopropyltoluene	Not detected	5		ug/L	1	99-87-6		
1,3-Dichlorobenzene	Not detected	1		ug/L	1	541-73-1		
1,4-Dichlorobenzene	Not detected	1		ug/L	1	106-46-7		7,500
1,2-Dichlorobenzene	Not detected	1		ug/L	1	95-50-1		
1,2,3-Trimethylbenzene	Not detected	1		ug/L	1	526-73-8		
n-Butylbenzene	Not detected	1		ug/L	1	104-51-8		
1,2,4-Trichlorobenzene	Not detected	5		ug/L	1	120-82-1		
1,2,3-Trichlorobenzene	Not detected	5		ug/L	1	87-61-6		
Naphthalene	Not detected	5		ug/L	1	91-20-3		
Acrolein	Not detected	1		ug/L	1	107-02-8		
2-Chlorotoluene	Not detected	1		ug/L	1	95-49-8		
4-Chlorotoluene	Not detected	1		ug/L	1	106-43-4		
1,3-Dichloropropane	Not detected	1		ug/L	1	142-28-9		
1,1-Dichloropropene	Not detected	1		ug/L	1	563-58-6		
2,2-Dichloropropane	Not detected	1		ug/L	1	594-20-7		
Hexachlorobutadiene	Not detected	1		ug/L	1	87-68-3		500
1,1,2-Trichloro-1,2,2-trifluoroethane	Not detected	1		ug/L	1	76-13-1		

Other / Misc.

Method: , Run Date: 12/18/22 16:52, Analyst: EF

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags	Limits
Alcohols*	Completed				1		O	

Method: , Run Date: 12/27/22 18:47, Analyst: EF

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags	Limits
Misc. Special Project*	Completed				1		O	

O-Analysis performed by outside laboratory. See attached report.

Lab Sample ID: S43550.02
Sample Tag: MW-106
Collected Date/Time: 12/15/2022 09:23
Matrix: Water
COC Reference: 158654

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
3	40ml Glass	HCL	Yes	4.4	IR
3	40ml Glass	None	Yes	4.4	IR
2	125ml Plastic	HNO3	Yes	4.4	IR

Extraction / Prep.

Parameter	Result	Method	Run Date	Analyst	Flags
Mercury Digestion	Completed	E245.1	12/21/22 02:37	CTV	
pH check for VOCs*	<2	N/A	12/19/22 11:40	JKJ	
Metal Digestion	Completed	SW3015A	12/19/22 09:45	CCM	

Metals

Method: E200.8, Run Date: 12/19/22 12:14, Analyst: CCM

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags	Limits
Aluminum	0.043	0.010		mg/L	2	7429-90-5		
Antimony*	Not detected	0.001		mg/L	2	7440-36-0		
Arsenic	Not detected	0.002		mg/L	2	7440-38-2		
Barium	0.049	0.005		mg/L	2	7440-39-3		
Beryllium	Not detected	0.001		mg/L	2	7440-41-7		
Boron	0.07	0.04		mg/L	2	7440-42-8		
Cadmium	Not detected	0.0005		mg/L	2	7440-43-9		
Chromium	Not detected	0.005		mg/L	2	7440-47-3		
Cobalt	Not detected	0.005		mg/L	2	7440-48-4		
Iron	0.11	0.02		mg/L	2	7439-89-6		
Lead	Not detected	0.003		mg/L	2	7439-92-1		
Manganese	0.206	0.005		mg/L	2	7439-96-5		
Molybdenum	Not detected	0.005		mg/L	2	7439-98-7		
Nickel	Not detected	0.005		mg/L	2	7440-02-0		
Selenium	Not detected	0.005		mg/L	2	7782-49-2		
Silver	Not detected	0.0002		mg/L	2	7440-22-4		
Strontium	0.262	0.005		mg/L	2	7440-24-6		
Thallium	Not detected	0.002		mg/L	2	7440-28-0		
Titanium	Not detected	0.005		mg/L	2	7440-32-6		
Vanadium	Not detected	0.002		mg/L	2	7440-62-2		
Zinc	Not detected	0.005		mg/L	2	7440-66-6		

Method: E200.8, Run Date: 12/19/22 15:10, Analyst: CCM

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags	Limits
Magnesium	16.7	0.50		mg/L	2	7439-95-4		
Potassium	3.91	0.50		mg/L	2	7440-09-7		

Method: E200.8, Run Date: 12/19/22 15:20, Analyst: CCM

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags	Limits
Calcium*	87.0	10.0		mg/L	50	7440-70-2		
Sodium	122	10.0		mg/L	50	7440-23-5		

Lab Sample ID: S43550.02 (continued)
Sample Tag: MW-106

Method: E245.1, Run Date: 12/21/22 01:34, Analyst: CTV

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags	Limits
Mercury	Not detected	0.0002		mg/L	1	7439-97-6		

Organics - Volatiles

Method: SW5030C/8260C, Run Date: 12/27/22 00:30, Analyst: KAG

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags	Limits
Diisopropyl ether (DIPE)	Not detected	5		ug/L	1	108-20-3		

Method: SW8260B - SIM, Run Date: 12/21/22 21:58, Analyst: KAG

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags	Limits
1,2-Dibromo-3-chloropropane*	Not detected	0.05		ug/L	1	96-12-8		

Volatile Organics, Method: SW5030C/8260C, Run Date: 12/18/22 22:58, Analyst: KAG

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags	Limits
Acetone	Not detected	50		ug/L	1	67-64-1		
tert-Methyl butyl ether (MTBE)	Not detected	5		ug/L	1	1634-04-4		
Acrylonitrile	Not detected	2		ug/L	1	107-13-1		
2-Butanone (MEK)	Not detected	25		ug/L	1	78-93-3		200,000
Dichlorodifluoromethane	Not detected	5		ug/L	1	75-71-8		
Chloromethane	Not detected	5		ug/L	1	74-87-3		
Vinyl chloride	Not detected	1		ug/L	1	75-01-4		200
Bromomethane	Not detected	5		ug/L	1	74-83-9		
Chloroethane	Not detected	5		ug/L	1	75-00-3		
Trichlorofluoromethane	Not detected	1		ug/L	1	75-69-4		
1,1-Dichloroethene	Not detected	1		ug/L	1	75-35-4		700
Methylene chloride	Not detected	5		ug/L	1	75-09-2		
trans-1,2-Dichloroethene	Not detected	1		ug/L	1	156-60-5		
1,1-Dichloroethane	Not detected	1		ug/L	1	75-34-3		
cis-1,2-Dichloroethene	Not detected	1		ug/L	1	156-59-2		
Chloroform	Not detected	1		ug/L	1	67-66-3		6,000
1,1,1-Trichloroethane	Not detected	1		ug/L	1	71-55-6		
4-Methyl-2-pentanone (MIBK)	Not detected	50		ug/L	1	108-10-1		
Carbon tetrachloride	Not detected	1		ug/L	1	56-23-5		500
Benzene	Not detected	1		ug/L	1	71-43-2		500
1,2-Dichloroethane	Not detected	1		ug/L	1	107-06-2		500
Trichloroethene	Not detected	1		ug/L	1	79-01-6		500
1,2-Dichloropropane	Not detected	1		ug/L	1	78-87-5		
Bromodichloromethane	Not detected	1		ug/L	1	75-27-4		
Dibromomethane	Not detected	5		ug/L	1	74-95-3		
cis-1,3-Dichloropropene	Not detected	1		ug/L	1	10061-01-5		
Toluene	Not detected	1		ug/L	1	108-88-3		
trans-1,3-Dichloropropene	Not detected	1		ug/L	1	10061-02-6		
1,1,2-Trichloroethane	Not detected	1		ug/L	1	79-00-5		
Tetrachloroethene	Not detected	1		ug/L	1	127-18-4		700
Dibromochloromethane	Not detected	5		ug/L	1	124-48-1		
1,2-Dibromoethane	Not detected	1		ug/L	1	106-93-4		
Chlorobenzene	31	1		ug/L	1	108-90-7		100,000
1,1,1,2-Tetrachloroethane	Not detected	1		ug/L	1	630-20-6		
Ethylbenzene	Not detected	1		ug/L	1	100-41-4		
p,m-Xylene*	Not detected	2		ug/L	1			
o-Xylene	Not detected	1		ug/L	1	95-47-6		

Lab Sample ID: S43550.02 (continued)
Sample Tag: MW-106

Volatile Organics, Method: SW5030C/8260C, Run Date: 12/18/22 22:58, Analyst: KAG (continued)

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags	Limits
Styrene	Not detected	1		ug/L	1	100-42-5		
Isopropylbenzene	Not detected	5		ug/L	1	98-82-8		
Bromoform	Not detected	1		ug/L	1	75-25-2		
1,1,2,2-Tetrachloroethane	Not detected	1		ug/L	1	79-34-5		
1,2,3-Trichloropropane	Not detected	1		ug/L	1	96-18-4		
n-Propylbenzene	Not detected	1		ug/L	1	103-65-1		
Bromobenzene	Not detected	1		ug/L	1	108-86-1		
1,3,5-Trimethylbenzene	Not detected	1		ug/L	1	108-67-8		
tert-Butylbenzene	Not detected	1		ug/L	1	98-06-6		
1,2,4-Trimethylbenzene	Not detected	1		ug/L	1	95-63-6		
sec-Butylbenzene	Not detected	1		ug/L	1	135-98-8		
p-Isopropyltoluene	Not detected	5		ug/L	1	99-87-6		
1,3-Dichlorobenzene	Not detected	1		ug/L	1	541-73-1		
1,4-Dichlorobenzene	Not detected	1		ug/L	1	106-46-7		7,500
1,2-Dichlorobenzene	Not detected	1		ug/L	1	95-50-1		
1,2,3-Trimethylbenzene	Not detected	1		ug/L	1	526-73-8		
n-Butylbenzene	Not detected	1		ug/L	1	104-51-8		
1,2,4-Trichlorobenzene	Not detected	5		ug/L	1	120-82-1		
1,2,3-Trichlorobenzene	Not detected	5		ug/L	1	87-61-6		
Naphthalene	Not detected	5		ug/L	1	91-20-3		
Acrolein	Not detected	1		ug/L	1	107-02-8		
2-Chlorotoluene	Not detected	1		ug/L	1	95-49-8		
4-Chlorotoluene	Not detected	1		ug/L	1	106-43-4		
1,3-Dichloropropane	Not detected	1		ug/L	1	142-28-9		
1,1-Dichloropropene	Not detected	1		ug/L	1	563-58-6		
2,2-Dichloropropane	Not detected	1		ug/L	1	594-20-7		
Hexachlorobutadiene	Not detected	1		ug/L	1	87-68-3		500
1,1,2-Trichloro-1,2,2-trifluoroethane	Not detected	1		ug/L	1	76-13-1		

Other / Misc.

Method: , Run Date: 12/18/22 17:14, Analyst: EF

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags	Limits
Alcohols*	Completed				1		O	

Method: , Run Date: 12/27/22 18:54, Analyst: EF

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags	Limits
Misc. Special Project*	Completed				1		O	

O-Analysis performed by outside laboratory. See attached report.

Lab Sample ID: S43550.03
Sample Tag: MW-121
Collected Date/Time: 12/15/2022 10:15
Matrix: Water
COC Reference: 158654

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
3	40ml Glass	HCL	Yes	4.4	IR
3	40ml Glass	None	Yes	4.4	IR
2	125ml Plastic	HNO3	Yes	4.4	IR

Extraction / Prep.

Parameter	Result	Method	Run Date	Analyst	Flags
Mercury Digestion	Completed	E245.1	12/21/22 02:37	CTV	
pH check for VOCs*	<2	N/A	12/19/22 11:40	JKJ	
Metal Digestion	Completed	SW3015A	12/19/22 09:45	CCM	

Metals

Method: E200.8, Run Date: 12/19/22 12:16, Analyst: CCM

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags	Limits
Aluminum	Not detected	0.010		mg/L	2	7429-90-5		
Antimony*	Not detected	0.001		mg/L	2	7440-36-0		
Arsenic	Not detected	0.002		mg/L	2	7440-38-2		
Barium	0.050	0.005		mg/L	2	7440-39-3		
Beryllium	Not detected	0.001		mg/L	2	7440-41-7		
Boron	0.26	0.04		mg/L	2	7440-42-8		
Cadmium	Not detected	0.0005		mg/L	2	7440-43-9		
Chromium	Not detected	0.005		mg/L	2	7440-47-3		
Cobalt	Not detected	0.005		mg/L	2	7440-48-4		
Iron	0.17	0.02		mg/L	2	7439-89-6		
Lead	Not detected	0.003		mg/L	2	7439-92-1		
Manganese	0.068	0.005		mg/L	2	7439-96-5		
Molybdenum	0.009	0.005		mg/L	2	7439-98-7		
Nickel	Not detected	0.005		mg/L	2	7440-02-0		
Selenium	Not detected	0.005		mg/L	2	7782-49-2		
Silver	Not detected	0.0002		mg/L	2	7440-22-4		
Strontium	0.374	0.005		mg/L	2	7440-24-6		
Thallium	Not detected	0.002		mg/L	2	7440-28-0		
Titanium	Not detected	0.005		mg/L	2	7440-32-6		
Vanadium	Not detected	0.002		mg/L	2	7440-62-2		
Zinc	Not detected	0.005		mg/L	2	7440-66-6		

Method: E200.8, Run Date: 12/19/22 15:12, Analyst: CCM

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags	Limits
Calcium*	125	0.50		mg/L	2	7440-70-2		
Magnesium	21.2	0.50		mg/L	2	7439-95-4		
Potassium	11.8	0.50		mg/L	2	7440-09-7		
Sodium	30.3	0.50		mg/L	2	7440-23-5		

Method: E245.1, Run Date: 12/21/22 01:38, Analyst: CTV

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags	Limits
Mercury	Not detected	0.0002		mg/L	1	7439-97-6		

Lab Sample ID: S43550.03 (continued)
Sample Tag: MW-121

Organics - Volatiles

Method: SW5030C/8260C, Run Date: 12/27/22 00:53, Analyst: KAG

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags	Limits
Diisopropyl ether (DIPE)	Not detected	5		ug/L	1	108-20-3		

Method: SW8260B - SIM, Run Date: 12/21/22 22:18, Analyst: KAG

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags	Limits
1,2-Dibromo-3-chloropropane*	Not detected	0.05		ug/L	1	96-12-8		

Volatile Organics, Method: SW5030C/8260C, Run Date: 12/18/22 23:17, Analyst: KAG

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags	Limits
Acetone	Not detected	50		ug/L	1	67-64-1		
tert-Methyl butyl ether (MTBE)	Not detected	5		ug/L	1	1634-04-4		
Acrylonitrile	Not detected	2		ug/L	1	107-13-1		
2-Butanone (MEK)	Not detected	25		ug/L	1	78-93-3		200,000
Dichlorodifluoromethane	Not detected	5		ug/L	1	75-71-8		
Chloromethane	Not detected	5		ug/L	1	74-87-3		
Vinyl chloride	Not detected	1		ug/L	1	75-01-4		200
Bromomethane	Not detected	5		ug/L	1	74-83-9		
Chloroethane	Not detected	5		ug/L	1	75-00-3		
Trichlorofluoromethane	Not detected	1		ug/L	1	75-69-4		
1,1-Dichloroethene	Not detected	1		ug/L	1	75-35-4		700
Methylene chloride	Not detected	5		ug/L	1	75-09-2		
trans-1,2-Dichloroethene	Not detected	1		ug/L	1	156-60-5		
1,1-Dichloroethane	Not detected	1		ug/L	1	75-34-3		
cis-1,2-Dichloroethene	Not detected	1		ug/L	1	156-59-2		
Chloroform	Not detected	1		ug/L	1	67-66-3		6,000
1,1,1-Trichloroethane	Not detected	1		ug/L	1	71-55-6		
4-Methyl-2-pentanone (MIBK)	Not detected	50		ug/L	1	108-10-1		
Carbon tetrachloride	Not detected	1		ug/L	1	56-23-5		500
Benzene	Not detected	1		ug/L	1	71-43-2		500
1,2-Dichloroethane	Not detected	1		ug/L	1	107-06-2		500
Trichloroethene	2	1		ug/L	1	79-01-6		500
1,2-Dichloropropane	Not detected	1		ug/L	1	78-87-5		
Bromodichloromethane	Not detected	1		ug/L	1	75-27-4		
Dibromomethane	Not detected	5		ug/L	1	74-95-3		
cis-1,3-Dichloropropene	Not detected	1		ug/L	1	10061-01-5		
Toluene	Not detected	1		ug/L	1	108-88-3		
trans-1,3-Dichloropropene	Not detected	1		ug/L	1	10061-02-6		
1,1,2-Trichloroethane	Not detected	1		ug/L	1	79-00-5		
Tetrachloroethene	Not detected	1		ug/L	1	127-18-4		700
Dibromochloromethane	Not detected	5		ug/L	1	124-48-1		
1,2-Dibromoethane	Not detected	1		ug/L	1	106-93-4		
Chlorobenzene	Not detected	1		ug/L	1	108-90-7		100,000
1,1,1,2-Tetrachloroethane	Not detected	1		ug/L	1	630-20-6		
Ethylbenzene	Not detected	1		ug/L	1	100-41-4		
p,m-Xylene*	Not detected	2		ug/L	1			
o-Xylene	Not detected	1		ug/L	1	95-47-6		
Styrene	Not detected	1		ug/L	1	100-42-5		
Isopropylbenzene	Not detected	5		ug/L	1	98-82-8		
Bromoform	Not detected	1		ug/L	1	75-25-2		
1,1,2,2-Tetrachloroethane	Not detected	1		ug/L	1	79-34-5		

Lab Sample ID: S43550.03 (continued)
Sample Tag: MW-121

Volatile Organics, Method: SW5030C/8260C, Run Date: 12/18/22 23:17, Analyst: KAG (continued)

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags	Limits
1,2,3-Trichloropropane	Not detected	1		ug/L	1	96-18-4		
n-Propylbenzene	Not detected	1		ug/L	1	103-65-1		
Bromobenzene	Not detected	1		ug/L	1	108-86-1		
1,3,5-Trimethylbenzene	Not detected	1		ug/L	1	108-67-8		
tert-Butylbenzene	Not detected	1		ug/L	1	98-06-6		
1,2,4-Trimethylbenzene	Not detected	1		ug/L	1	95-63-6		
sec-Butylbenzene	Not detected	1		ug/L	1	135-98-8		
p-Isopropyltoluene	Not detected	5		ug/L	1	99-87-6		
1,3-Dichlorobenzene	Not detected	1		ug/L	1	541-73-1		
1,4-Dichlorobenzene	Not detected	1		ug/L	1	106-46-7		7,500
1,2-Dichlorobenzene	Not detected	1		ug/L	1	95-50-1		
1,2,3-Trimethylbenzene	Not detected	1		ug/L	1	526-73-8		
n-Butylbenzene	Not detected	1		ug/L	1	104-51-8		
1,2,4-Trichlorobenzene	Not detected	5		ug/L	1	120-82-1		
1,2,3-Trichlorobenzene	Not detected	5		ug/L	1	87-61-6		
Naphthalene	Not detected	5		ug/L	1	91-20-3		
Acrolein	Not detected	1		ug/L	1	107-02-8		
2-Chlorotoluene	Not detected	1		ug/L	1	95-49-8		
4-Chlorotoluene	Not detected	1		ug/L	1	106-43-4		
1,3-Dichloropropane	Not detected	1		ug/L	1	142-28-9		
1,1-Dichloropropene	Not detected	1		ug/L	1	563-58-6		
2,2-Dichloropropane	Not detected	1		ug/L	1	594-20-7		
Hexachlorobutadiene	Not detected	1		ug/L	1	87-68-3		500
1,1,2-Trichloro-1,2,2-trifluoroethane	Not detected	1		ug/L	1	76-13-1		

Other / Misc.

Method: , Run Date: 12/18/22 17:35, Analyst: EF

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags	Limits
Alcohols*	Completed				1		O	

Method: , Run Date: 12/27/22 18:57, Analyst: EF

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags	Limits
Misc. Special Project*	Completed				1		O	

O-Analysis performed by outside laboratory. See attached report.

Lab Sample ID: S43550.04
Sample Tag: MW-113
Collected Date/Time: 12/15/2022 11:15
Matrix: Water
COC Reference: 158654

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
3	40ml Glass	HCL	Yes	4.4	IR
3	40ml Glass	None	Yes	4.4	IR
2	125ml Plastic	HNO3	Yes	4.4	IR

Extraction / Prep.

Parameter	Result	Method	Run Date	Analyst	Flags
Mercury Digestion	Completed	E245.1	12/21/22 02:37	CTV	
pH check for VOCs*	<2	N/A	12/19/22 11:40	JKJ	
Metal Digestion	Completed	SW3015A	12/19/22 11:40	CCM	

Metals

Method: E200.8, Run Date: 12/19/22 12:43, Analyst: CCM

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags	Limits
Aluminum	0.015	0.010		mg/L	2	7429-90-5		
Antimony*	Not detected	0.001		mg/L	2	7440-36-0		
Arsenic	Not detected	0.002		mg/L	2	7440-38-2		
Barium	0.032	0.005		mg/L	2	7440-39-3		
Beryllium	Not detected	0.001		mg/L	2	7440-41-7		
Boron	0.19	0.04		mg/L	2	7440-42-8		
Cadmium	Not detected	0.0005		mg/L	2	7440-43-9		
Chromium	Not detected	0.005		mg/L	2	7440-47-3		
Cobalt	Not detected	0.005		mg/L	2	7440-48-4		
Iron	0.14	0.02		mg/L	2	7439-89-6		
Lead	Not detected	0.003		mg/L	2	7439-92-1		
Manganese	0.019	0.005		mg/L	2	7439-96-5		
Molybdenum	Not detected	0.005		mg/L	2	7439-98-7		
Nickel	Not detected	0.005		mg/L	2	7440-02-0		
Selenium	Not detected	0.005		mg/L	2	7782-49-2		
Silver	Not detected	0.0002		mg/L	2	7440-22-4		
Strontium	0.839	0.005		mg/L	2	7440-24-6		
Thallium	Not detected	0.002		mg/L	2	7440-28-0		
Titanium	Not detected	0.005		mg/L	2	7440-32-6		
Vanadium	Not detected	0.002		mg/L	2	7440-62-2		
Zinc	Not detected	0.005		mg/L	2	7440-66-6		

Method: E200.8, Run Date: 12/19/22 15:28, Analyst: CCM

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags	Limits
Calcium*	141	0.50		mg/L	2	7440-70-2		
Magnesium	29.5	0.50		mg/L	2	7439-95-4		
Potassium	4.36	0.50		mg/L	2	7440-09-7		
Sodium	9.97	0.50		mg/L	2	7440-23-5		

Method: E245.1, Run Date: 12/21/22 01:42, Analyst: CTV

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags	Limits
Mercury	Not detected	0.0002		mg/L	1	7439-97-6		

Lab Sample ID: S43550.04 (continued)
Sample Tag: MW-113

Organics - Volatiles

Method: SW5030C/8260C, Run Date: 12/27/22 01:17, Analyst: KAG

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags	Limits
Diisopropyl ether (DIPE)	Not detected	5		ug/L	1	108-20-3		

Method: SW8260B - SIM, Run Date: 12/21/22 22:39, Analyst: KAG

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags	Limits
1,2-Dibromo-3-chloropropane*	Not detected	0.05		ug/L	1	96-12-8		

Volatile Organics, Method: SW5030C/8260C, Run Date: 12/18/22 23:37, Analyst: KAG

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags	Limits
Acetone	Not detected	50		ug/L	1	67-64-1		
tert-Methyl butyl ether (MTBE)	Not detected	5		ug/L	1	1634-04-4		
Acrylonitrile	Not detected	2		ug/L	1	107-13-1		
2-Butanone (MEK)	Not detected	25		ug/L	1	78-93-3		200,000
Dichlorodifluoromethane	Not detected	5		ug/L	1	75-71-8		
Chloromethane	Not detected	5		ug/L	1	74-87-3		
Vinyl chloride	Not detected	1		ug/L	1	75-01-4		200
Bromomethane	Not detected	5		ug/L	1	74-83-9		
Chloroethane	Not detected	5		ug/L	1	75-00-3		
Trichlorofluoromethane	Not detected	1		ug/L	1	75-69-4		
1,1-Dichloroethene	Not detected	1		ug/L	1	75-35-4		700
Methylene chloride	Not detected	5		ug/L	1	75-09-2		
trans-1,2-Dichloroethene	Not detected	1		ug/L	1	156-60-5		
1,1-Dichloroethane	Not detected	1		ug/L	1	75-34-3		
cis-1,2-Dichloroethene	Not detected	1		ug/L	1	156-59-2		
Chloroform	Not detected	1		ug/L	1	67-66-3		6,000
1,1,1-Trichloroethane	Not detected	1		ug/L	1	71-55-6		
4-Methyl-2-pentanone (MIBK)	Not detected	50		ug/L	1	108-10-1		
Carbon tetrachloride	Not detected	1		ug/L	1	56-23-5		500
Benzene	Not detected	1		ug/L	1	71-43-2		500
1,2-Dichloroethane	Not detected	1		ug/L	1	107-06-2		500
Trichloroethene	Not detected	1		ug/L	1	79-01-6		500
1,2-Dichloropropane	Not detected	1		ug/L	1	78-87-5		
Bromodichloromethane	Not detected	1		ug/L	1	75-27-4		
Dibromomethane	Not detected	5		ug/L	1	74-95-3		
cis-1,3-Dichloropropene	Not detected	1		ug/L	1	10061-01-5		
Toluene	Not detected	1		ug/L	1	108-88-3		
trans-1,3-Dichloropropene	Not detected	1		ug/L	1	10061-02-6		
1,1,2-Trichloroethane	Not detected	1		ug/L	1	79-00-5		
Tetrachloroethene	Not detected	1		ug/L	1	127-18-4		700
Dibromochloromethane	Not detected	5		ug/L	1	124-48-1		
1,2-Dibromoethane	Not detected	1		ug/L	1	106-93-4		
Chlorobenzene	Not detected	1		ug/L	1	108-90-7		100,000
1,1,1,2-Tetrachloroethane	Not detected	1		ug/L	1	630-20-6		
Ethylbenzene	Not detected	1		ug/L	1	100-41-4		
p,m-Xylene*	Not detected	2		ug/L	1			
o-Xylene	Not detected	1		ug/L	1	95-47-6		
Styrene	Not detected	1		ug/L	1	100-42-5		
Isopropylbenzene	Not detected	5		ug/L	1	98-82-8		
Bromoform	Not detected	1		ug/L	1	75-25-2		
1,1,2,2-Tetrachloroethane	Not detected	1		ug/L	1	79-34-5		

Lab Sample ID: S43550.04 (continued)
Sample Tag: MW-113

Volatile Organics, Method: SW5030C/8260C, Run Date: 12/18/22 23:37, Analyst: KAG (continued)

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags	Limits
1,2,3-Trichloropropane	Not detected	1		ug/L	1	96-18-4		
n-Propylbenzene	Not detected	1		ug/L	1	103-65-1		
Bromobenzene	Not detected	1		ug/L	1	108-86-1		
1,3,5-Trimethylbenzene	Not detected	1		ug/L	1	108-67-8		
tert-Butylbenzene	Not detected	1		ug/L	1	98-06-6		
1,2,4-Trimethylbenzene	Not detected	1		ug/L	1	95-63-6		
sec-Butylbenzene	Not detected	1		ug/L	1	135-98-8		
p-Isopropyltoluene	Not detected	5		ug/L	1	99-87-6		
1,3-Dichlorobenzene	Not detected	1		ug/L	1	541-73-1		
1,4-Dichlorobenzene	Not detected	1		ug/L	1	106-46-7		7,500
1,2-Dichlorobenzene	Not detected	1		ug/L	1	95-50-1		
1,2,3-Trimethylbenzene	Not detected	1		ug/L	1	526-73-8		
n-Butylbenzene	Not detected	1		ug/L	1	104-51-8		
1,2,4-Trichlorobenzene	Not detected	5		ug/L	1	120-82-1		
1,2,3-Trichlorobenzene	Not detected	5		ug/L	1	87-61-6		
Naphthalene	Not detected	5		ug/L	1	91-20-3		
Acrolein	Not detected	1		ug/L	1	107-02-8		
2-Chlorotoluene	Not detected	1		ug/L	1	95-49-8		
4-Chlorotoluene	Not detected	1		ug/L	1	106-43-4		
1,3-Dichloropropane	Not detected	1		ug/L	1	142-28-9		
1,1-Dichloropropene	Not detected	1		ug/L	1	563-58-6		
2,2-Dichloropropane	Not detected	1		ug/L	1	594-20-7		
Hexachlorobutadiene	Not detected	1		ug/L	1	87-68-3		500
1,1,2-Trichloro-1,2,2-trifluoroethane	Not detected	1		ug/L	1	76-13-1		

Other / Misc.

Method: , Run Date: 12/18/22 17:56, Analyst: EF

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags	Limits
Alcohols*	Completed				1		O	

Method: , Run Date: 12/27/22 19:01, Analyst: EF

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags	Limits
Misc. Special Project*	Completed				1		O	

O-Analysis performed by outside laboratory. See attached report.

Lab Sample ID: S43550.05
Sample Tag: MW-22-04
Collected Date/Time: 12/15/2022 12:00
Matrix: Water
COC Reference: 158654

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
3	40ml Glass	HCL	Yes	4.4	IR
3	40ml Glass	None	Yes	4.4	IR
2	125ml Plastic	HNO3	Yes	4.4	IR

Extraction / Prep.

Parameter	Result	Method	Run Date	Analyst	Flags
Mercury Digestion	Completed	E245.1	12/21/22 02:37	CTV	
pH check for VOCs*	<2	N/A	12/19/22 11:40	JKJ	
Metal Digestion	Completed	SW3015A	12/19/22 11:40	CCM	

Metals

Method: E200.8, Run Date: 12/19/22 12:45, Analyst: CCM

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags	Limits
Aluminum	Not detected	0.010		mg/L	2	7429-90-5		
Antimony*	Not detected	0.001		mg/L	2	7440-36-0		
Arsenic	0.004	0.002		mg/L	2	7440-38-2		
Barium	0.062	0.005		mg/L	2	7440-39-3		
Beryllium	Not detected	0.001		mg/L	2	7440-41-7		
Boron	0.08	0.04		mg/L	2	7440-42-8		
Cadmium	Not detected	0.0005		mg/L	2	7440-43-9		
Chromium	Not detected	0.005		mg/L	2	7440-47-3		
Cobalt	Not detected	0.005		mg/L	2	7440-48-4		
Iron	0.15	0.02		mg/L	2	7439-89-6		
Lead	Not detected	0.003		mg/L	2	7439-92-1		
Manganese	0.304	0.005		mg/L	2	7439-96-5		
Molybdenum	Not detected	0.005		mg/L	2	7439-98-7		
Nickel	Not detected	0.005		mg/L	2	7440-02-0		
Selenium	Not detected	0.005		mg/L	2	7782-49-2		
Silver	Not detected	0.0002		mg/L	2	7440-22-4		
Strontium	0.287	0.005		mg/L	2	7440-24-6		
Thallium	Not detected	0.002		mg/L	2	7440-28-0		
Titanium	Not detected	0.005		mg/L	2	7440-32-6		
Vanadium	Not detected	0.002		mg/L	2	7440-62-2		
Zinc	Not detected	0.005		mg/L	2	7440-66-6		

Method: E200.8, Run Date: 12/19/22 15:30, Analyst: CCM

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags	Limits
Calcium*	94.7	0.50		mg/L	2	7440-70-2		
Magnesium	16.3	0.50		mg/L	2	7439-95-4		
Potassium	2.29	0.50		mg/L	2	7440-09-7		
Sodium	44.5	0.50		mg/L	2	7440-23-5		

Method: E245.1, Run Date: 12/21/22 01:54, Analyst: CTV

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags	Limits
Mercury	Not detected	0.0002		mg/L	1	7439-97-6		

Lab Sample ID: S43550.05 (continued)
Sample Tag: MW-22-04

Organics - Volatiles

Method: SW5030C/8260C, Run Date: 12/27/22 01:41, Analyst: KAG

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags	Limits
Diisopropyl ether (DIPE)	Not detected	5		ug/L	1	108-20-3		

Method: SW8260B - SIM, Run Date: 12/21/22 23:00, Analyst: KAG

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags	Limits
1,2-Dibromo-3-chloropropane*	Not detected	0.05		ug/L	1	96-12-8		

Volatile Organics, Method: SW5030C/8260C, Run Date: 12/18/22 23:56, Analyst: KAG

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags	Limits
Acetone	Not detected	50		ug/L	1	67-64-1		
tert-Methyl butyl ether (MTBE)	Not detected	5		ug/L	1	1634-04-4		
Acrylonitrile	Not detected	2		ug/L	1	107-13-1		
2-Butanone (MEK)	Not detected	25		ug/L	1	78-93-3		200,000
Dichlorodifluoromethane	Not detected	5		ug/L	1	75-71-8		
Chloromethane	Not detected	5		ug/L	1	74-87-3		
Vinyl chloride	Not detected	1		ug/L	1	75-01-4		200
Bromomethane	Not detected	5		ug/L	1	74-83-9		
Chloroethane	Not detected	5		ug/L	1	75-00-3		
Trichlorofluoromethane	Not detected	1		ug/L	1	75-69-4		
1,1-Dichloroethene	Not detected	1		ug/L	1	75-35-4		700
Methylene chloride	Not detected	5		ug/L	1	75-09-2		
trans-1,2-Dichloroethene	Not detected	1		ug/L	1	156-60-5		
1,1-Dichloroethane	Not detected	1		ug/L	1	75-34-3		
cis-1,2-Dichloroethene	2	1		ug/L	1	156-59-2		
Chloroform	Not detected	1		ug/L	1	67-66-3		6,000
1,1,1-Trichloroethane	Not detected	1		ug/L	1	71-55-6		
4-Methyl-2-pentanone (MIBK)	Not detected	50		ug/L	1	108-10-1		
Carbon tetrachloride	Not detected	1		ug/L	1	56-23-5		500
Benzene	Not detected	1		ug/L	1	71-43-2		500
1,2-Dichloroethane	2	1		ug/L	1	107-06-2		500
Trichloroethene	2	1		ug/L	1	79-01-6		500
1,2-Dichloropropane	Not detected	1		ug/L	1	78-87-5		
Bromodichloromethane	Not detected	1		ug/L	1	75-27-4		
Dibromomethane	Not detected	5		ug/L	1	74-95-3		
cis-1,3-Dichloropropene	Not detected	1		ug/L	1	10061-01-5		
Toluene	Not detected	1		ug/L	1	108-88-3		
trans-1,3-Dichloropropene	Not detected	1		ug/L	1	10061-02-6		
1,1,2-Trichloroethane	Not detected	1		ug/L	1	79-00-5		
Tetrachloroethene	Not detected	1		ug/L	1	127-18-4		700
Dibromochloromethane	Not detected	5		ug/L	1	124-48-1		
1,2-Dibromoethane	Not detected	1		ug/L	1	106-93-4		
Chlorobenzene	3	1		ug/L	1	108-90-7		100,000
1,1,1,2-Tetrachloroethane	Not detected	1		ug/L	1	630-20-6		
Ethylbenzene	Not detected	1		ug/L	1	100-41-4		
p,m-Xylene*	Not detected	2		ug/L	1			
o-Xylene	Not detected	1		ug/L	1	95-47-6		
Styrene	Not detected	1		ug/L	1	100-42-5		
Isopropylbenzene	Not detected	5		ug/L	1	98-82-8		
Bromoform	Not detected	1		ug/L	1	75-25-2		
1,1,2,2-Tetrachloroethane	Not detected	1		ug/L	1	79-34-5		

Lab Sample ID: S43550.05 (continued)
Sample Tag: MW-22-04

Volatile Organics, Method: SW5030C/8260C, Run Date: 12/18/22 23:56, Analyst: KAG (continued)

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags	Limits
1,2,3-Trichloropropane	Not detected	1		ug/L	1	96-18-4		
n-Propylbenzene	Not detected	1		ug/L	1	103-65-1		
Bromobenzene	Not detected	1		ug/L	1	108-86-1		
1,3,5-Trimethylbenzene	Not detected	1		ug/L	1	108-67-8		
tert-Butylbenzene	Not detected	1		ug/L	1	98-06-6		
1,2,4-Trimethylbenzene	Not detected	1		ug/L	1	95-63-6		
sec-Butylbenzene	Not detected	1		ug/L	1	135-98-8		
p-Isopropyltoluene	Not detected	5		ug/L	1	99-87-6		
1,3-Dichlorobenzene	Not detected	1		ug/L	1	541-73-1		
1,4-Dichlorobenzene	Not detected	1		ug/L	1	106-46-7		7,500
1,2-Dichlorobenzene	Not detected	1		ug/L	1	95-50-1		
1,2,3-Trimethylbenzene	Not detected	1		ug/L	1	526-73-8		
n-Butylbenzene	Not detected	1		ug/L	1	104-51-8		
1,2,4-Trichlorobenzene	Not detected	5		ug/L	1	120-82-1		
1,2,3-Trichlorobenzene	Not detected	5		ug/L	1	87-61-6		
Naphthalene	Not detected	5		ug/L	1	91-20-3		
Acrolein	Not detected	1		ug/L	1	107-02-8		
2-Chlorotoluene	Not detected	1		ug/L	1	95-49-8		
4-Chlorotoluene	Not detected	1		ug/L	1	106-43-4		
1,3-Dichloropropane	Not detected	1		ug/L	1	142-28-9		
1,1-Dichloropropene	Not detected	1		ug/L	1	563-58-6		
2,2-Dichloropropane	Not detected	1		ug/L	1	594-20-7		
Hexachlorobutadiene	Not detected	1		ug/L	1	87-68-3		500
1,1,2-Trichloro-1,2,2-trifluoroethane	Not detected	1		ug/L	1	76-13-1		

Other / Misc.

Method: , Run Date: 12/18/22 18:17, Analyst: EF

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags	Limits
Alcohols*	Completed				1		O	

Method: , Run Date: 12/27/22 19:04, Analyst: EF

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags	Limits
Misc. Special Project*	Completed				1		O	

O-Analysis performed by outside laboratory. See attached report.

Analytical Laboratory Report

Lab Sample ID: S43550.06
Sample Tag: MW-22-05
Collected Date/Time: 12/15/2022 13:18
Matrix: Water
COC Reference: 158654

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
3	40ml Glass	HCL	Yes	4.4	IR
3	40ml Glass	None	Yes	4.4	IR
2	125ml Plastic	HNO3	Yes	4.4	IR

Extraction / Prep.

Parameter	Result	Method	Run Date	Analyst	Flags
Mercury Digestion	Completed	E245.1	12/21/22 02:37	CTV	
pH check for VOCs*	<2	N/A	12/19/22 11:40	JKJ	
Metal Digestion	Completed	SW3015A	12/19/22 11:40	CCM	

Metals

Method: E200.8, Run Date: 12/19/22 12:47, Analyst: CCM

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags	Limits
Aluminum	0.023	0.010		mg/L	2	7429-90-5		
Antimony*	Not detected	0.001		mg/L	2	7440-36-0		
Arsenic	0.007	0.002		mg/L	2	7440-38-2		
Barium	0.127	0.005		mg/L	2	7440-39-3		
Beryllium	Not detected	0.001		mg/L	2	7440-41-7		
Boron	0.30	0.04		mg/L	2	7440-42-8		
Cadmium	Not detected	0.0005		mg/L	2	7440-43-9		
Chromium	Not detected	0.005		mg/L	2	7440-47-3		
Cobalt	Not detected	0.005		mg/L	2	7440-48-4		
Iron	1.29	0.02		mg/L	2	7439-89-6		
Lead	Not detected	0.003		mg/L	2	7439-92-1		
Manganese	0.091	0.005		mg/L	2	7439-96-5		
Molybdenum	Not detected	0.005		mg/L	2	7439-98-7		
Nickel	Not detected	0.005		mg/L	2	7440-02-0		
Selenium	Not detected	0.005		mg/L	2	7782-49-2		
Silver	Not detected	0.0002		mg/L	2	7440-22-4		
Strontium	0.791	0.005		mg/L	2	7440-24-6		
Thallium	Not detected	0.002		mg/L	2	7440-28-0		
Titanium	Not detected	0.005		mg/L	2	7440-32-6		
Vanadium	Not detected	0.002		mg/L	2	7440-62-2		
Zinc	Not detected	0.005		mg/L	2	7440-66-6		

Method: E200.8, Run Date: 12/19/22 15:31, Analyst: CCM

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags	Limits
Calcium*	80.2	0.50		mg/L	2	7440-70-2		
Magnesium	38.8	0.50		mg/L	2	7439-95-4		
Potassium	6.84	0.50		mg/L	2	7440-09-7		
Sodium	18.9	0.50		mg/L	2	7440-23-5		

Method: E245.1, Run Date: 12/21/22 01:58, Analyst: CTV

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags	Limits
Mercury	Not detected	0.0002		mg/L	1	7439-97-6		

Lab Sample ID: S43550.06 (continued)
Sample Tag: MW-22-05

Organics - Volatiles

Method: SW5030C/8260C, Run Date: 12/27/22 02:06, Analyst: KAG

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags	Limits
Diisopropyl ether (DIPE)	Not detected	5		ug/L	1	108-20-3		

Method: SW8260B - SIM, Run Date: 12/21/22 23:20, Analyst: KAG

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags	Limits
1,2-Dibromo-3-chloropropane*	Not detected	0.05		ug/L	1	96-12-8		

Volatile Organics, Method: SW5030C/8260C, Run Date: 12/19/22 03:46, Analyst: KAG

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags	Limits
Acetone	Not detected	50		ug/L	1	67-64-1		
tert-Methyl butyl ether (MTBE)	Not detected	5		ug/L	1	1634-04-4		
Acrylonitrile	Not detected	2		ug/L	1	107-13-1		
2-Butanone (MEK)	Not detected	25		ug/L	1	78-93-3		200,000
Dichlorodifluoromethane	Not detected	5		ug/L	1	75-71-8		
Chloromethane	Not detected	5		ug/L	1	74-87-3		
Vinyl chloride	Not detected	1		ug/L	1	75-01-4		200
Bromomethane	Not detected	5		ug/L	1	74-83-9		
Chloroethane	Not detected	5		ug/L	1	75-00-3		
Trichlorofluoromethane	Not detected	1		ug/L	1	75-69-4		
1,1-Dichloroethene	Not detected	1		ug/L	1	75-35-4		700
Methylene chloride	Not detected	5		ug/L	1	75-09-2		
trans-1,2-Dichloroethene	Not detected	1		ug/L	1	156-60-5		
1,1-Dichloroethane	Not detected	1		ug/L	1	75-34-3		
cis-1,2-Dichloroethene	Not detected	1		ug/L	1	156-59-2		
Chloroform	Not detected	1		ug/L	1	67-66-3		6,000
1,1,1-Trichloroethane	Not detected	1		ug/L	1	71-55-6		
4-Methyl-2-pentanone (MIBK)	Not detected	50		ug/L	1	108-10-1		
Carbon tetrachloride	Not detected	1		ug/L	1	56-23-5		500
Benzene	Not detected	1		ug/L	1	71-43-2		500
1,2-Dichloroethane	Not detected	1		ug/L	1	107-06-2		500
Trichloroethene	Not detected	1		ug/L	1	79-01-6		500
1,2-Dichloropropane	Not detected	1		ug/L	1	78-87-5		
Bromodichloromethane	Not detected	1		ug/L	1	75-27-4		
Dibromomethane	Not detected	5		ug/L	1	74-95-3		
cis-1,3-Dichloropropene	Not detected	1		ug/L	1	10061-01-5		
Toluene	Not detected	1		ug/L	1	108-88-3		
trans-1,3-Dichloropropene	Not detected	1		ug/L	1	10061-02-6		
1,1,2-Trichloroethane	Not detected	1		ug/L	1	79-00-5		
Tetrachloroethene	Not detected	1		ug/L	1	127-18-4		700
Dibromochloromethane	Not detected	5		ug/L	1	124-48-1		
1,2-Dibromoethane	Not detected	1		ug/L	1	106-93-4		
Chlorobenzene	21	1		ug/L	1	108-90-7		100,000
1,1,1,2-Tetrachloroethane	Not detected	1		ug/L	1	630-20-6		
Ethylbenzene	Not detected	1		ug/L	1	100-41-4		
p,m-Xylene*	Not detected	2		ug/L	1			
o-Xylene	Not detected	1		ug/L	1	95-47-6		
Styrene	Not detected	1		ug/L	1	100-42-5		
Isopropylbenzene	Not detected	5		ug/L	1	98-82-8		
Bromoform	Not detected	1		ug/L	1	75-25-2		
1,1,2,2-Tetrachloroethane	Not detected	1		ug/L	1	79-34-5		

Lab Sample ID: S43550.06 (continued)
Sample Tag: MW-22-05

Volatile Organics, Method: SW5030C/8260C, Run Date: 12/19/22 03:46, Analyst: KAG (continued)

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags	Limits
1,2,3-Trichloropropane	Not detected	1		ug/L	1	96-18-4		
n-Propylbenzene	Not detected	1		ug/L	1	103-65-1		
Bromobenzene	Not detected	1		ug/L	1	108-86-1		
1,3,5-Trimethylbenzene	Not detected	1		ug/L	1	108-67-8		
tert-Butylbenzene	Not detected	1		ug/L	1	98-06-6		
1,2,4-Trimethylbenzene	Not detected	1		ug/L	1	95-63-6		
sec-Butylbenzene	Not detected	1		ug/L	1	135-98-8		
p-Isopropyltoluene	Not detected	5		ug/L	1	99-87-6		
1,3-Dichlorobenzene	Not detected	1		ug/L	1	541-73-1		
1,4-Dichlorobenzene	Not detected	1		ug/L	1	106-46-7		7,500
1,2-Dichlorobenzene	Not detected	1		ug/L	1	95-50-1		
1,2,3-Trimethylbenzene	Not detected	1		ug/L	1	526-73-8		
n-Butylbenzene	Not detected	1		ug/L	1	104-51-8		
1,2,4-Trichlorobenzene	Not detected	5		ug/L	1	120-82-1		
1,2,3-Trichlorobenzene	Not detected	5		ug/L	1	87-61-6		
Naphthalene	Not detected	5		ug/L	1	91-20-3		
Acrolein	Not detected	1		ug/L	1	107-02-8		
2-Chlorotoluene	Not detected	1		ug/L	1	95-49-8		
4-Chlorotoluene	Not detected	1		ug/L	1	106-43-4		
1,3-Dichloropropane	Not detected	1		ug/L	1	142-28-9		
1,1-Dichloropropene	Not detected	1		ug/L	1	563-58-6		
2,2-Dichloropropane	Not detected	1		ug/L	1	594-20-7		
Hexachlorobutadiene	Not detected	1		ug/L	1	87-68-3		500
1,1,2-Trichloro-1,2,2-trifluoroethane	Not detected	1		ug/L	1	76-13-1		

Other / Misc.

Method: , Run Date: 12/18/22 18:38, Analyst: EF

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags	Limits
Alcohols*	Completed				1		O	

Method: , Run Date: 12/27/22 19:08, Analyst: EF

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags	Limits
Misc. Special Project*	Completed				1		O	

O-Analysis performed by outside laboratory. See attached report.

Lab Sample ID: S43550.07
Sample Tag: MW-22-06
Collected Date/Time: 12/15/2022 13:55
Matrix: Water
COC Reference: 158654

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
3	40ml Glass	HCL	Yes	4.4	IR
3	40ml Glass	None	Yes	4.4	IR
2	125ml Plastic	HNO3	Yes	4.4	IR

Extraction / Prep.

Parameter	Result	Method	Run Date	Analyst	Flags
Mercury Digestion	Completed	E245.1	12/21/22 02:37	CTV	
pH check for VOCs*	<2	N/A	12/19/22 11:40	JKJ	
Metal Digestion	Completed	SW3015A	12/19/22 11:40	CCM	

Metals

Method: E200.8, Run Date: 12/19/22 12:48, Analyst: CCM

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags	Limits
Aluminum	Not detected	0.010		mg/L	2	7429-90-5		
Antimony*	Not detected	0.001		mg/L	2	7440-36-0		
Arsenic	0.006	0.002		mg/L	2	7440-38-2		
Barium	0.206	0.005		mg/L	2	7440-39-3		
Beryllium	Not detected	0.001		mg/L	2	7440-41-7		
Boron	0.46	0.04		mg/L	2	7440-42-8		
Cadmium	Not detected	0.0005		mg/L	2	7440-43-9		
Chromium	Not detected	0.005		mg/L	2	7440-47-3		
Cobalt	Not detected	0.005		mg/L	2	7440-48-4		
Iron	0.85	0.02		mg/L	2	7439-89-6		
Lead	Not detected	0.003		mg/L	2	7439-92-1		
Manganese	0.157	0.005		mg/L	2	7439-96-5		
Molybdenum	Not detected	0.005		mg/L	2	7439-98-7		
Nickel	Not detected	0.005		mg/L	2	7440-02-0		
Selenium	Not detected	0.005		mg/L	2	7782-49-2		
Silver	Not detected	0.0002		mg/L	2	7440-22-4		
Strontium	1.20	0.005		mg/L	2	7440-24-6		
Thallium	Not detected	0.002		mg/L	2	7440-28-0		
Titanium	Not detected	0.005		mg/L	2	7440-32-6		
Vanadium	Not detected	0.002		mg/L	2	7440-62-2		
Zinc	Not detected	0.005		mg/L	2	7440-66-6		

Method: E200.8, Run Date: 12/19/22 15:33, Analyst: CCM

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags	Limits
Calcium*	139	0.50		mg/L	2	7440-70-2		
Magnesium	43.4	0.50		mg/L	2	7439-95-4		
Potassium	7.53	0.50		mg/L	2	7440-09-7		
Sodium	28.7	0.50		mg/L	2	7440-23-5		

Method: E245.1, Run Date: 12/21/22 02:02, Analyst: CTV

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags	Limits
Mercury	Not detected	0.0002		mg/L	1	7439-97-6		

Lab Sample ID: S43550.07 (continued)
Sample Tag: MW-22-06

Organics - Volatiles

Method: SW5030C/8260C, Run Date: 12/27/22 02:29, Analyst: KAG

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags	Limits
Diisopropyl ether (DIPE)	Not detected	5		ug/L	1	108-20-3		

Method: SW8260B - SIM, Run Date: 12/21/22 23:41, Analyst: KAG

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags	Limits
1,2-Dibromo-3-chloropropane*	Not detected	0.05		ug/L	1	96-12-8		

Volatile Organics, Method: SW5030C/8260C, Run Date: 12/19/22 04:05, Analyst: KAG

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags	Limits
Acetone	Not detected	50		ug/L	1	67-64-1		
tert-Methyl butyl ether (MTBE)	Not detected	5		ug/L	1	1634-04-4		
Acrylonitrile	Not detected	2		ug/L	1	107-13-1		
2-Butanone (MEK)	Not detected	25		ug/L	1	78-93-3		200,000
Dichlorodifluoromethane	Not detected	5		ug/L	1	75-71-8		
Chloromethane	Not detected	5		ug/L	1	74-87-3		
Vinyl chloride	Not detected	1		ug/L	1	75-01-4		200
Bromomethane	Not detected	5		ug/L	1	74-83-9		
Chloroethane	Not detected	5		ug/L	1	75-00-3		
Trichlorofluoromethane	Not detected	1		ug/L	1	75-69-4		
1,1-Dichloroethene	Not detected	1		ug/L	1	75-35-4		700
Methylene chloride	Not detected	5		ug/L	1	75-09-2		
trans-1,2-Dichloroethene	Not detected	1		ug/L	1	156-60-5		
1,1-Dichloroethane	Not detected	1		ug/L	1	75-34-3		
cis-1,2-Dichloroethene	Not detected	1		ug/L	1	156-59-2		
Chloroform	Not detected	1		ug/L	1	67-66-3		6,000
1,1,1-Trichloroethane	Not detected	1		ug/L	1	71-55-6		
4-Methyl-2-pentanone (MIBK)	Not detected	50		ug/L	1	108-10-1		
Carbon tetrachloride	Not detected	1		ug/L	1	56-23-5		500
Benzene	Not detected	1		ug/L	1	71-43-2		500
1,2-Dichloroethane	Not detected	1		ug/L	1	107-06-2		500
Trichloroethene	Not detected	1		ug/L	1	79-01-6		500
1,2-Dichloropropane	Not detected	1		ug/L	1	78-87-5		
Bromodichloromethane	Not detected	1		ug/L	1	75-27-4		
Dibromomethane	Not detected	5		ug/L	1	74-95-3		
cis-1,3-Dichloropropene	Not detected	1		ug/L	1	10061-01-5		
Toluene	Not detected	1		ug/L	1	108-88-3		
trans-1,3-Dichloropropene	Not detected	1		ug/L	1	10061-02-6		
1,1,2-Trichloroethane	Not detected	1		ug/L	1	79-00-5		
Tetrachloroethene	Not detected	1		ug/L	1	127-18-4		700
Dibromochloromethane	Not detected	5		ug/L	1	124-48-1		
1,2-Dibromoethane	Not detected	1		ug/L	1	106-93-4		
Chlorobenzene	Not detected	1		ug/L	1	108-90-7		100,000
1,1,1,2-Tetrachloroethane	Not detected	1		ug/L	1	630-20-6		
Ethylbenzene	Not detected	1		ug/L	1	100-41-4		
p,m-Xylene*	Not detected	2		ug/L	1			
o-Xylene	Not detected	1		ug/L	1	95-47-6		
Styrene	Not detected	1		ug/L	1	100-42-5		
Isopropylbenzene	Not detected	5		ug/L	1	98-82-8		
Bromoform	Not detected	1		ug/L	1	75-25-2		
1,1,2,2-Tetrachloroethane	Not detected	1		ug/L	1	79-34-5		

Lab Sample ID: S43550.07 (continued)
Sample Tag: MW-22-06

Volatile Organics, Method: SW5030C/8260C, Run Date: 12/19/22 04:05, Analyst: KAG (continued)

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags	Limits
1,2,3-Trichloropropane	Not detected	1		ug/L	1	96-18-4		
n-Propylbenzene	Not detected	1		ug/L	1	103-65-1		
Bromobenzene	Not detected	1		ug/L	1	108-86-1		
1,3,5-Trimethylbenzene	Not detected	1		ug/L	1	108-67-8		
tert-Butylbenzene	Not detected	1		ug/L	1	98-06-6		
1,2,4-Trimethylbenzene	Not detected	1		ug/L	1	95-63-6		
sec-Butylbenzene	Not detected	1		ug/L	1	135-98-8		
p-Isopropyltoluene	Not detected	5		ug/L	1	99-87-6		
1,3-Dichlorobenzene	Not detected	1		ug/L	1	541-73-1		
1,4-Dichlorobenzene	Not detected	1		ug/L	1	106-46-7		7,500
1,2-Dichlorobenzene	Not detected	1		ug/L	1	95-50-1		
1,2,3-Trimethylbenzene	Not detected	1		ug/L	1	526-73-8		
n-Butylbenzene	Not detected	1		ug/L	1	104-51-8		
1,2,4-Trichlorobenzene	Not detected	5		ug/L	1	120-82-1		
1,2,3-Trichlorobenzene	Not detected	5		ug/L	1	87-61-6		
Naphthalene	Not detected	5		ug/L	1	91-20-3		
Acrolein	Not detected	1		ug/L	1	107-02-8		
2-Chlorotoluene	Not detected	1		ug/L	1	95-49-8		
4-Chlorotoluene	Not detected	1		ug/L	1	106-43-4		
1,3-Dichloropropane	Not detected	1		ug/L	1	142-28-9		
1,1-Dichloropropene	Not detected	1		ug/L	1	563-58-6		
2,2-Dichloropropane	Not detected	1		ug/L	1	594-20-7		
Hexachlorobutadiene	Not detected	1		ug/L	1	87-68-3		500
1,1,2-Trichloro-1,2,2-trifluoroethane	Not detected	1		ug/L	1	76-13-1		

Other / Misc.

Method: , Run Date: 12/18/22 18:59, Analyst: EF

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags	Limits
Alcohols*	Completed				1		O	

Method: , Run Date: 12/27/22 19:11, Analyst: EF

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags	Limits
Misc. Special Project*	Completed				1		O	

O-Analysis performed by outside laboratory. See attached report.

Merit Laboratories Login Checklist

Lab Set ID: S43550
Client: TRC (TRC)
Project: Eastern Boundary D.A.
Submitted: 12/16/2022 10:32 Login User: MMC

Attention: Kelly Cratsenburg
Address: TRC
1540 Eisenhower Place
Ann Arbor, MI 48108

Phone: 734-585-7829 C: FAX:
Email: KCratsenburg@trccompanies.com

Selection				Description	Note
Sample Receiving					
01.	[X] Yes	[ ] No	[ ] N/A	Samples are received at 4C +/- 2C Thermometer #	IR 4.4
02.	[X] Yes	[ ] No	[ ] N/A	Received on ice/ cooling process begun	
03.	[ ] Yes	[X] No	[ ] N/A	Samples shipped	
04.	[ ] Yes	[X] No	[ ] N/A	Samples left in 24 hr. drop box	
05.	[ ] Yes	[ ] No	[X] N/A	Are there custody seals/tape or is the drop box locked	
Chain of Custody					
06.	[X] Yes	[ ] No	[ ] N/A	COC adequately filled out	
07.	[X] Yes	[ ] No	[ ] N/A	COC signed and relinquished to the lab	
08.	[X] Yes	[ ] No	[ ] N/A	Sample tag on bottles match COC	
09.	[X] Yes	[ ] No	[ ] N/A	Subcontracting needed? Subcontacted to:	Eurofins
Preservation					
10.	[X] Yes	[ ] No	[ ] N/A	Do sample have correct chemical preservation	
11.	[X] Yes	[ ] No	[ ] N/A	Completed pH checks on preserved samples? (no VOAs)	
12.	[ ] Yes	[X] No	[ ] N/A	Did any samples need to be preserved in the lab?	
Bottle Conditions					
13.	[X] Yes	[ ] No	[ ] N/A	All bottles intact	
14.	[X] Yes	[ ] No	[ ] N/A	Appropriate analytical bottles are used	
15.	[X] Yes	[ ] No	[ ] N/A	Merit bottles used	
16.	[X] Yes	[ ] No	[ ] N/A	Sufficient sample volume received	
17.	[ ] Yes	[X] No	[ ] N/A	Samples require laboratory filtration	
18.	[X] Yes	[ ] No	[ ] N/A	Samples submitted within holding time	
19.	[ ] Yes	[X] No	[ ] N/A	Do water VOC or TOX bottles contain headspace	

Corrective action for all exceptions is to call the client and to notify the project manager.

Client Review By: _____ Date: _____

Merit Laboratories Bottle Preservation Check

Lab Set ID: S43550 Submitted: 12/16/2022 10:32

Client: TRC (TRC)

Project: Eastern Boundary D.A.

Initial Preservation Check: 12/16/2022 10:58 MMC

Preservation Recheck (E200.8): N/A

Attention: Kelly Cratsenburg
Address: TRC
1540 Eisenhower Place
Ann Arbor, MI 48108

Phone: 734-585-7829 C: FAX:
Email: KCratsenburg@trccompanies.com

Sample ID	Bottle / Preservation	pH (Orig)	Add ml	pH (New)	Notes
S43550.01	125ml Plastic HNO3	<2			
S43550.01	125ml Plastic HNO3	<2			
S43550.02	125ml Plastic HNO3	<2			
S43550.02	125ml Plastic HNO3	<2			
S43550.03	125ml Plastic HNO3	<2			
S43550.03	125ml Plastic HNO3	<2			
S43550.04	125ml Plastic HNO3	<2			
S43550.04	125ml Plastic HNO3	<2			
S43550.05	125ml Plastic HNO3	<2			
S43550.05	125ml Plastic HNO3	<2			
S43550.06	125ml Plastic HNO3	<2			
S43550.06	125ml Plastic HNO3	<2			
S43550.07	125ml Plastic HNO3	<2			
S43550.07	125ml Plastic HNO3	<2			

Merit Laboratories, Inc.

2680 East Lansing Dr., East Lansing, MI 48823
Phone (517) 332-0167 Fax (517) 332-4034
www.meritlabs.com

C.O.C. PAGE # ______ OF ______ 158654

CHAIN OF CUSTODY RECORD

REPORT TO

CONTACT NAME: Kely Cratsenburg
COMPANY: TRC
ADDRESS: 1540 Eisenhower Place
CITY: Ann Arbor STATE: MI ZIP CODE: 48106
PHONE NO.: CELL NO.: P.O. NO.: 189455
E-MAIL ADDRESS: QUOTE NO.:

INVOICE TO

CONTACT NAME: ☒ SAME
COMPANY:
ADDRESS:
CITY: STATE: ZIP CODE:
PHONE NO.: E-MAIL ADDRESS:

PROJECT NO./NAME: Eastern Boundary P.A

SAMPLER(S) - PLEASE PRINT/SIGN NAME:

TURNAROUND TIME REQUIRED ☐ 1 DAY ☐ 2 DAYS ☐ 3 DAYS ☒ STANDARD ☐ OTHER

DELIVERABLES REQUIRED ☐ STD ☐ LEVEL II ☐ LEVEL III ☐ LEVEL IV ☒ EDD ☐ OTHER TRC

MATRIX CODE: W=WATER GW=GROUNDWATER WW=WASTEWATER S=SOIL L=LIQUID SD=SOLID SL=SLUDGE DW=DRINKING WATER O=OIL WP=WIPE A=AIR WS=WASTE

ANALYSIS (ATTACH LIST IF MORE SPACE IS REQUIRED)

MERIT LAB NO. (FOR LAB USE ONLY)	DATE	TIME	SAMPLE TAG IDENTIFICATION-DESCRIPTION	MATRIX	# OF BOTTLES	NONE	HCl	HNO_3	H_2SO_4	NaOH	MeOH	OTHER	Ice Ferrous Iron	metals Hardness	Alkalinity/Anions
43550.01	12/15/22	0807	MW-107	W	7	X	X	X					X	X	X
.02	"	0922	MW-106	W	7	X	X	X					X	X	X
.03	"	1015	MW 121	W	7	X	X	X					X	X	X
.04	"	1115	MW 113	W	7	X	X	X					X	X	X
.05	"	1200	MW-22-04	W	7	X	X	X					X	X	X
.06	"	1318	MW-2205	W	7	X	X	X					X	X	X
.07	"	1355	MW 22-06	W	7	X	X	X					X	X	X

Certifications: ☐ OHIO VAP ☐ Drinking Water ☐ DoD ☐ NPDES

Project Locations: ☐ Detroit ☐ New York ☐ Other

Special Instructions: Detroit Axle Eastern Boundary

	DATE	TIME		DATE	TIME
RELINQUISHED BY: SIGNATURE/ORGANIZATION ☐ Sampler	12/15/22	1545	RELINQUISHED BY: SIGNATURE/ORGANIZATION [signature]	12/16/22	1032
RECEIVED BY: SIGNATURE/ORGANIZATION [signature]	12/16/22	800	RECEIVED BY: SIGNATURE/ORGANIZATION M Chilcote	12/16/22	1032
RELINQUISHED BY: SIGNATURE/ORGANIZATION			SEAL NO. SEAL INTACT YES ☐ NO ☐ INITIALS		
RECEIVED BY: SIGNATURE/ORGANIZATION			SEAL NO. SEAL INTACT YES ☐ NO ☐ INITIALS		

[signature] Trc 12/16/22 1032

NOTES:

TEMP. ON ARRIVAL 4.4

PLEASE NOTE: SIGNING ACKNOWLEDGES ADHERENCE TO MERIT'S SAMPLE ACCEPTANCE POLICY ON REVERSE SIDE

Rev. 1.26.22

eurofins | Environment Testing

ANALYTICAL REPORT

PREPARED FOR

Attn: Lab Results
Merit Laboratories
2680 E Lansing Drive
East Lansing, Michigan 48823

Generated 12/30/2022 9:04:30 AM

JOB DESCRIPTION

S43550

JOB NUMBER

190-30665-1

Eurofins Michigan
10448 Citation Drive
Suite 200
Brighton MI 48116

See page two for job notes and contact information.

Job Notes

The test results in this report meet all NELAP requirements for parameters for which accreditation is required or available. Any exceptions to the NELAP requirements are noted in this report. Pursuant to NELAP, this report may not be reproduced, except in full, without the written approval of the laboratory. This report is confidential and is intended for the sole use of Eurofins Environment Testing North Central, LLC and its client. All questions regarding this report should be directed to the Eurofins Environment Testing North Central, LLC Project Manager who has signed this report.

The test results in this report relate only to the samples as received by the laboratory and will meet all requirements of the methodology, with any exceptions noted. This report shall not be reproduced except in full, without the express written approval of the laboratory. All questions should be directed to the Eurofins Environment Testing North Central, LLC Project Manager.

Authorization

Generated
12/30/2022 9:04:30 AM

Authorized for release by
Nicole Kalis, Project Manager I
Nicole.Kalis@et.eurofinsus.com
Designee for
Sue Schafer, Project Manager II
Sue.Schafer@et.eurofinsus.com
(810)229-2763

Table of Contents

Sample Summary

Client: Merit Laboratories
Project/Site: S43550

Job ID: 190-30665-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
190-30665-1	S43550.01	Water	12/15/22 08:07	12/16/22 14:02
190-30665-2	S43550.02	Water	12/15/22 09:23	12/16/22 14:02
190-30665-3	S43550.03	Water	12/15/22 10:15	12/16/22 14:02
190-30665-4	S43550.04	Water	12/15/22 11:15	12/16/22 14:02
190-30665-5	S43550.05	Water	12/15/22 12:00	12/16/22 14:02
190-30665-6	S43550.06	Water	12/15/22 13:18	12/16/22 14:02
190-30665-7	S43550.07	Water	12/15/22 13:55	12/16/22 14:02

Case Narrative

Client: Merit Laboratories
Project/Site: S43550

Job ID: 190-30665-1

Job ID: 190-30665-1

Laboratory: Eurofins Michigan

Narrative

Job Narrative
190-30665-1

Receipt
The samples were received on 12/16/2022 2:02 PM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 4.2°C

GC Semi VOA
No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

Metals
Method 6020B: preparation batch 160-594437 Elevated reporting limits are provided for the following samples due to insufficient sample provided for preparation: S43550.01 (190-30665-1), S43550.02 (190-30665-2), S43550.03 (190-30665-3), S43550.04 (190-30665-4), S43550.05 (190-30665-5) and S43550.07 (190-30665-7).

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

Client: Merit Laboratories
Project/Site: S43550

Job ID: 190-30665-1

Client Sample ID: S43550.01
Lab Sample ID: 190-30665-1
Date Collected: 12/15/22 08:07
Matrix: Water
Date Received: 12/16/22 14:02

Method: SW846 8015D - Nonhalogenated Organic Compounds - Direct Injection (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Methanol	<3.7		3.7		mg/L			12/18/22 16:52	1

Method: SW846 6020B - Metals (ICP/MS)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Thorium	<4.0		4.0		ug/L		12/21/22 10:46	12/27/22 18:47	2

Client Sample ID: S43550.02
Lab Sample ID: 190-30665-2
Date Collected: 12/15/22 09:23
Matrix: Water
Date Received: 12/16/22 14:02

Method: SW846 8015D - Nonhalogenated Organic Compounds - Direct Injection (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Methanol	<3.7		3.7		mg/L			12/18/22 17:14	1

Method: SW846 6020B - Metals (ICP/MS)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Thorium	<4.0		4.0		ug/L		12/21/22 10:46	12/27/22 18:54	2

Client Sample ID: S43550.03
Lab Sample ID: 190-30665-3
Date Collected: 12/15/22 10:15
Matrix: Water
Date Received: 12/16/22 14:02

Method: SW846 8015D - Nonhalogenated Organic Compounds - Direct Injection (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Methanol	<3.7		3.7		mg/L			12/18/22 17:35	1

Method: SW846 6020B - Metals (ICP/MS)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Thorium	<4.0		4.0		ug/L		12/21/22 10:46	12/27/22 18:57	2

Client Sample ID: S43550.04
Lab Sample ID: 190-30665-4
Date Collected: 12/15/22 11:15
Matrix: Water
Date Received: 12/16/22 14:02

Method: SW846 8015D - Nonhalogenated Organic Compounds - Direct Injection (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Methanol	<3.7		3.7		mg/L			12/18/22 17:56	1

Method: SW846 6020B - Metals (ICP/MS)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Thorium	<4.0		4.0		ug/L		12/21/22 10:46	12/27/22 19:01	2

Client Sample ID: S43550.05
Lab Sample ID: 190-30665-5
Date Collected: 12/15/22 12:00
Matrix: Water
Date Received: 12/16/22 14:02

Method: SW846 8015D - Nonhalogenated Organic Compounds - Direct Injection (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Methanol	<3.7		3.7		mg/L			12/18/22 18:17	1

Method: SW846 6020B - Metals (ICP/MS)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Thorium	<2.0		2.0		ug/L		12/21/22 10:46	12/27/22 19:04	2

Client Sample Results

Client: Merit Laboratories
Project/Site: S43550

Job ID: 190-30665-1

Client Sample ID: S43550.06

Lab Sample ID: 190-30665-6

Date Collected: 12/15/22 13:18

Matrix: Water

Date Received: 12/16/22 14:02

Method: SW846 8015D - Nonhalogenated Organic Compounds - Direct Injection (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Methanol	<3.7		3.7		mg/L			12/18/22 18:38	1

Method: SW846 6020B - Metals (ICP/MS)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Thorium	<4.0		4.0		ug/L		12/21/22 10:46	12/27/22 19:08	2

Client Sample ID: S43550.07

Lab Sample ID: 190-30665-7

Date Collected: 12/15/22 13:55

Matrix: Water

Date Received: 12/16/22 14:02

Method: SW846 8015D - Nonhalogenated Organic Compounds - Direct Injection (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Methanol	<3.7		3.7		mg/L			12/18/22 18:59	1

Method: SW846 6020B - Metals (ICP/MS)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Thorium	<2.0		2.0		ug/L		12/21/22 10:46	12/27/22 19:11	2

Method: 8015D - Nonhalogenated Organic Compounds - Direct Injection (GC)

Lab Sample ID: MB 680-755745/10
Matrix: Water
Analysis Batch: 755745

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Methanol	<3.7		3.7		mg/L			12/18/22 16:10	1

Lab Sample ID: LCS 680-755745/6
Matrix: Water
Analysis Batch: 755745

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Methanol			20.0	21.9		mg/L		109	43 - 143		

Lab Sample ID: LCSD 680-755745/7
Matrix: Water
Analysis Batch: 755745

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Methanol			20.0	21.9		mg/L		110	43 - 143	0	50

Method: 6020B - Metals (ICP/MS)

Lab Sample ID: MB 160-594437/1-A
Matrix: Water
Analysis Batch: 594869

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 594437

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Thorium	<2.0		2.0		ug/L		12/21/22 10:46	12/27/22 18:16	2

Lab Sample ID: LCS 160-594437/2-A
Matrix: Water
Analysis Batch: 594869

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 594437

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Thorium			995	1030		ug/L		103	80 - 120		

Definitions/Glossary

Client: Merit Laboratories
Project/Site: S43550

Job ID: 190-30665-1

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

QC Association Summary

Client: Merit Laboratories
Project/Site: S43550

Job ID: 190-30665-1

GC Semi VOA

Analysis Batch: 755745

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
190-30665-1	S43550.01	Total/NA	Water	8015D	
190-30665-2	S43550.02	Total/NA	Water	8015D	
190-30665-3	S43550.03	Total/NA	Water	8015D	
190-30665-4	S43550.04	Total/NA	Water	8015D	
190-30665-5	S43550.05	Total/NA	Water	8015D	
190-30665-6	S43550.06	Total/NA	Water	8015D	
190-30665-7	S43550.07	Total/NA	Water	8015D	
MB 680-755745/10	Method Blank	Total/NA	Water	8015D	
LCS 680-755745/6	Lab Control Sample	Total/NA	Water	8015D	
LCSD 680-755745/7	Lab Control Sample Dup	Total/NA	Water	8015D	

Metals

Prep Batch: 594437

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
190-30665-1	S43550.01	Total/NA	Water	3010A	
190-30665-2	S43550.02	Total/NA	Water	3010A	
190-30665-3	S43550.03	Total/NA	Water	3010A	
190-30665-4	S43550.04	Total/NA	Water	3010A	
190-30665-5	S43550.05	Total/NA	Water	3010A	
190-30665-6	S43550.06	Total/NA	Water	3010A	
190-30665-7	S43550.07	Total/NA	Water	3010A	
MB 160-594437/1-A	Method Blank	Total/NA	Water	3010A	
LCS 160-594437/2-A	Lab Control Sample	Total/NA	Water	3010A	

Analysis Batch: 594869

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
190-30665-1	S43550.01	Total/NA	Water	6020B	594437
190-30665-2	S43550.02	Total/NA	Water	6020B	594437
190-30665-3	S43550.03	Total/NA	Water	6020B	594437
190-30665-4	S43550.04	Total/NA	Water	6020B	594437
190-30665-5	S43550.05	Total/NA	Water	6020B	594437
190-30665-6	S43550.06	Total/NA	Water	6020B	594437
190-30665-7	S43550.07	Total/NA	Water	6020B	594437
MB 160-594437/1-A	Method Blank	Total/NA	Water	6020B	594437
LCS 160-594437/2-A	Lab Control Sample	Total/NA	Water	6020B	594437

Lab Chronicle

Client: Merit Laboratories
Project/Site: S43550

Job ID: 190-30665-1

Client Sample ID: S43550.01
Date Collected: 12/15/22 08:07
Date Received: 12/16/22 14:02

Lab Sample ID: 190-30665-1
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8015D		1	755745	JCK	EET SAV	12/18/22 16:52
Total/NA	Prep	3010A			594437	LKP	EET SL	12/21/22 10:46
Total/NA	Analysis	6020B		2	594869	CGB	EET SL	12/27/22 18:47

Client Sample ID: S43550.02
Date Collected: 12/15/22 09:23
Date Received: 12/16/22 14:02

Lab Sample ID: 190-30665-2
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8015D		1	755745	JCK	EET SAV	12/18/22 17:14
Total/NA	Prep	3010A			594437	LKP	EET SL	12/21/22 10:46
Total/NA	Analysis	6020B		2	594869	CGB	EET SL	12/27/22 18:54

Client Sample ID: S43550.03
Date Collected: 12/15/22 10:15
Date Received: 12/16/22 14:02

Lab Sample ID: 190-30665-3
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8015D		1	755745	JCK	EET SAV	12/18/22 17:35
Total/NA	Prep	3010A			594437	LKP	EET SL	12/21/22 10:46
Total/NA	Analysis	6020B		2	594869	CGB	EET SL	12/27/22 18:57

Client Sample ID: S43550.04
Date Collected: 12/15/22 11:15
Date Received: 12/16/22 14:02

Lab Sample ID: 190-30665-4
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8015D		1	755745	JCK	EET SAV	12/18/22 17:56
Total/NA	Prep	3010A			594437	LKP	EET SL	12/21/22 10:46
Total/NA	Analysis	6020B		2	594869	CGB	EET SL	12/27/22 19:01

Client Sample ID: S43550.05
Date Collected: 12/15/22 12:00
Date Received: 12/16/22 14:02

Lab Sample ID: 190-30665-5
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8015D		1	755745	JCK	EET SAV	12/18/22 18:17
Total/NA	Prep	3010A			594437	LKP	EET SL	12/21/22 10:46
Total/NA	Analysis	6020B		2	594869	CGB	EET SL	12/27/22 19:04

Client Sample ID: S43550.06
Date Collected: 12/15/22 13:18
Date Received: 12/16/22 14:02

Lab Sample ID: 190-30665-6
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8015D		1	755745	JCK	EET SAV	12/18/22 18:38

Lab Chronicle

Client: Merit Laboratories
Project/Site: S43550

Job ID: 190-30665-1

Client Sample ID: S43550.06

Lab Sample ID: 190-30665-6

Date Collected: 12/15/22 13:18

Matrix: Water

Date Received: 12/16/22 14:02

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	3010A			594437	LKP	EET SL	12/21/22 10:46
Total/NA	Analysis	6020B		2	594869	CGB	EET SL	12/27/22 19:08

Client Sample ID: S43550.07

Lab Sample ID: 190-30665-7

Date Collected: 12/15/22 13:55

Matrix: Water

Date Received: 12/16/22 14:02

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8015D		1	755745	JCK	EET SAV	12/18/22 18:59
Total/NA	Prep	3010A			594437	LKP	EET SL	12/21/22 10:46
Total/NA	Analysis	6020B		2	594869	CGB	EET SL	12/27/22 19:11

Laboratory References:

EET SAV = Eurofins Savannah, 5102 LaRoche Avenue, Savannah, GA 31404, TEL (912)354-7858

EET SL = Eurofins St. Louis, 13715 Rider Trail North, Earth City, MO 63045, TEL (314)298-8566

Analyst References:

Lab: EET SAV

Batch Type: Analysis

JCK = Joshua Kellar

Lab: EET SL

Batch Type: Prep

LKP = Laura Pemberton

Batch Type: Analysis

CGB = Cory Buffington

Accreditation/Certification Summary

Client: Merit Laboratories
Project/Site: S43550

Job ID: 190-30665-1

Laboratory: Eurofins Savannah

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
	AFCEE	SAVLAB	
Alabama	State	41450	06-30-23
ANAB	Dept. of Defense ELAP	L2463	09-22-24
Arkansas DEQ	State	19-015-0	02-01-23
California	State	2939	06-30-22 *
Connecticut	State	PH-0161	03-31-23
Florida	NELAP	E87052	06-23-23
Georgia	State	E87052	06-30-23
Georgia (DW)	State	803	06-30-23
Guam	State	19-007R	04-17-23
Hawaii	State	<cert No.>	06-30-23
Illinois	NELAP	200022	11-30-22 *
Indiana	State	C-GA-02	06-30-23
Iowa	State	353	07-01-23
Kentucky (UST)	State	NA	06-30-23
Louisiana	NELAP	30690	06-30-23
Louisiana (All)	NELAP	30690	06-30-23
Louisiana (DW)	State	LA009	12-31-22
Maine	State	GA00006	12-27-22
Maryland	State	250	12-31-23
Massachusetts	State	M-GA006	07-30-23
Michigan	State	9925	06-30-23
Mississippi	State	<cert No.>	06-30-23
Nebraska	State	NE-OS-7-04	06-30-23
New Jersey	NELAP	GA769	06-30-23
New Mexico	State	GA00006	06-30-23
New York	NELAP	10842	04-01-23
North Carolina (DW)	State	13701	07-31-23
North Carolina (WW/SW)	State	269	12-31-22
Pennsylvania	NELAP	68-00474	06-30-23
Puerto Rico	State	GA00006	12-30-22
South Carolina	State	98001	06-30-23
Tennessee	State	TN02961	06-30-23
Texas	NELAP	T1047004185-19-14	11-30-23
Texas	TCEQ Water Supply	T104704185	06-30-23
USDA	US Federal Programs	P330-18-00313	09-03-24
Virginia	NELAP	460161	06-14-23
Wisconsin	State	999819810	08-31-23
Wyoming	State	8TMS-L	06-30-23

Laboratory: Eurofins St. Louis

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Alaska (UST)	State	20-001	05-06-25
ANAB	Dept. of Defense ELAP	L2305	04-06-25
ANAB	Dept. of Energy	L2305.01	04-06-25
ANAB	ISO/IEC 17025	L2305	04-06-25
Arizona	State	AZ0813	12-08-23
California	Los Angeles County Sanitation Districts	10259	06-30-22 *

* Accreditation/Certification renewal pending - accreditation/certification considered valid.

Accreditation/Certification Summary

Client: Merit Laboratories
Project/Site: S43550

Job ID: 190-30665-1

Laboratory: Eurofins St. Louis (Continued)

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
California	State	2886	06-30-23
Connecticut	State	PH-0241	03-31-23
Florida	NELAP	E87689	06-30-23
HI - RadChem Recognition	State	n/a	06-30-23
Illinois	NELAP	200023	11-30-23
Iowa	State	373	12-01-24
Kansas	NELAP	E-10236	10-31-23
Kentucky (DW)	State	KY90125	12-31-22
Kentucky (WW)	State	KY90125 (Permit KY0004049)	12-31-22
Louisiana (All)	NELAP	04080	06-30-23
Louisiana (DW)	State	LA011	12-31-22
Maryland	State	310	09-30-23
MI - RadChem Recognition	State	9005	06-30-23
Missouri	State	780	06-30-25
Nevada	State	MO000542020-1	07-31-23
New Jersey	NELAP	MO002	06-30-23
New York	NELAP	11616	04-01-23
North Dakota	State	R-207	06-30-23
NRC	NRC	24-24817-01	12-31-22
Oklahoma	NELAP	9997	08-31-23
Oregon	NELAP	4157	09-01-23
Pennsylvania	NELAP	68-00540	02-28-23
South Carolina	State	85002001	06-30-23
Texas	NELAP	T104704193	07-31-23
US Fish & Wildlife	US Federal Programs	058448	07-31-23
USDA	US Federal Programs	P330-17-00028	03-11-23
Utah	NELAP	MO000542021-14	07-31-23
Virginia	NELAP	10310	06-14-24
Washington	State	C592	08-30-23
West Virginia DEP	State	381	12-31-22

Method Summary

Client: Merit Laboratories
Project/Site: S43550

Job ID: 190-30665-1

Method	Method Description	Protocol	Laboratory
8015D	Nonhalogenated Organic Compounds - Direct Injection (GC)	SW846	EET SAV
6020B	Metals (ICP/MS)	SW846	EET SL
3010A	Preparation, Total Metals	SW846	EET SL

Protocol References:

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

EET SAV = Eurofins Savannah, 5102 LaRoche Avenue, Savannah, GA 31404, TEL (912)354-7858

EET SL = Eurofins St. Louis, 13715 Rider Trail North, Earth City, MO 63045, TEL (314)298-8566

Merit Laboratories, Inc.
2680 East Lansing Dr., East Lansing, MI 48823
Phone (517) 332-0167 Fax (517) 332-4034
www.meritlabs.com

CHAIN OF CUSTODY RECORD

REPORT TO

CONTACT NAME: Project Management Team
COMPANY: Merit Laboratories
ADDRESS: 2680 East Lansing Drive
CITY: East Lansing STATE: MI ZIP CODE: 48823
PHONE NO.: 517-332-0167 FAX NO.: P.O. NO.:
E-MAIL ADDRESS: results@meritlabs.com QUOTE NO.:

INVOICE TO

CONTACT NAME: Julie Teague ☒ SAME
COMPANY: Merit Laboratories
ADDRESS: 2680 East Lansing Drive
CITY: East Lansing STATE: MI ZIP CODE: 48823
PHONE NO.: 517-332-0167 E-MAIL ADDRESS: juliet@meritlabs.com

PROJECT NO./NAME: S43550 SAMPLER(S) - PLEASE PRINT/SIGN NAME:

TURNAROUND TIME REQUIRED ☐ 1 DAY ☐ 2 DAYS ☐ 3 DAYS ☒ STANDARD ☐ OTHER

DELIVERABLES REQUIRED ☐ STD ☒ LEVEL II ☐ LEVEL III ☐ LEVEL IV ☐ EDD ☐ OTHER

MATRIX CODE: GW=GROUNDWATER WW=WASTEWATER S=SOIL L=LIQUID SD=SOLID SL=SLUDGE DW=DRINKING WATER O=OIL WP=WIPE A=AIR W=WASTE

ANALYSIS (ATTACH LIST IF MORE SPACE IS REQUIRED)

Certifications: ☐ OHIO VAP ☐ Drinking Water ☐ DoD ☐ NPDES

Project Locations: ☐ Detroit ☐ New York ☐ Other

MERIT LAB NO. (FOR LAB USE ONLY)	YEAR DATE	YEAR TIME	SAMPLE TAG IDENTIFICATION-DESCRIPTION	MATRIX	# OF BOTTLES	# Containers & Preservatives: NONE	HCl	HNO3	H2SO4	NaOH	MeOH	OTHER	Alcohols*	Thorium	Special Instructions
	12/15/22	0807	S43550.01	W	4	3		1					✓	✓	*Methanol RL 3,700ppb
	12/15/22	0923	S43550.02	W	4	3		1					✓	✓	
	12/15/22	1015	S43550.03	W	4	3		1					✓	✓	
	12/15/22	1115	S43550.04	W	4	3		1					✓	✓	
	12/15/22	1200	S43550.05	W	4	3		1					✓	✓	
	12/15/22	1318	S43550.06	W	4	3		1					✓	✓	
	12/15/22	1355	S43550.07	W	4	3		1					✓	✓	
															Subcontracted to Eurofins

190-30665 Chain of Custody

RELINQUISHED BY: SIGNATURE/ORGANIZATION ☐ Sampler	DATE 12/16/22	TIME 1300	
RECEIVED BY: SIGNATURE/ORGANIZATION	DATE 12/16/22	TIME 1300	
RELINQUISHED BY: SIGNATURE/ORGANIZATION	DATE 12/16/22	TIME 1405	
RECEIVED BY: SIGNATURE/ORGANIZATION	DATE 12/16/22	TIME 1433	

RELINQUISHED BY: SIGNATURE/ORGANIZATION	DATE	TIME	
RECEIVED BY: SIGNATURE/ORGANIZATION	DATE 12/16/22	TIME 1402	
SEAL NO.	SEAL INTACT YES ☐ NO ☐	INITIALS	NOTES: TEMP. ON ARRIVAL
SEAL NO.	SEAL INTACT YES ☐ NO ☐	INITIALS	

PLEASE NOTE: SIGNING ACKNOWLEDGES ADHERENCE TO MERIT'S SAMPLE ACCEPTANCE POLICY ON REVERSE SIDE

Rev. 5.18.12

eurofins | Environment Testing TestAmerica

☐ SDS or Known Hazard Information Supplied by Client
☐ Discrepancies
☐ Short Hold
☐ Rush ☐ 24 Hr ☐ 2-Day ☐ 3-Day ☐ 5-Day ☐ Other: _____

Client ID: Merit
Work Oder #: 30665

Cooler / Sample Receipt

After hours receipt: complete gray areas. Place cooler in walk-in, place form in Receiving box. Date: _____ Time: _____

Receipt Evaluation Performed by: Initials: ____ Date: 12/16 Time: 14:02

Method of Shipment:
Walk-In Client Eurofins TA Field/Courier
Other Client / 3rd Party Courier: _____
Fed Ex Tracking #: _____
UPS Tracking #: _____
Other: _____

Shipping Container Type:
☐ Cooler ☐ Box
☐ None ☐ Other: _____

Packing Materials:
☐ Plastic Bags ☐ Foam
☐ Bubble Wrap ☐ Paper
☐ Packing Peanuts ☐ None
☐ Other: _____

Custody Seals Intact:
☐ Yes ☐ No
☒ NA (not used or required)

Cooling Materials:
☐ Ice (Solid) ☐ Ice (Melted)
☐ Blue Ice ☐ None
☐ Other: _____

Bacteriological Samples	Temp Corrected (°C)	Frozen? Yes	Frozen? No	Rec'd Within 2 Hrs? Yes	Rec'd Within 2 Hrs? No	Sample Flagged? Yes	Sample Flagged? No

Received on same day sampled? Yes No Additional Sheets Required? Yes No

Receipt Temperatures

Thermometer ID	Observed (°C)	Corrected (°C)	Temp Blank	Sample Temp	Acceptable	Cooler ID	Affected Samples
CP313207	4.2	4.2		✓	✓Y _N		
					_Y _N		
					_Y _N		

Receipt Questions**	Y	N	NA	"No" answers require additional comment
CoC present and ETA receipt signature, date, and time properly documented?	✓			
Containers and Labels in good condition? *(unbroken, not leaking, appropriately filled, labels legible & attached)*	✓			#1 Vial broken during Packaging in Michigan Center
Appropriate containers used and adequate volume provided?	✓			Preserved bottles checked for pH?* Yes No
Number of sample containers match CoC?	✓	N		pH strip lot # _____
Samples received within hold?	✓			
Samples submitted for GRO and Volatiles analysis (8260, 624, 524) received without headspace?				
Was a Trip Blank received with VOA samples?				
Were the samples free of any questionable physical conformities? (i.e.; field duplicates or multiple bottles of the same sample do not significantly vary in appearance – color, solid proportions, etc.)	✓			
Were the CoC bottle labels and all other items free of all other discrepancies or issues that would need to be addressed with the Project Manager and/or Client?	✓			
**May not be applicable if samples are not for compliance testing				*Excludes FOG, VOAs, TOC Vials, HEM

Client Contact Record
Contact Via: ☐ Phone ☐ Email ☐ Other: _____ Person Contacted: _____ Date/Time: _____
☐ Discrepancy allowance agreement is on record in the client project file

Discussion / Resolution

Any additional documentation and clarification from the client must be noted in the narrative and/or scanned into the CoC directory.
Reviewed by _____ Date: 12/16/22

WI-MI-010_020720

Eurofins Michigan
10448 Citation Drive Suite 200
Brighton, MI 48116
Phone: 810-229-2763 Fax: 810-229-0000

Chain of Custody Record

eurofins | Environment Testing

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Schafer, Sue	Carrier Tracking No(s):	COC No: 190-34939.1
Client Contact: Shipping/Receiving	Phone:	E-Mail: Sue.Schafer@et.eurofinsus.com	State of Origin: Michigan	Page: Page 1 of 1
Company: TestAmerica Laboratories, Inc.		Accreditations Required (See note):		Job #: 190-30665-1
Address: 13715 Rider Trail North, ,	Due Date Requested: 1/3/2023			
City: Earth City	TAT Requested (days):			
State, Zip: MO, 63045				
Phone: 314-298-8566(Tel) 314-298-8757(Fax)	PO #:			
Email:	WO #:			
Project Name: S43550	Project #: 19001249			
Site:	SSOW#:			

Analysis Requested

Preservation Codes:

A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Y - Trizma, Z - other (specify)

Other:

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	6020B/3010A_2% THORIUM ONLY	Total Number of containers	Special Instructions/Note:
			Preservation Code:						
S43550.01 (190-30665-1)	12/15/22	08:07 Eastern		Water			X	1	
S43550.02 (190-30665-2)	12/15/22	09:23 Eastern		Water			X	1	
S43550.03 (190-30665-3)	12/15/22	10:15 Eastern		Water			X	1	
S43550.04 (190-30665-4)	12/15/22	11:15 Eastern		Water			X	1	
S43550.05 (190-30665-5)	12/15/22	12:00 Eastern		Water			X	1	
S43550.06 (190-30665-6)	12/15/22	13:18 Eastern		Water			X	1	
S43550.07 (190-30665-7)	12/15/22	13:55 Eastern		Water			X	1	

Note: Since laboratory accreditations are subject to change, Eurofins Environment Testing North Central, LLC places the ownership of method, analyte & accreditation compliance upon our subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the Eurofins Environment Testing North Central, LLC laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins Environment Testing North Central, LLC attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said compliance to Eurofins Environment Testing North Central, LLC.

Possible Hazard Identification: Unconfirmed	Sample Disposal (A fee may be assessed if samples are retained longer than 1 month): ☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months
Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 2	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

Relinquished by:	Date/Time:	Company	Received by: FED EX	Date/Time:	Company
	12/16/22 14:50	ETA			
Relinquished by: FED EX	Date/Time:	Company	Received by: B Gonzalez	Date/Time: 12/19/22 8:25 am	Company ETA STL
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: ∆ Yes ∆ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks:

Ver: 06/08/2021

12/30/2022

ICOC No:
190-34939

Containers

Count	Container Type	Preservative
7	Plastic 125mL - Nitric Acid	Nitric Acid

ICOG No:
190-34939

Containers

Count	Container Type	Preservative
7	Plastic 125mL - Nitric Acid	Nitric Acid

Analytical Laboratory Report

Report ID: S43551.01(01)
Generated on 01/13/2023

Report to

Attention: Kelly Cratsenburg
TRC
1540 Eisenhower Place
Ann Arbor, MI 48108

Phone: 734-585-7829 C: 734-412-5424 FAX:
Email: KCratsenburg@trccompanies.com

Addtional Contacts: Vince Buening

Report produced by

Merit Laboratories, Inc.
2680 East Lansing Drive
East Lansing, MI 48823

Phone: (517) 332-0167 FAX: (517) 332-6333

Contacts for report questions:
John Laverty (johnlaverty@meritlabs.com)
Barbara Ball (bball@meritlabs.com)

Report Summary

Lab Sample ID(s): S43551.01-S43551.09
Project: Eastern Boundary D.A.
Collected Date(s): 12/15/2022
Submitted Date/Time: 12/16/2022 10:32
Sampled by: Unknown
P.O. #: 189455

Table of Contents

Maya Murshak
Technical Director

General Report Notes

Analytical results relate only to the samples tested, in the condition received by the laboratory.
Methods may be modified for improved performance.
Results reported on a dry weight basis where applicable.
'Not detected' indicates that parameter was not found at a level equal to or greater than the reporting limit (RL).
When MDL results are provided, then 'Not detected' indicates that parameter was not found at a level equal to or greater than the MDL.
40 CFR Part 136 Table II Required Containers, Preservation Techniques and Holding Times for the Clean Water Act specify that samples for acrolein and acrylonitrile, and 2-chloroethylvinyl ether need to be preserved at a pH in the range of 4 to 5 or if not preserved, analyzed within 3 days of sampling.
QA/QC corresponding to this analytical report is a separate document with the same Merit ID reference and is available upon request.
Full accreditation certificates are available upon request. Starred (*) analytes are not NELAP accredited.
Samples are held by the lab for 30 days from the final report date unless a written request to hold longer is provided by the client.

Limits for drinking water samples, are listed as the MCL Limits (Maximum Contaminant Level Concentrations)
PFAS requirement: Section 9.3.8 of U.S. EPA Method 537.1 states "If the method analyte(s) found in the Field Sample is present in the FRB at a concentration greater than 1/3 the MRL, then all samples collected with that FRB are invalid and must be recollected and reanalyzed."
Samples submitted without an accompanying FRB may not be acceptable for compliance purposes.
Wisconsin PFAs analysis: MDL = LOD; RL = LOQ. LOD and LOQ are adjusted for dilution.

Report Narrative

There is no additional narrative for this analytical report

Laboratory Certifications

Authority	Certification ID
Michigan DEQ	#9956
DOD ELAP/ISO 17025	#69699
WBENC	#2005110032
Ohio VAP	#CL0002
Indiana DOH	#C-MI-07
New York NELAC	#11814
North Carolina DENR	#680
North Carolina DOH	#26702
Alaska CSLAP	#17-001
Pennsylvania DEP	#68-05884
Wisconsin DNR	FID# 399147320

Qualifier Descriptions

Qualifier	Description
!	Result is outside of stated limit criteria
B	Compound also found in associated method blank
E	Concentration exceeds calibration range
F	Analysis run outside of holding time
G	Estimated result due to extraction run outside of holding time
H	Sample submitted and run outside of holding time
I	Matrix interference with internal standard
J	Estimated value less than reporting limit, but greater than MDL
L	Elevated reporting limit due to low sample amount
M	Result reported to MDL not RDL
O	Analysis performed by outside laboratory. See attached report.
R	Preliminary result
S	Surrogate recovery outside of control limits
T	No correction for total solids
X	Elevated reporting limit due to matrix interference
Y	Elevated reporting limit due to high target concentration
b	Value detected less than reporting limit, but greater than MDL
e	Reported value estimated due to interference
j	Analyte also found in associated method blank
p	Benzo(b)Fluoranthene and Benzo(k)Fluoranthene integrated as one peak.
x	Preserved from bulk sample

Glossary of Abbreviations

Abbreviation	Description
RL/RDL	Reporting Limit
MDL	Method Detection Limit
MS	Matrix Spike
MSD	Matrix Spike Duplicate
SW	EPA SW 846 (Soil and Wastewater) Methods
E	EPA Methods
SM	Standard Methods
LN	Linear
BR	Branched

Method Summary

Method	Version
ASTMD7979-19M	ASTM Method D7979 - 19 Modified (Isotopic Dilution)

Parameter Summary

Parameter	Synonym	Cas #
PFBA	Perfluorobutanoic Acid	375-22-4
PFPeA	Perfluoropentanoic Acid	2706-90-3
4:2 FTSA	4:2 Fluorotelomer Sulfonic Acid	757124-72-4
PFHxA	Perfluorohexanoic Acid	307-24-4
PFBS	Perfluorobutane sulfonic Acid	375-73-5
PFHpA	Perfluoroheptanoic Acid	375-85-9
PFPeS	Perfluoropentane Sulfonic Acid	2706-91-4
6:2 FTSA	6:2 Fluorotelomer Sulfonic Acid	27619-97-2
PFOA	Perfluorooctanoic Acid	335-67-1
PFHxS	Perfluorohexane Sulfonic Acid	355-46-4
PFHxS-LN	Perfluorohexane Sulfonic Acid - LN	355-46-4-LN
PFHxS-BR	Perfluorohexane Sulfonic Acid - BR	355-46-4-BR
PFNA	Perfluorononanoic Acid	375-95-1
8:2 FTSA	8:2 Fluorotelomer Sulfonic Acid	39108-34-4
PFHpS	Perfluoroheptane Sulfonic Acid	375-92-8
PFDA	Perfluorodecanoic Acid	335-76-2
N-MeFOSAA	N-methyl perfluorooctanesulfonamidoacetic acid	2355-31-9
EtFOSAA	N-Ethyl Perfluorooctane Sulfonamidoacetic Acid	2991-50-6
PFOS	Perfluorooctane Sulfonic Acid	1763-23-1
PFOS-LN	Perfluorooctane Sulfonic Acid - LN	1763-23-1-LN
PFOS-BR	Perfluorooctane Sulfonic Acid - BR	1763-23-1-BR
PFUnDA	Perfluoroundecanoic Acid	2058-94-8
PFNS	Perfluorononane Sulfonic Acid	68259-12-1
PFDoDA	Perfluorododecanoic Acid	307-55-1
PFDS	Perfluorodecane Sulfonic Acid	335-77-3
PFTrDA	Perfluorotridecanoic Acid	72629-94-8
FOSA	Perfluorooctane Sulfonamide	754-91-6
PFTeDA	Perfluorotetradecanoic Acid	376-06-7
11Cl-PF3OUdS	11-chloroeicosafluoro-3-oxaundecane-1-sulfonic acid	763051-92-9
9Cl-PF3ONS	9-chlorohexadecafluoro-3-oxanone1-sulfonic acid	756426-58-1
ADONA	4,8-dioxa-3H-perfluorononanoic acid	919005-14-4
HFPO-DA	Hexafluoropropylene oxide dimer	13252-13-6
PFECHS	Perfluoro-4-ethylcyclohexanesulfonate	67584-42-3
PFBSA	Perfluorobutanesulfonamide	30334-69-1
PFHxSA	Perfluorohexanesulfonamide	41997-13-1

Sample Summary (9 samples)

Sample ID	Sample Tag	Matrix	Collected Date/Time
S43551.01	MW-107	Water	12/15/22 08:07
S43551.02	MW-106	Water	12/15/22 09:23
S43551.03	MW-121	Water	12/15/22 10:15
S43551.04	MW-113	Water	12/15/22 11:15
S43551.05	MW-22-04	Water	12/15/22 12:00
S43551.06	MW-22-05	Water	12/15/22 13:18
S43551.07	MW-22-06	Water	12/15/22 13:55
S43551.08	Field Blank #1	Water	12/15/22 14:06
S43551.09	Equipment Blank #1	Water	12/15/22 14:20

Analytical Laboratory Report

Lab Sample ID: S43551.01
Sample Tag: MW-107
Collected Date/Time: 12/15/2022 08:07
Matrix: Water
COC Reference: 158656

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
1	15ml Centrifuge Tube	None	Yes	4.4	IR

Extraction / Prep.

Parameter	Result	Method	Run Date	Analyst	Flags
Initial wt. (g) / Final wt. (g) / Volume (ml)*	11.30/6.53/9	ASTMD7979-19M	01/06/23 14:00	PTW	

Organics

31 PFAs, Method: ASTMD7979-19M, Run Date: 01/07/23 06:18, Analyst: KCV

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
PFBA*	Not detected	9.5		ng/L	1.89	375-22-4	
PFPeA*	4.2	3.8		ng/L	1.89	2706-90-3	
4:2 FTSA*	Not detected	1.9		ng/L	1.89	757124-72-4	
PFHxA*	4.2	1.9		ng/L	1.89	307-24-4	
PFBS*	3.0	1.9		ng/L	1.89	375-73-5	
PFHpA*	3.3	1.9		ng/L	1.89	375-85-9	
PFPeS*	Not detected	1.9		ng/L	1.89	2706-91-4	
6:2 FTSA*	Not detected	1.9		ng/L	1.89	27619-97-2	
PFOA*	14	1.9		ng/L	1.89	335-67-1	
PFHxS*	6.0	1.9		ng/L	1.89	355-46-4	
PFHxS-LN*	4.7	1.9		ng/L	1.89	355-46-4-LN	
PFHxS-BR*	Not detected	1.9		ng/L	1.89	355-46-4-BR	
PFNA*	Not detected	1.9		ng/L	1.89	375-95-1	
8:2 FTSA*	Not detected	1.9		ng/L	1.89	39108-34-4	
PFHpS*	Not detected	1.9		ng/L	1.89	375-92-8	
PFDA*	Not detected	1.9		ng/L	1.89	335-76-2	
N-MeFOSAA*	Not detected	1.9		ng/L	1.89	2355-31-9	
EtFOSAA*	Not detected	3.8		ng/L	1.89	2991-50-6	
PFOS*	Not detected	1.9		ng/L	1.89	1763-23-1	
PFOS-LN*	Not detected	1.9		ng/L	1.89	1763-23-1-LN	
PFOS-BR*	Not detected	1.9		ng/L	1.89	1763-23-1-BR	
PFUnDA*	Not detected	1.9		ng/L	1.89	2058-94-8	
PFNS*	Not detected	1.9		ng/L	1.89	68259-12-1	
PFDoDA*	Not detected	1.9		ng/L	1.89	307-55-1	
PFDS*	Not detected	1.9		ng/L	1.89	335-77-3	
PFTrDA*	Not detected	1.9		ng/L	1.89	72629-94-8	
FOSA*	Not detected	1.9		ng/L	1.89	754-91-6	
PFTeDA*	Not detected	3.8		ng/L	1.89	376-06-7	
11Cl-PF3OUdS*	Not detected	1.9		ng/L	1.89	763051-92-9	
9Cl-PF3ONS*	Not detected	1.9		ng/L	1.89	756426-58-1	
ADONA*	Not detected	1.9		ng/L	1.89	919005-14-4	
HFPO-DA*	Not detected	1.9		ng/L	1.89	13252-13-6	
PFECHS*	Not detected	1.9		ng/L	1.89	67584-42-3	
PFBSA*	Not detected	1.9		ng/L	1.89	30334-69-1	
PFHxSA*	Not detected	1.9		ng/L	1.89	41997-13-1	

Analytical Laboratory Report

Lab Sample ID: S43551.02
Sample Tag: MW-106
Collected Date/Time: 12/15/2022 09:23
Matrix: Water
COC Reference: 158656

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
1	15ml Centrifuge Tube	None	Yes	4.4	IR

Extraction / Prep.

Parameter	Result	Method	Run Date	Analyst	Flags
Initial wt. (g) / Final wt. (g) / Volume (ml)*	11.66/6.51/10	ASTMD7979-19M	01/06/23 14:00	PTW	

Organics

31 PFAs, Method: ASTMD7979-19M, Run Date: 01/07/23 06:57, Analyst: KCV

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
PFBA*	Not detected	9.7		ng/L	1.94	375-22-4	
PFPeA*	Not detected	3.9		ng/L	1.94	2706-90-3	
4:2 FTSA*	Not detected	1.9		ng/L	1.94	757124-72-4	
PFHxA*	3.5	1.9		ng/L	1.94	307-24-4	
PFBS*	3.6	1.9		ng/L	1.94	375-73-5	
PFHpA*	3.6	1.9		ng/L	1.94	375-85-9	
PFPeS*	Not detected	1.9		ng/L	1.94	2706-91-4	
6:2 FTSA*	Not detected	1.9		ng/L	1.94	27619-97-2	
PFOA*	14	1.9		ng/L	1.94	335-67-1	
PFHxS*	19	1.9		ng/L	1.94	355-46-4	
PFHxS-LN*	16	1.9		ng/L	1.94	355-46-4-LN	
PFHxS-BR*	2.7	1.9		ng/L	1.94	355-46-4-BR	
PFNA*	Not detected	1.9		ng/L	1.94	375-95-1	
8:2 FTSA*	Not detected	1.9		ng/L	1.94	39108-34-4	
PFHpS*	Not detected	1.9		ng/L	1.94	375-92-8	
PFDA*	Not detected	1.9		ng/L	1.94	335-76-2	
N-MeFOSAA*	Not detected	1.9		ng/L	1.94	2355-31-9	
EtFOSAA*	Not detected	3.9		ng/L	1.94	2991-50-6	
PFOS*	Not detected	1.9		ng/L	1.94	1763-23-1	
PFOS-LN*	Not detected	1.9		ng/L	1.94	1763-23-1-LN	
PFOS-BR*	Not detected	1.9		ng/L	1.94	1763-23-1-BR	
PFUnDA*	Not detected	1.9		ng/L	1.94	2058-94-8	
PFNS*	Not detected	1.9		ng/L	1.94	68259-12-1	
PFDoDA*	Not detected	1.9		ng/L	1.94	307-55-1	
PFDS*	Not detected	1.9		ng/L	1.94	335-77-3	
PFTrDA*	Not detected	1.9		ng/L	1.94	72629-94-8	
FOSA*	Not detected	1.9		ng/L	1.94	754-91-6	
PFTeDA*	Not detected	3.9		ng/L	1.94	376-06-7	
11Cl-PF3OUdS*	Not detected	1.9		ng/L	1.94	763051-92-9	
9Cl-PF3ONS*	Not detected	1.9		ng/L	1.94	756426-58-1	
ADONA*	Not detected	1.9		ng/L	1.94	919005-14-4	
HFPO-DA*	Not detected	1.9		ng/L	1.94	13252-13-6	
PFECHS*	Not detected	1.9		ng/L	1.94	67584-42-3	
PFBSA*	Not detected	1.9		ng/L	1.94	30334-69-1	
PFHxSA*	Not detected	1.9		ng/L	1.94	41997-13-1	

Lab Sample ID: S43551.03
Sample Tag: MW-121
Collected Date/Time: 12/15/2022 10:15
Matrix: Water
COC Reference: 158656

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
1	15ml Centrifuge Tube	None	Yes	4.4	IR

Extraction / Prep.

Parameter	Result	Method	Run Date	Analyst	Flags
Initial wt. (g) / Final wt. (g) / Volume (ml)*	11.18/6.59/9	ASTMD7979-19M	01/06/23 14:00	PTW	

Organics

31 PFAs, Method: ASTMD7979-19M, Run Date: 01/07/23 07:36, Analyst: KCV

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
PFBA*	Not detected	9.8		ng/L	1.96	375-22-4	
PFPeA*	12	3.9		ng/L	1.96	2706-90-3	
4:2 FTSA*	Not detected	2.0		ng/L	1.96	757124-72-4	
PFHxA*	10	2.0		ng/L	1.96	307-24-4	
PFBS*	3.8	2.0		ng/L	1.96	375-73-5	
PFHpA*	9.0	2.0		ng/L	1.96	375-85-9	
PFPeS*	Not detected	2.0		ng/L	1.96	2706-91-4	
6:2 FTSA*	Not detected	2.0		ng/L	1.96	27619-97-2	
PFOA*	35	2.0		ng/L	1.96	335-67-1	
PFHxS*	5.9	2.0		ng/L	1.96	355-46-4	
PFHxS-LN*	5.0	2.0		ng/L	1.96	355-46-4-LN	
PFHxS-BR*	Not detected	2.0		ng/L	1.96	355-46-4-BR	
PFNA*	2.6	2.0		ng/L	1.96	375-95-1	
8:2 FTSA*	Not detected	2.0		ng/L	1.96	39108-34-4	
PFHpS*	Not detected	2.0		ng/L	1.96	375-92-8	
PFDA*	Not detected	2.0		ng/L	1.96	335-76-2	
N-MeFOSAA*	Not detected	2.0		ng/L	1.96	2355-31-9	
EtFOSAA*	Not detected	3.9		ng/L	1.96	2991-50-6	
PFOS*	3.9	2.0		ng/L	1.96	1763-23-1	
PFOS-LN*	Not detected	2.0		ng/L	1.96	1763-23-1-LN	
PFOS-BR*	3.4	2.0		ng/L	1.96	1763-23-1-BR	
PFUnDA*	Not detected	2.0		ng/L	1.96	2058-94-8	
PFNS*	Not detected	2.0		ng/L	1.96	68259-12-1	
PFDoDA*	Not detected	2.0		ng/L	1.96	307-55-1	
PFDS*	Not detected	2.0		ng/L	1.96	335-77-3	
PFTrDA*	Not detected	2.0		ng/L	1.96	72629-94-8	
FOSA*	Not detected	2.0		ng/L	1.96	754-91-6	
PFTeDA*	Not detected	3.9		ng/L	1.96	376-06-7	
11Cl-PF3OUdS*	Not detected	2.0		ng/L	1.96	763051-92-9	
9Cl-PF3ONS*	Not detected	2.0		ng/L	1.96	756426-58-1	
ADONA*	Not detected	2.0		ng/L	1.96	919005-14-4	
HFPO-DA*	Not detected	2.0		ng/L	1.96	13252-13-6	
PFECHS*	Not detected	2.0		ng/L	1.96	67584-42-3	
PFBSA*	Not detected	2.0		ng/L	1.96	30334-69-1	
PFHxSA*	Not detected	2.0		ng/L	1.96	41997-13-1	

Lab Sample ID: S43551.04
Sample Tag: MW-113
Collected Date/Time: 12/15/2022 11:15
Matrix: Water
COC Reference: 158656

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
1	15ml Centrifuge Tube	None	Yes	4.4	IR

Extraction / Prep.

Parameter	Result	Method	Run Date	Analyst	Flags
Initial wt. (g) / Final wt. (g) / Volume (ml)*	11.36/6.50/10	ASTMD7979-19M	01/06/23 14:00	PTW	

Organics

31 PFAs, Method: ASTMD7979-19M, Run Date: 01/07/23 07:55, Analyst: KCV

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
PFBA*	Not detected	10		ng/L	2.06	375-22-4	
PFPeA*	Not detected	4.1		ng/L	2.06	2706-90-3	
4:2 FTSA*	Not detected	2.1		ng/L	2.06	757124-72-4	
PFHxA*	Not detected	2.1		ng/L	2.06	307-24-4	
PFBS*	Not detected	2.1		ng/L	2.06	375-73-5	
PFHpA*	Not detected	2.1		ng/L	2.06	375-85-9	
PFPeS*	Not detected	2.1		ng/L	2.06	2706-91-4	
6:2 FTSA*	Not detected	2.1		ng/L	2.06	27619-97-2	
PFOA*	Not detected	2.1		ng/L	2.06	335-67-1	
PFHxS*	3.5	2.1		ng/L	2.06	355-46-4	
PFHxS-LN*	2.7	2.1		ng/L	2.06	355-46-4-LN	
PFHxS-BR*	Not detected	2.1		ng/L	2.06	355-46-4-BR	
PFNA*	Not detected	2.1		ng/L	2.06	375-95-1	
8:2 FTSA*	Not detected	2.1		ng/L	2.06	39108-34-4	
PFHpS*	Not detected	2.1		ng/L	2.06	375-92-8	
PFDA*	Not detected	2.1		ng/L	2.06	335-76-2	
N-MeFOSAA*	Not detected	2.1		ng/L	2.06	2355-31-9	
EtFOSAA*	Not detected	4.1		ng/L	2.06	2991-50-6	
PFOS*	Not detected	2.1		ng/L	2.06	1763-23-1	
PFOS-LN*	Not detected	2.1		ng/L	2.06	1763-23-1-LN	
PFOS-BR*	Not detected	2.1		ng/L	2.06	1763-23-1-BR	
PFUnDA*	Not detected	2.1		ng/L	2.06	2058-94-8	
PFNS*	Not detected	2.1		ng/L	2.06	68259-12-1	
PFDoDA*	Not detected	2.1		ng/L	2.06	307-55-1	
PFDS*	Not detected	2.1		ng/L	2.06	335-77-3	
PFTrDA*	Not detected	2.1		ng/L	2.06	72629-94-8	
FOSA*	Not detected	2.1		ng/L	2.06	754-91-6	
PFTeDA*	Not detected	4.1		ng/L	2.06	376-06-7	
11Cl-PF3OUdS*	Not detected	2.1		ng/L	2.06	763051-92-9	
9Cl-PF3ONS*	Not detected	2.1		ng/L	2.06	756426-58-1	
ADONA*	Not detected	2.1		ng/L	2.06	919005-14-4	
HFPO-DA*	Not detected	2.1		ng/L	2.06	13252-13-6	
PFECHS*	Not detected	2.1		ng/L	2.06	67584-42-3	
PFBSA*	Not detected	2.1		ng/L	2.06	30334-69-1	
PFHxSA*	Not detected	2.1		ng/L	2.06	41997-13-1	

Analytical Laboratory Report

Lab Sample ID: S43551.05
Sample Tag: MW-22-04
Collected Date/Time: 12/15/2022 12:00
Matrix: Water
COC Reference: 158656

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
1	15ml Centrifuge Tube	None	Yes	4.4	IR

Extraction / Prep.

Parameter	Result	Method	Run Date	Analyst	Flags
Initial wt. (g) / Final wt. (g) / Volume (ml)*	11.35/6.54/10	ASTMD7979-19M	01/06/23 14:00	PTW	

Organics

31 PFAs, Method: ASTMD7979-19M, Run Date: 01/07/23 08:15, Analyst: KCV

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
PFBA*	Not detected	10		ng/L	2.08	375-22-4	
PFPeA*	Not detected	4.2		ng/L	2.08	2706-90-3	
4:2 FTSA*	Not detected	2.1		ng/L	2.08	757124-72-4	
PFHxA*	Not detected	2.1		ng/L	2.08	307-24-4	
PFBS*	3.3	2.1		ng/L	2.08	375-73-5	
PFHpA*	Not detected	2.1		ng/L	2.08	375-85-9	
PFPeS*	Not detected	2.1		ng/L	2.08	2706-91-4	
6:2 FTSA*	Not detected	2.1		ng/L	2.08	27619-97-2	
PFOA*	5.8	2.1		ng/L	2.08	335-67-1	
PFHxS*	2.1	2.1		ng/L	2.08	355-46-4	
PFHxS-LN*	Not detected	2.1		ng/L	2.08	355-46-4-LN	
PFHxS-BR*	Not detected	2.1		ng/L	2.08	355-46-4-BR	
PFNA*	Not detected	2.1		ng/L	2.08	375-95-1	
8:2 FTSA*	Not detected	2.1		ng/L	2.08	39108-34-4	
PFHpS*	Not detected	2.1		ng/L	2.08	375-92-8	
PFDA*	Not detected	2.1		ng/L	2.08	335-76-2	
N-MeFOSAA*	Not detected	2.1		ng/L	2.08	2355-31-9	
EtFOSAA*	Not detected	4.2		ng/L	2.08	2991-50-6	
PFOS*	Not detected	2.1		ng/L	2.08	1763-23-1	
PFOS-LN*	Not detected	2.1		ng/L	2.08	1763-23-1-LN	
PFOS-BR*	Not detected	2.1		ng/L	2.08	1763-23-1-BR	
PFUnDA*	Not detected	2.1		ng/L	2.08	2058-94-8	
PFNS*	Not detected	2.1		ng/L	2.08	68259-12-1	
PFDoDA*	Not detected	2.1		ng/L	2.08	307-55-1	
PFDS*	Not detected	2.1		ng/L	2.08	335-77-3	
PFTrDA*	Not detected	2.1		ng/L	2.08	72629-94-8	
FOSA*	Not detected	2.1		ng/L	2.08	754-91-6	
PFTeDA*	Not detected	4.2		ng/L	2.08	376-06-7	
11Cl-PF3OUdS*	Not detected	2.1		ng/L	2.08	763051-92-9	
9Cl-PF3ONS*	Not detected	2.1		ng/L	2.08	756426-58-1	
ADONA*	Not detected	2.1		ng/L	2.08	919005-14-4	
HFPO-DA*	Not detected	2.1		ng/L	2.08	13252-13-6	
PFECHS*	Not detected	2.1		ng/L	2.08	67584-42-3	
PFBSA*	Not detected	2.1		ng/L	2.08	30334-69-1	
PFHxSA*	Not detected	2.1		ng/L	2.08	41997-13-1	

Analytical Laboratory Report

Lab Sample ID: S43551.06
Sample Tag: MW-22-05
Collected Date/Time: 12/15/2022 13:18
Matrix: Water
COC Reference: 158656

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
1	15ml Centrifuge Tube	None	Yes	4.4	IR

Extraction / Prep.

Parameter	Result	Method	Run Date	Analyst	Flags
Initial wt. (g) / Final wt. (g) / Volume (ml)*	11.05/6.46/9	ASTMD7979-19M	01/06/23 14:00	PTW	

Organics

31 PFAs, Method: ASTMD7979-19M, Run Date: 01/07/23 08:34, Analyst: KCV

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
PFBA*	Not detected	9.8		ng/L	1.96	375-22-4	
PFPeA*	Not detected	3.9		ng/L	1.96	2706-90-3	
4:2 FTSA*	Not detected	2.0		ng/L	1.96	757124-72-4	
PFHxA*	Not detected	2.0		ng/L	1.96	307-24-4	
PFBS*	Not detected	2.0		ng/L	1.96	375-73-5	
PFHpA*	Not detected	2.0		ng/L	1.96	375-85-9	
PFPeS*	Not detected	2.0		ng/L	1.96	2706-91-4	
6:2 FTSA*	Not detected	2.0		ng/L	1.96	27619-97-2	
PFOA*	6.4	2.0		ng/L	1.96	335-67-1	
PFHxS*	Not detected	2.0		ng/L	1.96	355-46-4	
PFHxS-LN*	Not detected	2.0		ng/L	1.96	355-46-4-LN	
PFHxS-BR*	Not detected	2.0		ng/L	1.96	355-46-4-BR	
PFNA*	Not detected	2.0		ng/L	1.96	375-95-1	
8:2 FTSA*	Not detected	2.0		ng/L	1.96	39108-34-4	
PFHpS*	Not detected	2.0		ng/L	1.96	375-92-8	
PFDA*	Not detected	2.0		ng/L	1.96	335-76-2	
N-MeFOSAA*	Not detected	2.0		ng/L	1.96	2355-31-9	
EtFOSAA*	Not detected	3.9		ng/L	1.96	2991-50-6	
PFOS*	Not detected	2.0		ng/L	1.96	1763-23-1	
PFOS-LN*	Not detected	2.0		ng/L	1.96	1763-23-1-LN	
PFOS-BR*	Not detected	2.0		ng/L	1.96	1763-23-1-BR	
PFUnDA*	Not detected	2.0		ng/L	1.96	2058-94-8	
PFNS*	Not detected	2.0		ng/L	1.96	68259-12-1	
PFDoDA*	Not detected	2.0		ng/L	1.96	307-55-1	
PFDS*	Not detected	2.0		ng/L	1.96	335-77-3	
PFTrDA*	Not detected	2.0		ng/L	1.96	72629-94-8	
FOSA*	Not detected	2.0		ng/L	1.96	754-91-6	
PFTeDA*	Not detected	3.9		ng/L	1.96	376-06-7	
11Cl-PF3OUdS*	Not detected	2.0		ng/L	1.96	763051-92-9	
9Cl-PF3ONS*	Not detected	2.0		ng/L	1.96	756426-58-1	
ADONA*	Not detected	2.0		ng/L	1.96	919005-14-4	
HFPO-DA*	Not detected	2.0		ng/L	1.96	13252-13-6	
PFECHS*	Not detected	2.0		ng/L	1.96	67584-42-3	
PFBSA*	Not detected	2.0		ng/L	1.96	30334-69-1	
PFHxSA*	Not detected	2.0		ng/L	1.96	41997-13-1	

Analytical Laboratory Report

Lab Sample ID: S43551.07
Sample Tag: MW-22-06
Collected Date/Time: 12/15/2022 13:55
Matrix: Water
COC Reference: 158656

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
1	15ml Centrifuge Tube	None	Yes	4.4	IR

Extraction / Prep.

Parameter	Result	Method	Run Date	Analyst	Flags
Initial wt. (g) / Final wt. (g) / Volume (ml)*	11.51/6.47/10	ASTMD7979-19M	01/06/23 14:00	PTW	

Organics

31 PFAs, Method: ASTMD7979-19M, Run Date: 01/07/23 08:54, Analyst: KCV

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
PFBA*	Not detected	9.9		ng/L	1.98	375-22-4	
PFPeA*	Not detected	4.0		ng/L	1.98	2706-90-3	
4:2 FTSA*	Not detected	2.0		ng/L	1.98	757124-72-4	
PFHxA*	2.5	2.0		ng/L	1.98	307-24-4	
PFBS*	Not detected	2.0		ng/L	1.98	375-73-5	
PFHpA*	Not detected	2.0		ng/L	1.98	375-85-9	
PFPeS*	Not detected	2.0		ng/L	1.98	2706-91-4	
6:2 FTSA*	Not detected	2.0		ng/L	1.98	27619-97-2	
PFOA*	Not detected	2.0		ng/L	1.98	335-67-1	
PFHxS*	5.2	2.0		ng/L	1.98	355-46-4	
PFHxS-LN*	4.0	2.0		ng/L	1.98	355-46-4-LN	
PFHxS-BR*	Not detected	2.0		ng/L	1.98	355-46-4-BR	
PFNA*	Not detected	2.0		ng/L	1.98	375-95-1	
8:2 FTSA*	Not detected	2.0		ng/L	1.98	39108-34-4	
PFHpS*	Not detected	2.0		ng/L	1.98	375-92-8	
PFDA*	Not detected	2.0		ng/L	1.98	335-76-2	
N-MeFOSAA*	Not detected	2.0		ng/L	1.98	2355-31-9	
EtFOSAA*	Not detected	4.0		ng/L	1.98	2991-50-6	
PFOS*	Not detected	2.0		ng/L	1.98	1763-23-1	
PFOS-LN*	Not detected	2.0		ng/L	1.98	1763-23-1-LN	
PFOS-BR*	Not detected	2.0		ng/L	1.98	1763-23-1-BR	
PFUnDA*	Not detected	2.0		ng/L	1.98	2058-94-8	
PFNS*	Not detected	2.0		ng/L	1.98	68259-12-1	
PFDoDA*	Not detected	2.0		ng/L	1.98	307-55-1	
PFDS*	Not detected	2.0		ng/L	1.98	335-77-3	
PFTrDA*	Not detected	2.0		ng/L	1.98	72629-94-8	
FOSA*	Not detected	2.0		ng/L	1.98	754-91-6	
PFTeDA*	Not detected	4.0		ng/L	1.98	376-06-7	
11Cl-PF3OUdS*	Not detected	2.0		ng/L	1.98	763051-92-9	
9Cl-PF3ONS*	Not detected	2.0		ng/L	1.98	756426-58-1	
ADONA*	Not detected	2.0		ng/L	1.98	919005-14-4	
HFPO-DA*	Not detected	2.0		ng/L	1.98	13252-13-6	
PFECHS*	Not detected	2.0		ng/L	1.98	67584-42-3	
PFBSA*	Not detected	2.0		ng/L	1.98	30334-69-1	
PFHxSA*	Not detected	2.0		ng/L	1.98	41997-13-1	

Analytical Laboratory Report

Lab Sample ID: S43551.08
Sample Tag: Field Blank #1
Collected Date/Time: 12/15/2022 14:06
Matrix: Water
COC Reference: 158656

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
1	15ml Centrifuge Tube	None	Yes	4.4	IR

Extraction / Prep.

Parameter	Result	Method	Run Date	Analyst	Flags
Initial wt. (g) / Final wt. (g) / Volume (ml)*	11.15/6.53/9	ASTMD7979-19M	01/06/23 14:00	PTW	

Organics

31 PFAs, Method: ASTMD7979-19M, Run Date: 01/07/23 09:13, Analyst: KCV

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
PFBA*	Not detected	9.8		ng/L	1.95	375-22-4	
PFPeA*	Not detected	3.9		ng/L	1.95	2706-90-3	
4:2 FTSA*	Not detected	2.0		ng/L	1.95	757124-72-4	
PFHxA*	Not detected	2.0		ng/L	1.95	307-24-4	
PFBS*	Not detected	2.0		ng/L	1.95	375-73-5	
PFHpA*	Not detected	2.0		ng/L	1.95	375-85-9	
PFPeS*	Not detected	2.0		ng/L	1.95	2706-91-4	
6:2 FTSA*	Not detected	2.0		ng/L	1.95	27619-97-2	
PFOA*	Not detected	2.0		ng/L	1.95	335-67-1	
PFHxS*	Not detected	2.0		ng/L	1.95	355-46-4	
PFHxS-LN*	Not detected	2.0		ng/L	1.95	355-46-4-LN	
PFHxS-BR*	Not detected	2.0		ng/L	1.95	355-46-4-BR	
PFNA*	Not detected	2.0		ng/L	1.95	375-95-1	
8:2 FTSA*	Not detected	2.0		ng/L	1.95	39108-34-4	
PFHpS*	Not detected	2.0		ng/L	1.95	375-92-8	
PFDA*	Not detected	2.0		ng/L	1.95	335-76-2	
N-MeFOSAA*	Not detected	2.0		ng/L	1.95	2355-31-9	
EtFOSAA*	Not detected	3.9		ng/L	1.95	2991-50-6	
PFOS*	Not detected	2.0		ng/L	1.95	1763-23-1	
PFOS-LN*	Not detected	2.0		ng/L	1.95	1763-23-1-LN	
PFOS-BR*	Not detected	2.0		ng/L	1.95	1763-23-1-BR	
PFUnDA*	Not detected	2.0		ng/L	1.95	2058-94-8	
PFNS*	Not detected	2.0		ng/L	1.95	68259-12-1	
PFDoDA*	Not detected	2.0		ng/L	1.95	307-55-1	
PFDS*	Not detected	2.0		ng/L	1.95	335-77-3	
PFTrDA*	Not detected	2.0		ng/L	1.95	72629-94-8	
FOSA*	Not detected	2.0		ng/L	1.95	754-91-6	
PFTeDA*	Not detected	3.9		ng/L	1.95	376-06-7	
11Cl-PF3OUdS*	Not detected	2.0		ng/L	1.95	763051-92-9	
9Cl-PF3ONS*	Not detected	2.0		ng/L	1.95	756426-58-1	
ADONA*	Not detected	2.0		ng/L	1.95	919005-14-4	
HFPO-DA*	Not detected	2.0		ng/L	1.95	13252-13-6	
PFECHS*	Not detected	2.0		ng/L	1.95	67584-42-3	
PFBSA*	Not detected	2.0		ng/L	1.95	30334-69-1	
PFHxSA*	Not detected	2.0		ng/L	1.95	41997-13-1	

Analytical Laboratory Report

Lab Sample ID: S43551.09
Sample Tag: Equipment Blank #1
Collected Date/Time: 12/15/2022 14:20
Matrix: Water
COC Reference: 158656

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
1	15ml Centrifuge Tube	None	Yes	4.4	IR

Extraction / Prep.

Parameter	Result	Method	Run Date	Analyst	Flags
Initial wt. (g) / Final wt. (g) / Volume (ml)*	11.05/6.48/9	ASTMD7979-19M	01/06/23 14:00	PTW	

Organics

31 PFAs, Method: ASTMD7979-19M, Run Date: 01/07/23 09:33, Analyst: KCV

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
PFBA*	Not detected	9.9		ng/L	1.97	375-22-4	
PFPeA*	Not detected	3.9		ng/L	1.97	2706-90-3	
4:2 FTSA*	Not detected	2.0		ng/L	1.97	757124-72-4	
PFHxA*	Not detected	2.0		ng/L	1.97	307-24-4	
PFBS*	Not detected	2.0		ng/L	1.97	375-73-5	
PFHpA*	Not detected	2.0		ng/L	1.97	375-85-9	
PFPeS*	Not detected	2.0		ng/L	1.97	2706-91-4	
6:2 FTSA*	Not detected	2.0		ng/L	1.97	27619-97-2	
PFOA*	Not detected	2.0		ng/L	1.97	335-67-1	
PFHxS*	Not detected	2.0		ng/L	1.97	355-46-4	
PFHxS-LN*	Not detected	2.0		ng/L	1.97	355-46-4-LN	
PFHxS-BR*	Not detected	2.0		ng/L	1.97	355-46-4-BR	
PFNA*	Not detected	2.0		ng/L	1.97	375-95-1	
8:2 FTSA*	Not detected	2.0		ng/L	1.97	39108-34-4	
PFHpS*	Not detected	2.0		ng/L	1.97	375-92-8	
PFDA*	Not detected	2.0		ng/L	1.97	335-76-2	
N-MeFOSAA*	Not detected	2.0		ng/L	1.97	2355-31-9	
EtFOSAA*	Not detected	3.9		ng/L	1.97	2991-50-6	
PFOS*	Not detected	2.0		ng/L	1.97	1763-23-1	
PFOS-LN*	Not detected	2.0		ng/L	1.97	1763-23-1-LN	
PFOS-BR*	Not detected	2.0		ng/L	1.97	1763-23-1-BR	
PFUnDA*	Not detected	2.0		ng/L	1.97	2058-94-8	
PFNS*	Not detected	2.0		ng/L	1.97	68259-12-1	
PFDoDA*	Not detected	2.0		ng/L	1.97	307-55-1	
PFDS*	Not detected	2.0		ng/L	1.97	335-77-3	
PFTrDA*	Not detected	2.0		ng/L	1.97	72629-94-8	
FOSA*	Not detected	2.0		ng/L	1.97	754-91-6	
PFTeDA*	Not detected	3.9		ng/L	1.97	376-06-7	
11Cl-PF3OUdS*	Not detected	2.0		ng/L	1.97	763051-92-9	
9Cl-PF3ONS*	Not detected	2.0		ng/L	1.97	756426-58-1	
ADONA*	Not detected	2.0		ng/L	1.97	919005-14-4	
HFPO-DA*	Not detected	2.0		ng/L	1.97	13252-13-6	
PFECHS*	Not detected	2.0		ng/L	1.97	67584-42-3	
PFBSA*	Not detected	2.0		ng/L	1.97	30334-69-1	
PFHxSA*	Not detected	2.0		ng/L	1.97	41997-13-1	

Merit Laboratories Login Checklist

Lab Set ID: S43551
Client: TRC (TRC)
Project: Eastern Boundary D.A.
Submitted: 12/16/2022 10:32 Login User: MMC

Attention: Kelly Cratsenburg
Address: TRC
1540 Eisenhower Place
Ann Arbor, MI 48108

Phone: 734-585-7829 C: FAX:
Email: KCratsenburg@trccompanies.com

Selection				Description	Note
Sample Receiving					
01.	[X] Yes	[ ] No	[ ] N/A	Samples are received at 4C +/- 2C Thermometer #	IR 4.4
02.	[X] Yes	[ ] No	[ ] N/A	Received on ice/ cooling process begun	
03.	[ ] Yes	[X] No	[ ] N/A	Samples shipped	
04.	[ ] Yes	[X] No	[ ] N/A	Samples left in 24 hr. drop box	
05.	[ ] Yes	[ ] No	[X] N/A	Are there custody seals/tape or is the drop box locked	
Chain of Custody					
06.	[X] Yes	[ ] No	[ ] N/A	COC adequately filled out	
07.	[X] Yes	[ ] No	[ ] N/A	COC signed and relinquished to the lab	
08.	[X] Yes	[ ] No	[ ] N/A	Sample tag on bottles match COC	
09.	[ ] Yes	[X] No	[ ] N/A	Subcontracting needed? Subcontacted to:	
Preservation					
10.	[X] Yes	[ ] No	[ ] N/A	Do sample have correct chemical preservation	
11.	[ ] Yes	[ ] No	[X] N/A	Completed pH checks on preserved samples? (no VOAs)	
12.	[ ] Yes	[X] No	[ ] N/A	Did any samples need to be preserved in the lab?	
Bottle Conditions					
13.	[X] Yes	[ ] No	[ ] N/A	All bottles intact	
14.	[X] Yes	[ ] No	[ ] N/A	Appropriate analytical bottles are used	
15.	[X] Yes	[ ] No	[ ] N/A	Merit bottles used	
16.	[X] Yes	[ ] No	[ ] N/A	Sufficient sample volume received	
17.	[ ] Yes	[X] No	[ ] N/A	Samples require laboratory filtration	
18.	[X] Yes	[ ] No	[ ] N/A	Samples submitted within holding time	
19.	[ ] Yes	[ ] No	[X] N/A	Do water VOC or TOX bottles contain headspace	

Corrective action for all exceptions is to call the client and to notify the project manager.

Client Review By: _____ Date: _____

Merit Laboratories, Inc.
2680 East Lansing Dr., East Lansing, MI 48823
Phone (517) 332-0167 Fax (517) 332-4034
www.meritlabs.com

C.O.C. PAGE # _____ OF _____ 158656

CHAIN OF CUSTODY RECORD

REPORT TO

CONTACT NAME: Kelly Craftsenburg
COMPANY: TRC
ADDRESS: 1540 Eisenhower Place
CITY: Ann Arbor STATE: MI ZIP CODE: 48108
PHONE NO.: CELL NO.: P.O. NO.: 189455
E-MAIL ADDRESS: QUOTE NO.:

INVOICE TO

CONTACT NAME: ☒ SAME
COMPANY:
ADDRESS:
CITY: STATE: ZIP CODE:
PHONE NO.: E-MAIL ADDRESS:

PROJECT NO./NAME: Eastern Boundary D. A.
SAMPLER(S) - PLEASE PRINT/SIGN NAME:

TURNAROUND TIME REQUIRED ☐ 1 DAY ☐ 2 DAYS ☐ 3 DAYS ☒ STANDARD ☐ OTHER _____

DELIVERABLES REQUIRED ☐ STD ☐ LEVEL II ☐ LEVEL III ☐ LEVEL IV ☒ EDD ☐ OTHER TRC

MATRIX CODE: W=WATER GW=GROUNDWATER WW=WASTEWATER S=SOIL L=LIQUID SD=SOLID SL=SLUDGE DW=DRINKING WATER O=OIL WP=WIPE A=AIR WS=WASTE

ANALYSIS (ATTACH LIST IF MORE SPACE IS REQUIRED): 31 PFAS

Certifications: ☐ OHIO VAP ☐ Drinking Water ☐ DoD ☐ NPDES
Project Locations: ☐ Detroit ☐ New York ☐ Other _____
Special Instructions: Detroit Axle Eastern Boundary

MERIT LAB NO. (FOR LAB USE ONLY)	COLLECTION DATE	COLLECTION TIME	SAMPLE TAG - IDENTIFICATION-DESCRIPTION	MATRIX	# OF BOTTLES	# Containers & Preservatives: NONE	HCl	HNO_3	H_2SO_4	NaOH	MeOH	OTHER	31 PFAS
43551.01	12/15/22	0807	MW-107	W	3	X							X
.02	12/15/22	0923	MW 106	W	3	X							X
.03	12/15/22	1015	MW-121	W	3	X							X
.04	12/15/22	1115	MW 113	W	3	X							X
.05	12/15/22	1200	MW-22-04	W	3	X							X
.06	12/15/22	1318	MW-22-05	W	3	X							X
.07	12/15/22	1355	MW-22-06	W	3	X							X
.08	12/15/22	1446	Field blank #1	DI	1	X							X
.09	12/15/22	1420	Equipment Blank #1	DI	3	X							X

RELINQUISHED BY: SIGNATURE/ORGANIZATION: TRC ☐ Sampler DATE: 12/15/22 TIME: 1545
RECEIVED BY: SIGNATURE/ORGANIZATION: DATE: TIME:

RELINQUISHED BY: SIGNATURE/ORGANIZATION: TRC DATE: 12/16/22 TIME: 800
RECEIVED BY: SIGNATURE/ORGANIZATION: DATE: 12/16/22 TIME: 800

RELINQUISHED BY: SIGNATURE/ORGANIZATION: DATE: 12/16/22 TIME: 1345
RECEIVED BY: SIGNATURE/ORGANIZATION: DATE: 12/16/22 TIME: 1032

SEAL NO. SEAL INTACT YES ☐ NO ☐ INITIALS
SEAL NO. SEAL INTACT YES ☐ NO ☐ INITIALS

NOTES: TEMP. ON ARRIVAL 4.4

PLEASE NOTE: SIGNING ACKNOWLEDGES ADHERENCE TO MERIT'S SAMPLE ACCEPTANCE POLICY ON REVERSE SIDE

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