Remedial Investigation / Alternatives Analysis Report

619 Exchange Street Site
NYSDEC BCP #C915403
Buffalo, New York

June 2025

Prepared for:

PG Larkinville, LLC
46 Prince Street, Suite 2003
Rochester, NY 14607

Prepared by:

Roux Environmental Engineering and Geology, D.P.C.
2558 Hamburg Turnpike, Suite 300
Buffalo, New York 14218

4374.0004B000

Environmental Consulting
& Management
+1.800.322.ROUX
rouxinc.com

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Certification

I, Thomas H. Forbes, certify that I am currently a NYS registered professional engineer and that this June 2025 Remedial Investigation (RI) Alternative Analysis (AA) Report for the 619 Exchange Street Site, located at 619 Exchange Street, Buffalo, New York was prepared in accordance with applicable statutes and regulations and in substantial conformance with the DER Technical Guidance for Site Investigation and Remediation (DER-10).

Thomas H. Forbes, P.E. _____ _____

NYS Professional Engineer #070950-1 Date Signature

It is a violation of Article 145 of New York State Education Law for any person to alter this document in any way without the express written verification of adoption by any New York State licensed engineer in accordance with Section 7209(2), Article 145, New York State Education Law.

1. Introduction

This Remedial Investigation/Alternatives Analysis (RI/AA) Report has been prepared by Roux Environmental Engineering and Geology, D.P.C. (Roux), on behalf of PG Larkinville, LLC, for the 619 Exchange Street Site (Site), addressed at 619 Exchange Street, City of Buffalo, Erie County, New York (see Figures 1 and 2).

PG Larkinville, LLC elected to pursue investigation, cleanup, and redevelopment of the Site under the New York State Brownfield Cleanup Program (BCP) and execute a Brownfield Cleanup Agreement (BCA) with the New York State Department of Environmental Conservation (NYSDEC) in December 2024 (Index No. C915403-03-24). The Remedial Investigation (RI) Work Plan was approved by the NYSDEC with the concurrence of the New York State Department of Health (NYSDOH) on April 8, 2025. Roux performed RI activities at the Site in April 2025 and May 2025.

1.1 Background

The Site consists of one 0.72-acre parcel addressed at 619 Exchange Street (SBL No. 122.25-2-11), Buffalo, Erie County, New York. The BCP Site is currently vacant and underutilized; the western portion of the Site consists of a concrete slab from a former building and the remainder of the Site is developed with a vacant building historically used for commercial and industrial purposes. Building Section 1, including the eastern and central portions of the building, includes basement areas at varying elevations. Building Section 2, the western-most portion of the building, is slab-on-grade construction. The western-most portion of the Site was formerly developed with a building that was demolished; therefore, the western portion of the Site is currently undeveloped and considered an exterior area.

Based on historic and municipal records and Sanborn Fire Insurance Maps, the Site was previously used in residential, commercial, and industrial capacities. Commercial and industrial uses of the Site included mill work, lumber storage, woodworking, bedding/textile manufacturing, warehousing, storage, and distribution. Prior to the construction of the existing building, the Site was developed with railroad tracks, an icehouse, residential structures, and outbuildings.

The existing building was constructed at the Site in 1908 with additions made in 1924. The Site was occupied by Iroquois Doors Co. and used for mill work, planning, woodworking, and lumber storage from at least 1926 through at least 1986. Other occupants include Otis Bedding Manufacturing Co. from at least 1992 through at least 2014, Ken's Sports Warehouse from at least 2008 through at least 2014, Copeland Family Servies in at least 2010, and K.W. Textile, Inc., a textile distribution warehouse (with possible textile manufacturing) from at least 2001 through 2018. The Site has been vacant since approximately 2018.

Historic municipal records indicate the wiring for a fuel oil burner in 1979. During previous investigations, cut copper lines, and a 5,000-gallon fuel gauge were identified at the Site. As further discussed below, during this RI work, an existing vaulted aboveground storage tank (AST) was identified along the south interior basement wall of building Section 1. In addition, a suspect candy cane vent pipe protruding from the south wall of the existing was presumably associated with the former fuel oil AST.

Past uses of the Site (e.g. mill work, woodworking, lumber storage, manufacturing, warehousing) and the presence of urban fill material across the Site (likely due to demolition and backfill of former structures) have resulted in environmental impacts to the Site.

1.2 Previous Investigations

Results of previous environmental investigations indicate polycyclic aromatic hydrocarbons (PAHs) and metals exceeding 6NYCRR Part 375 (Part 375) Restricted Residential Use Soil Cleanup Objectives (RRSCOs) across the Site. Previous investigation locations and analytical results are provided in Figure 3 and Table 3.

1.2.1 July 2018 – Phase I Environmental Site Assessment

A Phase I Environmental Site Assessment (ESA) completed by TurnKey Environmental Restoration, LLC (TurnKey, now Roux) in July 2018 identified recognized environmental conditions (RECs) at the Site. The specific RECs identified for the Site included the following:

- The long history of woodworking, planning, and milling operations. Such activities could result in environmental impacts beneath the building slab due to the reasonably anticipated use of woodworking machinery and chemicals such as wood preservatives, stains, paints, etc.
- Evidence of historic fuel oil heating system including cut copper lines and a suspect 5,000-gallon fuel gauge was identified. In addition, a suspect vent pipe was observed protruding from the south wall of the building near the basement boiler room and a suspect fill port was observed protruding from the north exterior wall of the building. [Since the time of this assessment, as previously discussed, a fuel oil AST has been located within a currently inaccessible vault along the south interior basement wall of Section 1.]
- Prior to the current on-Site development, railroad tracks bisected the Site.

1.2.2 October 2023 – Phase II Environmental Investigation

In October 2023, TurnKey completed a Phase II Environmental Investigation at the Site. Phase II activities included completion of three hand cores (HC-1 through HC-3), advancement of ten soil borings (SB-1 through SB-10), and collection of 13 subsurface soil/fill samples for laboratory analysis. The findings of the Phase II investigation are summarized below:

- Fill materials, consisting of mixtures of black fines, granular material, ash, cinders, and/or fragments of wood and brick were encountered across the Site at all of the investigation locations at depths ranging between 1 feet below ground surface (fbgs) and 3 fbgs. Chemical analysis indicates the presence of impacted fill materials across the Site.
- PAHs and metals were detected at concentrations above RRSCOs across the Site. The highest PAH concentrations were identified on the eastern and western portions of the Site. Elevated metals were identified across the Site, in the eastern, western, and central areas. The highest concentrations included arsenic, which exceeded its RRSCO at SB-2 (64.4 milligrams per kilogram, mg/kg), barium, which exceeded its RRSCO at SB-10 (1,850 mg/kg), lead, which exceeded its RRSCO at HC-1 (525 mg/kg), and mercury, which exceeded its RRSCO at HC-1 (12.2 mg/kg).

The findings of this Phase II Investigation supported the entry of the 619 Exchange Street Site into the BCP. Table 1 summarizes the samples collected and analyzed during the Phase II investigation and Phase II soil analytical results are summarized in Table 3. Phase II investigation locations and results are shown on Figures 3 and 4.

1.3 Purpose and Scope

This RI/AA Report has been prepared on behalf of PG Larkinville, LLC to describe and present the findings of the RI activities and evaluate remedial alternatives for the Site.

This report contains the following sections:

- Section 2.0 presents the approach for the RI
- Section 3.0 describes the physical characteristics of the Site as they pertain to the investigation results
- Section 4.0 presents the investigation results by media
- Section 5.0 presents the conceptual site model
- Section 6.0 describes the fate and transport of the contaminants of concern (COCs)
- Section 7.0 presents the qualitative exposure assessment
- Section 8.0 evaluates remedial alternatives for the Site
- Section 9.0 presents the RI/AAR summary and conclusions
- Section 10.0 provides a list of references

2. Remedial Investigation Approach

The RI scope of work focused on further defining the nature and extent of contamination on the BCP Site and obtaining data of sufficient quantity and quality to perform the remedial alternatives evaluation in accordance with NYSDEC DER-10. Field activities included: advancement of soil borings and hand cores, subsurface soil/fill sampling, monitoring well installation, groundwater sampling, soil vapor sampling, and collection of field and hydrogeologic data. The RI tasks were performed in accordance with the approved RI Work Plan (February 2025).

Field team personnel collected environmental samples (i.e., subsurface soil/fill, groundwater, and soil vapor) in accordance with the rationale and protocols described in the Sampling and Analysis Plan (SAP) of the Quality Assurance Project Plan (QAPP) (included in the RI Work Plan). Representative environmental samples were collected during the RI using dedicated sampling devices and were placed in pre-cleaned laboratory provided sample containers, cooled to 4ºC in the field, and transported under chain-of-custody command to a NYSDOH Environmental Laboratory Accreditation Program (ELAP) certified analytical laboratory.

Samples for chemical analysis were analyzed in accordance with United States Environmental Protection Agency (USEPA) SW-846 methodologies to meet the definitive-level data requirements. A Category B deliverable package was provided for each sample delivery group to allow independent third-party data validation and provide defensible data. Analytical results were evaluated by a third-party data validation expert in accordance with provisions described in the QAPP. The investigation activities are described below. Table 1 summarizes the samples collected and analyzed during the RI, Tables 3 through 6 summarize Phase II and RI analytical data and Figures 3 and 4 present the RI sample locations. Appendix A contains photographs of field activities.

2.1 Soil/Fill Investigation

The soil/fill investigation included advancement of soil borings and hand cores to allow for characterization of soil/fill material and collection of subsurface soil samples. RI soil investigation locations are shown on Figure 3.

2.1.1 Soil Borings

Seven soil borings (MW-1 through MW-6 and SB-11) were advanced to collect soil samples and allow for the installation of monitoring wells between April 27, 2025 and May 1, 2025. Soil borings were advanced to depths ranging between 14 and 20 fbgs. The following drilling equipment was used:

- Existing Building Sections 1 and 2 (interior areas) – drilling within the existing footprint was performed using a direct-push power Geoprobe 420M drill rig capable of installing one-inch diameter wells.
- Former Building Area Section 3 (exterior) – exterior borings were performed with a direct-push drill rig equipped with augers capable of installing two-inch diameter wells.

Roux provided oversight for the investigation activities and created a field borehole log for each investigation location. Field borehole logs are included in Appendix B. All soil samples were field screened for the presence of volatile organics using a calibrated photoionization detector (PID) with a 10.6 eV lamp.

Upon reaching the completion depth of each location, visual/olfactory observations and PID measurements were noted and used to determine sample intervals.

All non-dedicated drilling tools and equipment were decontaminated between boring locations using potable tap water and a phosphate-free detergent (e.g., Alconox).

Drill cuttings and any other investigation derived waste (IDW) was managed in accordance with DER-10 3.3(e). Specifically, drill cuttings from soil borings were wells were installed were placed in sealed New York State Department of Transportation (NYSDOT)-approved drums and labeled for subsequent characterization and disposal.

2.1.2 Hand Cores

Due to limited drill rig accessibility within the existing building, eight soil/fill samples were collected from beneath the existing building slabs via hand coring using a hand auger (HC-4 through HC-11) on April 29 and April 30, 2025. After concrete flooring was removed using a concrete core drill, one soil/fill sample was collected from beneath subbase material at each location. Two samples (HC-4 and HC-5) were collected from Section 2 (building slab-on-grade area) and six samples (HC-6 through HC-11) were collected from Section 1 (building basement area). Hand cores were advanced to the maximum reach of the hand tools (5 fbgs).

Gross contamination (i.e. visible product) was not encountered in soil during the RI. Spoils were returned into the cored auger holes from which they were removed in approximately the same order they were removed.

2.1.3 Subsurface Soil/Fill Collection and Analysis

As summarized on Table 3, a total of 19 subsurface soil/fill samples were collected during RI activities. Subsurface soil/fill samples were collected using dedicated stainless steel sampling tools and were placed in pre-cleaned laboratory provided sample bottles, cooled to 4°C in the field, and transported under chain-of-custody command to a NYSDOH ELAP-certified analytical laboratory.

RI subsurface soil/fill samples were analyzed for target compound list (TCL) semi-volatile organic compounds (SVOCs) plus tentatively identified compounds (TICs) and target analyte list (TAL) metals. Select subsurface soil/fill samples were also analyzed for TCL volatile organic compounds (VOCs) plus TICs, polychlorinated biphenyls (PCBs), pesticides, herbicides, and per- and polyfluoroalkyl substances (PFAS).

2.2 Groundwater Investigation

One two-inch diameter, exterior groundwater monitoring well (MW-1), and five one-inch diameter, interior groundwater monitoring wells (MW-2 through MW-6) were completed at the Site to assess groundwater quality data and flow direction. Groundwater monitoring well locations are shown on Figure 3.

2.2.1 Monitoring Well Installation

Monitoring wells were installed following the advancement of soil borings between April 27, 2025 and May 1, 2025. Monitoring well construction details are presented in Table 2 and monitoring well installation logs are included in Appendix B. The exterior monitoring well was constructed with two-inch diameter Schedule

(SCH) 40 PVC (ground surface to five fbgs) with flush joint SCH 40 PVC 0.010-inch machine-slotted well screen (five fbgs to 20 fbgs). Interior monitoring wells were constructed with a one-inch diameter SCH 40 PVC (ground surface to between four fbgs and five fbgs) with flush joint SCH 40 PVC 0.010-inch machine-slotted well screen (four fbgs or five fbgs to 14 fbgs or 20 fbgs). Each well screen and attached riser was placed at the bottom of each borehole and a silica sand filter pack (size #0) was installed from the base of the well to a maximum of two feet above the top of screen. A bentonite chip seal was installed and allowed to hydrate sufficiently to mitigate the potential for downhole grout contamination. The newly installed monitoring wells were completed with keyed-alike locks, a lockable J-plug, and a steel flush mounted road box.

2.2.2 Monitoring Well Development

The newly installed monitoring wells were developed in accordance with the approved RI Work Plan and Roux and NYSDEC protocols on May 1, 2025. Development of the monitoring wells was accomplished with dedicated disposable bailers via surge and purge methodology. Field parameters including pH, temperature, turbidity, dissolved oxygen (DO), oxidation-reduction potential (ORP) and specific conductance were measured periodically (i.e., every well volume or as necessary) during development. Field measurements continued until they became relatively stable. Stability is defined as variation between measurements of approximately 10 percent or less with no overall upward or downward trend in the measurements. A minimum of three well volumes was evacuated from each monitoring well during development activities.

Purged groundwater was containerized in NYSDOT-approved drums and labelled per monitoring well location pending laboratory analytical results. Based on the RI groundwater analytical results and field observations, the containerized development water is acceptable for surface discharge through carbon.

2.2.3 Groundwater Sample Collection and Analysis

Groundwater samples were collected on May 8, 2025. Prior to groundwater sample collection, static water levels were measured and recorded from all on-site monitoring wells to facilitate the preparation of a Site-wide isopotential map. Following water level measurement, field personnel purged and sampled monitoring wells using low-flow methodology at MW-1 and dedicated disposable bailers at MW-2 through MW-6. Field measurements for pH, temperature, turbidity, DO, ORP, specific conductance, and water level, as well as visual and olfactory field observations were periodically recorded and monitored for stabilization. All collected groundwater samples were placed in pre-cleaned, pre-preserved laboratory provided sample bottles, cooled to 4°C in the field, and transported under chain-of-custody command to a NYSDOH ELAP-certified analytical laboratory.

As summarized on Table 1, groundwater samples were analyzed for TCL VOCs, TCL SVOCs, 1,4-dioxane, TAL total metals, and TAL dissolved metals. Select subsurface soil/fill samples were also analyzed for PCBs, pesticides, herbicides, and PFAS. All sampling was performed in accordance with USEPA SW-846 methodology with equivalent NYSDEC Category B deliverables to allow for independent third-party data usability assessment.

2.3 Soil Vapor Investigation

Soil vapor was investigated to evaluate the potential for soil vapor intrusion (SVI) risks in future on-site buildings and to complete a qualitative off-site exposure assessment. Soil vapor and SVI sample locations are shown on Figure 3.

2.3.1 Exterior Soil Vapor Sampling

One exterior soil vapor sample (SV-1) was collected within the exterior portion of the Site on May 8, 2025. One ambient outdoor air sample (OA-2) was also collected at an upwind location, concurrent with the soil vapor sample. The soil vapor sampling probe was installed using specialized stainless steel soil probes. Once the steel rod was advanced to the target depth (3 fbgs), the steel rod was retracted, leaving the anchor point, sampling screen, and sampling tubing within the borehole annulus. Glass beads were poured around the sampling screen in a manner to cover the entire length of the sampling screen. Bentonite was placed above the glass beads to the ground surface to create a seal to prohibit infiltration of ambient air into the sampling area.

Once the sample probe was installed, the probe and tubing were purged (three volumes) using a syringe and helium tracer gas was used during the purging phase to ensure that the probes were well sealed.

The sampling was completed in general conformance with the NYSDOH Soil Vapor Intrusion Guidance and Roux's Ambient Air and Sub-Slab Vapor Sampling Field Operating Procedures. The soil vapor and outdoor air samples were sent to a NYSDOH-approved laboratory for analysis of USEPA TCL VOCs in accordance with USEPA Method TO-15.

2.3.2 Interior Soil Vapor Intrusion Sampling

Four sub-slab vapor (SSV-1 through SSV-4) and four co-located, concurrent indoor air samples (IA-1 through IA-4), were collected within the existing building on April 18, 2025. One ambient outdoor air sample (OA-1) was also collected at an upwind location, concurrent with the sub-slab soil and indoor air samples.

Prior to the initiation of SVI sampling, a pre-sampling inspection was completed to identify and minimize conditions that may have interfered with the sampling. The inspection evaluated the type of structure, floor layout, airflows, and physical conditions of the building. This information, along with information on sources of potential indoor air contamination, was identified on a building inventory form.

At each sub-slab vapor sampling location, Roux personnel drilled a hole through the concrete slab using a hand-held hammer drill. Temporary sub-slab vapor probes and tubing were utilized for the sample collection. The sub-slab vapor probes were sealed to the surface with non-VOC containing and non-shrinking clay putty for temporary installation. At each location, once the temporary sample probe was installed, the probe and tubing were purged (three volumes) using a syringe and helium tracer gas was used during the purging phase to ensure that the probes were well sealed.

The sampling was completed in general conformance with the NYSDOH Soil Vapor Intrusion Guidance and Roux's Ambient Air and Sub-Slab Vapor Sampling Field Operating Procedures. The soil vapor and outdoor air samples were sent to a NYSDOH-approved laboratory for analysis of USEPA TCL VOCs in accordance with USEPA Method TO-15.

Voids in the concrete slab were filled and sealed after completion of the sampling event.

2.4 Field Specific Quality Assurance/Quality Control Sampling

In addition to the subsurface soil/fill and groundwater samples described above, field-specific quality assurance/quality control (QA/QC) samples were collected and analyzed to ensure the reliability of the generated data as described in the QAPP and to support the required third-party data usability assessment effort. Site-specific QA/QC samples included matrix spikes, matrix spike duplicates, blind duplicates, and equipment and trip/field blanks.

2.5 Site Mapping

A Site map was developed for the RI based on Roux personnel field measurements and marked Site map with the locations of all soil borings, hand cores, monitoring wells, soil vapor, SVI, and outdoor air sampling locations. Monitoring well elevations were measured by Roux's surveyor. An isopotential map showing the general direction of overburden groundwater flow was prepared based on water level measurements relative to survey points previously collected for the site by others (see Figure 5).

2.6 Decontamination & Investigation Derived Waste Management

Every attempt was made to utilize dedicated sampling equipment during the RI, however, if non-dedicated equipment was required and/or used (e.g., spilt spoons) it was decontaminated with a non-phosphate detergent (i.e., Alconox®) and potable water mixture, rinsed with distilled water, and air-dried before each use in accordance with the field operating procedure (FOP).

Soil cuttings/spoils and development waters were containerized in 55-gallon drums, labeled, and temporarily stored on-Site in accordance with the approved RI Work Plan.

3. Site Physical Characteristics

The physical characteristics of the Site observed during the RI are described in the following sections.

3.1 General Site Features and Site Topography

The Site is located in an urban area at the southwest corner of the intersection of Exchange Street and Larkin Street in the City of Buffalo, New York. The Site is located in a highly developed mixed-use residential, commercial, and industrial area. The Site is bordered by commercial and industrial properties and Exchange Street to the north; a vacant commercial property to the south; a commercial property and Larkin Street to the east; and a commercial property and railroad lines to the west.

The Site is generally flat lying. One building is present on the Site and the remaining area is covered by asphalt or concrete. Precipitation (i.e., rain or melting snow) moves toward storm drains in the roadway via overland flow. Surface and shallow groundwater flow are likely affected by various cycles of development and filling, as well as utilities and foundations.

For the purpose of this report, as discussed above, the Site and existing building have been split into three sections, as follows:

- Section 1, eastern and central four-story portion of the building with a subgrade basement. Note that due to the basement, Section 1 is an approximate 10 ft lower grade compared to the rest of the Site.
- Section 2, the western-most two-story slab-on-grade portion of the existing structure.
- Section 3, the western-most exterior portion of the Site that includes a concrete slab from a former portion of the building that was previously demolished.

3.2 Geology and Hydrogeology

Geological and hydrogeological conditions identified during the RI are presented in the sections below.

3.2.1 Overburden

According to the United States Department of Agriculture (USDA) Web soil survey, Site soils are characterized as Urban land. These soils are characterized as 80 percent urban land and 20 percent minor components. Beneath concrete surfaces, the Site's lithology consists of an upper fill layer at depths ranging between 0.25 fbgs to at least 3 fbgs overlying native clay or native sandy clay to at least 20 fbgs. Additional information related to subsurface lithology is provided below in Section 4.1.1

3.2.2 Bedrock

Based on the bedrock geologic map of Erie County, the Site is situated over the Onondaga Formation of the Middle Devonian Series. The Onondaga Formation is comprised of a varying texture from coarse to very finely crystalline with a dark gray to tan color and chert and fossils within. The unit has an approximate thickness of 110 to 160 feet. An intersecting, orthogonal pattern of fractures and joint sets are common throughout the bedrock strata. The surficial geomorphology of the bedrock was modified by continental glaciation.

3.2.3 Hydrogeology

Water level measurements collected at overburden groundwater wells ranged from 0.65 feet below top of riser (fbTOR) and 4.54 fbTOR. RI groundwater elevations collected from overburden wells on June 16, 2025 are shown on Figure 5. The isopotential map depicts overburden groundwater at the Site generally flowing toward the northeast. Table 2 summarizes the groundwater elevation data.

Using well installation and water level measurements collected during the RI, the estimated overburden hydraulic gradient was calculated to range from 0.006 ft/ft (measured between MW-3 and MW-6) to 0.014 ft/ft (measured between MW-1 and MW-4. Further water level monitoring will be required to confirm these conditions.

4. Investigation Results by Media

The nature and extent of contamination at the Site was further characterized using soil/fill and groundwater samples collected and analyzed as part of the RI. Samples collected during the Phase II investigation were used to supplement this RI.

Appendix C contains laboratory analytical data packages for samples analyzed from the RI. Analytical data discussed in this section includes results from the Phase II investigations and RI data collected by Roux personnel. Tabulated analytical results are shown only for those parameters for which a value greater than the method detection limit and was detected at a minimum of one sample location.

Table 1 summarizes the sampling and analytical program employed under the RI. Subsurface soil/fill, groundwater, soil vapor, SVI, and outdoor air analytical results are summarized on Tables 3 through 6. Analytical reports are included in Appendix C.

4.1 Subsurface Soi/Fill Investigation

A total of 19 subsurface soil/fill samples were collected during the RI. Sample locations are shown on Figure 3. Subsurface soil results are summarized in Table 3 and Figure 4. Boring logs are provided in Appendix B.

4.1.1 Field Observations

As previously discussed, beneath concrete surfaces, the Site's lithology consists of an upper fill layer at depths ranging between 0.25 fbgs to at least 3 fbgs overlying native clay or native sandy clay to at least 20 fbgs. Fill at Section 1 generally consists of mixtures of black fines/granulars and cinders with gravel and sand and fill at remaining slab-on-grade areas (Sections 2 and 3) consisted of black sand with varying mixtures of white ash, cinders/black fines, and gravel. Fragments of coal, brick, and glass were noted intermingled with fill at certain investigation locations. In addition, intermingled potential slag fragments were noted at one investigation location (MW-1).

No odors or elevated PID readings above background (0.0 parts per million (ppm)) were identified at any RI or Phase II investigation location.

4.1.2 Analytical Results

Volatile Organic Compounds

VOCs were detected at concentrations above method detection limits (MDLs) at 9 of the 12 RI sample locations. No VOCs were detected at concentrations exceeding their respective RRSCOs. One VOC, acetone, was detected at concentrations exceeding its Unrestricted SCO (USCO) at HC-4 (0.5-1.5 ft) and MW-2 (0.75-2 ft). VOC TICs were not detected at any location. VOCs were not analyzed during the Phase II investigation.

Semi-Volatile Organic Compounds

SVOCs were detected at concentrations above MDLs at 15 of the 19 RI sample locations and the 13 Phase II sample locations. SVOCs, specifically PAHs, were detected exceeding USCOs and RRSCOs at five locations in the fill layers at SB-1 (0-1 ft), SB-9 (0-1 ft), MW-1 (0.25-3 ft), MW-5 (0.33-0.75 ft), and MW-6

(0.5-0.75 ft). 1,4-dioxane was not detected above MDLs at any location. SVOC TICs were identified at concentrations ranging from 0.18 mg/kg at MW-6 (8-10 ft) and 28.68 mg/kg at HC-11 (0.25-0.5 ft).

Metals

Metals were detected at concentrations above MDLs at the 19 RI sample locations and the 11 Phase II locations. Metals including arsenic, barium, copper, lead, mercury, selenium, and/or zinc were detected exceeding USCOs at 19 locations in the fill layer including SB-5 (0-1 ft), SB-6 (0-1 ft), SB-7 (0-1 ft), SB-8 (0-1 ft), SB-9 (0-1 ft), SB-10 (0-1 ft), HC-1 (0-1 ft), HC-2 (0-1 ft), HC-3 (0-1 ft), HC-4 (0.5-1.5 ft), HC-5 (0.33-0.66 ft), HC-6 (2-6 in), HC-7 (0.25-0.75 ft), HC-8 (1-3 in), HC-11 (0.25-0.5 ft), MW-1 (0.25-3 ft), MW-2 (0.75-2 ft), MW-3 (0.5-2.5 ft), MW-4 (0.25-1 ft), MW-5 (0.33-0.75 ft), and SB-11 (0.25-2 ft). Arsenic, barium, lead, and/or mercury were also detected exceeding their respective RRSCOs at SB-5 (0-1 ft), SB-8 (0-1 ft), SB-9 (0-1 ft), SB-10 (0-1 ft), HC-1 (0-1 ft), HC-2 (0-1 ft), HC-3 (0-1 ft) HC-4 (0.5-1.5 ft), HC-7 (0.25-0.75 ft), HC-11 (0.25-0.5 ft), MW-2 (0.75-2 ft), MW-3 (0.5-2.5 ft), and MW-5 (0.33-0.75 ft).

Polychlorinated Biphenyls

PCBs were detected at concentrations above MDLs at 1 of the 12 RI sample locations. Specifically, total PCBs exceeded its respective USCO at HC-11 (0.25-0.5) but not its RRSCO. PCBs were not analyzed during the Phase II investigation.

Pesticides

Pesticides were detected at concentrations above MDLs at 9 of the 12 RI sample locations. 4,4'-DDD, 4,4'-DDE, and/or 4,4'-DDT were detected exceeding their respective USCOs at six locations including HC-6 (2-6 in), HC-11 (0.25-0.5 ft), MW-1 (0.25-3 ft), MW-1 (18-20 ft), MW-2 (0.75-2 ft), and MW-4 (0.25-1 ft). Pesticides were not analyzed during the Phase II investigation.

Herbicides

Herbicides were detected at concentrations above MDLs at 4 of the 12 RI sample locations. No herbicides were detected exceeding USCOs. Herbicides were not analyzed during the Phase II investigation.

Per- and Polyfluoroalkyl Substances

PFAS were detected at concentrations above MDLs at 5 of the 12 RI sample locations. No PFAS were detected exceeding USCOs. PFAS were not analyzed during the Phase II investigation.

Soil/Fill Waste Characterization Sampling

Three waste characterization soil/fill samples, one from each section, were analyzed for waste characterization parameters including TCLP VOCs, TCLP SVOCs, TCLP Metals, PCBs, ignitability, and corrosivity. Laboratory analytical results appear to indicate that on-site soil/fill is considered non-hazardous.

4.2 Groundwater Investigation

Roux personnel provided oversight for the installation of six overburden groundwater monitoring wells, identified as MW-1 through MW-6. Groundwater level measurements were collected and monitoring wells were sampled to investigate on-site groundwater flow and quality. Groundwater monitoring well locations are shown on Figure 3. Groundwater results are summarized in Table 4.

4.2.1 Field Observations

No visual or olfactory concerns were identified during groundwater well installation, development, or sampling. Groundwater field forms are included in Appendix D.

4.2.2 Analytical Results

Volatile Organic Compounds

VOCs were detected at concentrations above MDLs at 5 of the 6 monitoring wells. No VOCs were detected exceeding TOGS 1.1.1 Groundwater Quality Standards (GWQS). VOC TICs were not detected at any location.

Semi-Volatile Organic Compounds

SVOCs were detected at concentrations above MDLs at all six monitoring wells. No SVOCs were detected exceeding GWQS. 1,4-dioxane was not detected above MDLs at any location. SVOC TICs were identified at concentrations ranging from non-detect (MW-5 and MW-6) to 51 ug/L (MW-2).

Metals

Total metals were detected at concentrations above MDLs at all six monitoring wells. Total metals including arsenic, barium, beryllium, chromium, lead, nickel, and/or mercury were detected exceeding GWQS at MW-1 through MW-6. Naturally occurring metals including iron, magnesium, manganese, and sodium were also detected exceeding GWQS at all six monitoring wells.

Dissolved metals concentrations were generally lower in comparison to total metals, and exceedances in dissolved metals were limited to naturally occurring metals including magnesium, manganese, and sodium.

Polychlorinated Biphenyls

PCBs were not detected above MDLs at the three sampled monitoring well locations.

Pesticides

Pesticides were detected at concentrations above MDLs at the three sampled monitoring well locations. Alpha-BHC and dieldrin were detected at concentrations slightly exceeding its respective GWQS at MW-4.

Herbicides

Herbicides were detected at concentrations above MDLs at 2 of the 3 sampled monitoring well locations. Total phenols were detected at concentrations slightly exceeding its GWQS at two locations, MW-4 and MW-5.

Per- and Polyfluoroalkyl Substances

PFAS were detected at concentrations above MDLs at 2 of the 3 sampled monitoring well locations. No PFAS were detected exceeding GWQS.

4.3 Soil Vapor Investigation

Soil vapor sampling was completed in two parts. One soil vapor sample was collected from the exterior, western portion of the Site (Section 3). Four paired sub-slab vapor/indoor air samples were collected from within the building (Sections 1 and 2). One ambient air sample was collected during each sampling event.

4.3.1 Exterior Soil Vapor Sampling

Soil vapor sampling logs are included in Appendix E. Multiple VOCs were detected in the one exterior soil vapor sample (SV-1) including 1,1,1-trichloroethane, methyl isobutyl ketone, acetone, benzene, carbon disulfide, chloroform, dichlorodifluoromethane, isopropyl alcohol, methyl butyl ketone, methyl ethyl ketone, n-heptane, n-hexane, tert-butyl alcohol, toluene, xylenes, trichloroethene, and trichlorofluoromethane (see Table 5). New York State does not currently have promulgated guidance values for soil vapor air sampling results. Generally, low-level concentrations of VOCs were identified in the soil vapor and outdoor air samples.

4.3.2 Interior Soil Vapor Intrusion Sampling

Prior to completion of SVI sampling, a building inventory form was completed to identify sources of potential indoor air contamination; no concerns were noted in the sample areas at the time of sample collection. The building inventory form and SVI sample logs are included in Appendix E.

Multiple VOCs were detected in sub-slab soil vapor samples (SSV-1 through SSV-4) and indoor air samples (IA-4 through IA-4) including 1,1,1-trichloroethane, 2,24-trimethylpentane, acetone, benzene, carbon disulfide, chloroform, cyclohexane, dichlorodifluoromethane, ethylbenzene, isopropyl alcohol, n-heptane, n-hexane, tert-butyl alcohol, tetrachloroethene, tetrahydrofuran, toluene, xylenes, and trichlorofluoromethane. Sub-slab soil vapor and indoor air sample results were compared to NYSDOH SVI decision matrices (see Table 6).

Analytical results, in comparison to NYSDOH decision matrices, indicate “no further action” therefore it does not appear that SVI is a concern in the building.

4.5 Community Air Monitoring Plan (CAMP) Results

Community air monitoring was performed during intrusive remedial activities completed April 28, 2025 through May 1, 2025. Intrusive activities completed during this time consisted of the advancement of soil borings, hand cores, and well installation. The results conformed to the Community Air Monitoring perimeter

particulate requirement (<150 ug/m^3) and the organic vapor requirement (<5 ppm) for the duration of intrusive RI activities. CAMP data is included in Appendix F.

4.6 Data Usability Summary

In accordance with the RI Work Plan, the laboratory analytical data from this investigation was assessed and, as required, submitted for independent review. Data Validation Services located in North Creek, New York performed the data usability summary assessment, which involved a review of the summary form information and sample raw data, and a limited review of associated QC raw data. Specifically, the following items were reviewed:

- Laboratory Narrative Discussion
- Custody Documentation
- Holding Times
- Surrogate and Internal Standard Recoveries
- Matrix Spike Recoveries/Duplicate Recoveries
- Field Duplicate Correlation
- Preparation/Calibration Blanks
- Control Spike/Laboratory Control Samples
- Instrumental IDLs
- Calibration/CRI/CRA Standards
- ICP Interference Check Standards
- ICP Serial Dilution Correlations
- Sample Results Verification

The Data Usability Summary Report (DUSR) was conducted using guidance from the USEPA Region 2 validation Standard Operating Procedures, the USEPA National Functional Guidelines for Data Review, as well as professional judgment.

In summary, results are usable either as reported or with minor qualification with the following exceptions:

- Soil
    - Chloroform detected in several soil samples was considered external contamination and was edited to non-detect. Results edited to non-detect were below USCOs.
    - Several pesticides were qualified as estimated/tentative or edited to non-detect due to uncertainty in identification and/or quantitation. 4,4'-DDT, endrin ketone, and gamma-BHC detected in several soil samples were edited to non-detect due to their presence in the associated blank. At HC-4 (0.5-1.5 ft), HC-6 (2-6 in), MW-1 (0.25-3 ft), MW-2 (0.75-2 ft), MW-4 (0.25-1 ft), MW-6 (0.5-0.75), and SB-11 (0.25-2 ft), concentrations of 4,4-DDT and 4,4-DDD were detected above USCOs before being edited to non-detect. Results edited to non-detect were below RRSCOs.
    - SVOC TICs detected in several soil samples were considered external contamination and were edited to non-detect.

- Groundwater
    - Several pesticides were qualified as estimated/tentative or edited to non-detect due to uncertainty in identification and/or quantitation. At MW-1 and MW-5 alpha-BHC was detected above GWQS before being edited to non-detect.
    - SVOC TICs detected in several soil samples were considered external contamination and were edited to non-detect.
    - PFHxA was edited to non-detect in MW-1 and PFOA/PFOS were edited to non-detect in MW-5 due to their presence in the equipment blank. Results edited to non-detect were below GWQS.

Additional qualifications of the data have been incorporated into the summary data tables. Appendix G includes the DUSR.

4.7 Constituents of Concern (COCs)

Based on the findings of the RI and previous investigations, and the planned redevelopment of the Site, the COCs are presented below:

Soil/Fill: Metals (barium, and mercury)

Groundwater: None

Soil Vapor: None

5. Conceptual Site Model

This Conceptual Site Model summarizes impacts to the soil, groundwater, and soil vapor at the Site to define the overall extent of contamination across the Site. This Section is a summary of all analytical and observational results to date, including the results of the RI, as discussed in Section 4.

5.1 Site Improvements and Cover

The Site is improved with one building, located on the central and eastern portion of the Site, and includes a concrete slab remaining from a demolished building on the western portion of the Site. The Site has been broken into three "Sections" as summarized below and shown in Figure 2.

- Section 1 includes the central and eastern portions of the existing building. Basement areas at varying elevations are present in this section. A 5,000-gallon assumed fuel oil AST was identified in the basement in the southwest portion this Section.
- Section 2 includes the western-most portion of the existing building. This section of the building is a slab-on-grade construction (i.e. no basement).
- Section 3 includes the exterior, western-most portion of the Site. The building was demolished in this area but the concrete building slab remains.

5.2 Soil Quality

Soil/fill was characterized during the RI to further assess known contamination and determine the vertical and horizontal extent of soil contamination at the Site. Beneath concrete surfaces, the overburden at the Site consists of an upper fill layer at depths ranging between 0.25 fbgs to at least 3 fbgs overlying native clay or native sandy clay to at least 20 fbgs. No visual or olfactory impacts or elevated PID readings were identified at any subsurface investigation location, however, chemical exceedances were identified in subsurface soil samples collected from the fill layer, as further discussed below. No laboratory analytical exceedances were identified in the native soil samples collected across the Site.

Subsurface soil/fill samples collected from across the Site did not yield herbicides or PFAS above USCOs at any sample location and VOCs, PCBs, and pesticides were not detected at concentrations above RRSCOs.

Individual PAHs were detected in the fill exceeding RRSCOs; however, total PAHs at these locations were minimal, ranging between 9.4 mg/kg (MW-5) to 50.8 mg/kg (SB-9).

Metals concentrations were compared to Commercial SCOs (CSCOs) to assess potential areas of concern under a Track 4 Restricted-Residential cleanup. Arsenic was detected slightly exceeding its CSCO (16 mg/kg) at SB-5 (18 mg/kg), SB-9 (16.8 mg/kg), HC-1 (22.1 mg/kg), HC-3 (22.1 mg/kg), MW-2 (19.5 mg/kg), and MW-3 (20.8 mg/kg); however, as further detailed in Section 8.3.1, results of a statistical analysis indicates an arsenic upper confidence limit below its RRSCO at the Site. Barium was detected exceeding its CSCO (400 mg/kg) at SB-8 (1,850 mg/kg), HC-7 (624 mg/kg), and HC-11 (6,290 mg/kg). Mercury was detected exceeding its CSCO (2.8 mg/kg) at SB-9 (12.2 mg/kg). Therefore, the elevated metal concentrations (barium and mercury) are considered COCs in soil at the Site.

Under a Track 4 Restricted-Residential cleanup, site-specific action levels (SSALs) may be developed to determine concentrations of COCs that may remain at the Site under cover. A discussion of SSALs developed for this Site is included in Section 8.3.1.

5.3 Groundwater Quality

Six monitoring wells were installed, developed, and sampled to characterize on-site groundwater. No visual or olfactory impacts or elevated PID readings were identified at any of the monitoring wells during development or sampling. VOCs, SVOCs, 1,4-dioxane, PCBs, and PFAS were not detected at concentrations exceeding their respective GWQS.

Naturally occurring minerals (i.e., iron, magnesium, manganese, and sodium) were detected in total and dissolved metals analyses. These analytes are commonly found in groundwater and are not considered as COCs for the Site. Total arsenic, barium, beryllium, chromium, lead, nickel, and/or mercury were identified exceeding their respective GWQS at MW-1, MW-2, MW-3, MW-4, and MW-6. However, dissolved concentrations of these compounds were below their respective GWQS at all locations, indicating that the elevated total metals concentrations were likely due to turbidity/suspended soil/fill in the groundwater samples. Two pesticides, alpha BHC and dieldrin, were detected exceeding their respective GWQS at MW-4. One herbicide, pentachlorophenol, was detected at a concentration such that total phenols exceeded its GWQS at MW-4 and MW-5. The exceedances identified are minimally above their respective GWQS with no indication of a site-wide concern and are therefore not considered COCs in groundwater.

Based on the above discussion, no COCs were identified in groundwater at the Site.

5.4 Soil Vapor and Air Quality

Soil vapor sampling was completed in the western, exterior portion of the Site (Section 3), and SVI sampling was completed throughout the lowest levels of the existing building (Sections 1 and 2).

Several VOCs were detected at low levels in the soil vapor sample collected from Section 3 and in the subslab vapor and indoor air samples collected from Sections 1 and 2. These results indicate that VOCs are not present at elevated concentrations in soil vapor at the Site. When compared to NYSDOH decision matrices, SVI results indicated that no further action was required at any location. Additionally, there is no apparent source for soil vapor contamination as VOCs were not identified as COCs in soil or groundwater. Therefore, based on this information, VOCs are not considered a COC in soil vapor, subslab/indoor air, and SVI is not an issue at the Site.

6. Fate and Trasport of COCs

The findings of the RI were used to evaluate the fate and transport of COCs in Site media. The mechanisms by which the COCs can migrate to other areas or media are briefly outlined below.

6.1 Fugitive Dust Generation

Volatile and non-volatile chemicals present in soil/fill can be released to ambient air as a result of fugitive dust generation. Impacted fill material is present on-Site and, as such, fugitive dust generation during intrusive activities related to remediation and redevelopment is considered a relevant potential short-term migration pathway.

Particulate monitoring in accordance with the approved CAMP will continue to be completed during intrusive activities and, if required, dust mitigation measures will be employed during future remediation and redevelopment.

6.2 Volatilization

Volatile chemicals present in soil vapor, soil/fill, and/or groundwater may be released to ambient or indoor air through volatilization either from or through the soil/fill underlying building structures. Volatile chemicals typically have a low organic-carbon partition coefficient (K_{oc}), low molecular weight, and a high Henry's Law constant.

With the exception of low level concentrations of acetone detected in subsurface soil/fill above USCOs, no VOCs were detected at concentrations above USCOs in subsurface soil/fill or above GWQS in groundwater. Low-level concentrations of VOCs were detected in soil vapor and SVI samples from across the Site. Accordingly, volatilization from subsurface VOC-impacted media is not considered a relevant migration pathway at the Site.

6.3 Surface Water Runoff

The potential for soil particle transport due to surface water runoff is low as the Site is covered with hardscape. Specifically, the western portion of the Site consists of a concrete slab from a former building and the remainder of the Site is developed with a vacant building. However, surface water runoff is considered a short-term migration pathway for the Site for the duration of remedial and construction activities, when impacted fill will be exposed.

Under the reasonably anticipated future mixed-use scenario, the Site will be used for residential and commercial purposes and will be primarily covered by hardscape (asphalt, buildings, etc.). Although storm water runoff is considered a short-term migration pathway during remedial and construction activities, erosion controls are typical construction practice and would be implemented in strict accordance with an Erosion Control Plan. Therefore, surface water runoff is not a relevant pathway.

6.4 Leaching

Leaching refers to chemicals present in soil/fill migrating downward to groundwater because of infiltration of precipitation.

Based on the findings of the RI and historic Phase II activities, certain PAHs and metals were detected above RRSCOs in the fill intervals. The detected contaminants tend to adsorb strongly to soil, sediments, and particulate matter and are not expected to leach under natural conditions (i.e., neutral pH). This is supported by the differential detections of analytes in the soil and groundwater analytical results. Therefore, leaching is not considered a relevant contamination pathway.

6.5 Groundwater Transport

As illustrated by Figure 5, overburden groundwater underlying the Site primarily migrates in a northeast direction. The results of the groundwater samples collected as part of the RI indicated the presence of metals including arsenic, barium, beryllium, lead, nickel, and mercury exceeding their respective GWQS in samples analyzed for total metals analysis. However, these metals were not observed exceeding GWQS in samples analyzed for dissolved metals analysis, suggesting the elevated concentrations from the total metals analysis were likely sourced from sediment in the samples. Naturally occurring metals were detected exceeding GWQS in samples analyzed for total and dissolved metals analysis and are not considered as COCs. Based on the lack of significant groundwater contamination at the Site, groundwater transport is not considered a pathway of concern.

6.6 Exposure Pathways

Based on the fate and transport analysis above, the pathway through which Site contaminants could potentially migrate to other areas or media is fugitive dust emissions via physical disturbance of soil particles during remedial measures and redevelopment. However, given the NYSDEC/NYSDOH requirements for dust monitoring and controls during intrusive activities at remedial program construction sites, it is unlikely that site-related contaminants would reach off-site receptors at significant exposure point concentrations.

7. Qualitative Exposure Assessment

7.1 Human Health Exposure

A qualitative exposure assessment consists of characterizing the exposure setting (including the physical environment and potentially exposed human populations), identifying exposure pathways, and evaluating contaminant fate and transport.

An exposure pathway describes the means by which an individual may be exposed to contaminants originating from a site. An exposure pathway has the following five elements:

- Receptor population
- Contaminant source
- Contaminant release and transport mechanism
- Point of exposure
- Route of exposure

An exposure pathway is complete when all five elements of an exposure pathway are documented; a potential exposure pathway exists when any one or more of the five elements comprising an exposure pathway is not documented but could reasonably occur. An exposure pathway may be eliminated from further evaluation when any one of the five elements comprising an exposure pathway does not exist in the present and will not exist in the future.

7.1.1 Receptor Population

The receptor population includes the people who are or may be exposed to contaminants at a point of exposure. The identification of potential human receptors is based on the characteristics of the Site, the surrounding land uses, and the probable future land uses. The Site is presently vacant land covered with hardscape. Under current Site use conditions, receptors would include site workers (i.e. environmental, construction, and outdoor workers).

The reasonably anticipated future use of the Site is for mixed use commercial and residential, consistent with surrounding property use and Site zoning. Exposed receptors under the future use scenario may be comprised of indoor occupants, indoor workers, outdoor workers (e.g., groundskeepers or maintenance staff), and construction workers who may be employed at or perform work on the property. Site visitors/customers may also be considered receptors; however, their exposure would be similar to that of the indoor worker but at a lesser frequency and duration. Therefore, consideration of the indoor worker is conservatively protective of the site visitor.

7.1.2 Contaminant Sources

The source of contamination is defined as either the source of contaminant release to the environment (such as a waste disposal area or point of discharge) or the impacted environmental medium (soil, air, biota, water) at the point of exposure. Section 4.0 discussed the COCs present in Site media at elevated concentrations. Areas containing metals at concentrations above RRSCOs in soil/fill remain.

7.1.3 Contaminant Release and Transport Mechanisms

Contaminant release and transport mechanisms carry contaminants from the source to points where people may be exposed and are specific to the type of contaminant and site use. Contaminant release and transport mechanisms include:

- Fugitive dust migration from impacted soils during future planned intrusive work/remedial activities.
- Direct contact with impacted soil/fill and groundwater during future planned intrusive work/remedial activities.

7.1.4 Point of Exposure

The point of exposure is a location where actual or potential human contact with a contaminated medium may occur. There is potential for construction workers to be exposed to contaminated soil during planned intrusive work, remedial activities, or post-redevelopment maintenance activities. For both the current and future use scenarios, groundwater is not considered a relevant mechanism for exposure due to the availability of a local municipal potable water source; and a restriction on the use of groundwater in the City of Buffalo. Given planned remedial actions at the Site, the point of exposure in the future use scenario will be reduced and/or eliminated.

7.1.5 Route of Exposure

The route of exposure is the manner in which a contaminant actually enters or contacts the body (i.e., ingestion, inhalation, dermal absorption). Based on the types of receptors and points of exposure identified above, potential routes of exposure are listed below:

Current Use Scenario

- Environmental, Construction, and/or Outdoor Workers (short-term) – direct contact, inhalation, and incidental ingestion.

Future Use Scenario

- Indoor Occupant – none
- Indoor Worker/Visitor/Vendor – none
- Construction and Outdoor Workers (short-term) – direct contact, inhalation, and incidental ingestion

7.1.6 Exposure Assessment Summary

Based on the above assessment, the potential exposure pathways for the current and future use conditions are listed below.

Current Use Scenario

Personnel involved with environmental remediation, construction workers, and other outdoor workers may be exposed to impacted soil/fill due to direct contact, inhalation of non-volatile chemicals via dust, and incidental ingestion. Exposure under the current use scenario is considered short-term for all personnel.

Future Use Scenario

There are no existing exposure pathways for indoor occupants, indoor workers, visitors, and/or vendors under the future use scenario. Construction and outdoor workers may may be exposed to impacted soil/fill due to direct contact, inhalation of non-volatile chemicals via dust, and incidental ingestion. Exposure under the future use scenario is considered short-term for construction and outdoor workers.

In most instances, these exposures can be readily mitigated through the use of personal protective equipment (PPE); proper soil/fill management during intrusive activities; and engineering controls including a cover system (i.e., placement of asphalt parking areas, a building, and landscape cover).

7.2 Fish and Wildlife Impact Assessment

The historical use/development of the Site has eliminated native species. The Site is entirely covered by hardscape (former building slab and existing building). There are no important plant habitats or endangered species identified for the area encompassing the Site.

The Site is slated for redevelopment in a mixed-use commercial and residential capacity, which is consistent with zoning and uses of surrounding properties. Buildings, parking areas, and/or maintained vegetative landscaping will substantially limit availability of suitable cover type for reestablishment of biota across the Site. The Site is not located within the vicinity of or contain any habitats of endangered, threatened, or special concern species. No federal or state wetlands were identified within Site boundaries or within 0.5 miles of the Site. No potential off-site ecological exposure scenario exists due to the immobility of Site contaminants (i.e., PAHs/metals) in soil, minimizing off-site migration. Therefore, no further work on the Fish and Wildlife Resource Impact Analysis (FWRIA) is required. The FWRIA key used in this assessment is included in Appendix H.

7.3 Qualitative Off-Site Exposure Assessment

During the RI, hand cores and soil borings were advanced across the Site, including areas proximate to Site property boundaries. These sampling locations were used in conjunction with previously collected data to complete this qualitative off-site exposure assessment and evaluate potential remedial measures to address Site contamination.

As discussed in Section 6.0, contaminants in on-Site soil/fill could potentially migrate off-site as fugitive dust emissions during intrusive activities. However, given the NYSDEC and NYSDOH requirements for dust monitoring and controls during intrusive activities at remedial program construction sites, it is unlikely that site-related contaminants would reach off-site receptors at significant exposure point concentrations. Once impacted soil/fill areas of concern are remediated, and either all impacted soil/fill is removed under Track 1 USCOs cleanup, or targeted soil/fill is removed and a Site cover system is installed as an engineering control under a Track 4 RRSCOs cleanup, potential off-site exposure will be eliminated.

8. Remedial Alternatives Analysis Evaluation

This section provides an analysis of the potential remedial approach(s) by using the Remedy Selection Evaluation Criteria identified in Section 4.2 of Guidance Document DER-10: Technical Guidance for Site Investigation and Remediation. In accordance with DER-10 Section 4.4(d)2, in addition to a "no action" baseline alternative, the following alternatives were developed and assessed based on NYSDEC-defined cleanup tracks as follows:

Track 1, 6 New York Codes, Rules and Regulations (6NYCRR) Part 375-3.8(e)(1) requires site media to meet Part 375 SCOs that will allow the site to be used for any purpose without restrictions on the use of the site (i.e., unrestricted use). The soil cleanup must achieve the unrestricted use criteria at any depth above bedrock. Details and evaluation of the Track 1 alternative are described below.

Track 2, 6NYCRR Part 375-3.8(e)(4) requires site media to meet generic SCOs under a restricted use scenario. For Track 2 remedies, long-term institutional or engineering controls may not be used to achieve SCOs, but short-term controls may be used if SCOs would be achieved in no more than 5 years. Long-term institutional and engineering controls may be implemented for groundwater or soil vapor if they can be realistically implemented and maintained in a reliable and enforceable manner. A Track 2 cleanup has not been considered in this analysis.

Track 4, 6NYCRR Part 375-3.8(e)(4) soil cleanups use site-specific information to identify site-specific SCOs that are protective of public health and the environment under a restricted use scenario. For Track 4 remedies, restrictions can be placed on the use of the property in the form of institutional and engineering controls if they can be realistically implemented and maintained in a reliable and enforceable manner. As set forth in 6 NYCRR Part 375-3.8(e)(4)(iii)(a)(1), the top two foot of all exposed surface soils, not otherwise covered by the components of the development of the site (e.g., buildings, pavement), shall not exceed the restricted use (Commercial Use) SCOs. Areas that exceed these SCOs must be covered by material meeting the requirements of the generic soil cleanup table contained in Part 375-6.7(d) for the applicable anticipated future site uses (i.e., Restricted-Residential Use).

8.1 Remedial Action Objectives

The final remedial measures for the Site must satisfy Remedial Action Objectives (RAOs). RAOs are site-specific statements that convey the goals for minimizing or eliminating substantial risks to public health and the environment. Appropriate RAOs for the Site, per DER-10 generic RAOs include:

Soil/Fill RAOs

RAOs for Public Health Protection

- Remove soil/fill areas of concern (i.e., soil/fill deemed unacceptable to remain on-Site) as necessary to protect public health and the environment.
- Prevent ingestion/direct contact with contaminated soil.

RAOs for Environmental Protection

- Prevent migration of contaminants that would result in groundwater contamination.

8.2 General Response Actions

General Response Actions (GRAs) are broad classes of actions that are developed to achieve the RAOs and form the foundation for the identification and screening of remedial technologies and alternatives.

The GRAs available to address the RAOs for soil/fill include:

- Excavation and off-site disposal
- Engineering Controls (e.g., cover system)
    - Institutional Controls (e.g., Environmental Easement, Site Management Plan)
    - Excavation and off-site disposal

8.3 Standards, Criteria, and Guidance

According to DER-10 Section 1.3(b)71, standards, criteria, and guidance (SCGs) means *"standards and criteria that are generally applicable, consistently applied, and officially promulgated, that are either directly applicable or not directly applicable but are relevant and appropriate, unless good cause exists why conformity should be dispensed with, and with consideration being given to guidance determined, after the exercise of scientific and engineering judgment, to be applicable. This term incorporates both the CERCLA concept of 'applicable or relevant and appropriate requirements' (ARARs) and the USEPA's 'to be considered' (TBCs) category of non-enforceable criteria or guidance. For purposes of this Guidance, 'soil SCGs' means the soil cleanup objectives and supplemental soil cleanup objectives identified in 6NYCRR 375-6.8 and the Commissioner Policy CP-51 on Soil Cleanup Guidance."*

Soil/Fill:

> Soil Cleanup Objectives (SCOs) per 6 New York Code Rules and Regulation (6 NYCRR) Part 375 Environmental Remediation Programs, Subparts 375-12 to 375-4 & 375-6, effective December 14, 2006.
>
> Maximum Concentrations of Contaminants for the Toxicity Characteristic per Code of Federal Regulations (CFR) Title 40, Chapter I, Subchapter I, Part 261, Subpart C Characteristics of Hazardous Waste §261.24 Toxicity Characteristics, Table 1.

Groundwater

> Class GA Groundwater Quality Standards and Guidance Values (GWQS/GVs) per NYSDEC's Division of Water, Technical and Operational Guidance Series (TOGS 1.1.1), June 1998, amended February 2023.

Additional discussions concerning the specific chemical-specific SCGs that may be applicable, relevant, or appropriate to remedy selection for the Site are presented below. In each case, the identified SCGs are generally limited to regulations or technical guidance in lieu of the environmental laws from which they are authorized, as the laws are typically less prescriptive in nature and inherently considered in the regulatory

and guidance evaluations. Table 7 summarizes the SCGs by media that may be applicable or relevant and appropriate to the Site.

8.3.1 Chemical-Specific SCGs

Chemical-specific SCGs are usually health- or risk-based concentrations in environmental media (e.g., air, soil, water), or methodologies that when applied to site-specific conditions, result in the establishment of concentrations of a chemical that may be found in, or discharged to, the ambient environment. The determination of potential chemical-specific SCGs for a site is based on the nature and extent of contamination; potential migration pathways and release mechanisms for site contaminants; reasonably anticipated future site use; and likelihood that exposure to site contaminants will occur.

Previous sampling events during historic Phase II and RI activities included the collection and analysis of subsurface soil/fill, groundwater, soil vapor, sub-slab soil vapor, indoor air, and outdoor air (see Tables 3 through 6).

As previously indicated, one of the remedial alternatives to be assessed for the Site is a Track 4 Restricted-Residential cleanup for soil/fill. This approach requires institutional controls (e.g., groundwater and land use restrictions, Site Management Plan, and Environmental Easement) and engineering controls (e.g., a soil cover system) as a component of the final remedy to reduce future potential exposure to impacted soil/fill that remains after remedial activities.

Proposed site-specific action levels (SSALs) were developed for the Site. These SSALs will be applicable to soil/fill that exceeding its CSCOs, have the potential to impact groundwater or otherwise represent an unacceptable risk to public health or the environment in the context of reasonably anticipated future use under a Track 4 cleanup approach, and guide the determination or remedial requirements. The SSALs are not applicable to soil/fill that will remain as or to be imported for use as the engineering control (e.g., site-wide engineered cover system).

These SSALs were developed based on the treatment and/or removal of source areas, including areas that have a greater potential for contaminant migration, and the feasibility of achieving the SSALs based on the nine factors outlined in 6NYCRR Part 375-1.8(f) as described below in Section 8.4. The SSALs only apply to a Track 4 cleanup with a cover system to be installed over all areas with remaining soil/fill contamination. Materials used for the soil cover system will need to meet RRSCOs. Track 4 sites also require an SMP and Environmental Easement. The following SSALs were developed and used to designate soil/fill areas requiring remediation.

- Total Barium > 400 mg/kg; this SSAL was developed using the CSCO for barium.
- Total Mercury > 2.8 mg/kg: this SSAL was developed using the CSCO for mercury.

There were some low-level exceedances of arsenic over its CSCO (16 mg/kg). The highest concentrations were detected at HC-1 (22.1 mg/kg) and HC-3 (also, 22.1 mg/kg). The 95% upper confidence limit (UCL) for the arsenic data generated during the previous investigation and RI was used to determine whether significant arsenic contamination is present at the Site. The results of the statistical analysis indicated a UCL of 12.88 mg/kg (see Table 8). Therefore, at 95% level of confidence, the average concentration of arsenic in on-site soil/fill is below the RRSCO for arsenic (16 mg/kg). Based on this information, as arsenic

is ubiquitous in the environment/fill material, the low-level arsenic concentrations identified at the Site do not require establishment of an SSAL and will be addressed by the site-wide cover system.

8.4 Evaluation of Alternatives

In addition to achieving RAOs, NYSDEC's Brownfield Cleanup Program calls for remedy evaluation in accordance with DER-10 Technical Guidance for Site Investigation and Remediation. The remedial alternatives are evaluated against the following criteria consistent with 6NYCRR Part 375-1.8(f):

- **Overall Protection of Public Health and the Environment**. This criterion is an evaluation of the remedy's ability to protect public health and the environment, assessing how risks posed through each existing or potential pathway of exposure are eliminated, reduced, or controlled through removal, treatment, engineering controls, or institutional controls.
- **Compliance with Standards, Criteria, and Guidance (SCGs)**. Compliance with SCGs addresses whether a remedy will meet applicable environmental laws, regulations, standards, and guidance.
- **Long-Term Effectiveness and Permanence**. This criterion evaluates the long-term effectiveness of the remedy after implementation. If wastes or treated residuals remain on-site after the selected remedy has been implemented, the following items are evaluated: (i) the magnitude of the remaining risks (i.e., will there be any significant threats, exposure pathways, or risks to the community and environment from the remaining wastes or treated residuals), (ii) the adequacy of the engineering and institutional controls intended to limit the risk, (iii) the reliability of these controls, and (iv) the ability of the remedy to continue to meet RAOs in the future.
- **Reduction of Toxicity, Mobility or Volume of Contamination through Treatment**. This criterion evaluates the remedy's ability to reduce the toxicity, mobility, or volume of Site contamination. Preference is given to remedies that permanently and significantly reduce the toxicity, mobility, or volume of the wastes at the Site.
- **Short-Term Impacts and Effectiveness**. Short-term effectiveness is an evaluation of the potential short-term adverse impacts and risks of the remedy upon the community, the workers, and the environment during construction and/or implementation. This includes a discussion of how the identified adverse impacts and health risks to the community or workers at the Site will be controlled, and the effectiveness of the controls. This criterion also includes a discussion of engineering controls that will be used to mitigate short term impacts (i.e., dust control measures), and an estimate of the length of time needed to achieve the remedial objectives.
- **Implementability**. The implementation criterion evaluates the technical and administrative feasibility of implementing the remedy. Technical feasibility includes the difficulties associated with the construction and the ability to monitor the effectiveness of the remedy. For administrative feasibility, the availability of the necessary personnel and material is evaluated along with potential difficulties in obtaining specific operating approvals, access for construction, etc.
- **Cost-Effectiveness**. Capital, operation, maintenance, and monitoring costs are estimated for the remedy and presented on a present worth basis.
- **Community Acceptance**. This criterion evaluates the public's comments, concerns, and overall perception of the remedy.
- **Land Use**. In addition to the above criteria, 6NYCRR Part 375-1 specifies that the criterion of Land Use (i.e., the current, intended, and reasonably anticipated future land uses of the Site and its surroundings) be considered in the selection of the remedy.

8.5 Anticipated Future Land Use Evaluation

In developing and screening remedial alternatives, NYSDEC's Part 375 regulations require that the reasonableness of the anticipated future land be factored into the evaluation. The regulations identify 16 criteria that must be considered. These criteria and the resultant outcome for the Site are presented below.

1. *Current use and historical and/or recent development patterns:* The Site was previously developed with numerous structures and previously used in residential, commercial, and industrial capacities. **Accordingly, the planned redevelopment is consistent with the historical and recent development patterns.**

2. *Applicable zoning laws and maps:* The Site is located in an area of the City of Buffalo identified as a highly developed residential, commercial, and industrial area. The site is currently zoned N-1S – Secondary Employment Center, which is defined as mixed-use employment centers primarily located along the New York Central Belt Line, often defined by mid-rise and large-footprint industrial structures. **The anticipated redevelopment of the Site for commercial and residential use will be consistent with Site zoning.**

3. *Brownfield opportunity areas as designated set forth in GML 970-r:* The Brownfield Opportunity Area (BOA) Program provides municipalities and community-based organizations with assistance to complete revitalization plans and implementation strategies for areas or communities affected by the presence of brownfield sites, and site assessments for strategic sites. **The Site is not located within a BOA.**

4. *Applicable comprehensive community master plans, local waterfront revitalization plans as provided for in EL article 42, or any other applicable land use plan formally adopted by a municipality*: **The Site is zoned N-1S – Secondary Employment Center. The future use in a mixed commercial and residential capacity is consistent with allowable site uses.**

5. *Proximity to real property currently used for residential use, and to urban, commercial, industrial, agricultural and recreational areas*: The site is bordered by commercial and industrial properties to the north, a vacant commercial property to the south, and commercial properties to the east and west. **Nearby and adjacent properties are commercial and industrial. The proposed/anticipated commercial and residential redevelopment is consistent with local development plans.**

6. *Any written and oral comments submitted by members of the public on the proposed use as part of the activities performed pursuant to the citizen participation plan*: **No comments have been received from the public to date pursuant to the citizen participation plan.**

7. *Environmental justice concerns, which include the extent to which the proposed use may reasonably be expected to cause or increase a disproportionate burden on the community in which the site is located, including low-income minority communities, or to result in a disproportionate concentration of commercial or industrial uses in what has historically been a mixed use or residential community*: Surrounding properties are actively used in commercial and industrial capacities. The Site is currently vacant and underutilized. As such, **future anticipated use of the Site in a commercial and residential capacity will not pose environmental justice issues.**

8. *Federal or State land use designations:* There are no known federal or state land use designations. **Redevelopment for anticipated commercial and residential use will be consistent with local land use.**

9. *Population growth patterns and projections:* City of Buffalo, encompassing approximately 52.5 square miles, has a population of 278,349 (2020 estimate - US Census Bureau), an increase of 6.52 percent from the 2010 census. The Site is located within Census Tract 164, a mixed-use area in the City of Buffalo. **Redevelopment of the currently unoccupied Site in a commercial and residential capacity would provide positive opportunities for growth.**

10. *Accessibility to existing infrastructure:* Access to the Site is from Exchange Street and Larkin Street. The Site has access to all major public and private utilities, including potable water, sanitary and storm sewers, electric, and natural gas. **Existing infrastructure supports planned reuse**.

11. *Proximity of the site to important cultural resources, including federal or State historic or heritage sites or Native American religious sites*. The site is located proximate to the Larkin Historic District of the City of Buffalo. **Per the New York State Historical Preservation Office, this area is proximate to several federal and state historic sites and districts, however there are no cultural resources identified at the Site.**

12. *Natural resources, including proximity of the site to important federal, State or local natural resources, including waterways, wildlife refuges, wetlands, or critical habitats of endangered or threatened species:* No State or Federal wetlands exist on the Site, nor is the Site located within a rare plant and/or animal habitat. The Site is not located within 1.0 mile any state or federal regulated wetlands. **The absence of a suitable setting for ecological resources on or adjacent to the Site indicates that the remediated Site will not pose an ecological threat.**

13. *Potential vulnerability of groundwater to contamination that might emanate from the site, including proximity to wellhead protection and groundwater recharge areas and other areas identified by the Department and the State's comprehensive groundwater remediation and protection program established set forth in ECL article 15 title 31:* There are no groundwater supply wells present on the Site or noted in the vicinity of the Site. Regionally, groundwater has not been extracted for industrial, commercial, agriculture, or public supply purposes. Potable water service is provided by the local municipal water authority. **The absence of potable wells and wellhead protection along with remediating the Site for use in an anticipated commercial and residential capacity prevents a threat to drinking water.**

14. *Proximity to flood plains:* The Erie County Internet Mapping System indicates that the Buffalo River, which has a designated flood zone, is located approximately 1-mile to the south/southwest. No flood zones are present on the property, and therefore there is a low risk of erosion due to flooding. **As such, remediating the Site for anticipated use in a commercial and residential capacity does not pose a risk to the surface water.**

15. *Geography and geology:* The Site is located within the Lake Erie-Niagara River major drainage basin, which is typified by little topographic relief that gently slopes westward towards the Niagara River, except in the immediate vicinity of major drainage ways. According to the United States Department of Agriculture (USDA) Web soil survey, Site soils are characterized as Urban land. These soils are characterized as 80 percent urban land and 20 percent minor components. Soils within the City of Buffalo with the majority of soil surface covered by asphalt, concrete, buildings, or other impervious structures, typical of an urban environment, are characterized as urban land. The Site's soil consists of an upper layer of fill, which overlies native sands/silts and gray clay. **The redevelopment plan is consistent with the geography and geology of the Site.**

16. *Current institutional controls applicable to the site:* **No institutional controls are currently present that would affect the proposed redevelopment.**

Based on the above analysis, planned reuse of the Site is consistent with past, current, and contemplated development and zoning on and around the Site, and does not pose additional environmental or human health risk.

8.6 Comparison of Remedial Alternatives

In addition to the evaluation of the alternatives to remediate the Site to the likely end use, NYSDEC regulations and policy call for evaluation of more restrictive end-use scenarios. These include an Unrestricted Use scenario (considered under 6NYCRR Part 375 to be representative of cleanup to pre-disposal conditions), and a scenario less restrictive than the reasonably anticipated future use. Per NYSDEC DER-10 Technical Guidance for Site Investigation and Remediation, evaluation of a "no action" alternative is also required to provide a baseline for comparison against other alternatives. The alternatives evaluated below in greater detail include:

- Alternative 1 – No Further Action
- Alternative 2 – Unrestricted Use (Track 1) Cleanup
- Alternative 3 – Restricted Residential Use (Track 4) Cleanup

8.6.1 Alternative 1 - No Further Action

Under this alternative, the Site would remain in its current state, with no remediation or controls in place.

Overall Protection of Public Health and the Environment – This alternative is not protective of human health and the environment, due to the presence of contamination remaining on-site above SCGs; the absence of engineering controls (e.g., cover system); and the absence of institutional controls to prevent more restrictive forms of future site use (e.g., unrestricted, residential, and restricted residential) or the export of Site soils to uncontrolled off-site locations. Accordingly, no further action is not protective of public health and does not satisfy the RAOs.

Compliance with SCGs – Under the current and reasonably anticipated future use scenario (commercial and residential), the contamination detected in on-site soil/fill does not comply with applicable SCGs.

Long-Term Effectiveness and Permanence – The no further action alternative involves no remediation, or implementation of engineering or institutional controls, and provides no long-term effectiveness toward achieving the RAOs.

Reduction of Toxicity, Mobility, or Volume of Contamination through Treatment – The no action alternative does not reduce the toxicity, mobility, or volume of contamination beyond natural degradation/attenuation, and therefore this alternative is not protective of public health and does not satisfy any of the RAOs.

Short-Term Impacts and Effectiveness – The contamination on-site does pose short-term risks to on-site workers and the environment. Adverse impacts and risks to the community, potential workers, or the environment would be attributable to implementation of the no action alternative. Therefore, implementation of the no further action alternative does not satisfy RAOs.

Implementation – No technical or administrative implementation issues are associated with the no further action alternative.

Cost – The capital cost of the no action alternative is $0. There would be no capital or long-term operation, maintenance, or monitoring costs associated with the no action alternative.

Community Acceptance – Community acceptance will be evaluated based on comments received from the public in response to a Fact Sheet and other planned Citizen Participation activities.

8.6.2 Alternative 2 - Unrestricted Use (Track 1) Cleanup

Alternative 2 would remediate the Site to Part 375 unrestricted use (Track 1) and would include the following components:

- Demolition of existing building, which is not feasible or part of the redevelopment plan, and based on the nature of the building, as it occupies the majority of the BCP Site, is the only way to achieve this alternative.
- Excavation and off-site disposal of all soil/fill exceeding USCOs.

An Unrestricted Use alternative necessitates remediation of all soil/fill where concentrations exceed USCOs. For the Unrestricted Use scenario, excavation and off-site disposal of impacted soil/fill is generally regarded as the most applicable remedial measure, because institutional controls cannot be used to supplement the remedy. As such, the Unrestricted Use alternative assumes soil/fill exceeding USCOs would be excavated and disposed at an off-Site commercial solid waste facility.

Based on the RI, USCO exceedances were detected in fill material across the Site. Fill depths varied across the Site and were noted to depths ranging between 0.25 and at least 3 ft. Approximately 1,865 cubic yards or 2,800 tons of impacted soil/fill would require excavation and off-site disposal; and equivalent backfilling (see Figure 6). Average fill depths and approximate excavation volumes for each Section are summarized below:

- Section 1: Using 1 ft as the average depth to bottom of fill for the majority Section 1 and 5 ft as the depth to bottom of fill in the AST area, approximately 740 cubic yards (1,115 tons) would require excavation
- Section 2: Using 2 ft as the average depth to bottom of fill, approximately 490 cubic yards (735 tons) would require excavation.
- Section 3: Using 3 ft as the average depth to bottom of fill, approximately 635 cubic yards (950 tons) would require excavation

Overall Protection of Public Health and the Environment – Excavation and off-site disposal to achieve USCOs would be protective of public health under any reuse scenario.

Compliance with SCGs – The Unrestricted Use alternative would be performed in accordance with all applicable, relevant, and appropriate standards, guidance, and criteria. Imported backfill material would need to meet backfill quality criteria per DER-10. Excavation of soil to achieve USCOs would satisfy this criterion.

Long-Term Effectiveness and Permanence – The Unrestricted Use alternative would achieve removal of all residual impacted soil/fill; therefore, the Unrestricted Use alternative would provide long-term effectiveness and permanence. Therefore, the completed remedial actions are fully protective of public health and the environment and achieve the RAOs for the Site.

Reduction of Toxicity, Mobility, or Volume of Contamination through Treatment – Through removal of all impacted soil/fill, the Unrestricted Use alternative would reduce the toxicity, mobility, and volume of Site contamination permanently and significantly. However, since this alternative transfers Site soil/fill from one environment to another, an overall reduction of toxicity and volume would not occur. Mobility of soluble constituents would be reduced in the commercial landfill with engineered liners, cover systems, and leachate collection.

Short-Term Effectiveness – The principal advantage of a large-scale excavation to achieve USCOs is reliability of effectiveness in the long-term. In the short-term, there would be a increase in exposure of impacted soil/fill to on-site workers and the community under this alternative. Short-term risks may include increased truck traffic during excavation and backfill, noise, and air emissions, including fugitive dust and odors. Excavation activities would be completed over an approximate 4-week period with backfilling occurring concurrently during the same time frame. Commercial construction equipment would be used, a health and safety plan would be followed, and community air monitoring would be completed during excavation activities to minimize risk.

Planned remedial activities will be performed in accordance with an approved Remedial Action Work Plan (RAWP), including a Health and Safety Plan (HASP) and CAMP. This alternative represents an adverse effect in the short-term; however, the RAOs would be achieved once the soil/fill is removed from the Site, and backfill soils are in place.

Implementation –Technical implementation issues may be encountered in completion of the Unrestricted Use alternative. Technical implementation issues include but are not limited to: demolition of a usable building, shoring/stabilizing excavation sidewalls along sidewalks and streets to prevent sloughing during the excavation, the need for construction, maintenance, and operation of dewatering facilities, groundwater and/or stormwater handling, treatment and/or discharge/disposal, and traffic coordination for trucks entering and exiting the Site. Standard construction techniques would be followed during excavation and for groundwater management.

Cost – As summarized on Table 9, the cost of implementing a Track 1 Unrestricted Use cleanup alternative is estimated at over $3.9M.

Community Acceptance – Community acceptance will be evaluated based on comments received from the public in response to Fact Sheets and other planned citizen participation activities.

8.6.3 Alternative 3 – Restricted Residential Use (Track 4) Cleanup

Under Alternative 3, the Site would be remediated to facilitate reasonably anticipated Restricted Residential use. This alternative would include:

- Excavation of areas of concern (AOCs) defined as soil/fill material exceeding SSALs in the areas of SB-8, SB-9, HC-7, HC-11 followed by backfilling and compaction of on-site soil/fill and/or clean, imported stone/soil approved by the Department. While currently unknown, the vaulted AST area is an assumed area requiring soil/fill excavation; however, this AST area, once accessible, is subject to further evaluation[1]. An estimated total of 250 tons of impacted soil/fill would require excavation and off-site disposal; and equivalent backfilling (see Figure 7).
- Placement of Cover System on the 0.72-acre Site, consisting of either hardscape (i.e., asphalt, concrete) or a demarcation layer underlying at least two feet of DER-10 acceptable backfill in areas without hardscape.
- Implementation of a Site Management Plan (SMP) including an Institutional Control and Engineering Control (IC/EC) Plan, an Operation and Maintenance Plan, an Excavation Work Plan, and a Site Monitoring Plan
- Filing of an Environmental Easement with Erie County.

Overall Protection of Public Health and the Environment – This alternative meets the NYSDEC requirements for a Track 4 cleanup under the BCP regulations and is protective of public health and the environment. The RAOs for the Site would be satisfied through the planned remedial activities, including: excavation of AOCs followed by excavation and off-site disposal at a commercial landfill, installation of cover system (clean imported soil and/or impervious materials); and the use of EC/ICs to prevent potential future exposure and limit the future Site use to residential and commercial.

Compliance with SCGs – The planned remedial activities would need to be performed in accordance with applicable, relevant, and appropriate SCGs. Post-excavation samples would be collected to verify conformance with SCG and SCOs. Imported cover material would need to meet backfill criteria per DER-10. Cover placement would be performed under the BCP and DER-10. Subgrade intrusive activities would necessitate adherence with the CAMP, in accordance with Appendices 1A and 1B of DER-10. The Site Management Plan will include: an Operation and Maintenance (O&M) plan to confirm that engineering controls (soil cover system) are operating and being maintained in accordance with the SMP; an Excavation Work Plan to address any impacted soil/fill encountered during post-development maintenance activities; and, a Site Monitoring Plan that will provide the schedule for a Site-wide Inspection program implemented to assure that the engineering and institutional controls placed on the Site have not been altered and remain effective.

The planned remedial activities for this alternative are fully protective of public health and the environment and achieve RAOs for the Site.

Long-Term Effectiveness and Permanence – Removal and disposal of impacted soil/fill would permanently remove contaminated soil/fill from the Site and construction of a soil cover system in the western portion of the Site would prevent direct contact with any remaining soil/fill exceeding RRSCOs.

[1] As part of the evaluation, the AST vault, once accessible, will be visually inspected for evidence of petroleum staining/evidence of release and one soil/fill sample, from beneath the concrete surface proximate to the AST, will be collected and analyzed for CP-51 VOCs and CP-51 SVOCs. Appendix I includes the PBS Application (to register the tank) and the Pre-Work Notification for PBS Closure (the AST will be properly removed, to be more fully described in the RAWP).

The SMP will include appropriate plans, controls, and measures and an environmental easement to ensure the restricted residential use remedy is protective of human health and the environment. The SMP will be followed by the current Site owner as well as future Site owners. As such, this alternative will provide long-term effectiveness and permanence.

Reduction of Toxicity, Mobility, or Volume of Contamination through Treatment – Through the planned remedial measures described above, this criterion will be achieved. Specifically, removal, and disposal of impacted soil/fill will permanently and significantly reduce the toxicity, mobility, and volume of the soil/fill that could potentially be contacted or produce localized areas of environmental impact at the Site. Contaminated soil removal will permanently and significantly reduce toxicity, mobility, and volume of impacted groundwater. Accordingly, this alternative satisfies this criterion.

Short-Term Impacts and Effectiveness – The short-term adverse impacts, such as truck traffic associated with off-site disposal of contaminated soil and imported backfill materials, and risks to the community, workers, and environment during implementation of this Restricted Residential Track 4 alternative are not considered significant and are controllable.

During intrusive remedial activities, typical construction equipment will be utilized. Required air monitoring would be performed to assure conformance with community air monitoring action levels. The excavation will be backfilled once contaminated soil/fill is removed to minimize the time excavations are left open. Planned remedial activities will be performed in accordance with an approved RAWP, including a HASP and CAMP. This alternative achieves the RAOs for the Site.

Implementation – No significant technical or administrative implementability issues are associated with this alternative. During intrusive remedial activities, typical construction equipment will be utilized to excavate and transport contaminated materials, and import backfill materials.

Cost – As summarized on Table 10, the capital cost of implementing this Track 4 alternative is estimated at $471K.

Community Acceptance – Community acceptance will be evaluated based on comments received from the public in response to Fact Sheets and other planned citizen participation activities.

8.7 Recommended Remedial Measure

Based on the alternatives analysis evaluation, *Alternative 3 – Restricted Residential Use (Track 4) Cleanup* is the recommended final remedial approach for the Site. The recommended remedial alternative would involve:

<u>Restricted Residential Use (Track 4) Cleanup</u>

- Excavation of areas of concern (AOCs) defined as soil/fill material exceeding SSALs in the areas of SB-8, SB-9, HC-7, HC-11, and potentially the AST area (pending further evaluation) followed by and backfilling and compaction of on-site soil/fill and/or clean, imported stone/soil approved by

the Department. An estimated total of 250 tons of impacted soil/fill would require excavation and off-site disposal; and equivalent backfilling.

- Placement of Cover System on the 0.72-acre Site, consisting of either hardscape (i.e., asphalt, concrete) or a demarcation layer underlying at least two feet of DER-10 acceptable backfill in areas without hardscape.
- Implementation of a Site Management Plan (SMP) including an Institutional Control and Engineering Control (IC/EC) Plan, an Operation and Maintenance Plan, an Excavation Work Plan, and a Site Monitoring Plan
- Filing of an Environmental Easement with Erie County.

This remedy is fully protective of public health and the environment; is advantageous over other remedies when evaluated against the remedy selection criteria; and fully satisfies the RAOs for the Site. The components and details of the remaining tasks will be more fully described in a Remedial Action Work Plan (RAWP).

Table 11 provides a comparison of the alternatives by media to identify remedial measures that will achieve the RAOs for the Site.

9. Summary and Conclusions

Based on the data and analyses presented in the preceding sections, we offer the following summary and conclusions:

Soil

Based on the historic and RI subsurface soil/fill findings, metals (barium and mercury) were identified at concentrations exceeding their SSALs in soil/fill samples collected in fill at certain investigation locations.

Groundwater

VOCs, SVOCs, PCBs, 1,4-dioxane, and PFAS were not detected above their respective GWQS. Naturally occurring metals were detected under total and dissolved metals analysis. Total arsenic, barium, beryllium, chromium, lead, nickel, and mercury were detected above their respective GWQS but dissolved constituents were detected at lower concentrations below their respective GWQS. Two pesticides, alpha-BHC and dieldrin, were detected at concentrations slightly exceeding their respective GWQS at one location (MW-4). One herbicide, total phenols, was detected at concentrations slightly exceeding its GWQS at MW-4 and MW-5. However, based on the minimal concentrations of pesticides and herbicides identified, they are not considered constituents of concern or a finding that requires further work.

Soil Vapor

Low level concentrations of VOCs were detected in the soil vapor and SVI samples; based on the data, there is no indication of a SVI a concern at the Site. Further, sub-slab/indoor air data in comparison to the NYSDOH decision matrices indicates that “no further action” is required.

Selected Remedy

Alternative #3 – Restricted Residential Use (Track 4) Cleanup is the selected remedy. The Track 4 Restricted Residential Use remedy: is fully protective of public health and the environment, is advantageous over other remedies when evaluated against the remedy selection criteria, and fully satisfies the RAOs for the Site. The components and details of the remaining tasks will be more fully described in an RAWP.

10. References

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TABLES

1. Summary of RI Sampling and Analytical Program
2. Summary of Groundwater Elevations and Monitoring Well Construction Details
3. Summary of Phase II and RI Subsurface Soil/Fill Analytical Data
4. Summary of RI Groundwater Analytical Data
5. Summary of RI Subslab Vapor, Soil Vapor, Indoor Air, and Outdoor Air Analytical Data
6. Comparison of Subslab Vapor, Indoor Air, and Outdoor Air Results to NYSDOH Decision Matrices
7. Standards, Criteria, and Guidance
8. Arsenic Evaluation (95% Upper Confidence Limit on the Mean)
9. Cost Estimate for Track 1 Unrestricted Use
10. Cost Estimate for Track 4 Restricted-Residential Use
11. Comparison of Remedial Alternatives

TABLE 1
SUMMARY OF RI SAMPLING AND ANALYTICAL PROGRAM
REMEDIAL INVESTIGATION/ALTERNATIVES ANALYSIS REPORT
619 EXCHANGE STREET (C915403)
BUFFALO, NEW YORK

Location	Data Source	Depth Sampled	Date	Parameter												
				TCL plus CP-51 VOCs + TICs EPA Method 8260	TCL SVOCs + TICs EPA Method 8270	TAL Metals & Mercury (total) EPA Method 6010/7471	TAL Metals & Mercury (dissolved) EPA Method 6010/7471	PCBs EPA Method 8082	Herbicides EPA Method 8051	Pesticides EPA Method 8081	PFAS EPA Method 1633	PAHs EPA Method 8270	RCRA Metals EPA Method 6010/7471	TCL VOCs EPA Method TO-15	1,4-Dioxane EPA Method 8270 SIM[1]	Waste Characterization Parameters[2]
Subsurface Soil																
SB-1 0-1 ft	Phase II	0-1 ft	5/23/2023	--	--	--	--	--	--	--	--	1	1	--	--	--
SB-2 0-1 ft	Phase II	0-1 ft	5/23/2023	--	--	--	--	--	--	--	--	1	1	--	--	--
SB-3 0-1 ft	Phase II	0-1 ft	5/23/2023	--	--	--	--	--	--	--	--	1	1	--	--	--
SB-4 0-1 ft	Phase II	0-1 ft	5/23/2023	--	--	--	--	--	--	--	--	1	1	--	--	--
SB-5 0-1 ft	Phase II	0-1 ft	5/23/2023	--	--	--	--	--	--	--	--	1	1	--	--	--
SB-6 0-1 ft	Phase II	0-1 ft	5/23/2023	--	--	--	--	--	--	--	--	1	1	--	--	--
SB-7	Phase II	0-1 ft	5/23/2023	--	--	--	--	--	--	--	--	1	1	--	--	--
SB-8	Phase II	0-1 ft	8/22/2023	--	--	--	--	--	--	--	--	1	1	--	--	--
SB-9	Phase II	0-1 ft	8/22/2023	--	--	--	--	--	--	--	--	1	1	--	--	--
SB-10	Phase II	0-1 ft	8/22/2023	--	--	--	--	--	--	--	--	1	1	--	--	--
HC-1	Phase II	0-1 ft	5/23/2023	--	--	--	--	--	--	--	--	1	1	--	--	--
HC-2	Phase II	0-1 ft	5/23/2023	--	--	--	--	--	--	--	--	1	1	--	--	--
HC-3	Phase II	0-1 ft	5/23/2023	--	--	--	--	--	--	--	--	1	1	--	--	--
HC-4	RI	0.5-1.5 ft	4/29/2025	1	1	1	--	1	1	1	1	--	--	--	--	--
HC-5	RI	0.33-0.66 ft	4/29/2025	--	1	1	--	--	--	--	--	--	--	--	--	--
HC-6	RI	2-6 in	4/29/2025	1	1	1	--	1	1	1	1	--	--	--	--	--
HC-7	RI	0.25-0.75 ft	4/29/2025	--	1	1	--	--	--	--	--	--	--	--	--	--
HC-8	RI	1-3 in	4/30/2025	--	1	1	--	--	--	--	--	--	--	--	--	--
HC-9	RI	5-8 in	4/30/2025	--	1	1	--	--	--	--	--	--	--	--	--	--
HC-10	RI	1-3 in	4/30/2025	--	1	1	--	--	--	--	--	--	--	--	--	--
HC-11	RI	0.25-0.5 ft	4/30/2025	1	1	1	--	1	1	1	1	--	--	--	--	--
MW-1	RI	0.25-3 ft	4/29/2025	1	1	1	--	1	1	1	1	--	--	--	--	--
MW-1	RI	18-20 ft	4/20/2025	1	1	1	--	1	1	1	1	--	--	--	--	
MW-2	RI	0.75-3 ft	4/29/2025	1	1	1	--	1	1	1	1	--	--	--	--	--
MW-2	RI	16-20 ft	4/30/2025	1	1	1	--	1	1	1	1	--	--	--	--	
MW-3	RI	0.5-2.5 ft	4/29/2025	--	1	1	--	--	--	--	--	--	--	--	--	--
MW-4	RI	0.25-1 ft	4/27/2025	1	1	1	--	1	1	1	1	--	--	--	--	--
MW-4	RI	12-14 ft	4/27/2025	1	1	1	--	1	1	1	1	--	--	--	--	
MW-5	RI	0.33-0.75 ft	4/27/2025	--	1	1	--	--	--	--	--	--	--	--	--	--
MW-6	RI	0.25-0.75 ft	4/27/2025	1	1	1	--	1	1	1	1	--	--	--	--	--
MW-6	RI	8-10 ft	4/27/2025	1	1	1	--	1	1	1	1	--	--	--	--	--
SB-11	RI	0.25-2 ft	5/1/2025	1	1	1	--	1	1	1	1	--	--	--	--	--
WC-1 through WC-3	RI	Comp	4/29/2025	--	--	--	--	--	--	--	--	--	--	--	--	3
Blind Duplicate[3]	RI	--	--	1	2	2	--	1	1	1	1	--	--	--	--	--
MS[3]	RI	--	--	2	2	2	--	2	2	2	2	--	--	--	--	--
MSD[3]	RI	--	--	2	2	2	--	2	2	2	2	--	--	--	--	--
Soil Subtotal				17	25	25	0	17	17	17	17	13	13	0	0	3
Soil Vapor (Method TO-15)																
SV-1	RI	3 ft	5/8/2025	--	--	--	--	--	--	--	--	--	--	1	--	--
Outdoor Air-2	RI	N/A	5/8/2025	--	--	--	--	--	--	--	--	--	--	1	--	--
Soil Vapor Subtotal				0	0	0	0	0	0	0	0	0	0	2	0	0
Subslab Vapor and Indoor Air (Method TO-15)																
SSV-1	RI	0.75 ft	4/18/2025	--	--	--	--	--	--	--	--	--	--	1	--	--
SSV-2	RI	0.75 ft	4/18/2025	--	--	--	--	--	--	--	--	--	--	1	--	--
SSV-3	RI	0.75 ft	4/18/2025	--	--	--	--	--	--	--	--	--	--	1	--	--
SSV-4	RI	0.75 ft	4/18/2025	--	--	--	--	--	--	--	--	--	--	1	--	--
IA-1	RI	N/A	4/18/2025	--	--	--	--	--	--	--	--	--	--	1	--	--
IA-2	RI	N/A	4/18/2025	--	--	--	--	--	--	--	--	--	--	1	--	--
IA-3	RI	N/A	4/18/2025	--	--	--	--	--	--	--	--	--	--	1	--	--
IA-4	RI	N/A	4/18/2025	--	--	--	--	--	--	--	--	--	--	1	--	--
Outdoor Air-1	RI	N/A	4/18/2025	--	--	--	--	--	--	--	--	--	--	1	--	--
Soil Vapor Subtotal				0	0	0	0	0	0	0	0	0	0	9	0	0
Groundwater																
MW-1	RI	13.84-18.5 ft	5/8/2025	1	1	1	1	1	1	1	1	--	--	--	1	--
MW-2	RI	15.4-17.2 ft	5/8/2025	1	1	1	1	--	--	--	--	--	--	--	1	--
MW-3	RI	16.4-18.1 ft	5/8/2025	1	1	1	1	--	--	--	--	--	--	--	1	--
MW-4	RI	10.1-11.6 ft	5/8/2025	1	1	1	1	1	1	1	1	--	--	--	1	--
MW-5	RI	10.75-12.25 ft	5/8/2025	1	1	1	1	1	1	1	1	--	--	--	1	--
MW-6	RI	10.84-12.37 ft	5/8/2025	1	1	1	1	--	--	--	--	--	--	--	1	--
Blind Duplicate[3]	RI	N/A	5/8/2025	1	1	1	1	1	1	1	1	--	--	--	1	--
MS[3]	RI	N/A	5/8/2025	1	1	1	1	1	1	1	1	--	--	--	1	--
MSD[3]	RI	N/A	5/8/2025	1	1	1	1	1	1	1	1	--	--	--	1	--
Trip Blank	RI	N/A	5/8/2025	1	--	--	--	--	--	--	--	--	--	--	--	--
Equipment Blank	RI	N/A	5/8/2025	--	--	--	--	--	--	--	1	--	--	--	--	--
Field Blank	RI	N/A	5/8/2025	--	--	--	--	--	--	--	1	--	--	--	--	--
Groundwater Subtotal				10	9	9	9	6	6	6	8	0	0	0	9	0
Sampling Totals				**27**	**34**	**34**	**9**	**23**	**23**	**23**	**25**	**13**	**13**	**11**	**9**	**3**

Notes:

1. 1,4-dioxane is included in the 8270 analysis for soil samples; an additional analysis using selected ion monitoring (SIM) methodology was completed for groundwater samples.
2. Waste characterization parameters included TCLP VOCs, TCLP SVOCs, TCLP metals & mercury, PCBs, ignitability, corrosivity, and reactivity.
3. Blind duplicate and MS/MSD QA/QC samples were taken at a frequency of one per 20 samples.

Acronyms:

VOCs = Volatile Organic Compounds
SVOCs = Semi-Volatile Organic Compounds
PCBs = Polychlorinated Biphenyls
PFAS = per-and polyfluoroalkyl substances
PAHs = Polycyclic aromatic hydrocarbons
RCRA = Resource Conservation and Recovery Act
SIM = selected ion monitoring
TCL = Target Compound List
TIC = Tentatively Identified Compound
TAL = Target Analyte List
MS/MSD = Matrix Spike/Matrix Spike Duplicate
MW = Monitoring Well
SB= Soil Boring
HC = Hand Core
SV = Soil Vapor
SSV = Subslab Vapor
IA = Indoor Air
OA = Outdoor Air

TABLE 2
SUMMARY OF GROUNDWATER ELEVATIONS AND MONITORING WELL CONSTRUCTION DETAILS
REMEDIAL INVESTIGATION/ALTERNATIVES ANALYSIS REPORT
619 EXCHANGE STREET (C915403)
BUFFALO, NEW YORK

Well Identification		Well Elevations		Groundwater Elevations		Well Diameter (inches)	Well Screen Data		
				8-May-25					
Well Number	Date Completed	Top of Casing Elevation [1,2] (feet)	Top of Riser Elevation [1] (feet)	DTW (fbTOR) [3]	Groundwater Elevation (feet)		Length of Well Screen (feet)	Screen Interval (fbTOC)	Screen Interval Elevation (feet)
MW-1	04/30/2025	99.00	98.73	3.32	95.41	2	15	5 to 20	94.00 to 79.00
MW-2	04/30/2025	98.59	98.34	4.04	94.30	1	15	5 to 20	93.59 to 78.59
MW-3	04/30/2025	98.61	98.40	4.54	93.86	1	15	5 to 20	93.61 to 78.61
MW-4	04/28/2025	92.50	92.36	0.80	91.56	1	10	4 to 14	88.50 to 78.50
MW-5	04/28/2025	92.65	92.37	0.78	91.59	1	10	4 to 14	88.65 to 78.65
MW-6	04/28/2025	92.69	92.39	0.65	91.74	1	10	4 to 14	88.69 to 78.69

Notes:
1. All elevations are feet relative to a nail set in a telephone pole near the southwest corner of the building (assumed datum 100 ft), collected June 16, 2025.
2. All wells are completed as flush mount wells; top of casing elevation represents floor elevation in Sections 1 and 2 and ground surface elevation in Section 3.
3. DTW and well depth based on static water levels and measurements collected by Roux on May 8, 2025

TOR = Top of riser
TOC = Top of casing
DTW = Depth to water
fb = feet below

TABLE 3
SUMMARY OF PHASE II AND RI SUBSURFACE SOIL/FILL ANALYTICAL DATA
REMEDIAL INVESTIGATION/ALTERNATIVES ANALYSIS REPORT
619 EXCHANGE STREET (C915403)
BUFFALO, NEW YORK

ROUX

PARAMETER [1]	Unrestricted Use SCOs [2]	Restricted Residential Use SCOs [2]	SSAL [3]	2023 Subsurface Investigation [4]														Roux 2025 Remedial Investigation [5]		
				SB-1 0-1 FT	SB-2 0-1 FT	SB-3 0-1 FT	SB-4 0-1 FT	SB-5 0-1 FT	SB-6 0-1 FT	SB-7 0-1 FT	SB-8 0-1 FT	SB-9 0-1 FT	SB-10 0-1 FT	HC-1 0-1 FT	HC-2 0-1 FT	HC-3 0-1 FT	HC-4 0.5-1.5 FT	HC-5 0.33-0.66 FT	HC-6 2-6 IN
				FILL	FILL	FILL	FILL	FILL	FILL	FILL	FILL	FILL	FILL	FILL	FILL	FILL	FILL	FILL	FILL
							5/23/2023					8/22/2023			5/23/2025			4/29/2025	
Volatile Organic Compounds (VOCs) - mg/Kg [6]																			
Acetone	**0.05**	**100**	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**0.053**	--	0.0083 J
Chloroform	**0.37**	**49**	--	--	--	--	--	--	--	--	--	--	--	--	--	--	ND	--	ND
Total Tentatively Identified Compounds	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	ND	--	ND
Total VOCs	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.053	--	0.0083
Semi Volatile Organic Compounds (SVOCs) - mg/Kg [6]																			
2-Methylnaphthalene	--	--	--	0.095 J	0.096 J	0.14 J	ND	ND	ND	0.06 J	ND	ND	ND	0.38	0.2 J	0.11 J	0.14 J	ND	0.069 J
Acenaphthene	**20**	**100**	--	ND	ND	0.054 J	ND	ND	ND	0.026 J	ND	ND	ND	0.11 J	0.061 J	0.16	0.073 J	0.22 J	ND
Acenaphthylene	**100**	**100**	--	0.15 J	ND	ND	ND	0.054 J	ND	ND	ND	0.72	0.046 J	0.037 J	ND	ND	0.028 J	ND	ND
Anthracene	**100**	**100**	--	0.58	ND	ND	ND	0.12 J	ND	ND	ND	1.8	0.16	0.28	ND	ND	0.2	0.47	ND
Benzo(a)anthracene	**1**	**1**	--	**2.7**	ND	0.048 J	0.024 J	0.22	ND	ND	0.3 J	**5**	0.28	0.54	ND	ND	0.56	0.72	0.035 J
Benzo(a)pyrene	**1**	**1**	--	**2.9**	ND	ND	ND	0.18	ND	ND	0.39 J	**3.9**	0.18	0.46	ND	ND	0.54	0.65	0.034 J
Benzo(b)fluoranthene	**1**	**1**	--	**2.9**	ND	0.051 J	ND	0.2	ND	ND	0.55 J	**4.3**	0.26	0.55	ND	ND	0.7	0.73	0.057 J
Benzo(ghi)perylene	**100**	**100**	--	1.6	ND	ND	ND	0.09 J	ND	ND	0.33 J	1.6	0.12 J	0.23	ND	ND	0.63	0.44	0.029 J
Benzo(k)fluoranthene	**0.8**	**3.9**	--	**0.86**	ND	ND	ND	0.07 J	ND	ND	0.2 J	**2.2**	0.082 J	0.15	ND	ND	0.26	0.44	ND
Biphenyl	--	--	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Bis(2-ethylhexyl) phthalate	--	--	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	**0.17 J**	ND	ND
Butyl benzyl phthalate	--	--	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Carbazole	--	--	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	**0.11 J**	0.19 J	ND
Chrysene	**1**	**3.9**	--	**2.3**	ND	0.046 J	0.024 J	0.19	ND	ND	0.35 J	**4.4**	0.28	0.52	ND	ND	0.64	0.69	0.051 J
Dibenzo(a,h)anthracene	**0.33**	**0.33**	--	**0.48**	ND	ND	ND	ND	ND	ND	ND	**0.62**	0.028 J	0.057 J	ND	ND	0.15 J	0.11 J	ND
Diethyl phthalate	--	--	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Dibenzofuran	**7**	**59**	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.1 J	0.1 J	ND
Fluoranthene	**100**	**100**	--	2.1	ND	0.11 J	0.036 J	ND	ND	ND	0.64 J	8.6	0.54	1.3	ND	ND	1.1 J	1.5	0.079 J
Fluorene	**30**	**100**	--	0.082 J	ND	ND	ND	0.074 J	ND	ND	ND	0.44	0.095 J	0.16 J	ND	ND	0.085 J	0.23 J	ND
Indeno(1,2,3-cd)pyrene	**0.5**	**0.5**	--	**2.1**	ND	ND	ND	0.11 J	ND	ND	0.25 J	**1.7**	0.13 J	0.29	ND	ND	0.47	0.38	ND
Naphthalene	**12**	**100**	--	0.19 J	ND	ND	0.052 J	0.073 J	0.029 J	ND	ND	0.55	0.24	0.1 J	ND	ND	0.088 J	0.12 J	0.039 J
Phenanthrene	**100**	**100**	--	1.3	ND	0.094 J	0.034 J	0.51	0.051 J	ND	0.41 J	7.8	0.64	1.2	ND	ND	1.1 J	1.5	0.093 J
Pyrene	**100**	**100**	--	2.3	ND	0.082 J	0.034 J	0.4	ND	ND	0.49 J	7.2	0.42	1.1	ND	ND	1.1 J	1.2	0.064 J
Total PAHs	--	--	--	22.542 J	0 J	0.485 J	0.204 J	2.291 J	0.08 J	0.026 J	3.91 J	50.83 J	3.501 J	7.084 J	0.061 J	0.16 J	7.724 J	9.4 J	0.481 J
TICS	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	6 TJN	2.78 T J N	4.54 TJN
Metals - mg/Kg																			
Aluminum	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	4960	6010	4540
Antimony	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	5 J	ND	ND
Arsenic	**13**	**16**	--	6.3	8.53	11.5	5.61	**18**	**13.3**	**15.3**	11.6	**16.8**	**14.8**	**22.1**	**14.8**	**22.1**	**13.8 J**	12.7	12.2
Barium	**350**	**400**	**400**	87	161	99.7	28.1	86.3	265	255	**1850**	127	68.5	64.6	68.5	64.6	135	153	330
Beryllium	**7.2**	**72**	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.87	0.92	0.9
Cadmium	**2.5**	**4.3**	--	0.124 J	0.214 J	0.218 J	0.233 J	0.322 J	0.13 J	0.18 J	0.38	0.341 J	0.324 J	0.636	0.324	0.636	0.26	ND	0.15 J
Calcium	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	22400	9010	32100
Chromium	**30**	**180**	--	10.5	16	10.2	6.38	20.1	9.7	8.3	12.4	10.5	10.6	7.57	10.6	7.57	20 J	10.7	8.4 B
Cobalt	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	7.2	5.7	5.7
Copper	**50**	**270**	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**87.2**	39.8	36.1
Iron	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	13200	45700	13300
Lead	**63**	**400**	--	16.8	45.3	56.1	24.3	**237**	24.3	20.5	**69**	**525**	**286**	**98.3**	**286**	**98.3**	**516 J**	**73.6**	**186**
Magnesium	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	3150	1710	3610
Manganese	**1600**	**2000**	--	--	--	--	--	--	--	--	--	--	--	--	--	--	131	212	84.4
Mercury	**0.18**	**0.81**	**2.8**	ND	ND	ND	0.088	**0.453**	0.059	0.029	0.073	**12.2**	**2.53**	**0.214**	**2.53**	**0.214**	**0.81**	0.023 J+	0.055
Nickel	**30**	**310**	--	--	--	--	--	--	--	--	--	--	--	--	--	--	14.9	17.4	13.7
Potassium	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	886	616	578
Selenium	**3.9**	**180**	--	0.277 J	0.394 J	0.399 J	0.386 J	**4.02**	ND	ND	ND	1.76	**4.03**	1.21	**4.03**	1.21	2 J	2.1 J	ND
Silver	**2**	**180**	--	ND	ND	0.192 J	0.173 J	ND	ND	ND	ND	0.688	0.298	ND	0.298	ND	ND	ND	ND
Sodium	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	218	236	239
Vanadium	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	18.7	20.4	14.1
Zinc	**109**	**10000**	--	--	--	--	--	--	--	--	--	--	--	--	--	--	99.7	36.4	**156**
Polychlorinated biphenyls (PCBs) - mg/Kg [6]																			
Aroclor 1260	**See Total PCBs**			--	--	--	--	--	--	--	--	--	--	--	--	--	--	ND	--	ND
Total PCBs	**0.1**	**1**	--	--	--	--	--	--	--	--	--	--	--	--	--	--	ND	--	ND
Pesticides - mg/Kg [6]																			
4,4'-DDD	**0.0033**	**13**	--	--	--	--	--	--	--	--	--	--	--	--	--	--	ND	--	**0.0053 J**
4,4'-DDE	**0.0033**	**8.9**	--	--	--	--	--	--	--	--	--	--	--	--	--	--	ND	--	ND
4,4'-DDT	**0.0033**	**7.9**	--	--	--	--	--	--	--	--	--	--	--	--	--	--	ND	--	ND
delta-BHC	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	ND	--	0.0057 J
Endrin aldehyde	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	ND	--	ND
Endrine ketone	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	ND	--	ND
gamma-BHC (Lindane)	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.0092 J	--	ND
Methoxychlor	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	ND	--	ND
Herbicides - mg/Kg [6]																			
Pentachlorophenol	**0.8**	**6.7**	--	--	--	--	--	--	--	--	--	--	--	--	--	--	ND		ND
Per - and Polyfluoroalkyl Substances (PFAS) - ug/Kg																			
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	ND	--	ND
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	ND	--	ND
Perfluoropentanoic acid (PFPeA)	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	ND	--	ND
Perfluorohexanoic acid (PFHxA)	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	ND	--	ND
Perfluoroheptanoic acid (PFHpA)			--	--	--	--	--	--	--	--	--	--	--	--	--	--	ND	--	ND
Perfluorooctanoic acid (PFOA)	**0.66**	**33**	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.044 J	--	ND
Perfluorooctanesulfonic acid (PFOS)	**0.88**	**44**	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.044 J	--	0.16 J
PFOA+PFOS	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.088 J	--	0.16 J
Total PFAS	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.088	--	0.16

Notes:

1. Only those parameters detected at a minimum of one sample location are presented in this table; other compounds were reported as non-detect.
2. Values per NYSDEC Part 375 Soil Cleanup Objectives (SCOs).
3. Site-specific action levels established using NYSDEC Part 375 Commercial SCOs.
4. 2023 Subsurface Investigation results from samples collected by Roux.
5. 2025 Subsurface Investigation results from samples collected by Roux.
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Definitions:

ND = Parameter not detected above laboratory detection limit.
"--" = No value available for the parameter; Parameter not analyzed for.
J = Estimated value; result is less than the sample quantitation limit but greater than zero.
J+ = Estimated value, biased high.
J- = Estimated value; biased low.
F1 = MS and/or MSD recovery exceeds control limits.
F2 = MS/ MSD RPD exceeds control limits.
T = Result is a tentatively identified compound (TIC) and an estimated value.
N = Presumptive evidence of material.

Bold	= Result exceeds Unrestricted SCOs.
Bold	= Result exceeds Restricted Residential SCOs.
Bold	= Result exceeds Site-Specific Action Levels.

TABLE 3
SUMMARY OF PHASE II AND RI SUBSURFACE SOIL/FILL ANALYTICAL DATA
REMEDIAL INVESTIGATION/ALTERNATIVES ANALYSIS REPORT
619 EXCHANGE STREET (C915403)
BUFFALO, NEW YORK

ROUX

PARAMETER[1]	Unrestricted Use SCOs [2]	Restricted Residential Use SCOs [2]	SSAL [3]	Roux 2025 Remedial Investigation [5]															
				HC-7 0.25-0.75 FT	HC-8 1-3 IN	HC-9 5-8 IN	HC-10 1-3 IN	HC-11 0.25-0.5 FT	MW-1 0.25-3 FT	MW-1 18-20 FT	MW-2 0.75-2 FT	MW-2 16-20 FT	MW-3 0.5-2.5 FT	MW-4 0.25-1 FT	MW-4 12-14 FT	MW-5 0.33-0.75 FT	MW-6 0.5-0.75 FT	MW-6 8-10 FT	SB-11 0.25-2 FT
				FILL	FILL	FILL	FILL	FILL	FILL	NATIVE	FILL	NATIVE	FILL	FILL	NATIVE	FILL	FILL	NATIVE	FILL
				4/29/2025	4/30/2025				4/29/2025	4/30/2025	4/29/2025	4/30/2025	4/29/2025			4/27/2025			5/1/2025
Volatile Organic Compounds (VOCs) - mg/Kg [4]																			
Acetone	**0.05**	**100**	--	--	--	--	--	ND	ND	0.0058 J-	**0.24**	0.0049 J	--	ND	0.0071 J	--	0.0049 J	0.0084 J	0.0098 J
Chloroform	**0.37**	**49**	--	--	--	--	--	ND	ND	ND	ND	ND	--	ND	ND	--	ND	ND	ND
Total Tentatively Identified Compounds	--	--	--	--	--	--	--	ND	ND	ND	ND	ND	--	ND	ND	--	ND	ND	ND
Total VOCs	--	--	--	--	--	--	--	0	0	0.0058	0.24	0.0049	--	0	0.0071	--	0.0049	0.0084	0.0098
Semi Volatile Organic Compounds (SVOCs) - mg/Kg [4]																			
2-Methylnaphthalene	--	--	--	ND	ND	ND	ND	ND	0.32	ND	0.21	ND	0.22	0.052 J	ND	0.14 J	0.11 J	ND	0.055 J
Acenaphthene	**20**	**100**	--	ND	ND	ND	ND	ND	0.06 J	ND	ND	ND	ND	ND	ND	0.048 J	0.18 J	ND	ND
Acenaphthylene	**100**	**100**	--	ND	ND	ND	ND	ND	0.088 J	ND	0.06 J	ND	0.052 J	ND	ND	ND	ND	ND	ND
Anthracene	**100**	**100**	--	ND	ND	0.058 J	ND	0.081 J	0.25	ND	0.11 J	ND	0.15 J	ND	ND	0.055 J	0.19 J	ND	0.068 J
Benzo(a)anthracene	**1**	**1**	--	0.04 J	ND	0.27 J	0.035 J	0.13 J	0.84	ND	0.44	ND	0.5	0.029 J	ND	0.41	**1.4**	ND	0.16 J
Benzo(a)pyrene	**1**	**1**	--	0.038 J	0.061 J	0.48 J	0.037 J	0.13 J	0.72	ND	0.34	ND	0.43	ND	ND	**1.5**	**3.2**	ND	0.12 J
Benzo(b)fluoranthene	**1**	**1**	--	0.051 J	0.099 J	0.41 J	ND	0.14 J	**1.1 F2**	ND	0.47	ND	0.65	0.04 J	ND	1	**2.8**	ND	0.2 J
Benzo(ghi)perylene	**100**	**100**	--	0.03 J	0.065 J	0.56 J	0.043 J	0.1 J	0.58	ND	0.26	ND	0.37	0.025 J	ND	2.7	3.2	ND	0.16 J
Benzo(k)fluoranthene	**0.8**	**3.9**	--	ND	0.03 J	0.24	0.028 J	0.085 J	0.33	ND	0.18 J	ND	0.23	ND	ND	0.34	**1.4**	ND	0.076 J
Biphenyl	--	--	--	ND	ND	ND	ND	ND	0.033 J	ND	ND	ND	0.037 J	ND	ND	ND	ND	ND	ND
Bis(2-ethylhexyl) phthalate	--	--	--	ND	ND	ND	ND	0.58	ND	ND	ND	ND	ND	0.12 J	ND	ND	ND	ND	ND
Butyl benzyl phthalate	--	--	--	ND	ND	ND	ND	0.091 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Carbazole	--	--	--	ND	ND	ND	ND	ND	0.12 J	ND	0.046 J	ND	0.066 J	ND	ND	0.11 J	ND	ND	0.028 J
Chrysene	**1**	**3.9**	--	0.049 J	ND	0.24 J	ND	0.15 J	0.89	ND	0.45	ND	0.63	0.047 J	ND	0.44	**1.4**	ND	0.2 J
Dibenzo(a,h)anthracene	**0.33**	**0.33**	--	ND	ND	0.11 J	ND	ND	0.21	ND	0.072 J	ND	0.12 J	ND	ND	**0.35**	**0.96**	ND	ND
Diethyl phthalate	--	--	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Dibenzofuran	**7**	**59**	--	ND	ND	ND	ND	ND	0.15 J	ND	0.08 J	ND	0.14 J	ND	ND	0.04 J	0.058 J	ND	0.039 J
Fluoranthene	**100**	**100**	--	0.085 J	0.14 J	0.21 J	0.039 J	0.3	1.2 F1	ND	0.74	ND	0.86	0.046 J	ND	0.34	1	ND	0.33
Fluorene	**30**	**100**	--	ND	ND	ND	ND	ND	0.1 J	ND	0.065 J	ND	0.056 J	ND	ND	ND	0.043 J	ND	0.033 J
Indeno(1,2,3-cd)pyrene	**0.5**	**0.5**	--	ND	0.049 J	0.39 J	0.029 J	0.083 J	0.5	ND	0.19 J	ND	0.28	ND	ND	**1.2**	**2.8**	ND	0.099 J
Naphthalene	**12**	**100**	--	ND	ND	0.028 J	ND	ND	0.12 J	ND	0.081 J	ND	0.085 J	ND	ND	0.13 J	0.09 J	ND	0.069 J
Phenanthrene	**100**	**100**	--	0.063 J	ND	0.17 J	0.067 J	0.25	1.4 J	ND	0.78	ND	1.1	0.094 J	ND	0.32	0.56	ND	0.34
Pyrene	**100**	**100**	--	0.067 J	0.12 J	0.27 J	0.052 J	0.24	1.2	ND	0.58	ND	0.72	0.045 J	ND	0.52	1.3	ND	0.27
Total PAHs	--	--	--	0.423 J	0.564 J	3.436 J	0.33 J	1.689 J	9.588 J	0 J	4.818 J	0 J	6.233 J	0.326 J	0 J	9.353 J	20.523 J	0 J	2.125 J
TICS	--	--	--	5.9 TJ	7.46 TJN	14.79 TJN	19.53 TJN	28.68 TJN	12.41 T J N	13 TJ	7.56 T J N	19.19 T J N	14.87 T J N	0.68 T J N	0.78 T J N	4.82 T J N	11.1 T J N	0.18 TJ	13.21 T J N
Metals - mg/Kg																			
Aluminum	--	--	--	7230	6590	10300	4360	5160	3960 J	15100 F2	2390	12200	3440	4160	16400	4960	4100	15500	4940
Antimony	--	--	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	2 J	ND	ND	ND	ND	ND	ND
Arsenic	**13**	**16**	--	4.7	5.7	6.4	9.5	6.3	12.2	4.1	**19.5**	2.9	**20.8**	6.3	3.6	10.8	3.5	3.2	5.4
Barium	**350**	**400**	**400**	**624**	277	126 J	68.8	**6290**	79.6	96.2 J-	150	85.9	101	242	112	80.1	69.4	114	139
Beryllium	**7.2**	**72**	--	0.48	0.4	1	0.32	0.56	0.66	0.68	0.85	0.55	0.86	0.53	0.74	0.92	0.31	0.67	0.51
Cadmium	**2.5**	**4.3**	--	0.17 J	ND	ND	0.13 J	1.5	0.22 J	0.12 J	0.11 J	0.11 J	0.29	0.24	0.18 J	0.14 J	ND	0.13 J	0.25 J
Calcium	--	--	--	631000	73200	26400	36200	23500	6940	62400 J-	13900	75800	134000	40100	50500	18000	41100	71000	9530
Chromium	**30**	**180**	--	7.5	7.7	12.9	6.5	8.5	11.1	19.6	8.7	16.1	13.1	7.2	21.1	8.4	5.2	20	8.4
Cobalt	--	--	--	4.5	4.2 ^5+	7.8 ^5+	4.2 ^5+	11.8	9.7 ^5+	3.5	7.5 ^5+	8.1	4.7 ^5+	10.2 ^5+	7.1 ^5+	3.8 ^5+	8.6 ^5+	4.2	
Copper	**50**	**270**	--	15.5	23	31.3 J	12.4	**168**	73.3	16	36.7	16.6	**79.5**	**59.4**	17.5	21.5	27	14.7	**167**
Iron	--	--	--	9320	9060	19200	10300	11700	65700	19400 J-	15400	16200	28200	11900	20500	8700	6000	18600 J-	13300
Lead	**63**	**400**	--	52.6	14 ^5+	21.4 ^5+	10.3 ^5+	**76.6 ^5+**	**136**	13.9 ^5+	**164**	12.6 ^5+	**281**	23.5	13.2	16.9	6.9	10.3	**145**
Magnesium	--	--	--	10500	11300	6090	5340	4520	1030	23300 J	1080	17900	2590	4070	19200	1380	11800	24200	1530
Manganese	**1600**	**2000**	--	136	224	208	165	164	208 J	454 J	172	338	236	102	417	93.6	151	390	80.2
Mercury	**0.18**	**0.81**	**2.8**	0.04	0.019 J	0.029	0.11	0.14	**0.71 J**	0.019 J	**0.58**	0.023 J	**1.6**	0.039	0.017 J	**1.9**	0.016 J	0.018 J	**0.46**
Nickel	**30**	**310**	--	13.5	10.7	28.8	12.8	11.8	20.3	22.5	9.6	17.6	16.8	13	24.2	15	8.6	20.2	10.6
Potassium	--	--	--	883	1090	2130	884	800	583	4780 F1	751	3720	772	468	5160	545	507	5280 J	821
Selenium	**3.9**	**180**	--	ND	ND	ND	ND	ND	1.9 J	ND	2.3 J	ND	2.1 J	ND	ND	1.5 J	1.2 J	1.1 J	**4.6 J**
Silver	**2**	**180**	--	ND	ND	ND	ND	ND	0.24 J^5-	ND	ND	ND	0.25 J^5-	ND	0.33 J^5-	ND	ND	0.32 J^5-	ND
Sodium	--	--	--	375	282	301	203	280	125 J	314	136 J	336 J	135 J	236	331	219	255	433	155 J
Vanadium	--	--	--	11.8	12.6	24.9	12.7	12.4	16.9	28.7	16.6	23.9	23.7	13.1	30.6	20.3	8.9	30.9	10.9
Zinc	**109**	**10000**	--	83.5	**133**	39.5	26.3	**3090**	100	58.8	67.3	50.3	96.9	85.5	59.2	25.3	25.5	52.3	**171**
Polychlorinated biphenyls (PCBs) - mg/Kg [6]																			
Aroclor 1260	**See Total PCBs**			--	--	--	--	0.16 J	ND	ND	ND	ND	--	ND	ND	--	ND	ND	ND
Total PCBs	**0.1**	**1**	--	--	--	--	--	**0.16 J**	ND	ND	ND	ND	--	ND	ND	--	ND	ND	ND
Pesticides - mg/Kg [6]																			
4,4'-DDD	**0.0033**	**13**	--	--	--	--	--	**0.0034 J**	ND	ND	**0.018 J N**	ND	--	**0.01 J**	ND	--	ND	ND	ND
4,4'-DDE	**0.0033**	**8.9**	--	--	--	--	--	0.0013 J	**0.0085 J**	ND	ND	ND	--	ND	ND	--	ND	ND	ND
4,4'-DDT	**0.0033**	**7.9**	--	--	--	--	--	**0.0065 J**	ND	**0.0034 J**	ND	0.0033 J	--	ND	ND	--	ND	ND	ND
delta-BHC	--	--	--	--	--	--	--	ND	ND	ND	ND	ND	--	ND	ND	--	ND	ND	ND
Endrin aldehyde	--	--	--	--	--	--	--	ND	ND	ND	ND	ND	--	ND	ND	--	ND	ND	ND
Endrine ketone	--	--	--	--	--	--	--	ND	ND	ND	ND	ND	--	ND	ND	--	ND	ND	ND
gamma-BHC (Lindane)	--	--	--	--	--	--	--	0.0011 J	ND	ND	0.012 J	0.00084 J	--	ND	ND	--	0.014 J	ND	ND
Methoxychlor	--	--	--	--	--	--	--	ND	ND	ND	ND	ND	--	0.056 J	ND	--	ND	ND	ND
Herbicides - mg/Kg [6]																			
Pentachlorophenol	**0.8**	**6.7**	--	--	--	--	--	0.1	ND	ND	ND	ND	--	0.0073 J	ND	--	0.015 J	ND	0.035
Per - and Polyfluoroalkyl Substances (PFAS) - ug/Kg																			
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	--	--	--	--	--	--	--	0.21	ND	ND	ND	ND	--	ND	ND	--	ND	ND	ND
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	--	--	--	--	--	--	--	0.039 J	ND	ND	ND	ND	--	ND	ND	--	ND	ND	ND
Perfluoropentanoic acid (PFPeA)	--	--	--	--	--	--	--	ND	ND	ND	0.24 J	ND	--	ND	ND	--	ND	ND	ND
Perfluorohexanoic acid (PFHxA)	--	--	--	--	--	--	--	ND	ND	ND	0.17	ND	--	ND	ND	--	ND	ND	ND
Perfluoroheptanoic acid (PFHpA)			--	--	--	--	--	0.04 J	ND	ND	0.11 J	ND	--	ND	ND	--	ND	ND	ND
Perfluorooctanoic acid (PFOA)	**0.66**	**33**	--	--	--	--	--	0.11 J	ND	ND	0.25	ND	--	ND	ND	--	ND	ND	ND
Perfluorooctanesulfonic acid (PFOS)	**0.88**	**44**	--	--	--	--	--	0.075 J	ND	ND	0.24	ND	--	0.14 J	ND	--	ND	ND	ND
PFOA+PFOS	--	--	--	--	--	--	--	0.185 J	ND	ND	0.49 J	ND	--	0.14 J	ND	--	ND	ND	ND
Total PFAS	--	--	--	--	--	--	--	0.474	ND	ND	1.01	ND	0	0.14	ND	0	ND	ND	ND

Notes:

1. Only those parameters detected at a minimum of one sample location are presented in this table; other compounds were reported as non-detect.
2. Values per NYSDEC Part 375 Soil Cleanup Objectives (SCOs).
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ROUX

TABLE 4
SUMMARY OF RI GROUNDWATER ANALYTICAL DATA
REMEDIAL INVESTIGATION/ALTERNATIVES ANALYSIS REPORT
619 Exchage Street (C915403)
BUFFALO, NEW YORK

Parameter [1]	NYSDEC Class GA GWQS [2]	Monitoring Well Location					
		MW-1	MW-2	MW-3	MW-4	MW-5	MW-6
		5/8/2025					
TCL Volatile Organic Compounds (VOCs) - ug/L							
Acetone	**50**	8.8 J	16 J	16	ND	ND	ND
Methylcyclohexane	**--**	0.2 J	ND	ND	ND	ND	0.18 J
Toluene	**5**	ND	ND	ND	ND	1.3	ND
Total VOC TICs	**--**	ND	ND	ND	ND	ND	ND
Total VOCs	**--**	9 J	16 J	16 J	0 J	1.3	0.18 J
TCL Semi-Volatile Organic Compounds (SVOCs) - ug/L							
2,4-Dichlorophenol	**5**	ND	ND	ND	ND	ND	0.7 J
Caprolactam	**-**	ND	3.4	3.1 J	ND	ND	ND
Diethyl phthalate	**50**	ND	0.5 J	0.26 J	0.24 J	0.27 J	ND
Dimethyl phthalate	**50**	ND	ND	ND	ND	0.4 J	0.43 J
Di-n-butyl phthalate	**50**	0.56 J	0.53 J	ND	0.43 J	ND	ND
Isophorone	**-**	ND	ND	ND	ND	0.44 J	0.53 J
Pentachlorophenol	**-**	ND	4.3 J	ND	4.6 J	4.6 J	4.3 J
Total SVOC TICs	**--**	9 T J N	51 T J N	3 T J N	12 T J N	ND	ND
Total SVOCs	**--**	0.56 J	8.73 J	3.36 J	5.27 J	5.71 J	5.26 J
Semi-Volatile Organic Compounds 8270 (SIM) [3] - ug/L							
1,4 - Dioxane	**0.35**	ND	ND	ND	ND	ND	ND
TAL Metals - ug/L (Total) [4]							
Aluminum	**--**	130000 F2	9400	9500	17200	18700	16400
Arsenic	**25**	**49**	13 J	8.6 J	8 J	12 J	9.9 J
Barium	**1,000**	1000 J	570	**2200**	**1600**	610	560
Beryllium	**3**	**5.6**	0.4 J	0.44 J	0.7 J	0.77 J	0.88 J
Cadmium	**5**	1.7 J	ND	1.4 J	0.6 J	ND	0.62 J
Calcium	**--**	416000 F2	129000	133000	109000	155000	166000
Chromium	**50**	**180 J**	16	35	24	31	21
Cobalt	**--**	80	7.1	5.9	5.9	8.8	23
Copper	**200**	180 J	59	28	28 J	32	110
Iron	**300**	**175000 J-**	**14200**	**11500**	**15600**	**21300**	**21400**
Lead	**25**	**180 J**	**46**	**99**	**50 J**	18	**29**
Magnesium	**35,000**	**153000**	**52500**	**54200**	**45800**	**74600**	**83100**
Manganese	**300**	**3000 F2**	**1100**	**580**	280 J	**380**	**540**
Nickel	**100**	**190 J**	18	17	17	25	36
Potassium	**--**	33700 J	19600	9900	9100	7300	7800
Silver	**50**	2.9 J^5-	ND	ND	ND	ND	ND
Sodium	**20,000**	**27500**	**80400**	**80300**	**62300**	**27800**	**108000**
Vanadium	**--**	240 J	19	20	30	34	30
Zinc	**5,000**	530 J	230	940	760	250	260
Mercury	**0.7**	0.64	0.37	**1.4**	0.24	0.043 J	ND
TAL Metals - ug/L (Dissolved) [4]							
Arsenic	**25**	ND	6.6 J	ND	ND	ND	ND
Barium	**1,000**	170	110	180	72	61	98
Calcium	**--**	75900	114000	106000	70700	106000	75900
Cobalt	**--**	ND	2.5 J	0.94 J	ND	ND	1.1 J
Copper	**200**	2.2 J	4.2 J	2.7 J	2.7 J	3.2 J	5.1 J
Magnesium	**35,000**	**40600**	**47100**	**46100**	**36900**	**61600**	**58500**
Manganese	**300**	26	**820**	**350**	30 B	51	31
Nickel	**100**	ND	4.2 J	2.9 J	1.3 J	2.8 J	2.3 J
Potassium	**--**	6000	16900	6100	2400	2800	3100
Sodium	**20,000**	**31800 F1**	**79300**	**75500**	**55300**	**29100**	**107000**
Zinc	**5,000**	ND	17 B	44 B	11 B	7.6 J B	ND
Organochlorine Pesticides ug/L							
4,4'-DDD	**0.3**	ND	--	--	0.019 J	ND	--
4,4'-DDE	**0.2**	0.015 J	--	--	0.023 J	ND	--
4,4'-DDT	**0.2**	ND	--	--	ND	0.011 J	--
alpha-BHC	**0.01**	ND	--	--	**0.013 J**	ND	--
delta-BHC	**0.04**	0.012 J	--	--	ND	ND	--
Dieldrin	**0.004**	ND	--	--	**0.014 J**	ND	--
Endrin aldehyde	**5**	0.022 J	--	--	ND	ND	--
gamma-BHC(Lindane)	**0.05**	ND	--	--	ND	ND	--
Heptachlor	**0.04**	0.015 J	--	--	ND	ND	--
Methoxychlor	**35**	ND	--	--	0.079	ND	--
Herbicides ug/L							
2,4-D	**--**	ND	--	--	0.72 J	ND	--
Pentachlorophenol	**--**	ND	--	--	1.1	1.2	--
Total Phenols	**1**	0	--	--	**1.82**	**1.2**	--
Polychlorinated Biphenyls (PCBs) ug/L							
Total PCBs	**0.09**	ND	--	--	ND	ND	--
Perfluorinated Alkyl Acids - ng/L							
Perfluorohexanoic Acid (PFHxA)	**--**	ND	--	--	ND	ND	--
Perfluorooctanoic Acid (PFOA)	**6.7**	ND	--	--	6.4 J	ND	--
Perfluorooctanesulfonic Acid (PFOS)	**2.7**	ND	--	--	ND	ND	--
N-Ethyl Perfluorooctanesulfonamidoacetic Acid (NEtFOSAA)	**--**	ND	--	--	ND	8.1 J	--

Notes:
1. Only those parameters detected at a minimum of one sample location are presented in this table; all other compounds were reported as non-detect.
2. Values per NYSDEC TOGS 1.1.1 Class GA Groundwater Quality Standards (GWQS).
3. Extraction methodology of Selective Ion Monitoring (SIM) was used for 1,4-dioxane.
4. Sample results were reported by the laboratory in milligrams per liter (mg/L) and converted to micrograms per liter (ug/L) for comparison to GWQS.

Definitions:
ND = Parameter not detected above laboratory detection limit.
-- = Sample not analyzed for parameter and/or no SCO available.
B = Compound was found in the blank and sample
J = Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
I = Value is EMPC (estimated maximum possible concentration)
N = Presumptive evidence of analyte; result should be used with caution as a potential false positive and/or elevated quantitative value.
T = Result is a tentitively identified compound (TIC) and an estimated value.

Exceeds NYSDEC Class GA GWQS

ROUX

TABLE 5
SUMMARY OF RI SUBSLAB VAPOR, SOIL VAPOR, INDOOR AIR, AND OUTDOOR AIR ANALYTICAL DATA
REMEDIAL INVESTIGATION/ALTERNATIVES ANALYSIS REPORT
619 EXCHANGE STREET (C915403)
BUFFALO, NEW YORK

Parameter [1]	SSV-1	IA-1	SSV-2	IA-2	SSV-3	IA-3	SSV-4	IA-4	SV-1	OA-1	OA-2
	4/18/2025								5/8/2025	4/18/2025	5/8/2025
Volatile Organic Compounds (VOCs, ug/m3)											
1,1,1-Trichloroethane (Matrix B)	1.2 J	ND< 2.7	ND< 2.7	ND< 2.7	ND< 2.7	ND< 2.7	2.8	ND< 2.7	2.1 J	ND< 2.7	ND< 1.1
1,1-Dichloroethene (Matrix A)	ND< 2	ND< 2	ND< 2	ND< 2	ND< 2	ND< 2	ND< 2	ND< 2	ND< 2	ND< 2	ND< 2
1,2,4-Trimethylbenzene (Matrix D)	ND< 2.5	ND< 2.5	ND< 2.5	ND< 2.5	ND< 2.5	ND< 2.5	ND< 2.5	ND< 2.5	ND< 2.5	ND< 2.5	ND< 2.5
1,3,5-Trimethylbenzene (Matrix D)	ND< 2.5	ND< 2.5	ND< 2.5	ND< 2.5	ND< 2.5	ND< 2.5	ND< 2.5	ND< 2.5	ND< 2.5	ND< 2.5	ND< 2.5
2,2,4-Trimethylpentane (Matrix D)	ND< 4.7	2.1 J	ND< 4.7	ND< 4.7	ND< 4.7	ND< 4.7	ND< 4.7	ND< 4.7	ND< 4.7	ND< 4.7	ND< 4.7
4-Methyl-2-pentanone (Methyl isobutyl ketone)	ND< 20	ND< 20	ND< 20	ND< 20	ND< 20	ND< 20	ND< 20	ND< 20	1.1 J	ND< 20	ND< 20
Acetone	27 J	15	18	13	20	28	21	33	130	11	11
Benzene (Matrix D)	1 J	0.91 J	0.38 J	ND< 1.6	2.1	ND< 1.6	1.2 J	ND< 1.6	4.1	0.37 J	ND< 1.6
Carbon Disulfide	0.74 J	ND< 0.4	5.4	ND< 3.1	2.1 J	ND< 3.1	2.8 J	ND< 3.1	7.9	ND< 3.1	ND< 3.1
Carbon Tetrachloride (Matrix A)	ND< 0.22	ND< 0.22	ND< 0.22	ND< 0.22	ND< 0.22	ND< 0.22	ND< 0.22	ND< 0.22	ND< 0.22	ND< 0.22	ND< 0.22
Chloroform	0.72 J	ND< 2.4	ND< 2.4	ND< 2.4	2.1 J	ND< 2.4	5.8	ND< 2.4	1.1 J	ND< 2.4	ND< 2.4
cis-1,2-Dichloroethene (Matrix A)	ND< 0.2	ND< 0.2	ND< 0.2	ND< 0.2	ND< 0.2	ND< 0.2	ND< 0.2	ND< 0.2	ND< 0.2	ND< 0.2	ND< 0.2
Cyclohexane (Matrix D)	13	2	2.8	0.86 J	42	1.2 J	5.4	1.3 J	ND< 1.7	ND< 1.7	ND< 1.7
Dichlorodifluoromethane	1.9 J	2.5	2.4 J	2.6	2.3 J	2.7	2.6	2.4 J	2.5	2.5	2.5
Ethylbenzene (Matrix D)	0.86 J	ND< 2.2	ND< 2.2	ND< 2.2	ND< 2.2	ND< 2.2	ND< 2.2	ND< 2.2	ND< 2.2	ND< 2.2	ND< 2.2
Isopropyl alcohol	0.98 J	1.4 J	0.92 J	1.4 J	1 J	1.2 J	0.97 J	1.7 J	1.7 J	0.89 J	0.78 J
m&p-Xylene (Matrix E)	2.9 J	ND< 4.3	1.4 J	ND< 4.3	1.8 J	ND< 4.3	ND< 4.3	ND< 4.3	1.2 J	ND< 4.3	ND< 4.3
Methyl Butyl Ketone	ND< 8.2	ND< 8.2	ND< 8.2	ND< 8.2	ND< 8.2	ND< 8.2	ND< 8.2	ND< 8.2	1.3 J	ND< 8.2	ND< 8.2
Methyl Ethyl Ketone	3.7 J	2.7 J	2.3 J	2.1 J	2.5 J	2.2 J	3.2 J	3.4 J	52	1.8 J	0.76 J
Methylene chloride (Matrix B)	ND< 6.9	ND< 6.9	ND< 6.9	ND< 6.9	ND< 6.9	ND< 6.9	ND< 6.9	ND< 6.9	ND< 6.9	ND< 6.9	ND< 6.9
Naphthalene (Matrix D)	ND< 2	ND< 2	ND< 2	ND< 2	ND< 2	ND< 2	ND< 2	ND< 2	ND< 2	ND< 2	ND< 2
n-Heptane (Matrix E)	6.2	ND< 2	ND< 2	ND< 2	20	ND< 2	0.96 J	ND< 2	2	ND< 2	ND< 2
n-Hexane (Matrix E)	7	2.8	0.91 J	ND< 1.8	26	ND< 1.8	3.4	ND< 1.8	12	ND< 1.8	ND< 1.8
o-Xylene (Matrix D)	ND< 2.2	ND< 2.2	ND< 2.2	ND< 2.2	ND< 2.2	ND< 2.2	ND< 2.2	ND< 2.2	ND< 2.2	ND< 2.2	ND< 2.2
tert-Butyl alcohol	1.7 J	1.3 J	1.5 J	1.1 J	1.2 J	1.2 J	0.7 J	0.99 J	15	ND< 3	ND< 3
Tetrachloroethene (Matrix B)	1.9 J	ND< 3.4	ND< 3.4	ND< 3.4	ND< 3.4	ND< 3.4	ND< 3.4	ND< 3.4	ND< 3.4	ND< 3.4	ND< 3.4
Tetrahydrofuran	ND< 1.5	1 J	ND< 1.5	ND< 1.5	ND< 1.5	ND< 1.5	58	ND< 1.5	ND< 1.5	ND< 1.5	ND< 1.5
Toluene (Matrix F)	6.5	1.9	3.7	0.7 J	7.1	0.82 J	2.2	ND< 1.9	1.7 J	0.51 J	ND< 1.9
Total Xylenes	2.9	4.3	1.4	4.3	1.8	4.3	4.3	4.3	1.2	4.3	4.3
Trichloroethene (Matrix A)	ND< 0.2	ND< 0.2	ND< 0.2	ND< 0.2	ND< 0.2	ND< 0.2	ND< 0.2	ND< 0.2	7.9	ND< 0.2	ND< 0.2
Trichlorofluoromethane	0.91 J	1.2 J	1.1 J	1.4 J	1 J	1.4 J	1.1 J	1.3 J	1.2 J	1.4 J	1.3 J
Vinyl chloride (Matrix C)	ND< 0.2	ND< 0.2	ND< 0.2	ND< 0.2	ND< 0.2	ND< 0.2	ND< 0.2	ND< 0.2	ND< 0.2	ND< 0.2	ND< 0.2

Notes:

1. Only those parameters detected above the method detection limit, at a minimum of one location, are presented in this table.

Definitions:

ND = Parameter not detected above laboratory detection limit.
"--" = No value available for the parameter. Or parameter not analyzed for.
J = The analyte was positively identified; the associated numerical value is an approximate concentration of the analyte in the sample.
D = Sample results are obtained from a dilution; the surrogate or matrix spike recoveries reported are calculated from diluted samples.
ug/m3 = micrograms per cubic meter

blue =one of 21 compounds regulated by the NYSDOH Guidance for Evaluating Soil Vapor Intrusio in the State of New York (May 2017, February 2024)

TABLE 6
COMPARISON OF SUBSLAB VAPOR, INDOOR AIR, AND OUTDOOR AIR ANALYTICAL RESULTS TO NYSDOH DECISION MATRICES
REMEDIAL INVESTIGATION/ALTERNATIVES ANALYSIS REPORT
691 EXCHAGE STREET (C915403)
BUFFALO, NEW YORK

ROUX

Sample Location	Carbon Tetrachloride		Trichloroethene (TCE)		cis-1,2-Dichloroethene		1,1-Dichloroethene		Tetrachloroethene (PCE)		1,1,1 -Trichloroethane		Methylene Chloride		Vinyl Chloride	
	Lab Reported Concentration (ug/m^3)	Soil Vapor / Indoor Air Matrix A	Lab Reported Concentration (ug/m^3)	Soil Vapor / Indoor Air Matrix A	Lab Reported Concentration (ug/m^3)	Soil Vapor / Indoor Air Matrix A	Lab Reported Concentration (ug/m^3)	Soil Vapor / Indoor Air Matrix A	Lab Reported Concentration (ug/m^3)	Soil Vapor / Indoor Air Matrix B	Lab Reported Concentration (ug/m^3)	Soil Vapor / Indoor Air Matrix B	Lab Reported Concentration (ug/m^3)	Soil Vapor / Indoor Air Matrix B	Lab Reported Concentration (ug/m^3)	Soil Vapor / Indoor Air Matrix C
INDOOR																
SSV-1	ND< 0.22	NFA	ND< 0.2	NFA	ND< 0.2	NFA	ND< 2	NFA	1.9 J	NFA	1.2 J	NFA	ND< 6.9	NFA	ND< 0.2	NFA
IA-1	ND< 0.22		ND< 0.2		ND< 0.2		ND< 2		ND< 3.4		ND< 2.7		ND< 6.9		ND< 0.2	
SSV-2	ND< 0.22		ND< 0.2		ND< 0.2		ND< 2		ND< 3.4		ND< 2.7		ND< 6.9		ND< 0.2	
IA-2	ND< 0.22		ND< 0.2		ND< 0.2		ND< 2		ND< 3.4		ND< 2.7		ND< 6.9		ND< 0.2	
SSV-3	ND< 0.22		ND< 0.2		ND< 0.2		ND< 2		ND< 3.4		ND< 2.7		ND< 6.9		ND< 0.2	
IA-3	ND< 0.22		ND< 0.2		ND< 0.2		ND< 2		ND< 3.4		ND< 2.7		ND< 6.9		ND< 0.2	
SSV-4	ND< 0.22		ND< 0.2		ND< 0.2		ND< 2		ND< 3.4		2.8		ND< 6.9		ND< 0.2	
IA-4	ND< 0.22		ND< 0.2		ND< 0.2		ND< 2		ND< 3.4		ND< 2.7		ND< 6.9		ND< 0.2	
OUTDOOR																
OA-1	ND< 0.22		ND< 0.2		ND< 0.2		ND< 2		ND< 3.4		ND< 2.7		ND< 6.9		ND< 0.2	
OA-2	ND< 0.22		ND< 0.2		ND< 0.2		ND< 2		ND< 3.4		ND< 2.7		ND< 6.9		ND< 0.2	

Notes:
1. Concentration in micrograms per cubic meter (ug/m^3)

Definitions:
ND = Not Detected
J = The analyte was positively identified; the associated numerical value is an approximate concentration of the analyte in the sample.
D = Sample results are obtained from a dilution; the surrogate or matrix spike recoveries reported are calculated from diluted samples.
NFA = No further action.
Monitor = Monitor soil vapor / indoor air
Mitigate = Mitigate source of identified parameter.

Analytes Assigned:
Trichloroethene (TCE), *cis*-1,2-Dichloroethene (*c*-1,2-DCE), 1,1-Dichloroethene (1,1-DCE), Carbon Tetrachloride

SUB-SLAB VAPOR CONCENTRATION of COMPOUND (mcg/m^3)	INDOOR AIR CONCENTRATION of COMPOUND (mcg/m^3)		
	< 0.2	0.2 to < 1	1 and above
< 6	1. No further action	2. No Further Action	3. IDENTIFY SOURCE(S) and RESAMPLE or MITIGATE
6 to < 60	4. No further action	5. MONITOR	6. MITIGATE
60 and above	7. MITIGATE	8. MITIGATE	9. MITIGATE

mcg/m^3 = micrograms per cubic meter

Analytes Assigned:
Tetrachloroethene (PCE), 1,1,1-Trichloroethane (1,1,1-TCA), Methylene Chloride

SUB-SLAB VAPOR CONCENTRATION of COMPOUND (mcg/m^3)	INDOOR AIR CONCENTRATION of COMPOUND (mcg/m^3)		
	< 3	3 to < 10	10 and above
< 100	1. No further action	2. No Further Action	3. IDENTIFY SOURCE(S) and RESAMPLE or MITIGATE
100 to < 1,000	4. No further action	5. MONITOR	6. MITIGATE
1,000 and above	7. MITIGATE	8. MITIGATE	9. MITIGATE

mcg/m^3 = micrograms per cubic meter

Analytes Assigned:
Vinyl Chloride

SUB-SLAB VAPOR CONCENTRATION of COMPOUND (mcg/m^3)	INDOOR AIR CONCENTRATION of COMPOUND (mcg/m^3)	
	< 0.2	0.2 and above
< 6	1. No further action	3. IDENTIFY SOURCE(S) and RESAMPLE or MITIGATE
6 to < 60	4. MONITOR	6. MITIGATE
60 and above	7. MITIGATE	9. MITIGATE

mcg/m^3 = micrograms per cubic meter

TABLE 6
COMPARISON OF SUBSLAB VAPOR, INDOOR AIR, AND OUTDOOR AIR ANALYTICAL RESULTS TO NYSDOH DECISION MATRICES
REMEDIAL INVESTIGATION/ALTERNATIVES ANALYSIS REPORT
691 EXCHAGE STREET (C915403)
BUFFALO, NEW YORK

ROUX

Sample Location	1,2,4-Trimethylbenzene		1,3,5-Trimethylbenzene		2,2-Trimethylpentane		Benzene		Cyclohexane		Ethylbenzene		Naphthalene		o-Xylene		Heptane		Hexane		m & p-Xylene		Toluene	
	Lab Reported Concentration (ug/m^3)	Soil Vapor / Indoor Air Matrix D	Lab Reported Concentration (ug/m^3)	Soil Vapor / Indoor Air Matrix D	Lab Reported Concentration (ug/m^3)	Soil Vapor / Indoor Air Matrix D	Lab Reported Concentration (ug/m^3)	Soil Vapor / Indoor Air Matrix D	Lab Reported Concentration (ug/m^3)	Soil Vapor / Indoor Air Matrix D	Lab Reported Concentration (ug/m^3)	Soil Vapor / Indoor Air Matrix D	Lab Reported Concentration (ug/m^3)	Soil Vapor / Indoor Air Matrix D	Lab Reported Concentration (ug/m^3)	Soil Vapor / Indoor Air Matrix D	Lab Reported Concentration (ug/m^3)	Soil Vapor / Indoor Air Matrix E	Lab Reported Concentration (ug/m^3)	Soil Vapor / Indoor Air Matrix E	Lab Reported Concentration (ug/m^3)	Soil Vapor / Indoor Air Matrix E	Lab Reported Concentration (ug/m^3)	Soil Vapor / Indoor Air Matrix F
INDOOR																								
SSV-1	ND< 2.5	NFA	ND< 2.5	NFA	ND< 4.7	NFA	1 J	NFA	13	NFA	0.86 J	NFA	ND< 2	NFA	ND< 2.2	NFA	6.2	NFA	7 J	NFA	2.9 J	NFA	6.5	NFA
IA-1	ND< 2.5		ND< 2.5		2.1		0.91 J		2		ND< 2.2		ND< 2		ND< 2.2		ND< 2		2.8 J		ND< 4.3		1.9	
SSV-2	ND< 2.5		ND< 2.5		ND< 4.7		0.38 J		2.8		ND< 2.2		ND< 2		ND< 2.2		ND< 2		0.91 J		1.4 J		3.7	
IA-2	ND< 2.5		ND< 2.5		ND< 4.7		ND< 1.6		0.86		ND< 2.2		ND< 2		ND< 2.2		ND< 2		ND< 1.8		ND< 4.3		0.7	
SSV-3	ND< 2.5		ND< 2.5		ND< 4.7		2.1		42		ND< 2.2		ND< 2		ND< 2.2		20		26		1.8 J		7.1	
IA-3	ND< 2.5		ND< 2.5		ND< 4.7		ND< 1.6		1.2		ND< 2.2		ND< 2		ND< 2.2		ND< 2		ND< 1.8		ND< 4.3		0.82 J	
SSV-4	ND< 2.5		ND< 2.5		ND< 4.7		1.2 J		5.4		ND< 2.2		ND< 2		ND< 2.2		0.96 J		3.4		ND< 4.3		2.2	
IA-4	ND< 2.5		ND< 2.5		ND< 4.7		ND< 1.6		1.3		ND< 2.2		ND< 2		ND< 2.2		ND< 2		ND< 1.8		ND< 4.3		ND< 1.9	
OUTDOOR																								
OA-1	ND< 2.5		ND< 2.5		ND< 4.7		0.37 J		ND< 1.7		ND< 2.2		ND< 2		ND< 2.2		0.34 J		ND< 1.8		ND< 4.3		0.51 J	
OA-2	ND< 2.5		ND< 2.5		ND< 4.7		ND< 1.6		ND< 1.7		ND< 2.2		ND< 2		ND< 2.2		ND< 2		ND< 1.8		ND< 4.3		ND< 1.9	

Notes:
1. Concentration in micrograms per cubic meter (ug/m^3)

Definitions:
ND = Not Detected
J = The analyte was positively identified; the associated numerical value is an approximate concentration of the analyte in the sample.
D = Sample results are obtained from a dilution; the surrogate or matrix spike recoveries reported are calculated from diluted samples.
NFA = No further action.
Monitor = Monitor soil vapor / indoor air
Mitigate = Mitigate source of identified parameter.

Analytes Assigned:
Benzene, ethylbenzene, naphthalene, cyclohexane, isooctane (2,2,4-trimethylpentane), 1,2,4-trimethylbenzene, 1,3,5-trimethylbenzene, *o*-xylene

SUB-SLAB VAPOR CONCENTRATION of COMPOUND (mcg/m^3)	INDOOR AIR CONCENTRATION of COMPOUND (mcg/m^3)		
	< 2	2 to < 10	10 and above
< 60	1. No further action	2. No Further Action	3. IDENTIFY SOURCE(S) or RESAMPLE or MITIGATE
60 to < 600	4. No further action	5. MONITOR	6. MITIGATE
600 and above	7. MITIGATE	8. MITIGATE	9. MITIGATE

mcg/m^3 = micrograms per cubic meter

Analytes Assigned:
m-xylene, *p*-xylene, heptane, hexane

SUB-SLAB VAPOR CONCENTRATION of COMPOUND (mcg/m^3)	INDOOR AIR CONCENTRATION of COMPOUND (mcg/m^3)		
	< 6	6 to < 20	20 and above
< 200	1. No further action	2. No Further Action	3. IDENTIFY SOURCE(S) or RESAMPLE or MITIGATE
200 to < 2,000	4. No further action	5. MONITOR	6. MITIGATE
2,000 and above	7. MITIGATE	8. MITIGATE	9. MITIGATE

mcg/m^3 = micrograms per cubic meter

Analytes Assigned:
Toluene

SUB-SLAB VAPOR CONCENTRATION of COMPOUND (mcg/m^3)	INDOOR AIR CONCENTRATION of COMPOUND (mcg/m^3)		
	< 10	10 to < 50	50 and above
< 300	1. No further action	2. No Further Action	3. IDENTIFY SOURCE(S) or RESAMPLE or MITIGATE
300 to < 3,000	4. No further action	5. MONITOR	6. MITIGATE
3,000 and above	7. MITIGATE	8. MITIGATE	9. MITIGATE

mcg/m^3 = micrograms per cubic meter

TABLE 7
STANDARDS, CRITERIA, AND GUIDANCE (SCGs)
REMEDIAL INVESTIGATION / ALTERNATIVES ANALYSIS REPORT
619 EXCHANGE STREET SITE (C915403)
BUFFALO, NEW YORK

Citation	Title	Regulatory Agency
General		
29CFR 1910.120	Hazardous Waste Operations and Emergency Response	US Dept. of Labor, OSHA
29CFR 1910.1000	OSHA General Industry Air Contaminants Standard	US Dept. of Labor, OSHA
29CFR 1926	Safety and Health Regulations for Construction	US Dept. of Labor, OSHA
Not Applicable	Analytical Services Protocol	NYSDEC
6NYCRR Part 608	Use and Protection of Waters	NYSDEC
6NYCRR Part 621	Uniform Procedures Regulations	NYSDEC
6NYCRR Parts 750-757	State Pollutant Discharge Elimination System	NYSDEC
Not Applicable	New York State Stormwater Management Design Manual	NYSDEC
Section 404	Clean Water Act	USACE
Soil/Fill		
6NYCRR Part 375	Environmental Remediation Programs	NYSDEC
DEC Policy CP-51	Soil Cleanup Guidance	NYSDEC
Groundwater		
6NYCRR Part 700-705	Surface Water and Ground Water Classification Standards	NYSDEC
TOGS 1.1.1	Ambient Water Quality Standards and Guidance Values	NYSDEC
TOGS 2.1.3	Primary and Principal Aquifer	NYSDEC
Air		
DER-10 Appendix 1B	Fugitive Dust Suppression and Particulate Monitoring Program at Inactive Hazardous Waste Sites	NYSDEC
NYSDOH, October 2006	Final - Guidance for Evaluating Soil Vapor Intrusion in the State of NY	NYSDOH
Solid Waste		
6NYCRR 360	Solid Waste Management Facilities	NYSDEC
6NYCRR 364	Waste Transporters	NYSDEC

TABLE 8
ARSENIC EVALUATION (95% UPPER CONFIDENCE LIMIT ON THE MEAN)
REMEDIAL INVESTIGATION/ALTERNATIVES ANALYSIS REPORT
619 EXCHANGE STREET (C915403)
BUFFALO, NEW YORK

Sample Location	Arsenic (mg/kg)
SB-1 0-1 FT	6.3
SB-2 0-1 FT	8.53
SB-3 0-1 FT	11.5
SB-4 0-1 FT	5.61
SB-5 0-1 FT	**18**
SB-6 0-1 FT	**13.3**
SB-7 0-1 FT	**15.3**
SB-8 0-1 FT	11.6
SB-9 0-1 FT	**16.8**
SB-10 0-1 FT	**14.8**
HC-1 0-1 FT	**22.1**
HC-2 0-1 FT	**14.8**
HC-3 0-1 FT	**22.1**
HC-4 0.5-1.5 FT	**13.8**
HC-5 0.33-0.66 FT	12.7
HC-6 2-6 IN	12.2
HC-7 0.25-0.75 FT	4.7
HC-8 1-3 IN	5.7
HC-9 5-8 IN	6.4
HC-10 1-3 IN	9.5
HC-11 0.25-0.5 FT	6.3
MW-1 0.25-3 FT	12.2
MW-1 18-20 FT	4.1
MW-2 0.75-2 FT	**19.5**
MW-2 16-20 FT	2.9
MW-3 0.5-2.5 FT	**20.8**
MW-4 0.25-1 FT	6.3
MW-4 12-14 FT	3.6
MW-5 0.33-0.75 FT	10.8
MW-6 0.5-0.75 FT	3.5
MW-6 8-10 FT	3.2
SB-11 0.25-2 FT	5.4
Average Concentration	10.76
Standard Deviation	5.88
T-Value [1]	2.04
95% Confidence Level	2.12
UCL	**12.88**

Notes:
1. Does not assume normal distribution.

Definitions:
UCL = 95% Upper Confidence Limit on the Mean

Bold	= Result exceeds Unrestricted SCOs.
Bold	= Result exceeds Restricted Residential SCOs.

TABLE 9
PRELIMINARY COST ESTIMATE FOR TRACK 1 UNRESTRICTED USE
REMEDIAL INVESTIGATION/ALTERNATIVES ANALYSIS REPORT
619 EXCHANGE STREET (C915403)
BUFFALO, NEW YORK

Item	Units	Unit	Unit Cost	Total Cost
Impacted Soil/Fill Removal				
Demolition of Existing Building	EST	1	$ 350,000	$ 350,000
AST Removal	EST	1	$ 50,000	$ 50,000
Concrete Foundations/Surface Removals and Recycling, Utility Disconnects	EST	1	$ 250,000	$ 250,000
Excavate Impacted Fill/Transport to LF	Tons	2,800	$ 25	$ 70,000
Dispose of Impacted Soils	Tons	2,800	$ 30	$ 84,000
Post-Excavation/Analytical Testing	EA	100	$ 350	$ 35,000
Data Validation	EA	100	$ 50	$ 5,000
Equipment & Expenses	EST	1	$ 150,000	$ 150,000
Groundwater Management	EST	1	$ 150,000	$ 150,000
Total Estimated Cost				**$ 1,144,000**
Backfill and Cover System				
Structural Backfill Material (fill removal areas and bring Section 1 basement to grade)	Tons	14,080	$ 45	$ 633,600
Place and Compact Backfill	Tons	14,080	$ 25	$ 352,000
Equipment & Expenses	EST	1	$ 300,000	$ 300,000
Geotechnical Testing, Import Sampling and Lab Analysis	EST	1	$ 75,000	$ 75,000
Surface Restoration, Storm Water Controls	EST	1	$ 250,000	$ 250,000
Total Estimated Cost				**$ 1,611,000**
Reporting				
Data Analysis & EQuIS	EST	1	$ 10,000	$ 10,000
Final Engineering Report	EST	1	$ 25,000	$ 25,000
Total Estimated Cost				**$ 35,000**
			Subtotal	**$ 2,790,000**
Contractor Mobilization/Demobilization (5%)				$ 139,500
Health and Safety (2%)				$ 55,800
Engineering, Oversight and Reporting (25%) + Contingency (10%)				$ 976,500
			Total Estimated Costs	**$ 3,962,000**

NOTES:
1) Assumed cleanup track is Unrestricted Track 1.
2) A remedy has not been approved by NYSDEC; this assessment assumes this Track 1 Unrestricted Cleanup to be impractical.
3) The final remedy will be established in NYSDEC-issued Decision Document, upon NYSDEC review and approval of the Remedial Investigation/Alternatives Analysis Report and 45-day public comment period.

TABLE 10
PRELIMINARY COST ESTIMATE FOR TRACK 4 RESTRICTED RESIDENTIAL USE
REMEDIAL INVESTIGATION/ALTERNATIVES ANALYSIS REPORT
619 EXCHANGE STREET (C915403)
BUFFALO, NEW YORK

Item	Units	Unit	Unit Cost	Total Cost
AST Removal				
Removal of tank, contents, access	EST	1	$ 50,000	$ 50,000
Total Estimated Cost				**$ 50,000**
Impacted Soil/Fill Removal				
Equipment/Earthwork & Expenses	EST	1	$ 65,000	$ 65,000
Concrete Cutting	EST	1	$ 5,000	$ 5,000
Excavate Soils (assumed 5 hot spots)	EST	1	$ 25,000	$ 25,000
Transportation of Soils	EST	1	$ 10,500	$ 10,500
Disposal of Soils	Tons	250	$ 30	$ 7,500
Post-Excavation/Analytical Testing	EA	40	$ 300	$ 12,000
Data Validation	EA	40	$ 46	$ 1,840
Groundwater Management	EST	1	$ 25,000	$ 25,000
Total Estimated Cost				**$ 152,000**
Backfill and Cover System				
Backfill Material	Tons	275	$ 20.00	$ 5,500
Import, Place and Compact Backfill	EST	1	$ 50,000	$ 50,000
Asphalt Parking Lot	Sq Ft	5,700	$ 5	$ 28,500
Concrete Replacement (interior AOCs)	EST	1	$ 5,000	$ 5,000
Total Estimated Cost				**$ 89,000**
Reporting				
Site Management Plan	EST	1	$ 15,000	$ 15,000
Final Engineering Report	EST	1	$ 25,000	$ 25,000
Total Estimated Cost				**$ 40,000**
			Subtotal	**$ 331,000**
Contractor Mobilization/Demobilization (5%)				$ 16,550
Health and Safety (2%)				$ 6,620
Engineering, Oversight and Reporting (25%) + Contingency (10%)				$ 115,850
			Total Estimated Costs	**$ 471,000**

NOTES:
1) Assumed cleanup track is Restricted Residential Track 4 with a soil cover system.
2) A remedy has not been approved by NYSDEC; this assessment assumes only the areas identified require remediation.
3) The final remedy will be established in NYSDEC-issued Decision Document, upon NYSDEC review and approval of the Remedial Investigation/Alternatives Analysis Report and 45-day public comment period.

ROUX

TABLE 11

COMPARISON OF REMEDIAL ALTERNATIVES
REMEDIAL INVESTIGATION/ALTERNATIVES ANALYSIS REPORT
619 EXCHANGE STREET (C915403)
BUFFALO, NEW YORK

Remedial Alternative	NYSDEC DER-10 Evaluation Criteria								
	1. Overall	2. SCGs	3. Eff & Perm	4. Reduction	5. Imp & Eff	6. Implement	7. Cost Eff	8. Community	9. Land Use
Alternative 1 - No Further Action						✓	$0	TBE	
Alternative 2 - Track 1 Unrestricted Cleanup	✓	✓	✓	✓	✓		$3.96M	TBE	✓
Alternative 3 - Track 4 Restricted Residential Cleanup	✓	✓	✓	✓	✓	✓	$471K	TBE	✓

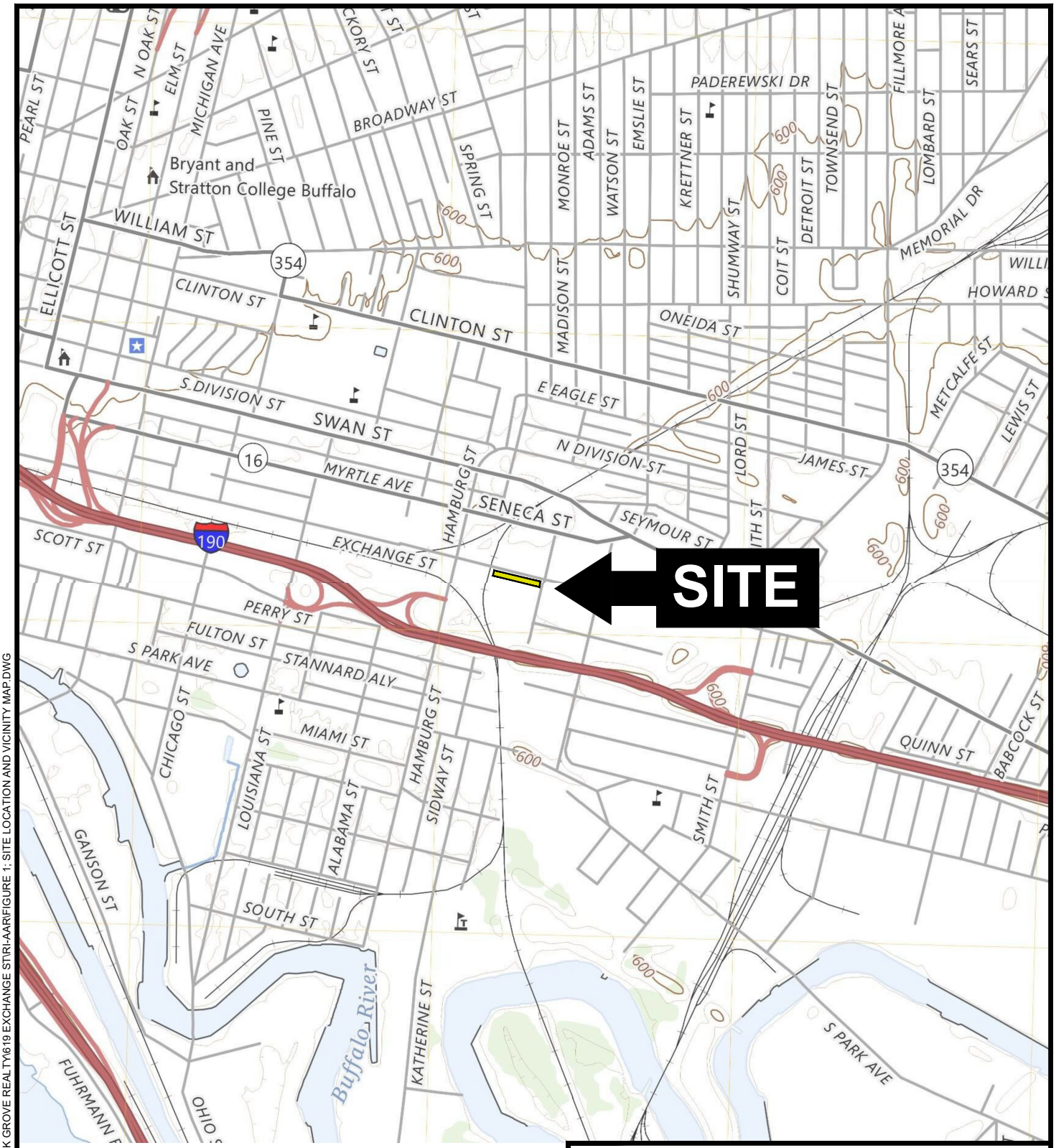
Notes:

1. Overall Protectiveness of Public Health and the Environment
2. Compliance with Standards, Criteria, and Guidance (SCGs)
3. Long-Term Effectiveness and Permanence
4. Reduction of Toxicity, Mobility, or Volume of Contamination through Treatment
5. Short-Term Impacts and Effectiveness
6. Implementability (Technical and Administrative)
7. Cost Effectiveness
8. Community Acceptance
9. Land Use

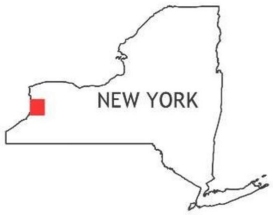
✓ = Alternative satisfies criterion
TBE = To be evaluated following public comment period

FIGURES

1. Site Location and Vicinity Map
2. Site Plan (Aerial)
3. Historic and Remedial Investigation Locations
4. Historic and Remedial Investigation Locations and Soil/Fill Exceedances
5. Groundwater Isopotential Map
6. Alternative 2: Track 1 Unrestricted Cleanup
7. Alternative 3: Track 4 Restricted Residential Cleanup



QUADRANGLE LOCATION



N

0' 1,500'

SOURCE:
USGS, 2023, BUFFALO, NY
7.5 MINUTE TOPOGRAPHIC QUADRANGLE

Title:

SITE LOCATION AND VICINITY MAP

REMEDIAL INVESTIGATION ALTERNATIVE ANALYSIS REPORT

619 EXCHANGE STREET SITE
BUFFALO, NEW YORK

Prepared for:

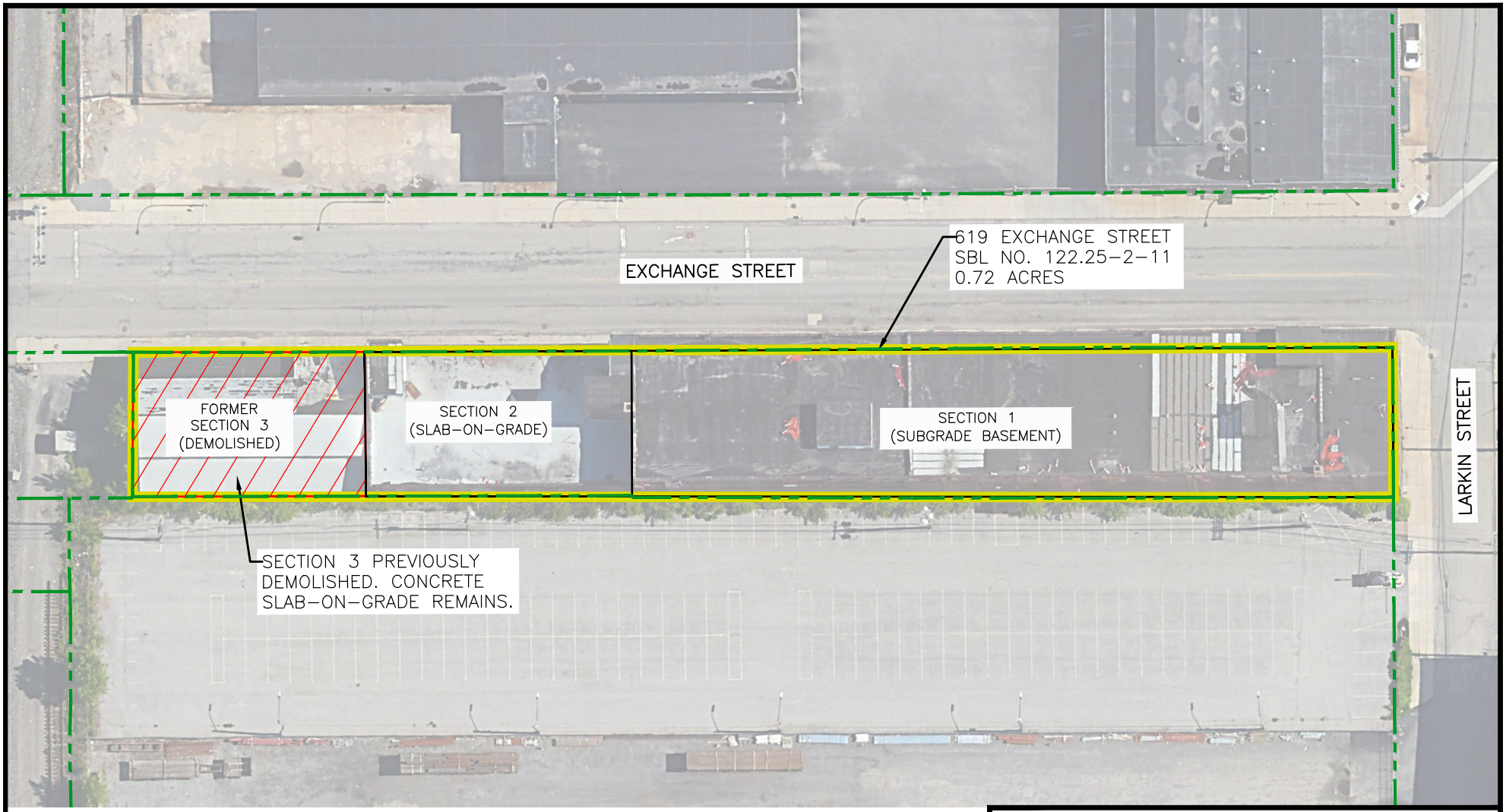
PG LARKINVILLE, LLC

ROUX

Compiled by: CNK	Date: JUNE 2025	FIGURE
Prepared by: CNK	Scale: AS SHOWN	1
Project Mgr: BWM	Project: 4374.0004B000	
File: FIGURE 1; SITE LOCATION AND VICINITY MAP.DWG		

\\SRVBFNYAFS1\BUFFALOSHARED\CAD\0-ROUX\PARK GROVE REALTY\619 EXCHANGE ST\RI-AAR\FIGURE 1; SITE LOCATION AND VICINITY MAP.DWG

\\SRVBFNYAFS1\BUFFALOSHARED\CAD\0-ROUX\PARK GROVE REALTY\619 EXCHANGE ST\RI-AAR\FIGURE 2; SITE PLAN.DWG



LEGEND

- BCP SITE BOUNDARY
- PARCEL BOUNDARY
- BUILDING OUTLINE
- DEMOLISHED BUILDING SECTION

NOTE:
1. IMAGE SOURCE GOOGLE EARTH 2022.
2. NO PUBLIC SOURCE AERIALS CURRENTLY SHOW BUILDING DEMOLITION.

N

60' 0 60'

Title:

SITE PLAN (AERIAL)

REMEDIAL INVESTIGATION
ALTERNATIVE ANALYSIS REPORT

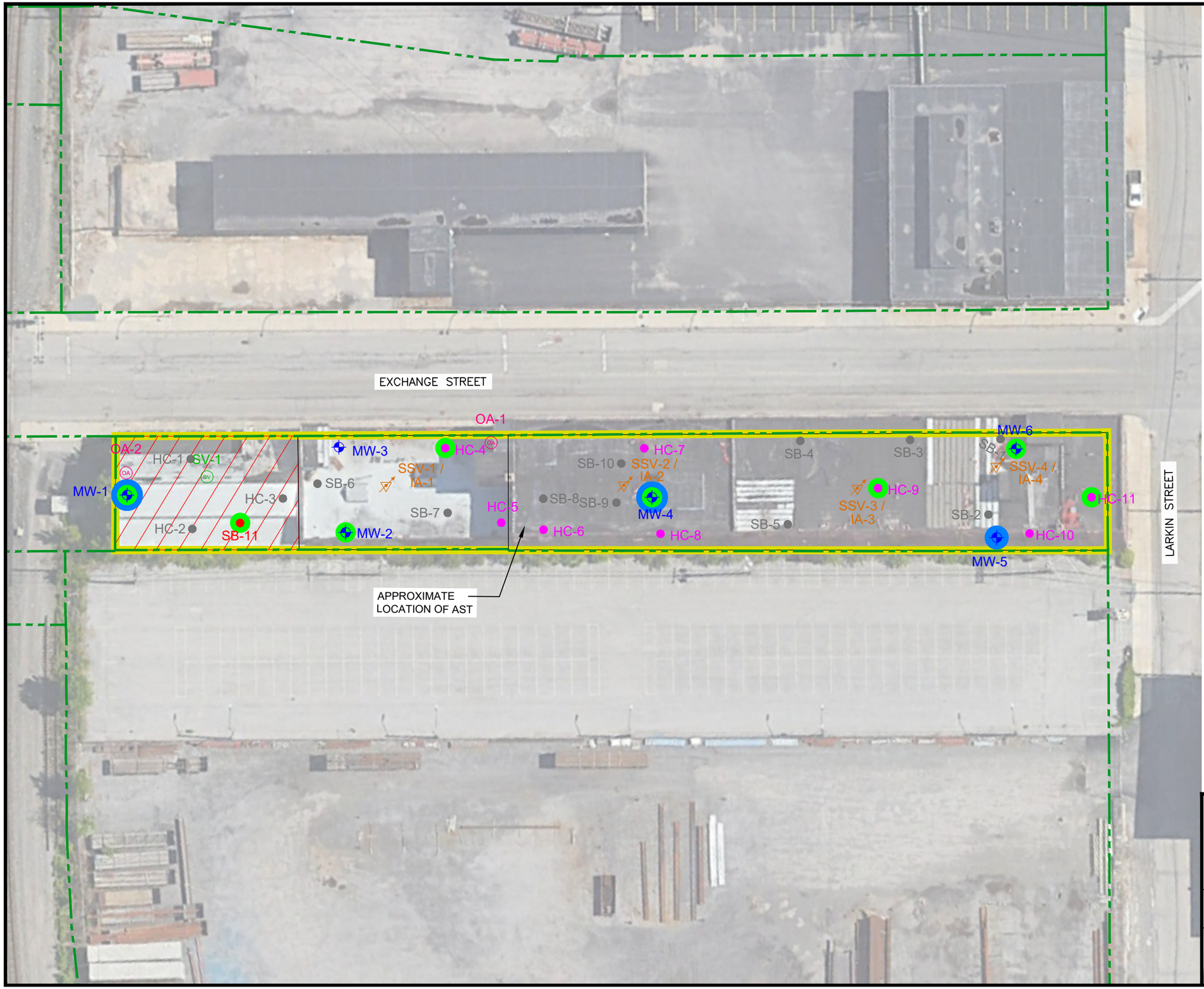
619 EXCHANGE STREET SITE
BUFFALO, NEW YORK

Prepared for:

PG LARKINVILLE, LLC

ROUX

Compiled by: CNK	Date: JUNE 2025	FIGURE
Prepared by: CNK	Scale: AS SHOWN	2
Project Mgr: BWM	Project: 4374.0004B000	
File: FIGURE 2; SITE PLAN.DWG		



F:\CAD\0-ROUX\PARK GROVE REALTY\619 EXCHANGE ST\RI-AAR\FIGURE 3; RI INVESTIGATION LOCATIONS AND AREAS OF CONCERN.DWG

LEGEND

- BCP SITE BOUNDARY
- PARCEL BOUNDARY
- BUILDING OUTLINE
- DEMOLISHED BUILDING SECTION (SLAB–ON–GRADE REMAINS)
- HC-1 PHASE II HAND CORE/AUGER
- SB-1 PHASE II SOIL BORING
- SB-11 RI SOIL BORING
- HC-4 RI HAND CORE/AUGER
- MW-2 RI MONITORING WELL
- SSV-1 / IA-1 RI SUB–SLAB VAPOR / INDOOR AIR
- SV-1 RI SOIL VAPOR
- OA-1 RI SUB–SLAB VAPOR / OUTDOOR AIR
- FULL SUITE SOIL SAMPLE LOCATION (8)
- FULL SUITE WATER SAMPLE

NOTE:
1. IMAGE SOURCE GOOGLE EARTH 2022.

N

50’ 0 50’

Title:

HISTORIC AND REMEDIAL INVESTIGATION LOCATIONS

REMEDIAL INVESTIGATION ALTERNATIVE ANALYSIS REPORT

619 EXCHANGE STREET SITE
BUFFALO, NEW YORK

Prepared for:

PG LARKINVILLE, LLC

ROUX

Compiled by: CMC	Date: JUNE 2025
Prepared by: CMC	Scale: AS SHOWN
Project Mgr: BWM	Project: 4374.0004B000
File: FIGURE 3; RI INVESTIGATION LOCATIONS AND AREAS OF CONCERN.DWG	

FIGURE 3

HC-1 (0-1 FT)	5/23/2023
PARAMETER	MG/KG
ARSENIC	22.1
LEAD	98.3
MERCURY	0.214

SB-6 (0-1 FT)	5/23/2023
PARAMETER	MG/KG
ARSENIC	13.3

MW-3 (0.5-2.5 FT)	4/27/2025
PARAMETER	MG/KG
ARSENIC	20.8
COPPER	79.5
LEAD	281
MERCURY	1.6

SB-10 (0-1 FT)	8/22/2023
PARAMETER	MG/KG
ARSENIC	14.8
LEAD	286
MERCURY	2.53
SELENIUM	4.03

SB-1 (0-1 FT)	5/23/2023
PARAMETER	MG/KG
BENZO(A)ANTHRACENE	2.7
BENZO(A)PYRENE	2.9
BENZO(B)FLUORANTHENE	2.9
BENZO(K)FLUORANTHENE	0.86
CHRYSENE	2.3
DIBENZO(A,H)ANTHRACENE	0.48
INDENO(1,2,3-CD)PYRENE	2.1

MW-6 (0.5-0.75 FT)	4/27/2025
PARAMETER	MG/KG
BENZO(A)ANTHRACENE	1.4
BENZO(A)PYRENE	3.2
BENZO(B)FLUORANTHENE	2.8
BENZO(K)FLUORANTHENE	1.4
CHRYSENE	1.4
DIBENZO(A,H)ANTHRACENE	0.96
INDENO(1,2,3-CD)PYRENE	2.8
4,4'-DDT	0.033

MW-1 (0.25-3 FT)	4/29/2025
PARAMETER	MG/KG
BENZO(B)FLUORANTHENE	1.1
LEAD	136
MERCURY	0.71
4,4'-DDD	0.027
4,4'-DDE	0.0085
4,4'-DDT	0.034

HC-4 (0.5-1.5 FT)	4/29/2025
PARAMETER	MG/KG
ACETONE	0.053
ARSENIC	13.8
COPPER	87.2
LEAD	516
MERCURY	0.81
4,4'-DDD	0.015
4,4'-DDT	0.034

HC-7 (0.25-0.75 FT)	4/29/2025
PARAMETER	MG/KG
BARIUM	624

HC-11 (0.25-0.5 FT)	4/30/2025
PARAMETER	MG/KG
BARIUM	6290
COPPER	168
LEAD	76.6
ZINC	3090
TOTAL PCBs	0.16
4,4'-DDD	0.0034
4,4'-DDT	0.0065

MW-1 (18-20 FT)	4/30/2025
PARAMETER	MG/KG
4,4'-DDT	0.034

EXCHANGE STREET

LARKIN STREET

MW-1 MW-2 MW-3 MW-4 MW-5 MW-6

HC-1 HC-2 HC-3 HC-4 HC-5 HC-6 HC-7 HC-8 HC-9 HC-10 HC-11

SB-1 SB-2 SB-3 SB-4 SB-5 SB-6 SB-7 SB-8 SB-9 SB-10 SB-11

SV-1

SSV-1 / IA-1

SSV-2 / IA-2

SSV-3 / IA-3

SSV-4 / IA-4

APPROXIMATE LOCATION OF AST

SB-11 (0.25-2 FT)	5/1/2025
PARAMETER	MG/KG
COPPER	167
LEAD	145
MERCURY	0.46
SELENIUM	4.6
ZINC	171
4,4'-DDD	0.0046

MW-2 (0.75-2 FT)	4/29/2025
PARAMETER	MG/KG
ACETONE	0.24
ARSENIC	19.5
LEAD	164
MERCURY	0.58
4,4'-DDD	0.018
4,4'-DDT	0.033

SB-8 (0-1 FT)	8/22/2023
PARAMETER	MG/KG
BARIUM	1850
LEAD	69

HC-6 (2-6 IN)	4/29/2025
PARAMETER	MG/KG
LEAD	186
ZINC	156
4,4'-DDD	0.0053
4,4'-DDT	0.019

SB-9 (0-1 FT)	8/22/2023
PARAMETER	MG/KG
BENZO(A)ANTHRACENE	5
BENZO(A)PYRENE	3.9
BENZO(B)FLUORANTHENE	4.3
BENZO(K)FLUORANTHENE	2.2
CHRYSENE	4.4
DIBENZO(A,H)ANTHRACENE	0.62
INDENO(1,2,3-CD)PYRENE	1.7
ARSENIC	16.8
LEAD	525
MERCURY	12.2

HC-8 (1-3 IN)	4/30/2025
PARAMETER	MG/KG
ZINC	133

MW-4 (0.25-1 FT)	4/27/2025
PARAMETER	MG/KG
COPPER	59.4
4,4'-DDD	0.01
4,4'-DDT	0.031

SB-5 (0-1 FT)	5/23/2023
PARAMETER	MG/KG
ARSENIC	18
LEAD	237
MERCURY	0.453
SELENIUM	4.02

MW-5 (0.33-0.75 FT)	4/27/2025
PARAMETER	MG/KG
BENZO(A)PYRENE	1.5
DIBENZO(A,H)ANTHRACENE	0.35
INDENO(1,2,3-CD)PYRENE	1.2
MERCURY	1.9

SB-7 (0-1 FT)	5/23/2023
PARAMETER	MG/KG
ARSENIC	15.3

HC-5 (0.33-0.66 FT)	4/29/2025
PARAMETER	MG/KG
LEAD	73.6

LEGEND

- BCP SITE BOUNDARY
- PARCEL BOUNDARY
- BUILDING OUTLINE
- DEMOLISHED BUILDING SECTION (SLAB-ON-GRADE REMAINS)
- HC-1 PHASE II HAND CORE/AUGER
- SB-1 PHASE II SOIL BORING
- SB-11 RI SOIL BORING
- HC-4 RI HAND CORE/AUGER
- MW-2 RI MONITORING WELL
- SSV-1 / IA-1 RI SUB-SLAB VAPOR / INDOOR AIR
- SV-1 RI SOIL VAPOR
- UNRESTRICTED USE SCO EXCEEDED
- RESTRICTED RESIDENTIAL USE SCO EXCEEDED
- SSAL EXCEEDED
- FULL SUITE SOIL SAMPLE LOCATION (8)
- FULL SUITE WATER SAMPLE

NOTE:
1. IMAGE SOURCE GOOGLE EARTH 2022.

N

60' 0 60'

Title:

HISTORIC AND REMEDIAL INVESTIGATION LOCATIONS AND SOIL/FILL EXCEEDANCES

REMEDIAL INVESTIGATION ALTERNATIVE ANALYSIS REPORT

619 EXCHANGE STREET SITE
BUFFALO, NEW YORK

Prepared for:

PG LARKINVILLE, LLC

ROUX

Compiled by: CMC	Date: JUNE 2025
Prepared by: CMC	Scale: AS SHOWN
Project Mgr: BWM	Project: 4374.0004B000
File: FIGURE 4; RI INVESTIGATION LOCATIONS AND SOIL-FILL EXCEEDANCES.DWG	

FIGURE 4

F:\CAD\0-ROUX\PARK GROVE REALTY\619 EXCHANGE ST\RI-AAR\FIGURE 4; RI INVESTIGATION LOCATIONS AND SOIL-FILL EXCEEDANCES.DWG



LEGEND

- BCP SITE BOUNDARY
- PARCEL BOUNDARY
- BUILDING OUTLINE
- MW-2 — RI MONITORING WELL AND GROUNDWATER ELEVATION (FT)
- GROUNDWATER CONTOUR LINE
- 100 — GROUNDWATER CONTOUR LABEL
- GROUNDWATER FLOW ARROW

NOTE:
1. IMAGE SOURCE GOOGLE EARTH 2022.
2. ELEVATIONS ARE FEET RELATIVE TO A NAIL SET IN A TELEPHONE POLE NEAR THE SOUTHWEST CORNER OF THE BUILDING (ASSUMED DATUM 100 FEET), COLLECTED JUNE 16, 2025.
3. DEPTH TO WATER BASED ON STATIC WATER LEVEL MEASUREMENTS COLLECTED MAY 8, 2025.
4. DASHED ISOPOTENTIAL LINE INDICATES EXTRAPOLATED DATA.

N

50’ 0 50’

Title:

GROUNDWATER ISOPOTENTIAL MAP

REMEDIAL INVESTIGATION ALTERNATIVE ANALYSIS REPORT

619 EXCHANGE STREET SITE (C915403)
BUFFALO, NEW YORK

Prepared for:

PG LARKINVILLE, LLC

ROUX

Compiled by: CNK	Date: JUNE 2025	FIGURE
Prepared by: CNK	Scale: AS SHOWN	5
Project Mgr: BWM	Project: 4374.0004B000	
File: FIGURE 5; GROUNDWATER ISOPOTENTIAL MAP.DWG		

F:\CAD\0-ROUX\PARK GROVE REALTY\619 EXCHANGE ST\RI-AAR\FIGURE 5; GROUNDWATER ISOPOTENTIAL MAP.DWG

SECTION 3
AREA: 5,700 SF
DEPTH: 3 FT
VOLUME: 633 CY (950 TONS)

SECTION 2
AREA: 6,600 SF
DEPTH: 2 FT
VOLUME: 489 CY (735 TONS)

SECTION 1 REMAINING AREA
AREA: 18,900 SF
DEPTH: 1 FT
VOLUME: 700 CY (1,050 TONS)

EXCHANGE STREET

LARKIN STREET

APPROXIMATE LOCATION OF AST

SECTION 1 APPROXIMATE LOCATION OF AST AREA (ACTUAL AREA TBD)
EST. AREA: 15 X 15 FT
DEPTH: 5 FT
VOLUME: 42 CY (63 TONS)

LEGEND

- BCP SITE BOUNDARY
- PARCEL BOUNDARY
- BUILDING OUTLINE
- HC-1 PHASE II HAND CORE/AUGER
- SB-1 PHASE II SOIL BORING
- SB-11 RI SOIL BORING
- HC-4 RI HAND CORE/AUGER
- MW-2 RI MONITORING WELL
- SECTION 1 EXCAVATION AREAS
- SECTION 2 EXCAVATION AREA
- SECTION 3 EXCAVATION AREA
- 1' SECTION 1 BOTTOM OF FILL DEPTH (FT)
- 1' SECTION 2 BOTTOM OF FILL DEPTH (FT)
- 1' SECTION 3 BOTTOM OF FILL DEPTH (FT)

NOTE:
1. IMAGE SOURCE GOOGLE EARTH 2022.

APPROXIMATE EXCAVATION VOLUME: 2,800 TONS

N

50' 0 50'

Title:

ALTERNATIVE 2: TRACK 1 UNRESTRICTED CLEANUP

REMEDIAL INVESTIGATION ALTERNATIVE ANALYSIS REPORT

619 EXCHANGE STREET SITE
BUFFALO, NEW YORK

Prepared for:

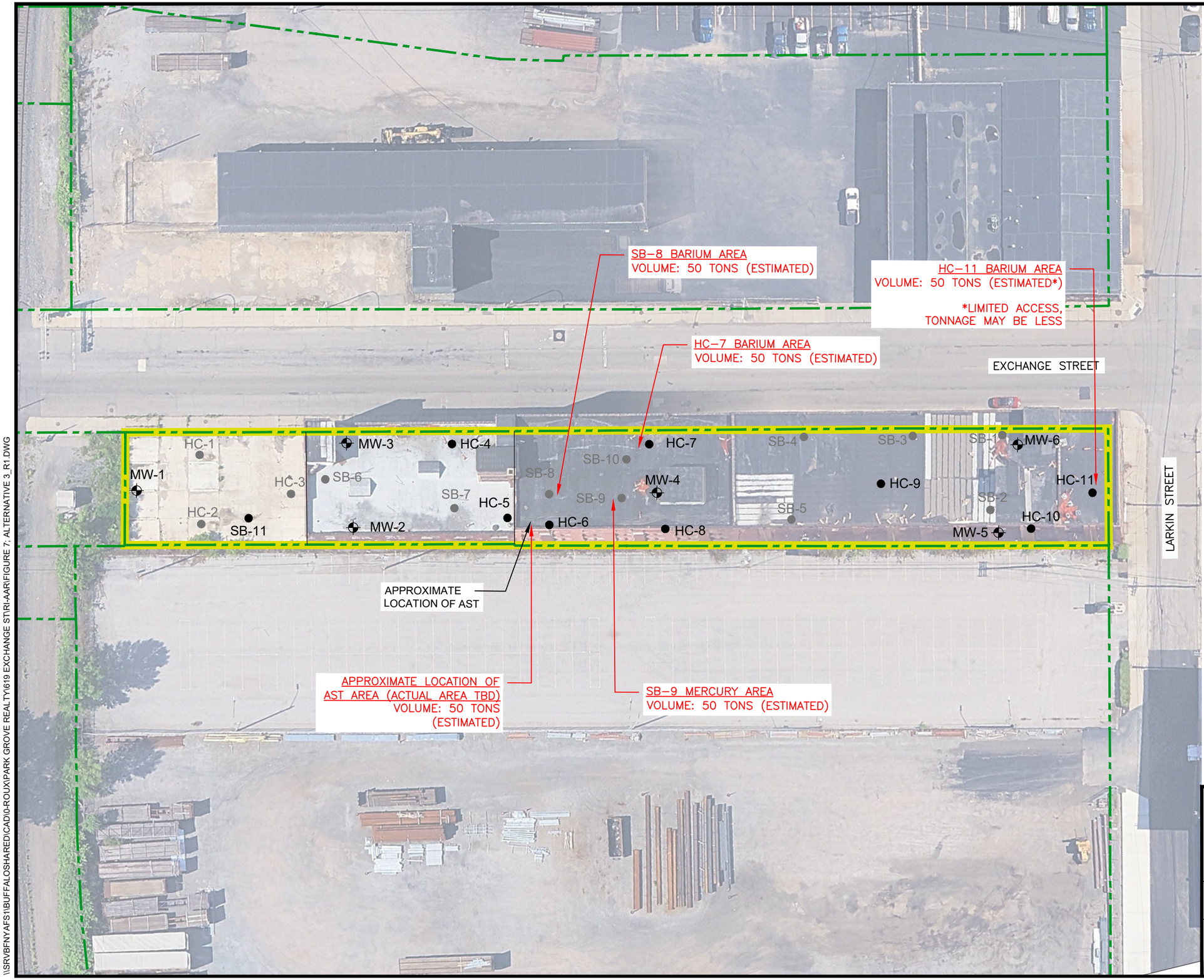
PG LARKINVILLE, LLC

ROUX

Compiled by: CNK	Date: JUNE 2025
Prepared by: CNK	Scale: AS SHOWN
Project Mgr: BWM	Project: 4374.0004B000
File: FIGURE 7; ALTERNATIVE 3.DWG	

FIGURE 6

F:\CAD\0-ROUX\PARK GROVE REALTY\619 EXCHANGE ST\RI-AAR\FIGURE 7; ALTERNATIVE 3.DWG



LEGEND

- BCP SITE BOUNDARY
- PARCEL BOUNDARY
- BUILDING OUTLINE
- HC-1 PHASE II HAND CORE/AUGER
- SB-1 PHASE II SOIL BORING
- SB-11 RI SOIL BORING
- HC-4 RI HAND CORE/AUGER
- MW-2 RI MONITORING WELL

NOTE:
1. IMAGE SOURCE GOOGLE EARTH 2024.

APPROXIMATE EXCAVATION VOLUME: 250 TONS

N

50' 0 50'

Title:

TRACK 4
RESTRICTED RESIDENTIAL CLEANUP

REMEDIAL INVESTIGATION ALTERNATIVE ANALYSIS REPORT

619 EXCHANGE STREET SITE
BUFFALO, NEW YORK

Prepared for:

PG LARKINVILLE, LLC

ROUX

Compiled by: CNK	Date: JUNE 2025
Prepared by: CNK	Scale: AS SHOWN
Project Mgr: BWM	Project: 4374.0004B000
File: FIGURE 7; ALTERNATIVE 3_R1.DWG	

FIGURE 7

\\SRVBFNYAFS1\BUFFALOSHARED\CAD\0-ROUX\PARK GROVE REALTY\619 EXCHANGE ST\RI-AAR\FIGURE 7; ALTERNATIVE 3_R1.DWG

APPENDICES

A. Site Photo Log

B. Soil Boring and Hand Core Logs and Monitoring Well Installation Logs

C. Analytical Laboratory Reports

D. Groundwater Field Forms

E. Building Inventory Form and Soil Vapor/SVI Field Forms

F. Community Air Monitoring Plan Summary

G. Data Usability Summary Report

H. Fish and Wildlife Resource Impact Analysis

I. Petroleum Bulk Storage Application and Pre-Work Notification for PBS Closure

APPENDIX A

Project Photolog

SITE PHOTOGRAPHS

Photo 1:



Photo 2:

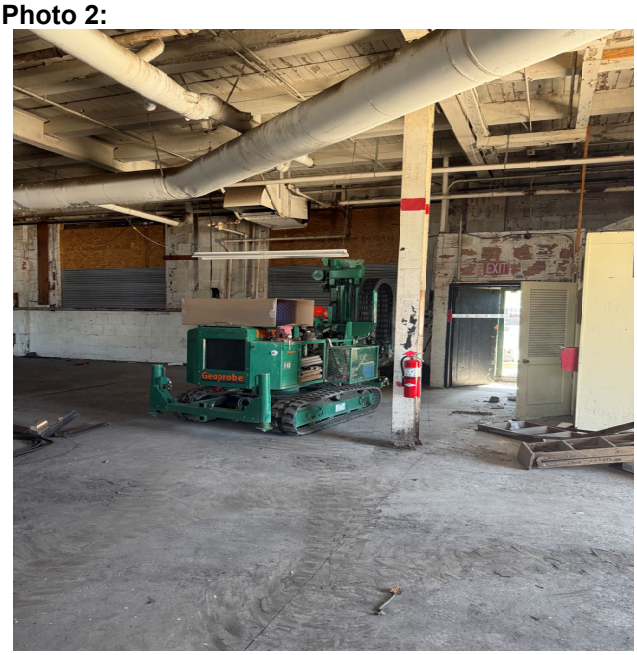


Photo 3:



Photo 4:



Photo 1: View of the installation of MW-4.

Photo 2: View of the installation of MW-2.

Photo 3: View of HC-6.

Photo 4: View of the soils encountered at HC-6.

619 Exchange Street Photo Date: April 2025	ROUX

SITE PHOTOGRAPHS

Photo 5:



Photo 6:



Photo 7:



Photo 8:



Photo 5: View of the fill encountered at MW-1.

Photo 6: View of SB-11

Photo 7: View of typical native soils.

Photo 8: Another view of typical native soils.

619 Exchange Street Photo Date: April 2025	ROUX

SITE PHOTOGRAPHS

Photo 9:

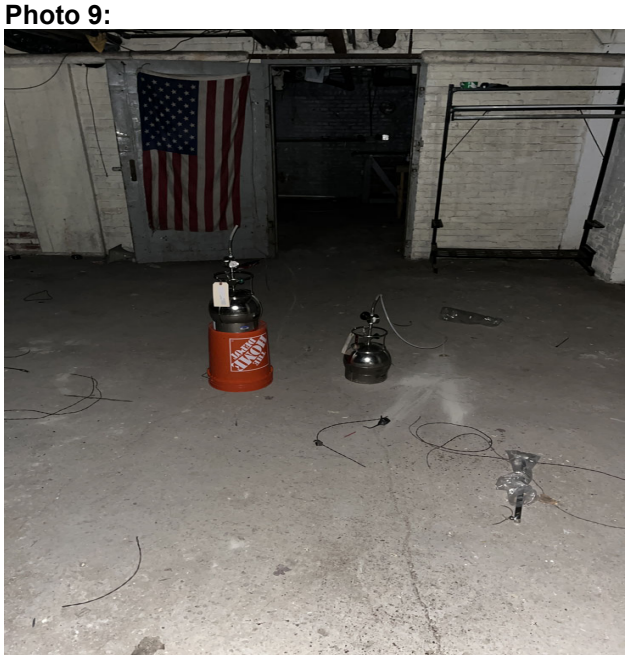


Photo 10:



Photo 11:



Photo 12:



Photo 9: View of SSV-4/IA-4.

Photo 10: View of SSV-3/IA-3.

Photo 11: View of SSV-2/IA-2.

Photo 12: View of SSV-1/IA-1.

APPENDIX B

Phase II & RI Borehole/Hand Core Logs and Well Completion Details

Project No: T0455-023-001

Borehole Number: HC-1

Project: Phase II Environmental Site Investigation

A.K.A.:

Client: Park Grove Realty

Logged By: CMS

Site Location: 619 Exchange Street

Checked By: BWM

TurnKey Environmental Restoration, LLC
2558 Hamburg Turnpike, Suite 300
Buffalo, NY 14218
(716) 856-0635

SUBSURFACE PROFILE			SAMPLE						
Depth (fbgs)	Elev. /Depth	Description (ASTM D2488: Visual-Manual Procedure)	Sample No.	SPT N-Value	Recovery (%)	Symbol	PID VOCs ppm (0 – 12.5 – 25)	Lab Sample	Well Completion Details or Remarks
0.0	0.0 / 0.0	Ground Surface ***Concrete Slab***					0.0		
	-0.3 / 0.3	***Fill*** Black, mostly fine sand, some black fines, some black granulars, trace wood, trace white ash, trace gravel, trace red brick, no odors.							
	-1.0 / 1.0	End of Borehole							

Drilled By: Trec
Drill Rig Type: 420M
Drill Method: Direct Push
Comments:
Drill Date(s): 5/23/2023

Hole Size: 2"
Stick-up:
Datum:

Sheet: 1 of 1

Project No: T0455-023-001

Borehole Number: HC-2

Project: Phase II Environmental Site Investigation

A.K.A.:

Client: Park Grove Realty

Logged By: CMS

Site Location: 619 Exchange Street

Checked By: BWM

TurnKey Environmental Restoration, LLC
2558 Hamburg Turnpike, Suite 300
Buffalo, NY 14218
(716) 856-0635

SUBSURFACE PROFILE			SAMPLE						
Depth (fbgs)	Elev. /Depth	Description (ASTM D2488: Visual-Manual Procedure)	Sample No.	SPT N-Value	Recovery (%)	Symbol	PID VOCs ppm (0 – 12.5 – 25)	Lab Sample	Well Completion Details or Remarks
0.0	0.0 / 0.0	Ground Surface ***Concrete Slab***							
	-0.5 / 0.5	***Fill*** Black, mostly fine sand, some black fines, some black granulars, some white ash, trace wood, trace gravel, no odors. Wet at 2.5 fbgs.					0.0 0.0 0.0	Sample Location	Observed water
	-3.0 / 3.0	***Clayey Sand*** Black to dark brown, wet, mostly fine sand, some medium plastic fines, low density, no odor.					0.0		
	-4.0 / 4.0	End of Borehole					0.0		

Drilled By: Trec
Drill Rig Type: 420M
Drill Method: Direct Push
Comments:
Drill Date(s): 5/23/2023

Hole Size: 2"
Stick-up:
Datum:

Sheet: 1 of 1

Project No: T0455-023-001

Borehole Number: HC-3

Project: Phase II Environmental Site Investigation

A.K.A.:

Client: Park Grove Realty

Logged By: CMS

Site Location: 619 Exchange Street

Checked By: BWM

TurnKey Environmental Restoration, LLC
2558 Hamburg Turnpike, Suite 300
Buffalo, NY 14218
(716) 856-0635

SUBSURFACE PROFILE			SAMPLE						
Depth (fbgs)	Elev. /Depth	Description (ASTM D2488: Visual-Manual Procedure)	Sample No.	SPT N-Value	Recovery (%)	Symbol	PID VOCs ppm (0 – 12.5 – 25)	Lab Sample	Well Completion Details or Remarks
0.0	0.0 / 0.0	Ground Surface							
		Concrete Slab							
	-0.5 / 0.5	***Fill*** Black, mostly fine sand, some black fines, some black granulars, some white ash, some wood, trace gravel, no odors.					0.0	Sample Location	
	-1.0 / 1.0	***Clayey Sand*** Black to dark brown, wet, mostly fine sand, some medium plastic fines, low density, no odor.					0.0		
	-2.0 / 2.0	End of Borehole							

Drilled By: Trec
Drill Rig Type: 420M
Drill Method: Direct Push
Comments:
Drill Date(s): 5/23/2023

Hole Size: 2"
Stick-up:
Datum:

Sheet: 1 of 1

HC-4

Client: PG Larkinville, LLC	Site: 619 Exchange Street Site	Project Number: 4374.0004B000
Address: 619 Exchange Street	City/State: Buffalo, NY	Logged By: NAS

Start to Finish Date: 4/29/2025 - 4/29/2025	Contractor: Trec Environmental Inc.	Drill Type: Hand Auger	Sampler Type/Method: 2" Hand Auger
Borehole Depth: 5 feet	Backfill:	Borehole Diameter: 2-inches	DTW: 3 feet
Area: NM	Elevation: NM	Northing: NM	Easting: NM

Depth (ft)	USCS	USCS Graphic	Visual Description	Sample Interval	Recovery (ft)	PID	Notes
	CONC		Concrete				
	MIXD		Fill- Black, moist, mostly fill (black fines, cinders, ash, well sorted gravel), some silty sand, medium dense, no odors	G		0	
1						0	
2	MLS		Silty sand- Black, moist, mostly silty sand, medium dense, no odors			0	
3	SP		Fine sand- Grey/brown, wet, mostly fine sand, some subrounded gravel, medium dense, no odors			0	
4	CL-ML		Sandy Lean Clay- Reddish brown, moist, mostly lean clay, some fine sand, stiff, no odors				
			Bottom of borehole at 5 feet				

ROUX STANDARD LOG_ - 6/5/25 09:54 - F:\GINT\PROJECTS\619 EXCHANGE STREET\619 EXCHANGE STREET.GPJ

HC-5

Client: PG Larkinville, LLC	Site: 619 Exchange Street Site	Project Number: 4374.0004B000
Address: 619 Exchange Street	City/State: Buffalo, NY	Logged By: NAS

Start to Finish Date: 4/29/2025 - 4/29/2025	Contractor: Trec Environmental Inc.	Drill Type: Hand Auger	Sampler Type/Method: 2" Hand Auger
Borehole Depth: 5 feet	Backfill:	Borehole Diameter: 2-inches	DTW: 3 feet
Area: NM	Elevation: NM	Northing: NM	Easting: NM

Depth (ft)	USCS	USCS Graphic	Visual Description	Sample Interval	Recovery (ft)	PID	Notes
	CONC		Concrete			0	
	MIXD		Fill- Black, moist, mostly fill (brick,cinders), some silty sand and well sorted gravel, medium dense, no odors	G		0	
1	CL-ML		Sandy Lean Clay- Reddish brown, moist, mostly lean clay, some fine sand, stiff, no odors			0	
2							
3							
4							

Bottom of borehole at 5 feet

ROUX STANDARD LOG_ - 6/5/25 09:54 - F:\GINT\PROJECTS\619 EXCHANGE STREET\619 EXCHANGE STREET.GPJ

HC-6

Client: PG Larkinville, LLC	Site: 619 Exchange Street Site	Project Number: 4374.0004B000
Address: 619 Exchange Street	City/State: Buffalo, NY	Logged By: NAS

Start to Finish Date: 4/29/2025 - 4/29/2025	Contractor: Trec Environmental Inc.	Drill Type: Hand Auger	Sampler Type/Method: 2" Hand Auger
Borehole Depth: 5 feet	Backfill:	Borehole Diameter: 2-inches	DTW: 3 feet
Area: NM	Elevation: NM	Northing: NM	Easting: NM

Depth (ft)	USCS	USCS Graphic	Visual Description	Sample Interval	Recovery (ft)	PID	Notes
	CONC		Concrete			0	
	MIXD		Fill- Black, moist, mostly fill (black fines, cinders, well sorted gravel), some silty sand, medium dense, no odors	G		0	
1	CL-ML		Sandy Lean Clay- Reddish brown, moist, mostly lean clay, some fine sand, stiff, no odors				
2						0	
3							
4							

Bottom of borehole at 5 feet

ROUX STANDARD LOG_ - 6/5/25 09:54 - F:\GINT\PROJECTS\619 EXCHANGE STREET\619 EXCHANGE STREET.GPJ

HC-7

Client: PG Larkinville, LLC	Site: 619 Exchange Street Site	Project Number: 4374.0004B000
Address: 619 Exchange Street	City/State: Buffalo, NY	Logged By: NAS

Start to Finish Date: 4/29/2025 - 4/29/2025	Contractor: Trec Environmental Inc.	Drill Type: Hand Auger	Sampler Type/Method: 2" Hand Auger
Borehole Depth: 5 feet	Backfill:	Borehole Diameter: 2-inches	DTW: 3 feet
Area: NM	Elevation: NM	Northing: NM	Easting: NM

Depth (ft)	USCS	USCS Graphic	Visual Description	Sample Interval	Recovery (ft)	PID	Notes
	CONC		Concrete			0	
	MIXD		Fill- Black, moist, mostly fill (black fines, cinders, gravel), some silty sand, medium dense, no odors			0	
1	CL-ML		Sandy Lean Clay- Reddish brown, moist, mostly lean clay, some fine sand, stiff, no odors				
2							
3						0	
4							

Bottom of borehole at 5 feet

ROUX STANDARD LOG_ - 6/5/25 09:54 - F:\GINT\PROJECTS\619 EXCHANGE STREET\619 EXCHANGE STREET.GPJ

HC-8

Client: PG Larkinville, LLC	Site: 619 Exchange Street Site	Project Number: 4374.0004B000
Address: 619 Exchange Street	City/State: Buffalo, NY	Logged By: NAS

Start to Finish Date: 4/29/2025 - 4/29/2025	Contractor: Trec Environmental Inc.	Drill Type: Hand Auger	Sampler Type/Method: 2" Hand Auger
Borehole Depth: 5 feet	Backfill:	Borehole Diameter: 2-inches	DTW: 3 feet
Area: NM	Elevation: NM	Northing: NM	Easting: NM

Depth (ft)	USCS	USCS Graphic	Visual Description	Sample Interval	Recovery (ft)	PID	Notes
	CONC		Concrete	G		0	
	MIXD		Fill- Black, moist, mostly fill (cinders, coal, ash, black fines, black sand), some silty sand, medium dense, no odors			0	
1	CL-ML		Sandy Lean Clay- Reddish brown, moist, mostly lean clay, some fine sand, stiff, no odors				
2						0	
3							
4							

Bottom of borehole at 5 feet

ROUX STANDARD LOG_ - 6/5/25 09:55 - F:\GINT\PROJECTS\619 EXCHANGE STREET\619 EXCHANGE STREET.GPJ

HC-9

Client: PG Larkinville, LLC	Site: 619 Exchange Street Site	Project Number: 4374.0004B000
Address: 619 Exchange Street	City/State: Buffalo, NY	Logged By: NAS

Start to Finish Date: 4/29/2025 - 4/29/2025	Contractor: Trec Environmental Inc.	Drill Type: Hand Auger	Sampler Type/Method: 2" Hand Auger
Borehole Depth: 5 feet	Backfill:	Borehole Diameter: 2-inches	DTW: 3 feet
Area: NM	Elevation: NM	Northing: NM	Easting: NM

Depth (ft)	USCS	USCS Graphic	Visual Description	Sample Interval	Recovery (ft)	PID	Notes
	CONC		Concrete				
	MIXD		Fill- Black, moist, mostly fill (well sorted gravel, cinders, black fines), some silty sand, medium dense, no odors			0	
1	CL-ML		Sandy Lean Clay- Reddish brown, moist, mostly lean clay, some fine sand, stiff, no odors	G		0	
2							
3						0	
4							
			Bottom of borehole at 5 feet				

ROUX STANDARD LOG_ - 6/5/25 09:55 - F:\GINT\PROJECTS\619 EXCHANGE STREET\619 EXCHANGE STREET.GPJ

HC-10

Client: PG Larkinville, LLC	Site: 619 Exchange Street Site	Project Number: 4374.0004B000
Address: 619 Exchange Street	City/State: Buffalo, NY	Logged By: NAS

Start to Finish Date: 4/29/2025 - 4/29/2025	Contractor: Trec Environmental Inc.	Drill Type: Hand Auger	Sampler Type/Method: 2" Hand Auger
Borehole Depth: 5 feet	Backfill:	Borehole Diameter: 2-inches	DTW: 3 feet
Area: NM	Elevation: NM	Northing: NM	Easting: NM

Depth (ft)	USCS	USCS Graphic	Visual Description	Sample Interval	Recovery (ft)	PID	Notes
	CONC		Concrete	G		0	
	MIXD		Fill- Black, moist, mostly fill (black fines, cinders, coal), some silty sand, medium dense, no odors			0	
1	CL-ML		Sandy Lean Clay- Reddish brown, moist, mostly lean clay, some fine sand, stiff, no odors				
2						0	
3							
4							

Bottom of borehole at 5 feet

ROUX STANDARD LOG_ - 6/5/25 09:54 - F:\GINT\PROJECTS\619 EXCHANGE STREET\619 EXCHANGE STREET.GPJ

HC-11

Client: PG Larkinville, LLC	Site: 619 Exchange Street Site	Project Number: 4374.0004B000
Address: 619 Exchange Street	City/State: Buffalo, NY	Logged By: NAS

Start to Finish Date: 4/29/2025 - 4/29/2025	Contractor: Trec Environmental Inc.	Drill Type: Hand Auger	Sampler Type/Method: 2" Hand Auger
Borehole Depth: 5 feet	Backfill:	Borehole Diameter: 2-inches	DTW: 3 feet
Area: NM	Elevation: NM	Northing: NM	Easting: NM

Depth (ft)	USCS	USCS Graphic	Visual Description	Sample Interval	Recovery (ft)	PID	Notes
	CONC		Concrete				
	MIXD		Fill- Black, moist, mostly fill (cinders, black fines), some well sorted gravel, medium dense, no odors	G		0	
						0	
1			Sandy Lean Clay- Reddish brown, moist, mostly lean clay, some fine sand, stiff, no odors				
2						0	
3	CL-ML						
4							
			Bottom of borehole at 5 feet				

ROUX STANDARD LOG_ - 6/5/25 09:54 - F:\GINT\PROJECTS\619 EXCHANGE STREET\619 EXCHANGE STREET.GPJ

Project No: T0455-023-001

Borehole Number: SB-1

Project: Phase II Environmental Site Investigation

A.K.A.:

Client: Park Grove Realty

Logged By: CMS

Site Location: 619 Exchange Street

Checked By: BWM

TurnKey Environmental Restoration, LLC
2558 Hamburg Turnpike, Suite 300
Buffalo, NY 14218
(716) 856-0635

SUBSURFACE PROFILE			SAMPLE						
Depth (fbgs)	Elev. /Depth	Description (ASTM D2488: Visual-Manual Procedure)	Sample No.	SPT N-Value	Recovery (%)	Symbol	PID VOCs ppm (0 – 12.5 – 25)	Lab Sample	Well Completion Details or Remarks
0.0	0.0	Ground Surface							
	0.0	***Concrete Slab***							
	-0.3								
	0.3	***Fill*** Black, mostly crushed gravel, some black fines, some black granulars, no odors.					0.0		
	-1.0								
	1.0	***Lean Clay*** Reddish brown, moist, mostly medium plastic fines, trace fine sand and gravel, very dense, no odors.					0.0		
		Equipment refusal due to tight clay.					0.0		
							0.0		
							0.0		
5.0							0.0		
	-6.0								
	6.0	End of Borehole							

Drilled By: Trec
Drill Rig Type: 420M
Drill Method: Direct Push
Comments:
Drill Date(s): 5/23/2023

Hole Size: 2"
Stick-up:
Datum:

Sheet: 1 of 1

Project No: T0455-023-001

Borehole Number: SB-2

Project: Phase II Environmental Site Investigation

A.K.A.:

Client: Park Grove Realty

Logged By: CMS

Site Location: 619 Exchange Street

Checked By: BWM

TurnKey Environmental Restoration, LLC
2558 Hamburg Turnpike, Suite 300
Buffalo, NY 14218
(716) 856-0635

SUBSURFACE PROFILE			SAMPLE						
Depth (fbgs)	Elev. /Depth	Description (ASTM D2488: Visual-Manual Procedure)	Sample No.	SPT N-Value	Recovery (%)	Symbol	PID VOCs ppm (0 / 12.5 / 25)	Lab Sample	Well Completion Details or Remarks
0.0	0.0	Ground Surface							
	0.0	***Concrete Slab***							
	-0.3								
	0.3	***Fill*** Black, mostly crushed gravel, some black fines, some black granulars, no odors.						Sample Location	
	-1.0						0.0		
	1.0	***Lean Clay*** Reddish brown, moist, mostly medium plastic fines, trace fine sand and gravel, very dense, no odors. Equipment refusal due to tight clay.					0.0		
							0.0		
							0.0		
	-4.0								
	4.0	End of Borehole							

Drilled By: Trec
Drill Rig Type: 420M
Drill Method: Direct Push
Comments:
Drill Date(s): 5/23/2023

Hole Size: 2"
Stick-up:
Datum:

Sheet: 1 of 1

Project No: T0455-023-001

Borehole Number: SB-3

Project: Phase II Environmental Site Investigation

A.K.A.:

Client: Park Grove Realty

Logged By: CMS

Site Location: 619 Exchange Street

Checked By: BWM

TurnKey Environmental Restoration, LLC
2558 Hamburg Turnpike, Suite 300
Buffalo, NY 14218
(716) 856-0635

SUBSURFACE PROFILE			SAMPLE						
Depth (fbgs)	Elev. /Depth	Description (ASTM D2488: Visual-Manual Procedure)	Sample No.	SPT N-Value	Recovery (%)	Symbol	PID VOCs ppm (0 – 12.5 – 25)	Lab Sample	Well Completion Details or Remarks
0.0	0.0	Ground Surface							
	0.0	***Concrete Slab***							
	-0.3								
	0.3	***Fill*** Black, mostly crushed gravel, some black fines, some black granulars, no odors.						Sample Location	
	-1.0						0.0		
	1.0	***Lean Clay*** Reddish brown, moist, mostly medium plastic fines, trace fine sand and gravel, very dense, no odors. Equipment refusal due to tight clay.					0.0		
							0.0		
	-4.0						0.0		
	4.0	End of Borehole							

Drilled By: Trec
Drill Rig Type: 420M
Drill Method: Direct Push
Comments:
Drill Date(s): 5/23/2023

Hole Size: 2"
Stick-up:
Datum:

Sheet: 1 of 1

Project No: T0455-023-001

Borehole Number: SB-4

Project: Phase II Environmental Site Investigation

A.K.A.:

Client: Park Grove Realty

Logged By: CMS

Site Location: 619 Exchange Street

Checked By: BWM

TurnKey Environmental Restoration, LLC
2558 Hamburg Turnpike, Suite 300
Buffalo, NY 14218
(716) 856-0635

SUBSURFACE PROFILE			SAMPLE						
Depth (fbgs)	Elev. /Depth	Description (ASTM D2488: Visual-Manual Procedure)	Sample No.	SPT N-Value	Recovery (%)	Symbol	PID VOCs ppm (0 – 12.5 – 25)	Lab Sample	Well Completion Details or Remarks
0.0	0.0	Ground Surface							
	0.0	***Concrete Slab***							
	-0.3 / 0.3	***Fill*** Black, mostly crushed gravel, some black fines, some black granulars, no odors.					0.0		
	-1.0 / 1.0	***Lean Clay*** Reddish brown, moist, mostly medium plastic fines, trace fine sand and gravel, very dense, wet at 3.75 fbgs, no odors. Equipment refusal due to tight clay.					0.0		
							0.0		*Observed water*
	-4.0 / 4.0	End of Borehole					0.0		

Drilled By: Trec
Drill Rig Type: 420M
Drill Method: Direct Push
Comments:
Drill Date(s): 5/23/2023

Hole Size: 2"
Stick-up:
Datum:

Sheet: 1 of 1

Project No: T0455-023-001

Borehole Number: SB-5

Project: Phase II Environmental Site Investigation

A.K.A.:

Client: Park Grove Realty

Logged By: CMS

Site Location: 619 Exchange Street

Checked By: BWM

TurnKey Environmental Restoration, LLC
2558 Hamburg Turnpike, Suite 300
Buffalo, NY 14218
(716) 856-0635

SUBSURFACE PROFILE			SAMPLE						
Depth (fbgs)	Elev. /Depth	Description (ASTM D2488: Visual-Manual Procedure)	Sample No.	SPT N-Value	Recovery (%)	Symbol	PID VOCs ppm (0 – 12.5 – 25)	Lab Sample	Well Completion Details or Remarks
0.0	0.0	Ground Surface							
	0.0	***Concrete Slab***					0.0		
	-0.3								
	0.3	***Fill*** Black, mostly crushed gravel, some black fines, some black granulars, no odors.						Sample Location	
	-1.0								
	1.0	***Lean Clay*** Reddish brown, moist, mostly medium plastic fines, trace fine sand and gravel, very dense, wet at 5 fbgs, no odors.					0.0		
		Equipment refusal due to tight clay.					0.0		
							0.0		
							0.0		
5.0							0.0		Observed water
	-6.0								
	6.0	End of Borehole					0.0		

Drilled By: Trec
Drill Rig Type: 420M
Drill Method: Direct Push
Comments:
Drill Date(s): 5/23/2023

Hole Size: 2"
Stick-up:
Datum:

Sheet: 1 of 1

Project No: T0455-023-001

Borehole Number: SB-6

Project: Phase II Environmental Site Investigation

A.K.A.:

Client: Park Grove Realty

Logged By: CMS

Site Location: 619 Exchange Street

Checked By: BWM

TurnKey Environmental Restoration, LLC
2558 Hamburg Turnpike, Suite 300
Buffalo, NY 14218
(716) 856-0635

SUBSURFACE PROFILE			SAMPLE						
Depth (fbgs)	Elev. /Depth	Description (ASTM D2488: Visual-Manual Procedure)	Sample No.	SPT N-Value	Recovery (%)	Symbol	PID VOCs ppm (0 – 12.5 – 25)	Lab Sample	Well Completion Details or Remarks
0.0	0.0 / 0.0	Ground Surface ***Concrete Slab***					0.0		
	-0.5 / 0.5	***Fill*** Brown and black, mostly fine sand, some crushed gravel, some black fines, some black granulars, no odors. No additional advancement due to equipment failure.						Sample Location	
	-1.0 / 1.0	End of Borehole							

Drilled By: Trec
Drill Rig Type: 420M
Drill Method: Direct Push
Comments:
Drill Date(s): 5/23/2023

Hole Size: 2"
Stick-up:
Datum:

Sheet: 1 of 1

Project No: T0455-023-001

Borehole Number: SB-7

Project: Phase II Environmental Site Investigation

A.K.A.:

Client: Park Grove Realty

Logged By: CMS

Site Location: 619 Exchange Street

Checked By: BWM

TurnKey Environmental Restoration, LLC
2558 Hamburg Turnpike, Suite 300
Buffalo, NY 14218
(716) 856-0635

SUBSURFACE PROFILE			SAMPLE						
Depth (fbgs)	Elev. /Depth	Description (ASTM D2488: Visual-Manual Procedure)	Sample No.	SPT N-Value	Recovery (%)	Symbol	PID VOCs ppm (0 / 12.5 / 25)	Lab Sample	Well Completion Details or Remarks
0.0	0.0 / 0.0	Ground Surface ***Concrete Slab***							
	-0.5 / 0.5	***Fill*** Black, mostly crushed gravel, some fine sand, some black fines, some black granulars, no odors.					0.0		
	-1.0 / 1.0	***Lean Clay*** Reddish brown, moist, mostly medium plastic fines, trace fine sand and gravel, very dense, no odors.					0.0		
							0.0		
	-4.0 / 4.0	End of Borehole					0.0		

Drilled By: Trec
Drill Rig Type: 420M
Drill Method: Direct Push
Comments:
Drill Date(s): 5/23/2023

Hole Size: 2"
Stick-up:
Datum:

Sheet: 1 of 1

Project No: T0455-023-001

Project: Phase II Environmental investigation Report

Client: Park Grove Realty

Site Location: 619 Exchange Street

Sample I.D.: SB-8

Logged By: CMS

Checked By: BWM

TurnKey Environmental Restoration, LLC
2558 Hamburg Turnpike, Suite 300
Buffalo, NY 14218
(716) 856-0635

SUBSURFACE PROFILE

Depth (fbgs)	Elev. /Depth	Description (ASTM D2488: Visual-Manual Procedure)	Lithologic Symbol	PID VOCs (ppm: 0, 25, 50, 75, 100)	Lab Sample	Remarks
0.0	0.0	Ground Surface				
	0.0	***Concrete Slab***				
	-0.5 / 0.5	***Fill*** Brown and black, mostly fine sand, some crushed gravel, some black fines, some black granulars, no odors. Water at 1 fbgs.		0.0	Sample Location	*Observed water*
	-1.0 / 1.0	***Native Clay*** Reddish brown, mostly medium plastic fines, trace fine sand, dense.				
	-2.0 / 2.0	End of Test Pit		0.0		

Excavated By:

Excavator Type:

Excavation Date(s): Sampled 8/22/2023

Length: 4'

Width: 4'

Depth: >2'

Depth to Water: 1'

Visual Impacts: Black fill

Olfactory Observations: No

Comments: Previously completed structural test pit

-

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Project No: T0455-023-001

Project: Phase II Environmental investigation Report

Client: Park Grove Realty

Site Location: 619 Exchange Street

Sample I.D.: SB-9

Logged By: CMS

Checked By: BWM

TurnKey Environmental Restoration, LLC
2558 Hamburg Turnpike, Suite 300
Buffalo, NY 14218
(716) 856-0635

SUBSURFACE PROFILE

Depth (fbgs)	Elev. /Depth	Description (ASTM D2488: Visual-Manual Procedure)	Lithologic Symbol	PID VOCs (ppm: 0, 25, 50, 75, 100)	Lab Sample	Remarks
0.0	0.0	Ground Surface				
	0.0	***Concrete Slab***				
	-0.5 / 0.5	***Fill*** Brown and black, mostly fine sand, some crushed gravel, some black fines, some black granulars, no odors. Water at 1 fbgs.		0.0	Sample Location	*Observed water*
	-1.0 / 1.0	***Native Clay*** Reddish brown, mostly medium plastic fines, trace fine sand, dense.				
	-2.0 / 2.0	End of Test Pit		0.0		

Excavated By:

Excavator Type:

Excavation Date(s): Sampled 8/22/2023

Length: 4'

Width: 4'

Depth: >2'

Depth to Water: 1'

Visual Impacts: Black fill

Olfactory Observations: No

Comments: Previously completed structural test pit

-

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Project No: T0455-023-001

Project: Phase II Environmental investigation Report

Client: Park Grove Realty

Site Location: 619 Exchange Street

Sample I.D.: SB-10

Logged By: CMS

Checked By: BWM

TurnKey Environmental Restoration, LLC
2558 Hamburg Turnpike, Suite 300
Buffalo, NY 14218
(716) 856-0635

SUBSURFACE PROFILE

Depth (fbgs)	Elev. /Depth	Description (ASTM D2488: Visual-Manual Procedure)	Lithologic Symbol	PID VOCs (ppm: 0, 25, 50, 75, 100)	Lab Sample	Remarks
0.0	0.0	Ground Surface				
	0.0	***Concrete Slab***				
	-0.5 / 0.5	***Fill*** Brown and black, mostly fine sand, some crushed gravel, some black fines, some black granulars, no odors. Water at 1 fbgs.		0.0	Sample Location	*Observed water*
	-1.0 / 1.0	***Native Clay*** Reddish brown, mostly medium plastic fines, trace fine sand, dense.				
	-2.0 / 2.0	End of Test Pit		0.0		

Excavated By:

Excavator Type:

Excavation Date(s): Sampled 8/22/2023

Length: 4'

Width: 4'

Depth: >2'

Depth to Water: 1'

Visual Impacts: Black fill

Olfactory Observations: No

Comments: Previously completed structural test pit

-

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SB-11

Client: PG Larkinville, LLC	Site: 619 Exchange Street Site	Project Number: 4374.0004B000
Address: 619 Exchange Street	City/State: Buffalo, NY	Logged By: NAS

Start to Finish Date: 4/30/2025 - 4/30/2025	Contractor: Trec Environmental Inc.	Drill Type: Hand Auger	Sampler Type/Method: 2" Macro-Core
Borehole Depth: 16 feet	Backfill:	Borehole Diameter: 2-inches	DTW: 3 feet
Area: NM	Elevation: NM	Northing: NM	Easting: NM

Depth (ft)	USCS	USCS Graphic	Visual Description	Sample Interval	Recovery (ft)	PID	Notes
	CONC		Concrete			0	
	MIXD		Fill- Black, moist, mostly fill (cinders, coal, ash, black fines, black sand), some silty sand, medium dense, no odors	G		0	
			Sandy Lean Clay- Reddish brown, moist to damp (12'), mostly lean clay, some fine sand, stiff, no odors			0	
5							
	CL-ML					0	
10							
						0	
15							
			Bottom of borehole at 16 feet				

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MW-1

Client: PG Larkinville, LLC	Site: 619 Exchange Street Site	Project Number: 4374.0004B000
Address: 619 Exchange Street	City/State: Buffalo, NY	Logged By: NAS

Start to Finish Date: 4/29/2025 - 4/30/2025	Contractor: Trec Environmental Inc.	Drill Type: HSA	Sampler Type/Method: 2" Macro-Core
Borehole Depth: 20 feet	Backfill:	Borehole Diameter: 2-inches	DTW: 18 feet
Area: NM	Elevation: NM	Northing: NM	Easting: NM

Well Depth: 20 feet	Well Dia./Materials: 2-inch PVC	Screen Interval: 5-20 feet	Screen Slot Size: 10-Slot	Sand/Filter Pack Size: #00	Annular Seal: Bentonite

Depth (ft)	Well Diagram	USCS	USCS Graphic	Visual Description	Sample Interval	Recovery (ft)	PID	Notes
	4" Steel Locking Protective casing 2" Locking test well plug	CONC		Concrete			0	
		MIXD		Fill- Black/white, moist, mostly fill (black fines,cinders, concrete, ash, slag, brick), some silty sand, medium dense, no odors	G		0	
		SP		Fine Sand-Tan, wet, mostly fine sand, little subrounded gravel, medium dense, no odors, suspect perched water			0	
5		CL-ML		Sandy Lean Clay- Reddish brown, moist to damp (12'), mostly lean clay, some fine sand, stiff, no odors			0	
10							0	
15		GWS		Well graded sand and gravel- grey, wet, mostly fine to medium sand, some subrounded gravel, medium dense, no odors	G		0	

Bottom of monitoing well at 20 feet

ROUX STANDARD LOG_ - 6/5/25 09:55 - F:\GINT\PROJECTS\619 EXCHANGE STREET\619 EXCHANGE STREET.GPJ

MW-2

Client: PG Larkinville, LLC	Site: 619 Exchange Street Site	Project Number: 4374.0004B000
Address: 619 Exchange Street	City/State: Buffalo, NY	Logged By: NAS

Start to Finish Date: 4/29/2025 - 4/30/2025	Contractor: Trec Environmental Inc.	Drill Type: Driven	Sampler Type/Method: 2" Macro-Core
Borehole Depth: 20 feet	Backfill:	Borehole Diameter: 2-inches	DTW: 18 feet
Area: NM	Elevation: NM	Northing: NM	Easting: NM

Well Depth: 20 feet	Well Dia./Materials: 1-inch PVC	Screen Interval: 5-20 feet	Screen Slot Size: 10-Slot	Sand/Filter Pack Size: #00	Annular Seal: Bentonite

Depth (ft)	Well Diagram	USCS	USCS Graphic	Visual Description	Sample Interval	Recovery (ft)	PID	Notes
	4" Steel Locking Protective casing 1" Locking test well plug	CONC		Concrete			0	
		MIXD		Fill- Black, moist, mostly fill (black fines, black sand, cinders, coal, concrete), some silty sand, medium dense, no odors	G		0	
		SP		Fine Sand-Tan, wet, mostly fine sand, little subrounded gravel, medium dense, no odors			0	
5		CL-ML		Sandy Lean Clay- Reddish brown, moist to damp (12'), mostly lean clay, some fine sand, stiff, no odors			0	
10							0	
15					G		0	

Bottom of monitoing well at 20 feet

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MW-3

Client: PG Larkinville, LLC	Site: 619 Exchange Street Site	Project Number: 4374.0004B000
Address: 619 Exchange Street	City/State: Buffalo, NY	Logged By: NAS

Start to Finish Date: 4/29/2025 - 4/30/2025	Contractor: Trec Environmental Inc.	Drill Type: Driven	Sampler Type/Method: 2" Macro-Core
Borehole Depth: 20 feet	Backfill:	Borehole Diameter: 2-inches	DTW: 12 feet
Area: NM	Elevation: NM	Northing: NM	Easting: NM

Well Depth: 20 feet	Well Dia./Materials: 1-inch PVC	Screen Interval: 5-20 feet	Screen Slot Size: 10-Slot	Sand/Filter Pack Size: #00	Annular Seal: Bentonite

Depth (ft)	Well Diagram	USCS	USCS Graphic	Visual Description	Sample Interval	Recovery (ft)	PID	Notes
	4" Steel Locking Protective casing 1" Locking test well plug	CONC		Concrete			0	
		MIXD		Fill- Black, moist, mostly fill (black fines, black sand, cinders, coal, concrete), some silty sand, medium dense, no odors	G		0	
		SP		Fine Sand-Tan, wet, mostly fine sand, little subrounded gravel, medium dense, no odors			0	
5		CL-ML		Sandy Lean Clay- Reddish brown, moist to damp (12'), mostly lean clay, some fine sand, stiff, no odors			0	
10							0	
15							0	

Bottom of monitoing well at 20 feet

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MW-4

Client: PG Larkinville, LLC	Site: 619 Exchange Street Site	Project Number: 4374.0004B000
Address: 619 Exchange Street	City/State: Buffalo, NY	Logged By: NAS

Start to Finish Date: 4/28/2025 - 4/28/2025	Contractor: Trec Environmental Inc.	Drill Type: Driven	Sampler Type/Method: 2" Macro-Core
Borehole Depth: 14 feet	Backfill:	Borehole Diameter: 2-inches	DTW: 6 feet
Area: NM	Elevation: NM	Northing: NM	Easting: NM

Well Depth: 14 feet	Well Dia./Materials: 1-inch PVC	Screen Interval: 4-14 feet	Screen Slot Size: 10-Slot	Sand/Filter Pack Size: #00	Annular Seal: Bentonite

Depth (ft)	Well Diagram	USCS	USCS Graphic	Visual Description	Sample Interval	Recovery (ft)	PID	Notes
	4" Steel Locking Protective casing 1" Locking test well plug	CONC		Concrete	G		0	
		MIXD		Fill- Black, moist, mostly fill (black fines, cinders, brick, glass, concrete, coal), some silty sand, medium dense, no odors			0	
				Sandy Lean Clay- Reddish brown, moist to damp (12'), mostly lean clay, some fine sand, stiff, no odors			0	
5		CL-ML					0	
10					G		0	

Bottom of monitoing well at 14 feet

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MW-5

Client: PG Larkinville, LLC	Site: 619 Exchange Street Site	Project Number: 4374.0004B000
Address: 619 Exchange Street	City/State: Buffalo, NY	Logged By: NAS

Start to Finish Date: 4/28/2025 - 4/28/2025	Contractor: Trec Environmental Inc.	Drill Type: Driven	Sampler Type/Method: 2" Macro-Core
Borehole Depth: 14 feet	Backfill:	Borehole Diameter: 2-inches	DTW: 13 feet
Area: NM	Elevation: NM	Northing: NM	Easting: NM

Well Depth: 14 feet	Well Dia./Materials: 1-inch PVC	Screen Interval: 4-14 feet	Screen Slot Size: 10-Slot	Sand/Filter Pack Size: #00	Annular Seal: Bentonite

Depth (ft)	Well Diagram	USCS	USCS Graphic	Visual Description	Sample Interval	Recovery (ft)	PID	Notes
	4" Steel Locking Protective casing 1" Locking test well plug	CONC		Concrete			0	
		MIXD		Fill- Black, moist, mostly fill (black fines, cinders, brick), some silty sand, medium dense, no odors			0	
				Sandy Lean Clay- Reddish brown, moist to damp (8'), mostly lean clay, some fine sand, stiff, no odors				
5		CL-ML					0	
10							0	
		SPG		Fine Sand with clay- Grey, damp, mostly fine sand, little medium sand, few lean clay, medium dense, no odors			0	
				Bottom of monitoing well at 14 feet				

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MW-6

Client: PG Larkinville, LLC	Site: 619 Exchange Street Site	Project Number: 4374.0004B000
Address: 619 Exchange Street	City/State: Buffalo, NY	Logged By: NAS

Start to Finish Date: 4/28/2025 - 4/28/2025	Contractor: Trec Environmental Inc.	Drill Type: Driven	Sampler Type/Method: 2" Macro-Core
Borehole Depth: 14 feet	Backfill:	Borehole Diameter: 2-inches	DTW: 10 feet
Area: NM	Elevation: NM	Northing: NM	Easting: NM

Well Depth: 14 feet	Well Dia./Materials: 1-inch PVC	Screen Interval: 4-14 feet	Screen Slot Size: 10-Slot	Sand/Filter Pack Size: #00	Annular Seal: Bentonite

Depth (ft)	Well Diagram	USCS	USCS Graphic	Visual Description	Sample Interval	Recovery (ft)	PID	Notes
	4" Steel Locking Protective casing 1" Locking test well plug	CONC		Concrete			0	
		MIXD		Fill- Black, moist, mostly fill (black fines, brick), some silty sand, medium dense, no odors	G		0	
				Sandy Lean Clay- Reddish brown, moist to damp (8'), mostly lean clay, some fine sand, stiff, no odors				
5		CL-ML					0	
10					G		0	
							0	
							0	

Bottom of monitoing well at 14 feet

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APPENDIX C

Laboratory Analytical Data Packages

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ANALYTICAL REPORT

PREPARED FOR

Attn: Bryan Mayback
Roux Environmental Engineering and Geology DPC
2558 Hamburg Turnpike
Suite 300
Lackawanna, New York 14218

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JOB DESCRIPTION

BCP RI - 619 Exchange Street Site

JOB NUMBER

480-228889-1

Eurofins Buffalo
10 Hazelwood Drive
Amherst NY 14228-2298

See page two for job notes and contact information.

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Job Notes

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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 Northeast, LLC Project Manager.

Authorization



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Authorized for release by
John Schove, Project Manager II
John.Schove@et.eurofinsus.com
(716)504-9838

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Definitions/Glossary

Client: Roux Environmental Engineering and Geology DPC
Job ID: 480-228889-1
Project/Site: BCP RI - 619 Exchange Street Site

Qualifiers

Air - GC/MS VOA

Qualifier	Qualifier Description
*-	LCS and/or LCSD is outside acceptance limits, low biased.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

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

Job ID: 480-228889-1 Eurofins Buffalo

Job Narrative
480-228889-1

Analytical test results meet all requirements of the associated regulatory program listed on the Accreditation/Certification Summary Page unless otherwise noted under the individual analysis. Data qualifiers and/or narrative comments are included to explain any exceptions, if applicable.

- Matrix QC may not be reported if insufficient sample is provided or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD may be performed, unless otherwise specified in the method.
- Surrogate and/or isotope dilution analyte recoveries (if applicable) which are outside of the QC window are confirmed unless attributed to a dilution or otherwise noted in the narrative.

Regulated compliance samples (e.g. SDWA, NPDES) must comply with the associated agency requirements/permits.

Receipt
The samples were received on 4/22/2025 9:50 AM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice.

Air - GC/MS VOA
Method TO15_LL_PF: The continuing calibration verification (CCV) associated with batch 410-636107 recovered above the upper control limit for 4-Isopropyltoluene. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported. The associated samples are:IA-3 (480-228889-5), IA-1 (480-228889-6), IA-2 (480-228889-7) and SSV-4 (480-228889-8).

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

Detection Summary

Client: Roux Environmental Engineering and Geology DPC
Job ID: 480-228889-1
Project/Site: BCP RI - 619 Exchange Street Site

Client Sample ID: IA-4
Lab Sample ID: 480-228889-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	33		4.8	1.3	ug/m3	1		TO 15 LL	Total/NA
Cyclohexane	1.3	J	1.7	0.38	ug/m3	1		TO 15 LL	Total/NA
Dichlorodifluoromethane	2.4	J	2.5	0.64	ug/m3	1		TO 15 LL	Total/NA
Isopropyl alcohol	1.7	J	4.9	0.59	ug/m3	1		TO 15 LL	Total/NA
Methyl Ethyl Ketone (2-Butanone)	3.4	J	5.9	0.62	ug/m3	1		TO 15 LL	Total/NA
tert-Butyl alcohol	0.99	J	3.0	0.64	ug/m3	1		TO 15 LL	Total/NA
Trichlorofluoromethane	1.3	J	2.8	0.84	ug/m3	1		TO 15 LL	Total/NA

Client Sample ID: SSV-2
Lab Sample ID: 480-228889-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	18		4.8	1.3	ug/m3	1		TO 15 LL	Total/NA
Benzene	0.38	J	1.6	0.35	ug/m3	1		TO 15 LL	Total/NA
Carbon disulfide	5.4		3.1	0.40	ug/m3	1		TO 15 LL	Total/NA
Cyclohexane	2.8		1.7	0.38	ug/m3	1		TO 15 LL	Total/NA
Dichlorodifluoromethane	2.4	J	2.5	0.64	ug/m3	1		TO 15 LL	Total/NA
Isopropyl alcohol	0.92	J	4.9	0.59	ug/m3	1		TO 15 LL	Total/NA
m,p-Xylene	1.4	J	4.3	1.1	ug/m3	1		TO 15 LL	Total/NA
Methyl Ethyl Ketone (2-Butanone)	2.3	J	5.9	0.62	ug/m3	1		TO 15 LL	Total/NA
n-Hexane	0.91	J	1.8	0.46	ug/m3	1		TO 15 LL	Total/NA
tert-Butyl alcohol	1.5	J	3.0	0.64	ug/m3	1		TO 15 LL	Total/NA
Toluene	3.7		1.9	0.45	ug/m3	1		TO 15 LL	Total/NA
Trichlorofluoromethane	1.1	J	2.8	0.84	ug/m3	1		TO 15 LL	Total/NA

Client Sample ID: SSV-1
Lab Sample ID: 480-228889-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1,1-Trichloroethane	1.2	J	2.7	0.65	ug/m3	1		TO 15 LL	Total/NA
Acetone	27		4.8	1.3	ug/m3	1		TO 15 LL	Total/NA
Benzene	1.0	J	1.6	0.35	ug/m3	1		TO 15 LL	Total/NA
Carbon disulfide	0.74	J	3.1	0.40	ug/m3	1		TO 15 LL	Total/NA
Chloroform	0.72	J	2.4	0.45	ug/m3	1		TO 15 LL	Total/NA
Cyclohexane	13		1.7	0.38	ug/m3	1		TO 15 LL	Total/NA
Dichlorodifluoromethane	1.9	J	2.5	0.64	ug/m3	1		TO 15 LL	Total/NA
Ethylbenzene	0.86	J	2.2	0.83	ug/m3	1		TO 15 LL	Total/NA
Isopropyl alcohol	0.98	J	4.9	0.59	ug/m3	1		TO 15 LL	Total/NA
m,p-Xylene	2.9	J	4.3	1.1	ug/m3	1		TO 15 LL	Total/NA
Methyl Ethyl Ketone (2-Butanone)	3.7	J	5.9	0.62	ug/m3	1		TO 15 LL	Total/NA
n-Heptane	6.2		2.0	0.94	ug/m3	1		TO 15 LL	Total/NA
n-Hexane	7.0		1.8	0.46	ug/m3	1		TO 15 LL	Total/NA
tert-Butyl alcohol	1.7	J	3.0	0.64	ug/m3	1		TO 15 LL	Total/NA
Tetrachloroethene	1.9	J	3.4	1.7	ug/m3	1		TO 15 LL	Total/NA
Toluene	6.5		1.9	0.45	ug/m3	1		TO 15 LL	Total/NA
Trichlorofluoromethane	0.91	J	2.8	0.84	ug/m3	1		TO 15 LL	Total/NA

Client Sample ID: SSV-3
Lab Sample ID: 480-228889-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	20		4.8	1.3	ug/m3	1		TO 15 LL	Total/NA
Benzene	2.1		1.6	0.35	ug/m3	1		TO 15 LL	Total/NA
Carbon disulfide	2.1	J	3.1	0.40	ug/m3	1		TO 15 LL	Total/NA
Chloroform	2.1	J	2.4	0.45	ug/m3	1		TO 15 LL	Total/NA

This Detection Summary does not include radiochemical test results.

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Client Sample ID: SSV-3 (Continued)
Lab Sample ID: 480-228889-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Cyclohexane	42		1.7	0.38	ug/m3	1		TO 15 LL	Total/NA
Dichlorodifluoromethane	2.3	J	2.5	0.64	ug/m3	1		TO 15 LL	Total/NA
Isopropyl alcohol	1.0	J	4.9	0.59	ug/m3	1		TO 15 LL	Total/NA
m,p-Xylene	1.8	J	4.3	1.1	ug/m3	1		TO 15 LL	Total/NA
Methyl Ethyl Ketone (2-Butanone)	2.5	J	5.9	0.62	ug/m3	1		TO 15 LL	Total/NA
n-Heptane	20		2.0	0.94	ug/m3	1		TO 15 LL	Total/NA
n-Hexane	26		1.8	0.46	ug/m3	1		TO 15 LL	Total/NA
tert-Butyl alcohol	1.2	J	3.0	0.64	ug/m3	1		TO 15 LL	Total/NA
Toluene	7.1		1.9	0.45	ug/m3	1		TO 15 LL	Total/NA
Trichlorofluoromethane	1.0	J	2.8	0.84	ug/m3	1		TO 15 LL	Total/NA

Client Sample ID: IA-3
Lab Sample ID: 480-228889-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	28		4.8	1.3	ug/m3	1		TO 15 LL	Total/NA
Cyclohexane	1.2	J	1.7	0.38	ug/m3	1		TO 15 LL	Total/NA
Dichlorodifluoromethane	2.7		2.5	0.64	ug/m3	1		TO 15 LL	Total/NA
Isopropyl alcohol	1.2	J	4.9	0.59	ug/m3	1		TO 15 LL	Total/NA
Methyl Ethyl Ketone (2-Butanone)	2.2	J	5.9	0.62	ug/m3	1		TO 15 LL	Total/NA
tert-Butyl alcohol	1.2	J	3.0	0.64	ug/m3	1		TO 15 LL	Total/NA
Toluene	0.82	J	1.9	0.45	ug/m3	1		TO 15 LL	Total/NA
Trichlorofluoromethane	1.4	J	2.8	0.84	ug/m3	1		TO 15 LL	Total/NA

Client Sample ID: IA-1
Lab Sample ID: 480-228889-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
2,2,4-Trimethylpentane	2.1	J	4.7	0.61	ug/m3	1		TO 15 LL	Total/NA
Acetone	15		4.8	1.3	ug/m3	1		TO 15 LL	Total/NA
Benzene	0.91	J	1.6	0.35	ug/m3	1		TO 15 LL	Total/NA
Cyclohexane	2.0		1.7	0.38	ug/m3	1		TO 15 LL	Total/NA
Dichlorodifluoromethane	2.5		2.5	0.64	ug/m3	1		TO 15 LL	Total/NA
Isopropyl alcohol	1.4	J	4.9	0.59	ug/m3	1		TO 15 LL	Total/NA
Methyl Ethyl Ketone (2-Butanone)	2.7	J	5.9	0.62	ug/m3	1		TO 15 LL	Total/NA
n-Hexane	2.8		1.8	0.46	ug/m3	1		TO 15 LL	Total/NA
tert-Butyl alcohol	1.3	J	3.0	0.64	ug/m3	1		TO 15 LL	Total/NA
Tetrahydrofuran	1.0	J	1.5	0.71	ug/m3	1		TO 15 LL	Total/NA
Toluene	1.9		1.9	0.45	ug/m3	1		TO 15 LL	Total/NA
Trichlorofluoromethane	1.2	J	2.8	0.84	ug/m3	1		TO 15 LL	Total/NA

Client Sample ID: IA-2
Lab Sample ID: 480-228889-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	13		4.8	1.3	ug/m3	1		TO 15 LL	Total/NA
Cyclohexane	0.86	J	1.7	0.38	ug/m3	1		TO 15 LL	Total/NA
Dichlorodifluoromethane	2.6		2.5	0.64	ug/m3	1		TO 15 LL	Total/NA
Isopropyl alcohol	1.4	J	4.9	0.59	ug/m3	1		TO 15 LL	Total/NA
Methyl Ethyl Ketone (2-Butanone)	2.1	J	5.9	0.62	ug/m3	1		TO 15 LL	Total/NA
tert-Butyl alcohol	1.1	J	3.0	0.64	ug/m3	1		TO 15 LL	Total/NA
Toluene	0.70	J	1.9	0.45	ug/m3	1		TO 15 LL	Total/NA
Trichlorofluoromethane	1.4	J	2.8	0.84	ug/m3	1		TO 15 LL	Total/NA

This Detection Summary does not include radiochemical test results.

Detection Summary

Client: Roux Environmental Engineering and Geology DPC
Job ID: 480-228889-1
Project/Site: BCP RI - 619 Exchange Street Site

Client Sample ID: SSV-4
Lab Sample ID: 480-228889-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1,1-Trichloroethane	2.8		2.7	0.65	ug/m3	1		TO 15 LL	Total/NA
Acetone	21		4.8	1.3	ug/m3	1		TO 15 LL	Total/NA
Benzene	1.2	J	1.6	0.35	ug/m3	1		TO 15 LL	Total/NA
Carbon disulfide	2.8	J	3.1	0.40	ug/m3	1		TO 15 LL	Total/NA
Chloroform	5.8		2.4	0.45	ug/m3	1		TO 15 LL	Total/NA
Cyclohexane	5.4		1.7	0.38	ug/m3	1		TO 15 LL	Total/NA
Dichlorodifluoromethane	2.6		2.5	0.64	ug/m3	1		TO 15 LL	Total/NA
Isopropyl alcohol	0.97	J	4.9	0.59	ug/m3	1		TO 15 LL	Total/NA
Methyl Ethyl Ketone (2-Butanone)	3.2	J	5.9	0.62	ug/m3	1		TO 15 LL	Total/NA
n-Heptane	0.96	J	2.0	0.94	ug/m3	1		TO 15 LL	Total/NA
n-Hexane	3.4		1.8	0.46	ug/m3	1		TO 15 LL	Total/NA
tert-Butyl alcohol	0.70	J	3.0	0.64	ug/m3	1		TO 15 LL	Total/NA
Tetrachloroethene	58		3.4	1.7	ug/m3	1		TO 15 LL	Total/NA
Toluene	2.2		1.9	0.45	ug/m3	1		TO 15 LL	Total/NA
Trichloroethene	1.0		0.20	0.97	ug/m3	1		TO 15 LL	Total/NA
Trichlorofluoromethane	1.1	J	2.8	0.84	ug/m3	1		TO 15 LL	Total/NA

This Detection Summary does not include radiochemical test results.

Client: Roux Environmental Engineering and Geology DPC
Job ID: 480-228889-1
Project/Site: BCP RI - 619 Exchange Street Site

Client Sample ID: IA-4
Lab Sample ID: 480-228889-1
Date Collected: 04/18/25 16:05
Matrix: Air
Date Received: 04/22/25 09:50
Sample Container: Summa Canister 6L

Method: EPA TO 15 LL - Volatile Organic Compounds in Ambient Air, Low Concentration (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		2.7	0.65	ug/m3			04/24/25 21:07	1
1,1,2,2-Tetrachloroethane	ND		3.4	1.0	ug/m3			04/24/25 21:07	1
1,1,2-Trichloroethane	ND		2.7	0.65	ug/m3			04/24/25 21:07	1
1,1,2-Trichlorotrifluoroethane	ND		3.8	0.84	ug/m3			04/24/25 21:07	1
1,1-Dichloroethane	ND		2.0	0.36	ug/m3			04/24/25 21:07	1
1,1-Dichloroethene	ND		0.20	0.56	ug/m3			04/24/25 21:07	1
1,2,4-Trichlorobenzene	ND		15	2.8	ug/m3			04/24/25 21:07	1
1,2,4-Trimethylbenzene	ND		2.5	1.4	ug/m3			04/24/25 21:07	1
1,2-Dibromoethane	ND		3.8	1.0	ug/m3			04/24/25 21:07	1
1,2-Dichlorobenzene	ND		3.0	1.2	ug/m3			04/24/25 21:07	1
1,2-Dichloroethane	ND		2.0	0.32	ug/m3			04/24/25 21:07	1
1,2-Dichlorotetrafluoroethane	ND		3.5	0.84	ug/m3			04/24/25 21:07	1
1,3,5-Trimethylbenzene	ND		2.5	1.6	ug/m3			04/24/25 21:07	1
1,3-Butadiene	ND		1.1	0.38	ug/m3			04/24/25 21:07	1
1,3-Dichlorobenzene	ND		3.0	1.1	ug/m3			04/24/25 21:07	1
1,4-Dioxane	ND		7.2	0.61	ug/m3			04/24/25 21:07	1
2,2,4-Trimethylpentane	ND		4.7	0.61	ug/m3			04/24/25 21:07	1
2-Chlorotoluene	ND		2.6	1.1	ug/m3			04/24/25 21:07	1
3-Chloropropene	ND		1.6	0.47	ug/m3			04/24/25 21:07	1
4-Ethyltoluene	ND		2.5	0.88	ug/m3			04/24/25 21:07	1
4-Isopropyltoluene	ND		2.7	1.5	ug/m3			04/24/25 21:07	1
4-Methyl-2-pentanone (Methyl isobutyl ketone)	ND		20	0.61	ug/m3			04/24/25 21:07	1
Acetone	**33**		4.8	1.3	ug/m3			04/24/25 21:07	1
Benzene	ND		1.6	0.35	ug/m3			04/24/25 21:07	1
Benzyl chloride	ND		2.6	1.3	ug/m3			04/24/25 21:07	1
Bromodichloromethane	ND		3.4	0.80	ug/m3			04/24/25 21:07	1
Bromoethene(Vinyl Bromide)	ND		22	0.79	ug/m3			04/24/25 21:07	1
Bromoform	ND		5.2	1.8	ug/m3			04/24/25 21:07	1
Bromomethane	ND		1.9	0.70	ug/m3			04/24/25 21:07	1
Carbon disulfide	ND		3.1	0.40	ug/m3			04/24/25 21:07	1
Carbon tetrachloride	ND		0.22	0.88	ug/m3			04/24/25 21:07	1
Chlorobenzene	ND		2.3	0.60	ug/m3			04/24/25 21:07	1
Chlorodifluoromethane	ND		1.8	0.53	ug/m3			04/24/25 21:07	1
Chloroethane	ND		1.3	0.50	ug/m3			04/24/25 21:07	1
Chloroform	ND		2.4	0.45	ug/m3			04/24/25 21:07	1
Chloromethane	ND		4.1	0.50	ug/m3			04/24/25 21:07	1
cis-1,2-Dichloroethene	ND		0.20	0.48	ug/m3			04/24/25 21:07	1
cis-1,3-Dichloropropene	ND		2.3	0.45	ug/m3			04/24/25 21:07	1
Cumene	ND		2.5	1.2	ug/m3			04/24/25 21:07	1
Cyclohexane	**1.3**	**J**	1.7	0.38	ug/m3			04/24/25 21:07	1
Dibromochloromethane	ND		4.3	1.1	ug/m3			04/24/25 21:07	1
Dichlorodifluoromethane	**2.4**	**J**	2.5	0.64	ug/m3			04/24/25 21:07	1
Ethylbenzene	ND		2.2	0.83	ug/m3			04/24/25 21:07	1
Hexachlorobutadiene	ND		21	5.0	ug/m3			04/24/25 21:07	1
Isopropyl alcohol	**1.7**	**J**	4.9	0.59	ug/m3			04/24/25 21:07	1
m,p-Xylene	ND		4.3	1.1	ug/m3			04/24/25 21:07	1
Methyl Butyl Ketone (2-Hexanone)	ND		8.2	0.74	ug/m3			04/24/25 21:07	1
Methyl Ethyl Ketone (2-Butanone)	**3.4**	**J**	5.9	0.62	ug/m3			04/24/25 21:07	1

Client Sample ID: IA-4
Lab Sample ID: 480-228889-1
Date Collected: 04/18/25 16:05
Matrix: Air
Date Received: 04/22/25 09:50
Sample Container: Summa Canister 6L

Method: EPA TO 15 LL - Volatile Organic Compounds in Ambient Air, Low Concentration (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl methacrylate	ND		4.1	0.61	ug/m3			04/24/25 21:07	1
Methyl tert-butyl ether	ND		1.8	0.54	ug/m3			04/24/25 21:07	1
Methylene Chloride	ND		6.9	0.87	ug/m3			04/24/25 21:07	1
Naphthalene	ND		2.0	2.6	ug/m3			04/24/25 21:07	1
n-Butylbenzene	ND		2.7	1.4	ug/m3			04/24/25 21:07	1
n-Heptane	ND		2.0	0.94	ug/m3			04/24/25 21:07	1
n-Hexane	ND		1.8	0.46	ug/m3			04/24/25 21:07	1
n-Propylbenzene	ND		2.5	1.0	ug/m3			04/24/25 21:07	1
o-Xylene	ND		2.2	1.3	ug/m3			04/24/25 21:07	1
sec-Butylbenzene	ND		2.7	2.1	ug/m3			04/24/25 21:07	1
Styrene	ND		2.1	0.85	ug/m3			04/24/25 21:07	1
tert-Butyl alcohol	**0.99**	**J**	3.0	0.64	ug/m3			04/24/25 21:07	1
tert-Butylbenzene	ND		5.5	4.2	ug/m3			04/24/25 21:07	1
Tetrachloroethene	ND		3.4	1.7	ug/m3			04/24/25 21:07	1
Tetrahydrofuran	ND		1.5	0.71	ug/m3			04/24/25 21:07	1
Toluene	ND		1.9	0.45	ug/m3			04/24/25 21:07	1
trans-1,2-Dichloroethene	ND		2.0	0.34	ug/m3			04/24/25 21:07	1
trans-1,3-Dichloropropene	ND		2.3	0.54	ug/m3			04/24/25 21:07	1
Trichloroethene	ND		0.20	0.97	ug/m3			04/24/25 21:07	1
Trichlorofluoromethane	**1.3**	**J**	2.8	0.84	ug/m3			04/24/25 21:07	1
Vinyl chloride	ND		0.20	0.31	ug/m3			04/24/25 21:07	1

Method: EPA TO 15 LL - Volatile Organic Compounds in Ambient Air, Low Concentration (GC/MS) - RA

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichloropropane	ND		2.3	0.60	ug/m3			04/25/25 17:50	1
1,4-Dichlorobenzene	ND		3.0	1.0	ug/m3			04/25/25 17:50	1

Client: Roux Environmental Engineering and Geology DPC
Job ID: 480-228889-1
Project/Site: BCP RI - 619 Exchange Street Site

Client Sample ID: SSV-2
Lab Sample ID: 480-228889-2
Date Collected: 04/18/25 16:01
Matrix: Air
Date Received: 04/22/25 09:50
Sample Container: Summa Canister 6L

Method: EPA TO 15 LL - Volatile Organic Compounds in Ambient Air, Low Concentration (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		2.7	0.65	ug/m3			04/24/25 21:35	1
1,1,2,2-Tetrachloroethane	ND		3.4	1.0	ug/m3			04/24/25 21:35	1
1,1,2-Trichloroethane	ND		2.7	0.65	ug/m3			04/24/25 21:35	1
1,1,2-Trichlorotrifluoroethane	ND		3.8	0.84	ug/m3			04/24/25 21:35	1
1,1-Dichloroethane	ND		2.0	0.36	ug/m3			04/24/25 21:35	1
1,1-Dichloroethene	ND		0.20	0.56	ug/m3			04/24/25 21:35	1
1,2,4-Trichlorobenzene	ND		15	2.8	ug/m3			04/24/25 21:35	1
1,2,4-Trimethylbenzene	ND		2.5	1.4	ug/m3			04/24/25 21:35	1
1,2-Dibromoethane	ND		3.8	1.0	ug/m3			04/24/25 21:35	1
1,2-Dichlorobenzene	ND		3.0	1.2	ug/m3			04/24/25 21:35	1
1,2-Dichloroethane	ND		2.0	0.32	ug/m3			04/24/25 21:35	1
1,2-Dichlorotetrafluoroethane	ND		3.5	0.84	ug/m3			04/24/25 21:35	1
1,3,5-Trimethylbenzene	ND		2.5	1.6	ug/m3			04/24/25 21:35	1
1,3-Butadiene	ND		1.1	0.38	ug/m3			04/24/25 21:35	1
1,3-Dichlorobenzene	ND		3.0	1.1	ug/m3			04/24/25 21:35	1
1,4-Dioxane	ND		7.2	0.61	ug/m3			04/24/25 21:35	1
2,2,4-Trimethylpentane	ND		4.7	0.61	ug/m3			04/24/25 21:35	1
2-Chlorotoluene	ND		2.6	1.1	ug/m3			04/24/25 21:35	1
3-Chloropropene	ND		1.6	0.47	ug/m3			04/24/25 21:35	1
4-Ethyltoluene	ND		2.5	0.88	ug/m3			04/24/25 21:35	1
4-Isopropyltoluene	ND		2.7	1.5	ug/m3			04/24/25 21:35	1
4-Methyl-2-pentanone (Methyl isobutyl ketone)	ND		20	0.61	ug/m3			04/24/25 21:35	1
Acetone	**18**		4.8	1.3	ug/m3			04/24/25 21:35	1
Benzene	**0.38**	**J**	1.6	0.35	ug/m3			04/24/25 21:35	1
Benzyl chloride	ND		2.6	1.3	ug/m3			04/24/25 21:35	1
Bromodichloromethane	ND		3.4	0.80	ug/m3			04/24/25 21:35	1
Bromoethene(Vinyl Bromide)	ND		22	0.79	ug/m3			04/24/25 21:35	1
Bromoform	ND		5.2	1.8	ug/m3			04/24/25 21:35	1
Bromomethane	ND		1.9	0.70	ug/m3			04/24/25 21:35	1
Carbon disulfide	**5.4**		3.1	0.40	ug/m3			04/24/25 21:35	1
Carbon tetrachloride	ND		0.22	0.88	ug/m3			04/24/25 21:35	1
Chlorobenzene	ND		2.3	0.60	ug/m3			04/24/25 21:35	1
Chlorodifluoromethane	ND		1.8	0.53	ug/m3			04/24/25 21:35	1
Chloroethane	ND		1.3	0.50	ug/m3			04/24/25 21:35	1
Chloroform	ND		2.4	0.45	ug/m3			04/24/25 21:35	1
Chloromethane	ND		4.1	0.50	ug/m3			04/24/25 21:35	1
cis-1,2-Dichloroethene	ND		0.20	0.48	ug/m3			04/24/25 21:35	1
cis-1,3-Dichloropropene	ND		2.3	0.45	ug/m3			04/24/25 21:35	1
Cumene	ND		2.5	1.2	ug/m3			04/24/25 21:35	1
Cyclohexane	**2.8**		1.7	0.38	ug/m3			04/24/25 21:35	1
Dibromochloromethane	ND		4.3	1.1	ug/m3			04/24/25 21:35	1
Dichlorodifluoromethane	**2.4**	**J**	2.5	0.64	ug/m3			04/24/25 21:35	1
Ethylbenzene	ND		2.2	0.83	ug/m3			04/24/25 21:35	1
Hexachlorobutadiene	ND		21	5.0	ug/m3			04/24/25 21:35	1
Isopropyl alcohol	**0.92**	**J**	4.9	0.59	ug/m3			04/24/25 21:35	1
m,p-Xylene	**1.4**	**J**	4.3	1.1	ug/m3			04/24/25 21:35	1
Methyl Butyl Ketone (2-Hexanone)	ND		8.2	0.74	ug/m3			04/24/25 21:35	1
Methyl Ethyl Ketone (2-Butanone)	**2.3**	**J**	5.9	0.62	ug/m3			04/24/25 21:35	1

Client: Roux Environmental Engineering and Geology DPC
Job ID: 480-228889-1
Project/Site: BCP RI - 619 Exchange Street Site

Client Sample ID: SSV-2
Lab Sample ID: 480-228889-2
Date Collected: 04/18/25 16:01
Matrix: Air
Date Received: 04/22/25 09:50
Sample Container: Summa Canister 6L

Method: EPA TO 15 LL - Volatile Organic Compounds in Ambient Air, Low Concentration (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl methacrylate	ND		4.1	0.61	ug/m3			04/24/25 21:35	1
Methyl tert-butyl ether	ND		1.8	0.54	ug/m3			04/24/25 21:35	1
Methylene Chloride	ND		6.9	0.87	ug/m3			04/24/25 21:35	1
Naphthalene	ND		2.0	2.6	ug/m3			04/24/25 21:35	1
n-Butylbenzene	ND		2.7	1.4	ug/m3			04/24/25 21:35	1
n-Heptane	ND		2.0	0.94	ug/m3			04/24/25 21:35	1
n-Hexane	**0.91**	**J**	1.8	0.46	ug/m3			04/24/25 21:35	1
n-Propylbenzene	ND		2.5	1.0	ug/m3			04/24/25 21:35	1
o-Xylene	ND		2.2	1.3	ug/m3			04/24/25 21:35	1
sec-Butylbenzene	ND		2.7	2.1	ug/m3			04/24/25 21:35	1
Styrene	ND		2.1	0.85	ug/m3			04/24/25 21:35	1
tert-Butyl alcohol	**1.5**	**J**	3.0	0.64	ug/m3			04/24/25 21:35	1
tert-Butylbenzene	ND		5.5	4.2	ug/m3			04/24/25 21:35	1
Tetrachloroethene	ND		3.4	1.7	ug/m3			04/24/25 21:35	1
Tetrahydrofuran	ND		1.5	0.71	ug/m3			04/24/25 21:35	1
Toluene	**3.7**		1.9	0.45	ug/m3			04/24/25 21:35	1
trans-1,2-Dichloroethene	ND		2.0	0.34	ug/m3			04/24/25 21:35	1
trans-1,3-Dichloropropene	ND		2.3	0.54	ug/m3			04/24/25 21:35	1
Trichloroethene	ND		0.20	0.97	ug/m3			04/24/25 21:35	1
Trichlorofluoromethane	**1.1**	**J**	2.8	0.84	ug/m3			04/24/25 21:35	1
Vinyl chloride	ND		0.20	0.31	ug/m3			04/24/25 21:35	1

Method: EPA TO 15 LL - Volatile Organic Compounds in Ambient Air, Low Concentration (GC/MS) - RA

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichloropropane	ND		2.3	0.60	ug/m3			04/25/25 18:19	1
1,4-Dichlorobenzene	ND		3.0	1.0	ug/m3			04/25/25 18:19	1

Client: Roux Environmental Engineering and Geology DPC
Job ID: 480-228889-1
Project/Site: BCP RI - 619 Exchange Street Site

Client Sample ID: SSV-1
Lab Sample ID: 480-228889-3
Date Collected: 04/18/25 15:57
Matrix: Air
Date Received: 04/22/25 09:50
Sample Container: Summa Canister 6L

Method: EPA TO 15 LL - Volatile Organic Compounds in Ambient Air, Low Concentration (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	**1.2**	**J**	2.7	0.65	ug/m3			04/24/25 22:04	1
1,1,2,2-Tetrachloroethane	ND		3.4	1.0	ug/m3			04/24/25 22:04	1
1,1,2-Trichloroethane	ND		2.7	0.65	ug/m3			04/24/25 22:04	1
1,1,2-Trichlorotrifluoroethane	ND		3.8	0.84	ug/m3			04/24/25 22:04	1
1,1-Dichloroethane	ND		2.0	0.36	ug/m3			04/24/25 22:04	1
1,1-Dichloroethene	ND		0.20	0.56	ug/m3			04/24/25 22:04	1
1,2,4-Trichlorobenzene	ND		15	2.8	ug/m3			04/24/25 22:04	1
1,2,4-Trimethylbenzene	ND		2.5	1.4	ug/m3			04/24/25 22:04	1
1,2-Dibromoethane	ND		3.8	1.0	ug/m3			04/24/25 22:04	1
1,2-Dichlorobenzene	ND		3.0	1.2	ug/m3			04/24/25 22:04	1
1,2-Dichloroethane	ND		2.0	0.32	ug/m3			04/24/25 22:04	1
1,2-Dichlorotetrafluoroethane	ND		3.5	0.84	ug/m3			04/24/25 22:04	1
1,3,5-Trimethylbenzene	ND		2.5	1.6	ug/m3			04/24/25 22:04	1
1,3-Butadiene	ND		1.1	0.38	ug/m3			04/24/25 22:04	1
1,3-Dichlorobenzene	ND		3.0	1.1	ug/m3			04/24/25 22:04	1
1,4-Dioxane	ND		7.2	0.61	ug/m3			04/24/25 22:04	1
2,2,4-Trimethylpentane	ND		4.7	0.61	ug/m3			04/24/25 22:04	1
2-Chlorotoluene	ND		2.6	1.1	ug/m3			04/24/25 22:04	1
3-Chloropropene	ND		1.6	0.47	ug/m3			04/24/25 22:04	1
4-Ethyltoluene	ND		2.5	0.88	ug/m3			04/24/25 22:04	1
4-Isopropyltoluene	ND		2.7	1.5	ug/m3			04/24/25 22:04	1
4-Methyl-2-pentanone (Methyl isobutyl ketone)	ND		20	0.61	ug/m3			04/24/25 22:04	1
Acetone	**27**		4.8	1.3	ug/m3			04/24/25 22:04	1
Benzene	**1.0**	**J**	1.6	0.35	ug/m3			04/24/25 22:04	1
Benzyl chloride	ND		2.6	1.3	ug/m3			04/24/25 22:04	1
Bromodichloromethane	ND		3.4	0.80	ug/m3			04/24/25 22:04	1
Bromoethene(Vinyl Bromide)	ND		22	0.79	ug/m3			04/24/25 22:04	1
Bromoform	ND		5.2	1.8	ug/m3			04/24/25 22:04	1
Bromomethane	ND		1.9	0.70	ug/m3			04/24/25 22:04	1
Carbon disulfide	**0.74**	**J**	3.1	0.40	ug/m3			04/24/25 22:04	1
Carbon tetrachloride	ND		0.22	0.88	ug/m3			04/24/25 22:04	1
Chlorobenzene	ND		2.3	0.60	ug/m3			04/24/25 22:04	1
Chlorodifluoromethane	ND		1.8	0.53	ug/m3			04/24/25 22:04	1
Chloroethane	ND		1.3	0.50	ug/m3			04/24/25 22:04	1
Chloroform	**0.72**	**J**	2.4	0.45	ug/m3			04/24/25 22:04	1
Chloromethane	ND		4.1	0.50	ug/m3			04/24/25 22:04	1
cis-1,2-Dichloroethene	ND		0.20	0.48	ug/m3			04/24/25 22:04	1
cis-1,3-Dichloropropene	ND		2.3	0.45	ug/m3			04/24/25 22:04	1
Cumene	ND		2.5	1.2	ug/m3			04/24/25 22:04	1
Cyclohexane	**13**		1.7	0.38	ug/m3			04/24/25 22:04	1
Dibromochloromethane	ND		4.3	1.1	ug/m3			04/24/25 22:04	1
Dichlorodifluoromethane	**1.9**	**J**	2.5	0.64	ug/m3			04/24/25 22:04	1
Ethylbenzene	**0.86**	**J**	2.2	0.83	ug/m3			04/24/25 22:04	1
Hexachlorobutadiene	ND		21	5.0	ug/m3			04/24/25 22:04	1
Isopropyl alcohol	**0.98**	**J**	4.9	0.59	ug/m3			04/24/25 22:04	1
m,p-Xylene	**2.9**	**J**	4.3	1.1	ug/m3			04/24/25 22:04	1
Methyl Butyl Ketone (2-Hexanone)	ND		8.2	0.74	ug/m3			04/24/25 22:04	1
Methyl Ethyl Ketone (2-Butanone)	**3.7**	**J**	5.9	0.62	ug/m3			04/24/25 22:04	1

Client: Roux Environmental Engineering and Geology DPC
Job ID: 480-228889-1
Project/Site: BCP RI - 619 Exchange Street Site

Client Sample ID: SSV-1
Lab Sample ID: 480-228889-3
Date Collected: 04/18/25 15:57
Matrix: Air
Date Received: 04/22/25 09:50
Sample Container: Summa Canister 6L

Method: EPA TO 15 LL - Volatile Organic Compounds in Ambient Air, Low Concentration (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl methacrylate	ND		4.1	0.61	ug/m3			04/24/25 22:04	1
Methyl tert-butyl ether	ND		1.8	0.54	ug/m3			04/24/25 22:04	1
Methylene Chloride	ND		6.9	0.87	ug/m3			04/24/25 22:04	1
Naphthalene	ND		2.0	2.6	ug/m3			04/24/25 22:04	1
n-Butylbenzene	ND		2.7	1.4	ug/m3			04/24/25 22:04	1
n-Heptane	**6.2**		2.0	0.94	ug/m3			04/24/25 22:04	1
n-Hexane	**7.0**		1.8	0.46	ug/m3			04/24/25 22:04	1
n-Propylbenzene	ND		2.5	1.0	ug/m3			04/24/25 22:04	1
o-Xylene	ND		2.2	1.3	ug/m3			04/24/25 22:04	1
sec-Butylbenzene	ND		2.7	2.1	ug/m3			04/24/25 22:04	1
Styrene	ND		2.1	0.85	ug/m3			04/24/25 22:04	1
tert-Butyl alcohol	**1.7**	**J**	3.0	0.64	ug/m3			04/24/25 22:04	1
tert-Butylbenzene	ND		5.5	4.2	ug/m3			04/24/25 22:04	1
Tetrachloroethene	**1.9**	**J**	3.4	1.7	ug/m3			04/24/25 22:04	1
Tetrahydrofuran	ND		1.5	0.71	ug/m3			04/24/25 22:04	1
Toluene	**6.5**		1.9	0.45	ug/m3			04/24/25 22:04	1
trans-1,2-Dichloroethene	ND		2.0	0.34	ug/m3			04/24/25 22:04	1
trans-1,3-Dichloropropene	ND		2.3	0.54	ug/m3			04/24/25 22:04	1
Trichloroethene	ND		0.20	0.97	ug/m3			04/24/25 22:04	1
Trichlorofluoromethane	**0.91**	**J**	2.8	0.84	ug/m3			04/24/25 22:04	1
Vinyl chloride	ND		0.20	0.31	ug/m3			04/24/25 22:04	1

Method: EPA TO 15 LL - Volatile Organic Compounds in Ambient Air, Low Concentration (GC/MS) - RA

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichloropropane	ND		2.3	0.60	ug/m3			04/25/25 18:47	1
1,4-Dichlorobenzene	ND		3.0	1.0	ug/m3			04/25/25 18:47	1

Client: Roux Environmental Engineering and Geology DPC
Job ID: 480-228889-1
Project/Site: BCP RI - 619 Exchange Street Site

Client Sample ID: SSV-3
Lab Sample ID: 480-228889-4
Date Collected: 04/18/25 16:03
Matrix: Air
Date Received: 04/22/25 09:50
Sample Container: Summa Canister 6L

Method: EPA TO 15 LL - Volatile Organic Compounds in Ambient Air, Low Concentration (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		2.7	0.65	ug/m3			04/24/25 22:33	1
1,1,2,2-Tetrachloroethane	ND		3.4	1.0	ug/m3			04/24/25 22:33	1
1,1,2-Trichloroethane	ND		2.7	0.65	ug/m3			04/24/25 22:33	1
1,1,2-Trichlorotrifluoroethane	ND		3.8	0.84	ug/m3			04/24/25 22:33	1
1,1-Dichloroethane	ND		2.0	0.36	ug/m3			04/24/25 22:33	1
1,1-Dichloroethene	ND		0.20	0.56	ug/m3			04/24/25 22:33	1
1,2,4-Trichlorobenzene	ND		15	2.8	ug/m3			04/24/25 22:33	1
1,2,4-Trimethylbenzene	ND		2.5	1.4	ug/m3			04/24/25 22:33	1
1,2-Dibromoethane	ND		3.8	1.0	ug/m3			04/24/25 22:33	1
1,2-Dichlorobenzene	ND		3.0	1.2	ug/m3			04/24/25 22:33	1
1,2-Dichloroethane	ND		2.0	0.32	ug/m3			04/24/25 22:33	1
1,2-Dichlorotetrafluoroethane	ND		3.5	0.84	ug/m3			04/24/25 22:33	1
1,3,5-Trimethylbenzene	ND		2.5	1.6	ug/m3			04/24/25 22:33	1
1,3-Butadiene	ND		1.1	0.38	ug/m3			04/24/25 22:33	1
1,3-Dichlorobenzene	ND		3.0	1.1	ug/m3			04/24/25 22:33	1
1,4-Dioxane	ND		7.2	0.61	ug/m3			04/24/25 22:33	1
2,2,4-Trimethylpentane	ND		4.7	0.61	ug/m3			04/24/25 22:33	1
2-Chlorotoluene	ND		2.6	1.1	ug/m3			04/24/25 22:33	1
3-Chloropropene	ND		1.6	0.47	ug/m3			04/24/25 22:33	1
4-Ethyltoluene	ND		2.5	0.88	ug/m3			04/24/25 22:33	1
4-Isopropyltoluene	ND		2.7	1.5	ug/m3			04/24/25 22:33	1
4-Methyl-2-pentanone (Methyl isobutyl ketone)	ND		20	0.61	ug/m3			04/24/25 22:33	1
Acetone	**20**		4.8	1.3	ug/m3			04/24/25 22:33	1
Benzene	**2.1**		1.6	0.35	ug/m3			04/24/25 22:33	1
Benzyl chloride	ND		2.6	1.3	ug/m3			04/24/25 22:33	1
Bromodichloromethane	ND		3.4	0.80	ug/m3			04/24/25 22:33	1
Bromoethene(Vinyl Bromide)	ND		22	0.79	ug/m3			04/24/25 22:33	1
Bromoform	ND		5.2	1.8	ug/m3			04/24/25 22:33	1
Bromomethane	ND		1.9	0.70	ug/m3			04/24/25 22:33	1
Carbon disulfide	**2.1**	**J**	3.1	0.40	ug/m3			04/24/25 22:33	1
Carbon tetrachloride	ND		0.22	0.88	ug/m3			04/24/25 22:33	1
Chlorobenzene	ND		2.3	0.60	ug/m3			04/24/25 22:33	1
Chlorodifluoromethane	ND		1.8	0.53	ug/m3			04/24/25 22:33	1
Chloroethane	ND		1.3	0.50	ug/m3			04/24/25 22:33	1
Chloroform	**2.1**	**J**	2.4	0.45	ug/m3			04/24/25 22:33	1
Chloromethane	ND		4.1	0.50	ug/m3			04/24/25 22:33	1
cis-1,2-Dichloroethene	ND		0.20	0.48	ug/m3			04/24/25 22:33	1
cis-1,3-Dichloropropene	ND		2.3	0.45	ug/m3			04/24/25 22:33	1
Cumene	ND		2.5	1.2	ug/m3			04/24/25 22:33	1
Cyclohexane	**42**		1.7	0.38	ug/m3			04/24/25 22:33	1
Dibromochloromethane	ND		4.3	1.1	ug/m3			04/24/25 22:33	1
Dichlorodifluoromethane	**2.3**	**J**	2.5	0.64	ug/m3			04/24/25 22:33	1
Ethylbenzene	ND		2.2	0.83	ug/m3			04/24/25 22:33	1
Hexachlorobutadiene	ND		21	5.0	ug/m3			04/24/25 22:33	1
Isopropyl alcohol	**1.0**	**J**	4.9	0.59	ug/m3			04/24/25 22:33	1
m,p-Xylene	**1.8**	**J**	4.3	1.1	ug/m3			04/24/25 22:33	1
Methyl Butyl Ketone (2-Hexanone)	ND		8.2	0.74	ug/m3			04/24/25 22:33	1
Methyl Ethyl Ketone (2-Butanone)	**2.5**	**J**	5.9	0.62	ug/m3			04/24/25 22:33	1

Client: Roux Environmental Engineering and Geology DPC
Job ID: 480-228889-1
Project/Site: BCP RI - 619 Exchange Street Site

Client Sample ID: SSV-3
Lab Sample ID: 480-228889-4
Date Collected: 04/18/25 16:03
Matrix: Air
Date Received: 04/22/25 09:50
Sample Container: Summa Canister 6L

Method: EPA TO 15 LL - Volatile Organic Compounds in Ambient Air, Low Concentration (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl methacrylate	ND		4.1	0.61	ug/m3			04/24/25 22:33	1
Methyl tert-butyl ether	ND		1.8	0.54	ug/m3			04/24/25 22:33	1
Methylene Chloride	ND		6.9	0.87	ug/m3			04/24/25 22:33	1
Naphthalene	ND		2.0	2.6	ug/m3			04/24/25 22:33	1
n-Butylbenzene	ND		2.7	1.4	ug/m3			04/24/25 22:33	1
n-Heptane	**20**		2.0	0.94	ug/m3			04/24/25 22:33	1
n-Hexane	**26**		1.8	0.46	ug/m3			04/24/25 22:33	1
n-Propylbenzene	ND		2.5	1.0	ug/m3			04/24/25 22:33	1
o-Xylene	ND		2.2	1.3	ug/m3			04/24/25 22:33	1
sec-Butylbenzene	ND		2.7	2.1	ug/m3			04/24/25 22:33	1
Styrene	ND		2.1	0.85	ug/m3			04/24/25 22:33	1
tert-Butyl alcohol	**1.2**	**J**	3.0	0.64	ug/m3			04/24/25 22:33	1
tert-Butylbenzene	ND		5.5	4.2	ug/m3			04/24/25 22:33	1
Tetrachloroethene	ND		3.4	1.7	ug/m3			04/24/25 22:33	1
Tetrahydrofuran	ND		1.5	0.71	ug/m3			04/24/25 22:33	1
Toluene	**7.1**		1.9	0.45	ug/m3			04/24/25 22:33	1
trans-1,2-Dichloroethene	ND		2.0	0.34	ug/m3			04/24/25 22:33	1
trans-1,3-Dichloropropene	ND		2.3	0.54	ug/m3			04/24/25 22:33	1
Trichloroethene	ND		0.20	0.97	ug/m3			04/24/25 22:33	1
Trichlorofluoromethane	**1.0**	**J**	2.8	0.84	ug/m3			04/24/25 22:33	1
Vinyl chloride	ND		0.20	0.31	ug/m3			04/24/25 22:33	1

Method: EPA TO 15 LL - Volatile Organic Compounds in Ambient Air, Low Concentration (GC/MS) - RA

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichloropropane	ND		2.3	0.60	ug/m3			04/25/25 19:16	1
1,4-Dichlorobenzene	ND		3.0	1.0	ug/m3			04/25/25 19:16	1

Client: Roux Environmental Engineering and Geology DPC
Job ID: 480-228889-1
Project/Site: BCP RI - 619 Exchange Street Site

Client Sample ID: IA-3
Lab Sample ID: 480-228889-5
Date Collected: 04/18/25 16:04
Matrix: Air
Date Received: 04/22/25 09:50
Sample Container: Summa Canister 6L

Method: EPA TO 15 LL - Volatile Organic Compounds in Ambient Air, Low Concentration (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		2.7	0.65	ug/m3			04/27/25 22:19	1
1,1,2,2-Tetrachloroethane	ND		3.4	1.0	ug/m3			04/27/25 22:19	1
1,1,2-Trichloroethane	ND		2.7	0.65	ug/m3			04/27/25 22:19	1
1,1,2-Trichlorotrifluoroethane	ND		3.8	0.84	ug/m3			04/27/25 22:19	1
1,1-Dichloroethane	ND		2.0	0.36	ug/m3			04/27/25 22:19	1
1,1-Dichloroethene	ND		0.20	0.56	ug/m3			04/27/25 22:19	1
1,2,4-Trichlorobenzene	ND		15	2.8	ug/m3			04/27/25 22:19	1
1,2,4-Trimethylbenzene	ND		2.5	1.4	ug/m3			04/27/25 22:19	1
1,2-Dibromoethane	ND		3.8	1.0	ug/m3			04/27/25 22:19	1
1,2-Dichlorobenzene	ND		3.0	1.2	ug/m3			04/27/25 22:19	1
1,2-Dichloroethane	ND		2.0	0.32	ug/m3			04/27/25 22:19	1
1,2-Dichloropropane	ND		2.3	0.60	ug/m3			04/27/25 22:19	1
1,2-Dichlorotetrafluoroethane	ND		3.5	0.84	ug/m3			04/27/25 22:19	1
1,3,5-Trimethylbenzene	ND		2.5	1.6	ug/m3			04/27/25 22:19	1
1,3-Butadiene	ND		1.1	0.38	ug/m3			04/27/25 22:19	1
1,3-Dichlorobenzene	ND		3.0	1.1	ug/m3			04/27/25 22:19	1
1,4-Dichlorobenzene	ND		3.0	1.0	ug/m3			04/27/25 22:19	1
1,4-Dioxane	ND		7.2	0.61	ug/m3			04/27/25 22:19	1
2,2,4-Trimethylpentane	ND		4.7	0.61	ug/m3			04/27/25 22:19	1
2-Chlorotoluene	ND		2.6	1.1	ug/m3			04/27/25 22:19	1
3-Chloropropene	ND		1.6	0.47	ug/m3			04/27/25 22:19	1
4-Ethyltoluene	ND		2.5	0.88	ug/m3			04/27/25 22:19	1
4-Isopropyltoluene	ND		2.7	1.5	ug/m3			04/27/25 22:19	1
4-Methyl-2-pentanone (Methyl isobutyl ketone)	ND		20	0.61	ug/m3			04/27/25 22:19	1
Acetone	**28**		4.8	1.3	ug/m3			04/27/25 22:19	1
Benzene	ND		1.6	0.35	ug/m3			04/27/25 22:19	1
Benzyl chloride	ND		2.6	1.3	ug/m3			04/27/25 22:19	1
Bromodichloromethane	ND		3.4	0.80	ug/m3			04/27/25 22:19	1
Bromoethene(Vinyl Bromide)	ND		22	0.79	ug/m3			04/27/25 22:19	1
Bromoform	ND		5.2	1.8	ug/m3			04/27/25 22:19	1
Bromomethane	ND		1.9	0.70	ug/m3			04/27/25 22:19	1
Carbon disulfide	ND		3.1	0.40	ug/m3			04/27/25 22:19	1
Carbon tetrachloride	ND		0.22	0.88	ug/m3			04/27/25 22:19	1
Chlorobenzene	ND		2.3	0.60	ug/m3			04/27/25 22:19	1
Chlorodifluoromethane	ND		1.8	0.53	ug/m3			04/27/25 22:19	1
Chloroethane	ND		1.3	0.50	ug/m3			04/27/25 22:19	1
Chloroform	ND		2.4	0.45	ug/m3			04/27/25 22:19	1
Chloromethane	ND		4.1	0.50	ug/m3			04/27/25 22:19	1
cis-1,2-Dichloroethene	ND		0.20	0.48	ug/m3			04/27/25 22:19	1
cis-1,3-Dichloropropene	ND		2.3	0.45	ug/m3			04/27/25 22:19	1
Cumene	ND		2.5	1.2	ug/m3			04/27/25 22:19	1
Cyclohexane	**1.2**	**J**	1.7	0.38	ug/m3			04/27/25 22:19	1
Dibromochloromethane	ND		4.3	1.1	ug/m3			04/27/25 22:19	1
Dichlorodifluoromethane	**2.7**		2.5	0.64	ug/m3			04/27/25 22:19	1
Ethylbenzene	ND		2.2	0.83	ug/m3			04/27/25 22:19	1
Hexachlorobutadiene	ND		21	5.0	ug/m3			04/27/25 22:19	1
Isopropyl alcohol	**1.2**	**J**	4.9	0.59	ug/m3			04/27/25 22:19	1
m,p-Xylene	ND		4.3	1.1	ug/m3			04/27/25 22:19	1

Client: Roux Environmental Engineering and Geology DPC
Job ID: 480-228889-1
Project/Site: BCP RI - 619 Exchange Street Site

Client Sample ID: IA-3
Lab Sample ID: 480-228889-5
Date Collected: 04/18/25 16:04
Matrix: Air
Date Received: 04/22/25 09:50
Sample Container: Summa Canister 6L

Method: EPA TO 15 LL - Volatile Organic Compounds in Ambient Air, Low Concentration (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl Butyl Ketone (2-Hexanone)	ND		8.2	0.74	ug/m3			04/27/25 22:19	1
Methyl Ethyl Ketone (2-Butanone)	**2.2**	**J**	5.9	0.62	ug/m3			04/27/25 22:19	1
Methyl methacrylate	ND		4.1	0.61	ug/m3			04/27/25 22:19	1
Methyl tert-butyl ether	ND		1.8	0.54	ug/m3			04/27/25 22:19	1
Methylene Chloride	ND		6.9	0.87	ug/m3			04/27/25 22:19	1
Naphthalene	ND		2.0	2.6	ug/m3			04/27/25 22:19	1
n-Butylbenzene	ND		2.7	1.4	ug/m3			04/27/25 22:19	1
n-Heptane	ND		2.0	0.94	ug/m3			04/27/25 22:19	1
n-Hexane	ND		1.8	0.46	ug/m3			04/27/25 22:19	1
n-Propylbenzene	ND		2.5	1.0	ug/m3			04/27/25 22:19	1
o-Xylene	ND		2.2	1.3	ug/m3			04/27/25 22:19	1
sec-Butylbenzene	ND		2.7	2.1	ug/m3			04/27/25 22:19	1
Styrene	ND		2.1	0.85	ug/m3			04/27/25 22:19	1
tert-Butyl alcohol	**1.2**	**J**	3.0	0.64	ug/m3			04/27/25 22:19	1
tert-Butylbenzene	ND		5.5	4.2	ug/m3			04/27/25 22:19	1
Tetrachloroethene	ND		3.4	1.7	ug/m3			04/27/25 22:19	1
Tetrahydrofuran	ND		1.5	0.71	ug/m3			04/27/25 22:19	1
Toluene	**0.82**	**J**	1.9	0.45	ug/m3			04/27/25 22:19	1
trans-1,2-Dichloroethene	ND		2.0	0.34	ug/m3			04/27/25 22:19	1
trans-1,3-Dichloropropene	ND		2.3	0.54	ug/m3			04/27/25 22:19	1
Trichloroethene	ND		0.20	0.97	ug/m3			04/27/25 22:19	1
Trichlorofluoromethane	**1.4**	**J**	2.8	0.84	ug/m3			04/27/25 22:19	1
Vinyl chloride	ND		0.20	0.31	ug/m3			04/27/25 22:19	1

Client: Roux Environmental Engineering and Geology DPC
Job ID: 480-228889-1
Project/Site: BCP RI - 619 Exchange Street Site

Client Sample ID: IA-1
Lab Sample ID: 480-228889-6
Date Collected: 04/18/25 15:58
Matrix: Air
Date Received: 04/22/25 09:50
Sample Container: Summa Canister 6L

Method: EPA TO 15 LL - Volatile Organic Compounds in Ambient Air, Low Concentration (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		2.7	0.65	ug/m3			04/27/25 22:48	1
1,1,2,2-Tetrachloroethane	ND		3.4	1.0	ug/m3			04/27/25 22:48	1
1,1,2-Trichloroethane	ND		2.7	0.65	ug/m3			04/27/25 22:48	1
1,1,2-Trichlorotrifluoroethane	ND		3.8	0.84	ug/m3			04/27/25 22:48	1
1,1-Dichloroethane	ND		2.0	0.36	ug/m3			04/27/25 22:48	1
1,1-Dichloroethene	ND		0.20	0.56	ug/m3			04/27/25 22:48	1
1,2,4-Trichlorobenzene	ND		15	2.8	ug/m3			04/27/25 22:48	1
1,2,4-Trimethylbenzene	ND		2.5	1.4	ug/m3			04/27/25 22:48	1
1,2-Dibromoethane	ND		3.8	1.0	ug/m3			04/27/25 22:48	1
1,2-Dichlorobenzene	ND		3.0	1.2	ug/m3			04/27/25 22:48	1
1,2-Dichloroethane	ND		2.0	0.32	ug/m3			04/27/25 22:48	1
1,2-Dichloropropane	ND		2.3	0.60	ug/m3			04/27/25 22:48	1
1,2-Dichlorotetrafluoroethane	ND		3.5	0.84	ug/m3			04/27/25 22:48	1
1,3,5-Trimethylbenzene	ND		2.5	1.6	ug/m3			04/27/25 22:48	1
1,3-Butadiene	ND		1.1	0.38	ug/m3			04/27/25 22:48	1
1,3-Dichlorobenzene	ND		3.0	1.1	ug/m3			04/27/25 22:48	1
1,4-Dichlorobenzene	ND		3.0	1.0	ug/m3			04/27/25 22:48	1
1,4-Dioxane	ND		7.2	0.61	ug/m3			04/27/25 22:48	1
2,2,4-Trimethylpentane	**2.1**	**J**	4.7	0.61	ug/m3			04/27/25 22:48	1
2-Chlorotoluene	ND		2.6	1.1	ug/m3			04/27/25 22:48	1
3-Chloropropene	ND		1.6	0.47	ug/m3			04/27/25 22:48	1
4-Ethyltoluene	ND		2.5	0.88	ug/m3			04/27/25 22:48	1
4-Isopropyltoluene	ND		2.7	1.5	ug/m3			04/27/25 22:48	1
4-Methyl-2-pentanone (Methyl isobutyl ketone)	ND		20	0.61	ug/m3			04/27/25 22:48	1
Acetone	**15**		4.8	1.3	ug/m3			04/27/25 22:48	1
Benzene	**0.91**	**J**	1.6	0.35	ug/m3			04/27/25 22:48	1
Benzyl chloride	ND		2.6	1.3	ug/m3			04/27/25 22:48	1
Bromodichloromethane	ND		3.4	0.80	ug/m3			04/27/25 22:48	1
Bromoethene(Vinyl Bromide)	ND		22	0.79	ug/m3			04/27/25 22:48	1
Bromoform	ND		5.2	1.8	ug/m3			04/27/25 22:48	1
Bromomethane	ND		1.9	0.70	ug/m3			04/27/25 22:48	1
Carbon disulfide	ND		3.1	0.40	ug/m3			04/27/25 22:48	1
Carbon tetrachloride	ND		0.22	0.88	ug/m3			04/27/25 22:48	1
Chlorobenzene	ND		2.3	0.60	ug/m3			04/27/25 22:48	1
Chlorodifluoromethane	ND		1.8	0.53	ug/m3			04/27/25 22:48	1
Chloroethane	ND		1.3	0.50	ug/m3			04/27/25 22:48	1
Chloroform	ND		2.4	0.45	ug/m3			04/27/25 22:48	1
Chloromethane	ND		4.1	0.50	ug/m3			04/27/25 22:48	1
cis-1,2-Dichloroethene	ND		0.20	0.48	ug/m3			04/27/25 22:48	1
cis-1,3-Dichloropropene	ND		2.3	0.45	ug/m3			04/27/25 22:48	1
Cumene	ND		2.5	1.2	ug/m3			04/27/25 22:48	1
Cyclohexane	**2.0**		1.7	0.38	ug/m3			04/27/25 22:48	1
Dibromochloromethane	ND		4.3	1.1	ug/m3			04/27/25 22:48	1
Dichlorodifluoromethane	**2.5**		2.5	0.64	ug/m3			04/27/25 22:48	1
Ethylbenzene	ND		2.2	0.83	ug/m3			04/27/25 22:48	1
Hexachlorobutadiene	ND		21	5.0	ug/m3			04/27/25 22:48	1
Isopropyl alcohol	**1.4**	**J**	4.9	0.59	ug/m3			04/27/25 22:48	1
m,p-Xylene	ND		4.3	1.1	ug/m3			04/27/25 22:48	1

Client: Roux Environmental Engineering and Geology DPC
Job ID: 480-228889-1
Project/Site: BCP RI - 619 Exchange Street Site

Client Sample ID: IA-1
Lab Sample ID: 480-228889-6
Date Collected: 04/18/25 15:58
Matrix: Air
Date Received: 04/22/25 09:50
Sample Container: Summa Canister 6L

Method: EPA TO 15 LL - Volatile Organic Compounds in Ambient Air, Low Concentration (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl Butyl Ketone (2-Hexanone)	ND		8.2	0.74	ug/m3			04/27/25 22:48	1
Methyl Ethyl Ketone (2-Butanone)	**2.7**	**J**	5.9	0.62	ug/m3			04/27/25 22:48	1
Methyl methacrylate	ND		4.1	0.61	ug/m3			04/27/25 22:48	1
Methyl tert-butyl ether	ND		1.8	0.54	ug/m3			04/27/25 22:48	1
Methylene Chloride	ND		6.9	0.87	ug/m3			04/27/25 22:48	1
Naphthalene	ND		2.0	2.6	ug/m3			04/27/25 22:48	1
n-Butylbenzene	ND		2.7	1.4	ug/m3			04/27/25 22:48	1
n-Heptane	ND		2.0	0.94	ug/m3			04/27/25 22:48	1
n-Hexane	**2.8**		1.8	0.46	ug/m3			04/27/25 22:48	1
n-Propylbenzene	ND		2.5	1.0	ug/m3			04/27/25 22:48	1
o-Xylene	ND		2.2	1.3	ug/m3			04/27/25 22:48	1
sec-Butylbenzene	ND		2.7	2.1	ug/m3			04/27/25 22:48	1
Styrene	ND		2.1	0.85	ug/m3			04/27/25 22:48	1
tert-Butyl alcohol	**1.3**	**J**	3.0	0.64	ug/m3			04/27/25 22:48	1
tert-Butylbenzene	ND		5.5	4.2	ug/m3			04/27/25 22:48	1
Tetrachloroethene	ND		3.4	1.7	ug/m3			04/27/25 22:48	1
Tetrahydrofuran	**1.0**	**J**	1.5	0.71	ug/m3			04/27/25 22:48	1
Toluene	**1.9**		1.9	0.45	ug/m3			04/27/25 22:48	1
trans-1,2-Dichloroethene	ND		2.0	0.34	ug/m3			04/27/25 22:48	1
trans-1,3-Dichloropropene	ND		2.3	0.54	ug/m3			04/27/25 22:48	1
Trichloroethene	ND		0.20	0.97	ug/m3			04/27/25 22:48	1
Trichlorofluoromethane	**1.2**	**J**	2.8	0.84	ug/m3			04/27/25 22:48	1
Vinyl chloride	ND		0.20	0.31	ug/m3			04/27/25 22:48	1

Client: Roux Environmental Engineering and Geology DPC
Job ID: 480-228889-1
Project/Site: BCP RI - 619 Exchange Street Site

Client Sample ID: IA-2
Lab Sample ID: 480-228889-7
Date Collected: 04/18/25 16:02
Matrix: Air
Date Received: 04/22/25 09:50
Sample Container: Summa Canister 6L

Method: EPA TO 15 LL - Volatile Organic Compounds in Ambient Air, Low Concentration (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		2.7	0.65	ug/m3			04/27/25 23:16	1
1,1,2,2-Tetrachloroethane	ND		3.4	1.0	ug/m3			04/27/25 23:16	1
1,1,2-Trichloroethane	ND		2.7	0.65	ug/m3			04/27/25 23:16	1
1,1,2-Trichlorotrifluoroethane	ND		3.8	0.84	ug/m3			04/27/25 23:16	1
1,1-Dichloroethane	ND		2.0	0.36	ug/m3			04/27/25 23:16	1
1,1-Dichloroethene	ND		0.20	0.56	ug/m3			04/27/25 23:16	1
1,2,4-Trichlorobenzene	ND		15	2.8	ug/m3			04/27/25 23:16	1
1,2,4-Trimethylbenzene	ND		2.5	1.4	ug/m3			04/27/25 23:16	1
1,2-Dibromoethane	ND		3.8	1.0	ug/m3			04/27/25 23:16	1
1,2-Dichlorobenzene	ND		3.0	1.2	ug/m3			04/27/25 23:16	1
1,2-Dichloroethane	ND		2.0	0.32	ug/m3			04/27/25 23:16	1
1,2-Dichloropropane	ND		2.3	0.60	ug/m3			04/27/25 23:16	1
1,2-Dichlorotetrafluoroethane	ND		3.5	0.84	ug/m3			04/27/25 23:16	1
1,3,5-Trimethylbenzene	ND		2.5	1.6	ug/m3			04/27/25 23:16	1
1,3-Butadiene	ND		1.1	0.38	ug/m3			04/27/25 23:16	1
1,3-Dichlorobenzene	ND		3.0	1.1	ug/m3			04/27/25 23:16	1
1,4-Dichlorobenzene	ND		3.0	1.0	ug/m3			04/27/25 23:16	1
1,4-Dioxane	ND		7.2	0.61	ug/m3			04/27/25 23:16	1
2,2,4-Trimethylpentane	ND		4.7	0.61	ug/m3			04/27/25 23:16	1
2-Chlorotoluene	ND		2.6	1.1	ug/m3			04/27/25 23:16	1
3-Chloropropene	ND		1.6	0.47	ug/m3			04/27/25 23:16	1
4-Ethyltoluene	ND		2.5	0.88	ug/m3			04/27/25 23:16	1
4-Isopropyltoluene	ND		2.7	1.5	ug/m3			04/27/25 23:16	1
4-Methyl-2-pentanone (Methyl isobutyl ketone)	ND		20	0.61	ug/m3			04/27/25 23:16	1
Acetone	**13**		4.8	1.3	ug/m3			04/27/25 23:16	1
Benzene	ND		1.6	0.35	ug/m3			04/27/25 23:16	1
Benzyl chloride	ND		2.6	1.3	ug/m3			04/27/25 23:16	1
Bromodichloromethane	ND		3.4	0.80	ug/m3			04/27/25 23:16	1
Bromoethene(Vinyl Bromide)	ND		22	0.79	ug/m3			04/27/25 23:16	1
Bromoform	ND		5.2	1.8	ug/m3			04/27/25 23:16	1
Bromomethane	ND		1.9	0.70	ug/m3			04/27/25 23:16	1
Carbon disulfide	ND		3.1	0.40	ug/m3			04/27/25 23:16	1
Carbon tetrachloride	ND		0.22	0.88	ug/m3			04/27/25 23:16	1
Chlorobenzene	ND		2.3	0.60	ug/m3			04/27/25 23:16	1
Chlorodifluoromethane	ND		1.8	0.53	ug/m3			04/27/25 23:16	1
Chloroethane	ND		1.3	0.50	ug/m3			04/27/25 23:16	1
Chloroform	ND		2.4	0.45	ug/m3			04/27/25 23:16	1
Chloromethane	ND		4.1	0.50	ug/m3			04/27/25 23:16	1
cis-1,2-Dichloroethene	ND		0.20	0.48	ug/m3			04/27/25 23:16	1
cis-1,3-Dichloropropene	ND		2.3	0.45	ug/m3			04/27/25 23:16	1
Cumene	ND		2.5	1.2	ug/m3			04/27/25 23:16	1
Cyclohexane	**0.86**	**J**	1.7	0.38	ug/m3			04/27/25 23:16	1
Dibromochloromethane	ND		4.3	1.1	ug/m3			04/27/25 23:16	1
Dichlorodifluoromethane	**2.6**		2.5	0.64	ug/m3			04/27/25 23:16	1
Ethylbenzene	ND		2.2	0.83	ug/m3			04/27/25 23:16	1
Hexachlorobutadiene	ND		21	5.0	ug/m3			04/27/25 23:16	1
Isopropyl alcohol	**1.4**	**J**	4.9	0.59	ug/m3			04/27/25 23:16	1
m,p-Xylene	ND		4.3	1.1	ug/m3			04/27/25 23:16	1

Client: Roux Environmental Engineering and Geology DPC
Job ID: 480-228889-1
Project/Site: BCP RI - 619 Exchange Street Site

Client Sample ID: IA-2
Lab Sample ID: 480-228889-7
Date Collected: 04/18/25 16:02
Matrix: Air
Date Received: 04/22/25 09:50
Sample Container: Summa Canister 6L

Method: EPA TO 15 LL - Volatile Organic Compounds in Ambient Air, Low Concentration (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl Butyl Ketone (2-Hexanone)	ND		8.2	0.74	ug/m3			04/27/25 23:16	1
Methyl Ethyl Ketone (2-Butanone)	**2.1**	**J**	5.9	0.62	ug/m3			04/27/25 23:16	1
Methyl methacrylate	ND		4.1	0.61	ug/m3			04/27/25 23:16	1
Methyl tert-butyl ether	ND		1.8	0.54	ug/m3			04/27/25 23:16	1
Methylene Chloride	ND		6.9	0.87	ug/m3			04/27/25 23:16	1
Naphthalene	ND		2.0	2.6	ug/m3			04/27/25 23:16	1
n-Butylbenzene	ND		2.7	1.4	ug/m3			04/27/25 23:16	1
n-Heptane	ND		2.0	0.94	ug/m3			04/27/25 23:16	1
n-Hexane	ND		1.8	0.46	ug/m3			04/27/25 23:16	1
n-Propylbenzene	ND		2.5	1.0	ug/m3			04/27/25 23:16	1
o-Xylene	ND		2.2	1.3	ug/m3			04/27/25 23:16	1
sec-Butylbenzene	ND		2.7	2.1	ug/m3			04/27/25 23:16	1
Styrene	ND		2.1	0.85	ug/m3			04/27/25 23:16	1
tert-Butyl alcohol	**1.1**	**J**	3.0	0.64	ug/m3			04/27/25 23:16	1
tert-Butylbenzene	ND		5.5	4.2	ug/m3			04/27/25 23:16	1
Tetrachloroethene	ND		3.4	1.7	ug/m3			04/27/25 23:16	1
Tetrahydrofuran	ND		1.5	0.71	ug/m3			04/27/25 23:16	1
Toluene	**0.70**	**J**	1.9	0.45	ug/m3			04/27/25 23:16	1
trans-1,2-Dichloroethene	ND		2.0	0.34	ug/m3			04/27/25 23:16	1
trans-1,3-Dichloropropene	ND		2.3	0.54	ug/m3			04/27/25 23:16	1
Trichloroethene	ND		0.20	0.97	ug/m3			04/27/25 23:16	1
Trichlorofluoromethane	**1.4**	**J**	2.8	0.84	ug/m3			04/27/25 23:16	1
Vinyl chloride	ND		0.20	0.31	ug/m3			04/27/25 23:16	1

Client: Roux Environmental Engineering and Geology DPC
Job ID: 480-228889-1
Project/Site: BCP RI - 619 Exchange Street Site

Client Sample ID: SSV-4
Lab Sample ID: 480-228889-8
Date Collected: 04/18/25 16:06
Matrix: Air
Date Received: 04/22/25 09:50
Sample Container: Summa Canister 6L

Method: EPA TO 15 LL - Volatile Organic Compounds in Ambient Air, Low Concentration (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	**2.8**		2.7	0.65	ug/m3			04/27/25 23:45	1
1,1,2,2-Tetrachloroethane	ND		3.4	1.0	ug/m3			04/27/25 23:45	1
1,1,2-Trichloroethane	ND		2.7	0.65	ug/m3			04/27/25 23:45	1
1,1,2-Trichlorotrifluoroethane	ND		3.8	0.84	ug/m3			04/27/25 23:45	1
1,1-Dichloroethane	ND		2.0	0.36	ug/m3			04/27/25 23:45	1
1,1-Dichloroethene	ND		0.20	0.56	ug/m3			04/27/25 23:45	1
1,2,4-Trichlorobenzene	ND		15	2.8	ug/m3			04/27/25 23:45	1
1,2,4-Trimethylbenzene	ND		2.5	1.4	ug/m3			04/27/25 23:45	1
1,2-Dibromoethane	ND		3.8	1.0	ug/m3			04/27/25 23:45	1
1,2-Dichlorobenzene	ND		3.0	1.2	ug/m3			04/27/25 23:45	1
1,2-Dichloroethane	ND		2.0	0.32	ug/m3			04/27/25 23:45	1
1,2-Dichloropropane	ND		2.3	0.60	ug/m3			04/27/25 23:45	1
1,2-Dichlorotetrafluoroethane	ND		3.5	0.84	ug/m3			04/27/25 23:45	1
1,3,5-Trimethylbenzene	ND		2.5	1.6	ug/m3			04/27/25 23:45	1
1,3-Butadiene	ND		1.1	0.38	ug/m3			04/27/25 23:45	1
1,3-Dichlorobenzene	ND		3.0	1.1	ug/m3			04/27/25 23:45	1
1,4-Dichlorobenzene	ND		3.0	1.0	ug/m3			04/27/25 23:45	1
1,4-Dioxane	ND		7.2	0.61	ug/m3			04/27/25 23:45	1
2,2,4-Trimethylpentane	ND		4.7	0.61	ug/m3			04/27/25 23:45	1
2-Chlorotoluene	ND		2.6	1.1	ug/m3			04/27/25 23:45	1
3-Chloropropene	ND		1.6	0.47	ug/m3			04/27/25 23:45	1
4-Ethyltoluene	ND		2.5	0.88	ug/m3			04/27/25 23:45	1
4-Isopropyltoluene	ND		2.7	1.5	ug/m3			04/27/25 23:45	1
4-Methyl-2-pentanone (Methyl isobutyl ketone)	ND		20	0.61	ug/m3			04/27/25 23:45	1
Acetone	**21**		4.8	1.3	ug/m3			04/27/25 23:45	1
Benzene	**1.2**	J	1.6	0.35	ug/m3			04/27/25 23:45	1
Benzyl chloride	ND		2.6	1.3	ug/m3			04/27/25 23:45	1
Bromodichloromethane	ND		3.4	0.80	ug/m3			04/27/25 23:45	1
Bromoethene(Vinyl Bromide)	ND		22	0.79	ug/m3			04/27/25 23:45	1
Bromoform	ND		5.2	1.8	ug/m3			04/27/25 23:45	1
Bromomethane	ND		1.9	0.70	ug/m3			04/27/25 23:45	1
Carbon disulfide	**2.8**	J	3.1	0.40	ug/m3			04/27/25 23:45	1
Carbon tetrachloride	ND		0.22	0.88	ug/m3			04/27/25 23:45	1
Chlorobenzene	ND		2.3	0.60	ug/m3			04/27/25 23:45	1
Chlorodifluoromethane	ND		1.8	0.53	ug/m3			04/27/25 23:45	1
Chloroethane	ND		1.3	0.50	ug/m3			04/27/25 23:45	1
Chloroform	**5.8**		2.4	0.45	ug/m3			04/27/25 23:45	1
Chloromethane	ND		4.1	0.50	ug/m3			04/27/25 23:45	1
cis-1,2-Dichloroethene	ND		0.20	0.48	ug/m3			04/27/25 23:45	1
cis-1,3-Dichloropropene	ND		2.3	0.45	ug/m3			04/27/25 23:45	1
Cumene	ND		2.5	1.2	ug/m3			04/27/25 23:45	1
Cyclohexane	**5.4**		1.7	0.38	ug/m3			04/27/25 23:45	1
Dibromochloromethane	ND		4.3	1.1	ug/m3			04/27/25 23:45	1
Dichlorodifluoromethane	**2.6**		2.5	0.64	ug/m3			04/27/25 23:45	1
Ethylbenzene	ND		2.2	0.83	ug/m3			04/27/25 23:45	1
Hexachlorobutadiene	ND		21	5.0	ug/m3			04/27/25 23:45	1
Isopropyl alcohol	**0.97**	J	4.9	0.59	ug/m3			04/27/25 23:45	1
m,p-Xylene	ND		4.3	1.1	ug/m3			04/27/25 23:45	1

Client: Roux Environmental Engineering and Geology DPC
Job ID: 480-228889-1
Project/Site: BCP RI - 619 Exchange Street Site

Client Sample ID: SSV-4
Lab Sample ID: 480-228889-8
Date Collected: 04/18/25 16:06
Matrix: Air
Date Received: 04/22/25 09:50
Sample Container: Summa Canister 6L

Method: EPA TO 15 LL - Volatile Organic Compounds in Ambient Air, Low Concentration (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl Butyl Ketone (2-Hexanone)	ND		8.2	0.74	ug/m3			04/27/25 23:45	1
Methyl Ethyl Ketone (2-Butanone)	**3.2**	**J**	5.9	0.62	ug/m3			04/27/25 23:45	1
Methyl methacrylate	ND		4.1	0.61	ug/m3			04/27/25 23:45	1
Methyl tert-butyl ether	ND		1.8	0.54	ug/m3			04/27/25 23:45	1
Methylene Chloride	ND		6.9	0.87	ug/m3			04/27/25 23:45	1
Naphthalene	ND		2.0	2.6	ug/m3			04/27/25 23:45	1
n-Butylbenzene	ND		2.7	1.4	ug/m3			04/27/25 23:45	1
n-Heptane	**0.96**	**J**	2.0	0.94	ug/m3			04/27/25 23:45	1
n-Hexane	**3.4**		1.8	0.46	ug/m3			04/27/25 23:45	1
n-Propylbenzene	ND		2.5	1.0	ug/m3			04/27/25 23:45	1
o-Xylene	ND		2.2	1.3	ug/m3			04/27/25 23:45	1
sec-Butylbenzene	ND		2.7	2.1	ug/m3			04/27/25 23:45	1
Styrene	ND		2.1	0.85	ug/m3			04/27/25 23:45	1
tert-Butyl alcohol	**0.70**	**J**	3.0	0.64	ug/m3			04/27/25 23:45	1
tert-Butylbenzene	ND		5.5	4.2	ug/m3			04/27/25 23:45	1
Tetrachloroethene	**58**		3.4	1.7	ug/m3			04/27/25 23:45	1
Tetrahydrofuran	ND		1.5	0.71	ug/m3			04/27/25 23:45	1
Toluene	**2.2**		1.9	0.45	ug/m3			04/27/25 23:45	1
trans-1,2-Dichloroethene	ND		2.0	0.34	ug/m3			04/27/25 23:45	1
trans-1,3-Dichloropropene	ND		2.3	0.54	ug/m3			04/27/25 23:45	1
Trichloroethene	**1.0**		0.20	0.97	ug/m3			04/27/25 23:45	1
Trichlorofluoromethane	**1.1**	**J**	2.8	0.84	ug/m3			04/27/25 23:45	1
Vinyl chloride	ND		0.20	0.31	ug/m3			04/27/25 23:45	1

Client: Roux Environmental Engineering and Geology DPC
Job ID: 480-228889-1
Project/Site: BCP RI - 619 Exchange Street Site

Method: TO 15 LL - Volatile Organic Compounds in Ambient Air, Low Concentration (GC/MS)

Lab Sample ID: MB 410-635121/7
Matrix: Air
Analysis Batch: 635121

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		2.7	0.65	ug/m3			04/24/25 20:38	1
1,1,2,2-Tetrachloroethane	ND		3.4	1.0	ug/m3			04/24/25 20:38	1
1,1,2-Trichloroethane	ND		2.7	0.65	ug/m3			04/24/25 20:38	1
1,1,2-Trichlorotrifluoroethane	ND		3.8	0.84	ug/m3			04/24/25 20:38	1
1,1-Dichloroethane	ND		2.0	0.36	ug/m3			04/24/25 20:38	1
1,1-Dichloroethene	ND		0.20	0.56	ug/m3			04/24/25 20:38	1
1,2,4-Trichlorobenzene	ND		15	2.8	ug/m3			04/24/25 20:38	1
1,2,4-Trimethylbenzene	ND		2.5	1.4	ug/m3			04/24/25 20:38	1
1,2-Dibromoethane	ND		3.8	1.0	ug/m3			04/24/25 20:38	1
1,2-Dichlorobenzene	ND		3.0	1.2	ug/m3			04/24/25 20:38	1
1,2-Dichloroethane	ND		2.0	0.32	ug/m3			04/24/25 20:38	1
1,2-Dichloropropane	ND		2.3	0.60	ug/m3			04/24/25 20:38	1
1,2-Dichlorotetrafluoroethane	ND		3.5	0.84	ug/m3			04/24/25 20:38	1
1,3,5-Trimethylbenzene	ND		2.5	1.6	ug/m3			04/24/25 20:38	1
1,3-Butadiene	ND		1.1	0.38	ug/m3			04/24/25 20:38	1
1,3-Dichlorobenzene	ND		3.0	1.1	ug/m3			04/24/25 20:38	1
1,4-Dichlorobenzene	ND		3.0	1.0	ug/m3			04/24/25 20:38	1
1,4-Dioxane	ND		7.2	0.61	ug/m3			04/24/25 20:38	1
2,2,4-Trimethylpentane	ND		4.7	0.61	ug/m3			04/24/25 20:38	1
2-Chlorotoluene	ND		2.6	1.1	ug/m3			04/24/25 20:38	1
3-Chloropropene	ND		1.6	0.47	ug/m3			04/24/25 20:38	1
4-Ethyltoluene	ND		2.5	0.88	ug/m3			04/24/25 20:38	1
4-Isopropyltoluene	ND		2.7	1.5	ug/m3			04/24/25 20:38	1
4-Methyl-2-pentanone (Methyl isobutyl ketone)	ND		20	0.61	ug/m3			04/24/25 20:38	1
Acetone	ND		4.8	1.3	ug/m3			04/24/25 20:38	1
Benzene	ND		1.6	0.35	ug/m3			04/24/25 20:38	1
Benzyl chloride	ND		2.6	1.3	ug/m3			04/24/25 20:38	1
Bromodichloromethane	ND		3.4	0.80	ug/m3			04/24/25 20:38	1
Bromoethene(Vinyl Bromide)	ND		22	0.79	ug/m3			04/24/25 20:38	1
Bromoform	ND		5.2	1.8	ug/m3			04/24/25 20:38	1
Bromomethane	ND		1.9	0.70	ug/m3			04/24/25 20:38	1
Carbon disulfide	ND		3.1	0.40	ug/m3			04/24/25 20:38	1
Carbon tetrachloride	ND		0.22	0.88	ug/m3			04/24/25 20:38	1
Chlorobenzene	ND		2.3	0.60	ug/m3			04/24/25 20:38	1
Chlorodifluoromethane	ND		1.8	0.53	ug/m3			04/24/25 20:38	1
Chloroethane	ND		1.3	0.50	ug/m3			04/24/25 20:38	1
Chloroform	ND		2.4	0.45	ug/m3			04/24/25 20:38	1
Chloromethane	ND		4.1	0.50	ug/m3			04/24/25 20:38	1
cis-1,2-Dichloroethene	ND		0.20	0.48	ug/m3			04/24/25 20:38	1
cis-1,3-Dichloropropene	ND		2.3	0.45	ug/m3			04/24/25 20:38	1
Cumene	ND		2.5	1.2	ug/m3			04/24/25 20:38	1
Cyclohexane	ND		1.7	0.38	ug/m3			04/24/25 20:38	1
Dibromochloromethane	ND		4.3	1.1	ug/m3			04/24/25 20:38	1
Dichlorodifluoromethane	ND		2.5	0.64	ug/m3			04/24/25 20:38	1
Ethylbenzene	ND		2.2	0.83	ug/m3			04/24/25 20:38	1
Hexachlorobutadiene	ND		21	5.0	ug/m3			04/24/25 20:38	1
Isopropyl alcohol	ND		4.9	0.59	ug/m3			04/24/25 20:38	1
m,p-Xylene	ND		4.3	1.1	ug/m3			04/24/25 20:38	1

Method: TO 15 LL - Volatile Organic Compounds in Ambient Air, Low Concentration (GC/MS) (Continued)

Lab Sample ID: MB 410-635121/7
Matrix: Air
Analysis Batch: 635121

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl Butyl Ketone (2-Hexanone)	ND		8.2	0.74	ug/m3			04/24/25 20:38	1
Methyl Ethyl Ketone (2-Butanone)	ND		5.9	0.62	ug/m3			04/24/25 20:38	1
Methyl methacrylate	ND		4.1	0.61	ug/m3			04/24/25 20:38	1
Methyl tert-butyl ether	ND		1.8	0.54	ug/m3			04/24/25 20:38	1
Methylene Chloride	ND		6.9	0.87	ug/m3			04/24/25 20:38	1
Naphthalene	ND		2.0	2.6	ug/m3			04/24/25 20:38	1
n-Butylbenzene	ND		2.7	1.4	ug/m3			04/24/25 20:38	1
n-Heptane	ND		2.0	0.94	ug/m3			04/24/25 20:38	1
n-Hexane	ND		1.8	0.46	ug/m3			04/24/25 20:38	1
n-Propylbenzene	ND		2.5	1.0	ug/m3			04/24/25 20:38	1
o-Xylene	ND		2.2	1.3	ug/m3			04/24/25 20:38	1
sec-Butylbenzene	ND		2.7	2.1	ug/m3			04/24/25 20:38	1
Styrene	ND		2.1	0.85	ug/m3			04/24/25 20:38	1
tert-Butyl alcohol	ND		3.0	0.64	ug/m3			04/24/25 20:38	1
tert-Butylbenzene	ND		5.5	4.2	ug/m3			04/24/25 20:38	1
Tetrachloroethene	ND		3.4	1.7	ug/m3			04/24/25 20:38	1
Tetrahydrofuran	ND		1.5	0.71	ug/m3			04/24/25 20:38	1
Toluene	ND		1.9	0.45	ug/m3			04/24/25 20:38	1
trans-1,2-Dichloroethene	ND		2.0	0.34	ug/m3			04/24/25 20:38	1
trans-1,3-Dichloropropene	ND		2.3	0.54	ug/m3			04/24/25 20:38	1
Trichloroethene	ND		0.20	0.97	ug/m3			04/24/25 20:38	1
Trichlorofluoromethane	ND		2.8	0.84	ug/m3			04/24/25 20:38	1
Vinyl chloride	ND		0.20	0.31	ug/m3			04/24/25 20:38	1

Lab Sample ID: LCS 410-635121/4
Matrix: Air
Analysis Batch: 635121

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
1,1,1-Trichloroethane	54.6	50.5		ug/m3		93	70 - 130
1,1,2,2-Tetrachloroethane	68.7	46.7		ug/m3		68	61 - 130
1,1,2-Trichloroethane	54.6	40.9		ug/m3		75	70 - 130
1,1,2-Trichlorotrifluoroethane	76.6	70.1		ug/m3		91	70 - 130
1,1-Dichloroethane	40.5	34.0		ug/m3		84	70 - 130
1,1-Dichloroethene	39.6	39.7		ug/m3		100	70 - 131
1,2,4-Trichlorobenzene	74.2	75.9		ug/m3		102	31 - 132
1,2,4-Trimethylbenzene	49.2	53.4		ug/m3		109	65 - 146
1,2-Dibromoethane	76.8	59.9		ug/m3		78	70 - 130
1,2-Dichlorobenzene	60.1	46.6		ug/m3		78	61 - 139
1,2-Dichloroethane	40.5	35.6		ug/m3		88	70 - 131
1,2-Dichloropropane	46.2	31.9	*-	ug/m3		69	70 - 130
1,2-Dichlorotetrafluoroethane	69.9	63.9		ug/m3		91	70 - 130
1,3,5-Trimethylbenzene	49.2	43.1		ug/m3		88	69 - 141
1,3-Butadiene	22.1	18.8		ug/m3		85	70 - 131
1,3-Dichlorobenzene	60.1	47.5		ug/m3		79	64 - 140
1,4-Dichlorobenzene	60.1	37.9	*-	ug/m3		63	64 - 137
1,4-Dioxane	36.0	33.5		ug/m3		93	70 - 130
2,2,4-Trimethylpentane	46.7	41.5		ug/m3		89	70 - 130

Method: TO 15 LL - Volatile Organic Compounds in Ambient Air, Low Concentration (GC/MS) (Continued)

Lab Sample ID: LCS 410-635121/4
Matrix: Air
Analysis Batch: 635121

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
2-Chlorotoluene	51.8	45.3		ug/m3		88	70 - 130
3-Chloropropene	31.3	29.9		ug/m3		96	70 - 137
4-Ethyltoluene	49.2	47.5		ug/m3		97	69 - 139
4-Isopropyltoluene	54.9	49.1		ug/m3		89	60 - 148
4-Methyl-2-pentanone (Methyl isobutyl ketone)	41.0	38.3		ug/m3		94	68 - 133
Acetone	23.8	24.3		ug/m3		102	70 - 137
Benzene	31.9	24.7		ug/m3		77	70 - 130
Benzyl chloride	51.8	46.1		ug/m3		89	42 - 160
Bromodichloromethane	67.0	52.1		ug/m3		78	70 - 130
Bromoethene(Vinyl Bromide)	43.7	44.3		ug/m3		101	70 - 130
Bromoform	103	88.0		ug/m3		85	60 - 139
Bromomethane	38.8	33.6		ug/m3		87	70 - 134
Carbon disulfide	31.1	27.1		ug/m3		87	70 - 130
Carbon tetrachloride	62.9	64.7		ug/m3		103	70 - 130
Chlorobenzene	46.0	34.7		ug/m3		75	70 - 130
Chlorodifluoromethane	35.4	34.8		ug/m3		98	70 - 141
Chloroethane	26.4	20.4		ug/m3		77	70 - 131
Chloroform	48.8	43.0		ug/m3		88	70 - 130
Chloromethane	20.7	15.7		ug/m3		76	51 - 138
cis-1,2-Dichloroethene	39.6	36.3		ug/m3		91	70 - 130
cis-1,3-Dichloropropene	45.4	35.9		ug/m3		79	70 - 130
Cumene	49.2	46.0		ug/m3		94	70 - 131
Cyclohexane	34.4	33.0		ug/m3		96	70 - 130
Dibromochloromethane	85.2	70.9		ug/m3		83	70 - 130
Dichlorodifluoromethane	49.5	48.8		ug/m3		99	70 - 131
Ethylbenzene	43.4	38.4		ug/m3		88	70 - 130
Hexachlorobutadiene	107	118		ug/m3		111	34 - 157
Isopropyl alcohol	24.6	25.1		ug/m3		102	46 - 144
m,p-Xylene	43.4	39.0		ug/m3		90	70 - 130
Methyl Butyl Ketone (2-Hexanone)	41.0	35.0		ug/m3		85	63 - 130
Methyl Ethyl Ketone (2-Butanone)	29.5	29.7		ug/m3		101	70 - 130
Methyl methacrylate	40.9	34.6		ug/m3		85	70 - 130
Methyl tert-butyl ether	36.1	37.4		ug/m3		104	70 - 130
Methylene Chloride	34.7	29.5		ug/m3		85	70 - 130
Naphthalene	60.8	53.0		ug/m3		87	33 - 149
n-Butylbenzene	54.9	49.0		ug/m3		89	57 - 149
n-Heptane	41.0	35.0		ug/m3		85	70 - 130
n-Hexane	35.2	31.0		ug/m3		88	70 - 130
n-Propylbenzene	49.2	42.7		ug/m3		87	70 - 130
o-Xylene	43.4	38.4		ug/m3		88	70 - 130
sec-Butylbenzene	54.9	58.1		ug/m3		106	66 - 141
Styrene	42.6	38.0		ug/m3		89	70 - 133
tert-Butyl alcohol	33.6	30.0		ug/m3		89	50 - 145
tert-Butylbenzene	54.9	55.1		ug/m3		100	63 - 142
Tetrachloroethene	67.8	56.6		ug/m3		83	70 - 130

Method: TO 15 LL - Volatile Organic Compounds in Ambient Air, Low Concentration (GC/MS) (Continued)

Lab Sample ID: LCS 410-635121/4
Matrix: Air
Analysis Batch: 635121

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Tetrahydrofuran	29.5	26.4		ug/m3		89	70 - 131
Toluene	37.7	31.4		ug/m3		83	70 - 130
trans-1,2-Dichloroethene	39.6	36.4		ug/m3		92	70 - 130
trans-1,3-Dichloropropene	45.4	41.2		ug/m3		91	70 - 130
Trichloroethene	53.7	44.7		ug/m3		83	70 - 130
Trichlorofluoromethane	56.2	53.7		ug/m3		96	70 - 130
Vinyl chloride	25.6	23.2		ug/m3		91	70 - 135

Lab Sample ID: LCSD 410-635121/5
Matrix: Air
Analysis Batch: 635121

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
1,1,1-Trichloroethane	54.6	51.9		ug/m3		95	70 - 130	3	25
1,1,2,2-Tetrachloroethane	68.7	51.3		ug/m3		75	61 - 130	9	25
1,1,2-Trichloroethane	54.6	41.8		ug/m3		77	70 - 130	2	25
1,1,2-Trichlorotrifluoroethane	76.6	71.0		ug/m3		93	70 - 130	1	25
1,1-Dichloroethane	40.5	34.7		ug/m3		86	70 - 130	2	25
1,1-Dichloroethene	39.6	39.7		ug/m3		100	70 - 131	0	25
1,2,4-Trichlorobenzene	74.2	84.2		ug/m3		113	31 - 132	10	25
1,2,4-Trimethylbenzene	49.2	60.4		ug/m3		123	65 - 146	12	25
1,2-Dibromoethane	76.8	67.1		ug/m3		87	70 - 130	11	25
1,2-Dichlorobenzene	60.1	50.2		ug/m3		84	61 - 139	7	25
1,2-Dichloroethane	40.5	35.8		ug/m3		88	70 - 131	0	25
1,2-Dichloropropane	46.2	33.8		ug/m3		73	70 - 130	6	25
1,2-Dichlorotetrafluoroethane	69.9	64.6		ug/m3		92	70 - 130	1	25
1,3,5-Trimethylbenzene	49.2	45.8		ug/m3		93	69 - 141	6	25
1,3-Butadiene	22.1	19.5		ug/m3		88	70 - 131	3	25
1,3-Dichlorobenzene	60.1	52.4		ug/m3		87	64 - 140	10	25
1,4-Dichlorobenzene	60.1	44.4		ug/m3		74	64 - 137	16	25
1,4-Dioxane	36.0	36.3		ug/m3		101	70 - 130	8	25
2,2,4-Trimethylpentane	46.7	41.7		ug/m3		89	70 - 130	1	25
2-Chlorotoluene	51.8	48.2		ug/m3		93	70 - 130	6	25
3-Chloropropene	31.3	30.4		ug/m3		97	70 - 137	2	25
4-Ethyltoluene	49.2	50.0		ug/m3		102	69 - 139	5	25
4-Isopropyltoluene	54.9	54.4		ug/m3		99	60 - 148	10	25
4-Methyl-2-pentanone (Methyl isobutyl ketone)	41.0	39.6		ug/m3		97	68 - 133	3	25
Acetone	23.8	24.6		ug/m3		104	70 - 137	1	25
Benzene	31.9	24.8		ug/m3		78	70 - 130	0	25
Benzyl chloride	51.8	50.6		ug/m3		98	42 - 160	9	25
Bromodichloromethane	67.0	53.2		ug/m3		79	70 - 130	2	25
Bromoethene(Vinyl Bromide)	43.7	45.0		ug/m3		103	70 - 130	2	25
Bromoform	103	91.5		ug/m3		89	60 - 139	4	25
Bromomethane	38.8	34.1		ug/m3		88	70 - 134	1	25
Carbon disulfide	31.1	27.5		ug/m3		88	70 - 130	1	25
Carbon tetrachloride	62.9	65.5		ug/m3		104	70 - 130	1	25
Chlorobenzene	46.0	34.3		ug/m3		74	70 - 130	1	25

Method: TO 15 LL - Volatile Organic Compounds in Ambient Air, Low Concentration (GC/MS) (Continued)

Lab Sample ID: LCSD 410-635121/5
Matrix: Air
Analysis Batch: 635121

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
Chlorodifluoromethane	35.4	35.0		ug/m3		99	70 - 141	0	25
Chloroethane	26.4	20.8		ug/m3		79	70 - 131	2	25
Chloroform	48.8	43.7		ug/m3		89	70 - 130	1	25
Chloromethane	20.7	16.2		ug/m3		79	51 - 138	3	25
cis-1,2-Dichloroethene	39.6	36.9		ug/m3		93	70 - 130	2	25
cis-1,3-Dichloropropene	45.4	36.5		ug/m3		81	70 - 130	2	25
Cumene	49.2	48.6		ug/m3		99	70 - 131	6	25
Cyclohexane	34.4	34.0		ug/m3		99	70 - 130	3	25
Dibromochloromethane	85.2	75.4		ug/m3		88	70 - 130	6	25
Dichlorodifluoromethane	49.5	49.5		ug/m3		100	70 - 131	1	25
Ethylbenzene	43.4	38.2		ug/m3		88	70 - 130	1	25
Hexachlorobutadiene	107	126		ug/m3		118	34 - 157	7	25
Isopropyl alcohol	24.6	25.9		ug/m3		105	46 - 144	3	25
m,p-Xylene	43.4	39.9		ug/m3		92	70 - 130	2	25
Methyl Butyl Ketone (2-Hexanone)	41.0	37.3		ug/m3		91	63 - 130	7	25
Methyl Ethyl Ketone (2-Butanone)	29.5	29.9		ug/m3		102	70 - 130	1	25
Methyl methacrylate	40.9	36.2		ug/m3		88	70 - 130	4	25
Methyl tert-butyl ether	36.1	37.9		ug/m3		105	70 - 130	1	25
Methylene Chloride	34.7	29.3		ug/m3		84	70 - 130	1	25
Naphthalene	60.8	60.4		ug/m3		99	33 - 149	13	25
n-Butylbenzene	54.9	52.4		ug/m3		96	57 - 149	7	25
n-Heptane	41.0	35.8		ug/m3		87	70 - 130	2	25
n-Hexane	35.2	31.5		ug/m3		89	70 - 130	2	25
n-Propylbenzene	49.2	46.3		ug/m3		94	70 - 130	8	25
o-Xylene	43.4	41.5		ug/m3		96	70 - 130	8	25
sec-Butylbenzene	54.9	62.4		ug/m3		114	66 - 141	7	25
Styrene	42.6	40.3		ug/m3		95	70 - 133	6	25
tert-Butyl alcohol	33.6	30.6		ug/m3		91	50 - 145	2	25
tert-Butylbenzene	54.9	62.0		ug/m3		113	63 - 142	12	25
Tetrachloroethene	67.8	58.7		ug/m3		87	70 - 130	4	25
Tetrahydrofuran	29.5	26.9		ug/m3		91	70 - 131	2	25
Toluene	37.7	33.4		ug/m3		89	70 - 130	6	25
trans-1,2-Dichloroethene	39.6	36.7		ug/m3		93	70 - 130	1	25
trans-1,3-Dichloropropene	45.4	42.3		ug/m3		93	70 - 130	3	25
Trichloroethene	53.7	45.6		ug/m3		85	70 - 130	2	25
Trichlorofluoromethane	56.2	54.7		ug/m3		97	70 - 130	2	25
Vinyl chloride	25.6	23.7		ug/m3		93	70 - 135	2	25

Lab Sample ID: MB 410-635531/6
Matrix: Air
Analysis Batch: 635531

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		2.7	0.65	ug/m3			04/25/25 15:43	1
1,1,2,2-Tetrachloroethane	ND		3.4	1.0	ug/m3			04/25/25 15:43	1
1,1,2-Trichloroethane	ND		2.7	0.65	ug/m3			04/25/25 15:43	1

Method: TO 15 LL - Volatile Organic Compounds in Ambient Air, Low Concentration (GC/MS) (Continued)

Lab Sample ID: MB 410-635531/6
Matrix: Air
Analysis Batch: 635531

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,2-Trichlorotrifluoroethane	ND		3.8	0.84	ug/m3			04/25/25 15:43	1
1,1-Dichloroethane	ND		2.0	0.36	ug/m3			04/25/25 15:43	1
1,1-Dichloroethene	ND		0.20	0.56	ug/m3			04/25/25 15:43	1
1,2,4-Trichlorobenzene	ND		15	2.8	ug/m3			04/25/25 15:43	1
1,2,4-Trimethylbenzene	ND		2.5	1.4	ug/m3			04/25/25 15:43	1
1,2-Dibromoethane	ND		3.8	1.0	ug/m3			04/25/25 15:43	1
1,2-Dichlorobenzene	ND		3.0	1.2	ug/m3			04/25/25 15:43	1
1,2-Dichloroethane	ND		2.0	0.32	ug/m3			04/25/25 15:43	1
1,2-Dichloropropane	ND		2.3	0.60	ug/m3			04/25/25 15:43	1
1,2-Dichlorotetrafluoroethane	ND		3.5	0.84	ug/m3			04/25/25 15:43	1
1,3,5-Trimethylbenzene	ND		2.5	1.6	ug/m3			04/25/25 15:43	1
1,3-Butadiene	ND		1.1	0.38	ug/m3			04/25/25 15:43	1
1,3-Dichlorobenzene	ND		3.0	1.1	ug/m3			04/25/25 15:43	1
1,4-Dichlorobenzene	ND		3.0	1.0	ug/m3			04/25/25 15:43	1
1,4-Dioxane	ND		7.2	0.61	ug/m3			04/25/25 15:43	1
2,2,4-Trimethylpentane	ND		4.7	0.61	ug/m3			04/25/25 15:43	1
2-Chlorotoluene	ND		2.6	1.1	ug/m3			04/25/25 15:43	1
3-Chloropropene	ND		1.6	0.47	ug/m3			04/25/25 15:43	1
4-Ethyltoluene	ND		2.5	0.88	ug/m3			04/25/25 15:43	1
4-Isopropyltoluene	ND		2.7	1.5	ug/m3			04/25/25 15:43	1
4-Methyl-2-pentanone (Methyl isobutyl ketone)	ND		20	0.61	ug/m3			04/25/25 15:43	1
Acetone	ND		4.8	1.3	ug/m3			04/25/25 15:43	1
Benzene	ND		1.6	0.35	ug/m3			04/25/25 15:43	1
Benzyl chloride	ND		2.6	1.3	ug/m3			04/25/25 15:43	1
Bromodichloromethane	ND		3.4	0.80	ug/m3			04/25/25 15:43	1
Bromoethene(Vinyl Bromide)	ND		22	0.79	ug/m3			04/25/25 15:43	1
Bromoform	ND		5.2	1.8	ug/m3			04/25/25 15:43	1
Bromomethane	ND		1.9	0.70	ug/m3			04/25/25 15:43	1
Carbon disulfide	ND		3.1	0.40	ug/m3			04/25/25 15:43	1
Carbon tetrachloride	ND		0.22	0.88	ug/m3			04/25/25 15:43	1
Chlorobenzene	ND		2.3	0.60	ug/m3			04/25/25 15:43	1
Chlorodifluoromethane	ND		1.8	0.53	ug/m3			04/25/25 15:43	1
Chloroethane	ND		1.3	0.50	ug/m3			04/25/25 15:43	1
Chloroform	ND		2.4	0.45	ug/m3			04/25/25 15:43	1
Chloromethane	ND		4.1	0.50	ug/m3			04/25/25 15:43	1
cis-1,2-Dichloroethene	ND		0.20	0.48	ug/m3			04/25/25 15:43	1
cis-1,3-Dichloropropene	ND		2.3	0.45	ug/m3			04/25/25 15:43	1
Cumene	ND		2.5	1.2	ug/m3			04/25/25 15:43	1
Cyclohexane	ND		1.7	0.38	ug/m3			04/25/25 15:43	1
Dibromochloromethane	ND		4.3	1.1	ug/m3			04/25/25 15:43	1
Dichlorodifluoromethane	ND		2.5	0.64	ug/m3			04/25/25 15:43	1
Ethylbenzene	ND		2.2	0.83	ug/m3			04/25/25 15:43	1
Hexachlorobutadiene	ND		21	5.0	ug/m3			04/25/25 15:43	1
Isopropyl alcohol	ND		4.9	0.59	ug/m3			04/25/25 15:43	1
m,p-Xylene	ND		4.3	1.1	ug/m3			04/25/25 15:43	1
Methyl Butyl Ketone (2-Hexanone)	ND		8.2	0.74	ug/m3			04/25/25 15:43	1
Methyl Ethyl Ketone (2-Butanone)	ND		5.9	0.62	ug/m3			04/25/25 15:43	1

Method: TO 15 LL - Volatile Organic Compounds in Ambient Air, Low Concentration (GC/MS) (Continued)

Lab Sample ID: MB 410-635531/6
Matrix: Air
Analysis Batch: 635531

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl methacrylate	ND		4.1	0.61	ug/m3			04/25/25 15:43	1
Methyl tert-butyl ether	ND		1.8	0.54	ug/m3			04/25/25 15:43	1
Methylene Chloride	ND		6.9	0.87	ug/m3			04/25/25 15:43	1
Naphthalene	ND		2.0	2.6	ug/m3			04/25/25 15:43	1
n-Butylbenzene	ND		2.7	1.4	ug/m3			04/25/25 15:43	1
n-Heptane	ND		2.0	0.94	ug/m3			04/25/25 15:43	1
n-Hexane	ND		1.8	0.46	ug/m3			04/25/25 15:43	1
n-Propylbenzene	ND		2.5	1.0	ug/m3			04/25/25 15:43	1
o-Xylene	ND		2.2	1.3	ug/m3			04/25/25 15:43	1
sec-Butylbenzene	ND		2.7	2.1	ug/m3			04/25/25 15:43	1
Styrene	ND		2.1	0.85	ug/m3			04/25/25 15:43	1
tert-Butyl alcohol	ND		3.0	0.64	ug/m3			04/25/25 15:43	1
tert-Butylbenzene	ND		5.5	4.2	ug/m3			04/25/25 15:43	1
Tetrachloroethene	ND		3.4	1.7	ug/m3			04/25/25 15:43	1
Tetrahydrofuran	ND		1.5	0.71	ug/m3			04/25/25 15:43	1
Toluene	ND		1.9	0.45	ug/m3			04/25/25 15:43	1
trans-1,2-Dichloroethene	ND		2.0	0.34	ug/m3			04/25/25 15:43	1
trans-1,3-Dichloropropene	ND		2.3	0.54	ug/m3			04/25/25 15:43	1
Trichloroethene	ND		0.20	0.97	ug/m3			04/25/25 15:43	1
Trichlorofluoromethane	ND		2.8	0.84	ug/m3			04/25/25 15:43	1
Vinyl chloride	ND		0.20	0.31	ug/m3			04/25/25 15:43	1

Lab Sample ID: LCS 410-635531/4
Matrix: Air
Analysis Batch: 635531

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
1,1,1-Trichloroethane	54.6	48.5		ug/m3		89	70 - 130
1,1,2,2-Tetrachloroethane	68.7	53.9		ug/m3		79	61 - 130
1,1,2-Trichloroethane	54.6	43.2		ug/m3		79	70 - 130
1,1,2-Trichlorotrifluoroethane	76.6	69.6		ug/m3		91	70 - 130
1,1-Dichloroethane	40.5	33.2		ug/m3		82	70 - 130
1,1-Dichloroethene	39.6	38.8		ug/m3		98	70 - 131
1,2,4-Trichlorobenzene	74.2	82.6		ug/m3		111	31 - 132
1,2,4-Trimethylbenzene	49.2	63.1		ug/m3		128	65 - 146
1,2-Dibromoethane	76.8	68.6		ug/m3		89	70 - 130
1,2-Dichlorobenzene	60.1	56.0		ug/m3		93	61 - 139
1,2-Dichloroethane	40.5	36.2		ug/m3		89	70 - 131
1,2-Dichloropropane	46.2	34.4		ug/m3		74	70 - 130
1,2-Dichlorotetrafluoroethane	69.9	63.2		ug/m3		90	70 - 130
1,3,5-Trimethylbenzene	49.2	48.9		ug/m3		100	69 - 141
1,3-Butadiene	22.1	18.7		ug/m3		85	70 - 131
1,3-Dichlorobenzene	60.1	56.9		ug/m3		95	64 - 140
1,4-Dichlorobenzene	60.1	47.1		ug/m3		78	64 - 137
1,4-Dioxane	36.0	37.2		ug/m3		103	70 - 130
2,2,4-Trimethylpentane	46.7	42.7		ug/m3		91	70 - 130
2-Chlorotoluene	51.8	51.4		ug/m3		99	70 - 130
3-Chloropropene	31.3	30.6		ug/m3		98	70 - 137

Method: TO 15 LL - Volatile Organic Compounds in Ambient Air, Low Concentration (GC/MS) (Continued)

Lab Sample ID: LCS 410-635531/4
Matrix: Air
Analysis Batch: 635531

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
4-Ethyltoluene	49.2	53.1		ug/m3		108	69 - 139
4-Isopropyltoluene	54.9	57.0		ug/m3		104	60 - 148
4-Methyl-2-pentanone (Methyl isobutyl ketone)	41.0	40.7		ug/m3		99	68 - 133
Acetone	23.8	22.8		ug/m3		96	70 - 137
Benzene	31.9	25.6		ug/m3		80	70 - 130
Benzyl chloride	51.8	53.8		ug/m3		104	42 - 160
Bromodichloromethane	67.0	54.3		ug/m3		81	70 - 130
Bromoethene(Vinyl Bromide)	43.7	44.2		ug/m3		101	70 - 130
Bromoform	103	95.4		ug/m3		92	60 - 139
Bromomethane	38.8	33.1		ug/m3		85	70 - 134
Carbon disulfide	31.1	27.6		ug/m3		89	70 - 130
Carbon tetrachloride	62.9	59.0		ug/m3		94	70 - 130
Chlorobenzene	46.0	37.8		ug/m3		82	70 - 130
Chlorodifluoromethane	35.4	34.2		ug/m3		97	70 - 141
Chloroethane	26.4	20.9		ug/m3		79	70 - 131
Chloroform	48.8	41.6		ug/m3		85	70 - 130
Chloromethane	20.7	14.5		ug/m3		70	51 - 138
cis-1,2-Dichloroethene	39.6	35.8		ug/m3		90	70 - 130
cis-1,3-Dichloropropene	45.4	37.8		ug/m3		83	70 - 130
Cumene	49.2	51.5		ug/m3		105	70 - 131
Cyclohexane	34.4	32.5		ug/m3		94	70 - 130
Dibromochloromethane	85.2	77.4		ug/m3		91	70 - 130
Dichlorodifluoromethane	49.5	48.0		ug/m3		97	70 - 131
Ethylbenzene	43.4	41.4		ug/m3		95	70 - 130
Hexachlorobutadiene	107	121		ug/m3		113	34 - 157
Isopropyl alcohol	24.6	25.1		ug/m3		102	46 - 144
m,p-Xylene	43.4	44.9		ug/m3		103	70 - 130
Methyl Butyl Ketone (2-Hexanone)	41.0	39.1		ug/m3		95	63 - 130
Methyl Ethyl Ketone (2-Butanone)	29.5	28.9		ug/m3		98	70 - 130
Methyl methacrylate	40.9	38.3		ug/m3		93	70 - 130
Methyl tert-butyl ether	36.1	35.5		ug/m3		98	70 - 130
Methylene Chloride	34.7	29.5		ug/m3		85	70 - 130
Naphthalene	60.8	60.6		ug/m3		100	33 - 149
n-Butylbenzene	54.9	57.7		ug/m3		105	57 - 149
n-Heptane	41.0	37.8		ug/m3		92	70 - 130
n-Hexane	35.2	31.5		ug/m3		89	70 - 130
n-Propylbenzene	49.2	48.2		ug/m3		98	70 - 130
o-Xylene	43.4	41.3		ug/m3		95	70 - 130
sec-Butylbenzene	54.9	74.5		ug/m3		136	66 - 141
Styrene	42.6	43.3		ug/m3		102	70 - 133
tert-Butyl alcohol	33.6	28.6		ug/m3		85	50 - 145
tert-Butylbenzene	54.9	62.4		ug/m3		114	63 - 142
Tetrachloroethene	67.8	82.8		ug/m3		122	70 - 130
Tetrahydrofuran	29.5	26.0		ug/m3		88	70 - 131
Toluene	37.7	33.3		ug/m3		88	70 - 130

Method: TO 15 LL - Volatile Organic Compounds in Ambient Air, Low Concentration (GC/MS) (Continued)

Lab Sample ID: LCS 410-635531/4
Matrix: Air
Analysis Batch: 635531

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
trans-1,2-Dichloroethene	39.6	35.6		ug/m3		90	70 - 130
trans-1,3-Dichloropropene	45.4	43.0		ug/m3		95	70 - 130
Trichloroethene	53.7	48.3		ug/m3		90	70 - 130
Trichlorofluoromethane	56.2	52.0		ug/m3		93	70 - 130
Vinyl chloride	25.6	23.2		ug/m3		91	70 - 135

Lab Sample ID: LCSD 410-635531/8
Matrix: Air
Analysis Batch: 635531

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
1,1,1-Trichloroethane	54.6	48.7		ug/m3		89	70 - 130	0	25
1,1,2,2-Tetrachloroethane	68.7	54.8		ug/m3		80	61 - 130	2	25
1,1,2-Trichloroethane	54.6	43.4		ug/m3		79	70 - 130	0	25
1,1,2-Trichlorotrifluoroethane	76.6	69.6		ug/m3		91	70 - 130	0	25
1,1-Dichloroethane	40.5	33.6		ug/m3		83	70 - 130	1	25
1,1-Dichloroethene	39.6	38.7		ug/m3		98	70 - 131	0	25
1,2,4-Trichlorobenzene	74.2	88.9		ug/m3		120	31 - 132	7	25
1,2,4-Trimethylbenzene	49.2	52.7		ug/m3		107	65 - 146	18	25
1,2-Dibromoethane	76.8	68.9		ug/m3		90	70 - 130	0	25
1,2-Dichlorobenzene	60.1	59.0		ug/m3		98	61 - 139	5	25
1,2-Dichloroethane	40.5	36.2		ug/m3		89	70 - 131	0	25
1,2-Dichloropropane	46.2	34.3		ug/m3		74	70 - 130	0	25
1,2-Dichlorotetrafluoroethane	69.9	62.6		ug/m3		90	70 - 130	1	25
1,3,5-Trimethylbenzene	49.2	49.5		ug/m3		101	69 - 141	1	25
1,3-Butadiene	22.1	18.8		ug/m3		85	70 - 131	0	25
1,3-Dichlorobenzene	60.1	67.6		ug/m3		112	64 - 140	17	25
1,4-Dichlorobenzene	60.1	56.8		ug/m3		94	64 - 137	19	25
1,4-Dioxane	36.0	37.6		ug/m3		104	70 - 130	1	25
2,2,4-Trimethylpentane	46.7	43.0		ug/m3		92	70 - 130	1	25
2-Chlorotoluene	51.8	51.2		ug/m3		99	70 - 130	0	25
3-Chloropropene	31.3	31.0		ug/m3		99	70 - 137	1	25
4-Ethyltoluene	49.2	53.3		ug/m3		108	69 - 139	1	25
4-Isopropyltoluene	54.9	68.2		ug/m3		124	60 - 148	18	25
4-Methyl-2-pentanone (Methyl isobutyl ketone)	41.0	41.0		ug/m3		100	68 - 133	1	25
Acetone	23.8	22.8		ug/m3		96	70 - 137	0	25
Benzene	31.9	25.8		ug/m3		81	70 - 130	1	25
Benzyl chloride	51.8	61.8		ug/m3		119	42 - 160	14	25
Bromodichloromethane	67.0	54.4		ug/m3		81	70 - 130	0	25
Bromoethene(Vinyl Bromide)	43.7	44.6		ug/m3		102	70 - 130	1	25
Bromoform	103	94.8		ug/m3		92	60 - 139	1	25
Bromomethane	38.8	33.1		ug/m3		85	70 - 134	0	25
Carbon disulfide	31.1	27.8		ug/m3		89	70 - 130	1	25
Carbon tetrachloride	62.9	59.3		ug/m3		94	70 - 130	1	25
Chlorobenzene	46.0	38.3		ug/m3		83	70 - 130	1	25
Chlorodifluoromethane	35.4	33.3		ug/m3		94	70 - 141	3	25
Chloroethane	26.4	20.9		ug/m3		79	70 - 131	0	25

Method: TO 15 LL - Volatile Organic Compounds in Ambient Air, Low Concentration (GC/MS) (Continued)

Lab Sample ID: LCSD 410-635531/8
Matrix: Air
Analysis Batch: 635531

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
Chloroform	48.8	42.2		ug/m3		86	70 - 130	1	25
Chloromethane	20.7	15.0		ug/m3		72	51 - 138	3	25
cis-1,2-Dichloroethene	39.6	36.1		ug/m3		91	70 - 130	1	25
cis-1,3-Dichloropropene	45.4	38.9		ug/m3		86	70 - 130	3	25
Cumene	49.2	52.4		ug/m3		107	70 - 131	2	25
Cyclohexane	34.4	32.4		ug/m3		94	70 - 130	0	25
Dibromochloromethane	85.2	77.4		ug/m3		91	70 - 130	0	25
Dichlorodifluoromethane	49.5	47.2		ug/m3		95	70 - 131	2	25
Ethylbenzene	43.4	42.1		ug/m3		97	70 - 130	2	25
Hexachlorobutadiene	107	129		ug/m3		121	34 - 157	7	25
Isopropyl alcohol	24.6	25.1		ug/m3		102	46 - 144	0	25
m,p-Xylene	43.4	45.3		ug/m3		104	70 - 130	1	25
Methyl Butyl Ketone (2-Hexanone)	41.0	39.5		ug/m3		96	63 - 130	1	25
Methyl Ethyl Ketone (2-Butanone)	29.5	30.3		ug/m3		103	70 - 130	5	25
Methyl methacrylate	40.9	38.5		ug/m3		94	70 - 130	1	25
Methyl tert-butyl ether	36.1	35.6		ug/m3		99	70 - 130	0	25
Methylene Chloride	34.7	29.3		ug/m3		84	70 - 130	1	25
Naphthalene	60.8	66.8		ug/m3		110	33 - 149	10	25
n-Butylbenzene	54.9	61.6		ug/m3		112	57 - 149	7	25
n-Heptane	41.0	37.5		ug/m3		91	70 - 130	1	25
n-Hexane	35.2	30.9		ug/m3		88	70 - 130	2	25
n-Propylbenzene	49.2	48.7		ug/m3		99	70 - 130	1	25
o-Xylene	43.4	42.1		ug/m3		97	70 - 130	2	25
sec-Butylbenzene	54.9	58.8		ug/m3		107	66 - 141	24	25
Styrene	42.6	44.3		ug/m3		104	70 - 133	2	25
tert-Butyl alcohol	33.6	29.0		ug/m3		86	50 - 145	1	25
tert-Butylbenzene	54.9	57.9		ug/m3		105	63 - 142	7	25
Tetrachloroethene	67.8	82.9		ug/m3		122	70 - 130	0	25
Tetrahydrofuran	29.5	26.1		ug/m3		89	70 - 131	0	25
Toluene	37.7	33.5		ug/m3		89	70 - 130	1	25
trans-1,2-Dichloroethene	39.6	35.8		ug/m3		90	70 - 130	0	25
trans-1,3-Dichloropropene	45.4	43.8		ug/m3		96	70 - 130	2	25
Trichloroethene	53.7	48.9		ug/m3		91	70 - 130	1	25
Trichlorofluoromethane	56.2	52.2		ug/m3		93	70 - 130	0	25
Vinyl chloride	25.6	23.3		ug/m3		91	70 - 135	0	25

Lab Sample ID: MB 410-636107/8
Matrix: Air
Analysis Batch: 636107

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		2.7	0.65	ug/m3			04/27/25 17:00	1
1,1,2,2-Tetrachloroethane	ND		3.4	1.0	ug/m3			04/27/25 17:00	1
1,1,2-Trichloroethane	ND		2.7	0.65	ug/m3			04/27/25 17:00	1
1,1,2-Trichlorotrifluoroethane	ND		3.8	0.84	ug/m3			04/27/25 17:00	1
1,1-Dichloroethane	ND		2.0	0.36	ug/m3			04/27/25 17:00	1

Method: TO 15 LL - Volatile Organic Compounds in Ambient Air, Low Concentration (GC/MS) (Continued)

Lab Sample ID: MB 410-636107/8
Matrix: Air
Analysis Batch: 636107

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	ND		0.20	0.56	ug/m3			04/27/25 17:00	1
1,2,4-Trichlorobenzene	ND		15	2.8	ug/m3			04/27/25 17:00	1
1,2,4-Trimethylbenzene	ND		2.5	1.4	ug/m3			04/27/25 17:00	1
1,2-Dibromoethane	ND		3.8	1.0	ug/m3			04/27/25 17:00	1
1,2-Dichlorobenzene	ND		3.0	1.2	ug/m3			04/27/25 17:00	1
1,2-Dichloroethane	ND		2.0	0.32	ug/m3			04/27/25 17:00	1
1,2-Dichloropropane	ND		2.3	0.60	ug/m3			04/27/25 17:00	1
1,2-Dichlorotetrafluoroethane	ND		3.5	0.84	ug/m3			04/27/25 17:00	1
1,3,5-Trimethylbenzene	ND		2.5	1.6	ug/m3			04/27/25 17:00	1
1,3-Butadiene	ND		1.1	0.38	ug/m3			04/27/25 17:00	1
1,3-Dichlorobenzene	ND		3.0	1.1	ug/m3			04/27/25 17:00	1
1,4-Dichlorobenzene	ND		3.0	1.0	ug/m3			04/27/25 17:00	1
1,4-Dioxane	ND		7.2	0.61	ug/m3			04/27/25 17:00	1
2,2,4-Trimethylpentane	ND		4.7	0.61	ug/m3			04/27/25 17:00	1
2-Chlorotoluene	ND		2.6	1.1	ug/m3			04/27/25 17:00	1
3-Chloropropene	ND		1.6	0.47	ug/m3			04/27/25 17:00	1
4-Ethyltoluene	ND		2.5	0.88	ug/m3			04/27/25 17:00	1
4-Isopropyltoluene	ND		2.7	1.5	ug/m3			04/27/25 17:00	1
4-Methyl-2-pentanone (Methyl isobutyl ketone)	ND		20	0.61	ug/m3			04/27/25 17:00	1
Acetone	ND		4.8	1.3	ug/m3			04/27/25 17:00	1
Benzene	ND		1.6	0.35	ug/m3			04/27/25 17:00	1
Benzyl chloride	ND		2.6	1.3	ug/m3			04/27/25 17:00	1
Bromodichloromethane	ND		3.4	0.80	ug/m3			04/27/25 17:00	1
Bromoethene(Vinyl Bromide)	ND		22	0.79	ug/m3			04/27/25 17:00	1
Bromoform	ND		5.2	1.8	ug/m3			04/27/25 17:00	1
Bromomethane	ND		1.9	0.70	ug/m3			04/27/25 17:00	1
Carbon disulfide	ND		3.1	0.40	ug/m3			04/27/25 17:00	1
Carbon tetrachloride	ND		0.22	0.88	ug/m3			04/27/25 17:00	1
Chlorobenzene	ND		2.3	0.60	ug/m3			04/27/25 17:00	1
Chlorodifluoromethane	ND		1.8	0.53	ug/m3			04/27/25 17:00	1
Chloroethane	ND		1.3	0.50	ug/m3			04/27/25 17:00	1
Chloroform	ND		2.4	0.45	ug/m3			04/27/25 17:00	1
Chloromethane	ND		4.1	0.50	ug/m3			04/27/25 17:00	1
cis-1,2-Dichloroethene	ND		0.20	0.48	ug/m3			04/27/25 17:00	1
cis-1,3-Dichloropropene	ND		2.3	0.45	ug/m3			04/27/25 17:00	1
Cumene	ND		2.5	1.2	ug/m3			04/27/25 17:00	1
Cyclohexane	ND		1.7	0.38	ug/m3			04/27/25 17:00	1
Dibromochloromethane	ND		4.3	1.1	ug/m3			04/27/25 17:00	1
Dichlorodifluoromethane	ND		2.5	0.64	ug/m3			04/27/25 17:00	1
Ethylbenzene	ND		2.2	0.83	ug/m3			04/27/25 17:00	1
Hexachlorobutadiene	ND		21	5.0	ug/m3			04/27/25 17:00	1
Isopropyl alcohol	ND		4.9	0.59	ug/m3			04/27/25 17:00	1
m,p-Xylene	ND		4.3	1.1	ug/m3			04/27/25 17:00	1
Methyl Butyl Ketone (2-Hexanone)	ND		8.2	0.74	ug/m3			04/27/25 17:00	1
Methyl Ethyl Ketone (2-Butanone)	ND		5.9	0.62	ug/m3			04/27/25 17:00	1
Methyl methacrylate	ND		4.1	0.61	ug/m3			04/27/25 17:00	1
Methyl tert-butyl ether	ND		1.8	0.54	ug/m3			04/27/25 17:00	1

Method: TO 15 LL - Volatile Organic Compounds in Ambient Air, Low Concentration (GC/MS) (Continued)

Lab Sample ID: MB 410-636107/8
Matrix: Air
Analysis Batch: 636107

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methylene Chloride	ND		6.9	0.87	ug/m3			04/27/25 17:00	1
Naphthalene	ND		2.0	2.6	ug/m3			04/27/25 17:00	1
n-Butylbenzene	ND		2.7	1.4	ug/m3			04/27/25 17:00	1
n-Heptane	ND		2.0	0.94	ug/m3			04/27/25 17:00	1
n-Hexane	ND		1.8	0.46	ug/m3			04/27/25 17:00	1
n-Propylbenzene	ND		2.5	1.0	ug/m3			04/27/25 17:00	1
o-Xylene	ND		2.2	1.3	ug/m3			04/27/25 17:00	1
sec-Butylbenzene	ND		2.7	2.1	ug/m3			04/27/25 17:00	1
Styrene	ND		2.1	0.85	ug/m3			04/27/25 17:00	1
tert-Butyl alcohol	ND		3.0	0.64	ug/m3			04/27/25 17:00	1
tert-Butylbenzene	ND		5.5	4.2	ug/m3			04/27/25 17:00	1
Tetrachloroethene	ND		3.4	1.7	ug/m3			04/27/25 17:00	1
Tetrahydrofuran	ND		1.5	0.71	ug/m3			04/27/25 17:00	1
Toluene	ND		1.9	0.45	ug/m3			04/27/25 17:00	1
trans-1,2-Dichloroethene	ND		2.0	0.34	ug/m3			04/27/25 17:00	1
trans-1,3-Dichloropropene	ND		2.3	0.54	ug/m3			04/27/25 17:00	1
Trichloroethene	ND		0.20	0.97	ug/m3			04/27/25 17:00	1
Trichlorofluoromethane	ND		2.8	0.84	ug/m3			04/27/25 17:00	1
Vinyl chloride	ND		0.20	0.31	ug/m3			04/27/25 17:00	1

Lab Sample ID: LCS 410-636107/5
Matrix: Air
Analysis Batch: 636107

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
1,1,1-Trichloroethane	54.6	58.5		ug/m3		107	70 - 130
1,1,2,2-Tetrachloroethane	68.7	54.1		ug/m3		79	61 - 130
1,1,2-Trichloroethane	54.6	43.5		ug/m3		80	70 - 130
1,1,2-Trichlorotrifluoroethane	76.6	84.1		ug/m3		110	70 - 130
1,1-Dichloroethane	40.5	39.3		ug/m3		97	70 - 130
1,1-Dichloroethene	39.6	44.6		ug/m3		112	70 - 131
1,2,4-Trichlorobenzene	74.2	76.5		ug/m3		103	31 - 132
1,2,4-Trimethylbenzene	49.2	50.7		ug/m3		103	65 - 146
1,2-Dibromoethane	76.8	68.0		ug/m3		88	70 - 130
1,2-Dichlorobenzene	60.1	58.3		ug/m3		97	61 - 139
1,2-Dichloroethane	40.5	40.0		ug/m3		99	70 - 131
1,2-Dichloropropane	46.2	35.4		ug/m3		77	70 - 130
1,2-Dichlorotetrafluoroethane	69.9	76.2		ug/m3		109	70 - 130
1,3,5-Trimethylbenzene	49.2	46.1		ug/m3		94	69 - 141
1,3-Butadiene	22.1	21.3		ug/m3		96	70 - 131
1,3-Dichlorobenzene	60.1	61.9		ug/m3		103	64 - 140
1,4-Dichlorobenzene	60.1	52.5		ug/m3		87	64 - 137
1,4-Dioxane	36.0	37.1		ug/m3		103	70 - 130
2,2,4-Trimethylpentane	46.7	43.5		ug/m3		93	70 - 130
2-Chlorotoluene	51.8	49.3		ug/m3		95	70 - 130
3-Chloropropene	31.3	34.9		ug/m3		112	70 - 137
4-Ethyltoluene	49.2	51.1		ug/m3		104	69 - 139
4-Isopropyltoluene	54.9	61.3		ug/m3		112	60 - 148

Method: TO 15 LL - Volatile Organic Compounds in Ambient Air, Low Concentration (GC/MS) (Continued)

Lab Sample ID: LCS 410-636107/5
Matrix: Air
Analysis Batch: 636107

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
4-Methyl-2-pentanone (Methyl isobutyl ketone)	41.0	39.0		ug/m3		95	68 - 133
Acetone	23.8	26.3		ug/m3		111	70 - 137
Benzene	31.9	27.4		ug/m3		86	70 - 130
Benzyl chloride	51.8	60.9		ug/m3		118	42 - 160
Bromodichloromethane	67.0	58.9		ug/m3		88	70 - 130
Bromoethene(Vinyl Bromide)	43.7	51.7		ug/m3		118	70 - 130
Bromoform	103	97.1		ug/m3		94	60 - 139
Bromomethane	38.8	41.1		ug/m3		106	70 - 134
Carbon disulfide	31.1	32.1		ug/m3		103	70 - 130
Carbon tetrachloride	62.9	75.8		ug/m3		121	70 - 130
Chlorobenzene	46.0	38.0		ug/m3		83	70 - 130
Chlorodifluoromethane	35.4	41.4		ug/m3		117	70 - 141
Chloroethane	26.4	23.8		ug/m3		90	70 - 131
Chloroform	48.8	50.4		ug/m3		103	70 - 130
Chloromethane	20.7	16.8		ug/m3		81	51 - 138
cis-1,2-Dichloroethene	39.6	41.8		ug/m3		106	70 - 130
cis-1,3-Dichloropropene	45.4	39.3		ug/m3		87	70 - 130
Cumene	49.2	50.2		ug/m3		102	70 - 131
Cyclohexane	34.4	36.5		ug/m3		106	70 - 130
Dibromochloromethane	85.2	77.8		ug/m3		91	70 - 130
Dichlorodifluoromethane	49.5	58.5		ug/m3		118	70 - 131
Ethylbenzene	43.4	40.7		ug/m3		94	70 - 130
Hexachlorobutadiene	107	117		ug/m3		109	34 - 157
Isopropyl alcohol	24.6	27.3		ug/m3		111	46 - 144
m,p-Xylene	43.4	42.0		ug/m3		97	70 - 130
Methyl Butyl Ketone (2-Hexanone)	41.0	34.0		ug/m3		83	63 - 130
Methyl Ethyl Ketone (2-Butanone)	29.5	33.5		ug/m3		113	70 - 130
Methyl methacrylate	40.9	38.5		ug/m3		94	70 - 130
Methyl tert-butyl ether	36.1	41.8		ug/m3		116	70 - 130
Methylene Chloride	34.7	34.3		ug/m3		99	70 - 130
Naphthalene	60.8	52.2		ug/m3		86	33 - 149
n-Butylbenzene	54.9	59.1		ug/m3		108	57 - 149
n-Heptane	41.0	39.0		ug/m3		95	70 - 130
n-Hexane	35.2	35.9		ug/m3		102	70 - 130
n-Propylbenzene	49.2	46.0		ug/m3		94	70 - 130
o-Xylene	43.4	40.4		ug/m3		93	70 - 130
sec-Butylbenzene	54.9	51.2		ug/m3		93	66 - 141
Styrene	42.6	42.2		ug/m3		99	70 - 133
tert-Butyl alcohol	33.6	32.6		ug/m3		97	50 - 145
tert-Butylbenzene	54.9	58.1		ug/m3		106	63 - 142
Tetrachloroethene	67.8	64.1		ug/m3		95	70 - 130
Tetrahydrofuran	29.5	28.2		ug/m3		96	70 - 131
Toluene	37.7	34.0		ug/m3		90	70 - 130
trans-1,2-Dichloroethene	39.6	43.2		ug/m3		109	70 - 130
trans-1,3-Dichloropropene	45.4	45.0		ug/m3		99	70 - 130

Method: TO 15 LL - Volatile Organic Compounds in Ambient Air, Low Concentration (GC/MS) (Continued)

Lab Sample ID: LCS 410-636107/5
Matrix: Air
Analysis Batch: 636107

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Trichloroethene	53.7	51.1		ug/m3		95	70 - 130
Trichlorofluoromethane	56.2	63.8		ug/m3		114	70 - 130
Vinyl chloride	25.6	26.5		ug/m3		104	70 - 135

Lab Sample ID: LCSD 410-636107/6
Matrix: Air
Analysis Batch: 636107

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
1,1,1-Trichloroethane	54.6	58.1		ug/m3		106	70 - 130	1	25
1,1,2,2-Tetrachloroethane	68.7	54.3		ug/m3		79	61 - 130	0	25
1,1,2-Trichloroethane	54.6	45.0		ug/m3		83	70 - 130	3	25
1,1,2-Trichlorotrifluoroethane	76.6	81.6		ug/m3		106	70 - 130	3	25
1,1-Dichloroethane	40.5	39.1		ug/m3		97	70 - 130	1	25
1,1-Dichloroethene	39.6	44.9		ug/m3		113	70 - 131	1	25
1,2,4-Trichlorobenzene	74.2	80.2		ug/m3		108	31 - 132	5	25
1,2,4-Trimethylbenzene	49.2	60.7		ug/m3		124	65 - 146	18	25
1,2-Dibromoethane	76.8	70.4		ug/m3		92	70 - 130	3	25
1,2-Dichlorobenzene	60.1	59.3		ug/m3		99	61 - 139	2	25
1,2-Dichloroethane	40.5	39.0		ug/m3		96	70 - 131	2	25
1,2-Dichloropropane	46.2	34.7		ug/m3		75	70 - 130	2	25
1,2-Dichlorotetrafluoroethane	69.9	71.7		ug/m3		103	70 - 130	6	25
1,3,5-Trimethylbenzene	49.2	50.0		ug/m3		102	69 - 141	8	25
1,3-Butadiene	22.1	21.3		ug/m3		96	70 - 131	0	25
1,3-Dichlorobenzene	60.1	65.0		ug/m3		108	64 - 140	5	25
1,4-Dichlorobenzene	60.1	54.6		ug/m3		91	64 - 137	4	25
1,4-Dioxane	36.0	36.3		ug/m3		101	70 - 130	2	25
2,2,4-Trimethylpentane	46.7	43.4		ug/m3		93	70 - 130	0	25
2-Chlorotoluene	51.8	52.8		ug/m3		102	70 - 130	7	25
3-Chloropropene	31.3	34.5		ug/m3		110	70 - 137	1	25
4-Ethyltoluene	49.2	54.3		ug/m3		111	69 - 139	6	25
4-Isopropyltoluene	54.9	64.5		ug/m3		117	60 - 148	5	25
4-Methyl-2-pentanone (Methyl isobutyl ketone)	41.0	38.7		ug/m3		95	68 - 133	1	25
Acetone	23.8	26.1		ug/m3		110	70 - 137	1	25
Benzene	31.9	26.9		ug/m3		84	70 - 130	2	25
Benzyl chloride	51.8	63.0		ug/m3		122	42 - 160	3	25
Bromodichloromethane	67.0	57.6		ug/m3		86	70 - 130	2	25
Bromoethene(Vinyl Bromide)	43.7	51.7		ug/m3		118	70 - 130	0	25
Bromoform	103	97.4		ug/m3		94	60 - 139	0	25
Bromomethane	38.8	40.6		ug/m3		104	70 - 134	1	25
Carbon disulfide	31.1	31.9		ug/m3		102	70 - 130	1	25
Carbon tetrachloride	62.9	74.5		ug/m3		119	70 - 130	2	25
Chlorobenzene	46.0	37.6		ug/m3		82	70 - 130	1	25
Chlorodifluoromethane	35.4	39.2		ug/m3		111	70 - 141	5	25
Chloroethane	26.4	23.3		ug/m3		88	70 - 131	2	25
Chloroform	48.8	49.8		ug/m3		102	70 - 130	1	25
Chloromethane	20.7	17.0		ug/m3		82	51 - 138	1	25

Method: TO 15 LL - Volatile Organic Compounds in Ambient Air, Low Concentration (GC/MS) (Continued)

Lab Sample ID: LCSD 410-636107/6
Matrix: Air
Analysis Batch: 636107

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
cis-1,2-Dichloroethene	39.6	41.2		ug/m3		104	70 - 130	2	25
cis-1,3-Dichloropropene	45.4	39.5		ug/m3		87	70 - 130	0	25
Cumene	49.2	51.6		ug/m3		105	70 - 131	3	25
Cyclohexane	34.4	36.6		ug/m3		106	70 - 130	0	25
Dibromochloromethane	85.2	80.8		ug/m3		95	70 - 130	4	25
Dichlorodifluoromethane	49.5	55.5		ug/m3		112	70 - 131	5	25
Ethylbenzene	43.4	40.0		ug/m3		92	70 - 130	2	25
Hexachlorobutadiene	107	123		ug/m3		115	34 - 157	5	25
Isopropyl alcohol	24.6	27.8		ug/m3		113	46 - 144	1	25
m,p-Xylene	43.4	42.9		ug/m3		99	70 - 130	2	25
Methyl Butyl Ketone (2-Hexanone)	41.0	34.8		ug/m3		85	63 - 130	2	25
Methyl Ethyl Ketone (2-Butanone)	29.5	32.6		ug/m3		111	70 - 130	3	25
Methyl methacrylate	40.9	38.3		ug/m3		93	70 - 130	0	25
Methyl tert-butyl ether	36.1	41.4		ug/m3		115	70 - 130	1	25
Methylene Chloride	34.7	34.5		ug/m3		99	70 - 130	0	25
Naphthalene	60.8	57.9		ug/m3		95	33 - 149	10	25
n-Butylbenzene	54.9	59.6		ug/m3		109	57 - 149	1	25
n-Heptane	41.0	38.6		ug/m3		94	70 - 130	1	25
n-Hexane	35.2	36.4		ug/m3		103	70 - 130	2	25
n-Propylbenzene	49.2	49.2		ug/m3		100	70 - 130	7	25
o-Xylene	43.4	42.9		ug/m3		99	70 - 130	6	25
sec-Butylbenzene	54.9	57.1		ug/m3		104	66 - 141	11	25
Styrene	42.6	44.6		ug/m3		105	70 - 133	5	25
tert-Butyl alcohol	33.6	32.1		ug/m3		95	50 - 145	1	25
tert-Butylbenzene	54.9	64.3		ug/m3		117	63 - 142	10	25
Tetrachloroethene	67.8	64.3		ug/m3		95	70 - 130	0	25
Tetrahydrofuran	29.5	28.9		ug/m3		98	70 - 131	2	25
Toluene	37.7	35.4		ug/m3		94	70 - 130	4	25
trans-1,2-Dichloroethene	39.6	41.8		ug/m3		105	70 - 130	3	25
trans-1,3-Dichloropropene	45.4	46.2		ug/m3		102	70 - 130	3	25
Trichloroethene	53.7	51.3		ug/m3		95	70 - 130	0	25
Trichlorofluoromethane	56.2	62.6		ug/m3		111	70 - 130	2	25
Vinyl chloride	25.6	26.6		ug/m3		104	70 - 135	0	25

Client: Roux Environmental Engineering and Geology DPC
Job ID: 480-228889-1
Project/Site: BCP RI - 619 Exchange Street Site

Air - GC/MS VOA

Analysis Batch: 635121

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-228889-1	IA-4	Total/NA	Air	TO 15 LL	
480-228889-2	SSV-2	Total/NA	Air	TO 15 LL	
480-228889-3	SSV-1	Total/NA	Air	TO 15 LL	
480-228889-4	SSV-3	Total/NA	Air	TO 15 LL	
MB 410-635121/7	Method Blank	Total/NA	Air	TO 15 LL	
LCS 410-635121/4	Lab Control Sample	Total/NA	Air	TO 15 LL	
LCSD 410-635121/5	Lab Control Sample Dup	Total/NA	Air	TO 15 LL	

Analysis Batch: 635531

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-228889-1 - RA	IA-4	Total/NA	Air	TO 15 LL	
480-228889-2 - RA	SSV-2	Total/NA	Air	TO 15 LL	
480-228889-3 - RA	SSV-1	Total/NA	Air	TO 15 LL	
480-228889-4 - RA	SSV-3	Total/NA	Air	TO 15 LL	
MB 410-635531/6	Method Blank	Total/NA	Air	TO 15 LL	
LCS 410-635531/4	Lab Control Sample	Total/NA	Air	TO 15 LL	
LCSD 410-635531/8	Lab Control Sample Dup	Total/NA	Air	TO 15 LL	

Analysis Batch: 636107

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-228889-5	IA-3	Total/NA	Air	TO 15 LL	
480-228889-6	IA-1	Total/NA	Air	TO 15 LL	
480-228889-7	IA-2	Total/NA	Air	TO 15 LL	
480-228889-8	SSV-4	Total/NA	Air	TO 15 LL	
MB 410-636107/8	Method Blank	Total/NA	Air	TO 15 LL	
LCS 410-636107/5	Lab Control Sample	Total/NA	Air	TO 15 LL	
LCSD 410-636107/6	Lab Control Sample Dup	Total/NA	Air	TO 15 LL	

Lab Chronicle

Client: Roux Environmental Engineering and Geology DPC
Job ID: 480-228889-1
Project/Site: BCP RI - 619 Exchange Street Site

Client Sample ID: IA-4
Lab Sample ID: 480-228889-1
Date Collected: 04/18/25 16:05
Matrix: Air
Date Received: 04/22/25 09:50

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	TO 15 LL		1	635121	D7UM	ELLE	04/24/25 21:07
Total/NA	Analysis	TO 15 LL	RA	1	635531	JXC9	ELLE	04/25/25 17:50

Client Sample ID: SSV-2
Lab Sample ID: 480-228889-2
Date Collected: 04/18/25 16:01
Matrix: Air
Date Received: 04/22/25 09:50

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	TO 15 LL		1	635121	D7UM	ELLE	04/24/25 21:35
Total/NA	Analysis	TO 15 LL	RA	1	635531	JXC9	ELLE	04/25/25 18:19

Client Sample ID: SSV-1
Lab Sample ID: 480-228889-3
Date Collected: 04/18/25 15:57
Matrix: Air
Date Received: 04/22/25 09:50

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	TO 15 LL		1	635121	D7UM	ELLE	04/24/25 22:04
Total/NA	Analysis	TO 15 LL	RA	1	635531	JXC9	ELLE	04/25/25 18:47

Client Sample ID: SSV-3
Lab Sample ID: 480-228889-4
Date Collected: 04/18/25 16:03
Matrix: Air
Date Received: 04/22/25 09:50

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	TO 15 LL		1	635121	D7UM	ELLE	04/24/25 22:33
Total/NA	Analysis	TO 15 LL	RA	1	635531	JXC9	ELLE	04/25/25 19:16

Client Sample ID: IA-3
Lab Sample ID: 480-228889-5
Date Collected: 04/18/25 16:04
Matrix: Air
Date Received: 04/22/25 09:50

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	TO 15 LL		1	636107	D7UM	ELLE	04/27/25 22:19

Client Sample ID: IA-1
Lab Sample ID: 480-228889-6
Date Collected: 04/18/25 15:58
Matrix: Air
Date Received: 04/22/25 09:50

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	TO 15 LL		1	636107	D7UM	ELLE	04/27/25 22:48

Lab Chronicle

Client: Roux Environmental Engineering and Geology DPC
Job ID: 480-228889-1
Project/Site: BCP RI - 619 Exchange Street Site

Client Sample ID: IA-2
Lab Sample ID: 480-228889-7
Date Collected: 04/18/25 16:02
Matrix: Air
Date Received: 04/22/25 09:50

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	TO 15 LL		1	636107	D7UM	ELLE	04/27/25 23:16

Client Sample ID: SSV-4
Lab Sample ID: 480-228889-8
Date Collected: 04/18/25 16:06
Matrix: Air
Date Received: 04/22/25 09:50

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	TO 15 LL		1	636107	D7UM	ELLE	04/27/25 23:45

Laboratory References:

ELLE = Eurofins Lancaster Laboratories Environment Testing, LLC, 2425 New Holland Pike, Lancaster, PA 17601, TEL (717)656-2300

Accreditation/Certification Summary

Client: Roux Environmental Engineering and Geology DPC
Job ID: 480-228889-1
Project/Site: BCP RI - 619 Exchange Street Site

Laboratory: Eurofins Lancaster Laboratories Environment Testing, LLC

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	Identification Number	Expiration Date
New York	NELAP	10670	04-01-26

The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

Analysis Method	Prep Method	Matrix	Analyte
TO 15 LL		Air	4-Ethyltoluene
TO 15 LL		Air	4-Isopropyltoluene
TO 15 LL		Air	Chlorodifluoromethane
TO 15 LL		Air	Methyl Butyl Ketone (2-Hexanone)
TO 15 LL		Air	n-Butylbenzene
TO 15 LL		Air	n-Propylbenzene
TO 15 LL		Air	sec-Butylbenzene
TO 15 LL		Air	tert-Butylbenzene
TO 15 LL		Air	Tetrahydrofuran

Method Summary

Client: Roux Environmental Engineering and Geology DPC
Job ID: 480-228889-1
Project/Site: BCP RI - 619 Exchange Street Site

Method	Method Description	Protocol	Laboratory
TO 15 LL	Volatile Organic Compounds in Ambient Air, Low Concentration (GC/MS)	EPA	ELLE

Protocol References:

EPA = US Environmental Protection Agency

Laboratory References:

ELLE = Eurofins Lancaster Laboratories Environment Testing, LLC, 2425 New Holland Pike, Lancaster, PA 17601, TEL (717)656-2300

Sample Summary

Client: Roux Environmental Engineering and Geology DPC
Job ID: 480-228889-1
Project/Site: BCP RI - 619 Exchange Street Site

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
480-228889-1	IA-4	Air	04/18/25 16:05	04/22/25 09:50	Air Canister (6-Liter) #1613
480-228889-2	SSV-2	Air	04/18/25 16:01	04/22/25 09:50	Air Canister (6-Liter) #1539
480-228889-3	SSV-1	Air	04/18/25 15:57	04/22/25 09:50	Air Canister (6-Liter) #1766
480-228889-4	SSV-3	Air	04/18/25 16:03	04/22/25 09:50	Air Canister (6-Liter) #504
480-228889-5	IA-3	Air	04/18/25 16:04	04/22/25 09:50	Air Canister (6-Liter) #1380
480-228889-6	IA-1	Air	04/18/25 15:58	04/22/25 09:50	Air Canister (6-Liter) #1492
480-228889-7	IA-2	Air	04/18/25 16:02	04/22/25 09:50	Air Canister (6-Liter) #805
480-228889-8	SSV-4	Air	04/18/25 16:06	04/22/25 09:50	Air Canister (6-Liter) #1232

Canister Field Test Data/Chain of Custody

eurofins | Lancaster Environmental

480-228889 Chain of Custody

For Eurofins Lancaster Laboratories Environmental use only

Job # _____ Sample # _____ Bottle Order (SCR) # 204313

Client Information

Client: Roux Inc — Account #:

Project Name/#: 619 exchange Street — 4374.0004B000

Project Manager: Bryan Mayhew/Brian Fischer — P.O. #:

Sampler: Nick Surace — Quote #:

Name of state where samples were collected: New York

Turnaround Time Requested (TAT) (circle one)

(Standard) Rush (specify) _____

Data Package Required? (Yes) No

EDD Required? (Yes) No

	Temperature (F) Start	Temperature (F) Stop	Pressure ("Hg) Start	Pressure ("Hg) Stop
Ambient	52	52		
Maximum	52	52		
Minimum	64	64		

Analyses Requested

EPA TO - 15 | ☐ MTBE | ☐ BTEX | EPA 18 | EPA 25 (select range below) | Helium as tracer | O2/CO2 | Library Search

Sample Identification	Start Date/Time (24-hour clock)	Stop Date/Time (24-hour clock)	Canister Pressure in Field ("Hg) (Start)	Canister Pressure in Field ("Hg) (Stop)	Interior Temp. (F) (Start)	Interior Temp. (F) (Stop)	Flow Reg. ID	Can ID	Can Size (L)	Controller Flowrate (mL/min)	EPA TO - 15
IA-4	4/16/25 9:50	4/16/25 1605	-29	-10	52°	52°	A765002	1673	6	10.6	X
							A903015	1232	6	10.7	
SSV-2	9:40	1601	-29	-10	52	52	A730013	[illegible]	6	10.8	X
SSV-1	9:35	1557	-28.5	-9	52	52	A439004	1766	6	10.8	X
SSV-3	9:45	1603	-28.5	-9	52	52	A101017	504	6	10.5	X
IA-3	9:47	1604	-27.5	-10	52	52	A803019	[illegible]	6	10.6	X
IA-1	9:37	1558	-28	-9	52	52	A327011	[illegible]	6	10.7	X
IA-2	9:42	1602	-29	-10	52	52	A355020	[illegible]	6	10.8	X
							A803006	805	6	10.7	
							A805011	1346	6	10.8	
SSV-4	9:52	1606	-28	-9	52	52	A908015	1232	6	10.7	X

Instructions/QC Requirements & Comments

Cat B, NYSDEC equis

EPA 25 (check one) ☐ C1 - C4 ☐ C2 - C10 ☐ C1 - C10 ☐ C4 - C10 (GRO) ☐ C2 - C4

Canisters Shipped by: 91224	Date/Time: 15:11 4/14/25	Canisters Received by:	Date/Time:	Relinquished by:	Date/Time: 4/21/25 1340	Received by:	Date/Time: 4/21/25 13:10
Relinquished by:	Date/Time: 4/21/25 16:01	Received by:	Date/Time:	Relinquished by:	Date/Time:	Received by:	Date/Time:
Relinquished by:	Date/Time:	Received by:	Date/Time:	Relinquished by:	Date/Time:	Received by:	Date/Time: 04/22/25 095

Eurofins Lancaster Laboratories Environmental, LLC • 2425 New Holland Pike, Lancaster, PA 17601 • 717-656-2300

The white copy should accompany samples to Eurofins Lancaster Laboratories Environmental. The yellow copy should be retained by the client.

7056 1015

Login Sample Receipt Checklist

Client: Roux Environmental Engineering and Geology DPC

Job Number: 480-228889-1

Login Number: 228889
List Number: 2
Creator: Foreman, Leah M

List Source: Eurofins Lancaster Laboratories Environment Testing, LLC
List Creation: 04/23/25 12:12 PM

Question	Answer	Comment
The cooler's custody seal is intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	False	Thermal preservation not required.
Cooler Temperature acceptable,where thermal pres is required(</=6C, not frozen).	True	
Cooler Temperature is recorded.	True	
WV:Container Temp acceptable,where thermal pres is required (</=6C, not frozen).	N/A	
WV: Container Temperature is recorded.	N/A	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
There are no discrepancies between the containers received and the COC.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	N/A	
There is sufficient vol. for all requested analyses.	True	
Is the Field Sampler's name present on COC?	True	
Sample custody seals are intact.	N/A	
VOA sample vials do not have headspace >6mm in diameter (none, if from WV)?	N/A	

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC
Job No.: 410-215073-1

SDG No.:

Client Sample ID: 1613
Lab Sample ID: 410-215073-1

Matrix: Air
Lab File ID: 5M31X33.D

Analysis Method: TO-15
Date Collected: 04/01/2025 13:30

Sample wt/vol: 200(mL)
Date Analyzed: 04/01/2025 17:35

Soil Aliquot Vol:
Dilution Factor: 1

Soil Extract Vol.:
GC Column: DB-624 30m ID: 0.25(mm)

Purge Volume:
Heated Purge: (Y/N) pH:

% Moisture: % Solids:
Level: (low/med) Low

Analysis Batch No.: 624298
Units: ppb v/v

Preparation Batch No.:
Instrument ID: HP22820

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	ND		1.0	0.15
71-55-6	1,1,1-Trichloroethane	ND		1.0	0.12
79-34-5	1,1,2,2-Tetrachloroethane	ND		1.0	0.15
79-00-5	1,1,2-Trichloroethane	ND		1.0	0.12
75-34-3	1,1-Dichloroethane	ND		1.0	0.089
75-35-4	1,1-Dichloroethene	ND		1.0	0.14
96-18-4	1,2,3-Trichloropropane	ND		1.0	0.14
120-82-1	1,2,4-Trichlorobenzene	ND		2.0	0.50
95-63-6	1,2,4-Trimethylbenzene	ND	*+	2.0	0.28
106-93-4	1,2-Dibromoethane	ND		1.0	0.13
96-12-8	1,2-Dibromo-3-Chloropropane	ND		2.0	0.28
95-50-1	1,2-Dichlorobenzene	ND		1.0	0.20
107-06-2	1,2-Dichloroethane	ND		1.0	0.080
78-87-5	1,2-Dichloropropane	ND		1.0	0.13
108-67-8	1,3,5-Trimethylbenzene	ND		2.0	0.32
540-59-0	1,2-Dichloroethene (total)	ND		1.0	0.20
106-99-0	1,3-Butadiene	ND		1.0	0.17
541-73-1	1,3-Dichlorobenzene	ND		1.0	0.30
106-46-7	1,4-Dichlorobenzene	ND		1.0	0.30
78-93-3	2-Butanone	ND		1.0	0.21
591-78-6	2-Hexanone	ND		2.0	0.50
542-75-6	1,3-Dichloropropene, Total	ND		1.0	0.10
107-05-1	3-Chloroprene	ND		1.0	0.20
622-96-8	4-Ethyltoluene	ND		1.0	0.18
108-10-1	4-Methyl-2-pentanone	ND		1.0	0.15
67-64-1	Acetone	ND		5.0	1.0
71-43-2	Benzene	ND		1.0	0.11
108-86-1	Bromobenzene	ND		1.0	0.20
75-27-4	Bromodichloromethane	ND		1.0	0.40
75-25-2	Bromoform	ND		1.0	0.40
74-83-9	Bromomethane	ND		1.0	0.20
75-15-0	Carbon disulfide	ND		1.0	0.40

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC
Job No.: 410-215073-1

SDG No.:

Client Sample ID: 1613
Lab Sample ID: 410-215073-1

Matrix: Air
Lab File ID: 5M31X33.D

Analysis Method: TO-15
Date Collected: 04/01/2025 13:30

Sample wt/vol: 200(mL)
Date Analyzed: 04/01/2025 17:35

Soil Aliquot Vol:
Dilution Factor: 1

Soil Extract Vol.:
GC Column: DB-624 30m ID: 0.25(mm)

Purge Volume:
Heated Purge: (Y/N) pH:

% Moisture: % Solids:
Level: (low/med) Low

Analysis Batch No.: 624298
Units: ppb v/v

Preparation Batch No.:
Instrument ID: HP22820

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
56-23-5	Carbon tetrachloride	ND		1.0	0.14
108-90-7	Chlorobenzene	ND		1.0	0.13
75-45-6	Chlorodifluoromethane	ND		1.0	0.40
75-00-3	Chloroethane	ND		1.0	0.30
67-66-3	Chloroform	ND		1.0	0.092
74-87-3	Chloromethane	ND		1.0	0.40
156-59-2	cis-1,2-Dichloroethene	ND		1.0	0.20
10061-01-5	cis-1,3-Dichloropropene	ND		1.0	0.10
593-60-2	Bromoethene	ND		1.0	0.18
98-82-8	Cumene	ND		1.0	0.24
124-48-1	Dibromochloromethane	ND		1.0	0.40
74-95-3	Dibromomethane	ND		1.0	0.14
75-71-8	Dichlorodifluoromethane	ND		1.0	0.13
75-43-4	Dichlorofluoromethane	ND		1.0	0.11
100-41-4	Ethylbenzene	ND		1.0	0.19
76-13-1	Freon 113	ND		1.0	0.20
76-14-2	Freon-114	ND		1.0	0.12
142-82-5	Heptane	ND		1.0	0.23
67-72-1	Hexachloroethane	ND		2.0	0.27
110-54-3	Hexane	ND		1.0	0.30
540-84-1	Isooctane	ND		1.0	0.40
179601-23-1	m&p-Xylene	ND		1.0	0.26
1634-04-4	Methyl t-butyl ether	ND		1.0	0.15
75-09-2	Methylene Chloride	ND		2.0	0.25
95-47-6	o-Xylene	ND		1.0	0.19
111-65-9	Octane	ND		2.0	0.40
109-66-0	Pentane	ND		1.0	0.20
100-42-5	Styrene	ND		1.0	0.20
127-18-4	Tetrachloroethene	ND		2.0	0.25
108-88-3	Toluene	ND		1.0	0.40
156-60-5	trans-1,2-Dichloroethene	ND		1.0	0.20
10061-02-6	trans-1,3-Dichloropropene	ND		1.0	0.12

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC
Job No.: 410-215073-1

SDG No.:

Client Sample ID: 1613
Lab Sample ID: 410-215073-1

Matrix: Air
Lab File ID: 5M31X33.D

Analysis Method: TO-15
Date Collected: 04/01/2025 13:30

Sample wt/vol: 200(mL)
Date Analyzed: 04/01/2025 17:35

Soil Aliquot Vol:
Dilution Factor: 1

Soil Extract Vol.:
GC Column: DB-624 30m ID: 0.25(mm)

Purge Volume:
Heated Purge: (Y/N) pH:

% Moisture: % Solids:
Level: (low/med) Low

Analysis Batch No.: 624298
Units: ppb v/v

Preparation Batch No.:
Instrument ID: HP22820

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
79-01-6	Trichloroethene	ND		1.0	0.18
75-69-4	Trichlorofluoromethane	ND		1.0	0.15
75-01-4	Vinyl chloride	ND		1.0	0.12
67-63-0	Isopropanol	ND		1.0	0.60
91-20-3	Naphthalene	ND		2.0	1.0
1330-20-7	Xylenes, Total	ND		2.0	0.19
96-33-3	Methyl acrylate	ND		1.0	0.20
109-99-9	Tetrahydrofuran	ND		1.0	0.24
141-78-6	Ethyl acetate	ND		2.0	0.25
80-62-6	Methyl methacrylate	ND		1.0	0.15
75-65-0	tert-Butyl alcohol	ND		1.0	0.21
100-44-7	Benzyl chloride	ND		2.0	0.30
87-68-3	Hexachlorobutadiene	ND		2.0	0.47
104-51-8	n-Butylbenzene	ND		2.0	0.26
95-49-8	2-Chlorotoluene	ND		1.0	0.22
75-05-8	Acetonitrile	ND		5.0	0.83
115-07-1	Propene	ND		1.0	0.30
123-91-1	1,4-Dioxane	ND		1.0	0.17
74-88-4	Iodomethane	ND		1.0	0.20
107-13-1	Acrylonitrile	ND		1.0	0.20
98-83-9	Alpha Methyl Styrene	ND		1.0	0.20
97-63-2	Ethyl methacrylate	ND		1.0	0.19
135-98-8	sec-Butylbenzene	ND	*1	2.0	0.39
103-65-1	N-Propylbenzene	ND		1.0	0.21
637-92-3	Ethyl tert-butyl ether	ND		1.0	0.15
108-20-3	di-Isopropyl ether	ND		1.0	0.15
110-82-7	Cyclohexane	ND		1.0	0.20
107-02-8	Acrolein	ND		5.0	0.62
64-17-5	Ethanol	ND		5.0	2.0
99-87-6	p-Isopropyltoluene	ND		2.0	0.28
140-88-5	Ethyl acrylate	ND		1.0	0.16
994-05-8	Tert-amyl methyl ether	ND		1.0	0.11

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC
Job No.: 410-215073-1

SDG No.:

Client Sample ID: 1613
Lab Sample ID: 410-215073-1

Matrix: Air
Lab File ID: 5M31X33.D

Analysis Method: TO-15
Date Collected: 04/01/2025 13:30

Sample wt/vol: 200(mL)
Date Analyzed: 04/01/2025 17:35

Soil Aliquot Vol:
Dilution Factor: 1

Soil Extract Vol.:
GC Column: DB-624 30m ID: 0.25(mm)

Purge Volume:
Heated Purge: (Y/N) pH:

% Moisture: % Solids:
Level: (low/med) Low

Analysis Batch No.: 624298
Units: ppb v/v

Preparation Batch No.:
Instrument ID: HP22820

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
108-05-4	Vinyl acetate	ND		1.0	0.16
98-06-6	tert-Butylbenzene	ND		5.0	0.76

Eurofins Lancaster Laboratories Environment Testing, LLC
Target Compound Quantitation Report

Data File:	\\chromfs\Lancaster\ChromData\HP22820\20250331-142565.b\5M31X33.D				
Lims ID:	410-215073-A-1				
Client ID:	1613				
Sample Type:	Client				
Inject. Date:	01-Apr-2025 17:35:26	ALS Bottle#:	13	Worklist Smp#:	32
Purge Vol:	200.000 mL	Dil. Factor:	1.0000		
Sample Info:	cc1613				
Misc. Info.:	410-0142565-032				
Operator ID:	mcd07824	Instrument ID:	HP22820		
Method:	\\chromfs\Lancaster\ChromData\HP22820\20250331-142565.b\AirMS_TO15_HP22820.m				
Limit Group:	MSV - TO15				
Last Update:	02-Apr-2025 13:10:16	Calib Date:	03-Feb-2025 03:40:12		
Integrator:	Falcon	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Lancaster\ChromData\HP22820\20250202-137070.b\5F02X24.D				
Column 1 :	DB-624 30m .25mm (0.25 mm)		Det: MS Quad		
Process Host:	CTX1672				
First Level Reviewer: D7UM		Date:	02-Apr-2025 13:08:22		

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ppb v/v	Flags
* 39 Chlorobromomethane (IS)	130	5.177	5.177	-0.001	74	110926	10.0	
* 51 1,4-Difluorobenzene	114	6.007	6.007	0.000	92	310948	10.0	
* 72 Chlorobenzene-d5 (IS)	117	8.206	8.206	0.000	82	377578	10.0	

QC Flag Legend

Processing Flags

Reagents:

AIRIS200 ppb_00462 Amount Added: 10.00 Units: mL Run Reagent

Report Date: 02-Apr-2025 13:52:46 Chrom Revision: 2.3 21-Mar-2025 14:03:38

Eurofins Lancaster Laboratories Environment Testing, LLC

Data File: \\chromfs\Lancaster\ChromData\HP22820\20250331-142565.b\5M31X33.D

Injection Date: 01-Apr-2025 17:35:26 Instrument ID: HP22820

Lims ID: 410-215073-A-1 Lab Sample ID: 410-215073-1

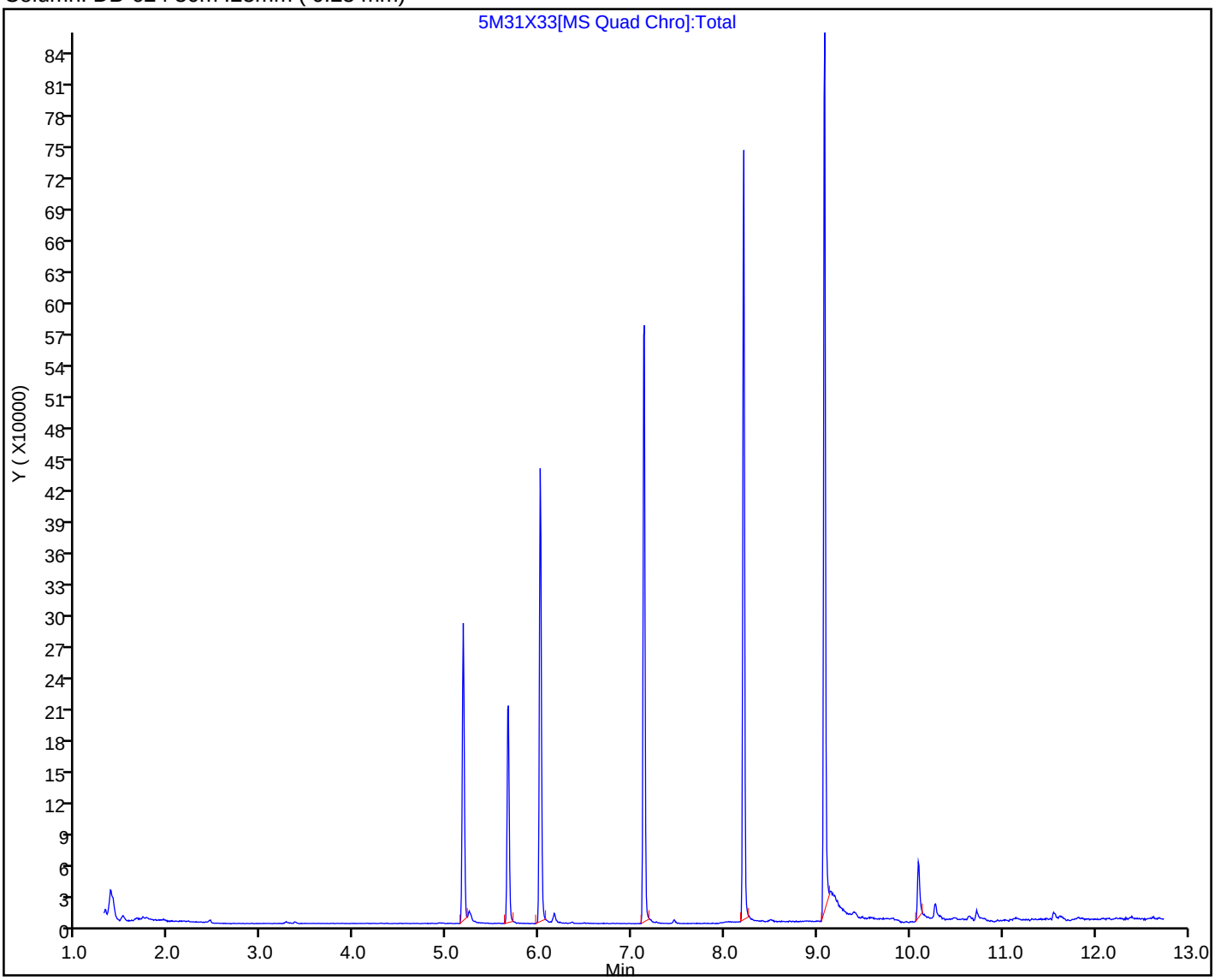
Client ID: 1613

Operator ID: mcd07824 ALS Bottle#: 13 Worklist Smp#: 32

Purge Vol: 200.000 mL Dil. Factor: 1.0000

Method: AirMS_TO15_HP22820 Limit Group: MSV - TO15

Column: DB-624 30m .25mm (0.25 mm)



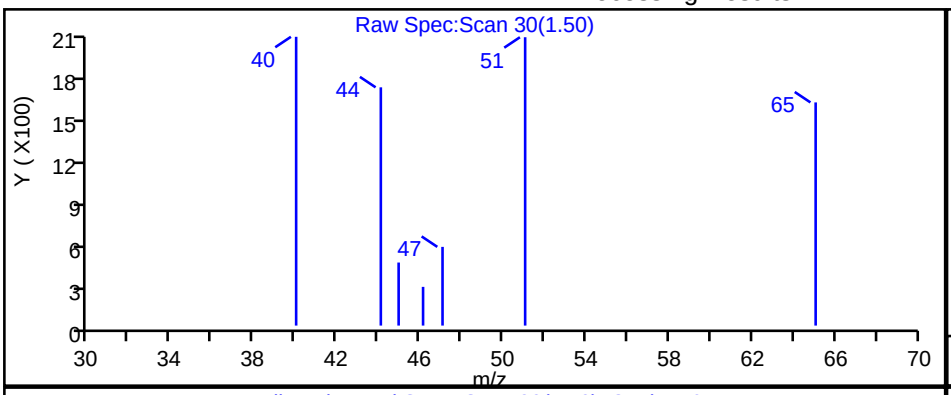
User Disabled Compound Report

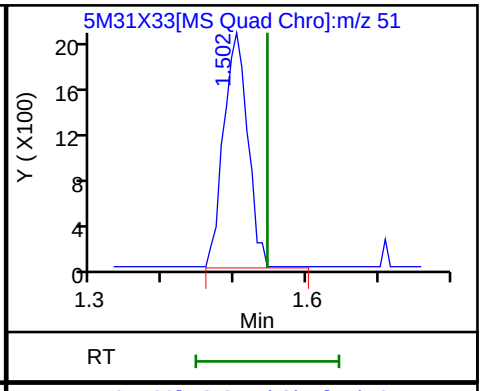
Eurofins Lancaster Laboratories Environment Testing, LLC

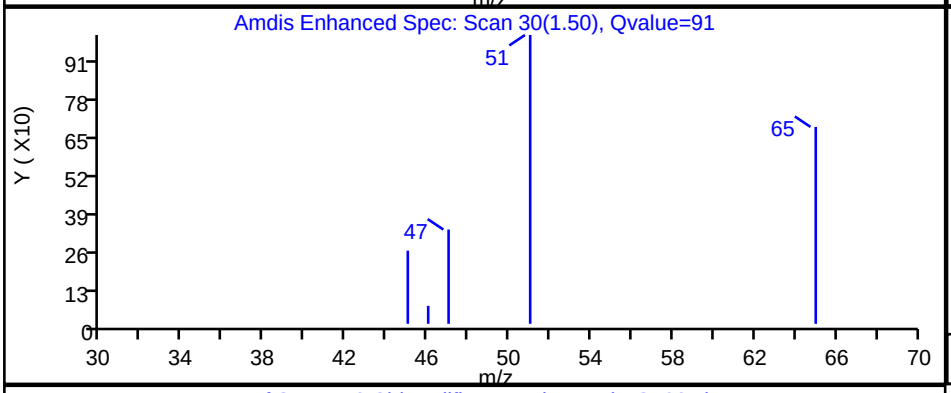
Data File:	\\chromfs\Lancaster\ChromData\HP22820\20250331-142565.b\5M31X33.D				
Injection Date:	01-Apr-2025 17:35:26	Instrument ID:	HP22820		
Lims ID:	410-215073-A-1	Lab Sample ID:	410-215073-1		
Client ID:	1613				
Operator ID:	mcd07824	ALS Bottle#:	13	Worklist Smp#:	32
Purge Vol:	200.000 mL	Dil. Factor:	1.0000		
Method:	AirMS_TO15_HP22820	Limit Group:	MSV - TO15		
Column:	DB-624 30m .25mm (0.25 mm)	Detector	MS Quad		

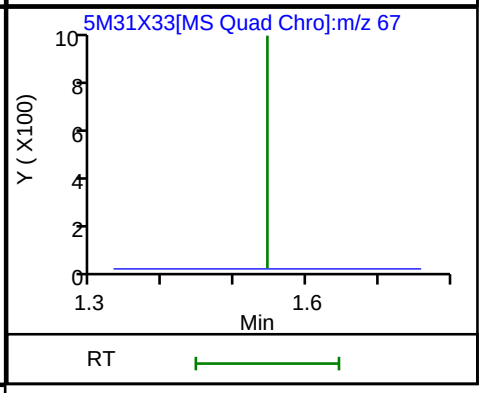
3 Chlorodifluoromethane, CAS: 75-45-6

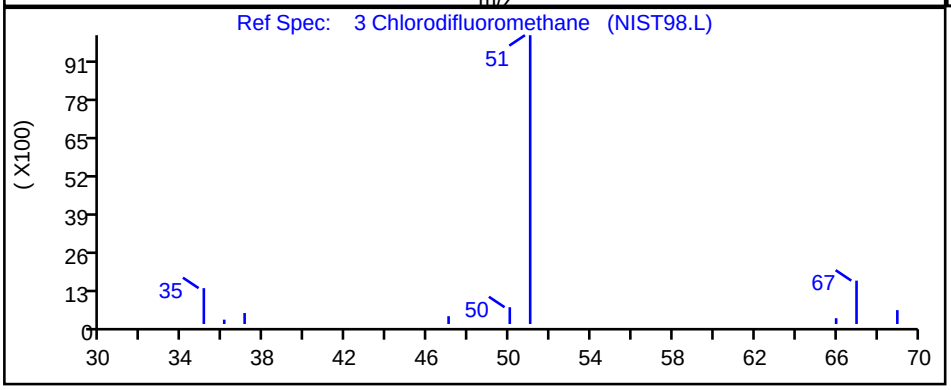
Processing Results











RT	Mass	Response	Amount
1.50	51.00	4704	0.276872
1.54	67.00	0	

Reviewer: D7UM, 02-Apr-2025 13:06:33 -04:00:00 (UTC)

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

Summa Canister Dilution Worksheet

Client: Roux Environmental Engineering and Geolo
Project/Site: BCP RI - 619 Exchange Street Site

Job No.: 480-228889-1

Lab Sample ID	Canister Volume (L)	Preadjusted Pressure ("Hg)	Preadjusted Pressure (atm)	Preadjusted Volume (L)	Adjusted Pressure (psig)	Adjusted Pressure (atm)	Adjusted Volume (L)	Initial Volume (mL)	Dilution Factor	Final Dilution Factor	Pressure Gauge ID	Date	Analyst Initals
480-228889-1	6	-8.6	0.71	4.28	6.2	1.42	8.53		2.00	2.00		04/23/25 19:50	JXC9
480-228889-2	6	-9	0.70	4.20	5.9	1.40	8.41		2.00	2.00		04/23/25 19:50	JXC9
480-228889-3	6	-8.2	0.73	4.36	6.6	1.45	8.69		2.00	2.00		04/23/25 19:51	JXC9
480-228889-4	6	-6.2	0.79	4.76	8.6	1.59	9.51		2.00	2.00		04/23/25 19:51	JXC9
480-228889-5	6	-9	0.70	4.20	5.9	1.40	8.41		2.00	2.00		04/23/25 19:51	JXC9
480-228889-6	6	-9.6	0.68	4.07	5.3	1.36	8.16		2.00	2.00		04/23/25 19:51	JXC9
480-228889-7	6	-9	0.70	4.20	5.9	1.40	8.41		2.00	2.00		04/23/25 19:52	JXC9
480-228889-8	6	-8.4	0.72	4.32	6.4	1.44	8.61		2.00	2.00		04/23/25 19:52	JXC9

Formulae:

Preadjusted Volume (L) = ((Preadjusted Pressure ("Hg) + 29.92 "Hg) * Vol L) / 29.92 "Hg

Adjusted Volume (L) = ((Adjusted Pressure (psig) + 14.7 psig)* Vol L) / 14.7 psig

Dilution Factor = Adjusted Volume (L) / Preadjusted Volume (L)

Where:

29.92 "Hg = Standard atmospheric pressure in inches of Mercury (“Hg)

14.7 psig = Standard atmospheric pressure in pounds per square inch gauge (psig)

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ANALYTICAL REPORT

PREPARED FOR

Attn: Bryan Mayback
Roux Environmental Engineering and Geology DPC
2558 Hamburg Turnpike
Suite 300
Lackawanna, New York 14218

Generated 5/11/2025 11:54:37 PM

JOB DESCRIPTION

BCP RI - 619 Exchange Street Site

JOB NUMBER

480-229031-1

Eurofins Buffalo
10 Hazelwood Drive
Amherst NY 14228-2298

See page two for job notes and contact information.

Job Notes

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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 Northeast, LLC Project Manager.

Authorization



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Authorized for release by
John Schove, Project Manager II
John.Schove@et.eurofinsus.com
(716)504-9838

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Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
B	Compound was found in the blank and sample.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

GC/MS Semi VOA

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

GC/MS Semi VOA TICs

Qualifier	Qualifier Description
J	Indicates an Estimated Value for TICs
N	Presumptive evidence of material.
T	Result is a tentatively identified compound (TIC) and an estimated value.

GC Semi VOA

Qualifier	Qualifier Description
B	Compound was found in the blank and sample.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
S1+	Surrogate recovery exceeds control limits, high biased.

LCMS

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Metals

Qualifier	Qualifier Description
^5-	Linear Range Check (LRC) is outside acceptance limits, low biased.
^5+	Linear Range Check (LRC) is outside acceptance limits, high biased.
4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.
F1	MS and/or MSD recovery exceeds control limits.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

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)

Glossary (Continued)

Abbreviation	These commonly used abbreviations may or may not be present in this report.
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

Job ID: 480-229031-1 Eurofins Buffalo

Job Narrative
480-229031-1

Receipt
The samples were received on 4/28/2025 4:25 PM. Unless otherwise noted below, the samples arrived in good condition, and where required, properly preserved and on ice. The temperatures of the 2 coolers at receipt time were 5.1º C and 10.6º C.

GC/MS VOA
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

GC/MS Semi VOA
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

GC Semi VOA
Method 8081B: The following samples were diluted due to the nature of the sample matrix: MW-6 0.5-0.75 Ft (480-229031-1) and MW-4 0.25-1 Ft (480-229031-4). As such, surrogate recoveries are below the calibration range, estimated and not representative. Elevated reporting limits (RLs) are provided.

Method 8081B: The method blank for preparation batch 480-744938 and analytical batch 480-745019 contained 4,4'-DDT, Endrin ketone and Methoxychlor above the method detection limit. This target analyte concentration was less than the reporting limit (RL) in the method blank; therefore, re-extraction and/or re-analysis of samples was not performed. The following associated samples are impacted: MW-6 0.5-0.75 Ft (480-229031-1), MW-6 8-10 Ft (480-229031-2), MW-4 0.25-1 Ft (480-229031-4) and MW-4 12-14 Ft (480-229031-5).

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Metals
Method 6010D: The linear range check (LRC) standard recovery associated with 480-744955 is outside the acceptance criteria for the following analytes: Silver and Cobalt. The concentration of these analyte(s) in the sample(s) are below the highest standard of the calibration curve; therefore, the data have been reported.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

LCMS
Method 1633: The continuing calibration verification (CCV) recovered outside of control limits for IDA compound(s) (flagged). Section 14.3.3 of the finalized EPA 1633 states that the recovery of target analytes for the CCV(s) must be within 70 - 130%, unless the analyte is not of concern for a given project. Since target analytes associated with this IDA are within spec, data is reported. The following samples are impacted: MW-6 0.5-0.75 Ft (480-229031-1), MW-6 8-10 Ft (480-229031-2), MW-4 0.25-1 Ft (480-229031-4), MW-4 12-14 Ft (480-229031-5), (CCV 240-654529/16), (480-229067-A-5-A), (480-229067-A-5-B MS), (480-229067-A-5-C MSD), (480-229068-D-1-A) and (480-229068-D-1-B DU).

Method 1633: Isotope Dilution Analyte (IDA) recovery is above the method recommended limit for the following sample: (480-229067-A-5-A). Quantitation by isotope dilution generally precludes any adverse effect on data quality due to elevated IDA recoveries.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Organic Prep
Method 3546: The following samples required a Florisil clean-up, via EPA Method 3620C, to reduce matrix interferences: MW-6 0.5-0.75 Ft (480-229031-1) and MW-4 0.25-1 Ft (480-229031-4).

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Detection Summary

Client: Roux Environmental Engineering and Geology DPC
Job ID: 480-229031-1
Project/Site: BCP RI - 619 Exchange Street Site

Client Sample ID: MW-6 0.5-0.75 Ft
Lab Sample ID: 480-229031-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	4.9	J	25	4.2	ug/Kg	1	☼	8260C	Total/NA
Chloroform	1.2	J B	4.9	0.30	ug/Kg	1	☼	8260C	Total/NA
2-Methylnaphthalene	110	J	220	43	ug/Kg	1	☼	8270D	Total/NA
Acenaphthene	180	J	220	32	ug/Kg	1	☼	8270D	Total/NA
Anthracene	190	J	220	53	ug/Kg	1	☼	8270D	Total/NA
Benzo[a]anthracene	1400		220	22	ug/Kg	1	☼	8270D	Total/NA
Benzo[a]pyrene	3200		220	32	ug/Kg	1	☼	8270D	Total/NA
Benzo[b]fluoranthene	2800		220	34	ug/Kg	1	☼	8270D	Total/NA
Benzo[g,h,i]perylene	3200		220	23	ug/Kg	1	☼	8270D	Total/NA
Benzo[k]fluoranthene	1400		220	28	ug/Kg	1	☼	8270D	Total/NA
Carbazole	100	J	220	25	ug/Kg	1	☼	8270D	Total/NA
Chrysene	1400		220	48	ug/Kg	1	☼	8270D	Total/NA
Dibenz(a,h)anthracene	960		220	38	ug/Kg	1	☼	8270D	Total/NA
Dibenzofuran	58	J	220	25	ug/Kg	1	☼	8270D	Total/NA
Fluoranthene	1000		220	23	ug/Kg	1	☼	8270D	Total/NA
Fluorene	43	J	220	25	ug/Kg	1	☼	8270D	Total/NA
Indeno[1,2,3-cd]pyrene	2800		220	27	ug/Kg	1	☼	8270D	Total/NA
Naphthalene	90	J	220	28	ug/Kg	1	☼	8270D	Total/NA
Phenanthrene	560		220	32	ug/Kg	1	☼	8270D	Total/NA
Pyrene	1300		220	25	ug/Kg	1	☼	8270D	Total/NA
4,4'-DDT	33	J B	41	9.5	ug/Kg	10	☼	8081B	Total/NA
Endrin ketone	14	J B	41	10	ug/Kg	10	☼	8081B	Total/NA
gamma-BHC (Lindane)	14	J	41	7.5	ug/Kg	10	☼	8081B	Total/NA
Pentachlorophenol	15	J	21	6.8	ug/Kg	1	☼	8151A	Total/NA
Aluminum	4100		12.8	11.1	mg/Kg	1	☼	6010D	Total/NA
Arsenic	3.5		2.6	1.1	mg/Kg	1	☼	6010D	Total/NA
Barium	69.4		0.64	0.18	mg/Kg	1	☼	6010D	Total/NA
Beryllium	0.31		0.26	0.051	mg/Kg	1	☼	6010D	Total/NA
Calcium	41100		64.2	34.7	mg/Kg	1	☼	6010D	Total/NA
Chromium	5.2		0.64	0.46	mg/Kg	1	☼	6010D	Total/NA
Cobalt	3.8	^5+	0.64	0.13	mg/Kg	1	☼	6010D	Total/NA
Copper	27.0		1.3	0.73	mg/Kg	1	☼	6010D	Total/NA
Iron	6000		12.8	10.9	mg/Kg	1	☼	6010D	Total/NA
Lead	6.9		1.3	0.59	mg/Kg	1	☼	6010D	Total/NA
Magnesium	11800		25.7	10.9	mg/Kg	1	☼	6010D	Total/NA
Manganese	151		1.3	0.36	mg/Kg	1	☼	6010D	Total/NA
Nickel	8.6		6.4	0.32	mg/Kg	1	☼	6010D	Total/NA
Potassium	507		38.5	31.1	mg/Kg	1	☼	6010D	Total/NA
Selenium	1.2	J	5.1	1.0	mg/Kg	1	☼	6010D	Total/NA
Sodium	255		180	78.8	mg/Kg	1	☼	6010D	Total/NA
Vanadium	8.9		0.64	0.17	mg/Kg	1	☼	6010D	Total/NA
Zinc	25.5		2.6	1.3	mg/Kg	1	☼	6010D	Total/NA
Mercury	0.016	J	0.026	0.0059	mg/Kg	1	☼	7471B	Total/NA

Client Sample ID: MW-6 8-10 Ft
Lab Sample ID: 480-229031-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	8.4	J	28	4.8	ug/Kg	1	☼	8260C	Total/NA
Chloroform	1.4	J B	5.7	0.35	ug/Kg	1	☼	8260C	Total/NA
4,4'-DDT	3.3	J B	4.3	0.99	ug/Kg	1	☼	8081B	Total/NA
Aluminum	15500		13.0	11.2	mg/Kg	1	☼	6010D	Total/NA

This Detection Summary does not include radiochemical test results.

Eurofins Buffalo

Client Sample ID: MW-6 8-10 Ft (Continued)
Lab Sample ID: 480-229031-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	3.2		2.6	1.1	mg/Kg	1	☼	6010D	Total/NA
Barium	114		0.65	0.18	mg/Kg	1	☼	6010D	Total/NA
Beryllium	0.67		0.26	0.052	mg/Kg	1	☼	6010D	Total/NA
Cadmium	0.13	J	0.26	0.091	mg/Kg	1	☼	6010D	Total/NA
Calcium	71000		64.9	35.0	mg/Kg	1	☼	6010D	Total/NA
Chromium	20.0		0.65	0.47	mg/Kg	1	☼	6010D	Total/NA
Cobalt	8.6	^5+	0.65	0.13	mg/Kg	1	☼	6010D	Total/NA
Copper	14.7		1.3	0.74	mg/Kg	1	☼	6010D	Total/NA
Iron	18600		13.0	11.0	mg/Kg	1	☼	6010D	Total/NA
Lead	10.3		1.3	0.60	mg/Kg	1	☼	6010D	Total/NA
Magnesium	24200		25.9	11.0	mg/Kg	1	☼	6010D	Total/NA
Manganese	390		1.3	0.36	mg/Kg	1	☼	6010D	Total/NA
Nickel	20.2		6.5	0.32	mg/Kg	1	☼	6010D	Total/NA
Potassium	5280	F1	38.9	31.4	mg/Kg	1	☼	6010D	Total/NA
Selenium	1.1	J	5.2	1.0	mg/Kg	1	☼	6010D	Total/NA
Silver	0.32	J ^5-	0.78	0.26	mg/Kg	1	☼	6010D	Total/NA
Sodium	433		182	79.5	mg/Kg	1	☼	6010D	Total/NA
Vanadium	30.9		0.65	0.17	mg/Kg	1	☼	6010D	Total/NA
Zinc	52.3		2.6	1.3	mg/Kg	1	☼	6010D	Total/NA
Mercury	0.018	J	0.025	0.0058	mg/Kg	1	☼	7471B	Total/NA

Client Sample ID: MW-5 0.33-0.75 Ft
Lab Sample ID: 480-229031-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
2-Methylnaphthalene	140	J	210	42	ug/Kg	1	☼	8270D	Total/NA
Acenaphthene	48	J	210	31	ug/Kg	1	☼	8270D	Total/NA
Anthracene	55	J	210	51	ug/Kg	1	☼	8270D	Total/NA
Benzo[a]anthracene	410		210	21	ug/Kg	1	☼	8270D	Total/NA
Benzo[a]pyrene	1500		210	31	ug/Kg	1	☼	8270D	Total/NA
Benzo[b]fluoranthene	1000		210	33	ug/Kg	1	☼	8270D	Total/NA
Benzo[g,h,i]perylene	2700		210	22	ug/Kg	1	☼	8270D	Total/NA
Benzo[k]fluoranthene	340		210	27	ug/Kg	1	☼	8270D	Total/NA
Chrysene	440		210	47	ug/Kg	1	☼	8270D	Total/NA
Dibenz(a,h)anthracene	350		210	37	ug/Kg	1	☼	8270D	Total/NA
Dibenzofuran	40	J	210	24	ug/Kg	1	☼	8270D	Total/NA
Fluoranthene	340		210	22	ug/Kg	1	☼	8270D	Total/NA
Indeno[1,2,3-cd]pyrene	1200		210	26	ug/Kg	1	☼	8270D	Total/NA
Naphthalene	130	J	210	27	ug/Kg	1	☼	8270D	Total/NA
Phenanthrene	320		210	31	ug/Kg	1	☼	8270D	Total/NA
Pyrene	520		210	24	ug/Kg	1	☼	8270D	Total/NA
Aluminum	4960		12.7	10.9	mg/Kg	1	☼	6010D	Total/NA
Arsenic	10.8		2.5	1.1	mg/Kg	1	☼	6010D	Total/NA
Barium	80.1		0.63	0.18	mg/Kg	1	☼	6010D	Total/NA
Beryllium	0.92		0.25	0.051	mg/Kg	1	☼	6010D	Total/NA
Cadmium	0.14	J	0.25	0.089	mg/Kg	1	☼	6010D	Total/NA
Calcium	18000		63.5	34.3	mg/Kg	1	☼	6010D	Total/NA
Chromium	8.4		0.63	0.46	mg/Kg	1	☼	6010D	Total/NA
Cobalt	7.1	^5+	0.63	0.13	mg/Kg	1	☼	6010D	Total/NA
Copper	21.5		1.3	0.72	mg/Kg	1	☼	6010D	Total/NA
Iron	8700		12.7	10.8	mg/Kg	1	☼	6010D	Total/NA
Lead	16.9		1.3	0.58	mg/Kg	1	☼	6010D	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: MW-5 0.33-0.75 Ft (Continued)
Lab Sample ID: 480-229031-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Magnesium	1380		25.4	10.8	mg/Kg	1	☼	6010D	Total/NA
Manganese	93.6		1.3	0.36	mg/Kg	1	☼	6010D	Total/NA
Nickel	15.0		6.3	0.32	mg/Kg	1	☼	6010D	Total/NA
Potassium	545		38.1	30.8	mg/Kg	1	☼	6010D	Total/NA
Selenium	1.5	J	5.1	1.0	mg/Kg	1	☼	6010D	Total/NA
Sodium	219		178	77.8	mg/Kg	1	☼	6010D	Total/NA
Vanadium	20.3		0.63	0.17	mg/Kg	1	☼	6010D	Total/NA
Zinc	25.3		2.5	1.3	mg/Kg	1	☼	6010D	Total/NA
Mercury	1.9		0.025	0.0057	mg/Kg	1	☼	7471B	Total/NA

Client Sample ID: MW-4 0.25-1 Ft
Lab Sample ID: 480-229031-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloroform	1.2	J B	5.0	0.31	ug/Kg	1	☼	8260C	Total/NA
2-Methylnaphthalene	52	J	210	41	ug/Kg	1	☼	8270D	Total/NA
Benzo[a]anthracene	29	J	210	21	ug/Kg	1	☼	8270D	Total/NA
Benzo[b]fluoranthene	40	J	210	33	ug/Kg	1	☼	8270D	Total/NA
Benzo[g,h,i]perylene	25	J	210	22	ug/Kg	1	☼	8270D	Total/NA
Bis(2-ethylhexyl) phthalate	120	J	210	71	ug/Kg	1	☼	8270D	Total/NA
Chrysene	47	J	210	46	ug/Kg	1	☼	8270D	Total/NA
Fluoranthene	46	J	210	22	ug/Kg	1	☼	8270D	Total/NA
Phenanthrene	94	J	210	30	ug/Kg	1	☼	8270D	Total/NA
Pyrene	45	J	210	24	ug/Kg	1	☼	8270D	Total/NA
4,4'-DDD	10	J	39	7.6	ug/Kg	10	☼	8081B	Total/NA
4,4'-DDT	31	J B	39	9.2	ug/Kg	10	☼	8081B	Total/NA
Methoxychlor	56	B	39	8.0	ug/Kg	10	☼	8081B	Total/NA
Pentachlorophenol	7.3	J	20	6.5	ug/Kg	1	☼	8151A	Total/NA
Perfluorooctanesulfonic acid (PFOS)	0.14	J	0.15	0.039	ug/Kg	1	☼	Draft-3 1633	Total/NA
Aluminum	4160		12.1	10.5	mg/Kg	1	☼	6010D	Total/NA
Arsenic	6.3		2.4	1.1	mg/Kg	1	☼	6010D	Total/NA
Barium	242		0.61	0.17	mg/Kg	1	☼	6010D	Total/NA
Beryllium	0.53		0.24	0.049	mg/Kg	1	☼	6010D	Total/NA
Cadmium	0.24		0.24	0.085	mg/Kg	1	☼	6010D	Total/NA
Calcium	40100		60.7	32.7	mg/Kg	1	☼	6010D	Total/NA
Chromium	7.2		0.61	0.44	mg/Kg	1	☼	6010D	Total/NA
Cobalt	4.7	^5+	0.61	0.12	mg/Kg	1	☼	6010D	Total/NA
Copper	59.4		1.2	0.69	mg/Kg	1	☼	6010D	Total/NA
Iron	11900		12.1	10.3	mg/Kg	1	☼	6010D	Total/NA
Lead	23.5		1.2	0.56	mg/Kg	1	☼	6010D	Total/NA
Magnesium	4070		24.3	10.3	mg/Kg	1	☼	6010D	Total/NA
Manganese	102		1.2	0.34	mg/Kg	1	☼	6010D	Total/NA
Nickel	13.0		6.1	0.30	mg/Kg	1	☼	6010D	Total/NA
Potassium	468		36.4	29.4	mg/Kg	1	☼	6010D	Total/NA
Sodium	236		170	74.4	mg/Kg	1	☼	6010D	Total/NA
Vanadium	13.1		0.61	0.16	mg/Kg	1	☼	6010D	Total/NA
Zinc	85.5		2.4	1.2	mg/Kg	1	☼	6010D	Total/NA
Mercury	0.039		0.024	0.0056	mg/Kg	1	☼	7471B	Total/NA

Client Sample ID: MW-4 12-14 Ft
Lab Sample ID: 480-229031-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	7.1	J	34	5.7	ug/Kg	1	☼	8260C	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: MW-4 12-14 Ft (Continued)
Lab Sample ID: 480-229031-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloroform	1.7	J B	6.8	0.42	ug/Kg	1	☼	8260C	Total/NA
4,4'-DDT	3.2	J B	4.1	0.97	ug/Kg	1	☼	8081B	Total/NA
Endrin ketone	3.3	J B	4.1	1.0	ug/Kg	1	☼	8081B	Total/NA
Methoxychlor	3.9	J B	4.1	0.84	ug/Kg	1	☼	8081B	Total/NA
Aluminum	16400		12.2	10.5	mg/Kg	1	☼	6010D	Total/NA
Arsenic	3.6		2.4	1.1	mg/Kg	1	☼	6010D	Total/NA
Barium	112		0.61	0.17	mg/Kg	1	☼	6010D	Total/NA
Beryllium	0.74		0.24	0.049	mg/Kg	1	☼	6010D	Total/NA
Cadmium	0.18	J	0.24	0.085	mg/Kg	1	☼	6010D	Total/NA
Calcium	50500		61.0	32.9	mg/Kg	1	☼	6010D	Total/NA
Chromium	21.1		0.61	0.44	mg/Kg	1	☼	6010D	Total/NA
Cobalt	10.2	^5+	0.61	0.12	mg/Kg	1	☼	6010D	Total/NA
Copper	17.5		1.2	0.70	mg/Kg	1	☼	6010D	Total/NA
Iron	20500		12.2	10.3	mg/Kg	1	☼	6010D	Total/NA
Lead	13.2		1.2	0.56	mg/Kg	1	☼	6010D	Total/NA
Magnesium	19200		24.4	10.3	mg/Kg	1	☼	6010D	Total/NA
Manganese	417		1.2	0.34	mg/Kg	1	☼	6010D	Total/NA
Nickel	24.2		6.1	0.30	mg/Kg	1	☼	6010D	Total/NA
Potassium	5160		36.6	29.6	mg/Kg	1	☼	6010D	Total/NA
Silver	0.33	J ^5-	0.73	0.24	mg/Kg	1	☼	6010D	Total/NA
Sodium	331		171	74.8	mg/Kg	1	☼	6010D	Total/NA
Vanadium	30.6		0.61	0.16	mg/Kg	1	☼	6010D	Total/NA
Zinc	59.2		2.4	1.2	mg/Kg	1	☼	6010D	Total/NA
Mercury	0.017	J	0.024	0.0056	mg/Kg	1	☼	7471B	Total/NA

This Detection Summary does not include radiochemical test results.

Client: Roux Environmental Engineering and Geology DPC
Job ID: 480-229031-1
Project/Site: BCP RI - 619 Exchange Street Site

Client Sample ID: MW-6 0.5-0.75 Ft
Lab Sample ID: 480-229031-1
Date Collected: 04/27/25 09:30
Matrix: Solid
Date Received: 04/28/25 16:25
Percent Solids: 78.3

Method: SW846 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		4.9	0.36	ug/Kg	☼	04/28/25 17:10	04/29/25 03:01	1
1,1,2,2-Tetrachloroethane	ND		4.9	0.80	ug/Kg	☼	04/28/25 17:10	04/29/25 03:01	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		4.9	1.1	ug/Kg	☼	04/28/25 17:10	04/29/25 03:01	1
1,1,2-Trichloroethane	ND		4.9	0.64	ug/Kg	☼	04/28/25 17:10	04/29/25 03:01	1
1,1-Dichloroethane	ND		4.9	0.60	ug/Kg	☼	04/28/25 17:10	04/29/25 03:01	1
1,1-Dichloroethene	ND		4.9	0.60	ug/Kg	☼	04/28/25 17:10	04/29/25 03:01	1
1,2,4-Trichlorobenzene	ND		4.9	0.30	ug/Kg	☼	04/28/25 17:10	04/29/25 03:01	1
1,2,4-Trimethylbenzene	ND		4.9	0.95	ug/Kg	☼	04/28/25 17:10	04/29/25 03:01	1
1,2-Dibromo-3-Chloropropane	ND		4.9	2.5	ug/Kg	☼	04/28/25 17:10	04/29/25 03:01	1
1,2-Dibromoethane	ND		4.9	0.63	ug/Kg	☼	04/28/25 17:10	04/29/25 03:01	1
1,2-Dichlorobenzene	ND		4.9	0.39	ug/Kg	☼	04/28/25 17:10	04/29/25 03:01	1
1,2-Dichloroethane	ND		4.9	0.25	ug/Kg	☼	04/28/25 17:10	04/29/25 03:01	1
1,2-Dichloropropane	ND		4.9	2.5	ug/Kg	☼	04/28/25 17:10	04/29/25 03:01	1
1,3,5-Trimethylbenzene	ND		4.9	0.32	ug/Kg	☼	04/28/25 17:10	04/29/25 03:01	1
1,3-Dichlorobenzene	ND		4.9	0.25	ug/Kg	☼	04/28/25 17:10	04/29/25 03:01	1
1,4-Dichlorobenzene	ND		4.9	0.69	ug/Kg	☼	04/28/25 17:10	04/29/25 03:01	1
2-Butanone (MEK)	ND		25	1.8	ug/Kg	☼	04/28/25 17:10	04/29/25 03:01	1
2-Hexanone	ND		25	2.5	ug/Kg	☼	04/28/25 17:10	04/29/25 03:01	1
4-Isopropyltoluene	ND		4.9	0.40	ug/Kg	☼	04/28/25 17:10	04/29/25 03:01	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.6	ug/Kg	☼	04/28/25 17:10	04/29/25 03:01	1
Acetone	**4.9**	**J**	25	4.2	ug/Kg	☼	04/28/25 17:10	04/29/25 03:01	1
Benzene	ND		4.9	0.24	ug/Kg	☼	04/28/25 17:10	04/29/25 03:01	1
Bromodichloromethane	ND		4.9	0.66	ug/Kg	☼	04/28/25 17:10	04/29/25 03:01	1
Bromoform	ND		4.9	2.5	ug/Kg	☼	04/28/25 17:10	04/29/25 03:01	1
Bromomethane	ND		4.9	0.44	ug/Kg	☼	04/28/25 17:10	04/29/25 03:01	1
Carbon disulfide	ND		4.9	2.5	ug/Kg	☼	04/28/25 17:10	04/29/25 03:01	1
Carbon tetrachloride	ND		4.9	0.48	ug/Kg	☼	04/28/25 17:10	04/29/25 03:01	1
Chlorobenzene	ND		4.9	0.65	ug/Kg	☼	04/28/25 17:10	04/29/25 03:01	1
Chloroethane	ND		4.9	1.1	ug/Kg	☼	04/28/25 17:10	04/29/25 03:01	1
Chloroform	**1.2**	**J B**	4.9	0.30	ug/Kg	☼	04/28/25 17:10	04/29/25 03:01	1
Chloromethane	ND		4.9	0.30	ug/Kg	☼	04/28/25 17:10	04/29/25 03:01	1
cis-1,2-Dichloroethene	ND		4.9	0.63	ug/Kg	☼	04/28/25 17:10	04/29/25 03:01	1
cis-1,3-Dichloropropene	ND		4.9	0.71	ug/Kg	☼	04/28/25 17:10	04/29/25 03:01	1
Cyclohexane	ND		4.9	0.69	ug/Kg	☼	04/28/25 17:10	04/29/25 03:01	1
Dibromochloromethane	ND		4.9	0.63	ug/Kg	☼	04/28/25 17:10	04/29/25 03:01	1
Dichlorodifluoromethane	ND		4.9	0.41	ug/Kg	☼	04/28/25 17:10	04/29/25 03:01	1
Ethylbenzene	ND		4.9	0.34	ug/Kg	☼	04/28/25 17:10	04/29/25 03:01	1
Isopropylbenzene	ND		4.9	0.74	ug/Kg	☼	04/28/25 17:10	04/29/25 03:01	1
Methyl acetate	ND		25	3.0	ug/Kg	☼	04/28/25 17:10	04/29/25 03:01	1
Methyl tert-butyl ether	ND		4.9	0.48	ug/Kg	☼	04/28/25 17:10	04/29/25 03:01	1
Methylcyclohexane	ND		4.9	0.75	ug/Kg	☼	04/28/25 17:10	04/29/25 03:01	1
Methylene Chloride	ND		4.9	2.3	ug/Kg	☼	04/28/25 17:10	04/29/25 03:01	1
Naphthalene	ND		4.9	0.66	ug/Kg	☼	04/28/25 17:10	04/29/25 03:01	1
n-Butylbenzene	ND		4.9	0.43	ug/Kg	☼	04/28/25 17:10	04/29/25 03:01	1
N-Propylbenzene	ND		4.9	0.39	ug/Kg	☼	04/28/25 17:10	04/29/25 03:01	1
sec-Butylbenzene	ND		4.9	0.43	ug/Kg	☼	04/28/25 17:10	04/29/25 03:01	1
Styrene	ND		4.9	0.25	ug/Kg	☼	04/28/25 17:10	04/29/25 03:01	1
tert-Butylbenzene	ND		4.9	0.51	ug/Kg	☼	04/28/25 17:10	04/29/25 03:01	1
Tetrachloroethene	ND		4.9	0.66	ug/Kg	☼	04/28/25 17:10	04/29/25 03:01	1

Client: Roux Environmental Engineering and Geology DPC
Job ID: 480-229031-1
Project/Site: BCP RI - 619 Exchange Street Site

Client Sample ID: MW-6 0.5-0.75 Ft
Lab Sample ID: 480-229031-1
Date Collected: 04/27/25 09:30
Matrix: Solid
Date Received: 04/28/25 16:25
Percent Solids: 78.3

Method: SW846 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Toluene	ND		4.9	0.37	ug/Kg	☼	04/28/25 17:10	04/29/25 03:01	1
trans-1,2-Dichloroethene	ND		4.9	0.51	ug/Kg	☼	04/28/25 17:10	04/29/25 03:01	1
trans-1,3-Dichloropropene	ND		4.9	2.2	ug/Kg	☼	04/28/25 17:10	04/29/25 03:01	1
Trichloroethene	ND		4.9	1.1	ug/Kg	☼	04/28/25 17:10	04/29/25 03:01	1
Trichlorofluoromethane	ND		4.9	0.47	ug/Kg	☼	04/28/25 17:10	04/29/25 03:01	1
Vinyl chloride	ND		4.9	0.60	ug/Kg	☼	04/28/25 17:10	04/29/25 03:01	1
Xylenes, Total	ND		9.9	0.83	ug/Kg	☼	04/28/25 17:10	04/29/25 03:01	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/Kg*	☼		*N/A*	*04/28/25 17:10*	*04/29/25 03:01*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*105*		*64 - 126*	*04/28/25 17:10*	*04/29/25 03:01*	*1*
4-Bromofluorobenzene (Surr)	*100*		*72 - 126*	*04/28/25 17:10*	*04/29/25 03:01*	*1*
Dibromofluoromethane (Surr)	*103*		*60 - 140*	*04/28/25 17:10*	*04/29/25 03:01*	*1*
Toluene-d8 (Surr)	*96*		*71 - 125*	*04/28/25 17:10*	*04/29/25 03:01*	*1*

Method: SW846 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	ND		130	70	ug/Kg	☼	05/07/25 13:55	05/08/25 16:37	1
2,4,5-Trichlorophenol	ND		220	58	ug/Kg	☼	05/07/25 13:55	05/08/25 16:37	1
2,4,6-Trichlorophenol	ND		220	43	ug/Kg	☼	05/07/25 13:55	05/08/25 16:37	1
2,4-Dichlorophenol	ND		220	23	ug/Kg	☼	05/07/25 13:55	05/08/25 16:37	1
2,4-Dimethylphenol	ND		220	52	ug/Kg	☼	05/07/25 13:55	05/08/25 16:37	1
2,4-Dinitrophenol	ND		2100	990	ug/Kg	☼	05/07/25 13:55	05/08/25 16:37	1
2,4-Dinitrotoluene	ND		220	44	ug/Kg	☼	05/07/25 13:55	05/08/25 16:37	1
2,6-Dinitrotoluene	ND		220	25	ug/Kg	☼	05/07/25 13:55	05/08/25 16:37	1
2-Chloronaphthalene	ND		220	35	ug/Kg	☼	05/07/25 13:55	05/08/25 16:37	1
2-Chlorophenol	ND		420	39	ug/Kg	☼	05/07/25 13:55	05/08/25 16:37	1
2-Methylnaphthalene	**110**	**J**	220	43	ug/Kg	☼	05/07/25 13:55	05/08/25 16:37	1
2-Methylphenol	ND		220	25	ug/Kg	☼	05/07/25 13:55	05/08/25 16:37	1
2-Nitroaniline	ND		420	32	ug/Kg	☼	05/07/25 13:55	05/08/25 16:37	1
2-Nitrophenol	ND		220	61	ug/Kg	☼	05/07/25 13:55	05/08/25 16:37	1
3,3'-Dichlorobenzidine	ND		420	250	ug/Kg	☼	05/07/25 13:55	05/08/25 16:37	1
3-Nitroaniline	ND		420	59	ug/Kg	☼	05/07/25 13:55	05/08/25 16:37	1
4,6-Dinitro-2-methylphenol	ND		420	220	ug/Kg	☼	05/07/25 13:55	05/08/25 16:37	1
4-Bromophenyl phenyl ether	ND		220	30	ug/Kg	☼	05/07/25 13:55	05/08/25 16:37	1
4-Chloro-3-methylphenol	ND		220	53	ug/Kg	☼	05/07/25 13:55	05/08/25 16:37	1
4-Chloroaniline	ND		220	53	ug/Kg	☼	05/07/25 13:55	05/08/25 16:37	1
4-Chlorophenyl phenyl ether	ND		220	27	ug/Kg	☼	05/07/25 13:55	05/08/25 16:37	1
4-Methylphenol	ND		420	25	ug/Kg	☼	05/07/25 13:55	05/08/25 16:37	1
4-Nitroaniline	ND		420	110	ug/Kg	☼	05/07/25 13:55	05/08/25 16:37	1
4-Nitrophenol	ND		420	150	ug/Kg	☼	05/07/25 13:55	05/08/25 16:37	1
Acenaphthene	**180**	**J**	220	32	ug/Kg	☼	05/07/25 13:55	05/08/25 16:37	1
Acenaphthylene	ND		220	28	ug/Kg	☼	05/07/25 13:55	05/08/25 16:37	1
Acetophenone	ND		220	29	ug/Kg	☼	05/07/25 13:55	05/08/25 16:37	1
Anthracene	**190**	**J**	220	53	ug/Kg	☼	05/07/25 13:55	05/08/25 16:37	1
Atrazine	ND		220	75	ug/Kg	☼	05/07/25 13:55	05/08/25 16:37	1
Benzaldehyde	ND		220	170	ug/Kg	☼	05/07/25 13:55	05/08/25 16:37	1
Benzo[a]anthracene	**1400**		220	22	ug/Kg	☼	05/07/25 13:55	05/08/25 16:37	1

Client: Roux Environmental Engineering and Geology DPC
Job ID: 480-229031-1
Project/Site: BCP RI - 619 Exchange Street Site

Client Sample ID: MW-6 0.5-0.75 Ft
Lab Sample ID: 480-229031-1
Date Collected: 04/27/25 09:30
Matrix: Solid
Date Received: 04/28/25 16:25
Percent Solids: 78.3

Method: SW846 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[a]pyrene	**3200**		220	32	ug/Kg	☼	05/07/25 13:55	05/08/25 16:37	1
Benzo[b]fluoranthene	**2800**		220	34	ug/Kg	☼	05/07/25 13:55	05/08/25 16:37	1
Benzo[g,h,i]perylene	**3200**		220	23	ug/Kg	☼	05/07/25 13:55	05/08/25 16:37	1
Benzo[k]fluoranthene	**1400**		220	28	ug/Kg	☼	05/07/25 13:55	05/08/25 16:37	1
Biphenyl	ND		220	32	ug/Kg	☼	05/07/25 13:55	05/08/25 16:37	1
bis (2-chloroisopropyl) ether	ND		220	43	ug/Kg	☼	05/07/25 13:55	05/08/25 16:37	1
Bis(2-chloroethoxy)methane	ND		220	46	ug/Kg	☼	05/07/25 13:55	05/08/25 16:37	1
Bis(2-chloroethyl)ether	ND		220	28	ug/Kg	☼	05/07/25 13:55	05/08/25 16:37	1
Bis(2-ethylhexyl) phthalate	ND		220	73	ug/Kg	☼	05/07/25 13:55	05/08/25 16:37	1
Butyl benzyl phthalate	ND		220	35	ug/Kg	☼	05/07/25 13:55	05/08/25 16:37	1
Caprolactam	ND		220	65	ug/Kg	☼	05/07/25 13:55	05/08/25 16:37	1
Carbazole	**100**	**J**	220	25	ug/Kg	☼	05/07/25 13:55	05/08/25 16:37	1
Chrysene	**1400**		220	48	ug/Kg	☼	05/07/25 13:55	05/08/25 16:37	1
Dibenz(a,h)anthracene	**960**		220	38	ug/Kg	☼	05/07/25 13:55	05/08/25 16:37	1
Dibenzofuran	**58**	**J**	220	25	ug/Kg	☼	05/07/25 13:55	05/08/25 16:37	1
Diethyl phthalate	ND		220	28	ug/Kg	☼	05/07/25 13:55	05/08/25 16:37	1
Dimethyl phthalate	ND		220	25	ug/Kg	☼	05/07/25 13:55	05/08/25 16:37	1
Di-n-butyl phthalate	ND		220	37	ug/Kg	☼	05/07/25 13:55	05/08/25 16:37	1
Di-n-octyl phthalate	ND		220	25	ug/Kg	☼	05/07/25 13:55	05/08/25 16:37	1
Fluoranthene	**1000**		220	23	ug/Kg	☼	05/07/25 13:55	05/08/25 16:37	1
Fluorene	**43**	**J**	220	25	ug/Kg	☼	05/07/25 13:55	05/08/25 16:37	1
Hexachlorobenzene	ND		220	29	ug/Kg	☼	05/07/25 13:55	05/08/25 16:37	1
Hexachlorobutadiene	ND		220	32	ug/Kg	☼	05/07/25 13:55	05/08/25 16:37	1
Hexachlorocyclopentadiene	ND		220	29	ug/Kg	☼	05/07/25 13:55	05/08/25 16:37	1
Hexachloroethane	ND		220	28	ug/Kg	☼	05/07/25 13:55	05/08/25 16:37	1
Indeno[1,2,3-cd]pyrene	**2800**		220	27	ug/Kg	☼	05/07/25 13:55	05/08/25 16:37	1
Isophorone	ND		220	46	ug/Kg	☼	05/07/25 13:55	05/08/25 16:37	1
Naphthalene	**90**	**J**	220	28	ug/Kg	☼	05/07/25 13:55	05/08/25 16:37	1
Nitrobenzene	ND		220	24	ug/Kg	☼	05/07/25 13:55	05/08/25 16:37	1
N-Nitrosodi-n-propylamine	ND		220	37	ug/Kg	☼	05/07/25 13:55	05/08/25 16:37	1
N-Nitrosodiphenylamine	ND		220	170	ug/Kg	☼	05/07/25 13:55	05/08/25 16:37	1
Pentachlorophenol	ND		420	220	ug/Kg	☼	05/07/25 13:55	05/08/25 16:37	1
Phenanthrene	**560**		220	32	ug/Kg	☼	05/07/25 13:55	05/08/25 16:37	1
Phenol	ND		220	33	ug/Kg	☼	05/07/25 13:55	05/08/25 16:37	1
Pyrene	**1300**		220	25	ug/Kg	☼	05/07/25 13:55	05/08/25 16:37	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Unknown	*2500*	*T J*	*ug/Kg*	☼	*1.87*	*N/A*	*05/07/25 13:55*	*05/08/25 16:37*	*1*
Unknown	*4100*	*T J*	*ug/Kg*	☼	*1.98*	*N/A*	*05/07/25 13:55*	*05/08/25 16:37*	*1*
Unknown	*710*	*T J*	*ug/Kg*	☼	*3.22*	*N/A*	*05/07/25 13:55*	*05/08/25 16:37*	*1*
Unknown	*2200*	*T J*	*ug/Kg*	☼	*3.45*	*N/A*	*05/07/25 13:55*	*05/08/25 16:37*	*1*
Unknown	*640*	*T J*	*ug/Kg*	☼	*4.12*	*N/A*	*05/07/25 13:55*	*05/08/25 16:37*	*1*
Unknown	*2500*	*T J*	*ug/Kg*	☼	*4.59*	*N/A*	*05/07/25 13:55*	*05/08/25 16:37*	*1*
Unknown	*610*	*T J*	*ug/Kg*	☼	*4.63*	*N/A*	*05/07/25 13:55*	*05/08/25 16:37*	*1*
Unknown	*1400*	*T J*	*ug/Kg*	☼	*4.94*	*N/A*	*05/07/25 13:55*	*05/08/25 16:37*	*1*
Cyclohexane, 1-methyl-2-propyl-	*1500*	*T J N*	*ug/Kg*	☼	*4.97*	*4291-79-6*	*05/07/25 13:55*	*05/08/25 16:37*	*1*
Benzo[j]fluoranthene	*660*	*T J N*	*ug/Kg*	☼	*14.28*	*205-82-3*	*05/07/25 13:55*	*05/08/25 16:37*	*1*
Benzo[e]pyrene	*1700*	*T J N*	*ug/Kg*	☼	*14.42*	*192-97-2*	*05/07/25 13:55*	*05/08/25 16:37*	*1*
Perylene	*1100*	*T J N*	*ug/Kg*	☼	*14.53*	*198-55-0*	*05/07/25 13:55*	*05/08/25 16:37*	*1*
13H-Dibenzo[a,h]fluorene	*900*	*T J N*	*ug/Kg*	☼	*14.64*	*239-85-0*	*05/07/25 13:55*	*05/08/25 16:37*	*1*

Client Sample ID: MW-6 0.5-0.75 Ft
Lab Sample ID: 480-229031-1
Date Collected: 04/27/25 09:30
Matrix: Solid
Date Received: 04/28/25 16:25
Percent Solids: 78.3

Method: SW846 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Tentatively Identified Compound	Est. Result	Qualifier	Unit	D	RT	CAS No.	Prepared	Analyzed	Dil Fac
Pentacene	1100	T J N	ug/Kg	☼	15.54	135-48-8	05/07/25 13:55	05/08/25 16:37	1
Benzo[a]naphthacene	1600	T J N	ug/Kg	☼	15.57	226-88-0	05/07/25 13:55	05/08/25 16:37	1
5H-Naphtho[2,3-c]carbazole	690	T J N	ug/Kg	☼	15.79	198-96-9	05/07/25 13:55	05/08/25 16:37	1
Dibenzo[def,mno]chrysene	1500	T J N	ug/Kg	☼	15.85	191-26-4	05/07/25 13:55	05/08/25 16:37	1
Unknown	650	T J	ug/Kg	☼	16.23	N/A	05/07/25 13:55	05/08/25 16:37	1
1,2:3,4-Dibenzopyrene	1200	T J N	ug/Kg	☼	16.95	191-30-0	05/07/25 13:55	05/08/25 16:37	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol (Surr)	103		26 - 143	05/07/25 13:55	05/08/25 16:37	1
2-Fluorobiphenyl (Surr)	102		50 - 121	05/07/25 13:55	05/08/25 16:37	1
2-Fluorophenol (Surr)	88		36 - 120	05/07/25 13:55	05/08/25 16:37	1
Nitrobenzene-d5 (Surr)	98		40 - 121	05/07/25 13:55	05/08/25 16:37	1
Phenol-d5 (Surr)	91		41 - 120	05/07/25 13:55	05/08/25 16:37	1
p-Terphenyl-d14 (Surr)	113		46 - 143	05/07/25 13:55	05/08/25 16:37	1

Method: SW846 8081B - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	ND		41	7.9	ug/Kg	☼	05/01/25 06:41	05/01/25 17:44	10
4,4'-DDE	ND		41	8.6	ug/Kg	☼	05/01/25 06:41	05/01/25 17:44	10
4,4'-DDT	**33**	**J B**	41	9.5	ug/Kg	☼	05/01/25 06:41	05/01/25 17:44	10
Aldrin	ND		41	10	ug/Kg	☼	05/01/25 06:41	05/01/25 17:44	10
alpha-BHC	ND		41	7.3	ug/Kg	☼	05/01/25 06:41	05/01/25 17:44	10
cis-Chlordane	ND		41	20	ug/Kg	☼	05/01/25 06:41	05/01/25 17:44	10
beta-BHC	ND		41	7.3	ug/Kg	☼	05/01/25 06:41	05/01/25 17:44	10
delta-BHC	ND		41	7.6	ug/Kg	☼	05/01/25 06:41	05/01/25 17:44	10
Dieldrin	ND		41	9.8	ug/Kg	☼	05/01/25 06:41	05/01/25 17:44	10
Endosulfan I	ND		41	7.8	ug/Kg	☼	05/01/25 06:41	05/01/25 17:44	10
Endosulfan II	ND		41	7.3	ug/Kg	☼	05/01/25 06:41	05/01/25 17:44	10
Endosulfan sulfate	ND		41	7.6	ug/Kg	☼	05/01/25 06:41	05/01/25 17:44	10
Endrin	ND		41	8.1	ug/Kg	☼	05/01/25 06:41	05/01/25 17:44	10
Endrin aldehyde	ND		41	10	ug/Kg	☼	05/01/25 06:41	05/01/25 17:44	10
Endrin ketone	**14**	**J B**	41	10	ug/Kg	☼	05/01/25 06:41	05/01/25 17:44	10
gamma-BHC (Lindane)	**14**	**J**	41	7.5	ug/Kg	☼	05/01/25 06:41	05/01/25 17:44	10
trans-Chlordane	ND		41	13	ug/Kg	☼	05/01/25 06:41	05/01/25 17:44	10
Heptachlor	ND		41	8.8	ug/Kg	☼	05/01/25 06:41	05/01/25 17:44	10
Heptachlor epoxide	ND		41	11	ug/Kg	☼	05/01/25 06:41	05/01/25 17:44	10
Methoxychlor	ND		41	8.3	ug/Kg	☼	05/01/25 06:41	05/01/25 17:44	10
Toxaphene	ND		410	240	ug/Kg	☼	05/01/25 06:41	05/01/25 17:44	10

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
DCB Decachlorobiphenyl	116		45 - 120	05/01/25 06:41	05/01/25 17:44	10
DCB Decachlorobiphenyl	344	S1+	45 - 120	05/01/25 06:41	05/01/25 17:44	10
Tetrachloro-m-xylene	110		30 - 124	05/01/25 06:41	05/01/25 17:44	10
Tetrachloro-m-xylene	138	S1+	30 - 124	05/01/25 06:41	05/01/25 17:44	10

Method: SW846 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		0.30	0.058	mg/Kg	☼	04/29/25 08:37	04/29/25 14:45	1
PCB-1221	ND		0.30	0.058	mg/Kg	☼	04/29/25 08:37	04/29/25 14:45	1
PCB-1232	ND		0.30	0.058	mg/Kg	☼	04/29/25 08:37	04/29/25 14:45	1

Client Sample ID: MW-6 0.5-0.75 Ft
Lab Sample ID: 480-229031-1
Date Collected: 04/27/25 09:30
Matrix: Solid
Date Received: 04/28/25 16:25
Percent Solids: 78.3

Method: SW846 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1242	ND		0.30	0.058	mg/Kg	☼	04/29/25 08:37	04/29/25 14:45	1
PCB-1248	ND		0.30	0.058	mg/Kg	☼	04/29/25 08:37	04/29/25 14:45	1
PCB-1254	ND		0.30	0.14	mg/Kg	☼	04/29/25 08:37	04/29/25 14:45	1
PCB-1260	ND		0.30	0.14	mg/Kg	☼	04/29/25 08:37	04/29/25 14:45	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*144*		*60 - 154*	*04/29/25 08:37*	*04/29/25 14:45*	*1*
Tetrachloro-m-xylene	*142*		*60 - 154*	*04/29/25 08:37*	*04/29/25 14:45*	*1*
DCB Decachlorobiphenyl	*127*		*65 - 174*	*04/29/25 08:37*	*04/29/25 14:45*	*1*
DCB Decachlorobiphenyl	*127*		*65 - 174*	*04/29/25 08:37*	*04/29/25 14:45*	*1*

Method: SW846 8151A - Herbicides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-T	ND		21	6.6	ug/Kg	☼	05/01/25 06:27	05/08/25 15:09	1
2,4-D	ND		21	13	ug/Kg	☼	05/01/25 06:27	05/08/25 15:09	1
Dichlorprop	ND		21	10	ug/Kg	☼	05/01/25 06:27	05/08/25 15:09	1
Pentachlorophenol	**15**	**J**	21	6.8	ug/Kg	☼	05/01/25 06:27	05/08/25 15:09	1
Picloram	ND		21	8.9	ug/Kg	☼	05/01/25 06:27	05/08/25 15:09	1
Silvex (2,4,5-TP)	ND		21	7.5	ug/Kg	☼	05/01/25 06:27	05/08/25 15:09	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4-Dichlorophenylacetic acid	*63*		*28 - 129*	*05/01/25 06:27*	*05/08/25 15:09*	*1*
2,4-Dichlorophenylacetic acid	*68*		*28 - 129*	*05/01/25 06:27*	*05/08/25 15:09*	*1*

Method: EPA Draft-3 1633 - Per- and Polyfluoroalkyl Substances by LC/MS/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)	ND		0.63	0.16	ug/Kg	☼	05/02/25 08:22	05/03/25 00:19	1
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2 FTS)	ND		0.63	0.16	ug/Kg	☼	05/02/25 08:22	05/03/25 00:19	1
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2 FTS)	ND		0.63	0.16	ug/Kg	☼	05/02/25 08:22	05/03/25 00:19	1
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2 FTS)	ND		0.63	0.16	ug/Kg	☼	05/02/25 08:22	05/03/25 00:19	1
3-Perfluoroheptylpropanoic acid (7:3 FTCA)	ND		3.9	0.99	ug/Kg	☼	05/02/25 08:22	05/03/25 00:19	1
3-Perfluoropentylpropanoic acid (5:3 FTCA)	ND		3.9	0.99	ug/Kg	☼	05/02/25 08:22	05/03/25 00:19	1
3-Perfluoropropylpropanoic acid (3:3 FTCA)	ND		0.79	0.20	ug/Kg	☼	05/02/25 08:22	05/03/25 00:19	1
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	ND		0.63	0.16	ug/Kg	☼	05/02/25 08:22	05/03/25 00:19	1
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9Cl-PF3ONS)	ND		0.63	0.16	ug/Kg	☼	05/02/25 08:22	05/03/25 00:19	1
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA)	ND		0.63	0.16	ug/Kg	☼	05/02/25 08:22	05/03/25 00:19	1
N-ethylperfluorooctane sulfonamide (NEtFOSA)	ND		0.16	0.039	ug/Kg	☼	05/02/25 08:22	05/03/25 00:19	1
N-ethylperfluorooctane sulfonamidoethanol (NEtFOSE)	ND		1.6	0.39	ug/Kg	☼	05/02/25 08:22	05/03/25 00:19	1
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	ND		0.16	0.039	ug/Kg	☼	05/02/25 08:22	05/03/25 00:19	1
N-methylperfluorooctane sulfonamide (NMeFOSA)	ND		0.16	0.039	ug/Kg	☼	05/02/25 08:22	05/03/25 00:19	1

Client: Roux Environmental Engineering and Geology DPC
Job ID: 480-229031-1
Project/Site: BCP RI - 619 Exchange Street Site

Client Sample ID: MW-6 0.5-0.75 Ft
Lab Sample ID: 480-229031-1
Date Collected: 04/27/25 09:30
Matrix: Solid
Date Received: 04/28/25 16:25
Percent Solids: 78.3

Method: EPA Draft-3 1633 - Per- and Polyfluoroalkyl Substances by LC/MS/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
N-methylperfluorooctane sulfonamidoethanol (NMeFOSE)	ND		1.6	0.39	ug/Kg	☼	05/02/25 08:22	05/03/25 00:19	1
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	ND		0.16	0.039	ug/Kg	☼	05/02/25 08:22	05/03/25 00:19	1
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	ND		0.32	0.079	ug/Kg	☼	05/02/25 08:22	05/03/25 00:19	1
Perfluoro (2-ethoxyethane) sulfonic acid (PFEESA)	ND		0.32	0.079	ug/Kg	☼	05/02/25 08:22	05/03/25 00:19	1
Perfluoro-3-methoxypropanoic acid (PFMPA)	ND		0.32	0.079	ug/Kg	☼	05/02/25 08:22	05/03/25 00:19	1
Perfluoro-4-methoxybutanoic acid (PFMBA)	ND		0.32	0.079	ug/Kg	☼	05/02/25 08:22	05/03/25 00:19	1
Perfluorobutanesulfonic acid (PFBS)	ND		0.16	0.039	ug/Kg	☼	05/02/25 08:22	05/03/25 00:19	1
Perfluorobutanoic acid (PFBA)	ND		0.63	0.16	ug/Kg	☼	05/02/25 08:22	05/03/25 00:19	1
Perfluorodecanesulfonic acid (PFDS)	ND		0.16	0.039	ug/Kg	☼	05/02/25 08:22	05/03/25 00:19	1
Perfluorodecanoic acid (PFDA)	ND		0.16	0.039	ug/Kg	☼	05/02/25 08:22	05/03/25 00:19	1
Perfluorododecanesulfonic acid (PFDoS)	ND		0.16	0.039	ug/Kg	☼	05/02/25 08:22	05/03/25 00:19	1
Perfluorododecanoic acid (PFDoA)	ND		0.16	0.039	ug/Kg	☼	05/02/25 08:22	05/03/25 00:19	1
Perfluoroheptanesulfonic acid (PFHpS)	ND		0.16	0.039	ug/Kg	☼	05/02/25 08:22	05/03/25 00:19	1
Perfluoroheptanoic acid (PFHpA)	ND		0.16	0.039	ug/Kg	☼	05/02/25 08:22	05/03/25 00:19	1
Perfluorohexanesulfonic acid (PFHxS)	ND		0.16	0.039	ug/Kg	☼	05/02/25 08:22	05/03/25 00:19	1
Perfluorohexanoic acid (PFHxA)	ND		0.16	0.039	ug/Kg	☼	05/02/25 08:22	05/03/25 00:19	1
Perfluorononanesulfonic acid (PFNS)	ND		0.16	0.039	ug/Kg	☼	05/02/25 08:22	05/03/25 00:19	1
Perfluorononanoic acid (PFNA)	ND		0.16	0.039	ug/Kg	☼	05/02/25 08:22	05/03/25 00:19	1
Perfluorooctanesulfonamide (PFOSA)	ND		0.16	0.039	ug/Kg	☼	05/02/25 08:22	05/03/25 00:19	1
Perfluorooctanesulfonic acid (PFOS)	ND		0.16	0.039	ug/Kg	☼	05/02/25 08:22	05/03/25 00:19	1
Perfluorooctanoic acid (PFOA)	ND		0.16	0.039	ug/Kg	☼	05/02/25 08:22	05/03/25 00:19	1
Perfluoropentanesulfonic acid (PFPeS)	ND		0.16	0.039	ug/Kg	☼	05/02/25 08:22	05/03/25 00:19	1
Perfluoropentanoic acid (PFPeA)	ND		0.32	0.079	ug/Kg	☼	05/02/25 08:22	05/03/25 00:19	1
Perfluorotetradecanoic acid (PFTeDA)	ND		0.16	0.039	ug/Kg	☼	05/02/25 08:22	05/03/25 00:19	1
Perfluorotridecanoic acid (PFTrDA)	ND		0.16	0.039	ug/Kg	☼	05/02/25 08:22	05/03/25 00:19	1
Perfluoroundecanoic acid (PFUnA)	ND		0.16	0.039	ug/Kg	☼	05/02/25 08:22	05/03/25 00:19	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C2 PFTeDA	*71.9*		*20 - 150*	*05/02/25 08:22*	*05/03/25 00:19*	*1*
13C2-PFDoDA	*83.7*		*20 - 150*	*05/02/25 08:22*	*05/03/25 00:19*	*1*
13C3 HFPO-DA	*77.2*		*20 - 150*	*05/02/25 08:22*	*05/03/25 00:19*	*1*
13C3 PFBS	*69.8*		*20 - 150*	*05/02/25 08:22*	*05/03/25 00:19*	*1*
13C3 PFHxS	*70.0*		*20 - 150*	*05/02/25 08:22*	*05/03/25 00:19*	*1*
13C4 PFBA	*68.6*		*20 - 150*	*05/02/25 08:22*	*05/03/25 00:19*	*1*
13C4 PFHpA	*74.6*		*20 - 150*	*05/02/25 08:22*	*05/03/25 00:19*	*1*
13C5 PFHxA	*73.4*		*20 - 150*	*05/02/25 08:22*	*05/03/25 00:19*	*1*
13C5 PFPeA	*75.0*		*20 - 150*	*05/02/25 08:22*	*05/03/25 00:19*	*1*
13C6 PFDA	*85.7*		*20 - 150*	*05/02/25 08:22*	*05/03/25 00:19*	*1*
13C7 PFUnA	*86.0*		*20 - 150*	*05/02/25 08:22*	*05/03/25 00:19*	*1*
13C8 PFOA	*77.0*		*20 - 150*	*05/02/25 08:22*	*05/03/25 00:19*	*1*
13C8 PFOS	*78.1*		*20 - 150*	*05/02/25 08:22*	*05/03/25 00:19*	*1*
13C8 PFOSA	*72.0*		*20 - 150*	*05/02/25 08:22*	*05/03/25 00:19*	*1*
13C9 PFNA	*71.3*		*20 - 150*	*05/02/25 08:22*	*05/03/25 00:19*	*1*

Client Sample ID: MW-6 0.5-0.75 Ft
Lab Sample ID: 480-229031-1
Date Collected: 04/27/25 09:30
Matrix: Solid
Date Received: 04/28/25 16:25
Percent Solids: 78.3

Method: EPA Draft-3 1633 - Per- and Polyfluoroalkyl Substances by LC/MS/MS (Continued)

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
D3-NMeFOSA	59.0		20 - 150	05/02/25 08:22	05/03/25 00:19	1
d3-NMeFOSAA	81.4		20 - 150	05/02/25 08:22	05/03/25 00:19	1
d5-NEtFOSAA	97.7		20 - 150	05/02/25 08:22	05/03/25 00:19	1
d5-NEtPFOSA	65.5		20 - 150	05/02/25 08:22	05/03/25 00:19	1
d7-N-MeFOSE-M	66.4		20 - 150	05/02/25 08:22	05/03/25 00:19	1
d9-N-EtFOSE-M	63.7		20 - 150	05/02/25 08:22	05/03/25 00:19	1
M2-4:2 FTS	60.5		20 - 150	05/02/25 08:22	05/03/25 00:19	1
M2-6:2 FTS	69.6		20 - 150	05/02/25 08:22	05/03/25 00:19	1
M2-8:2 FTS	73.2		20 - 150	05/02/25 08:22	05/03/25 00:19	1

Method: SW846 6010D - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**4100**		12.8	11.1	mg/Kg	☼	04/30/25 14:51	04/30/25 19:55	1
Antimony	ND		19.3	0.68	mg/Kg	☼	04/30/25 14:51	04/30/25 19:55	1
Arsenic	**3.5**		2.6	1.1	mg/Kg	☼	04/30/25 14:51	04/30/25 19:55	1
Barium	**69.4**		0.64	0.18	mg/Kg	☼	04/30/25 14:51	04/30/25 19:55	1
Beryllium	**0.31**		0.26	0.051	mg/Kg	☼	04/30/25 14:51	04/30/25 19:55	1
Cadmium	ND		0.26	0.090	mg/Kg	☼	04/30/25 14:51	04/30/25 19:55	1
Calcium	**41100**		64.2	34.7	mg/Kg	☼	04/30/25 14:51	04/30/25 19:55	1
Chromium	**5.2**		0.64	0.46	mg/Kg	☼	04/30/25 14:51	04/30/25 19:55	1
Cobalt	**3.8**	**^5+**	0.64	0.13	mg/Kg	☼	04/30/25 14:51	04/30/25 19:55	1
Copper	**27.0**		1.3	0.73	mg/Kg	☼	04/30/25 14:51	04/30/25 19:55	1
Iron	**6000**		12.8	10.9	mg/Kg	☼	04/30/25 14:51	04/30/25 19:55	1
Lead	**6.9**		1.3	0.59	mg/Kg	☼	04/30/25 14:51	04/30/25 19:55	1
Magnesium	**11800**		25.7	10.9	mg/Kg	☼	04/30/25 14:51	04/30/25 19:55	1
Manganese	**151**		1.3	0.36	mg/Kg	☼	04/30/25 14:51	04/30/25 19:55	1
Nickel	**8.6**		6.4	0.32	mg/Kg	☼	04/30/25 14:51	04/30/25 19:55	1
Potassium	**507**		38.5	31.1	mg/Kg	☼	04/30/25 14:51	04/30/25 19:55	1
Selenium	**1.2**	**J**	5.1	1.0	mg/Kg	☼	04/30/25 14:51	04/30/25 19:55	1
Silver	ND	^5-	0.77	0.26	mg/Kg	☼	04/30/25 14:51	04/30/25 19:55	1
Sodium	**255**		180	78.8	mg/Kg	☼	04/30/25 14:51	04/30/25 19:55	1
Thallium	ND		7.7	0.98	mg/Kg	☼	04/30/25 14:51	04/30/25 19:55	1
Vanadium	**8.9**		0.64	0.17	mg/Kg	☼	04/30/25 14:51	04/30/25 19:55	1
Zinc	**25.5**		2.6	1.3	mg/Kg	☼	04/30/25 14:51	04/30/25 19:55	1

Method: SW846 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.016**	**J**	0.026	0.0059	mg/Kg	☼	05/02/25 09:11	05/02/25 11:23	1

Client: Roux Environmental Engineering and Geology DPC
Job ID: 480-229031-1
Project/Site: BCP RI - 619 Exchange Street Site

Client Sample ID: MW-6 8-10 Ft
Lab Sample ID: 480-229031-2
Date Collected: 04/27/25 12:00
Matrix: Solid
Date Received: 04/28/25 16:25
Percent Solids: 76.4

Method: SW846 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		5.7	0.41	ug/Kg	☼	04/28/25 17:10	04/29/25 03:25	1
1,1,2,2-Tetrachloroethane	ND		5.7	0.92	ug/Kg	☼	04/28/25 17:10	04/29/25 03:25	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		5.7	1.3	ug/Kg	☼	04/28/25 17:10	04/29/25 03:25	1
1,1,2-Trichloroethane	ND		5.7	0.74	ug/Kg	☼	04/28/25 17:10	04/29/25 03:25	1
1,1-Dichloroethane	ND		5.7	0.69	ug/Kg	☼	04/28/25 17:10	04/29/25 03:25	1
1,1-Dichloroethene	ND		5.7	0.70	ug/Kg	☼	04/28/25 17:10	04/29/25 03:25	1
1,2,4-Trichlorobenzene	ND		5.7	0.35	ug/Kg	☼	04/28/25 17:10	04/29/25 03:25	1
1,2,4-Trimethylbenzene	ND		5.7	1.1	ug/Kg	☼	04/28/25 17:10	04/29/25 03:25	1
1,2-Dibromo-3-Chloropropane	ND		5.7	2.8	ug/Kg	☼	04/28/25 17:10	04/29/25 03:25	1
1,2-Dibromoethane	ND		5.7	0.73	ug/Kg	☼	04/28/25 17:10	04/29/25 03:25	1
1,2-Dichlorobenzene	ND		5.7	0.44	ug/Kg	☼	04/28/25 17:10	04/29/25 03:25	1
1,2-Dichloroethane	ND		5.7	0.29	ug/Kg	☼	04/28/25 17:10	04/29/25 03:25	1
1,2-Dichloropropane	ND		5.7	2.8	ug/Kg	☼	04/28/25 17:10	04/29/25 03:25	1
1,3,5-Trimethylbenzene	ND		5.7	0.37	ug/Kg	☼	04/28/25 17:10	04/29/25 03:25	1
1,3-Dichlorobenzene	ND		5.7	0.29	ug/Kg	☼	04/28/25 17:10	04/29/25 03:25	1
1,4-Dichlorobenzene	ND		5.7	0.79	ug/Kg	☼	04/28/25 17:10	04/29/25 03:25	1
2-Butanone (MEK)	ND		28	2.1	ug/Kg	☼	04/28/25 17:10	04/29/25 03:25	1
2-Hexanone	ND		28	2.8	ug/Kg	☼	04/28/25 17:10	04/29/25 03:25	1
4-Isopropyltoluene	ND		5.7	0.46	ug/Kg	☼	04/28/25 17:10	04/29/25 03:25	1
4-Methyl-2-pentanone (MIBK)	ND		28	1.9	ug/Kg	☼	04/28/25 17:10	04/29/25 03:25	1
Acetone	**8.4**	**J**	28	4.8	ug/Kg	☼	04/28/25 17:10	04/29/25 03:25	1
Benzene	ND		5.7	0.28	ug/Kg	☼	04/28/25 17:10	04/29/25 03:25	1
Bromodichloromethane	ND		5.7	0.76	ug/Kg	☼	04/28/25 17:10	04/29/25 03:25	1
Bromoform	ND		5.7	2.8	ug/Kg	☼	04/28/25 17:10	04/29/25 03:25	1
Bromomethane	ND		5.7	0.51	ug/Kg	☼	04/28/25 17:10	04/29/25 03:25	1
Carbon disulfide	ND		5.7	2.8	ug/Kg	☼	04/28/25 17:10	04/29/25 03:25	1
Carbon tetrachloride	ND		5.7	0.55	ug/Kg	☼	04/28/25 17:10	04/29/25 03:25	1
Chlorobenzene	ND		5.7	0.75	ug/Kg	☼	04/28/25 17:10	04/29/25 03:25	1
Chloroethane	ND		5.7	1.3	ug/Kg	☼	04/28/25 17:10	04/29/25 03:25	1
Chloroform	**1.4**	**J B**	5.7	0.35	ug/Kg	☼	04/28/25 17:10	04/29/25 03:25	1
Chloromethane	ND		5.7	0.34	ug/Kg	☼	04/28/25 17:10	04/29/25 03:25	1
cis-1,2-Dichloroethene	ND		5.7	0.73	ug/Kg	☼	04/28/25 17:10	04/29/25 03:25	1
cis-1,3-Dichloropropene	ND		5.7	0.82	ug/Kg	☼	04/28/25 17:10	04/29/25 03:25	1
Cyclohexane	ND		5.7	0.79	ug/Kg	☼	04/28/25 17:10	04/29/25 03:25	1
Dibromochloromethane	ND		5.7	0.73	ug/Kg	☼	04/28/25 17:10	04/29/25 03:25	1
Dichlorodifluoromethane	ND		5.7	0.47	ug/Kg	☼	04/28/25 17:10	04/29/25 03:25	1
Ethylbenzene	ND		5.7	0.39	ug/Kg	☼	04/28/25 17:10	04/29/25 03:25	1
Isopropylbenzene	ND		5.7	0.86	ug/Kg	☼	04/28/25 17:10	04/29/25 03:25	1
Methyl acetate	ND		28	3.4	ug/Kg	☼	04/28/25 17:10	04/29/25 03:25	1
Methyl tert-butyl ether	ND		5.7	0.56	ug/Kg	☼	04/28/25 17:10	04/29/25 03:25	1
Methylcyclohexane	ND		5.7	0.86	ug/Kg	☼	04/28/25 17:10	04/29/25 03:25	1
Methylene Chloride	ND		5.7	2.6	ug/Kg	☼	04/28/25 17:10	04/29/25 03:25	1
Naphthalene	ND		5.7	0.76	ug/Kg	☼	04/28/25 17:10	04/29/25 03:25	1
n-Butylbenzene	ND		5.7	0.49	ug/Kg	☼	04/28/25 17:10	04/29/25 03:25	1
N-Propylbenzene	ND		5.7	0.45	ug/Kg	☼	04/28/25 17:10	04/29/25 03:25	1
sec-Butylbenzene	ND		5.7	0.49	ug/Kg	☼	04/28/25 17:10	04/29/25 03:25	1
Styrene	ND		5.7	0.28	ug/Kg	☼	04/28/25 17:10	04/29/25 03:25	1
tert-Butylbenzene	ND		5.7	0.59	ug/Kg	☼	04/28/25 17:10	04/29/25 03:25	1
Tetrachloroethene	ND		5.7	0.76	ug/Kg	☼	04/28/25 17:10	04/29/25 03:25	1

Client: Roux Environmental Engineering and Geology DPC
Job ID: 480-229031-1
Project/Site: BCP RI - 619 Exchange Street Site

Client Sample ID: MW-6 8-10 Ft
Lab Sample ID: 480-229031-2
Date Collected: 04/27/25 12:00
Matrix: Solid
Date Received: 04/28/25 16:25
Percent Solids: 76.4

Method: SW846 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Toluene	ND		5.7	0.43	ug/Kg	☼	04/28/25 17:10	04/29/25 03:25	1
trans-1,2-Dichloroethene	ND		5.7	0.59	ug/Kg	☼	04/28/25 17:10	04/29/25 03:25	1
trans-1,3-Dichloropropene	ND		5.7	2.5	ug/Kg	☼	04/28/25 17:10	04/29/25 03:25	1
Trichloroethene	ND		5.7	1.2	ug/Kg	☼	04/28/25 17:10	04/29/25 03:25	1
Trichlorofluoromethane	ND		5.7	0.54	ug/Kg	☼	04/28/25 17:10	04/29/25 03:25	1
Vinyl chloride	ND		5.7	0.69	ug/Kg	☼	04/28/25 17:10	04/29/25 03:25	1
Xylenes, Total	ND		11	0.95	ug/Kg	☼	04/28/25 17:10	04/29/25 03:25	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/Kg*	☼		*N/A*	*04/28/25 17:10*	*04/29/25 03:25*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*102*		*64 - 126*	*04/28/25 17:10*	*04/29/25 03:25*	*1*
4-Bromofluorobenzene (Surr)	*100*		*72 - 126*	*04/28/25 17:10*	*04/29/25 03:25*	*1*
Dibromofluoromethane (Surr)	*101*		*60 - 140*	*04/28/25 17:10*	*04/29/25 03:25*	*1*
Toluene-d8 (Surr)	*98*		*71 - 125*	*04/28/25 17:10*	*04/29/25 03:25*	*1*

Method: SW846 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	ND		130	72	ug/Kg	☼	05/07/25 13:55	05/08/25 17:04	1
2,4,5-Trichlorophenol	ND		220	60	ug/Kg	☼	05/07/25 13:55	05/08/25 17:04	1
2,4,6-Trichlorophenol	ND		220	44	ug/Kg	☼	05/07/25 13:55	05/08/25 17:04	1
2,4-Dichlorophenol	ND		220	23	ug/Kg	☼	05/07/25 13:55	05/08/25 17:04	1
2,4-Dimethylphenol	ND		220	53	ug/Kg	☼	05/07/25 13:55	05/08/25 17:04	1
2,4-Dinitrophenol	ND		2200	1000	ug/Kg	☼	05/07/25 13:55	05/08/25 17:04	1
2,4-Dinitrotoluene	ND		220	46	ug/Kg	☼	05/07/25 13:55	05/08/25 17:04	1
2,6-Dinitrotoluene	ND		220	26	ug/Kg	☼	05/07/25 13:55	05/08/25 17:04	1
2-Chloronaphthalene	ND		220	36	ug/Kg	☼	05/07/25 13:55	05/08/25 17:04	1
2-Chlorophenol	ND		430	40	ug/Kg	☼	05/07/25 13:55	05/08/25 17:04	1
2-Methylnaphthalene	ND		220	44	ug/Kg	☼	05/07/25 13:55	05/08/25 17:04	1
2-Methylphenol	ND		220	26	ug/Kg	☼	05/07/25 13:55	05/08/25 17:04	1
2-Nitroaniline	ND		430	33	ug/Kg	☼	05/07/25 13:55	05/08/25 17:04	1
2-Nitrophenol	ND		220	63	ug/Kg	☼	05/07/25 13:55	05/08/25 17:04	1
3,3'-Dichlorobenzidine	ND		430	260	ug/Kg	☼	05/07/25 13:55	05/08/25 17:04	1
3-Nitroaniline	ND		430	61	ug/Kg	☼	05/07/25 13:55	05/08/25 17:04	1
4,6-Dinitro-2-methylphenol	ND		430	220	ug/Kg	☼	05/07/25 13:55	05/08/25 17:04	1
4-Bromophenyl phenyl ether	ND		220	31	ug/Kg	☼	05/07/25 13:55	05/08/25 17:04	1
4-Chloro-3-methylphenol	ND		220	55	ug/Kg	☼	05/07/25 13:55	05/08/25 17:04	1
4-Chloroaniline	ND		220	55	ug/Kg	☼	05/07/25 13:55	05/08/25 17:04	1
4-Chlorophenyl phenyl ether	ND		220	27	ug/Kg	☼	05/07/25 13:55	05/08/25 17:04	1
4-Methylphenol	ND		430	26	ug/Kg	☼	05/07/25 13:55	05/08/25 17:04	1
4-Nitroaniline	ND		430	120	ug/Kg	☼	05/07/25 13:55	05/08/25 17:04	1
4-Nitrophenol	ND		430	160	ug/Kg	☼	05/07/25 13:55	05/08/25 17:04	1
Acenaphthene	ND		220	33	ug/Kg	☼	05/07/25 13:55	05/08/25 17:04	1
Acenaphthylene	ND		220	29	ug/Kg	☼	05/07/25 13:55	05/08/25 17:04	1
Acetophenone	ND		220	30	ug/Kg	☼	05/07/25 13:55	05/08/25 17:04	1
Anthracene	ND		220	55	ug/Kg	☼	05/07/25 13:55	05/08/25 17:04	1
Atrazine	ND		220	77	ug/Kg	☼	05/07/25 13:55	05/08/25 17:04	1
Benzaldehyde	ND		220	180	ug/Kg	☼	05/07/25 13:55	05/08/25 17:04	1
Benzo[a]anthracene	ND		220	22	ug/Kg	☼	05/07/25 13:55	05/08/25 17:04	1

Client: Roux Environmental Engineering and Geology DPC
Job ID: 480-229031-1
Project/Site: BCP RI - 619 Exchange Street Site

Client Sample ID: MW-6 8-10 Ft
Lab Sample ID: 480-229031-2
Date Collected: 04/27/25 12:00
Matrix: Solid
Date Received: 04/28/25 16:25
Percent Solids: 76.4

Method: SW846 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[a]pyrene	ND		220	33	ug/Kg	☼	05/07/25 13:55	05/08/25 17:04	1
Benzo[b]fluoranthene	ND		220	35	ug/Kg	☼	05/07/25 13:55	05/08/25 17:04	1
Benzo[g,h,i]perylene	ND		220	23	ug/Kg	☼	05/07/25 13:55	05/08/25 17:04	1
Benzo[k]fluoranthene	ND		220	29	ug/Kg	☼	05/07/25 13:55	05/08/25 17:04	1
Biphenyl	ND		220	33	ug/Kg	☼	05/07/25 13:55	05/08/25 17:04	1
bis (2-chloroisopropyl) ether	ND		220	44	ug/Kg	☼	05/07/25 13:55	05/08/25 17:04	1
Bis(2-chloroethoxy)methane	ND		220	47	ug/Kg	☼	05/07/25 13:55	05/08/25 17:04	1
Bis(2-chloroethyl)ether	ND		220	29	ug/Kg	☼	05/07/25 13:55	05/08/25 17:04	1
Bis(2-ethylhexyl) phthalate	ND		220	76	ug/Kg	☼	05/07/25 13:55	05/08/25 17:04	1
Butyl benzyl phthalate	ND		220	36	ug/Kg	☼	05/07/25 13:55	05/08/25 17:04	1
Caprolactam	ND		220	66	ug/Kg	☼	05/07/25 13:55	05/08/25 17:04	1
Carbazole	ND		220	26	ug/Kg	☼	05/07/25 13:55	05/08/25 17:04	1
Chrysene	ND		220	50	ug/Kg	☼	05/07/25 13:55	05/08/25 17:04	1
Dibenz(a,h)anthracene	ND		220	39	ug/Kg	☼	05/07/25 13:55	05/08/25 17:04	1
Dibenzofuran	ND		220	26	ug/Kg	☼	05/07/25 13:55	05/08/25 17:04	1
Diethyl phthalate	ND		220	29	ug/Kg	☼	05/07/25 13:55	05/08/25 17:04	1
Dimethyl phthalate	ND		220	26	ug/Kg	☼	05/07/25 13:55	05/08/25 17:04	1
Di-n-butyl phthalate	ND		220	38	ug/Kg	☼	05/07/25 13:55	05/08/25 17:04	1
Di-n-octyl phthalate	ND		220	26	ug/Kg	☼	05/07/25 13:55	05/08/25 17:04	1
Fluoranthene	ND		220	23	ug/Kg	☼	05/07/25 13:55	05/08/25 17:04	1
Fluorene	ND		220	26	ug/Kg	☼	05/07/25 13:55	05/08/25 17:04	1
Hexachlorobenzene	ND		220	30	ug/Kg	☼	05/07/25 13:55	05/08/25 17:04	1
Hexachlorobutadiene	ND		220	33	ug/Kg	☼	05/07/25 13:55	05/08/25 17:04	1
Hexachlorocyclopentadiene	ND		220	30	ug/Kg	☼	05/07/25 13:55	05/08/25 17:04	1
Hexachloroethane	ND		220	29	ug/Kg	☼	05/07/25 13:55	05/08/25 17:04	1
Indeno[1,2,3-cd]pyrene	ND		220	27	ug/Kg	☼	05/07/25 13:55	05/08/25 17:04	1
Isophorone	ND		220	47	ug/Kg	☼	05/07/25 13:55	05/08/25 17:04	1
Naphthalene	ND		220	29	ug/Kg	☼	05/07/25 13:55	05/08/25 17:04	1
Nitrobenzene	ND		220	25	ug/Kg	☼	05/07/25 13:55	05/08/25 17:04	1
N-Nitrosodi-n-propylamine	ND		220	38	ug/Kg	☼	05/07/25 13:55	05/08/25 17:04	1
N-Nitrosodiphenylamine	ND		220	180	ug/Kg	☼	05/07/25 13:55	05/08/25 17:04	1
Pentachlorophenol	ND		430	220	ug/Kg	☼	05/07/25 13:55	05/08/25 17:04	1
Phenanthrene	ND		220	33	ug/Kg	☼	05/07/25 13:55	05/08/25 17:04	1
Phenol	ND		220	34	ug/Kg	☼	05/07/25 13:55	05/08/25 17:04	1
Pyrene	ND		220	26	ug/Kg	☼	05/07/25 13:55	05/08/25 17:04	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Unknown	*3100*	*T J*	*ug/Kg*	☼	*1.87*	*N/A*	*05/07/25 13:55*	*05/08/25 17:04*	*1*
Unknown	*4800*	*T J*	*ug/Kg*	☼	*1.98*	*N/A*	*05/07/25 13:55*	*05/08/25 17:04*	*1*
Unknown	*590*	*T J*	*ug/Kg*	☼	*3.00*	*N/A*	*05/07/25 13:55*	*05/08/25 17:04*	*1*
Unknown	*300*	*T J*	*ug/Kg*	☼	*3.22*	*N/A*	*05/07/25 13:55*	*05/08/25 17:04*	*1*
Unknown	*2100*	*T J*	*ug/Kg*	☼	*3.44*	*N/A*	*05/07/25 13:55*	*05/08/25 17:04*	*1*
Unknown	*740*	*T J*	*ug/Kg*	☼	*4.11*	*N/A*	*05/07/25 13:55*	*05/08/25 17:04*	*1*
Unknown	*180*	*T J*	*ug/Kg*	☼	*4.29*	*N/A*	*05/07/25 13:55*	*05/08/25 17:04*	*1*
Unknown	*230*	*T J*	*ug/Kg*	☼	*4.39*	*N/A*	*05/07/25 13:55*	*05/08/25 17:04*	*1*
Unknown	*2400*	*T J*	*ug/Kg*	☼	*4.58*	*N/A*	*05/07/25 13:55*	*05/08/25 17:04*	*1*
Unknown	*650*	*T J*	*ug/Kg*	☼	*4.62*	*N/A*	*05/07/25 13:55*	*05/08/25 17:04*	*1*
Unknown	*590*	*T J*	*ug/Kg*	☼	*4.74*	*N/A*	*05/07/25 13:55*	*05/08/25 17:04*	*1*
Unknown	*450*	*T J*	*ug/Kg*	☼	*4.76*	*N/A*	*05/07/25 13:55*	*05/08/25 17:04*	*1*
Unknown	*230*	*T J*	*ug/Kg*	☼	*4.88*	*N/A*	*05/07/25 13:55*	*05/08/25 17:04*	*1*

Client Sample ID: MW-6 8-10 Ft
Lab Sample ID: 480-229031-2
Date Collected: 04/27/25 12:00
Matrix: Solid
Date Received: 04/28/25 16:25
Percent Solids: 76.4

Method: SW846 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Tentatively Identified Compound	Est. Result	Qualifier	Unit	D	RT	CAS No.	Prepared	Analyzed	Dil Fac
Unknown	1500	T J	ug/Kg	☼	4.94	N/A	05/07/25 13:55	05/08/25 17:04	1
Unknown	1500	T J	ug/Kg	☼	4.96	N/A	05/07/25 13:55	05/08/25 17:04	1
Unknown	260	T J	ug/Kg	☼	5.03	N/A	05/07/25 13:55	05/08/25 17:04	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol (Surr)	103		26 - 143	05/07/25 13:55	05/08/25 17:04	1
2-Fluorobiphenyl (Surr)	99		50 - 121	05/07/25 13:55	05/08/25 17:04	1
2-Fluorophenol (Surr)	88		36 - 120	05/07/25 13:55	05/08/25 17:04	1
Nitrobenzene-d5 (Surr)	95		40 - 121	05/07/25 13:55	05/08/25 17:04	1
Phenol-d5 (Surr)	94		41 - 120	05/07/25 13:55	05/08/25 17:04	1
p-Terphenyl-d14 (Surr)	110		46 - 143	05/07/25 13:55	05/08/25 17:04	1

Method: SW846 8081B - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	ND		4.3	0.82	ug/Kg	☼	05/01/25 06:41	05/01/25 18:03	1
4,4'-DDE	ND		4.3	0.89	ug/Kg	☼	05/01/25 06:41	05/01/25 18:03	1
4,4'-DDT	**3.3**	**J B**	4.3	0.99	ug/Kg	☼	05/01/25 06:41	05/01/25 18:03	1
Aldrin	ND		4.3	1.0	ug/Kg	☼	05/01/25 06:41	05/01/25 18:03	1
alpha-BHC	ND		4.3	0.76	ug/Kg	☼	05/01/25 06:41	05/01/25 18:03	1
cis-Chlordane	ND		4.3	2.1	ug/Kg	☼	05/01/25 06:41	05/01/25 18:03	1
beta-BHC	ND		4.3	0.76	ug/Kg	☼	05/01/25 06:41	05/01/25 18:03	1
delta-BHC	ND		4.3	0.79	ug/Kg	☼	05/01/25 06:41	05/01/25 18:03	1
Dieldrin	ND		4.3	1.0	ug/Kg	☼	05/01/25 06:41	05/01/25 18:03	1
Endosulfan I	ND		4.3	0.81	ug/Kg	☼	05/01/25 06:41	05/01/25 18:03	1
Endosulfan II	ND		4.3	0.76	ug/Kg	☼	05/01/25 06:41	05/01/25 18:03	1
Endosulfan sulfate	ND		4.3	0.79	ug/Kg	☼	05/01/25 06:41	05/01/25 18:03	1
Endrin	ND		4.3	0.84	ug/Kg	☼	05/01/25 06:41	05/01/25 18:03	1
Endrin aldehyde	ND		4.3	1.1	ug/Kg	☼	05/01/25 06:41	05/01/25 18:03	1
Endrin ketone	ND		4.3	1.0	ug/Kg	☼	05/01/25 06:41	05/01/25 18:03	1
gamma-BHC (Lindane)	ND		4.3	0.78	ug/Kg	☼	05/01/25 06:41	05/01/25 18:03	1
trans-Chlordane	ND		4.3	1.3	ug/Kg	☼	05/01/25 06:41	05/01/25 18:03	1
Heptachlor	ND		4.3	0.92	ug/Kg	☼	05/01/25 06:41	05/01/25 18:03	1
Heptachlor epoxide	ND		4.3	1.1	ug/Kg	☼	05/01/25 06:41	05/01/25 18:03	1
Methoxychlor	ND		4.3	0.87	ug/Kg	☼	05/01/25 06:41	05/01/25 18:03	1
Toxaphene	ND		43	25	ug/Kg	☼	05/01/25 06:41	05/01/25 18:03	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
DCB Decachlorobiphenyl	102		45 - 120	05/01/25 06:41	05/01/25 18:03	1
DCB Decachlorobiphenyl	111		45 - 120	05/01/25 06:41	05/01/25 18:03	1
Tetrachloro-m-xylene	80		30 - 124	05/01/25 06:41	05/01/25 18:03	1
Tetrachloro-m-xylene	82		30 - 124	05/01/25 06:41	05/01/25 18:03	1

Method: SW846 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		0.28	0.056	mg/Kg	☼	04/29/25 08:37	04/29/25 15:04	1
PCB-1221	ND		0.28	0.056	mg/Kg	☼	04/29/25 08:37	04/29/25 15:04	1
PCB-1232	ND		0.28	0.056	mg/Kg	☼	04/29/25 08:37	04/29/25 15:04	1
PCB-1242	ND		0.28	0.056	mg/Kg	☼	04/29/25 08:37	04/29/25 15:04	1
PCB-1248	ND		0.28	0.056	mg/Kg	☼	04/29/25 08:37	04/29/25 15:04	1
PCB-1254	ND		0.28	0.13	mg/Kg	☼	04/29/25 08:37	04/29/25 15:04	1

Client Sample ID: MW-6 8-10 Ft
Lab Sample ID: 480-229031-2
Date Collected: 04/27/25 12:00
Matrix: Solid
Date Received: 04/28/25 16:25
Percent Solids: 76.4

Method: SW846 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1260	ND		0.28	0.13	mg/Kg	☼	04/29/25 08:37	04/29/25 15:04	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*127*		*60 - 154*	*04/29/25 08:37*	*04/29/25 15:04*	*1*
Tetrachloro-m-xylene	*121*		*60 - 154*	*04/29/25 08:37*	*04/29/25 15:04*	*1*
DCB Decachlorobiphenyl	*112*		*65 - 174*	*04/29/25 08:37*	*04/29/25 15:04*	*1*
DCB Decachlorobiphenyl	*109*		*65 - 174*	*04/29/25 08:37*	*04/29/25 15:04*	*1*

Method: SW846 8151A - Herbicides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-T	ND		21	6.8	ug/Kg	☼	05/01/25 06:27	05/08/25 15:46	1
2,4-D	ND		21	13	ug/Kg	☼	05/01/25 06:27	05/08/25 15:46	1
Dichlorprop	ND		21	11	ug/Kg	☼	05/01/25 06:27	05/08/25 15:46	1
Pentachlorophenol	ND		21	6.9	ug/Kg	☼	05/01/25 06:27	05/08/25 15:46	1
Picloram	ND		21	9.2	ug/Kg	☼	05/01/25 06:27	05/08/25 15:46	1
Silvex (2,4,5-TP)	ND		21	7.7	ug/Kg	☼	05/01/25 06:27	05/08/25 15:46	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4-Dichlorophenylacetic acid	*87*		*28 - 129*	*05/01/25 06:27*	*05/08/25 15:46*	*1*
2,4-Dichlorophenylacetic acid	*83*		*28 - 129*	*05/01/25 06:27*	*05/08/25 15:46*	*1*

Method: EPA Draft-3 1633 - Per- and Polyfluoroalkyl Substances by LC/MS/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)	ND		0.66	0.16	ug/Kg	☼	05/02/25 08:22	05/03/25 00:36	1
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2 FTS)	ND		0.66	0.16	ug/Kg	☼	05/02/25 08:22	05/03/25 00:36	1
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2 FTS)	ND		0.66	0.16	ug/Kg	☼	05/02/25 08:22	05/03/25 00:36	1
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2 FTS)	ND		0.66	0.16	ug/Kg	☼	05/02/25 08:22	05/03/25 00:36	1
3-Perfluoroheptylpropanoic acid (7:3 FTCA)	ND		4.1	1.0	ug/Kg	☼	05/02/25 08:22	05/03/25 00:36	1
3-Perfluoropentylpropanoic acid (5:3 FTCA)	ND		4.1	1.0	ug/Kg	☼	05/02/25 08:22	05/03/25 00:36	1
3-Perfluoropropylpropanoic acid (3:3 FTCA)	ND		0.82	0.21	ug/Kg	☼	05/02/25 08:22	05/03/25 00:36	1
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	ND		0.66	0.16	ug/Kg	☼	05/02/25 08:22	05/03/25 00:36	1
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9Cl-PF3ONS)	ND		0.66	0.16	ug/Kg	☼	05/02/25 08:22	05/03/25 00:36	1
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA)	ND		0.66	0.16	ug/Kg	☼	05/02/25 08:22	05/03/25 00:36	1
N-ethylperfluorooctane sulfonamide (NEtFOSA)	ND		0.16	0.041	ug/Kg	☼	05/02/25 08:22	05/03/25 00:36	1
N-ethylperfluorooctane sulfonamidoethanol (NEtFOSE)	ND		1.6	0.41	ug/Kg	☼	05/02/25 08:22	05/03/25 00:36	1
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	ND		0.16	0.041	ug/Kg	☼	05/02/25 08:22	05/03/25 00:36	1
N-methylperfluorooctane sulfonamide (NMeFOSA)	ND		0.16	0.041	ug/Kg	☼	05/02/25 08:22	05/03/25 00:36	1
N-methylperfluorooctane sulfonamidoethanol (NMeFOSE)	ND		1.6	0.41	ug/Kg	☼	05/02/25 08:22	05/03/25 00:36	1

Client Sample ID: MW-6 8-10 Ft
Lab Sample ID: 480-229031-2
Date Collected: 04/27/25 12:00
Matrix: Solid
Date Received: 04/28/25 16:25
Percent Solids: 76.4

Method: EPA Draft-3 1633 - Per- and Polyfluoroalkyl Substances by LC/MS/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	ND		0.16	0.041	ug/Kg	☼	05/02/25 08:22	05/03/25 00:36	1
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	ND		0.33	0.082	ug/Kg	☼	05/02/25 08:22	05/03/25 00:36	1
Perfluoro (2-ethoxyethane) sulfonic acid (PFEESA)	ND		0.33	0.082	ug/Kg	☼	05/02/25 08:22	05/03/25 00:36	1
Perfluoro-3-methoxypropanoic acid (PFMPA)	ND		0.33	0.082	ug/Kg	☼	05/02/25 08:22	05/03/25 00:36	1
Perfluoro-4-methoxybutanoic acid (PFMBA)	ND		0.33	0.082	ug/Kg	☼	05/02/25 08:22	05/03/25 00:36	1
Perfluorobutanesulfonic acid (PFBS)	ND		0.16	0.041	ug/Kg	☼	05/02/25 08:22	05/03/25 00:36	1
Perfluorobutanoic acid (PFBA)	ND		0.66	0.16	ug/Kg	☼	05/02/25 08:22	05/03/25 00:36	1
Perfluorodecanesulfonic acid (PFDS)	ND		0.16	0.041	ug/Kg	☼	05/02/25 08:22	05/03/25 00:36	1
Perfluorodecanoic acid (PFDA)	ND		0.16	0.041	ug/Kg	☼	05/02/25 08:22	05/03/25 00:36	1
Perfluorododecanesulfonic acid (PFDoS)	ND		0.16	0.041	ug/Kg	☼	05/02/25 08:22	05/03/25 00:36	1
Perfluorododecanoic acid (PFDoA)	ND		0.16	0.041	ug/Kg	☼	05/02/25 08:22	05/03/25 00:36	1
Perfluoroheptanesulfonic acid (PFHpS)	ND		0.16	0.041	ug/Kg	☼	05/02/25 08:22	05/03/25 00:36	1
Perfluoroheptanoic acid (PFHpA)	ND		0.16	0.041	ug/Kg	☼	05/02/25 08:22	05/03/25 00:36	1
Perfluorohexanesulfonic acid (PFHxS)	ND		0.16	0.041	ug/Kg	☼	05/02/25 08:22	05/03/25 00:36	1
Perfluorohexanoic acid (PFHxA)	ND		0.16	0.041	ug/Kg	☼	05/02/25 08:22	05/03/25 00:36	1
Perfluorononanesulfonic acid (PFNS)	ND		0.16	0.041	ug/Kg	☼	05/02/25 08:22	05/03/25 00:36	1
Perfluorononanoic acid (PFNA)	ND		0.16	0.041	ug/Kg	☼	05/02/25 08:22	05/03/25 00:36	1
Perfluorooctanesulfonamide (PFOSA)	ND		0.16	0.041	ug/Kg	☼	05/02/25 08:22	05/03/25 00:36	1
Perfluorooctanesulfonic acid (PFOS)	ND		0.16	0.041	ug/Kg	☼	05/02/25 08:22	05/03/25 00:36	1
Perfluorooctanoic acid (PFOA)	ND		0.16	0.041	ug/Kg	☼	05/02/25 08:22	05/03/25 00:36	1
Perfluoropentanesulfonic acid (PFPeS)	ND		0.16	0.041	ug/Kg	☼	05/02/25 08:22	05/03/25 00:36	1
Perfluoropentanoic acid (PFPeA)	ND		0.33	0.082	ug/Kg	☼	05/02/25 08:22	05/03/25 00:36	1
Perfluorotetradecanoic acid (PFTeDA)	ND		0.16	0.041	ug/Kg	☼	05/02/25 08:22	05/03/25 00:36	1
Perfluorotridecanoic acid (PFTrDA)	ND		0.16	0.041	ug/Kg	☼	05/02/25 08:22	05/03/25 00:36	1
Perfluoroundecanoic acid (PFUnA)	ND		0.16	0.041	ug/Kg	☼	05/02/25 08:22	05/03/25 00:36	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C2 PFTeDA	*76.4*		*20 - 150*	*05/02/25 08:22*	*05/03/25 00:36*	*1*
13C2-PFDoDA	*79.0*		*20 - 150*	*05/02/25 08:22*	*05/03/25 00:36*	*1*
13C3 HFPO-DA	*80.2*		*20 - 150*	*05/02/25 08:22*	*05/03/25 00:36*	*1*
13C3 PFBS	*76.8*		*20 - 150*	*05/02/25 08:22*	*05/03/25 00:36*	*1*
13C3 PFHxS	*70.2*		*20 - 150*	*05/02/25 08:22*	*05/03/25 00:36*	*1*
13C4 PFBA	*79.5*		*20 - 150*	*05/02/25 08:22*	*05/03/25 00:36*	*1*
13C4 PFHpA	*80.2*		*20 - 150*	*05/02/25 08:22*	*05/03/25 00:36*	*1*
13C5 PFHxA	*75.9*		*20 - 150*	*05/02/25 08:22*	*05/03/25 00:36*	*1*
13C5 PFPeA	*84.7*		*20 - 150*	*05/02/25 08:22*	*05/03/25 00:36*	*1*
13C6 PFDA	*81.9*		*20 - 150*	*05/02/25 08:22*	*05/03/25 00:36*	*1*
13C7 PFUnA	*82.7*		*20 - 150*	*05/02/25 08:22*	*05/03/25 00:36*	*1*
13C8 PFOA	*72.9*		*20 - 150*	*05/02/25 08:22*	*05/03/25 00:36*	*1*
13C8 PFOS	*77.9*		*20 - 150*	*05/02/25 08:22*	*05/03/25 00:36*	*1*
13C8 PFOSA	*71.0*		*20 - 150*	*05/02/25 08:22*	*05/03/25 00:36*	*1*
13C9 PFNA	*74.0*		*20 - 150*	*05/02/25 08:22*	*05/03/25 00:36*	*1*
D3-NMeFOSA	*62.2*		*20 - 150*	*05/02/25 08:22*	*05/03/25 00:36*	*1*
d3-NMeFOSAA	*84.3*		*20 - 150*	*05/02/25 08:22*	*05/03/25 00:36*	*1*

Client Sample ID: MW-6 8-10 Ft
Lab Sample ID: 480-229031-2
Date Collected: 04/27/25 12:00
Matrix: Solid
Date Received: 04/28/25 16:25
Percent Solids: 76.4

Method: EPA Draft-3 1633 - Per- and Polyfluoroalkyl Substances by LC/MS/MS (Continued)

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
d5-NEtFOSAA	*95.2*		*20 - 150*	*05/02/25 08:22*	*05/03/25 00:36*	*1*
d5-NEtPFOSA	*65.6*		*20 - 150*	*05/02/25 08:22*	*05/03/25 00:36*	*1*
d7-N-MeFOSE-M	*58.1*		*20 - 150*	*05/02/25 08:22*	*05/03/25 00:36*	*1*
d9-N-EtFOSE-M	*59.0*		*20 - 150*	*05/02/25 08:22*	*05/03/25 00:36*	*1*
M2-4:2 FTS	*70.0*		*20 - 150*	*05/02/25 08:22*	*05/03/25 00:36*	*1*
M2-6:2 FTS	*74.6*		*20 - 150*	*05/02/25 08:22*	*05/03/25 00:36*	*1*
M2-8:2 FTS	*80.2*		*20 - 150*	*05/02/25 08:22*	*05/03/25 00:36*	*1*

Method: SW846 6010D - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**15500**		13.0	11.2	mg/Kg	☼	04/30/25 14:51	04/30/25 19:57	1
Antimony	ND	F1	19.5	0.69	mg/Kg	☼	04/30/25 14:51	04/30/25 19:57	1
Arsenic	**3.2**		2.6	1.1	mg/Kg	☼	04/30/25 14:51	04/30/25 19:57	1
Barium	**114**		0.65	0.18	mg/Kg	☼	04/30/25 14:51	04/30/25 19:57	1
Beryllium	**0.67**		0.26	0.052	mg/Kg	☼	04/30/25 14:51	04/30/25 19:57	1
Cadmium	**0.13**	**J**	0.26	0.091	mg/Kg	☼	04/30/25 14:51	04/30/25 19:57	1
Calcium	**71000**		64.9	35.0	mg/Kg	☼	04/30/25 14:51	04/30/25 19:57	1
Chromium	**20.0**		0.65	0.47	mg/Kg	☼	04/30/25 14:51	04/30/25 19:57	1
Cobalt	**8.6**	**^5+**	0.65	0.13	mg/Kg	☼	04/30/25 14:51	04/30/25 19:57	1
Copper	**14.7**		1.3	0.74	mg/Kg	☼	04/30/25 14:51	04/30/25 19:57	1
Iron	**18600**		13.0	11.0	mg/Kg	☼	04/30/25 14:51	04/30/25 19:57	1
Lead	**10.3**		1.3	0.60	mg/Kg	☼	04/30/25 14:51	04/30/25 19:57	1
Magnesium	**24200**		25.9	11.0	mg/Kg	☼	04/30/25 14:51	04/30/25 19:57	1
Manganese	**390**		1.3	0.36	mg/Kg	☼	04/30/25 14:51	04/30/25 19:57	1
Nickel	**20.2**		6.5	0.32	mg/Kg	☼	04/30/25 14:51	04/30/25 19:57	1
Potassium	**5280**	**F1**	38.9	31.4	mg/Kg	☼	04/30/25 14:51	04/30/25 19:57	1
Selenium	**1.1**	**J**	5.2	1.0	mg/Kg	☼	04/30/25 14:51	04/30/25 19:57	1
Silver	**0.32**	**J ^5-**	0.78	0.26	mg/Kg	☼	04/30/25 14:51	04/30/25 19:57	1
Sodium	**433**		182	79.5	mg/Kg	☼	04/30/25 14:51	04/30/25 19:57	1
Thallium	ND		7.8	0.99	mg/Kg	☼	04/30/25 14:51	04/30/25 19:57	1
Vanadium	**30.9**		0.65	0.17	mg/Kg	☼	04/30/25 14:51	04/30/25 19:57	1
Zinc	**52.3**		2.6	1.3	mg/Kg	☼	04/30/25 14:51	04/30/25 19:57	1

Method: SW846 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.018**	**J**	0.025	0.0058	mg/Kg	☼	05/02/25 09:11	05/02/25 11:24	1

Client: Roux Environmental Engineering and Geology DPC
Job ID: 480-229031-1
Project/Site: BCP RI - 619 Exchange Street Site

Client Sample ID: MW-5 0.33-0.75 Ft
Lab Sample ID: 480-229031-3
Date Collected: 04/27/25 10:30
Matrix: Solid
Date Received: 04/28/25 16:25
Percent Solids: 81.5

Method: SW846 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	ND		120	67	ug/Kg	☼	05/07/25 13:55	05/08/25 17:45	1
2,4,5-Trichlorophenol	ND		210	56	ug/Kg	☼	05/07/25 13:55	05/08/25 17:45	1
2,4,6-Trichlorophenol	ND		210	42	ug/Kg	☼	05/07/25 13:55	05/08/25 17:45	1
2,4-Dichlorophenol	ND		210	22	ug/Kg	☼	05/07/25 13:55	05/08/25 17:45	1
2,4-Dimethylphenol	ND		210	50	ug/Kg	☼	05/07/25 13:55	05/08/25 17:45	1
2,4-Dinitrophenol	ND		2000	960	ug/Kg	☼	05/07/25 13:55	05/08/25 17:45	1
2,4-Dinitrotoluene	ND		210	43	ug/Kg	☼	05/07/25 13:55	05/08/25 17:45	1
2,6-Dinitrotoluene	ND		210	24	ug/Kg	☼	05/07/25 13:55	05/08/25 17:45	1
2-Chloronaphthalene	ND		210	34	ug/Kg	☼	05/07/25 13:55	05/08/25 17:45	1
2-Chlorophenol	ND		400	38	ug/Kg	☼	05/07/25 13:55	05/08/25 17:45	1
2-Methylnaphthalene	**140**	**J**	210	42	ug/Kg	☼	05/07/25 13:55	05/08/25 17:45	1
2-Methylphenol	ND		210	24	ug/Kg	☼	05/07/25 13:55	05/08/25 17:45	1
2-Nitroaniline	ND		400	31	ug/Kg	☼	05/07/25 13:55	05/08/25 17:45	1
2-Nitrophenol	ND		210	59	ug/Kg	☼	05/07/25 13:55	05/08/25 17:45	1
3,3'-Dichlorobenzidine	ND		400	240	ug/Kg	☼	05/07/25 13:55	05/08/25 17:45	1
3-Nitroaniline	ND		400	58	ug/Kg	☼	05/07/25 13:55	05/08/25 17:45	1
4,6-Dinitro-2-methylphenol	ND		400	210	ug/Kg	☼	05/07/25 13:55	05/08/25 17:45	1
4-Bromophenyl phenyl ether	ND		210	29	ug/Kg	☼	05/07/25 13:55	05/08/25 17:45	1
4-Chloro-3-methylphenol	ND		210	51	ug/Kg	☼	05/07/25 13:55	05/08/25 17:45	1
4-Chloroaniline	ND		210	51	ug/Kg	☼	05/07/25 13:55	05/08/25 17:45	1
4-Chlorophenyl phenyl ether	ND		210	26	ug/Kg	☼	05/07/25 13:55	05/08/25 17:45	1
4-Methylphenol	ND		400	24	ug/Kg	☼	05/07/25 13:55	05/08/25 17:45	1
4-Nitroaniline	ND		400	110	ug/Kg	☼	05/07/25 13:55	05/08/25 17:45	1
4-Nitrophenol	ND		400	150	ug/Kg	☼	05/07/25 13:55	05/08/25 17:45	1
Acenaphthene	**48**	**J**	210	31	ug/Kg	☼	05/07/25 13:55	05/08/25 17:45	1
Acenaphthylene	ND		210	27	ug/Kg	☼	05/07/25 13:55	05/08/25 17:45	1
Acetophenone	ND		210	28	ug/Kg	☼	05/07/25 13:55	05/08/25 17:45	1
Anthracene	**55**	**J**	210	51	ug/Kg	☼	05/07/25 13:55	05/08/25 17:45	1
Atrazine	ND		210	72	ug/Kg	☼	05/07/25 13:55	05/08/25 17:45	1
Benzaldehyde	ND		210	170	ug/Kg	☼	05/07/25 13:55	05/08/25 17:45	1
Benzo[a]anthracene	**410**		210	21	ug/Kg	☼	05/07/25 13:55	05/08/25 17:45	1
Benzo[a]pyrene	**1500**		210	31	ug/Kg	☼	05/07/25 13:55	05/08/25 17:45	1
Benzo[b]fluoranthene	**1000**		210	33	ug/Kg	☼	05/07/25 13:55	05/08/25 17:45	1
Benzo[g,h,i]perylene	**2700**		210	22	ug/Kg	☼	05/07/25 13:55	05/08/25 17:45	1
Benzo[k]fluoranthene	**340**		210	27	ug/Kg	☼	05/07/25 13:55	05/08/25 17:45	1
Biphenyl	ND		210	31	ug/Kg	☼	05/07/25 13:55	05/08/25 17:45	1
bis (2-chloroisopropyl) ether	ND		210	42	ug/Kg	☼	05/07/25 13:55	05/08/25 17:45	1
Bis(2-chloroethoxy)methane	ND		210	44	ug/Kg	☼	05/07/25 13:55	05/08/25 17:45	1
Bis(2-chloroethyl)ether	ND		210	27	ug/Kg	☼	05/07/25 13:55	05/08/25 17:45	1
Bis(2-ethylhexyl) phthalate	ND		210	71	ug/Kg	☼	05/07/25 13:55	05/08/25 17:45	1
Butyl benzyl phthalate	ND		210	34	ug/Kg	☼	05/07/25 13:55	05/08/25 17:45	1
Caprolactam	ND		210	62	ug/Kg	☼	05/07/25 13:55	05/08/25 17:45	1
Carbazole	ND		210	24	ug/Kg	☼	05/07/25 13:55	05/08/25 17:45	1
Chrysene	**440**		210	47	ug/Kg	☼	05/07/25 13:55	05/08/25 17:45	1
Dibenz(a,h)anthracene	**350**		210	37	ug/Kg	☼	05/07/25 13:55	05/08/25 17:45	1
Dibenzofuran	**40**	**J**	210	24	ug/Kg	☼	05/07/25 13:55	05/08/25 17:45	1
Diethyl phthalate	ND		210	27	ug/Kg	☼	05/07/25 13:55	05/08/25 17:45	1
Dimethyl phthalate	ND		210	24	ug/Kg	☼	05/07/25 13:55	05/08/25 17:45	1
Di-n-butyl phthalate	ND		210	35	ug/Kg	☼	05/07/25 13:55	05/08/25 17:45	1

Client Sample ID: MW-5 0.33-0.75 Ft
Lab Sample ID: 480-229031-3
Date Collected: 04/27/25 10:30
Matrix: Solid
Date Received: 04/28/25 16:25
Percent Solids: 81.5

Method: SW846 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate	ND		210	24	ug/Kg	☼	05/07/25 13:55	05/08/25 17:45	1
Fluoranthene	**340**		210	22	ug/Kg	☼	05/07/25 13:55	05/08/25 17:45	1
Fluorene	ND		210	24	ug/Kg	☼	05/07/25 13:55	05/08/25 17:45	1
Hexachlorobenzene	ND		210	28	ug/Kg	☼	05/07/25 13:55	05/08/25 17:45	1
Hexachlorobutadiene	ND		210	31	ug/Kg	☼	05/07/25 13:55	05/08/25 17:45	1
Hexachlorocyclopentadiene	ND		210	28	ug/Kg	☼	05/07/25 13:55	05/08/25 17:45	1
Hexachloroethane	ND		210	27	ug/Kg	☼	05/07/25 13:55	05/08/25 17:45	1
Indeno[1,2,3-cd]pyrene	**1200**		210	26	ug/Kg	☼	05/07/25 13:55	05/08/25 17:45	1
Isophorone	ND		210	44	ug/Kg	☼	05/07/25 13:55	05/08/25 17:45	1
Naphthalene	**130**	**J**	210	27	ug/Kg	☼	05/07/25 13:55	05/08/25 17:45	1
Nitrobenzene	ND		210	23	ug/Kg	☼	05/07/25 13:55	05/08/25 17:45	1
N-Nitrosodi-n-propylamine	ND		210	35	ug/Kg	☼	05/07/25 13:55	05/08/25 17:45	1
N-Nitrosodiphenylamine	ND		210	170	ug/Kg	☼	05/07/25 13:55	05/08/25 17:45	1
Pentachlorophenol	ND		400	210	ug/Kg	☼	05/07/25 13:55	05/08/25 17:45	1
Phenanthrene	**320**		210	31	ug/Kg	☼	05/07/25 13:55	05/08/25 17:45	1
Phenol	ND		210	32	ug/Kg	☼	05/07/25 13:55	05/08/25 17:45	1
Pyrene	**520**		210	24	ug/Kg	☼	05/07/25 13:55	05/08/25 17:45	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Unknown	*2400*	*T J*	*ug/Kg*	☼	*1.87*	*N/A*	*05/07/25 13:55*	*05/08/25 17:45*	*1*
Unknown	*4500*	*T J*	*ug/Kg*	☼	*1.99*	*N/A*	*05/07/25 13:55*	*05/08/25 17:45*	*1*
Unknown	*620*	*T J*	*ug/Kg*	☼	*2.70*	*N/A*	*05/07/25 13:55*	*05/08/25 17:45*	*1*
Unknown	*550*	*T J*	*ug/Kg*	☼	*3.01*	*N/A*	*05/07/25 13:55*	*05/08/25 17:45*	*1*
Unknown	*790*	*T J*	*ug/Kg*	☼	*3.21*	*N/A*	*05/07/25 13:55*	*05/08/25 17:45*	*1*
Unknown	*2100*	*T J*	*ug/Kg*	☼	*3.45*	*N/A*	*05/07/25 13:55*	*05/08/25 17:45*	*1*
Unknown	*700*	*T J*	*ug/Kg*	☼	*4.11*	*N/A*	*05/07/25 13:55*	*05/08/25 17:45*	*1*
Unknown	*2300*	*T J*	*ug/Kg*	☼	*4.58*	*N/A*	*05/07/25 13:55*	*05/08/25 17:45*	*1*
Unknown	*590*	*T J*	*ug/Kg*	☼	*4.62*	*N/A*	*05/07/25 13:55*	*05/08/25 17:45*	*1*
Unknown	*300*	*T J*	*ug/Kg*	☼	*4.75*	*N/A*	*05/07/25 13:55*	*05/08/25 17:45*	*1*
Unknown	*1300*	*T J*	*ug/Kg*	☼	*4.94*	*N/A*	*05/07/25 13:55*	*05/08/25 17:45*	*1*
Unknown	*1500*	*T J*	*ug/Kg*	☼	*4.97*	*N/A*	*05/07/25 13:55*	*05/08/25 17:45*	*1*
Perylene	*950*	*T J N*	*ug/Kg*	☼	*14.41*	*198-55-0*	*05/07/25 13:55*	*05/08/25 17:45*	*1*
Benzo[e]pyrene	*420*	*T J N*	*ug/Kg*	☼	*14.52*	*192-97-2*	*05/07/25 13:55*	*05/08/25 17:45*	*1*
Unknown	*420*	*T J*	*ug/Kg*	☼	*15.57*	*N/A*	*05/07/25 13:55*	*05/08/25 17:45*	*1*
Dibenzo[def,mno]chrysene	*880*	*T J N*	*ug/Kg*	☼	*15.84*	*191-26-4*	*05/07/25 13:55*	*05/08/25 17:45*	*1*
Unknown	*330*	*T J*	*ug/Kg*	☼	*16.14*	*N/A*	*05/07/25 13:55*	*05/08/25 17:45*	*1*
Benzo[ghi]perylene, 4-methyl-	*350*	*T J N*	*ug/Kg*	☼	*16.36*	*19224-38-5*	*05/07/25 13:55*	*05/08/25 17:45*	*1*
1,2:3,4-Dibenzopyrene	*850*	*T J N*	*ug/Kg*	☼	*16.95*	*191-30-0*	*05/07/25 13:55*	*05/08/25 17:45*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol (Surr)	*107*		*26 - 143*	*05/07/25 13:55*	*05/08/25 17:45*	*1*
2-Fluorobiphenyl (Surr)	*102*		*50 - 121*	*05/07/25 13:55*	*05/08/25 17:45*	*1*
2-Fluorophenol (Surr)	*89*		*36 - 120*	*05/07/25 13:55*	*05/08/25 17:45*	*1*
Nitrobenzene-d5 (Surr)	*95*		*40 - 121*	*05/07/25 13:55*	*05/08/25 17:45*	*1*
Phenol-d5 (Surr)	*93*		*41 - 120*	*05/07/25 13:55*	*05/08/25 17:45*	*1*
p-Terphenyl-d14 (Surr)	*103*		*46 - 143*	*05/07/25 13:55*	*05/08/25 17:45*	*1*

Method: SW846 6010D - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**4960**		12.7	10.9	mg/Kg	☼	04/30/25 14:51	04/30/25 20:13	1

Client Sample ID: MW-5 0.33-0.75 Ft
Lab Sample ID: 480-229031-3
Date Collected: 04/27/25 10:30
Matrix: Solid
Date Received: 04/28/25 16:25
Percent Solids: 81.5

Method: SW846 6010D - Metals (ICP) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		19.0	0.67	mg/Kg	☼	04/30/25 14:51	04/30/25 20:13	1
Arsenic	**10.8**		2.5	1.1	mg/Kg	☼	04/30/25 14:51	04/30/25 20:13	1
Barium	**80.1**		0.63	0.18	mg/Kg	☼	04/30/25 14:51	04/30/25 20:13	1
Beryllium	**0.92**		0.25	0.051	mg/Kg	☼	04/30/25 14:51	04/30/25 20:13	1
Cadmium	**0.14**	**J**	0.25	0.089	mg/Kg	☼	04/30/25 14:51	04/30/25 20:13	1
Calcium	**18000**		63.5	34.3	mg/Kg	☼	04/30/25 14:51	04/30/25 20:13	1
Chromium	**8.4**		0.63	0.46	mg/Kg	☼	04/30/25 14:51	04/30/25 20:13	1
Cobalt	**7.1**	**^5+**	0.63	0.13	mg/Kg	☼	04/30/25 14:51	04/30/25 20:13	1
Copper	**21.5**		1.3	0.72	mg/Kg	☼	04/30/25 14:51	04/30/25 20:13	1
Iron	**8700**		12.7	10.8	mg/Kg	☼	04/30/25 14:51	04/30/25 20:13	1
Lead	**16.9**		1.3	0.58	mg/Kg	☼	04/30/25 14:51	04/30/25 20:13	1
Magnesium	**1380**		25.4	10.8	mg/Kg	☼	04/30/25 14:51	04/30/25 20:13	1
Manganese	**93.6**		1.3	0.36	mg/Kg	☼	04/30/25 14:51	04/30/25 20:13	1
Nickel	**15.0**		6.3	0.32	mg/Kg	☼	04/30/25 14:51	04/30/25 20:13	1
Potassium	**545**		38.1	30.8	mg/Kg	☼	04/30/25 14:51	04/30/25 20:13	1
Selenium	**1.5**	**J**	5.1	1.0	mg/Kg	☼	04/30/25 14:51	04/30/25 20:13	1
Silver	ND	^5-	0.76	0.25	mg/Kg	☼	04/30/25 14:51	04/30/25 20:13	1
Sodium	**219**		178	77.8	mg/Kg	☼	04/30/25 14:51	04/30/25 20:13	1
Thallium	ND		7.6	0.96	mg/Kg	☼	04/30/25 14:51	04/30/25 20:13	1
Vanadium	**20.3**		0.63	0.17	mg/Kg	☼	04/30/25 14:51	04/30/25 20:13	1
Zinc	**25.3**		2.5	1.3	mg/Kg	☼	04/30/25 14:51	04/30/25 20:13	1

Method: SW846 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**1.9**		0.025	0.0057	mg/Kg	☼	05/02/25 09:11	05/02/25 11:25	1

Client: Roux Environmental Engineering and Geology DPC
Job ID: 480-229031-1
Project/Site: BCP RI - 619 Exchange Street Site

Client Sample ID: MW-4 0.25-1 Ft
Lab Sample ID: 480-229031-4
Date Collected: 04/27/25 11:00
Matrix: Solid
Date Received: 04/28/25 16:25
Percent Solids: 81.2

Method: SW846 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		5.0	0.36	ug/Kg	☼	04/28/25 17:10	04/29/25 03:48	1
1,1,2,2-Tetrachloroethane	ND		5.0	0.80	ug/Kg	☼	04/28/25 17:10	04/29/25 03:48	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		5.0	1.1	ug/Kg	☼	04/28/25 17:10	04/29/25 03:48	1
1,1,2-Trichloroethane	ND		5.0	0.64	ug/Kg	☼	04/28/25 17:10	04/29/25 03:48	1
1,1-Dichloroethane	ND		5.0	0.60	ug/Kg	☼	04/28/25 17:10	04/29/25 03:48	1
1,1-Dichloroethene	ND		5.0	0.61	ug/Kg	☼	04/28/25 17:10	04/29/25 03:48	1
1,2,4-Trichlorobenzene	ND		5.0	0.30	ug/Kg	☼	04/28/25 17:10	04/29/25 03:48	1
1,2,4-Trimethylbenzene	ND		5.0	0.95	ug/Kg	☼	04/28/25 17:10	04/29/25 03:48	1
1,2-Dibromo-3-Chloropropane	ND		5.0	2.5	ug/Kg	☼	04/28/25 17:10	04/29/25 03:48	1
1,2-Dibromoethane	ND		5.0	0.64	ug/Kg	☼	04/28/25 17:10	04/29/25 03:48	1
1,2-Dichlorobenzene	ND		5.0	0.39	ug/Kg	☼	04/28/25 17:10	04/29/25 03:48	1
1,2-Dichloroethane	ND		5.0	0.25	ug/Kg	☼	04/28/25 17:10	04/29/25 03:48	1
1,2-Dichloropropane	ND		5.0	2.5	ug/Kg	☼	04/28/25 17:10	04/29/25 03:48	1
1,3,5-Trimethylbenzene	ND		5.0	0.32	ug/Kg	☼	04/28/25 17:10	04/29/25 03:48	1
1,3-Dichlorobenzene	ND		5.0	0.25	ug/Kg	☼	04/28/25 17:10	04/29/25 03:48	1
1,4-Dichlorobenzene	ND		5.0	0.69	ug/Kg	☼	04/28/25 17:10	04/29/25 03:48	1
2-Butanone (MEK)	ND		25	1.8	ug/Kg	☼	04/28/25 17:10	04/29/25 03:48	1
2-Hexanone	ND		25	2.5	ug/Kg	☼	04/28/25 17:10	04/29/25 03:48	1
4-Isopropyltoluene	ND		5.0	0.40	ug/Kg	☼	04/28/25 17:10	04/29/25 03:48	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.6	ug/Kg	☼	04/28/25 17:10	04/29/25 03:48	1
Acetone	ND		25	4.2	ug/Kg	☼	04/28/25 17:10	04/29/25 03:48	1
Benzene	ND		5.0	0.24	ug/Kg	☼	04/28/25 17:10	04/29/25 03:48	1
Bromodichloromethane	ND		5.0	0.66	ug/Kg	☼	04/28/25 17:10	04/29/25 03:48	1
Bromoform	ND		5.0	2.5	ug/Kg	☼	04/28/25 17:10	04/29/25 03:48	1
Bromomethane	ND		5.0	0.45	ug/Kg	☼	04/28/25 17:10	04/29/25 03:48	1
Carbon disulfide	ND		5.0	2.5	ug/Kg	☼	04/28/25 17:10	04/29/25 03:48	1
Carbon tetrachloride	ND		5.0	0.48	ug/Kg	☼	04/28/25 17:10	04/29/25 03:48	1
Chlorobenzene	ND		5.0	0.65	ug/Kg	☼	04/28/25 17:10	04/29/25 03:48	1
Chloroethane	ND		5.0	1.1	ug/Kg	☼	04/28/25 17:10	04/29/25 03:48	1
Chloroform	1.2	J B	5.0	0.31	ug/Kg	☼	04/28/25 17:10	04/29/25 03:48	1
Chloromethane	ND		5.0	0.30	ug/Kg	☼	04/28/25 17:10	04/29/25 03:48	1
cis-1,2-Dichloroethene	ND		5.0	0.63	ug/Kg	☼	04/28/25 17:10	04/29/25 03:48	1
cis-1,3-Dichloropropene	ND		5.0	0.71	ug/Kg	☼	04/28/25 17:10	04/29/25 03:48	1
Cyclohexane	ND		5.0	0.69	ug/Kg	☼	04/28/25 17:10	04/29/25 03:48	1
Dibromochloromethane	ND		5.0	0.63	ug/Kg	☼	04/28/25 17:10	04/29/25 03:48	1
Dichlorodifluoromethane	ND		5.0	0.41	ug/Kg	☼	04/28/25 17:10	04/29/25 03:48	1
Ethylbenzene	ND		5.0	0.34	ug/Kg	☼	04/28/25 17:10	04/29/25 03:48	1
Isopropylbenzene	ND		5.0	0.75	ug/Kg	☼	04/28/25 17:10	04/29/25 03:48	1
Methyl acetate	ND		25	3.0	ug/Kg	☼	04/28/25 17:10	04/29/25 03:48	1
Methyl tert-butyl ether	ND		5.0	0.49	ug/Kg	☼	04/28/25 17:10	04/29/25 03:48	1
Methylcyclohexane	ND		5.0	0.75	ug/Kg	☼	04/28/25 17:10	04/29/25 03:48	1
Methylene Chloride	ND		5.0	2.3	ug/Kg	☼	04/28/25 17:10	04/29/25 03:48	1
Naphthalene	ND		5.0	0.66	ug/Kg	☼	04/28/25 17:10	04/29/25 03:48	1
n-Butylbenzene	ND		5.0	0.43	ug/Kg	☼	04/28/25 17:10	04/29/25 03:48	1
N-Propylbenzene	ND		5.0	0.40	ug/Kg	☼	04/28/25 17:10	04/29/25 03:48	1
sec-Butylbenzene	ND		5.0	0.43	ug/Kg	☼	04/28/25 17:10	04/29/25 03:48	1
Styrene	ND		5.0	0.25	ug/Kg	☼	04/28/25 17:10	04/29/25 03:48	1
tert-Butylbenzene	ND		5.0	0.52	ug/Kg	☼	04/28/25 17:10	04/29/25 03:48	1
Tetrachloroethene	ND		5.0	0.67	ug/Kg	☼	04/28/25 17:10	04/29/25 03:48	1

Client Sample ID: MW-4 0.25-1 Ft
Lab Sample ID: 480-229031-4
Date Collected: 04/27/25 11:00
Matrix: Solid
Date Received: 04/28/25 16:25
Percent Solids: 81.2

Method: SW846 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Toluene	ND		5.0	0.37	ug/Kg	☼	04/28/25 17:10	04/29/25 03:48	1
trans-1,2-Dichloroethene	ND		5.0	0.51	ug/Kg	☼	04/28/25 17:10	04/29/25 03:48	1
trans-1,3-Dichloropropene	ND		5.0	2.2	ug/Kg	☼	04/28/25 17:10	04/29/25 03:48	1
Trichloroethene	ND		5.0	1.1	ug/Kg	☼	04/28/25 17:10	04/29/25 03:48	1
Trichlorofluoromethane	ND		5.0	0.47	ug/Kg	☼	04/28/25 17:10	04/29/25 03:48	1
Vinyl chloride	ND		5.0	0.60	ug/Kg	☼	04/28/25 17:10	04/29/25 03:48	1
Xylenes, Total	ND		9.9	0.83	ug/Kg	☼	04/28/25 17:10	04/29/25 03:48	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/Kg*	☼		*N/A*	*04/28/25 17:10*	*04/29/25 03:48*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*103*		*64 - 126*	*04/28/25 17:10*	*04/29/25 03:48*	*1*
4-Bromofluorobenzene (Surr)	*101*		*72 - 126*	*04/28/25 17:10*	*04/29/25 03:48*	*1*
Dibromofluoromethane (Surr)	*106*		*60 - 140*	*04/28/25 17:10*	*04/29/25 03:48*	*1*
Toluene-d8 (Surr)	*99*		*71 - 125*	*04/28/25 17:10*	*04/29/25 03:48*	*1*

Method: SW846 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	ND		120	67	ug/Kg	☼	05/07/25 13:55	05/08/25 18:11	1
2,4,5-Trichlorophenol	ND		210	56	ug/Kg	☼	05/07/25 13:55	05/08/25 18:11	1
2,4,6-Trichlorophenol	ND		210	41	ug/Kg	☼	05/07/25 13:55	05/08/25 18:11	1
2,4-Dichlorophenol	ND		210	22	ug/Kg	☼	05/07/25 13:55	05/08/25 18:11	1
2,4-Dimethylphenol	ND		210	50	ug/Kg	☼	05/07/25 13:55	05/08/25 18:11	1
2,4-Dinitrophenol	ND		2000	960	ug/Kg	☼	05/07/25 13:55	05/08/25 18:11	1
2,4-Dinitrotoluene	ND		210	43	ug/Kg	☼	05/07/25 13:55	05/08/25 18:11	1
2,6-Dinitrotoluene	ND		210	24	ug/Kg	☼	05/07/25 13:55	05/08/25 18:11	1
2-Chloronaphthalene	ND		210	34	ug/Kg	☼	05/07/25 13:55	05/08/25 18:11	1
2-Chlorophenol	ND		400	38	ug/Kg	☼	05/07/25 13:55	05/08/25 18:11	1
2-Methylnaphthalene	**52**	**J**	210	41	ug/Kg	☼	05/07/25 13:55	05/08/25 18:11	1
2-Methylphenol	ND		210	24	ug/Kg	☼	05/07/25 13:55	05/08/25 18:11	1
2-Nitroaniline	ND		400	30	ug/Kg	☼	05/07/25 13:55	05/08/25 18:11	1
2-Nitrophenol	ND		210	59	ug/Kg	☼	05/07/25 13:55	05/08/25 18:11	1
3,3'-Dichlorobenzidine	ND		400	240	ug/Kg	☼	05/07/25 13:55	05/08/25 18:11	1
3-Nitroaniline	ND		400	57	ug/Kg	☼	05/07/25 13:55	05/08/25 18:11	1
4,6-Dinitro-2-methylphenol	ND		400	210	ug/Kg	☼	05/07/25 13:55	05/08/25 18:11	1
4-Bromophenyl phenyl ether	ND		210	29	ug/Kg	☼	05/07/25 13:55	05/08/25 18:11	1
4-Chloro-3-methylphenol	ND		210	51	ug/Kg	☼	05/07/25 13:55	05/08/25 18:11	1
4-Chloroaniline	ND		210	51	ug/Kg	☼	05/07/25 13:55	05/08/25 18:11	1
4-Chlorophenyl phenyl ether	ND		210	26	ug/Kg	☼	05/07/25 13:55	05/08/25 18:11	1
4-Methylphenol	ND		400	24	ug/Kg	☼	05/07/25 13:55	05/08/25 18:11	1
4-Nitroaniline	ND		400	110	ug/Kg	☼	05/07/25 13:55	05/08/25 18:11	1
4-Nitrophenol	ND		400	150	ug/Kg	☼	05/07/25 13:55	05/08/25 18:11	1
Acenaphthene	ND		210	30	ug/Kg	☼	05/07/25 13:55	05/08/25 18:11	1
Acenaphthylene	ND		210	27	ug/Kg	☼	05/07/25 13:55	05/08/25 18:11	1
Acetophenone	ND		210	28	ug/Kg	☼	05/07/25 13:55	05/08/25 18:11	1
Anthracene	ND		210	51	ug/Kg	☼	05/07/25 13:55	05/08/25 18:11	1
Atrazine	ND		210	72	ug/Kg	☼	05/07/25 13:55	05/08/25 18:11	1
Benzaldehyde	ND		210	160	ug/Kg	☼	05/07/25 13:55	05/08/25 18:11	1
Benzo[a]anthracene	**29**	**J**	210	21	ug/Kg	☼	05/07/25 13:55	05/08/25 18:11	1

Client Sample ID: MW-4 0.25-1 Ft
Lab Sample ID: 480-229031-4
Date Collected: 04/27/25 11:00
Matrix: Solid
Date Received: 04/28/25 16:25
Percent Solids: 81.2

Method: SW846 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[a]pyrene	ND		210	30	ug/Kg	☼	05/07/25 13:55	05/08/25 18:11	1
Benzo[b]fluoranthene	**40**	**J**	210	33	ug/Kg	☼	05/07/25 13:55	05/08/25 18:11	1
Benzo[g,h,i]perylene	**25**	**J**	210	22	ug/Kg	☼	05/07/25 13:55	05/08/25 18:11	1
Benzo[k]fluoranthene	ND		210	27	ug/Kg	☼	05/07/25 13:55	05/08/25 18:11	1
Biphenyl	ND		210	30	ug/Kg	☼	05/07/25 13:55	05/08/25 18:11	1
bis (2-chloroisopropyl) ether	ND		210	41	ug/Kg	☼	05/07/25 13:55	05/08/25 18:11	1
Bis(2-chloroethoxy)methane	ND		210	44	ug/Kg	☼	05/07/25 13:55	05/08/25 18:11	1
Bis(2-chloroethyl)ether	ND		210	27	ug/Kg	☼	05/07/25 13:55	05/08/25 18:11	1
Bis(2-ethylhexyl) phthalate	**120**	**J**	210	71	ug/Kg	☼	05/07/25 13:55	05/08/25 18:11	1
Butyl benzyl phthalate	ND		210	34	ug/Kg	☼	05/07/25 13:55	05/08/25 18:11	1
Caprolactam	ND		210	62	ug/Kg	☼	05/07/25 13:55	05/08/25 18:11	1
Carbazole	ND		210	24	ug/Kg	☼	05/07/25 13:55	05/08/25 18:11	1
Chrysene	**47**	**J**	210	46	ug/Kg	☼	05/07/25 13:55	05/08/25 18:11	1
Dibenz(a,h)anthracene	ND		210	37	ug/Kg	☼	05/07/25 13:55	05/08/25 18:11	1
Dibenzofuran	ND		210	24	ug/Kg	☼	05/07/25 13:55	05/08/25 18:11	1
Diethyl phthalate	ND		210	27	ug/Kg	☼	05/07/25 13:55	05/08/25 18:11	1
Dimethyl phthalate	ND		210	24	ug/Kg	☼	05/07/25 13:55	05/08/25 18:11	1
Di-n-butyl phthalate	ND		210	35	ug/Kg	☼	05/07/25 13:55	05/08/25 18:11	1
Di-n-octyl phthalate	ND		210	24	ug/Kg	☼	05/07/25 13:55	05/08/25 18:11	1
Fluoranthene	**46**	**J**	210	22	ug/Kg	☼	05/07/25 13:55	05/08/25 18:11	1
Fluorene	ND		210	24	ug/Kg	☼	05/07/25 13:55	05/08/25 18:11	1
Hexachlorobenzene	ND		210	28	ug/Kg	☼	05/07/25 13:55	05/08/25 18:11	1
Hexachlorobutadiene	ND		210	30	ug/Kg	☼	05/07/25 13:55	05/08/25 18:11	1
Hexachlorocyclopentadiene	ND		210	28	ug/Kg	☼	05/07/25 13:55	05/08/25 18:11	1
Hexachloroethane	ND		210	27	ug/Kg	☼	05/07/25 13:55	05/08/25 18:11	1
Indeno[1,2,3-cd]pyrene	ND		210	26	ug/Kg	☼	05/07/25 13:55	05/08/25 18:11	1
Isophorone	ND		210	44	ug/Kg	☼	05/07/25 13:55	05/08/25 18:11	1
Naphthalene	ND		210	27	ug/Kg	☼	05/07/25 13:55	05/08/25 18:11	1
Nitrobenzene	ND		210	23	ug/Kg	☼	05/07/25 13:55	05/08/25 18:11	1
N-Nitrosodi-n-propylamine	ND		210	35	ug/Kg	☼	05/07/25 13:55	05/08/25 18:11	1
N-Nitrosodiphenylamine	ND		210	170	ug/Kg	☼	05/07/25 13:55	05/08/25 18:11	1
Pentachlorophenol	ND		400	210	ug/Kg	☼	05/07/25 13:55	05/08/25 18:11	1
Phenanthrene	**94**	**J**	210	30	ug/Kg	☼	05/07/25 13:55	05/08/25 18:11	1
Phenol	ND		210	32	ug/Kg	☼	05/07/25 13:55	05/08/25 18:11	1
Pyrene	**45**	**J**	210	24	ug/Kg	☼	05/07/25 13:55	05/08/25 18:11	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Unknown	*2700*	*T J*	*ug/Kg*	☼	*1.99*	*N/A*	*05/07/25 13:55*	*05/08/25 18:11*	*1*
Unknown	*190*	*T J*	*ug/Kg*	☼	*2.70*	*N/A*	*05/07/25 13:55*	*05/08/25 18:11*	*1*
Unknown	*390*	*T J*	*ug/Kg*	☼	*3.01*	*N/A*	*05/07/25 13:55*	*05/08/25 18:11*	*1*
Unknown	*360*	*T J*	*ug/Kg*	☼	*3.22*	*N/A*	*05/07/25 13:55*	*05/08/25 18:11*	*1*
Unknown	*1400*	*T J*	*ug/Kg*	☼	*3.45*	*N/A*	*05/07/25 13:55*	*05/08/25 18:11*	*1*
Unknown	*490*	*T J*	*ug/Kg*	☼	*4.11*	*N/A*	*05/07/25 13:55*	*05/08/25 18:11*	*1*
Unknown	*170*	*T J*	*ug/Kg*	☼	*4.39*	*N/A*	*05/07/25 13:55*	*05/08/25 18:11*	*1*
Unknown	*1600*	*T J*	*ug/Kg*	☼	*4.58*	*N/A*	*05/07/25 13:55*	*05/08/25 18:11*	*1*
Unknown	*400*	*T J*	*ug/Kg*	☼	*4.62*	*N/A*	*05/07/25 13:55*	*05/08/25 18:11*	*1*
Unknown	*220*	*T J*	*ug/Kg*	☼	*4.75*	*N/A*	*05/07/25 13:55*	*05/08/25 18:11*	*1*
Unknown	*930*	*T J*	*ug/Kg*	☼	*4.94*	*N/A*	*05/07/25 13:55*	*05/08/25 18:11*	*1*
Unknown	*1000*	*T J*	*ug/Kg*	☼	*4.97*	*N/A*	*05/07/25 13:55*	*05/08/25 18:11*	*1*
Pentadecane, 2,6,10,14-tetramethyl-	*310*	*T J N*	*ug/Kg*	☼	*10.43*	*1921-70-6*	*05/07/25 13:55*	*05/08/25 18:11*	*1*

Client Sample ID: MW-4 0.25-1 Ft
Lab Sample ID: 480-229031-4
Date Collected: 04/27/25 11:00
Matrix: Solid
Date Received: 04/28/25 16:25
Percent Solids: 81.2

Method: SW846 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Tentatively Identified Compound	Est. Result	Qualifier	Unit	D	RT	CAS No.	Prepared	Analyzed	Dil Fac
Unknown	180	T J	ug/Kg	☼	12.58	N/A	05/07/25 13:55	05/08/25 18:11	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol (Surr)	91		26 - 143	05/07/25 13:55	05/08/25 18:11	1
2-Fluorobiphenyl (Surr)	81		50 - 121	05/07/25 13:55	05/08/25 18:11	1
2-Fluorophenol (Surr)	60		36 - 120	05/07/25 13:55	05/08/25 18:11	1
Nitrobenzene-d5 (Surr)	69		40 - 121	05/07/25 13:55	05/08/25 18:11	1
Phenol-d5 (Surr)	66		41 - 120	05/07/25 13:55	05/08/25 18:11	1
p-Terphenyl-d14 (Surr)	97		46 - 143	05/07/25 13:55	05/08/25 18:11	1

Method: SW846 8081B - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	**10**	**J**	39	7.6	ug/Kg	☼	05/01/25 06:41	05/01/25 18:23	10
4,4'-DDE	ND		39	8.3	ug/Kg	☼	05/01/25 06:41	05/01/25 18:23	10
4,4'-DDT	**31**	**J B**	39	9.2	ug/Kg	☼	05/01/25 06:41	05/01/25 18:23	10
Aldrin	ND		39	9.7	ug/Kg	☼	05/01/25 06:41	05/01/25 18:23	10
alpha-BHC	ND		39	7.1	ug/Kg	☼	05/01/25 06:41	05/01/25 18:23	10
cis-Chlordane	ND		39	20	ug/Kg	☼	05/01/25 06:41	05/01/25 18:23	10
beta-BHC	ND		39	7.1	ug/Kg	☼	05/01/25 06:41	05/01/25 18:23	10
delta-BHC	ND		39	7.3	ug/Kg	☼	05/01/25 06:41	05/01/25 18:23	10
Dieldrin	ND		39	9.4	ug/Kg	☼	05/01/25 06:41	05/01/25 18:23	10
Endosulfan I	ND		39	7.6	ug/Kg	☼	05/01/25 06:41	05/01/25 18:23	10
Endosulfan II	ND		39	7.1	ug/Kg	☼	05/01/25 06:41	05/01/25 18:23	10
Endosulfan sulfate	ND		39	7.3	ug/Kg	☼	05/01/25 06:41	05/01/25 18:23	10
Endrin	ND		39	7.8	ug/Kg	☼	05/01/25 06:41	05/01/25 18:23	10
Endrin aldehyde	ND		39	10	ug/Kg	☼	05/01/25 06:41	05/01/25 18:23	10
Endrin ketone	ND		39	9.7	ug/Kg	☼	05/01/25 06:41	05/01/25 18:23	10
gamma-BHC (Lindane)	ND		39	7.2	ug/Kg	☼	05/01/25 06:41	05/01/25 18:23	10
trans-Chlordane	ND		39	13	ug/Kg	☼	05/01/25 06:41	05/01/25 18:23	10
Heptachlor	ND		39	8.5	ug/Kg	☼	05/01/25 06:41	05/01/25 18:23	10
Heptachlor epoxide	ND		39	10	ug/Kg	☼	05/01/25 06:41	05/01/25 18:23	10
Methoxychlor	**56**	**B**	39	8.0	ug/Kg	☼	05/01/25 06:41	05/01/25 18:23	10
Toxaphene	ND		390	230	ug/Kg	☼	05/01/25 06:41	05/01/25 18:23	10

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
DCB Decachlorobiphenyl	210	S1+	45 - 120	05/01/25 06:41	05/01/25 18:23	10
DCB Decachlorobiphenyl	182	S1+	45 - 120	05/01/25 06:41	05/01/25 18:23	10
Tetrachloro-m-xylene	157	S1+	30 - 124	05/01/25 06:41	05/01/25 18:23	10
Tetrachloro-m-xylene	105		30 - 124	05/01/25 06:41	05/01/25 18:23	10

Method: SW846 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		0.29	0.057	mg/Kg	☼	04/29/25 08:37	04/29/25 15:22	1
PCB-1221	ND		0.29	0.057	mg/Kg	☼	04/29/25 08:37	04/29/25 15:22	1
PCB-1232	ND		0.29	0.057	mg/Kg	☼	04/29/25 08:37	04/29/25 15:22	1
PCB-1242	ND		0.29	0.057	mg/Kg	☼	04/29/25 08:37	04/29/25 15:22	1
PCB-1248	ND		0.29	0.057	mg/Kg	☼	04/29/25 08:37	04/29/25 15:22	1
PCB-1254	ND		0.29	0.14	mg/Kg	☼	04/29/25 08:37	04/29/25 15:22	1
PCB-1260	ND		0.29	0.14	mg/Kg	☼	04/29/25 08:37	04/29/25 15:22	1

Client Sample ID: MW-4 0.25-1 Ft
Lab Sample ID: 480-229031-4
Date Collected: 04/27/25 11:00
Matrix: Solid
Date Received: 04/28/25 16:25
Percent Solids: 81.2

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	*124*		*60 - 154*	*04/29/25 08:37*	*04/29/25 15:22*	*1*
Tetrachloro-m-xylene	*116*		*60 - 154*	*04/29/25 08:37*	*04/29/25 15:22*	*1*
DCB Decachlorobiphenyl	*112*		*65 - 174*	*04/29/25 08:37*	*04/29/25 15:22*	*1*
DCB Decachlorobiphenyl	*109*		*65 - 174*	*04/29/25 08:37*	*04/29/25 15:22*	*1*

Method: SW846 8151A - Herbicides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-T	ND		20	6.4	ug/Kg	☼	05/01/25 06:27	05/08/25 16:05	1
2,4-D	ND		20	13	ug/Kg	☼	05/01/25 06:27	05/08/25 16:05	1
Dichlorprop	ND		20	10	ug/Kg	☼	05/01/25 06:27	05/08/25 16:05	1
Pentachlorophenol	**7.3**	**J**	20	6.5	ug/Kg	☼	05/01/25 06:27	05/08/25 16:05	1
Picloram	ND		20	8.6	ug/Kg	☼	05/01/25 06:27	05/08/25 16:05	1
Silvex (2,4,5-TP)	ND		20	7.2	ug/Kg	☼	05/01/25 06:27	05/08/25 16:05	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2,4-Dichlorophenylacetic acid	*77*		*28 - 129*	*05/01/25 06:27*	*05/08/25 16:05*	*1*
2,4-Dichlorophenylacetic acid	*71*		*28 - 129*	*05/01/25 06:27*	*05/08/25 16:05*	*1*

Method: EPA Draft-3 1633 - Per- and Polyfluoroalkyl Substances by LC/MS/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)	ND		0.62	0.15	ug/Kg	☼	05/02/25 08:22	05/03/25 00:53	1
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2 FTS)	ND		0.62	0.15	ug/Kg	☼	05/02/25 08:22	05/03/25 00:53	1
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2 FTS)	ND		0.62	0.15	ug/Kg	☼	05/02/25 08:22	05/03/25 00:53	1
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2 FTS)	ND		0.62	0.15	ug/Kg	☼	05/02/25 08:22	05/03/25 00:53	1
3-Perfluoroheptylpropanoic acid (7:3 FTCA)	ND		3.9	0.97	ug/Kg	☼	05/02/25 08:22	05/03/25 00:53	1
3-Perfluoropentylpropanoic acid (5:3 FTCA)	ND		3.9	0.97	ug/Kg	☼	05/02/25 08:22	05/03/25 00:53	1
3-Perfluoropropylpropanoic acid (3:3 FTCA)	ND		0.77	0.19	ug/Kg	☼	05/02/25 08:22	05/03/25 00:53	1
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	ND		0.62	0.15	ug/Kg	☼	05/02/25 08:22	05/03/25 00:53	1
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9Cl-PF3ONS)	ND		0.62	0.15	ug/Kg	☼	05/02/25 08:22	05/03/25 00:53	1
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA)	ND		0.62	0.15	ug/Kg	☼	05/02/25 08:22	05/03/25 00:53	1
N-ethylperfluorooctane sulfonamide (NEtFOSA)	ND		0.15	0.039	ug/Kg	☼	05/02/25 08:22	05/03/25 00:53	1
N-ethylperfluorooctane sulfonamidoethanol (NEtFOSE)	ND		1.5	0.39	ug/Kg	☼	05/02/25 08:22	05/03/25 00:53	1
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	ND		0.15	0.039	ug/Kg	☼	05/02/25 08:22	05/03/25 00:53	1
N-methylperfluorooctane sulfonamide (NMeFOSA)	ND		0.15	0.039	ug/Kg	☼	05/02/25 08:22	05/03/25 00:53	1
N-methylperfluorooctane sulfonamidoethanol (NMeFOSE)	ND		1.5	0.39	ug/Kg	☼	05/02/25 08:22	05/03/25 00:53	1
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	ND		0.15	0.039	ug/Kg	☼	05/02/25 08:22	05/03/25 00:53	1
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	ND		0.31	0.077	ug/Kg	☼	05/02/25 08:22	05/03/25 00:53	1

Client: Roux Environmental Engineering and Geology DPC
Job ID: 480-229031-1
Project/Site: BCP RI - 619 Exchange Street Site

Client Sample ID: MW-4 0.25-1 Ft
Lab Sample ID: 480-229031-4
Date Collected: 04/27/25 11:00
Matrix: Solid
Date Received: 04/28/25 16:25
Percent Solids: 81.2

Method: EPA Draft-3 1633 - Per- and Polyfluoroalkyl Substances by LC/MS/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluoro (2-ethoxyethane) sulfonic acid (PFEESA)	ND		0.31	0.077	ug/Kg	☼	05/02/25 08:22	05/03/25 00:53	1
Perfluoro-3-methoxypropanoic acid (PFMPA)	ND		0.31	0.077	ug/Kg	☼	05/02/25 08:22	05/03/25 00:53	1
Perfluoro-4-methoxybutanoic acid (PFMBA)	ND		0.31	0.077	ug/Kg	☼	05/02/25 08:22	05/03/25 00:53	1
Perfluorobutanesulfonic acid (PFBS)	ND		0.15	0.039	ug/Kg	☼	05/02/25 08:22	05/03/25 00:53	1
Perfluorobutanoic acid (PFBA)	ND		0.62	0.15	ug/Kg	☼	05/02/25 08:22	05/03/25 00:53	1
Perfluorodecanesulfonic acid (PFDS)	ND		0.15	0.039	ug/Kg	☼	05/02/25 08:22	05/03/25 00:53	1
Perfluorodecanoic acid (PFDA)	ND		0.15	0.039	ug/Kg	☼	05/02/25 08:22	05/03/25 00:53	1
Perfluorododecanesulfonic acid (PFDoS)	ND		0.15	0.039	ug/Kg	☼	05/02/25 08:22	05/03/25 00:53	1
Perfluorododecanoic acid (PFDoA)	ND		0.15	0.039	ug/Kg	☼	05/02/25 08:22	05/03/25 00:53	1
Perfluoroheptanesulfonic acid (PFHpS)	ND		0.15	0.039	ug/Kg	☼	05/02/25 08:22	05/03/25 00:53	1
Perfluoroheptanoic acid (PFHpA)	ND		0.15	0.039	ug/Kg	☼	05/02/25 08:22	05/03/25 00:53	1
Perfluorohexanesulfonic acid (PFHxS)	ND		0.15	0.039	ug/Kg	☼	05/02/25 08:22	05/03/25 00:53	1
Perfluorohexanoic acid (PFHxA)	ND		0.15	0.039	ug/Kg	☼	05/02/25 08:22	05/03/25 00:53	1
Perfluorononanesulfonic acid (PFNS)	ND		0.15	0.039	ug/Kg	☼	05/02/25 08:22	05/03/25 00:53	1
Perfluorononanoic acid (PFNA)	ND		0.15	0.039	ug/Kg	☼	05/02/25 08:22	05/03/25 00:53	1
Perfluorooctanesulfonamide (PFOSA)	ND		0.15	0.039	ug/Kg	☼	05/02/25 08:22	05/03/25 00:53	1
Perfluorooctanesulfonic acid (PFOS)	**0.14**	**J**	0.15	0.039	ug/Kg	☼	05/02/25 08:22	05/03/25 00:53	1
Perfluorooctanoic acid (PFOA)	ND		0.15	0.039	ug/Kg	☼	05/02/25 08:22	05/03/25 00:53	1
Perfluoropentanesulfonic acid (PFPeS)	ND		0.15	0.039	ug/Kg	☼	05/02/25 08:22	05/03/25 00:53	1
Perfluoropentanoic acid (PFPeA)	ND		0.31	0.077	ug/Kg	☼	05/02/25 08:22	05/03/25 00:53	1
Perfluorotetradecanoic acid (PFTeDA)	ND		0.15	0.039	ug/Kg	☼	05/02/25 08:22	05/03/25 00:53	1
Perfluorotridecanoic acid (PFTrDA)	ND		0.15	0.039	ug/Kg	☼	05/02/25 08:22	05/03/25 00:53	1
Perfluoroundecanoic acid (PFUnA)	ND		0.15	0.039	ug/Kg	☼	05/02/25 08:22	05/03/25 00:53	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C2 PFTeDA	*86.4*		*20 - 150*	*05/02/25 08:22*	*05/03/25 00:53*	*1*
13C2-PFDoDA	*89.9*		*20 - 150*	*05/02/25 08:22*	*05/03/25 00:53*	*1*
13C3 HFPO-DA	*103*		*20 - 150*	*05/02/25 08:22*	*05/03/25 00:53*	*1*
13C3 PFBS	*96.0*		*20 - 150*	*05/02/25 08:22*	*05/03/25 00:53*	*1*
13C3 PFHxS	*90.9*		*20 - 150*	*05/02/25 08:22*	*05/03/25 00:53*	*1*
13C4 PFBA	*93.3*		*20 - 150*	*05/02/25 08:22*	*05/03/25 00:53*	*1*
13C4 PFHpA	*100*		*20 - 150*	*05/02/25 08:22*	*05/03/25 00:53*	*1*
13C5 PFHxA	*90.7*		*20 - 150*	*05/02/25 08:22*	*05/03/25 00:53*	*1*
13C5 PFPeA	*107*		*20 - 150*	*05/02/25 08:22*	*05/03/25 00:53*	*1*
13C6 PFDA	*94.5*		*20 - 150*	*05/02/25 08:22*	*05/03/25 00:53*	*1*
13C7 PFUnA	*95.6*		*20 - 150*	*05/02/25 08:22*	*05/03/25 00:53*	*1*
13C8 PFOA	*93.8*		*20 - 150*	*05/02/25 08:22*	*05/03/25 00:53*	*1*
13C8 PFOS	*94.9*		*20 - 150*	*05/02/25 08:22*	*05/03/25 00:53*	*1*
13C8 PFOSA	*86.3*		*20 - 150*	*05/02/25 08:22*	*05/03/25 00:53*	*1*
13C9 PFNA	*83.6*		*20 - 150*	*05/02/25 08:22*	*05/03/25 00:53*	*1*
D3-NMeFOSA	*76.2*		*20 - 150*	*05/02/25 08:22*	*05/03/25 00:53*	*1*
d3-NMeFOSAA	*100*		*20 - 150*	*05/02/25 08:22*	*05/03/25 00:53*	*1*
d5-NEtFOSAA	*109*		*20 - 150*	*05/02/25 08:22*	*05/03/25 00:53*	*1*
d5-NEtPFOSA	*73.7*		*20 - 150*	*05/02/25 08:22*	*05/03/25 00:53*	*1*
d7-N-MeFOSE-M	*75.5*		*20 - 150*	*05/02/25 08:22*	*05/03/25 00:53*	*1*

Client Sample ID: MW-4 0.25-1 Ft
Lab Sample ID: 480-229031-4

Date Collected: 04/27/25 11:00
Matrix: Solid
Date Received: 04/28/25 16:25
Percent Solids: 81.2

Method: EPA Draft-3 1633 - Per- and Polyfluoroalkyl Substances by LC/MS/MS (Continued)

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
d9-N-EtFOSE-M	66.0		20 - 150	05/02/25 08:22	05/03/25 00:53	1
M2-4:2 FTS	104		20 - 150	05/02/25 08:22	05/03/25 00:53	1
M2-6:2 FTS	97.1		20 - 150	05/02/25 08:22	05/03/25 00:53	1
M2-8:2 FTS	92.4		20 - 150	05/02/25 08:22	05/03/25 00:53	1

Method: SW846 6010D - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**4160**		12.1	10.5	mg/Kg	☼	04/30/25 14:51	04/30/25 20:14	1
Antimony	ND		18.2	0.64	mg/Kg	☼	04/30/25 14:51	04/30/25 20:14	1
Arsenic	**6.3**		2.4	1.1	mg/Kg	☼	04/30/25 14:51	04/30/25 20:14	1
Barium	**242**		0.61	0.17	mg/Kg	☼	04/30/25 14:51	04/30/25 20:14	1
Beryllium	**0.53**		0.24	0.049	mg/Kg	☼	04/30/25 14:51	04/30/25 20:14	1
Cadmium	**0.24**		0.24	0.085	mg/Kg	☼	04/30/25 14:51	04/30/25 20:14	1
Calcium	**40100**		60.7	32.7	mg/Kg	☼	04/30/25 14:51	04/30/25 20:14	1
Chromium	**7.2**		0.61	0.44	mg/Kg	☼	04/30/25 14:51	04/30/25 20:14	1
Cobalt	**4.7**	**^5+**	0.61	0.12	mg/Kg	☼	04/30/25 14:51	04/30/25 20:14	1
Copper	**59.4**		1.2	0.69	mg/Kg	☼	04/30/25 14:51	04/30/25 20:14	1
Iron	**11900**		12.1	10.3	mg/Kg	☼	04/30/25 14:51	04/30/25 20:14	1
Lead	**23.5**		1.2	0.56	mg/Kg	☼	04/30/25 14:51	04/30/25 20:14	1
Magnesium	**4070**		24.3	10.3	mg/Kg	☼	04/30/25 14:51	04/30/25 20:14	1
Manganese	**102**		1.2	0.34	mg/Kg	☼	04/30/25 14:51	04/30/25 20:14	1
Nickel	**13.0**		6.1	0.30	mg/Kg	☼	04/30/25 14:51	04/30/25 20:14	1
Potassium	**468**		36.4	29.4	mg/Kg	☼	04/30/25 14:51	04/30/25 20:14	1
Selenium	ND		4.9	0.97	mg/Kg	☼	04/30/25 14:51	04/30/25 20:14	1
Silver	ND	^5-	0.73	0.24	mg/Kg	☼	04/30/25 14:51	04/30/25 20:14	1
Sodium	**236**		170	74.4	mg/Kg	☼	04/30/25 14:51	04/30/25 20:14	1
Thallium	ND		7.3	0.92	mg/Kg	☼	04/30/25 14:51	04/30/25 20:14	1
Vanadium	**13.1**		0.61	0.16	mg/Kg	☼	04/30/25 14:51	04/30/25 20:14	1
Zinc	**85.5**		2.4	1.2	mg/Kg	☼	04/30/25 14:51	04/30/25 20:14	1

Method: SW846 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.039**		0.024	0.0056	mg/Kg	☼	05/02/25 09:11	05/02/25 11:27	1

Client: Roux Environmental Engineering and Geology DPC
Job ID: 480-229031-1
Project/Site: BCP RI - 619 Exchange Street Site

Client Sample ID: MW-4 12-14 Ft
Lab Sample ID: 480-229031-5
Date Collected: 04/27/25 13:30
Matrix: Solid
Date Received: 04/28/25 16:25
Percent Solids: 78.9

Method: SW846 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		6.8	0.49	ug/Kg	☼	04/28/25 17:10	04/29/25 04:12	1
1,1,2,2-Tetrachloroethane	ND		6.8	1.1	ug/Kg	☼	04/28/25 17:10	04/29/25 04:12	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		6.8	1.6	ug/Kg	☼	04/28/25 17:10	04/29/25 04:12	1
1,1,2-Trichloroethane	ND		6.8	0.89	ug/Kg	☼	04/28/25 17:10	04/29/25 04:12	1
1,1-Dichloroethane	ND		6.8	0.83	ug/Kg	☼	04/28/25 17:10	04/29/25 04:12	1
1,1-Dichloroethene	ND		6.8	0.83	ug/Kg	☼	04/28/25 17:10	04/29/25 04:12	1
1,2,4-Trichlorobenzene	ND		6.8	0.41	ug/Kg	☼	04/28/25 17:10	04/29/25 04:12	1
1,2,4-Trimethylbenzene	ND		6.8	1.3	ug/Kg	☼	04/28/25 17:10	04/29/25 04:12	1
1,2-Dibromo-3-Chloropropane	ND		6.8	3.4	ug/Kg	☼	04/28/25 17:10	04/29/25 04:12	1
1,2-Dibromoethane	ND		6.8	0.88	ug/Kg	☼	04/28/25 17:10	04/29/25 04:12	1
1,2-Dichlorobenzene	ND		6.8	0.53	ug/Kg	☼	04/28/25 17:10	04/29/25 04:12	1
1,2-Dichloroethane	ND		6.8	0.34	ug/Kg	☼	04/28/25 17:10	04/29/25 04:12	1
1,2-Dichloropropane	ND		6.8	3.4	ug/Kg	☼	04/28/25 17:10	04/29/25 04:12	1
1,3,5-Trimethylbenzene	ND		6.8	0.44	ug/Kg	☼	04/28/25 17:10	04/29/25 04:12	1
1,3-Dichlorobenzene	ND		6.8	0.35	ug/Kg	☼	04/28/25 17:10	04/29/25 04:12	1
1,4-Dichlorobenzene	ND		6.8	0.95	ug/Kg	☼	04/28/25 17:10	04/29/25 04:12	1
2-Butanone (MEK)	ND		34	2.5	ug/Kg	☼	04/28/25 17:10	04/29/25 04:12	1
2-Hexanone	ND		34	3.4	ug/Kg	☼	04/28/25 17:10	04/29/25 04:12	1
4-Isopropyltoluene	ND		6.8	0.55	ug/Kg	☼	04/28/25 17:10	04/29/25 04:12	1
4-Methyl-2-pentanone (MIBK)	ND		34	2.2	ug/Kg	☼	04/28/25 17:10	04/29/25 04:12	1
Acetone	**7.1**	**J**	34	5.7	ug/Kg	☼	04/28/25 17:10	04/29/25 04:12	1
Benzene	ND		6.8	0.33	ug/Kg	☼	04/28/25 17:10	04/29/25 04:12	1
Bromodichloromethane	ND		6.8	0.91	ug/Kg	☼	04/28/25 17:10	04/29/25 04:12	1
Bromoform	ND		6.8	3.4	ug/Kg	☼	04/28/25 17:10	04/29/25 04:12	1
Bromomethane	ND		6.8	0.61	ug/Kg	☼	04/28/25 17:10	04/29/25 04:12	1
Carbon disulfide	ND		6.8	3.4	ug/Kg	☼	04/28/25 17:10	04/29/25 04:12	1
Carbon tetrachloride	ND		6.8	0.66	ug/Kg	☼	04/28/25 17:10	04/29/25 04:12	1
Chlorobenzene	ND		6.8	0.90	ug/Kg	☼	04/28/25 17:10	04/29/25 04:12	1
Chloroethane	ND		6.8	1.5	ug/Kg	☼	04/28/25 17:10	04/29/25 04:12	1
Chloroform	**1.7**	**J B**	6.8	0.42	ug/Kg	☼	04/28/25 17:10	04/29/25 04:12	1
Chloromethane	ND		6.8	0.41	ug/Kg	☼	04/28/25 17:10	04/29/25 04:12	1
cis-1,2-Dichloroethene	ND		6.8	0.87	ug/Kg	☼	04/28/25 17:10	04/29/25 04:12	1
cis-1,3-Dichloropropene	ND		6.8	0.98	ug/Kg	☼	04/28/25 17:10	04/29/25 04:12	1
Cyclohexane	ND		6.8	0.95	ug/Kg	☼	04/28/25 17:10	04/29/25 04:12	1
Dibromochloromethane	ND		6.8	0.87	ug/Kg	☼	04/28/25 17:10	04/29/25 04:12	1
Dichlorodifluoromethane	ND		6.8	0.56	ug/Kg	☼	04/28/25 17:10	04/29/25 04:12	1
Ethylbenzene	ND		6.8	0.47	ug/Kg	☼	04/28/25 17:10	04/29/25 04:12	1
Isopropylbenzene	ND		6.8	1.0	ug/Kg	☼	04/28/25 17:10	04/29/25 04:12	1
Methyl acetate	ND		34	4.1	ug/Kg	☼	04/28/25 17:10	04/29/25 04:12	1
Methyl tert-butyl ether	ND		6.8	0.67	ug/Kg	☼	04/28/25 17:10	04/29/25 04:12	1
Methylcyclohexane	ND		6.8	1.0	ug/Kg	☼	04/28/25 17:10	04/29/25 04:12	1
Methylene Chloride	ND		6.8	3.1	ug/Kg	☼	04/28/25 17:10	04/29/25 04:12	1
Naphthalene	ND		6.8	0.91	ug/Kg	☼	04/28/25 17:10	04/29/25 04:12	1
n-Butylbenzene	ND		6.8	0.59	ug/Kg	☼	04/28/25 17:10	04/29/25 04:12	1
N-Propylbenzene	ND		6.8	0.55	ug/Kg	☼	04/28/25 17:10	04/29/25 04:12	1
sec-Butylbenzene	ND		6.8	0.59	ug/Kg	☼	04/28/25 17:10	04/29/25 04:12	1
Styrene	ND		6.8	0.34	ug/Kg	☼	04/28/25 17:10	04/29/25 04:12	1
tert-Butylbenzene	ND		6.8	0.71	ug/Kg	☼	04/28/25 17:10	04/29/25 04:12	1
Tetrachloroethene	ND		6.8	0.91	ug/Kg	☼	04/28/25 17:10	04/29/25 04:12	1

Client: Roux Environmental Engineering and Geology DPC
Job ID: 480-229031-1
Project/Site: BCP RI - 619 Exchange Street Site

Client Sample ID: MW-4 12-14 Ft
Lab Sample ID: 480-229031-5
Date Collected: 04/27/25 13:30
Matrix: Solid
Date Received: 04/28/25 16:25
Percent Solids: 78.9

Method: SW846 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Toluene	ND		6.8	0.52	ug/Kg	☼	04/28/25 17:10	04/29/25 04:12	1
trans-1,2-Dichloroethene	ND		6.8	0.70	ug/Kg	☼	04/28/25 17:10	04/29/25 04:12	1
trans-1,3-Dichloropropene	ND		6.8	3.0	ug/Kg	☼	04/28/25 17:10	04/29/25 04:12	1
Trichloroethene	ND		6.8	1.5	ug/Kg	☼	04/28/25 17:10	04/29/25 04:12	1
Trichlorofluoromethane	ND		6.8	0.64	ug/Kg	☼	04/28/25 17:10	04/29/25 04:12	1
Vinyl chloride	ND		6.8	0.83	ug/Kg	☼	04/28/25 17:10	04/29/25 04:12	1
Xylenes, Total	ND		14	1.1	ug/Kg	☼	04/28/25 17:10	04/29/25 04:12	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/Kg*	☼		*N/A*	*04/28/25 17:10*	*04/29/25 04:12*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*105*		*64 - 126*	*04/28/25 17:10*	*04/29/25 04:12*	*1*
4-Bromofluorobenzene (Surr)	*100*		*72 - 126*	*04/28/25 17:10*	*04/29/25 04:12*	*1*
Dibromofluoromethane (Surr)	*104*		*60 - 140*	*04/28/25 17:10*	*04/29/25 04:12*	*1*
Toluene-d8 (Surr)	*97*		*71 - 125*	*04/28/25 17:10*	*04/29/25 04:12*	*1*

Method: SW846 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	ND		130	69	ug/Kg	☼	05/07/25 13:55	05/08/25 18:37	1
2,4,5-Trichlorophenol	ND		210	58	ug/Kg	☼	05/07/25 13:55	05/08/25 18:37	1
2,4,6-Trichlorophenol	ND		210	43	ug/Kg	☼	05/07/25 13:55	05/08/25 18:37	1
2,4-Dichlorophenol	ND		210	23	ug/Kg	☼	05/07/25 13:55	05/08/25 18:37	1
2,4-Dimethylphenol	ND		210	52	ug/Kg	☼	05/07/25 13:55	05/08/25 18:37	1
2,4-Dinitrophenol	ND		2100	990	ug/Kg	☼	05/07/25 13:55	05/08/25 18:37	1
2,4-Dinitrotoluene	ND		210	44	ug/Kg	☼	05/07/25 13:55	05/08/25 18:37	1
2,6-Dinitrotoluene	ND		210	25	ug/Kg	☼	05/07/25 13:55	05/08/25 18:37	1
2-Chloronaphthalene	ND		210	35	ug/Kg	☼	05/07/25 13:55	05/08/25 18:37	1
2-Chlorophenol	ND		420	39	ug/Kg	☼	05/07/25 13:55	05/08/25 18:37	1
2-Methylnaphthalene	ND		210	43	ug/Kg	☼	05/07/25 13:55	05/08/25 18:37	1
2-Methylphenol	ND		210	25	ug/Kg	☼	05/07/25 13:55	05/08/25 18:37	1
2-Nitroaniline	ND		420	31	ug/Kg	☼	05/07/25 13:55	05/08/25 18:37	1
2-Nitrophenol	ND		210	60	ug/Kg	☼	05/07/25 13:55	05/08/25 18:37	1
3,3'-Dichlorobenzidine	ND		420	250	ug/Kg	☼	05/07/25 13:55	05/08/25 18:37	1
3-Nitroaniline	ND		420	59	ug/Kg	☼	05/07/25 13:55	05/08/25 18:37	1
4,6-Dinitro-2-methylphenol	ND		420	210	ug/Kg	☼	05/07/25 13:55	05/08/25 18:37	1
4-Bromophenyl phenyl ether	ND		210	30	ug/Kg	☼	05/07/25 13:55	05/08/25 18:37	1
4-Chloro-3-methylphenol	ND		210	53	ug/Kg	☼	05/07/25 13:55	05/08/25 18:37	1
4-Chloroaniline	ND		210	53	ug/Kg	☼	05/07/25 13:55	05/08/25 18:37	1
4-Chlorophenyl phenyl ether	ND		210	26	ug/Kg	☼	05/07/25 13:55	05/08/25 18:37	1
4-Methylphenol	ND		420	25	ug/Kg	☼	05/07/25 13:55	05/08/25 18:37	1
4-Nitroaniline	ND		420	110	ug/Kg	☼	05/07/25 13:55	05/08/25 18:37	1
4-Nitrophenol	ND		420	150	ug/Kg	☼	05/07/25 13:55	05/08/25 18:37	1
Acenaphthene	ND		210	31	ug/Kg	☼	05/07/25 13:55	05/08/25 18:37	1
Acenaphthylene	ND		210	28	ug/Kg	☼	05/07/25 13:55	05/08/25 18:37	1
Acetophenone	ND		210	29	ug/Kg	☼	05/07/25 13:55	05/08/25 18:37	1
Anthracene	ND		210	53	ug/Kg	☼	05/07/25 13:55	05/08/25 18:37	1
Atrazine	ND		210	74	ug/Kg	☼	05/07/25 13:55	05/08/25 18:37	1
Benzaldehyde	ND		210	170	ug/Kg	☼	05/07/25 13:55	05/08/25 18:37	1
Benzo[a]anthracene	ND		210	21	ug/Kg	☼	05/07/25 13:55	05/08/25 18:37	1

Client: Roux Environmental Engineering and Geology DPC
Job ID: 480-229031-1
Project/Site: BCP RI - 619 Exchange Street Site

Client Sample ID: MW-4 12-14 Ft
Lab Sample ID: 480-229031-5
Date Collected: 04/27/25 13:30
Matrix: Solid
Date Received: 04/28/25 16:25
Percent Solids: 78.9

Method: SW846 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[a]pyrene	ND		210	31	ug/Kg	☼	05/07/25 13:55	05/08/25 18:37	1
Benzo[b]fluoranthene	ND		210	34	ug/Kg	☼	05/07/25 13:55	05/08/25 18:37	1
Benzo[g,h,i]perylene	ND		210	23	ug/Kg	☼	05/07/25 13:55	05/08/25 18:37	1
Benzo[k]fluoranthene	ND		210	28	ug/Kg	☼	05/07/25 13:55	05/08/25 18:37	1
Biphenyl	ND		210	31	ug/Kg	☼	05/07/25 13:55	05/08/25 18:37	1
bis (2-chloroisopropyl) ether	ND		210	43	ug/Kg	☼	05/07/25 13:55	05/08/25 18:37	1
Bis(2-chloroethoxy)methane	ND		210	45	ug/Kg	☼	05/07/25 13:55	05/08/25 18:37	1
Bis(2-chloroethyl)ether	ND		210	28	ug/Kg	☼	05/07/25 13:55	05/08/25 18:37	1
Bis(2-ethylhexyl) phthalate	ND		210	73	ug/Kg	☼	05/07/25 13:55	05/08/25 18:37	1
Butyl benzyl phthalate	ND		210	35	ug/Kg	☼	05/07/25 13:55	05/08/25 18:37	1
Caprolactam	ND		210	64	ug/Kg	☼	05/07/25 13:55	05/08/25 18:37	1
Carbazole	ND		210	25	ug/Kg	☼	05/07/25 13:55	05/08/25 18:37	1
Chrysene	ND		210	48	ug/Kg	☼	05/07/25 13:55	05/08/25 18:37	1
Dibenz(a,h)anthracene	ND		210	38	ug/Kg	☼	05/07/25 13:55	05/08/25 18:37	1
Dibenzofuran	ND		210	25	ug/Kg	☼	05/07/25 13:55	05/08/25 18:37	1
Diethyl phthalate	ND		210	28	ug/Kg	☼	05/07/25 13:55	05/08/25 18:37	1
Dimethyl phthalate	ND		210	25	ug/Kg	☼	05/07/25 13:55	05/08/25 18:37	1
Di-n-butyl phthalate	ND		210	36	ug/Kg	☼	05/07/25 13:55	05/08/25 18:37	1
Di-n-octyl phthalate	ND		210	25	ug/Kg	☼	05/07/25 13:55	05/08/25 18:37	1
Fluoranthene	ND		210	23	ug/Kg	☼	05/07/25 13:55	05/08/25 18:37	1
Fluorene	ND		210	25	ug/Kg	☼	05/07/25 13:55	05/08/25 18:37	1
Hexachlorobenzene	ND		210	29	ug/Kg	☼	05/07/25 13:55	05/08/25 18:37	1
Hexachlorobutadiene	ND		210	31	ug/Kg	☼	05/07/25 13:55	05/08/25 18:37	1
Hexachlorocyclopentadiene	ND		210	29	ug/Kg	☼	05/07/25 13:55	05/08/25 18:37	1
Hexachloroethane	ND		210	28	ug/Kg	☼	05/07/25 13:55	05/08/25 18:37	1
Indeno[1,2,3-cd]pyrene	ND		210	26	ug/Kg	☼	05/07/25 13:55	05/08/25 18:37	1
Isophorone	ND		210	45	ug/Kg	☼	05/07/25 13:55	05/08/25 18:37	1
Naphthalene	ND		210	28	ug/Kg	☼	05/07/25 13:55	05/08/25 18:37	1
Nitrobenzene	ND		210	24	ug/Kg	☼	05/07/25 13:55	05/08/25 18:37	1
N-Nitrosodi-n-propylamine	ND		210	36	ug/Kg	☼	05/07/25 13:55	05/08/25 18:37	1
N-Nitrosodiphenylamine	ND		210	170	ug/Kg	☼	05/07/25 13:55	05/08/25 18:37	1
Pentachlorophenol	ND		420	210	ug/Kg	☼	05/07/25 13:55	05/08/25 18:37	1
Phenanthrene	ND		210	31	ug/Kg	☼	05/07/25 13:55	05/08/25 18:37	1
Phenol	ND		210	33	ug/Kg	☼	05/07/25 13:55	05/08/25 18:37	1
Pyrene	ND		210	25	ug/Kg	☼	05/07/25 13:55	05/08/25 18:37	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Unknown	*4300*	*T J*	*ug/Kg*	☼	*1.98*	*N/A*	*05/07/25 13:55*	*05/08/25 18:37*	*1*
Unknown	*460*	*T J*	*ug/Kg*	☼	*3.00*	*N/A*	*05/07/25 13:55*	*05/08/25 18:37*	*1*
Unknown	*250*	*T J*	*ug/Kg*	☼	*3.22*	*N/A*	*05/07/25 13:55*	*05/08/25 18:37*	*1*
Unknown	*1700*	*T J*	*ug/Kg*	☼	*3.44*	*N/A*	*05/07/25 13:55*	*05/08/25 18:37*	*1*
Unknown	*600*	*T J*	*ug/Kg*	☼	*4.11*	*N/A*	*05/07/25 13:55*	*05/08/25 18:37*	*1*
Unknown	*190*	*T J*	*ug/Kg*	☼	*4.39*	*N/A*	*05/07/25 13:55*	*05/08/25 18:37*	*1*
Unknown	*1900*	*T J*	*ug/Kg*	☼	*4.58*	*N/A*	*05/07/25 13:55*	*05/08/25 18:37*	*1*
Unknown	*510*	*T J*	*ug/Kg*	☼	*4.62*	*N/A*	*05/07/25 13:55*	*05/08/25 18:37*	*1*
Unknown	*490*	*T J*	*ug/Kg*	☼	*4.74*	*N/A*	*05/07/25 13:55*	*05/08/25 18:37*	*1*
Unknown	*190*	*T J*	*ug/Kg*	☼	*4.88*	*N/A*	*05/07/25 13:55*	*05/08/25 18:37*	*1*
Unknown	*1000*	*T J*	*ug/Kg*	☼	*4.94*	*N/A*	*05/07/25 13:55*	*05/08/25 18:37*	*1*
Unknown	*1300*	*T J*	*ug/Kg*	☼	*4.96*	*N/A*	*05/07/25 13:55*	*05/08/25 18:37*	*1*
Unknown	*210*	*T J*	*ug/Kg*	☼	*5.03*	*N/A*	*05/07/25 13:55*	*05/08/25 18:37*	*1*

Client Sample ID: MW-4 12-14 Ft
Lab Sample ID: 480-229031-5
Date Collected: 04/27/25 13:30
Matrix: Solid
Date Received: 04/28/25 16:25
Percent Solids: 78.9

Method: SW846 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Tentatively Identified Compound	Est. Result	Qualifier	Unit	D	RT	CAS No.	Prepared	Analyzed	Dil Fac
Nonadecane	180	T J N	ug/Kg	☼	12.95	629-92-5	05/07/25 13:55	05/08/25 18:37	1
Eicosane	190	T J N	ug/Kg	☼	13.23	112-95-8	05/07/25 13:55	05/08/25 18:37	1
Heptadecane	220	T J N	ug/Kg	☼	13.50	629-78-7	05/07/25 13:55	05/08/25 18:37	1
Heptacosane	190	T J N	ug/Kg	☼	13.76	593-49-7	05/07/25 13:55	05/08/25 18:37	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol (Surr)	104		26 - 143	05/07/25 13:55	05/08/25 18:37	1
2-Fluorobiphenyl (Surr)	93		50 - 121	05/07/25 13:55	05/08/25 18:37	1
2-Fluorophenol (Surr)	75		36 - 120	05/07/25 13:55	05/08/25 18:37	1
Nitrobenzene-d5 (Surr)	80		40 - 121	05/07/25 13:55	05/08/25 18:37	1
Phenol-d5 (Surr)	83		41 - 120	05/07/25 13:55	05/08/25 18:37	1
p-Terphenyl-d14 (Surr)	112		46 - 143	05/07/25 13:55	05/08/25 18:37	1

Method: SW846 8081B - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	ND		4.1	0.80	ug/Kg	☼	05/01/25 06:41	05/01/25 18:43	1
4,4'-DDE	ND		4.1	0.87	ug/Kg	☼	05/01/25 06:41	05/01/25 18:43	1
4,4'-DDT	**3.2**	**J B**	4.1	0.97	ug/Kg	☼	05/01/25 06:41	05/01/25 18:43	1
Aldrin	ND		4.1	1.0	ug/Kg	☼	05/01/25 06:41	05/01/25 18:43	1
alpha-BHC	ND		4.1	0.74	ug/Kg	☼	05/01/25 06:41	05/01/25 18:43	1
cis-Chlordane	ND		4.1	2.1	ug/Kg	☼	05/01/25 06:41	05/01/25 18:43	1
beta-BHC	ND		4.1	0.74	ug/Kg	☼	05/01/25 06:41	05/01/25 18:43	1
delta-BHC	ND		4.1	0.77	ug/Kg	☼	05/01/25 06:41	05/01/25 18:43	1
Dieldrin	ND		4.1	0.99	ug/Kg	☼	05/01/25 06:41	05/01/25 18:43	1
Endosulfan I	ND		4.1	0.79	ug/Kg	☼	05/01/25 06:41	05/01/25 18:43	1
Endosulfan II	ND		4.1	0.74	ug/Kg	☼	05/01/25 06:41	05/01/25 18:43	1
Endosulfan sulfate	ND		4.1	0.77	ug/Kg	☼	05/01/25 06:41	05/01/25 18:43	1
Endrin	ND		4.1	0.82	ug/Kg	☼	05/01/25 06:41	05/01/25 18:43	1
Endrin aldehyde	ND		4.1	1.1	ug/Kg	☼	05/01/25 06:41	05/01/25 18:43	1
Endrin ketone	**3.3**	**J B**	4.1	1.0	ug/Kg	☼	05/01/25 06:41	05/01/25 18:43	1
gamma-BHC (Lindane)	ND		4.1	0.76	ug/Kg	☼	05/01/25 06:41	05/01/25 18:43	1
trans-Chlordane	ND		4.1	1.3	ug/Kg	☼	05/01/25 06:41	05/01/25 18:43	1
Heptachlor	ND		4.1	0.90	ug/Kg	☼	05/01/25 06:41	05/01/25 18:43	1
Heptachlor epoxide	ND		4.1	1.1	ug/Kg	☼	05/01/25 06:41	05/01/25 18:43	1
Methoxychlor	**3.9**	**J B**	4.1	0.84	ug/Kg	☼	05/01/25 06:41	05/01/25 18:43	1
Toxaphene	ND		41	24	ug/Kg	☼	05/01/25 06:41	05/01/25 18:43	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
DCB Decachlorobiphenyl	98		45 - 120	05/01/25 06:41	05/01/25 18:43	1
DCB Decachlorobiphenyl	110		45 - 120	05/01/25 06:41	05/01/25 18:43	1
Tetrachloro-m-xylene	79		30 - 124	05/01/25 06:41	05/01/25 18:43	1
Tetrachloro-m-xylene	80		30 - 124	05/01/25 06:41	05/01/25 18:43	1

Method: SW846 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		0.28	0.055	mg/Kg	☼	04/29/25 08:37	04/29/25 15:41	1
PCB-1221	ND		0.28	0.055	mg/Kg	☼	04/29/25 08:37	04/29/25 15:41	1
PCB-1232	ND		0.28	0.055	mg/Kg	☼	04/29/25 08:37	04/29/25 15:41	1
PCB-1242	ND		0.28	0.055	mg/Kg	☼	04/29/25 08:37	04/29/25 15:41	1
PCB-1248	ND		0.28	0.055	mg/Kg	☼	04/29/25 08:37	04/29/25 15:41	1

Client Sample ID: MW-4 12-14 Ft
Lab Sample ID: 480-229031-5
Date Collected: 04/27/25 13:30
Matrix: Solid
Date Received: 04/28/25 16:25
Percent Solids: 78.9

Method: SW846 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1254	ND		0.28	0.13	mg/Kg	☼	04/29/25 08:37	04/29/25 15:41	1
PCB-1260	ND		0.28	0.13	mg/Kg	☼	04/29/25 08:37	04/29/25 15:41	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*140*		*60 - 154*	*04/29/25 08:37*	*04/29/25 15:41*	*1*
Tetrachloro-m-xylene	*131*		*60 - 154*	*04/29/25 08:37*	*04/29/25 15:41*	*1*
DCB Decachlorobiphenyl	*131*		*65 - 174*	*04/29/25 08:37*	*04/29/25 15:41*	*1*
DCB Decachlorobiphenyl	*128*		*65 - 174*	*04/29/25 08:37*	*04/29/25 15:41*	*1*

Method: SW846 8151A - Herbicides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-T	ND		21	6.7	ug/Kg	☼	05/01/25 06:27	05/08/25 16:23	1
2,4-D	ND		21	13	ug/Kg	☼	05/01/25 06:27	05/08/25 16:23	1
Dichlorprop	ND		21	10	ug/Kg	☼	05/01/25 06:27	05/08/25 16:23	1
Pentachlorophenol	ND		21	6.8	ug/Kg	☼	05/01/25 06:27	05/08/25 16:23	1
Picloram	ND		21	9.0	ug/Kg	☼	05/01/25 06:27	05/08/25 16:23	1
Silvex (2,4,5-TP)	ND		21	7.5	ug/Kg	☼	05/01/25 06:27	05/08/25 16:23	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4-Dichlorophenylacetic acid	*79*		*28 - 129*	*05/01/25 06:27*	*05/08/25 16:23*	*1*
2,4-Dichlorophenylacetic acid	*73*		*28 - 129*	*05/01/25 06:27*	*05/08/25 16:23*	*1*

Method: EPA Draft-3 1633 - Per- and Polyfluoroalkyl Substances by LC/MS/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)	ND		0.63	0.16	ug/Kg	☼	05/02/25 08:22	05/03/25 01:09	1
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2 FTS)	ND		0.63	0.16	ug/Kg	☼	05/02/25 08:22	05/03/25 01:09	1
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2 FTS)	ND		0.63	0.16	ug/Kg	☼	05/02/25 08:22	05/03/25 01:09	1
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2 FTS)	ND		0.63	0.16	ug/Kg	☼	05/02/25 08:22	05/03/25 01:09	1
3-Perfluoroheptylpropanoic acid (7:3 FTCA)	ND		4.0	0.99	ug/Kg	☼	05/02/25 08:22	05/03/25 01:09	1
3-Perfluoropentylpropanoic acid (5:3 FTCA)	ND		4.0	0.99	ug/Kg	☼	05/02/25 08:22	05/03/25 01:09	1
3-Perfluoropropylpropanoic acid (3:3 FTCA)	ND		0.79	0.20	ug/Kg	☼	05/02/25 08:22	05/03/25 01:09	1
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	ND		0.63	0.16	ug/Kg	☼	05/02/25 08:22	05/03/25 01:09	1
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9Cl-PF3ONS)	ND		0.63	0.16	ug/Kg	☼	05/02/25 08:22	05/03/25 01:09	1
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA)	ND		0.63	0.16	ug/Kg	☼	05/02/25 08:22	05/03/25 01:09	1
N-ethylperfluorooctane sulfonamide (NEtFOSA)	ND		0.16	0.040	ug/Kg	☼	05/02/25 08:22	05/03/25 01:09	1
N-ethylperfluorooctane sulfonamidoethanol (NEtFOSE)	ND		1.6	0.40	ug/Kg	☼	05/02/25 08:22	05/03/25 01:09	1
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	ND		0.16	0.040	ug/Kg	☼	05/02/25 08:22	05/03/25 01:09	1
N-methylperfluorooctane sulfonamide (NMeFOSA)	ND		0.16	0.040	ug/Kg	☼	05/02/25 08:22	05/03/25 01:09	1
N-methylperfluorooctane sulfonamidoethanol (NMeFOSE)	ND		1.6	0.40	ug/Kg	☼	05/02/25 08:22	05/03/25 01:09	1

Client: Roux Environmental Engineering and Geology DPC
Job ID: 480-229031-1
Project/Site: BCP RI - 619 Exchange Street Site

Client Sample ID: MW-4 12-14 Ft
Lab Sample ID: 480-229031-5
Date Collected: 04/27/25 13:30
Matrix: Solid
Date Received: 04/28/25 16:25
Percent Solids: 78.9

Method: EPA Draft-3 1633 - Per- and Polyfluoroalkyl Substances by LC/MS/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	ND		0.16	0.040	ug/Kg	☼	05/02/25 08:22	05/03/25 01:09	1
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	ND		0.32	0.079	ug/Kg	☼	05/02/25 08:22	05/03/25 01:09	1
Perfluoro (2-ethoxyethane) sulfonic acid (PFEESA)	ND		0.32	0.079	ug/Kg	☼	05/02/25 08:22	05/03/25 01:09	1
Perfluoro-3-methoxypropanoic acid (PFMPA)	ND		0.32	0.079	ug/Kg	☼	05/02/25 08:22	05/03/25 01:09	1
Perfluoro-4-methoxybutanoic acid (PFMBA)	ND		0.32	0.079	ug/Kg	☼	05/02/25 08:22	05/03/25 01:09	1
Perfluorobutanesulfonic acid (PFBS)	ND		0.16	0.040	ug/Kg	☼	05/02/25 08:22	05/03/25 01:09	1
Perfluorobutanoic acid (PFBA)	ND		0.63	0.16	ug/Kg	☼	05/02/25 08:22	05/03/25 01:09	1
Perfluorodecanesulfonic acid (PFDS)	ND		0.16	0.040	ug/Kg	☼	05/02/25 08:22	05/03/25 01:09	1
Perfluorodecanoic acid (PFDA)	ND		0.16	0.040	ug/Kg	☼	05/02/25 08:22	05/03/25 01:09	1
Perfluorododecanesulfonic acid (PFDoS)	ND		0.16	0.040	ug/Kg	☼	05/02/25 08:22	05/03/25 01:09	1
Perfluorododecanoic acid (PFDoA)	ND		0.16	0.040	ug/Kg	☼	05/02/25 08:22	05/03/25 01:09	1
Perfluoroheptanesulfonic acid (PFHpS)	ND		0.16	0.040	ug/Kg	☼	05/02/25 08:22	05/03/25 01:09	1
Perfluoroheptanoic acid (PFHpA)	ND		0.16	0.040	ug/Kg	☼	05/02/25 08:22	05/03/25 01:09	1
Perfluorohexanesulfonic acid (PFHxS)	ND		0.16	0.040	ug/Kg	☼	05/02/25 08:22	05/03/25 01:09	1
Perfluorohexanoic acid (PFHxA)	ND		0.16	0.040	ug/Kg	☼	05/02/25 08:22	05/03/25 01:09	1
Perfluorononanesulfonic acid (PFNS)	ND		0.16	0.040	ug/Kg	☼	05/02/25 08:22	05/03/25 01:09	1
Perfluorononanoic acid (PFNA)	ND		0.16	0.040	ug/Kg	☼	05/02/25 08:22	05/03/25 01:09	1
Perfluorooctanesulfonamide (PFOSA)	ND		0.16	0.040	ug/Kg	☼	05/02/25 08:22	05/03/25 01:09	1
Perfluorooctanesulfonic acid (PFOS)	ND		0.16	0.040	ug/Kg	☼	05/02/25 08:22	05/03/25 01:09	1
Perfluorooctanoic acid (PFOA)	ND		0.16	0.040	ug/Kg	☼	05/02/25 08:22	05/03/25 01:09	1
Perfluoropentanesulfonic acid (PFPeS)	ND		0.16	0.040	ug/Kg	☼	05/02/25 08:22	05/03/25 01:09	1
Perfluoropentanoic acid (PFPeA)	ND		0.32	0.079	ug/Kg	☼	05/02/25 08:22	05/03/25 01:09	1
Perfluorotetradecanoic acid (PFTeDA)	ND		0.16	0.040	ug/Kg	☼	05/02/25 08:22	05/03/25 01:09	1
Perfluorotridecanoic acid (PFTrDA)	ND		0.16	0.040	ug/Kg	☼	05/02/25 08:22	05/03/25 01:09	1
Perfluoroundecanoic acid (PFUnA)	ND		0.16	0.040	ug/Kg	☼	05/02/25 08:22	05/03/25 01:09	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C2 PFTeDA	*68.6*		*20 - 150*	*05/02/25 08:22*	*05/03/25 01:09*	*1*
13C2-PFDoDA	*73.9*		*20 - 150*	*05/02/25 08:22*	*05/03/25 01:09*	*1*
13C3 HFPO-DA	*83.8*		*20 - 150*	*05/02/25 08:22*	*05/03/25 01:09*	*1*
13C3 PFBS	*81.4*		*20 - 150*	*05/02/25 08:22*	*05/03/25 01:09*	*1*
13C3 PFHxS	*74.9*		*20 - 150*	*05/02/25 08:22*	*05/03/25 01:09*	*1*
13C4 PFBA	*80.7*		*20 - 150*	*05/02/25 08:22*	*05/03/25 01:09*	*1*
13C4 PFHpA	*77.7*		*20 - 150*	*05/02/25 08:22*	*05/03/25 01:09*	*1*
13C5 PFHxA	*79.7*		*20 - 150*	*05/02/25 08:22*	*05/03/25 01:09*	*1*
13C5 PFPeA	*82.1*		*20 - 150*	*05/02/25 08:22*	*05/03/25 01:09*	*1*
13C6 PFDA	*76.9*		*20 - 150*	*05/02/25 08:22*	*05/03/25 01:09*	*1*
13C7 PFUnA	*80.5*		*20 - 150*	*05/02/25 08:22*	*05/03/25 01:09*	*1*
13C8 PFOA	*78.0*		*20 - 150*	*05/02/25 08:22*	*05/03/25 01:09*	*1*
13C8 PFOS	*72.5*		*20 - 150*	*05/02/25 08:22*	*05/03/25 01:09*	*1*
13C8 PFOSA	*68.2*		*20 - 150*	*05/02/25 08:22*	*05/03/25 01:09*	*1*
13C9 PFNA	*70.2*		*20 - 150*	*05/02/25 08:22*	*05/03/25 01:09*	*1*
D3-NMeFOSA	*53.5*		*20 - 150*	*05/02/25 08:22*	*05/03/25 01:09*	*1*
d3-NMeFOSAA	*79.6*		*20 - 150*	*05/02/25 08:22*	*05/03/25 01:09*	*1*

Client: Roux Environmental Engineering and Geology DPC
Job ID: 480-229031-1
Project/Site: BCP RI - 619 Exchange Street Site

Client Sample ID: MW-4 12-14 Ft
Lab Sample ID: 480-229031-5
Date Collected: 04/27/25 13:30
Matrix: Solid
Date Received: 04/28/25 16:25
Percent Solids: 78.9

Method: EPA Draft-3 1633 - Per- and Polyfluoroalkyl Substances by LC/MS/MS (Continued)

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
d5-NEtFOSAA	*76.6*		*20 - 150*	*05/02/25 08:22*	*05/03/25 01:09*	*1*
d5-NEtPFOSA	*51.5*		*20 - 150*	*05/02/25 08:22*	*05/03/25 01:09*	*1*
d7-N-MeFOSE-M	*50.7*		*20 - 150*	*05/02/25 08:22*	*05/03/25 01:09*	*1*
d9-N-EtFOSE-M	*45.7*		*20 - 150*	*05/02/25 08:22*	*05/03/25 01:09*	*1*
M2-4:2 FTS	*79.8*		*20 - 150*	*05/02/25 08:22*	*05/03/25 01:09*	*1*
M2-6:2 FTS	*79.5*		*20 - 150*	*05/02/25 08:22*	*05/03/25 01:09*	*1*
M2-8:2 FTS	*75.3*		*20 - 150*	*05/02/25 08:22*	*05/03/25 01:09*	*1*

Method: SW846 6010D - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**16400**		12.2	10.5	mg/Kg	☼	04/30/25 14:51	04/30/25 20:16	1
Antimony	ND		18.3	0.65	mg/Kg	☼	04/30/25 14:51	04/30/25 20:16	1
Arsenic	**3.6**		2.4	1.1	mg/Kg	☼	04/30/25 14:51	04/30/25 20:16	1
Barium	**112**		0.61	0.17	mg/Kg	☼	04/30/25 14:51	04/30/25 20:16	1
Beryllium	**0.74**		0.24	0.049	mg/Kg	☼	04/30/25 14:51	04/30/25 20:16	1
Cadmium	**0.18**	**J**	0.24	0.085	mg/Kg	☼	04/30/25 14:51	04/30/25 20:16	1
Calcium	**50500**		61.0	32.9	mg/Kg	☼	04/30/25 14:51	04/30/25 20:16	1
Chromium	**21.1**		0.61	0.44	mg/Kg	☼	04/30/25 14:51	04/30/25 20:16	1
Cobalt	**10.2**	**^5+**	0.61	0.12	mg/Kg	☼	04/30/25 14:51	04/30/25 20:16	1
Copper	**17.5**		1.2	0.70	mg/Kg	☼	04/30/25 14:51	04/30/25 20:16	1
Iron	**20500**		12.2	10.3	mg/Kg	☼	04/30/25 14:51	04/30/25 20:16	1
Lead	**13.2**		1.2	0.56	mg/Kg	☼	04/30/25 14:51	04/30/25 20:16	1
Magnesium	**19200**		24.4	10.3	mg/Kg	☼	04/30/25 14:51	04/30/25 20:16	1
Manganese	**417**		1.2	0.34	mg/Kg	☼	04/30/25 14:51	04/30/25 20:16	1
Nickel	**24.2**		6.1	0.30	mg/Kg	☼	04/30/25 14:51	04/30/25 20:16	1
Potassium	**5160**		36.6	29.6	mg/Kg	☼	04/30/25 14:51	04/30/25 20:16	1
Selenium	ND		4.9	0.98	mg/Kg	☼	04/30/25 14:51	04/30/25 20:16	1
Silver	**0.33**	**J ^5-**	0.73	0.24	mg/Kg	☼	04/30/25 14:51	04/30/25 20:16	1
Sodium	**331**		171	74.8	mg/Kg	☼	04/30/25 14:51	04/30/25 20:16	1
Thallium	ND		7.3	0.93	mg/Kg	☼	04/30/25 14:51	04/30/25 20:16	1
Vanadium	**30.6**		0.61	0.16	mg/Kg	☼	04/30/25 14:51	04/30/25 20:16	1
Zinc	**59.2**		2.4	1.2	mg/Kg	☼	04/30/25 14:51	04/30/25 20:16	1

Method: SW846 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.017**	**J**	0.024	0.0056	mg/Kg	☼	05/02/25 09:11	05/02/25 11:28	1

Surrogate Summary

Client: Roux Environmental Engineering and Geology DPC
Job ID: 480-229031-1
Project/Site: BCP RI - 619 Exchange Street Site

Method: 8260C - Volatile Organic Compounds by GC/MS

Matrix: Solid **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)							
		DCA	BFB	DBFM	TOL				
Lab Sample ID	Client Sample ID	(64-126)	(72-126)	(60-140)	(71-125)				
480-229031-1	MW-6 0.5-0.75 Ft	105	100	103	96				
480-229031-2	MW-6 8-10 Ft	102	100	101	98				
480-229031-4	MW-4 0.25-1 Ft	103	101	106	99				
480-229031-5	MW-4 12-14 Ft	105	100	104	97				
LCS 480-744702/1-A	Lab Control Sample	103	98	104	101				
MB 480-744702/2-A	Method Blank	101	103	104	100				

Surrogate Legend

DCA = 1,2-Dichloroethane-d4 (Surr)
BFB = 4-Bromofluorobenzene (Surr)
DBFM = Dibromofluoromethane (Surr)
TOL = Toluene-d8 (Surr)

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Matrix: Solid **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)							
		TBP	FBP	2FP	NBZ	PHL	TPHd14		
Lab Sample ID	Client Sample ID	(26-143)	(50-121)	(36-120)	(40-121)	(41-120)	(46-143)		
480-229031-1	MW-6 0.5-0.75 Ft	103	102	88	98	91	113		
480-229031-2	MW-6 8-10 Ft	103	99	88	95	94	110		
480-229031-3	MW-5 0.33-0.75 Ft	107	102	89	95	93	103		
480-229031-4	MW-4 0.25-1 Ft	91	81	60	69	66	97		
480-229031-5	MW-4 12-14 Ft	104	93	75	80	83	112		
LCS 480-745441/2-A	Lab Control Sample	113	96	84	89	89	102		
MB 480-745441/1-A	Method Blank	102	91	81	86	85	102		

Surrogate Legend

TBP = 2,4,6-Tribromophenol (Surr)
FBP = 2-Fluorobiphenyl (Surr)
2FP = 2-Fluorophenol (Surr)
NBZ = Nitrobenzene-d5 (Surr)
PHL = Phenol-d5 (Surr)
TPHd14 = p-Terphenyl-d14 (Surr)

Method: 8081B - Organochlorine Pesticides (GC)

Matrix: Solid **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)							
		DCBP1	DCBP2	TCX1	TCX2				
Lab Sample ID	Client Sample ID	(45-120)	(45-120)	(30-124)	(30-124)				
480-229031-1	MW-6 0.5-0.75 Ft	116	344 S1+	110	138 S1+				
480-229031-2	MW-6 8-10 Ft	102	111	80	82				
480-229031-4	MW-4 0.25-1 Ft	210 S1+	182 S1+	157 S1+	105				
480-229031-5	MW-4 12-14 Ft	98	110	79	80				
LCS 480-744938/2-A	Lab Control Sample	96	113	72	67				
MB 480-744938/1-A	Method Blank	119	117	84	81				

Surrogate Legend

DCBP = DCB Decachlorobiphenyl
TCX = Tetrachloro-m-xylene

Surrogate Summary

Client: Roux Environmental Engineering and Geology DPC
Job ID: 480-229031-1
Project/Site: BCP RI - 619 Exchange Street Site

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Matrix: Solid **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)			
		TCX1	TCX2	DCBP1	DCBP2
Lab Sample ID	Client Sample ID	(60-154)	(60-154)	(65-174)	(65-174)
480-229031-1	MW-6 0.5-0.75 Ft	144	142	127	127
480-229031-2	MW-6 8-10 Ft	127	121	112	109
480-229031-4	MW-4 0.25-1 Ft	124	116	112	109
480-229031-5	MW-4 12-14 Ft	140	131	131	128
LCS 480-744720/2-A	Lab Control Sample	159 S1+	147	174	155
MB 480-744720/1-A	Method Blank	142	133	150	150

Surrogate Legend

TCX = Tetrachloro-m-xylene

DCBP = DCB Decachlorobiphenyl

Method: 8151A - Herbicides (GC)

Matrix: Solid **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)	
		DCPAA1	DCPAA2
Lab Sample ID	Client Sample ID	(28-129)	(28-129)
480-229031-1	MW-6 0.5-0.75 Ft	63	68
480-229031-2	MW-6 8-10 Ft	87	83
480-229031-4	MW-4 0.25-1 Ft	77	71
480-229031-5	MW-4 12-14 Ft	79	73
LCS 480-744937/2-A	Lab Control Sample	83	76
MB 480-744937/1-A	Method Blank	78	76

Surrogate Legend

DCPAA = 2,4-Dichlorophenylacetic acid

Isotope Dilution Summary

Client: Roux Environmental Engineering and Geology DPC
Job ID: 480-229031-1
Project/Site: BCP RI - 619 Exchange Street Site

Method: Draft-3 1633 - Per- and Polyfluoroalkyl Substances by LC/MS/MS

Matrix: Solid **Prep Type: Total/NA**

		Percent Isotope Dilution Recovery (Acceptance Limits)							
		PFTDA	PFDoDA	HFPODA	C3PFBS	C3PFHS	PFBA	C4PFHA	13C5PHA
Lab Sample ID	Client Sample ID	(20-150)	(20-150)	(20-150)	(20-150)	(20-150)	(20-150)	(20-150)	(20-150)
480-229031-1	MW-6 0.5-0.75 Ft	71.9	83.7	77.2	69.8	70.0	68.6	74.6	73.4
480-229031-2	MW-6 8-10 Ft	76.4	79.0	80.2	76.8	70.2	79.5	80.2	75.9
480-229031-4	MW-4 0.25-1 Ft	86.4	89.9	103	96.0	90.9	93.3	100	90.7
480-229031-5	MW-4 12-14 Ft	68.6	73.9	83.8	81.4	74.9	80.7	77.7	79.7
LCS 240-654462/3-A	Lab Control Sample	77.3	83.0	100	95.1	88.6	91.7	93.9	92.7
LLCS 240-654462/2-A	Lab Control Sample	75.1	85.2	101	97.9	89.0	91.3	93.9	92.9
MB 240-654462/1-A	Method Blank	74.9	84.8	95.9	99.6	94.4	95.9	92.9	98.2

		Percent Isotope Dilution Recovery (Acceptance Limits)							
		PFPeA	C6PFDA	13C7PUA	C8PFOA	C8PFOS	PFOSA	C9PFNA	d3NMFSA
Lab Sample ID	Client Sample ID	(20-150)	(20-150)	(20-150)	(20-150)	(20-150)	(20-150)	(20-150)	(20-150)
480-229031-1	MW-6 0.5-0.75 Ft	75.0	85.7	86.0	77.0	78.1	72.0	71.3	59.0
480-229031-2	MW-6 8-10 Ft	84.7	81.9	82.7	72.9	77.9	71.0	74.0	62.2
480-229031-4	MW-4 0.25-1 Ft	107	94.5	95.6	93.8	94.9	86.3	83.6	76.2
480-229031-5	MW-4 12-14 Ft	82.1	76.9	80.5	78.0	72.5	68.2	70.2	53.5
LCS 240-654462/3-A	Lab Control Sample	100	86.4	85.0	94.3	92.4	86.0	84.5	74.6
LLCS 240-654462/2-A	Lab Control Sample	97.3	90.1	84.9	89.6	91.5	82.3	82.8	61.3
MB 240-654462/1-A	Method Blank	97.7	89.7	88.9	94.4	96.8	89.4	87.7	83.2

		Percent Isotope Dilution Recovery (Acceptance Limits)							
		d3NMFOS	d5NEFOS	d5NPFSA	NMFM	NEFM	M242FTS	M262FTS	M282FTS
Lab Sample ID	Client Sample ID	(20-150)	(20-150)	(20-150)	(20-150)	(20-150)	(20-150)	(20-150)	(20-150)
480-229031-1	MW-6 0.5-0.75 Ft	81.4	97.7	65.5	66.4	63.7	60.5	69.6	73.2
480-229031-2	MW-6 8-10 Ft	84.3	95.2	65.6	58.1	59.0	70.0	74.6	80.2
480-229031-4	MW-4 0.25-1 Ft	100	109	73.7	75.5	66.0	104	97.1	92.4
480-229031-5	MW-4 12-14 Ft	79.6	76.6	51.5	50.7	45.7	79.8	79.5	75.3
LCS 240-654462/3-A	Lab Control Sample	94.0	124	70.0	77.3	66.5	103	96.3	90.8
LLCS 240-654462/2-A	Lab Control Sample	92.9	97.2	67.6	62.7	61.0	105	96.9	87.0
MB 240-654462/1-A	Method Blank	102	98.4	74.9	87.5	80.9	102	101	94.1

Surrogate Legend

PFTDA = 13C2 PFTeDA
PFDoDA = 13C2-PFDoDA
HFPODA = 13C3 HFPO-DA
C3PFBS = 13C3 PFBS
C3PFHS = 13C3 PFHxS
PFBA = 13C4 PFBA
C4PFHA = 13C4 PFHpA
13C5PHA = 13C5 PFHxA
PFPeA = 13C5 PFPeA
C6PFDA = 13C6 PFDA
13C7PUA = 13C7 PFUnA
C8PFOA = 13C8 PFOA
C8PFOS = 13C8 PFOS
PFOSA = 13C8 PFOSA
C9PFNA = 13C9 PFNA
d3NMFSA = D3-NMeFOSA
d3NMFOS = d3-NMeFOSAA
d5NEFOS = d5-NEtFOSAA
d5NPFSA = d5-NEtPFOSA
NMFM = d7-N-MeFOSE-M

Isotope Dilution Summary

Client: Roux Environmental Engineering and Geology DPC
Job ID: 480-229031-1
Project/Site: BCP RI - 619 Exchange Street Site

NEFM = d9-N-EtFOSE-M
M242FTS = M2-4:2 FTS
M262FTS = M2-6:2 FTS
M282FTS = M2-8:2 FTS

Method: 8260C - Volatile Organic Compounds by GC/MS

Lab Sample ID: MB 480-744702/2-A
Matrix: Solid
Analysis Batch: 744703

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 744702

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		5.0	0.36	ug/Kg		04/28/25 17:10	04/28/25 20:44	1
1,1,2,2-Tetrachloroethane	ND		5.0	0.81	ug/Kg		04/28/25 17:10	04/28/25 20:44	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		5.0	1.1	ug/Kg		04/28/25 17:10	04/28/25 20:44	1
1,1,2-Trichloroethane	ND		5.0	0.65	ug/Kg		04/28/25 17:10	04/28/25 20:44	1
1,1-Dichloroethane	ND		5.0	0.61	ug/Kg		04/28/25 17:10	04/28/25 20:44	1
1,1-Dichloroethene	ND		5.0	0.61	ug/Kg		04/28/25 17:10	04/28/25 20:44	1
1,2,4-Trichlorobenzene	ND		5.0	0.30	ug/Kg		04/28/25 17:10	04/28/25 20:44	1
1,2,4-Trimethylbenzene	ND		5.0	0.96	ug/Kg		04/28/25 17:10	04/28/25 20:44	1
1,2-Dibromo-3-Chloropropane	ND		5.0	2.5	ug/Kg		04/28/25 17:10	04/28/25 20:44	1
1,2-Dibromoethane	ND		5.0	0.64	ug/Kg		04/28/25 17:10	04/28/25 20:44	1
1,2-Dichlorobenzene	ND		5.0	0.39	ug/Kg		04/28/25 17:10	04/28/25 20:44	1
1,2-Dichloroethane	ND		5.0	0.25	ug/Kg		04/28/25 17:10	04/28/25 20:44	1
1,2-Dichloropropane	ND		5.0	2.5	ug/Kg		04/28/25 17:10	04/28/25 20:44	1
1,3,5-Trimethylbenzene	ND		5.0	0.32	ug/Kg		04/28/25 17:10	04/28/25 20:44	1
1,3-Dichlorobenzene	ND		5.0	0.26	ug/Kg		04/28/25 17:10	04/28/25 20:44	1
1,4-Dichlorobenzene	ND		5.0	0.70	ug/Kg		04/28/25 17:10	04/28/25 20:44	1
2-Butanone (MEK)	ND		25	1.8	ug/Kg		04/28/25 17:10	04/28/25 20:44	1
2-Hexanone	ND		25	2.5	ug/Kg		04/28/25 17:10	04/28/25 20:44	1
4-Isopropyltoluene	ND		5.0	0.40	ug/Kg		04/28/25 17:10	04/28/25 20:44	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.6	ug/Kg		04/28/25 17:10	04/28/25 20:44	1
Acetone	ND		25	4.2	ug/Kg		04/28/25 17:10	04/28/25 20:44	1
Benzene	ND		5.0	0.25	ug/Kg		04/28/25 17:10	04/28/25 20:44	1
Bromodichloromethane	ND		5.0	0.67	ug/Kg		04/28/25 17:10	04/28/25 20:44	1
Bromoform	ND		5.0	2.5	ug/Kg		04/28/25 17:10	04/28/25 20:44	1
Bromomethane	ND		5.0	0.45	ug/Kg		04/28/25 17:10	04/28/25 20:44	1
Carbon disulfide	ND		5.0	2.5	ug/Kg		04/28/25 17:10	04/28/25 20:44	1
Carbon tetrachloride	ND		5.0	0.48	ug/Kg		04/28/25 17:10	04/28/25 20:44	1
Chlorobenzene	ND		5.0	0.66	ug/Kg		04/28/25 17:10	04/28/25 20:44	1
Chloroethane	ND		5.0	1.1	ug/Kg		04/28/25 17:10	04/28/25 20:44	1
Chloroform	1.49	J	5.0	0.31	ug/Kg		04/28/25 17:10	04/28/25 20:44	1
Chloromethane	ND		5.0	0.30	ug/Kg		04/28/25 17:10	04/28/25 20:44	1
cis-1,2-Dichloroethene	ND		5.0	0.64	ug/Kg		04/28/25 17:10	04/28/25 20:44	1
cis-1,3-Dichloropropene	ND		5.0	0.72	ug/Kg		04/28/25 17:10	04/28/25 20:44	1
Cyclohexane	ND		5.0	0.70	ug/Kg		04/28/25 17:10	04/28/25 20:44	1
Dibromochloromethane	ND		5.0	0.64	ug/Kg		04/28/25 17:10	04/28/25 20:44	1
Dichlorodifluoromethane	ND		5.0	0.41	ug/Kg		04/28/25 17:10	04/28/25 20:44	1
Ethylbenzene	ND		5.0	0.35	ug/Kg		04/28/25 17:10	04/28/25 20:44	1
Isopropylbenzene	ND		5.0	0.75	ug/Kg		04/28/25 17:10	04/28/25 20:44	1
Methyl acetate	ND		25	3.0	ug/Kg		04/28/25 17:10	04/28/25 20:44	1
Methyl tert-butyl ether	ND		5.0	0.49	ug/Kg		04/28/25 17:10	04/28/25 20:44	1
Methylcyclohexane	ND		5.0	0.76	ug/Kg		04/28/25 17:10	04/28/25 20:44	1
Methylene Chloride	ND		5.0	2.3	ug/Kg		04/28/25 17:10	04/28/25 20:44	1
Naphthalene	ND		5.0	0.67	ug/Kg		04/28/25 17:10	04/28/25 20:44	1
n-Butylbenzene	ND		5.0	0.44	ug/Kg		04/28/25 17:10	04/28/25 20:44	1
N-Propylbenzene	ND		5.0	0.40	ug/Kg		04/28/25 17:10	04/28/25 20:44	1
sec-Butylbenzene	ND		5.0	0.44	ug/Kg		04/28/25 17:10	04/28/25 20:44	1
Styrene	ND		5.0	0.25	ug/Kg		04/28/25 17:10	04/28/25 20:44	1
tert-Butylbenzene	ND		5.0	0.52	ug/Kg		04/28/25 17:10	04/28/25 20:44	1

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: MB 480-744702/2-A
Matrix: Solid
Analysis Batch: 744703

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 744702

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Tetrachloroethene	ND		5.0	0.67	ug/Kg		04/28/25 17:10	04/28/25 20:44	1
Toluene	ND		5.0	0.38	ug/Kg		04/28/25 17:10	04/28/25 20:44	1
trans-1,2-Dichloroethene	ND		5.0	0.52	ug/Kg		04/28/25 17:10	04/28/25 20:44	1
trans-1,3-Dichloropropene	ND		5.0	2.2	ug/Kg		04/28/25 17:10	04/28/25 20:44	1
Trichloroethene	ND		5.0	1.1	ug/Kg		04/28/25 17:10	04/28/25 20:44	1
Trichlorofluoromethane	ND		5.0	0.47	ug/Kg		04/28/25 17:10	04/28/25 20:44	1
Vinyl chloride	ND		5.0	0.61	ug/Kg		04/28/25 17:10	04/28/25 20:44	1
Xylenes, Total	ND		10	0.84	ug/Kg		04/28/25 17:10	04/28/25 20:44	1

Tentatively Identified Compound	*MB Est. Result*	*MB Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/Kg*			*N/A*	*04/28/25 17:10*	*04/28/25 20:44*	*1*

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*101*		*64 - 126*	*04/28/25 17:10*	*04/28/25 20:44*	*1*
4-Bromofluorobenzene (Surr)	*103*		*72 - 126*	*04/28/25 17:10*	*04/28/25 20:44*	*1*
Dibromofluoromethane (Surr)	*104*		*60 - 140*	*04/28/25 17:10*	*04/28/25 20:44*	*1*
Toluene-d8 (Surr)	*100*		*71 - 125*	*04/28/25 17:10*	*04/28/25 20:44*	*1*

Lab Sample ID: LCS 480-744702/1-A
Matrix: Solid
Analysis Batch: 744703

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 744702

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
1,1,1-Trichloroethane	50.0	49.1		ug/Kg		98	77 - 121
1,1,2,2-Tetrachloroethane	50.0	48.9		ug/Kg		98	80 - 120
1,1,2-Trichloro-1,2,2-trifluoroethane	50.0	46.9		ug/Kg		94	60 - 140
1,1,2-Trichloroethane	50.0	49.5		ug/Kg		99	78 - 122
1,1-Dichloroethane	50.0	48.4		ug/Kg		97	73 - 126
1,1-Dichloroethene	50.0	47.2		ug/Kg		94	59 - 125
1,2,4-Trichlorobenzene	50.0	48.6		ug/Kg		97	64 - 120
1,2,4-Trimethylbenzene	50.0	47.6		ug/Kg		95	74 - 120
1,2-Dibromo-3-Chloropropane	50.0	52.5		ug/Kg		105	63 - 124
1,2-Dibromoethane	50.0	48.9		ug/Kg		98	78 - 120
1,2-Dichlorobenzene	50.0	47.3		ug/Kg		95	75 - 120
1,2-Dichloroethane	50.0	49.9		ug/Kg		100	77 - 122
1,2-Dichloropropane	50.0	49.6		ug/Kg		99	75 - 124
1,3,5-Trimethylbenzene	50.0	48.2		ug/Kg		96	74 - 120
1,3-Dichlorobenzene	50.0	47.4		ug/Kg		95	74 - 120
1,4-Dichlorobenzene	50.0	46.6		ug/Kg		93	73 - 120
2-Butanone (MEK)	250	277		ug/Kg		111	70 - 134
2-Hexanone	250	258		ug/Kg		103	59 - 130
4-Isopropyltoluene	50.0	48.1		ug/Kg		96	74 - 120
4-Methyl-2-pentanone (MIBK)	250	262		ug/Kg		105	65 - 133
Acetone	250	264		ug/Kg		106	61 - 137
Benzene	50.0	48.1		ug/Kg		96	79 - 127
Bromodichloromethane	50.0	49.0		ug/Kg		98	80 - 122
Bromoform	50.0	51.6		ug/Kg		103	68 - 126

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCS 480-744702/1-A
Matrix: Solid
Analysis Batch: 744703

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 744702

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Bromomethane	50.0	47.3		ug/Kg		95	37 - 149
Carbon disulfide	50.0	44.8		ug/Kg		90	64 - 131
Carbon tetrachloride	50.0	48.5		ug/Kg		97	75 - 135
Chlorobenzene	50.0	47.5		ug/Kg		95	76 - 124
Chloroethane	50.0	46.9		ug/Kg		94	69 - 135
Chloroform	50.0	47.5		ug/Kg		95	80 - 120
Chloromethane	50.0	45.9		ug/Kg		92	63 - 127
cis-1,2-Dichloroethene	50.0	47.1		ug/Kg		94	81 - 120
cis-1,3-Dichloropropene	50.0	51.0		ug/Kg		102	80 - 120
Cyclohexane	50.0	47.2		ug/Kg		94	65 - 120
Dibromochloromethane	50.0	50.8		ug/Kg		102	76 - 125
Dichlorodifluoromethane	50.0	42.9		ug/Kg		86	57 - 142
Ethylbenzene	50.0	46.4		ug/Kg		93	80 - 120
Isopropylbenzene	50.0	48.8		ug/Kg		98	72 - 120
Methyl acetate	100	105		ug/Kg		105	55 - 136
Methyl tert-butyl ether	50.0	48.5		ug/Kg		97	63 - 125
Methylcyclohexane	50.0	47.5		ug/Kg		95	60 - 140
Methylene Chloride	50.0	52.1		ug/Kg		104	61 - 127
Naphthalene	50.0	49.4		ug/Kg		99	38 - 137
n-Butylbenzene	50.0	47.3		ug/Kg		95	70 - 120
N-Propylbenzene	50.0	48.1		ug/Kg		96	70 - 130
sec-Butylbenzene	50.0	48.2		ug/Kg		96	74 - 120
Styrene	50.0	45.8		ug/Kg		92	80 - 120
tert-Butylbenzene	50.0	50.1		ug/Kg		100	73 - 120
Tetrachloroethene	50.0	47.2		ug/Kg		94	74 - 122
Toluene	50.0	47.1		ug/Kg		94	74 - 128
trans-1,2-Dichloroethene	50.0	47.7		ug/Kg		95	78 - 126
trans-1,3-Dichloropropene	50.0	49.7		ug/Kg		99	73 - 123
Trichloroethene	50.0	49.0		ug/Kg		98	77 - 129
Trichlorofluoromethane	50.0	49.5		ug/Kg		99	65 - 146
Vinyl chloride	50.0	46.5		ug/Kg		93	61 - 133
Xylenes, Total	100	95.4		ug/Kg		95	70 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*103*		*64 - 126*
4-Bromofluorobenzene (Surr)	*98*		*72 - 126*
Dibromofluoromethane (Surr)	*104*		*60 - 140*
Toluene-d8 (Surr)	*101*		*71 - 125*

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Lab Sample ID: MB 480-745441/1-A
Matrix: Solid
Analysis Batch: 745508

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 745441

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	ND		100	55	ug/Kg		05/07/25 13:55	05/08/25 12:12	1
2,4,5-Trichlorophenol	ND		170	46	ug/Kg		05/07/25 13:55	05/08/25 12:12	1
2,4,6-Trichlorophenol	ND		170	34	ug/Kg		05/07/25 13:55	05/08/25 12:12	1

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 480-745441/1-A
Matrix: Solid
Analysis Batch: 745508

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 745441

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4-Dichlorophenol	ND		170	18	ug/Kg		05/07/25 13:55	05/08/25 12:12	1
2,4-Dimethylphenol	ND		170	41	ug/Kg		05/07/25 13:55	05/08/25 12:12	1
2,4-Dinitrophenol	ND		1700	780	ug/Kg		05/07/25 13:55	05/08/25 12:12	1
2,4-Dinitrotoluene	ND		170	35	ug/Kg		05/07/25 13:55	05/08/25 12:12	1
2,6-Dinitrotoluene	ND		170	20	ug/Kg		05/07/25 13:55	05/08/25 12:12	1
2-Chloronaphthalene	ND		170	28	ug/Kg		05/07/25 13:55	05/08/25 12:12	1
2-Chlorophenol	ND		330	31	ug/Kg		05/07/25 13:55	05/08/25 12:12	1
2-Methylnaphthalene	ND		170	34	ug/Kg		05/07/25 13:55	05/08/25 12:12	1
2-Methylphenol	ND		170	20	ug/Kg		05/07/25 13:55	05/08/25 12:12	1
2-Nitroaniline	ND		330	25	ug/Kg		05/07/25 13:55	05/08/25 12:12	1
2-Nitrophenol	ND		170	48	ug/Kg		05/07/25 13:55	05/08/25 12:12	1
3,3'-Dichlorobenzidine	ND		330	200	ug/Kg		05/07/25 13:55	05/08/25 12:12	1
3-Nitroaniline	ND		330	47	ug/Kg		05/07/25 13:55	05/08/25 12:12	1
4,6-Dinitro-2-methylphenol	ND		330	170	ug/Kg		05/07/25 13:55	05/08/25 12:12	1
4-Bromophenyl phenyl ether	ND		170	24	ug/Kg		05/07/25 13:55	05/08/25 12:12	1
4-Chloro-3-methylphenol	ND		170	42	ug/Kg		05/07/25 13:55	05/08/25 12:12	1
4-Chloroaniline	ND		170	42	ug/Kg		05/07/25 13:55	05/08/25 12:12	1
4-Chlorophenyl phenyl ether	ND		170	21	ug/Kg		05/07/25 13:55	05/08/25 12:12	1
4-Methylphenol	ND		330	20	ug/Kg		05/07/25 13:55	05/08/25 12:12	1
4-Nitroaniline	ND		330	89	ug/Kg		05/07/25 13:55	05/08/25 12:12	1
4-Nitrophenol	ND		330	120	ug/Kg		05/07/25 13:55	05/08/25 12:12	1
Acenaphthene	ND		170	25	ug/Kg		05/07/25 13:55	05/08/25 12:12	1
Acenaphthylene	ND		170	22	ug/Kg		05/07/25 13:55	05/08/25 12:12	1
Acetophenone	ND		170	23	ug/Kg		05/07/25 13:55	05/08/25 12:12	1
Anthracene	ND		170	42	ug/Kg		05/07/25 13:55	05/08/25 12:12	1
Atrazine	ND		170	59	ug/Kg		05/07/25 13:55	05/08/25 12:12	1
Benzaldehyde	ND		170	140	ug/Kg		05/07/25 13:55	05/08/25 12:12	1
Benzo[a]anthracene	ND		170	17	ug/Kg		05/07/25 13:55	05/08/25 12:12	1
Benzo[a]pyrene	ND		170	25	ug/Kg		05/07/25 13:55	05/08/25 12:12	1
Benzo[b]fluoranthene	ND		170	27	ug/Kg		05/07/25 13:55	05/08/25 12:12	1
Benzo[g,h,i]perylene	ND		170	18	ug/Kg		05/07/25 13:55	05/08/25 12:12	1
Benzo[k]fluoranthene	ND		170	22	ug/Kg		05/07/25 13:55	05/08/25 12:12	1
Biphenyl	ND		170	25	ug/Kg		05/07/25 13:55	05/08/25 12:12	1
bis (2-chloroisopropyl) ether	ND		170	34	ug/Kg		05/07/25 13:55	05/08/25 12:12	1
Bis(2-chloroethoxy)methane	ND		170	36	ug/Kg		05/07/25 13:55	05/08/25 12:12	1
Bis(2-chloroethyl)ether	ND		170	22	ug/Kg		05/07/25 13:55	05/08/25 12:12	1
Bis(2-ethylhexyl) phthalate	ND		170	58	ug/Kg		05/07/25 13:55	05/08/25 12:12	1
Butyl benzyl phthalate	ND		170	28	ug/Kg		05/07/25 13:55	05/08/25 12:12	1
Caprolactam	ND		170	51	ug/Kg		05/07/25 13:55	05/08/25 12:12	1
Carbazole	ND		170	20	ug/Kg		05/07/25 13:55	05/08/25 12:12	1
Chrysene	ND		170	38	ug/Kg		05/07/25 13:55	05/08/25 12:12	1
Dibenz(a,h)anthracene	ND		170	30	ug/Kg		05/07/25 13:55	05/08/25 12:12	1
Dibenzofuran	ND		170	20	ug/Kg		05/07/25 13:55	05/08/25 12:12	1
Diethyl phthalate	ND		170	22	ug/Kg		05/07/25 13:55	05/08/25 12:12	1
Dimethyl phthalate	ND		170	20	ug/Kg		05/07/25 13:55	05/08/25 12:12	1
Di-n-butyl phthalate	ND		170	29	ug/Kg		05/07/25 13:55	05/08/25 12:12	1
Di-n-octyl phthalate	ND		170	20	ug/Kg		05/07/25 13:55	05/08/25 12:12	1
Fluoranthene	ND		170	18	ug/Kg		05/07/25 13:55	05/08/25 12:12	1
Fluorene	ND		170	20	ug/Kg		05/07/25 13:55	05/08/25 12:12	1

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 480-745441/1-A
Matrix: Solid
Analysis Batch: 745508

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 745441

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hexachlorobenzene	ND		170	23	ug/Kg		05/07/25 13:55	05/08/25 12:12	1
Hexachlorobutadiene	ND		170	25	ug/Kg		05/07/25 13:55	05/08/25 12:12	1
Hexachlorocyclopentadiene	ND		170	23	ug/Kg		05/07/25 13:55	05/08/25 12:12	1
Hexachloroethane	ND		170	22	ug/Kg		05/07/25 13:55	05/08/25 12:12	1
Indeno[1,2,3-cd]pyrene	ND		170	21	ug/Kg		05/07/25 13:55	05/08/25 12:12	1
Isophorone	ND		170	36	ug/Kg		05/07/25 13:55	05/08/25 12:12	1
Naphthalene	ND		170	22	ug/Kg		05/07/25 13:55	05/08/25 12:12	1
Nitrobenzene	ND		170	19	ug/Kg		05/07/25 13:55	05/08/25 12:12	1
N-Nitrosodi-n-propylamine	ND		170	29	ug/Kg		05/07/25 13:55	05/08/25 12:12	1
N-Nitrosodiphenylamine	ND		170	140	ug/Kg		05/07/25 13:55	05/08/25 12:12	1
Pentachlorophenol	ND		330	170	ug/Kg		05/07/25 13:55	05/08/25 12:12	1
Phenanthrene	ND		170	25	ug/Kg		05/07/25 13:55	05/08/25 12:12	1
Phenol	ND		170	26	ug/Kg		05/07/25 13:55	05/08/25 12:12	1
Pyrene	ND		170	20	ug/Kg		05/07/25 13:55	05/08/25 12:12	1

Tentatively Identified Compound	*MB Est. Result*	*MB Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Unknown	*2690*	*T J*	*ug/Kg*		*1.88*	*N/A*	*05/07/25 13:55*	*05/08/25 12:12*	*1*
Unknown	*3970*	*T J*	*ug/Kg*		*1.99*	*N/A*	*05/07/25 13:55*	*05/08/25 12:12*	*1*
Unknown	*397*	*T J*	*ug/Kg*		*3.02*	*N/A*	*05/07/25 13:55*	*05/08/25 12:12*	*1*
2-Hexene, 3,5,5-trimethyl-	*210*	*T J N*	*ug/Kg*		*3.23*	*26456-76-8*	*05/07/25 13:55*	*05/08/25 12:12*	*1*
Unknown	*1420*	*T J*	*ug/Kg*		*3.45*	*N/A*	*05/07/25 13:55*	*05/08/25 12:12*	*1*
Unknown	*499*	*T J*	*ug/Kg*		*4.12*	*N/A*	*05/07/25 13:55*	*05/08/25 12:12*	*1*
Unknown	*158*	*T J*	*ug/Kg*		*4.40*	*N/A*	*05/07/25 13:55*	*05/08/25 12:12*	*1*
Unknown	*1600*	*T J*	*ug/Kg*		*4.59*	*N/A*	*05/07/25 13:55*	*05/08/25 12:12*	*1*
Unknown	*407*	*T J*	*ug/Kg*		*4.62*	*N/A*	*05/07/25 13:55*	*05/08/25 12:12*	*1*
Unknown	*395*	*T J*	*ug/Kg*		*4.75*	*N/A*	*05/07/25 13:55*	*05/08/25 12:12*	*1*
Unknown	*158*	*T J*	*ug/Kg*		*4.89*	*N/A*	*05/07/25 13:55*	*05/08/25 12:12*	*1*
Unknown	*988*	*T J*	*ug/Kg*		*4.94*	*N/A*	*05/07/25 13:55*	*05/08/25 12:12*	*1*
Unknown	*968*	*T J*	*ug/Kg*		*4.97*	*N/A*	*05/07/25 13:55*	*05/08/25 12:12*	*1*
Unknown	*177*	*T J*	*ug/Kg*		*5.03*	*N/A*	*05/07/25 13:55*	*05/08/25 12:12*	*1*

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol (Surr)	*102*		*26 - 143*	*05/07/25 13:55*	*05/08/25 12:12*	*1*
2-Fluorobiphenyl (Surr)	*91*		*50 - 121*	*05/07/25 13:55*	*05/08/25 12:12*	*1*
2-Fluorophenol (Surr)	*81*		*36 - 120*	*05/07/25 13:55*	*05/08/25 12:12*	*1*
Nitrobenzene-d5 (Surr)	*86*		*40 - 121*	*05/07/25 13:55*	*05/08/25 12:12*	*1*
Phenol-d5 (Surr)	*85*		*41 - 120*	*05/07/25 13:55*	*05/08/25 12:12*	*1*
p-Terphenyl-d14 (Surr)	*102*		*46 - 143*	*05/07/25 13:55*	*05/08/25 12:12*	*1*

Lab Sample ID: LCS 480-745441/2-A
Matrix: Solid
Analysis Batch: 745508

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 745441

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
1,4-Dioxane	1330	638		ug/Kg		48	23 - 120
2,4,5-Trichlorophenol	1330	1380		ug/Kg		103	59 - 126
2,4,6-Trichlorophenol	1330	1370		ug/Kg		103	59 - 123
2,4-Dichlorophenol	1330	1240		ug/Kg		93	61 - 120

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 480-745441/2-A
Matrix: Solid
Analysis Batch: 745508

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 745441

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
2,4-Dimethylphenol	1330	1240		ug/Kg		93	59 - 120
2,4-Dinitrophenol	2670	3230		ug/Kg		121	41 - 146
2,4-Dinitrotoluene	1330	1390		ug/Kg		104	63 - 120
2,6-Dinitrotoluene	1330	1330		ug/Kg		100	66 - 120
2-Chloronaphthalene	1330	1230		ug/Kg		92	57 - 120
2-Chlorophenol	1330	1120		ug/Kg		84	53 - 120
2-Methylnaphthalene	1330	1170		ug/Kg		88	59 - 120
2-Methylphenol	1330	1150		ug/Kg		86	54 - 120
2-Nitroaniline	1330	1310		ug/Kg		98	61 - 120
2-Nitrophenol	1330	1300		ug/Kg		97	56 - 120
3,3'-Dichlorobenzidine	1330	1070		ug/Kg		80	54 - 120
3-Nitroaniline	1330	877		ug/Kg		66	48 - 120
4,6-Dinitro-2-methylphenol	2670	3170		ug/Kg		119	49 - 122
4-Bromophenyl phenyl ether	1330	1360		ug/Kg		102	58 - 120
4-Chloro-3-methylphenol	1330	1310		ug/Kg		98	61 - 120
4-Chloroaniline	1330	542		ug/Kg		41	38 - 120
4-Chlorophenyl phenyl ether	1330	1300		ug/Kg		97	63 - 124
4-Methylphenol	1330	1200		ug/Kg		90	55 - 120
4-Nitroaniline	1330	1260		ug/Kg		95	56 - 120
4-Nitrophenol	2670	2740		ug/Kg		103	43 - 147
Acenaphthene	1330	1270		ug/Kg		95	62 - 120
Acenaphthylene	1330	1230		ug/Kg		92	58 - 121
Acetophenone	1330	1130		ug/Kg		85	54 - 120
Anthracene	1330	1350		ug/Kg		101	62 - 120
Atrazine	1330	1030		ug/Kg		77	60 - 127
Benzaldehyde	1330	865		ug/Kg		65	10 - 150
Benzo[a]anthracene	1330	1370		ug/Kg		103	65 - 120
Benzo[a]pyrene	1330	1440		ug/Kg		108	64 - 120
Benzo[b]fluoranthene	1330	1430		ug/Kg		107	64 - 120
Benzo[g,h,i]perylene	1330	1520		ug/Kg		114	45 - 145
Benzo[k]fluoranthene	1330	1410		ug/Kg		106	65 - 120
Biphenyl	1330	1250		ug/Kg		94	59 - 120
bis (2-chloroisopropyl) ether	1330	1080		ug/Kg		81	44 - 120
Bis(2-chloroethoxy)methane	1330	1200		ug/Kg		90	55 - 120
Bis(2-chloroethyl)ether	1330	1100		ug/Kg		82	45 - 120
Bis(2-ethylhexyl) phthalate	1330	1320		ug/Kg		99	61 - 133
Butyl benzyl phthalate	1330	1280		ug/Kg		96	61 - 129
Caprolactam	1330	980		ug/Kg		74	47 - 120
Carbazole	1330	1380		ug/Kg		103	65 - 120
Chrysene	1330	1340		ug/Kg		101	64 - 120
Dibenz(a,h)anthracene	1330	1430		ug/Kg		107	54 - 132
Dibenzofuran	1330	1300		ug/Kg		97	63 - 120
Diethyl phthalate	1330	1350		ug/Kg		101	66 - 120
Dimethyl phthalate	1330	1310		ug/Kg		98	65 - 124
Di-n-butyl phthalate	1330	1250		ug/Kg		94	58 - 130
Di-n-octyl phthalate	1330	1250		ug/Kg		93	57 - 133
Fluoranthene	1330	1390		ug/Kg		105	62 - 120
Fluorene	1330	1320		ug/Kg		99	63 - 120
Hexachlorobenzene	1330	1370		ug/Kg		103	60 - 120

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 480-745441/2-A
Matrix: Solid
Analysis Batch: 745508

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 745441

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Hexachlorobutadiene	1330	1170		ug/Kg		88	45 - 120
Hexachlorocyclopentadiene	1330	1220		ug/Kg		91	47 - 120
Hexachloroethane	1330	1060		ug/Kg		80	41 - 120
Indeno[1,2,3-cd]pyrene	1330	1460		ug/Kg		109	56 - 134
Isophorone	1330	1190		ug/Kg		89	56 - 120
Naphthalene	1330	1170		ug/Kg		87	55 - 120
Nitrobenzene	1330	1130		ug/Kg		85	54 - 120
N-Nitrosodi-n-propylamine	1330	1140		ug/Kg		86	52 - 120
N-Nitrosodiphenylamine	1330	1340		ug/Kg		101	51 - 128
Pentachlorophenol	2670	2990		ug/Kg		112	10 - 120
Phenanthrene	1330	1340		ug/Kg		101	60 - 120
Phenol	1330	1120		ug/Kg		84	53 - 120
Pyrene	1330	1370		ug/Kg		102	61 - 133

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2,4,6-Tribromophenol (Surr)	*113*		*26 - 143*
2-Fluorobiphenyl (Surr)	*96*		*50 - 121*
2-Fluorophenol (Surr)	*84*		*36 - 120*
Nitrobenzene-d5 (Surr)	*89*		*40 - 121*
Phenol-d5 (Surr)	*89*		*41 - 120*
p-Terphenyl-d14 (Surr)	*102*		*46 - 143*

Method: 8081B - Organochlorine Pesticides (GC)

Lab Sample ID: MB 480-744938/1-A
Matrix: Solid
Analysis Batch: 745019

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 744938

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	ND		3.3	0.65	ug/Kg		05/01/25 06:41	05/01/25 14:48	1
4,4'-DDE	ND		3.3	0.70	ug/Kg		05/01/25 06:41	05/01/25 14:48	1
4,4'-DDT	2.65	J	3.3	0.78	ug/Kg		05/01/25 06:41	05/01/25 14:48	1
Aldrin	ND		3.3	0.82	ug/Kg		05/01/25 06:41	05/01/25 14:48	1
alpha-BHC	ND		3.3	0.60	ug/Kg		05/01/25 06:41	05/01/25 14:48	1
cis-Chlordane	ND		3.3	1.7	ug/Kg		05/01/25 06:41	05/01/25 14:48	1
beta-BHC	ND		3.3	0.60	ug/Kg		05/01/25 06:41	05/01/25 14:48	1
delta-BHC	ND		3.3	0.62	ug/Kg		05/01/25 06:41	05/01/25 14:48	1
Dieldrin	ND		3.3	0.80	ug/Kg		05/01/25 06:41	05/01/25 14:48	1
Endosulfan I	ND		3.3	0.64	ug/Kg		05/01/25 06:41	05/01/25 14:48	1
Endosulfan II	ND		3.3	0.60	ug/Kg		05/01/25 06:41	05/01/25 14:48	1
Endosulfan sulfate	ND		3.3	0.62	ug/Kg		05/01/25 06:41	05/01/25 14:48	1
Endrin	ND		3.3	0.66	ug/Kg		05/01/25 06:41	05/01/25 14:48	1
Endrin aldehyde	ND		3.3	0.85	ug/Kg		05/01/25 06:41	05/01/25 14:48	1
Endrin ketone	2.25	J	3.3	0.82	ug/Kg		05/01/25 06:41	05/01/25 14:48	1
gamma-BHC (Lindane)	ND		3.3	0.61	ug/Kg		05/01/25 06:41	05/01/25 14:48	1
trans-Chlordane	ND		3.3	1.1	ug/Kg		05/01/25 06:41	05/01/25 14:48	1
Heptachlor	ND		3.3	0.72	ug/Kg		05/01/25 06:41	05/01/25 14:48	1
Heptachlor epoxide	ND		3.3	0.86	ug/Kg		05/01/25 06:41	05/01/25 14:48	1
Methoxychlor	3.04	J	3.3	0.68	ug/Kg		05/01/25 06:41	05/01/25 14:48	1

Method: 8081B - Organochlorine Pesticides (GC) (Continued)

Lab Sample ID: MB 480-744938/1-A
Matrix: Solid
Analysis Batch: 745019

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 744938

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Toxaphene	ND		33	19	ug/Kg		05/01/25 06:41	05/01/25 14:48	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*119*		*45 - 120*	*05/01/25 06:41*	*05/01/25 14:48*	*1*
DCB Decachlorobiphenyl	*117*		*45 - 120*	*05/01/25 06:41*	*05/01/25 14:48*	*1*
Tetrachloro-m-xylene	*84*		*30 - 124*	*05/01/25 06:41*	*05/01/25 14:48*	*1*
Tetrachloro-m-xylene	*81*		*30 - 124*	*05/01/25 06:41*	*05/01/25 14:48*	*1*

Lab Sample ID: LCS 480-744938/2-A
Matrix: Solid
Analysis Batch: 745019

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 744938

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
4,4'-DDD	33.3	31.2		ug/Kg		94	56 - 120
4,4'-DDE	33.3	28.6		ug/Kg		86	44 - 120
4,4'-DDT	33.3	33.1		ug/Kg		99	38 - 120
Aldrin	33.3	22.6		ug/Kg		68	38 - 120
alpha-BHC	33.3	23.5		ug/Kg		71	39 - 120
cis-Chlordane	33.3	27.2		ug/Kg		82	47 - 120
beta-BHC	33.3	26.7		ug/Kg		80	40 - 120
delta-BHC	33.3	23.5		ug/Kg		71	45 - 120
Dieldrin	33.3	28.9		ug/Kg		87	58 - 120
Endosulfan I	33.3	28.8		ug/Kg		87	49 - 120
Endosulfan II	33.3	30.7		ug/Kg		92	55 - 120
Endosulfan sulfate	33.3	20.2		ug/Kg		61	49 - 124
Endrin	33.3	29.8		ug/Kg		89	58 - 120
Endrin aldehyde	33.3	30.7		ug/Kg		92	37 - 121
Endrin ketone	33.3	32.4		ug/Kg		97	46 - 123
gamma-BHC (Lindane)	33.3	25.5		ug/Kg		77	50 - 120
trans-Chlordane	33.3	27.3		ug/Kg		82	48 - 120
Heptachlor	33.3	26.7		ug/Kg		80	50 - 120
Heptachlor epoxide	33.3	27.3		ug/Kg		82	50 - 120
Methoxychlor	33.3	36.6		ug/Kg		110	58 - 133

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
DCB Decachlorobiphenyl	*96*		*45 - 120*
DCB Decachlorobiphenyl	*113*		*45 - 120*
Tetrachloro-m-xylene	*72*		*30 - 124*
Tetrachloro-m-xylene	*67*		*30 - 124*

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Lab Sample ID: MB 480-744720/1-A
Matrix: Solid
Analysis Batch: 744757

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 744720

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		0.25	0.049	mg/Kg		04/29/25 06:41	04/29/25 12:36	1

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography (Continued)

Lab Sample ID: MB 480-744720/1-A
Matrix: Solid
Analysis Batch: 744757

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 744720

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1221	ND		0.25	0.049	mg/Kg		04/29/25 06:41	04/29/25 12:36	1
PCB-1232	ND		0.25	0.049	mg/Kg		04/29/25 06:41	04/29/25 12:36	1
PCB-1242	ND		0.25	0.049	mg/Kg		04/29/25 06:41	04/29/25 12:36	1
PCB-1248	ND		0.25	0.049	mg/Kg		04/29/25 06:41	04/29/25 12:36	1
PCB-1254	ND		0.25	0.12	mg/Kg		04/29/25 06:41	04/29/25 12:36	1
PCB-1260	ND		0.25	0.12	mg/Kg		04/29/25 06:41	04/29/25 12:36	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*142*		*60 - 154*	*04/29/25 06:41*	*04/29/25 12:36*	*1*
Tetrachloro-m-xylene	*133*		*60 - 154*	*04/29/25 06:41*	*04/29/25 12:36*	*1*
DCB Decachlorobiphenyl	*150*		*65 - 174*	*04/29/25 06:41*	*04/29/25 12:36*	*1*
DCB Decachlorobiphenyl	*150*		*65 - 174*	*04/29/25 06:41*	*04/29/25 12:36*	*1*

Lab Sample ID: LCS 480-744720/2-A
Matrix: Solid
Analysis Batch: 744757

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 744720

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
PCB-1016	2.50	3.33		mg/Kg		133	51 - 185
PCB-1260	2.50	3.50		mg/Kg		140	61 - 184

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Tetrachloro-m-xylene	*159*	*S1+*	*60 - 154*
Tetrachloro-m-xylene	*147*		*60 - 154*
DCB Decachlorobiphenyl	*174*		*65 - 174*
DCB Decachlorobiphenyl	*155*		*65 - 174*

Method: 8151A - Herbicides (GC)

Lab Sample ID: MB 480-744937/1-A
Matrix: Solid
Analysis Batch: 745549

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 744937

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-T	ND		17	5.3	ug/Kg		05/01/25 06:27	05/08/25 12:25	1
2,4-D	ND		17	11	ug/Kg		05/01/25 06:27	05/08/25 12:25	1
Dichlorprop	ND		17	8.3	ug/Kg		05/01/25 06:27	05/08/25 12:25	1
Pentachlorophenol	ND		17	5.4	ug/Kg		05/01/25 06:27	05/08/25 12:25	1
Picloram	ND		17	7.2	ug/Kg		05/01/25 06:27	05/08/25 12:25	1
Silvex (2,4,5-TP)	ND		17	6.0	ug/Kg		05/01/25 06:27	05/08/25 12:25	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4-Dichlorophenylacetic acid	*78*		*28 - 129*	*05/01/25 06:27*	*05/08/25 12:25*	*1*
2,4-Dichlorophenylacetic acid	*76*		*28 - 129*	*05/01/25 06:27*	*05/08/25 12:25*	*1*

Method: 8151A - Herbicides (GC) (Continued)

Lab Sample ID: LCS 480-744937/2-A
Matrix: Solid
Analysis Batch: 745549

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 744937

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
2,4,5-T	66.7	52.0		ug/Kg		78	41 - 120
2,4-D	66.7	53.0		ug/Kg		80	40 - 120
Dichlorprop	66.7	55.1		ug/Kg		83	34 - 121
Pentachlorophenol	66.7	14.8	J	ug/Kg		22	10 - 120
Picloram	66.7	52.5		ug/Kg		79	22 - 149
Silvex (2,4,5-TP)	66.7	52.7		ug/Kg		79	39 - 125

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2,4-Dichlorophenylacetic acid	*83*		*28 - 129*
2,4-Dichlorophenylacetic acid	*76*		*28 - 129*

Method: Draft-3 1633 - Per- and Polyfluoroalkyl Substances by LC/MS/MS

Lab Sample ID: MB 240-654462/1-A
Matrix: Solid
Analysis Batch: 654529

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 654462

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)	ND		0.50	0.13	ug/Kg		05/02/25 08:22	05/02/25 23:30	1
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2 FTS)	ND		0.50	0.13	ug/Kg		05/02/25 08:22	05/02/25 23:30	1
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2 FTS)	ND		0.50	0.13	ug/Kg		05/02/25 08:22	05/02/25 23:30	1
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2 FTS)	ND		0.50	0.13	ug/Kg		05/02/25 08:22	05/02/25 23:30	1
3-Perfluoroheptylpropanoic acid (7:3 FTCA)	ND		3.1	0.78	ug/Kg		05/02/25 08:22	05/02/25 23:30	1
3-Perfluoropentylpropanoic acid (5:3 FTCA)	ND		3.1	0.78	ug/Kg		05/02/25 08:22	05/02/25 23:30	1
3-Perfluoropropylpropanoic acid (3:3 FTCA)	ND		0.63	0.16	ug/Kg		05/02/25 08:22	05/02/25 23:30	1
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	ND		0.50	0.13	ug/Kg		05/02/25 08:22	05/02/25 23:30	1
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9Cl-PF3ONS)	ND		0.50	0.13	ug/Kg		05/02/25 08:22	05/02/25 23:30	1
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA)	ND		0.50	0.13	ug/Kg		05/02/25 08:22	05/02/25 23:30	1
N-ethylperfluorooctane sulfonamide (NEtFOSA)	ND		0.13	0.031	ug/Kg		05/02/25 08:22	05/02/25 23:30	1
N-ethylperfluorooctane sulfonamidoethanol (NEtFOSE)	ND		1.3	0.31	ug/Kg		05/02/25 08:22	05/02/25 23:30	1
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	ND		0.13	0.031	ug/Kg		05/02/25 08:22	05/02/25 23:30	1
N-methylperfluorooctane sulfonamide (NMeFOSA)	ND		0.13	0.031	ug/Kg		05/02/25 08:22	05/02/25 23:30	1
N-methylperfluorooctane sulfonamidoethanol (NMeFOSE)	ND		1.3	0.31	ug/Kg		05/02/25 08:22	05/02/25 23:30	1
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	ND		0.13	0.031	ug/Kg		05/02/25 08:22	05/02/25 23:30	1
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	ND		0.25	0.063	ug/Kg		05/02/25 08:22	05/02/25 23:30	1

Method: Draft-3 1633 - Per- and Polyfluoroalkyl Substances by LC/MS/MS (Continued)

Lab Sample ID: MB 240-654462/1-A
Matrix: Solid
Analysis Batch: 654529

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 654462

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluoro (2-ethoxyethane) sulfonic acid (PFEESA)	ND		0.25	0.063	ug/Kg		05/02/25 08:22	05/02/25 23:30	1
Perfluoro-3-methoxypropanoic acid (PFMPA)	ND		0.25	0.063	ug/Kg		05/02/25 08:22	05/02/25 23:30	1
Perfluoro-4-methoxybutanoic acid (PFMBA)	ND		0.25	0.063	ug/Kg		05/02/25 08:22	05/02/25 23:30	1
Perfluorobutanesulfonic acid (PFBS)	ND		0.13	0.031	ug/Kg		05/02/25 08:22	05/02/25 23:30	1
Perfluorobutanoic acid (PFBA)	ND		0.50	0.13	ug/Kg		05/02/25 08:22	05/02/25 23:30	1
Perfluorodecanesulfonic acid (PFDS)	ND		0.13	0.031	ug/Kg		05/02/25 08:22	05/02/25 23:30	1
Perfluorodecanoic acid (PFDA)	ND		0.13	0.031	ug/Kg		05/02/25 08:22	05/02/25 23:30	1
Perfluorododecanesulfonic acid (PFDoS)	ND		0.13	0.031	ug/Kg		05/02/25 08:22	05/02/25 23:30	1
Perfluorododecanoic acid (PFDoA)	ND		0.13	0.031	ug/Kg		05/02/25 08:22	05/02/25 23:30	1
Perfluoroheptanesulfonic acid (PFHpS)	ND		0.13	0.031	ug/Kg		05/02/25 08:22	05/02/25 23:30	1
Perfluoroheptanoic acid (PFHpA)	ND		0.13	0.031	ug/Kg		05/02/25 08:22	05/02/25 23:30	1
Perfluorohexanesulfonic acid (PFHxS)	ND		0.13	0.031	ug/Kg		05/02/25 08:22	05/02/25 23:30	1
Perfluorohexanoic acid (PFHxA)	ND		0.13	0.031	ug/Kg		05/02/25 08:22	05/02/25 23:30	1
Perfluorononanesulfonic acid (PFNS)	ND		0.13	0.031	ug/Kg		05/02/25 08:22	05/02/25 23:30	1
Perfluorononanoic acid (PFNA)	ND		0.13	0.031	ug/Kg		05/02/25 08:22	05/02/25 23:30	1
Perfluorooctanesulfonamide (PFOSA)	ND		0.13	0.031	ug/Kg		05/02/25 08:22	05/02/25 23:30	1
Perfluorooctanesulfonic acid (PFOS)	ND		0.13	0.031	ug/Kg		05/02/25 08:22	05/02/25 23:30	1
Perfluorooctanoic acid (PFOA)	ND		0.13	0.031	ug/Kg		05/02/25 08:22	05/02/25 23:30	1
Perfluoropentanesulfonic acid (PFPeS)	ND		0.13	0.031	ug/Kg		05/02/25 08:22	05/02/25 23:30	1
Perfluoropentanoic acid (PFPeA)	ND		0.25	0.063	ug/Kg		05/02/25 08:22	05/02/25 23:30	1
Perfluorotetradecanoic acid (PFTeDA)	ND		0.13	0.031	ug/Kg		05/02/25 08:22	05/02/25 23:30	1
Perfluorotridecanoic acid (PFTrDA)	ND		0.13	0.031	ug/Kg		05/02/25 08:22	05/02/25 23:30	1
Perfluoroundecanoic acid (PFUnA)	ND		0.13	0.031	ug/Kg		05/02/25 08:22	05/02/25 23:30	1

Isotope Dilution	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C2 PFTeDA	*74.9*		*20 - 150*	*05/02/25 08:22*	*05/02/25 23:30*	*1*
13C2-PFDoDA	*84.8*		*20 - 150*	*05/02/25 08:22*	*05/02/25 23:30*	*1*
13C3 HFPO-DA	*95.9*		*20 - 150*	*05/02/25 08:22*	*05/02/25 23:30*	*1*
13C3 PFBS	*99.6*		*20 - 150*	*05/02/25 08:22*	*05/02/25 23:30*	*1*
13C3 PFHxS	*94.4*		*20 - 150*	*05/02/25 08:22*	*05/02/25 23:30*	*1*
13C4 PFBA	*95.9*		*20 - 150*	*05/02/25 08:22*	*05/02/25 23:30*	*1*
13C4 PFHpA	*92.9*		*20 - 150*	*05/02/25 08:22*	*05/02/25 23:30*	*1*
13C5 PFHxA	*98.2*		*20 - 150*	*05/02/25 08:22*	*05/02/25 23:30*	*1*
13C5 PFPeA	*97.7*		*20 - 150*	*05/02/25 08:22*	*05/02/25 23:30*	*1*
13C6 PFDA	*89.7*		*20 - 150*	*05/02/25 08:22*	*05/02/25 23:30*	*1*
13C7 PFUnA	*88.9*		*20 - 150*	*05/02/25 08:22*	*05/02/25 23:30*	*1*
13C8 PFOA	*94.4*		*20 - 150*	*05/02/25 08:22*	*05/02/25 23:30*	*1*
13C8 PFOS	*96.8*		*20 - 150*	*05/02/25 08:22*	*05/02/25 23:30*	*1*
13C8 PFOSA	*89.4*		*20 - 150*	*05/02/25 08:22*	*05/02/25 23:30*	*1*
13C9 PFNA	*87.7*		*20 - 150*	*05/02/25 08:22*	*05/02/25 23:30*	*1*
D3-NMeFOSA	*83.2*		*20 - 150*	*05/02/25 08:22*	*05/02/25 23:30*	*1*
d3-NMeFOSAA	*102*		*20 - 150*	*05/02/25 08:22*	*05/02/25 23:30*	*1*
d5-NEtFOSAA	*98.4*		*20 - 150*	*05/02/25 08:22*	*05/02/25 23:30*	*1*
d5-NEtPFOSA	*74.9*		*20 - 150*	*05/02/25 08:22*	*05/02/25 23:30*	*1*

Method: Draft-3 1633 - Per- and Polyfluoroalkyl Substances by LC/MS/MS (Continued)

Lab Sample ID: MB 240-654462/1-A
Matrix: Solid
Analysis Batch: 654529

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 654462

Isotope Dilution	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
d7-N-MeFOSE-M	87.5		20 - 150	05/02/25 08:22	05/02/25 23:30	1
d9-N-EtFOSE-M	80.9		20 - 150	05/02/25 08:22	05/02/25 23:30	1
M2-4:2 FTS	102		20 - 150	05/02/25 08:22	05/02/25 23:30	1
M2-6:2 FTS	101		20 - 150	05/02/25 08:22	05/02/25 23:30	1
M2-8:2 FTS	94.1		20 - 150	05/02/25 08:22	05/02/25 23:30	1

Lab Sample ID: LCS 240-654462/3-A
Matrix: Solid
Analysis Batch: 654529

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 654462

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)	5.90	5.25		ug/Kg		89	40 - 150
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2 FTS)	6.00	6.40		ug/Kg		107	40 - 150
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2 FTS)	5.86	6.03		ug/Kg		103	40 - 150
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2 FTS)	5.95	6.30		ug/Kg		106	40 - 150
3-Perfluoroheptylpropanoic acid (7:3 FTCA)	39.1	36.6		ug/Kg		94	40 - 150
3-Perfluoropentylpropanoic acid (5:3 FTCA)	39.1	39.7		ug/Kg		102	40 - 150
3-Perfluoropropylpropanoic acid (3:3 FTCA)	7.81	7.63		ug/Kg		98	40 - 150
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	5.91	5.75		ug/Kg		97	40 - 150
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9Cl-PF3ONS)	5.84	5.38		ug/Kg		92	40 - 150
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA)	6.25	6.65		ug/Kg		106	40 - 150
N-ethylperfluorooctane sulfonamide (NEtFOSA)	1.56	1.64		ug/Kg		105	40 - 150
N-ethylperfluorooctane sulfonamidoethanol (NEtFOSE)	15.6	17.8		ug/Kg		114	40 - 150
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	1.56	1.54		ug/Kg		99	40 - 150
N-methylperfluorooctane sulfonamide (NMeFOSA)	1.56	1.57		ug/Kg		101	40 - 150
N-methylperfluorooctane sulfonamidoethanol (NMeFOSE)	15.6	16.0		ug/Kg		102	40 - 150
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	1.56	1.62		ug/Kg		104	40 - 150
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	3.13	3.71		ug/Kg		119	40 - 150
Perfluoro (2-ethoxyethane) sulfonic acid (PFEESA)	2.79	2.92		ug/Kg		105	40 - 150
Perfluoro-3-methoxypropanoic acid (PFMPA)	3.13	3.23		ug/Kg		104	40 - 150
Perfluoro-4-methoxybutanoic acid (PFMBA)	3.13	3.51		ug/Kg		112	40 - 150

Method: Draft-3 1633 - Per- and Polyfluoroalkyl Substances by LC/MS/MS (Continued)

Lab Sample ID: LCS 240-654462/3-A
Matrix: Solid
Analysis Batch: 654529

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 654462

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Perfluorobutanesulfonic acid (PFBS)	1.39	1.43		ug/Kg		103	40 - 150
Perfluorobutanoic acid (PFBA)	6.25	6.75		ug/Kg		108	40 - 150
Perfluorodecanesulfonic acid (PFDS)	1.51	1.50		ug/Kg		100	40 - 150
Perfluorodecanoic acid (PFDA)	1.56	1.53		ug/Kg		98	40 - 150
Perfluorododecanesulfonic acid (PFDoS)	1.52	1.42		ug/Kg		94	40 - 150
Perfluorododecanoic acid (PFDoA)	1.56	1.70		ug/Kg		109	40 - 150
Perfluoroheptanesulfonic acid (PFHpS)	1.49	1.54		ug/Kg		103	40 - 150
Perfluoroheptanoic acid (PFHpA)	1.56	1.66		ug/Kg		106	40 - 150
Perfluorohexanesulfonic acid (PFHxS)	1.43	1.46		ug/Kg		102	40 - 150
Perfluorohexanoic acid (PFHxA)	1.56	1.64		ug/Kg		105	40 - 150
Perfluorononanesulfonic acid (PFNS)	1.50	1.51		ug/Kg		100	40 - 150
Perfluorononanoic acid (PFNA)	1.56	1.82		ug/Kg		117	40 - 150
Perfluorooctanesulfonamide (PFOSA)	1.56	1.65		ug/Kg		106	40 - 150
Perfluorooctanesulfonic acid (PFOS)	1.45	1.42		ug/Kg		98	40 - 150
Perfluorooctanoic acid (PFOA)	1.56	1.60		ug/Kg		102	40 - 150
Perfluoropentanesulfonic acid (PFPeS)	1.47	1.68		ug/Kg		114	40 - 150
Perfluoropentanoic acid (PFPeA)	3.13	3.44		ug/Kg		110	40 - 150
Perfluorotetradecanoic acid (PFTeDA)	1.56	1.67		ug/Kg		107	40 - 150
Perfluorotridecanoic acid (PFTrDA)	1.56	1.57		ug/Kg		101	40 - 150
Perfluoroundecanoic acid (PFUnA)	1.56	1.70		ug/Kg		109	40 - 150

Isotope Dilution	*LCS %Recovery*	*LCS Qualifier*	*Limits*
13C2 PFTeDA	*77.3*		*20 - 150*
13C2-PFDoDA	*83.0*		*20 - 150*
13C3 HFPO-DA	*100*		*20 - 150*
13C3 PFBS	*95.1*		*20 - 150*
13C3 PFHxS	*88.6*		*20 - 150*
13C4 PFBA	*91.7*		*20 - 150*
13C4 PFHpA	*93.9*		*20 - 150*
13C5 PFHxA	*92.7*		*20 - 150*
13C5 PFPeA	*100*		*20 - 150*
13C6 PFDA	*86.4*		*20 - 150*
13C7 PFUnA	*85.0*		*20 - 150*
13C8 PFOA	*94.3*		*20 - 150*
13C8 PFOS	*92.4*		*20 - 150*
13C8 PFOSA	*86.0*		*20 - 150*
13C9 PFNA	*84.5*		*20 - 150*
D3-NMeFOSA	*74.6*		*20 - 150*
d3-NMeFOSAA	*94.0*		*20 - 150*

Method: Draft-3 1633 - Per- and Polyfluoroalkyl Substances by LC/MS/MS (Continued)

Lab Sample ID: LCS 240-654462/3-A
Matrix: Solid
Analysis Batch: 654529

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 654462

Isotope Dilution	LCS %Recovery	LCS Qualifier	Limits
d5-NEtFOSAA	124		20 - 150
d5-NEtPFOSA	70.0		20 - 150
d7-N-MeFOSE-M	77.3		20 - 150
d9-N-EtFOSE-M	66.5		20 - 150
M2-4:2 FTS	103		20 - 150
M2-6:2 FTS	96.3		20 - 150
M2-8:2 FTS	90.8		20 - 150

Lab Sample ID: LLCS 240-654462/2-A
Matrix: Solid
Analysis Batch: 654529

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 654462

Analyte	Spike Added	LLCS Result	LLCS Qualifier	Unit	D	%Rec	%Rec Limits
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)	0.472	0.411	J	ug/Kg		87	40 - 150
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2 FTS)	0.480	0.516		ug/Kg		108	40 - 150
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2 FTS)	0.469	0.460	J	ug/Kg		98	40 - 150
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2 FTS)	0.476	0.496	J	ug/Kg		104	40 - 150
3-Perfluoroheptylpropanoic acid (7:3 FTCA)	3.13	2.71	J	ug/Kg		87	40 - 150
3-Perfluoropentylpropanoic acid (5:3 FTCA)	3.13	2.92	J	ug/Kg		93	40 - 150
3-Perfluoropropylpropanoic acid (3:3 FTCA)	0.625	0.579	J	ug/Kg		93	40 - 150
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	0.473	0.447	J	ug/Kg		95	40 - 150
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9Cl-PF3ONS)	0.467	0.428	J	ug/Kg		92	40 - 150
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA)	0.500	0.524		ug/Kg		105	40 - 150
N-ethylperfluorooctane sulfonamide (NEtFOSA)	0.125	0.127	J	ug/Kg		102	40 - 150
N-ethylperfluorooctane sulfonamidoethanol (NEtFOSE)	1.25	1.13	J	ug/Kg		91	40 - 150
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	0.125	0.136		ug/Kg		109	40 - 150
N-methylperfluorooctane sulfonamide (NMeFOSA)	0.125	0.167		ug/Kg		134	40 - 150
N-methylperfluorooctane sulfonamidoethanol (NMeFOSE)	1.25	1.42		ug/Kg		114	40 - 150
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	0.125	0.129	J	ug/Kg		103	40 - 150
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	0.250	0.269		ug/Kg		107	40 - 150
Perfluoro (2-ethoxyethane) sulfonic acid (PFEESA)	0.223	0.222	J	ug/Kg		99	40 - 150
Perfluoro-3-methoxypropanoic acid (PFMPA)	0.250	0.256		ug/Kg		103	40 - 150

Method: Draft-3 1633 - Per- and Polyfluoroalkyl Substances by LC/MS/MS (Continued)

Lab Sample ID: LLCS 240-654462/2-A
Matrix: Solid
Analysis Batch: 654529

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 654462

Analyte	Spike Added	LLCS Result	LLCS Qualifier	Unit	D	%Rec	%Rec Limits
Perfluoro-4-methoxybutanoic acid (PFMBA)	0.250	0.275		ug/Kg		110	40 - 150
Perfluorobutanesulfonic acid (PFBS)	0.111	0.105	J	ug/Kg		94	40 - 150
Perfluorobutanoic acid (PFBA)	0.500	0.522		ug/Kg		104	40 - 150
Perfluorodecanesulfonic acid (PFDS)	0.121	0.116	J	ug/Kg		96	40 - 150
Perfluorodecanoic acid (PFDA)	0.125	0.112	J	ug/Kg		89	40 - 150
Perfluorododecanesulfonic acid (PFDoS)	0.121	0.102	J	ug/Kg		84	40 - 150
Perfluorododecanoic acid (PFDoA)	0.125	0.126	J	ug/Kg		101	40 - 150
Perfluoroheptanesulfonic acid (PFHpS)	0.119	0.120	J	ug/Kg		101	40 - 150
Perfluoroheptanoic acid (PFHpA)	0.125	0.127	J	ug/Kg		101	40 - 150
Perfluorohexanesulfonic acid (PFHxS)	0.114	0.123	J	ug/Kg		108	40 - 150
Perfluorohexanoic acid (PFHxA)	0.125	0.133		ug/Kg		106	40 - 150
Perfluorononanesulfonic acid (PFNS)	0.120	0.121	J	ug/Kg		101	40 - 150
Perfluorononanoic acid (PFNA)	0.125	0.143		ug/Kg		114	40 - 150
Perfluorooctanesulfonamide (PFOSA)	0.125	0.129	J	ug/Kg		103	40 - 150
Perfluorooctanesulfonic acid (PFOS)	0.116	0.121	J	ug/Kg		104	40 - 150
Perfluorooctanoic acid (PFOA)	0.125	0.134		ug/Kg		107	40 - 150
Perfluoropentanesulfonic acid (PFPeS)	0.118	0.124	J	ug/Kg		106	40 - 150
Perfluoropentanoic acid (PFPeA)	0.250	0.302		ug/Kg		121	40 - 150
Perfluorotetradecanoic acid (PFTeDA)	0.125	0.123	J	ug/Kg		99	40 - 150
Perfluorotridecanoic acid (PFTrDA)	0.125	0.122	J	ug/Kg		97	40 - 150
Perfluoroundecanoic acid (PFUnA)	0.125	0.129	J	ug/Kg		103	40 - 150

Isotope Dilution	*LLCS %Recovery*	*LLCS Qualifier*	*Limits*
13C2 PFTeDA	*75.1*		*20 - 150*
13C2-PFDoDA	*85.2*		*20 - 150*
13C3 HFPO-DA	*101*		*20 - 150*
13C3 PFBS	*97.9*		*20 - 150*
13C3 PFHxS	*89.0*		*20 - 150*
13C4 PFBA	*91.3*		*20 - 150*
13C4 PFHpA	*93.9*		*20 - 150*
13C5 PFHxA	*92.9*		*20 - 150*
13C5 PFPeA	*97.3*		*20 - 150*
13C6 PFDA	*90.1*		*20 - 150*
13C7 PFUnA	*84.9*		*20 - 150*
13C8 PFOA	*89.6*		*20 - 150*
13C8 PFOS	*91.5*		*20 - 150*
13C8 PFOSA	*82.3*		*20 - 150*
13C9 PFNA	*82.8*		*20 - 150*

Method: Draft-3 1633 - Per- and Polyfluoroalkyl Substances by LC/MS/MS (Continued)

Lab Sample ID: LLCS 240-654462/2-A
Matrix: Solid
Analysis Batch: 654529

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 654462

Isotope Dilution	LLCS %Recovery	LLCS Qualifier	Limits
D3-NMeFOSA	61.3		20 - 150
d3-NMeFOSAA	92.9		20 - 150
d5-NEtFOSAA	97.2		20 - 150
d5-NEtPFOSA	67.6		20 - 150
d7-N-MeFOSE-M	62.7		20 - 150
d9-N-EtFOSE-M	61.0		20 - 150
M2-4:2 FTS	105		20 - 150
M2-6:2 FTS	96.9		20 - 150
M2-8:2 FTS	87.0		20 - 150

Method: 6010D - Metals (ICP)

Lab Sample ID: MB 480-744776/1-A
Matrix: Solid
Analysis Batch: 744955

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 744776

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	ND		10.5	9.1	mg/Kg		04/30/25 14:51	04/30/25 19:52	1
Antimony	ND		15.8	0.56	mg/Kg		04/30/25 14:51	04/30/25 19:52	1
Arsenic	ND		2.1	0.93	mg/Kg		04/30/25 14:51	04/30/25 19:52	1
Barium	ND		0.53	0.15	mg/Kg		04/30/25 14:51	04/30/25 19:52	1
Beryllium	ND		0.21	0.042	mg/Kg		04/30/25 14:51	04/30/25 19:52	1
Cadmium	ND		0.21	0.074	mg/Kg		04/30/25 14:51	04/30/25 19:52	1
Calcium	ND		52.7	28.4	mg/Kg		04/30/25 14:51	04/30/25 19:52	1
Chromium	ND		0.53	0.38	mg/Kg		04/30/25 14:51	04/30/25 19:52	1
Cobalt	ND	^5+	0.53	0.11	mg/Kg		04/30/25 14:51	04/30/25 19:52	1
Copper	ND		1.1	0.60	mg/Kg		04/30/25 14:51	04/30/25 19:52	1
Iron	ND		10.5	8.9	mg/Kg		04/30/25 14:51	04/30/25 19:52	1
Lead	ND		1.1	0.48	mg/Kg		04/30/25 14:51	04/30/25 19:52	1
Magnesium	ND		21.1	8.9	mg/Kg		04/30/25 14:51	04/30/25 19:52	1
Manganese	ND		1.1	0.30	mg/Kg		04/30/25 14:51	04/30/25 19:52	1
Nickel	ND		5.3	0.26	mg/Kg		04/30/25 14:51	04/30/25 19:52	1
Potassium	ND		31.6	25.5	mg/Kg		04/30/25 14:51	04/30/25 19:52	1
Selenium	ND		4.2	0.84	mg/Kg		04/30/25 14:51	04/30/25 19:52	1
Silver	ND	^5-	0.63	0.21	mg/Kg		04/30/25 14:51	04/30/25 19:52	1
Sodium	ND		148	64.6	mg/Kg		04/30/25 14:51	04/30/25 19:52	1
Thallium	ND		6.3	0.80	mg/Kg		04/30/25 14:51	04/30/25 19:52	1
Vanadium	ND		0.53	0.14	mg/Kg		04/30/25 14:51	04/30/25 19:52	1
Zinc	ND		2.1	1.1	mg/Kg		04/30/25 14:51	04/30/25 19:52	1

Lab Sample ID: LCSSRM 480-744776/2-A
Matrix: Solid
Analysis Batch: 744955

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 744776

Analyte	Spike Added	LCSSRM Result	LCSSRM Qualifier	Unit	D	%Rec	%Rec Limits
Aluminum	7680	7187		mg/Kg		93.6	47.4 - 130.2
Antimony	201	73.02		mg/Kg		36.3	0.06 - 100.0
Arsenic	181	121.0		mg/Kg		66.9	66.3 - 97.8

Method: 6010D - Metals (ICP) (Continued)

Lab Sample ID: LCSSRM 480-744776/2-A
Matrix: Solid
Analysis Batch: 744955

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 744776

Analyte	Spike Added	LCSSRM Result	LCSSRM Qualifier	Unit	D	%Rec	%Rec Limits
Barium	211	174.1		mg/Kg		82.5	73.9 - 107.1
Beryllium	270	229.9		mg/Kg		85.1	73.0 - 104.4
Cadmium	221	171.2		mg/Kg		77.5	70.6 - 101.8
Calcium	4280	3782		mg/Kg		88.4	77.3 - 111.0
Chromium	149	122.9		mg/Kg		82.5	71.8 - 105.4
Cobalt	142	122.2		mg/Kg		86.1	73.2 - 104.2
Copper	264	214.9		mg/Kg		81.4	73.5 - 104.2
Iron	7360	6015		mg/Kg		81.7	55.4 - 130.3
Lead	106	87.97		mg/Kg		83.0	76.1 - 109.4
Magnesium	2170	1830		mg/Kg		84.3	68.7 - 112.0
Manganese	270	218.0		mg/Kg		80.7	73.0 - 107.8
Nickel	177	150.4		mg/Kg		85.0	71.8 - 103.4
Potassium	2340	2026		mg/Kg		86.6	62.8 - 113.7
Selenium	139	99.65		mg/Kg		71.7	70.0 - 107.9
Silver	59.9	47.89		mg/Kg		79.9	72.8 - 110.7
Sodium	306	268.2		mg/Kg		87.6	66.0 - 113.4
Thallium	205	172.0		mg/Kg		83.9	71.7 - 106.8
Vanadium	155	126.6		mg/Kg		81.7	69.0 - 107.7
Zinc	398	314.6		mg/Kg		79.0	68.8 - 104.5

Lab Sample ID: 480-229031-2 MS
Matrix: Solid
Analysis Batch: 744955

Client Sample ID: MW-6 8-10 Ft
Prep Type: Total/NA
Prep Batch: 744776

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Aluminum	15500		1340	24320	4	mg/Kg	☼	658	75 - 125
Antimony	ND	F1	132	62.50	F1	mg/Kg	☼	48	75 - 125
Arsenic	3.2		263	214.2		mg/Kg	☼	80	75 - 125
Barium	114		263	357.2		mg/Kg	☼	93	75 - 125
Beryllium	0.67		131	111.3		mg/Kg	☼	85	75 - 125
Cadmium	0.13	J	132	110.5		mg/Kg	☼	84	75 - 125
Calcium	71000		6580	74670	4	mg/Kg	☼	55	75 - 125
Chromium	20.0		132	134.4		mg/Kg	☼	87	75 - 125
Cobalt	8.6	^5+	132	127.8	^5+	mg/Kg	☼	91	75 - 125
Copper	14.7		132	127.8		mg/Kg	☼	86	75 - 125

Method: 6010D - Metals (ICP) (Continued)

Lab Sample ID: 480-229031-2 MS
Matrix: Solid
Analysis Batch: 744955

Client Sample ID: MW-6 8-10 Ft
Prep Type: Total/NA
Prep Batch: 744776

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Iron	18600		1340	20890	4	mg/Kg	☼	173	75 - 125
Lead	10.3		132	130.2		mg/Kg	☼	91	75 - 125
Magnesium	24200		6580	30430		mg/Kg	☼	95	75 - 125
Manganese	390		132	511.3		mg/Kg	☼	92	75 - 125
Nickel	20.2		132	141.8		mg/Kg	☼	92	75 - 125
Potassium	5280	F1	6580	14080	F1	mg/Kg	☼	134	75 - 125
Selenium	1.1	J	263	200.9		mg/Kg	☼	76	75 - 125
Silver	0.32	J ^5-	13.2	12.08	^5-	mg/Kg	☼	89	75 - 125
Sodium	433		6580	6150		mg/Kg	☼	87	75 - 125
Thallium	ND		263	229.0		mg/Kg	☼	87	75 - 125
Vanadium	30.9		132	151.4		mg/Kg	☼	92	75 - 125
Zinc	52.3		132	161.3		mg/Kg	☼	83	75 - 125

Lab Sample ID: 480-229031-2 MSD
Matrix: Solid
Analysis Batch: 744955

Client Sample ID: MW-6 8-10 Ft
Prep Type: Total/NA
Prep Batch: 744776

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Aluminum	15500		1290	23660	4	mg/Kg	☼	633	75 - 125	3	20
Antimony	ND	F1	127	58.75	F1	mg/Kg	☼	46	75 - 125	6	20
Arsenic	3.2		253	207.8		mg/Kg	☼	81	75 - 125	3	20
Barium	114		253	351.1		mg/Kg	☼	94	75 - 125	2	20
Beryllium	0.67		126	107.0		mg/Kg	☼	85	75 - 125	4	20
Cadmium	0.13	J	127	107.2		mg/Kg	☼	85	75 - 125	3	20
Calcium	71000		6330	74920	4	mg/Kg	☼	61	75 - 125	0	20
Chromium	20.0		127	130.6		mg/Kg	☼	87	75 - 125	3	20
Cobalt	8.6	^5+	127	125.0	^5+	mg/Kg	☼	92	75 - 125	2	20
Copper	14.7		127	125.7		mg/Kg	☼	88	75 - 125	2	20
Iron	18600		1290	20770	4	mg/Kg	☼	171	75 - 125	1	20
Lead	10.3		127	126.4		mg/Kg	☼	92	75 - 125	3	20
Magnesium	24200		6320	29490		mg/Kg	☼	84	75 - 125	3	20
Manganese	390		127	507.2		mg/Kg	☼	92	75 - 125	1	20
Nickel	20.2		127	138.9		mg/Kg	☼	94	75 - 125	2	20
Potassium	5280	F1	6330	13430	F1	mg/Kg	☼	129	75 - 125	5	20
Selenium	1.1	J	253	196.0		mg/Kg	☼	77	75 - 125	2	20
Silver	0.32	J ^5-	12.7	11.72	^5-	mg/Kg	☼	90	75 - 125	3	20
Sodium	433		6330	5944		mg/Kg	☼	87	75 - 125	3	20
Thallium	ND		253	223.7		mg/Kg	☼	88	75 - 125	2	20
Vanadium	30.9		127	148.0		mg/Kg	☼	93	75 - 125	2	20
Zinc	52.3		127	155.2		mg/Kg	☼	81	75 - 125	4	20

Method: 7471B - Mercury (CVAA)

Lab Sample ID: MB 480-744978/1-A
Matrix: Solid
Analysis Batch: 745103

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 744978

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.019	0.0044	mg/Kg		05/02/25 09:11	05/02/25 11:01	1

Method: 7471B - Mercury (CVAA) (Continued)

Lab Sample ID: LCSSRM 480-744978/2-A ^10
Client Sample ID: Lab Control Sample
Matrix: Solid
Prep Type: Total/NA
Analysis Batch: 745103
Prep Batch: 744978

Analyte			Spike Added	LCSSRM Result	LCSSRM Qualifier	Unit	D	%Rec	%Rec Limits		
Mercury			24.0	19.20		mg/Kg		80.0	55.8 - 109.6		

GC/MS VOA

Prep Batch: 744702

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-229031-1	MW-6 0.5-0.75 Ft	Total/NA	Solid	5035A_L	
480-229031-2	MW-6 8-10 Ft	Total/NA	Solid	5035A_L	
480-229031-4	MW-4 0.25-1 Ft	Total/NA	Solid	5035A_L	
480-229031-5	MW-4 12-14 Ft	Total/NA	Solid	5035A_L	
MB 480-744702/2-A	Method Blank	Total/NA	Solid	5035A_L	
LCS 480-744702/1-A	Lab Control Sample	Total/NA	Solid	5035A_L	

Analysis Batch: 744703

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-229031-1	MW-6 0.5-0.75 Ft	Total/NA	Solid	8260C	744702
480-229031-2	MW-6 8-10 Ft	Total/NA	Solid	8260C	744702
480-229031-4	MW-4 0.25-1 Ft	Total/NA	Solid	8260C	744702
480-229031-5	MW-4 12-14 Ft	Total/NA	Solid	8260C	744702
MB 480-744702/2-A	Method Blank	Total/NA	Solid	8260C	744702
LCS 480-744702/1-A	Lab Control Sample	Total/NA	Solid	8260C	744702

GC/MS Semi VOA

Prep Batch: 745441

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-229031-1	MW-6 0.5-0.75 Ft	Total/NA	Solid	3550C	
480-229031-2	MW-6 8-10 Ft	Total/NA	Solid	3550C	
480-229031-3	MW-5 0.33-0.75 Ft	Total/NA	Solid	3550C	
480-229031-4	MW-4 0.25-1 Ft	Total/NA	Solid	3550C	
480-229031-5	MW-4 12-14 Ft	Total/NA	Solid	3550C	
MB 480-745441/1-A	Method Blank	Total/NA	Solid	3550C	
LCS 480-745441/2-A	Lab Control Sample	Total/NA	Solid	3550C	

Analysis Batch: 745508

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-229031-1	MW-6 0.5-0.75 Ft	Total/NA	Solid	8270D	745441
480-229031-2	MW-6 8-10 Ft	Total/NA	Solid	8270D	745441
480-229031-3	MW-5 0.33-0.75 Ft	Total/NA	Solid	8270D	745441
480-229031-4	MW-4 0.25-1 Ft	Total/NA	Solid	8270D	745441
480-229031-5	MW-4 12-14 Ft	Total/NA	Solid	8270D	745441
MB 480-745441/1-A	Method Blank	Total/NA	Solid	8270D	745441
LCS 480-745441/2-A	Lab Control Sample	Total/NA	Solid	8270D	745441

GC Semi VOA

Prep Batch: 744720

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-229031-1	MW-6 0.5-0.75 Ft	Total/NA	Solid	3550C	
480-229031-2	MW-6 8-10 Ft	Total/NA	Solid	3550C	
480-229031-4	MW-4 0.25-1 Ft	Total/NA	Solid	3550C	
480-229031-5	MW-4 12-14 Ft	Total/NA	Solid	3550C	
MB 480-744720/1-A	Method Blank	Total/NA	Solid	3550C	
LCS 480-744720/2-A	Lab Control Sample	Total/NA	Solid	3550C	

Analysis Batch: 744757

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-229031-1	MW-6 0.5-0.75 Ft	Total/NA	Solid	8082A	744720

GC Semi VOA (Continued)

Analysis Batch: 744757 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-229031-2	MW-6 8-10 Ft	Total/NA	Solid	8082A	744720
480-229031-4	MW-4 0.25-1 Ft	Total/NA	Solid	8082A	744720
480-229031-5	MW-4 12-14 Ft	Total/NA	Solid	8082A	744720
MB 480-744720/1-A	Method Blank	Total/NA	Solid	8082A	744720
LCS 480-744720/2-A	Lab Control Sample	Total/NA	Solid	8082A	744720

Prep Batch: 744937

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-229031-1	MW-6 0.5-0.75 Ft	Total/NA	Solid	8151A	
480-229031-2	MW-6 8-10 Ft	Total/NA	Solid	8151A	
480-229031-4	MW-4 0.25-1 Ft	Total/NA	Solid	8151A	
480-229031-5	MW-4 12-14 Ft	Total/NA	Solid	8151A	
MB 480-744937/1-A	Method Blank	Total/NA	Solid	8151A	
LCS 480-744937/2-A	Lab Control Sample	Total/NA	Solid	8151A	

Prep Batch: 744938

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-229031-1	MW-6 0.5-0.75 Ft	Total/NA	Solid	3546	
480-229031-2	MW-6 8-10 Ft	Total/NA	Solid	3546	
480-229031-4	MW-4 0.25-1 Ft	Total/NA	Solid	3546	
480-229031-5	MW-4 12-14 Ft	Total/NA	Solid	3546	
MB 480-744938/1-A	Method Blank	Total/NA	Solid	3546	
LCS 480-744938/2-A	Lab Control Sample	Total/NA	Solid	3546	

Analysis Batch: 745019

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-229031-1	MW-6 0.5-0.75 Ft	Total/NA	Solid	8081B	744938
480-229031-2	MW-6 8-10 Ft	Total/NA	Solid	8081B	744938
480-229031-4	MW-4 0.25-1 Ft	Total/NA	Solid	8081B	744938
480-229031-5	MW-4 12-14 Ft	Total/NA	Solid	8081B	744938
MB 480-744938/1-A	Method Blank	Total/NA	Solid	8081B	744938
LCS 480-744938/2-A	Lab Control Sample	Total/NA	Solid	8081B	744938

Analysis Batch: 745549

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-229031-1	MW-6 0.5-0.75 Ft	Total/NA	Solid	8151A	744937
480-229031-2	MW-6 8-10 Ft	Total/NA	Solid	8151A	744937
480-229031-4	MW-4 0.25-1 Ft	Total/NA	Solid	8151A	744937
480-229031-5	MW-4 12-14 Ft	Total/NA	Solid	8151A	744937
MB 480-744937/1-A	Method Blank	Total/NA	Solid	8151A	744937
LCS 480-744937/2-A	Lab Control Sample	Total/NA	Solid	8151A	744937

LCMS

Prep Batch: 654462

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-229031-1	MW-6 0.5-0.75 Ft	Total/NA	Solid	1633 Shake	
480-229031-2	MW-6 8-10 Ft	Total/NA	Solid	1633 Shake	
480-229031-4	MW-4 0.25-1 Ft	Total/NA	Solid	1633 Shake	
480-229031-5	MW-4 12-14 Ft	Total/NA	Solid	1633 Shake	
MB 240-654462/1-A	Method Blank	Total/NA	Solid	1633 Shake	

LCMS (Continued)

Prep Batch: 654462 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 240-654462/3-A	Lab Control Sample	Total/NA	Solid	1633 Shake	
LLCS 240-654462/2-A	Lab Control Sample	Total/NA	Solid	1633 Shake	

Analysis Batch: 654529

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-229031-1	MW-6 0.5-0.75 Ft	Total/NA	Solid	Draft-3 1633	654462
480-229031-2	MW-6 8-10 Ft	Total/NA	Solid	Draft-3 1633	654462
480-229031-4	MW-4 0.25-1 Ft	Total/NA	Solid	Draft-3 1633	654462
480-229031-5	MW-4 12-14 Ft	Total/NA	Solid	Draft-3 1633	654462
MB 240-654462/1-A	Method Blank	Total/NA	Solid	Draft-3 1633	654462
LCS 240-654462/3-A	Lab Control Sample	Total/NA	Solid	Draft-3 1633	654462
LLCS 240-654462/2-A	Lab Control Sample	Total/NA	Solid	Draft-3 1633	654462

Metals

Prep Batch: 744776

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-229031-1	MW-6 0.5-0.75 Ft	Total/NA	Solid	3050B	
480-229031-2	MW-6 8-10 Ft	Total/NA	Solid	3050B	
480-229031-3	MW-5 0.33-0.75 Ft	Total/NA	Solid	3050B	
480-229031-4	MW-4 0.25-1 Ft	Total/NA	Solid	3050B	
480-229031-5	MW-4 12-14 Ft	Total/NA	Solid	3050B	
MB 480-744776/1-A	Method Blank	Total/NA	Solid	3050B	
LCSSRM 480-744776/2-A	Lab Control Sample	Total/NA	Solid	3050B	
480-229031-2 MS	MW-6 8-10 Ft	Total/NA	Solid	3050B	
480-229031-2 MSD	MW-6 8-10 Ft	Total/NA	Solid	3050B	

Analysis Batch: 744955

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-229031-1	MW-6 0.5-0.75 Ft	Total/NA	Solid	6010D	744776
480-229031-2	MW-6 8-10 Ft	Total/NA	Solid	6010D	744776
480-229031-3	MW-5 0.33-0.75 Ft	Total/NA	Solid	6010D	744776
480-229031-4	MW-4 0.25-1 Ft	Total/NA	Solid	6010D	744776
480-229031-5	MW-4 12-14 Ft	Total/NA	Solid	6010D	744776
MB 480-744776/1-A	Method Blank	Total/NA	Solid	6010D	744776
LCSSRM 480-744776/2-A	Lab Control Sample	Total/NA	Solid	6010D	744776
480-229031-2 MS	MW-6 8-10 Ft	Total/NA	Solid	6010D	744776
480-229031-2 MSD	MW-6 8-10 Ft	Total/NA	Solid	6010D	744776

Prep Batch: 744978

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-229031-1	MW-6 0.5-0.75 Ft	Total/NA	Solid	7471B	
480-229031-2	MW-6 8-10 Ft	Total/NA	Solid	7471B	
480-229031-3	MW-5 0.33-0.75 Ft	Total/NA	Solid	7471B	
480-229031-4	MW-4 0.25-1 Ft	Total/NA	Solid	7471B	
480-229031-5	MW-4 12-14 Ft	Total/NA	Solid	7471B	
MB 480-744978/1-A	Method Blank	Total/NA	Solid	7471B	
LCSSRM 480-744978/2-A ^10	Lab Control Sample	Total/NA	Solid	7471B	

Client: Roux Environmental Engineering and Geology DPC
Job ID: 480-229031-1
Project/Site: BCP RI - 619 Exchange Street Site

Metals

Analysis Batch: 745103

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-229031-1	MW-6 0.5-0.75 Ft	Total/NA	Solid	7471B	744978
480-229031-2	MW-6 8-10 Ft	Total/NA	Solid	7471B	744978
480-229031-3	MW-5 0.33-0.75 Ft	Total/NA	Solid	7471B	744978
480-229031-4	MW-4 0.25-1 Ft	Total/NA	Solid	7471B	744978
480-229031-5	MW-4 12-14 Ft	Total/NA	Solid	7471B	744978
MB 480-744978/1-A	Method Blank	Total/NA	Solid	7471B	744978
LCSSRM 480-744978/2-A ^10	Lab Control Sample	Total/NA	Solid	7471B	744978

General Chemistry

Analysis Batch: 745034

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-229031-1	MW-6 0.5-0.75 Ft	Total/NA	Solid	Moisture	
480-229031-2	MW-6 8-10 Ft	Total/NA	Solid	Moisture	
480-229031-4	MW-4 0.25-1 Ft	Total/NA	Solid	Moisture	
480-229031-5	MW-4 12-14 Ft	Total/NA	Solid	Moisture	

Analysis Batch: 745137

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-229031-3	MW-5 0.33-0.75 Ft	Total/NA	Solid	Moisture	

Client Sample ID: MW-6 0.5-0.75 Ft
Lab Sample ID: 480-229031-1

Date Collected: 04/27/25 09:30
Matrix: Solid
Date Received: 04/28/25 16:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	Moisture		1	745034	JMM	EET BUF	05/01/25 15:43

Client Sample ID: MW-6 0.5-0.75 Ft
Lab Sample ID: 480-229031-1

Date Collected: 04/27/25 09:30
Matrix: Solid
Date Received: 04/28/25 16:25
Percent Solids: 78.3

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5035A_L			744702	CDC	EET BUF	04/28/25 17:10
Total/NA	Analysis	8260C		1	744703	CDC	EET BUF	04/29/25 03:01
Total/NA	Prep	3550C			745441	LSC	EET BUF	05/07/25 13:55
Total/NA	Analysis	8270D		1	745508	JMM	EET BUF	05/08/25 16:37
Total/NA	Prep	3546			744938	VXF	EET BUF	05/01/25 06:41
Total/NA	Analysis	8081B		10	745019	JLS	EET BUF	05/01/25 17:44
Total/NA	Prep	3550C			744720	VXF	EET BUF	04/29/25 08:37
Total/NA	Analysis	8082A		1	744757	H9RU	EET BUF	04/29/25 14:45
Total/NA	Prep	8151A			744937	VXF	EET BUF	05/01/25 06:27
Total/NA	Analysis	8151A		1	745549	JLS	EET BUF	05/08/25 15:09
Total/NA	Prep	1633 Shake			654462	KML	EET CLE	05/02/25 08:22
Total/NA	Analysis	Draft-3 1633		1	654529	LD	EET CLE	05/03/25 00:19
Total/NA	Prep	3050B			744776	EMO	EET BUF	04/30/25 14:51
Total/NA	Analysis	6010D		1	744955	BMB	EET BUF	04/30/25 19:55
Total/NA	Prep	7471B			744978	ESB	EET BUF	05/02/25 09:11
Total/NA	Analysis	7471B		1	745103	BMB	EET BUF	05/02/25 11:23

Client Sample ID: MW-6 8-10 Ft
Lab Sample ID: 480-229031-2

Date Collected: 04/27/25 12:00
Matrix: Solid
Date Received: 04/28/25 16:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	Moisture		1	745034	JMM	EET BUF	05/01/25 15:43

Client Sample ID: MW-6 8-10 Ft
Lab Sample ID: 480-229031-2

Date Collected: 04/27/25 12:00
Matrix: Solid
Date Received: 04/28/25 16:25
Percent Solids: 76.4

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5035A_L			744702	CDC	EET BUF	04/28/25 17:10
Total/NA	Analysis	8260C		1	744703	CDC	EET BUF	04/29/25 03:25
Total/NA	Prep	3550C			745441	LSC	EET BUF	05/07/25 13:55
Total/NA	Analysis	8270D		1	745508	JMM	EET BUF	05/08/25 17:04
Total/NA	Prep	3546			744938	VXF	EET BUF	05/01/25 06:41
Total/NA	Analysis	8081B		1	745019	JLS	EET BUF	05/01/25 18:03
Total/NA	Prep	3550C			744720	VXF	EET BUF	04/29/25 08:37
Total/NA	Analysis	8082A		1	744757	H9RU	EET BUF	04/29/25 15:04

Client Sample ID: MW-6 8-10 Ft
Lab Sample ID: 480-229031-2

Date Collected: 04/27/25 12:00
Matrix: Solid
Date Received: 04/28/25 16:25
Percent Solids: 76.4

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	8151A			744937	VXF	EET BUF	05/01/25 06:27
Total/NA	Analysis	8151A		1	745549	JLS	EET BUF	05/08/25 15:46
Total/NA	Prep	1633 Shake			654462	KML	EET CLE	05/02/25 08:22
Total/NA	Analysis	Draft-3 1633		1	654529	LD	EET CLE	05/03/25 00:36
Total/NA	Prep	3050B			744776	EMO	EET BUF	04/30/25 14:51
Total/NA	Analysis	6010D		1	744955	BMB	EET BUF	04/30/25 19:57
Total/NA	Prep	7471B			744978	ESB	EET BUF	05/02/25 09:11
Total/NA	Analysis	7471B		1	745103	BMB	EET BUF	05/02/25 11:24

Client Sample ID: MW-5 0.33-0.75 Ft
Lab Sample ID: 480-229031-3

Date Collected: 04/27/25 10:30
Matrix: Solid
Date Received: 04/28/25 16:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	Moisture		1	745137	AF	EET BUF	05/02/25 14:48

Client Sample ID: MW-5 0.33-0.75 Ft
Lab Sample ID: 480-229031-3

Date Collected: 04/27/25 10:30
Matrix: Solid
Date Received: 04/28/25 16:25
Percent Solids: 81.5

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	3550C			745441	LSC	EET BUF	05/07/25 13:55
Total/NA	Analysis	8270D		1	745508	JMM	EET BUF	05/08/25 17:45
Total/NA	Prep	3050B			744776	EMO	EET BUF	04/30/25 14:51
Total/NA	Analysis	6010D		1	744955	BMB	EET BUF	04/30/25 20:13
Total/NA	Prep	7471B			744978	ESB	EET BUF	05/02/25 09:11
Total/NA	Analysis	7471B		1	745103	BMB	EET BUF	05/02/25 11:25

Client Sample ID: MW-4 0.25-1 Ft
Lab Sample ID: 480-229031-4

Date Collected: 04/27/25 11:00
Matrix: Solid
Date Received: 04/28/25 16:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	Moisture		1	745034	JMM	EET BUF	05/01/25 15:43

Client Sample ID: MW-4 0.25-1 Ft
Lab Sample ID: 480-229031-4

Date Collected: 04/27/25 11:00
Matrix: Solid
Date Received: 04/28/25 16:25
Percent Solids: 81.2

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5035A_L			744702	CDC	EET BUF	04/28/25 17:10
Total/NA	Analysis	8260C		1	744703	CDC	EET BUF	04/29/25 03:48
Total/NA	Prep	3550C			745441	LSC	EET BUF	05/07/25 13:55
Total/NA	Analysis	8270D		1	745508	JMM	EET BUF	05/08/25 18:11
Total/NA	Prep	3546			744938	VXF	EET BUF	05/01/25 06:41
Total/NA	Analysis	8081B		10	745019	JLS	EET BUF	05/01/25 18:23

Lab Chronicle

Client: Roux Environmental Engineering and Geology DPC
Job ID: 480-229031-1
Project/Site: BCP RI - 619 Exchange Street Site

Client Sample ID: MW-4 0.25-1 Ft
Lab Sample ID: 480-229031-4

Date Collected: 04/27/25 11:00
Matrix: Solid
Date Received: 04/28/25 16:25
Percent Solids: 81.2

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	3550C			744720	VXF	EET BUF	04/29/25 08:37
Total/NA	Analysis	8082A		1	744757	H9RU	EET BUF	04/29/25 15:22
Total/NA	Prep	8151A			744937	VXF	EET BUF	05/01/25 06:27
Total/NA	Analysis	8151A		1	745549	JLS	EET BUF	05/08/25 16:05
Total/NA	Prep	1633 Shake			654462	KML	EET CLE	05/02/25 08:22
Total/NA	Analysis	Draft-3 1633		1	654529	LD	EET CLE	05/03/25 00:53
Total/NA	Prep	3050B			744776	EMO	EET BUF	04/30/25 14:51
Total/NA	Analysis	6010D		1	744955	BMB	EET BUF	04/30/25 20:14
Total/NA	Prep	7471B			744978	ESB	EET BUF	05/02/25 09:11
Total/NA	Analysis	7471B		1	745103	BMB	EET BUF	05/02/25 11:27

Client Sample ID: MW-4 12-14 Ft
Lab Sample ID: 480-229031-5

Date Collected: 04/27/25 13:30
Matrix: Solid
Date Received: 04/28/25 16:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	Moisture		1	745034	JMM	EET BUF	05/01/25 15:43

Client Sample ID: MW-4 12-14 Ft
Lab Sample ID: 480-229031-5

Date Collected: 04/27/25 13:30
Matrix: Solid
Date Received: 04/28/25 16:25
Percent Solids: 78.9

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5035A_L			744702	CDC	EET BUF	04/28/25 17:10
Total/NA	Analysis	8260C		1	744703	CDC	EET BUF	04/29/25 04:12
Total/NA	Prep	3550C			745441	LSC	EET BUF	05/07/25 13:55
Total/NA	Analysis	8270D		1	745508	JMM	EET BUF	05/08/25 18:37
Total/NA	Prep	3546			744938	VXF	EET BUF	05/01/25 06:41
Total/NA	Analysis	8081B		1	745019	JLS	EET BUF	05/01/25 18:43
Total/NA	Prep	3550C			744720	VXF	EET BUF	04/29/25 08:37
Total/NA	Analysis	8082A		1	744757	H9RU	EET BUF	04/29/25 15:41
Total/NA	Prep	8151A			744937	VXF	EET BUF	05/01/25 06:27
Total/NA	Analysis	8151A		1	745549	JLS	EET BUF	05/08/25 16:23
Total/NA	Prep	1633 Shake			654462	KML	EET CLE	05/02/25 08:22
Total/NA	Analysis	Draft-3 1633		1	654529	LD	EET CLE	05/03/25 01:09
Total/NA	Prep	3050B			744776	EMO	EET BUF	04/30/25 14:51
Total/NA	Analysis	6010D		1	744955	BMB	EET BUF	04/30/25 20:16
Total/NA	Prep	7471B			744978	ESB	EET BUF	05/02/25 09:11
Total/NA	Analysis	7471B		1	745103	BMB	EET BUF	05/02/25 11:28

Laboratory References:

EET BUF = Eurofins Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600

EET CLE = Eurofins Cleveland, 180 S. Van Buren Avenue, Barberton, OH 44203, TEL (330)497-9396

Accreditation/Certification Summary

Client: Roux Environmental Engineering and Geology DPC
Job ID: 480-229031-1
Project/Site: BCP RI - 619 Exchange Street Site

Laboratory: Eurofins Buffalo

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	Identification Number	Expiration Date
New York	NELAP	10026	03-31-26

The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

Analysis Method	Prep Method	Matrix	Analyte
8151A	8151A	Solid	Picloram
Moisture		Solid	Percent Moisture
Moisture		Solid	Percent Solids

Laboratory: Eurofins Cleveland

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Connecticut	State	PH-0806	12-31-26
Georgia	State	4062	02-27-26
Illinois	NELAP	200004	08-31-25
Iowa	State	421	06-01-25
Kansas	NELAP	E-10336	01-31-26
Kentucky (UST)	State	112225	02-28-26
Kentucky (WW)	State	KY98016	12-31-25
Minnesota	NELAP	039-999-348	12-31-25
New Hampshire	NELAP	225024	09-30-25
New Jersey	NELAP	OH001	07-03-25
New York	NELAP	10975	04-01-26
North Dakota	State	R-244	02-27-26
Ohio	State	8303	11-04-25
Ohio VAP	State	ORELAP 4062	02-28-26
Oregon	NELAP	4062	02-27-26
Pennsylvania	NELAP	68-00340	08-31-25
Texas	NELAP	T104704517-22-19	08-31-25
US Fish & Wildlife	US Federal Programs	A26406	02-28-26
USDA	US Federal Programs	P330-18-00281	01-05-27
Virginia	NELAP	460175	09-14-25
West Virginia DEP	State	210	12-31-25
Wisconsin	State	399167560	08-31-25

Method Summary

Client: Roux Environmental Engineering and Geology DPC
Job ID: 480-229031-1
Project/Site: BCP RI - 619 Exchange Street Site

Method	Method Description	Protocol	Laboratory
8260C	Volatile Organic Compounds by GC/MS	SW846	EET BUF
8270D	Semivolatile Organic Compounds (GC/MS)	SW846	EET BUF
8081B	Organochlorine Pesticides (GC)	SW846	EET BUF
8082A	Polychlorinated Biphenyls (PCBs) by Gas Chromatography	SW846	EET BUF
8151A	Herbicides (GC)	SW846	EET BUF
Draft-3 1633	Per- and Polyfluoroalkyl Substances by LC/MS/MS	EPA	EET CLE
6010D	Metals (ICP)	SW846	EET BUF
7471B	Mercury (CVAA)	SW846	EET BUF
Moisture	Percent Moisture	EPA	EET BUF
1633 Shake	Shake Extraction with SPE	EPA	EET CLE
3050B	Preparation, Metals	SW846	EET BUF
3546	Microwave Extraction	SW846	EET BUF
3550C	Ultrasonic Extraction	SW846	EET BUF
5035A_L	Closed System Purge and Trap	SW846	EET BUF
7471B	Preparation, Mercury	SW846	EET BUF
8151A	Extraction (Herbicides)	SW846	EET BUF

Protocol References:

EPA = US Environmental Protection Agency

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

EET BUF = Eurofins Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600

EET CLE = Eurofins Cleveland, 180 S. Van Buren Avenue, Barberton, OH 44203, TEL (330)497-9396

Sample Summary

Client: Roux Environmental Engineering and Geology DPC
Job ID: 480-229031-1
Project/Site: BCP RI - 619 Exchange Street Site

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
480-229031-1	MW-6 0.5-0.75 Ft	Solid	04/27/25 09:30	04/28/25 16:25
480-229031-2	MW-6 8-10 Ft	Solid	04/27/25 12:00	04/28/25 16:25
480-229031-3	MW-5 0.33-0.75 Ft	Solid	04/27/25 10:30	04/28/25 16:25
480-229031-4	MW-4 0.25-1 Ft	Solid	04/27/25 11:00	04/28/25 16:25
480-229031-5	MW-4 12-14 Ft	Solid	04/27/25 13:30	04/28/25 16:25

Amherst, NY 14228-2298
Phone: 716-691-2600 Fax: 716-691-7991

Chain of Custody Record

Environment Testing

Client Information	Sampler: Nick Surace	Lab PM: Fischer, Brian J	Carrier Tracking No(s):	COC No: 480-204352-41691.1
Client Contact: Bryan Mayback	Phone: 716-713-3937	E-Mail: Brian.Fischer@et.eurofinsus.com	State of Origin:	Page: Page 1 of 4
Company: Roux Environmental Engineering and Geology DPC	PWSID:			Job #:
Address: 2558 Hamburg Turnpike Suite 300	Due Date Requested:			
City: Lackawanna	TAT Requested (days): Standard			
State, Zip: NY, 14218	Compliance Project: Δ Yes Δ No			
Phone:	PO #: Purchase Order Requested 4374.0004Base			
Email: bmayback@rouxinc.com	WO #:			
Project Name: BCP RI - 619 Exchange Street Site- soil	Project #: 48028561			
Site: 619 Exchange St	SSOW#:			

Analysis Requested

Sample Identification	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)	1633_Final - PFAS	8081B, 8082A, 8151A, Moisture	8260C - VOC + TICs	6010D, 7471B, 8270D + TICs	TIC SVOCs + TICs	TAL Metals	Total Number of containers	Special Instructions/Note:
			Preservation Code:				N	N	N	N				
MW-6 0.5-0.75 Ft	4/28/25	9:30	G	Solid			X	X	X	X				encore j
MW-6 8-10 Ft		1200		Solid			X	X	X	X				encore j
MW-5 0.33-0.75 Ft		1030		Solid							X	X		
MW-4 0.25-1 Ft		1100		Solid			X	X	X	X				encore j
MW-4 12-14 Ft		1330		Solid			X	X	X	X				encore j
				Solid										
				Solid										
				Solid										
				Solid										
				Solid										
				Solid										

480-229031 Chain of Custody

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

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) Cat B, NYSDEC EQuIS

Special Instructions/QC Requirements: Cat B, NYSDEC EQuIS

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
		4/28/25 16:24			4-28-25 16:25	
	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
	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: 10.4, 5.1 IR#8C Ice

Ver: 10/10/2024

Eurofins Buffalo
10 Hazelwood Drive
Amherst, NY 14228-2298
Phone: 716-691-2600 Fax: 716-691-7991

Chain of Custody Record

eurofins | Environment Testing

Client Information	Sampler: Mike Swan	Lab PM: Fischer, Brian J	Carrier Tracking No(s):	COC No: 480-204352-41691.1
Client Contact: Bryan Mayback	Phone: 716-713-3937	E-Mail: Brian.Fischer@et.eurofinsus.com	State of Origin:	Page: Page 1 of 4
Company: Roux Environmental Engineering and Geology DPC	PWSID:			Job #:
Address: 2558 Hamburg Turnpike Suite 300	Due Date Requested:			
City: Lackawanna	TAT Requested (days): Standard			
State, Zip: NY, 14218	Compliance Project: Δ Yes Δ No			
Phone:	PO #: Purchase Order Requested 4374.0004Bac			
Email: bmayback@rouxinc.com	WO #:			
Project Name: BCP RI - 619 Exchange Street Site- soil	Project #: 48028561			
Site: 619 Exchange St	SSOW#:			

Analysis Requested

Sample Identification	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)	1633_Final - PFAS	8081B, 8082A, 8151A, Moisture	8260C - VOC + TICs	6010D, 7471B, 8270D + TICs	TIC_SVOC's + TICs	TAL Metals	Total Number of containers	Special Instructions/Note:
			Preservation Code:				N	N	N	N				
MW-6 0.5-0.75 Ft	4/28/25	9:30	G	Solid			X	X	X	X				encore j
MW-6 8-10 Ft		1200		Solid			X	X	X	X				encore j
MW-5 0.33-0.75 Ft		1030		Solid							X	X		
MW-4 0.25-1 Ft		1100		Solid			X	X	X	X				encore j
MW-4 12-14 Ft		1330		Solid			X	X	X	X				encore j
				Solid										
				Solid										
				Solid										
				Solid										
				Solid										
				Solid										

480-229031 Chain of Custody

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

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) Cat B, NYSDEC EQuIS

Special Instructions/QC Requirements: Cat B, NYSDEC EQuIS

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

Relinquished by:	Date/Time: 4/28/25 16:24	Company	Received by:	Date/Time: 4-28-25 16:35	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
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: 10.4, 5.1 IR#8C Ice

Ver: 10/10/2024

Eurofins Buffalo
10 Hazelwood Drive
Amherst, NY 14228-2298
Phone: 716-691-2600 Fax: 716-691-7991

Chain of Custody Record

4.6/5.1

eurofins Environment Testing

Client Information (Sub Contract Lab)	Sampler: N/A	Lab PM: Schove, John R	Carrier Tracking No(s): N/A	COC No: 480-92298.1
Client Contact: Shipping/Receiving	Phone: N/A	E-Mail: John.Schove@et.eurofinsus.com	State of Origin: New York	Page: Page 1 of 1
Company: Eurofins Environment Testing North Centr		Accreditations Required (See note): NELAP - New York		Job #: 480-229031-1
Address: 180 S. Van Buren Avenue,	Due Date Requested: 5/12/2025			
City: Barberton	TAT Requested (days): N/A			
State, Zip: OH, 44203				
Phone: 330-497-9396(Tel) 330-497-0772(Fax)	PO #: N/A			
Email: N/A	WO #: N/A			
Project Name: BCP RI - 619 Exchange Street Site	Project #: 48028561			
Site: N/A	SSOW#: N/A			

Analysis Requested

Preservation Codes:

Other: N/A

PFAS_081-07

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)	1633_Final/1633_Shake 1633 Standard List 40	Total Number of containers	Special Instructions/Note:
			Preservation Code:						
MW-6 0.5-0.75 Ft (480-229031-1)	4/27/25	09:30 Eastern	G	Solid			X	1	
MW-6 8-10 Ft (480-229031-2)	4/27/25	12:00 Eastern	G	Solid			X	1	
MW-4 0.25-1 Ft (480-229031-4)	4/27/25	11:00 Eastern	G	Solid			X	1	
MW-4 12-14 Ft (480-229031-5)	4/27/25	13:30 Eastern	G	Solid			X	1	

Note: Since laboratory accreditations are subject to change, Eurofins Environment Testing Northeast, 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 Northeast, LLC laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins Environment Testing Northeast, 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 Northeast, 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: JCollins	Date/Time: 4-30-25 0710	Company: Eur
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
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:

Eurofins – Cleveland Sample Receipt Form/Narrative **Login #** _____
Barberton Facility

Client Eurofins Buffalo Site Name _____ Cooler unpacked by: JC

Cooler Received on 4-30-25 Opened on 4-30-25

FedEx: 1st Grd (Exp) UPS FAS Waypoint Client Drop Off Eurofins Courier Other _____

Receipt After-hours Drop-off Date/Time _____ Storage Location _____

Eurofins Cooler # EC Foam Box Client Cooler Box Other _____

Packing material used: Bubble Wrap Foam Plastic Bag None Other

COOLANT (Wet Ice) Blue Ice Dry Ice Water None

1 Cooler temperature upon receipt ☐ See Multiple Cooler Form

IR GUN # 13 (CF 0.5 °C) Observed Cooler Temp. 4.6 °C Corrected Cooler Temp. 5.1 °C

2. Were tamper/custody seals on the outside of the cooler(s)? If Yes Quantity_____	Yes (No)	
-Were the seals on the outside of the cooler(s) signed & dated?	Yes (No)	NA
-Were tamper/custody seals on the bottle(s) or bottle kits (LLHg/MeHg)?	Yes (No)	
-Were tamper/custody seals intact and uncompromised?	(Yes) No	NA
3 Shippers packing slip attached to the cooler(s)?	(Yes) No	
4 Did custody papers accompany the sample(s)?	(Yes) No	
5 Were the custody papers relinquished & signed in the appropriate place?	(Yes) No	
6. Was/were the person(s) who collected the samples clearly identified on the COC?	Yes (No)	
7 Did all bottles arrive in good condition (Unbroken)?	(Yes) No	
8 Could all bottle labels (ID/Date/Time) be reconciled with the COC?	(Yes) No	
9 For each sample, does the COC specify preservatives (Y/N), # of containers (Y/N), and sample type of grab/comp (Y/N)?	(Y) (Y) (Y)	
10 Were correct bottle(s) used for the test(s) indicated?	(Yes) No	
11 Sufficient quantity received to perform indicated analyses?	(Yes) No	
12 Are these work share samples and all listed on the COC?	(Yes) No	
If yes, Questions 13-17 have been checked at the originating laboratory		
13 Were all preserved sample(s) at the correct pH upon receipt?	Yes No	NA pH Strip Lot# HC457151
14 Were VOAs on the COC?	Yes No	
15 Were air bubbles >6 mm in any VOA vials? ● ← Larger than this	Yes No	NA
16 Was a VOA trip blank present in the cooler(s)? Trip Blank Lot #_____	Yes No	
17 Was a LL Hg or Me Hg trip blank present? _____	Yes No	

Tests that are not checked for pH by Receiving:
VOAs
Oil and Grease
TOC

Contacted PM _____ Date _____ by _____ via Verbal Voice Mail Other

Concerning _____

18. CHAIN OF CUSTODY & SAMPLE DISCREPANCIES ☐ additional next page | Samples processed by:

_____

_____

_____

_____

19 SAMPLE CONDITION

Sample(s) _____ were received after the recommended holding time had expired

Sample(s) _____ were received in a broken container

Sample(s) _____ were received with bubble >6 mm in diameter (Notify PM)

20. SAMPLE PRESERVATION

Sample(s) _____ were further preserved in the laboratory

Time preserved. _____ Preservative(s) added/Lot number(s) _____

VOA Sample Preservation - Date/Time VOAs Frozen. _____

SAMPLE CONTROL
EUROFINS ENVIRONMENT TESTING

ACTWGT 22.65 LB
CAD 0759273/CAFE3805
DIMS 15x12x11 IN

BILL SENDER

TO SAMPLE RECEIPT
EUROFINS CLEVELAND
180 S VAN BUREN AVE

BARBERTON OH 44203543
(330) 497-9396
REF. BARBERTON

FedEx Express

TRK# 0201 7463 0663 7799

WED - 30 APR 10:30
PRIORITY OVERNIGHT

44203
OH US
CLE

XP CAKA

1000446 799Apr2025 BUFA 5816/4ACC/5FE5

Login Sample Receipt Checklist

Client: Roux Environmental Engineering and Geology DPC

Job Number: 480-229031-1

Login Number: 229031

List Source: Eurofins Buffalo

List Number: 1

Creator: Stapleton, Kaitlyn

Question	Answer	Comment
Radioactivity either was not measured or, if measured, is at or below background	True	
The cooler's custody seal, if present, is intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	10.6, 5.1 IR#SC ice
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the sample IDs on the containers and the COC.	True	
Samples are received within Holding Time (Excluding tests with immediate HTs)..	True	Encores frozen 4/28/25 at 1736
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
VOA sample vials do not have headspace or bubble is <6mm (1/4") in diameter.	N/A	
If necessary, staff have been informed of any short hold time or quick TAT needs	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Sampling Company provided.	True	Roux Environmental
Samples received within 48 hours of sampling.	True	
Samples requiring field filtration have been filtered in the field.	True	
Chlorine Residual checked.	N/A	

eurofins | Environment Testing

ANALYTICAL REPORT

PREPARED FOR

Attn: Bryan Mayback
Roux Environmental Engineering and Geology DPC
2558 Hamburg Turnpike
Suite 300
Lackawanna, New York 14218

Generated 5/9/2025 10:00:19 AM

JOB DESCRIPTION

BCP RI - 619 Exchange Street Site

JOB NUMBER

480-229067-1

Eurofins Buffalo
10 Hazelwood Drive
Amherst NY 14228-2298

See page two for job notes and contact information.

my EOL

Job Notes

This report may not be reproduced except in full, and with written approval from the laboratory. The results relate only to the samples tested. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

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 Northeast, LLC Project Manager.

Authorization



Generated
5/9/2025 10:00:19 AM

Authorized for release by
John Schove, Project Manager II
John.Schove@et.eurofinsus.com
(716)504-9838

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Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
*+	LCS and/or LCSD is outside acceptance limits, high biased.
B	Compound was found in the blank and sample.
F1	MS and/or MSD recovery exceeds control limits.
F2	MS/MSD RPD exceeds control limits
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

GC/MS Semi VOA

Qualifier	Qualifier Description
F1	MS and/or MSD recovery exceeds control limits.
F2	MS/MSD RPD exceeds control limits
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

GC/MS Semi VOA TICs

Qualifier	Qualifier Description
J	Indicates an Estimated Value for TICs
N	Presumptive evidence of material.
T	Result is a tentatively identified compound (TIC) and an estimated value.

GC Semi VOA

Qualifier	Qualifier Description
B	Compound was found in the blank and sample.
F1	MS and/or MSD recovery exceeds control limits.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
S1+	Surrogate recovery exceeds control limits, high biased.

LCMS

Qualifier	Qualifier Description
*5+	Isotope dilution analyte is outside acceptance limits, high biased.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Metals

Qualifier	Qualifier Description
^5-	Linear Range Check (LRC) is outside acceptance limits, low biased.
4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.
E	Result exceeded calibration range.
F1	MS and/or MSD recovery exceeds control limits.
F2	MS/MSD RPD exceeds control limits
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

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"

Glossary (Continued)

Abbreviation	These commonly used abbreviations may or may not be present in this report.
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

Job ID: 480-229067-1 Eurofins Buffalo

Job Narrative
480-229067-1

Receipt
The samples were received on 4/29/2025 3:43 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 was 4.7º C.

GC/MS VOA
Method 8260C: The continuing calibration verification (CCV) associated with batch 480-744923 recovered above the upper control limit for Cyclohexane and Trichlorofluoromethane. The sample(s) associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported. The associated sample is:MW-1 0.25-3Ft (480-229067-5).

Method 8260C: The laboratory control sample (LCS) for preparation batch 480-744799 and analytical batch 480-744923 recovered outside control limits for the following analyte: Cyclohexane. This analyte was biased high in the LCS and was not detected in the associated samples; therefore, the data have been reported.The associated sample is:MW-1 0.25-3Ft (480-229067-5).

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

GC/MS Semi VOA
Method 8270D: The continuing calibration verification (CCV) associated with batch 480-745000 recovered above the upper control limit for bis (2-chloroisopropyl) ether. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported. The associated sample is:MW-1 0.25-3Ft (480-229067-5).

Method 8270D: The continuing calibration verification (CCV) associated with batch 480-745105 recovered above the upper control limit for 2-Nitrophenol, 4,6-Dinitro-2-methylphenol and Di-n-octyl phthalate. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported. The associated samples are:HC-4 0.5-1.5Ft (480-229067-1) and BD-1 (480-229067-2).

Method 8270D: The continuing calibration verification (CCV) analyzed in batch 480-745105 was outside the method criteria for the following analyte(s): 2,4,6-Tribromophenol (Surr). A CCV standard at or below the reporting limit (RL) was analyzed with the affected samples and found to be acceptable. As indicated in the reference method, sample analysis may proceed; however, any detection for the affected analyte(s) is considered estimated.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

GC Semi VOA
Method 8082A: Surrogate recovery was outside acceptance limits for the following matrix spike/matrix spike duplicate (MS/MSD) sample: MW-1 0.25-3Ft (480-229067-5[MS]). The parent sample's surrogate recovery was within limits. The MS/MSD sample has been qualified and reported.

Method 8081B: The %RPD between the primary and confirmation column exceeded 40% for Methoxychlor for the following samples: HC-4 0.5-1.5Ft (480-229067-1) and MW-2 0.75-2Ft (480-229067-3). The lower value(s) has been reported and qualified in accordance with the laboratory's SOP.

Method 8081B: The following samples were diluted due to the nature of the sample matrix: HC-4 0.5-1.5Ft (480-229067-1), BD-1 (480-229067-2), MW-2 0.75-2Ft (480-229067-3), MW-1 0.25-3Ft (480-229067-5) and HC-6 2in-6in (480-229067-7). As such, surrogate recoveries are below the calibration range, estimated and not representative. Elevated reporting limits (RLs) are provided.

Method 8081B: The method blank for preparation batch 480-744938 and analytical batch 480-745019 contained 4,4'-DDT, Endrin ketone and Methoxychlor above the method detection limit. This target analyte concentration was less than the reporting limit (RL) in the method blank; therefore, re-extraction and/or re-analysis of samples was not performed. The following associated samples are impacted: HC-4 0.5-1.5Ft (480-229067-1), BD-1 (480-229067-2), MW-2 0.75-2Ft (480-229067-3), MW-1 0.25-3Ft (480-229067-5) and HC-6 2in-6in (480-229067-7).

Method 8081B: The following samples were diluted due to the nature of the sample matrix: MW-1 0.25-3Ft (480-229067-5[MS]) and MW-1 0.25-3Ft (480-229067-5[MSD]). As such, spike and surrogate recoveries are below the calibration range, estimated and not representative. Elevated reporting limits (RLs) are provided.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Metals

Job ID: 480-229067-1 (Continued) Eurofins Buffalo

Method 6010D: The linear range check (LRC) standard recovery associated with 480-745013 is outside the acceptance criteria for the following analytes: Silver. The concentration of these analyte(s) in the sample(s) are below the highest standard of the calibration curve; therefore, the data have been reported.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

LCMS
Method 1633: The continuing calibration verification (CCV) recovered outside of control limits for IDA compound(s) (flagged). Section 14.3.3 of the finalized EPA 1633 states that the recovery of target analytes for the CCV(s) must be within 70 - 130%, unless the analyte is not of concern for a given project. Since target analytes associated with this IDA are within spec, data is reported. The following samples are impacted: HC-4 0.5-1.5Ft (480-229067-1), BD-1 (480-229067-2), MW-2 0.75-2Ft (480-229067-3), MW-1 0.25-3Ft (480-229067-5), MW-1 0.25-3Ft (480-229067-5[MS]), MW-1 0.25-3Ft (480-229067-5[MSD]), HC-6 2in-6in (480-229067-7), (CCV 240-654529/16), (480-229068-D-1-A) and (480-229068-D-1-B DU).

Method 1633: Isotope Dilution Analyte (IDA) recovery is above the method recommended limit for the following sample: MW-1 0.25-3Ft (480-229067-5). Quantitation by isotope dilution generally precludes any adverse effect on data quality due to elevated IDA recoveries.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Organic Prep
Method 3546: The following samples required a Florisil clean-up, via EPA Method 3620C, to reduce matrix interferences: HC-4 0.5-1.5Ft (480-229067-1), BD-1 (480-229067-2), MW-2 0.75-2Ft (480-229067-3), MW-1 0.25-3Ft (480-229067-5), MW-1 0.25-3Ft (480-229067-5[MS]), MW-1 0.25-3Ft (480-229067-5[MSD]) and HC-6 2in-6in (480-229067-7).

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Detection Summary

Client: Roux Environmental Engineering and Geology DPC
Job ID: 480-229067-1
Project/Site: BCP RI - 619 Exchange Street Site

Client Sample ID: HC-4 0.5-1.5Ft
Lab Sample ID: 480-229067-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	53		30	5.1	ug/Kg	1	☼	8260C	Total/NA
Chloroform	1.4	J B	6.0	0.37	ug/Kg	1	☼	8260C	Total/NA
2-Methylnaphthalene	140	J	190	39	ug/Kg	1	☼	8270D	Total/NA
Acenaphthene	73	J	190	29	ug/Kg	1	☼	8270D	Total/NA
Acenaphthylene	28	J	190	25	ug/Kg	1	☼	8270D	Total/NA
Anthracene	200		190	48	ug/Kg	1	☼	8270D	Total/NA
Benzo[a]anthracene	560		190	19	ug/Kg	1	☼	8270D	Total/NA
Benzo[a]pyrene	540		190	29	ug/Kg	1	☼	8270D	Total/NA
Benzo[b]fluoranthene	700		190	31	ug/Kg	1	☼	8270D	Total/NA
Benzo[g,h,i]perylene	630		190	21	ug/Kg	1	☼	8270D	Total/NA
Benzo[k]fluoranthene	260		190	25	ug/Kg	1	☼	8270D	Total/NA
Bis(2-ethylhexyl) phthalate	170	J	190	66	ug/Kg	1	☼	8270D	Total/NA
Carbazole	110	J	190	23	ug/Kg	1	☼	8270D	Total/NA
Chrysene	640		190	43	ug/Kg	1	☼	8270D	Total/NA
Dibenz(a,h)anthracene	150	J	190	34	ug/Kg	1	☼	8270D	Total/NA
Dibenzofuran	100	J	190	23	ug/Kg	1	☼	8270D	Total/NA
Fluoranthene	1100		190	21	ug/Kg	1	☼	8270D	Total/NA
Fluorene	85	J	190	23	ug/Kg	1	☼	8270D	Total/NA
Indeno[1,2,3-cd]pyrene	470		190	24	ug/Kg	1	☼	8270D	Total/NA
Naphthalene	88	J	190	25	ug/Kg	1	☼	8270D	Total/NA
Phenanthrene	1100		190	29	ug/Kg	1	☼	8270D	Total/NA
Pyrene	1100		190	23	ug/Kg	1	☼	8270D	Total/NA
4,4'-DDD	15	J	36	7.1	ug/Kg	10	☼	8081B	Total/NA
4,4'-DDT	34	J B	36	8.5	ug/Kg	10	☼	8081B	Total/NA
Endrin ketone	13	J B	36	8.9	ug/Kg	10	☼	8081B	Total/NA
gamma-BHC (Lindane)	9.2	J	36	6.7	ug/Kg	10	☼	8081B	Total/NA
Methoxychlor	38	B	36	7.4	ug/Kg	10	☼	8081B	Total/NA
Perfluorooctanesulfonic acid (PFOS)	0.044	J	0.14	0.036	ug/Kg	1	☼	Draft-3 1633	Total/NA
Perfluorooctanoic acid (PFOA)	0.044	J	0.14	0.036	ug/Kg	1	☼	Draft-3 1633	Total/NA
Aluminum	4960		11.6	10	mg/Kg	1	☼	6010D	Total/NA
Antimony	5.0	J	17.4	0.61	mg/Kg	1	☼	6010D	Total/NA
Arsenic	13.8		2.3	1.0	mg/Kg	1	☼	6010D	Total/NA
Barium	135		0.58	0.16	mg/Kg	1	☼	6010D	Total/NA
Beryllium	0.87		0.23	0.046	mg/Kg	1	☼	6010D	Total/NA
Cadmium	0.26		0.23	0.081	mg/Kg	1	☼	6010D	Total/NA
Calcium	22400		58.0	31.3	mg/Kg	1	☼	6010D	Total/NA
Chromium	20.0		0.58	0.42	mg/Kg	1	☼	6010D	Total/NA
Cobalt	7.2		0.58	0.12	mg/Kg	1	☼	6010D	Total/NA
Copper	87.2		1.2	0.66	mg/Kg	1	☼	6010D	Total/NA
Iron	13200		11.6	9.8	mg/Kg	1	☼	6010D	Total/NA
Lead	516		1.2	0.53	mg/Kg	1	☼	6010D	Total/NA
Magnesium	3150		23.2	9.8	mg/Kg	1	☼	6010D	Total/NA
Manganese	131		1.2	0.32	mg/Kg	1	☼	6010D	Total/NA
Nickel	14.9		5.8	0.29	mg/Kg	1	☼	6010D	Total/NA
Potassium	886		34.8	28.1	mg/Kg	1	☼	6010D	Total/NA
Selenium	2.0	J	4.6	0.93	mg/Kg	1	☼	6010D	Total/NA
Sodium	218		162	71.1	mg/Kg	1	☼	6010D	Total/NA
Vanadium	18.7		0.58	0.15	mg/Kg	1	☼	6010D	Total/NA
Zinc	99.7		2.3	1.2	mg/Kg	1	☼	6010D	Total/NA
Mercury	0.81		0.023	0.0053	mg/Kg	1	☼	7471B	Total/NA

This Detection Summary does not include radiochemical test results.

Eurofins Buffalo

Detection Summary

Client: Roux Environmental Engineering and Geology DPC
Job ID: 480-229067-1
Project/Site: BCP RI - 619 Exchange Street Site

Client Sample ID: BD-1
Lab Sample ID: 480-229067-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	75		29	4.8	ug/Kg	1	☼	8260C	Total/NA
Chloroform	1.3	J B	5.8	0.36	ug/Kg	1	☼	8260C	Total/NA
2-Methylnaphthalene	110	J	190	37	ug/Kg	1	☼	8270D	Total/NA
Acenaphthene	43	J	190	27	ug/Kg	1	☼	8270D	Total/NA
Anthracene	170	J	190	46	ug/Kg	1	☼	8270D	Total/NA
Benzo[a]anthracene	340		190	19	ug/Kg	1	☼	8270D	Total/NA
Benzo[a]pyrene	290		190	27	ug/Kg	1	☼	8270D	Total/NA
Benzo[b]fluoranthene	350		190	29	ug/Kg	1	☼	8270D	Total/NA
Benzo[g,h,i]perylene	250		190	20	ug/Kg	1	☼	8270D	Total/NA
Benzo[k]fluoranthene	140	J	190	24	ug/Kg	1	☼	8270D	Total/NA
Bis(2-ethylhexyl) phthalate	110	J	190	63	ug/Kg	1	☼	8270D	Total/NA
Carbazole	35	J	190	22	ug/Kg	1	☼	8270D	Total/NA
Chrysene	360		190	41	ug/Kg	1	☼	8270D	Total/NA
Dibenz(a,h)anthracene	70	J	190	33	ug/Kg	1	☼	8270D	Total/NA
Dibenzofuran	59	J	190	22	ug/Kg	1	☼	8270D	Total/NA
Fluoranthene	540		190	20	ug/Kg	1	☼	8270D	Total/NA
Fluorene	62	J	190	22	ug/Kg	1	☼	8270D	Total/NA
Indeno[1,2,3-cd]pyrene	210		190	23	ug/Kg	1	☼	8270D	Total/NA
Naphthalene	46	J	190	24	ug/Kg	1	☼	8270D	Total/NA
Phenanthrene	660		190	27	ug/Kg	1	☼	8270D	Total/NA
Pyrene	540		190	22	ug/Kg	1	☼	8270D	Total/NA
4,4'-DDT	31	J B	35	8.3	ug/Kg	10	☼	8081B	Total/NA
Endrin ketone	24	J B	35	8.7	ug/Kg	10	☼	8081B	Total/NA
Methoxychlor	33	J B	35	7.2	ug/Kg	10	☼	8081B	Total/NA
Perfluorooctanesulfonic acid (PFOS)	0.037	J	0.14	0.034	ug/Kg	1	☼	Draft-3 1633	Total/NA
Aluminum	5350		10.8	9.3	mg/Kg	1	☼	6010D	Total/NA
Antimony	3.8	J	16.2	0.57	mg/Kg	1	☼	6010D	Total/NA
Arsenic	7.4		2.2	0.95	mg/Kg	1	☼	6010D	Total/NA
Barium	83.5		0.54	0.15	mg/Kg	1	☼	6010D	Total/NA
Beryllium	0.63		0.22	0.043	mg/Kg	1	☼	6010D	Total/NA
Cadmium	0.25		0.22	0.076	mg/Kg	1	☼	6010D	Total/NA
Calcium	31000		54.2	29.2	mg/Kg	1	☼	6010D	Total/NA
Chromium	11.3		0.54	0.39	mg/Kg	1	☼	6010D	Total/NA
Cobalt	6.7		0.54	0.11	mg/Kg	1	☼	6010D	Total/NA
Copper	53.0		1.1	0.62	mg/Kg	1	☼	6010D	Total/NA
Iron	11400		10.8	9.2	mg/Kg	1	☼	6010D	Total/NA
Lead	219		1.1	0.50	mg/Kg	1	☼	6010D	Total/NA
Magnesium	5130		21.7	9.2	mg/Kg	1	☼	6010D	Total/NA
Manganese	183		1.1	0.30	mg/Kg	1	☼	6010D	Total/NA
Nickel	16.2		5.4	0.27	mg/Kg	1	☼	6010D	Total/NA
Potassium	1070		32.5	26.3	mg/Kg	1	☼	6010D	Total/NA
Selenium	1.4	J	4.3	0.87	mg/Kg	1	☼	6010D	Total/NA
Sodium	174		152	66.4	mg/Kg	1	☼	6010D	Total/NA
Vanadium	15.6		0.54	0.14	mg/Kg	1	☼	6010D	Total/NA
Zinc	78.2		2.2	1.1	mg/Kg	1	☼	6010D	Total/NA
Mercury	0.47		0.021	0.0049	mg/Kg	1	☼	7471B	Total/NA

Client Sample ID: MW-2 0.75-2Ft
Lab Sample ID: 480-229067-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	240		34	5.8	ug/Kg	1	☼	8260C	Total/NA

This Detection Summary does not include radiochemical test results.

Eurofins Buffalo

Client Sample ID: MW-2 0.75-2Ft (Continued)
Lab Sample ID: 480-229067-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloroform	1.7	J B	6.9	0.42	ug/Kg	1	☼	8260C	Total/NA
2-Methylnaphthalene	210		210	42	ug/Kg	1	☼	8270D	Total/NA
Acenaphthylene	60	J	210	27	ug/Kg	1	☼	8270D	Total/NA
Anthracene	110	J	210	51	ug/Kg	1	☼	8270D	Total/NA
Benzo[a]anthracene	440		210	21	ug/Kg	1	☼	8270D	Total/NA
Benzo[a]pyrene	340		210	31	ug/Kg	1	☼	8270D	Total/NA
Benzo[b]fluoranthene	470		210	33	ug/Kg	1	☼	8270D	Total/NA
Benzo[g,h,i]perylene	260		210	22	ug/Kg	1	☼	8270D	Total/NA
Benzo[k]fluoranthene	180	J	210	27	ug/Kg	1	☼	8270D	Total/NA
Carbazole	46	J	210	24	ug/Kg	1	☼	8270D	Total/NA
Chrysene	450		210	46	ug/Kg	1	☼	8270D	Total/NA
Dibenz(a,h)anthracene	72	J	210	37	ug/Kg	1	☼	8270D	Total/NA
Dibenzofuran	80	J	210	24	ug/Kg	1	☼	8270D	Total/NA
Fluoranthene	740		210	22	ug/Kg	1	☼	8270D	Total/NA
Fluorene	65	J	210	24	ug/Kg	1	☼	8270D	Total/NA
Indeno[1,2,3-cd]pyrene	190	J	210	26	ug/Kg	1	☼	8270D	Total/NA
Naphthalene	81	J	210	27	ug/Kg	1	☼	8270D	Total/NA
Phenanthrene	780		210	31	ug/Kg	1	☼	8270D	Total/NA
Pyrene	580		210	24	ug/Kg	1	☼	8270D	Total/NA
4,4'-DDD	18	J	41	7.9	ug/Kg	10	☼	8081B	Total/NA
4,4'-DDT	33	J B	41	9.6	ug/Kg	10	☼	8081B	Total/NA
Endrin ketone	13	J B	41	10	ug/Kg	10	☼	8081B	Total/NA
gamma-BHC (Lindane)	12	J	41	7.5	ug/Kg	10	☼	8081B	Total/NA
Methoxychlor	42	B	41	8.3	ug/Kg	10	☼	8081B	Total/NA
Perfluoroheptanoic acid (PFHpA)	0.11	J	0.15	0.038	ug/Kg	1	☼	Draft-3 1633	Total/NA
Perfluorohexanoic acid (PFHxA)	0.17		0.15	0.038	ug/Kg	1	☼	Draft-3 1633	Total/NA
Perfluorooctanesulfonic acid (PFOS)	0.24		0.15	0.038	ug/Kg	1	☼	Draft-3 1633	Total/NA
Perfluorooctanoic acid (PFOA)	0.25		0.15	0.038	ug/Kg	1	☼	Draft-3 1633	Total/NA
Perfluoropentanoic acid (PFPeA)	0.24	J	0.31	0.077	ug/Kg	1	☼	Draft-3 1633	Total/NA
Aluminum	2390		12.2	10.6	mg/Kg	1	☼	6010D	Total/NA
Arsenic	19.5		2.4	1.1	mg/Kg	1	☼	6010D	Total/NA
Barium	150		0.61	0.17	mg/Kg	1	☼	6010D	Total/NA
Beryllium	0.85		0.24	0.049	mg/Kg	1	☼	6010D	Total/NA
Cadmium	0.11	J	0.24	0.086	mg/Kg	1	☼	6010D	Total/NA
Calcium	13900		61.2	33.0	mg/Kg	1	☼	6010D	Total/NA
Chromium	8.7		0.61	0.44	mg/Kg	1	☼	6010D	Total/NA
Cobalt	3.5		0.61	0.12	mg/Kg	1	☼	6010D	Total/NA
Copper	36.7		1.2	0.70	mg/Kg	1	☼	6010D	Total/NA
Iron	15400		12.2	10.4	mg/Kg	1	☼	6010D	Total/NA
Lead	164		1.2	0.56	mg/Kg	1	☼	6010D	Total/NA
Magnesium	1080		24.5	10.4	mg/Kg	1	☼	6010D	Total/NA
Manganese	172		1.2	0.34	mg/Kg	1	☼	6010D	Total/NA
Nickel	9.6		6.1	0.31	mg/Kg	1	☼	6010D	Total/NA
Potassium	751		36.7	29.7	mg/Kg	1	☼	6010D	Total/NA
Selenium	2.3	J	4.9	0.98	mg/Kg	1	☼	6010D	Total/NA
Sodium	136	J	171	75.0	mg/Kg	1	☼	6010D	Total/NA
Vanadium	16.6		0.61	0.16	mg/Kg	1	☼	6010D	Total/NA
Zinc	67.3		2.4	1.2	mg/Kg	1	☼	6010D	Total/NA
Mercury	0.58		0.025	0.0057	mg/Kg	1	☼	7471B	Total/NA

This Detection Summary does not include radiochemical test results.

Detection Summary

Client: Roux Environmental Engineering and Geology DPC
Job ID: 480-229067-1
Project/Site: BCP RI - 619 Exchange Street Site

Client Sample ID: MW-3 0.5-2.5Ft
Lab Sample ID: 480-229067-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
2-Methylnaphthalene	220		200	41	ug/Kg	1	☼	8270D	Total/NA
Acenaphthylene	52	J	200	26	ug/Kg	1	☼	8270D	Total/NA
Anthracene	150	J	200	50	ug/Kg	1	☼	8270D	Total/NA
Benzo[a]anthracene	500		200	20	ug/Kg	1	☼	8270D	Total/NA
Benzo[a]pyrene	430		200	30	ug/Kg	1	☼	8270D	Total/NA
Benzo[b]fluoranthene	650		200	32	ug/Kg	1	☼	8270D	Total/NA
Benzo[g,h,i]perylene	370		200	21	ug/Kg	1	☼	8270D	Total/NA
Benzo[k]fluoranthene	230		200	26	ug/Kg	1	☼	8270D	Total/NA
Biphenyl	37	J	200	30	ug/Kg	1	☼	8270D	Total/NA
Carbazole	66	J	200	24	ug/Kg	1	☼	8270D	Total/NA
Chrysene	630		200	45	ug/Kg	1	☼	8270D	Total/NA
Dibenz(a,h)anthracene	120	J	200	36	ug/Kg	1	☼	8270D	Total/NA
Dibenzofuran	140	J	200	24	ug/Kg	1	☼	8270D	Total/NA
Fluoranthene	860		200	21	ug/Kg	1	☼	8270D	Total/NA
Fluorene	56	J	200	24	ug/Kg	1	☼	8270D	Total/NA
Indeno[1,2,3-cd]pyrene	280		200	25	ug/Kg	1	☼	8270D	Total/NA
Naphthalene	85	J	200	26	ug/Kg	1	☼	8270D	Total/NA
Phenanthrene	1100		200	30	ug/Kg	1	☼	8270D	Total/NA
Pyrene	720		200	24	ug/Kg	1	☼	8270D	Total/NA
Aluminum	3440		11.6	10	mg/Kg	1	☼	6010D	Total/NA
Antimony	2.0	J	17.3	0.61	mg/Kg	1	☼	6010D	Total/NA
Arsenic	20.8		2.3	1.0	mg/Kg	1	☼	6010D	Total/NA
Barium	101		0.58	0.16	mg/Kg	1	☼	6010D	Total/NA
Beryllium	0.86		0.23	0.046	mg/Kg	1	☼	6010D	Total/NA
Cadmium	0.29		0.23	0.081	mg/Kg	1	☼	6010D	Total/NA
Calcium	13400		57.8	31.2	mg/Kg	1	☼	6010D	Total/NA
Chromium	13.1		0.58	0.42	mg/Kg	1	☼	6010D	Total/NA
Cobalt	8.1		0.58	0.12	mg/Kg	1	☼	6010D	Total/NA
Copper	79.5		1.2	0.66	mg/Kg	1	☼	6010D	Total/NA
Iron	28200		11.6	9.8	mg/Kg	1	☼	6010D	Total/NA
Lead	281		1.2	0.53	mg/Kg	1	☼	6010D	Total/NA
Magnesium	2590		23.1	9.8	mg/Kg	1	☼	6010D	Total/NA
Manganese	236		1.2	0.32	mg/Kg	1	☼	6010D	Total/NA
Nickel	16.8		5.8	0.29	mg/Kg	1	☼	6010D	Total/NA
Potassium	772		34.7	28.0	mg/Kg	1	☼	6010D	Total/NA
Selenium	2.1	J	4.6	0.92	mg/Kg	1	☼	6010D	Total/NA
Silver	0.25	J ^5-	0.69	0.23	mg/Kg	1	☼	6010D	Total/NA
Sodium	135	J	162	70.9	mg/Kg	1	☼	6010D	Total/NA
Vanadium	23.7		0.58	0.15	mg/Kg	1	☼	6010D	Total/NA
Zinc	96.9		2.3	1.2	mg/Kg	1	☼	6010D	Total/NA
Mercury	1.6		0.023	0.0054	mg/Kg	1	☼	7471B	Total/NA

Client Sample ID: MW-1 0.25-3Ft
Lab Sample ID: 480-229067-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloroform	1.6	J F1 B	6.6	0.41	ug/Kg	1	☼	8260C	Total/NA
2-Methylnaphthalene	320		210	42	ug/Kg	1	☼	8270D	Total/NA
Acenaphthene	60	J	210	31	ug/Kg	1	☼	8270D	Total/NA
Acenaphthylene	88	J	210	27	ug/Kg	1	☼	8270D	Total/NA
Anthracene	250		210	52	ug/Kg	1	☼	8270D	Total/NA
Benzo[a]anthracene	840		210	21	ug/Kg	1	☼	8270D	Total/NA

This Detection Summary does not include radiochemical test results.

Eurofins Buffalo

Client Sample ID: MW-1 0.25-3Ft (Continued)
Lab Sample ID: 480-229067-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzo[a]pyrene	720		210	31	ug/Kg	1	☼	8270D	Total/NA
Benzo[b]fluoranthene	1100	F2	210	34	ug/Kg	1	☼	8270D	Total/NA
Benzo[g,h,i]perylene	580		210	22	ug/Kg	1	☼	8270D	Total/NA
Benzo[k]fluoranthene	330		210	27	ug/Kg	1	☼	8270D	Total/NA
Biphenyl	33	J	210	31	ug/Kg	1	☼	8270D	Total/NA
Carbazole	120	J	210	25	ug/Kg	1	☼	8270D	Total/NA
Chrysene	890		210	47	ug/Kg	1	☼	8270D	Total/NA
Dibenz(a,h)anthracene	210		210	37	ug/Kg	1	☼	8270D	Total/NA
Dibenzofuran	150	J	210	25	ug/Kg	1	☼	8270D	Total/NA
Fluoranthene	1200	F1	210	22	ug/Kg	1	☼	8270D	Total/NA
Fluorene	100	J	210	25	ug/Kg	1	☼	8270D	Total/NA
Indeno[1,2,3-cd]pyrene	500		210	26	ug/Kg	1	☼	8270D	Total/NA
Naphthalene	120	J	210	27	ug/Kg	1	☼	8270D	Total/NA
Phenanthrene	1400	F1	210	31	ug/Kg	1	☼	8270D	Total/NA
Pyrene	1200		210	25	ug/Kg	1	☼	8270D	Total/NA
4,4'-DDD	27	J	40	7.8	ug/Kg	10	☼	8081B	Total/NA
4,4'-DDE	8.5	J	40	8.4	ug/Kg	10	☼	8081B	Total/NA
4,4'-DDT	34	J B	40	9.4	ug/Kg	10	☼	8081B	Total/NA
Endrin ketone	21	J B	40	9.8	ug/Kg	10	☼	8081B	Total/NA
Methoxychlor	35	J B	40	8.2	ug/Kg	10	☼	8081B	Total/NA
Aluminum	3960		11.8	10.2	mg/Kg	1	☼	6010D	Total/NA
Arsenic	12.2		2.4	1.0	mg/Kg	1	☼	6010D	Total/NA
Barium	79.6		0.59	0.17	mg/Kg	1	☼	6010D	Total/NA
Beryllium	0.66		0.24	0.047	mg/Kg	1	☼	6010D	Total/NA
Cadmium	0.22	J	0.24	0.083	mg/Kg	1	☼	6010D	Total/NA
Calcium	6490		59.0	31.8	mg/Kg	1	☼	6010D	Total/NA
Chromium	11.1		0.59	0.42	mg/Kg	1	☼	6010D	Total/NA
Cobalt	11.8		0.59	0.12	mg/Kg	1	☼	6010D	Total/NA
Copper	73.3		1.2	0.67	mg/Kg	1	☼	6010D	Total/NA
Iron	65700		11.8	10.0	mg/Kg	1	☼	6010D	Total/NA
Lead	136		1.2	0.54	mg/Kg	1	☼	6010D	Total/NA
Magnesium	1030		23.6	10.0	mg/Kg	1	☼	6010D	Total/NA
Manganese	208		1.2	0.33	mg/Kg	1	☼	6010D	Total/NA
Nickel	20.3		5.9	0.29	mg/Kg	1	☼	6010D	Total/NA
Potassium	583		35.4	28.6	mg/Kg	1	☼	6010D	Total/NA
Selenium	1.9	J	4.7	0.94	mg/Kg	1	☼	6010D	Total/NA
Silver	0.24	J ^5-	0.71	0.24	mg/Kg	1	☼	6010D	Total/NA
Sodium	125	J	165	72.3	mg/Kg	1	☼	6010D	Total/NA
Vanadium	16.9		0.59	0.15	mg/Kg	1	☼	6010D	Total/NA
Zinc	100		2.4	1.2	mg/Kg	1	☼	6010D	Total/NA
Mercury	0.71	F1 F2	0.024	0.0056	mg/Kg	1	☼	7471B	Total/NA

Client Sample ID: HC-5 0.33-0.66Ft
Lab Sample ID: 480-229067-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acenaphthene	220	J	250	36	ug/Kg	1	☼	8270D	Total/NA
Anthracene	470		250	61	ug/Kg	1	☼	8270D	Total/NA
Benzo[a]anthracene	720		250	25	ug/Kg	1	☼	8270D	Total/NA
Benzo[a]pyrene	650		250	36	ug/Kg	1	☼	8270D	Total/NA
Benzo[b]fluoranthene	730		250	39	ug/Kg	1	☼	8270D	Total/NA
Benzo[g,h,i]perylene	440		250	26	ug/Kg	1	☼	8270D	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: HC-5 0.33-0.66Ft (Continued)
Lab Sample ID: 480-229067-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzo[k]fluoranthene	440		250	32	ug/Kg	1	☼	8270D	Total/NA
Carbazole	190	J	250	29	ug/Kg	1	☼	8270D	Total/NA
Chrysene	690		250	55	ug/Kg	1	☼	8270D	Total/NA
Dibenz(a,h)anthracene	110	J	250	44	ug/Kg	1	☼	8270D	Total/NA
Dibenzofuran	100	J	250	29	ug/Kg	1	☼	8270D	Total/NA
Fluoranthene	1500		250	26	ug/Kg	1	☼	8270D	Total/NA
Fluorene	230	J	250	29	ug/Kg	1	☼	8270D	Total/NA
Indeno[1,2,3-cd]pyrene	380		250	31	ug/Kg	1	☼	8270D	Total/NA
Naphthalene	120	J	250	32	ug/Kg	1	☼	8270D	Total/NA
Phenanthrene	1500		250	36	ug/Kg	1	☼	8270D	Total/NA
Pyrene	1200		250	29	ug/Kg	1	☼	8270D	Total/NA
Aluminum	6010		15.0	12.9	mg/Kg	1	☼	6010D	Total/NA
Arsenic	12.7		3.0	1.3	mg/Kg	1	☼	6010D	Total/NA
Barium	153		0.75	0.21	mg/Kg	1	☼	6010D	Total/NA
Beryllium	0.92		0.30	0.060	mg/Kg	1	☼	6010D	Total/NA
Calcium	9010		74.9	40.5	mg/Kg	1	☼	6010D	Total/NA
Chromium	10.7		0.75	0.54	mg/Kg	1	☼	6010D	Total/NA
Cobalt	5.7		0.75	0.15	mg/Kg	1	☼	6010D	Total/NA
Copper	39.8		1.5	0.85	mg/Kg	1	☼	6010D	Total/NA
Iron	45700		15.0	12.7	mg/Kg	1	☼	6010D	Total/NA
Lead	73.6		1.5	0.69	mg/Kg	1	☼	6010D	Total/NA
Magnesium	1710		30.0	12.7	mg/Kg	1	☼	6010D	Total/NA
Manganese	212		1.5	0.42	mg/Kg	1	☼	6010D	Total/NA
Nickel	17.4		7.5	0.37	mg/Kg	1	☼	6010D	Total/NA
Potassium	616		45.0	36.3	mg/Kg	1	☼	6010D	Total/NA
Selenium	2.1	J	6.0	1.2	mg/Kg	1	☼	6010D	Total/NA
Sodium	236		210	91.9	mg/Kg	1	☼	6010D	Total/NA
Vanadium	20.4		0.75	0.19	mg/Kg	1	☼	6010D	Total/NA
Zinc	36.4		3.0	1.5	mg/Kg	1	☼	6010D	Total/NA
Mercury	0.023	J	0.029	0.0067	mg/Kg	1	☼	7471B	Total/NA

Client Sample ID: HC-6 2in-6in
Lab Sample ID: 480-229067-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	8.3	J	26	4.4	ug/Kg	1	☼	8260C	Total/NA
Chloroform	1.3	J B	5.3	0.33	ug/Kg	1	☼	8260C	Total/NA
2-Methylnaphthalene	69	J	230	46	ug/Kg	1	☼	8270D	Total/NA
Benzo[a]anthracene	35	J	230	23	ug/Kg	1	☼	8270D	Total/NA
Benzo[a]pyrene	34	J	230	34	ug/Kg	1	☼	8270D	Total/NA
Benzo[b]fluoranthene	57	J	230	36	ug/Kg	1	☼	8270D	Total/NA
Benzo[g,h,i]perylene	29	J	230	24	ug/Kg	1	☼	8270D	Total/NA
Chrysene	51	J	230	51	ug/Kg	1	☼	8270D	Total/NA
Fluoranthene	79	J	230	24	ug/Kg	1	☼	8270D	Total/NA
Naphthalene	39	J	230	30	ug/Kg	1	☼	8270D	Total/NA
Phenanthrene	93	J	230	34	ug/Kg	1	☼	8270D	Total/NA
Pyrene	64	J	230	27	ug/Kg	1	☼	8270D	Total/NA
4,4'-DDD	5.3	J	23	4.4	ug/Kg	5	☼	8081B	Total/NA
4,4'-DDT	19	J B	23	5.3	ug/Kg	5	☼	8081B	Total/NA
delta-BHC	5.7	J	23	4.2	ug/Kg	5	☼	8081B	Total/NA
Endrin ketone	14	J B	23	5.6	ug/Kg	5	☼	8081B	Total/NA
Perfluorooctanesulfonic acid (PFOS)	0.16	J	0.17	0.042	ug/Kg	1	☼	Draft-3 1633	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: HC-6 2in-6in (Continued)
Lab Sample ID: 480-229067-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Aluminum	4540		13.9	12.0	mg/Kg	1	☼	6010D	Total/NA
Arsenic	12.2		2.8	1.2	mg/Kg	1	☼	6010D	Total/NA
Barium	330		0.69	0.19	mg/Kg	1	☼	6010D	Total/NA
Beryllium	0.90		0.28	0.056	mg/Kg	1	☼	6010D	Total/NA
Cadmium	0.15	J	0.28	0.097	mg/Kg	1	☼	6010D	Total/NA
Calcium	32100		69.5	37.5	mg/Kg	1	☼	6010D	Total/NA
Chromium	8.4		0.69	0.50	mg/Kg	1	☼	6010D	Total/NA
Cobalt	5.7		0.69	0.14	mg/Kg	1	☼	6010D	Total/NA
Copper	36.1		1.4	0.79	mg/Kg	1	☼	6010D	Total/NA
Iron	13300		13.9	11.8	mg/Kg	1	☼	6010D	Total/NA
Lead	186		1.4	0.64	mg/Kg	1	☼	6010D	Total/NA
Magnesium	3610		27.8	11.8	mg/Kg	1	☼	6010D	Total/NA
Manganese	84.4		1.4	0.39	mg/Kg	1	☼	6010D	Total/NA
Nickel	13.7		6.9	0.35	mg/Kg	1	☼	6010D	Total/NA
Potassium	578		41.7	33.7	mg/Kg	1	☼	6010D	Total/NA
Sodium	239		195	85.2	mg/Kg	1	☼	6010D	Total/NA
Vanadium	14.1		0.69	0.18	mg/Kg	1	☼	6010D	Total/NA
Zinc	156		2.8	1.4	mg/Kg	1	☼	6010D	Total/NA
Mercury	0.055		0.027	0.0062	mg/Kg	1	☼	7471B	Total/NA

Client Sample ID: HC-7 0.25-0.75Ft
Lab Sample ID: 480-229067-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzo[a]anthracene	40	J	210	21	ug/Kg	1	☼	8270D	Total/NA
Benzo[a]pyrene	38	J	210	31	ug/Kg	1	☼	8270D	Total/NA
Benzo[b]fluoranthene	51	J	210	34	ug/Kg	1	☼	8270D	Total/NA
Benzo[g,h,i]perylene	30	J	210	22	ug/Kg	1	☼	8270D	Total/NA
Chrysene	49	J	210	47	ug/Kg	1	☼	8270D	Total/NA
Fluoranthene	85	J	210	22	ug/Kg	1	☼	8270D	Total/NA
Phenanthrene	63	J	210	31	ug/Kg	1	☼	8270D	Total/NA
Pyrene	67	J	210	25	ug/Kg	1	☼	8270D	Total/NA
Aluminum	7230		12.8	11.0	mg/Kg	1	☼	6010D	Total/NA
Arsenic	4.7		2.6	1.1	mg/Kg	1	☼	6010D	Total/NA
Barium	624		0.64	0.18	mg/Kg	1	☼	6010D	Total/NA
Beryllium	0.48		0.26	0.051	mg/Kg	1	☼	6010D	Total/NA
Cadmium	0.17	J	0.26	0.090	mg/Kg	1	☼	6010D	Total/NA
Calcium	63100		64.1	34.6	mg/Kg	1	☼	6010D	Total/NA
Chromium	7.5		0.64	0.46	mg/Kg	1	☼	6010D	Total/NA
Cobalt	4.5		0.64	0.13	mg/Kg	1	☼	6010D	Total/NA
Copper	15.5		1.3	0.73	mg/Kg	1	☼	6010D	Total/NA
Iron	9320		12.8	10.9	mg/Kg	1	☼	6010D	Total/NA
Lead	52.6		1.3	0.59	mg/Kg	1	☼	6010D	Total/NA
Magnesium	10500		25.6	10.9	mg/Kg	1	☼	6010D	Total/NA
Manganese	136		1.3	0.36	mg/Kg	1	☼	6010D	Total/NA
Nickel	13.5		6.4	0.32	mg/Kg	1	☼	6010D	Total/NA
Potassium	883		38.4	31.1	mg/Kg	1	☼	6010D	Total/NA
Sodium	375		179	78.5	mg/Kg	1	☼	6010D	Total/NA
Vanadium	11.8		0.64	0.17	mg/Kg	1	☼	6010D	Total/NA
Zinc	83.5		2.6	1.3	mg/Kg	1	☼	6010D	Total/NA
Mercury	0.040		0.024	0.0056	mg/Kg	1	☼	7471B	Total/NA

This Detection Summary does not include radiochemical test results.

Client: Roux Environmental Engineering and Geology DPC
Job ID: 480-229067-1
Project/Site: BCP RI - 619 Exchange Street Site

Client Sample ID: HC-4 0.5-1.5Ft
Lab Sample ID: 480-229067-1
Date Collected: 04/29/25 09:30
Matrix: Solid
Date Received: 04/29/25 15:43
Percent Solids: 87.2

Method: SW846 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		6.0	0.44	ug/Kg	☼	04/29/25 16:51	04/29/25 22:01	1
1,1,2,2-Tetrachloroethane	ND		6.0	0.98	ug/Kg	☼	04/29/25 16:51	04/29/25 22:01	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		6.0	1.4	ug/Kg	☼	04/29/25 16:51	04/29/25 22:01	1
1,1,2-Trichloroethane	ND		6.0	0.78	ug/Kg	☼	04/29/25 16:51	04/29/25 22:01	1
1,1-Dichloroethane	ND		6.0	0.73	ug/Kg	☼	04/29/25 16:51	04/29/25 22:01	1
1,1-Dichloroethene	ND		6.0	0.74	ug/Kg	☼	04/29/25 16:51	04/29/25 22:01	1
1,2,4-Trichlorobenzene	ND		6.0	0.37	ug/Kg	☼	04/29/25 16:51	04/29/25 22:01	1
1,2,4-Trimethylbenzene	ND		6.0	1.2	ug/Kg	☼	04/29/25 16:51	04/29/25 22:01	1
1,2-Dibromo-3-Chloropropane	ND		6.0	3.0	ug/Kg	☼	04/29/25 16:51	04/29/25 22:01	1
1,2-Dibromoethane	ND		6.0	0.77	ug/Kg	☼	04/29/25 16:51	04/29/25 22:01	1
1,2-Dichlorobenzene	ND		6.0	0.47	ug/Kg	☼	04/29/25 16:51	04/29/25 22:01	1
1,2-Dichloroethane	ND		6.0	0.30	ug/Kg	☼	04/29/25 16:51	04/29/25 22:01	1
1,2-Dichloropropane	ND		6.0	3.0	ug/Kg	☼	04/29/25 16:51	04/29/25 22:01	1
1,3,5-Trimethylbenzene	ND		6.0	0.39	ug/Kg	☼	04/29/25 16:51	04/29/25 22:01	1
1,3-Dichlorobenzene	ND		6.0	0.31	ug/Kg	☼	04/29/25 16:51	04/29/25 22:01	1
1,4-Dichlorobenzene	ND		6.0	0.84	ug/Kg	☼	04/29/25 16:51	04/29/25 22:01	1
2-Butanone (MEK)	ND		30	2.2	ug/Kg	☼	04/29/25 16:51	04/29/25 22:01	1
2-Hexanone	ND		30	3.0	ug/Kg	☼	04/29/25 16:51	04/29/25 22:01	1
4-Isopropyltoluene	ND		6.0	0.48	ug/Kg	☼	04/29/25 16:51	04/29/25 22:01	1
4-Methyl-2-pentanone (MIBK)	ND		30	2.0	ug/Kg	☼	04/29/25 16:51	04/29/25 22:01	1
Acetone	**53**		30	5.1	ug/Kg	☼	04/29/25 16:51	04/29/25 22:01	1
Benzene	ND		6.0	0.29	ug/Kg	☼	04/29/25 16:51	04/29/25 22:01	1
Bromodichloromethane	ND		6.0	0.81	ug/Kg	☼	04/29/25 16:51	04/29/25 22:01	1
Bromoform	ND		6.0	3.0	ug/Kg	☼	04/29/25 16:51	04/29/25 22:01	1
Bromomethane	ND		6.0	0.54	ug/Kg	☼	04/29/25 16:51	04/29/25 22:01	1
Carbon disulfide	ND		6.0	3.0	ug/Kg	☼	04/29/25 16:51	04/29/25 22:01	1
Carbon tetrachloride	ND		6.0	0.58	ug/Kg	☼	04/29/25 16:51	04/29/25 22:01	1
Chlorobenzene	ND		6.0	0.79	ug/Kg	☼	04/29/25 16:51	04/29/25 22:01	1
Chloroethane	ND		6.0	1.4	ug/Kg	☼	04/29/25 16:51	04/29/25 22:01	1
Chloroform	**1.4**	**J B**	6.0	0.37	ug/Kg	☼	04/29/25 16:51	04/29/25 22:01	1
Chloromethane	ND		6.0	0.36	ug/Kg	☼	04/29/25 16:51	04/29/25 22:01	1
cis-1,2-Dichloroethene	ND		6.0	0.77	ug/Kg	☼	04/29/25 16:51	04/29/25 22:01	1
cis-1,3-Dichloropropene	ND		6.0	0.87	ug/Kg	☼	04/29/25 16:51	04/29/25 22:01	1
Cyclohexane	ND		6.0	0.84	ug/Kg	☼	04/29/25 16:51	04/29/25 22:01	1
Dibromochloromethane	ND		6.0	0.77	ug/Kg	☼	04/29/25 16:51	04/29/25 22:01	1
Dichlorodifluoromethane	ND		6.0	0.50	ug/Kg	☼	04/29/25 16:51	04/29/25 22:01	1
Ethylbenzene	ND		6.0	0.41	ug/Kg	☼	04/29/25 16:51	04/29/25 22:01	1
Isopropylbenzene	ND		6.0	0.91	ug/Kg	☼	04/29/25 16:51	04/29/25 22:01	1
Methyl acetate	ND		30	3.6	ug/Kg	☼	04/29/25 16:51	04/29/25 22:01	1
Methyl tert-butyl ether	ND		6.0	0.59	ug/Kg	☼	04/29/25 16:51	04/29/25 22:01	1
Methylcyclohexane	ND		6.0	0.91	ug/Kg	☼	04/29/25 16:51	04/29/25 22:01	1
Methylene Chloride	ND		6.0	2.8	ug/Kg	☼	04/29/25 16:51	04/29/25 22:01	1
Naphthalene	ND		6.0	0.81	ug/Kg	☼	04/29/25 16:51	04/29/25 22:01	1
n-Butylbenzene	ND		6.0	0.52	ug/Kg	☼	04/29/25 16:51	04/29/25 22:01	1
N-Propylbenzene	ND		6.0	0.48	ug/Kg	☼	04/29/25 16:51	04/29/25 22:01	1
sec-Butylbenzene	ND		6.0	0.52	ug/Kg	☼	04/29/25 16:51	04/29/25 22:01	1
Styrene	ND		6.0	0.30	ug/Kg	☼	04/29/25 16:51	04/29/25 22:01	1
tert-Butylbenzene	ND		6.0	0.63	ug/Kg	☼	04/29/25 16:51	04/29/25 22:01	1
Tetrachloroethene	ND		6.0	0.81	ug/Kg	☼	04/29/25 16:51	04/29/25 22:01	1

Client Sample ID: HC-4 0.5-1.5Ft
Lab Sample ID: 480-229067-1
Date Collected: 04/29/25 09:30
Matrix: Solid
Date Received: 04/29/25 15:43
Percent Solids: 87.2

Method: SW846 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Toluene	ND		6.0	0.45	ug/Kg	☼	04/29/25 16:51	04/29/25 22:01	1
trans-1,2-Dichloroethene	ND		6.0	0.62	ug/Kg	☼	04/29/25 16:51	04/29/25 22:01	1
trans-1,3-Dichloropropene	ND		6.0	2.6	ug/Kg	☼	04/29/25 16:51	04/29/25 22:01	1
Trichloroethene	ND		6.0	1.3	ug/Kg	☼	04/29/25 16:51	04/29/25 22:01	1
Trichlorofluoromethane	ND		6.0	0.57	ug/Kg	☼	04/29/25 16:51	04/29/25 22:01	1
Vinyl chloride	ND		6.0	0.73	ug/Kg	☼	04/29/25 16:51	04/29/25 22:01	1
Xylenes, Total	ND		12	1.0	ug/Kg	☼	04/29/25 16:51	04/29/25 22:01	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/Kg*	☼		*N/A*	*04/29/25 16:51*	*04/29/25 22:01*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*105*		*64 - 126*	*04/29/25 16:51*	*04/29/25 22:01*	*1*
4-Bromofluorobenzene (Surr)	*88*		*72 - 126*	*04/29/25 16:51*	*04/29/25 22:01*	*1*
Dibromofluoromethane (Surr)	*106*		*60 - 140*	*04/29/25 16:51*	*04/29/25 22:01*	*1*
Toluene-d8 (Surr)	*103*		*71 - 125*	*04/29/25 16:51*	*04/29/25 22:01*	*1*

Method: SW846 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	ND		110	63	ug/Kg	☼	04/30/25 13:32	05/03/25 02:21	1
2,4,5-Trichlorophenol	ND		190	53	ug/Kg	☼	04/30/25 13:32	05/03/25 02:21	1
2,4,6-Trichlorophenol	ND		190	39	ug/Kg	☼	04/30/25 13:32	05/03/25 02:21	1
2,4-Dichlorophenol	ND		190	21	ug/Kg	☼	04/30/25 13:32	05/03/25 02:21	1
2,4-Dimethylphenol	ND		190	47	ug/Kg	☼	04/30/25 13:32	05/03/25 02:21	1
2,4-Dinitrophenol	ND		1900	890	ug/Kg	☼	04/30/25 13:32	05/03/25 02:21	1
2,4-Dinitrotoluene	ND		190	40	ug/Kg	☼	04/30/25 13:32	05/03/25 02:21	1
2,6-Dinitrotoluene	ND		190	23	ug/Kg	☼	04/30/25 13:32	05/03/25 02:21	1
2-Chloronaphthalene	ND		190	32	ug/Kg	☼	04/30/25 13:32	05/03/25 02:21	1
2-Chlorophenol	ND		380	35	ug/Kg	☼	04/30/25 13:32	05/03/25 02:21	1
2-Methylnaphthalene	**140**	**J**	190	39	ug/Kg	☼	04/30/25 13:32	05/03/25 02:21	1
2-Methylphenol	ND		190	23	ug/Kg	☼	04/30/25 13:32	05/03/25 02:21	1
2-Nitroaniline	ND		380	29	ug/Kg	☼	04/30/25 13:32	05/03/25 02:21	1
2-Nitrophenol	ND		190	55	ug/Kg	☼	04/30/25 13:32	05/03/25 02:21	1
3,3'-Dichlorobenzidine	ND		380	230	ug/Kg	☼	04/30/25 13:32	05/03/25 02:21	1
3-Nitroaniline	ND		380	54	ug/Kg	☼	04/30/25 13:32	05/03/25 02:21	1
4,6-Dinitro-2-methylphenol	ND		380	190	ug/Kg	☼	04/30/25 13:32	05/03/25 02:21	1
4-Bromophenyl phenyl ether	ND		190	27	ug/Kg	☼	04/30/25 13:32	05/03/25 02:21	1
4-Chloro-3-methylphenol	ND		190	48	ug/Kg	☼	04/30/25 13:32	05/03/25 02:21	1
4-Chloroaniline	ND		190	48	ug/Kg	☼	04/30/25 13:32	05/03/25 02:21	1
4-Chlorophenyl phenyl ether	ND		190	24	ug/Kg	☼	04/30/25 13:32	05/03/25 02:21	1
4-Methylphenol	ND		380	23	ug/Kg	☼	04/30/25 13:32	05/03/25 02:21	1
4-Nitroaniline	ND		380	100	ug/Kg	☼	04/30/25 13:32	05/03/25 02:21	1
4-Nitrophenol	ND		380	140	ug/Kg	☼	04/30/25 13:32	05/03/25 02:21	1
Acenaphthene	**73**	**J**	190	29	ug/Kg	☼	04/30/25 13:32	05/03/25 02:21	1
Acenaphthylene	**28**	**J**	190	25	ug/Kg	☼	04/30/25 13:32	05/03/25 02:21	1
Acetophenone	ND		190	26	ug/Kg	☼	04/30/25 13:32	05/03/25 02:21	1
Anthracene	**200**		190	48	ug/Kg	☼	04/30/25 13:32	05/03/25 02:21	1
Atrazine	ND		190	67	ug/Kg	☼	04/30/25 13:32	05/03/25 02:21	1
Benzaldehyde	ND		190	150	ug/Kg	☼	04/30/25 13:32	05/03/25 02:21	1
Benzo[a]anthracene	**560**		190	19	ug/Kg	☼	04/30/25 13:32	05/03/25 02:21	1

Client: Roux Environmental Engineering and Geology DPC
Job ID: 480-229067-1
Project/Site: BCP RI - 619 Exchange Street Site

Client Sample ID: HC-4 0.5-1.5Ft
Lab Sample ID: 480-229067-1
Date Collected: 04/29/25 09:30
Matrix: Solid
Date Received: 04/29/25 15:43
Percent Solids: 87.2

Method: SW846 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[a]pyrene	**540**		190	29	ug/Kg	☼	04/30/25 13:32	05/03/25 02:21	1
Benzo[b]fluoranthene	**700**		190	31	ug/Kg	☼	04/30/25 13:32	05/03/25 02:21	1
Benzo[g,h,i]perylene	**630**		190	21	ug/Kg	☼	04/30/25 13:32	05/03/25 02:21	1
Benzo[k]fluoranthene	**260**		190	25	ug/Kg	☼	04/30/25 13:32	05/03/25 02:21	1
Biphenyl	ND		190	29	ug/Kg	☼	04/30/25 13:32	05/03/25 02:21	1
bis (2-chloroisopropyl) ether	ND		190	39	ug/Kg	☼	04/30/25 13:32	05/03/25 02:21	1
Bis(2-chloroethoxy)methane	ND		190	41	ug/Kg	☼	04/30/25 13:32	05/03/25 02:21	1
Bis(2-chloroethyl)ether	ND		190	25	ug/Kg	☼	04/30/25 13:32	05/03/25 02:21	1
Bis(2-ethylhexyl) phthalate	**170**	**J**	190	66	ug/Kg	☼	04/30/25 13:32	05/03/25 02:21	1
Butyl benzyl phthalate	ND		190	32	ug/Kg	☼	04/30/25 13:32	05/03/25 02:21	1
Caprolactam	ND		190	58	ug/Kg	☼	04/30/25 13:32	05/03/25 02:21	1
Carbazole	**110**	**J**	190	23	ug/Kg	☼	04/30/25 13:32	05/03/25 02:21	1
Chrysene	**640**		190	43	ug/Kg	☼	04/30/25 13:32	05/03/25 02:21	1
Dibenz(a,h)anthracene	**150**	**J**	190	34	ug/Kg	☼	04/30/25 13:32	05/03/25 02:21	1
Dibenzofuran	**100**	**J**	190	23	ug/Kg	☼	04/30/25 13:32	05/03/25 02:21	1
Diethyl phthalate	ND		190	25	ug/Kg	☼	04/30/25 13:32	05/03/25 02:21	1
Dimethyl phthalate	ND		190	23	ug/Kg	☼	04/30/25 13:32	05/03/25 02:21	1
Di-n-butyl phthalate	ND		190	33	ug/Kg	☼	04/30/25 13:32	05/03/25 02:21	1
Di-n-octyl phthalate	ND		190	23	ug/Kg	☼	04/30/25 13:32	05/03/25 02:21	1
Fluoranthene	**1100**		190	21	ug/Kg	☼	04/30/25 13:32	05/03/25 02:21	1
Fluorene	**85**	**J**	190	23	ug/Kg	☼	04/30/25 13:32	05/03/25 02:21	1
Hexachlorobenzene	ND		190	26	ug/Kg	☼	04/30/25 13:32	05/03/25 02:21	1
Hexachlorobutadiene	ND		190	29	ug/Kg	☼	04/30/25 13:32	05/03/25 02:21	1
Hexachlorocyclopentadiene	ND		190	26	ug/Kg	☼	04/30/25 13:32	05/03/25 02:21	1
Hexachloroethane	ND		190	25	ug/Kg	☼	04/30/25 13:32	05/03/25 02:21	1
Indeno[1,2,3-cd]pyrene	**470**		190	24	ug/Kg	☼	04/30/25 13:32	05/03/25 02:21	1
Isophorone	ND		190	41	ug/Kg	☼	04/30/25 13:32	05/03/25 02:21	1
Naphthalene	**88**	**J**	190	25	ug/Kg	☼	04/30/25 13:32	05/03/25 02:21	1
Nitrobenzene	ND		190	22	ug/Kg	☼	04/30/25 13:32	05/03/25 02:21	1
N-Nitrosodi-n-propylamine	ND		190	33	ug/Kg	☼	04/30/25 13:32	05/03/25 02:21	1
N-Nitrosodiphenylamine	ND		190	160	ug/Kg	☼	04/30/25 13:32	05/03/25 02:21	1
Pentachlorophenol	ND		380	190	ug/Kg	☼	04/30/25 13:32	05/03/25 02:21	1
Phenanthrene	**1100**		190	29	ug/Kg	☼	04/30/25 13:32	05/03/25 02:21	1
Phenol	ND		190	30	ug/Kg	☼	04/30/25 13:32	05/03/25 02:21	1
Pyrene	**1100**		190	23	ug/Kg	☼	04/30/25 13:32	05/03/25 02:21	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Unknown	*9300*	*T J*	*ug/Kg*	☼	*1.99*	*N/A*	*04/30/25 13:32*	*05/03/25 02:21*	*1*
Unknown	*1100*	*T J*	*ug/Kg*	☼	*3.47*	*N/A*	*04/30/25 13:32*	*05/03/25 02:21*	*1*
Unknown	*330*	*T J*	*ug/Kg*	☼	*7.81*	*N/A*	*04/30/25 13:32*	*05/03/25 02:21*	*1*
Tridecane	*280*	*T J N*	*ug/Kg*	☼	*8.01*	*629-50-5*	*04/30/25 13:32*	*05/03/25 02:21*	*1*
Naphthalene, 2,3-dimethyl-	*300*	*T J N*	*ug/Kg*	☼	*8.90*	*581-40-8*	*04/30/25 13:32*	*05/03/25 02:21*	*1*
Unknown	*680*	*T J*	*ug/Kg*	☼	*9.05*	*N/A*	*04/30/25 13:32*	*05/03/25 02:21*	*1*
Unknown	*290*	*T J*	*ug/Kg*	☼	*9.87*	*N/A*	*04/30/25 13:32*	*05/03/25 02:21*	*1*
Unknown	*310*	*T J*	*ug/Kg*	☼	*10.12*	*N/A*	*04/30/25 13:32*	*05/03/25 02:21*	*1*
Heptadecane, 2,6-dimethyl-	*1100*	*T J N*	*ug/Kg*	☼	*10.41*	*54105-67-8*	*04/30/25 13:32*	*05/03/25 02:21*	*1*
Eicosane	*240*	*T J N*	*ug/Kg*	☼	*11.65*	*112-95-8*	*04/30/25 13:32*	*05/03/25 02:21*	*1*
Heptadecane, 2,6,10,15-tetramethyl-	*260*	*T J N*	*ug/Kg*	☼	*12.00*	*54833-48-6*	*04/30/25 13:32*	*05/03/25 02:21*	*1*
Pyrene, 1-methyl-	*290*	*T J N*	*ug/Kg*	☼	*12.53*	*2381-21-7*	*04/30/25 13:32*	*05/03/25 02:21*	*1*
Tricosane	*330*	*T J N*	*ug/Kg*	☼	*12.63*	*638-67-5*	*04/30/25 13:32*	*05/03/25 02:21*	*1*

Client Sample ID: HC-4 0.5-1.5Ft
Lab Sample ID: 480-229067-1
Date Collected: 04/29/25 09:30
Matrix: Solid
Date Received: 04/29/25 15:43
Percent Solids: 87.2

Method: SW846 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Tentatively Identified Compound	Est. Result	Qualifier	Unit	D	RT	CAS No.	Prepared	Analyzed	Dil Fac
Heptadecane, 2-methyl-	410	T J N	ug/Kg	☼	13.46	1560-89-0	04/30/25 13:32	05/03/25 02:21	1
Heptadecane	250	T J N	ug/Kg	☼	13.73	629-78-7	04/30/25 13:32	05/03/25 02:21	1
Nonadecane	420	T J N	ug/Kg	☼	13.98	629-92-5	04/30/25 13:32	05/03/25 02:21	1
Octadecane	350	T J N	ug/Kg	☼	14.22	593-45-3	04/30/25 13:32	05/03/25 02:21	1
Perylene	290	T J N	ug/Kg	☼	14.36	198-55-0	04/30/25 13:32	05/03/25 02:21	1
3,4:8,9-Dibenzopyrene	280	T J N	ug/Kg	☼	16.81	189-64-0	04/30/25 13:32	05/03/25 02:21	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol (Surr)	62		26 - 143	04/30/25 13:32	05/03/25 02:21	1
2-Fluorobiphenyl (Surr)	74		50 - 121	04/30/25 13:32	05/03/25 02:21	1
2-Fluorophenol (Surr)	60		36 - 120	04/30/25 13:32	05/03/25 02:21	1
Nitrobenzene-d5 (Surr)	81		40 - 121	04/30/25 13:32	05/03/25 02:21	1
Phenol-d5 (Surr)	66		41 - 120	04/30/25 13:32	05/03/25 02:21	1
p-Terphenyl-d14 (Surr)	91		46 - 143	04/30/25 13:32	05/03/25 02:21	1

Method: SW846 8081B - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	**15**	**J**	36	7.1	ug/Kg	☼	05/01/25 06:41	05/01/25 16:26	10
4,4'-DDE	ND		36	7.6	ug/Kg	☼	05/01/25 06:41	05/01/25 16:26	10
4,4'-DDT	**34**	**J B**	36	8.5	ug/Kg	☼	05/01/25 06:41	05/01/25 16:26	10
Aldrin	ND		36	8.9	ug/Kg	☼	05/01/25 06:41	05/01/25 16:26	10
alpha-BHC	ND		36	6.5	ug/Kg	☼	05/01/25 06:41	05/01/25 16:26	10
cis-Chlordane	ND		36	18	ug/Kg	☼	05/01/25 06:41	05/01/25 16:26	10
beta-BHC	ND		36	6.5	ug/Kg	☼	05/01/25 06:41	05/01/25 16:26	10
delta-BHC	ND		36	6.8	ug/Kg	☼	05/01/25 06:41	05/01/25 16:26	10
Dieldrin	ND		36	8.7	ug/Kg	☼	05/01/25 06:41	05/01/25 16:26	10
Endosulfan I	ND		36	7.0	ug/Kg	☼	05/01/25 06:41	05/01/25 16:26	10
Endosulfan II	ND		36	6.5	ug/Kg	☼	05/01/25 06:41	05/01/25 16:26	10
Endosulfan sulfate	ND		36	6.8	ug/Kg	☼	05/01/25 06:41	05/01/25 16:26	10
Endrin	ND		36	7.2	ug/Kg	☼	05/01/25 06:41	05/01/25 16:26	10
Endrin aldehyde	ND		36	9.3	ug/Kg	☼	05/01/25 06:41	05/01/25 16:26	10
Endrin ketone	**13**	**J B**	36	8.9	ug/Kg	☼	05/01/25 06:41	05/01/25 16:26	10
gamma-BHC (Lindane)	**9.2**	**J**	36	6.7	ug/Kg	☼	05/01/25 06:41	05/01/25 16:26	10
trans-Chlordane	ND		36	12	ug/Kg	☼	05/01/25 06:41	05/01/25 16:26	10
Heptachlor	ND		36	7.9	ug/Kg	☼	05/01/25 06:41	05/01/25 16:26	10
Heptachlor epoxide	ND		36	9.4	ug/Kg	☼	05/01/25 06:41	05/01/25 16:26	10
Methoxychlor	**38**	**B**	36	7.4	ug/Kg	☼	05/01/25 06:41	05/01/25 16:26	10
Toxaphene	ND		360	210	ug/Kg	☼	05/01/25 06:41	05/01/25 16:26	10

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
DCB Decachlorobiphenyl	201	S1+	45 - 120	05/01/25 06:41	05/01/25 16:26	10
DCB Decachlorobiphenyl	185	S1+	45 - 120	05/01/25 06:41	05/01/25 16:26	10
Tetrachloro-m-xylene	104		30 - 124	05/01/25 06:41	05/01/25 16:26	10
Tetrachloro-m-xylene	89		30 - 124	05/01/25 06:41	05/01/25 16:26	10

Method: SW846 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		0.22	0.043	mg/Kg	☼	05/01/25 07:04	05/01/25 17:53	1
PCB-1221	ND		0.22	0.043	mg/Kg	☼	05/01/25 07:04	05/01/25 17:53	1
PCB-1232	ND		0.22	0.043	mg/Kg	☼	05/01/25 07:04	05/01/25 17:53	1

Client Sample ID: HC-4 0.5-1.5Ft
Lab Sample ID: 480-229067-1
Date Collected: 04/29/25 09:30
Matrix: Solid
Date Received: 04/29/25 15:43
Percent Solids: 87.2

Method: SW846 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1242	ND		0.22	0.043	mg/Kg	☼	05/01/25 07:04	05/01/25 17:53	1
PCB-1248	ND		0.22	0.043	mg/Kg	☼	05/01/25 07:04	05/01/25 17:53	1
PCB-1254	ND		0.22	0.10	mg/Kg	☼	05/01/25 07:04	05/01/25 17:53	1
PCB-1260	ND		0.22	0.10	mg/Kg	☼	05/01/25 07:04	05/01/25 17:53	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*101*		*65 - 174*	*05/01/25 07:04*	*05/01/25 17:53*	*1*
DCB Decachlorobiphenyl	*111*		*65 - 174*	*05/01/25 07:04*	*05/01/25 17:53*	*1*
Tetrachloro-m-xylene	*106*		*60 - 154*	*05/01/25 07:04*	*05/01/25 17:53*	*1*
Tetrachloro-m-xylene	*102*		*60 - 154*	*05/01/25 07:04*	*05/01/25 17:53*	*1*

Method: SW846 8151A - Herbicides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-T	ND		19	6.1	ug/Kg	☼	05/01/25 06:27	05/08/25 13:55	1
2,4-D	ND		19	12	ug/Kg	☼	05/01/25 06:27	05/08/25 13:55	1
Dichlorprop	ND		19	9.5	ug/Kg	☼	05/01/25 06:27	05/08/25 13:55	1
Pentachlorophenol	ND		19	6.2	ug/Kg	☼	05/01/25 06:27	05/08/25 13:55	1
Picloram	ND		19	8.2	ug/Kg	☼	05/01/25 06:27	05/08/25 13:55	1
Silvex (2,4,5-TP)	ND		19	6.9	ug/Kg	☼	05/01/25 06:27	05/08/25 13:55	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4-Dichlorophenylacetic acid	*68*		*28 - 129*	*05/01/25 06:27*	*05/08/25 13:55*	*1*
2,4-Dichlorophenylacetic acid	*71*		*28 - 129*	*05/01/25 06:27*	*05/08/25 13:55*	*1*

Method: EPA Draft-3 1633 - Per- and Polyfluoroalkyl Substances by LC/MS/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)	ND		0.57	0.14	ug/Kg	☼	05/02/25 08:22	05/03/25 01:26	1
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2 FTS)	ND		0.57	0.14	ug/Kg	☼	05/02/25 08:22	05/03/25 01:26	1
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2 FTS)	ND		0.57	0.14	ug/Kg	☼	05/02/25 08:22	05/03/25 01:26	1
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2 FTS)	ND		0.57	0.14	ug/Kg	☼	05/02/25 08:22	05/03/25 01:26	1
3-Perfluoroheptylpropanoic acid (7:3 FTCA)	ND		3.6	0.89	ug/Kg	☼	05/02/25 08:22	05/03/25 01:26	1
3-Perfluoropentylpropanoic acid (5:3 FTCA)	ND		3.6	0.89	ug/Kg	☼	05/02/25 08:22	05/03/25 01:26	1
3-Perfluoropropylpropanoic acid (3:3 FTCA)	ND		0.71	0.18	ug/Kg	☼	05/02/25 08:22	05/03/25 01:26	1
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	ND		0.57	0.14	ug/Kg	☼	05/02/25 08:22	05/03/25 01:26	1
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9Cl-PF3ONS)	ND		0.57	0.14	ug/Kg	☼	05/02/25 08:22	05/03/25 01:26	1
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA)	ND		0.57	0.14	ug/Kg	☼	05/02/25 08:22	05/03/25 01:26	1
N-ethylperfluorooctane sulfonamide (NEtFOSA)	ND		0.14	0.036	ug/Kg	☼	05/02/25 08:22	05/03/25 01:26	1
N-ethylperfluorooctane sulfonamidoethanol (NEtFOSE)	ND		1.4	0.36	ug/Kg	☼	05/02/25 08:22	05/03/25 01:26	1
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	ND		0.14	0.036	ug/Kg	☼	05/02/25 08:22	05/03/25 01:26	1
N-methylperfluorooctane sulfonamide (NMeFOSA)	ND		0.14	0.036	ug/Kg	☼	05/02/25 08:22	05/03/25 01:26	1

Client: Roux Environmental Engineering and Geology DPC
Job ID: 480-229067-1
Project/Site: BCP RI - 619 Exchange Street Site

Client Sample ID: HC-4 0.5-1.5Ft
Lab Sample ID: 480-229067-1
Date Collected: 04/29/25 09:30
Matrix: Solid
Date Received: 04/29/25 15:43
Percent Solids: 87.2

Method: EPA Draft-3 1633 - Per- and Polyfluoroalkyl Substances by LC/MS/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
N-methylperfluorooctane sulfonamidoethanol (NMeFOSE)	ND		1.4	0.36	ug/Kg	☼	05/02/25 08:22	05/03/25 01:26	1
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	ND		0.14	0.036	ug/Kg	☼	05/02/25 08:22	05/03/25 01:26	1
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	ND		0.29	0.071	ug/Kg	☼	05/02/25 08:22	05/03/25 01:26	1
Perfluoro (2-ethoxyethane) sulfonic acid (PFEESA)	ND		0.29	0.071	ug/Kg	☼	05/02/25 08:22	05/03/25 01:26	1
Perfluoro-3-methoxypropanoic acid (PFMPA)	ND		0.29	0.071	ug/Kg	☼	05/02/25 08:22	05/03/25 01:26	1
Perfluoro-4-methoxybutanoic acid (PFMBA)	ND		0.29	0.071	ug/Kg	☼	05/02/25 08:22	05/03/25 01:26	1
Perfluorobutanesulfonic acid (PFBS)	ND		0.14	0.036	ug/Kg	☼	05/02/25 08:22	05/03/25 01:26	1
Perfluorobutanoic acid (PFBA)	ND		0.57	0.14	ug/Kg	☼	05/02/25 08:22	05/03/25 01:26	1
Perfluorodecanesulfonic acid (PFDS)	ND		0.14	0.036	ug/Kg	☼	05/02/25 08:22	05/03/25 01:26	1
Perfluorodecanoic acid (PFDA)	ND		0.14	0.036	ug/Kg	☼	05/02/25 08:22	05/03/25 01:26	1
Perfluorododecanesulfonic acid (PFDoS)	ND		0.14	0.036	ug/Kg	☼	05/02/25 08:22	05/03/25 01:26	1
Perfluorododecanoic acid (PFDoA)	ND		0.14	0.036	ug/Kg	☼	05/02/25 08:22	05/03/25 01:26	1
Perfluoroheptanesulfonic acid (PFHpS)	ND		0.14	0.036	ug/Kg	☼	05/02/25 08:22	05/03/25 01:26	1
Perfluoroheptanoic acid (PFHpA)	ND		0.14	0.036	ug/Kg	☼	05/02/25 08:22	05/03/25 01:26	1
Perfluorohexanesulfonic acid (PFHxS)	ND		0.14	0.036	ug/Kg	☼	05/02/25 08:22	05/03/25 01:26	1
Perfluorohexanoic acid (PFHxA)	ND		0.14	0.036	ug/Kg	☼	05/02/25 08:22	05/03/25 01:26	1
Perfluorononanesulfonic acid (PFNS)	ND		0.14	0.036	ug/Kg	☼	05/02/25 08:22	05/03/25 01:26	1
Perfluorononanoic acid (PFNA)	ND		0.14	0.036	ug/Kg	☼	05/02/25 08:22	05/03/25 01:26	1
Perfluorooctanesulfonamide (PFOSA)	ND		0.14	0.036	ug/Kg	☼	05/02/25 08:22	05/03/25 01:26	1
Perfluorooctanesulfonic acid (PFOS)	**0.044**	**J**	0.14	0.036	ug/Kg	☼	05/02/25 08:22	05/03/25 01:26	1
Perfluorooctanoic acid (PFOA)	**0.044**	**J**	0.14	0.036	ug/Kg	☼	05/02/25 08:22	05/03/25 01:26	1
Perfluoropentanesulfonic acid (PFPeS)	ND		0.14	0.036	ug/Kg	☼	05/02/25 08:22	05/03/25 01:26	1
Perfluoropentanoic acid (PFPeA)	ND		0.29	0.071	ug/Kg	☼	05/02/25 08:22	05/03/25 01:26	1
Perfluorotetradecanoic acid (PFTeDA)	ND		0.14	0.036	ug/Kg	☼	05/02/25 08:22	05/03/25 01:26	1
Perfluorotridecanoic acid (PFTrDA)	ND		0.14	0.036	ug/Kg	☼	05/02/25 08:22	05/03/25 01:26	1
Perfluoroundecanoic acid (PFUnA)	ND		0.14	0.036	ug/Kg	☼	05/02/25 08:22	05/03/25 01:26	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C2 PFTeDA	*81.5*		*20 - 150*	*05/02/25 08:22*	*05/03/25 01:26*	*1*
13C2-PFDoDA	*88.8*		*20 - 150*	*05/02/25 08:22*	*05/03/25 01:26*	*1*
13C3 HFPO-DA	*98.7*		*20 - 150*	*05/02/25 08:22*	*05/03/25 01:26*	*1*
13C3 PFBS	*96.3*		*20 - 150*	*05/02/25 08:22*	*05/03/25 01:26*	*1*
13C3 PFHxS	*90.5*		*20 - 150*	*05/02/25 08:22*	*05/03/25 01:26*	*1*
13C4 PFBA	*89.7*		*20 - 150*	*05/02/25 08:22*	*05/03/25 01:26*	*1*
13C4 PFHpA	*94.2*		*20 - 150*	*05/02/25 08:22*	*05/03/25 01:26*	*1*
13C5 PFHxA	*90.1*		*20 - 150*	*05/02/25 08:22*	*05/03/25 01:26*	*1*
13C5 PFPeA	*99.6*		*20 - 150*	*05/02/25 08:22*	*05/03/25 01:26*	*1*
13C6 PFDA	*88.5*		*20 - 150*	*05/02/25 08:22*	*05/03/25 01:26*	*1*
13C7 PFUnA	*86.7*		*20 - 150*	*05/02/25 08:22*	*05/03/25 01:26*	*1*
13C8 PFOA	*91.7*		*20 - 150*	*05/02/25 08:22*	*05/03/25 01:26*	*1*
13C8 PFOS	*93.8*		*20 - 150*	*05/02/25 08:22*	*05/03/25 01:26*	*1*
13C8 PFOSA	*83.6*		*20 - 150*	*05/02/25 08:22*	*05/03/25 01:26*	*1*
13C9 PFNA	*84.3*		*20 - 150*	*05/02/25 08:22*	*05/03/25 01:26*	*1*

Client: Roux Environmental Engineering and Geology DPC
Job ID: 480-229067-1
Project/Site: BCP RI - 619 Exchange Street Site

Client Sample ID: HC-4 0.5-1.5Ft
Lab Sample ID: 480-229067-1
Date Collected: 04/29/25 09:30
Matrix: Solid
Date Received: 04/29/25 15:43
Percent Solids: 87.2

Method: EPA Draft-3 1633 - Per- and Polyfluoroalkyl Substances by LC/MS/MS (Continued)

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
D3-NMeFOSA	80.8		20 - 150	05/02/25 08:22	05/03/25 01:26	1
d3-NMeFOSAA	91.2		20 - 150	05/02/25 08:22	05/03/25 01:26	1
d5-NEtFOSAA	105		20 - 150	05/02/25 08:22	05/03/25 01:26	1
d5-NEtPFOSA	76.3		20 - 150	05/02/25 08:22	05/03/25 01:26	1
d7-N-MeFOSE-M	63.4		20 - 150	05/02/25 08:22	05/03/25 01:26	1
d9-N-EtFOSE-M	48.0		20 - 150	05/02/25 08:22	05/03/25 01:26	1
M2-4:2 FTS	102		20 - 150	05/02/25 08:22	05/03/25 01:26	1
M2-6:2 FTS	95.9		20 - 150	05/02/25 08:22	05/03/25 01:26	1
M2-8:2 FTS	95.9		20 - 150	05/02/25 08:22	05/03/25 01:26	1

Method: SW846 6010D - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	4960		11.6	10	mg/Kg	☼	04/30/25 14:09	05/01/25 12:16	1
Antimony	5.0	J	17.4	0.61	mg/Kg	☼	04/30/25 14:09	05/01/25 12:16	1
Arsenic	13.8		2.3	1.0	mg/Kg	☼	04/30/25 14:09	05/01/25 12:16	1
Barium	135		0.58	0.16	mg/Kg	☼	04/30/25 14:09	05/01/25 12:16	1
Beryllium	0.87		0.23	0.046	mg/Kg	☼	04/30/25 14:09	05/01/25 12:16	1
Cadmium	0.26		0.23	0.081	mg/Kg	☼	04/30/25 14:09	05/01/25 12:16	1
Calcium	22400		58.0	31.3	mg/Kg	☼	04/30/25 14:09	05/01/25 12:16	1
Chromium	20.0		0.58	0.42	mg/Kg	☼	04/30/25 14:09	05/01/25 12:16	1
Cobalt	7.2		0.58	0.12	mg/Kg	☼	04/30/25 14:09	05/01/25 12:16	1
Copper	87.2		1.2	0.66	mg/Kg	☼	04/30/25 14:09	05/01/25 12:16	1
Iron	13200		11.6	9.8	mg/Kg	☼	04/30/25 14:09	05/01/25 12:16	1
Lead	516		1.2	0.53	mg/Kg	☼	04/30/25 14:09	05/01/25 12:16	1
Magnesium	3150		23.2	9.8	mg/Kg	☼	04/30/25 14:09	05/01/25 12:16	1
Manganese	131		1.2	0.32	mg/Kg	☼	04/30/25 14:09	05/01/25 12:16	1
Nickel	14.9		5.8	0.29	mg/Kg	☼	04/30/25 14:09	05/01/25 12:16	1
Potassium	886		34.8	28.1	mg/Kg	☼	04/30/25 14:09	05/01/25 12:16	1
Selenium	2.0	J	4.6	0.93	mg/Kg	☼	04/30/25 14:09	05/01/25 12:16	1
Silver	ND	^5-	0.70	0.23	mg/Kg	☼	04/30/25 14:09	05/01/25 12:16	1
Sodium	218		162	71.1	mg/Kg	☼	04/30/25 14:09	05/01/25 12:16	1
Thallium	ND		7.0	0.88	mg/Kg	☼	04/30/25 14:09	05/01/25 12:16	1
Vanadium	18.7		0.58	0.15	mg/Kg	☼	04/30/25 14:09	05/01/25 12:16	1
Zinc	99.7		2.3	1.2	mg/Kg	☼	04/30/25 14:09	05/01/25 12:16	1

Method: SW846 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.81		0.023	0.0053	mg/Kg	☼	05/02/25 09:11	05/02/25 11:38	1

Client: Roux Environmental Engineering and Geology DPC
Job ID: 480-229067-1
Project/Site: BCP RI - 619 Exchange Street Site

Client Sample ID: BD-1
Lab Sample ID: 480-229067-2
Date Collected: 04/29/25 09:45
Matrix: Solid
Date Received: 04/29/25 15:43
Percent Solids: 91.1

Method: SW846 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		5.8	0.42	ug/Kg	☼	04/29/25 16:51	04/29/25 22:25	1
1,1,2,2-Tetrachloroethane	ND		5.8	0.93	ug/Kg	☼	04/29/25 16:51	04/29/25 22:25	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		5.8	1.3	ug/Kg	☼	04/29/25 16:51	04/29/25 22:25	1
1,1,2-Trichloroethane	ND		5.8	0.75	ug/Kg	☼	04/29/25 16:51	04/29/25 22:25	1
1,1-Dichloroethane	ND		5.8	0.70	ug/Kg	☼	04/29/25 16:51	04/29/25 22:25	1
1,1-Dichloroethene	ND		5.8	0.70	ug/Kg	☼	04/29/25 16:51	04/29/25 22:25	1
1,2,4-Trichlorobenzene	ND		5.8	0.35	ug/Kg	☼	04/29/25 16:51	04/29/25 22:25	1
1,2,4-Trimethylbenzene	ND		5.8	1.1	ug/Kg	☼	04/29/25 16:51	04/29/25 22:25	1
1,2-Dibromo-3-Chloropropane	ND		5.8	2.9	ug/Kg	☼	04/29/25 16:51	04/29/25 22:25	1
1,2-Dibromoethane	ND		5.8	0.74	ug/Kg	☼	04/29/25 16:51	04/29/25 22:25	1
1,2-Dichlorobenzene	ND		5.8	0.45	ug/Kg	☼	04/29/25 16:51	04/29/25 22:25	1
1,2-Dichloroethane	ND		5.8	0.29	ug/Kg	☼	04/29/25 16:51	04/29/25 22:25	1
1,2-Dichloropropane	ND		5.8	2.9	ug/Kg	☼	04/29/25 16:51	04/29/25 22:25	1
1,3,5-Trimethylbenzene	ND		5.8	0.37	ug/Kg	☼	04/29/25 16:51	04/29/25 22:25	1
1,3-Dichlorobenzene	ND		5.8	0.30	ug/Kg	☼	04/29/25 16:51	04/29/25 22:25	1
1,4-Dichlorobenzene	ND		5.8	0.81	ug/Kg	☼	04/29/25 16:51	04/29/25 22:25	1
2-Butanone (MEK)	ND		29	2.1	ug/Kg	☼	04/29/25 16:51	04/29/25 22:25	1
2-Hexanone	ND		29	2.9	ug/Kg	☼	04/29/25 16:51	04/29/25 22:25	1
4-Isopropyltoluene	ND		5.8	0.46	ug/Kg	☼	04/29/25 16:51	04/29/25 22:25	1
4-Methyl-2-pentanone (MIBK)	ND		29	1.9	ug/Kg	☼	04/29/25 16:51	04/29/25 22:25	1
Acetone	**75**		29	4.8	ug/Kg	☼	04/29/25 16:51	04/29/25 22:25	1
Benzene	ND		5.8	0.28	ug/Kg	☼	04/29/25 16:51	04/29/25 22:25	1
Bromodichloromethane	ND		5.8	0.77	ug/Kg	☼	04/29/25 16:51	04/29/25 22:25	1
Bromoform	ND		5.8	2.9	ug/Kg	☼	04/29/25 16:51	04/29/25 22:25	1
Bromomethane	ND		5.8	0.52	ug/Kg	☼	04/29/25 16:51	04/29/25 22:25	1
Carbon disulfide	ND		5.8	2.9	ug/Kg	☼	04/29/25 16:51	04/29/25 22:25	1
Carbon tetrachloride	ND		5.8	0.56	ug/Kg	☼	04/29/25 16:51	04/29/25 22:25	1
Chlorobenzene	ND		5.8	0.76	ug/Kg	☼	04/29/25 16:51	04/29/25 22:25	1
Chloroethane	ND		5.8	1.3	ug/Kg	☼	04/29/25 16:51	04/29/25 22:25	1
Chloroform	**1.3**	**J B**	5.8	0.36	ug/Kg	☼	04/29/25 16:51	04/29/25 22:25	1
Chloromethane	ND		5.8	0.35	ug/Kg	☼	04/29/25 16:51	04/29/25 22:25	1
cis-1,2-Dichloroethene	ND		5.8	0.74	ug/Kg	☼	04/29/25 16:51	04/29/25 22:25	1
cis-1,3-Dichloropropene	ND		5.8	0.83	ug/Kg	☼	04/29/25 16:51	04/29/25 22:25	1
Cyclohexane	ND		5.8	0.81	ug/Kg	☼	04/29/25 16:51	04/29/25 22:25	1
Dibromochloromethane	ND		5.8	0.74	ug/Kg	☼	04/29/25 16:51	04/29/25 22:25	1
Dichlorodifluoromethane	ND		5.8	0.47	ug/Kg	☼	04/29/25 16:51	04/29/25 22:25	1
Ethylbenzene	ND		5.8	0.40	ug/Kg	☼	04/29/25 16:51	04/29/25 22:25	1
Isopropylbenzene	ND		5.8	0.87	ug/Kg	☼	04/29/25 16:51	04/29/25 22:25	1
Methyl acetate	ND		29	3.5	ug/Kg	☼	04/29/25 16:51	04/29/25 22:25	1
Methyl tert-butyl ether	ND		5.8	0.56	ug/Kg	☼	04/29/25 16:51	04/29/25 22:25	1
Methylcyclohexane	ND		5.8	0.87	ug/Kg	☼	04/29/25 16:51	04/29/25 22:25	1
Methylene Chloride	ND		5.8	2.6	ug/Kg	☼	04/29/25 16:51	04/29/25 22:25	1
Naphthalene	ND		5.8	0.77	ug/Kg	☼	04/29/25 16:51	04/29/25 22:25	1
n-Butylbenzene	ND		5.8	0.50	ug/Kg	☼	04/29/25 16:51	04/29/25 22:25	1
N-Propylbenzene	ND		5.8	0.46	ug/Kg	☼	04/29/25 16:51	04/29/25 22:25	1
sec-Butylbenzene	ND		5.8	0.50	ug/Kg	☼	04/29/25 16:51	04/29/25 22:25	1
Styrene	ND		5.8	0.29	ug/Kg	☼	04/29/25 16:51	04/29/25 22:25	1
tert-Butylbenzene	ND		5.8	0.60	ug/Kg	☼	04/29/25 16:51	04/29/25 22:25	1
Tetrachloroethene	ND		5.8	0.77	ug/Kg	☼	04/29/25 16:51	04/29/25 22:25	1

Client: Roux Environmental Engineering and Geology DPC
Job ID: 480-229067-1
Project/Site: BCP RI - 619 Exchange Street Site

Client Sample ID: BD-1
Lab Sample ID: 480-229067-2
Date Collected: 04/29/25 09:45
Matrix: Solid
Date Received: 04/29/25 15:43
Percent Solids: 91.1

Method: SW846 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Toluene	ND		5.8	0.43	ug/Kg	☼	04/29/25 16:51	04/29/25 22:25	1
trans-1,2-Dichloroethene	ND		5.8	0.59	ug/Kg	☼	04/29/25 16:51	04/29/25 22:25	1
trans-1,3-Dichloropropene	ND		5.8	2.5	ug/Kg	☼	04/29/25 16:51	04/29/25 22:25	1
Trichloroethene	ND		5.8	1.3	ug/Kg	☼	04/29/25 16:51	04/29/25 22:25	1
Trichlorofluoromethane	ND		5.8	0.54	ug/Kg	☼	04/29/25 16:51	04/29/25 22:25	1
Vinyl chloride	ND		5.8	0.70	ug/Kg	☼	04/29/25 16:51	04/29/25 22:25	1
Xylenes, Total	ND		12	0.97	ug/Kg	☼	04/29/25 16:51	04/29/25 22:25	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/Kg*	☼		*N/A*	*04/29/25 16:51*	*04/29/25 22:25*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*104*		*64 - 126*	*04/29/25 16:51*	*04/29/25 22:25*	*1*
4-Bromofluorobenzene (Surr)	*91*		*72 - 126*	*04/29/25 16:51*	*04/29/25 22:25*	*1*
Dibromofluoromethane (Surr)	*103*		*60 - 140*	*04/29/25 16:51*	*04/29/25 22:25*	*1*
Toluene-d8 (Surr)	*103*		*71 - 125*	*04/29/25 16:51*	*04/29/25 22:25*	*1*

Method: SW846 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	ND		110	60	ug/Kg	☼	04/30/25 13:32	05/03/25 02:46	1
2,4,5-Trichlorophenol	ND		190	50	ug/Kg	☼	04/30/25 13:32	05/03/25 02:46	1
2,4,6-Trichlorophenol	ND		190	37	ug/Kg	☼	04/30/25 13:32	05/03/25 02:46	1
2,4-Dichlorophenol	ND		190	20	ug/Kg	☼	04/30/25 13:32	05/03/25 02:46	1
2,4-Dimethylphenol	ND		190	45	ug/Kg	☼	04/30/25 13:32	05/03/25 02:46	1
2,4-Dinitrophenol	ND		1800	860	ug/Kg	☼	04/30/25 13:32	05/03/25 02:46	1
2,4-Dinitrotoluene	ND		190	38	ug/Kg	☼	04/30/25 13:32	05/03/25 02:46	1
2,6-Dinitrotoluene	ND		190	22	ug/Kg	☼	04/30/25 13:32	05/03/25 02:46	1
2-Chloronaphthalene	ND		190	31	ug/Kg	☼	04/30/25 13:32	05/03/25 02:46	1
2-Chlorophenol	ND		360	34	ug/Kg	☼	04/30/25 13:32	05/03/25 02:46	1
2-Methylnaphthalene	**110**	**J**	190	37	ug/Kg	☼	04/30/25 13:32	05/03/25 02:46	1
2-Methylphenol	ND		190	22	ug/Kg	☼	04/30/25 13:32	05/03/25 02:46	1
2-Nitroaniline	ND		360	27	ug/Kg	☼	04/30/25 13:32	05/03/25 02:46	1
2-Nitrophenol	ND		190	52	ug/Kg	☼	04/30/25 13:32	05/03/25 02:46	1
3,3'-Dichlorobenzidine	ND		360	220	ug/Kg	☼	04/30/25 13:32	05/03/25 02:46	1
3-Nitroaniline	ND		360	51	ug/Kg	☼	04/30/25 13:32	05/03/25 02:46	1
4,6-Dinitro-2-methylphenol	ND		360	190	ug/Kg	☼	04/30/25 13:32	05/03/25 02:46	1
4-Bromophenyl phenyl ether	ND		190	26	ug/Kg	☼	04/30/25 13:32	05/03/25 02:46	1
4-Chloro-3-methylphenol	ND		190	46	ug/Kg	☼	04/30/25 13:32	05/03/25 02:46	1
4-Chloroaniline	ND		190	46	ug/Kg	☼	04/30/25 13:32	05/03/25 02:46	1
4-Chlorophenyl phenyl ether	ND		190	23	ug/Kg	☼	04/30/25 13:32	05/03/25 02:46	1
4-Methylphenol	ND		360	22	ug/Kg	☼	04/30/25 13:32	05/03/25 02:46	1
4-Nitroaniline	ND		360	97	ug/Kg	☼	04/30/25 13:32	05/03/25 02:46	1
4-Nitrophenol	ND		360	130	ug/Kg	☼	04/30/25 13:32	05/03/25 02:46	1
Acenaphthene	**43**	**J**	190	27	ug/Kg	☼	04/30/25 13:32	05/03/25 02:46	1
Acenaphthylene	ND		190	24	ug/Kg	☼	04/30/25 13:32	05/03/25 02:46	1
Acetophenone	ND		190	25	ug/Kg	☼	04/30/25 13:32	05/03/25 02:46	1
Anthracene	**170**	**J**	190	46	ug/Kg	☼	04/30/25 13:32	05/03/25 02:46	1
Atrazine	ND		190	64	ug/Kg	☼	04/30/25 13:32	05/03/25 02:46	1
Benzaldehyde	ND		190	150	ug/Kg	☼	04/30/25 13:32	05/03/25 02:46	1
Benzo[a]anthracene	**340**		190	19	ug/Kg	☼	04/30/25 13:32	05/03/25 02:46	1

Client Sample ID: BD-1
Lab Sample ID: 480-229067-2
Date Collected: 04/29/25 09:45
Matrix: Solid
Date Received: 04/29/25 15:43
Percent Solids: 91.1

Method: SW846 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[a]pyrene	**290**		190	27	ug/Kg	☼	04/30/25 13:32	05/03/25 02:46	1
Benzo[b]fluoranthene	**350**		190	29	ug/Kg	☼	04/30/25 13:32	05/03/25 02:46	1
Benzo[g,h,i]perylene	**250**		190	20	ug/Kg	☼	04/30/25 13:32	05/03/25 02:46	1
Benzo[k]fluoranthene	**140**	**J**	190	24	ug/Kg	☼	04/30/25 13:32	05/03/25 02:46	1
Biphenyl	ND		190	27	ug/Kg	☼	04/30/25 13:32	05/03/25 02:46	1
bis (2-chloroisopropyl) ether	ND		190	37	ug/Kg	☼	04/30/25 13:32	05/03/25 02:46	1
Bis(2-chloroethoxy)methane	ND		190	39	ug/Kg	☼	04/30/25 13:32	05/03/25 02:46	1
Bis(2-chloroethyl)ether	ND		190	24	ug/Kg	☼	04/30/25 13:32	05/03/25 02:46	1
Bis(2-ethylhexyl) phthalate	**110**	**J**	190	63	ug/Kg	☼	04/30/25 13:32	05/03/25 02:46	1
Butyl benzyl phthalate	ND		190	31	ug/Kg	☼	04/30/25 13:32	05/03/25 02:46	1
Caprolactam	ND		190	56	ug/Kg	☼	04/30/25 13:32	05/03/25 02:46	1
Carbazole	**35**	**J**	190	22	ug/Kg	☼	04/30/25 13:32	05/03/25 02:46	1
Chrysene	**360**		190	41	ug/Kg	☼	04/30/25 13:32	05/03/25 02:46	1
Dibenz(a,h)anthracene	**70**	**J**	190	33	ug/Kg	☼	04/30/25 13:32	05/03/25 02:46	1
Dibenzofuran	**59**	**J**	190	22	ug/Kg	☼	04/30/25 13:32	05/03/25 02:46	1
Diethyl phthalate	ND		190	24	ug/Kg	☼	04/30/25 13:32	05/03/25 02:46	1
Dimethyl phthalate	ND		190	22	ug/Kg	☼	04/30/25 13:32	05/03/25 02:46	1
Di-n-butyl phthalate	ND		190	32	ug/Kg	☼	04/30/25 13:32	05/03/25 02:46	1
Di-n-octyl phthalate	ND		190	22	ug/Kg	☼	04/30/25 13:32	05/03/25 02:46	1
Fluoranthene	**540**		190	20	ug/Kg	☼	04/30/25 13:32	05/03/25 02:46	1
Fluorene	**62**	**J**	190	22	ug/Kg	☼	04/30/25 13:32	05/03/25 02:46	1
Hexachlorobenzene	ND		190	25	ug/Kg	☼	04/30/25 13:32	05/03/25 02:46	1
Hexachlorobutadiene	ND		190	27	ug/Kg	☼	04/30/25 13:32	05/03/25 02:46	1
Hexachlorocyclopentadiene	ND		190	25	ug/Kg	☼	04/30/25 13:32	05/03/25 02:46	1
Hexachloroethane	ND		190	24	ug/Kg	☼	04/30/25 13:32	05/03/25 02:46	1
Indeno[1,2,3-cd]pyrene	**210**		190	23	ug/Kg	☼	04/30/25 13:32	05/03/25 02:46	1
Isophorone	ND		190	39	ug/Kg	☼	04/30/25 13:32	05/03/25 02:46	1
Naphthalene	**46**	**J**	190	24	ug/Kg	☼	04/30/25 13:32	05/03/25 02:46	1
Nitrobenzene	ND		190	21	ug/Kg	☼	04/30/25 13:32	05/03/25 02:46	1
N-Nitrosodi-n-propylamine	ND		190	32	ug/Kg	☼	04/30/25 13:32	05/03/25 02:46	1
N-Nitrosodiphenylamine	ND		190	150	ug/Kg	☼	04/30/25 13:32	05/03/25 02:46	1
Pentachlorophenol	ND		360	190	ug/Kg	☼	04/30/25 13:32	05/03/25 02:46	1
Phenanthrene	**660**		190	27	ug/Kg	☼	04/30/25 13:32	05/03/25 02:46	1
Phenol	ND		190	28	ug/Kg	☼	04/30/25 13:32	05/03/25 02:46	1
Pyrene	**540**		190	22	ug/Kg	☼	04/30/25 13:32	05/03/25 02:46	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Unknown	*7300*	*T J*	*ug/Kg*	☼	*1.99*	*N/A*	*04/30/25 13:32*	*05/03/25 02:46*	*1*
Unknown	*970*	*T J*	*ug/Kg*	☼	*3.47*	*N/A*	*04/30/25 13:32*	*05/03/25 02:46*	*1*
Unknown	*200*	*T J*	*ug/Kg*	☼	*7.81*	*N/A*	*04/30/25 13:32*	*05/03/25 02:46*	*1*
Tridecane	*210*	*T J N*	*ug/Kg*	☼	*8.01*	*629-50-5*	*04/30/25 13:32*	*05/03/25 02:46*	*1*
Undecane	*420*	*T J N*	*ug/Kg*	☼	*9.05*	*1120-21-4*	*04/30/25 13:32*	*05/03/25 02:46*	*1*
3-Methyl-4-(methoxycarbonyl)hexa-2,4-dienoic acid	*220*	*T J N*	*ug/Kg*	☼	*9.87*	*1000104-10-8*	*04/30/25 13:32*	*05/03/25 02:46*	*1*
Unknown	*230*	*T J*	*ug/Kg*	☼	*10.12*	*N/A*	*04/30/25 13:32*	*05/03/25 02:46*	*1*
Pentadecane, 2,6,10,14-tetramethyl-	*830*	*T J N*	*ug/Kg*	☼	*10.41*	*1921-70-6*	*04/30/25 13:32*	*05/03/25 02:46*	*1*
Unknown	*340*	*T J*	*ug/Kg*	☼	*11.50*	*N/A*	*04/30/25 13:32*	*05/03/25 02:46*	*1*
Heptadecane, 2,6,10,15-tetramethyl-	*240*	*T J N*	*ug/Kg*	☼	*12.00*	*54833-48-6*	*04/30/25 13:32*	*05/03/25 02:46*	*1*
Heptadecane	*210*	*T J N*	*ug/Kg*	☼	*12.33*	*629-78-7*	*04/30/25 13:32*	*05/03/25 02:46*	*1*

Client Sample ID: BD-1
Lab Sample ID: 480-229067-2
Date Collected: 04/29/25 09:45
Matrix: Solid
Date Received: 04/29/25 15:43
Percent Solids: 91.1

Method: SW846 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Tentatively Identified Compound	Est. Result	Qualifier	Unit	D	RT	CAS No.	Prepared	Analyzed	Dil Fac
11H-Benzo[a]fluorene	280	T J N	ug/Kg	☼	12.54	238-84-6	04/30/25 13:32	05/03/25 02:46	1
Octadecane	310	T J N	ug/Kg	☼	12.63	593-45-3	04/30/25 13:32	05/03/25 02:46	1
Tetradecane	250	T J N	ug/Kg	☼	13.20	629-59-4	04/30/25 13:32	05/03/25 02:46	1
Decane, 3,8-dimethyl-	250	T J N	ug/Kg	☼	13.46	17312-55-9	04/30/25 13:32	05/03/25 02:46	1
Nonadecane, 2-methyl-	200	T J N	ug/Kg	☼	13.73	1560-86-7	04/30/25 13:32	05/03/25 02:46	1
Nonadecane	290	T J N	ug/Kg	☼	13.98	629-92-5	04/30/25 13:32	05/03/25 02:46	1
Unknown	340	T J	ug/Kg	☼	14.22	N/A	04/30/25 13:32	05/03/25 02:46	1
Unknown	220	T J	ug/Kg	☼	14.47	N/A	04/30/25 13:32	05/03/25 02:46	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol (Surr)	77		26 - 143	04/30/25 13:32	05/03/25 02:46	1
2-Fluorobiphenyl (Surr)	78		50 - 121	04/30/25 13:32	05/03/25 02:46	1
2-Fluorophenol (Surr)	70		36 - 120	04/30/25 13:32	05/03/25 02:46	1
Nitrobenzene-d5 (Surr)	87		40 - 121	04/30/25 13:32	05/03/25 02:46	1
Phenol-d5 (Surr)	77		41 - 120	04/30/25 13:32	05/03/25 02:46	1
p-Terphenyl-d14 (Surr)	88		46 - 143	04/30/25 13:32	05/03/25 02:46	1

Method: SW846 8081B - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	ND		35	6.9	ug/Kg	☼	05/01/25 06:41	05/01/25 16:45	10
4,4'-DDE	ND		35	7.4	ug/Kg	☼	05/01/25 06:41	05/01/25 16:45	10
4,4'-DDT	**31**	**J B**	35	8.3	ug/Kg	☼	05/01/25 06:41	05/01/25 16:45	10
Aldrin	ND		35	8.7	ug/Kg	☼	05/01/25 06:41	05/01/25 16:45	10
alpha-BHC	ND		35	6.4	ug/Kg	☼	05/01/25 06:41	05/01/25 16:45	10
cis-Chlordane	ND		35	18	ug/Kg	☼	05/01/25 06:41	05/01/25 16:45	10
beta-BHC	ND		35	6.4	ug/Kg	☼	05/01/25 06:41	05/01/25 16:45	10
delta-BHC	ND		35	6.6	ug/Kg	☼	05/01/25 06:41	05/01/25 16:45	10
Dieldrin	ND		35	8.5	ug/Kg	☼	05/01/25 06:41	05/01/25 16:45	10
Endosulfan I	ND		35	6.8	ug/Kg	☼	05/01/25 06:41	05/01/25 16:45	10
Endosulfan II	ND		35	6.4	ug/Kg	☼	05/01/25 06:41	05/01/25 16:45	10
Endosulfan sulfate	ND		35	6.6	ug/Kg	☼	05/01/25 06:41	05/01/25 16:45	10
Endrin	ND		35	7.0	ug/Kg	☼	05/01/25 06:41	05/01/25 16:45	10
Endrin aldehyde	ND		35	9.0	ug/Kg	☼	05/01/25 06:41	05/01/25 16:45	10
Endrin ketone	**24**	**J B**	35	8.7	ug/Kg	☼	05/01/25 06:41	05/01/25 16:45	10
gamma-BHC (Lindane)	ND		35	6.5	ug/Kg	☼	05/01/25 06:41	05/01/25 16:45	10
trans-Chlordane	ND		35	11	ug/Kg	☼	05/01/25 06:41	05/01/25 16:45	10
Heptachlor	ND		35	7.7	ug/Kg	☼	05/01/25 06:41	05/01/25 16:45	10
Heptachlor epoxide	ND		35	9.1	ug/Kg	☼	05/01/25 06:41	05/01/25 16:45	10
Methoxychlor	**33**	**J B**	35	7.2	ug/Kg	☼	05/01/25 06:41	05/01/25 16:45	10
Toxaphene	ND		350	210	ug/Kg	☼	05/01/25 06:41	05/01/25 16:45	10

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
DCB Decachlorobiphenyl	179	S1+	45 - 120	05/01/25 06:41	05/01/25 16:45	10
DCB Decachlorobiphenyl	175	S1+	45 - 120	05/01/25 06:41	05/01/25 16:45	10
Tetrachloro-m-xylene	103		30 - 124	05/01/25 06:41	05/01/25 16:45	10
Tetrachloro-m-xylene	87		30 - 124	05/01/25 06:41	05/01/25 16:45	10

Method: SW846 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		0.25	0.049	mg/Kg	☼	05/01/25 07:04	05/01/25 18:12	1

Client Sample ID: BD-1
Date Collected: 04/29/25 09:45
Date Received: 04/29/25 15:43

Lab Sample ID: 480-229067-2
Matrix: Solid
Percent Solids: 91.1

Method: SW846 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1221	ND		0.25	0.049	mg/Kg	☼	05/01/25 07:04	05/01/25 18:12	1
PCB-1232	ND		0.25	0.049	mg/Kg	☼	05/01/25 07:04	05/01/25 18:12	1
PCB-1242	ND		0.25	0.049	mg/Kg	☼	05/01/25 07:04	05/01/25 18:12	1
PCB-1248	ND		0.25	0.049	mg/Kg	☼	05/01/25 07:04	05/01/25 18:12	1
PCB-1254	ND		0.25	0.12	mg/Kg	☼	05/01/25 07:04	05/01/25 18:12	1
PCB-1260	ND		0.25	0.12	mg/Kg	☼	05/01/25 07:04	05/01/25 18:12	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*117*		*65 - 174*	*05/01/25 07:04*	*05/01/25 18:12*	*1*
DCB Decachlorobiphenyl	*108*		*65 - 174*	*05/01/25 07:04*	*05/01/25 18:12*	*1*
Tetrachloro-m-xylene	*107*		*60 - 154*	*05/01/25 07:04*	*05/01/25 18:12*	*1*
Tetrachloro-m-xylene	*104*		*60 - 154*	*05/01/25 07:04*	*05/01/25 18:12*	*1*

Method: SW846 8151A - Herbicides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-T	ND		18	5.7	ug/Kg	☼	05/01/25 06:27	05/08/25 14:14	1
2,4-D	ND		18	11	ug/Kg	☼	05/01/25 06:27	05/08/25 14:14	1
Dichlorprop	ND		18	9.0	ug/Kg	☼	05/01/25 06:27	05/08/25 14:14	1
Pentachlorophenol	ND		18	5.8	ug/Kg	☼	05/01/25 06:27	05/08/25 14:14	1
Picloram	ND		18	7.7	ug/Kg	☼	05/01/25 06:27	05/08/25 14:14	1
Silvex (2,4,5-TP)	ND		18	6.5	ug/Kg	☼	05/01/25 06:27	05/08/25 14:14	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4-Dichlorophenylacetic acid	*73*		*28 - 129*	*05/01/25 06:27*	*05/08/25 14:14*	*1*
2,4-Dichlorophenylacetic acid	*74*		*28 - 129*	*05/01/25 06:27*	*05/08/25 14:14*	*1*

Method: EPA Draft-3 1633 - Per- and Polyfluoroalkyl Substances by LC/MS/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)	ND		0.55	0.14	ug/Kg	☼	05/02/25 08:22	05/03/25 01:42	1
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2 FTS)	ND		0.55	0.14	ug/Kg	☼	05/02/25 08:22	05/03/25 01:42	1
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2 FTS)	ND		0.55	0.14	ug/Kg	☼	05/02/25 08:22	05/03/25 01:42	1
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2 FTS)	ND		0.55	0.14	ug/Kg	☼	05/02/25 08:22	05/03/25 01:42	1
3-Perfluoroheptylpropanoic acid (7:3 FTCA)	ND		3.4	0.86	ug/Kg	☼	05/02/25 08:22	05/03/25 01:42	1
3-Perfluoropentylpropanoic acid (5:3 FTCA)	ND		3.4	0.86	ug/Kg	☼	05/02/25 08:22	05/03/25 01:42	1
3-Perfluoropropylpropanoic acid (3:3 FTCA)	ND		0.69	0.17	ug/Kg	☼	05/02/25 08:22	05/03/25 01:42	1
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	ND		0.55	0.14	ug/Kg	☼	05/02/25 08:22	05/03/25 01:42	1
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9Cl-PF3ONS)	ND		0.55	0.14	ug/Kg	☼	05/02/25 08:22	05/03/25 01:42	1
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA)	ND		0.55	0.14	ug/Kg	☼	05/02/25 08:22	05/03/25 01:42	1
N-ethylperfluorooctane sulfonamide (NEtFOSA)	ND		0.14	0.034	ug/Kg	☼	05/02/25 08:22	05/03/25 01:42	1
N-ethylperfluorooctane sulfonamidoethanol (NEtFOSE)	ND		1.4	0.34	ug/Kg	☼	05/02/25 08:22	05/03/25 01:42	1
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	ND		0.14	0.034	ug/Kg	☼	05/02/25 08:22	05/03/25 01:42	1

Client: Roux Environmental Engineering and Geology DPC
Job ID: 480-229067-1
Project/Site: BCP RI - 619 Exchange Street Site

Client Sample ID: BD-1
Lab Sample ID: 480-229067-2
Date Collected: 04/29/25 09:45
Matrix: Solid
Date Received: 04/29/25 15:43
Percent Solids: 91.1

Method: EPA Draft-3 1633 - Per- and Polyfluoroalkyl Substances by LC/MS/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
N-methylperfluorooctane sulfonamide (NMeFOSA)	ND		0.14	0.034	ug/Kg	☼	05/02/25 08:22	05/03/25 01:42	1
N-methylperfluorooctane sulfonamidoethanol (NMeFOSE)	ND		1.4	0.34	ug/Kg	☼	05/02/25 08:22	05/03/25 01:42	1
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	ND		0.14	0.034	ug/Kg	☼	05/02/25 08:22	05/03/25 01:42	1
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	ND		0.28	0.069	ug/Kg	☼	05/02/25 08:22	05/03/25 01:42	1
Perfluoro (2-ethoxyethane) sulfonic acid (PFEESA)	ND		0.28	0.069	ug/Kg	☼	05/02/25 08:22	05/03/25 01:42	1
Perfluoro-3-methoxypropanoic acid (PFMPA)	ND		0.28	0.069	ug/Kg	☼	05/02/25 08:22	05/03/25 01:42	1
Perfluoro-4-methoxybutanoic acid (PFMBA)	ND		0.28	0.069	ug/Kg	☼	05/02/25 08:22	05/03/25 01:42	1
Perfluorobutanesulfonic acid (PFBS)	ND		0.14	0.034	ug/Kg	☼	05/02/25 08:22	05/03/25 01:42	1
Perfluorobutanoic acid (PFBA)	ND		0.55	0.14	ug/Kg	☼	05/02/25 08:22	05/03/25 01:42	1
Perfluorodecanesulfonic acid (PFDS)	ND		0.14	0.034	ug/Kg	☼	05/02/25 08:22	05/03/25 01:42	1
Perfluorodecanoic acid (PFDA)	ND		0.14	0.034	ug/Kg	☼	05/02/25 08:22	05/03/25 01:42	1
Perfluorododecanesulfonic acid (PFDoS)	ND		0.14	0.034	ug/Kg	☼	05/02/25 08:22	05/03/25 01:42	1
Perfluorododecanoic acid (PFDoA)	ND		0.14	0.034	ug/Kg	☼	05/02/25 08:22	05/03/25 01:42	1
Perfluoroheptanesulfonic acid (PFHpS)	ND		0.14	0.034	ug/Kg	☼	05/02/25 08:22	05/03/25 01:42	1
Perfluoroheptanoic acid (PFHpA)	ND		0.14	0.034	ug/Kg	☼	05/02/25 08:22	05/03/25 01:42	1
Perfluorohexanesulfonic acid (PFHxS)	ND		0.14	0.034	ug/Kg	☼	05/02/25 08:22	05/03/25 01:42	1
Perfluorohexanoic acid (PFHxA)	ND		0.14	0.034	ug/Kg	☼	05/02/25 08:22	05/03/25 01:42	1
Perfluorononanesulfonic acid (PFNS)	ND		0.14	0.034	ug/Kg	☼	05/02/25 08:22	05/03/25 01:42	1
Perfluorononanoic acid (PFNA)	ND		0.14	0.034	ug/Kg	☼	05/02/25 08:22	05/03/25 01:42	1
Perfluorooctanesulfonamide (PFOSA)	ND		0.14	0.034	ug/Kg	☼	05/02/25 08:22	05/03/25 01:42	1
Perfluorooctanesulfonic acid (PFOS)	**0.037**	**J**	0.14	0.034	ug/Kg	☼	05/02/25 08:22	05/03/25 01:42	1
Perfluorooctanoic acid (PFOA)	ND		0.14	0.034	ug/Kg	☼	05/02/25 08:22	05/03/25 01:42	1
Perfluoropentanesulfonic acid (PFPeS)	ND		0.14	0.034	ug/Kg	☼	05/02/25 08:22	05/03/25 01:42	1
Perfluoropentanoic acid (PFPeA)	ND		0.28	0.069	ug/Kg	☼	05/02/25 08:22	05/03/25 01:42	1
Perfluorotetradecanoic acid (PFTeDA)	ND		0.14	0.034	ug/Kg	☼	05/02/25 08:22	05/03/25 01:42	1
Perfluorotridecanoic acid (PFTrDA)	ND		0.14	0.034	ug/Kg	☼	05/02/25 08:22	05/03/25 01:42	1
Perfluoroundecanoic acid (PFUnA)	ND		0.14	0.034	ug/Kg	☼	05/02/25 08:22	05/03/25 01:42	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C2 PFTeDA	*76.7*		*20 - 150*	*05/02/25 08:22*	*05/03/25 01:42*	*1*
13C2-PFDoDA	*82.9*		*20 - 150*	*05/02/25 08:22*	*05/03/25 01:42*	*1*
13C3 HFPO-DA	*98.4*		*20 - 150*	*05/02/25 08:22*	*05/03/25 01:42*	*1*
13C3 PFBS	*92.9*		*20 - 150*	*05/02/25 08:22*	*05/03/25 01:42*	*1*
13C3 PFHxS	*89.1*		*20 - 150*	*05/02/25 08:22*	*05/03/25 01:42*	*1*
13C4 PFBA	*91.4*		*20 - 150*	*05/02/25 08:22*	*05/03/25 01:42*	*1*
13C4 PFHpA	*92.3*		*20 - 150*	*05/02/25 08:22*	*05/03/25 01:42*	*1*
13C5 PFHxA	*92.5*		*20 - 150*	*05/02/25 08:22*	*05/03/25 01:42*	*1*
13C5 PFPeA	*100*		*20 - 150*	*05/02/25 08:22*	*05/03/25 01:42*	*1*
13C6 PFDA	*93.8*		*20 - 150*	*05/02/25 08:22*	*05/03/25 01:42*	*1*
13C7 PFUnA	*87.1*		*20 - 150*	*05/02/25 08:22*	*05/03/25 01:42*	*1*
13C8 PFOA	*85.6*		*20 - 150*	*05/02/25 08:22*	*05/03/25 01:42*	*1*
13C8 PFOS	*91.8*		*20 - 150*	*05/02/25 08:22*	*05/03/25 01:42*	*1*

Client Sample ID: BD-1
Lab Sample ID: 480-229067-2

Date Collected: 04/29/25 09:45
Matrix: Solid

Date Received: 04/29/25 15:43
Percent Solids: 91.1

Method: EPA Draft-3 1633 - Per- and Polyfluoroalkyl Substances by LC/MS/MS (Continued)

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C8 PFOSA	82.8		20 - 150	05/02/25 08:22	05/03/25 01:42	1
13C9 PFNA	82.0		20 - 150	05/02/25 08:22	05/03/25 01:42	1
D3-NMeFOSA	72.0		20 - 150	05/02/25 08:22	05/03/25 01:42	1
d3-NMeFOSAA	93.2		20 - 150	05/02/25 08:22	05/03/25 01:42	1
d5-NEtFOSAA	98.5		20 - 150	05/02/25 08:22	05/03/25 01:42	1
d5-NEtPFOSA	71.2		20 - 150	05/02/25 08:22	05/03/25 01:42	1
d7-N-MeFOSE-M	65.8		20 - 150	05/02/25 08:22	05/03/25 01:42	1
d9-N-EtFOSE-M	64.2		20 - 150	05/02/25 08:22	05/03/25 01:42	1
M2-4:2 FTS	104		20 - 150	05/02/25 08:22	05/03/25 01:42	1
M2-6:2 FTS	99.3		20 - 150	05/02/25 08:22	05/03/25 01:42	1
M2-8:2 FTS	94.7		20 - 150	05/02/25 08:22	05/03/25 01:42	1

Method: SW846 6010D - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	5350		10.8	9.3	mg/Kg	☼	04/30/25 14:09	05/01/25 12:18	1
Antimony	3.8	J	16.2	0.57	mg/Kg	☼	04/30/25 14:09	05/01/25 12:18	1
Arsenic	7.4		2.2	0.95	mg/Kg	☼	04/30/25 14:09	05/01/25 12:18	1
Barium	83.5		0.54	0.15	mg/Kg	☼	04/30/25 14:09	05/01/25 12:18	1
Beryllium	0.63		0.22	0.043	mg/Kg	☼	04/30/25 14:09	05/01/25 12:18	1
Cadmium	0.25		0.22	0.076	mg/Kg	☼	04/30/25 14:09	05/01/25 12:18	1
Calcium	31000		54.2	29.2	mg/Kg	☼	04/30/25 14:09	05/01/25 12:18	1
Chromium	11.3		0.54	0.39	mg/Kg	☼	04/30/25 14:09	05/01/25 12:18	1
Cobalt	6.7		0.54	0.11	mg/Kg	☼	04/30/25 14:09	05/01/25 12:18	1
Copper	53.0		1.1	0.62	mg/Kg	☼	04/30/25 14:09	05/01/25 12:18	1
Iron	11400		10.8	9.2	mg/Kg	☼	04/30/25 14:09	05/01/25 12:18	1
Lead	219		1.1	0.50	mg/Kg	☼	04/30/25 14:09	05/01/25 12:18	1
Magnesium	5130		21.7	9.2	mg/Kg	☼	04/30/25 14:09	05/01/25 12:18	1
Manganese	183		1.1	0.30	mg/Kg	☼	04/30/25 14:09	05/01/25 12:18	1
Nickel	16.2		5.4	0.27	mg/Kg	☼	04/30/25 14:09	05/01/25 12:18	1
Potassium	1070		32.5	26.3	mg/Kg	☼	04/30/25 14:09	05/01/25 12:18	1
Selenium	1.4	J	4.3	0.87	mg/Kg	☼	04/30/25 14:09	05/01/25 12:18	1
Silver	ND	^5-	0.65	0.22	mg/Kg	☼	04/30/25 14:09	05/01/25 12:18	1
Sodium	174		152	66.4	mg/Kg	☼	04/30/25 14:09	05/01/25 12:18	1
Thallium	ND		6.5	0.82	mg/Kg	☼	04/30/25 14:09	05/01/25 12:18	1
Vanadium	15.6		0.54	0.14	mg/Kg	☼	04/30/25 14:09	05/01/25 12:18	1
Zinc	78.2		2.2	1.1	mg/Kg	☼	04/30/25 14:09	05/01/25 12:18	1

Method: SW846 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.47		0.021	0.0049	mg/Kg	☼	05/02/25 09:11	05/02/25 11:40	1

Client: Roux Environmental Engineering and Geology DPC
Job ID: 480-229067-1
Project/Site: BCP RI - 619 Exchange Street Site

Client Sample ID: MW-2 0.75-2Ft
Lab Sample ID: 480-229067-3
Date Collected: 04/29/25 12:00
Matrix: Solid
Date Received: 04/29/25 15:43
Percent Solids: 80.5

Method: SW846 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		6.9	0.50	ug/Kg	☼	04/29/25 16:51	04/29/25 22:49	1
1,1,2,2-Tetrachloroethane	ND		6.9	1.1	ug/Kg	☼	04/29/25 16:51	04/29/25 22:49	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		6.9	1.6	ug/Kg	☼	04/29/25 16:51	04/29/25 22:49	1
1,1,2-Trichloroethane	ND		6.9	0.89	ug/Kg	☼	04/29/25 16:51	04/29/25 22:49	1
1,1-Dichloroethane	ND		6.9	0.84	ug/Kg	☼	04/29/25 16:51	04/29/25 22:49	1
1,1-Dichloroethene	ND		6.9	0.84	ug/Kg	☼	04/29/25 16:51	04/29/25 22:49	1
1,2,4-Trichlorobenzene	ND		6.9	0.42	ug/Kg	☼	04/29/25 16:51	04/29/25 22:49	1
1,2,4-Trimethylbenzene	ND		6.9	1.3	ug/Kg	☼	04/29/25 16:51	04/29/25 22:49	1
1,2-Dibromo-3-Chloropropane	ND		6.9	3.4	ug/Kg	☼	04/29/25 16:51	04/29/25 22:49	1
1,2-Dibromoethane	ND		6.9	0.88	ug/Kg	☼	04/29/25 16:51	04/29/25 22:49	1
1,2-Dichlorobenzene	ND		6.9	0.54	ug/Kg	☼	04/29/25 16:51	04/29/25 22:49	1
1,2-Dichloroethane	ND		6.9	0.34	ug/Kg	☼	04/29/25 16:51	04/29/25 22:49	1
1,2-Dichloropropane	ND		6.9	3.4	ug/Kg	☼	04/29/25 16:51	04/29/25 22:49	1
1,3,5-Trimethylbenzene	ND		6.9	0.44	ug/Kg	☼	04/29/25 16:51	04/29/25 22:49	1
1,3-Dichlorobenzene	ND		6.9	0.35	ug/Kg	☼	04/29/25 16:51	04/29/25 22:49	1
1,4-Dichlorobenzene	ND		6.9	0.96	ug/Kg	☼	04/29/25 16:51	04/29/25 22:49	1
2-Butanone (MEK)	ND		34	2.5	ug/Kg	☼	04/29/25 16:51	04/29/25 22:49	1
2-Hexanone	ND		34	3.4	ug/Kg	☼	04/29/25 16:51	04/29/25 22:49	1
4-Isopropyltoluene	ND		6.9	0.55	ug/Kg	☼	04/29/25 16:51	04/29/25 22:49	1
4-Methyl-2-pentanone (MIBK)	ND		34	2.3	ug/Kg	☼	04/29/25 16:51	04/29/25 22:49	1
Acetone	**240**		34	5.8	ug/Kg	☼	04/29/25 16:51	04/29/25 22:49	1
Benzene	ND		6.9	0.34	ug/Kg	☼	04/29/25 16:51	04/29/25 22:49	1
Bromodichloromethane	ND		6.9	0.92	ug/Kg	☼	04/29/25 16:51	04/29/25 22:49	1
Bromoform	ND		6.9	3.4	ug/Kg	☼	04/29/25 16:51	04/29/25 22:49	1
Bromomethane	ND		6.9	0.62	ug/Kg	☼	04/29/25 16:51	04/29/25 22:49	1
Carbon disulfide	ND		6.9	3.4	ug/Kg	☼	04/29/25 16:51	04/29/25 22:49	1
Carbon tetrachloride	ND		6.9	0.66	ug/Kg	☼	04/29/25 16:51	04/29/25 22:49	1
Chlorobenzene	ND		6.9	0.91	ug/Kg	☼	04/29/25 16:51	04/29/25 22:49	1
Chloroethane	ND		6.9	1.6	ug/Kg	☼	04/29/25 16:51	04/29/25 22:49	1
Chloroform	**1.7**	**J B**	6.9	0.42	ug/Kg	☼	04/29/25 16:51	04/29/25 22:49	1
Chloromethane	ND		6.9	0.41	ug/Kg	☼	04/29/25 16:51	04/29/25 22:49	1
cis-1,2-Dichloroethene	ND		6.9	0.88	ug/Kg	☼	04/29/25 16:51	04/29/25 22:49	1
cis-1,3-Dichloropropene	ND		6.9	0.99	ug/Kg	☼	04/29/25 16:51	04/29/25 22:49	1
Cyclohexane	ND		6.9	0.96	ug/Kg	☼	04/29/25 16:51	04/29/25 22:49	1
Dibromochloromethane	ND		6.9	0.88	ug/Kg	☼	04/29/25 16:51	04/29/25 22:49	1
Dichlorodifluoromethane	ND		6.9	0.57	ug/Kg	☼	04/29/25 16:51	04/29/25 22:49	1
Ethylbenzene	ND		6.9	0.47	ug/Kg	☼	04/29/25 16:51	04/29/25 22:49	1
Isopropylbenzene	ND		6.9	1.0	ug/Kg	☼	04/29/25 16:51	04/29/25 22:49	1
Methyl acetate	ND		34	4.1	ug/Kg	☼	04/29/25 16:51	04/29/25 22:49	1
Methyl tert-butyl ether	ND		6.9	0.67	ug/Kg	☼	04/29/25 16:51	04/29/25 22:49	1
Methylcyclohexane	ND		6.9	1.0	ug/Kg	☼	04/29/25 16:51	04/29/25 22:49	1
Methylene Chloride	ND		6.9	3.2	ug/Kg	☼	04/29/25 16:51	04/29/25 22:49	1
Naphthalene	ND		6.9	0.92	ug/Kg	☼	04/29/25 16:51	04/29/25 22:49	1
n-Butylbenzene	ND		6.9	0.60	ug/Kg	☼	04/29/25 16:51	04/29/25 22:49	1
N-Propylbenzene	ND		6.9	0.55	ug/Kg	☼	04/29/25 16:51	04/29/25 22:49	1
sec-Butylbenzene	ND		6.9	0.60	ug/Kg	☼	04/29/25 16:51	04/29/25 22:49	1
Styrene	ND		6.9	0.34	ug/Kg	☼	04/29/25 16:51	04/29/25 22:49	1
tert-Butylbenzene	ND		6.9	0.71	ug/Kg	☼	04/29/25 16:51	04/29/25 22:49	1
Tetrachloroethene	ND		6.9	0.92	ug/Kg	☼	04/29/25 16:51	04/29/25 22:49	1

Client Sample ID: MW-2 0.75-2Ft
Lab Sample ID: 480-229067-3

Date Collected: 04/29/25 12:00
Matrix: Solid

Date Received: 04/29/25 15:43
Percent Solids: 80.5

Method: SW846 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Toluene	ND		6.9	0.52	ug/Kg	☼	04/29/25 16:51	04/29/25 22:49	1
trans-1,2-Dichloroethene	ND		6.9	0.71	ug/Kg	☼	04/29/25 16:51	04/29/25 22:49	1
trans-1,3-Dichloropropene	ND		6.9	3.0	ug/Kg	☼	04/29/25 16:51	04/29/25 22:49	1
Trichloroethene	ND		6.9	1.5	ug/Kg	☼	04/29/25 16:51	04/29/25 22:49	1
Trichlorofluoromethane	ND		6.9	0.65	ug/Kg	☼	04/29/25 16:51	04/29/25 22:49	1
Vinyl chloride	ND		6.9	0.84	ug/Kg	☼	04/29/25 16:51	04/29/25 22:49	1
Xylenes, Total	ND		14	1.2	ug/Kg	☼	04/29/25 16:51	04/29/25 22:49	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/Kg*	☼		*N/A*	*04/29/25 16:51*	*04/29/25 22:49*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*109*		*64 - 126*	*04/29/25 16:51*	*04/29/25 22:49*	*1*
4-Bromofluorobenzene (Surr)	*82*		*72 - 126*	*04/29/25 16:51*	*04/29/25 22:49*	*1*
Dibromofluoromethane (Surr)	*107*		*60 - 140*	*04/29/25 16:51*	*04/29/25 22:49*	*1*
Toluene-d8 (Surr)	*108*		*71 - 125*	*04/29/25 16:51*	*04/29/25 22:49*	*1*

Method: SW846 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	ND		120	67	ug/Kg	☼	05/01/25 06:55	05/06/25 15:28	1
2,4,5-Trichlorophenol	ND		210	56	ug/Kg	☼	05/01/25 06:55	05/06/25 15:28	1
2,4,6-Trichlorophenol	ND		210	42	ug/Kg	☼	05/01/25 06:55	05/06/25 15:28	1
2,4-Dichlorophenol	ND		210	22	ug/Kg	☼	05/01/25 06:55	05/06/25 15:28	1
2,4-Dimethylphenol	ND		210	50	ug/Kg	☼	05/01/25 06:55	05/06/25 15:28	1
2,4-Dinitrophenol	ND		2000	960	ug/Kg	☼	05/01/25 06:55	05/06/25 15:28	1
2,4-Dinitrotoluene	ND		210	43	ug/Kg	☼	05/01/25 06:55	05/06/25 15:28	1
2,6-Dinitrotoluene	ND		210	24	ug/Kg	☼	05/01/25 06:55	05/06/25 15:28	1
2-Chloronaphthalene	ND		210	34	ug/Kg	☼	05/01/25 06:55	05/06/25 15:28	1
2-Chlorophenol	ND		400	38	ug/Kg	☼	05/01/25 06:55	05/06/25 15:28	1
2-Methylnaphthalene	**210**		210	42	ug/Kg	☼	05/01/25 06:55	05/06/25 15:28	1
2-Methylphenol	ND		210	24	ug/Kg	☼	05/01/25 06:55	05/06/25 15:28	1
2-Nitroaniline	ND		400	31	ug/Kg	☼	05/01/25 06:55	05/06/25 15:28	1
2-Nitrophenol	ND		210	59	ug/Kg	☼	05/01/25 06:55	05/06/25 15:28	1
3,3'-Dichlorobenzidine	ND		400	240	ug/Kg	☼	05/01/25 06:55	05/06/25 15:28	1
3-Nitroaniline	ND		400	57	ug/Kg	☼	05/01/25 06:55	05/06/25 15:28	1
4,6-Dinitro-2-methylphenol	ND		400	210	ug/Kg	☼	05/01/25 06:55	05/06/25 15:28	1
4-Bromophenyl phenyl ether	ND		210	29	ug/Kg	☼	05/01/25 06:55	05/06/25 15:28	1
4-Chloro-3-methylphenol	ND		210	51	ug/Kg	☼	05/01/25 06:55	05/06/25 15:28	1
4-Chloroaniline	ND		210	51	ug/Kg	☼	05/01/25 06:55	05/06/25 15:28	1
4-Chlorophenyl phenyl ether	ND		210	26	ug/Kg	☼	05/01/25 06:55	05/06/25 15:28	1
4-Methylphenol	ND		400	24	ug/Kg	☼	05/01/25 06:55	05/06/25 15:28	1
4-Nitroaniline	ND		400	110	ug/Kg	☼	05/01/25 06:55	05/06/25 15:28	1
4-Nitrophenol	ND		400	150	ug/Kg	☼	05/01/25 06:55	05/06/25 15:28	1
Acenaphthene	ND		210	31	ug/Kg	☼	05/01/25 06:55	05/06/25 15:28	1
Acenaphthylene	**60**	**J**	210	27	ug/Kg	☼	05/01/25 06:55	05/06/25 15:28	1
Acetophenone	ND		210	28	ug/Kg	☼	05/01/25 06:55	05/06/25 15:28	1
Anthracene	**110**	**J**	210	51	ug/Kg	☼	05/01/25 06:55	05/06/25 15:28	1
Atrazine	ND		210	72	ug/Kg	☼	05/01/25 06:55	05/06/25 15:28	1
Benzaldehyde	ND		210	170	ug/Kg	☼	05/01/25 06:55	05/06/25 15:28	1
Benzo[a]anthracene	**440**		210	21	ug/Kg	☼	05/01/25 06:55	05/06/25 15:28	1

Client Sample ID: MW-2 0.75-2Ft
Lab Sample ID: 480-229067-3
Date Collected: 04/29/25 12:00
Matrix: Solid
Date Received: 04/29/25 15:43
Percent Solids: 80.5

Method: SW846 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[a]pyrene	**340**		210	31	ug/Kg	☼	05/01/25 06:55	05/06/25 15:28	1
Benzo[b]fluoranthene	**470**		210	33	ug/Kg	☼	05/01/25 06:55	05/06/25 15:28	1
Benzo[g,h,i]perylene	**260**		210	22	ug/Kg	☼	05/01/25 06:55	05/06/25 15:28	1
Benzo[k]fluoranthene	**180**	**J**	210	27	ug/Kg	☼	05/01/25 06:55	05/06/25 15:28	1
Biphenyl	ND		210	31	ug/Kg	☼	05/01/25 06:55	05/06/25 15:28	1
bis (2-chloroisopropyl) ether	ND		210	42	ug/Kg	☼	05/01/25 06:55	05/06/25 15:28	1
Bis(2-chloroethoxy)methane	ND		210	44	ug/Kg	☼	05/01/25 06:55	05/06/25 15:28	1
Bis(2-chloroethyl)ether	ND		210	27	ug/Kg	☼	05/01/25 06:55	05/06/25 15:28	1
Bis(2-ethylhexyl) phthalate	ND		210	71	ug/Kg	☼	05/01/25 06:55	05/06/25 15:28	1
Butyl benzyl phthalate	ND		210	34	ug/Kg	☼	05/01/25 06:55	05/06/25 15:28	1
Caprolactam	ND		210	62	ug/Kg	☼	05/01/25 06:55	05/06/25 15:28	1
Carbazole	**46**	**J**	210	24	ug/Kg	☼	05/01/25 06:55	05/06/25 15:28	1
Chrysene	**450**		210	46	ug/Kg	☼	05/01/25 06:55	05/06/25 15:28	1
Dibenz(a,h)anthracene	**72**	**J**	210	37	ug/Kg	☼	05/01/25 06:55	05/06/25 15:28	1
Dibenzofuran	**80**	**J**	210	24	ug/Kg	☼	05/01/25 06:55	05/06/25 15:28	1
Diethyl phthalate	ND		210	27	ug/Kg	☼	05/01/25 06:55	05/06/25 15:28	1
Dimethyl phthalate	ND		210	24	ug/Kg	☼	05/01/25 06:55	05/06/25 15:28	1
Di-n-butyl phthalate	ND		210	35	ug/Kg	☼	05/01/25 06:55	05/06/25 15:28	1
Di-n-octyl phthalate	ND		210	24	ug/Kg	☼	05/01/25 06:55	05/06/25 15:28	1
Fluoranthene	**740**		210	22	ug/Kg	☼	05/01/25 06:55	05/06/25 15:28	1
Fluorene	**65**	**J**	210	24	ug/Kg	☼	05/01/25 06:55	05/06/25 15:28	1
Hexachlorobenzene	ND		210	28	ug/Kg	☼	05/01/25 06:55	05/06/25 15:28	1
Hexachlorobutadiene	ND		210	31	ug/Kg	☼	05/01/25 06:55	05/06/25 15:28	1
Hexachlorocyclopentadiene	ND		210	28	ug/Kg	☼	05/01/25 06:55	05/06/25 15:28	1
Hexachloroethane	ND		210	27	ug/Kg	☼	05/01/25 06:55	05/06/25 15:28	1
Indeno[1,2,3-cd]pyrene	**190**	**J**	210	26	ug/Kg	☼	05/01/25 06:55	05/06/25 15:28	1
Isophorone	ND		210	44	ug/Kg	☼	05/01/25 06:55	05/06/25 15:28	1
Naphthalene	**81**	**J**	210	27	ug/Kg	☼	05/01/25 06:55	05/06/25 15:28	1
Nitrobenzene	ND		210	23	ug/Kg	☼	05/01/25 06:55	05/06/25 15:28	1
N-Nitrosodi-n-propylamine	ND		210	35	ug/Kg	☼	05/01/25 06:55	05/06/25 15:28	1
N-Nitrosodiphenylamine	ND		210	170	ug/Kg	☼	05/01/25 06:55	05/06/25 15:28	1
Pentachlorophenol	ND		400	210	ug/Kg	☼	05/01/25 06:55	05/06/25 15:28	1
Phenanthrene	**780**		210	31	ug/Kg	☼	05/01/25 06:55	05/06/25 15:28	1
Phenol	ND		210	32	ug/Kg	☼	05/01/25 06:55	05/06/25 15:28	1
Pyrene	**580**		210	24	ug/Kg	☼	05/01/25 06:55	05/06/25 15:28	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Unknown	*3900*	*T J*	*ug/Kg*	☼	*2.00*	*N/A*	*05/01/25 06:55*	*05/06/25 15:28*	*1*
Unknown	*380*	*T J*	*ug/Kg*	☼	*3.46*	*N/A*	*05/01/25 06:55*	*05/06/25 15:28*	*1*
Unknown	*460*	*T J*	*ug/Kg*	☼	*7.81*	*N/A*	*05/01/25 06:55*	*05/06/25 15:28*	*1*
Tridecane	*410*	*T J N*	*ug/Kg*	☼	*8.01*	*629-50-5*	*05/01/25 06:55*	*05/06/25 15:28*	*1*
Naphthalene, 1,6-dimethyl-	*360*	*T J N*	*ug/Kg*	☼	*8.90*	*575-43-9*	*05/01/25 06:55*	*05/06/25 15:28*	*1*
Dodecane, 2,6,11-trimethyl-	*740*	*T J N*	*ug/Kg*	☼	*9.05*	*31295-56-4*	*05/01/25 06:55*	*05/06/25 15:28*	*1*
Hexadecane	*370*	*T J N*	*ug/Kg*	☼	*9.87*	*544-76-3*	*05/01/25 06:55*	*05/06/25 15:28*	*1*
Unknown	*330*	*T J*	*ug/Kg*	☼	*10.12*	*N/A*	*05/01/25 06:55*	*05/06/25 15:28*	*1*
Pentadecane, 2,6,10,14-tetramethyl-	*1200*	*T J N*	*ug/Kg*	☼	*10.41*	*1921-70-6*	*05/01/25 06:55*	*05/06/25 15:28*	*1*
Unknown	*430*	*T J*	*ug/Kg*	☼	*11.50*	*N/A*	*05/01/25 06:55*	*05/06/25 15:28*	*1*
Eicosane	*370*	*T J N*	*ug/Kg*	☼	*11.65*	*112-95-8*	*05/01/25 06:55*	*05/06/25 15:28*	*1*
Pentadecane	*410*	*T J N*	*ug/Kg*	☼	*12.00*	*629-62-9*	*05/01/25 06:55*	*05/06/25 15:28*	*1*
Unknown	*340*	*T J*	*ug/Kg*	☼	*12.54*	*N/A*	*05/01/25 06:55*	*05/06/25 15:28*	*1*

Client Sample ID: MW-2 0.75-2Ft
Lab Sample ID: 480-229067-3
Date Collected: 04/29/25 12:00
Matrix: Solid
Date Received: 04/29/25 15:43
Percent Solids: 80.5

Method: SW846 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Tentatively Identified Compound	Est. Result	Qualifier	Unit	D	RT	CAS No.	Prepared	Analyzed	Dil Fac
Unknown	410	T J	ug/Kg	☼	12.63	N/A	05/01/25 06:55	05/06/25 15:28	1
Octadecane	330	T J N	ug/Kg	☼	13.20	593-45-3	05/01/25 06:55	05/06/25 15:28	1
Decane, 1-iodo-	510	T J N	ug/Kg	☼	13.46	2050-77-3	05/01/25 06:55	05/06/25 15:28	1
Nonadecane	560	T J N	ug/Kg	☼	13.98	629-92-5	05/01/25 06:55	05/06/25 15:28	1
Hexacosane	400	T J N	ug/Kg	☼	14.22	630-01-3	05/01/25 06:55	05/06/25 15:28	1
Unknown	440	T J	ug/Kg	☼	14.47	N/A	05/01/25 06:55	05/06/25 15:28	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol (Surr)	103		26 - 143	05/01/25 06:55	05/06/25 15:28	1
2-Fluorobiphenyl (Surr)	97		50 - 121	05/01/25 06:55	05/06/25 15:28	1
2-Fluorophenol (Surr)	80		36 - 120	05/01/25 06:55	05/06/25 15:28	1
Nitrobenzene-d5 (Surr)	91		40 - 121	05/01/25 06:55	05/06/25 15:28	1
Phenol-d5 (Surr)	90		41 - 120	05/01/25 06:55	05/06/25 15:28	1
p-Terphenyl-d14 (Surr)	101		46 - 143	05/01/25 06:55	05/06/25 15:28	1

Method: SW846 8081B - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	**18**	**J**	41	7.9	ug/Kg	☼	05/01/25 06:41	05/01/25 17:05	10
4,4'-DDE	ND		41	8.6	ug/Kg	☼	05/01/25 06:41	05/01/25 17:05	10
4,4'-DDT	**33**	**J B**	41	9.6	ug/Kg	☼	05/01/25 06:41	05/01/25 17:05	10
Aldrin	ND		41	10	ug/Kg	☼	05/01/25 06:41	05/01/25 17:05	10
alpha-BHC	ND		41	7.3	ug/Kg	☼	05/01/25 06:41	05/01/25 17:05	10
cis-Chlordane	ND		41	20	ug/Kg	☼	05/01/25 06:41	05/01/25 17:05	10
beta-BHC	ND		41	7.3	ug/Kg	☼	05/01/25 06:41	05/01/25 17:05	10
delta-BHC	ND		41	7.6	ug/Kg	☼	05/01/25 06:41	05/01/25 17:05	10
Dieldrin	ND		41	9.8	ug/Kg	☼	05/01/25 06:41	05/01/25 17:05	10
Endosulfan I	ND		41	7.8	ug/Kg	☼	05/01/25 06:41	05/01/25 17:05	10
Endosulfan II	ND		41	7.3	ug/Kg	☼	05/01/25 06:41	05/01/25 17:05	10
Endosulfan sulfate	ND		41	7.6	ug/Kg	☼	05/01/25 06:41	05/01/25 17:05	10
Endrin	ND		41	8.1	ug/Kg	☼	05/01/25 06:41	05/01/25 17:05	10
Endrin aldehyde	ND		41	10	ug/Kg	☼	05/01/25 06:41	05/01/25 17:05	10
Endrin ketone	**13**	**J B**	41	10	ug/Kg	☼	05/01/25 06:41	05/01/25 17:05	10
gamma-BHC (Lindane)	**12**	**J**	41	7.5	ug/Kg	☼	05/01/25 06:41	05/01/25 17:05	10
trans-Chlordane	ND		41	13	ug/Kg	☼	05/01/25 06:41	05/01/25 17:05	10
Heptachlor	ND		41	8.8	ug/Kg	☼	05/01/25 06:41	05/01/25 17:05	10
Heptachlor epoxide	ND		41	11	ug/Kg	☼	05/01/25 06:41	05/01/25 17:05	10
Methoxychlor	**42**	**B**	41	8.3	ug/Kg	☼	05/01/25 06:41	05/01/25 17:05	10
Toxaphene	ND		410	240	ug/Kg	☼	05/01/25 06:41	05/01/25 17:05	10

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
DCB Decachlorobiphenyl	180	S1+	45 - 120	05/01/25 06:41	05/01/25 17:05	10
DCB Decachlorobiphenyl	297	S1+	45 - 120	05/01/25 06:41	05/01/25 17:05	10
Tetrachloro-m-xylene	115		30 - 124	05/01/25 06:41	05/01/25 17:05	10
Tetrachloro-m-xylene	157	S1+	30 - 124	05/01/25 06:41	05/01/25 17:05	10

Method: SW846 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		0.24	0.047	mg/Kg	☼	05/01/25 07:04	05/01/25 18:30	1
PCB-1221	ND		0.24	0.047	mg/Kg	☼	05/01/25 07:04	05/01/25 18:30	1
PCB-1232	ND		0.24	0.047	mg/Kg	☼	05/01/25 07:04	05/01/25 18:30	1

Client Sample ID: MW-2 0.75-2Ft
Lab Sample ID: 480-229067-3
Date Collected: 04/29/25 12:00
Matrix: Solid
Date Received: 04/29/25 15:43
Percent Solids: 80.5

Method: SW846 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1242	ND		0.24	0.047	mg/Kg	☼	05/01/25 07:04	05/01/25 18:30	1
PCB-1248	ND		0.24	0.047	mg/Kg	☼	05/01/25 07:04	05/01/25 18:30	1
PCB-1254	ND		0.24	0.11	mg/Kg	☼	05/01/25 07:04	05/01/25 18:30	1
PCB-1260	ND		0.24	0.11	mg/Kg	☼	05/01/25 07:04	05/01/25 18:30	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*105*		*65 - 174*	*05/01/25 07:04*	*05/01/25 18:30*	*1*
DCB Decachlorobiphenyl	*106*		*65 - 174*	*05/01/25 07:04*	*05/01/25 18:30*	*1*
Tetrachloro-m-xylene	*111*		*60 - 154*	*05/01/25 07:04*	*05/01/25 18:30*	*1*
Tetrachloro-m-xylene	*105*		*60 - 154*	*05/01/25 07:04*	*05/01/25 18:30*	*1*

Method: SW846 8151A - Herbicides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-T	ND		20	6.5	ug/Kg	☼	05/01/25 06:27	05/08/25 14:32	1
2,4-D	ND		20	13	ug/Kg	☼	05/01/25 06:27	05/08/25 14:32	1
Dichlorprop	ND		20	10	ug/Kg	☼	05/01/25 06:27	05/08/25 14:32	1
Pentachlorophenol	ND		20	6.6	ug/Kg	☼	05/01/25 06:27	05/08/25 14:32	1
Picloram	ND		20	8.8	ug/Kg	☼	05/01/25 06:27	05/08/25 14:32	1
Silvex (2,4,5-TP)	ND		20	7.3	ug/Kg	☼	05/01/25 06:27	05/08/25 14:32	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4-Dichlorophenylacetic acid	*72*		*28 - 129*	*05/01/25 06:27*	*05/08/25 14:32*	*1*
2,4-Dichlorophenylacetic acid	*75*		*28 - 129*	*05/01/25 06:27*	*05/08/25 14:32*	*1*

Method: EPA Draft-3 1633 - Per- and Polyfluoroalkyl Substances by LC/MS/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)	ND		0.61	0.15	ug/Kg	☼	05/02/25 08:22	05/03/25 01:59	1
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2 FTS)	ND		0.61	0.15	ug/Kg	☼	05/02/25 08:22	05/03/25 01:59	1
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2 FTS)	ND		0.61	0.15	ug/Kg	☼	05/02/25 08:22	05/03/25 01:59	1
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2 FTS)	ND		0.61	0.15	ug/Kg	☼	05/02/25 08:22	05/03/25 01:59	1
3-Perfluoroheptylpropanoic acid (7:3 FTCA)	ND		3.8	0.96	ug/Kg	☼	05/02/25 08:22	05/03/25 01:59	1
3-Perfluoropentylpropanoic acid (5:3 FTCA)	ND		3.8	0.96	ug/Kg	☼	05/02/25 08:22	05/03/25 01:59	1
3-Perfluoropropylpropanoic acid (3:3 FTCA)	ND		0.77	0.19	ug/Kg	☼	05/02/25 08:22	05/03/25 01:59	1
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	ND		0.61	0.15	ug/Kg	☼	05/02/25 08:22	05/03/25 01:59	1
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9Cl-PF3ONS)	ND		0.61	0.15	ug/Kg	☼	05/02/25 08:22	05/03/25 01:59	1
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA)	ND		0.61	0.15	ug/Kg	☼	05/02/25 08:22	05/03/25 01:59	1
N-ethylperfluorooctane sulfonamide (NEtFOSA)	ND		0.15	0.038	ug/Kg	☼	05/02/25 08:22	05/03/25 01:59	1
N-ethylperfluorooctane sulfonamidoethanol (NEtFOSE)	ND		1.5	0.38	ug/Kg	☼	05/02/25 08:22	05/03/25 01:59	1
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	ND		0.15	0.038	ug/Kg	☼	05/02/25 08:22	05/03/25 01:59	1
N-methylperfluorooctane sulfonamide (NMeFOSA)	ND		0.15	0.038	ug/Kg	☼	05/02/25 08:22	05/03/25 01:59	1

Client: Roux Environmental Engineering and Geology DPC
Job ID: 480-229067-1
Project/Site: BCP RI - 619 Exchange Street Site

Client Sample ID: MW-2 0.75-2Ft
Lab Sample ID: 480-229067-3
Date Collected: 04/29/25 12:00
Matrix: Solid
Date Received: 04/29/25 15:43
Percent Solids: 80.5

Method: EPA Draft-3 1633 - Per- and Polyfluoroalkyl Substances by LC/MS/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
N-methylperfluorooctane sulfonamidoethanol (NMeFOSE)	ND		1.5	0.38	ug/Kg	☼	05/02/25 08:22	05/03/25 01:59	1
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	ND		0.15	0.038	ug/Kg	☼	05/02/25 08:22	05/03/25 01:59	1
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	ND		0.31	0.077	ug/Kg	☼	05/02/25 08:22	05/03/25 01:59	1
Perfluoro (2-ethoxyethane) sulfonic acid (PFEESA)	ND		0.31	0.077	ug/Kg	☼	05/02/25 08:22	05/03/25 01:59	1
Perfluoro-3-methoxypropanoic acid (PFMPA)	ND		0.31	0.077	ug/Kg	☼	05/02/25 08:22	05/03/25 01:59	1
Perfluoro-4-methoxybutanoic acid (PFMBA)	ND		0.31	0.077	ug/Kg	☼	05/02/25 08:22	05/03/25 01:59	1
Perfluorobutanesulfonic acid (PFBS)	ND		0.15	0.038	ug/Kg	☼	05/02/25 08:22	05/03/25 01:59	1
Perfluorobutanoic acid (PFBA)	ND		0.61	0.15	ug/Kg	☼	05/02/25 08:22	05/03/25 01:59	1
Perfluorodecanesulfonic acid (PFDS)	ND		0.15	0.038	ug/Kg	☼	05/02/25 08:22	05/03/25 01:59	1
Perfluorodecanoic acid (PFDA)	ND		0.15	0.038	ug/Kg	☼	05/02/25 08:22	05/03/25 01:59	1
Perfluorododecanesulfonic acid (PFDoS)	ND		0.15	0.038	ug/Kg	☼	05/02/25 08:22	05/03/25 01:59	1
Perfluorododecanoic acid (PFDoA)	ND		0.15	0.038	ug/Kg	☼	05/02/25 08:22	05/03/25 01:59	1
Perfluoroheptanesulfonic acid (PFHpS)	ND		0.15	0.038	ug/Kg	☼	05/02/25 08:22	05/03/25 01:59	1
Perfluoroheptanoic acid (PFHpA)	**0.11**	**J**	0.15	0.038	ug/Kg	☼	05/02/25 08:22	05/03/25 01:59	1
Perfluorohexanesulfonic acid (PFHxS)	ND		0.15	0.038	ug/Kg	☼	05/02/25 08:22	05/03/25 01:59	1
Perfluorohexanoic acid (PFHxA)	**0.17**		0.15	0.038	ug/Kg	☼	05/02/25 08:22	05/03/25 01:59	1
Perfluorononanesulfonic acid (PFNS)	ND		0.15	0.038	ug/Kg	☼	05/02/25 08:22	05/03/25 01:59	1
Perfluorononanoic acid (PFNA)	ND		0.15	0.038	ug/Kg	☼	05/02/25 08:22	05/03/25 01:59	1
Perfluorooctanesulfonamide (PFOSA)	ND		0.15	0.038	ug/Kg	☼	05/02/25 08:22	05/03/25 01:59	1
Perfluorooctanesulfonic acid (PFOS)	**0.24**		0.15	0.038	ug/Kg	☼	05/02/25 08:22	05/03/25 01:59	1
Perfluorooctanoic acid (PFOA)	**0.25**		0.15	0.038	ug/Kg	☼	05/02/25 08:22	05/03/25 01:59	1
Perfluoropentanesulfonic acid (PFPeS)	ND		0.15	0.038	ug/Kg	☼	05/02/25 08:22	05/03/25 01:59	1
Perfluoropentanoic acid (PFPeA)	**0.24**	**J**	0.31	0.077	ug/Kg	☼	05/02/25 08:22	05/03/25 01:59	1
Perfluorotetradecanoic acid (PFTeDA)	ND		0.15	0.038	ug/Kg	☼	05/02/25 08:22	05/03/25 01:59	1
Perfluorotridecanoic acid (PFTrDA)	ND		0.15	0.038	ug/Kg	☼	05/02/25 08:22	05/03/25 01:59	1
Perfluoroundecanoic acid (PFUnA)	ND		0.15	0.038	ug/Kg	☼	05/02/25 08:22	05/03/25 01:59	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C2 PFTeDA	*89.1*		*20 - 150*	*05/02/25 08:22*	*05/03/25 01:59*	*1*
13C2-PFDoDA	*93.5*		*20 - 150*	*05/02/25 08:22*	*05/03/25 01:59*	*1*
13C3 HFPO-DA	*98.0*		*20 - 150*	*05/02/25 08:22*	*05/03/25 01:59*	*1*
13C3 PFBS	*94.4*		*20 - 150*	*05/02/25 08:22*	*05/03/25 01:59*	*1*
13C3 PFHxS	*94.1*		*20 - 150*	*05/02/25 08:22*	*05/03/25 01:59*	*1*
13C4 PFBA	*91.3*		*20 - 150*	*05/02/25 08:22*	*05/03/25 01:59*	*1*
13C4 PFHpA	*93.0*		*20 - 150*	*05/02/25 08:22*	*05/03/25 01:59*	*1*
13C5 PFHxA	*94.0*		*20 - 150*	*05/02/25 08:22*	*05/03/25 01:59*	*1*
13C5 PFPeA	*102*		*20 - 150*	*05/02/25 08:22*	*05/03/25 01:59*	*1*
13C6 PFDA	*93.1*		*20 - 150*	*05/02/25 08:22*	*05/03/25 01:59*	*1*
13C7 PFUnA	*92.1*		*20 - 150*	*05/02/25 08:22*	*05/03/25 01:59*	*1*
13C8 PFOA	*92.3*		*20 - 150*	*05/02/25 08:22*	*05/03/25 01:59*	*1*
13C8 PFOS	*92.8*		*20 - 150*	*05/02/25 08:22*	*05/03/25 01:59*	*1*
13C8 PFOSA	*83.1*		*20 - 150*	*05/02/25 08:22*	*05/03/25 01:59*	*1*
13C9 PFNA	*85.6*		*20 - 150*	*05/02/25 08:22*	*05/03/25 01:59*	*1*

Client Sample ID: MW-2 0.75-2Ft

Lab Sample ID: 480-229067-3

Date Collected: 04/29/25 12:00
Matrix: Solid
Date Received: 04/29/25 15:43
Percent Solids: 80.5

Method: EPA Draft-3 1633 - Per- and Polyfluoroalkyl Substances by LC/MS/MS (Continued)

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
D3-NMeFOSA	*76.4*		*20 - 150*	*05/02/25 08:22*	*05/03/25 01:59*	*1*
d3-NMeFOSAA	*95.4*		*20 - 150*	*05/02/25 08:22*	*05/03/25 01:59*	*1*
d5-NEtFOSAA	*106*		*20 - 150*	*05/02/25 08:22*	*05/03/25 01:59*	*1*
d5-NEtPFOSA	*75.7*		*20 - 150*	*05/02/25 08:22*	*05/03/25 01:59*	*1*
d7-N-MeFOSE-M	*60.4*		*20 - 150*	*05/02/25 08:22*	*05/03/25 01:59*	*1*
d9-N-EtFOSE-M	*54.2*		*20 - 150*	*05/02/25 08:22*	*05/03/25 01:59*	*1*
M2-4:2 FTS	*135*		*20 - 150*	*05/02/25 08:22*	*05/03/25 01:59*	*1*
M2-6:2 FTS	*115*		*20 - 150*	*05/02/25 08:22*	*05/03/25 01:59*	*1*
M2-8:2 FTS	*102*		*20 - 150*	*05/02/25 08:22*	*05/03/25 01:59*	*1*

Method: SW846 6010D - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**2390**		12.2	10.6	mg/Kg	☼	04/30/25 14:09	05/01/25 12:20	1
Antimony	ND		18.4	0.65	mg/Kg	☼	04/30/25 14:09	05/01/25 12:20	1
Arsenic	**19.5**		2.4	1.1	mg/Kg	☼	04/30/25 14:09	05/01/25 12:20	1
Barium	**150**		0.61	0.17	mg/Kg	☼	04/30/25 14:09	05/01/25 12:20	1
Beryllium	**0.85**		0.24	0.049	mg/Kg	☼	04/30/25 14:09	05/01/25 12:20	1
Cadmium	**0.11**	**J**	0.24	0.086	mg/Kg	☼	04/30/25 14:09	05/01/25 12:20	1
Calcium	**13900**		61.2	33.0	mg/Kg	☼	04/30/25 14:09	05/01/25 12:20	1
Chromium	**8.7**		0.61	0.44	mg/Kg	☼	04/30/25 14:09	05/01/25 12:20	1
Cobalt	**3.5**		0.61	0.12	mg/Kg	☼	04/30/25 14:09	05/01/25 12:20	1
Copper	**36.7**		1.2	0.70	mg/Kg	☼	04/30/25 14:09	05/01/25 12:20	1
Iron	**15400**		12.2	10.4	mg/Kg	☼	04/30/25 14:09	05/01/25 12:20	1
Lead	**164**		1.2	0.56	mg/Kg	☼	04/30/25 14:09	05/01/25 12:20	1
Magnesium	**1080**		24.5	10.4	mg/Kg	☼	04/30/25 14:09	05/01/25 12:20	1
Manganese	**172**		1.2	0.34	mg/Kg	☼	04/30/25 14:09	05/01/25 12:20	1
Nickel	**9.6**		6.1	0.31	mg/Kg	☼	04/30/25 14:09	05/01/25 12:20	1
Potassium	**751**		36.7	29.7	mg/Kg	☼	04/30/25 14:09	05/01/25 12:20	1
Selenium	**2.3**	**J**	4.9	0.98	mg/Kg	☼	04/30/25 14:09	05/01/25 12:20	1
Silver	ND	^5-	0.73	0.24	mg/Kg	☼	04/30/25 14:09	05/01/25 12:20	1
Sodium	**136**	**J**	171	75.0	mg/Kg	☼	04/30/25 14:09	05/01/25 12:20	1
Thallium	ND		7.3	0.93	mg/Kg	☼	04/30/25 14:09	05/01/25 12:20	1
Vanadium	**16.6**		0.61	0.16	mg/Kg	☼	04/30/25 14:09	05/01/25 12:20	1
Zinc	**67.3**		2.4	1.2	mg/Kg	☼	04/30/25 14:09	05/01/25 12:20	1

Method: SW846 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.58**		0.025	0.0057	mg/Kg	☼	05/02/25 09:11	05/02/25 11:43	1

Client: Roux Environmental Engineering and Geology DPC
Job ID: 480-229067-1
Project/Site: BCP RI - 619 Exchange Street Site

Client Sample ID: MW-3 0.5-2.5Ft
Lab Sample ID: 480-229067-4
Date Collected: 04/29/25 13:30
Matrix: Solid
Date Received: 04/29/25 15:43
Percent Solids: 83.7

Method: SW846 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	ND		120	66	ug/Kg	☼	04/30/25 13:32	05/06/25 10:31	1
2,4,5-Trichlorophenol	ND		200	55	ug/Kg	☼	04/30/25 13:32	05/06/25 10:31	1
2,4,6-Trichlorophenol	ND		200	41	ug/Kg	☼	04/30/25 13:32	05/06/25 10:31	1
2,4-Dichlorophenol	ND		200	21	ug/Kg	☼	04/30/25 13:32	05/06/25 10:31	1
2,4-Dimethylphenol	ND		200	49	ug/Kg	☼	04/30/25 13:32	05/06/25 10:31	1
2,4-Dinitrophenol	ND		2000	930	ug/Kg	☼	04/30/25 13:32	05/06/25 10:31	1
2,4-Dinitrotoluene	ND		200	42	ug/Kg	☼	04/30/25 13:32	05/06/25 10:31	1
2,6-Dinitrotoluene	ND		200	24	ug/Kg	☼	04/30/25 13:32	05/06/25 10:31	1
2-Chloronaphthalene	ND		200	33	ug/Kg	☼	04/30/25 13:32	05/06/25 10:31	1
2-Chlorophenol	ND		390	37	ug/Kg	☼	04/30/25 13:32	05/06/25 10:31	1
2-Methylnaphthalene	**220**		200	41	ug/Kg	☼	04/30/25 13:32	05/06/25 10:31	1
2-Methylphenol	ND		200	24	ug/Kg	☼	04/30/25 13:32	05/06/25 10:31	1
2-Nitroaniline	ND		390	30	ug/Kg	☼	04/30/25 13:32	05/06/25 10:31	1
2-Nitrophenol	ND		200	57	ug/Kg	☼	04/30/25 13:32	05/06/25 10:31	1
3,3'-Dichlorobenzidine	ND		390	240	ug/Kg	☼	04/30/25 13:32	05/06/25 10:31	1
3-Nitroaniline	ND		390	56	ug/Kg	☼	04/30/25 13:32	05/06/25 10:31	1
4,6-Dinitro-2-methylphenol	ND		390	200	ug/Kg	☼	04/30/25 13:32	05/06/25 10:31	1
4-Bromophenyl phenyl ether	ND		200	29	ug/Kg	☼	04/30/25 13:32	05/06/25 10:31	1
4-Chloro-3-methylphenol	ND		200	50	ug/Kg	☼	04/30/25 13:32	05/06/25 10:31	1
4-Chloroaniline	ND		200	50	ug/Kg	☼	04/30/25 13:32	05/06/25 10:31	1
4-Chlorophenyl phenyl ether	ND		200	25	ug/Kg	☼	04/30/25 13:32	05/06/25 10:31	1
4-Methylphenol	ND		390	24	ug/Kg	☼	04/30/25 13:32	05/06/25 10:31	1
4-Nitroaniline	ND		390	110	ug/Kg	☼	04/30/25 13:32	05/06/25 10:31	1
4-Nitrophenol	ND		390	140	ug/Kg	☼	04/30/25 13:32	05/06/25 10:31	1
Acenaphthene	ND		200	30	ug/Kg	☼	04/30/25 13:32	05/06/25 10:31	1
Acenaphthylene	**52**	**J**	200	26	ug/Kg	☼	04/30/25 13:32	05/06/25 10:31	1
Acetophenone	ND		200	27	ug/Kg	☼	04/30/25 13:32	05/06/25 10:31	1
Anthracene	**150**	**J**	200	50	ug/Kg	☼	04/30/25 13:32	05/06/25 10:31	1
Atrazine	ND		200	70	ug/Kg	☼	04/30/25 13:32	05/06/25 10:31	1
Benzaldehyde	ND		200	160	ug/Kg	☼	04/30/25 13:32	05/06/25 10:31	1
Benzo[a]anthracene	**500**		200	20	ug/Kg	☼	04/30/25 13:32	05/06/25 10:31	1
Benzo[a]pyrene	**430**		200	30	ug/Kg	☼	04/30/25 13:32	05/06/25 10:31	1
Benzo[b]fluoranthene	**650**		200	32	ug/Kg	☼	04/30/25 13:32	05/06/25 10:31	1
Benzo[g,h,i]perylene	**370**		200	21	ug/Kg	☼	04/30/25 13:32	05/06/25 10:31	1
Benzo[k]fluoranthene	**230**		200	26	ug/Kg	☼	04/30/25 13:32	05/06/25 10:31	1
Biphenyl	**37**	**J**	200	30	ug/Kg	☼	04/30/25 13:32	05/06/25 10:31	1
bis (2-chloroisopropyl) ether	ND		200	41	ug/Kg	☼	04/30/25 13:32	05/06/25 10:31	1
Bis(2-chloroethoxy)methane	ND		200	43	ug/Kg	☼	04/30/25 13:32	05/06/25 10:31	1
Bis(2-chloroethyl)ether	ND		200	26	ug/Kg	☼	04/30/25 13:32	05/06/25 10:31	1
Bis(2-ethylhexyl) phthalate	ND		200	69	ug/Kg	☼	04/30/25 13:32	05/06/25 10:31	1
Butyl benzyl phthalate	ND		200	33	ug/Kg	☼	04/30/25 13:32	05/06/25 10:31	1
Caprolactam	ND		200	61	ug/Kg	☼	04/30/25 13:32	05/06/25 10:31	1
Carbazole	**66**	**J**	200	24	ug/Kg	☼	04/30/25 13:32	05/06/25 10:31	1
Chrysene	**630**		200	45	ug/Kg	☼	04/30/25 13:32	05/06/25 10:31	1
Dibenz(a,h)anthracene	**120**	**J**	200	36	ug/Kg	☼	04/30/25 13:32	05/06/25 10:31	1
Dibenzofuran	**140**	**J**	200	24	ug/Kg	☼	04/30/25 13:32	05/06/25 10:31	1
Diethyl phthalate	ND		200	26	ug/Kg	☼	04/30/25 13:32	05/06/25 10:31	1
Dimethyl phthalate	ND		200	24	ug/Kg	☼	04/30/25 13:32	05/06/25 10:31	1
Di-n-butyl phthalate	ND		200	35	ug/Kg	☼	04/30/25 13:32	05/06/25 10:31	1

Client: Roux Environmental Engineering and Geology DPC
Job ID: 480-229067-1
Project/Site: BCP RI - 619 Exchange Street Site

Client Sample ID: MW-3 0.5-2.5Ft
Lab Sample ID: 480-229067-4
Date Collected: 04/29/25 13:30
Matrix: Solid
Date Received: 04/29/25 15:43
Percent Solids: 83.7

Method: SW846 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate	ND		200	24	ug/Kg	☼	04/30/25 13:32	05/06/25 10:31	1
Fluoranthene	**860**		200	21	ug/Kg	☼	04/30/25 13:32	05/06/25 10:31	1
Fluorene	**56**	**J**	200	24	ug/Kg	☼	04/30/25 13:32	05/06/25 10:31	1
Hexachlorobenzene	ND		200	27	ug/Kg	☼	04/30/25 13:32	05/06/25 10:31	1
Hexachlorobutadiene	ND		200	30	ug/Kg	☼	04/30/25 13:32	05/06/25 10:31	1
Hexachlorocyclopentadiene	ND		200	27	ug/Kg	☼	04/30/25 13:32	05/06/25 10:31	1
Hexachloroethane	ND		200	26	ug/Kg	☼	04/30/25 13:32	05/06/25 10:31	1
Indeno[1,2,3-cd]pyrene	**280**		200	25	ug/Kg	☼	04/30/25 13:32	05/06/25 10:31	1
Isophorone	ND		200	43	ug/Kg	☼	04/30/25 13:32	05/06/25 10:31	1
Naphthalene	**85**	**J**	200	26	ug/Kg	☼	04/30/25 13:32	05/06/25 10:31	1
Nitrobenzene	ND		200	23	ug/Kg	☼	04/30/25 13:32	05/06/25 10:31	1
N-Nitrosodi-n-propylamine	ND		200	35	ug/Kg	☼	04/30/25 13:32	05/06/25 10:31	1
N-Nitrosodiphenylamine	ND		200	160	ug/Kg	☼	04/30/25 13:32	05/06/25 10:31	1
Pentachlorophenol	ND		390	200	ug/Kg	☼	04/30/25 13:32	05/06/25 10:31	1
Phenanthrene	**1100**		200	30	ug/Kg	☼	04/30/25 13:32	05/06/25 10:31	1
Phenol	ND		200	31	ug/Kg	☼	04/30/25 13:32	05/06/25 10:31	1
Pyrene	**720**		200	24	ug/Kg	☼	04/30/25 13:32	05/06/25 10:31	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Unknown	*4100*	*T J*	*ug/Kg*	☼	*1.99*	*N/A*	*04/30/25 13:32*	*05/06/25 10:31*	*1*
Unknown	*1200*	*T J*	*ug/Kg*	☼	*3.46*	*N/A*	*04/30/25 13:32*	*05/06/25 10:31*	*1*
Column Bleed	*590*	*T J*	*ug/Kg*	☼	*5.33*	*N/A*	*04/30/25 13:32*	*05/06/25 10:31*	*1*
Unknown	*730*	*T J*	*ug/Kg*	☼	*7.83*	*N/A*	*04/30/25 13:32*	*05/06/25 10:31*	*1*
Tridecane	*530*	*T J N*	*ug/Kg*	☼	*8.03*	*629-50-5*	*04/30/25 13:32*	*05/06/25 10:31*	*1*
Hexadecane	*830*	*T J N*	*ug/Kg*	☼	*9.08*	*544-76-3*	*04/30/25 13:32*	*05/06/25 10:31*	*1*
Pentadecane, 2,6,10-trimethyl-	*790*	*T J N*	*ug/Kg*	☼	*10.15*	*3892-00-0*	*04/30/25 13:32*	*05/06/25 10:31*	*1*
Pentadecane, 2,6,10,14-tetramethyl-	*3400*	*T J N*	*ug/Kg*	☼	*10.44*	*1921-70-6*	*04/30/25 13:32*	*05/06/25 10:31*	*1*
Heptadecane	*820*	*T J N*	*ug/Kg*	☼	*10.89*	*629-78-7*	*04/30/25 13:32*	*05/06/25 10:31*	*1*
Nonadecane	*920*	*T J N*	*ug/Kg*	☼	*11.31*	*629-92-5*	*04/30/25 13:32*	*05/06/25 10:31*	*1*
1H-Cyclopropa[l]phenanthrene,1a,9b -dihydro-	*750*	*T J N*	*ug/Kg*	☼	*11.47*	*949-41-7*	*04/30/25 13:32*	*05/06/25 10:31*	*1*
Phenanthrene, 1-methyl-	*570*	*T J N*	*ug/Kg*	☼	*11.54*	*832-69-9*	*04/30/25 13:32*	*05/06/25 10:31*	*1*
Heptacosane	*850*	*T J N*	*ug/Kg*	☼	*11.69*	*593-49-7*	*04/30/25 13:32*	*05/06/25 10:31*	*1*
Phenanthrene, 3,6-dimethyl-	*570*	*T J N*	*ug/Kg*	☼	*11.96*	*1576-67-6*	*04/30/25 13:32*	*05/06/25 10:31*	*1*
Heneicosane	*1100*	*T J N*	*ug/Kg*	☼	*12.04*	*629-94-7*	*04/30/25 13:32*	*05/06/25 10:31*	*1*
Octacosane	*570*	*T J N*	*ug/Kg*	☼	*12.36*	*630-02-4*	*04/30/25 13:32*	*05/06/25 10:31*	*1*
11H-Benzo[b]fluorene	*540*	*T J N*	*ug/Kg*	☼	*12.58*	*243-17-4*	*04/30/25 13:32*	*05/06/25 10:31*	*1*
Docosane	*680*	*T J N*	*ug/Kg*	☼	*12.67*	*629-97-0*	*04/30/25 13:32*	*05/06/25 10:31*	*1*
Eicosane	*630*	*T J N*	*ug/Kg*	☼	*14.27*	*112-95-8*	*04/30/25 13:32*	*05/06/25 10:31*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol (Surr)	*91*		*26 - 143*	*04/30/25 13:32*	*05/06/25 10:31*	*1*
2-Fluorobiphenyl (Surr)	*85*		*50 - 121*	*04/30/25 13:32*	*05/06/25 10:31*	*1*
2-Fluorophenol (Surr)	*69*		*36 - 120*	*04/30/25 13:32*	*05/06/25 10:31*	*1*
Nitrobenzene-d5 (Surr)	*75*		*40 - 121*	*04/30/25 13:32*	*05/06/25 10:31*	*1*
Phenol-d5 (Surr)	*76*		*41 - 120*	*04/30/25 13:32*	*05/06/25 10:31*	*1*
p-Terphenyl-d14 (Surr)	*88*		*46 - 143*	*04/30/25 13:32*	*05/06/25 10:31*	*1*

Client: Roux Environmental Engineering and Geology DPC
Job ID: 480-229067-1
Project/Site: BCP RI - 619 Exchange Street Site

Client Sample ID: MW-3 0.5-2.5Ft
Lab Sample ID: 480-229067-4
Date Collected: 04/29/25 13:30
Matrix: Solid
Date Received: 04/29/25 15:43
Percent Solids: 83.7

Method: SW846 6010D - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	3440		11.6	10	mg/Kg	☼	04/30/25 14:09	05/01/25 12:22	1
Antimony	2.0	J	17.3	0.61	mg/Kg	☼	04/30/25 14:09	05/01/25 12:22	1
Arsenic	20.8		2.3	1.0	mg/Kg	☼	04/30/25 14:09	05/01/25 12:22	1
Barium	101		0.58	0.16	mg/Kg	☼	04/30/25 14:09	05/01/25 12:22	1
Beryllium	0.86		0.23	0.046	mg/Kg	☼	04/30/25 14:09	05/01/25 12:22	1
Cadmium	0.29		0.23	0.081	mg/Kg	☼	04/30/25 14:09	05/01/25 12:22	1
Calcium	13400		57.8	31.2	mg/Kg	☼	04/30/25 14:09	05/01/25 12:22	1
Chromium	13.1		0.58	0.42	mg/Kg	☼	04/30/25 14:09	05/01/25 12:22	1
Cobalt	8.1		0.58	0.12	mg/Kg	☼	04/30/25 14:09	05/01/25 12:22	1
Copper	79.5		1.2	0.66	mg/Kg	☼	04/30/25 14:09	05/01/25 12:22	1
Iron	28200		11.6	9.8	mg/Kg	☼	04/30/25 14:09	05/01/25 12:22	1
Lead	281		1.2	0.53	mg/Kg	☼	04/30/25 14:09	05/01/25 12:22	1
Magnesium	2590		23.1	9.8	mg/Kg	☼	04/30/25 14:09	05/01/25 12:22	1
Manganese	236		1.2	0.32	mg/Kg	☼	04/30/25 14:09	05/01/25 12:22	1
Nickel	16.8		5.8	0.29	mg/Kg	☼	04/30/25 14:09	05/01/25 12:22	1
Potassium	772		34.7	28.0	mg/Kg	☼	04/30/25 14:09	05/01/25 12:22	1
Selenium	2.1	J	4.6	0.92	mg/Kg	☼	04/30/25 14:09	05/01/25 12:22	1
Silver	0.25	J ^5-	0.69	0.23	mg/Kg	☼	04/30/25 14:09	05/01/25 12:22	1
Sodium	135	J	162	70.9	mg/Kg	☼	04/30/25 14:09	05/01/25 12:22	1
Thallium	ND		6.9	0.88	mg/Kg	☼	04/30/25 14:09	05/01/25 12:22	1
Vanadium	23.7		0.58	0.15	mg/Kg	☼	04/30/25 14:09	05/01/25 12:22	1
Zinc	96.9		2.3	1.2	mg/Kg	☼	04/30/25 14:09	05/01/25 12:22	1

Method: SW846 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	1.6		0.023	0.0054	mg/Kg	☼	05/02/25 09:11	05/02/25 11:44	1

Client: Roux Environmental Engineering and Geology DPC
Job ID: 480-229067-1
Project/Site: BCP RI - 619 Exchange Street Site

Client Sample ID: MW-1 0.25-3Ft
Lab Sample ID: 480-229067-5
Date Collected: 04/29/25 13:00
Matrix: Solid
Date Received: 04/29/25 15:43
Percent Solids: 80.1

Method: SW846 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		6.6	0.48	ug/Kg	☼	04/29/25 16:52	04/30/25 22:41	1
1,1,2,2-Tetrachloroethane	ND	F1	6.6	1.1	ug/Kg	☼	04/29/25 16:52	04/30/25 22:41	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		6.6	1.5	ug/Kg	☼	04/29/25 16:52	04/30/25 22:41	1
1,1,2-Trichloroethane	ND	F1	6.6	0.86	ug/Kg	☼	04/29/25 16:52	04/30/25 22:41	1
1,1-Dichloroethane	ND		6.6	0.81	ug/Kg	☼	04/29/25 16:52	04/30/25 22:41	1
1,1-Dichloroethene	ND		6.6	0.81	ug/Kg	☼	04/29/25 16:52	04/30/25 22:41	1
1,2,4-Trichlorobenzene	ND	F2 F1	6.6	0.40	ug/Kg	☼	04/29/25 16:52	04/30/25 22:41	1
1,2,4-Trimethylbenzene	ND	F2 F1	6.6	1.3	ug/Kg	☼	04/29/25 16:52	04/30/25 22:41	1
1,2-Dibromo-3-Chloropropane	ND	F1	6.6	3.3	ug/Kg	☼	04/29/25 16:52	04/30/25 22:41	1
1,2-Dibromoethane	ND	F1	6.6	0.85	ug/Kg	☼	04/29/25 16:52	04/30/25 22:41	1
1,2-Dichlorobenzene	ND	F2 F1	6.6	0.52	ug/Kg	☼	04/29/25 16:52	04/30/25 22:41	1
1,2-Dichloroethane	ND	F1	6.6	0.33	ug/Kg	☼	04/29/25 16:52	04/30/25 22:41	1
1,2-Dichloropropane	ND	F1	6.6	3.3	ug/Kg	☼	04/29/25 16:52	04/30/25 22:41	1
1,3,5-Trimethylbenzene	ND	F2 F1	6.6	0.43	ug/Kg	☼	04/29/25 16:52	04/30/25 22:41	1
1,3-Dichlorobenzene	ND	F2 F1	6.6	0.34	ug/Kg	☼	04/29/25 16:52	04/30/25 22:41	1
1,4-Dichlorobenzene	ND	F2 F1	6.6	0.93	ug/Kg	☼	04/29/25 16:52	04/30/25 22:41	1
2-Butanone (MEK)	ND	F1	33	2.4	ug/Kg	☼	04/29/25 16:52	04/30/25 22:41	1
2-Hexanone	ND	F1	33	3.3	ug/Kg	☼	04/29/25 16:52	04/30/25 22:41	1
4-Isopropyltoluene	ND	F2 F1	6.6	0.53	ug/Kg	☼	04/29/25 16:52	04/30/25 22:41	1
4-Methyl-2-pentanone (MIBK)	ND		33	2.2	ug/Kg	☼	04/29/25 16:52	04/30/25 22:41	1
Acetone	ND		33	5.6	ug/Kg	☼	04/29/25 16:52	04/30/25 22:41	1
Benzene	ND	F1	6.6	0.32	ug/Kg	☼	04/29/25 16:52	04/30/25 22:41	1
Bromodichloromethane	ND	F1	6.6	0.89	ug/Kg	☼	04/29/25 16:52	04/30/25 22:41	1
Bromoform	ND	F1	6.6	3.3	ug/Kg	☼	04/29/25 16:52	04/30/25 22:41	1
Bromomethane	ND		6.6	0.60	ug/Kg	☼	04/29/25 16:52	04/30/25 22:41	1
Carbon disulfide	ND	F2 F1	6.6	3.3	ug/Kg	☼	04/29/25 16:52	04/30/25 22:41	1
Carbon tetrachloride	ND		6.6	0.64	ug/Kg	☼	04/29/25 16:52	04/30/25 22:41	1
Chlorobenzene	ND	F2 F1	6.6	0.87	ug/Kg	☼	04/29/25 16:52	04/30/25 22:41	1
Chloroethane	ND		6.6	1.5	ug/Kg	☼	04/29/25 16:52	04/30/25 22:41	1
Chloroform	**1.6**	**J F1 B**	6.6	0.41	ug/Kg	☼	04/29/25 16:52	04/30/25 22:41	1
Chloromethane	ND		6.6	0.40	ug/Kg	☼	04/29/25 16:52	04/30/25 22:41	1
cis-1,2-Dichloroethene	ND	F2 F1	6.6	0.85	ug/Kg	☼	04/29/25 16:52	04/30/25 22:41	1
cis-1,3-Dichloropropene	ND	F2 F1	6.6	0.95	ug/Kg	☼	04/29/25 16:52	04/30/25 22:41	1
Cyclohexane	ND	*+	6.6	0.93	ug/Kg	☼	04/29/25 16:52	04/30/25 22:41	1
Dibromochloromethane	ND	F1	6.6	0.85	ug/Kg	☼	04/29/25 16:52	04/30/25 22:41	1
Dichlorodifluoromethane	ND		6.6	0.55	ug/Kg	☼	04/29/25 16:52	04/30/25 22:41	1
Ethylbenzene	ND	F2 F1	6.6	0.46	ug/Kg	☼	04/29/25 16:52	04/30/25 22:41	1
Isopropylbenzene	ND	F2 F1	6.6	1.0	ug/Kg	☼	04/29/25 16:52	04/30/25 22:41	1
Methyl acetate	ND		33	4.0	ug/Kg	☼	04/29/25 16:52	04/30/25 22:41	1
Methyl tert-butyl ether	ND		6.6	0.65	ug/Kg	☼	04/29/25 16:52	04/30/25 22:41	1
Methylcyclohexane	ND	F2 F1	6.6	1.0	ug/Kg	☼	04/29/25 16:52	04/30/25 22:41	1
Methylene Chloride	ND		6.6	3.0	ug/Kg	☼	04/29/25 16:52	04/30/25 22:41	1
Naphthalene	ND	F2 F1	6.6	0.89	ug/Kg	☼	04/29/25 16:52	04/30/25 22:41	1
n-Butylbenzene	ND	F2 F1	6.6	0.58	ug/Kg	☼	04/29/25 16:52	04/30/25 22:41	1
N-Propylbenzene	ND	F2 F1	6.6	0.53	ug/Kg	☼	04/29/25 16:52	04/30/25 22:41	1
sec-Butylbenzene	ND	F2 F1	6.6	0.58	ug/Kg	☼	04/29/25 16:52	04/30/25 22:41	1
Styrene	ND	F2 F1	6.6	0.33	ug/Kg	☼	04/29/25 16:52	04/30/25 22:41	1
tert-Butylbenzene	ND	F2	6.6	0.69	ug/Kg	☼	04/29/25 16:52	04/30/25 22:41	1
Tetrachloroethene	ND	F2 F1	6.6	0.89	ug/Kg	☼	04/29/25 16:52	04/30/25 22:41	1

Client: Roux Environmental Engineering and Geology DPC
Job ID: 480-229067-1
Project/Site: BCP RI - 619 Exchange Street Site

Client Sample ID: MW-1 0.25-3Ft
Lab Sample ID: 480-229067-5
Date Collected: 04/29/25 13:00
Matrix: Solid
Date Received: 04/29/25 15:43
Percent Solids: 80.1

Method: SW846 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Toluene	ND	F2 F1	6.6	0.50	ug/Kg	☼	04/29/25 16:52	04/30/25 22:41	1
trans-1,2-Dichloroethene	ND	F2 F1	6.6	0.68	ug/Kg	☼	04/29/25 16:52	04/30/25 22:41	1
trans-1,3-Dichloropropene	ND	F2 F1	6.6	2.9	ug/Kg	☼	04/29/25 16:52	04/30/25 22:41	1
Trichloroethene	ND	F2 F1	6.6	1.5	ug/Kg	☼	04/29/25 16:52	04/30/25 22:41	1
Trichlorofluoromethane	ND		6.6	0.63	ug/Kg	☼	04/29/25 16:52	04/30/25 22:41	1
Vinyl chloride	ND		6.6	0.81	ug/Kg	☼	04/29/25 16:52	04/30/25 22:41	1
Xylenes, Total	ND	F2 F1	13	1.1	ug/Kg	☼	04/29/25 16:52	04/30/25 22:41	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/Kg*	☼		*N/A*	*04/29/25 16:52*	*04/30/25 22:41*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*108*		*64 - 126*	*04/29/25 16:52*	*04/30/25 22:41*	*1*
4-Bromofluorobenzene (Surr)	*94*		*72 - 126*	*04/29/25 16:52*	*04/30/25 22:41*	*1*
Dibromofluoromethane (Surr)	*104*		*60 - 140*	*04/29/25 16:52*	*04/30/25 22:41*	*1*
Toluene-d8 (Surr)	*102*		*71 - 125*	*04/29/25 16:52*	*04/30/25 22:41*	*1*

Method: SW846 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	ND		120	69	ug/Kg	☼	04/30/25 13:32	05/02/25 06:47	1
2,4,5-Trichlorophenol	ND		210	57	ug/Kg	☼	04/30/25 13:32	05/02/25 06:47	1
2,4,6-Trichlorophenol	ND		210	42	ug/Kg	☼	04/30/25 13:32	05/02/25 06:47	1
2,4-Dichlorophenol	ND		210	22	ug/Kg	☼	04/30/25 13:32	05/02/25 06:47	1
2,4-Dimethylphenol	ND		210	51	ug/Kg	☼	04/30/25 13:32	05/02/25 06:47	1
2,4-Dinitrophenol	ND		2100	980	ug/Kg	☼	04/30/25 13:32	05/02/25 06:47	1
2,4-Dinitrotoluene	ND		210	44	ug/Kg	☼	04/30/25 13:32	05/02/25 06:47	1
2,6-Dinitrotoluene	ND		210	25	ug/Kg	☼	04/30/25 13:32	05/02/25 06:47	1
2-Chloronaphthalene	ND		210	35	ug/Kg	☼	04/30/25 13:32	05/02/25 06:47	1
2-Chlorophenol	ND		410	39	ug/Kg	☼	04/30/25 13:32	05/02/25 06:47	1
2-Methylnaphthalene	**320**		210	42	ug/Kg	☼	04/30/25 13:32	05/02/25 06:47	1
2-Methylphenol	ND		210	25	ug/Kg	☼	04/30/25 13:32	05/02/25 06:47	1
2-Nitroaniline	ND		410	31	ug/Kg	☼	04/30/25 13:32	05/02/25 06:47	1
2-Nitrophenol	ND		210	60	ug/Kg	☼	04/30/25 13:32	05/02/25 06:47	1
3,3'-Dichlorobenzidine	ND	F1	410	250	ug/Kg	☼	04/30/25 13:32	05/02/25 06:47	1
3-Nitroaniline	ND		410	59	ug/Kg	☼	04/30/25 13:32	05/02/25 06:47	1
4,6-Dinitro-2-methylphenol	ND		410	210	ug/Kg	☼	04/30/25 13:32	05/02/25 06:47	1
4-Bromophenyl phenyl ether	ND		210	30	ug/Kg	☼	04/30/25 13:32	05/02/25 06:47	1
4-Chloro-3-methylphenol	ND		210	52	ug/Kg	☼	04/30/25 13:32	05/02/25 06:47	1
4-Chloroaniline	ND		210	52	ug/Kg	☼	04/30/25 13:32	05/02/25 06:47	1
4-Chlorophenyl phenyl ether	ND		210	26	ug/Kg	☼	04/30/25 13:32	05/02/25 06:47	1
4-Methylphenol	ND		410	25	ug/Kg	☼	04/30/25 13:32	05/02/25 06:47	1
4-Nitroaniline	ND		410	110	ug/Kg	☼	04/30/25 13:32	05/02/25 06:47	1
4-Nitrophenol	ND		410	150	ug/Kg	☼	04/30/25 13:32	05/02/25 06:47	1
Acenaphthene	**60**	**J**	210	31	ug/Kg	☼	04/30/25 13:32	05/02/25 06:47	1
Acenaphthylene	**88**	**J**	210	27	ug/Kg	☼	04/30/25 13:32	05/02/25 06:47	1
Acetophenone	ND		210	29	ug/Kg	☼	04/30/25 13:32	05/02/25 06:47	1
Anthracene	**250**		210	52	ug/Kg	☼	04/30/25 13:32	05/02/25 06:47	1
Atrazine	ND		210	74	ug/Kg	☼	04/30/25 13:32	05/02/25 06:47	1
Benzaldehyde	ND		210	170	ug/Kg	☼	04/30/25 13:32	05/02/25 06:47	1
Benzo[a]anthracene	**840**		210	21	ug/Kg	☼	04/30/25 13:32	05/02/25 06:47	1

Client Sample ID: MW-1 0.25-3Ft
Lab Sample ID: 480-229067-5
Date Collected: 04/29/25 13:00
Matrix: Solid
Date Received: 04/29/25 15:43
Percent Solids: 80.1

Method: SW846 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[a]pyrene	**720**		210	31	ug/Kg	☼	04/30/25 13:32	05/02/25 06:47	1
Benzo[b]fluoranthene	**1100**	**F2**	210	34	ug/Kg	☼	04/30/25 13:32	05/02/25 06:47	1
Benzo[g,h,i]perylene	**580**		210	22	ug/Kg	☼	04/30/25 13:32	05/02/25 06:47	1
Benzo[k]fluoranthene	**330**		210	27	ug/Kg	☼	04/30/25 13:32	05/02/25 06:47	1
Biphenyl	**33**	**J**	210	31	ug/Kg	☼	04/30/25 13:32	05/02/25 06:47	1
bis (2-chloroisopropyl) ether	ND		210	42	ug/Kg	☼	04/30/25 13:32	05/02/25 06:47	1
Bis(2-chloroethoxy)methane	ND		210	45	ug/Kg	☼	04/30/25 13:32	05/02/25 06:47	1
Bis(2-chloroethyl)ether	ND		210	27	ug/Kg	☼	04/30/25 13:32	05/02/25 06:47	1
Bis(2-ethylhexyl) phthalate	ND		210	72	ug/Kg	☼	04/30/25 13:32	05/02/25 06:47	1
Butyl benzyl phthalate	ND		210	35	ug/Kg	☼	04/30/25 13:32	05/02/25 06:47	1
Caprolactam	ND		210	64	ug/Kg	☼	04/30/25 13:32	05/02/25 06:47	1
Carbazole	**120**	**J**	210	25	ug/Kg	☼	04/30/25 13:32	05/02/25 06:47	1
Chrysene	**890**		210	47	ug/Kg	☼	04/30/25 13:32	05/02/25 06:47	1
Dibenz(a,h)anthracene	**210**		210	37	ug/Kg	☼	04/30/25 13:32	05/02/25 06:47	1
Dibenzofuran	**150**	**J**	210	25	ug/Kg	☼	04/30/25 13:32	05/02/25 06:47	1
Diethyl phthalate	ND		210	27	ug/Kg	☼	04/30/25 13:32	05/02/25 06:47	1
Dimethyl phthalate	ND		210	25	ug/Kg	☼	04/30/25 13:32	05/02/25 06:47	1
Di-n-butyl phthalate	ND		210	36	ug/Kg	☼	04/30/25 13:32	05/02/25 06:47	1
Di-n-octyl phthalate	ND		210	25	ug/Kg	☼	04/30/25 13:32	05/02/25 06:47	1
Fluoranthene	**1200**	**F1**	210	22	ug/Kg	☼	04/30/25 13:32	05/02/25 06:47	1
Fluorene	**100**	**J**	210	25	ug/Kg	☼	04/30/25 13:32	05/02/25 06:47	1
Hexachlorobenzene	ND		210	29	ug/Kg	☼	04/30/25 13:32	05/02/25 06:47	1
Hexachlorobutadiene	ND		210	31	ug/Kg	☼	04/30/25 13:32	05/02/25 06:47	1
Hexachlorocyclopentadiene	ND		210	29	ug/Kg	☼	04/30/25 13:32	05/02/25 06:47	1
Hexachloroethane	ND		210	27	ug/Kg	☼	04/30/25 13:32	05/02/25 06:47	1
Indeno[1,2,3-cd]pyrene	**500**		210	26	ug/Kg	☼	04/30/25 13:32	05/02/25 06:47	1
Isophorone	ND		210	45	ug/Kg	☼	04/30/25 13:32	05/02/25 06:47	1
Naphthalene	**120**	**J**	210	27	ug/Kg	☼	04/30/25 13:32	05/02/25 06:47	1
Nitrobenzene	ND		210	24	ug/Kg	☼	04/30/25 13:32	05/02/25 06:47	1
N-Nitrosodi-n-propylamine	ND		210	36	ug/Kg	☼	04/30/25 13:32	05/02/25 06:47	1
N-Nitrosodiphenylamine	ND		210	170	ug/Kg	☼	04/30/25 13:32	05/02/25 06:47	1
Pentachlorophenol	ND		410	210	ug/Kg	☼	04/30/25 13:32	05/02/25 06:47	1
Phenanthrene	**1400**	**F1**	210	31	ug/Kg	☼	04/30/25 13:32	05/02/25 06:47	1
Phenol	ND		210	32	ug/Kg	☼	04/30/25 13:32	05/02/25 06:47	1
Pyrene	**1200**		210	25	ug/Kg	☼	04/30/25 13:32	05/02/25 06:47	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Unknown	*5700*	*T J*	*ug/Kg*	☼	*1.99*	*N/A*	*04/30/25 13:32*	*05/02/25 06:47*	*1*
Unknown	*1200*	*T J*	*ug/Kg*	☼	*3.47*	*N/A*	*04/30/25 13:32*	*05/02/25 06:47*	*1*
Unknown	*570*	*T J*	*ug/Kg*	☼	*7.81*	*N/A*	*04/30/25 13:32*	*05/02/25 06:47*	*1*
Tridecane	*460*	*T J N*	*ug/Kg*	☼	*8.01*	*629-50-5*	*04/30/25 13:32*	*05/02/25 06:47*	*1*
Naphthalene, 2,3-dimethyl-	*430*	*T J N*	*ug/Kg*	☼	*8.90*	*581-40-8*	*04/30/25 13:32*	*05/02/25 06:47*	*1*
Unknown	*890*	*T J*	*ug/Kg*	☼	*9.05*	*N/A*	*04/30/25 13:32*	*05/02/25 06:47*	*1*
Dodecane	*420*	*T J N*	*ug/Kg*	☼	*9.87*	*112-40-3*	*04/30/25 13:32*	*05/02/25 06:47*	*1*
Unknown	*730*	*T J*	*ug/Kg*	☼	*10.12*	*N/A*	*04/30/25 13:32*	*05/02/25 06:47*	*1*
Heptadecane, 2,6-dimethyl-	*2600*	*T J N*	*ug/Kg*	☼	*10.41*	*54105-67-8*	*04/30/25 13:32*	*05/02/25 06:47*	*1*
Octadecane	*540*	*T J N*	*ug/Kg*	☼	*10.85*	*593-45-3*	*04/30/25 13:32*	*05/02/25 06:47*	*1*
Nonadecane	*620*	*T J N*	*ug/Kg*	☼	*11.27*	*629-92-5*	*04/30/25 13:32*	*05/02/25 06:47*	*1*
1H-Cyclopropa[l]phenanthrene,1a,9b -dihydro-	*630*	*T J N*	*ug/Kg*	☼	*11.42*	*949-41-7*	*04/30/25 13:32*	*05/02/25 06:47*	*1*

Client Sample ID: MW-1 0.25-3Ft
Lab Sample ID: 480-229067-5
Date Collected: 04/29/25 13:00
Matrix: Solid
Date Received: 04/29/25 15:43
Percent Solids: 80.1

Method: SW846 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Tentatively Identified Compound	Est. Result	Qualifier	Unit	D	RT	CAS No.	Prepared	Analyzed	Dil Fac
Unknown	990	T J	ug/Kg	☼	11.49	N/A	04/30/25 13:32	05/02/25 06:47	1
Eicosane	680	T J N	ug/Kg	☼	11.65	112-95-8	04/30/25 13:32	05/02/25 06:47	1
Unknown	400	T J	ug/Kg	☼	11.68	N/A	04/30/25 13:32	05/02/25 06:47	1
Phenanthrene, 3,6-dimethyl-	480	T J N	ug/Kg	☼	11.91	1576-67-6	04/30/25 13:32	05/02/25 06:47	1
Hexadecane	720	T J N	ug/Kg	☼	11.99	544-76-3	04/30/25 13:32	05/02/25 06:47	1
Unknown	400	T J	ug/Kg	☼	12.62	N/A	04/30/25 13:32	05/02/25 06:47	1
Perylene	430	T J N	ug/Kg	☼	14.22	198-55-0	04/30/25 13:32	05/02/25 06:47	1
Benzo[e]pyrene	420	T J N	ug/Kg	☼	14.36	192-97-2	04/30/25 13:32	05/02/25 06:47	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol (Surr)	106		26 - 143	04/30/25 13:32	05/02/25 06:47	1
2-Fluorobiphenyl (Surr)	87		50 - 121	04/30/25 13:32	05/02/25 06:47	1
2-Fluorophenol (Surr)	76		36 - 120	04/30/25 13:32	05/02/25 06:47	1
Nitrobenzene-d5 (Surr)	101		40 - 121	04/30/25 13:32	05/02/25 06:47	1
Phenol-d5 (Surr)	89		41 - 120	04/30/25 13:32	05/02/25 06:47	1
p-Terphenyl-d14 (Surr)	101		46 - 143	04/30/25 13:32	05/02/25 06:47	1

Method: SW846 8081B - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	**27**	**J**	40	7.8	ug/Kg	☼	05/01/25 06:41	05/01/25 16:06	10
4,4'-DDE	**8.5**	**J**	40	8.4	ug/Kg	☼	05/01/25 06:41	05/01/25 16:06	10
4,4'-DDT	**34**	**J B**	40	9.4	ug/Kg	☼	05/01/25 06:41	05/01/25 16:06	10
Aldrin	ND		40	9.8	ug/Kg	☼	05/01/25 06:41	05/01/25 16:06	10
alpha-BHC	ND		40	7.2	ug/Kg	☼	05/01/25 06:41	05/01/25 16:06	10
cis-Chlordane	ND		40	20	ug/Kg	☼	05/01/25 06:41	05/01/25 16:06	10
beta-BHC	ND		40	7.2	ug/Kg	☼	05/01/25 06:41	05/01/25 16:06	10
delta-BHC	ND		40	7.4	ug/Kg	☼	05/01/25 06:41	05/01/25 16:06	10
Dieldrin	ND		40	9.6	ug/Kg	☼	05/01/25 06:41	05/01/25 16:06	10
Endosulfan I	ND		40	7.7	ug/Kg	☼	05/01/25 06:41	05/01/25 16:06	10
Endosulfan II	ND		40	7.2	ug/Kg	☼	05/01/25 06:41	05/01/25 16:06	10
Endosulfan sulfate	ND		40	7.5	ug/Kg	☼	05/01/25 06:41	05/01/25 16:06	10
Endrin	ND		40	7.9	ug/Kg	☼	05/01/25 06:41	05/01/25 16:06	10
Endrin aldehyde	ND		40	10	ug/Kg	☼	05/01/25 06:41	05/01/25 16:06	10
Endrin ketone	**21**	**J B**	40	9.8	ug/Kg	☼	05/01/25 06:41	05/01/25 16:06	10
gamma-BHC (Lindane)	ND		40	7.3	ug/Kg	☼	05/01/25 06:41	05/01/25 16:06	10
trans-Chlordane	ND		40	13	ug/Kg	☼	05/01/25 06:41	05/01/25 16:06	10
Heptachlor	ND		40	8.7	ug/Kg	☼	05/01/25 06:41	05/01/25 16:06	10
Heptachlor epoxide	ND		40	10	ug/Kg	☼	05/01/25 06:41	05/01/25 16:06	10
Methoxychlor	**35**	**J B**	40	8.2	ug/Kg	☼	05/01/25 06:41	05/01/25 16:06	10
Toxaphene	ND		400	230	ug/Kg	☼	05/01/25 06:41	05/01/25 16:06	10

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
DCB Decachlorobiphenyl	222	S1+	45 - 120	05/01/25 06:41	05/01/25 16:06	10
DCB Decachlorobiphenyl	289	S1+	45 - 120	05/01/25 06:41	05/01/25 16:06	10
Tetrachloro-m-xylene	115		30 - 124	05/01/25 06:41	05/01/25 16:06	10
Tetrachloro-m-xylene	82		30 - 124	05/01/25 06:41	05/01/25 16:06	10

Method: SW846 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		0.24	0.047	mg/Kg	☼	05/01/25 07:04	05/01/25 16:58	1

Client Sample ID: MW-1 0.25-3Ft
Lab Sample ID: 480-229067-5
Date Collected: 04/29/25 13:00
Matrix: Solid
Date Received: 04/29/25 15:43
Percent Solids: 80.1

Method: SW846 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1221	ND		0.24	0.047	mg/Kg	☼	05/01/25 07:04	05/01/25 16:58	1
PCB-1232	ND		0.24	0.047	mg/Kg	☼	05/01/25 07:04	05/01/25 16:58	1
PCB-1242	ND		0.24	0.047	mg/Kg	☼	05/01/25 07:04	05/01/25 16:58	1
PCB-1248	ND		0.24	0.047	mg/Kg	☼	05/01/25 07:04	05/01/25 16:58	1
PCB-1254	ND		0.24	0.11	mg/Kg	☼	05/01/25 07:04	05/01/25 16:58	1
PCB-1260	ND		0.24	0.11	mg/Kg	☼	05/01/25 07:04	05/01/25 16:58	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*94*		*65 - 174*	*05/01/25 07:04*	*05/01/25 16:58*	*1*
DCB Decachlorobiphenyl	*107*		*65 - 174*	*05/01/25 07:04*	*05/01/25 16:58*	*1*
Tetrachloro-m-xylene	*103*		*60 - 154*	*05/01/25 07:04*	*05/01/25 16:58*	*1*
Tetrachloro-m-xylene	*97*		*60 - 154*	*05/01/25 07:04*	*05/01/25 16:58*	*1*

Method: SW846 8151A - Herbicides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-T	ND		21	6.6	ug/Kg	☼	05/01/25 06:27	05/08/25 13:37	1
2,4-D	ND		21	13	ug/Kg	☼	05/01/25 06:27	05/08/25 13:37	1
Dichlorprop	ND		21	10	ug/Kg	☼	05/01/25 06:27	05/08/25 13:37	1
Pentachlorophenol	ND		21	6.7	ug/Kg	☼	05/01/25 06:27	05/08/25 13:37	1
Picloram	ND		21	8.9	ug/Kg	☼	05/01/25 06:27	05/08/25 13:37	1
Silvex (2,4,5-TP)	ND		21	7.4	ug/Kg	☼	05/01/25 06:27	05/08/25 13:37	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4-Dichlorophenylacetic acid	*72*		*28 - 129*	*05/01/25 06:27*	*05/08/25 13:37*	*1*
2,4-Dichlorophenylacetic acid	*72*		*28 - 129*	*05/01/25 06:27*	*05/08/25 13:37*	*1*

Method: EPA Draft-3 1633 - Per- and Polyfluoroalkyl Substances by LC/MS/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)	ND		0.62	0.15	ug/Kg	☼	05/02/25 08:22	05/03/25 02:49	1
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2 FTS)	ND		0.62	0.15	ug/Kg	☼	05/02/25 08:22	05/03/25 02:49	1
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2 FTS)	ND		0.62	0.15	ug/Kg	☼	05/02/25 08:22	05/03/25 02:49	1
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2 FTS)	ND		0.62	0.15	ug/Kg	☼	05/02/25 08:22	05/03/25 02:49	1
3-Perfluoroheptylpropanoic acid (7:3 FTCA)	ND		3.9	0.97	ug/Kg	☼	05/02/25 08:22	05/03/25 02:49	1
3-Perfluoropentylpropanoic acid (5:3 FTCA)	ND		3.9	0.97	ug/Kg	☼	05/02/25 08:22	05/03/25 02:49	1
3-Perfluoropropylpropanoic acid (3:3 FTCA)	ND		0.77	0.19	ug/Kg	☼	05/02/25 08:22	05/03/25 02:49	1
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	ND		0.62	0.15	ug/Kg	☼	05/02/25 08:22	05/03/25 02:49	1
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9Cl-PF3ONS)	ND		0.62	0.15	ug/Kg	☼	05/02/25 08:22	05/03/25 02:49	1
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA)	ND		0.62	0.15	ug/Kg	☼	05/02/25 08:22	05/03/25 02:49	1
N-ethylperfluorooctane sulfonamide (NEtFOSA)	ND		0.15	0.039	ug/Kg	☼	05/02/25 08:22	05/03/25 02:49	1
N-ethylperfluorooctane sulfonamidoethanol (NEtFOSE)	ND		1.5	0.39	ug/Kg	☼	05/02/25 08:22	05/03/25 02:49	1
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	ND		0.15	0.039	ug/Kg	☼	05/02/25 08:22	05/03/25 02:49	1

Client: Roux Environmental Engineering and Geology DPC
Job ID: 480-229067-1
Project/Site: BCP RI - 619 Exchange Street Site

Client Sample ID: MW-1 0.25-3Ft
Lab Sample ID: 480-229067-5
Date Collected: 04/29/25 13:00
Matrix: Solid
Date Received: 04/29/25 15:43
Percent Solids: 80.1

Method: EPA Draft-3 1633 - Per- and Polyfluoroalkyl Substances by LC/MS/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
N-methylperfluorooctane sulfonamide (NMeFOSA)	ND		0.15	0.039	ug/Kg	☼	05/02/25 08:22	05/03/25 02:49	1
N-methylperfluorooctane sulfonamidoethanol (NMeFOSE)	ND		1.5	0.39	ug/Kg	☼	05/02/25 08:22	05/03/25 02:49	1
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	ND		0.15	0.039	ug/Kg	☼	05/02/25 08:22	05/03/25 02:49	1
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	ND		0.31	0.077	ug/Kg	☼	05/02/25 08:22	05/03/25 02:49	1
Perfluoro (2-ethoxyethane) sulfonic acid (PFEESA)	ND		0.31	0.077	ug/Kg	☼	05/02/25 08:22	05/03/25 02:49	1
Perfluoro-3-methoxypropanoic acid (PFMPA)	ND		0.31	0.077	ug/Kg	☼	05/02/25 08:22	05/03/25 02:49	1
Perfluoro-4-methoxybutanoic acid (PFMBA)	ND		0.31	0.077	ug/Kg	☼	05/02/25 08:22	05/03/25 02:49	1
Perfluorobutanesulfonic acid (PFBS)	ND		0.15	0.039	ug/Kg	☼	05/02/25 08:22	05/03/25 02:49	1
Perfluorobutanoic acid (PFBA)	ND		0.62	0.15	ug/Kg	☼	05/02/25 08:22	05/03/25 02:49	1
Perfluorodecanesulfonic acid (PFDS)	ND		0.15	0.039	ug/Kg	☼	05/02/25 08:22	05/03/25 02:49	1
Perfluorodecanoic acid (PFDA)	ND		0.15	0.039	ug/Kg	☼	05/02/25 08:22	05/03/25 02:49	1
Perfluorododecanesulfonic acid (PFDoS)	ND		0.15	0.039	ug/Kg	☼	05/02/25 08:22	05/03/25 02:49	1
Perfluorododecanoic acid (PFDoA)	ND		0.15	0.039	ug/Kg	☼	05/02/25 08:22	05/03/25 02:49	1
Perfluoroheptanesulfonic acid (PFHpS)	ND		0.15	0.039	ug/Kg	☼	05/02/25 08:22	05/03/25 02:49	1
Perfluoroheptanoic acid (PFHpA)	ND		0.15	0.039	ug/Kg	☼	05/02/25 08:22	05/03/25 02:49	1
Perfluorohexanesulfonic acid (PFHxS)	ND		0.15	0.039	ug/Kg	☼	05/02/25 08:22	05/03/25 02:49	1
Perfluorohexanoic acid (PFHxA)	ND		0.15	0.039	ug/Kg	☼	05/02/25 08:22	05/03/25 02:49	1
Perfluorononanesulfonic acid (PFNS)	ND		0.15	0.039	ug/Kg	☼	05/02/25 08:22	05/03/25 02:49	1
Perfluorononanoic acid (PFNA)	ND		0.15	0.039	ug/Kg	☼	05/02/25 08:22	05/03/25 02:49	1
Perfluorooctanesulfonamide (PFOSA)	ND		0.15	0.039	ug/Kg	☼	05/02/25 08:22	05/03/25 02:49	1
Perfluorooctanesulfonic acid (PFOS)	ND		0.15	0.039	ug/Kg	☼	05/02/25 08:22	05/03/25 02:49	1
Perfluorooctanoic acid (PFOA)	ND		0.15	0.039	ug/Kg	☼	05/02/25 08:22	05/03/25 02:49	1
Perfluoropentanesulfonic acid (PFPeS)	ND		0.15	0.039	ug/Kg	☼	05/02/25 08:22	05/03/25 02:49	1
Perfluoropentanoic acid (PFPeA)	ND		0.31	0.077	ug/Kg	☼	05/02/25 08:22	05/03/25 02:49	1
Perfluorotetradecanoic acid (PFTeDA)	ND		0.15	0.039	ug/Kg	☼	05/02/25 08:22	05/03/25 02:49	1
Perfluorotridecanoic acid (PFTrDA)	ND		0.15	0.039	ug/Kg	☼	05/02/25 08:22	05/03/25 02:49	1
Perfluoroundecanoic acid (PFUnA)	ND		0.15	0.039	ug/Kg	☼	05/02/25 08:22	05/03/25 02:49	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C2 PFTeDA	*80.4*		*20 - 150*	*05/02/25 08:22*	*05/03/25 02:49*	*1*
13C2-PFDoDA	*86.7*		*20 - 150*	*05/02/25 08:22*	*05/03/25 02:49*	*1*
13C3 HFPO-DA	*93.1*		*20 - 150*	*05/02/25 08:22*	*05/03/25 02:49*	*1*
13C3 PFBS	*94.3*		*20 - 150*	*05/02/25 08:22*	*05/03/25 02:49*	*1*
13C3 PFHxS	*92.0*		*20 - 150*	*05/02/25 08:22*	*05/03/25 02:49*	*1*
13C4 PFBA	*91.7*		*20 - 150*	*05/02/25 08:22*	*05/03/25 02:49*	*1*
13C4 PFHpA	*93.2*		*20 - 150*	*05/02/25 08:22*	*05/03/25 02:49*	*1*
13C5 PFHxA	*90.6*		*20 - 150*	*05/02/25 08:22*	*05/03/25 02:49*	*1*
13C5 PFPeA	*102*		*20 - 150*	*05/02/25 08:22*	*05/03/25 02:49*	*1*
13C6 PFDA	*92.0*		*20 - 150*	*05/02/25 08:22*	*05/03/25 02:49*	*1*
13C7 PFUnA	*86.6*		*20 - 150*	*05/02/25 08:22*	*05/03/25 02:49*	*1*
13C8 PFOA	*88.3*		*20 - 150*	*05/02/25 08:22*	*05/03/25 02:49*	*1*
13C8 PFOS	*91.8*		*20 - 150*	*05/02/25 08:22*	*05/03/25 02:49*	*1*
13C8 PFOSA	*81.5*		*20 - 150*	*05/02/25 08:22*	*05/03/25 02:49*	*1*

Client Sample ID: MW-1 0.25-3Ft
Lab Sample ID: 480-229067-5
Date Collected: 04/29/25 13:00
Matrix: Solid
Date Received: 04/29/25 15:43
Percent Solids: 80.1

Method: EPA Draft-3 1633 - Per- and Polyfluoroalkyl Substances by LC/MS/MS (Continued)

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C9 PFNA	*83.8*		*20 - 150*	*05/02/25 08:22*	*05/03/25 02:49*	*1*
D3-NMeFOSA	*60.0*		*20 - 150*	*05/02/25 08:22*	*05/03/25 02:49*	*1*
d3-NMeFOSAA	*94.4*		*20 - 150*	*05/02/25 08:22*	*05/03/25 02:49*	*1*
d5-NEtFOSAA	*94.8*		*20 - 150*	*05/02/25 08:22*	*05/03/25 02:49*	*1*
d5-NEtPFOSA	*66.6*		*20 - 150*	*05/02/25 08:22*	*05/03/25 02:49*	*1*
d7-N-MeFOSE-M	*59.5*		*20 - 150*	*05/02/25 08:22*	*05/03/25 02:49*	*1*
d9-N-EtFOSE-M	*43.2*		*20 - 150*	*05/02/25 08:22*	*05/03/25 02:49*	*1*
M2-4:2 FTS	*154*	**5+*	*20 - 150*	*05/02/25 08:22*	*05/03/25 02:49*	*1*
M2-6:2 FTS	*120*		*20 - 150*	*05/02/25 08:22*	*05/03/25 02:49*	*1*
M2-8:2 FTS	*106*		*20 - 150*	*05/02/25 08:22*	*05/03/25 02:49*	*1*

Method: SW846 6010D - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**3960**		11.8	10.2	mg/Kg	☼	04/30/25 14:09	05/01/25 12:24	1
Antimony	ND		17.7	0.63	mg/Kg	☼	04/30/25 14:09	05/01/25 12:24	1
Arsenic	**12.2**		2.4	1.0	mg/Kg	☼	04/30/25 14:09	05/01/25 12:24	1
Barium	**79.6**		0.59	0.17	mg/Kg	☼	04/30/25 14:09	05/01/25 12:24	1
Beryllium	**0.66**		0.24	0.047	mg/Kg	☼	04/30/25 14:09	05/01/25 12:24	1
Cadmium	**0.22**	**J**	0.24	0.083	mg/Kg	☼	04/30/25 14:09	05/01/25 12:24	1
Calcium	**6490**		59.0	31.8	mg/Kg	☼	04/30/25 14:09	05/01/25 12:24	1
Chromium	**11.1**		0.59	0.42	mg/Kg	☼	04/30/25 14:09	05/01/25 12:24	1
Cobalt	**11.8**		0.59	0.12	mg/Kg	☼	04/30/25 14:09	05/01/25 12:24	1
Copper	**73.3**		1.2	0.67	mg/Kg	☼	04/30/25 14:09	05/01/25 12:24	1
Iron	**65700**		11.8	10.0	mg/Kg	☼	04/30/25 14:09	05/01/25 12:24	1
Lead	**136**		1.2	0.54	mg/Kg	☼	04/30/25 14:09	05/01/25 12:24	1
Magnesium	**1030**		23.6	10.0	mg/Kg	☼	04/30/25 14:09	05/01/25 12:24	1
Manganese	**208**		1.2	0.33	mg/Kg	☼	04/30/25 14:09	05/01/25 12:24	1
Nickel	**20.3**		5.9	0.29	mg/Kg	☼	04/30/25 14:09	05/01/25 12:24	1
Potassium	**583**		35.4	28.6	mg/Kg	☼	04/30/25 14:09	05/01/25 12:24	1
Selenium	**1.9**	**J**	4.7	0.94	mg/Kg	☼	04/30/25 14:09	05/01/25 12:24	1
Silver	**0.24**	**J ^5-**	0.71	0.24	mg/Kg	☼	04/30/25 14:09	05/01/25 12:24	1
Sodium	**125**	**J**	165	72.3	mg/Kg	☼	04/30/25 14:09	05/01/25 12:24	1
Thallium	ND		7.1	0.90	mg/Kg	☼	04/30/25 14:09	05/01/25 12:24	1
Vanadium	**16.9**		0.59	0.15	mg/Kg	☼	04/30/25 14:09	05/01/25 12:24	1
Zinc	**100**		2.4	1.2	mg/Kg	☼	04/30/25 14:09	05/01/25 12:24	1

Method: SW846 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.71**	**F1 F2**	0.024	0.0056	mg/Kg	☼	05/02/25 09:11	05/02/25 11:46	1

Client: Roux Environmental Engineering and Geology DPC
Job ID: 480-229067-1
Project/Site: BCP RI - 619 Exchange Street Site

Client Sample ID: HC-5 0.33-0.66Ft
Lab Sample ID: 480-229067-6
Date Collected: 04/29/25 14:30
Matrix: Solid
Date Received: 04/29/25 15:43
Percent Solids: 67.1

Method: SW846 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	ND		150	80	ug/Kg	☼	05/01/25 06:55	05/06/25 15:52	1
2,4,5-Trichlorophenol	ND		250	67	ug/Kg	☼	05/01/25 06:55	05/06/25 15:52	1
2,4,6-Trichlorophenol	ND		250	49	ug/Kg	☼	05/01/25 06:55	05/06/25 15:52	1
2,4-Dichlorophenol	ND		250	26	ug/Kg	☼	05/01/25 06:55	05/06/25 15:52	1
2,4-Dimethylphenol	ND		250	60	ug/Kg	☼	05/01/25 06:55	05/06/25 15:52	1
2,4-Dinitrophenol	ND		2400	1100	ug/Kg	☼	05/01/25 06:55	05/06/25 15:52	1
2,4-Dinitrotoluene	ND		250	51	ug/Kg	☼	05/01/25 06:55	05/06/25 15:52	1
2,6-Dinitrotoluene	ND		250	29	ug/Kg	☼	05/01/25 06:55	05/06/25 15:52	1
2-Chloronaphthalene	ND		250	41	ug/Kg	☼	05/01/25 06:55	05/06/25 15:52	1
2-Chlorophenol	ND		480	45	ug/Kg	☼	05/01/25 06:55	05/06/25 15:52	1
2-Methylnaphthalene	ND		250	49	ug/Kg	☼	05/01/25 06:55	05/06/25 15:52	1
2-Methylphenol	ND		250	29	ug/Kg	☼	05/01/25 06:55	05/06/25 15:52	1
2-Nitroaniline	ND		480	36	ug/Kg	☼	05/01/25 06:55	05/06/25 15:52	1
2-Nitrophenol	ND		250	70	ug/Kg	☼	05/01/25 06:55	05/06/25 15:52	1
3,3'-Dichlorobenzidine	ND		480	290	ug/Kg	☼	05/01/25 06:55	05/06/25 15:52	1
3-Nitroaniline	ND		480	68	ug/Kg	☼	05/01/25 06:55	05/06/25 15:52	1
4,6-Dinitro-2-methylphenol	ND		480	250	ug/Kg	☼	05/01/25 06:55	05/06/25 15:52	1
4-Bromophenyl phenyl ether	ND		250	35	ug/Kg	☼	05/01/25 06:55	05/06/25 15:52	1
4-Chloro-3-methylphenol	ND		250	61	ug/Kg	☼	05/01/25 06:55	05/06/25 15:52	1
4-Chloroaniline	ND		250	61	ug/Kg	☼	05/01/25 06:55	05/06/25 15:52	1
4-Chlorophenyl phenyl ether	ND		250	31	ug/Kg	☼	05/01/25 06:55	05/06/25 15:52	1
4-Methylphenol	ND		480	29	ug/Kg	☼	05/01/25 06:55	05/06/25 15:52	1
4-Nitroaniline	ND		480	130	ug/Kg	☼	05/01/25 06:55	05/06/25 15:52	1
4-Nitrophenol	ND		480	170	ug/Kg	☼	05/01/25 06:55	05/06/25 15:52	1
Acenaphthene	**220**	**J**	250	36	ug/Kg	☼	05/01/25 06:55	05/06/25 15:52	1
Acenaphthylene	ND		250	32	ug/Kg	☼	05/01/25 06:55	05/06/25 15:52	1
Acetophenone	ND		250	33	ug/Kg	☼	05/01/25 06:55	05/06/25 15:52	1
Anthracene	**470**		250	61	ug/Kg	☼	05/01/25 06:55	05/06/25 15:52	1
Atrazine	ND		250	86	ug/Kg	☼	05/01/25 06:55	05/06/25 15:52	1
Benzaldehyde	ND		250	200	ug/Kg	☼	05/01/25 06:55	05/06/25 15:52	1
Benzo[a]anthracene	**720**		250	25	ug/Kg	☼	05/01/25 06:55	05/06/25 15:52	1
Benzo[a]pyrene	**650**		250	36	ug/Kg	☼	05/01/25 06:55	05/06/25 15:52	1
Benzo[b]fluoranthene	**730**		250	39	ug/Kg	☼	05/01/25 06:55	05/06/25 15:52	1
Benzo[g,h,i]perylene	**440**		250	26	ug/Kg	☼	05/01/25 06:55	05/06/25 15:52	1
Benzo[k]fluoranthene	**440**		250	32	ug/Kg	☼	05/01/25 06:55	05/06/25 15:52	1
Biphenyl	ND		250	36	ug/Kg	☼	05/01/25 06:55	05/06/25 15:52	1
bis (2-chloroisopropyl) ether	ND		250	49	ug/Kg	☼	05/01/25 06:55	05/06/25 15:52	1
Bis(2-chloroethoxy)methane	ND		250	52	ug/Kg	☼	05/01/25 06:55	05/06/25 15:52	1
Bis(2-chloroethyl)ether	ND		250	32	ug/Kg	☼	05/01/25 06:55	05/06/25 15:52	1
Bis(2-ethylhexyl) phthalate	ND		250	84	ug/Kg	☼	05/01/25 06:55	05/06/25 15:52	1
Butyl benzyl phthalate	ND		250	41	ug/Kg	☼	05/01/25 06:55	05/06/25 15:52	1
Caprolactam	ND		250	74	ug/Kg	☼	05/01/25 06:55	05/06/25 15:52	1
Carbazole	**190**	**J**	250	29	ug/Kg	☼	05/01/25 06:55	05/06/25 15:52	1
Chrysene	**690**		250	55	ug/Kg	☼	05/01/25 06:55	05/06/25 15:52	1
Dibenz(a,h)anthracene	**110**	**J**	250	44	ug/Kg	☼	05/01/25 06:55	05/06/25 15:52	1
Dibenzofuran	**100**	**J**	250	29	ug/Kg	☼	05/01/25 06:55	05/06/25 15:52	1
Diethyl phthalate	ND		250	32	ug/Kg	☼	05/01/25 06:55	05/06/25 15:52	1
Dimethyl phthalate	ND		250	29	ug/Kg	☼	05/01/25 06:55	05/06/25 15:52	1
Di-n-butyl phthalate	ND		250	42	ug/Kg	☼	05/01/25 06:55	05/06/25 15:52	1

Client Sample ID: HC-5 0.33-0.66Ft
Lab Sample ID: 480-229067-6
Date Collected: 04/29/25 14:30
Matrix: Solid
Date Received: 04/29/25 15:43
Percent Solids: 67.1

Method: SW846 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate	ND		250	29	ug/Kg	☼	05/01/25 06:55	05/06/25 15:52	1
Fluoranthene	**1500**		250	26	ug/Kg	☼	05/01/25 06:55	05/06/25 15:52	1
Fluorene	**230**	**J**	250	29	ug/Kg	☼	05/01/25 06:55	05/06/25 15:52	1
Hexachlorobenzene	ND		250	33	ug/Kg	☼	05/01/25 06:55	05/06/25 15:52	1
Hexachlorobutadiene	ND		250	36	ug/Kg	☼	05/01/25 06:55	05/06/25 15:52	1
Hexachlorocyclopentadiene	ND		250	33	ug/Kg	☼	05/01/25 06:55	05/06/25 15:52	1
Hexachloroethane	ND		250	32	ug/Kg	☼	05/01/25 06:55	05/06/25 15:52	1
Indeno[1,2,3-cd]pyrene	**380**		250	31	ug/Kg	☼	05/01/25 06:55	05/06/25 15:52	1
Isophorone	ND		250	52	ug/Kg	☼	05/01/25 06:55	05/06/25 15:52	1
Naphthalene	**120**	**J**	250	32	ug/Kg	☼	05/01/25 06:55	05/06/25 15:52	1
Nitrobenzene	ND		250	28	ug/Kg	☼	05/01/25 06:55	05/06/25 15:52	1
N-Nitrosodi-n-propylamine	ND		250	42	ug/Kg	☼	05/01/25 06:55	05/06/25 15:52	1
N-Nitrosodiphenylamine	ND		250	200	ug/Kg	☼	05/01/25 06:55	05/06/25 15:52	1
Pentachlorophenol	ND		480	250	ug/Kg	☼	05/01/25 06:55	05/06/25 15:52	1
Phenanthrene	**1500**		250	36	ug/Kg	☼	05/01/25 06:55	05/06/25 15:52	1
Phenol	ND		250	38	ug/Kg	☼	05/01/25 06:55	05/06/25 15:52	1
Pyrene	**1200**		250	29	ug/Kg	☼	05/01/25 06:55	05/06/25 15:52	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Unknown	*6900*	*T J*	*ug/Kg*	☼	*2.00*	*N/A*	*05/01/25 06:55*	*05/06/25 15:52*	*1*
Unknown	*210*	*T J*	*ug/Kg*	☼	*2.74*	*N/A*	*05/01/25 06:55*	*05/06/25 15:52*	*1*
Unknown	*1800*	*T J*	*ug/Kg*	☼	*3.46*	*N/A*	*05/01/25 06:55*	*05/06/25 15:52*	*1*
Unknown	*360*	*T J*	*ug/Kg*	☼	*11.50*	*N/A*	*05/01/25 06:55*	*05/06/25 15:52*	*1*
11H-Benzo[b]fluorene	*260*	*T J N*	*ug/Kg*	☼	*12.54*	*243-17-4*	*05/01/25 06:55*	*05/06/25 15:52*	*1*
Unknown	*270*	*T J*	*ug/Kg*	☼	*13.48*	*N/A*	*05/01/25 06:55*	*05/06/25 15:52*	*1*
Benzo[e]pyrene	*240*	*T J N*	*ug/Kg*	☼	*14.22*	*192-97-2*	*05/01/25 06:55*	*05/06/25 15:52*	*1*
Perylene	*340*	*T J N*	*ug/Kg*	☼	*14.36*	*198-55-0*	*05/01/25 06:55*	*05/06/25 15:52*	*1*
Unknown	*290*	*T J*	*ug/Kg*	☼	*14.58*	*N/A*	*05/01/25 06:55*	*05/06/25 15:52*	*1*
Unknown	*230*	*T J*	*ug/Kg*	☼	*15.49*	*N/A*	*05/01/25 06:55*	*05/06/25 15:52*	*1*
Unknown	*330*	*T J*	*ug/Kg*	☼	*15.74*	*N/A*	*05/01/25 06:55*	*05/06/25 15:52*	*1*
Unknown	*280*	*T J*	*ug/Kg*	☼	*16.82*	*N/A*	*05/01/25 06:55*	*05/06/25 15:52*	*1*
Unknown	*240*	*T J*	*ug/Kg*	☼	*16.92*	*N/A*	*05/01/25 06:55*	*05/06/25 15:52*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol (Surr)	*95*		*26 - 143*	*05/01/25 06:55*	*05/06/25 15:52*	*1*
2-Fluorobiphenyl (Surr)	*98*		*50 - 121*	*05/01/25 06:55*	*05/06/25 15:52*	*1*
2-Fluorophenol (Surr)	*82*		*36 - 120*	*05/01/25 06:55*	*05/06/25 15:52*	*1*
Nitrobenzene-d5 (Surr)	*95*		*40 - 121*	*05/01/25 06:55*	*05/06/25 15:52*	*1*
Phenol-d5 (Surr)	*87*		*41 - 120*	*05/01/25 06:55*	*05/06/25 15:52*	*1*
p-Terphenyl-d14 (Surr)	*104*		*46 - 143*	*05/01/25 06:55*	*05/06/25 15:52*	*1*

Method: SW846 6010D - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**6010**		15.0	12.9	mg/Kg	☼	04/30/25 14:09	05/01/25 12:39	1
Antimony	ND		22.5	0.79	mg/Kg	☼	04/30/25 14:09	05/01/25 12:39	1
Arsenic	**12.7**		3.0	1.3	mg/Kg	☼	04/30/25 14:09	05/01/25 12:39	1
Barium	**153**		0.75	0.21	mg/Kg	☼	04/30/25 14:09	05/01/25 12:39	1
Beryllium	**0.92**		0.30	0.060	mg/Kg	☼	04/30/25 14:09	05/01/25 12:39	1
Cadmium	ND		0.30	0.10	mg/Kg	☼	04/30/25 14:09	05/01/25 12:39	1
Calcium	**9010**		74.9	40.5	mg/Kg	☼	04/30/25 14:09	05/01/25 12:39	1

Client: Roux Environmental Engineering and Geology DPC
Job ID: 480-229067-1
Project/Site: BCP RI - 619 Exchange Street Site

Client Sample ID: HC-5 0.33-0.66Ft
Lab Sample ID: 480-229067-6
Date Collected: 04/29/25 14:30
Matrix: Solid
Date Received: 04/29/25 15:43
Percent Solids: 67.1

Method: SW846 6010D - Metals (ICP) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium	10.7		0.75	0.54	mg/Kg	☼	04/30/25 14:09	05/01/25 12:39	1
Cobalt	5.7		0.75	0.15	mg/Kg	☼	04/30/25 14:09	05/01/25 12:39	1
Copper	39.8		1.5	0.85	mg/Kg	☼	04/30/25 14:09	05/01/25 12:39	1
Iron	45700		15.0	12.7	mg/Kg	☼	04/30/25 14:09	05/01/25 12:39	1
Lead	73.6		1.5	0.69	mg/Kg	☼	04/30/25 14:09	05/01/25 12:39	1
Magnesium	1710		30.0	12.7	mg/Kg	☼	04/30/25 14:09	05/01/25 12:39	1
Manganese	212		1.5	0.42	mg/Kg	☼	04/30/25 14:09	05/01/25 12:39	1
Nickel	17.4		7.5	0.37	mg/Kg	☼	04/30/25 14:09	05/01/25 12:39	1
Potassium	616		45.0	36.3	mg/Kg	☼	04/30/25 14:09	05/01/25 12:39	1
Selenium	2.1	J	6.0	1.2	mg/Kg	☼	04/30/25 14:09	05/01/25 12:39	1
Silver	ND	^5-	0.90	0.30	mg/Kg	☼	04/30/25 14:09	05/01/25 12:39	1
Sodium	236		210	91.9	mg/Kg	☼	04/30/25 14:09	05/01/25 12:39	1
Thallium	ND		9.0	1.1	mg/Kg	☼	04/30/25 14:09	05/01/25 12:39	1
Vanadium	20.4		0.75	0.19	mg/Kg	☼	04/30/25 14:09	05/01/25 12:39	1
Zinc	36.4		3.0	1.5	mg/Kg	☼	04/30/25 14:09	05/01/25 12:39	1

Method: SW846 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.023	J	0.029	0.0067	mg/Kg	☼	05/02/25 09:11	05/02/25 11:56	1

Client: Roux Environmental Engineering and Geology DPC
Job ID: 480-229067-1
Project/Site: BCP RI - 619 Exchange Street Site

Client Sample ID: HC-6 2in-6in
Lab Sample ID: 480-229067-7
Date Collected: 04/29/25 15:00
Matrix: Solid
Date Received: 04/29/25 15:43
Percent Solids: 73.7

Method: SW846 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		5.3	0.38	ug/Kg	☼	04/29/25 16:51	04/29/25 23:36	1
1,1,2,2-Tetrachloroethane	ND		5.3	0.86	ug/Kg	☼	04/29/25 16:51	04/29/25 23:36	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		5.3	1.2	ug/Kg	☼	04/29/25 16:51	04/29/25 23:36	1
1,1,2-Trichloroethane	ND		5.3	0.69	ug/Kg	☼	04/29/25 16:51	04/29/25 23:36	1
1,1-Dichloroethane	ND		5.3	0.64	ug/Kg	☼	04/29/25 16:51	04/29/25 23:36	1
1,1-Dichloroethene	ND		5.3	0.65	ug/Kg	☼	04/29/25 16:51	04/29/25 23:36	1
1,2,4-Trichlorobenzene	ND		5.3	0.32	ug/Kg	☼	04/29/25 16:51	04/29/25 23:36	1
1,2,4-Trimethylbenzene	ND		5.3	1.0	ug/Kg	☼	04/29/25 16:51	04/29/25 23:36	1
1,2-Dibromo-3-Chloropropane	ND		5.3	2.6	ug/Kg	☼	04/29/25 16:51	04/29/25 23:36	1
1,2-Dibromoethane	ND		5.3	0.68	ug/Kg	☼	04/29/25 16:51	04/29/25 23:36	1
1,2-Dichlorobenzene	ND		5.3	0.41	ug/Kg	☼	04/29/25 16:51	04/29/25 23:36	1
1,2-Dichloroethane	ND		5.3	0.27	ug/Kg	☼	04/29/25 16:51	04/29/25 23:36	1
1,2-Dichloropropane	ND		5.3	2.6	ug/Kg	☼	04/29/25 16:51	04/29/25 23:36	1
1,3,5-Trimethylbenzene	ND		5.3	0.34	ug/Kg	☼	04/29/25 16:51	04/29/25 23:36	1
1,3-Dichlorobenzene	ND		5.3	0.27	ug/Kg	☼	04/29/25 16:51	04/29/25 23:36	1
1,4-Dichlorobenzene	ND		5.3	0.74	ug/Kg	☼	04/29/25 16:51	04/29/25 23:36	1
2-Butanone (MEK)	ND		26	1.9	ug/Kg	☼	04/29/25 16:51	04/29/25 23:36	1
2-Hexanone	ND		26	2.6	ug/Kg	☼	04/29/25 16:51	04/29/25 23:36	1
4-Isopropyltoluene	ND		5.3	0.42	ug/Kg	☼	04/29/25 16:51	04/29/25 23:36	1
4-Methyl-2-pentanone (MIBK)	ND		26	1.7	ug/Kg	☼	04/29/25 16:51	04/29/25 23:36	1
Acetone	**8.3**	**J**	26	4.4	ug/Kg	☼	04/29/25 16:51	04/29/25 23:36	1
Benzene	ND		5.3	0.26	ug/Kg	☼	04/29/25 16:51	04/29/25 23:36	1
Bromodichloromethane	ND		5.3	0.71	ug/Kg	☼	04/29/25 16:51	04/29/25 23:36	1
Bromoform	ND		5.3	2.6	ug/Kg	☼	04/29/25 16:51	04/29/25 23:36	1
Bromomethane	ND		5.3	0.48	ug/Kg	☼	04/29/25 16:51	04/29/25 23:36	1
Carbon disulfide	ND		5.3	2.6	ug/Kg	☼	04/29/25 16:51	04/29/25 23:36	1
Carbon tetrachloride	ND		5.3	0.51	ug/Kg	☼	04/29/25 16:51	04/29/25 23:36	1
Chlorobenzene	ND		5.3	0.70	ug/Kg	☼	04/29/25 16:51	04/29/25 23:36	1
Chloroethane	ND		5.3	1.2	ug/Kg	☼	04/29/25 16:51	04/29/25 23:36	1
Chloroform	**1.3**	**J B**	5.3	0.33	ug/Kg	☼	04/29/25 16:51	04/29/25 23:36	1
Chloromethane	ND		5.3	0.32	ug/Kg	☼	04/29/25 16:51	04/29/25 23:36	1
cis-1,2-Dichloroethene	ND		5.3	0.68	ug/Kg	☼	04/29/25 16:51	04/29/25 23:36	1
cis-1,3-Dichloropropene	ND		5.3	0.76	ug/Kg	☼	04/29/25 16:51	04/29/25 23:36	1
Cyclohexane	ND		5.3	0.74	ug/Kg	☼	04/29/25 16:51	04/29/25 23:36	1
Dibromochloromethane	ND		5.3	0.68	ug/Kg	☼	04/29/25 16:51	04/29/25 23:36	1
Dichlorodifluoromethane	ND		5.3	0.44	ug/Kg	☼	04/29/25 16:51	04/29/25 23:36	1
Ethylbenzene	ND		5.3	0.36	ug/Kg	☼	04/29/25 16:51	04/29/25 23:36	1
Isopropylbenzene	ND		5.3	0.80	ug/Kg	☼	04/29/25 16:51	04/29/25 23:36	1
Methyl acetate	ND		26	3.2	ug/Kg	☼	04/29/25 16:51	04/29/25 23:36	1
Methyl tert-butyl ether	ND		5.3	0.52	ug/Kg	☼	04/29/25 16:51	04/29/25 23:36	1
Methylcyclohexane	ND		5.3	0.80	ug/Kg	☼	04/29/25 16:51	04/29/25 23:36	1
Methylene Chloride	ND		5.3	2.4	ug/Kg	☼	04/29/25 16:51	04/29/25 23:36	1
Naphthalene	ND		5.3	0.71	ug/Kg	☼	04/29/25 16:51	04/29/25 23:36	1
n-Butylbenzene	ND		5.3	0.46	ug/Kg	☼	04/29/25 16:51	04/29/25 23:36	1
N-Propylbenzene	ND		5.3	0.42	ug/Kg	☼	04/29/25 16:51	04/29/25 23:36	1
sec-Butylbenzene	ND		5.3	0.46	ug/Kg	☼	04/29/25 16:51	04/29/25 23:36	1
Styrene	ND		5.3	0.26	ug/Kg	☼	04/29/25 16:51	04/29/25 23:36	1
tert-Butylbenzene	ND		5.3	0.55	ug/Kg	☼	04/29/25 16:51	04/29/25 23:36	1
Tetrachloroethene	ND		5.3	0.71	ug/Kg	☼	04/29/25 16:51	04/29/25 23:36	1

Client Sample ID: HC-6 2in-6in
Lab Sample ID: 480-229067-7
Date Collected: 04/29/25 15:00
Matrix: Solid
Date Received: 04/29/25 15:43
Percent Solids: 73.7

Method: SW846 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Toluene	ND		5.3	0.40	ug/Kg	☼	04/29/25 16:51	04/29/25 23:36	1
trans-1,2-Dichloroethene	ND		5.3	0.55	ug/Kg	☼	04/29/25 16:51	04/29/25 23:36	1
trans-1,3-Dichloropropene	ND		5.3	2.3	ug/Kg	☼	04/29/25 16:51	04/29/25 23:36	1
Trichloroethene	ND		5.3	1.2	ug/Kg	☼	04/29/25 16:51	04/29/25 23:36	1
Trichlorofluoromethane	ND		5.3	0.50	ug/Kg	☼	04/29/25 16:51	04/29/25 23:36	1
Vinyl chloride	ND		5.3	0.64	ug/Kg	☼	04/29/25 16:51	04/29/25 23:36	1
Xylenes, Total	ND		11	0.89	ug/Kg	☼	04/29/25 16:51	04/29/25 23:36	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/Kg*	☼		*N/A*	*04/29/25 16:51*	*04/29/25 23:36*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*106*		*64 - 126*	*04/29/25 16:51*	*04/29/25 23:36*	*1*
4-Bromofluorobenzene (Surr)	*101*		*72 - 126*	*04/29/25 16:51*	*04/29/25 23:36*	*1*
Dibromofluoromethane (Surr)	*105*		*60 - 140*	*04/29/25 16:51*	*04/29/25 23:36*	*1*
Toluene-d8 (Surr)	*97*		*71 - 125*	*04/29/25 16:51*	*04/29/25 23:36*	*1*

Method: SW846 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	ND		130	74	ug/Kg	☼	04/30/25 13:32	05/06/25 10:58	1
2,4,5-Trichlorophenol	ND		230	62	ug/Kg	☼	04/30/25 13:32	05/06/25 10:58	1
2,4,6-Trichlorophenol	ND		230	46	ug/Kg	☼	04/30/25 13:32	05/06/25 10:58	1
2,4-Dichlorophenol	ND		230	24	ug/Kg	☼	04/30/25 13:32	05/06/25 10:58	1
2,4-Dimethylphenol	ND		230	55	ug/Kg	☼	04/30/25 13:32	05/06/25 10:58	1
2,4-Dinitrophenol	ND		2200	1100	ug/Kg	☼	04/30/25 13:32	05/06/25 10:58	1
2,4-Dinitrotoluene	ND		230	47	ug/Kg	☼	04/30/25 13:32	05/06/25 10:58	1
2,6-Dinitrotoluene	ND		230	27	ug/Kg	☼	04/30/25 13:32	05/06/25 10:58	1
2-Chloronaphthalene	ND		230	38	ug/Kg	☼	04/30/25 13:32	05/06/25 10:58	1
2-Chlorophenol	ND		450	42	ug/Kg	☼	04/30/25 13:32	05/06/25 10:58	1
2-Methylnaphthalene	**69**	**J**	230	46	ug/Kg	☼	04/30/25 13:32	05/06/25 10:58	1
2-Methylphenol	ND		230	27	ug/Kg	☼	04/30/25 13:32	05/06/25 10:58	1
2-Nitroaniline	ND		450	34	ug/Kg	☼	04/30/25 13:32	05/06/25 10:58	1
2-Nitrophenol	ND		230	65	ug/Kg	☼	04/30/25 13:32	05/06/25 10:58	1
3,3'-Dichlorobenzidine	ND		450	270	ug/Kg	☼	04/30/25 13:32	05/06/25 10:58	1
3-Nitroaniline	ND		450	63	ug/Kg	☼	04/30/25 13:32	05/06/25 10:58	1
4,6-Dinitro-2-methylphenol	ND		450	230	ug/Kg	☼	04/30/25 13:32	05/06/25 10:58	1
4-Bromophenyl phenyl ether	ND		230	32	ug/Kg	☼	04/30/25 13:32	05/06/25 10:58	1
4-Chloro-3-methylphenol	ND		230	57	ug/Kg	☼	04/30/25 13:32	05/06/25 10:58	1
4-Chloroaniline	ND		230	57	ug/Kg	☼	04/30/25 13:32	05/06/25 10:58	1
4-Chlorophenyl phenyl ether	ND		230	28	ug/Kg	☼	04/30/25 13:32	05/06/25 10:58	1
4-Methylphenol	ND		450	27	ug/Kg	☼	04/30/25 13:32	05/06/25 10:58	1
4-Nitroaniline	ND		450	120	ug/Kg	☼	04/30/25 13:32	05/06/25 10:58	1
4-Nitrophenol	ND		450	160	ug/Kg	☼	04/30/25 13:32	05/06/25 10:58	1
Acenaphthene	ND		230	34	ug/Kg	☼	04/30/25 13:32	05/06/25 10:58	1
Acenaphthylene	ND		230	30	ug/Kg	☼	04/30/25 13:32	05/06/25 10:58	1
Acetophenone	ND		230	31	ug/Kg	☼	04/30/25 13:32	05/06/25 10:58	1
Anthracene	ND		230	57	ug/Kg	☼	04/30/25 13:32	05/06/25 10:58	1
Atrazine	ND		230	80	ug/Kg	☼	04/30/25 13:32	05/06/25 10:58	1
Benzaldehyde	ND		230	180	ug/Kg	☼	04/30/25 13:32	05/06/25 10:58	1
Benzo[a]anthracene	**35**	**J**	230	23	ug/Kg	☼	04/30/25 13:32	05/06/25 10:58	1

Client: Roux Environmental Engineering and Geology DPC
Job ID: 480-229067-1
Project/Site: BCP RI - 619 Exchange Street Site

Client Sample ID: HC-6 2in-6in
Lab Sample ID: 480-229067-7
Date Collected: 04/29/25 15:00
Matrix: Solid
Date Received: 04/29/25 15:43
Percent Solids: 73.7

Method: SW846 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[a]pyrene	**34**	**J**	230	34	ug/Kg	☼	04/30/25 13:32	05/06/25 10:58	1
Benzo[b]fluoranthene	**57**	**J**	230	36	ug/Kg	☼	04/30/25 13:32	05/06/25 10:58	1
Benzo[g,h,i]perylene	**29**	**J**	230	24	ug/Kg	☼	04/30/25 13:32	05/06/25 10:58	1
Benzo[k]fluoranthene	ND		230	30	ug/Kg	☼	04/30/25 13:32	05/06/25 10:58	1
Biphenyl	ND		230	34	ug/Kg	☼	04/30/25 13:32	05/06/25 10:58	1
bis (2-chloroisopropyl) ether	ND		230	46	ug/Kg	☼	04/30/25 13:32	05/06/25 10:58	1
Bis(2-chloroethoxy)methane	ND		230	49	ug/Kg	☼	04/30/25 13:32	05/06/25 10:58	1
Bis(2-chloroethyl)ether	ND		230	30	ug/Kg	☼	04/30/25 13:32	05/06/25 10:58	1
Bis(2-ethylhexyl) phthalate	ND		230	78	ug/Kg	☼	04/30/25 13:32	05/06/25 10:58	1
Butyl benzyl phthalate	ND		230	38	ug/Kg	☼	04/30/25 13:32	05/06/25 10:58	1
Caprolactam	ND		230	69	ug/Kg	☼	04/30/25 13:32	05/06/25 10:58	1
Carbazole	ND		230	27	ug/Kg	☼	04/30/25 13:32	05/06/25 10:58	1
Chrysene	**51**	**J**	230	51	ug/Kg	☼	04/30/25 13:32	05/06/25 10:58	1
Dibenz(a,h)anthracene	ND		230	40	ug/Kg	☼	04/30/25 13:32	05/06/25 10:58	1
Dibenzofuran	ND		230	27	ug/Kg	☼	04/30/25 13:32	05/06/25 10:58	1
Diethyl phthalate	ND		230	30	ug/Kg	☼	04/30/25 13:32	05/06/25 10:58	1
Dimethyl phthalate	ND		230	27	ug/Kg	☼	04/30/25 13:32	05/06/25 10:58	1
Di-n-butyl phthalate	ND		230	39	ug/Kg	☼	04/30/25 13:32	05/06/25 10:58	1
Di-n-octyl phthalate	ND		230	27	ug/Kg	☼	04/30/25 13:32	05/06/25 10:58	1
Fluoranthene	**79**	**J**	230	24	ug/Kg	☼	04/30/25 13:32	05/06/25 10:58	1
Fluorene	ND		230	27	ug/Kg	☼	04/30/25 13:32	05/06/25 10:58	1
Hexachlorobenzene	ND		230	31	ug/Kg	☼	04/30/25 13:32	05/06/25 10:58	1
Hexachlorobutadiene	ND		230	34	ug/Kg	☼	04/30/25 13:32	05/06/25 10:58	1
Hexachlorocyclopentadiene	ND		230	31	ug/Kg	☼	04/30/25 13:32	05/06/25 10:58	1
Hexachloroethane	ND		230	30	ug/Kg	☼	04/30/25 13:32	05/06/25 10:58	1
Indeno[1,2,3-cd]pyrene	ND		230	28	ug/Kg	☼	04/30/25 13:32	05/06/25 10:58	1
Isophorone	ND		230	49	ug/Kg	☼	04/30/25 13:32	05/06/25 10:58	1
Naphthalene	**39**	**J**	230	30	ug/Kg	☼	04/30/25 13:32	05/06/25 10:58	1
Nitrobenzene	ND		230	26	ug/Kg	☼	04/30/25 13:32	05/06/25 10:58	1
N-Nitrosodi-n-propylamine	ND		230	39	ug/Kg	☼	04/30/25 13:32	05/06/25 10:58	1
N-Nitrosodiphenylamine	ND		230	190	ug/Kg	☼	04/30/25 13:32	05/06/25 10:58	1
Pentachlorophenol	ND		450	230	ug/Kg	☼	04/30/25 13:32	05/06/25 10:58	1
Phenanthrene	**93**	**J**	230	34	ug/Kg	☼	04/30/25 13:32	05/06/25 10:58	1
Phenol	ND		230	35	ug/Kg	☼	04/30/25 13:32	05/06/25 10:58	1
Pyrene	**64**	**J**	230	27	ug/Kg	☼	04/30/25 13:32	05/06/25 10:58	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Unknown	*3300*	*T J*	*ug/Kg*	☼	*1.87*	*N/A*	*04/30/25 13:32*	*05/06/25 10:58*	*1*
Unknown	*4900*	*T J*	*ug/Kg*	☼	*1.99*	*N/A*	*04/30/25 13:32*	*05/06/25 10:58*	*1*
Unknown	*1100*	*T J*	*ug/Kg*	☼	*3.46*	*N/A*	*04/30/25 13:32*	*05/06/25 10:58*	*1*
Unknown	*290*	*T J*	*ug/Kg*	☼	*5.33*	*N/A*	*04/30/25 13:32*	*05/06/25 10:58*	*1*
Column Bleed	*240*	*T J*	*ug/Kg*	☼	*6.75*	*N/A*	*04/30/25 13:32*	*05/06/25 10:58*	*1*
Ethanol, 2-butoxy-, phosphate (3:1)	*710*	*T J N*	*ug/Kg*	☼	*12.94*	*78-51-3*	*04/30/25 13:32*	*05/06/25 10:58*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol (Surr)	*78*		*26 - 143*	*04/30/25 13:32*	*05/06/25 10:58*	*1*
2-Fluorobiphenyl (Surr)	*82*		*50 - 121*	*04/30/25 13:32*	*05/06/25 10:58*	*1*
2-Fluorophenol (Surr)	*71*		*36 - 120*	*04/30/25 13:32*	*05/06/25 10:58*	*1*
Nitrobenzene-d5 (Surr)	*75*		*40 - 121*	*04/30/25 13:32*	*05/06/25 10:58*	*1*
Phenol-d5 (Surr)	*75*		*41 - 120*	*04/30/25 13:32*	*05/06/25 10:58*	*1*

Client Sample ID: HC-6 2in-6in

Lab Sample ID: 480-229067-7
Date Collected: 04/29/25 15:00
Matrix: Solid
Date Received: 04/29/25 15:43
Percent Solids: 73.7

Method: SW846 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
p-Terphenyl-d14 (Surr)	*93*		*46 - 143*	*04/30/25 13:32*	*05/06/25 10:58*	*1*

Method: SW846 8081B - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	**5.3**	**J**	23	4.4	ug/Kg	☼	05/01/25 06:41	05/01/25 17:24	5
4,4'-DDE	ND		23	4.7	ug/Kg	☼	05/01/25 06:41	05/01/25 17:24	5
4,4'-DDT	**19**	**J B**	23	5.3	ug/Kg	☼	05/01/25 06:41	05/01/25 17:24	5
Aldrin	ND		23	5.6	ug/Kg	☼	05/01/25 06:41	05/01/25 17:24	5
alpha-BHC	ND		23	4.1	ug/Kg	☼	05/01/25 06:41	05/01/25 17:24	5
cis-Chlordane	ND		23	11	ug/Kg	☼	05/01/25 06:41	05/01/25 17:24	5
beta-BHC	ND		23	4.1	ug/Kg	☼	05/01/25 06:41	05/01/25 17:24	5
delta-BHC	**5.7**	**J**	23	4.2	ug/Kg	☼	05/01/25 06:41	05/01/25 17:24	5
Dieldrin	ND		23	5.4	ug/Kg	☼	05/01/25 06:41	05/01/25 17:24	5
Endosulfan I	ND		23	4.3	ug/Kg	☼	05/01/25 06:41	05/01/25 17:24	5
Endosulfan II	ND		23	4.1	ug/Kg	☼	05/01/25 06:41	05/01/25 17:24	5
Endosulfan sulfate	ND		23	4.2	ug/Kg	☼	05/01/25 06:41	05/01/25 17:24	5
Endrin	ND		23	4.5	ug/Kg	☼	05/01/25 06:41	05/01/25 17:24	5
Endrin aldehyde	ND		23	5.8	ug/Kg	☼	05/01/25 06:41	05/01/25 17:24	5
Endrin ketone	**14**	**J B**	23	5.6	ug/Kg	☼	05/01/25 06:41	05/01/25 17:24	5
gamma-BHC (Lindane)	ND		23	4.1	ug/Kg	☼	05/01/25 06:41	05/01/25 17:24	5
trans-Chlordane	ND		23	7.2	ug/Kg	☼	05/01/25 06:41	05/01/25 17:24	5
Heptachlor	ND		23	4.9	ug/Kg	☼	05/01/25 06:41	05/01/25 17:24	5
Heptachlor epoxide	ND		23	5.8	ug/Kg	☼	05/01/25 06:41	05/01/25 17:24	5
Methoxychlor	ND		23	4.6	ug/Kg	☼	05/01/25 06:41	05/01/25 17:24	5
Toxaphene	ND		230	130	ug/Kg	☼	05/01/25 06:41	05/01/25 17:24	5

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
DCB Decachlorobiphenyl	*157*	*S1+*	*45 - 120*	*05/01/25 06:41*	*05/01/25 17:24*	*5*
DCB Decachlorobiphenyl	*162*	*S1+*	*45 - 120*	*05/01/25 06:41*	*05/01/25 17:24*	*5*
Tetrachloro-m-xylene	*99*		*30 - 124*	*05/01/25 06:41*	*05/01/25 17:24*	*5*
Tetrachloro-m-xylene	*83*		*30 - 124*	*05/01/25 06:41*	*05/01/25 17:24*	*5*

Method: SW846 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		0.30	0.058	mg/Kg	☼	05/01/25 07:04	05/01/25 18:49	1
PCB-1221	ND		0.30	0.058	mg/Kg	☼	05/01/25 07:04	05/01/25 18:49	1
PCB-1232	ND		0.30	0.058	mg/Kg	☼	05/01/25 07:04	05/01/25 18:49	1
PCB-1242	ND		0.30	0.058	mg/Kg	☼	05/01/25 07:04	05/01/25 18:49	1
PCB-1248	ND		0.30	0.058	mg/Kg	☼	05/01/25 07:04	05/01/25 18:49	1
PCB-1254	ND		0.30	0.14	mg/Kg	☼	05/01/25 07:04	05/01/25 18:49	1
PCB-1260	ND		0.30	0.14	mg/Kg	☼	05/01/25 07:04	05/01/25 18:49	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
DCB Decachlorobiphenyl	*105*		*65 - 174*	*05/01/25 07:04*	*05/01/25 18:49*	*1*
DCB Decachlorobiphenyl	*110*		*65 - 174*	*05/01/25 07:04*	*05/01/25 18:49*	*1*
Tetrachloro-m-xylene	*111*		*60 - 154*	*05/01/25 07:04*	*05/01/25 18:49*	*1*
Tetrachloro-m-xylene	*105*		*60 - 154*	*05/01/25 07:04*	*05/01/25 18:49*	*1*

Client: Roux Environmental Engineering and Geology DPC
Job ID: 480-229067-1
Project/Site: BCP RI - 619 Exchange Street Site

Client Sample ID: HC-6 2in-6in
Lab Sample ID: 480-229067-7

Date Collected: 04/29/25 15:00
Matrix: Solid

Date Received: 04/29/25 15:43
Percent Solids: 73.7

Method: SW846 8151A - Herbicides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-T	ND		22	7.1	ug/Kg	☼	05/01/25 06:27	05/08/25 14:51	1
2,4-D	ND		22	14	ug/Kg	☼	05/01/25 06:27	05/08/25 14:51	1
Dichlorprop	ND		22	11	ug/Kg	☼	05/01/25 06:27	05/08/25 14:51	1
Pentachlorophenol	ND		22	7.3	ug/Kg	☼	05/01/25 06:27	05/08/25 14:51	1
Picloram	ND		22	9.6	ug/Kg	☼	05/01/25 06:27	05/08/25 14:51	1
Silvex (2,4,5-TP)	ND		22	8.0	ug/Kg	☼	05/01/25 06:27	05/08/25 14:51	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4-Dichlorophenylacetic acid	*78*		*28 - 129*	*05/01/25 06:27*	*05/08/25 14:51*	*1*
2,4-Dichlorophenylacetic acid	*70*		*28 - 129*	*05/01/25 06:27*	*05/08/25 14:51*	*1*

Method: EPA Draft-3 1633 - Per- and Polyfluoroalkyl Substances by LC/MS/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)	ND		0.67	0.17	ug/Kg	☼	05/02/25 08:22	05/03/25 03:38	1
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2 FTS)	ND		0.67	0.17	ug/Kg	☼	05/02/25 08:22	05/03/25 03:38	1
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2 FTS)	ND		0.67	0.17	ug/Kg	☼	05/02/25 08:22	05/03/25 03:38	1
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2 FTS)	ND		0.67	0.17	ug/Kg	☼	05/02/25 08:22	05/03/25 03:38	1
3-Perfluoroheptylpropanoic acid (7:3 FTCA)	ND		4.2	1.1	ug/Kg	☼	05/02/25 08:22	05/03/25 03:38	1
3-Perfluoropentylpropanoic acid (5:3 FTCA)	ND		4.2	1.1	ug/Kg	☼	05/02/25 08:22	05/03/25 03:38	1
3-Perfluoropropylpropanoic acid (3:3 FTCA)	ND		0.84	0.21	ug/Kg	☼	05/02/25 08:22	05/03/25 03:38	1
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	ND		0.67	0.17	ug/Kg	☼	05/02/25 08:22	05/03/25 03:38	1
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9Cl-PF3ONS)	ND		0.67	0.17	ug/Kg	☼	05/02/25 08:22	05/03/25 03:38	1
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA)	ND		0.67	0.17	ug/Kg	☼	05/02/25 08:22	05/03/25 03:38	1
N-ethylperfluorooctane sulfonamide (NEtFOSA)	ND		0.17	0.042	ug/Kg	☼	05/02/25 08:22	05/03/25 03:38	1
N-ethylperfluorooctane sulfonamidoethanol (NEtFOSE)	ND		1.7	0.42	ug/Kg	☼	05/02/25 08:22	05/03/25 03:38	1
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	ND		0.17	0.042	ug/Kg	☼	05/02/25 08:22	05/03/25 03:38	1
N-methylperfluorooctane sulfonamide (NMeFOSA)	ND		0.17	0.042	ug/Kg	☼	05/02/25 08:22	05/03/25 03:38	1
N-methylperfluorooctane sulfonamidoethanol (NMeFOSE)	ND		1.7	0.42	ug/Kg	☼	05/02/25 08:22	05/03/25 03:38	1
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	ND		0.17	0.042	ug/Kg	☼	05/02/25 08:22	05/03/25 03:38	1
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	ND		0.34	0.084	ug/Kg	☼	05/02/25 08:22	05/03/25 03:38	1
Perfluoro (2-ethoxyethane) sulfonic acid (PFEESA)	ND		0.34	0.084	ug/Kg	☼	05/02/25 08:22	05/03/25 03:38	1
Perfluoro-3-methoxypropanoic acid (PFMPA)	ND		0.34	0.084	ug/Kg	☼	05/02/25 08:22	05/03/25 03:38	1
Perfluoro-4-methoxybutanoic acid (PFMBA)	ND		0.34	0.084	ug/Kg	☼	05/02/25 08:22	05/03/25 03:38	1
Perfluorobutanesulfonic acid (PFBS)	ND		0.17	0.042	ug/Kg	☼	05/02/25 08:22	05/03/25 03:38	1
Perfluorobutanoic acid (PFBA)	ND		0.67	0.17	ug/Kg	☼	05/02/25 08:22	05/03/25 03:38	1

Client: Roux Environmental Engineering and Geology DPC
Job ID: 480-229067-1
Project/Site: BCP RI - 619 Exchange Street Site

Client Sample ID: HC-6 2in-6in
Lab Sample ID: 480-229067-7
Date Collected: 04/29/25 15:00
Matrix: Solid
Date Received: 04/29/25 15:43
Percent Solids: 73.7

Method: EPA Draft-3 1633 - Per- and Polyfluoroalkyl Substances by LC/MS/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorodecanesulfonic acid (PFDS)	ND		0.17	0.042	ug/Kg	☼	05/02/25 08:22	05/03/25 03:38	1
Perfluorodecanoic acid (PFDA)	ND		0.17	0.042	ug/Kg	☼	05/02/25 08:22	05/03/25 03:38	1
Perfluorododecanesulfonic acid (PFDoS)	ND		0.17	0.042	ug/Kg	☼	05/02/25 08:22	05/03/25 03:38	1
Perfluorododecanoic acid (PFDoA)	ND		0.17	0.042	ug/Kg	☼	05/02/25 08:22	05/03/25 03:38	1
Perfluoroheptanesulfonic acid (PFHpS)	ND		0.17	0.042	ug/Kg	☼	05/02/25 08:22	05/03/25 03:38	1
Perfluoroheptanoic acid (PFHpA)	ND		0.17	0.042	ug/Kg	☼	05/02/25 08:22	05/03/25 03:38	1
Perfluorohexanesulfonic acid (PFHxS)	ND		0.17	0.042	ug/Kg	☼	05/02/25 08:22	05/03/25 03:38	1
Perfluorohexanoic acid (PFHxA)	ND		0.17	0.042	ug/Kg	☼	05/02/25 08:22	05/03/25 03:38	1
Perfluorononanesulfonic acid (PFNS)	ND		0.17	0.042	ug/Kg	☼	05/02/25 08:22	05/03/25 03:38	1
Perfluorononanoic acid (PFNA)	ND		0.17	0.042	ug/Kg	☼	05/02/25 08:22	05/03/25 03:38	1
Perfluorooctanesulfonamide (PFOSA)	ND		0.17	0.042	ug/Kg	☼	05/02/25 08:22	05/03/25 03:38	1
Perfluorooctanesulfonic acid (PFOS)	**0.16**	**J**	0.17	0.042	ug/Kg	☼	05/02/25 08:22	05/03/25 03:38	1
Perfluorooctanoic acid (PFOA)	ND		0.17	0.042	ug/Kg	☼	05/02/25 08:22	05/03/25 03:38	1
Perfluoropentanesulfonic acid (PFPeS)	ND		0.17	0.042	ug/Kg	☼	05/02/25 08:22	05/03/25 03:38	1
Perfluoropentanoic acid (PFPeA)	ND		0.34	0.084	ug/Kg	☼	05/02/25 08:22	05/03/25 03:38	1
Perfluorotetradecanoic acid (PFTeDA)	ND		0.17	0.042	ug/Kg	☼	05/02/25 08:22	05/03/25 03:38	1
Perfluorotridecanoic acid (PFTrDA)	ND		0.17	0.042	ug/Kg	☼	05/02/25 08:22	05/03/25 03:38	1
Perfluoroundecanoic acid (PFUnA)	ND		0.17	0.042	ug/Kg	☼	05/02/25 08:22	05/03/25 03:38	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C2 PFTeDA	*77.0*		*20 - 150*	*05/02/25 08:22*	*05/03/25 03:38*	*1*
13C2-PFDoDA	*84.1*		*20 - 150*	*05/02/25 08:22*	*05/03/25 03:38*	*1*
13C3 HFPO-DA	*101*		*20 - 150*	*05/02/25 08:22*	*05/03/25 03:38*	*1*
13C3 PFBS	*97.3*		*20 - 150*	*05/02/25 08:22*	*05/03/25 03:38*	*1*
13C3 PFHxS	*93.3*		*20 - 150*	*05/02/25 08:22*	*05/03/25 03:38*	*1*
13C4 PFBA	*91.5*		*20 - 150*	*05/02/25 08:22*	*05/03/25 03:38*	*1*
13C4 PFHpA	*91.4*		*20 - 150*	*05/02/25 08:22*	*05/03/25 03:38*	*1*
13C5 PFHxA	*92.3*		*20 - 150*	*05/02/25 08:22*	*05/03/25 03:38*	*1*
13C5 PFPeA	*103*		*20 - 150*	*05/02/25 08:22*	*05/03/25 03:38*	*1*
13C6 PFDA	*92.7*		*20 - 150*	*05/02/25 08:22*	*05/03/25 03:38*	*1*
13C7 PFUnA	*88.0*		*20 - 150*	*05/02/25 08:22*	*05/03/25 03:38*	*1*
13C8 PFOA	*89.3*		*20 - 150*	*05/02/25 08:22*	*05/03/25 03:38*	*1*
13C8 PFOS	*91.0*		*20 - 150*	*05/02/25 08:22*	*05/03/25 03:38*	*1*
13C8 PFOSA	*78.8*		*20 - 150*	*05/02/25 08:22*	*05/03/25 03:38*	*1*
13C9 PFNA	*82.4*		*20 - 150*	*05/02/25 08:22*	*05/03/25 03:38*	*1*
D3-NMeFOSA	*77.3*		*20 - 150*	*05/02/25 08:22*	*05/03/25 03:38*	*1*
d3-NMeFOSAA	*81.9*		*20 - 150*	*05/02/25 08:22*	*05/03/25 03:38*	*1*
d5-NEtFOSAA	*93.1*		*20 - 150*	*05/02/25 08:22*	*05/03/25 03:38*	*1*
d5-NEtPFOSA	*69.5*		*20 - 150*	*05/02/25 08:22*	*05/03/25 03:38*	*1*
d7-N-MeFOSE-M	*59.3*		*20 - 150*	*05/02/25 08:22*	*05/03/25 03:38*	*1*
d9-N-EtFOSE-M	*56.5*		*20 - 150*	*05/02/25 08:22*	*05/03/25 03:38*	*1*
M2-4:2 FTS	*94.0*		*20 - 150*	*05/02/25 08:22*	*05/03/25 03:38*	*1*
M2-6:2 FTS	*94.8*		*20 - 150*	*05/02/25 08:22*	*05/03/25 03:38*	*1*
M2-8:2 FTS	*89.6*		*20 - 150*	*05/02/25 08:22*	*05/03/25 03:38*	*1*

Client: Roux Environmental Engineering and Geology DPC
Job ID: 480-229067-1
Project/Site: BCP RI - 619 Exchange Street Site

Client Sample ID: HC-6 2in-6in
Lab Sample ID: 480-229067-7
Date Collected: 04/29/25 15:00
Matrix: Solid
Date Received: 04/29/25 15:43
Percent Solids: 73.7

Method: SW846 6010D - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	4540		13.9	12.0	mg/Kg	☼	04/30/25 14:09	05/01/25 12:41	1
Antimony	ND		20.8	0.74	mg/Kg	☼	04/30/25 14:09	05/01/25 12:41	1
Arsenic	12.2		2.8	1.2	mg/Kg	☼	04/30/25 14:09	05/01/25 12:41	1
Barium	330		0.69	0.19	mg/Kg	☼	04/30/25 14:09	05/01/25 12:41	1
Beryllium	0.90		0.28	0.056	mg/Kg	☼	04/30/25 14:09	05/01/25 12:41	1
Cadmium	0.15	J	0.28	0.097	mg/Kg	☼	04/30/25 14:09	05/01/25 12:41	1
Calcium	32100		69.5	37.5	mg/Kg	☼	04/30/25 14:09	05/01/25 12:41	1
Chromium	8.4		0.69	0.50	mg/Kg	☼	04/30/25 14:09	05/01/25 12:41	1
Cobalt	5.7		0.69	0.14	mg/Kg	☼	04/30/25 14:09	05/01/25 12:41	1
Copper	36.1		1.4	0.79	mg/Kg	☼	04/30/25 14:09	05/01/25 12:41	1
Iron	13300		13.9	11.8	mg/Kg	☼	04/30/25 14:09	05/01/25 12:41	1
Lead	186		1.4	0.64	mg/Kg	☼	04/30/25 14:09	05/01/25 12:41	1
Magnesium	3610		27.8	11.8	mg/Kg	☼	04/30/25 14:09	05/01/25 12:41	1
Manganese	84.4		1.4	0.39	mg/Kg	☼	04/30/25 14:09	05/01/25 12:41	1
Nickel	13.7		6.9	0.35	mg/Kg	☼	04/30/25 14:09	05/01/25 12:41	1
Potassium	578		41.7	33.7	mg/Kg	☼	04/30/25 14:09	05/01/25 12:41	1
Selenium	ND		5.6	1.1	mg/Kg	☼	04/30/25 14:09	05/01/25 12:41	1
Silver	ND	^5-	0.83	0.28	mg/Kg	☼	04/30/25 14:09	05/01/25 12:41	1
Sodium	239		195	85.2	mg/Kg	☼	04/30/25 14:09	05/01/25 12:41	1
Thallium	ND		8.3	1.1	mg/Kg	☼	04/30/25 14:09	05/01/25 12:41	1
Vanadium	14.1		0.69	0.18	mg/Kg	☼	04/30/25 14:09	05/01/25 12:41	1
Zinc	156		2.8	1.4	mg/Kg	☼	04/30/25 14:09	05/01/25 12:41	1

Method: SW846 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.055		0.027	0.0062	mg/Kg	☼	05/02/25 09:11	05/02/25 11:58	1

Client: Roux Environmental Engineering and Geology DPC
Job ID: 480-229067-1
Project/Site: BCP RI - 619 Exchange Street Site

Client Sample ID: HC-7 0.25-0.75Ft
Lab Sample ID: 480-229067-8
Date Collected: 04/29/25 14:45
Matrix: Solid
Date Received: 04/29/25 15:43
Percent Solids: 79.7

Method: SW846 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	ND		120	69	ug/Kg	☼	04/30/25 13:32	05/06/25 11:26	1
2,4,5-Trichlorophenol	ND		210	57	ug/Kg	☼	04/30/25 13:32	05/06/25 11:26	1
2,4,6-Trichlorophenol	ND		210	42	ug/Kg	☼	04/30/25 13:32	05/06/25 11:26	1
2,4-Dichlorophenol	ND		210	22	ug/Kg	☼	04/30/25 13:32	05/06/25 11:26	1
2,4-Dimethylphenol	ND		210	51	ug/Kg	☼	04/30/25 13:32	05/06/25 11:26	1
2,4-Dinitrophenol	ND		2100	980	ug/Kg	☼	04/30/25 13:32	05/06/25 11:26	1
2,4-Dinitrotoluene	ND		210	44	ug/Kg	☼	04/30/25 13:32	05/06/25 11:26	1
2,6-Dinitrotoluene	ND		210	25	ug/Kg	☼	04/30/25 13:32	05/06/25 11:26	1
2-Chloronaphthalene	ND		210	35	ug/Kg	☼	04/30/25 13:32	05/06/25 11:26	1
2-Chlorophenol	ND		410	39	ug/Kg	☼	04/30/25 13:32	05/06/25 11:26	1
2-Methylnaphthalene	ND		210	42	ug/Kg	☼	04/30/25 13:32	05/06/25 11:26	1
2-Methylphenol	ND		210	25	ug/Kg	☼	04/30/25 13:32	05/06/25 11:26	1
2-Nitroaniline	ND		410	31	ug/Kg	☼	04/30/25 13:32	05/06/25 11:26	1
2-Nitrophenol	ND		210	60	ug/Kg	☼	04/30/25 13:32	05/06/25 11:26	1
3,3'-Dichlorobenzidine	ND		410	250	ug/Kg	☼	04/30/25 13:32	05/06/25 11:26	1
3-Nitroaniline	ND		410	59	ug/Kg	☼	04/30/25 13:32	05/06/25 11:26	1
4,6-Dinitro-2-methylphenol	ND		410	210	ug/Kg	☼	04/30/25 13:32	05/06/25 11:26	1
4-Bromophenyl phenyl ether	ND		210	30	ug/Kg	☼	04/30/25 13:32	05/06/25 11:26	1
4-Chloro-3-methylphenol	ND		210	52	ug/Kg	☼	04/30/25 13:32	05/06/25 11:26	1
4-Chloroaniline	ND		210	52	ug/Kg	☼	04/30/25 13:32	05/06/25 11:26	1
4-Chlorophenyl phenyl ether	ND		210	26	ug/Kg	☼	04/30/25 13:32	05/06/25 11:26	1
4-Methylphenol	ND		410	25	ug/Kg	☼	04/30/25 13:32	05/06/25 11:26	1
4-Nitroaniline	ND		410	110	ug/Kg	☼	04/30/25 13:32	05/06/25 11:26	1
4-Nitrophenol	ND		410	150	ug/Kg	☼	04/30/25 13:32	05/06/25 11:26	1
Acenaphthene	ND		210	31	ug/Kg	☼	04/30/25 13:32	05/06/25 11:26	1
Acenaphthylene	ND		210	27	ug/Kg	☼	04/30/25 13:32	05/06/25 11:26	1
Acetophenone	ND		210	29	ug/Kg	☼	04/30/25 13:32	05/06/25 11:26	1
Anthracene	ND		210	52	ug/Kg	☼	04/30/25 13:32	05/06/25 11:26	1
Atrazine	ND		210	74	ug/Kg	☼	04/30/25 13:32	05/06/25 11:26	1
Benzaldehyde	ND		210	170	ug/Kg	☼	04/30/25 13:32	05/06/25 11:26	1
Benzo[a]anthracene	**40**	**J**	210	21	ug/Kg	☼	04/30/25 13:32	05/06/25 11:26	1
Benzo[a]pyrene	**38**	**J**	210	31	ug/Kg	☼	04/30/25 13:32	05/06/25 11:26	1
Benzo[b]fluoranthene	**51**	**J**	210	34	ug/Kg	☼	04/30/25 13:32	05/06/25 11:26	1
Benzo[g,h,i]perylene	**30**	**J**	210	22	ug/Kg	☼	04/30/25 13:32	05/06/25 11:26	1
Benzo[k]fluoranthene	ND		210	27	ug/Kg	☼	04/30/25 13:32	05/06/25 11:26	1
Biphenyl	ND		210	31	ug/Kg	☼	04/30/25 13:32	05/06/25 11:26	1
bis (2-chloroisopropyl) ether	ND		210	42	ug/Kg	☼	04/30/25 13:32	05/06/25 11:26	1
Bis(2-chloroethoxy)methane	ND		210	45	ug/Kg	☼	04/30/25 13:32	05/06/25 11:26	1
Bis(2-chloroethyl)ether	ND		210	27	ug/Kg	☼	04/30/25 13:32	05/06/25 11:26	1
Bis(2-ethylhexyl) phthalate	ND		210	72	ug/Kg	☼	04/30/25 13:32	05/06/25 11:26	1
Butyl benzyl phthalate	ND		210	35	ug/Kg	☼	04/30/25 13:32	05/06/25 11:26	1
Caprolactam	ND		210	64	ug/Kg	☼	04/30/25 13:32	05/06/25 11:26	1
Carbazole	ND		210	25	ug/Kg	☼	04/30/25 13:32	05/06/25 11:26	1
Chrysene	**49**	**J**	210	47	ug/Kg	☼	04/30/25 13:32	05/06/25 11:26	1
Dibenz(a,h)anthracene	ND		210	37	ug/Kg	☼	04/30/25 13:32	05/06/25 11:26	1
Dibenzofuran	ND		210	25	ug/Kg	☼	04/30/25 13:32	05/06/25 11:26	1
Diethyl phthalate	ND		210	27	ug/Kg	☼	04/30/25 13:32	05/06/25 11:26	1
Dimethyl phthalate	ND		210	25	ug/Kg	☼	04/30/25 13:32	05/06/25 11:26	1
Di-n-butyl phthalate	ND		210	36	ug/Kg	☼	04/30/25 13:32	05/06/25 11:26	1

Client Sample ID: HC-7 0.25-0.75Ft
Lab Sample ID: 480-229067-8
Date Collected: 04/29/25 14:45
Matrix: Solid
Date Received: 04/29/25 15:43
Percent Solids: 79.7

Method: SW846 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate	ND		210	25	ug/Kg	☼	04/30/25 13:32	05/06/25 11:26	1
Fluoranthene	**85**	**J**	210	22	ug/Kg	☼	04/30/25 13:32	05/06/25 11:26	1
Fluorene	ND		210	25	ug/Kg	☼	04/30/25 13:32	05/06/25 11:26	1
Hexachlorobenzene	ND		210	29	ug/Kg	☼	04/30/25 13:32	05/06/25 11:26	1
Hexachlorobutadiene	ND		210	31	ug/Kg	☼	04/30/25 13:32	05/06/25 11:26	1
Hexachlorocyclopentadiene	ND		210	29	ug/Kg	☼	04/30/25 13:32	05/06/25 11:26	1
Hexachloroethane	ND		210	27	ug/Kg	☼	04/30/25 13:32	05/06/25 11:26	1
Indeno[1,2,3-cd]pyrene	ND		210	26	ug/Kg	☼	04/30/25 13:32	05/06/25 11:26	1
Isophorone	ND		210	45	ug/Kg	☼	04/30/25 13:32	05/06/25 11:26	1
Naphthalene	ND		210	27	ug/Kg	☼	04/30/25 13:32	05/06/25 11:26	1
Nitrobenzene	ND		210	24	ug/Kg	☼	04/30/25 13:32	05/06/25 11:26	1
N-Nitrosodi-n-propylamine	ND		210	36	ug/Kg	☼	04/30/25 13:32	05/06/25 11:26	1
N-Nitrosodiphenylamine	ND		210	170	ug/Kg	☼	04/30/25 13:32	05/06/25 11:26	1
Pentachlorophenol	ND		410	210	ug/Kg	☼	04/30/25 13:32	05/06/25 11:26	1
Phenanthrene	**63**	**J**	210	31	ug/Kg	☼	04/30/25 13:32	05/06/25 11:26	1
Phenol	ND		210	32	ug/Kg	☼	04/30/25 13:32	05/06/25 11:26	1
Pyrene	**67**	**J**	210	25	ug/Kg	☼	04/30/25 13:32	05/06/25 11:26	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Unknown	*3300*	*T J*	*ug/Kg*	☼	*1.88*	*N/A*	*04/30/25 13:32*	*05/06/25 11:26*	*1*
Unknown	*4800*	*T J*	*ug/Kg*	☼	*1.99*	*N/A*	*04/30/25 13:32*	*05/06/25 11:26*	*1*
Unknown	*1100*	*T J*	*ug/Kg*	☼	*3.45*	*N/A*	*04/30/25 13:32*	*05/06/25 11:26*	*1*
Column Bleed	*320*	*T J*	*ug/Kg*	☼	*5.33*	*N/A*	*04/30/25 13:32*	*05/06/25 11:26*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol (Surr)	*66*		*26 - 143*	*04/30/25 13:32*	*05/06/25 11:26*	*1*
2-Fluorobiphenyl (Surr)	*85*		*50 - 121*	*04/30/25 13:32*	*05/06/25 11:26*	*1*
2-Fluorophenol (Surr)	*74*		*36 - 120*	*04/30/25 13:32*	*05/06/25 11:26*	*1*
Nitrobenzene-d5 (Surr)	*80*		*40 - 121*	*04/30/25 13:32*	*05/06/25 11:26*	*1*
Phenol-d5 (Surr)	*78*		*41 - 120*	*04/30/25 13:32*	*05/06/25 11:26*	*1*
p-Terphenyl-d14 (Surr)	*95*		*46 - 143*	*04/30/25 13:32*	*05/06/25 11:26*	*1*

Method: SW846 6010D - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**7230**		12.8	11.0	mg/Kg	☼	04/30/25 14:09	05/01/25 12:43	1
Antimony	ND		19.2	0.68	mg/Kg	☼	04/30/25 14:09	05/01/25 12:43	1
Arsenic	**4.7**		2.6	1.1	mg/Kg	☼	04/30/25 14:09	05/01/25 12:43	1
Barium	**624**		0.64	0.18	mg/Kg	☼	04/30/25 14:09	05/01/25 12:43	1
Beryllium	**0.48**		0.26	0.051	mg/Kg	☼	04/30/25 14:09	05/01/25 12:43	1
Cadmium	**0.17**	**J**	0.26	0.090	mg/Kg	☼	04/30/25 14:09	05/01/25 12:43	1
Calcium	**63100**		64.1	34.6	mg/Kg	☼	04/30/25 14:09	05/01/25 12:43	1
Chromium	**7.5**		0.64	0.46	mg/Kg	☼	04/30/25 14:09	05/01/25 12:43	1
Cobalt	**4.5**		0.64	0.13	mg/Kg	☼	04/30/25 14:09	05/01/25 12:43	1
Copper	**15.5**		1.3	0.73	mg/Kg	☼	04/30/25 14:09	05/01/25 12:43	1
Iron	**9320**		12.8	10.9	mg/Kg	☼	04/30/25 14:09	05/01/25 12:43	1
Lead	**52.6**		1.3	0.59	mg/Kg	☼	04/30/25 14:09	05/01/25 12:43	1
Magnesium	**10500**		25.6	10.9	mg/Kg	☼	04/30/25 14:09	05/01/25 12:43	1
Manganese	**136**		1.3	0.36	mg/Kg	☼	04/30/25 14:09	05/01/25 12:43	1
Nickel	**13.5**		6.4	0.32	mg/Kg	☼	04/30/25 14:09	05/01/25 12:43	1
Potassium	**883**		38.4	31.1	mg/Kg	☼	04/30/25 14:09	05/01/25 12:43	1

Client: Roux Environmental Engineering and Geology DPC
Job ID: 480-229067-1
Project/Site: BCP RI - 619 Exchange Street Site

Client Sample ID: HC-7 0.25-0.75Ft
Lab Sample ID: 480-229067-8
Date Collected: 04/29/25 14:45
Matrix: Solid
Date Received: 04/29/25 15:43
Percent Solids: 79.7

Method: SW846 6010D - Metals (ICP) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Selenium	ND		5.1	1.0	mg/Kg	☼	04/30/25 14:09	05/01/25 12:43	1
Silver	ND	^5-	0.77	0.26	mg/Kg	☼	04/30/25 14:09	05/01/25 12:43	1
Sodium	**375**		179	78.5	mg/Kg	☼	04/30/25 14:09	05/01/25 12:43	1
Thallium	ND		7.7	0.97	mg/Kg	☼	04/30/25 14:09	05/01/25 12:43	1
Vanadium	**11.8**		0.64	0.17	mg/Kg	☼	04/30/25 14:09	05/01/25 12:43	1
Zinc	**83.5**		2.6	1.3	mg/Kg	☼	04/30/25 14:09	05/01/25 12:43	1

Method: SW846 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.040**		0.024	0.0056	mg/Kg	☼	05/02/25 09:11	05/02/25 11:59	1

Surrogate Summary

Client: Roux Environmental Engineering and Geology DPC
Job ID: 480-229067-1
Project/Site: BCP RI - 619 Exchange Street Site

Method: 8260C - Volatile Organic Compounds by GC/MS

Matrix: Solid **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)							
		DCA	BFB	DBFM	TOL				
Lab Sample ID	Client Sample ID	(64-126)	(72-126)	(60-140)	(71-125)				
480-229067-1	HC-4 0.5-1.5Ft	105	88	106	103				
480-229067-2	BD-1	104	91	103	103				
480-229067-3	MW-2 0.75-2Ft	109	82	107	108				
480-229067-5	MW-1 0.25-3Ft	108	94	104	102				
480-229067-5 MS	MW-1 0.25-3Ft	92	85	100	107				
480-229067-5 MSD	MW-1 0.25-3Ft	92	82	103	112				
480-229067-7	HC-6 2in-6in	106	101	105	97				
LCS 480-744798/2-A	Lab Control Sample	103	98	101	97				
LCS 480-744799/2-A	Lab Control Sample	102	98	105	100				
MB 480-744798/1-A	Method Blank	101	101	101	97				
MB 480-744799/1-A	Method Blank	103	98	103	97				

Surrogate Legend

DCA = 1,2-Dichloroethane-d4 (Surr)
BFB = 4-Bromofluorobenzene (Surr)
DBFM = Dibromofluoromethane (Surr)
TOL = Toluene-d8 (Surr)

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Matrix: Solid **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)							
		TBP	FBP	2FP	NBZ	PHL	TPHd14		
Lab Sample ID	Client Sample ID	(26-143)	(50-121)	(36-120)	(40-121)	(41-120)	(46-143)		
480-229067-1	HC-4 0.5-1.5Ft	62	74	60	81	66	91		
480-229067-2	BD-1	77	78	70	87	77	88		
480-229067-3	MW-2 0.75-2Ft	103	97	80	91	90	101		
480-229067-4	MW-3 0.5-2.5Ft	91	85	69	75	76	88		
480-229067-5	MW-1 0.25-3Ft	106	87	76	101	89	101		
480-229067-5 MS	MW-1 0.25-3Ft	105	83	72	93	86	96		
480-229067-5 MSD	MW-1 0.25-3Ft	105	84	77	98	89	105		
480-229067-6	HC-5 0.33-0.66Ft	95	98	82	95	87	104		
480-229067-7	HC-6 2in-6in	78	82	71	75	75	93		
480-229067-8	HC-7 0.25-0.75Ft	66	85	74	80	78	95		
LCS 480-744863/2-A	Lab Control Sample	102	83	74	87	88	106		
LCS 480-744941/2-A	Lab Control Sample	98	92	80	86	89	95		
MB 480-744863/1-A	Method Blank	90	78	74	87	84	108		
MB 480-744941/1-A	Method Blank	86	85	77	88	83	97		

Surrogate Legend

TBP = 2,4,6-Tribromophenol (Surr)
FBP = 2-Fluorobiphenyl (Surr)
2FP = 2-Fluorophenol (Surr)
NBZ = Nitrobenzene-d5 (Surr)
PHL = Phenol-d5 (Surr)
TPHd14 = p-Terphenyl-d14 (Surr)

Surrogate Summary

Client: Roux Environmental Engineering and Geology DPC
Job ID: 480-229067-1
Project/Site: BCP RI - 619 Exchange Street Site

Method: 8081B - Organochlorine Pesticides (GC)

Matrix: Solid **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)			
		DCBP1	DCBP2	TCX1	TCX2
Lab Sample ID	Client Sample ID	(45-120)	(45-120)	(30-124)	(30-124)
480-229067-1	HC-4 0.5-1.5Ft	201 S1+	185 S1+	104	89
480-229067-2	BD-1	179 S1+	175 S1+	103	87
480-229067-3	MW-2 0.75-2Ft	180 S1+	297 S1+	115	157 S1+
480-229067-5	MW-1 0.25-3Ft	222 S1+	289 S1+	115	82
480-229067-5 MS	MW-1 0.25-3Ft	274 S1+	342 S1+	117	92
480-229067-5 MSD	MW-1 0.25-3Ft	275 S1+	437 S1+	117	92
480-229067-7	HC-6 2in-6in	157 S1+	162 S1+	99	83
LCS 480-744938/2-A	Lab Control Sample	96	113	72	67
MB 480-744938/1-A	Method Blank	119	117	84	81

Surrogate Legend

DCBP = DCB Decachlorobiphenyl

TCX = Tetrachloro-m-xylene

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Matrix: Solid **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)			
		DCBP1	DCBP2	TCX1	TCX2
Lab Sample ID	Client Sample ID	(65-174)	(65-174)	(60-154)	(60-154)
480-229067-1	HC-4 0.5-1.5Ft	101	111	106	102
480-229067-2	BD-1	117	108	107	104
480-229067-3	MW-2 0.75-2Ft	105	106	111	105
480-229067-5	MW-1 0.25-3Ft	94	107	103	97
480-229067-5 MS	MW-1 0.25-3Ft	168	166	163 S1+	155 S1+
480-229067-5 MSD	MW-1 0.25-3Ft	133	143	137	127
480-229067-7	HC-6 2in-6in	105	110	111	105
LCS 480-744942/2-A	Lab Control Sample	169	167	156 S1+	150
MB 480-744942/1-A	Method Blank	136	139	133	123

Surrogate Legend

DCBP = DCB Decachlorobiphenyl

TCX = Tetrachloro-m-xylene

Method: 8151A - Herbicides (GC)

Matrix: Solid **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)	
		DCPAA1	DCPAA2
Lab Sample ID	Client Sample ID	(28-129)	(28-129)
480-229067-1	HC-4 0.5-1.5Ft	68	71
480-229067-2	BD-1	73	74
480-229067-3	MW-2 0.75-2Ft	72	75
480-229067-5	MW-1 0.25-3Ft	72	72
480-229067-5 MS	MW-1 0.25-3Ft	73	73
480-229067-5 MSD	MW-1 0.25-3Ft	80	81
480-229067-7	HC-6 2in-6in	78	70
LCS 480-744937/2-A	Lab Control Sample	83	76
MB 480-744937/1-A	Method Blank	78	76

Surrogate Legend

DCPAA = 2,4-Dichlorophenylacetic acid

Isotope Dilution Summary

Client: Roux Environmental Engineering and Geology DPC
Job ID: 480-229067-1
Project/Site: BCP RI - 619 Exchange Street Site

Method: Draft-3 1633 - Per- and Polyfluoroalkyl Substances by LC/MS/MS

Matrix: Solid **Prep Type: Total/NA**

		Percent Isotope Dilution Recovery (Acceptance Limits)							
		PFTDA	PFDoDA	HFPODA	C3PFBS	C3PFHS	PFBA	C4PFHA	13C5PHA
Lab Sample ID	Client Sample ID	(20-150)	(20-150)	(20-150)	(20-150)	(20-150)	(20-150)	(20-150)	(20-150)
480-229067-1	HC-4 0.5-1.5Ft	81.5	88.8	98.7	96.3	90.5	89.7	94.2	90.1
480-229067-2	BD-1	76.7	82.9	98.4	92.9	89.1	91.4	92.3	92.5
480-229067-3	MW-2 0.75-2Ft	89.1	93.5	98.0	94.4	94.1	91.3	93.0	94.0
480-229067-5	MW-1 0.25-3Ft	80.4	86.7	93.1	94.3	92.0	91.7	93.2	90.6
480-229067-5 MS	MW-1 0.25-3Ft	80.1	85.9	92.2	93.8	89.3	92.9	93.3	86.3
480-229067-5 MSD	MW-1 0.25-3Ft	77.2	81.3	91.0	93.0	90.0	88.3	83.5	87.7
480-229067-7	HC-6 2in-6in	77.0	84.1	101	97.3	93.3	91.5	91.4	92.3
LCS 240-654462/3-A	Lab Control Sample	77.3	83.0	100	95.1	88.6	91.7	93.9	92.7
LLCS 240-654462/2-A	Lab Control Sample	75.1	85.2	101	97.9	89.0	91.3	93.9	92.9
MB 240-654462/1-A	Method Blank	74.9	84.8	95.9	99.6	94.4	95.9	92.9	98.2

		Percent Isotope Dilution Recovery (Acceptance Limits)							
		PFPeA	C6PFDA	13C7PUA	C8PFOA	C8PFOS	PFOSA	C9PFNA	d3NMFSA
Lab Sample ID	Client Sample ID	(20-150)	(20-150)	(20-150)	(20-150)	(20-150)	(20-150)	(20-150)	(20-150)
480-229067-1	HC-4 0.5-1.5Ft	99.6	88.5	86.7	91.7	93.8	83.6	84.3	80.8
480-229067-2	BD-1	100	93.8	87.1	85.6	91.8	82.8	82.0	72.0
480-229067-3	MW-2 0.75-2Ft	102	93.1	92.1	92.3	92.8	83.1	85.6	76.4
480-229067-5	MW-1 0.25-3Ft	102	92.0	86.6	88.3	91.8	81.5	83.8	60.0
480-229067-5 MS	MW-1 0.25-3Ft	100	90.5	93.8	90.2	90.9	82.6	80.1	65.6
480-229067-5 MSD	MW-1 0.25-3Ft	97.9	85.2	79.1	85.2	85.8	82.4	80.8	65.3
480-229067-7	HC-6 2in-6in	103	92.7	88.0	89.3	91.0	78.8	82.4	77.3
LCS 240-654462/3-A	Lab Control Sample	100	86.4	85.0	94.3	92.4	86.0	84.5	74.6
LLCS 240-654462/2-A	Lab Control Sample	97.3	90.1	84.9	89.6	91.5	82.3	82.8	61.3
MB 240-654462/1-A	Method Blank	97.7	89.7	88.9	94.4	96.8	89.4	87.7	83.2

		Percent Isotope Dilution Recovery (Acceptance Limits)							
		d3NMFOS	d5NEFOS	d5NPFSA	NMFM	NEFM	M242FTS	M262FTS	M282FTS
Lab Sample ID	Client Sample ID	(20-150)	(20-150)	(20-150)	(20-150)	(20-150)	(20-150)	(20-150)	(20-150)
480-229067-1	HC-4 0.5-1.5Ft	91.2	105	76.3	63.4	48.0	102	95.9	95.9
480-229067-2	BD-1	93.2	98.5	71.2	65.8	64.2	104	99.3	94.7
480-229067-3	MW-2 0.75-2Ft	95.4	106	75.7	60.4	54.2	135	115	102
480-229067-5	MW-1 0.25-3Ft	94.4	94.8	66.6	59.5	43.2	154 *5+	120	106
480-229067-5 MS	MW-1 0.25-3Ft	93.3	101	65.3	61.9	62.8	136	123	97.0
480-229067-5 MSD	MW-1 0.25-3Ft	90.4	92.2	69.0	56.4	55.5	135	116	99.1
480-229067-7	HC-6 2in-6in	81.9	93.1	69.5	59.3	56.5	94.0	94.8	89.6
LCS 240-654462/3-A	Lab Control Sample	94.0	124	70.0	77.3	66.5	103	96.3	90.8
LLCS 240-654462/2-A	Lab Control Sample	92.9	97.2	67.6	62.7	61.0	105	96.9	87.0
MB 240-654462/1-A	Method Blank	102	98.4	74.9	87.5	80.9	102	101	94.1

Surrogate Legend

PFTDA = 13C2 PFTeDA
PFDoDA = 13C2-PFDoDA
HFPODA = 13C3 HFPO-DA
C3PFBS = 13C3 PFBS
C3PFHS = 13C3 PFHxS
PFBA = 13C4 PFBA
C4PFHA = 13C4 PFHpA
13C5PHA = 13C5 PFHxA
PFPeA = 13C5 PFPeA
C6PFDA = 13C6 PFDA
13C7PUA = 13C7 PFUnA

Isotope Dilution Summary

Client: Roux Environmental Engineering and Geology DPC
Job ID: 480-229067-1
Project/Site: BCP RI - 619 Exchange Street Site

C8PFOA = 13C8 PFOA
C8PFOS = 13C8 PFOS
PFOSA = 13C8 PFOSA
C9PFNA = 13C9 PFNA
d3NMFSA = D3-NMeFOSA
d3NMFOS = d3-NMeFOSAA
d5NEFOS = d5-NEtFOSAA
d5NPFSA = d5-NEtPFOSA
NMFM = d7-N-MeFOSE-M
NEFM = d9-N-EtFOSE-M
M242FTS = M2-4:2 FTS
M262FTS = M2-6:2 FTS
M282FTS = M2-8:2 FTS

Method: 8260C - Volatile Organic Compounds by GC/MS

Lab Sample ID: MB 480-744798/1-A
Matrix: Solid
Analysis Batch: 744801

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 744798

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		5.0	0.36	ug/Kg		04/29/25 16:51	04/29/25 21:30	1
1,1,2,2-Tetrachloroethane	ND		5.0	0.81	ug/Kg		04/29/25 16:51	04/29/25 21:30	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		5.0	1.1	ug/Kg		04/29/25 16:51	04/29/25 21:30	1
1,1,2-Trichloroethane	ND		5.0	0.65	ug/Kg		04/29/25 16:51	04/29/25 21:30	1
1,1-Dichloroethane	ND		5.0	0.61	ug/Kg		04/29/25 16:51	04/29/25 21:30	1
1,1-Dichloroethene	ND		5.0	0.61	ug/Kg		04/29/25 16:51	04/29/25 21:30	1
1,2,4-Trichlorobenzene	ND		5.0	0.30	ug/Kg		04/29/25 16:51	04/29/25 21:30	1
1,2,4-Trimethylbenzene	ND		5.0	0.96	ug/Kg		04/29/25 16:51	04/29/25 21:30	1
1,2-Dibromo-3-Chloropropane	ND		5.0	2.5	ug/Kg		04/29/25 16:51	04/29/25 21:30	1
1,2-Dibromoethane	ND		5.0	0.64	ug/Kg		04/29/25 16:51	04/29/25 21:30	1
1,2-Dichlorobenzene	ND		5.0	0.39	ug/Kg		04/29/25 16:51	04/29/25 21:30	1
1,2-Dichloroethane	ND		5.0	0.25	ug/Kg		04/29/25 16:51	04/29/25 21:30	1
1,2-Dichloropropane	ND		5.0	2.5	ug/Kg		04/29/25 16:51	04/29/25 21:30	1
1,3,5-Trimethylbenzene	ND		5.0	0.32	ug/Kg		04/29/25 16:51	04/29/25 21:30	1
1,3-Dichlorobenzene	ND		5.0	0.26	ug/Kg		04/29/25 16:51	04/29/25 21:30	1
1,4-Dichlorobenzene	ND		5.0	0.70	ug/Kg		04/29/25 16:51	04/29/25 21:30	1
2-Butanone (MEK)	ND		25	1.8	ug/Kg		04/29/25 16:51	04/29/25 21:30	1
2-Hexanone	ND		25	2.5	ug/Kg		04/29/25 16:51	04/29/25 21:30	1
4-Isopropyltoluene	ND		5.0	0.40	ug/Kg		04/29/25 16:51	04/29/25 21:30	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.6	ug/Kg		04/29/25 16:51	04/29/25 21:30	1
Acetone	ND		25	4.2	ug/Kg		04/29/25 16:51	04/29/25 21:30	1
Benzene	ND		5.0	0.25	ug/Kg		04/29/25 16:51	04/29/25 21:30	1
Bromodichloromethane	ND		5.0	0.67	ug/Kg		04/29/25 16:51	04/29/25 21:30	1
Bromoform	ND		5.0	2.5	ug/Kg		04/29/25 16:51	04/29/25 21:30	1
Bromomethane	ND		5.0	0.45	ug/Kg		04/29/25 16:51	04/29/25 21:30	1
Carbon disulfide	ND		5.0	2.5	ug/Kg		04/29/25 16:51	04/29/25 21:30	1
Carbon tetrachloride	ND		5.0	0.48	ug/Kg		04/29/25 16:51	04/29/25 21:30	1
Chlorobenzene	ND		5.0	0.66	ug/Kg		04/29/25 16:51	04/29/25 21:30	1
Chloroethane	ND		5.0	1.1	ug/Kg		04/29/25 16:51	04/29/25 21:30	1
Chloroform	1.13	J	5.0	0.31	ug/Kg		04/29/25 16:51	04/29/25 21:30	1
Chloromethane	ND		5.0	0.30	ug/Kg		04/29/25 16:51	04/29/25 21:30	1
cis-1,2-Dichloroethene	ND		5.0	0.64	ug/Kg		04/29/25 16:51	04/29/25 21:30	1
cis-1,3-Dichloropropene	ND		5.0	0.72	ug/Kg		04/29/25 16:51	04/29/25 21:30	1
Cyclohexane	ND		5.0	0.70	ug/Kg		04/29/25 16:51	04/29/25 21:30	1
Dibromochloromethane	ND		5.0	0.64	ug/Kg		04/29/25 16:51	04/29/25 21:30	1
Dichlorodifluoromethane	ND		5.0	0.41	ug/Kg		04/29/25 16:51	04/29/25 21:30	1
Ethylbenzene	ND		5.0	0.35	ug/Kg		04/29/25 16:51	04/29/25 21:30	1
Isopropylbenzene	ND		5.0	0.75	ug/Kg		04/29/25 16:51	04/29/25 21:30	1
Methyl acetate	ND		25	3.0	ug/Kg		04/29/25 16:51	04/29/25 21:30	1
Methyl tert-butyl ether	ND		5.0	0.49	ug/Kg		04/29/25 16:51	04/29/25 21:30	1
Methylcyclohexane	ND		5.0	0.76	ug/Kg		04/29/25 16:51	04/29/25 21:30	1
Methylene Chloride	ND		5.0	2.3	ug/Kg		04/29/25 16:51	04/29/25 21:30	1
Naphthalene	ND		5.0	0.67	ug/Kg		04/29/25 16:51	04/29/25 21:30	1
n-Butylbenzene	ND		5.0	0.44	ug/Kg		04/29/25 16:51	04/29/25 21:30	1
N-Propylbenzene	ND		5.0	0.40	ug/Kg		04/29/25 16:51	04/29/25 21:30	1
sec-Butylbenzene	ND		5.0	0.44	ug/Kg		04/29/25 16:51	04/29/25 21:30	1
Styrene	ND		5.0	0.25	ug/Kg		04/29/25 16:51	04/29/25 21:30	1
tert-Butylbenzene	ND		5.0	0.52	ug/Kg		04/29/25 16:51	04/29/25 21:30	1

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: MB 480-744798/1-A
Matrix: Solid
Analysis Batch: 744801

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 744798

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Tetrachloroethene	ND		5.0	0.67	ug/Kg		04/29/25 16:51	04/29/25 21:30	1
Toluene	ND		5.0	0.38	ug/Kg		04/29/25 16:51	04/29/25 21:30	1
trans-1,2-Dichloroethene	ND		5.0	0.52	ug/Kg		04/29/25 16:51	04/29/25 21:30	1
trans-1,3-Dichloropropene	ND		5.0	2.2	ug/Kg		04/29/25 16:51	04/29/25 21:30	1
Trichloroethene	ND		5.0	1.1	ug/Kg		04/29/25 16:51	04/29/25 21:30	1
Trichlorofluoromethane	ND		5.0	0.47	ug/Kg		04/29/25 16:51	04/29/25 21:30	1
Vinyl chloride	ND		5.0	0.61	ug/Kg		04/29/25 16:51	04/29/25 21:30	1
Xylenes, Total	ND		10	0.84	ug/Kg		04/29/25 16:51	04/29/25 21:30	1

Tentatively Identified Compound	*MB Est. Result*	*MB Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/Kg*			*N/A*	*04/29/25 16:51*	*04/29/25 21:30*	*1*

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*101*		*64 - 126*	*04/29/25 16:51*	*04/29/25 21:30*	*1*
4-Bromofluorobenzene (Surr)	*101*		*72 - 126*	*04/29/25 16:51*	*04/29/25 21:30*	*1*
Dibromofluoromethane (Surr)	*101*		*60 - 140*	*04/29/25 16:51*	*04/29/25 21:30*	*1*
Toluene-d8 (Surr)	*97*		*71 - 125*	*04/29/25 16:51*	*04/29/25 21:30*	*1*

Lab Sample ID: LCS 480-744798/2-A
Matrix: Solid
Analysis Batch: 744801

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 744798

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
1,1,1-Trichloroethane	50.0	48.7		ug/Kg		97	77 - 121
1,1,2,2-Tetrachloroethane	50.0	46.9		ug/Kg		94	80 - 120
1,1,2-Trichloro-1,2,2-trifluoroethane	50.0	48.3		ug/Kg		97	60 - 140
1,1,2-Trichloroethane	50.0	47.2		ug/Kg		94	78 - 122
1,1-Dichloroethane	50.0	47.7		ug/Kg		95	73 - 126
1,1-Dichloroethene	50.0	47.4		ug/Kg		95	59 - 125
1,2,4-Trichlorobenzene	50.0	46.7		ug/Kg		93	64 - 120
1,2,4-Trimethylbenzene	50.0	47.0		ug/Kg		94	74 - 120
1,2-Dibromo-3-Chloropropane	50.0	47.4		ug/Kg		95	63 - 124
1,2-Dibromoethane	50.0	48.0		ug/Kg		96	78 - 120
1,2-Dichlorobenzene	50.0	46.5		ug/Kg		93	75 - 120
1,2-Dichloroethane	50.0	49.5		ug/Kg		99	77 - 122
1,2-Dichloropropane	50.0	49.5		ug/Kg		99	75 - 124
1,3,5-Trimethylbenzene	50.0	47.8		ug/Kg		96	74 - 120
1,3-Dichlorobenzene	50.0	46.8		ug/Kg		94	74 - 120
1,4-Dichlorobenzene	50.0	45.8		ug/Kg		92	73 - 120
2-Butanone (MEK)	250	269		ug/Kg		107	70 - 134
2-Hexanone	250	248		ug/Kg		99	59 - 130
4-Isopropyltoluene	50.0	48.0		ug/Kg		96	74 - 120
4-Methyl-2-pentanone (MIBK)	250	248		ug/Kg		99	65 - 133
Acetone	250	259		ug/Kg		103	61 - 137
Benzene	50.0	47.8		ug/Kg		96	79 - 127
Bromodichloromethane	50.0	49.3		ug/Kg		99	80 - 122
Bromoform	50.0	48.6		ug/Kg		97	68 - 126

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCS 480-744798/2-A
Matrix: Solid
Analysis Batch: 744801

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 744798

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Bromomethane	50.0	46.7		ug/Kg		93	37 - 149
Carbon disulfide	50.0	44.5		ug/Kg		89	64 - 131
Carbon tetrachloride	50.0	47.8		ug/Kg		96	75 - 135
Chlorobenzene	50.0	46.3		ug/Kg		93	76 - 124
Chloroethane	50.0	49.1		ug/Kg		98	69 - 135
Chloroform	50.0	46.5		ug/Kg		93	80 - 120
Chloromethane	50.0	47.1		ug/Kg		94	63 - 127
cis-1,2-Dichloroethene	50.0	47.3		ug/Kg		95	81 - 120
cis-1,3-Dichloropropene	50.0	51.0		ug/Kg		102	80 - 120
Cyclohexane	50.0	47.6		ug/Kg		95	65 - 120
Dibromochloromethane	50.0	48.9		ug/Kg		98	76 - 125
Dichlorodifluoromethane	50.0	43.5		ug/Kg		87	57 - 142
Ethylbenzene	50.0	45.7		ug/Kg		91	80 - 120
Isopropylbenzene	50.0	48.1		ug/Kg		96	72 - 120
Methyl acetate	100	100		ug/Kg		100	55 - 136
Methyl tert-butyl ether	50.0	46.9		ug/Kg		94	63 - 125
Methylcyclohexane	50.0	46.5		ug/Kg		93	60 - 140
Methylene Chloride	50.0	50.1		ug/Kg		100	61 - 127
Naphthalene	50.0	47.5		ug/Kg		95	38 - 137
n-Butylbenzene	50.0	47.1		ug/Kg		94	70 - 120
N-Propylbenzene	50.0	47.7		ug/Kg		95	70 - 130
sec-Butylbenzene	50.0	47.9		ug/Kg		96	74 - 120
Styrene	50.0	44.8		ug/Kg		90	80 - 120
tert-Butylbenzene	50.0	50.1		ug/Kg		100	73 - 120
Tetrachloroethene	50.0	46.4		ug/Kg		93	74 - 122
Toluene	50.0	46.0		ug/Kg		92	74 - 128
trans-1,2-Dichloroethene	50.0	46.6		ug/Kg		93	78 - 126
trans-1,3-Dichloropropene	50.0	48.4		ug/Kg		97	73 - 123
Trichloroethene	50.0	49.0		ug/Kg		98	77 - 129
Trichlorofluoromethane	50.0	49.6		ug/Kg		99	65 - 146
Vinyl chloride	50.0	47.7		ug/Kg		95	61 - 133
Xylenes, Total	100	93.0		ug/Kg		93	70 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*103*		*64 - 126*
4-Bromofluorobenzene (Surr)	*98*		*72 - 126*
Dibromofluoromethane (Surr)	*101*		*60 - 140*
Toluene-d8 (Surr)	*97*		*71 - 125*

Lab Sample ID: MB 480-744799/1-A
Matrix: Solid
Analysis Batch: 744923

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 744799

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		5.0	0.36	ug/Kg		04/29/25 16:52	04/30/25 22:04	1
1,1,2,2-Tetrachloroethane	ND		5.0	0.81	ug/Kg		04/29/25 16:52	04/30/25 22:04	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		5.0	1.1	ug/Kg		04/29/25 16:52	04/30/25 22:04	1
1,1,2-Trichloroethane	ND		5.0	0.65	ug/Kg		04/29/25 16:52	04/30/25 22:04	1

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: MB 480-744799/1-A
Matrix: Solid
Analysis Batch: 744923

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 744799

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethane	ND		5.0	0.61	ug/Kg		04/29/25 16:52	04/30/25 22:04	1
1,1-Dichloroethene	ND		5.0	0.61	ug/Kg		04/29/25 16:52	04/30/25 22:04	1
1,2,4-Trichlorobenzene	ND		5.0	0.30	ug/Kg		04/29/25 16:52	04/30/25 22:04	1
1,2,4-Trimethylbenzene	ND		5.0	0.96	ug/Kg		04/29/25 16:52	04/30/25 22:04	1
1,2-Dibromo-3-Chloropropane	ND		5.0	2.5	ug/Kg		04/29/25 16:52	04/30/25 22:04	1
1,2-Dibromoethane	ND		5.0	0.64	ug/Kg		04/29/25 16:52	04/30/25 22:04	1
1,2-Dichlorobenzene	ND		5.0	0.39	ug/Kg		04/29/25 16:52	04/30/25 22:04	1
1,2-Dichloroethane	ND		5.0	0.25	ug/Kg		04/29/25 16:52	04/30/25 22:04	1
1,2-Dichloropropane	ND		5.0	2.5	ug/Kg		04/29/25 16:52	04/30/25 22:04	1
1,3,5-Trimethylbenzene	ND		5.0	0.32	ug/Kg		04/29/25 16:52	04/30/25 22:04	1
1,3-Dichlorobenzene	ND		5.0	0.26	ug/Kg		04/29/25 16:52	04/30/25 22:04	1
1,4-Dichlorobenzene	ND		5.0	0.70	ug/Kg		04/29/25 16:52	04/30/25 22:04	1
2-Butanone (MEK)	ND		25	1.8	ug/Kg		04/29/25 16:52	04/30/25 22:04	1
2-Hexanone	ND		25	2.5	ug/Kg		04/29/25 16:52	04/30/25 22:04	1
4-Isopropyltoluene	ND		5.0	0.40	ug/Kg		04/29/25 16:52	04/30/25 22:04	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.6	ug/Kg		04/29/25 16:52	04/30/25 22:04	1
Acetone	ND		25	4.2	ug/Kg		04/29/25 16:52	04/30/25 22:04	1
Benzene	ND		5.0	0.25	ug/Kg		04/29/25 16:52	04/30/25 22:04	1
Bromodichloromethane	ND		5.0	0.67	ug/Kg		04/29/25 16:52	04/30/25 22:04	1
Bromoform	ND		5.0	2.5	ug/Kg		04/29/25 16:52	04/30/25 22:04	1
Bromomethane	ND		5.0	0.45	ug/Kg		04/29/25 16:52	04/30/25 22:04	1
Carbon disulfide	ND		5.0	2.5	ug/Kg		04/29/25 16:52	04/30/25 22:04	1
Carbon tetrachloride	ND		5.0	0.48	ug/Kg		04/29/25 16:52	04/30/25 22:04	1
Chlorobenzene	ND		5.0	0.66	ug/Kg		04/29/25 16:52	04/30/25 22:04	1
Chloroethane	ND		5.0	1.1	ug/Kg		04/29/25 16:52	04/30/25 22:04	1
Chloroform	1.18	J	5.0	0.31	ug/Kg		04/29/25 16:52	04/30/25 22:04	1
Chloromethane	ND		5.0	0.30	ug/Kg		04/29/25 16:52	04/30/25 22:04	1
cis-1,2-Dichloroethene	ND		5.0	0.64	ug/Kg		04/29/25 16:52	04/30/25 22:04	1
cis-1,3-Dichloropropene	ND		5.0	0.72	ug/Kg		04/29/25 16:52	04/30/25 22:04	1
Cyclohexane	ND		5.0	0.70	ug/Kg		04/29/25 16:52	04/30/25 22:04	1
Dibromochloromethane	ND		5.0	0.64	ug/Kg		04/29/25 16:52	04/30/25 22:04	1
Dichlorodifluoromethane	ND		5.0	0.41	ug/Kg		04/29/25 16:52	04/30/25 22:04	1
Ethylbenzene	ND		5.0	0.35	ug/Kg		04/29/25 16:52	04/30/25 22:04	1
Isopropylbenzene	ND		5.0	0.75	ug/Kg		04/29/25 16:52	04/30/25 22:04	1
Methyl acetate	ND		25	3.0	ug/Kg		04/29/25 16:52	04/30/25 22:04	1
Methyl tert-butyl ether	ND		5.0	0.49	ug/Kg		04/29/25 16:52	04/30/25 22:04	1
Methylcyclohexane	ND		5.0	0.76	ug/Kg		04/29/25 16:52	04/30/25 22:04	1
Methylene Chloride	ND		5.0	2.3	ug/Kg		04/29/25 16:52	04/30/25 22:04	1
Naphthalene	ND		5.0	0.67	ug/Kg		04/29/25 16:52	04/30/25 22:04	1
n-Butylbenzene	ND		5.0	0.44	ug/Kg		04/29/25 16:52	04/30/25 22:04	1
N-Propylbenzene	ND		5.0	0.40	ug/Kg		04/29/25 16:52	04/30/25 22:04	1
sec-Butylbenzene	ND		5.0	0.44	ug/Kg		04/29/25 16:52	04/30/25 22:04	1
Styrene	ND		5.0	0.25	ug/Kg		04/29/25 16:52	04/30/25 22:04	1
tert-Butylbenzene	ND		5.0	0.52	ug/Kg		04/29/25 16:52	04/30/25 22:04	1
Tetrachloroethene	ND		5.0	0.67	ug/Kg		04/29/25 16:52	04/30/25 22:04	1
Toluene	ND		5.0	0.38	ug/Kg		04/29/25 16:52	04/30/25 22:04	1
trans-1,2-Dichloroethene	ND		5.0	0.52	ug/Kg		04/29/25 16:52	04/30/25 22:04	1
trans-1,3-Dichloropropene	ND		5.0	2.2	ug/Kg		04/29/25 16:52	04/30/25 22:04	1
Trichloroethene	ND		5.0	1.1	ug/Kg		04/29/25 16:52	04/30/25 22:04	1

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: MB 480-744799/1-A
Matrix: Solid
Analysis Batch: 744923

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 744799

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Trichlorofluoromethane	ND		5.0	0.47	ug/Kg		04/29/25 16:52	04/30/25 22:04	1
Vinyl chloride	ND		5.0	0.61	ug/Kg		04/29/25 16:52	04/30/25 22:04	1
Xylenes, Total	ND		10	0.84	ug/Kg		04/29/25 16:52	04/30/25 22:04	1

Tentatively Identified Compound	*MB Est. Result*	*MB Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/Kg*			*N/A*	*04/29/25 16:52*	*04/30/25 22:04*	*1*

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*103*		*64 - 126*	*04/29/25 16:52*	*04/30/25 22:04*	*1*
4-Bromofluorobenzene (Surr)	*98*		*72 - 126*	*04/29/25 16:52*	*04/30/25 22:04*	*1*
Dibromofluoromethane (Surr)	*103*		*60 - 140*	*04/29/25 16:52*	*04/30/25 22:04*	*1*
Toluene-d8 (Surr)	*97*		*71 - 125*	*04/29/25 16:52*	*04/30/25 22:04*	*1*

Lab Sample ID: LCS 480-744799/2-A
Matrix: Solid
Analysis Batch: 744923

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 744799

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
1,1,1-Trichloroethane	50.0	60.4		ug/Kg		121	77 - 121
1,1,2,2-Tetrachloroethane	50.0	50.7		ug/Kg		101	80 - 120
1,1,2-Trichloro-1,2,2-trifluoroethane	50.0	59.2		ug/Kg		118	60 - 140
1,1,2-Trichloroethane	50.0	49.9		ug/Kg		100	78 - 122
1,1-Dichloroethane	50.0	56.8		ug/Kg		114	73 - 126
1,1-Dichloroethene	50.0	58.9		ug/Kg		118	59 - 125
1,2,4-Trichlorobenzene	50.0	50.1		ug/Kg		100	64 - 120
1,2,4-Trimethylbenzene	50.0	52.6		ug/Kg		105	74 - 120
1,2-Dibromo-3-Chloropropane	50.0	51.6		ug/Kg		103	63 - 124
1,2-Dibromoethane	50.0	49.8		ug/Kg		100	78 - 120
1,2-Dichlorobenzene	50.0	50.7		ug/Kg		101	75 - 120
1,2-Dichloroethane	50.0	52.4		ug/Kg		105	77 - 122
1,2-Dichloropropane	50.0	55.1		ug/Kg		110	75 - 124
1,3,5-Trimethylbenzene	50.0	54.2		ug/Kg		108	74 - 120
1,3-Dichlorobenzene	50.0	50.6		ug/Kg		101	74 - 120
1,4-Dichlorobenzene	50.0	50.1		ug/Kg		100	73 - 120
2-Butanone (MEK)	250	269		ug/Kg		108	70 - 134
2-Hexanone	250	268		ug/Kg		107	59 - 130
4-Isopropyltoluene	50.0	55.0		ug/Kg		110	74 - 120
4-Methyl-2-pentanone (MIBK)	250	274		ug/Kg		110	65 - 133
Acetone	250	272		ug/Kg		109	61 - 137
Benzene	50.0	54.6		ug/Kg		109	79 - 127
Bromodichloromethane	50.0	53.9		ug/Kg		108	80 - 122
Bromoform	50.0	52.1		ug/Kg		104	68 - 126
Bromomethane	50.0	53.7		ug/Kg		107	37 - 149
Carbon disulfide	50.0	55.0		ug/Kg		110	64 - 131
Carbon tetrachloride	50.0	59.8		ug/Kg		120	75 - 135
Chlorobenzene	50.0	51.4		ug/Kg		103	76 - 124
Chloroethane	50.0	57.1		ug/Kg		114	69 - 135

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCS 480-744799/2-A
Matrix: Solid
Analysis Batch: 744923

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 744799

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloroform	50.0	53.4		ug/Kg		107	80 - 120
Chloromethane	50.0	56.6		ug/Kg		113	63 - 127
cis-1,2-Dichloroethene	50.0	54.8		ug/Kg		110	81 - 120
cis-1,3-Dichloropropene	50.0	53.4		ug/Kg		107	80 - 120
Cyclohexane	50.0	60.8	*+	ug/Kg		122	65 - 120
Dibromochloromethane	50.0	52.8		ug/Kg		106	76 - 125
Dichlorodifluoromethane	50.0	54.7		ug/Kg		109	57 - 142
Ethylbenzene	50.0	53.2		ug/Kg		106	80 - 120
Isopropylbenzene	50.0	55.6		ug/Kg		111	72 - 120
Methyl acetate	100	104		ug/Kg		104	55 - 136
Methyl tert-butyl ether	50.0	52.9		ug/Kg		106	63 - 125
Methylcyclohexane	50.0	60.0		ug/Kg		120	60 - 140
Methylene Chloride	50.0	58.2		ug/Kg		116	61 - 127
Naphthalene	50.0	50.2		ug/Kg		100	38 - 137
n-Butylbenzene	50.0	54.6		ug/Kg		109	70 - 120
N-Propylbenzene	50.0	54.8		ug/Kg		110	70 - 130
sec-Butylbenzene	50.0	55.4		ug/Kg		111	74 - 120
Styrene	50.0	49.9		ug/Kg		100	80 - 120
tert-Butylbenzene	50.0	56.0		ug/Kg		112	73 - 120
Tetrachloroethene	50.0	54.5		ug/Kg		109	74 - 122
Toluene	50.0	52.5		ug/Kg		105	74 - 128
trans-1,2-Dichloroethene	50.0	56.7		ug/Kg		113	78 - 126
trans-1,3-Dichloropropene	50.0	50.8		ug/Kg		102	73 - 123
Trichloroethene	50.0	55.4		ug/Kg		111	77 - 129
Trichlorofluoromethane	50.0	61.1		ug/Kg		122	65 - 146
Vinyl chloride	50.0	58.4		ug/Kg		117	61 - 133
Xylenes, Total	100	107		ug/Kg		107	70 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*102*		*64 - 126*
4-Bromofluorobenzene (Surr)	*98*		*72 - 126*
Dibromofluoromethane (Surr)	*105*		*60 - 140*
Toluene-d8 (Surr)	*100*		*71 - 125*

Lab Sample ID: 480-229067-5 MS
Matrix: Solid
Analysis Batch: 744923

Client Sample ID: MW-1 0.25-3Ft
Prep Type: Total/NA
Prep Batch: 744799

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
1,1,1-Trichloroethane	ND		60.3	64.2		ug/Kg	☼	107	77 - 121
1,1,2,2-Tetrachloroethane	ND	F1	60.3	46.6	F1	ug/Kg	☼	77	80 - 120
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		60.3	63.2		ug/Kg	☼	105	60 - 140
1,1,2-Trichloroethane	ND	F1	60.3	45.6	F1	ug/Kg	☼	76	78 - 122
1,1-Dichloroethane	ND		60.3	61.6		ug/Kg	☼	102	73 - 126
1,1-Dichloroethene	ND		60.3	56.6		ug/Kg	☼	94	59 - 125
1,2,4-Trichlorobenzene	ND	F2 F1	60.3	14.4	F1	ug/Kg	☼	24	64 - 120
1,2,4-Trimethylbenzene	ND	F2 F1	60.3	48.4		ug/Kg	☼	80	74 - 120
1,2-Dibromo-3-Chloropropane	ND	F1	60.3	33.9	F1	ug/Kg	☼	56	63 - 124

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: 480-229067-5 MS
Matrix: Solid
Analysis Batch: 744923

Client Sample ID: MW-1 0.25-3Ft
Prep Type: Total/NA
Prep Batch: 744799

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
1,2-Dibromoethane	ND	F1	60.3	36.5	F1	ug/Kg	☼	61	78 - 120
1,2-Dichlorobenzene	ND	F2 F1	60.3	31.2	F1	ug/Kg	☼	52	75 - 120
1,2-Dichloroethane	ND	F1	60.3	48.1		ug/Kg	☼	80	77 - 122
1,2-Dichloropropane	ND	F1	60.3	56.5		ug/Kg	☼	94	75 - 124
1,3,5-Trimethylbenzene	ND	F2 F1	60.3	54.7		ug/Kg	☼	91	74 - 120
1,3-Dichlorobenzene	ND	F2 F1	60.3	30.2	F1	ug/Kg	☼	50	74 - 120
1,4-Dichlorobenzene	ND	F2 F1	60.3	28.7	F1	ug/Kg	☼	48	73 - 120
2-Butanone (MEK)	ND	F1	301	193	F1	ug/Kg	☼	64	70 - 134
2-Hexanone	ND	F1	301	178		ug/Kg	☼	59	59 - 130
4-Isopropyltoluene	ND	F2 F1	60.3	45.9		ug/Kg	☼	76	74 - 120
4-Methyl-2-pentanone (MIBK)	ND		301	200		ug/Kg	☼	66	65 - 133
Acetone	ND		301	206		ug/Kg	☼	68	61 - 137
Benzene	ND	F1	60.3	55.9		ug/Kg	☼	93	79 - 127
Bromodichloromethane	ND	F1	60.3	50.8		ug/Kg	☼	84	80 - 122
Bromoform	ND	F1	60.3	34.3	F1	ug/Kg	☼	57	68 - 126
Bromomethane	ND		60.3	58.4		ug/Kg	☼	97	37 - 149
Carbon disulfide	ND	F2 F1	60.3	38.8		ug/Kg	☼	64	64 - 131
Carbon tetrachloride	ND		60.3	61.6		ug/Kg	☼	102	75 - 135
Chlorobenzene	ND	F2 F1	60.3	39.0	F1	ug/Kg	☼	65	76 - 124
Chloroethane	ND		60.3	61.3		ug/Kg	☼	102	69 - 135
Chloroform	1.6	J F1 B	60.3	55.1		ug/Kg	☼	89	80 - 120
Chloromethane	ND		60.3	63.2		ug/Kg	☼	105	63 - 127
cis-1,2-Dichloroethene	ND	F2 F1	60.3	48.9		ug/Kg	☼	81	80 - 120
cis-1,3-Dichloropropene	ND	F2 F1	60.3	43.3	F1	ug/Kg	☼	72	80 - 120
Cyclohexane	ND	*+	60.3	61.7		ug/Kg	☼	102	65 - 120
Dibromochloromethane	ND	F1	60.3	44.8	F1	ug/Kg	☼	74	76 - 125
Dichlorodifluoromethane	ND		60.3	63.2		ug/Kg	☼	105	57 - 142
Ethylbenzene	ND	F2 F1	60.3	44.3	F1	ug/Kg	☼	73	80 - 120
Isopropylbenzene	ND	F2 F1	60.3	61.5		ug/Kg	☼	102	72 - 120
Methyl acetate	ND		121	77.0		ug/Kg	☼	64	55 - 136
Methyl tert-butyl ether	ND		60.3	49.6		ug/Kg	☼	82	63 - 125
Methylcyclohexane	ND	F2 F1	60.3	49.2		ug/Kg	☼	82	60 - 140
Methylene Chloride	ND		60.3	57.2		ug/Kg	☼	95	61 - 127
Naphthalene	ND	F2 F1	60.3	15.7	F1	ug/Kg	☼	26	38 - 137
n-Butylbenzene	ND	F2 F1	60.3	29.9	F1	ug/Kg	☼	50	70 - 120
N-Propylbenzene	ND	F2 F1	60.3	46.7		ug/Kg	☼	78	70 - 130
sec-Butylbenzene	ND	F2 F1	60.3	48.7		ug/Kg	☼	81	74 - 120
Styrene	ND	F2 F1	60.3	33.3	F1	ug/Kg	☼	55	80 - 120
tert-Butylbenzene	ND	F2	60.3	65.6		ug/Kg	☼	109	73 - 120
Tetrachloroethene	ND	F2 F1	60.3	45.8		ug/Kg	☼	76	74 - 122
Toluene	ND	F2 F1	60.3	51.4		ug/Kg	☼	85	74 - 128
trans-1,2-Dichloroethene	ND	F2 F1	60.3	47.8		ug/Kg	☼	79	78 - 126
trans-1,3-Dichloropropene	ND	F2 F1	60.3	35.9	F1	ug/Kg	☼	60	73 - 123
Trichloroethene	ND	F2 F1	60.3	46.1		ug/Kg	☼	77	77 - 129
Trichlorofluoromethane	ND		60.3	65.0		ug/Kg	☼	108	65 - 146
Vinyl chloride	ND		60.3	59.8		ug/Kg	☼	99	61 - 133
Xylenes, Total	ND	F2 F1	121	90.2		ug/Kg	☼	75	70 - 130

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: 480-229067-5 MS
Matrix: Solid
Analysis Batch: 744923

Client Sample ID: MW-1 0.25-3Ft
Prep Type: Total/NA
Prep Batch: 744799

Surrogate	MS %Recovery	MS Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	*92*		*64 - 126*
4-Bromofluorobenzene (Surr)	*85*		*72 - 126*
Dibromofluoromethane (Surr)	*100*		*60 - 140*
Toluene-d8 (Surr)	*107*		*71 - 125*

Lab Sample ID: 480-229067-5 MSD
Matrix: Solid
Analysis Batch: 744923

Client Sample ID: MW-1 0.25-3Ft
Prep Type: Total/NA
Prep Batch: 744799

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
1,1,1-Trichloroethane	ND		62.6	54.2		ug/Kg	☼	87	77 - 121	17	30
1,1,2,2-Tetrachloroethane	ND	F1	62.6	44.9	F1	ug/Kg	☼	72	80 - 120	4	30
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		62.6	53.3		ug/Kg	☼	85	60 - 140	17	30
1,1,2-Trichloroethane	ND	F1	62.6	39.7	F1	ug/Kg	☼	63	78 - 122	14	30
1,1-Dichloroethane	ND		62.6	52.2		ug/Kg	☼	83	73 - 126	17	30
1,1-Dichloroethene	ND		62.6	42.5		ug/Kg	☼	68	59 - 125	28	30
1,2,4-Trichlorobenzene	ND	F2 F1	62.6	8.11	F2 F1	ug/Kg	☼	13	64 - 120	56	30
1,2,4-Trimethylbenzene	ND	F2 F1	62.6	31.5	F2 F1	ug/Kg	☼	50	74 - 120	42	30
1,2-Dibromo-3-Chloropropane	ND	F1	62.6	25.9	F1	ug/Kg	☼	41	63 - 124	27	30
1,2-Dibromoethane	ND	F1	62.6	27.2	F1	ug/Kg	☼	43	78 - 120	29	30
1,2-Dichlorobenzene	ND	F2 F1	62.6	19.1	F2 F1	ug/Kg	☼	31	75 - 120	48	30
1,2-Dichloroethane	ND	F1	62.6	38.6	F1	ug/Kg	☼	62	77 - 122	22	30
1,2-Dichloropropane	ND	F1	62.6	45.9	F1	ug/Kg	☼	73	75 - 124	21	30
1,3,5-Trimethylbenzene	ND	F2 F1	62.6	37.2	F2 F1	ug/Kg	☼	59	74 - 120	38	30
1,3-Dichlorobenzene	ND	F2 F1	62.6	18.1	F2 F1	ug/Kg	☼	29	74 - 120	50	30
1,4-Dichlorobenzene	ND	F2 F1	62.6	16.9	F2 F1	ug/Kg	☼	27	73 - 120	52	30
2-Butanone (MEK)	ND	F1	313	194	F1	ug/Kg	☼	62	70 - 134	0	30
2-Hexanone	ND	F1	313	167	F1	ug/Kg	☼	53	59 - 130	7	30
4-Isopropyltoluene	ND	F2 F1	62.6	27.9	F2 F1	ug/Kg	☼	44	74 - 120	49	30
4-Methyl-2-pentanone (MIBK)	ND		313	205		ug/Kg	☼	65	65 - 133	2	30
Acetone	ND		313	212		ug/Kg	☼	68	61 - 137	3	30
Benzene	ND	F1	62.6	43.2	F1	ug/Kg	☼	69	79 - 127	26	30
Bromodichloromethane	ND	F1	62.6	38.9	F1	ug/Kg	☼	62	80 - 122	27	30
Bromoform	ND	F1	62.6	26.3	F1	ug/Kg	☼	42	68 - 126	26	30
Bromomethane	ND		62.6	49.8		ug/Kg	☼	79	37 - 149	16	30
Carbon disulfide	ND	F2 F1	62.6	24.2	F2 F1	ug/Kg	☼	39	64 - 131	47	30
Carbon tetrachloride	ND		62.6	49.6		ug/Kg	☼	79	75 - 135	22	30
Chlorobenzene	ND	F2 F1	62.6	24.6	F2 F1	ug/Kg	☼	39	76 - 124	45	30
Chloroethane	ND		62.6	52.3		ug/Kg	☼	83	69 - 135	16	30
Chloroform	1.6	J F1 B	62.6	45.6	F1	ug/Kg	☼	70	80 - 120	19	30
Chloromethane	ND		62.6	55.5		ug/Kg	☼	89	63 - 127	13	30
cis-1,2-Dichloroethene	ND	F2 F1	62.6	35.9	F2 F1	ug/Kg	☼	57	80 - 120	31	30
cis-1,3-Dichloropropene	ND	F2 F1	62.6	27.3	F2 F1	ug/Kg	☼	44	80 - 120	45	30
Cyclohexane	ND	*+	62.6	46.5		ug/Kg	☼	74	65 - 120	28	30
Dibromochloromethane	ND	F1	62.6	36.1	F1	ug/Kg	☼	58	76 - 125	22	30
Dichlorodifluoromethane	ND		62.6	55.1		ug/Kg	☼	88	57 - 142	14	30
Ethylbenzene	ND	F2 F1	62.6	27.7	F2 F1	ug/Kg	☼	44	80 - 120	46	30
Isopropylbenzene	ND	F2 F1	62.6	42.7	F2 F1	ug/Kg	☼	68	72 - 120	36	30

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: 480-229067-5 MSD
Matrix: Solid
Analysis Batch: 744923

Client Sample ID: MW-1 0.25-3Ft
Prep Type: Total/NA
Prep Batch: 744799

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Methyl acetate	ND		125	79.1		ug/Kg	☼	63	55 - 136	3	30
Methyl tert-butyl ether	ND		62.6	51.1		ug/Kg	☼	82	63 - 125	3	30
Methylcyclohexane	ND	F2 F1	62.6	32.5	F2 F1	ug/Kg	☼	52	60 - 140	41	30
Methylene Chloride	ND		62.6	47.9		ug/Kg	☼	76	61 - 127	18	30
Naphthalene	ND	F2 F1	62.6	8.30	F2 F1	ug/Kg	☼	13	38 - 137	62	30
n-Butylbenzene	ND	F2 F1	62.6	17.1	F2 F1	ug/Kg	☼	27	70 - 120	54	30
N-Propylbenzene	ND	F2 F1	62.6	28.9	F2 F1	ug/Kg	☼	46	70 - 130	47	30
sec-Butylbenzene	ND	F2 F1	62.6	30.6	F2 F1	ug/Kg	☼	49	74 - 120	46	30
Styrene	ND	F2 F1	62.6	19.0	F2 F1	ug/Kg	☼	30	80 - 120	55	30
tert-Butylbenzene	ND	F2	62.6	47.4	F2	ug/Kg	☼	76	73 - 120	32	30
Tetrachloroethene	ND	F2 F1	62.6	28.7	F2 F1	ug/Kg	☼	46	74 - 122	46	30
Toluene	ND	F2 F1	62.6	35.9	F2 F1	ug/Kg	☼	57	74 - 128	36	30
trans-1,2-Dichloroethene	ND	F2 F1	62.6	31.6	F2 F1	ug/Kg	☼	50	78 - 126	41	30
trans-1,3-Dichloropropene	ND	F2 F1	62.6	21.9	F2 F1	ug/Kg	☼	35	73 - 123	49	30
Trichloroethene	ND	F2 F1	62.6	28.4	F2 F1	ug/Kg	☼	45	77 - 129	48	30
Trichlorofluoromethane	ND		62.6	55.7		ug/Kg	☼	89	65 - 146	15	30
Vinyl chloride	ND		62.6	46.9		ug/Kg	☼	75	61 - 133	24	30
Xylenes, Total	ND	F2 F1	125	57.4	F2 F1	ug/Kg	☼	46	70 - 130	44	30

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*92*		*64 - 126*
4-Bromofluorobenzene (Surr)	*82*		*72 - 126*
Dibromofluoromethane (Surr)	*103*		*60 - 140*
Toluene-d8 (Surr)	*112*		*71 - 125*

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Lab Sample ID: MB 480-744863/1-A
Matrix: Solid
Analysis Batch: 745000

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 744863

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	ND		100	55	ug/Kg		04/30/25 13:32	05/02/25 05:09	1
2,4,5-Trichlorophenol	ND		170	46	ug/Kg		04/30/25 13:32	05/02/25 05:09	1
2,4,6-Trichlorophenol	ND		170	34	ug/Kg		04/30/25 13:32	05/02/25 05:09	1
2,4-Dichlorophenol	ND		170	18	ug/Kg		04/30/25 13:32	05/02/25 05:09	1
2,4-Dimethylphenol	ND		170	41	ug/Kg		04/30/25 13:32	05/02/25 05:09	1
2,4-Dinitrophenol	ND		1700	780	ug/Kg		04/30/25 13:32	05/02/25 05:09	1
2,4-Dinitrotoluene	ND		170	35	ug/Kg		04/30/25 13:32	05/02/25 05:09	1
2,6-Dinitrotoluene	ND		170	20	ug/Kg		04/30/25 13:32	05/02/25 05:09	1
2-Chloronaphthalene	ND		170	28	ug/Kg		04/30/25 13:32	05/02/25 05:09	1
2-Chlorophenol	ND		330	31	ug/Kg		04/30/25 13:32	05/02/25 05:09	1
2-Methylnaphthalene	ND		170	34	ug/Kg		04/30/25 13:32	05/02/25 05:09	1
2-Methylphenol	ND		170	20	ug/Kg		04/30/25 13:32	05/02/25 05:09	1
2-Nitroaniline	ND		330	25	ug/Kg		04/30/25 13:32	05/02/25 05:09	1
2-Nitrophenol	ND		170	48	ug/Kg		04/30/25 13:32	05/02/25 05:09	1
3,3'-Dichlorobenzidine	ND		330	200	ug/Kg		04/30/25 13:32	05/02/25 05:09	1
3-Nitroaniline	ND		330	47	ug/Kg		04/30/25 13:32	05/02/25 05:09	1
4,6-Dinitro-2-methylphenol	ND		330	170	ug/Kg		04/30/25 13:32	05/02/25 05:09	1

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 480-744863/1-A
Matrix: Solid
Analysis Batch: 745000

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 744863

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4-Bromophenyl phenyl ether	ND		170	24	ug/Kg		04/30/25 13:32	05/02/25 05:09	1
4-Chloro-3-methylphenol	ND		170	42	ug/Kg		04/30/25 13:32	05/02/25 05:09	1
4-Chloroaniline	ND		170	42	ug/Kg		04/30/25 13:32	05/02/25 05:09	1
4-Chlorophenyl phenyl ether	ND		170	21	ug/Kg		04/30/25 13:32	05/02/25 05:09	1
4-Methylphenol	ND		330	20	ug/Kg		04/30/25 13:32	05/02/25 05:09	1
4-Nitroaniline	ND		330	89	ug/Kg		04/30/25 13:32	05/02/25 05:09	1
4-Nitrophenol	ND		330	120	ug/Kg		04/30/25 13:32	05/02/25 05:09	1
Acenaphthene	ND		170	25	ug/Kg		04/30/25 13:32	05/02/25 05:09	1
Acenaphthylene	ND		170	22	ug/Kg		04/30/25 13:32	05/02/25 05:09	1
Acetophenone	ND		170	23	ug/Kg		04/30/25 13:32	05/02/25 05:09	1
Anthracene	ND		170	42	ug/Kg		04/30/25 13:32	05/02/25 05:09	1
Atrazine	ND		170	59	ug/Kg		04/30/25 13:32	05/02/25 05:09	1
Benzaldehyde	ND		170	140	ug/Kg		04/30/25 13:32	05/02/25 05:09	1
Benzo[a]anthracene	ND		170	17	ug/Kg		04/30/25 13:32	05/02/25 05:09	1
Benzo[a]pyrene	ND		170	25	ug/Kg		04/30/25 13:32	05/02/25 05:09	1
Benzo[b]fluoranthene	ND		170	27	ug/Kg		04/30/25 13:32	05/02/25 05:09	1
Benzo[g,h,i]perylene	ND		170	18	ug/Kg		04/30/25 13:32	05/02/25 05:09	1
Benzo[k]fluoranthene	ND		170	22	ug/Kg		04/30/25 13:32	05/02/25 05:09	1
Biphenyl	ND		170	25	ug/Kg		04/30/25 13:32	05/02/25 05:09	1
bis (2-chloroisopropyl) ether	ND		170	34	ug/Kg		04/30/25 13:32	05/02/25 05:09	1
Bis(2-chloroethoxy)methane	ND		170	36	ug/Kg		04/30/25 13:32	05/02/25 05:09	1
Bis(2-chloroethyl)ether	ND		170	22	ug/Kg		04/30/25 13:32	05/02/25 05:09	1
Bis(2-ethylhexyl) phthalate	ND		170	58	ug/Kg		04/30/25 13:32	05/02/25 05:09	1
Butyl benzyl phthalate	ND		170	28	ug/Kg		04/30/25 13:32	05/02/25 05:09	1
Caprolactam	ND		170	51	ug/Kg		04/30/25 13:32	05/02/25 05:09	1
Carbazole	ND		170	20	ug/Kg		04/30/25 13:32	05/02/25 05:09	1
Chrysene	ND		170	38	ug/Kg		04/30/25 13:32	05/02/25 05:09	1
Dibenz(a,h)anthracene	ND		170	30	ug/Kg		04/30/25 13:32	05/02/25 05:09	1
Dibenzofuran	ND		170	20	ug/Kg		04/30/25 13:32	05/02/25 05:09	1
Diethyl phthalate	ND		170	22	ug/Kg		04/30/25 13:32	05/02/25 05:09	1
Dimethyl phthalate	ND		170	20	ug/Kg		04/30/25 13:32	05/02/25 05:09	1
Di-n-butyl phthalate	ND		170	29	ug/Kg		04/30/25 13:32	05/02/25 05:09	1
Di-n-octyl phthalate	ND		170	20	ug/Kg		04/30/25 13:32	05/02/25 05:09	1
Fluoranthene	ND		170	18	ug/Kg		04/30/25 13:32	05/02/25 05:09	1
Fluorene	ND		170	20	ug/Kg		04/30/25 13:32	05/02/25 05:09	1
Hexachlorobenzene	ND		170	23	ug/Kg		04/30/25 13:32	05/02/25 05:09	1
Hexachlorobutadiene	ND		170	25	ug/Kg		04/30/25 13:32	05/02/25 05:09	1
Hexachlorocyclopentadiene	ND		170	23	ug/Kg		04/30/25 13:32	05/02/25 05:09	1
Hexachloroethane	ND		170	22	ug/Kg		04/30/25 13:32	05/02/25 05:09	1
Indeno[1,2,3-cd]pyrene	ND		170	21	ug/Kg		04/30/25 13:32	05/02/25 05:09	1
Isophorone	ND		170	36	ug/Kg		04/30/25 13:32	05/02/25 05:09	1
Naphthalene	ND		170	22	ug/Kg		04/30/25 13:32	05/02/25 05:09	1
Nitrobenzene	ND		170	19	ug/Kg		04/30/25 13:32	05/02/25 05:09	1
N-Nitrosodi-n-propylamine	ND		170	29	ug/Kg		04/30/25 13:32	05/02/25 05:09	1
N-Nitrosodiphenylamine	ND		170	140	ug/Kg		04/30/25 13:32	05/02/25 05:09	1
Pentachlorophenol	ND		330	170	ug/Kg		04/30/25 13:32	05/02/25 05:09	1
Phenanthrene	ND		170	25	ug/Kg		04/30/25 13:32	05/02/25 05:09	1
Phenol	ND		170	26	ug/Kg		04/30/25 13:32	05/02/25 05:09	1
Pyrene	ND		170	20	ug/Kg		04/30/25 13:32	05/02/25 05:09	1

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Tentatively Identified Compound	MB Est. Result	MB Qualifier	Unit	D	RT	CAS No.	Prepared	Analyzed	Dil Fac
Unknown	13400	T J	ug/Kg		2.00	N/A	04/30/25 13:32	05/02/25 05:09	1
Unknown	740	T J	ug/Kg		3.47	N/A	04/30/25 13:32	05/02/25 05:09	1
D-Limonene	228	T J N	ug/Kg		5.86	5989-27-5	04/30/25 13:32	05/02/25 05:09	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol (Surr)	90		26 - 143	04/30/25 13:32	05/02/25 05:09	1
2-Fluorobiphenyl (Surr)	78		50 - 121	04/30/25 13:32	05/02/25 05:09	1
2-Fluorophenol (Surr)	74		36 - 120	04/30/25 13:32	05/02/25 05:09	1
Nitrobenzene-d5 (Surr)	87		40 - 121	04/30/25 13:32	05/02/25 05:09	1
Phenol-d5 (Surr)	84		41 - 120	04/30/25 13:32	05/02/25 05:09	1
p-Terphenyl-d14 (Surr)	108		46 - 143	04/30/25 13:32	05/02/25 05:09	1

Lab Sample ID: LCS 480-744863/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 745000 — **Prep Batch: 744863**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
1,4-Dioxane	1330	534		ug/Kg		40	23 - 120
2,4,5-Trichlorophenol	1330	1250		ug/Kg		94	59 - 126
2,4,6-Trichlorophenol	1330	1240		ug/Kg		93	59 - 123
2,4-Dichlorophenol	1330	1170		ug/Kg		88	61 - 120
2,4-Dimethylphenol	1330	1150		ug/Kg		87	59 - 120
2,4-Dinitrophenol	2670	2320		ug/Kg		87	41 - 146
2,4-Dinitrotoluene	1330	1210		ug/Kg		91	63 - 120
2,6-Dinitrotoluene	1330	1230		ug/Kg		93	66 - 120
2-Chloronaphthalene	1330	1100		ug/Kg		82	57 - 120
2-Chlorophenol	1330	1150		ug/Kg		86	53 - 120
2-Methylnaphthalene	1330	1140		ug/Kg		85	59 - 120
2-Methylphenol	1330	1280		ug/Kg		96	54 - 120
2-Nitroaniline	1330	1280		ug/Kg		96	61 - 120
2-Nitrophenol	1330	1360		ug/Kg		102	56 - 120
3,3'-Dichlorobenzidine	1330	1060		ug/Kg		79	54 - 120
3-Nitroaniline	1330	976		ug/Kg		73	48 - 120
4,6-Dinitro-2-methylphenol	2670	2690		ug/Kg		101	49 - 122
4-Bromophenyl phenyl ether	1330	1220		ug/Kg		92	58 - 120
4-Chloro-3-methylphenol	1330	1190		ug/Kg		89	61 - 120
4-Chloroaniline	1330	927		ug/Kg		70	38 - 120
4-Chlorophenyl phenyl ether	1330	1170		ug/Kg		88	63 - 124
4-Methylphenol	1330	1190		ug/Kg		90	55 - 120
4-Nitroaniline	1330	1180		ug/Kg		89	56 - 120
4-Nitrophenol	2670	2370		ug/Kg		89	43 - 147
Acenaphthene	1330	1190		ug/Kg		89	62 - 120
Acenaphthylene	1330	1180		ug/Kg		88	58 - 121
Acetophenone	1330	1150		ug/Kg		86	54 - 120
Anthracene	1330	1260		ug/Kg		94	62 - 120
Atrazine	1330	919		ug/Kg		69	60 - 127
Benzaldehyde	1330	796		ug/Kg		60	10 - 150
Benzo[a]anthracene	1330	1260		ug/Kg		95	65 - 120
Benzo[a]pyrene	1330	1310		ug/Kg		98	64 - 120
Benzo[b]fluoranthene	1330	1360		ug/Kg		102	64 - 120
Benzo[g,h,i]perylene	1330	1200		ug/Kg		90	45 - 145

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 480-744863/2-A
Matrix: Solid
Analysis Batch: 745000

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 744863

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Benzo[k]fluoranthene	1330	1250		ug/Kg		94	65 - 120
Biphenyl	1330	1120		ug/Kg		84	59 - 120
bis (2-chloroisopropyl) ether	1330	1220		ug/Kg		91	44 - 120
Bis(2-chloroethoxy)methane	1330	1140		ug/Kg		85	55 - 120
Bis(2-chloroethyl)ether	1330	1070		ug/Kg		80	45 - 120
Bis(2-ethylhexyl) phthalate	1330	1360		ug/Kg		102	61 - 133
Butyl benzyl phthalate	1330	1360		ug/Kg		102	61 - 129
Caprolactam	1330	1050		ug/Kg		79	47 - 120
Carbazole	1330	1250		ug/Kg		94	65 - 120
Chrysene	1330	1240		ug/Kg		93	64 - 120
Dibenz(a,h)anthracene	1330	1250		ug/Kg		94	54 - 132
Dibenzofuran	1330	1200		ug/Kg		90	63 - 120
Diethyl phthalate	1330	1150		ug/Kg		86	66 - 120
Dimethyl phthalate	1330	1160		ug/Kg		87	65 - 124
Di-n-butyl phthalate	1330	1200		ug/Kg		90	58 - 130
Di-n-octyl phthalate	1330	1150		ug/Kg		86	57 - 133
Fluoranthene	1330	1130		ug/Kg		85	62 - 120
Fluorene	1330	1240		ug/Kg		93	63 - 120
Hexachlorobenzene	1330	1180		ug/Kg		88	60 - 120
Hexachlorobutadiene	1330	1040		ug/Kg		78	45 - 120
Hexachlorocyclopentadiene	1330	1010		ug/Kg		76	47 - 120
Hexachloroethane	1330	1030		ug/Kg		77	41 - 120
Indeno[1,2,3-cd]pyrene	1330	1230		ug/Kg		93	56 - 134
Isophorone	1330	1120		ug/Kg		84	56 - 120
Naphthalene	1330	1090		ug/Kg		82	55 - 120
Nitrobenzene	1330	1170		ug/Kg		88	54 - 120
N-Nitrosodi-n-propylamine	1330	1190		ug/Kg		89	52 - 120
N-Nitrosodiphenylamine	1330	1320		ug/Kg		99	51 - 128
Pentachlorophenol	2670	2470		ug/Kg		92	10 - 120
Phenanthrene	1330	1210		ug/Kg		91	60 - 120
Phenol	1330	1140		ug/Kg		85	53 - 120
Pyrene	1330	1410		ug/Kg		106	61 - 133

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2,4,6-Tribromophenol (Surr)	*102*		*26 - 143*
2-Fluorobiphenyl (Surr)	*83*		*50 - 121*
2-Fluorophenol (Surr)	*74*		*36 - 120*
Nitrobenzene-d5 (Surr)	*87*		*40 - 121*
Phenol-d5 (Surr)	*88*		*41 - 120*
p-Terphenyl-d14 (Surr)	*106*		*46 - 143*

Lab Sample ID: 480-229067-5 MS
Matrix: Solid
Analysis Batch: 745000

Client Sample ID: MW-1 0.25-3Ft
Prep Type: Total/NA
Prep Batch: 744863

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
1,4-Dioxane	ND		1620	679		ug/Kg	☼	42	13 - 120
2,4,5-Trichlorophenol	ND		1620	1520		ug/Kg	☼	94	46 - 120

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 480-229067-5 MS
Matrix: Solid
Analysis Batch: 745000

Client Sample ID: MW-1 0.25-3Ft
Prep Type: Total/NA
Prep Batch: 744863

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
2,4,6-Trichlorophenol	ND		1620	1400		ug/Kg	☼	86	41 - 123
2,4-Dichlorophenol	ND		1620	1350		ug/Kg	☼	83	45 - 120
2,4-Dimethylphenol	ND		1620	1280		ug/Kg	☼	79	52 - 120
2,4-Dinitrophenol	ND		3240	1670	J	ug/Kg	☼	51	41 - 146
2,4-Dinitrotoluene	ND		1620	1340		ug/Kg	☼	83	63 - 125
2,6-Dinitrotoluene	ND		1620	1550		ug/Kg	☼	96	66 - 120
2-Chloronaphthalene	ND		1620	1330		ug/Kg	☼	82	57 - 120
2-Chlorophenol	ND		1620	1300		ug/Kg	☼	80	43 - 120
2-Methylnaphthalene	320		1620	1640		ug/Kg	☼	82	55 - 120
2-Methylphenol	ND		1620	1450		ug/Kg	☼	90	48 - 120
2-Nitroaniline	ND		1620	1580		ug/Kg	☼	98	61 - 120
2-Nitrophenol	ND		1620	1800		ug/Kg	☼	111	37 - 120
3,3'-Dichlorobenzidine	ND	F1	1620	273	J F1	ug/Kg	☼	17	37 - 126
3-Nitroaniline	ND		1620	955		ug/Kg	☼	59	48 - 120
4,6-Dinitro-2-methylphenol	ND		3240	2940		ug/Kg	☼	91	23 - 149
4-Bromophenyl phenyl ether	ND		1620	1520		ug/Kg	☼	94	58 - 120
4-Chloro-3-methylphenol	ND		1620	1390		ug/Kg	☼	86	49 - 125
4-Chloroaniline	ND		1620	878		ug/Kg	☼	54	38 - 120
4-Chlorophenyl phenyl ether	ND		1620	1430		ug/Kg	☼	88	63 - 124
4-Methylphenol	ND		1620	1360		ug/Kg	☼	84	50 - 120
4-Nitroaniline	ND		1620	881		ug/Kg	☼	54	47 - 120
4-Nitrophenol	ND		3240	2640		ug/Kg	☼	82	31 - 147
Acenaphthene	60	J	1620	1470		ug/Kg	☼	87	60 - 120
Acenaphthylene	88	J	1620	1480		ug/Kg	☼	86	58 - 121
Acetophenone	ND		1620	1400		ug/Kg	☼	86	47 - 120
Anthracene	250		1620	1660		ug/Kg	☼	87	62 - 120
Atrazine	ND		1620	1150		ug/Kg	☼	71	60 - 150
Benzaldehyde	ND		1620	962		ug/Kg	☼	59	10 - 150
Benzo[a]anthracene	840		1620	2210		ug/Kg	☼	85	65 - 120
Benzo[a]pyrene	720		1620	2220		ug/Kg	☼	92	64 - 120
Benzo[b]fluoranthene	1100	F2	1620	2400		ug/Kg	☼	82	10 - 150
Benzo[g,h,i]perylene	580		1620	2260		ug/Kg	☼	103	45 - 145
Benzo[k]fluoranthene	330		1620	1670		ug/Kg	☼	83	23 - 150
Biphenyl	33	J	1620	1380		ug/Kg	☼	83	58 - 120
bis (2-chloroisopropyl) ether	ND		1620	1430		ug/Kg	☼	88	31 - 120
Bis(2-chloroethoxy)methane	ND		1620	1370		ug/Kg	☼	85	52 - 120
Bis(2-chloroethyl)ether	ND		1620	1300		ug/Kg	☼	80	45 - 120
Bis(2-ethylhexyl) phthalate	ND		1620	1570		ug/Kg	☼	97	61 - 133
Butyl benzyl phthalate	ND		1620	1510		ug/Kg	☼	93	61 - 120
Caprolactam	ND		1620	1230		ug/Kg	☼	76	37 - 133
Carbazole	120	J	1620	1480		ug/Kg	☼	84	59 - 120
Chrysene	890		1620	2380		ug/Kg	☼	92	64 - 120
Dibenz(a,h)anthracene	210		1620	1860		ug/Kg	☼	102	54 - 132
Dibenzofuran	150	J	1620	1500		ug/Kg	☼	83	62 - 120
Diethyl phthalate	ND		1620	1360		ug/Kg	☼	84	66 - 120
Dimethyl phthalate	ND		1620	1390		ug/Kg	☼	86	65 - 124
Di-n-butyl phthalate	ND		1620	1520		ug/Kg	☼	94	58 - 130
Di-n-octyl phthalate	ND		1620	1550		ug/Kg	☼	95	57 - 133
Fluoranthene	1200	F1	1620	2330		ug/Kg	☼	68	62 - 120

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 480-229067-5 MS
Matrix: Solid
Analysis Batch: 745000

Client Sample ID: MW-1 0.25-3Ft
Prep Type: Total/NA
Prep Batch: 744863

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Fluorene	100	J	1620	1510		ug/Kg	☼	87	63 - 120		
Hexachlorobenzene	ND		1620	1380		ug/Kg	☼	85	60 - 120		
Hexachlorobutadiene	ND		1620	1190		ug/Kg	☼	73	45 - 120		
Hexachlorocyclopentadiene	ND		1620	1300		ug/Kg	☼	80	31 - 120		
Hexachloroethane	ND		1620	1280		ug/Kg	☼	79	21 - 120		
Indeno[1,2,3-cd]pyrene	500		1620	2200		ug/Kg	☼	105	56 - 134		
Isophorone	ND		1620	1390		ug/Kg	☼	86	56 - 120		
Naphthalene	120	J	1620	1430		ug/Kg	☼	81	46 - 120		
Nitrobenzene	ND		1620	1460		ug/Kg	☼	90	49 - 120		
N-Nitrosodi-n-propylamine	ND		1620	1410		ug/Kg	☼	87	46 - 120		
N-Nitrosodiphenylamine	ND		1620	1690		ug/Kg	☼	104	20 - 128		
Pentachlorophenol	ND		3240	2660		ug/Kg	☼	82	10 - 136		
Phenanthrene	1400	F1	1620	2290	F1	ug/Kg	☼	53	60 - 122		
Phenol	ND		1620	1290		ug/Kg	☼	80	50 - 120		
Pyrene	1200		1620	2500		ug/Kg	☼	80	61 - 133		

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
2,4,6-Tribromophenol (Surr)	*105*		*26 - 143*
2-Fluorobiphenyl (Surr)	*83*		*50 - 121*
2-Fluorophenol (Surr)	*72*		*36 - 120*
Nitrobenzene-d5 (Surr)	*93*		*40 - 121*
Phenol-d5 (Surr)	*86*		*41 - 120*
p-Terphenyl-d14 (Surr)	*96*		*46 - 143*

Lab Sample ID: 480-229067-5 MSD
Matrix: Solid
Analysis Batch: 745000

Client Sample ID: MW-1 0.25-3Ft
Prep Type: Total/NA
Prep Batch: 744863

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
1,4-Dioxane	ND		1600	695		ug/Kg	☼	43	13 - 120	2	50
2,4,5-Trichlorophenol	ND		1600	1470		ug/Kg	☼	92	46 - 120	3	18
2,4,6-Trichlorophenol	ND		1600	1450		ug/Kg	☼	91	41 - 123	4	19
2,4-Dichlorophenol	ND		1600	1390		ug/Kg	☼	87	45 - 120	3	19
2,4-Dimethylphenol	ND		1600	1320		ug/Kg	☼	82	52 - 120	3	42
2,4-Dinitrophenol	ND		3200	1650	J	ug/Kg	☼	51	41 - 146	1	22
2,4-Dinitrotoluene	ND		1600	1430		ug/Kg	☼	89	63 - 125	6	20
2,6-Dinitrotoluene	ND		1600	1560		ug/Kg	☼	97	66 - 120	0	15
2-Chloronaphthalene	ND		1600	1350		ug/Kg	☼	84	57 - 120	1	21
2-Chlorophenol	ND		1600	1350		ug/Kg	☼	84	43 - 120	4	25
2-Methylnaphthalene	320		1600	1680		ug/Kg	☼	85	55 - 120	2	21
2-Methylphenol	ND		1600	1440		ug/Kg	☼	90	48 - 120	1	27
2-Nitroaniline	ND		1600	1600		ug/Kg	☼	100	61 - 120	1	15
2-Nitrophenol	ND		1600	1900		ug/Kg	☼	119	37 - 120	5	18
3,3'-Dichlorobenzidine	ND	F1	1600	303	J F1	ug/Kg	☼	19	37 - 126	10	25
3-Nitroaniline	ND		1600	999		ug/Kg	☼	62	48 - 120	4	19
4,6-Dinitro-2-methylphenol	ND		3200	2800		ug/Kg	☼	88	23 - 149	5	15
4-Bromophenyl phenyl ether	ND		1600	1440		ug/Kg	☼	90	58 - 120	6	15
4-Chloro-3-methylphenol	ND		1600	1380		ug/Kg	☼	86	49 - 125	1	27

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 480-229067-5 MSD
Client Sample ID: MW-1 0.25-3Ft
Matrix: Solid
Prep Type: Total/NA
Analysis Batch: 745000
Prep Batch: 744863

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
4-Chloroaniline	ND		1600	981		ug/Kg	☼	61	38 - 120	11	22
4-Chlorophenyl phenyl ether	ND		1600	1400		ug/Kg	☼	87	63 - 124	3	16
4-Methylphenol	ND		1600	1390		ug/Kg	☼	87	50 - 120	3	24
4-Nitroaniline	ND		1600	847		ug/Kg	☼	53	47 - 120	4	24
4-Nitrophenol	ND		3200	2590		ug/Kg	☼	81	31 - 147	2	25
Acenaphthene	60	J	1600	1450		ug/Kg	☼	87	60 - 120	1	35
Acenaphthylene	88	J	1600	1470		ug/Kg	☼	86	58 - 121	1	18
Acetophenone	ND		1600	1390		ug/Kg	☼	87	47 - 120	1	20
Anthracene	250		1600	1630		ug/Kg	☼	87	62 - 120	2	15
Atrazine	ND		1600	1110		ug/Kg	☼	69	60 - 150	3	20
Benzaldehyde	ND		1600	1060		ug/Kg	☼	66	10 - 150	10	20
Benzo[a]anthracene	840		1600	2030		ug/Kg	☼	75	65 - 120	8	15
Benzo[a]pyrene	720		1600	2040		ug/Kg	☼	82	64 - 120	8	15
Benzo[b]fluoranthene	1100	F2	1600	1980	F2	ug/Kg	☼	58	10 - 150	19	15
Benzo[g,h,i]perylene	580		1600	2220		ug/Kg	☼	102	45 - 145	2	15
Benzo[k]fluoranthene	330		1600	1840		ug/Kg	☼	94	23 - 150	10	22
Biphenyl	33	J	1600	1370		ug/Kg	☼	84	58 - 120	1	20
bis (2-chloroisopropyl) ether	ND		1600	1470		ug/Kg	☼	92	31 - 120	3	24
Bis(2-chloroethoxy)methane	ND		1600	1390		ug/Kg	☼	87	52 - 120	1	17
Bis(2-chloroethyl)ether	ND		1600	1310		ug/Kg	☼	82	45 - 120	1	21
Bis(2-ethylhexyl) phthalate	ND		1600	1680		ug/Kg	☼	105	61 - 133	7	15
Butyl benzyl phthalate	ND		1600	1680		ug/Kg	☼	105	61 - 120	10	16
Caprolactam	ND		1600	1260		ug/Kg	☼	79	37 - 133	3	20
Carbazole	120	J	1600	1480		ug/Kg	☼	85	59 - 120	0	20
Chrysene	890		1600	2080		ug/Kg	☼	74	64 - 120	13	15
Dibenz(a,h)anthracene	210		1600	1970		ug/Kg	☼	110	54 - 132	6	15
Dibenzofuran	150	J	1600	1510		ug/Kg	☼	85	62 - 120	1	15
Diethyl phthalate	ND		1600	1380		ug/Kg	☼	86	66 - 120	1	15
Dimethyl phthalate	ND		1600	1390		ug/Kg	☼	87	65 - 124	0	15
Di-n-butyl phthalate	ND		1600	1530		ug/Kg	☼	96	58 - 130	1	15
Di-n-octyl phthalate	ND		1600	1660		ug/Kg	☼	104	57 - 133	7	16
Fluoranthene	1200	F1	1600	2020	F1	ug/Kg	☼	50	62 - 120	14	15
Fluorene	100	J	1600	1510		ug/Kg	☼	88	63 - 120	0	15
Hexachlorobenzene	ND		1600	1350		ug/Kg	☼	84	60 - 120	3	15
Hexachlorobutadiene	ND		1600	1270		ug/Kg	☼	79	45 - 120	6	44
Hexachlorocyclopentadiene	ND		1600	1290		ug/Kg	☼	80	31 - 120	1	49
Hexachloroethane	ND		1600	1290		ug/Kg	☼	81	21 - 120	1	46
Indeno[1,2,3-cd]pyrene	500		1600	2080		ug/Kg	☼	99	56 - 134	6	15
Isophorone	ND		1600	1420		ug/Kg	☼	89	56 - 120	2	17
Naphthalene	120	J	1600	1460		ug/Kg	☼	84	46 - 120	2	29
Nitrobenzene	ND		1600	1570		ug/Kg	☼	98	49 - 120	7	24
N-Nitrosodi-n-propylamine	ND		1600	1520		ug/Kg	☼	95	46 - 120	7	31
N-Nitrosodiphenylamine	ND		1600	1710		ug/Kg	☼	107	20 - 128	1	15
Pentachlorophenol	ND		3200	2540		ug/Kg	☼	79	10 - 136	5	35
Phenanthrene	1400	F1	1600	2250	F1	ug/Kg	☼	51	60 - 122	2	15
Phenol	ND		1600	1330		ug/Kg	☼	83	50 - 120	3	35
Pyrene	1200		1600	2370		ug/Kg	☼	73	61 - 133	5	35

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 480-229067-5 MSD
Matrix: Solid
Analysis Batch: 745000

Client Sample ID: MW-1 0.25-3Ft
Prep Type: Total/NA
Prep Batch: 744863

Surrogate	MSD %Recovery	MSD Qualifier	Limits
2,4,6-Tribromophenol (Surr)	105		26 - 143
2-Fluorobiphenyl (Surr)	84		50 - 121
2-Fluorophenol (Surr)	77		36 - 120
Nitrobenzene-d5 (Surr)	98		40 - 121
Phenol-d5 (Surr)	89		41 - 120
p-Terphenyl-d14 (Surr)	105		46 - 143

Lab Sample ID: MB 480-744941/1-A
Matrix: Solid
Analysis Batch: 745287

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 744941

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	ND		100	55	ug/Kg		05/01/25 06:55	05/06/25 13:00	1
2,4,5-Trichlorophenol	ND		170	46	ug/Kg		05/01/25 06:55	05/06/25 13:00	1
2,4,6-Trichlorophenol	ND		170	34	ug/Kg		05/01/25 06:55	05/06/25 13:00	1
2,4-Dichlorophenol	ND		170	18	ug/Kg		05/01/25 06:55	05/06/25 13:00	1
2,4-Dimethylphenol	ND		170	41	ug/Kg		05/01/25 06:55	05/06/25 13:00	1
2,4-Dinitrophenol	ND		1700	780	ug/Kg		05/01/25 06:55	05/06/25 13:00	1
2,4-Dinitrotoluene	ND		170	35	ug/Kg		05/01/25 06:55	05/06/25 13:00	1
2,6-Dinitrotoluene	ND		170	20	ug/Kg		05/01/25 06:55	05/06/25 13:00	1
2-Chloronaphthalene	ND		170	28	ug/Kg		05/01/25 06:55	05/06/25 13:00	1
2-Chlorophenol	ND		330	31	ug/Kg		05/01/25 06:55	05/06/25 13:00	1
2-Methylnaphthalene	ND		170	34	ug/Kg		05/01/25 06:55	05/06/25 13:00	1
2-Methylphenol	ND		170	20	ug/Kg		05/01/25 06:55	05/06/25 13:00	1
2-Nitroaniline	ND		330	25	ug/Kg		05/01/25 06:55	05/06/25 13:00	1
2-Nitrophenol	ND		170	48	ug/Kg		05/01/25 06:55	05/06/25 13:00	1
3,3'-Dichlorobenzidine	ND		330	200	ug/Kg		05/01/25 06:55	05/06/25 13:00	1
3-Nitroaniline	ND		330	47	ug/Kg		05/01/25 06:55	05/06/25 13:00	1
4,6-Dinitro-2-methylphenol	ND		330	170	ug/Kg		05/01/25 06:55	05/06/25 13:00	1
4-Bromophenyl phenyl ether	ND		170	24	ug/Kg		05/01/25 06:55	05/06/25 13:00	1
4-Chloro-3-methylphenol	ND		170	42	ug/Kg		05/01/25 06:55	05/06/25 13:00	1
4-Chloroaniline	ND		170	42	ug/Kg		05/01/25 06:55	05/06/25 13:00	1
4-Chlorophenyl phenyl ether	ND		170	21	ug/Kg		05/01/25 06:55	05/06/25 13:00	1
4-Methylphenol	ND		330	20	ug/Kg		05/01/25 06:55	05/06/25 13:00	1
4-Nitroaniline	ND		330	89	ug/Kg		05/01/25 06:55	05/06/25 13:00	1
4-Nitrophenol	ND		330	120	ug/Kg		05/01/25 06:55	05/06/25 13:00	1
Acenaphthene	ND		170	25	ug/Kg		05/01/25 06:55	05/06/25 13:00	1
Acenaphthylene	ND		170	22	ug/Kg		05/01/25 06:55	05/06/25 13:00	1
Acetophenone	ND		170	23	ug/Kg		05/01/25 06:55	05/06/25 13:00	1
Anthracene	ND		170	42	ug/Kg		05/01/25 06:55	05/06/25 13:00	1
Atrazine	ND		170	59	ug/Kg		05/01/25 06:55	05/06/25 13:00	1
Benzaldehyde	ND		170	140	ug/Kg		05/01/25 06:55	05/06/25 13:00	1
Benzo[a]anthracene	ND		170	17	ug/Kg		05/01/25 06:55	05/06/25 13:00	1
Benzo[a]pyrene	ND		170	25	ug/Kg		05/01/25 06:55	05/06/25 13:00	1
Benzo[b]fluoranthene	ND		170	27	ug/Kg		05/01/25 06:55	05/06/25 13:00	1
Benzo[g,h,i]perylene	ND		170	18	ug/Kg		05/01/25 06:55	05/06/25 13:00	1
Benzo[k]fluoranthene	ND		170	22	ug/Kg		05/01/25 06:55	05/06/25 13:00	1
Biphenyl	ND		170	25	ug/Kg		05/01/25 06:55	05/06/25 13:00	1

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 480-744941/1-A
Matrix: Solid
Analysis Batch: 745287

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 744941

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
bis (2-chloroisopropyl) ether	ND		170	34	ug/Kg		05/01/25 06:55	05/06/25 13:00	1
Bis(2-chloroethoxy)methane	ND		170	36	ug/Kg		05/01/25 06:55	05/06/25 13:00	1
Bis(2-chloroethyl)ether	ND		170	22	ug/Kg		05/01/25 06:55	05/06/25 13:00	1
Bis(2-ethylhexyl) phthalate	ND		170	58	ug/Kg		05/01/25 06:55	05/06/25 13:00	1
Butyl benzyl phthalate	ND		170	28	ug/Kg		05/01/25 06:55	05/06/25 13:00	1
Caprolactam	ND		170	51	ug/Kg		05/01/25 06:55	05/06/25 13:00	1
Carbazole	ND		170	20	ug/Kg		05/01/25 06:55	05/06/25 13:00	1
Chrysene	ND		170	38	ug/Kg		05/01/25 06:55	05/06/25 13:00	1
Dibenz(a,h)anthracene	ND		170	30	ug/Kg		05/01/25 06:55	05/06/25 13:00	1
Dibenzofuran	ND		170	20	ug/Kg		05/01/25 06:55	05/06/25 13:00	1
Diethyl phthalate	ND		170	22	ug/Kg		05/01/25 06:55	05/06/25 13:00	1
Dimethyl phthalate	ND		170	20	ug/Kg		05/01/25 06:55	05/06/25 13:00	1
Di-n-butyl phthalate	ND		170	29	ug/Kg		05/01/25 06:55	05/06/25 13:00	1
Di-n-octyl phthalate	ND		170	20	ug/Kg		05/01/25 06:55	05/06/25 13:00	1
Fluoranthene	ND		170	18	ug/Kg		05/01/25 06:55	05/06/25 13:00	1
Fluorene	ND		170	20	ug/Kg		05/01/25 06:55	05/06/25 13:00	1
Hexachlorobenzene	ND		170	23	ug/Kg		05/01/25 06:55	05/06/25 13:00	1
Hexachlorobutadiene	ND		170	25	ug/Kg		05/01/25 06:55	05/06/25 13:00	1
Hexachlorocyclopentadiene	ND		170	23	ug/Kg		05/01/25 06:55	05/06/25 13:00	1
Hexachloroethane	ND		170	22	ug/Kg		05/01/25 06:55	05/06/25 13:00	1
Indeno[1,2,3-cd]pyrene	ND		170	21	ug/Kg		05/01/25 06:55	05/06/25 13:00	1
Isophorone	ND		170	36	ug/Kg		05/01/25 06:55	05/06/25 13:00	1
Naphthalene	ND		170	22	ug/Kg		05/01/25 06:55	05/06/25 13:00	1
Nitrobenzene	ND		170	19	ug/Kg		05/01/25 06:55	05/06/25 13:00	1
N-Nitrosodi-n-propylamine	ND		170	29	ug/Kg		05/01/25 06:55	05/06/25 13:00	1
N-Nitrosodiphenylamine	ND		170	140	ug/Kg		05/01/25 06:55	05/06/25 13:00	1
Pentachlorophenol	ND		330	170	ug/Kg		05/01/25 06:55	05/06/25 13:00	1
Phenanthrene	ND		170	25	ug/Kg		05/01/25 06:55	05/06/25 13:00	1
Phenol	ND		170	26	ug/Kg		05/01/25 06:55	05/06/25 13:00	1
Pyrene	ND		170	20	ug/Kg		05/01/25 06:55	05/06/25 13:00	1

Tentatively Identified Compound	*MB Est. Result*	*MB Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Unknown	*276*	*T J*	*ug/Kg*		*3.46*	*N/A*	*05/01/25 06:55*	*05/06/25 13:00*	*1*
Unknown	*146*	*T J*	*ug/Kg*		*13.48*	*N/A*	*05/01/25 06:55*	*05/06/25 13:00*	*1*

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol (Surr)	*86*		*26 - 143*	*05/01/25 06:55*	*05/06/25 13:00*	*1*
2-Fluorobiphenyl (Surr)	*85*		*50 - 121*	*05/01/25 06:55*	*05/06/25 13:00*	*1*
2-Fluorophenol (Surr)	*77*		*36 - 120*	*05/01/25 06:55*	*05/06/25 13:00*	*1*
Nitrobenzene-d5 (Surr)	*88*		*40 - 121*	*05/01/25 06:55*	*05/06/25 13:00*	*1*
Phenol-d5 (Surr)	*83*		*41 - 120*	*05/01/25 06:55*	*05/06/25 13:00*	*1*
p-Terphenyl-d14 (Surr)	*97*		*46 - 143*	*05/01/25 06:55*	*05/06/25 13:00*	*1*

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 480-744941/2-A
Matrix: Solid
Analysis Batch: 745287

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 744941

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
1,4-Dioxane	1330	705		ug/Kg		53	23 - 120
2,4,5-Trichlorophenol	1330	1400		ug/Kg		105	59 - 126
2,4,6-Trichlorophenol	1330	1280		ug/Kg		96	59 - 123
2,4-Dichlorophenol	1330	1140		ug/Kg		86	61 - 120
2,4-Dimethylphenol	1330	1180		ug/Kg		89	59 - 120
2,4-Dinitrophenol	2670	2660		ug/Kg		100	41 - 146
2,4-Dinitrotoluene	1330	1280		ug/Kg		96	63 - 120
2,6-Dinitrotoluene	1330	1300		ug/Kg		97	66 - 120
2-Chloronaphthalene	1330	1170		ug/Kg		88	57 - 120
2-Chlorophenol	1330	1080		ug/Kg		81	53 - 120
2-Methylnaphthalene	1330	1080		ug/Kg		81	59 - 120
2-Methylphenol	1330	1120		ug/Kg		84	54 - 120
2-Nitroaniline	1330	1320		ug/Kg		99	61 - 120
2-Nitrophenol	1330	1070		ug/Kg		80	56 - 120
3,3'-Dichlorobenzidine	1330	1020		ug/Kg		76	54 - 120
3-Nitroaniline	1330	839		ug/Kg		63	48 - 120
4,6-Dinitro-2-methylphenol	2670	2590		ug/Kg		97	49 - 122
4-Bromophenyl phenyl ether	1330	1270		ug/Kg		95	58 - 120
4-Chloro-3-methylphenol	1330	1190		ug/Kg		90	61 - 120
4-Chloroaniline	1330	788		ug/Kg		59	38 - 120
4-Chlorophenyl phenyl ether	1330	1230		ug/Kg		92	63 - 124
4-Methylphenol	1330	1120		ug/Kg		84	55 - 120
4-Nitroaniline	1330	1120		ug/Kg		84	56 - 120
4-Nitrophenol	2670	2580		ug/Kg		97	43 - 147
Acenaphthene	1330	1290		ug/Kg		97	62 - 120
Acenaphthylene	1330	1240		ug/Kg		93	58 - 121
Acetophenone	1330	1090		ug/Kg		82	54 - 120
Anthracene	1330	1230		ug/Kg		92	62 - 120
Atrazine	1330	846		ug/Kg		63	60 - 127
Benzaldehyde	1330	683		ug/Kg		51	10 - 150
Benzo[a]anthracene	1330	1220		ug/Kg		91	65 - 120
Benzo[a]pyrene	1330	1290		ug/Kg		97	64 - 120
Benzo[b]fluoranthene	1330	1220		ug/Kg		91	64 - 120
Benzo[g,h,i]perylene	1330	1400		ug/Kg		105	45 - 145
Benzo[k]fluoranthene	1330	1350		ug/Kg		101	65 - 120
Biphenyl	1330	1210		ug/Kg		91	59 - 120
bis (2-chloroisopropyl) ether	1330	1080		ug/Kg		81	44 - 120
Bis(2-chloroethoxy)methane	1330	1180		ug/Kg		89	55 - 120
Bis(2-chloroethyl)ether	1330	1080		ug/Kg		81	45 - 120
Bis(2-ethylhexyl) phthalate	1330	1270		ug/Kg		95	61 - 133
Butyl benzyl phthalate	1330	1220		ug/Kg		91	61 - 129
Caprolactam	1330	849		ug/Kg		64	47 - 120
Carbazole	1330	1310		ug/Kg		98	65 - 120
Chrysene	1330	1210		ug/Kg		91	64 - 120
Dibenz(a,h)anthracene	1330	1370		ug/Kg		103	54 - 132
Dibenzofuran	1330	1230		ug/Kg		92	63 - 120
Diethyl phthalate	1330	1310		ug/Kg		98	66 - 120
Dimethyl phthalate	1330	1280		ug/Kg		96	65 - 124

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 480-744941/2-A
Matrix: Solid
Analysis Batch: 745287

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 744941

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Di-n-butyl phthalate	1330	1190		ug/Kg		89	58 - 130
Di-n-octyl phthalate	1330	1230		ug/Kg		92	57 - 133
Fluoranthene	1330	1270		ug/Kg		95	62 - 120
Fluorene	1330	1310		ug/Kg		98	63 - 120
Hexachlorobenzene	1330	1250		ug/Kg		94	60 - 120
Hexachlorobutadiene	1330	1080		ug/Kg		81	45 - 120
Hexachlorocyclopentadiene	1330	1190		ug/Kg		89	47 - 120
Hexachloroethane	1330	977		ug/Kg		73	41 - 120
Indeno[1,2,3-cd]pyrene	1330	1360		ug/Kg		102	56 - 134
Isophorone	1330	1170		ug/Kg		87	56 - 120
Naphthalene	1330	1080		ug/Kg		81	55 - 120
Nitrobenzene	1330	1090		ug/Kg		82	54 - 120
N-Nitrosodi-n-propylamine	1330	1130		ug/Kg		85	52 - 120
N-Nitrosodiphenylamine	1330	1310		ug/Kg		98	51 - 128
Pentachlorophenol	2670	2620		ug/Kg		98	10 - 120
Phenanthrene	1330	1270		ug/Kg		95	60 - 120
Phenol	1330	1090		ug/Kg		82	53 - 120
Pyrene	1330	1250		ug/Kg		94	61 - 133

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2,4,6-Tribromophenol (Surr)	*98*		*26 - 143*
2-Fluorobiphenyl (Surr)	*92*		*50 - 121*
2-Fluorophenol (Surr)	*80*		*36 - 120*
Nitrobenzene-d5 (Surr)	*86*		*40 - 121*
Phenol-d5 (Surr)	*89*		*41 - 120*
p-Terphenyl-d14 (Surr)	*95*		*46 - 143*

Method: 8081B - Organochlorine Pesticides (GC)

Lab Sample ID: MB 480-744938/1-A
Matrix: Solid
Analysis Batch: 745019

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 744938

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	ND		3.3	0.65	ug/Kg		05/01/25 06:41	05/01/25 14:48	1
4,4'-DDE	ND		3.3	0.70	ug/Kg		05/01/25 06:41	05/01/25 14:48	1
4,4'-DDT	2.65	J	3.3	0.78	ug/Kg		05/01/25 06:41	05/01/25 14:48	1
Aldrin	ND		3.3	0.82	ug/Kg		05/01/25 06:41	05/01/25 14:48	1
alpha-BHC	ND		3.3	0.60	ug/Kg		05/01/25 06:41	05/01/25 14:48	1
cis-Chlordane	ND		3.3	1.7	ug/Kg		05/01/25 06:41	05/01/25 14:48	1
beta-BHC	ND		3.3	0.60	ug/Kg		05/01/25 06:41	05/01/25 14:48	1
delta-BHC	ND		3.3	0.62	ug/Kg		05/01/25 06:41	05/01/25 14:48	1
Dieldrin	ND		3.3	0.80	ug/Kg		05/01/25 06:41	05/01/25 14:48	1
Endosulfan I	ND		3.3	0.64	ug/Kg		05/01/25 06:41	05/01/25 14:48	1
Endosulfan II	ND		3.3	0.60	ug/Kg		05/01/25 06:41	05/01/25 14:48	1
Endosulfan sulfate	ND		3.3	0.62	ug/Kg		05/01/25 06:41	05/01/25 14:48	1
Endrin	ND		3.3	0.66	ug/Kg		05/01/25 06:41	05/01/25 14:48	1
Endrin aldehyde	ND		3.3	0.85	ug/Kg		05/01/25 06:41	05/01/25 14:48	1
Endrin ketone	2.25	J	3.3	0.82	ug/Kg		05/01/25 06:41	05/01/25 14:48	1

Method: 8081B - Organochlorine Pesticides (GC) (Continued)

Lab Sample ID: MB 480-744938/1-A
Matrix: Solid
Analysis Batch: 745019

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 744938

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
gamma-BHC (Lindane)	ND		3.3	0.61	ug/Kg		05/01/25 06:41	05/01/25 14:48	1
trans-Chlordane	ND		3.3	1.1	ug/Kg		05/01/25 06:41	05/01/25 14:48	1
Heptachlor	ND		3.3	0.72	ug/Kg		05/01/25 06:41	05/01/25 14:48	1
Heptachlor epoxide	ND		3.3	0.86	ug/Kg		05/01/25 06:41	05/01/25 14:48	1
Methoxychlor	3.04	J	3.3	0.68	ug/Kg		05/01/25 06:41	05/01/25 14:48	1
Toxaphene	ND		33	19	ug/Kg		05/01/25 06:41	05/01/25 14:48	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*119*		*45 - 120*	*05/01/25 06:41*	*05/01/25 14:48*	*1*
DCB Decachlorobiphenyl	*117*		*45 - 120*	*05/01/25 06:41*	*05/01/25 14:48*	*1*
Tetrachloro-m-xylene	*84*		*30 - 124*	*05/01/25 06:41*	*05/01/25 14:48*	*1*
Tetrachloro-m-xylene	*81*		*30 - 124*	*05/01/25 06:41*	*05/01/25 14:48*	*1*

Lab Sample ID: LCS 480-744938/2-A
Matrix: Solid
Analysis Batch: 745019

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 744938

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
4,4'-DDD	33.3	31.2		ug/Kg		94	56 - 120
4,4'-DDE	33.3	28.6		ug/Kg		86	44 - 120
4,4'-DDT	33.3	33.1		ug/Kg		99	38 - 120
Aldrin	33.3	22.6		ug/Kg		68	38 - 120
alpha-BHC	33.3	23.5		ug/Kg		71	39 - 120
cis-Chlordane	33.3	27.2		ug/Kg		82	47 - 120
beta-BHC	33.3	26.7		ug/Kg		80	40 - 120
delta-BHC	33.3	23.5		ug/Kg		71	45 - 120
Dieldrin	33.3	28.9		ug/Kg		87	58 - 120
Endosulfan I	33.3	28.8		ug/Kg		87	49 - 120
Endosulfan II	33.3	30.7		ug/Kg		92	55 - 120
Endosulfan sulfate	33.3	20.2		ug/Kg		61	49 - 124
Endrin	33.3	29.8		ug/Kg		89	58 - 120
Endrin aldehyde	33.3	30.7		ug/Kg		92	37 - 121
Endrin ketone	33.3	32.4		ug/Kg		97	46 - 123
gamma-BHC (Lindane)	33.3	25.5		ug/Kg		77	50 - 120
trans-Chlordane	33.3	27.3		ug/Kg		82	48 - 120
Heptachlor	33.3	26.7		ug/Kg		80	50 - 120
Heptachlor epoxide	33.3	27.3		ug/Kg		82	50 - 120
Methoxychlor	33.3	36.6		ug/Kg		110	58 - 133

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
DCB Decachlorobiphenyl	*96*		*45 - 120*
DCB Decachlorobiphenyl	*113*		*45 - 120*
Tetrachloro-m-xylene	*72*		*30 - 124*
Tetrachloro-m-xylene	*67*		*30 - 124*

Method: 8081B - Organochlorine Pesticides (GC) (Continued)

Lab Sample ID: 480-229067-5 MS
Matrix: Solid
Analysis Batch: 745019

Client Sample ID: MW-1 0.25-3Ft
Prep Type: Total/NA
Prep Batch: 744938

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
4,4'-DDD	27	J	40.8	53.7		ug/Kg	☼	67	37 - 126
4,4'-DDE	8.5	J	40.8	28.4	J	ug/Kg	☼	49	34 - 120
4,4'-DDT	34	J B	40.8	57.8		ug/Kg	☼	59	43 - 123
Aldrin	ND		40.8	24.4	J	ug/Kg	☼	60	37 - 125
alpha-BHC	ND		40.8	23.3	J	ug/Kg	☼	57	39 - 120
cis-Chlordane	ND		40.8	26.2	J	ug/Kg	☼	64	35 - 120
beta-BHC	ND		40.8	21.3	J	ug/Kg	☼	52	36 - 120
delta-BHC	ND		40.8	26.6	J	ug/Kg	☼	65	34 - 120
Dieldrin	ND		40.8	27.3	J	ug/Kg	☼	67	45 - 120
Endosulfan I	ND		40.8	26.1	J	ug/Kg	☼	64	39 - 120
Endosulfan II	ND		40.8	36.3	J	ug/Kg	☼	89	34 - 126
Endosulfan sulfate	ND		40.8	23.2	J	ug/Kg	☼	57	27 - 130
Endrin	ND		40.8	27.9	J	ug/Kg	☼	68	47 - 121
Endrin aldehyde	ND		40.8	30.6	J	ug/Kg	☼	75	33 - 123
Endrin ketone	47	B	40.8	67.0		ug/Kg	☼	48	43 - 126
gamma-BHC (Lindane)	ND		40.8	36.1	J	ug/Kg	☼	89	50 - 120
trans-Chlordane	ND		40.8	32.8	J	ug/Kg	☼	40	31 - 120
Heptachlor	ND		40.8	24.3	J	ug/Kg	☼	60	42 - 120
Heptachlor epoxide	ND		40.8	23.2	J	ug/Kg	☼	57	40 - 120
Methoxychlor	120	B F1	40.8	169		ug/Kg	☼	126	44 - 150

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
DCB Decachlorobiphenyl	*274*	*S1+*	*45 - 120*
DCB Decachlorobiphenyl	*342*	*S1+*	*45 - 120*
Tetrachloro-m-xylene	*117*		*30 - 124*
Tetrachloro-m-xylene	*92*		*30 - 124*

Lab Sample ID: 480-229067-5 MSD
Matrix: Solid
Analysis Batch: 745019

Client Sample ID: MW-1 0.25-3Ft
Prep Type: Total/NA
Prep Batch: 744938

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
4,4'-DDD	27	J	39.0	56.4		ug/Kg	☼	77	37 - 126	5	21
4,4'-DDE	8.5	J	39.0	29.4	J	ug/Kg	☼	54	34 - 120	4	18
4,4'-DDT	34	J B	39.0	70.1		ug/Kg	☼	94	43 - 123	19	25
Aldrin	ND		39.0	23.9	J	ug/Kg	☼	61	37 - 125	2	12
alpha-BHC	ND		39.0	23.0	J	ug/Kg	☼	59	39 - 120	1	15
cis-Chlordane	ND		39.0	27.4	J	ug/Kg	☼	70	35 - 120	4	23
beta-BHC	ND		39.0	21.0	J	ug/Kg	☼	54	36 - 120	1	19
delta-BHC	ND		39.0	26.5	J	ug/Kg	☼	68	34 - 120	0	14
Dieldrin	ND		39.0	28.9	J	ug/Kg	☼	74	45 - 120	6	12
Endosulfan I	ND		39.0	27.5	J	ug/Kg	☼	71	39 - 120	5	18
Endosulfan II	ND		39.0	39.2		ug/Kg	☼	100	34 - 126	8	26
Endosulfan sulfate	ND		39.0	28.9	J	ug/Kg	☼	74	27 - 130	22	35
Endrin	ND		39.0	28.0	J	ug/Kg	☼	72	47 - 121	1	20
Endrin aldehyde	ND		39.0	36.6	J	ug/Kg	☼	94	33 - 123	18	47
Endrin ketone	47	B	39.0	79.7		ug/Kg	☼	83	43 - 126	17	37
gamma-BHC (Lindane)	ND		39.0	34.4	J	ug/Kg	☼	88	50 - 120	5	12

Method: 8081B - Organochlorine Pesticides (GC) (Continued)

Lab Sample ID: 480-229067-5 MSD
Matrix: Solid
Analysis Batch: 745019

Client Sample ID: MW-1 0.25-3Ft
Prep Type: Total/NA
Prep Batch: 744938

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
trans-Chlordane	ND		39.0	30.6	J	ug/Kg	☼	36	31 - 120	7	15
Heptachlor	ND		39.0	24.6	J	ug/Kg	☼	63	42 - 120	1	22
Heptachlor epoxide	ND		39.0	23.5	J	ug/Kg	☼	60	40 - 120	1	15
Methoxychlor	120	B F1	39.0	188	F1	ug/Kg	☼	181	44 - 150	11	24

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
DCB Decachlorobiphenyl	*275*	*S1+*	*45 - 120*
DCB Decachlorobiphenyl	*437*	*S1+*	*45 - 120*
Tetrachloro-m-xylene	*117*		*30 - 124*
Tetrachloro-m-xylene	*92*		*30 - 124*

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Lab Sample ID: MB 480-744942/1-A
Matrix: Solid
Analysis Batch: 745005

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 744942

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		0.25	0.049	mg/Kg		05/01/25 07:04	05/01/25 15:07	1
PCB-1221	ND		0.25	0.049	mg/Kg		05/01/25 07:04	05/01/25 15:07	1
PCB-1232	ND		0.25	0.049	mg/Kg		05/01/25 07:04	05/01/25 15:07	1
PCB-1242	ND		0.25	0.049	mg/Kg		05/01/25 07:04	05/01/25 15:07	1
PCB-1248	ND		0.25	0.049	mg/Kg		05/01/25 07:04	05/01/25 15:07	1
PCB-1254	ND		0.25	0.12	mg/Kg		05/01/25 07:04	05/01/25 15:07	1
PCB-1260	ND		0.25	0.12	mg/Kg		05/01/25 07:04	05/01/25 15:07	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*136*		*65 - 174*	*05/01/25 07:04*	*05/01/25 15:07*	*1*
DCB Decachlorobiphenyl	*139*		*65 - 174*	*05/01/25 07:04*	*05/01/25 15:07*	*1*
Tetrachloro-m-xylene	*133*		*60 - 154*	*05/01/25 07:04*	*05/01/25 15:07*	*1*
Tetrachloro-m-xylene	*123*		*60 - 154*	*05/01/25 07:04*	*05/01/25 15:07*	*1*

Lab Sample ID: LCS 480-744942/2-A
Matrix: Solid
Analysis Batch: 745005

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 744942

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
PCB-1016			2.50	3.42		mg/Kg		137	51 - 185		
PCB-1260			2.50	3.51		mg/Kg		141	61 - 184		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
DCB Decachlorobiphenyl	*169*		*65 - 174*
DCB Decachlorobiphenyl	*167*		*65 - 174*
Tetrachloro-m-xylene	*156*	*S1+*	*60 - 154*
Tetrachloro-m-xylene	*150*		*60 - 154*

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography (Continued)

Lab Sample ID: 480-229067-5 MS
Matrix: Solid
Analysis Batch: 745005

Client Sample ID: MW-1 0.25-3Ft
Prep Type: Total/NA
Prep Batch: 744942

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
PCB-1016	ND		2.85	3.94		mg/Kg	☼	138	50 - 177
PCB-1260	ND		2.85	4.00		mg/Kg	☼	140	33 - 200

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
DCB Decachlorobiphenyl	*168*		*65 - 174*
DCB Decachlorobiphenyl	*166*		*65 - 174*
Tetrachloro-m-xylene	*163*	*S1+*	*60 - 154*
Tetrachloro-m-xylene	*155*	*S1+*	*60 - 154*

Lab Sample ID: 480-229067-5 MSD
Matrix: Solid
Analysis Batch: 745005

Client Sample ID: MW-1 0.25-3Ft
Prep Type: Total/NA
Prep Batch: 744942

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
PCB-1016	ND		2.59	2.96		mg/Kg	☼	114	50 - 177	28	50
PCB-1260	ND		2.59	3.05		mg/Kg	☼	118	33 - 200	27	50

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
DCB Decachlorobiphenyl	*133*		*65 - 174*
DCB Decachlorobiphenyl	*143*		*65 - 174*
Tetrachloro-m-xylene	*137*		*60 - 154*
Tetrachloro-m-xylene	*127*		*60 - 154*

Method: 8151A - Herbicides (GC)

Lab Sample ID: MB 480-744937/1-A
Matrix: Solid
Analysis Batch: 745549

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 744937

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-T	ND		17	5.3	ug/Kg		05/01/25 06:27	05/08/25 12:25	1
2,4-D	ND		17	11	ug/Kg		05/01/25 06:27	05/08/25 12:25	1
Dichlorprop	ND		17	8.3	ug/Kg		05/01/25 06:27	05/08/25 12:25	1
Pentachlorophenol	ND		17	5.4	ug/Kg		05/01/25 06:27	05/08/25 12:25	1
Picloram	ND		17	7.2	ug/Kg		05/01/25 06:27	05/08/25 12:25	1
Silvex (2,4,5-TP)	ND		17	6.0	ug/Kg		05/01/25 06:27	05/08/25 12:25	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4-Dichlorophenylacetic acid	*78*		*28 - 129*	*05/01/25 06:27*	*05/08/25 12:25*	*1*
2,4-Dichlorophenylacetic acid	*76*		*28 - 129*	*05/01/25 06:27*	*05/08/25 12:25*	*1*

Lab Sample ID: LCS 480-744937/2-A
Matrix: Solid
Analysis Batch: 745549

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 744937

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
2,4,5-T	66.7	52.0		ug/Kg		78	41 - 120
2,4-D	66.7	53.0		ug/Kg		80	40 - 120

Method: 8151A - Herbicides (GC) (Continued)

Lab Sample ID: LCS 480-744937/2-A
Matrix: Solid
Analysis Batch: 745549

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 744937

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Dichlorprop	66.7	55.1		ug/Kg		83	34 - 121
Pentachlorophenol	66.7	14.8	J	ug/Kg		22	10 - 120
Picloram	66.7	52.5		ug/Kg		79	22 - 149
Silvex (2,4,5-TP)	66.7	52.7		ug/Kg		79	39 - 125

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2,4-Dichlorophenylacetic acid	*83*		*28 - 129*
2,4-Dichlorophenylacetic acid	*76*		*28 - 129*

Lab Sample ID: 480-229067-5 MS
Matrix: Solid
Analysis Batch: 745549

Client Sample ID: MW-1 0.25-3Ft
Prep Type: Total/NA
Prep Batch: 744937

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
2,4,5-T	ND		81.7	58.0		ug/Kg	☼	71	29 - 123
2,4-D	ND		81.7	60.2		ug/Kg	☼	74	32 - 115
Dichlorprop	ND		81.7	72.3		ug/Kg	☼	88	28 - 125
Pentachlorophenol	ND		81.7	49.4		ug/Kg	☼	60	10 - 130
Picloram	ND		81.7	57.4		ug/Kg	☼	70	10 - 150
Silvex (2,4,5-TP)	ND		81.7	57.6		ug/Kg	☼	71	22 - 140

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
2,4-Dichlorophenylacetic acid	*73*		*28 - 129*
2,4-Dichlorophenylacetic acid	*73*		*28 - 129*

Lab Sample ID: 480-229067-5 MSD
Matrix: Solid
Analysis Batch: 745549

Client Sample ID: MW-1 0.25-3Ft
Prep Type: Total/NA
Prep Batch: 744937

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
2,4,5-T	ND		79.4	64.1		ug/Kg	☼	81	29 - 123	10	50
2,4-D	ND		79.4	68.3		ug/Kg	☼	86	32 - 115	13	50
Dichlorprop	ND		79.4	77.5		ug/Kg	☼	98	28 - 125	7	50
Pentachlorophenol	ND		79.4	56.3		ug/Kg	☼	71	10 - 130	13	50
Picloram	ND		79.4	52.8		ug/Kg	☼	66	10 - 150	8	50
Silvex (2,4,5-TP)	ND		79.4	65.8		ug/Kg	☼	83	22 - 140	13	50

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
2,4-Dichlorophenylacetic acid	*80*		*28 - 129*
2,4-Dichlorophenylacetic acid	*81*		*28 - 129*

Client: Roux Environmental Engineering and Geology DPC
Job ID: 480-229067-1
Project/Site: BCP RI - 619 Exchange Street Site

Method: Draft-3 1633 - Per- and Polyfluoroalkyl Substances by LC/MS/MS

Lab Sample ID: MB 240-654462/1-A
Matrix: Solid
Analysis Batch: 654529

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 654462

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)	ND		0.50	0.13	ug/Kg		05/02/25 08:22	05/02/25 23:30	1
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2 FTS)	ND		0.50	0.13	ug/Kg		05/02/25 08:22	05/02/25 23:30	1
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2 FTS)	ND		0.50	0.13	ug/Kg		05/02/25 08:22	05/02/25 23:30	1
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2 FTS)	ND		0.50	0.13	ug/Kg		05/02/25 08:22	05/02/25 23:30	1
3-Perfluoroheptylpropanoic acid (7:3 FTCA)	ND		3.1	0.78	ug/Kg		05/02/25 08:22	05/02/25 23:30	1
3-Perfluoropentylpropanoic acid (5:3 FTCA)	ND		3.1	0.78	ug/Kg		05/02/25 08:22	05/02/25 23:30	1
3-Perfluoropropylpropanoic acid (3:3 FTCA)	ND		0.63	0.16	ug/Kg		05/02/25 08:22	05/02/25 23:30	1
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	ND		0.50	0.13	ug/Kg		05/02/25 08:22	05/02/25 23:30	1
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9Cl-PF3ONS)	ND		0.50	0.13	ug/Kg		05/02/25 08:22	05/02/25 23:30	1
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA)	ND		0.50	0.13	ug/Kg		05/02/25 08:22	05/02/25 23:30	1
N-ethylperfluorooctane sulfonamide (NEtFOSA)	ND		0.13	0.031	ug/Kg		05/02/25 08:22	05/02/25 23:30	1
N-ethylperfluorooctane sulfonamidoethanol (NEtFOSE)	ND		1.3	0.31	ug/Kg		05/02/25 08:22	05/02/25 23:30	1
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	ND		0.13	0.031	ug/Kg		05/02/25 08:22	05/02/25 23:30	1
N-methylperfluorooctane sulfonamide (NMeFOSA)	ND		0.13	0.031	ug/Kg		05/02/25 08:22	05/02/25 23:30	1
N-methylperfluorooctane sulfonamidoethanol (NMeFOSE)	ND		1.3	0.31	ug/Kg		05/02/25 08:22	05/02/25 23:30	1
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	ND		0.13	0.031	ug/Kg		05/02/25 08:22	05/02/25 23:30	1
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	ND		0.25	0.063	ug/Kg		05/02/25 08:22	05/02/25 23:30	1
Perfluoro (2-ethoxyethane) sulfonic acid (PFEESA)	ND		0.25	0.063	ug/Kg		05/02/25 08:22	05/02/25 23:30	1
Perfluoro-3-methoxypropanoic acid (PFMPA)	ND		0.25	0.063	ug/Kg		05/02/25 08:22	05/02/25 23:30	1
Perfluoro-4-methoxybutanoic acid (PFMBA)	ND		0.25	0.063	ug/Kg		05/02/25 08:22	05/02/25 23:30	1
Perfluorobutanesulfonic acid (PFBS)	ND		0.13	0.031	ug/Kg		05/02/25 08:22	05/02/25 23:30	1
Perfluorobutanoic acid (PFBA)	ND		0.50	0.13	ug/Kg		05/02/25 08:22	05/02/25 23:30	1
Perfluorodecanesulfonic acid (PFDS)	ND		0.13	0.031	ug/Kg		05/02/25 08:22	05/02/25 23:30	1
Perfluorodecanoic acid (PFDA)	ND		0.13	0.031	ug/Kg		05/02/25 08:22	05/02/25 23:30	1
Perfluorododecanesulfonic acid (PFDoS)	ND		0.13	0.031	ug/Kg		05/02/25 08:22	05/02/25 23:30	1
Perfluorododecanoic acid (PFDoA)	ND		0.13	0.031	ug/Kg		05/02/25 08:22	05/02/25 23:30	1
Perfluoroheptanesulfonic acid (PFHpS)	ND		0.13	0.031	ug/Kg		05/02/25 08:22	05/02/25 23:30	1
Perfluoroheptanoic acid (PFHpA)	ND		0.13	0.031	ug/Kg		05/02/25 08:22	05/02/25 23:30	1
Perfluorohexanesulfonic acid (PFHxS)	ND		0.13	0.031	ug/Kg		05/02/25 08:22	05/02/25 23:30	1
Perfluorohexanoic acid (PFHxA)	ND		0.13	0.031	ug/Kg		05/02/25 08:22	05/02/25 23:30	1
Perfluorononanesulfonic acid (PFNS)	ND		0.13	0.031	ug/Kg		05/02/25 08:22	05/02/25 23:30	1
Perfluorononanoic acid (PFNA)	ND		0.13	0.031	ug/Kg		05/02/25 08:22	05/02/25 23:30	1

Method: Draft-3 1633 - Per- and Polyfluoroalkyl Substances by LC/MS/MS (Continued)

Lab Sample ID: MB 240-654462/1-A
Matrix: Solid
Analysis Batch: 654529

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 654462

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorooctanesulfonamide (PFOSA)	ND		0.13	0.031	ug/Kg		05/02/25 08:22	05/02/25 23:30	1
Perfluorooctanesulfonic acid (PFOS)	ND		0.13	0.031	ug/Kg		05/02/25 08:22	05/02/25 23:30	1
Perfluorooctanoic acid (PFOA)	ND		0.13	0.031	ug/Kg		05/02/25 08:22	05/02/25 23:30	1
Perfluoropentanesulfonic acid (PFPeS)	ND		0.13	0.031	ug/Kg		05/02/25 08:22	05/02/25 23:30	1
Perfluoropentanoic acid (PFPeA)	ND		0.25	0.063	ug/Kg		05/02/25 08:22	05/02/25 23:30	1
Perfluorotetradecanoic acid (PFTeDA)	ND		0.13	0.031	ug/Kg		05/02/25 08:22	05/02/25 23:30	1
Perfluorotridecanoic acid (PFTrDA)	ND		0.13	0.031	ug/Kg		05/02/25 08:22	05/02/25 23:30	1
Perfluoroundecanoic acid (PFUnA)	ND		0.13	0.031	ug/Kg		05/02/25 08:22	05/02/25 23:30	1

Isotope Dilution	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C2 PFTeDA	*74.9*		*20 - 150*	*05/02/25 08:22*	*05/02/25 23:30*	*1*
13C2-PFDoDA	*84.8*		*20 - 150*	*05/02/25 08:22*	*05/02/25 23:30*	*1*
13C3 HFPO-DA	*95.9*		*20 - 150*	*05/02/25 08:22*	*05/02/25 23:30*	*1*
13C3 PFBS	*99.6*		*20 - 150*	*05/02/25 08:22*	*05/02/25 23:30*	*1*
13C3 PFHxS	*94.4*		*20 - 150*	*05/02/25 08:22*	*05/02/25 23:30*	*1*
13C4 PFBA	*95.9*		*20 - 150*	*05/02/25 08:22*	*05/02/25 23:30*	*1*
13C4 PFHpA	*92.9*		*20 - 150*	*05/02/25 08:22*	*05/02/25 23:30*	*1*
13C5 PFHxA	*98.2*		*20 - 150*	*05/02/25 08:22*	*05/02/25 23:30*	*1*
13C5 PFPeA	*97.7*		*20 - 150*	*05/02/25 08:22*	*05/02/25 23:30*	*1*
13C6 PFDA	*89.7*		*20 - 150*	*05/02/25 08:22*	*05/02/25 23:30*	*1*
13C7 PFUnA	*88.9*		*20 - 150*	*05/02/25 08:22*	*05/02/25 23:30*	*1*
13C8 PFOA	*94.4*		*20 - 150*	*05/02/25 08:22*	*05/02/25 23:30*	*1*
13C8 PFOS	*96.8*		*20 - 150*	*05/02/25 08:22*	*05/02/25 23:30*	*1*
13C8 PFOSA	*89.4*		*20 - 150*	*05/02/25 08:22*	*05/02/25 23:30*	*1*
13C9 PFNA	*87.7*		*20 - 150*	*05/02/25 08:22*	*05/02/25 23:30*	*1*
D3-NMeFOSA	*83.2*		*20 - 150*	*05/02/25 08:22*	*05/02/25 23:30*	*1*
d3-NMeFOSAA	*102*		*20 - 150*	*05/02/25 08:22*	*05/02/25 23:30*	*1*
d5-NEtFOSAA	*98.4*		*20 - 150*	*05/02/25 08:22*	*05/02/25 23:30*	*1*
d5-NEtPFOSA	*74.9*		*20 - 150*	*05/02/25 08:22*	*05/02/25 23:30*	*1*
d7-N-MeFOSE-M	*87.5*		*20 - 150*	*05/02/25 08:22*	*05/02/25 23:30*	*1*
d9-N-EtFOSE-M	*80.9*		*20 - 150*	*05/02/25 08:22*	*05/02/25 23:30*	*1*
M2-4:2 FTS	*102*		*20 - 150*	*05/02/25 08:22*	*05/02/25 23:30*	*1*
M2-6:2 FTS	*101*		*20 - 150*	*05/02/25 08:22*	*05/02/25 23:30*	*1*
M2-8:2 FTS	*94.1*		*20 - 150*	*05/02/25 08:22*	*05/02/25 23:30*	*1*

Lab Sample ID: LCS 240-654462/3-A
Matrix: Solid
Analysis Batch: 654529

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 654462

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)	5.90	5.25		ug/Kg		89	40 - 150
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2 FTS)	6.00	6.40		ug/Kg		107	40 - 150
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2 FTS)	5.86	6.03		ug/Kg		103	40 - 150
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2 FTS)	5.95	6.30		ug/Kg		106	40 - 150

Method: Draft-3 1633 - Per- and Polyfluoroalkyl Substances by LC/MS/MS (Continued)

Lab Sample ID: LCS 240-654462/3-A
Matrix: Solid
Analysis Batch: 654529

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 654462

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
3-Perfluoroheptylpropanoic acid (7:3 FTCA)	39.1	36.6		ug/Kg		94	40 - 150
3-Perfluoropentylpropanoic acid (5:3 FTCA)	39.1	39.7		ug/Kg		102	40 - 150
3-Perfluoropropylpropanoic acid (3:3 FTCA)	7.81	7.63		ug/Kg		98	40 - 150
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	5.91	5.75		ug/Kg		97	40 - 150
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9Cl-PF3ONS)	5.84	5.38		ug/Kg		92	40 - 150
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA)	6.25	6.65		ug/Kg		106	40 - 150
N-ethylperfluorooctane sulfonamide (NEtFOSA)	1.56	1.64		ug/Kg		105	40 - 150
N-ethylperfluorooctane sulfonamidoethanol (NEtFOSE)	15.6	17.8		ug/Kg		114	40 - 150
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	1.56	1.54		ug/Kg		99	40 - 150
N-methylperfluorooctane sulfonamide (NMeFOSA)	1.56	1.57		ug/Kg		101	40 - 150
N-methylperfluorooctane sulfonamidoethanol (NMeFOSE)	15.6	16.0		ug/Kg		102	40 - 150
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	1.56	1.62		ug/Kg		104	40 - 150
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	3.13	3.71		ug/Kg		119	40 - 150
Perfluoro (2-ethoxyethane) sulfonic acid (PFEESA)	2.79	2.92		ug/Kg		105	40 - 150
Perfluoro-3-methoxypropanoic acid (PFMPA)	3.13	3.23		ug/Kg		104	40 - 150
Perfluoro-4-methoxybutanoic acid (PFMBA)	3.13	3.51		ug/Kg		112	40 - 150
Perfluorobutanesulfonic acid (PFBS)	1.39	1.43		ug/Kg		103	40 - 150
Perfluorobutanoic acid (PFBA)	6.25	6.75		ug/Kg		108	40 - 150
Perfluorodecanesulfonic acid (PFDS)	1.51	1.50		ug/Kg		100	40 - 150
Perfluorodecanoic acid (PFDA)	1.56	1.53		ug/Kg		98	40 - 150
Perfluorododecanesulfonic acid (PFDoS)	1.52	1.42		ug/Kg		94	40 - 150
Perfluorododecanoic acid (PFDoA)	1.56	1.70		ug/Kg		109	40 - 150
Perfluoroheptanesulfonic acid (PFHpS)	1.49	1.54		ug/Kg		103	40 - 150
Perfluoroheptanoic acid (PFHpA)	1.56	1.66		ug/Kg		106	40 - 150
Perfluorohexanesulfonic acid (PFHxS)	1.43	1.46		ug/Kg		102	40 - 150
Perfluorohexanoic acid (PFHxA)	1.56	1.64		ug/Kg		105	40 - 150
Perfluorononanesulfonic acid (PFNS)	1.50	1.51		ug/Kg		100	40 - 150
Perfluorononanoic acid (PFNA)	1.56	1.82		ug/Kg		117	40 - 150
Perfluorooctanesulfonamide (PFOSA)	1.56	1.65		ug/Kg		106	40 - 150

Method: Draft-3 1633 - Per- and Polyfluoroalkyl Substances by LC/MS/MS (Continued)

Lab Sample ID: LCS 240-654462/3-A
Matrix: Solid
Analysis Batch: 654529

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 654462

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Perfluorooctanesulfonic acid (PFOS)	1.45	1.42		ug/Kg		98	40 - 150
Perfluorooctanoic acid (PFOA)	1.56	1.60		ug/Kg		102	40 - 150
Perfluoropentanesulfonic acid (PFPeS)	1.47	1.68		ug/Kg		114	40 - 150
Perfluoropentanoic acid (PFPeA)	3.13	3.44		ug/Kg		110	40 - 150
Perfluorotetradecanoic acid (PFTeDA)	1.56	1.67		ug/Kg		107	40 - 150
Perfluorotridecanoic acid (PFTrDA)	1.56	1.57		ug/Kg		101	40 - 150
Perfluoroundecanoic acid (PFUnA)	1.56	1.70		ug/Kg		109	40 - 150

Isotope Dilution	*LCS %Recovery*	*LCS Qualifier*	*Limits*
13C2 PFTeDA	*77.3*		*20 - 150*
13C2-PFDoDA	*83.0*		*20 - 150*
13C3 HFPO-DA	*100*		*20 - 150*
13C3 PFBS	*95.1*		*20 - 150*
13C3 PFHxS	*88.6*		*20 - 150*
13C4 PFBA	*91.7*		*20 - 150*
13C4 PFHpA	*93.9*		*20 - 150*
13C5 PFHxA	*92.7*		*20 - 150*
13C5 PFPeA	*100*		*20 - 150*
13C6 PFDA	*86.4*		*20 - 150*
13C7 PFUnA	*85.0*		*20 - 150*
13C8 PFOA	*94.3*		*20 - 150*
13C8 PFOS	*92.4*		*20 - 150*
13C8 PFOSA	*86.0*		*20 - 150*
13C9 PFNA	*84.5*		*20 - 150*
D3-NMeFOSA	*74.6*		*20 - 150*
d3-NMeFOSAA	*94.0*		*20 - 150*
d5-NEtFOSAA	*124*		*20 - 150*
d5-NEtPFOSA	*70.0*		*20 - 150*
d7-N-MeFOSE-M	*77.3*		*20 - 150*
d9-N-EtFOSE-M	*66.5*		*20 - 150*
M2-4:2 FTS	*103*		*20 - 150*
M2-6:2 FTS	*96.3*		*20 - 150*
M2-8:2 FTS	*90.8*		*20 - 150*

Lab Sample ID: LLCS 240-654462/2-A
Matrix: Solid
Analysis Batch: 654529

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 654462

Analyte	Spike Added	LLCS Result	LLCS Qualifier	Unit	D	%Rec	%Rec Limits
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)	0.472	0.411	J	ug/Kg		87	40 - 150
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2 FTS)	0.480	0.516		ug/Kg		108	40 - 150
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2 FTS)	0.469	0.460	J	ug/Kg		98	40 - 150

Method: Draft-3 1633 - Per- and Polyfluoroalkyl Substances by LC/MS/MS (Continued)

Lab Sample ID: LLCS 240-654462/2-A
Matrix: Solid
Analysis Batch: 654529

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 654462

Analyte	Spike Added	LLCS Result	LLCS Qualifier	Unit	D	%Rec	%Rec Limits
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2 FTS)	0.476	0.496	J	ug/Kg		104	40 - 150
3-Perfluoroheptylpropanoic acid (7:3 FTCA)	3.13	2.71	J	ug/Kg		87	40 - 150
3-Perfluoropentylpropanoic acid (5:3 FTCA)	3.13	2.92	J	ug/Kg		93	40 - 150
3-Perfluoropropylpropanoic acid (3:3 FTCA)	0.625	0.579	J	ug/Kg		93	40 - 150
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	0.473	0.447	J	ug/Kg		95	40 - 150
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9Cl-PF3ONS)	0.467	0.428	J	ug/Kg		92	40 - 150
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA)	0.500	0.524		ug/Kg		105	40 - 150
N-ethylperfluorooctane sulfonamide (NEtFOSA)	0.125	0.127	J	ug/Kg		102	40 - 150
N-ethylperfluorooctane sulfonamidoethanol (NEtFOSE)	1.25	1.13	J	ug/Kg		91	40 - 150
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	0.125	0.136		ug/Kg		109	40 - 150
N-methylperfluorooctane sulfonamide (NMeFOSA)	0.125	0.167		ug/Kg		134	40 - 150
N-methylperfluorooctane sulfonamidoethanol (NMeFOSE)	1.25	1.42		ug/Kg		114	40 - 150
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	0.125	0.129	J	ug/Kg		103	40 - 150
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	0.250	0.269		ug/Kg		107	40 - 150
Perfluoro (2-ethoxyethane) sulfonic acid (PFEESA)	0.223	0.222	J	ug/Kg		99	40 - 150
Perfluoro-3-methoxypropanoic acid (PFMPA)	0.250	0.256		ug/Kg		103	40 - 150
Perfluoro-4-methoxybutanoic acid (PFMBA)	0.250	0.275		ug/Kg		110	40 - 150
Perfluorobutanesulfonic acid (PFBS)	0.111	0.105	J	ug/Kg		94	40 - 150
Perfluorobutanoic acid (PFBA)	0.500	0.522		ug/Kg		104	40 - 150
Perfluorodecanesulfonic acid (PFDS)	0.121	0.116	J	ug/Kg		96	40 - 150
Perfluorodecanoic acid (PFDA)	0.125	0.112	J	ug/Kg		89	40 - 150
Perfluorododecanesulfonic acid (PFDoS)	0.121	0.102	J	ug/Kg		84	40 - 150
Perfluorododecanoic acid (PFDoA)	0.125	0.126	J	ug/Kg		101	40 - 150
Perfluoroheptanesulfonic acid (PFHpS)	0.119	0.120	J	ug/Kg		101	40 - 150
Perfluoroheptanoic acid (PFHpA)	0.125	0.127	J	ug/Kg		101	40 - 150
Perfluorohexanesulfonic acid (PFHxS)	0.114	0.123	J	ug/Kg		108	40 - 150
Perfluorohexanoic acid (PFHxA)	0.125	0.133		ug/Kg		106	40 - 150
Perfluorononanesulfonic acid (PFNS)	0.120	0.121	J	ug/Kg		101	40 - 150
Perfluorononanoic acid (PFNA)	0.125	0.143		ug/Kg		114	40 - 150

Method: Draft-3 1633 - Per- and Polyfluoroalkyl Substances by LC/MS/MS (Continued)

Lab Sample ID: LLCS 240-654462/2-A
Matrix: Solid
Analysis Batch: 654529

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 654462

Analyte	Spike Added	LLCS Result	LLCS Qualifier	Unit	D	%Rec	%Rec Limits
Perfluorooctanesulfonamide (PFOSA)	0.125	0.129	J	ug/Kg		103	40 - 150
Perfluorooctanesulfonic acid (PFOS)	0.116	0.121	J	ug/Kg		104	40 - 150
Perfluorooctanoic acid (PFOA)	0.125	0.134		ug/Kg		107	40 - 150
Perfluoropentanesulfonic acid (PFPeS)	0.118	0.124	J	ug/Kg		106	40 - 150
Perfluoropentanoic acid (PFPeA)	0.250	0.302		ug/Kg		121	40 - 150
Perfluorotetradecanoic acid (PFTeDA)	0.125	0.123	J	ug/Kg		99	40 - 150
Perfluorotridecanoic acid (PFTrDA)	0.125	0.122	J	ug/Kg		97	40 - 150
Perfluoroundecanoic acid (PFUnA)	0.125	0.129	J	ug/Kg		103	40 - 150

Isotope Dilution	*LLCS %Recovery*	*LLCS Qualifier*	*Limits*
13C2 PFTeDA	*75.1*		*20 - 150*
13C2-PFDoDA	*85.2*		*20 - 150*
13C3 HFPO-DA	*101*		*20 - 150*
13C3 PFBS	*97.9*		*20 - 150*
13C3 PFHxS	*89.0*		*20 - 150*
13C4 PFBA	*91.3*		*20 - 150*
13C4 PFHpA	*93.9*		*20 - 150*
13C5 PFHxA	*92.9*		*20 - 150*
13C5 PFPeA	*97.3*		*20 - 150*
13C6 PFDA	*90.1*		*20 - 150*
13C7 PFUnA	*84.9*		*20 - 150*
13C8 PFOA	*89.6*		*20 - 150*
13C8 PFOS	*91.5*		*20 - 150*
13C8 PFOSA	*82.3*		*20 - 150*
13C9 PFNA	*82.8*		*20 - 150*
D3-NMeFOSA	*61.3*		*20 - 150*
d3-NMeFOSAA	*92.9*		*20 - 150*
d5-NEtFOSAA	*97.2*		*20 - 150*
d5-NEtPFOSA	*67.6*		*20 - 150*
d7-N-MeFOSE-M	*62.7*		*20 - 150*
d9-N-EtFOSE-M	*61.0*		*20 - 150*
M2-4:2 FTS	*105*		*20 - 150*
M2-6:2 FTS	*96.9*		*20 - 150*
M2-8:2 FTS	*87.0*		*20 - 150*

Lab Sample ID: 480-229067-5 MS
Matrix: Solid
Analysis Batch: 654529

Client Sample ID: MW-1 0.25-3Ft
Prep Type: Total/NA
Prep Batch: 654462

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)	ND		7.20	6.03		ug/Kg	☼	84	40 - 150
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2 FTS)	ND		7.33	7.57		ug/Kg	☼	103	40 - 150

Method: Draft-3 1633 - Per- and Polyfluoroalkyl Substances by LC/MS/MS (Continued)

Lab Sample ID: 480-229067-5 MS
Matrix: Solid
Analysis Batch: 654529

Client Sample ID: MW-1 0.25-3Ft
Prep Type: Total/NA
Prep Batch: 654462

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2 FTS)	ND		7.16	6.52		ug/Kg	☼	91	40 - 150
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2 FTS)	ND		7.27	6.13		ug/Kg	☼	84	40 - 150
3-Perfluoroheptylpropanoic acid (7:3 FTCA)	ND		47.7	41.3		ug/Kg	☼	87	40 - 150
3-Perfluoropentylpropanoic acid (5:3 FTCA)	ND		47.7	45.4		ug/Kg	☼	95	40 - 150
3-Perfluoropropylpropanoic acid (3:3 FTCA)	ND		9.54	7.91		ug/Kg	☼	83	40 - 150
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	ND		7.22	6.41		ug/Kg	☼	89	40 - 150
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9Cl-PF3ONS)	ND		7.13	6.39		ug/Kg	☼	90	40 - 150
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA)	ND		7.63	7.34		ug/Kg	☼	96	40 - 150
N-ethylperfluorooctane sulfonamide (NEtFOSA)	ND		1.91	1.82		ug/Kg	☼	96	40 - 150
N-ethylperfluorooctane sulfonamidoethanol (NEtFOSE)	ND		19.1	17.1		ug/Kg	☼	90	40 - 150
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	ND		1.91	1.73		ug/Kg	☼	91	40 - 150
N-methylperfluorooctane sulfonamide (NMeFOSA)	ND		1.91	1.74		ug/Kg	☼	91	40 - 150
N-methylperfluorooctane sulfonamidoethanol (NMeFOSE)	ND		19.1	19.7		ug/Kg	☼	103	40 - 150
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	ND		1.91	1.81		ug/Kg	☼	95	40 - 150
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	ND		3.82	3.87		ug/Kg	☼	101	40 - 150
Perfluoro (2-ethoxyethane) sulfonic acid (PFEESA)	ND		3.40	3.19		ug/Kg	☼	94	40 - 150
Perfluoro-3-methoxypropanoic acid (PFMPA)	ND		3.82	3.04		ug/Kg	☼	80	40 - 150
Perfluoro-4-methoxybutanoic acid (PFMBA)	ND		3.82	3.28		ug/Kg	☼	86	40 - 150
Perfluorobutanesulfonic acid (PFBS)	ND		1.69	1.43		ug/Kg	☼	84	40 - 150
Perfluorobutanoic acid (PFBA)	ND		7.63	7.14		ug/Kg	☼	94	40 - 150
Perfluorodecanesulfonic acid (PFDS)	ND		1.84	1.42		ug/Kg	☼	77	40 - 150
Perfluorodecanoic acid (PFDA)	ND		1.91	1.74		ug/Kg	☼	91	40 - 150
Perfluorododecanesulfonic acid (PFDoS)	ND		1.85	1.47		ug/Kg	☼	79	40 - 150
Perfluorododecanoic acid (PFDoA)	ND		1.91	1.73		ug/Kg	☼	91	40 - 150
Perfluoroheptanesulfonic acid (PFHpS)	ND		1.82	1.76		ug/Kg	☼	97	40 - 150
Perfluoroheptanoic acid (PFHpA)	ND		1.91	1.97		ug/Kg	☼	103	40 - 150
Perfluorohexanesulfonic acid (PFHxS)	ND		1.74	1.43		ug/Kg	☼	82	40 - 150
Perfluorohexanoic acid (PFHxA)	ND		1.91	1.75		ug/Kg	☼	92	40 - 150
Perfluorononanesulfonic acid (PFNS)	ND		1.84	1.59		ug/Kg	☼	87	40 - 150

Method: Draft-3 1633 - Per- and Polyfluoroalkyl Substances by LC/MS/MS (Continued)

Lab Sample ID: 480-229067-5 MS
Matrix: Solid
Analysis Batch: 654529

Client Sample ID: MW-1 0.25-3Ft
Prep Type: Total/NA
Prep Batch: 654462

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Perfluorononanoic acid (PFNA)	ND		1.91	1.90		ug/Kg	☼	100	40 - 150
Perfluorooctanesulfonamide (PFOSA)	ND		1.91	1.70		ug/Kg	☼	89	40 - 150
Perfluorooctanesulfonic acid (PFOS)	ND		1.77	1.61		ug/Kg	☼	91	40 - 150
Perfluorooctanoic acid (PFOA)	ND		1.91	1.77		ug/Kg	☼	93	40 - 150
Perfluoropentanesulfonic acid (PFPeS)	ND		1.79	1.89		ug/Kg	☼	106	40 - 150
Perfluoropentanoic acid (PFPeA)	ND		3.82	3.10		ug/Kg	☼	81	40 - 150
Perfluorotetradecanoic acid (PFTeDA)	ND		1.91	1.89		ug/Kg	☼	99	40 - 150
Perfluorotridecanoic acid (PFTrDA)	ND		1.91	1.79		ug/Kg	☼	94	40 - 150
Perfluoroundecanoic acid (PFUnA)	ND		1.91	1.80		ug/Kg	☼	94	40 - 150

Isotope Dilution	*MS %Recovery*	*MS Qualifier*	*Limits*
13C2 PFTeDA	*80.1*		*20 - 150*
13C2-PFDoDA	*85.9*		*20 - 150*
13C3 HFPO-DA	*92.2*		*20 - 150*
13C3 PFBS	*93.8*		*20 - 150*
13C3 PFHxS	*89.3*		*20 - 150*
13C4 PFBA	*92.9*		*20 - 150*
13C4 PFHpA	*93.3*		*20 - 150*
13C5 PFHxA	*86.3*		*20 - 150*
13C5 PFPeA	*100*		*20 - 150*
13C6 PFDA	*90.5*		*20 - 150*
13C7 PFUnA	*93.8*		*20 - 150*
13C8 PFOA	*90.2*		*20 - 150*
13C8 PFOS	*90.9*		*20 - 150*
13C8 PFOSA	*82.6*		*20 - 150*
13C9 PFNA	*80.1*		*20 - 150*
D3-NMeFOSA	*65.6*		*20 - 150*
d3-NMeFOSAA	*93.3*		*20 - 150*
d5-NEtFOSAA	*101*		*20 - 150*
d5-NEtPFOSA	*65.3*		*20 - 150*
d7-N-MeFOSE-M	*61.9*		*20 - 150*
d9-N-EtFOSE-M	*62.8*		*20 - 150*
M2-4:2 FTS	*136*		*20 - 150*
M2-6:2 FTS	*123*		*20 - 150*
M2-8:2 FTS	*97.0*		*20 - 150*

Lab Sample ID: 480-229067-5 MSD
Matrix: Solid
Analysis Batch: 654529

Client Sample ID: MW-1 0.25-3Ft
Prep Type: Total/NA
Prep Batch: 654462

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)	ND		7.10	6.13		ug/Kg	☼	86	40 - 150	2	30

Method: Draft-3 1633 - Per- and Polyfluoroalkyl Substances by LC/MS/MS (Continued)

Lab Sample ID: 480-229067-5 MSD
Matrix: Solid
Analysis Batch: 654529

Client Sample ID: MW-1 0.25-3Ft
Prep Type: Total/NA
Prep Batch: 654462

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2 FTS)	ND		7.22	6.86		ug/Kg	☼	95	40 - 150	10	30
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2 FTS)	ND		7.06	6.55		ug/Kg	☼	93	40 - 150	0	30
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2 FTS)	ND		7.16	6.23		ug/Kg	☼	87	40 - 150	2	30
3-Perfluoroheptylpropanoic acid (7:3 FTCA)	ND		47.0	40.2		ug/Kg	☼	86	40 - 150	3	30
3-Perfluoropentylpropanoic acid (5:3 FTCA)	ND		47.0	45.3		ug/Kg	☼	96	40 - 150	0	30
3-Perfluoropropylpropanoic acid (3:3 FTCA)	ND		9.41	7.77		ug/Kg	☼	83	40 - 150	2	30
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	ND		7.12	6.60		ug/Kg	☼	93	40 - 150	3	30
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9Cl-PF3ONS)	ND		7.03	6.52		ug/Kg	☼	93	40 - 150	2	30
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA)	ND		7.53	7.65		ug/Kg	☼	102	40 - 150	4	30
N-ethylperfluorooctane sulfonamide (NEtFOSA)	ND		1.88	1.70		ug/Kg	☼	90	40 - 150	7	30
N-ethylperfluorooctane sulfonamidoethanol (NEtFOSE)	ND		18.8	17.3		ug/Kg	☼	92	40 - 150	1	30
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	ND		1.88	1.80		ug/Kg	☼	96	40 - 150	4	30
N-methylperfluorooctane sulfonamide (NMeFOSA)	ND		1.88	1.60		ug/Kg	☼	85	40 - 150	8	30
N-methylperfluorooctane sulfonamidoethanol (NMeFOSE)	ND		18.8	17.6		ug/Kg	☼	94	40 - 150	11	30
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	ND		1.88	1.87		ug/Kg	☼	99	40 - 150	3	30
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	ND		3.76	3.82		ug/Kg	☼	102	40 - 150	1	30
Perfluoro (2-ethoxyethane) sulfonic acid (PFEESA)	ND		3.36	3.03		ug/Kg	☼	90	40 - 150	5	30
Perfluoro-3-methoxypropanoic acid (PFMPA)	ND		3.76	3.13		ug/Kg	☼	83	40 - 150	3	30
Perfluoro-4-methoxybutanoic acid (PFMBA)	ND		3.76	3.30		ug/Kg	☼	88	40 - 150	1	30
Perfluorobutanesulfonic acid (PFBS)	ND		1.67	1.39		ug/Kg	☼	83	40 - 150	3	30
Perfluorobutanoic acid (PFBA)	ND		7.53	7.21		ug/Kg	☼	96	40 - 150	1	30
Perfluorodecanesulfonic acid (PFDS)	ND		1.81	1.47		ug/Kg	☼	81	40 - 150	4	30
Perfluorodecanoic acid (PFDA)	ND		1.88	1.74		ug/Kg	☼	93	40 - 150	0	30
Perfluorododecanesulfonic acid (PFDoS)	ND		1.83	1.58		ug/Kg	☼	86	40 - 150	7	30
Perfluorododecanoic acid (PFDoA)	ND		1.88	1.80		ug/Kg	☼	96	40 - 150	4	30
Perfluoroheptanesulfonic acid (PFHpS)	ND		1.79	1.79		ug/Kg	☼	99	40 - 150	1	30
Perfluoroheptanoic acid (PFHpA)	ND		1.88	2.21		ug/Kg	☼	118	40 - 150	11	30
Perfluorohexanesulfonic acid (PFHxS)	ND		1.72	1.36		ug/Kg	☼	79	40 - 150	5	30
Perfluorohexanoic acid (PFHxA)	ND		1.88	1.80		ug/Kg	☼	96	40 - 150	3	30

Method: Draft-3 1633 - Per- and Polyfluoroalkyl Substances by LC/MS/MS (Continued)

Lab Sample ID: 480-229067-5 MSD
Matrix: Solid
Analysis Batch: 654529

Client Sample ID: MW-1 0.25-3Ft
Prep Type: Total/NA
Prep Batch: 654462

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Perfluorononanesulfonic acid (PFNS)	ND		1.81	1.69		ug/Kg	☼	94	40 - 150	6	30
Perfluorononanoic acid (PFNA)	ND		1.88	1.87		ug/Kg	☼	100	40 - 150	2	30
Perfluorooctanesulfonamide (PFOSA)	ND		1.88	1.65		ug/Kg	☼	88	40 - 150	3	30
Perfluorooctanesulfonic acid (PFOS)	ND		1.75	1.63		ug/Kg	☼	93	40 - 150	1	30
Perfluorooctanoic acid (PFOA)	ND		1.88	1.79		ug/Kg	☼	95	40 - 150	1	30
Perfluoropentanesulfonic acid (PFPeS)	ND		1.77	1.79		ug/Kg	☼	101	40 - 150	6	30
Perfluoropentanoic acid (PFPeA)	ND		3.76	2.92		ug/Kg	☼	78	40 - 150	6	30
Perfluorotetradecanoic acid (PFTeDA)	ND		1.88	1.77		ug/Kg	☼	94	40 - 150	7	30
Perfluorotridecanoic acid (PFTrDA)	ND		1.88	1.74		ug/Kg	☼	92	40 - 150	3	30
Perfluoroundecanoic acid (PFUnA)	ND		1.88	1.93		ug/Kg	☼	103	40 - 150	7	30

Isotope Dilution	*MSD %Recovery*	*MSD Qualifier*	*Limits*
13C2 PFTeDA	*77.2*		*20 - 150*
13C2-PFDoDA	*81.3*		*20 - 150*
13C3 HFPO-DA	*91.0*		*20 - 150*
13C3 PFBS	*93.0*		*20 - 150*
13C3 PFHxS	*90.0*		*20 - 150*
13C4 PFBA	*88.3*		*20 - 150*
13C4 PFHpA	*83.5*		*20 - 150*
13C5 PFHxA	*87.7*		*20 - 150*
13C5 PFPeA	*97.9*		*20 - 150*
13C6 PFDA	*85.2*		*20 - 150*
13C7 PFUnA	*79.1*		*20 - 150*
13C8 PFOA	*85.2*		*20 - 150*
13C8 PFOS	*85.8*		*20 - 150*
13C8 PFOSA	*82.4*		*20 - 150*
13C9 PFNA	*80.8*		*20 - 150*
D3-NMeFOSA	*65.3*		*20 - 150*
d3-NMeFOSAA	*90.4*		*20 - 150*
d5-NEtFOSAA	*92.2*		*20 - 150*
d5-NEtPFOSA	*69.0*		*20 - 150*
d7-N-MeFOSE-M	*56.4*		*20 - 150*
d9-N-EtFOSE-M	*55.5*		*20 - 150*
M2-4:2 FTS	*135*		*20 - 150*
M2-6:2 FTS	*116*		*20 - 150*
M2-8:2 FTS	*99.1*		*20 - 150*

Method: 6010D - Metals (ICP)

Lab Sample ID: MB 480-744845/1-A
Matrix: Solid
Analysis Batch: 745013

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 744845

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	ND		10.4	9.0	mg/Kg		04/30/25 14:09	05/01/25 12:12	1
Antimony	ND		15.6	0.55	mg/Kg		04/30/25 14:09	05/01/25 12:12	1
Arsenic	ND		2.1	0.91	mg/Kg		04/30/25 14:09	05/01/25 12:12	1
Barium	ND		0.52	0.15	mg/Kg		04/30/25 14:09	05/01/25 12:12	1
Beryllium	ND		0.21	0.042	mg/Kg		04/30/25 14:09	05/01/25 12:12	1
Cadmium	ND		0.21	0.073	mg/Kg		04/30/25 14:09	05/01/25 12:12	1
Calcium	ND		52.0	28.1	mg/Kg		04/30/25 14:09	05/01/25 12:12	1
Chromium	ND		0.52	0.37	mg/Kg		04/30/25 14:09	05/01/25 12:12	1
Cobalt	ND		0.52	0.10	mg/Kg		04/30/25 14:09	05/01/25 12:12	1
Copper	ND		1.0	0.59	mg/Kg		04/30/25 14:09	05/01/25 12:12	1
Iron	ND		10.4	8.8	mg/Kg		04/30/25 14:09	05/01/25 12:12	1
Lead	ND		1.0	0.48	mg/Kg		04/30/25 14:09	05/01/25 12:12	1
Magnesium	ND		20.8	8.8	mg/Kg		04/30/25 14:09	05/01/25 12:12	1
Manganese	ND		1.0	0.29	mg/Kg		04/30/25 14:09	05/01/25 12:12	1
Nickel	ND		5.2	0.26	mg/Kg		04/30/25 14:09	05/01/25 12:12	1
Potassium	ND		31.2	25.2	mg/Kg		04/30/25 14:09	05/01/25 12:12	1
Selenium	ND		4.2	0.83	mg/Kg		04/30/25 14:09	05/01/25 12:12	1
Silver	ND	^5-	0.62	0.21	mg/Kg		04/30/25 14:09	05/01/25 12:12	1
Sodium	ND		145	63.7	mg/Kg		04/30/25 14:09	05/01/25 12:12	1
Thallium	ND		6.2	0.79	mg/Kg		04/30/25 14:09	05/01/25 12:12	1
Vanadium	ND		0.52	0.14	mg/Kg		04/30/25 14:09	05/01/25 12:12	1
Zinc	ND		2.1	1.1	mg/Kg		04/30/25 14:09	05/01/25 12:12	1

Lab Sample ID: LCSSRM 480-744845/2-B
Matrix: Solid
Analysis Batch: 745013

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 744845

Analyte	Spike Added	LCSSRM Result	LCSSRM Qualifier	Unit	D	%Rec	%Rec Limits
Aluminum	7680	8063		mg/Kg		105.0	47.4 - 130.2
Antimony	201	81.52		mg/Kg		40.6	0.06 - 100.0
Arsenic	181	145.8		mg/Kg		80.6	66.3 - 97.8
Barium	211	225.7		mg/Kg		107.0	73.9 - 107.1
Beryllium	270	276.9		mg/Kg		102.5	73.0 - 104.4
Cadmium	221	204.6		mg/Kg		92.6	70.6 - 101.8
Calcium	4280	4479		mg/Kg		104.7	77.3 - 111.0
Chromium	149	142.3		mg/Kg		95.5	71.8 - 105.4
Cobalt	142	147.8		mg/Kg		104.1	73.2 - 104.2
Copper	264	246.5		mg/Kg		93.4	73.5 - 104.2
Iron	7360	6708		mg/Kg		91.1	55.4 - 130.3
Lead	106	99.17		mg/Kg		93.6	76.1 - 109.4

Method: 6010D - Metals (ICP) (Continued)

Lab Sample ID: LCSSRM 480-744845/2-B
Matrix: Solid
Analysis Batch: 745013

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 744845

Analyte	Spike Added	LCSSRM Result	LCSSRM Qualifier	Unit	D	%Rec	%Rec Limits
Magnesium	2170	2079		mg/Kg		95.8	68.7 - 112.0
Manganese	270	244.3		mg/Kg		90.5	73.0 - 107.8
Potassium	2340	2284		mg/Kg		97.6	62.8 - 113.7
Selenium	139	118.4		mg/Kg		85.2	70.0 - 107.9
Silver	59.9	54.80		mg/Kg		91.5	72.8 - 110.7
Sodium	306	309.3		mg/Kg		101.1	66.0 - 113.4
Thallium	205	202.0		mg/Kg		98.5	71.7 - 106.8
Vanadium	155	141.8		mg/Kg		91.5	69.0 - 107.7
Zinc	398	371.1		mg/Kg		93.2	68.8 - 104.5

Lab Sample ID: LCSSRM 480-744845/2-B
Matrix: Solid
Analysis Batch: 745031

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 744845

Analyte	Spike Added	LCSSRM Result	LCSSRM Qualifier	Unit	D	%Rec	%Rec Limits
Nickel	177	182.3		mg/Kg		103.0	71.8 - 103.4

Lab Sample ID: 480-229067-5 MS
Matrix: Solid
Analysis Batch: 745013

Client Sample ID: MW-1 0.25-3Ft
Prep Type: Total/NA
Prep Batch: 744845

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Aluminum	3960		1220	8197	F1	mg/Kg	☼	347	75 - 125
Antimony	ND		120	78.47	F1	mg/Kg	☼	66	75 - 125
Arsenic	12.2		239	208.5		mg/Kg	☼	82	75 - 125
Barium	79.6		239	276.2		mg/Kg	☼	82	75 - 125
Beryllium	0.66		119	103.6		mg/Kg	☼	87	75 - 125
Cadmium	0.22	J	120	112.7		mg/Kg	☼	94	75 - 125
Calcium	6490		5990	11100		mg/Kg	☼	77	75 - 125
Chromium	11.1		120	113.3		mg/Kg	☼	85	75 - 125
Cobalt	11.8		120	119.4		mg/Kg	☼	90	75 - 125
Copper	73.3		120	180.6		mg/Kg	☼	90	75 - 125
Iron	65700		1220	59550	4	mg/Kg	☼	-503	75 - 125
Lead	136		120	219.0	F1	mg/Kg	☼	69	75 - 125
Magnesium	1030		5980	5816		mg/Kg	☼	80	75 - 125
Manganese	208		120	246.1	F1	mg/Kg	☼	32	75 - 125
Nickel	20.3		120	131.2		mg/Kg	☼	93	75 - 125
Potassium	583		5990	5797		mg/Kg	☼	87	75 - 125
Selenium	1.9	J	239	195.2		mg/Kg	☼	81	75 - 125
Silver	0.24	J ^5-	12.0	10.37	^5-	mg/Kg	☼	87	75 - 125
Sodium	125	J	5990	5313		mg/Kg	☼	87	75 - 125
Thallium	ND		239	199.1		mg/Kg	☼	83	75 - 125

Method: 6010D - Metals (ICP) (Continued)

Lab Sample ID: 480-229067-5 MS
Matrix: Solid
Analysis Batch: 745013

Client Sample ID: MW-1 0.25-3Ft
Prep Type: Total/NA
Prep Batch: 744845

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Vanadium	16.9		120	121.2		mg/Kg	☼	87	75 - 125
Zinc	100		120	194.8		mg/Kg	☼	79	75 - 125

Lab Sample ID: 480-229067-5 MSD
Matrix: Solid
Analysis Batch: 745013

Client Sample ID: MW-1 0.25-3Ft
Prep Type: Total/NA
Prep Batch: 744845

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Aluminum	3960		1240	6127	F1 F2	mg/Kg	☼	176	75 - 125	29	20
Antimony	ND		121	88.24	F1	mg/Kg	☼	73	75 - 125	12	20
Arsenic	12.2		242	219.0		mg/Kg	☼	85	75 - 125	5	20
Barium	79.6		242	285.7		mg/Kg	☼	85	75 - 125	3	20
Beryllium	0.66		120	110.3		mg/Kg	☼	91	75 - 125	6	20
Cadmium	0.22	J	121	118.7		mg/Kg	☼	98	75 - 125	5	20
Calcium	6490		6060	9326	F1	mg/Kg	☼	47	75 - 125	17	20
Chromium	11.1		121	116.3		mg/Kg	☼	87	75 - 125	3	20
Cobalt	11.8		121	118.9		mg/Kg	☼	88	75 - 125	0	20
Copper	73.3		121	168.0		mg/Kg	☼	78	75 - 125	7	20
Iron	65700		1240	45310	4 F2	mg/Kg	☼	-1650	75 - 125	27	20
Lead	136		121	227.2		mg/Kg	☼	75	75 - 125	4	20
Magnesium	1030		6050	6192		mg/Kg	☼	85	75 - 125	6	20
Manganese	208		121	242.9	F1	mg/Kg	☼	29	75 - 125	1	20
Nickel	20.3		121	127.6		mg/Kg	☼	89	75 - 125	3	20
Potassium	583		6060	6041		mg/Kg	☼	90	75 - 125	4	20
Selenium	1.9	J	242	204.6		mg/Kg	☼	84	75 - 125	5	20
Silver	0.24	J ^5-	12.1	10.62	^5-	mg/Kg	☼	88	75 - 125	2	20
Sodium	125	J	6060	5580		mg/Kg	☼	90	75 - 125	5	20
Thallium	ND		242	203.4		mg/Kg	☼	84	75 - 125	2	20
Vanadium	16.9		121	123.6		mg/Kg	☼	88	75 - 125	2	20
Zinc	100		121	212.6		mg/Kg	☼	93	75 - 125	9	20

Method: 7471B - Mercury (CVAA)

Lab Sample ID: MB 480-744980/1-A
Matrix: Solid
Analysis Batch: 745103

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 744980

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.020	0.0046	mg/Kg		05/02/25 09:11	05/02/25 11:36	1

Lab Sample ID: LCSSRM 480-744980/2-A ^10
Matrix: Solid
Analysis Batch: 745103

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 744980

Analyte			Spike Added	LCSSRM Result	LCSSRM Qualifier	Unit	D	%Rec	%Rec Limits
Mercury			24.0	19.10		mg/Kg		79.6	55.8 - 109.6

Method: 7471B - Mercury (CVAA) (Continued)

Lab Sample ID: 480-229067-5 MS
Matrix: Solid
Analysis Batch: 745103

Client Sample ID: MW-1 0.25-3Ft
Prep Type: Total/NA
Prep Batch: 744980

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Mercury	0.71	F1 F2	0.405	1.22	F1	mg/Kg	☼	127	80 - 120

Lab Sample ID: 480-229067-5 MSD
Matrix: Solid
Analysis Batch: 745103

Client Sample ID: MW-1 0.25-3Ft
Prep Type: Total/NA
Prep Batch: 744980

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Mercury	0.71	F1 F2	0.405	12.85	E F1 F2	mg/Kg	☼	2997	80 - 120	165	20

GC/MS VOA

Prep Batch: 744798

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-229067-1	HC-4 0.5-1.5Ft	Total/NA	Solid	5035A_L	
480-229067-2	BD-1	Total/NA	Solid	5035A_L	
480-229067-3	MW-2 0.75-2Ft	Total/NA	Solid	5035A_L	
480-229067-7	HC-6 2in-6in	Total/NA	Solid	5035A_L	
MB 480-744798/1-A	Method Blank	Total/NA	Solid	5035A_L	
LCS 480-744798/2-A	Lab Control Sample	Total/NA	Solid	5035A_L	

Prep Batch: 744799

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-229067-5	MW-1 0.25-3Ft	Total/NA	Solid	5035A_L	
MB 480-744799/1-A	Method Blank	Total/NA	Solid	5035A_L	
LCS 480-744799/2-A	Lab Control Sample	Total/NA	Solid	5035A_L	
480-229067-5 MS	MW-1 0.25-3Ft	Total/NA	Solid	5035A_L	
480-229067-5 MSD	MW-1 0.25-3Ft	Total/NA	Solid	5035A_L	

Analysis Batch: 744801

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-229067-1	HC-4 0.5-1.5Ft	Total/NA	Solid	8260C	744798
480-229067-2	BD-1	Total/NA	Solid	8260C	744798
480-229067-3	MW-2 0.75-2Ft	Total/NA	Solid	8260C	744798
480-229067-7	HC-6 2in-6in	Total/NA	Solid	8260C	744798
MB 480-744798/1-A	Method Blank	Total/NA	Solid	8260C	744798
LCS 480-744798/2-A	Lab Control Sample	Total/NA	Solid	8260C	744798

Analysis Batch: 744923

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-229067-5	MW-1 0.25-3Ft	Total/NA	Solid	8260C	744799
MB 480-744799/1-A	Method Blank	Total/NA	Solid	8260C	744799
LCS 480-744799/2-A	Lab Control Sample	Total/NA	Solid	8260C	744799
480-229067-5 MS	MW-1 0.25-3Ft	Total/NA	Solid	8260C	744799
480-229067-5 MSD	MW-1 0.25-3Ft	Total/NA	Solid	8260C	744799

GC/MS Semi VOA

Prep Batch: 744863

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-229067-1	HC-4 0.5-1.5Ft	Total/NA	Solid	3550C	
480-229067-2	BD-1	Total/NA	Solid	3550C	
480-229067-4	MW-3 0.5-2.5Ft	Total/NA	Solid	3550C	
480-229067-5	MW-1 0.25-3Ft	Total/NA	Solid	3550C	
480-229067-7	HC-6 2in-6in	Total/NA	Solid	3550C	
480-229067-8	HC-7 0.25-0.75Ft	Total/NA	Solid	3550C	
MB 480-744863/1-A	Method Blank	Total/NA	Solid	3550C	
LCS 480-744863/2-A	Lab Control Sample	Total/NA	Solid	3550C	
480-229067-5 MS	MW-1 0.25-3Ft	Total/NA	Solid	3550C	
480-229067-5 MSD	MW-1 0.25-3Ft	Total/NA	Solid	3550C	

Prep Batch: 744941

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-229067-3	MW-2 0.75-2Ft	Total/NA	Solid	3550C	
480-229067-6	HC-5 0.33-0.66Ft	Total/NA	Solid	3550C	

GC/MS Semi VOA (Continued)

Prep Batch: 744941 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 480-744941/1-A	Method Blank	Total/NA	Solid	3550C	
LCS 480-744941/2-A	Lab Control Sample	Total/NA	Solid	3550C	

Analysis Batch: 745000

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-229067-5	MW-1 0.25-3Ft	Total/NA	Solid	8270D	744863
MB 480-744863/1-A	Method Blank	Total/NA	Solid	8270D	744863
LCS 480-744863/2-A	Lab Control Sample	Total/NA	Solid	8270D	744863
480-229067-5 MS	MW-1 0.25-3Ft	Total/NA	Solid	8270D	744863
480-229067-5 MSD	MW-1 0.25-3Ft	Total/NA	Solid	8270D	744863

Analysis Batch: 745105

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-229067-1	HC-4 0.5-1.5Ft	Total/NA	Solid	8270D	744863
480-229067-2	BD-1	Total/NA	Solid	8270D	744863

Analysis Batch: 745191

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-229067-4	MW-3 0.5-2.5Ft	Total/NA	Solid	8270D	744863
480-229067-7	HC-6 2in-6in	Total/NA	Solid	8270D	744863
480-229067-8	HC-7 0.25-0.75Ft	Total/NA	Solid	8270D	744863

Analysis Batch: 745287

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-229067-3	MW-2 0.75-2Ft	Total/NA	Solid	8270D	744941
480-229067-6	HC-5 0.33-0.66Ft	Total/NA	Solid	8270D	744941
MB 480-744941/1-A	Method Blank	Total/NA	Solid	8270D	744941
LCS 480-744941/2-A	Lab Control Sample	Total/NA	Solid	8270D	744941

GC Semi VOA

Prep Batch: 744937

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-229067-1	HC-4 0.5-1.5Ft	Total/NA	Solid	8151A	
480-229067-2	BD-1	Total/NA	Solid	8151A	
480-229067-3	MW-2 0.75-2Ft	Total/NA	Solid	8151A	
480-229067-5	MW-1 0.25-3Ft	Total/NA	Solid	8151A	
480-229067-7	HC-6 2in-6in	Total/NA	Solid	8151A	
MB 480-744937/1-A	Method Blank	Total/NA	Solid	8151A	
LCS 480-744937/2-A	Lab Control Sample	Total/NA	Solid	8151A	
480-229067-5 MS	MW-1 0.25-3Ft	Total/NA	Solid	8151A	
480-229067-5 MSD	MW-1 0.25-3Ft	Total/NA	Solid	8151A	

Prep Batch: 744938

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-229067-1	HC-4 0.5-1.5Ft	Total/NA	Solid	3546	
480-229067-2	BD-1	Total/NA	Solid	3546	
480-229067-3	MW-2 0.75-2Ft	Total/NA	Solid	3546	
480-229067-5	MW-1 0.25-3Ft	Total/NA	Solid	3546	
480-229067-7	HC-6 2in-6in	Total/NA	Solid	3546	
MB 480-744938/1-A	Method Blank	Total/NA	Solid	3546	

GC Semi VOA (Continued)

Prep Batch: 744938 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 480-744938/2-A	Lab Control Sample	Total/NA	Solid	3546	
480-229067-5 MS	MW-1 0.25-3Ft	Total/NA	Solid	3546	
480-229067-5 MSD	MW-1 0.25-3Ft	Total/NA	Solid	3546	

Prep Batch: 744942

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-229067-1	HC-4 0.5-1.5Ft	Total/NA	Solid	3550C	
480-229067-2	BD-1	Total/NA	Solid	3550C	
480-229067-3	MW-2 0.75-2Ft	Total/NA	Solid	3550C	
480-229067-5	MW-1 0.25-3Ft	Total/NA	Solid	3550C	
480-229067-7	HC-6 2in-6in	Total/NA	Solid	3550C	
MB 480-744942/1-A	Method Blank	Total/NA	Solid	3550C	
LCS 480-744942/2-A	Lab Control Sample	Total/NA	Solid	3550C	
480-229067-5 MS	MW-1 0.25-3Ft	Total/NA	Solid	3550C	
480-229067-5 MSD	MW-1 0.25-3Ft	Total/NA	Solid	3550C	

Analysis Batch: 745005

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-229067-1	HC-4 0.5-1.5Ft	Total/NA	Solid	8082A	744942
480-229067-2	BD-1	Total/NA	Solid	8082A	744942
480-229067-3	MW-2 0.75-2Ft	Total/NA	Solid	8082A	744942
480-229067-5	MW-1 0.25-3Ft	Total/NA	Solid	8082A	744942
480-229067-7	HC-6 2in-6in	Total/NA	Solid	8082A	744942
MB 480-744942/1-A	Method Blank	Total/NA	Solid	8082A	744942
LCS 480-744942/2-A	Lab Control Sample	Total/NA	Solid	8082A	744942
480-229067-5 MS	MW-1 0.25-3Ft	Total/NA	Solid	8082A	744942
480-229067-5 MSD	MW-1 0.25-3Ft	Total/NA	Solid	8082A	744942

Analysis Batch: 745019

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-229067-1	HC-4 0.5-1.5Ft	Total/NA	Solid	8081B	744938
480-229067-2	BD-1	Total/NA	Solid	8081B	744938
480-229067-3	MW-2 0.75-2Ft	Total/NA	Solid	8081B	744938
480-229067-5	MW-1 0.25-3Ft	Total/NA	Solid	8081B	744938
480-229067-7	HC-6 2in-6in	Total/NA	Solid	8081B	744938
MB 480-744938/1-A	Method Blank	Total/NA	Solid	8081B	744938
LCS 480-744938/2-A	Lab Control Sample	Total/NA	Solid	8081B	744938
480-229067-5 MS	MW-1 0.25-3Ft	Total/NA	Solid	8081B	744938
480-229067-5 MSD	MW-1 0.25-3Ft	Total/NA	Solid	8081B	744938

Analysis Batch: 745549

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-229067-1	HC-4 0.5-1.5Ft	Total/NA	Solid	8151A	744937
480-229067-2	BD-1	Total/NA	Solid	8151A	744937
480-229067-3	MW-2 0.75-2Ft	Total/NA	Solid	8151A	744937
480-229067-5	MW-1 0.25-3Ft	Total/NA	Solid	8151A	744937
480-229067-7	HC-6 2in-6in	Total/NA	Solid	8151A	744937
MB 480-744937/1-A	Method Blank	Total/NA	Solid	8151A	744937
LCS 480-744937/2-A	Lab Control Sample	Total/NA	Solid	8151A	744937
480-229067-5 MS	MW-1 0.25-3Ft	Total/NA	Solid	8151A	744937
480-229067-5 MSD	MW-1 0.25-3Ft	Total/NA	Solid	8151A	744937

LCMS

Prep Batch: 654462

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-229067-1	HC-4 0.5-1.5Ft	Total/NA	Solid	1633 Shake	
480-229067-2	BD-1	Total/NA	Solid	1633 Shake	
480-229067-3	MW-2 0.75-2Ft	Total/NA	Solid	1633 Shake	
480-229067-5	MW-1 0.25-3Ft	Total/NA	Solid	1633 Shake	
480-229067-7	HC-6 2in-6in	Total/NA	Solid	1633 Shake	
MB 240-654462/1-A	Method Blank	Total/NA	Solid	1633 Shake	
LCS 240-654462/3-A	Lab Control Sample	Total/NA	Solid	1633 Shake	
LLCS 240-654462/2-A	Lab Control Sample	Total/NA	Solid	1633 Shake	
480-229067-5 MS	MW-1 0.25-3Ft	Total/NA	Solid	1633 Shake	
480-229067-5 MSD	MW-1 0.25-3Ft	Total/NA	Solid	1633 Shake	

Analysis Batch: 654529

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-229067-1	HC-4 0.5-1.5Ft	Total/NA	Solid	Draft-3 1633	654462
480-229067-2	BD-1	Total/NA	Solid	Draft-3 1633	654462
480-229067-3	MW-2 0.75-2Ft	Total/NA	Solid	Draft-3 1633	654462
480-229067-5	MW-1 0.25-3Ft	Total/NA	Solid	Draft-3 1633	654462
480-229067-7	HC-6 2in-6in	Total/NA	Solid	Draft-3 1633	654462
MB 240-654462/1-A	Method Blank	Total/NA	Solid	Draft-3 1633	654462
LCS 240-654462/3-A	Lab Control Sample	Total/NA	Solid	Draft-3 1633	654462
LLCS 240-654462/2-A	Lab Control Sample	Total/NA	Solid	Draft-3 1633	654462
480-229067-5 MS	MW-1 0.25-3Ft	Total/NA	Solid	Draft-3 1633	654462
480-229067-5 MSD	MW-1 0.25-3Ft	Total/NA	Solid	Draft-3 1633	654462

Metals

Prep Batch: 744845

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-229067-1	HC-4 0.5-1.5Ft	Total/NA	Solid	3050B	
480-229067-2	BD-1	Total/NA	Solid	3050B	
480-229067-3	MW-2 0.75-2Ft	Total/NA	Solid	3050B	
480-229067-4	MW-3 0.5-2.5Ft	Total/NA	Solid	3050B	
480-229067-5	MW-1 0.25-3Ft	Total/NA	Solid	3050B	
480-229067-6	HC-5 0.33-0.66Ft	Total/NA	Solid	3050B	
480-229067-7	HC-6 2in-6in	Total/NA	Solid	3050B	
480-229067-8	HC-7 0.25-0.75Ft	Total/NA	Solid	3050B	
MB 480-744845/1-A	Method Blank	Total/NA	Solid	3050B	
LCSSRM 480-744845/2-B	Lab Control Sample	Total/NA	Solid	3050B	
480-229067-5 MS	MW-1 0.25-3Ft	Total/NA	Solid	3050B	
480-229067-5 MSD	MW-1 0.25-3Ft	Total/NA	Solid	3050B	

Prep Batch: 744980

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-229067-1	HC-4 0.5-1.5Ft	Total/NA	Solid	7471B	
480-229067-2	BD-1	Total/NA	Solid	7471B	
480-229067-3	MW-2 0.75-2Ft	Total/NA	Solid	7471B	
480-229067-4	MW-3 0.5-2.5Ft	Total/NA	Solid	7471B	
480-229067-5	MW-1 0.25-3Ft	Total/NA	Solid	7471B	
480-229067-6	HC-5 0.33-0.66Ft	Total/NA	Solid	7471B	
480-229067-7	HC-6 2in-6in	Total/NA	Solid	7471B	
480-229067-8	HC-7 0.25-0.75Ft	Total/NA	Solid	7471B	

Metals (Continued)

Prep Batch: 744980 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 480-744980/1-A	Method Blank	Total/NA	Solid	7471B	
LCSSRM 480-744980/2-A ^10	Lab Control Sample	Total/NA	Solid	7471B	
480-229067-5 MS	MW-1 0.25-3Ft	Total/NA	Solid	7471B	
480-229067-5 MSD	MW-1 0.25-3Ft	Total/NA	Solid	7471B	

Analysis Batch: 745013

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-229067-1	HC-4 0.5-1.5Ft	Total/NA	Solid	6010D	744845
480-229067-2	BD-1	Total/NA	Solid	6010D	744845
480-229067-3	MW-2 0.75-2Ft	Total/NA	Solid	6010D	744845
480-229067-4	MW-3 0.5-2.5Ft	Total/NA	Solid	6010D	744845
480-229067-5	MW-1 0.25-3Ft	Total/NA	Solid	6010D	744845
480-229067-6	HC-5 0.33-0.66Ft	Total/NA	Solid	6010D	744845
480-229067-7	HC-6 2in-6in	Total/NA	Solid	6010D	744845
480-229067-8	HC-7 0.25-0.75Ft	Total/NA	Solid	6010D	744845
MB 480-744845/1-A	Method Blank	Total/NA	Solid	6010D	744845
LCSSRM 480-744845/2-B	Lab Control Sample	Total/NA	Solid	6010D	744845
480-229067-5 MS	MW-1 0.25-3Ft	Total/NA	Solid	6010D	744845
480-229067-5 MSD	MW-1 0.25-3Ft	Total/NA	Solid	6010D	744845

Analysis Batch: 745031

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCSSRM 480-744845/2-B	Lab Control Sample	Total/NA	Solid	6010D	744845

Analysis Batch: 745103

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-229067-1	HC-4 0.5-1.5Ft	Total/NA	Solid	7471B	744980
480-229067-2	BD-1	Total/NA	Solid	7471B	744980
480-229067-3	MW-2 0.75-2Ft	Total/NA	Solid	7471B	744980
480-229067-4	MW-3 0.5-2.5Ft	Total/NA	Solid	7471B	744980
480-229067-5	MW-1 0.25-3Ft	Total/NA	Solid	7471B	744980
480-229067-6	HC-5 0.33-0.66Ft	Total/NA	Solid	7471B	744980
480-229067-7	HC-6 2in-6in	Total/NA	Solid	7471B	744980
480-229067-8	HC-7 0.25-0.75Ft	Total/NA	Solid	7471B	744980
MB 480-744980/1-A	Method Blank	Total/NA	Solid	7471B	744980
LCSSRM 480-744980/2-A ^10	Lab Control Sample	Total/NA	Solid	7471B	744980
480-229067-5 MS	MW-1 0.25-3Ft	Total/NA	Solid	7471B	744980
480-229067-5 MSD	MW-1 0.25-3Ft	Total/NA	Solid	7471B	744980

General Chemistry

Analysis Batch: 744867

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-229067-1	HC-4 0.5-1.5Ft	Total/NA	Solid	Moisture	
480-229067-2	BD-1	Total/NA	Solid	Moisture	
480-229067-3	MW-2 0.75-2Ft	Total/NA	Solid	Moisture	
480-229067-4	MW-3 0.5-2.5Ft	Total/NA	Solid	Moisture	
480-229067-5	MW-1 0.25-3Ft	Total/NA	Solid	Moisture	
480-229067-6	HC-5 0.33-0.66Ft	Total/NA	Solid	Moisture	
480-229067-7	HC-6 2in-6in	Total/NA	Solid	Moisture	
480-229067-8	HC-7 0.25-0.75Ft	Total/NA	Solid	Moisture	

General Chemistry (Continued)

Analysis Batch: 744867 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-229067-5 MS	MW-1 0.25-3Ft	Total/NA	Solid	Moisture	
480-229067-5 MSD	MW-1 0.25-3Ft	Total/NA	Solid	Moisture	

Lab Chronicle

Client: Roux Environmental Engineering and Geology DPC
Job ID: 480-229067-1
Project/Site: BCP RI - 619 Exchange Street Site

Client Sample ID: HC-4 0.5-1.5Ft
Lab Sample ID: 480-229067-1
Date Collected: 04/29/25 09:30
Matrix: Solid
Date Received: 04/29/25 15:43

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	Moisture		1	744867	VXF	EET BUF	04/30/25 14:01

Client Sample ID: HC-4 0.5-1.5Ft
Lab Sample ID: 480-229067-1
Date Collected: 04/29/25 09:30
Matrix: Solid
Date Received: 04/29/25 15:43
Percent Solids: 87.2

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5035A_L			744798	ATG	EET BUF	04/29/25 16:51
Total/NA	Analysis	8260C		1	744801	CDC	EET BUF	04/29/25 22:01
Total/NA	Prep	3550C			744863	LSC	EET BUF	04/30/25 13:32
Total/NA	Analysis	8270D		1	745105	JMM	EET BUF	05/03/25 02:21
Total/NA	Prep	3546			744938	VXF	EET BUF	05/01/25 06:41
Total/NA	Analysis	8081B		10	745019	JLS	EET BUF	05/01/25 16:26
Total/NA	Prep	3550C			744942	SMP	EET BUF	05/01/25 07:04
Total/NA	Analysis	8082A		1	745005	W1T	EET BUF	05/01/25 17:53
Total/NA	Prep	8151A			744937	VXF	EET BUF	05/01/25 06:27
Total/NA	Analysis	8151A		1	745549	JLS	EET BUF	05/08/25 13:55
Total/NA	Prep	1633 Shake			654462	KML	EET CLE	05/02/25 08:22
Total/NA	Analysis	Draft-3 1633		1	654529	LD	EET CLE	05/03/25 01:26
Total/NA	Prep	3050B			744845	EMO	EET BUF	04/30/25 14:09
Total/NA	Analysis	6010D		1	745013	BMB	EET BUF	05/01/25 12:16
Total/NA	Prep	7471B			744980	ESB	EET BUF	05/02/25 09:11
Total/NA	Analysis	7471B		1	745103	BMB	EET BUF	05/02/25 11:38

Client Sample ID: BD-1
Lab Sample ID: 480-229067-2
Date Collected: 04/29/25 09:45
Matrix: Solid
Date Received: 04/29/25 15:43

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	Moisture		1	744867	VXF	EET BUF	04/30/25 14:01

Client Sample ID: BD-1
Lab Sample ID: 480-229067-2
Date Collected: 04/29/25 09:45
Matrix: Solid
Date Received: 04/29/25 15:43
Percent Solids: 91.1

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5035A_L			744798	ATG	EET BUF	04/29/25 16:51
Total/NA	Analysis	8260C		1	744801	CDC	EET BUF	04/29/25 22:25
Total/NA	Prep	3550C			744863	LSC	EET BUF	04/30/25 13:32
Total/NA	Analysis	8270D		1	745105	JMM	EET BUF	05/03/25 02:46
Total/NA	Prep	3546			744938	VXF	EET BUF	05/01/25 06:41
Total/NA	Analysis	8081B		10	745019	JLS	EET BUF	05/01/25 16:45
Total/NA	Prep	3550C			744942	SMP	EET BUF	05/01/25 07:04
Total/NA	Analysis	8082A		1	745005	W1T	EET BUF	05/01/25 18:12

Client Sample ID: BD-1
Lab Sample ID: 480-229067-2

Date Collected: 04/29/25 09:45
Matrix: Solid
Date Received: 04/29/25 15:43
Percent Solids: 91.1

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	8151A			744937	VXF	EET BUF	05/01/25 06:27
Total/NA	Analysis	8151A		1	745549	JLS	EET BUF	05/08/25 14:14
Total/NA	Prep	1633 Shake			654462	KML	EET CLE	05/02/25 08:22
Total/NA	Analysis	Draft-3 1633		1	654529	LD	EET CLE	05/03/25 01:42
Total/NA	Prep	3050B			744845	EMO	EET BUF	04/30/25 14:09
Total/NA	Analysis	6010D		1	745013	BMB	EET BUF	05/01/25 12:18
Total/NA	Prep	7471B			744980	ESB	EET BUF	05/02/25 09:11
Total/NA	Analysis	7471B		1	745103	BMB	EET BUF	05/02/25 11:40

Client Sample ID: MW-2 0.75-2Ft
Lab Sample ID: 480-229067-3

Date Collected: 04/29/25 12:00
Matrix: Solid
Date Received: 04/29/25 15:43

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	Moisture		1	744867	VXF	EET BUF	04/30/25 14:01

Client Sample ID: MW-2 0.75-2Ft
Lab Sample ID: 480-229067-3

Date Collected: 04/29/25 12:00
Matrix: Solid
Date Received: 04/29/25 15:43
Percent Solids: 80.5

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5035A_L			744798	ATG	EET BUF	04/29/25 16:51
Total/NA	Analysis	8260C		1	744801	CDC	EET BUF	04/29/25 22:49
Total/NA	Prep	3550C			744941	SMP	EET BUF	05/01/25 06:55
Total/NA	Analysis	8270D		1	745287	JMM	EET BUF	05/06/25 15:28
Total/NA	Prep	3546			744938	VXF	EET BUF	05/01/25 06:41
Total/NA	Analysis	8081B		10	745019	JLS	EET BUF	05/01/25 17:05
Total/NA	Prep	3550C			744942	SMP	EET BUF	05/01/25 07:04
Total/NA	Analysis	8082A		1	745005	W1T	EET BUF	05/01/25 18:30
Total/NA	Prep	8151A			744937	VXF	EET BUF	05/01/25 06:27
Total/NA	Analysis	8151A		1	745549	JLS	EET BUF	05/08/25 14:32
Total/NA	Prep	1633 Shake			654462	KML	EET CLE	05/02/25 08:22
Total/NA	Analysis	Draft-3 1633		1	654529	LD	EET CLE	05/03/25 01:59
Total/NA	Prep	3050B			744845	EMO	EET BUF	04/30/25 14:09
Total/NA	Analysis	6010D		1	745013	BMB	EET BUF	05/01/25 12:20
Total/NA	Prep	7471B			744980	ESB	EET BUF	05/02/25 09:11
Total/NA	Analysis	7471B		1	745103	BMB	EET BUF	05/02/25 11:43

Client Sample ID: MW-3 0.5-2.5Ft
Lab Sample ID: 480-229067-4

Date Collected: 04/29/25 13:30
Matrix: Solid
Date Received: 04/29/25 15:43

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	Moisture		1	744867	VXF	EET BUF	04/30/25 14:01

Lab Chronicle

Client: Roux Environmental Engineering and Geology DPC
Job ID: 480-229067-1
Project/Site: BCP RI - 619 Exchange Street Site

Client Sample ID: MW-3 0.5-2.5Ft
Lab Sample ID: 480-229067-4
Date Collected: 04/29/25 13:30
Matrix: Solid
Date Received: 04/29/25 15:43
Percent Solids: 83.7

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	3550C			744863	LSC	EET BUF	04/30/25 13:32
Total/NA	Analysis	8270D		1	745191	JMM	EET BUF	05/06/25 10:31
Total/NA	Prep	3050B			744845	EMO	EET BUF	04/30/25 14:09
Total/NA	Analysis	6010D		1	745013	BMB	EET BUF	05/01/25 12:22
Total/NA	Prep	7471B			744980	ESB	EET BUF	05/02/25 09:11
Total/NA	Analysis	7471B		1	745103	BMB	EET BUF	05/02/25 11:44

Client Sample ID: MW-1 0.25-3Ft
Lab Sample ID: 480-229067-5
Date Collected: 04/29/25 13:00
Matrix: Solid
Date Received: 04/29/25 15:43

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	Moisture		1	744867	VXF	EET BUF	04/30/25 14:01

Client Sample ID: MW-1 0.25-3Ft
Lab Sample ID: 480-229067-5
Date Collected: 04/29/25 13:00
Matrix: Solid
Date Received: 04/29/25 15:43
Percent Solids: 80.1

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5035A_L			744799	ATG	EET BUF	04/29/25 16:52
Total/NA	Analysis	8260C		1	744923	CDC	EET BUF	04/30/25 22:41
Total/NA	Prep	3550C			744863	LSC	EET BUF	04/30/25 13:32
Total/NA	Analysis	8270D		1	745000	JMM	EET BUF	05/02/25 06:47
Total/NA	Prep	3546			744938	VXF	EET BUF	05/01/25 06:41
Total/NA	Analysis	8081B		10	745019	JLS	EET BUF	05/01/25 16:06
Total/NA	Prep	3550C			744942	SMP	EET BUF	05/01/25 07:04
Total/NA	Analysis	8082A		1	745005	W1T	EET BUF	05/01/25 16:58
Total/NA	Prep	8151A			744937	VXF	EET BUF	05/01/25 06:27
Total/NA	Analysis	8151A		1	745549	JLS	EET BUF	05/08/25 13:37
Total/NA	Prep	1633 Shake			654462	KML	EET CLE	05/02/25 08:22
Total/NA	Analysis	Draft-3 1633		1	654529	LD	EET CLE	05/03/25 02:49
Total/NA	Prep	3050B			744845	EMO	EET BUF	04/30/25 14:09
Total/NA	Analysis	6010D		1	745013	BMB	EET BUF	05/01/25 12:24
Total/NA	Prep	7471B			744980	ESB	EET BUF	05/02/25 09:11
Total/NA	Analysis	7471B		1	745103	BMB	EET BUF	05/02/25 11:46

Client Sample ID: HC-5 0.33-0.66Ft
Lab Sample ID: 480-229067-6
Date Collected: 04/29/25 14:30
Matrix: Solid
Date Received: 04/29/25 15:43

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	Moisture		1	744867	VXF	EET BUF	04/30/25 14:01

Client Sample ID: HC-5 0.33-0.66Ft
Lab Sample ID: 480-229067-6

Date Collected: 04/29/25 14:30
Matrix: Solid
Date Received: 04/29/25 15:43
Percent Solids: 67.1

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	3550C			744941	SMP	EET BUF	05/01/25 06:55
Total/NA	Analysis	8270D		1	745287	JMM	EET BUF	05/06/25 15:52
Total/NA	Prep	3050B			744845	EMO	EET BUF	04/30/25 14:09
Total/NA	Analysis	6010D		1	745013	BMB	EET BUF	05/01/25 12:39
Total/NA	Prep	7471B			744980	ESB	EET BUF	05/02/25 09:11
Total/NA	Analysis	7471B		1	745103	BMB	EET BUF	05/02/25 11:56

Client Sample ID: HC-6 2in-6in
Lab Sample ID: 480-229067-7

Date Collected: 04/29/25 15:00
Matrix: Solid
Date Received: 04/29/25 15:43

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	Moisture		1	744867	VXF	EET BUF	04/30/25 14:01

Client Sample ID: HC-6 2in-6in
Lab Sample ID: 480-229067-7

Date Collected: 04/29/25 15:00
Matrix: Solid
Date Received: 04/29/25 15:43
Percent Solids: 73.7

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5035A_L			744798	ATG	EET BUF	04/29/25 16:51
Total/NA	Analysis	8260C		1	744801	CDC	EET BUF	04/29/25 23:36
Total/NA	Prep	3550C			744863	LSC	EET BUF	04/30/25 13:32
Total/NA	Analysis	8270D		1	745191	JMM	EET BUF	05/06/25 10:58
Total/NA	Prep	3546			744938	VXF	EET BUF	05/01/25 06:41
Total/NA	Analysis	8081B		5	745019	JLS	EET BUF	05/01/25 17:24
Total/NA	Prep	3550C			744942	SMP	EET BUF	05/01/25 07:04
Total/NA	Analysis	8082A		1	745005	W1T	EET BUF	05/01/25 18:49
Total/NA	Prep	8151A			744937	VXF	EET BUF	05/01/25 06:27
Total/NA	Analysis	8151A		1	745549	JLS	EET BUF	05/08/25 14:51
Total/NA	Prep	1633 Shake			654462	KML	EET CLE	05/02/25 08:22
Total/NA	Analysis	Draft-3 1633		1	654529	LD	EET CLE	05/03/25 03:38
Total/NA	Prep	3050B			744845	EMO	EET BUF	04/30/25 14:09
Total/NA	Analysis	6010D		1	745013	BMB	EET BUF	05/01/25 12:41
Total/NA	Prep	7471B			744980	ESB	EET BUF	05/02/25 09:11
Total/NA	Analysis	7471B		1	745103	BMB	EET BUF	05/02/25 11:58

Client Sample ID: HC-7 0.25-0.75Ft
Lab Sample ID: 480-229067-8

Date Collected: 04/29/25 14:45
Matrix: Solid
Date Received: 04/29/25 15:43

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	Moisture		1	744867	VXF	EET BUF	04/30/25 14:01

Lab Chronicle

Client: Roux Environmental Engineering and Geology DPC
Job ID: 480-229067-1
Project/Site: BCP RI - 619 Exchange Street Site

Client Sample ID: HC-7 0.25-0.75Ft
Lab Sample ID: 480-229067-8
Date Collected: 04/29/25 14:45
Matrix: Solid
Date Received: 04/29/25 15:43
Percent Solids: 79.7

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	3550C			744863	LSC	EET BUF	04/30/25 13:32
Total/NA	Analysis	8270D		1	745191	JMM	EET BUF	05/06/25 11:26
Total/NA	Prep	3050B			744845	EMO	EET BUF	04/30/25 14:09
Total/NA	Analysis	6010D		1	745013	BMB	EET BUF	05/01/25 12:43
Total/NA	Prep	7471B			744980	ESB	EET BUF	05/02/25 09:11
Total/NA	Analysis	7471B		1	745103	BMB	EET BUF	05/02/25 11:59

Laboratory References:

EET BUF = Eurofins Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600

EET CLE = Eurofins Cleveland, 180 S. Van Buren Avenue, Barberton, OH 44203, TEL (330)497-9396

Accreditation/Certification Summary

Client: Roux Environmental Engineering and Geology DPC
Job ID: 480-229067-1
Project/Site: BCP RI - 619 Exchange Street Site

Laboratory: Eurofins Buffalo

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	Identification Number	Expiration Date
New York	NELAP	10026	03-31-26

The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

Analysis Method	Prep Method	Matrix	Analyte
8151A	8151A	Solid	Picloram
Moisture		Solid	Percent Moisture
Moisture		Solid	Percent Solids

Laboratory: Eurofins Cleveland

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Connecticut	State	PH-0806	12-31-26
Georgia	State	4062	02-27-26
Illinois	NELAP	200004	08-31-25
Iowa	State	421	06-01-25
Kansas	NELAP	E-10336	01-31-26
Kentucky (UST)	State	112225	02-28-26
Kentucky (WW)	State	KY98016	12-31-25
Minnesota	NELAP	039-999-348	12-31-25
New Hampshire	NELAP	225024	09-30-25
New Jersey	NELAP	OH001	07-03-25
New York	NELAP	10975	04-01-26
North Dakota	State	R-244	02-27-26
Ohio	State	8303	11-04-25
Ohio VAP	State	ORELAP 4062	02-28-26
Oregon	NELAP	4062	02-27-26
Pennsylvania	NELAP	68-00340	08-31-25
Texas	NELAP	T104704517-22-19	08-31-25
US Fish & Wildlife	US Federal Programs	A26406	02-28-26
USDA	US Federal Programs	P330-18-00281	01-05-27
Virginia	NELAP	460175	09-14-25
West Virginia DEP	State	210	12-31-25
Wisconsin	State	399167560	08-31-25

Method Summary

Client: Roux Environmental Engineering and Geology DPC
Job ID: 480-229067-1
Project/Site: BCP RI - 619 Exchange Street Site

Method	Method Description	Protocol	Laboratory
8260C	Volatile Organic Compounds by GC/MS	SW846	EET BUF
8270D	Semivolatile Organic Compounds (GC/MS)	SW846	EET BUF
8081B	Organochlorine Pesticides (GC)	SW846	EET BUF
8082A	Polychlorinated Biphenyls (PCBs) by Gas Chromatography	SW846	EET BUF
8151A	Herbicides (GC)	SW846	EET BUF
Draft-3 1633	Per- and Polyfluoroalkyl Substances by LC/MS/MS	EPA	EET CLE
6010D	Metals (ICP)	SW846	EET BUF
7471B	Mercury (CVAA)	SW846	EET BUF
Moisture	Percent Moisture	EPA	EET BUF
1633 Shake	Shake Extraction with SPE	EPA	EET CLE
3050B	Preparation, Metals	SW846	EET BUF
3546	Microwave Extraction	SW846	EET BUF
3550C	Ultrasonic Extraction	SW846	EET BUF
5035A_L	Closed System Purge and Trap	SW846	EET BUF
7471B	Preparation, Mercury	SW846	EET BUF
8151A	Extraction (Herbicides)	SW846	EET BUF

Protocol References:

EPA = US Environmental Protection Agency

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

EET BUF = Eurofins Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600

EET CLE = Eurofins Cleveland, 180 S. Van Buren Avenue, Barberton, OH 44203, TEL (330)497-9396

Sample Summary

Client: Roux Environmental Engineering and Geology DPC
Job ID: 480-229067-1
Project/Site: BCP RI - 619 Exchange Street Site

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
480-229067-1	HC-4 0.5-1.5Ft	Solid	04/29/25 09:30	04/29/25 15:43
480-229067-2	BD-1	Solid	04/29/25 09:45	04/29/25 15:43
480-229067-3	MW-2 0.75-2Ft	Solid	04/29/25 12:00	04/29/25 15:43
480-229067-4	MW-3 0.5-2.5Ft	Solid	04/29/25 13:30	04/29/25 15:43
480-229067-5	MW-1 0.25-3Ft	Solid	04/29/25 13:00	04/29/25 15:43
480-229067-6	HC-5 0.33-0.66Ft	Solid	04/29/25 14:30	04/29/25 15:43
480-229067-7	HC-6 2in-6in	Solid	04/29/25 15:00	04/29/25 15:43
480-229067-8	HC-7 0.25-0.75Ft	Solid	04/29/25 14:45	04/29/25 15:43

Eurofins Buffalo
10 Hazelwood Drive
Amherst, NY 14228-2298
Phone: 716-691-2600 Fax: 716-691-7991

Chain of Custody Record

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Client Information	Sampler: Mack Scott	Lab PM: Fischer, Brian J	Carrier Tracking No(s):	COC No: 480-204352-41691.2
Client Contact: Bryan Mayback	Phone: 716-713-3937	E-Mail: Brian.Fischer@et.eurofinsus.com	State of Origin:	Page: Page 2 of 4
Company: Roux Environmental Engineering and Geology DPC	PWSID:			Job #:
Address: 2558 Hamburg Turnpike Suite 300	Due Date Requested:			
City: Lackawanna	TAT Requested (days): Standard			
State, Zip: NY, 14218	Compliance Project: Δ Yes Δ No			
Phone:	PO #: Purchase Order Requested 4374.0004Bo			
Email: bmayback@rouxinc.com	WO #:			
Project Name: BCP RI - 619 Exchange Street Site- soil	Project #: 48028561			
Site:	SSOW#:			

Analysis Requested

Preservation Codes: N - None

Other:

Sample Identification	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)	1633_Final - PFAS	8081B, 8082A, 8151A, Moisture	8260C - VOC	6010D, 7471B, 8270D	TCL SVOCs + TICs	TAL Metals	Total Number of containers	Special Instructions/Note:
			Preservation Code:				N	N	N	N				
HC-4 0.5-1.5 Ft	4/24/25	9:30	G	Solid			X	X	X	X				2 cures
BD-1		9:45	G	Solid			X	X	X	X				
MW-2 0.75-2 Ft		1200	G	Solid			X	X	X	X				
MW-3 0.5-2.5 Ft		1330	G	Solid							X	X		
MW-1 0.25-3 Ft		1300	G	Solid		X	X	X	X	X				MS/MSD-1, 2 cures
HC-5 0.33-0.66 Ft		1430	G	Solid							X	X		
HC-6 2-2.6		1500	G	Solid			X	X	X	X				2 cures
HC-7 0.25-0.75 Ft		1445	G	Solid							X	X		
				Solid										
				Solid										
				Solid										

480-229067 Chain of Custody

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if sa
☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Mon...

Deliverable Requested: I, II, III, IV, Other (specify) Cat B, NYSDEC EQuIS

Special Instructions/QC Requirements: Cat B, NYSDEC EQuIS

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

Relinquished by:	Date/Time: 4/24/25 15:43	Company: Roux	Received by: Cavattale	Date/Time: 4/29/25 1543	Company: EUR
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
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: 4.7 ICE IR # SC

Ver: 10/10/2024

Eurofins Buffalo
10 Hazelwood Drive
Amherst, NY 14228-2298
Phone: 716-691-2600 Fax: 716-691 7991

Chain of Custody Record

eurofins
Environment Testing

Client Information (Sub Contract Lab)	Sampler: N/A	Lab PM: Schove, John R	Carrier Tracking No(s): N/A	COC No: 480-92309.1
Client Contact: Shipping/Receiving	Phone: N/A	E-Mail: John.Schove@et.eurofinsus.com	State of Origin: New York	Page: Page 1 of 1
Company: Eurofins Environment Testing North Centr		Accreditations Required (See note): NELAP New York		Job #: 480-229067 1
Address: 180 S. Van Buren Avenue,	Due Date Requested: 5/12/2025			Preservation Codes:
City: Barberton	TAT Requested (days): N/A			
State, Zip: OH, 44203				
Phone: 330-497-9396(Tel) 330-497-0772(Fax)	PO #: N/A			
Email: N/A	WO #: N/A			
Project Name: BCP RI 619 Exchange Street Site	Project #: 48028561			
Site: N/A	SSOW#: N/A			Other: N/A

Analysis Requested *

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)	1633_Final/1633_Shake PFAS Analyte List NY Standard 40	Total Number of containers	Special Instructions/Note:
			Preservation Code:						
HC-4 0.5-1.5Ft (480-229067 1)	4/29/25	09:30 Eastern	G	Solid			X	1	
BD-1 (480-229067-2)	4/29/25	09:45 Eastern	G	Solid			X	1	
MW-2 0.75-2Ft (480-229067-3)	4/29/25	12:00 Eastern	G	Solid			X	1	
MW-1 0.25-3Ft (480-229067-5)	4/29/25	13:00 Eastern	G	Solid			X	1	
MW-1 0.25-3Ft (480-229067-5MS)	4/29/25	13:00 Eastern	G	Solid			X	1	
MW-1 0.25-3Ft (480-229067-5MSD)	4/29/25	13:00 Eastern	G	Solid			X	1	
HC-6 2in-6in (480-229067 7)	4/29/25	15:00 Eastern	G	Solid			X	1	

Pfos Ro81- 07

Note: Since laboratory accreditations are subject to change, Eurofins Environment Testing Northeast, 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 Northeast, LLC laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins Environment Testing Northeast, 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 Northeast, 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
[signature]	4-30-25 1600		JAYDEN COLLINS	5-1-25 945	Eurofins
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
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:

Eurofins – Cleveland Sample Receipt Form/Narrative — Login #:
Barberton Facility

Client Eurofins Buffalo — Site Name:

Cooler unpacked by: JC

Cooler Received on 5-1-25 — Opened on 5-1-25

FedEx 1st Grd (Exp) UPS FAS Waypoint Client Drop-Off Eurofins Courier Other

Receipt After-hours Drop-off Date/Time — Storage Location

Eurofins Cooler # EC — Foam Box Client Cooler Box Other

Packing material used: Bubble Wrap Foam (Plastic Bag) None Other

COOLANT: (Wet Ice) Blue Ice Dry Ice Water None

1 Cooler temperature upon receipt ☐ See Multiple Cooler Form

IR GUN # 18 (CF 0.7 °C) Observed Cooler Temp. 1.8 °C Corrected Cooler Temp 1.1 °C

2 Were tamper/custody seals on the outside of the cooler(s)? If Yes Quantity	(Yes)	No
-Were the seals on the outside of the cooler(s) signed & dated?	Yes (No)	NA
Were tamper/custody seals on the bottle(s) or bottle kits (LLHg/MeHg)?	Yes (No)	
-Were tamper/custody seals intact and uncompromised?	(Yes)	No NA
3 Shippers' packing slip attached to the cooler(s)?	(Yes)	No
4 Did custody papers accompany the sample(s)?	(Yes)	No
5 Were the custody papers relinquished & signed in the appropriate place?	(Yes)	No
6. Was/were the person(s) who collected the samples clearly identified on the COC?	Yes (No)	
7 Did all bottles arrive in good condition (Unbroken)?	(Yes)	No
8 Could all bottle labels (ID/Date/Time) be reconciled with the COC?	(Yes)	No
9 For each sample, does the COC specify preservatives (Y/N), # of containers (Y/N), and sample type of grab/comp (Y/N)?	(Y)	(Y) (Y)
10 Were correct bottle(s) used for the test(s) indicated?	(Yes)	No
11 Sufficient quantity received to perform indicated analyses?	(Yes)	No
12. Are these work share samples and all listed on the COC?	(Yes)	No
If yes, Questions 13-17 have been checked at the originating laboratory		
13 Were all preserved sample(s) at the correct pH upon receipt?	(Yes)	No NA pH Strip Lot# HC457151
14 Were VOAs on the COC?	(Yes)	No
15 Were air bubbles >6 mm in any VOA vials? ● ← Larger than this	Yes	(No) NA
16. Was a VOA trip blank present in the cooler(s)? Trip Blank Lot #	Yes	(No)
17 Was a LL Hg or Me Hg trip blank present?	Yes	(No)

Tests that are not checked for pH by Receiving:
VOAs
Oil and Grease
TOC

Contacted PM ____ Date ____ by ____ via Verbal Voice Mail Other

Concerning ____

18. CHAIN OF CUSTODY & SAMPLE DISCREPANCIES ☐ additional next page

Labeled by: NA

Labels Verified by:

19 SAMPLE CONDITION

Sample(s) ____ were received after the recommended holding time had expired.

Sample(s) ____ were received in a broken container

Sample(s) ____ were received with bubble >6 mm in diameter (Notify PM)

20. SAMPLE PRESERVATION

Sample(s) ____ were further preserved in the laboratory

Time preserved. ____ Preservative(s) added/Lot number(s): ____

VOA Sample Preservation - Date/Time VOAs Frozen. ____

Do not
223
ECEIPT
S CLEVELAND
N BUREN AVE
TON OH 44203 3543
BERTON
DIMS 19x18x11 IN
BILL SENDER
FedEx Express
J243024070401uv
THU - 01 MAY 10:30A
PRIORITY OVERNIGHT
TRK# 0201 7463 0663 8350
XP CAKA
44203
OH-US CLE

Login Sample Receipt Checklist

Client: Roux Environmental Engineering and Geology DPC

Job Number: 480-229067-1

Login Number: 229067

List Source: Eurofins Buffalo

List Number: 1

Creator: Yeager, Brian A

Question	Answer	Comment
Radioactivity either was not measured or, if measured, is at or below background	True	
The cooler's custody seal, if present, is intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	4.7 ICE IR# SC
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the sample IDs on the containers and the COC.	True	
Samples are received within Holding Time (Excluding tests with immediate HTs)..	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
VOA sample vials do not have headspace or bubble is <6mm (1/4") in diameter.	N/A	
If necessary, staff have been informed of any short hold time or quick TAT needs	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Sampling Company provided.	True	ROUX
Samples received within 48 hours of sampling.	True	
Samples requiring field filtration have been filtered in the field.	True	
Chlorine Residual checked.	N/A	

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ANALYTICAL REPORT

PREPARED FOR

Attn: Bryan Mayback
Roux Environmental Engineering and Geology DPC
2558 Hamburg Turnpike
Suite 300
Lackawanna, New York 14218

Generated 5/8/2025 10:03:48 PM

JOB DESCRIPTION

BCP RI - 619 Exchange Street Site

JOB NUMBER

480-229103-1

Eurofins Buffalo
10 Hazelwood Drive
Amherst NY 14228-2298

See page two for job notes and contact information.

Job Notes

This report may not be reproduced except in full, and with written approval from the laboratory. The results relate only to the samples tested. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

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 Northeast, LLC Project Manager.

Authorization



Generated
5/8/2025 10:03:48 PM

Authorized for release by
John Schove, Project Manager II
John.Schove@et.eurofinsus.com
(716)504-9838

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Qualifiers

GC/MS Semi VOA

Qualifier	Qualifier Description
B	Compound was found in the blank and sample.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

GC Semi VOA

Qualifier	Qualifier Description
S1+	Surrogate recovery exceeds control limits, high biased.

Metals

Qualifier	Qualifier Description
^5-	Linear Range Check (LRC) is outside acceptance limits, low biased.
F1	MS and/or MSD recovery exceeds control limits.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

General Chemistry

Qualifier	Qualifier Description
HF	Parameter with a holding time of 15 minutes. Test performed by laboratory at client's request. Sample was analyzed outside of hold time.

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

Job ID: 480-229103-1 Eurofins Buffalo

Job Narrative
480-229103-1

Receipt
The samples were received on 4/30/2025 4:56 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 was 12.0º C.

GC/MS VOA
Method 8260C: The continuing calibration verification (CCV) associated with batch 480-745299 recovered above the upper control limit for 2-Butanone (MEK). The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported. The associated samples are:WC-1 (480-229103-1), WC-2 (480-229103-2) and WC-3 (480-229103-3).

Method 8260C: The following samples were diluted due to the nature of the TCLP matrix: WC-1 (480-229103-1), WC-2 (480-229103-2), WC-3 (480-229103-3) and (LB 480-745177/1-A). Elevated reporting limits (RLs) are provided.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

GC/MS Semi VOA
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

GC Semi VOA
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Metals
Method 6010D: The linear range check (LRC) standard recovery associated with 480-745388 is outside the acceptance criteria for the following analytes: Silver. The concentration of these analyte(s) in the sample(s) are below the highest standard of the calibration curve; therefore, the data have been reported.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

General Chemistry
Method 9045D: This analysis is normally performed in the field and has a method-defined holding time of 15 minutes. The following samples has been qualified with the "HF" flag to indicate analysis was performed in the laboratory outside the 15 minute timeframe: WC-1 (480-229103-1), WC-2 (480-229103-2) and WC-3 (480-229103-3).

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Organic Prep
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Detection Summary

Client: Roux Environmental Engineering and Geology DPC
Job ID: 480-229103-1
Project/Site: BCP RI - 619 Exchange Street Site

Client Sample ID: WC-1 — Lab Sample ID: 480-229103-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Pyridine	0.0020	J B	0.10	0.0016	mg/L	1		8270D	TCLP
Barium	0.72	J	1.0	0.10	mg/L	1		6010D	TCLP
Lead	0.0044	J	0.020	0.0030	mg/L	1		6010D	TCLP
Flashpoint	>180		50.0	50.0	Degrees F	1		1010A	Total/NA
pH	7.8	HF	0.1	0.1	SU	1		9045D	Total/NA
Temperature	20.0	HF	0.001	0.001	Degrees C	1		9045D	Total/NA

Client Sample ID: WC-2 — Lab Sample ID: 480-229103-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Pyridine	0.0029	J B	0.10	0.0016	mg/L	1		8270D	TCLP
Barium	0.53	J	1.0	0.10	mg/L	1		6010D	TCLP
Cadmium	0.0015	J	0.0020	0.00050	mg/L	1		6010D	TCLP
Lead	0.032		0.020	0.0030	mg/L	1		6010D	TCLP
Flashpoint	>180		50.0	50.0	Degrees F	1		1010A	Total/NA
pH	8.4	HF	0.1	0.1	SU	1		9045D	Total/NA
Temperature	20.0	HF	0.001	0.001	Degrees C	1		9045D	Total/NA

Client Sample ID: WC-3 — Lab Sample ID: 480-229103-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Pyridine	0.0022	J B	0.10	0.0016	mg/L	1		8270D	TCLP
Barium	0.91	J	1.0	0.10	mg/L	1		6010D	TCLP
Cadmium	0.0014	J	0.0020	0.00050	mg/L	1		6010D	TCLP
Lead	0.38		0.020	0.0030	mg/L	1		6010D	TCLP
Flashpoint	>180		50.0	50.0	Degrees F	1		1010A	Total/NA
pH	8.5	HF	0.1	0.1	SU	1		9045D	Total/NA
Temperature	20.6	HF	0.001	0.001	Degrees C	1		9045D	Total/NA

This Detection Summary does not include radiochemical test results.

Client: Roux Environmental Engineering and Geology DPC
Job ID: 480-229103-1
Project/Site: BCP RI - 619 Exchange Street Site

Client Sample ID: WC-1
Lab Sample ID: 480-229103-1
Date Collected: 04/30/25 13:00
Matrix: Solid
Date Received: 04/30/25 16:56

Method: SW846 8260C - TCLP Volatiles - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	ND		0.010	0.0029	mg/L			05/06/25 14:31	10
1,2-Dichloroethane	ND		0.010	0.0021	mg/L			05/06/25 14:31	10
2-Butanone (MEK)	ND		0.050	0.013	mg/L			05/06/25 14:31	10
Benzene	ND		0.010	0.0041	mg/L			05/06/25 14:31	10
Carbon tetrachloride	ND		0.010	0.0027	mg/L			05/06/25 14:31	10
Chlorobenzene	ND		0.010	0.0075	mg/L			05/06/25 14:31	10
Chloroform	ND		0.010	0.0034	mg/L			05/06/25 14:31	10
Tetrachloroethene	ND		0.010	0.0036	mg/L			05/06/25 14:31	10
Trichloroethene	ND		0.010	0.0046	mg/L			05/06/25 14:31	10
Vinyl chloride	ND		0.010	0.0090	mg/L			05/06/25 14:31	10

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*103*		*77 - 120*		*05/06/25 14:31*	*10*
4-Bromofluorobenzene (Surr)	*100*		*73 - 120*		*05/06/25 14:31*	*10*
Dibromofluoromethane (Surr)	*102*		*75 - 123*		*05/06/25 14:31*	*10*
Toluene-d8 (Surr)	*100*		*80 - 120*		*05/06/25 14:31*	*10*

Method: SW846 8270D - Semivolatile Organic Compounds (GC/MS) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dichlorobenzene	ND		0.040	0.0018	mg/L		05/06/25 09:51	05/07/25 15:10	1
2,4,5-Trichlorophenol	ND		0.020	0.0019	mg/L		05/06/25 09:51	05/07/25 15:10	1
2,4,6-Trichlorophenol	ND		0.020	0.0024	mg/L		05/06/25 09:51	05/07/25 15:10	1
2,4-Dinitrotoluene	ND		0.020	0.0017	mg/L		05/06/25 09:51	05/07/25 15:10	1
2-Methylphenol	ND		0.020	0.0016	mg/L		05/06/25 09:51	05/07/25 15:10	1
3-Methylphenol	ND		0.040	0.0016	mg/L		05/06/25 09:51	05/07/25 15:10	1
4-Methylphenol	ND		0.040	0.0014	mg/L		05/06/25 09:51	05/07/25 15:10	1
Hexachlorobenzene	ND		0.020	0.0020	mg/L		05/06/25 09:51	05/07/25 15:10	1
Hexachlorobutadiene	ND		0.020	0.0027	mg/L		05/06/25 09:51	05/07/25 15:10	1
Hexachloroethane	ND		0.020	0.0023	mg/L		05/06/25 09:51	05/07/25 15:10	1
Nitrobenzene	ND		0.020	0.0011	mg/L		05/06/25 09:51	05/07/25 15:10	1
Pentachlorophenol	ND		0.040	0.0088	mg/L		05/06/25 09:51	05/07/25 15:10	1
Pyridine	**0.0020**	**J B**	0.10	0.0016	mg/L		05/06/25 09:51	05/07/25 15:10	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol (Surr)	*91*		*25 - 144*	*05/06/25 09:51*	*05/07/25 15:10*	*1*
2-Fluorobiphenyl (Surr)	*83*		*53 - 126*	*05/06/25 09:51*	*05/07/25 15:10*	*1*
2-Fluorophenol (Surr)	*54*		*24 - 120*	*05/06/25 09:51*	*05/07/25 15:10*	*1*
Nitrobenzene-d5 (Surr)	*73*		*29 - 129*	*05/06/25 09:51*	*05/07/25 15:10*	*1*
Phenol-d5 (Surr)	*36*		*10 - 120*	*05/06/25 09:51*	*05/07/25 15:10*	*1*
p-Terphenyl-d14 (Surr)	*78*		*33 - 132*	*05/06/25 09:51*	*05/07/25 15:10*	*1*

Method: SW846 6010D - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		0.015	0.0056	mg/L		05/06/25 10:04	05/06/25 17:52	1
Barium	**0.72**	**J**	1.0	0.10	mg/L		05/06/25 10:04	05/06/25 17:52	1
Cadmium	ND		0.0020	0.00050	mg/L		05/06/25 10:04	05/06/25 17:52	1
Chromium	ND		0.020	0.010	mg/L		05/06/25 10:04	05/06/25 17:52	1
Lead	**0.0044**	**J**	0.020	0.0030	mg/L		05/06/25 10:04	05/06/25 17:52	1
Selenium	ND		0.025	0.0087	mg/L		05/06/25 10:04	05/06/25 17:52	1
Silver	ND	^5-	0.0060	0.0017	mg/L		05/06/25 10:04	05/06/25 17:52	1

Client: Roux Environmental Engineering and Geology DPC
Job ID: 480-229103-1
Project/Site: BCP RI - 619 Exchange Street Site

Client Sample ID: WC-1
Lab Sample ID: 480-229103-1
Date Collected: 04/30/25 13:00
Matrix: Solid
Date Received: 04/30/25 16:56

Method: SW846 7470A - TCLP Mercury - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND	F1	0.00020	0.000042	mg/L		05/06/25 11:33	05/06/25 14:53	1

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Flashpoint (SW846 1010A)	>180		50.0	50.0	Degrees F			05/01/25 12:31	1
pH (SW846 9045D)	7.8	HF	0.1	0.1	SU			05/06/25 09:45	1
Temperature (SW846 9045D)	20.0	HF	0.001	0.001	Degrees C			05/06/25 09:45	1

Client: Roux Environmental Engineering and Geology DPC
Job ID: 480-229103-1
Project/Site: BCP RI - 619 Exchange Street Site

Client Sample ID: WC-1
Lab Sample ID: 480-229103-1
Date Collected: 04/30/25 13:00
Matrix: Solid
Date Received: 04/30/25 16:56
Percent Solids: 82.0

Method: SW846 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		0.23	0.045	mg/Kg	☼	05/01/25 07:04	05/01/25 19:26	1
PCB-1221	ND		0.23	0.045	mg/Kg	☼	05/01/25 07:04	05/01/25 19:26	1
PCB-1232	ND		0.23	0.045	mg/Kg	☼	05/01/25 07:04	05/01/25 19:26	1
PCB-1242	ND		0.23	0.045	mg/Kg	☼	05/01/25 07:04	05/01/25 19:26	1
PCB-1248	ND		0.23	0.045	mg/Kg	☼	05/01/25 07:04	05/01/25 19:26	1
PCB-1254	ND		0.23	0.11	mg/Kg	☼	05/01/25 07:04	05/01/25 19:26	1
PCB-1260	ND		0.23	0.11	mg/Kg	☼	05/01/25 07:04	05/01/25 19:26	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*104*		*65 - 174*	*05/01/25 07:04*	*05/01/25 19:26*	*1*
DCB Decachlorobiphenyl	*108*		*65 - 174*	*05/01/25 07:04*	*05/01/25 19:26*	*1*
Tetrachloro-m-xylene	*116*		*60 - 154*	*05/01/25 07:04*	*05/01/25 19:26*	*1*
Tetrachloro-m-xylene	*107*		*60 - 154*	*05/01/25 07:04*	*05/01/25 19:26*	*1*

Client Sample ID: WC-2
Lab Sample ID: 480-229103-2

Date Collected: 04/29/25 14:00
Matrix: Solid

Date Received: 04/30/25 16:56

Method: SW846 8260C - TCLP Volatiles - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	ND		0.010	0.0029	mg/L			05/06/25 14:54	10
1,2-Dichloroethane	ND		0.010	0.0021	mg/L			05/06/25 14:54	10
2-Butanone (MEK)	ND		0.050	0.013	mg/L			05/06/25 14:54	10
Benzene	ND		0.010	0.0041	mg/L			05/06/25 14:54	10
Carbon tetrachloride	ND		0.010	0.0027	mg/L			05/06/25 14:54	10
Chlorobenzene	ND		0.010	0.0075	mg/L			05/06/25 14:54	10
Chloroform	ND		0.010	0.0034	mg/L			05/06/25 14:54	10
Tetrachloroethene	ND		0.010	0.0036	mg/L			05/06/25 14:54	10
Trichloroethene	ND		0.010	0.0046	mg/L			05/06/25 14:54	10
Vinyl chloride	ND		0.010	0.0090	mg/L			05/06/25 14:54	10

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*105*		*77 - 120*		*05/06/25 14:54*	*10*
4-Bromofluorobenzene (Surr)	*99*		*73 - 120*		*05/06/25 14:54*	*10*
Dibromofluoromethane (Surr)	*102*		*75 - 123*		*05/06/25 14:54*	*10*
Toluene-d8 (Surr)	*99*		*80 - 120*		*05/06/25 14:54*	*10*

Method: SW846 8270D - Semivolatile Organic Compounds (GC/MS) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dichlorobenzene	ND		0.040	0.0018	mg/L		05/06/25 09:51	05/07/25 15:38	1
2,4,5-Trichlorophenol	ND		0.020	0.0019	mg/L		05/06/25 09:51	05/07/25 15:38	1
2,4,6-Trichlorophenol	ND		0.020	0.0024	mg/L		05/06/25 09:51	05/07/25 15:38	1
2,4-Dinitrotoluene	ND		0.020	0.0017	mg/L		05/06/25 09:51	05/07/25 15:38	1
2-Methylphenol	ND		0.020	0.0016	mg/L		05/06/25 09:51	05/07/25 15:38	1
3-Methylphenol	ND		0.040	0.0016	mg/L		05/06/25 09:51	05/07/25 15:38	1
4-Methylphenol	ND		0.040	0.0014	mg/L		05/06/25 09:51	05/07/25 15:38	1
Hexachlorobenzene	ND		0.020	0.0020	mg/L		05/06/25 09:51	05/07/25 15:38	1
Hexachlorobutadiene	ND		0.020	0.0027	mg/L		05/06/25 09:51	05/07/25 15:38	1
Hexachloroethane	ND		0.020	0.0023	mg/L		05/06/25 09:51	05/07/25 15:38	1
Nitrobenzene	ND		0.020	0.0011	mg/L		05/06/25 09:51	05/07/25 15:38	1
Pentachlorophenol	ND		0.040	0.0088	mg/L		05/06/25 09:51	05/07/25 15:38	1
Pyridine	**0.0029**	**J B**	0.10	0.0016	mg/L		05/06/25 09:51	05/07/25 15:38	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol (Surr)	*90*		*25 - 144*	*05/06/25 09:51*	*05/07/25 15:38*	*1*
2-Fluorobiphenyl (Surr)	*76*		*53 - 126*	*05/06/25 09:51*	*05/07/25 15:38*	*1*
2-Fluorophenol (Surr)	*51*		*24 - 120*	*05/06/25 09:51*	*05/07/25 15:38*	*1*
Nitrobenzene-d5 (Surr)	*65*		*29 - 129*	*05/06/25 09:51*	*05/07/25 15:38*	*1*
Phenol-d5 (Surr)	*35*		*10 - 120*	*05/06/25 09:51*	*05/07/25 15:38*	*1*
p-Terphenyl-d14 (Surr)	*72*		*33 - 132*	*05/06/25 09:51*	*05/07/25 15:38*	*1*

Method: SW846 6010D - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		0.015	0.0056	mg/L		05/06/25 10:04	05/06/25 18:07	1
Barium	**0.53**	**J**	1.0	0.10	mg/L		05/06/25 10:04	05/06/25 18:07	1
Cadmium	**0.0015**	**J**	0.0020	0.00050	mg/L		05/06/25 10:04	05/06/25 18:07	1
Chromium	ND		0.020	0.010	mg/L		05/06/25 10:04	05/06/25 18:07	1
Lead	**0.032**		0.020	0.0030	mg/L		05/06/25 10:04	05/06/25 18:07	1
Selenium	ND		0.025	0.0087	mg/L		05/06/25 10:04	05/06/25 18:07	1
Silver	ND	^5-	0.0060	0.0017	mg/L		05/06/25 10:04	05/06/25 18:07	1

Client: Roux Environmental Engineering and Geology DPC
Job ID: 480-229103-1
Project/Site: BCP RI - 619 Exchange Street Site

Client Sample ID: WC-2
Lab Sample ID: 480-229103-2
Date Collected: 04/29/25 14:00
Matrix: Solid
Date Received: 04/30/25 16:56

Method: SW846 7470A - TCLP Mercury - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020	0.000042	mg/L		05/06/25 11:33	05/06/25 14:59	1

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Flashpoint (SW846 1010A)	>180		50.0	50.0	Degrees F			05/01/25 13:39	1
pH (SW846 9045D)	8.4	HF	0.1	0.1	SU			05/06/25 09:45	1
Temperature (SW846 9045D)	20.0	HF	0.001	0.001	Degrees C			05/06/25 09:45	1

Client: Roux Environmental Engineering and Geology DPC
Job ID: 480-229103-1
Project/Site: BCP RI - 619 Exchange Street Site

Client Sample ID: WC-2
Lab Sample ID: 480-229103-2
Date Collected: 04/29/25 14:00
Matrix: Solid
Date Received: 04/30/25 16:56
Percent Solids: 86.2

Method: SW846 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		0.27	0.054	mg/Kg	☼	05/01/25 07:04	05/02/25 10:04	1
PCB-1221	ND		0.27	0.054	mg/Kg	☼	05/01/25 07:04	05/02/25 10:04	1
PCB-1232	ND		0.27	0.054	mg/Kg	☼	05/01/25 07:04	05/02/25 10:04	1
PCB-1242	ND		0.27	0.054	mg/Kg	☼	05/01/25 07:04	05/02/25 10:04	1
PCB-1248	ND		0.27	0.054	mg/Kg	☼	05/01/25 07:04	05/02/25 10:04	1
PCB-1254	ND		0.27	0.13	mg/Kg	☼	05/01/25 07:04	05/02/25 10:04	1
PCB-1260	ND		0.27	0.13	mg/Kg	☼	05/01/25 07:04	05/02/25 10:04	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*119*		*65 - 174*	*05/01/25 07:04*	*05/02/25 10:04*	*1*
DCB Decachlorobiphenyl	*118*		*65 - 174*	*05/01/25 07:04*	*05/02/25 10:04*	*1*
Tetrachloro-m-xylene	*115*		*60 - 154*	*05/01/25 07:04*	*05/02/25 10:04*	*1*
Tetrachloro-m-xylene	*109*		*60 - 154*	*05/01/25 07:04*	*05/02/25 10:04*	*1*

Client: Roux Environmental Engineering and Geology DPC
Job ID: 480-229103-1
Project/Site: BCP RI - 619 Exchange Street Site

Client Sample ID: WC-3
Lab Sample ID: 480-229103-3
Date Collected: 04/30/25 11:00
Matrix: Solid
Date Received: 04/30/25 16:56

Method: SW846 8260C - TCLP Volatiles - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	ND		0.010	0.0029	mg/L			05/06/25 15:16	10
1,2-Dichloroethane	ND		0.010	0.0021	mg/L			05/06/25 15:16	10
2-Butanone (MEK)	ND		0.050	0.013	mg/L			05/06/25 15:16	10
Benzene	ND		0.010	0.0041	mg/L			05/06/25 15:16	10
Carbon tetrachloride	ND		0.010	0.0027	mg/L			05/06/25 15:16	10
Chlorobenzene	ND		0.010	0.0075	mg/L			05/06/25 15:16	10
Chloroform	ND		0.010	0.0034	mg/L			05/06/25 15:16	10
Tetrachloroethene	ND		0.010	0.0036	mg/L			05/06/25 15:16	10
Trichloroethene	ND		0.010	0.0046	mg/L			05/06/25 15:16	10
Vinyl chloride	ND		0.010	0.0090	mg/L			05/06/25 15:16	10

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*105*		*77 - 120*		*05/06/25 15:16*	*10*
4-Bromofluorobenzene (Surr)	*100*		*73 - 120*		*05/06/25 15:16*	*10*
Dibromofluoromethane (Surr)	*100*		*75 - 123*		*05/06/25 15:16*	*10*
Toluene-d8 (Surr)	*100*		*80 - 120*		*05/06/25 15:16*	*10*

Method: SW846 8270D - Semivolatile Organic Compounds (GC/MS) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dichlorobenzene	ND		0.040	0.0018	mg/L		05/06/25 09:51	05/07/25 16:06	1
2,4,5-Trichlorophenol	ND		0.020	0.0019	mg/L		05/06/25 09:51	05/07/25 16:06	1
2,4,6-Trichlorophenol	ND		0.020	0.0024	mg/L		05/06/25 09:51	05/07/25 16:06	1
2,4-Dinitrotoluene	ND		0.020	0.0017	mg/L		05/06/25 09:51	05/07/25 16:06	1
2-Methylphenol	ND		0.020	0.0016	mg/L		05/06/25 09:51	05/07/25 16:06	1
3-Methylphenol	ND		0.040	0.0016	mg/L		05/06/25 09:51	05/07/25 16:06	1
4-Methylphenol	ND		0.040	0.0014	mg/L		05/06/25 09:51	05/07/25 16:06	1
Hexachlorobenzene	ND		0.020	0.0020	mg/L		05/06/25 09:51	05/07/25 16:06	1
Hexachlorobutadiene	ND		0.020	0.0027	mg/L		05/06/25 09:51	05/07/25 16:06	1
Hexachloroethane	ND		0.020	0.0023	mg/L		05/06/25 09:51	05/07/25 16:06	1
Nitrobenzene	ND		0.020	0.0011	mg/L		05/06/25 09:51	05/07/25 16:06	1
Pentachlorophenol	ND		0.040	0.0088	mg/L		05/06/25 09:51	05/07/25 16:06	1
Pyridine	**0.0022**	**J B**	0.10	0.0016	mg/L		05/06/25 09:51	05/07/25 16:06	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol (Surr)	*91*		*25 - 144*	*05/06/25 09:51*	*05/07/25 16:06*	*1*
2-Fluorobiphenyl (Surr)	*80*		*53 - 126*	*05/06/25 09:51*	*05/07/25 16:06*	*1*
2-Fluorophenol (Surr)	*51*		*24 - 120*	*05/06/25 09:51*	*05/07/25 16:06*	*1*
Nitrobenzene-d5 (Surr)	*69*		*29 - 129*	*05/06/25 09:51*	*05/07/25 16:06*	*1*
Phenol-d5 (Surr)	*35*		*10 - 120*	*05/06/25 09:51*	*05/07/25 16:06*	*1*
p-Terphenyl-d14 (Surr)	*79*		*33 - 132*	*05/06/25 09:51*	*05/07/25 16:06*	*1*

Method: SW846 6010D - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		0.015	0.0056	mg/L		05/06/25 10:04	05/06/25 18:09	1
Barium	**0.91**	**J**	1.0	0.10	mg/L		05/06/25 10:04	05/06/25 18:09	1
Cadmium	**0.0014**	**J**	0.0020	0.00050	mg/L		05/06/25 10:04	05/06/25 18:09	1
Chromium	ND		0.020	0.010	mg/L		05/06/25 10:04	05/06/25 18:09	1
Lead	**0.38**		0.020	0.0030	mg/L		05/06/25 10:04	05/06/25 18:09	1
Selenium	ND		0.025	0.0087	mg/L		05/06/25 10:04	05/06/25 18:09	1
Silver	ND	^5-	0.0060	0.0017	mg/L		05/06/25 10:04	05/06/25 18:09	1

Client: Roux Environmental Engineering and Geology DPC
Job ID: 480-229103-1
Project/Site: BCP RI - 619 Exchange Street Site

Client Sample ID: WC-3
Lab Sample ID: 480-229103-3
Date Collected: 04/30/25 11:00
Matrix: Solid
Date Received: 04/30/25 16:56

Method: SW846 7470A - TCLP Mercury - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020	0.000042	mg/L		05/06/25 11:33	05/06/25 15:00	1

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Flashpoint (SW846 1010A)	>180		50.0	50.0	Degrees F			05/01/25 13:40	1
pH (SW846 9045D)	8.5	HF	0.1	0.1	SU			05/06/25 09:45	1
Temperature (SW846 9045D)	20.6	HF	0.001	0.001	Degrees C			05/06/25 09:45	1

Client: Roux Environmental Engineering and Geology DPC
Job ID: 480-229103-1
Project/Site: BCP RI - 619 Exchange Street Site

Client Sample ID: WC-3
Lab Sample ID: 480-229103-3
Date Collected: 04/30/25 11:00
Matrix: Solid
Date Received: 04/30/25 16:56
Percent Solids: 79.6

Method: SW846 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		0.24	0.047	mg/Kg	☼	05/01/25 07:04	05/02/25 10:22	1
PCB-1221	ND		0.24	0.047	mg/Kg	☼	05/01/25 07:04	05/02/25 10:22	1
PCB-1232	ND		0.24	0.047	mg/Kg	☼	05/01/25 07:04	05/02/25 10:22	1
PCB-1242	ND		0.24	0.047	mg/Kg	☼	05/01/25 07:04	05/02/25 10:22	1
PCB-1248	ND		0.24	0.047	mg/Kg	☼	05/01/25 07:04	05/02/25 10:22	1
PCB-1254	ND		0.24	0.11	mg/Kg	☼	05/01/25 07:04	05/02/25 10:22	1
PCB-1260	ND		0.24	0.11	mg/Kg	☼	05/01/25 07:04	05/02/25 10:22	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*127*		*65 - 174*	*05/01/25 07:04*	*05/02/25 10:22*	*1*
DCB Decachlorobiphenyl	*130*		*65 - 174*	*05/01/25 07:04*	*05/02/25 10:22*	*1*
Tetrachloro-m-xylene	*126*		*60 - 154*	*05/01/25 07:04*	*05/02/25 10:22*	*1*
Tetrachloro-m-xylene	*119*		*60 - 154*	*05/01/25 07:04*	*05/02/25 10:22*	*1*

Surrogate Summary

Client: Roux Environmental Engineering and Geology DPC
Job ID: 480-229103-1
Project/Site: BCP RI - 619 Exchange Street Site

Method: 8260C - TCLP Volatiles

Matrix: Solid — **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)			
		DCA	BFB	DBFM	TOL
Lab Sample ID	Client Sample ID	(77-120)	(73-120)	(75-123)	(80-120)
LCS 480-745299/6	Lab Control Sample	101	96	98	99
MB 480-745299/8	Method Blank	103	99	100	99

Surrogate Legend

DCA = 1,2-Dichloroethane-d4 (Surr)
BFB = 4-Bromofluorobenzene (Surr)
DBFM = Dibromofluoromethane (Surr)
TOL = Toluene-d8 (Surr)

Method: 8260C - TCLP Volatiles

Matrix: Solid — **Prep Type: TCLP**

		Percent Surrogate Recovery (Acceptance Limits)			
		DCA	BFB	DBFM	TOL
Lab Sample ID	Client Sample ID	(77-120)	(73-120)	(75-123)	(80-120)
480-229103-1	WC-1	103	100	102	100
480-229103-2	WC-2	105	99	102	99
480-229103-3	WC-3	105	100	100	100
LB 480-745177/1-A	Method Blank	105	98	104	99

Surrogate Legend

DCA = 1,2-Dichloroethane-d4 (Surr)
BFB = 4-Bromofluorobenzene (Surr)
DBFM = Dibromofluoromethane (Surr)
TOL = Toluene-d8 (Surr)

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Matrix: Solid — **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)					
		TBP	FBP	2FP	NBZ	PHL	TPHd14
Lab Sample ID	Client Sample ID	(25-144)	(53-126)	(24-120)	(29-129)	(10-120)	(33-132)
LCS 480-745306/2-A	Lab Control Sample	100	84	55	77	41	87
LCSD 480-745306/3-A	Lab Control Sample Dup	106	86	59	81	45	97
MB 480-745306/1-A	Method Blank	67	70	45	63	31	79

Surrogate Legend

TBP = 2,4,6-Tribromophenol (Surr)
FBP = 2-Fluorobiphenyl (Surr)
2FP = 2-Fluorophenol (Surr)
NBZ = Nitrobenzene-d5 (Surr)
PHL = Phenol-d5 (Surr)
TPHd14 = p-Terphenyl-d14 (Surr)

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Matrix: Solid — **Prep Type: TCLP**

		Percent Surrogate Recovery (Acceptance Limits)					
		TBP	FBP	2FP	NBZ	PHL	TPHd14
Lab Sample ID	Client Sample ID	(25-144)	(53-126)	(24-120)	(29-129)	(10-120)	(33-132)
480-229103-1	WC-1	91	83	54	73	36	78
480-229103-2	WC-2	90	76	51	65	35	72

Surrogate Summary

Client: Roux Environmental Engineering and Geology DPC
Job ID: 480-229103-1
Project/Site: BCP RI - 619 Exchange Street Site

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Matrix: Solid **Prep Type: TCLP**

		Percent Surrogate Recovery (Acceptance Limits)					
		TBP	FBP	2FP	NBZ	PHL	TPHd14
Lab Sample ID	Client Sample ID	(25-144)	(53-126)	(24-120)	(29-129)	(10-120)	(33-132)
480-229103-3	WC-3	91	80	51	69	35	79
LB 480-745176/1-D	Method Blank	91	81	49	67	33	69

Surrogate Legend

TBP = 2,4,6-Tribromophenol (Surr)
FBP = 2-Fluorobiphenyl (Surr)
2FP = 2-Fluorophenol (Surr)
NBZ = Nitrobenzene-d5 (Surr)
PHL = Phenol-d5 (Surr)
TPHd14 = p-Terphenyl-d14 (Surr)

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Matrix: Solid **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)			
		DCBP1	DCBP2	TCX1	TCX2
Lab Sample ID	Client Sample ID	(65-174)	(65-174)	(60-154)	(60-154)
480-229103-1	WC-1	104	108	116	107
480-229103-2	WC-2	119	118	115	109
480-229103-3	WC-3	127	130	126	119
LCS 480-744942/2-A	Lab Control Sample	169	167	156 S1+	150
MB 480-744942/1-A	Method Blank	136	139	133	123

Surrogate Legend

DCBP = DCB Decachlorobiphenyl
TCX = Tetrachloro-m-xylene

Method: 8260C - TCLP Volatiles

Lab Sample ID: MB 480-745299/8
Matrix: Solid
Analysis Batch: 745299

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	ND		0.0010	0.00029	mg/L			05/06/25 12:40	1
1,2-Dichloroethane	ND		0.0010	0.00021	mg/L			05/06/25 12:40	1
2-Butanone (MEK)	ND		0.0050	0.0013	mg/L			05/06/25 12:40	1
Benzene	ND		0.0010	0.00041	mg/L			05/06/25 12:40	1
Carbon tetrachloride	ND		0.0010	0.00027	mg/L			05/06/25 12:40	1
Chlorobenzene	ND		0.0010	0.00075	mg/L			05/06/25 12:40	1
Chloroform	ND		0.0010	0.00034	mg/L			05/06/25 12:40	1
Tetrachloroethene	ND		0.0010	0.00036	mg/L			05/06/25 12:40	1
Trichloroethene	ND		0.0010	0.00046	mg/L			05/06/25 12:40	1
Vinyl chloride	ND		0.0010	0.00090	mg/L			05/06/25 12:40	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*103*		*77 - 120*		*05/06/25 12:40*	*1*
4-Bromofluorobenzene (Surr)	*99*		*73 - 120*		*05/06/25 12:40*	*1*
Dibromofluoromethane (Surr)	*100*		*75 - 123*		*05/06/25 12:40*	*1*
Toluene-d8 (Surr)	*99*		*80 - 120*		*05/06/25 12:40*	*1*

Lab Sample ID: LCS 480-745299/6
Matrix: Solid
Analysis Batch: 745299

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
1,1-Dichloroethene			0.0250	0.0273		mg/L		109	66 - 127		
1,2-Dichloroethane			0.0250	0.0280		mg/L		112	75 - 120		
2-Butanone (MEK)			0.125	0.172		mg/L		137	57 - 140		
Benzene			0.0250	0.0262		mg/L		105	71 - 124		
Carbon tetrachloride			0.0250	0.0256		mg/L		102	72 - 134		
Chlorobenzene			0.0250	0.0274		mg/L		110	80 - 120		
Chloroform			0.0250	0.0288		mg/L		115	73 - 127		
Tetrachloroethene			0.0250	0.0274		mg/L		109	74 - 122		
Trichloroethene			0.0250	0.0271		mg/L		109	74 - 123		
Vinyl chloride			0.0250	0.0262		mg/L		105	65 - 133		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*101*		*77 - 120*
4-Bromofluorobenzene (Surr)	*96*		*73 - 120*
Dibromofluoromethane (Surr)	*98*		*75 - 123*
Toluene-d8 (Surr)	*99*		*80 - 120*

Lab Sample ID: LB 480-745177/1-A
Matrix: Solid
Analysis Batch: 745299

Client Sample ID: Method Blank
Prep Type: TCLP

Analyte	LB Result	LB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	ND		0.010	0.0029	mg/L			05/06/25 13:47	10
1,2-Dichloroethane	ND		0.010	0.0021	mg/L			05/06/25 13:47	10
2-Butanone (MEK)	ND		0.050	0.013	mg/L			05/06/25 13:47	10
Benzene	ND		0.010	0.0041	mg/L			05/06/25 13:47	10

Method: 8260C - TCLP Volatiles (Continued)

Lab Sample ID: LB 480-745177/1-A
Matrix: Solid
Analysis Batch: 745299

Client Sample ID: Method Blank
Prep Type: TCLP

Analyte	LB Result	LB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Carbon tetrachloride	ND		0.010	0.0027	mg/L			05/06/25 13:47	10
Chlorobenzene	ND		0.010	0.0075	mg/L			05/06/25 13:47	10
Chloroform	ND		0.010	0.0034	mg/L			05/06/25 13:47	10
Tetrachloroethene	ND		0.010	0.0036	mg/L			05/06/25 13:47	10
Trichloroethene	ND		0.010	0.0046	mg/L			05/06/25 13:47	10
Vinyl chloride	ND		0.010	0.0090	mg/L			05/06/25 13:47	10

Surrogate	*LB %Recovery*	*LB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*105*		*77 - 120*		*05/06/25 13:47*	*10*
4-Bromofluorobenzene (Surr)	*98*		*73 - 120*		*05/06/25 13:47*	*10*
Dibromofluoromethane (Surr)	*104*		*75 - 123*		*05/06/25 13:47*	*10*
Toluene-d8 (Surr)	*99*		*80 - 120*		*05/06/25 13:47*	*10*

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Lab Sample ID: MB 480-745306/1-A
Matrix: Solid
Analysis Batch: 745359

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 745306

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dichlorobenzene	ND		0.040	0.0018	mg/L		05/06/25 09:51	05/06/25 17:34	1
2,4,5-Trichlorophenol	ND		0.020	0.0019	mg/L		05/06/25 09:51	05/06/25 17:34	1
2,4,6-Trichlorophenol	ND		0.020	0.0024	mg/L		05/06/25 09:51	05/06/25 17:34	1
2,4-Dinitrotoluene	ND		0.020	0.0017	mg/L		05/06/25 09:51	05/06/25 17:34	1
2-Methylphenol	ND		0.020	0.0016	mg/L		05/06/25 09:51	05/06/25 17:34	1
3-Methylphenol	ND		0.040	0.0016	mg/L		05/06/25 09:51	05/06/25 17:34	1
4-Methylphenol	ND		0.040	0.0014	mg/L		05/06/25 09:51	05/06/25 17:34	1
Hexachlorobenzene	ND		0.020	0.0020	mg/L		05/06/25 09:51	05/06/25 17:34	1
Hexachlorobutadiene	ND		0.020	0.0027	mg/L		05/06/25 09:51	05/06/25 17:34	1
Hexachloroethane	ND		0.020	0.0023	mg/L		05/06/25 09:51	05/06/25 17:34	1
Nitrobenzene	ND		0.020	0.0011	mg/L		05/06/25 09:51	05/06/25 17:34	1
Pentachlorophenol	ND		0.040	0.0088	mg/L		05/06/25 09:51	05/06/25 17:34	1
Pyridine	ND		0.10	0.0016	mg/L		05/06/25 09:51	05/06/25 17:34	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol (Surr)	*67*		*25 - 144*	*05/06/25 09:51*	*05/06/25 17:34*	*1*
2-Fluorobiphenyl (Surr)	*70*		*53 - 126*	*05/06/25 09:51*	*05/06/25 17:34*	*1*
2-Fluorophenol (Surr)	*45*		*24 - 120*	*05/06/25 09:51*	*05/06/25 17:34*	*1*
Nitrobenzene-d5 (Surr)	*63*		*29 - 129*	*05/06/25 09:51*	*05/06/25 17:34*	*1*
Phenol-d5 (Surr)	*31*		*10 - 120*	*05/06/25 09:51*	*05/06/25 17:34*	*1*
p-Terphenyl-d14 (Surr)	*79*		*33 - 132*	*05/06/25 09:51*	*05/06/25 17:34*	*1*

Lab Sample ID: LCS 480-745306/2-A
Matrix: Solid
Analysis Batch: 745359

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 745306

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
1,4-Dichlorobenzene	0.0320	0.0232	J	mg/L		73	42 - 120

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 480-745306/2-A
Matrix: Solid
Analysis Batch: 745359

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 745306

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
2,4,5-Trichlorophenol			0.0320	0.0291		mg/L		91	65 - 126		
2,4,6-Trichlorophenol			0.0320	0.0272		mg/L		85	64 - 120		
2,4-Dinitrotoluene			0.0320	0.0317		mg/L		99	69 - 120		
2-Methylphenol			0.0320	0.0238		mg/L		74	39 - 120		
3-Methylphenol			0.0320	0.0220	J	mg/L		69	39 - 120		
4-Methylphenol			0.0320	0.0220	J	mg/L		69	29 - 131		
Hexachlorobenzene			0.0320	0.0295		mg/L		92	61 - 120		
Hexachlorobutadiene			0.0320	0.0244		mg/L		76	35 - 120		
Hexachloroethane			0.0320	0.0204		mg/L		64	33 - 120		
Nitrobenzene			0.0320	0.0246		mg/L		77	53 - 123		
Pentachlorophenol			0.0640	0.0605		mg/L		94	10 - 136		
Pyridine			0.0640	0.0417	J	mg/L		65	10 - 120		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2,4,6-Tribromophenol (Surr)	*100*		*25 - 144*
2-Fluorobiphenyl (Surr)	*84*		*53 - 126*
2-Fluorophenol (Surr)	*55*		*24 - 120*
Nitrobenzene-d5 (Surr)	*77*		*29 - 129*
Phenol-d5 (Surr)	*41*		*10 - 120*
p-Terphenyl-d14 (Surr)	*87*		*33 - 132*

Lab Sample ID: LCSD 480-745306/3-A
Matrix: Solid
Analysis Batch: 745359

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 745306

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
1,4-Dichlorobenzene			0.0320	0.0251	J	mg/L		79	42 - 120	8	36
2,4,5-Trichlorophenol			0.0320	0.0306		mg/L		96	65 - 126	5	18
2,4,6-Trichlorophenol			0.0320	0.0290		mg/L		91	64 - 120	6	19
2,4-Dinitrotoluene			0.0320	0.0333		mg/L		104	69 - 120	5	20
2-Methylphenol			0.0320	0.0258		mg/L		81	39 - 120	8	27
3-Methylphenol			0.0320	0.0240	J	mg/L		75	39 - 120	9	30
4-Methylphenol			0.0320	0.0240	J	mg/L		75	29 - 131	9	24
Hexachlorobenzene			0.0320	0.0323		mg/L		101	61 - 120	9	15
Hexachlorobutadiene			0.0320	0.0256		mg/L		80	35 - 120	5	44
Hexachloroethane			0.0320	0.0222		mg/L		69	33 - 120	8	46
Nitrobenzene			0.0320	0.0256		mg/L		80	53 - 123	4	24
Pentachlorophenol			0.0640	0.0682		mg/L		107	10 - 136	12	37
Pyridine			0.0640	0.0453	J	mg/L		71	10 - 120	8	49

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
2,4,6-Tribromophenol (Surr)	*106*		*25 - 144*
2-Fluorobiphenyl (Surr)	*86*		*53 - 126*
2-Fluorophenol (Surr)	*59*		*24 - 120*
Nitrobenzene-d5 (Surr)	*81*		*29 - 129*
Phenol-d5 (Surr)	*45*		*10 - 120*
p-Terphenyl-d14 (Surr)	*97*		*33 - 132*

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LB 480-745176/1-D
Matrix: Solid
Analysis Batch: 745395

Client Sample ID: Method Blank
Prep Type: TCLP
Prep Batch: 745306

Analyte	LB Result	LB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dichlorobenzene	ND		0.040	0.0018	mg/L		05/06/25 09:51	05/07/25 14:14	1
2,4,5-Trichlorophenol	ND		0.020	0.0019	mg/L		05/06/25 09:51	05/07/25 14:14	1
2,4,6-Trichlorophenol	ND		0.020	0.0024	mg/L		05/06/25 09:51	05/07/25 14:14	1
2,4-Dinitrotoluene	ND		0.020	0.0017	mg/L		05/06/25 09:51	05/07/25 14:14	1
2-Methylphenol	ND		0.020	0.0016	mg/L		05/06/25 09:51	05/07/25 14:14	1
3-Methylphenol	ND		0.040	0.0016	mg/L		05/06/25 09:51	05/07/25 14:14	1
4-Methylphenol	ND		0.040	0.0014	mg/L		05/06/25 09:51	05/07/25 14:14	1
Hexachlorobenzene	ND		0.020	0.0020	mg/L		05/06/25 09:51	05/07/25 14:14	1
Hexachlorobutadiene	ND		0.020	0.0027	mg/L		05/06/25 09:51	05/07/25 14:14	1
Hexachloroethane	ND		0.020	0.0023	mg/L		05/06/25 09:51	05/07/25 14:14	1
Nitrobenzene	ND		0.020	0.0011	mg/L		05/06/25 09:51	05/07/25 14:14	1
Pentachlorophenol	ND		0.040	0.0088	mg/L		05/06/25 09:51	05/07/25 14:14	1
Pyridine	0.00208	J	0.10	0.0016	mg/L		05/06/25 09:51	05/07/25 14:14	1

Surrogate	*LB %Recovery*	*LB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol (Surr)	*91*		*25 - 144*	*05/06/25 09:51*	*05/07/25 14:14*	*1*
2-Fluorobiphenyl (Surr)	*81*		*53 - 126*	*05/06/25 09:51*	*05/07/25 14:14*	*1*
2-Fluorophenol (Surr)	*49*		*24 - 120*	*05/06/25 09:51*	*05/07/25 14:14*	*1*
Nitrobenzene-d5 (Surr)	*67*		*29 - 129*	*05/06/25 09:51*	*05/07/25 14:14*	*1*
Phenol-d5 (Surr)	*33*		*10 - 120*	*05/06/25 09:51*	*05/07/25 14:14*	*1*
p-Terphenyl-d14 (Surr)	*69*		*33 - 132*	*05/06/25 09:51*	*05/07/25 14:14*	*1*

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Lab Sample ID: MB 480-744942/1-A
Matrix: Solid
Analysis Batch: 745005

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 744942

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		0.25	0.049	mg/Kg		05/01/25 07:04	05/01/25 15:07	1
PCB-1221	ND		0.25	0.049	mg/Kg		05/01/25 07:04	05/01/25 15:07	1
PCB-1232	ND		0.25	0.049	mg/Kg		05/01/25 07:04	05/01/25 15:07	1
PCB-1242	ND		0.25	0.049	mg/Kg		05/01/25 07:04	05/01/25 15:07	1
PCB-1248	ND		0.25	0.049	mg/Kg		05/01/25 07:04	05/01/25 15:07	1
PCB-1254	ND		0.25	0.12	mg/Kg		05/01/25 07:04	05/01/25 15:07	1
PCB-1260	ND		0.25	0.12	mg/Kg		05/01/25 07:04	05/01/25 15:07	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*136*		*65 - 174*	*05/01/25 07:04*	*05/01/25 15:07*	*1*
DCB Decachlorobiphenyl	*139*		*65 - 174*	*05/01/25 07:04*	*05/01/25 15:07*	*1*
Tetrachloro-m-xylene	*133*		*60 - 154*	*05/01/25 07:04*	*05/01/25 15:07*	*1*
Tetrachloro-m-xylene	*123*		*60 - 154*	*05/01/25 07:04*	*05/01/25 15:07*	*1*

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography (Continued)

Lab Sample ID: LCS 480-744942/2-A
Matrix: Solid
Analysis Batch: 745005

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 744942

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
PCB-1016			2.50	3.42		mg/Kg		137	51 - 185		
PCB-1260			2.50	3.51		mg/Kg		141	61 - 184		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
DCB Decachlorobiphenyl	*169*		*65 - 174*
DCB Decachlorobiphenyl	*167*		*65 - 174*
Tetrachloro-m-xylene	*156*	*S1+*	*60 - 154*
Tetrachloro-m-xylene	*150*		*60 - 154*

Method: 6010D - Metals (ICP)

Lab Sample ID: MB 480-745301/2-A
Matrix: Solid
Analysis Batch: 745388

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 745301

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		0.015	0.0056	mg/L		05/06/25 10:04	05/06/25 17:46	1
Barium	ND		1.0	0.10	mg/L		05/06/25 10:04	05/06/25 17:46	1
Cadmium	ND		0.0020	0.00050	mg/L		05/06/25 10:04	05/06/25 17:46	1
Chromium	ND		0.020	0.010	mg/L		05/06/25 10:04	05/06/25 17:46	1
Lead	ND		0.020	0.0030	mg/L		05/06/25 10:04	05/06/25 17:46	1
Selenium	ND		0.025	0.0087	mg/L		05/06/25 10:04	05/06/25 17:46	1
Silver	ND	^5-	0.0060	0.0017	mg/L		05/06/25 10:04	05/06/25 17:46	1

Lab Sample ID: LCS 480-745301/3-A
Matrix: Solid
Analysis Batch: 745388

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 745301

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Arsenic			1.00	0.962		mg/L		96	80 - 120		
Barium			1.00	1.06		mg/L		106	80 - 120		
Cadmium			0.500	0.486		mg/L		97	80 - 120		
Chromium			0.500	0.494		mg/L		99	80 - 120		
Lead			0.500	0.488		mg/L		98	80 - 120		
Selenium			1.00	0.935		mg/L		94	80 - 120		
Silver			0.0500	0.0512	^5-	mg/L		102	80 - 120		

Lab Sample ID: LB 480-745176/1-B
Matrix: Solid
Analysis Batch: 745388

Client Sample ID: Method Blank
Prep Type: TCLP
Prep Batch: 745301

Analyte	LB Result	LB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		0.015	0.0056	mg/L		05/06/25 10:04	05/06/25 17:44	1
Barium	ND		1.0	0.10	mg/L		05/06/25 10:04	05/06/25 17:44	1
Cadmium	ND		0.0020	0.00050	mg/L		05/06/25 10:04	05/06/25 17:44	1
Chromium	ND		0.020	0.010	mg/L		05/06/25 10:04	05/06/25 17:44	1
Lead	ND		0.020	0.0030	mg/L		05/06/25 10:04	05/06/25 17:44	1
Selenium	ND		0.025	0.0087	mg/L		05/06/25 10:04	05/06/25 17:44	1
Silver	ND		0.0060	0.0017	mg/L		05/06/25 10:04	05/06/25 17:44	1

Method: 6010D - Metals (ICP)

Lab Sample ID: 480-229103-1 MS
Matrix: Solid
Analysis Batch: 745388

Client Sample ID: WC-1
Prep Type: TCLP
Prep Batch: 745301

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Arsenic	ND		1.00	1.02		mg/L		102	75 - 125
Barium	0.72	J	1.00	1.78		mg/L		106	75 - 125
Cadmium	ND		0.500	0.516		mg/L		103	75 - 125
Chromium	ND		0.500	0.490		mg/L		98	75 - 125
Lead	0.0044	J	0.500	0.501		mg/L		99	75 - 125
Selenium	ND		1.00	0.970		mg/L		97	75 - 125
Silver	ND	^5-	0.0500	0.0538	^5-	mg/L		108	75 - 125

Lab Sample ID: 480-229103-1 MSD
Matrix: Solid
Analysis Batch: 745388

Client Sample ID: WC-1
Prep Type: TCLP
Prep Batch: 745301

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Arsenic	ND		1.00	0.991		mg/L		99	75 - 125	3	20
Barium	0.72	J	1.00	1.76		mg/L		104	75 - 125	1	20
Cadmium	ND		0.500	0.504		mg/L		101	75 - 125	2	20
Chromium	ND		0.500	0.480		mg/L		96	75 - 125	2	20
Lead	0.0044	J	0.500	0.492		mg/L		97	75 - 125	2	20
Selenium	ND		1.00	0.950		mg/L		95	75 - 125	2	20
Silver	ND	^5-	0.0500	0.0528	^5-	mg/L		106	75 - 125	2	20

Method: 7470A - TCLP Mercury

Lab Sample ID: MB 480-745304/2-A
Matrix: Solid
Analysis Batch: 745378

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 745304

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020	0.000042	mg/L		05/06/25 11:33	05/06/25 14:47	1

Lab Sample ID: LCS 480-745304/3-A
Matrix: Solid
Analysis Batch: 745378

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 745304

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Mercury	0.00670	0.00549		mg/L		82	80 - 120

Lab Sample ID: LB 480-745176/1-C
Matrix: Solid
Analysis Batch: 745378

Client Sample ID: Method Blank
Prep Type: TCLP
Prep Batch: 745304

Analyte	LB Result	LB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020	0.000042	mg/L		05/06/25 11:33	05/06/25 14:46	1

Lab Sample ID: 480-229103-1 MS
Matrix: Solid
Analysis Batch: 745378

Client Sample ID: WC-1
Prep Type: TCLP
Prep Batch: 745304

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Mercury	ND	F1	0.00670	0.00532	F1	mg/L		79	80 - 120

Method: 7470A - TCLP Mercury

Lab Sample ID: 480-229103-1 MSD
Matrix: Solid
Analysis Batch: 745378

Client Sample ID: WC-1
Prep Type: TCLP
Prep Batch: 745304

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Mercury	ND	F1	0.00670	0.00542		mg/L		81	80 - 120	2	20

Method: 1010A - Ignitability, Pensky-Martens Closed-Cup Method

Lab Sample ID: LCS 480-744968/1
Matrix: Solid
Analysis Batch: 744968

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Flashpoint			81.0	82.40		Degrees F		102	97.5 - 102.5		

Method: 9045D - pH

Lab Sample ID: LCS 480-745316/1
Matrix: Solid
Analysis Batch: 745316

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
pH			7.00	7.1		SU		101	99 - 101		

Lab Sample ID: 480-229103-1 DU
Matrix: Solid
Analysis Batch: 745316

Client Sample ID: WC-1
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
pH	7.8	HF		7.8		SU				0.6	5
Temperature	20.0	HF		20.1		Degrees C				0.5	10

GC/MS VOA

Leach Batch: 745177

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-229103-1	WC-1	TCLP	Solid	1311	
480-229103-2	WC-2	TCLP	Solid	1311	
480-229103-3	WC-3	TCLP	Solid	1311	
LB 480-745177/1-A	Method Blank	TCLP	Solid	1311	

Analysis Batch: 745299

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-229103-1	WC-1	TCLP	Solid	8260C	745177
480-229103-2	WC-2	TCLP	Solid	8260C	745177
480-229103-3	WC-3	TCLP	Solid	8260C	745177
LB 480-745177/1-A	Method Blank	TCLP	Solid	8260C	745177
MB 480-745299/8	Method Blank	Total/NA	Solid	8260C	
LCS 480-745299/6	Lab Control Sample	Total/NA	Solid	8260C	

GC/MS Semi VOA

Leach Batch: 745176

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-229103-1	WC-1	TCLP	Solid	1311	
480-229103-2	WC-2	TCLP	Solid	1311	
480-229103-3	WC-3	TCLP	Solid	1311	
LB 480-745176/1-D	Method Blank	TCLP	Solid	1311	

Prep Batch: 745306

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-229103-1	WC-1	TCLP	Solid	3510C	745176
480-229103-2	WC-2	TCLP	Solid	3510C	745176
480-229103-3	WC-3	TCLP	Solid	3510C	745176
LB 480-745176/1-D	Method Blank	TCLP	Solid	3510C	745176
MB 480-745306/1-A	Method Blank	Total/NA	Solid	3510C	
LCS 480-745306/2-A	Lab Control Sample	Total/NA	Solid	3510C	
LCSD 480-745306/3-A	Lab Control Sample Dup	Total/NA	Solid	3510C	

Analysis Batch: 745359

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 480-745306/1-A	Method Blank	Total/NA	Solid	8270D	745306
LCS 480-745306/2-A	Lab Control Sample	Total/NA	Solid	8270D	745306
LCSD 480-745306/3-A	Lab Control Sample Dup	Total/NA	Solid	8270D	745306

Analysis Batch: 745395

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-229103-1	WC-1	TCLP	Solid	8270D	745306
480-229103-2	WC-2	TCLP	Solid	8270D	745306
480-229103-3	WC-3	TCLP	Solid	8270D	745306
LB 480-745176/1-D	Method Blank	TCLP	Solid	8270D	745306

GC Semi VOA

Prep Batch: 744942

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-229103-1	WC-1	Total/NA	Solid	3550C	
480-229103-2	WC-2	Total/NA	Solid	3550C	

GC Semi VOA (Continued)

Prep Batch: 744942 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-229103-3	WC-3	Total/NA	Solid	3550C	
MB 480-744942/1-A	Method Blank	Total/NA	Solid	3550C	
LCS 480-744942/2-A	Lab Control Sample	Total/NA	Solid	3550C	

Analysis Batch: 745005

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-229103-1	WC-1	Total/NA	Solid	8082A	744942
MB 480-744942/1-A	Method Blank	Total/NA	Solid	8082A	744942
LCS 480-744942/2-A	Lab Control Sample	Total/NA	Solid	8082A	744942

Analysis Batch: 745053

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-229103-2	WC-2	Total/NA	Solid	8082A	744942
480-229103-3	WC-3	Total/NA	Solid	8082A	744942

Metals

Leach Batch: 745176

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-229103-1	WC-1	TCLP	Solid	1311	
480-229103-2	WC-2	TCLP	Solid	1311	
480-229103-3	WC-3	TCLP	Solid	1311	
LB 480-745176/1-B	Method Blank	TCLP	Solid	1311	
LB 480-745176/1-C	Method Blank	TCLP	Solid	1311	
480-229103-1 MS	WC-1	TCLP	Solid	1311	
480-229103-1 MSD	WC-1	TCLP	Solid	1311	

Prep Batch: 745301

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-229103-1	WC-1	TCLP	Solid	3010A	745176
480-229103-2	WC-2	TCLP	Solid	3010A	745176
480-229103-3	WC-3	TCLP	Solid	3010A	745176
LB 480-745176/1-B	Method Blank	TCLP	Solid	3010A	745176
MB 480-745301/2-A	Method Blank	Total/NA	Solid	3010A	
LCS 480-745301/3-A	Lab Control Sample	Total/NA	Solid	3010A	
480-229103-1 MS	WC-1	TCLP	Solid	3010A	745176
480-229103-1 MSD	WC-1	TCLP	Solid	3010A	745176

Prep Batch: 745304

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-229103-1	WC-1	TCLP	Solid	7470A	745176
480-229103-2	WC-2	TCLP	Solid	7470A	745176
480-229103-3	WC-3	TCLP	Solid	7470A	745176
LB 480-745176/1-C	Method Blank	TCLP	Solid	7470A	745176
MB 480-745304/2-A	Method Blank	Total/NA	Solid	7470A	
LCS 480-745304/3-A	Lab Control Sample	Total/NA	Solid	7470A	
480-229103-1 MS	WC-1	TCLP	Solid	7470A	745176
480-229103-1 MSD	WC-1	TCLP	Solid	7470A	745176

Metals

Analysis Batch: 745378

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-229103-1	WC-1	TCLP	Solid	7470A	745304
480-229103-2	WC-2	TCLP	Solid	7470A	745304
480-229103-3	WC-3	TCLP	Solid	7470A	745304
LB 480-745176/1-C	Method Blank	TCLP	Solid	7470A	745304
MB 480-745304/2-A	Method Blank	Total/NA	Solid	7470A	745304
LCS 480-745304/3-A	Lab Control Sample	Total/NA	Solid	7470A	745304
480-229103-1 MS	WC-1	TCLP	Solid	7470A	745304
480-229103-1 MSD	WC-1	TCLP	Solid	7470A	745304

Analysis Batch: 745388

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-229103-1	WC-1	TCLP	Solid	6010D	745301
480-229103-2	WC-2	TCLP	Solid	6010D	745301
480-229103-3	WC-3	TCLP	Solid	6010D	745301
LB 480-745176/1-B	Method Blank	TCLP	Solid	6010D	745301
MB 480-745301/2-A	Method Blank	Total/NA	Solid	6010D	745301
LCS 480-745301/3-A	Lab Control Sample	Total/NA	Solid	6010D	745301
480-229103-1 MS	WC-1	TCLP	Solid	6010D	745301
480-229103-1 MSD	WC-1	TCLP	Solid	6010D	745301

General Chemistry

Analysis Batch: 744968

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-229103-1	WC-1	Total/NA	Solid	1010A	
480-229103-2	WC-2	Total/NA	Solid	1010A	
480-229103-3	WC-3	Total/NA	Solid	1010A	
LCS 480-744968/1	Lab Control Sample	Total/NA	Solid	1010A	

Analysis Batch: 745034

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-229103-1	WC-1	Total/NA	Solid	Moisture	
480-229103-2	WC-2	Total/NA	Solid	Moisture	
480-229103-3	WC-3	Total/NA	Solid	Moisture	

Analysis Batch: 745316

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-229103-1	WC-1	Total/NA	Solid	9045D	
480-229103-2	WC-2	Total/NA	Solid	9045D	
480-229103-3	WC-3	Total/NA	Solid	9045D	
LCS 480-745316/1	Lab Control Sample	Total/NA	Solid	9045D	
480-229103-1 DU	WC-1	Total/NA	Solid	9045D	

Lab Chronicle

Client: Roux Environmental Engineering and Geology DPC
Job ID: 480-229103-1
Project/Site: BCP RI - 619 Exchange Street Site

Client Sample ID: WC-1
Lab Sample ID: 480-229103-1
Date Collected: 04/30/25 13:00
Matrix: Solid
Date Received: 04/30/25 16:56

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
TCLP	Leach	1311			745177	SMP	EET BUF	05/05/25 07:02 - 05/06/25 09:56 [1]
TCLP	Analysis	8260C		10	745299	AXK	EET BUF	05/06/25 14:31
TCLP	Leach	1311			745176	SMP	EET BUF	05/05/25 06:57 - 05/06/25 08:58 [1]
TCLP	Prep	3510C			745306	JMP	EET BUF	05/06/25 09:51
TCLP	Analysis	8270D		1	745395	JMM	EET BUF	05/07/25 15:10
TCLP	Leach	1311			745176	SMP	EET BUF	05/05/25 06:57 - 05/06/25 08:58 [1]
TCLP	Prep	3010A			745301	EMO	EET BUF	05/06/25 10:04
TCLP	Analysis	6010D		1	745388	BMB	EET BUF	05/06/25 17:52
TCLP	Leach	1311			745176	SMP	EET BUF	05/05/25 06:57 - 05/06/25 08:58 [1]
TCLP	Prep	7470A			745304	ESB	EET BUF	05/06/25 11:33
TCLP	Analysis	7470A		1	745378	ESB	EET BUF	05/06/25 14:53
Total/NA	Analysis	1010A		1	744968	KM	EET BUF	05/01/25 12:31
Total/NA	Analysis	9045D		1	745316	CG	EET BUF	05/06/25 09:45
Total/NA	Analysis	Moisture		1	745034	JMM	EET BUF	05/01/25 15:43

Client Sample ID: WC-1
Lab Sample ID: 480-229103-1
Date Collected: 04/30/25 13:00
Matrix: Solid
Date Received: 04/30/25 16:56
Percent Solids: 82.0

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	3550C			744942	SMP	EET BUF	05/01/25 07:04
Total/NA	Analysis	8082A		1	745005	W1T	EET BUF	05/01/25 19:26

Client Sample ID: WC-2
Lab Sample ID: 480-229103-2
Date Collected: 04/29/25 14:00
Matrix: Solid
Date Received: 04/30/25 16:56

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
TCLP	Leach	1311			745177	SMP	EET BUF	05/05/25 07:02 - 05/06/25 09:56 [1]
TCLP	Analysis	8260C		10	745299	AXK	EET BUF	05/06/25 14:54
TCLP	Leach	1311			745176	SMP	EET BUF	05/05/25 06:57 - 05/06/25 08:58 [1]
TCLP	Prep	3510C			745306	JMP	EET BUF	05/06/25 09:51
TCLP	Analysis	8270D		1	745395	JMM	EET BUF	05/07/25 15:38
TCLP	Leach	1311			745176	SMP	EET BUF	05/05/25 06:57 - 05/06/25 08:58 [1]
TCLP	Prep	3010A			745301	EMO	EET BUF	05/06/25 10:04
TCLP	Analysis	6010D		1	745388	BMB	EET BUF	05/06/25 18:07
TCLP	Leach	1311			745176	SMP	EET BUF	05/05/25 06:57 - 05/06/25 08:58 [1]
TCLP	Prep	7470A			745304	ESB	EET BUF	05/06/25 11:33
TCLP	Analysis	7470A		1	745378	ESB	EET BUF	05/06/25 14:59
Total/NA	Analysis	1010A		1	744968	KM	EET BUF	05/01/25 13:39
Total/NA	Analysis	9045D		1	745316	CG	EET BUF	05/06/25 09:45
Total/NA	Analysis	Moisture		1	745034	JMM	EET BUF	05/01/25 15:43

Lab Chronicle

Client: Roux Environmental Engineering and Geology DPC
Job ID: 480-229103-1
Project/Site: BCP RI - 619 Exchange Street Site

Client Sample ID: WC-2
Lab Sample ID: 480-229103-2
Date Collected: 04/29/25 14:00
Matrix: Solid
Date Received: 04/30/25 16:56
Percent Solids: 86.2

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	3550C			744942	SMP	EET BUF	05/01/25 07:04
Total/NA	Analysis	8082A		1	745053	H9RU	EET BUF	05/02/25 10:04

Client Sample ID: WC-3
Lab Sample ID: 480-229103-3
Date Collected: 04/30/25 11:00
Matrix: Solid
Date Received: 04/30/25 16:56

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
TCLP	Leach	1311			745177	SMP	EET BUF	05/05/25 07:02 - 05/06/25 09:56 [1]
TCLP	Analysis	8260C		10	745299	AXK	EET BUF	05/06/25 15:16
TCLP	Leach	1311			745176	SMP	EET BUF	05/05/25 06:57 - 05/06/25 08:58 [1]
TCLP	Prep	3510C			745306	JMP	EET BUF	05/06/25 09:51
TCLP	Analysis	8270D		1	745395	JMM	EET BUF	05/07/25 16:06
TCLP	Leach	1311			745176	SMP	EET BUF	05/05/25 06:57 - 05/06/25 08:58 [1]
TCLP	Prep	3010A			745301	EMO	EET BUF	05/06/25 10:04
TCLP	Analysis	6010D		1	745388	BMB	EET BUF	05/06/25 18:09
TCLP	Leach	1311			745176	SMP	EET BUF	05/05/25 06:57 - 05/06/25 08:58 [1]
TCLP	Prep	7470A			745304	ESB	EET BUF	05/06/25 11:33
TCLP	Analysis	7470A		1	745378	ESB	EET BUF	05/06/25 15:00
Total/NA	Analysis	1010A		1	744968	KM	EET BUF	05/01/25 13:40
Total/NA	Analysis	9045D		1	745316	CG	EET BUF	05/06/25 09:45
Total/NA	Analysis	Moisture		1	745034	JMM	EET BUF	05/01/25 15:43

Client Sample ID: WC-3
Lab Sample ID: 480-229103-3
Date Collected: 04/30/25 11:00
Matrix: Solid
Date Received: 04/30/25 16:56
Percent Solids: 79.6

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	3550C			744942	SMP	EET BUF	05/01/25 07:04
Total/NA	Analysis	8082A		1	745053	H9RU	EET BUF	05/02/25 10:22

[1] This procedure uses a method stipulated length of time for the process. Both start and end times are displayed.

Laboratory References:

EET BUF = Eurofins Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600

Accreditation/Certification Summary

Client: Roux Environmental Engineering and Geology DPC
Job ID: 480-229103-1
Project/Site: BCP RI - 619 Exchange Street Site

Laboratory: Eurofins Buffalo

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	Identification Number	Expiration Date
New York	NELAP	10026	03-31-26

The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

Analysis Method	Prep Method	Matrix	Analyte
7470A	7470A	Solid	Mercury
9045D		Solid	Temperature
Moisture		Solid	Percent Moisture
Moisture		Solid	Percent Solids

Method Summary

Client: Roux Environmental Engineering and Geology DPC
Job ID: 480-229103-1
Project/Site: BCP RI - 619 Exchange Street Site

Method	Method Description	Protocol	Laboratory
8260C	TCLP Volatiles	SW846	EET BUF
8270D	Semivolatile Organic Compounds (GC/MS)	SW846	EET BUF
8082A	Polychlorinated Biphenyls (PCBs) by Gas Chromatography	SW846	EET BUF
6010D	Metals (ICP)	SW846	EET BUF
7470A	TCLP Mercury	SW846	EET BUF
1010A	Ignitability, Pensky-Martens Closed-Cup Method	SW846	EET BUF
9045D	pH	SW846	EET BUF
Moisture	Percent Moisture	EPA	EET BUF
1311	TCLP Extraction	SW846	EET BUF
3010A	Preparation, Total Metals	SW846	EET BUF
3510C	Liquid-Liquid Extraction (Separatory Funnel)	SW846	EET BUF
3550C	Ultrasonic Extraction	SW846	EET BUF
5030C	Purge and Trap	SW846	EET BUF
7470A	Preparation, Mercury	SW846	EET BUF

Protocol References:

EPA = US Environmental Protection Agency

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

EET BUF = Eurofins Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600

Sample Summary

Client: Roux Environmental Engineering and Geology DPC
Job ID: 480-229103-1
Project/Site: BCP RI - 619 Exchange Street Site

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
480-229103-1	WC-1	Solid	04/30/25 13:00	04/30/25 16:56
480-229103-2	WC-2	Solid	04/29/25 14:00	04/30/25 16:56
480-229103-3	WC-3	Solid	04/30/25 11:00	04/30/25 16:56

Amherst, NY 14228-2298
Phone: 716-691-2600 Fax: 716-691-7991

Chain of Custody Record

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Client Information	Sampler: Alice Sabi	Lab PM: Fischer, Brian J	Carrier Tracking No(s):	COC No: 480-204353-41692.1
Client Contact: Bryan Mayback	Phone: 716-713-3437	E-Mail: Brian.Fischer@et.eurofinsus.com	State of Origin:	Page: Page 1 of 1
Company: Roux Environmental Engineering and Geology DPC	PWSID:			Job #:
Address: 2558 Hamburg Turnpike Suite 300	Due Date Requested:			
City: Lackawanna	TAT Requested (days):			
State, Zip: NY, 14218	Compliance Project: Δ Yes Δ No			
Phone:	PO #: Purchase Order Requested 4374.0004Bu			
Email: bmayback@rouxinc.com	WO #:			
Project Name: BCP RI - 619 Exchange Street - waste	Project #: 48028561			
Site:	SSOW#:			

Analysis Requested

Preservation Codes: N - None

Other:

Sample Identification	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)	6010C, 7470A, 8082A, 8270D	8260C - TCLP Voa	1010A, 9045D, Moisture	Total Number of containers	Special Instructions/Note:
			Preservation Code:				N	N	N		
WC-1	4/30/25	1300		Solid			X	X	X		
WC-2	4/29/25	1400		Solid			X	X	X		
WC-3	4/30/25	1100		Solid			X	X	X		

480-229103 Chain of Custody

Possible Hazard Identification

☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

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) ~~EDD, PDF~~

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

	Relinquished by	Date/Time	Company	Received by	Date/Time	Company
	Relinquished by:	4/30/25 1604		VS	4-30-25 1656	
	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
	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: 12.0 IR #5 Ice

Ver: 10/10/2024

5/8/2025

Eurofins Buffalo
10 Hazelwood Drive
Amherst, NY 14228-2298
Phone: 716-691-2600 Fax: 716-691-7991

Chain of Custody Record

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Client Information	Sampler: Nicole Sucui	Lab PM: Fischer, Brian J	Carrier Tracking No(s):	COC No: 480-204353-41692.1
Client Contact: Bryan Mayback	Phone: 716-713-3437	E-Mail: Brian.Fischer@et.eurofinsus.com	State of Origin:	Page: Page 1 of 1
Company: Roux Environmental Engineering and Geology DPC	PWSID:			Job #:
Address: 2558 Hamburg Turnpike Suite 300	Due Date Requested:			
City: Lackawanna	TAT Requested (days):			
State, Zip: NY, 14218	Compliance Project: Δ Yes Δ No			
Phone:	PO #: Purchase Order Requested 4374.0004Bu			
Email: bmayback@rouxinc.com	WO #:			
Project Name: BCP RI - 619 Exchange Street - waste	Project #: 48028561			
Site:	SSOW#:			

Analysis Requested

Preservation Codes: N - None

Other:

Sample Identification	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)	6010C, 7470A, 8082A, 8270D	8260C - TCLP Voa	1010A, 9045D, Moisture	Total Number of containers	Special Instructions/Note:
			Preservation Code:				N	N	N		
WC-1	4/30/25	1300		Solid			X	X	X		
WC-2	4/29/25	1400		Solid			X	X	X		
WC-3	4/30/25	1100		Solid			X	X	X		

480-229103 Chain of Custody

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

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) ~~CAT B, NYS~~

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
		4/30/25 1654			4-30-25 1654	
	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
	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: 12.0 IR #3 Ice

Ver: 10/10/2024

Login Sample Receipt Checklist

Client: Roux Environmental Engineering and Geology DPC

Job Number: 480-229103-1

Login Number: 229103

List Source: Eurofins Buffalo

List Number: 1

Creator: Stapleton, Kaitlyn

Question	Answer	Comment
Radioactivity either was not measured or, if measured, is at or below background	True	
The cooler's custody seal, if present, is intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	12.0 IR#SC ice
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the sample IDs on the containers and the COC.	True	
Samples are received within Holding Time (Excluding tests with immediate HTs)..	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
VOA sample vials do not have headspace or bubble is <6mm (1/4") in diameter.	N/A	
If necessary, staff have been informed of any short hold time or quick TAT needs	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Sampling Company provided.	True	Roux Environmental
Samples received within 48 hours of sampling.	True	
Samples requiring field filtration have been filtered in the field.	True	
Chlorine Residual checked.	N/A	

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ANALYTICAL REPORT

PREPARED FOR

Attn: Bryan Mayback
Roux Environmental Engineering and Geology DPC
2558 Hamburg Turnpike
Suite 300
Lackawanna, New York 14218

Generated 5/12/2025 6:15:22 PM

JOB DESCRIPTION

BCP RI - 619 Exchange Street Site

JOB NUMBER

480-229104-1

Eurofins Buffalo
10 Hazelwood Drive
Amherst NY 14228-2298

See page two for job notes and contact information.

my EOL

Job Notes

This report may not be reproduced except in full, and with written approval from the laboratory. The results relate only to the samples tested. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

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 Northeast, LLC Project Manager.

Authorization



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Authorized for release by
John Schove, Project Manager II
John.Schove@et.eurofinsus.com
(716)504-9838

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Definitions/Glossary

Client: Roux Environmental Engineering and Geology DPC
Job ID: 480-229104-1
Project/Site: BCP RI - 619 Exchange Street Site

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
B	Compound was found in the blank and sample.
F1	MS and/or MSD recovery exceeds control limits.
F2	MS/MSD RPD exceeds control limits
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

GC/MS Semi VOA

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

GC/MS Semi VOA TICs

Qualifier	Qualifier Description
J	Indicates an Estimated Value for TICs
N	Presumptive evidence of material.
T	Result is a tentatively identified compound (TIC) and an estimated value.

GC Semi VOA

Qualifier	Qualifier Description
B	Compound was found in the blank and sample.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
S1+	Surrogate recovery exceeds control limits, high biased.

LCMS

Qualifier	Qualifier Description
*5+	Isotope dilution analyte is outside acceptance limits, high biased.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Metals

Qualifier	Qualifier Description
^5-	Linear Range Check (LRC) is outside acceptance limits, low biased.
^5+	Linear Range Check (LRC) is outside acceptance limits, high biased.
4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.
F1	MS and/or MSD recovery exceeds control limits.
F2	MS/MSD RPD exceeds control limits
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

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)

Glossary (Continued)

Abbreviation	These commonly used abbreviations may or may not be present in this report.
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

Job ID: 480-229104-1 Eurofins Buffalo

Job Narrative
480-229104-1

Analytical test results meet all requirements of the associated regulatory program listed on the Accreditation/Certification Summary Page unless otherwise noted under the individual analysis. Data qualifiers and/or narrative comments are included to explain any exceptions, if applicable.

- Matrix QC may not be reported if insufficient sample is provided or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD may be performed, unless otherwise specified in the method.
- Surrogate and/or isotope dilution analyte recoveries (if applicable) which are outside of the QC window are confirmed unless attributed to a dilution or otherwise noted in the narrative.

Regulated compliance samples (e.g. SDWA, NPDES) must comply with the associated agency requirements/permits.

Receipt
The samples were received on 4/30/2025 4:56 PM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperatures of the 2 coolers at receipt time were 10.6°C and 11.3°C.

GC/MS VOA
Method 8260C: The continuing calibration verification (CCV) associated with batch 480-744923 recovered above the upper control limit for Cyclohexane and Trichlorofluoromethane. The sample(s) associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported. The associated samples are:MW-1 18-20 Ft (480-229104-1), HC-11 0.25-0.5 Ft (480-229104-5) and MW-2 16-20 Ft (480-229104-7).

Method 8260C: The laboratory control sample (LCS) for preparation batch 480-744922 and analytical batch 480-744923 recovered outside control limits for the following analyte: Cyclohexane. This analyte was biased high in the LCS and was not detected in the associated samples; therefore, the data have been reported.The associated samples are:MW-1 18-20 Ft (480-229104-1), HC-11 0.25-0.5 Ft (480-229104-5) and MW-2 16-20 Ft (480-229104-7).

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

GC/MS Semi VOA
No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

Herbicides
No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

PCBs
No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

Pesticides
Method 8081B: The following sample required a Florisil clean-up, via EPA Method 3620C, to reduce matrix interferences: HC-11 0.25-0.5 Ft (480-229104-5).

Method 8081B: The %RPD between the primary and confirmation column exceeded 40% for 4,4'-DDT and Methoxychlor for the following sample: HC-11 0.25-0.5 Ft (480-229104-5). The lower value(s) has been reported and qualified in accordance with the laboratory's SOP.

Method 8081B: The method blank for preparation batch 480-745050 and analytical batch 480-745178 contained Endrin ketone and Methoxychlor above the method detection limit. This target analyte concentration was less than the reporting limit (RL) in the method blank; therefore, re-extraction and/or re-analysis of samples was not performed. The following associated samples are impacted: MW-1 18-20 Ft (480-229104-1), HC-11 0.25-0.5 Ft (480-229104-5) and MW-2 16-20 Ft (480-229104-7).

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

PFAS
Method 1633: Isotope Dilution Analyte (IDA) recovery is above the method recommended limit for the following samples: HC-11 0.25-0.5 Ft (480-229104-5), (480-229140-E-3-A) and (480-229140-E-3-B DU). Quantitation by isotope dilution generally precludes any adverse effect on data quality due to elevated IDA recoveries.

Eurofins Buffalo

Job ID: 480-229104-1 (Continued) Eurofins Buffalo

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

Metals
Method 6010D: The linear range check (LRC) standard recovery associated with 480-745141 is outside the acceptance criteria for the following analytes: Silver, Cobalt, and Lead. The concentration of these analyte(s) in the sample(s) are below the highest standard of the calibration curve; therefore, the data have been reported.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

General Chemistry
No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

Detection Summary

Client: Roux Environmental Engineering and Geology DPC
Job ID: 480-229104-1
Project/Site: BCP RI - 619 Exchange Street Site

Client Sample ID: MW-1 18-20 Ft
Lab Sample ID: 480-229104-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	5.8	J F1	28	4.8	ug/Kg	1	☼	8260C	Total/NA
Chloroform	1.4	J F1 B	5.7	0.35	ug/Kg	1	☼	8260C	Total/NA
4,4'-DDT	3.4	J	4.1	0.96	ug/Kg	1	☼	8081B	Total/NA
Endrin ketone	2.4	J B	4.1	1.0	ug/Kg	1	☼	8081B	Total/NA
Aluminum	15100	F2	12.3	10.6	mg/Kg	1	☼	6010D	Total/NA
Arsenic	4.1		2.5	1.1	mg/Kg	1	☼	6010D	Total/NA
Barium	96.2		0.61	0.17	mg/Kg	1	☼	6010D	Total/NA
Beryllium	0.68		0.25	0.049	mg/Kg	1	☼	6010D	Total/NA
Cadmium	0.12	J	0.25	0.086	mg/Kg	1	☼	6010D	Total/NA
Calcium	62400		61.3	33.1	mg/Kg	1	☼	6010D	Total/NA
Chromium	19.6		0.61	0.44	mg/Kg	1	☼	6010D	Total/NA
Cobalt	9.7	^5+	0.61	0.12	mg/Kg	1	☼	6010D	Total/NA
Copper	16.0		1.2	0.70	mg/Kg	1	☼	6010D	Total/NA
Iron	19400	F2	12.3	10.4	mg/Kg	1	☼	6010D	Total/NA
Lead	13.9	^5+	1.2	0.56	mg/Kg	1	☼	6010D	Total/NA
Magnesium	23300	F1	24.5	10.4	mg/Kg	1	☼	6010D	Total/NA
Manganese	454	F1	1.2	0.34	mg/Kg	1	☼	6010D	Total/NA
Nickel	22.5		6.1	0.31	mg/Kg	1	☼	6010D	Total/NA
Potassium	4780	F1	36.8	29.7	mg/Kg	1	☼	6010D	Total/NA
Sodium	314		172	75.1	mg/Kg	1	☼	6010D	Total/NA
Vanadium	28.7		0.61	0.16	mg/Kg	1	☼	6010D	Total/NA
Zinc	58.8		2.5	1.2	mg/Kg	1	☼	6010D	Total/NA
Mercury	0.019	J	0.024	0.0056	mg/Kg	1	☼	7471B	Total/NA

Client Sample ID: HC-8 1-3 in
Lab Sample ID: 480-229104-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzo[a]pyrene	61	J	200	29	ug/Kg	1	☼	8270D	Total/NA
Benzo[b]fluoranthene	99	J	200	31	ug/Kg	1	☼	8270D	Total/NA
Benzo[g,h,i]perylene	65	J	200	21	ug/Kg	1	☼	8270D	Total/NA
Benzo[k]fluoranthene	30	J	200	26	ug/Kg	1	☼	8270D	Total/NA
Fluoranthene	140	J	200	21	ug/Kg	1	☼	8270D	Total/NA
Indeno[1,2,3-cd]pyrene	49	J	200	24	ug/Kg	1	☼	8270D	Total/NA
Pyrene	120	J	200	23	ug/Kg	1	☼	8270D	Total/NA
Aluminum	6590		11.9	10.3	mg/Kg	1	☼	6010D	Total/NA
Arsenic	5.7		2.4	1.0	mg/Kg	1	☼	6010D	Total/NA
Barium	277		0.60	0.17	mg/Kg	1	☼	6010D	Total/NA
Beryllium	0.40		0.24	0.048	mg/Kg	1	☼	6010D	Total/NA
Calcium	73200		59.6	32.2	mg/Kg	1	☼	6010D	Total/NA
Chromium	7.7		0.60	0.43	mg/Kg	1	☼	6010D	Total/NA
Cobalt	4.2	^5+	0.60	0.12	mg/Kg	1	☼	6010D	Total/NA
Copper	23.0		1.2	0.68	mg/Kg	1	☼	6010D	Total/NA
Iron	9060		11.9	10.1	mg/Kg	1	☼	6010D	Total/NA
Lead	14.0	^5+	1.2	0.55	mg/Kg	1	☼	6010D	Total/NA
Magnesium	11300		23.8	10.1	mg/Kg	1	☼	6010D	Total/NA
Manganese	224		1.2	0.33	mg/Kg	1	☼	6010D	Total/NA
Nickel	10.7		6.0	0.30	mg/Kg	1	☼	6010D	Total/NA
Potassium	1090		35.7	28.9	mg/Kg	1	☼	6010D	Total/NA
Sodium	282		167	73.1	mg/Kg	1	☼	6010D	Total/NA
Vanadium	12.6		0.60	0.15	mg/Kg	1	☼	6010D	Total/NA
Zinc	133		2.4	1.2	mg/Kg	1	☼	6010D	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: HC-8 1-3 in (Continued)
Lab Sample ID: 480-229104-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Mercury	0.019	J	0.024	0.0055	mg/Kg	1	☼	7471B	Total/NA

Client Sample ID: HC-9 5-8 in
Lab Sample ID: 480-229104-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Anthracene	58	J	220	53	ug/Kg	1	☼	8270D	Total/NA
Benzo[a]anthracene	270		220	22	ug/Kg	1	☼	8270D	Total/NA
Benzo[a]pyrene	480		220	32	ug/Kg	1	☼	8270D	Total/NA
Benzo[b]fluoranthene	410		220	34	ug/Kg	1	☼	8270D	Total/NA
Benzo[g,h,i]perylene	560		220	23	ug/Kg	1	☼	8270D	Total/NA
Benzo[k]fluoranthene	240		220	28	ug/Kg	1	☼	8270D	Total/NA
Chrysene	240		220	48	ug/Kg	1	☼	8270D	Total/NA
Dibenz(a,h)anthracene	110	J	220	38	ug/Kg	1	☼	8270D	Total/NA
Fluoranthene	210	J	220	23	ug/Kg	1	☼	8270D	Total/NA
Indeno[1,2,3-cd]pyrene	390		220	27	ug/Kg	1	☼	8270D	Total/NA
Naphthalene	28	J	220	28	ug/Kg	1	☼	8270D	Total/NA
Phenanthrene	170	J	220	32	ug/Kg	1	☼	8270D	Total/NA
Pyrene	270		220	25	ug/Kg	1	☼	8270D	Total/NA
Aluminum	10300		13.8	11.9	mg/Kg	1	☼	6010D	Total/NA
Arsenic	6.4		2.8	1.2	mg/Kg	1	☼	6010D	Total/NA
Barium	126		0.69	0.19	mg/Kg	1	☼	6010D	Total/NA
Beryllium	1.0		0.28	0.055	mg/Kg	1	☼	6010D	Total/NA
Calcium	26400		68.8	37.1	mg/Kg	1	☼	6010D	Total/NA
Chromium	12.9		0.69	0.50	mg/Kg	1	☼	6010D	Total/NA
Cobalt	7.8	^5+	0.69	0.14	mg/Kg	1	☼	6010D	Total/NA
Copper	31.3		1.4	0.78	mg/Kg	1	☼	6010D	Total/NA
Iron	19200		13.8	11.7	mg/Kg	1	☼	6010D	Total/NA
Lead	21.4	^5+	1.4	0.63	mg/Kg	1	☼	6010D	Total/NA
Magnesium	6090		27.5	11.7	mg/Kg	1	☼	6010D	Total/NA
Manganese	208		1.4	0.39	mg/Kg	1	☼	6010D	Total/NA
Nickel	28.8		6.9	0.34	mg/Kg	1	☼	6010D	Total/NA
Potassium	2130		41.3	33.4	mg/Kg	1	☼	6010D	Total/NA
Sodium	301		193	84.4	mg/Kg	1	☼	6010D	Total/NA
Vanadium	24.9		0.69	0.18	mg/Kg	1	☼	6010D	Total/NA
Zinc	39.5		2.8	1.4	mg/Kg	1	☼	6010D	Total/NA
Mercury	0.029		0.025	0.0058	mg/Kg	1	☼	7471B	Total/NA

Client Sample ID: HC-10 1-3 in
Lab Sample ID: 480-229104-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzo[a]anthracene	35	J	220	22	ug/Kg	1	☼	8270D	Total/NA
Benzo[a]pyrene	37	J	220	32	ug/Kg	1	☼	8270D	Total/NA
Benzo[g,h,i]perylene	43	J	220	23	ug/Kg	1	☼	8270D	Total/NA
Benzo[k]fluoranthene	28	J	220	28	ug/Kg	1	☼	8270D	Total/NA
Fluoranthene	39	J	220	23	ug/Kg	1	☼	8270D	Total/NA
Indeno[1,2,3-cd]pyrene	29	J	220	27	ug/Kg	1	☼	8270D	Total/NA
Phenanthrene	67	J	220	32	ug/Kg	1	☼	8270D	Total/NA
Pyrene	52	J	220	25	ug/Kg	1	☼	8270D	Total/NA
Aluminum	4360		13.5	11.7	mg/Kg	1	☼	6010D	Total/NA
Arsenic	9.5		2.7	1.2	mg/Kg	1	☼	6010D	Total/NA
Barium	68.8		0.68	0.19	mg/Kg	1	☼	6010D	Total/NA
Beryllium	0.32		0.27	0.054	mg/Kg	1	☼	6010D	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: HC-10 1-3 in (Continued)
Lab Sample ID: 480-229104-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Cadmium	0.13	J	0.27	0.095	mg/Kg	1	☼	6010D	Total/NA
Calcium	36200		67.7	36.6	mg/Kg	1	☼	6010D	Total/NA
Chromium	6.5		0.68	0.49	mg/Kg	1	☼	6010D	Total/NA
Cobalt	4.2	^5+	0.68	0.14	mg/Kg	1	☼	6010D	Total/NA
Copper	12.4		1.4	0.77	mg/Kg	1	☼	6010D	Total/NA
Iron	10300		13.5	11.5	mg/Kg	1	☼	6010D	Total/NA
Lead	10.3	^5+	1.4	0.62	mg/Kg	1	☼	6010D	Total/NA
Magnesium	5340		27.1	11.5	mg/Kg	1	☼	6010D	Total/NA
Manganese	165		1.4	0.38	mg/Kg	1	☼	6010D	Total/NA
Nickel	12.8		6.8	0.34	mg/Kg	1	☼	6010D	Total/NA
Potassium	884		40.6	32.8	mg/Kg	1	☼	6010D	Total/NA
Sodium	203		190	83.1	mg/Kg	1	☼	6010D	Total/NA
Vanadium	12.7		0.68	0.18	mg/Kg	1	☼	6010D	Total/NA
Zinc	26.3		2.7	1.4	mg/Kg	1	☼	6010D	Total/NA
Mercury	0.11		0.024	0.0056	mg/Kg	1	☼	7471B	Total/NA

Client Sample ID: HC-11 0.25-0.5 Ft
Lab Sample ID: 480-229104-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloroform	1.1	J B	4.8	0.30	ug/Kg	1	☼	8260C	Total/NA
Anthracene	81	J	200	50	ug/Kg	1	☼	8270D	Total/NA
Benzo[a]anthracene	130	J	200	20	ug/Kg	1	☼	8270D	Total/NA
Benzo[a]pyrene	130	J	200	29	ug/Kg	1	☼	8270D	Total/NA
Benzo[b]fluoranthene	140	J	200	32	ug/Kg	1	☼	8270D	Total/NA
Benzo[g,h,i]perylene	100	J	200	21	ug/Kg	1	☼	8270D	Total/NA
Benzo[k]fluoranthene	85	J	200	26	ug/Kg	1	☼	8270D	Total/NA
Bis(2-ethylhexyl) phthalate	580		200	68	ug/Kg	1	☼	8270D	Total/NA
Butyl benzyl phthalate	91	J	200	33	ug/Kg	1	☼	8270D	Total/NA
Chrysene	150	J	200	45	ug/Kg	1	☼	8270D	Total/NA
Fluoranthene	300		200	21	ug/Kg	1	☼	8270D	Total/NA
Indeno[1,2,3-cd]pyrene	83	J	200	25	ug/Kg	1	☼	8270D	Total/NA
Phenanthrene	250		200	29	ug/Kg	1	☼	8270D	Total/NA
Pyrene	240		200	24	ug/Kg	1	☼	8270D	Total/NA
4,4'-DDD	3.4	J	3.8	0.74	ug/Kg	1	☼	8081B	Total/NA
4,4'-DDE	1.3	J	3.8	0.80	ug/Kg	1	☼	8081B	Total/NA
4,4'-DDT	6.5		3.8	0.90	ug/Kg	1	☼	8081B	Total/NA
Endrin ketone	1.8	J B	3.8	0.94	ug/Kg	1	☼	8081B	Total/NA
gamma-BHC (Lindane)	1.1	J	3.8	0.70	ug/Kg	1	☼	8081B	Total/NA
Methoxychlor	4.4	B	3.8	0.78	ug/Kg	1	☼	8081B	Total/NA
PCB-1260	0.16	J	0.29	0.13	mg/Kg	1	☼	8082A	Total/NA
Pentachlorophenol	100		20	6.4	ug/Kg	1	☼	8151A	Total/NA
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	0.21		0.15	0.037	ug/Kg	1	☼	Draft-3 1633	Total/NA
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	0.039	J	0.15	0.037	ug/Kg	1	☼	Draft-3 1633	Total/NA
Perfluoroheptanoic acid (PFHpA)	0.040	J	0.15	0.037	ug/Kg	1	☼	Draft-3 1633	Total/NA
Perfluorooctanesulfonic acid (PFOS)	0.075	J	0.15	0.037	ug/Kg	1	☼	Draft-3 1633	Total/NA
Perfluorooctanoic acid (PFOA)	0.11	J	0.15	0.037	ug/Kg	1	☼	Draft-3 1633	Total/NA
Aluminum	5160		11.8	10.2	mg/Kg	1	☼	6010D	Total/NA
Arsenic	6.3		2.4	1.0	mg/Kg	1	☼	6010D	Total/NA
Barium	6290		2.9	0.83	mg/Kg	5	☼	6010D	Total/NA
Beryllium	0.56		0.24	0.047	mg/Kg	1	☼	6010D	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: HC-11 0.25-0.5 Ft (Continued)
Lab Sample ID: 480-229104-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Cadmium	1.5		0.24	0.083	mg/Kg	1	☼	6010D	Total/NA
Calcium	23500		59.0	31.8	mg/Kg	1	☼	6010D	Total/NA
Chromium	8.5		0.59	0.42	mg/Kg	1	☼	6010D	Total/NA
Cobalt	6.4	^5+	0.59	0.12	mg/Kg	1	☼	6010D	Total/NA
Copper	168		1.2	0.67	mg/Kg	1	☼	6010D	Total/NA
Iron	11700		11.8	10.0	mg/Kg	1	☼	6010D	Total/NA
Lead	76.6	^5+	1.2	0.54	mg/Kg	1	☼	6010D	Total/NA
Magnesium	4520		23.6	10.0	mg/Kg	1	☼	6010D	Total/NA
Manganese	164		1.2	0.33	mg/Kg	1	☼	6010D	Total/NA
Nickel	11.8		5.9	0.29	mg/Kg	1	☼	6010D	Total/NA
Potassium	800		35.4	28.6	mg/Kg	1	☼	6010D	Total/NA
Sodium	280		165	72.3	mg/Kg	1	☼	6010D	Total/NA
Vanadium	12.4		0.59	0.15	mg/Kg	1	☼	6010D	Total/NA
Zinc	3090		11.8	6.0	mg/Kg	5	☼	6010D	Total/NA
Mercury	0.14		0.023	0.0053	mg/Kg	1	☼	7471B	Total/NA

Client Sample ID: BD-2
Lab Sample ID: 480-229104-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acenaphthene	93	J	200	29	ug/Kg	1	☼	8270D	Total/NA
Anthracene	200		200	49	ug/Kg	1	☼	8270D	Total/NA
Benzo[a]anthracene	800		200	20	ug/Kg	1	☼	8270D	Total/NA
Benzo[a]pyrene	1300		200	29	ug/Kg	1	☼	8270D	Total/NA
Benzo[b]fluoranthene	1200		200	32	ug/Kg	1	☼	8270D	Total/NA
Benzo[g,h,i]perylene	1200		200	21	ug/Kg	1	☼	8270D	Total/NA
Benzo[k]fluoranthene	580		200	26	ug/Kg	1	☼	8270D	Total/NA
Carbazole	82	J	200	24	ug/Kg	1	☼	8270D	Total/NA
Chrysene	710		200	45	ug/Kg	1	☼	8270D	Total/NA
Dibenz(a,h)anthracene	350		200	35	ug/Kg	1	☼	8270D	Total/NA
Dibenzofuran	40	J	200	24	ug/Kg	1	☼	8270D	Total/NA
Fluoranthene	720		200	21	ug/Kg	1	☼	8270D	Total/NA
Fluorene	44	J	200	24	ug/Kg	1	☼	8270D	Total/NA
Indeno[1,2,3-cd]pyrene	940		200	25	ug/Kg	1	☼	8270D	Total/NA
Phenanthrene	560		200	29	ug/Kg	1	☼	8270D	Total/NA
Pyrene	750		200	24	ug/Kg	1	☼	8270D	Total/NA
Aluminum	8910		11.4	9.9	mg/Kg	1	☼	6010D	Total/NA
Arsenic	4.8		2.3	1.0	mg/Kg	1	☼	6010D	Total/NA
Barium	406		0.57	0.16	mg/Kg	1	☼	6010D	Total/NA
Beryllium	0.79		0.23	0.046	mg/Kg	1	☼	6010D	Total/NA
Calcium	35700		57.2	30.9	mg/Kg	1	☼	6010D	Total/NA
Chromium	13.7		0.57	0.41	mg/Kg	1	☼	6010D	Total/NA
Cobalt	6.6	^5+	0.57	0.11	mg/Kg	1	☼	6010D	Total/NA
Copper	17.9		1.1	0.65	mg/Kg	1	☼	6010D	Total/NA
Iron	16200		11.4	9.7	mg/Kg	1	☼	6010D	Total/NA
Lead	15.1	^5+	1.1	0.53	mg/Kg	1	☼	6010D	Total/NA
Magnesium	8500		22.9	9.7	mg/Kg	1	☼	6010D	Total/NA
Manganese	236		1.1	0.32	mg/Kg	1	☼	6010D	Total/NA
Nickel	20.6		5.7	0.29	mg/Kg	1	☼	6010D	Total/NA
Potassium	2100		34.3	27.7	mg/Kg	1	☼	6010D	Total/NA
Silver	0.24	J ^5-	0.69	0.23	mg/Kg	1	☼	6010D	Total/NA
Sodium	255		160	70.2	mg/Kg	1	☼	6010D	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: BD-2 (Continued)
Lab Sample ID: 480-229104-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Vanadium	20.9		0.57	0.15	mg/Kg	1	☼	6010D	Total/NA
Zinc	45.2		2.3	1.2	mg/Kg	1	☼	6010D	Total/NA
Mercury	0.023	J	0.024	0.0055	mg/Kg	1	☼	7471B	Total/NA

Client Sample ID: MW-2 16-20 Ft
Lab Sample ID: 480-229104-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	4.9	J	25	4.2	ug/Kg	1	☼	8260C	Total/NA
Chloroform	1.1	J B	5.0	0.31	ug/Kg	1	☼	8260C	Total/NA
4,4'-DDT	3.3	J	4.0	0.93	ug/Kg	1	☼	8081B	Total/NA
gamma-BHC (Lindane)	0.84	J	4.0	0.73	ug/Kg	1	☼	8081B	Total/NA
Methoxychlor	4.0	B	4.0	0.81	ug/Kg	1	☼	8081B	Total/NA
Aluminum	12200		13.0	11.2	mg/Kg	1	☼	6010D	Total/NA
Arsenic	2.9		2.6	1.1	mg/Kg	1	☼	6010D	Total/NA
Barium	85.9		0.65	0.18	mg/Kg	1	☼	6010D	Total/NA
Beryllium	0.55		0.26	0.052	mg/Kg	1	☼	6010D	Total/NA
Cadmium	0.11	J	0.26	0.091	mg/Kg	1	☼	6010D	Total/NA
Calcium	75800		64.8	35.0	mg/Kg	1	☼	6010D	Total/NA
Chromium	16.1		0.65	0.47	mg/Kg	1	☼	6010D	Total/NA
Cobalt	7.5	^5+	0.65	0.13	mg/Kg	1	☼	6010D	Total/NA
Copper	16.6		1.3	0.74	mg/Kg	1	☼	6010D	Total/NA
Iron	16200		13.0	11.0	mg/Kg	1	☼	6010D	Total/NA
Lead	12.6	^5+	1.3	0.60	mg/Kg	1	☼	6010D	Total/NA
Magnesium	17900		25.9	11.0	mg/Kg	1	☼	6010D	Total/NA
Manganese	338		1.3	0.36	mg/Kg	1	☼	6010D	Total/NA
Nickel	17.6		6.5	0.32	mg/Kg	1	☼	6010D	Total/NA
Potassium	3720		38.9	31.4	mg/Kg	1	☼	6010D	Total/NA
Sodium	336		182	79.5	mg/Kg	1	☼	6010D	Total/NA
Vanadium	23.9		0.65	0.17	mg/Kg	1	☼	6010D	Total/NA
Zinc	50.3		2.6	1.3	mg/Kg	1	☼	6010D	Total/NA
Mercury	0.023	J	0.024	0.0056	mg/Kg	1	☼	7471B	Total/NA

This Detection Summary does not include radiochemical test results.

Client: Roux Environmental Engineering and Geology DPC
Job ID: 480-229104-1
Project/Site: BCP RI - 619 Exchange Street Site

Client Sample ID: MW-1 18-20 Ft
Lab Sample ID: 480-229104-1
Date Collected: 04/30/25 10:30
Matrix: Solid
Date Received: 04/30/25 16:56
Percent Solids: 79.9

Method: SW846 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		5.7	0.41	ug/Kg	☼	04/30/25 17:43	05/01/25 00:16	1
1,1,2,2-Tetrachloroethane	ND	F1	5.7	0.92	ug/Kg	☼	04/30/25 17:43	05/01/25 00:16	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		5.7	1.3	ug/Kg	☼	04/30/25 17:43	05/01/25 00:16	1
1,1,2-Trichloroethane	ND	F1	5.7	0.74	ug/Kg	☼	04/30/25 17:43	05/01/25 00:16	1
1,1-Dichloroethane	ND		5.7	0.70	ug/Kg	☼	04/30/25 17:43	05/01/25 00:16	1
1,1-Dichloroethene	ND		5.7	0.70	ug/Kg	☼	04/30/25 17:43	05/01/25 00:16	1
1,2,4-Trichlorobenzene	ND	F1	5.7	0.35	ug/Kg	☼	04/30/25 17:43	05/01/25 00:16	1
1,2,4-Trimethylbenzene	ND	F1	5.7	1.1	ug/Kg	☼	04/30/25 17:43	05/01/25 00:16	1
1,2-Dibromo-3-Chloropropane	ND	F1	5.7	2.8	ug/Kg	☼	04/30/25 17:43	05/01/25 00:16	1
1,2-Dibromoethane	ND	F1	5.7	0.73	ug/Kg	☼	04/30/25 17:43	05/01/25 00:16	1
1,2-Dichlorobenzene	ND	F1	5.7	0.45	ug/Kg	☼	04/30/25 17:43	05/01/25 00:16	1
1,2-Dichloroethane	ND	F1	5.7	0.29	ug/Kg	☼	04/30/25 17:43	05/01/25 00:16	1
1,2-Dichloropropane	ND		5.7	2.8	ug/Kg	☼	04/30/25 17:43	05/01/25 00:16	1
1,3,5-Trimethylbenzene	ND	F1	5.7	0.37	ug/Kg	☼	04/30/25 17:43	05/01/25 00:16	1
1,3-Dichlorobenzene	ND	F1	5.7	0.29	ug/Kg	☼	04/30/25 17:43	05/01/25 00:16	1
1,4-Dichlorobenzene	ND	F1	5.7	0.80	ug/Kg	☼	04/30/25 17:43	05/01/25 00:16	1
2-Butanone (MEK)	ND	F1	28	2.1	ug/Kg	☼	04/30/25 17:43	05/01/25 00:16	1
2-Hexanone	ND	F1	28	2.8	ug/Kg	☼	04/30/25 17:43	05/01/25 00:16	1
4-Isopropyltoluene	ND	F1	5.7	0.46	ug/Kg	☼	04/30/25 17:43	05/01/25 00:16	1
4-Methyl-2-pentanone (MIBK)	ND	F1	28	1.9	ug/Kg	☼	04/30/25 17:43	05/01/25 00:16	1
Acetone	**5.8**	**J F1**	28	4.8	ug/Kg	☼	04/30/25 17:43	05/01/25 00:16	1
Benzene	ND	F1	5.7	0.28	ug/Kg	☼	04/30/25 17:43	05/01/25 00:16	1
Bromodichloromethane	ND	F1	5.7	0.76	ug/Kg	☼	04/30/25 17:43	05/01/25 00:16	1
Bromoform	ND	F1	5.7	2.8	ug/Kg	☼	04/30/25 17:43	05/01/25 00:16	1
Bromomethane	ND		5.7	0.51	ug/Kg	☼	04/30/25 17:43	05/01/25 00:16	1
Carbon disulfide	ND	F1	5.7	2.8	ug/Kg	☼	04/30/25 17:43	05/01/25 00:16	1
Carbon tetrachloride	ND		5.7	0.55	ug/Kg	☼	04/30/25 17:43	05/01/25 00:16	1
Chlorobenzene	ND	F1	5.7	0.75	ug/Kg	☼	04/30/25 17:43	05/01/25 00:16	1
Chloroethane	ND		5.7	1.3	ug/Kg	☼	04/30/25 17:43	05/01/25 00:16	1
Chloroform	**1.4**	**J F1 B**	5.7	0.35	ug/Kg	☼	04/30/25 17:43	05/01/25 00:16	1
Chloromethane	ND		5.7	0.34	ug/Kg	☼	04/30/25 17:43	05/01/25 00:16	1
cis-1,2-Dichloroethene	ND	F1	5.7	0.73	ug/Kg	☼	04/30/25 17:43	05/01/25 00:16	1
cis-1,3-Dichloropropene	ND	F1	5.7	0.82	ug/Kg	☼	04/30/25 17:43	05/01/25 00:16	1
Cyclohexane	ND		5.7	0.80	ug/Kg	☼	04/30/25 17:43	05/01/25 00:16	1
Dibromochloromethane	ND	F1	5.7	0.73	ug/Kg	☼	04/30/25 17:43	05/01/25 00:16	1
Dichlorodifluoromethane	ND		5.7	0.47	ug/Kg	☼	04/30/25 17:43	05/01/25 00:16	1
Ethylbenzene	ND	F1	5.7	0.39	ug/Kg	☼	04/30/25 17:43	05/01/25 00:16	1
Isopropylbenzene	ND	F1	5.7	0.86	ug/Kg	☼	04/30/25 17:43	05/01/25 00:16	1
Methyl acetate	ND		28	3.4	ug/Kg	☼	04/30/25 17:43	05/01/25 00:16	1
Methyl tert-butyl ether	ND		5.7	0.56	ug/Kg	☼	04/30/25 17:43	05/01/25 00:16	1
Methylcyclohexane	ND		5.7	0.87	ug/Kg	☼	04/30/25 17:43	05/01/25 00:16	1
Methylene Chloride	ND		5.7	2.6	ug/Kg	☼	04/30/25 17:43	05/01/25 00:16	1
Naphthalene	ND		5.7	0.76	ug/Kg	☼	04/30/25 17:43	05/01/25 00:16	1
n-Butylbenzene	ND	F1	5.7	0.50	ug/Kg	☼	04/30/25 17:43	05/01/25 00:16	1
N-Propylbenzene	ND	F1	5.7	0.46	ug/Kg	☼	04/30/25 17:43	05/01/25 00:16	1
sec-Butylbenzene	ND	F1	5.7	0.50	ug/Kg	☼	04/30/25 17:43	05/01/25 00:16	1
Styrene	ND	F1	5.7	0.28	ug/Kg	☼	04/30/25 17:43	05/01/25 00:16	1
tert-Butylbenzene	ND	F1	5.7	0.59	ug/Kg	☼	04/30/25 17:43	05/01/25 00:16	1
Tetrachloroethene	ND	F1	5.7	0.76	ug/Kg	☼	04/30/25 17:43	05/01/25 00:16	1

Client Sample ID: MW-1 18-20 Ft
Lab Sample ID: 480-229104-1
Date Collected: 04/30/25 10:30
Matrix: Solid
Date Received: 04/30/25 16:56
Percent Solids: 79.9

Method: SW846 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Toluene	ND	F1	5.7	0.43	ug/Kg	☼	04/30/25 17:43	05/01/25 00:16	1
trans-1,2-Dichloroethene	ND	F1	5.7	0.59	ug/Kg	☼	04/30/25 17:43	05/01/25 00:16	1
trans-1,3-Dichloropropene	ND	F1	5.7	2.5	ug/Kg	☼	04/30/25 17:43	05/01/25 00:16	1
Trichloroethene	ND	F1	5.7	1.3	ug/Kg	☼	04/30/25 17:43	05/01/25 00:16	1
Trichlorofluoromethane	ND		5.7	0.54	ug/Kg	☼	04/30/25 17:43	05/01/25 00:16	1
Vinyl chloride	ND	F2	5.7	0.70	ug/Kg	☼	04/30/25 17:43	05/01/25 00:16	1
Xylenes, Total	ND	F1	11	0.96	ug/Kg	☼	04/30/25 17:43	05/01/25 00:16	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/Kg*	☼		*N/A*	*04/30/25 17:43*	*05/01/25 00:16*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*105*		*64 - 126*	*04/30/25 17:43*	*05/01/25 00:16*	*1*
4-Bromofluorobenzene (Surr)	*98*		*72 - 126*	*04/30/25 17:43*	*05/01/25 00:16*	*1*
Dibromofluoromethane (Surr)	*103*		*60 - 140*	*04/30/25 17:43*	*05/01/25 00:16*	*1*
Toluene-d8 (Surr)	*97*		*71 - 125*	*04/30/25 17:43*	*05/01/25 00:16*	*1*

Method: SW846 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	ND		120	68	ug/Kg	☼	05/01/25 06:55	05/06/25 14:39	1
2,4,5-Trichlorophenol	ND		210	57	ug/Kg	☼	05/01/25 06:55	05/06/25 14:39	1
2,4,6-Trichlorophenol	ND		210	42	ug/Kg	☼	05/01/25 06:55	05/06/25 14:39	1
2,4-Dichlorophenol	ND		210	22	ug/Kg	☼	05/01/25 06:55	05/06/25 14:39	1
2,4-Dimethylphenol	ND		210	50	ug/Kg	☼	05/01/25 06:55	05/06/25 14:39	1
2,4-Dinitrophenol	ND		2000	960	ug/Kg	☼	05/01/25 06:55	05/06/25 14:39	1
2,4-Dinitrotoluene	ND		210	43	ug/Kg	☼	05/01/25 06:55	05/06/25 14:39	1
2,6-Dinitrotoluene	ND		210	25	ug/Kg	☼	05/01/25 06:55	05/06/25 14:39	1
2-Chloronaphthalene	ND		210	34	ug/Kg	☼	05/01/25 06:55	05/06/25 14:39	1
2-Chlorophenol	ND		410	38	ug/Kg	☼	05/01/25 06:55	05/06/25 14:39	1
2-Methylnaphthalene	ND		210	42	ug/Kg	☼	05/01/25 06:55	05/06/25 14:39	1
2-Methylphenol	ND		210	25	ug/Kg	☼	05/01/25 06:55	05/06/25 14:39	1
2-Nitroaniline	ND		410	31	ug/Kg	☼	05/01/25 06:55	05/06/25 14:39	1
2-Nitrophenol	ND		210	59	ug/Kg	☼	05/01/25 06:55	05/06/25 14:39	1
3,3'-Dichlorobenzidine	ND		410	250	ug/Kg	☼	05/01/25 06:55	05/06/25 14:39	1
3-Nitroaniline	ND		410	58	ug/Kg	☼	05/01/25 06:55	05/06/25 14:39	1
4,6-Dinitro-2-methylphenol	ND		410	210	ug/Kg	☼	05/01/25 06:55	05/06/25 14:39	1
4-Bromophenyl phenyl ether	ND		210	29	ug/Kg	☼	05/01/25 06:55	05/06/25 14:39	1
4-Chloro-3-methylphenol	ND		210	52	ug/Kg	☼	05/01/25 06:55	05/06/25 14:39	1
4-Chloroaniline	ND		210	52	ug/Kg	☼	05/01/25 06:55	05/06/25 14:39	1
4-Chlorophenyl phenyl ether	ND		210	26	ug/Kg	☼	05/01/25 06:55	05/06/25 14:39	1
4-Methylphenol	ND		410	25	ug/Kg	☼	05/01/25 06:55	05/06/25 14:39	1
4-Nitroaniline	ND		410	110	ug/Kg	☼	05/01/25 06:55	05/06/25 14:39	1
4-Nitrophenol	ND		410	150	ug/Kg	☼	05/01/25 06:55	05/06/25 14:39	1
Acenaphthene	ND		210	31	ug/Kg	☼	05/01/25 06:55	05/06/25 14:39	1
Acenaphthylene	ND		210	27	ug/Kg	☼	05/01/25 06:55	05/06/25 14:39	1
Acetophenone	ND		210	28	ug/Kg	☼	05/01/25 06:55	05/06/25 14:39	1
Anthracene	ND		210	52	ug/Kg	☼	05/01/25 06:55	05/06/25 14:39	1
Atrazine	ND		210	73	ug/Kg	☼	05/01/25 06:55	05/06/25 14:39	1
Benzaldehyde	ND		210	170	ug/Kg	☼	05/01/25 06:55	05/06/25 14:39	1
Benzo[a]anthracene	ND		210	21	ug/Kg	☼	05/01/25 06:55	05/06/25 14:39	1

Client: Roux Environmental Engineering and Geology DPC
Job ID: 480-229104-1
Project/Site: BCP RI - 619 Exchange Street Site

Client Sample ID: MW-1 18-20 Ft
Lab Sample ID: 480-229104-1
Date Collected: 04/30/25 10:30
Matrix: Solid
Date Received: 04/30/25 16:56
Percent Solids: 79.9

Method: SW846 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[a]pyrene	ND		210	31	ug/Kg	☼	05/01/25 06:55	05/06/25 14:39	1
Benzo[b]fluoranthene	ND		210	33	ug/Kg	☼	05/01/25 06:55	05/06/25 14:39	1
Benzo[g,h,i]perylene	ND		210	22	ug/Kg	☼	05/01/25 06:55	05/06/25 14:39	1
Benzo[k]fluoranthene	ND		210	27	ug/Kg	☼	05/01/25 06:55	05/06/25 14:39	1
Biphenyl	ND		210	31	ug/Kg	☼	05/01/25 06:55	05/06/25 14:39	1
bis (2-chloroisopropyl) ether	ND		210	42	ug/Kg	☼	05/01/25 06:55	05/06/25 14:39	1
Bis(2-chloroethoxy)methane	ND		210	44	ug/Kg	☼	05/01/25 06:55	05/06/25 14:39	1
Bis(2-chloroethyl)ether	ND		210	27	ug/Kg	☼	05/01/25 06:55	05/06/25 14:39	1
Bis(2-ethylhexyl) phthalate	ND		210	71	ug/Kg	☼	05/01/25 06:55	05/06/25 14:39	1
Butyl benzyl phthalate	ND		210	34	ug/Kg	☼	05/01/25 06:55	05/06/25 14:39	1
Caprolactam	ND		210	63	ug/Kg	☼	05/01/25 06:55	05/06/25 14:39	1
Carbazole	ND		210	25	ug/Kg	☼	05/01/25 06:55	05/06/25 14:39	1
Chrysene	ND		210	47	ug/Kg	☼	05/01/25 06:55	05/06/25 14:39	1
Dibenz(a,h)anthracene	ND		210	37	ug/Kg	☼	05/01/25 06:55	05/06/25 14:39	1
Dibenzofuran	ND		210	25	ug/Kg	☼	05/01/25 06:55	05/06/25 14:39	1
Diethyl phthalate	ND		210	27	ug/Kg	☼	05/01/25 06:55	05/06/25 14:39	1
Dimethyl phthalate	ND		210	25	ug/Kg	☼	05/01/25 06:55	05/06/25 14:39	1
Di-n-butyl phthalate	ND		210	36	ug/Kg	☼	05/01/25 06:55	05/06/25 14:39	1
Di-n-octyl phthalate	ND		210	25	ug/Kg	☼	05/01/25 06:55	05/06/25 14:39	1
Fluoranthene	ND		210	22	ug/Kg	☼	05/01/25 06:55	05/06/25 14:39	1
Fluorene	ND		210	25	ug/Kg	☼	05/01/25 06:55	05/06/25 14:39	1
Hexachlorobenzene	ND		210	28	ug/Kg	☼	05/01/25 06:55	05/06/25 14:39	1
Hexachlorobutadiene	ND		210	31	ug/Kg	☼	05/01/25 06:55	05/06/25 14:39	1
Hexachlorocyclopentadiene	ND		210	28	ug/Kg	☼	05/01/25 06:55	05/06/25 14:39	1
Hexachloroethane	ND		210	27	ug/Kg	☼	05/01/25 06:55	05/06/25 14:39	1
Indeno[1,2,3-cd]pyrene	ND		210	26	ug/Kg	☼	05/01/25 06:55	05/06/25 14:39	1
Isophorone	ND		210	44	ug/Kg	☼	05/01/25 06:55	05/06/25 14:39	1
Naphthalene	ND		210	27	ug/Kg	☼	05/01/25 06:55	05/06/25 14:39	1
Nitrobenzene	ND		210	23	ug/Kg	☼	05/01/25 06:55	05/06/25 14:39	1
N-Nitrosodi-n-propylamine	ND		210	36	ug/Kg	☼	05/01/25 06:55	05/06/25 14:39	1
N-Nitrosodiphenylamine	ND		210	170	ug/Kg	☼	05/01/25 06:55	05/06/25 14:39	1
Pentachlorophenol	ND		410	210	ug/Kg	☼	05/01/25 06:55	05/06/25 14:39	1
Phenanthrene	ND		210	31	ug/Kg	☼	05/01/25 06:55	05/06/25 14:39	1
Phenol	ND		210	32	ug/Kg	☼	05/01/25 06:55	05/06/25 14:39	1
Pyrene	ND		210	25	ug/Kg	☼	05/01/25 06:55	05/06/25 14:39	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Unknown	*13000*	*T J*	*ug/Kg*	☼	*1.99*	*N/A*	*05/01/25 06:55*	*05/06/25 14:39*	*1*
Unknown	*1600*	*T J*	*ug/Kg*	☼	*3.46*	*N/A*	*05/01/25 06:55*	*05/06/25 14:39*	*1*
Unknown	*250*	*T J*	*ug/Kg*	☼	*13.46*	*N/A*	*05/01/25 06:55*	*05/06/25 14:39*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol (Surr)	*92*		*26 - 143*	*05/01/25 06:55*	*05/06/25 14:39*	*1*
2-Fluorobiphenyl (Surr)	*91*		*50 - 121*	*05/01/25 06:55*	*05/06/25 14:39*	*1*
2-Fluorophenol (Surr)	*84*		*36 - 120*	*05/01/25 06:55*	*05/06/25 14:39*	*1*
Nitrobenzene-d5 (Surr)	*90*		*40 - 121*	*05/01/25 06:55*	*05/06/25 14:39*	*1*
Phenol-d5 (Surr)	*93*		*41 - 120*	*05/01/25 06:55*	*05/06/25 14:39*	*1*
p-Terphenyl-d14 (Surr)	*99*		*46 - 143*	*05/01/25 06:55*	*05/06/25 14:39*	*1*

Client Sample ID: MW-1 18-20 Ft
Lab Sample ID: 480-229104-1
Date Collected: 04/30/25 10:30
Matrix: Solid
Date Received: 04/30/25 16:56
Percent Solids: 79.9

Method: SW846 8081B - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	ND		4.1	0.80	ug/Kg	☼	05/02/25 06:59	05/05/25 11:46	1
4,4'-DDE	ND		4.1	0.86	ug/Kg	☼	05/02/25 06:59	05/05/25 11:46	1
4,4'-DDT	**3.4**	**J**	4.1	0.96	ug/Kg	☼	05/02/25 06:59	05/05/25 11:46	1
Aldrin	ND		4.1	1.0	ug/Kg	☼	05/02/25 06:59	05/05/25 11:46	1
alpha-BHC	ND		4.1	0.74	ug/Kg	☼	05/02/25 06:59	05/05/25 11:46	1
cis-Chlordane	ND		4.1	2.1	ug/Kg	☼	05/02/25 06:59	05/05/25 11:46	1
beta-BHC	ND		4.1	0.74	ug/Kg	☼	05/02/25 06:59	05/05/25 11:46	1
delta-BHC	ND		4.1	0.77	ug/Kg	☼	05/02/25 06:59	05/05/25 11:46	1
Dieldrin	ND		4.1	0.99	ug/Kg	☼	05/02/25 06:59	05/05/25 11:46	1
Endosulfan I	ND		4.1	0.79	ug/Kg	☼	05/02/25 06:59	05/05/25 11:46	1
Endosulfan II	ND		4.1	0.74	ug/Kg	☼	05/02/25 06:59	05/05/25 11:46	1
Endosulfan sulfate	ND		4.1	0.77	ug/Kg	☼	05/02/25 06:59	05/05/25 11:46	1
Endrin	ND		4.1	0.82	ug/Kg	☼	05/02/25 06:59	05/05/25 11:46	1
Endrin aldehyde	ND		4.1	1.1	ug/Kg	☼	05/02/25 06:59	05/05/25 11:46	1
Endrin ketone	**2.4**	**J B**	4.1	1.0	ug/Kg	☼	05/02/25 06:59	05/05/25 11:46	1
gamma-BHC (Lindane)	ND		4.1	0.76	ug/Kg	☼	05/02/25 06:59	05/05/25 11:46	1
trans-Chlordane	ND		4.1	1.3	ug/Kg	☼	05/02/25 06:59	05/05/25 11:46	1
Heptachlor	ND		4.1	0.89	ug/Kg	☼	05/02/25 06:59	05/05/25 11:46	1
Heptachlor epoxide	ND		4.1	1.1	ug/Kg	☼	05/02/25 06:59	05/05/25 11:46	1
Methoxychlor	ND		4.1	0.84	ug/Kg	☼	05/02/25 06:59	05/05/25 11:46	1
Toxaphene	ND		41	24	ug/Kg	☼	05/02/25 06:59	05/05/25 11:46	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*76*		*45 - 120*	*05/02/25 06:59*	*05/05/25 11:46*	*1*
DCB Decachlorobiphenyl	*77*		*45 - 120*	*05/02/25 06:59*	*05/05/25 11:46*	*1*
Tetrachloro-m-xylene	*60*		*30 - 124*	*05/02/25 06:59*	*05/05/25 11:46*	*1*
Tetrachloro-m-xylene	*57*		*30 - 124*	*05/02/25 06:59*	*05/05/25 11:46*	*1*

Method: SW846 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		0.24	0.046	mg/Kg	☼	05/01/25 07:04	05/01/25 17:16	1
PCB-1221	ND		0.24	0.046	mg/Kg	☼	05/01/25 07:04	05/01/25 17:16	1
PCB-1232	ND		0.24	0.046	mg/Kg	☼	05/01/25 07:04	05/01/25 17:16	1
PCB-1242	ND		0.24	0.046	mg/Kg	☼	05/01/25 07:04	05/01/25 17:16	1
PCB-1248	ND		0.24	0.046	mg/Kg	☼	05/01/25 07:04	05/01/25 17:16	1
PCB-1254	ND		0.24	0.11	mg/Kg	☼	05/01/25 07:04	05/01/25 17:16	1
PCB-1260	ND		0.24	0.11	mg/Kg	☼	05/01/25 07:04	05/01/25 17:16	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*99*		*65 - 174*	*05/01/25 07:04*	*05/01/25 17:16*	*1*
DCB Decachlorobiphenyl	*106*		*65 - 174*	*05/01/25 07:04*	*05/01/25 17:16*	*1*
Tetrachloro-m-xylene	*109*		*60 - 154*	*05/01/25 07:04*	*05/01/25 17:16*	*1*
Tetrachloro-m-xylene	*103*		*60 - 154*	*05/01/25 07:04*	*05/01/25 17:16*	*1*

Method: SW846 8151A - Herbicides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-T	ND		21	6.6	ug/Kg	☼	05/06/25 06:53	05/09/25 13:34	1
2,4-D	ND		21	13	ug/Kg	☼	05/06/25 06:53	05/09/25 13:34	1
Dichlorprop	ND		21	10	ug/Kg	☼	05/06/25 06:53	05/09/25 13:34	1
Pentachlorophenol	ND		21	6.7	ug/Kg	☼	05/06/25 06:53	05/09/25 13:34	1

Client Sample ID: MW-1 18-20 Ft
Lab Sample ID: 480-229104-1
Date Collected: 04/30/25 10:30
Matrix: Solid
Date Received: 04/30/25 16:56
Percent Solids: 79.9

Method: SW846 8151A - Herbicides (GC) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Picloram	ND		21	8.9	ug/Kg	☼	05/06/25 06:53	05/09/25 13:34	1
Silvex (2,4,5-TP)	ND		21	7.4	ug/Kg	☼	05/06/25 06:53	05/09/25 13:34	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4-Dichlorophenylacetic acid	*81*		*28 - 129*	*05/06/25 06:53*	*05/09/25 13:34*	*1*
2,4-Dichlorophenylacetic acid	*77*		*28 - 129*	*05/06/25 06:53*	*05/09/25 13:34*	*1*

Method: EPA Draft-3 1633 - Per- and Polyfluoroalkyl Substances by LC/MS/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)	ND		0.65	0.16	ug/Kg	☼	05/05/25 14:38	05/07/25 01:02	1
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2 FTS)	ND		0.65	0.16	ug/Kg	☼	05/05/25 14:38	05/07/25 01:02	1
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2 FTS)	ND		0.65	0.16	ug/Kg	☼	05/05/25 14:38	05/07/25 01:02	1
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2 FTS)	ND		0.65	0.16	ug/Kg	☼	05/05/25 14:38	05/07/25 01:02	1
3-Perfluoroheptylpropanoic acid (7:3 FTCA)	ND		4.1	1.0	ug/Kg	☼	05/05/25 14:38	05/07/25 01:02	1
3-Perfluoropentylpropanoic acid (5:3 FTCA)	ND		4.1	1.0	ug/Kg	☼	05/05/25 14:38	05/07/25 01:02	1
3-Perfluoropropylpropanoic acid (3:3 FTCA)	ND		0.81	0.20	ug/Kg	☼	05/05/25 14:38	05/07/25 01:02	1
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	ND		0.65	0.16	ug/Kg	☼	05/05/25 14:38	05/07/25 01:02	1
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9Cl-PF3ONS)	ND		0.65	0.16	ug/Kg	☼	05/05/25 14:38	05/07/25 01:02	1
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA)	ND		0.65	0.16	ug/Kg	☼	05/05/25 14:38	05/07/25 01:02	1
N-ethylperfluorooctane sulfonamide (NEtFOSA)	ND		0.16	0.041	ug/Kg	☼	05/05/25 14:38	05/07/25 01:02	1
N-ethylperfluorooctane sulfonamidoethanol (NEtFOSE)	ND		1.6	0.41	ug/Kg	☼	05/05/25 14:38	05/07/25 01:02	1
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	ND		0.16	0.041	ug/Kg	☼	05/05/25 14:38	05/07/25 01:02	1
N-methylperfluorooctane sulfonamide (NMeFOSA)	ND		0.16	0.041	ug/Kg	☼	05/05/25 14:38	05/07/25 01:02	1
N-methylperfluorooctane sulfonamidoethanol (NMeFOSE)	ND		1.6	0.41	ug/Kg	☼	05/05/25 14:38	05/07/25 01:02	1
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	ND		0.16	0.041	ug/Kg	☼	05/05/25 14:38	05/07/25 01:02	1
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	ND		0.33	0.081	ug/Kg	☼	05/05/25 14:38	05/07/25 01:02	1
Perfluoro (2-ethoxyethane) sulfonic acid (PFEESA)	ND		0.33	0.081	ug/Kg	☼	05/05/25 14:38	05/07/25 01:02	1
Perfluoro-3-methoxypropanoic acid (PFMPA)	ND		0.33	0.081	ug/Kg	☼	05/05/25 14:38	05/07/25 01:02	1
Perfluoro-4-methoxybutanoic acid (PFMBA)	ND		0.33	0.081	ug/Kg	☼	05/05/25 14:38	05/07/25 01:02	1
Perfluorobutanesulfonic acid (PFBS)	ND		0.16	0.041	ug/Kg	☼	05/05/25 14:38	05/07/25 01:02	1
Perfluorobutanoic acid (PFBA)	ND		0.65	0.16	ug/Kg	☼	05/05/25 14:38	05/07/25 01:02	1
Perfluorodecanesulfonic acid (PFDS)	ND		0.16	0.041	ug/Kg	☼	05/05/25 14:38	05/07/25 01:02	1
Perfluorodecanoic acid (PFDA)	ND		0.16	0.041	ug/Kg	☼	05/05/25 14:38	05/07/25 01:02	1
Perfluorododecanesulfonic acid (PFDoS)	ND		0.16	0.041	ug/Kg	☼	05/05/25 14:38	05/07/25 01:02	1

Client Sample ID: MW-1 18-20 Ft
Lab Sample ID: 480-229104-1
Date Collected: 04/30/25 10:30
Matrix: Solid
Date Received: 04/30/25 16:56
Percent Solids: 79.9

Method: EPA Draft-3 1633 - Per- and Polyfluoroalkyl Substances by LC/MS/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorododecanoic acid (PFDoA)	ND		0.16	0.041	ug/Kg	☼	05/05/25 14:38	05/07/25 01:02	1
Perfluoroheptanesulfonic acid (PFHpS)	ND		0.16	0.041	ug/Kg	☼	05/05/25 14:38	05/07/25 01:02	1
Perfluoroheptanoic acid (PFHpA)	ND		0.16	0.041	ug/Kg	☼	05/05/25 14:38	05/07/25 01:02	1
Perfluorohexanesulfonic acid (PFHxS)	ND		0.16	0.041	ug/Kg	☼	05/05/25 14:38	05/07/25 01:02	1
Perfluorohexanoic acid (PFHxA)	ND		0.16	0.041	ug/Kg	☼	05/05/25 14:38	05/07/25 01:02	1
Perfluorononanesulfonic acid (PFNS)	ND		0.16	0.041	ug/Kg	☼	05/05/25 14:38	05/07/25 01:02	1
Perfluorononanoic acid (PFNA)	ND		0.16	0.041	ug/Kg	☼	05/05/25 14:38	05/07/25 01:02	1
Perfluorooctanesulfonamide (PFOSA)	ND		0.16	0.041	ug/Kg	☼	05/05/25 14:38	05/07/25 01:02	1
Perfluorooctanesulfonic acid (PFOS)	ND		0.16	0.041	ug/Kg	☼	05/05/25 14:38	05/07/25 01:02	1
Perfluorooctanoic acid (PFOA)	ND		0.16	0.041	ug/Kg	☼	05/05/25 14:38	05/07/25 01:02	1
Perfluoropentanesulfonic acid (PFPeS)	ND		0.16	0.041	ug/Kg	☼	05/05/25 14:38	05/07/25 01:02	1
Perfluoropentanoic acid (PFPeA)	ND		0.33	0.081	ug/Kg	☼	05/05/25 14:38	05/07/25 01:02	1
Perfluorotetradecanoic acid (PFTeDA)	ND		0.16	0.041	ug/Kg	☼	05/05/25 14:38	05/07/25 01:02	1
Perfluorotridecanoic acid (PFTrDA)	ND		0.16	0.041	ug/Kg	☼	05/05/25 14:38	05/07/25 01:02	1
Perfluoroundecanoic acid (PFUnA)	ND		0.16	0.041	ug/Kg	☼	05/05/25 14:38	05/07/25 01:02	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C2 PFTeDA	*62.9*		*20 - 150*	*05/05/25 14:38*	*05/07/25 01:02*	*1*
13C2-PFDoDA	*66.2*		*20 - 150*	*05/05/25 14:38*	*05/07/25 01:02*	*1*
13C3 HFPO-DA	*71.0*		*20 - 150*	*05/05/25 14:38*	*05/07/25 01:02*	*1*
13C3 PFBS	*61.2*		*20 - 150*	*05/05/25 14:38*	*05/07/25 01:02*	*1*
13C3 PFHxS	*56.6*		*20 - 150*	*05/05/25 14:38*	*05/07/25 01:02*	*1*
13C4 PFBA	*64.7*		*20 - 150*	*05/05/25 14:38*	*05/07/25 01:02*	*1*
13C4 PFHpA	*68.5*		*20 - 150*	*05/05/25 14:38*	*05/07/25 01:02*	*1*
13C5 PFHxA	*67.5*		*20 - 150*	*05/05/25 14:38*	*05/07/25 01:02*	*1*
13C5 PFPeA	*73.7*		*20 - 150*	*05/05/25 14:38*	*05/07/25 01:02*	*1*
13C6 PFDA	*72.7*		*20 - 150*	*05/05/25 14:38*	*05/07/25 01:02*	*1*
13C7 PFUnA	*67.5*		*20 - 150*	*05/05/25 14:38*	*05/07/25 01:02*	*1*
13C8 PFOA	*64.3*		*20 - 150*	*05/05/25 14:38*	*05/07/25 01:02*	*1*
13C8 PFOS	*59.8*		*20 - 150*	*05/05/25 14:38*	*05/07/25 01:02*	*1*
13C8 PFOSA	*58.5*		*20 - 150*	*05/05/25 14:38*	*05/07/25 01:02*	*1*
13C9 PFNA	*69.5*		*20 - 150*	*05/05/25 14:38*	*05/07/25 01:02*	*1*
D3-NMeFOSA	*63.3*		*20 - 150*	*05/05/25 14:38*	*05/07/25 01:02*	*1*
d3-NMeFOSAA	*58.8*		*20 - 150*	*05/05/25 14:38*	*05/07/25 01:02*	*1*
d5-NEtFOSAA	*102*		*20 - 150*	*05/05/25 14:38*	*05/07/25 01:02*	*1*
d5-NEtPFOSA	*53.3*		*20 - 150*	*05/05/25 14:38*	*05/07/25 01:02*	*1*
d7-N-MeFOSE-M	*44.4*		*20 - 150*	*05/05/25 14:38*	*05/07/25 01:02*	*1*
d9-N-EtFOSE-M	*40.2*		*20 - 150*	*05/05/25 14:38*	*05/07/25 01:02*	*1*
M2-4:2 FTS	*58.7*		*20 - 150*	*05/05/25 14:38*	*05/07/25 01:02*	*1*
M2-6:2 FTS	*55.7*		*20 - 150*	*05/05/25 14:38*	*05/07/25 01:02*	*1*
M2-8:2 FTS	*62.3*		*20 - 150*	*05/05/25 14:38*	*05/07/25 01:02*	*1*

Method: SW846 6010D - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**15100**	**F2**	12.3	10.6	mg/Kg	☼	05/01/25 14:59	05/02/25 15:20	1
Antimony	ND	F1	18.4	0.65	mg/Kg	☼	05/01/25 14:59	05/02/25 15:20	1
Arsenic	**4.1**		2.5	1.1	mg/Kg	☼	05/01/25 14:59	05/02/25 15:20	1
Barium	**96.2**		0.61	0.17	mg/Kg	☼	05/01/25 14:59	05/02/25 15:20	1
Beryllium	**0.68**		0.25	0.049	mg/Kg	☼	05/01/25 14:59	05/02/25 15:20	1

Client Sample ID: MW-1 18-20 Ft
Lab Sample ID: 480-229104-1
Date Collected: 04/30/25 10:30
Matrix: Solid
Date Received: 04/30/25 16:56
Percent Solids: 79.9

Method: SW846 6010D - Metals (ICP) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	0.12	J	0.25	0.086	mg/Kg	☼	05/01/25 14:59	05/02/25 15:20	1
Calcium	62400		61.3	33.1	mg/Kg	☼	05/01/25 14:59	05/02/25 15:20	1
Chromium	19.6		0.61	0.44	mg/Kg	☼	05/01/25 14:59	05/02/25 15:20	1
Cobalt	9.7	^5+	0.61	0.12	mg/Kg	☼	05/01/25 14:59	05/02/25 15:20	1
Copper	16.0		1.2	0.70	mg/Kg	☼	05/01/25 14:59	05/02/25 15:20	1
Iron	19400	F2	12.3	10.4	mg/Kg	☼	05/01/25 14:59	05/02/25 15:20	1
Lead	13.9	^5+	1.2	0.56	mg/Kg	☼	05/01/25 14:59	05/02/25 15:20	1
Magnesium	23300	F1	24.5	10.4	mg/Kg	☼	05/01/25 14:59	05/02/25 15:20	1
Manganese	454	F1	1.2	0.34	mg/Kg	☼	05/01/25 14:59	05/02/25 15:20	1
Nickel	22.5		6.1	0.31	mg/Kg	☼	05/01/25 14:59	05/02/25 15:20	1
Potassium	4780	F1	36.8	29.7	mg/Kg	☼	05/01/25 14:59	05/02/25 15:20	1
Selenium	ND	F1	4.9	0.98	mg/Kg	☼	05/01/25 14:59	05/02/25 15:20	1
Silver	ND	^5-	0.74	0.25	mg/Kg	☼	05/01/25 14:59	05/02/25 15:20	1
Sodium	314		172	75.1	mg/Kg	☼	05/01/25 14:59	05/02/25 15:20	1
Thallium	ND		7.4	0.93	mg/Kg	☼	05/01/25 14:59	05/02/25 15:20	1
Vanadium	28.7		0.61	0.16	mg/Kg	☼	05/01/25 14:59	05/02/25 15:20	1
Zinc	58.8		2.5	1.2	mg/Kg	☼	05/01/25 14:59	05/02/25 15:20	1

Method: SW846 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.019	J	0.024	0.0056	mg/Kg	☼	05/02/25 09:11	05/02/25 11:04	1

Client Sample ID: HC-8 1-3 in
Lab Sample ID: 480-229104-2
Date Collected: 04/30/25 11:15
Matrix: Solid
Date Received: 04/30/25 16:56
Percent Solids: 84.1

Method: SW846 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	ND		120	64	ug/Kg	☼	05/01/25 06:55	05/06/25 18:44	1
2,4,5-Trichlorophenol	ND		200	54	ug/Kg	☼	05/01/25 06:55	05/06/25 18:44	1
2,4,6-Trichlorophenol	ND		200	40	ug/Kg	☼	05/01/25 06:55	05/06/25 18:44	1
2,4-Dichlorophenol	ND		200	21	ug/Kg	☼	05/01/25 06:55	05/06/25 18:44	1
2,4-Dimethylphenol	ND		200	48	ug/Kg	☼	05/01/25 06:55	05/06/25 18:44	1
2,4-Dinitrophenol	ND		1900	910	ug/Kg	☼	05/01/25 06:55	05/06/25 18:44	1
2,4-Dinitrotoluene	ND		200	41	ug/Kg	☼	05/01/25 06:55	05/06/25 18:44	1
2,6-Dinitrotoluene	ND		200	23	ug/Kg	☼	05/01/25 06:55	05/06/25 18:44	1
2-Chloronaphthalene	ND		200	33	ug/Kg	☼	05/01/25 06:55	05/06/25 18:44	1
2-Chlorophenol	ND		380	36	ug/Kg	☼	05/01/25 06:55	05/06/25 18:44	1
2-Methylnaphthalene	ND		200	40	ug/Kg	☼	05/01/25 06:55	05/06/25 18:44	1
2-Methylphenol	ND		200	23	ug/Kg	☼	05/01/25 06:55	05/06/25 18:44	1
2-Nitroaniline	ND		380	29	ug/Kg	☼	05/01/25 06:55	05/06/25 18:44	1
2-Nitrophenol	ND		200	56	ug/Kg	☼	05/01/25 06:55	05/06/25 18:44	1
3,3'-Dichlorobenzidine	ND		380	230	ug/Kg	☼	05/01/25 06:55	05/06/25 18:44	1
3-Nitroaniline	ND		380	55	ug/Kg	☼	05/01/25 06:55	05/06/25 18:44	1
4,6-Dinitro-2-methylphenol	ND		380	200	ug/Kg	☼	05/01/25 06:55	05/06/25 18:44	1
4-Bromophenyl phenyl ether	ND		200	28	ug/Kg	☼	05/01/25 06:55	05/06/25 18:44	1
4-Chloro-3-methylphenol	ND		200	49	ug/Kg	☼	05/01/25 06:55	05/06/25 18:44	1
4-Chloroaniline	ND		200	49	ug/Kg	☼	05/01/25 06:55	05/06/25 18:44	1
4-Chlorophenyl phenyl ether	ND		200	24	ug/Kg	☼	05/01/25 06:55	05/06/25 18:44	1
4-Methylphenol	ND		380	23	ug/Kg	☼	05/01/25 06:55	05/06/25 18:44	1
4-Nitroaniline	ND		380	100	ug/Kg	☼	05/01/25 06:55	05/06/25 18:44	1
4-Nitrophenol	ND		380	140	ug/Kg	☼	05/01/25 06:55	05/06/25 18:44	1
Acenaphthene	ND		200	29	ug/Kg	☼	05/01/25 06:55	05/06/25 18:44	1
Acenaphthylene	ND		200	26	ug/Kg	☼	05/01/25 06:55	05/06/25 18:44	1
Acetophenone	ND		200	27	ug/Kg	☼	05/01/25 06:55	05/06/25 18:44	1
Anthracene	ND		200	49	ug/Kg	☼	05/01/25 06:55	05/06/25 18:44	1
Atrazine	ND		200	69	ug/Kg	☼	05/01/25 06:55	05/06/25 18:44	1
Benzaldehyde	ND		200	160	ug/Kg	☼	05/01/25 06:55	05/06/25 18:44	1
Benzo[a]anthracene	ND		200	20	ug/Kg	☼	05/01/25 06:55	05/06/25 18:44	1
Benzo[a]pyrene	**61**	**J**	200	29	ug/Kg	☼	05/01/25 06:55	05/06/25 18:44	1
Benzo[b]fluoranthene	**99**	**J**	200	31	ug/Kg	☼	05/01/25 06:55	05/06/25 18:44	1
Benzo[g,h,i]perylene	**65**	**J**	200	21	ug/Kg	☼	05/01/25 06:55	05/06/25 18:44	1
Benzo[k]fluoranthene	**30**	**J**	200	26	ug/Kg	☼	05/01/25 06:55	05/06/25 18:44	1
Biphenyl	ND		200	29	ug/Kg	☼	05/01/25 06:55	05/06/25 18:44	1
bis (2-chloroisopropyl) ether	ND		200	40	ug/Kg	☼	05/01/25 06:55	05/06/25 18:44	1
Bis(2-chloroethoxy)methane	ND		200	42	ug/Kg	☼	05/01/25 06:55	05/06/25 18:44	1
Bis(2-chloroethyl)ether	ND		200	26	ug/Kg	☼	05/01/25 06:55	05/06/25 18:44	1
Bis(2-ethylhexyl) phthalate	ND		200	68	ug/Kg	☼	05/01/25 06:55	05/06/25 18:44	1
Butyl benzyl phthalate	ND		200	33	ug/Kg	☼	05/01/25 06:55	05/06/25 18:44	1
Caprolactam	ND		200	59	ug/Kg	☼	05/01/25 06:55	05/06/25 18:44	1
Carbazole	ND		200	23	ug/Kg	☼	05/01/25 06:55	05/06/25 18:44	1
Chrysene	ND		200	44	ug/Kg	☼	05/01/25 06:55	05/06/25 18:44	1
Dibenz(a,h)anthracene	ND		200	35	ug/Kg	☼	05/01/25 06:55	05/06/25 18:44	1
Dibenzofuran	ND		200	23	ug/Kg	☼	05/01/25 06:55	05/06/25 18:44	1
Diethyl phthalate	ND		200	26	ug/Kg	☼	05/01/25 06:55	05/06/25 18:44	1
Dimethyl phthalate	ND		200	23	ug/Kg	☼	05/01/25 06:55	05/06/25 18:44	1
Di-n-butyl phthalate	ND		200	34	ug/Kg	☼	05/01/25 06:55	05/06/25 18:44	1

Client Sample ID: HC-8 1-3 in
Lab Sample ID: 480-229104-2

Date Collected: 04/30/25 11:15
Matrix: Solid

Date Received: 04/30/25 16:56
Percent Solids: 84.1

Method: SW846 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate	ND		200	23	ug/Kg	☼	05/01/25 06:55	05/06/25 18:44	1
Fluoranthene	**140**	**J**	200	21	ug/Kg	☼	05/01/25 06:55	05/06/25 18:44	1
Fluorene	ND		200	23	ug/Kg	☼	05/01/25 06:55	05/06/25 18:44	1
Hexachlorobenzene	ND		200	27	ug/Kg	☼	05/01/25 06:55	05/06/25 18:44	1
Hexachlorobutadiene	ND		200	29	ug/Kg	☼	05/01/25 06:55	05/06/25 18:44	1
Hexachlorocyclopentadiene	ND		200	27	ug/Kg	☼	05/01/25 06:55	05/06/25 18:44	1
Hexachloroethane	ND		200	26	ug/Kg	☼	05/01/25 06:55	05/06/25 18:44	1
Indeno[1,2,3-cd]pyrene	**49**	**J**	200	24	ug/Kg	☼	05/01/25 06:55	05/06/25 18:44	1
Isophorone	ND		200	42	ug/Kg	☼	05/01/25 06:55	05/06/25 18:44	1
Naphthalene	ND		200	26	ug/Kg	☼	05/01/25 06:55	05/06/25 18:44	1
Nitrobenzene	ND		200	22	ug/Kg	☼	05/01/25 06:55	05/06/25 18:44	1
N-Nitrosodi-n-propylamine	ND		200	34	ug/Kg	☼	05/01/25 06:55	05/06/25 18:44	1
N-Nitrosodiphenylamine	ND		200	160	ug/Kg	☼	05/01/25 06:55	05/06/25 18:44	1
Pentachlorophenol	ND		380	200	ug/Kg	☼	05/01/25 06:55	05/06/25 18:44	1
Phenanthrene	ND		200	29	ug/Kg	☼	05/01/25 06:55	05/06/25 18:44	1
Phenol	ND		200	30	ug/Kg	☼	05/01/25 06:55	05/06/25 18:44	1
Pyrene	**120**	**J**	200	23	ug/Kg	☼	05/01/25 06:55	05/06/25 18:44	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Unknown	*6600*	*T J*	*ug/Kg*	☼	*2.00*	*N/A*	*05/01/25 06:55*	*05/06/25 18:44*	*1*
Unknown	*650*	*T J*	*ug/Kg*	☼	*3.46*	*N/A*	*05/01/25 06:55*	*05/06/25 18:44*	*1*
Tridecanoic acid	*220*	*T J N*	*ug/Kg*	☼	*11.48*	*638-53-9*	*05/01/25 06:55*	*05/06/25 18:44*	*1*
Octadecane	*270*	*T J N*	*ug/Kg*	☼	*13.20*	*593-45-3*	*05/01/25 06:55*	*05/06/25 18:44*	*1*
Unknown	*230*	*T J*	*ug/Kg*	☼	*13.46*	*N/A*	*05/01/25 06:55*	*05/06/25 18:44*	*1*
Unknown	*160*	*T J*	*ug/Kg*	☼	*13.98*	*N/A*	*05/01/25 06:55*	*05/06/25 18:44*	*1*
Unknown	*210*	*T J*	*ug/Kg*	☼	*14.47*	*N/A*	*05/01/25 06:55*	*05/06/25 18:44*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol (Surr)	*69*		*26 - 143*	*05/01/25 06:55*	*05/06/25 18:44*	*1*
2-Fluorobiphenyl (Surr)	*84*		*50 - 121*	*05/01/25 06:55*	*05/06/25 18:44*	*1*
2-Fluorophenol (Surr)	*74*		*36 - 120*	*05/01/25 06:55*	*05/06/25 18:44*	*1*
Nitrobenzene-d5 (Surr)	*79*		*40 - 121*	*05/01/25 06:55*	*05/06/25 18:44*	*1*
Phenol-d5 (Surr)	*79*		*41 - 120*	*05/01/25 06:55*	*05/06/25 18:44*	*1*
p-Terphenyl-d14 (Surr)	*85*		*46 - 143*	*05/01/25 06:55*	*05/06/25 18:44*	*1*

Method: SW846 6010D - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**6590**		11.9	10.3	mg/Kg	☼	05/01/25 14:59	05/02/25 15:38	1
Antimony	ND		17.9	0.63	mg/Kg	☼	05/01/25 14:59	05/02/25 15:38	1
Arsenic	**5.7**		2.4	1.0	mg/Kg	☼	05/01/25 14:59	05/02/25 15:38	1
Barium	**277**		0.60	0.17	mg/Kg	☼	05/01/25 14:59	05/02/25 15:38	1
Beryllium	**0.40**		0.24	0.048	mg/Kg	☼	05/01/25 14:59	05/02/25 15:38	1
Cadmium	ND		0.24	0.083	mg/Kg	☼	05/01/25 14:59	05/02/25 15:38	1
Calcium	**73200**		59.6	32.2	mg/Kg	☼	05/01/25 14:59	05/02/25 15:38	1
Chromium	**7.7**		0.60	0.43	mg/Kg	☼	05/01/25 14:59	05/02/25 15:38	1
Cobalt	**4.2**	**^5+**	0.60	0.12	mg/Kg	☼	05/01/25 14:59	05/02/25 15:38	1
Copper	**23.0**		1.2	0.68	mg/Kg	☼	05/01/25 14:59	05/02/25 15:38	1
Iron	**9060**		11.9	10.1	mg/Kg	☼	05/01/25 14:59	05/02/25 15:38	1
Lead	**14.0**	**^5+**	1.2	0.55	mg/Kg	☼	05/01/25 14:59	05/02/25 15:38	1
Magnesium	**11300**		23.8	10.1	mg/Kg	☼	05/01/25 14:59	05/02/25 15:38	1

Client: Roux Environmental Engineering and Geology DPC
Job ID: 480-229104-1
Project/Site: BCP RI - 619 Exchange Street Site

Client Sample ID: HC-8 1-3 in
Lab Sample ID: 480-229104-2
Date Collected: 04/30/25 11:15
Matrix: Solid
Date Received: 04/30/25 16:56
Percent Solids: 84.1

Method: SW846 6010D - Metals (ICP) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Manganese	224		1.2	0.33	mg/Kg	☼	05/01/25 14:59	05/02/25 15:38	1
Nickel	10.7		6.0	0.30	mg/Kg	☼	05/01/25 14:59	05/02/25 15:38	1
Potassium	1090		35.7	28.9	mg/Kg	☼	05/01/25 14:59	05/02/25 15:38	1
Selenium	ND		4.8	0.95	mg/Kg	☼	05/01/25 14:59	05/02/25 15:38	1
Silver	ND	^5-	0.71	0.24	mg/Kg	☼	05/01/25 14:59	05/02/25 15:38	1
Sodium	282		167	73.1	mg/Kg	☼	05/01/25 14:59	05/02/25 15:38	1
Thallium	ND		7.1	0.91	mg/Kg	☼	05/01/25 14:59	05/02/25 15:38	1
Vanadium	12.6		0.60	0.15	mg/Kg	☼	05/01/25 14:59	05/02/25 15:38	1
Zinc	133		2.4	1.2	mg/Kg	☼	05/01/25 14:59	05/02/25 15:38	1

Method: SW846 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.019	J	0.024	0.0055	mg/Kg	☼	05/02/25 09:11	05/02/25 11:09	1

Client Sample ID: HC-9 5-8 in
Lab Sample ID: 480-229104-3
Date Collected: 04/30/25 11:45
Matrix: Solid
Date Received: 04/30/25 16:56
Percent Solids: 77.2

Method: SW846 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	ND		130	70	ug/Kg	☼	05/01/25 06:55	05/06/25 19:08	1
2,4,5-Trichlorophenol	ND		220	58	ug/Kg	☼	05/01/25 06:55	05/06/25 19:08	1
2,4,6-Trichlorophenol	ND		220	43	ug/Kg	☼	05/01/25 06:55	05/06/25 19:08	1
2,4-Dichlorophenol	ND		220	23	ug/Kg	☼	05/01/25 06:55	05/06/25 19:08	1
2,4-Dimethylphenol	ND		220	52	ug/Kg	☼	05/01/25 06:55	05/06/25 19:08	1
2,4-Dinitrophenol	ND		2100	1000	ug/Kg	☼	05/01/25 06:55	05/06/25 19:08	1
2,4-Dinitrotoluene	ND		220	44	ug/Kg	☼	05/01/25 06:55	05/06/25 19:08	1
2,6-Dinitrotoluene	ND		220	25	ug/Kg	☼	05/01/25 06:55	05/06/25 19:08	1
2-Chloronaphthalene	ND		220	36	ug/Kg	☼	05/01/25 06:55	05/06/25 19:08	1
2-Chlorophenol	ND		420	39	ug/Kg	☼	05/01/25 06:55	05/06/25 19:08	1
2-Methylnaphthalene	ND		220	43	ug/Kg	☼	05/01/25 06:55	05/06/25 19:08	1
2-Methylphenol	ND		220	25	ug/Kg	☼	05/01/25 06:55	05/06/25 19:08	1
2-Nitroaniline	ND		420	32	ug/Kg	☼	05/01/25 06:55	05/06/25 19:08	1
2-Nitrophenol	ND		220	61	ug/Kg	☼	05/01/25 06:55	05/06/25 19:08	1
3,3'-Dichlorobenzidine	ND		420	250	ug/Kg	☼	05/01/25 06:55	05/06/25 19:08	1
3-Nitroaniline	ND		420	60	ug/Kg	☼	05/01/25 06:55	05/06/25 19:08	1
4,6-Dinitro-2-methylphenol	ND		420	220	ug/Kg	☼	05/01/25 06:55	05/06/25 19:08	1
4-Bromophenyl phenyl ether	ND		220	30	ug/Kg	☼	05/01/25 06:55	05/06/25 19:08	1
4-Chloro-3-methylphenol	ND		220	53	ug/Kg	☼	05/01/25 06:55	05/06/25 19:08	1
4-Chloroaniline	ND		220	53	ug/Kg	☼	05/01/25 06:55	05/06/25 19:08	1
4-Chlorophenyl phenyl ether	ND		220	27	ug/Kg	☼	05/01/25 06:55	05/06/25 19:08	1
4-Methylphenol	ND		420	25	ug/Kg	☼	05/01/25 06:55	05/06/25 19:08	1
4-Nitroaniline	ND		420	110	ug/Kg	☼	05/01/25 06:55	05/06/25 19:08	1
4-Nitrophenol	ND		420	150	ug/Kg	☼	05/01/25 06:55	05/06/25 19:08	1
Acenaphthene	ND		220	32	ug/Kg	☼	05/01/25 06:55	05/06/25 19:08	1
Acenaphthylene	ND		220	28	ug/Kg	☼	05/01/25 06:55	05/06/25 19:08	1
Acetophenone	ND		220	29	ug/Kg	☼	05/01/25 06:55	05/06/25 19:08	1
Anthracene	**58**	**J**	220	53	ug/Kg	☼	05/01/25 06:55	05/06/25 19:08	1
Atrazine	ND		220	75	ug/Kg	☼	05/01/25 06:55	05/06/25 19:08	1
Benzaldehyde	ND		220	170	ug/Kg	☼	05/01/25 06:55	05/06/25 19:08	1
Benzo[a]anthracene	**270**		220	22	ug/Kg	☼	05/01/25 06:55	05/06/25 19:08	1
Benzo[a]pyrene	**480**		220	32	ug/Kg	☼	05/01/25 06:55	05/06/25 19:08	1
Benzo[b]fluoranthene	**410**		220	34	ug/Kg	☼	05/01/25 06:55	05/06/25 19:08	1
Benzo[g,h,i]perylene	**560**		220	23	ug/Kg	☼	05/01/25 06:55	05/06/25 19:08	1
Benzo[k]fluoranthene	**240**		220	28	ug/Kg	☼	05/01/25 06:55	05/06/25 19:08	1
Biphenyl	ND		220	32	ug/Kg	☼	05/01/25 06:55	05/06/25 19:08	1
bis (2-chloroisopropyl) ether	ND		220	43	ug/Kg	☼	05/01/25 06:55	05/06/25 19:08	1
Bis(2-chloroethoxy)methane	ND		220	46	ug/Kg	☼	05/01/25 06:55	05/06/25 19:08	1
Bis(2-chloroethyl)ether	ND		220	28	ug/Kg	☼	05/01/25 06:55	05/06/25 19:08	1
Bis(2-ethylhexyl) phthalate	ND		220	74	ug/Kg	☼	05/01/25 06:55	05/06/25 19:08	1
Butyl benzyl phthalate	ND		220	36	ug/Kg	☼	05/01/25 06:55	05/06/25 19:08	1
Caprolactam	ND		220	65	ug/Kg	☼	05/01/25 06:55	05/06/25 19:08	1
Carbazole	ND		220	25	ug/Kg	☼	05/01/25 06:55	05/06/25 19:08	1
Chrysene	**240**		220	48	ug/Kg	☼	05/01/25 06:55	05/06/25 19:08	1
Dibenz(a,h)anthracene	**110**	**J**	220	38	ug/Kg	☼	05/01/25 06:55	05/06/25 19:08	1
Dibenzofuran	ND		220	25	ug/Kg	☼	05/01/25 06:55	05/06/25 19:08	1
Diethyl phthalate	ND		220	28	ug/Kg	☼	05/01/25 06:55	05/06/25 19:08	1
Dimethyl phthalate	ND		220	25	ug/Kg	☼	05/01/25 06:55	05/06/25 19:08	1
Di-n-butyl phthalate	ND		220	37	ug/Kg	☼	05/01/25 06:55	05/06/25 19:08	1

Client Sample ID: HC-9 5-8 in
Lab Sample ID: 480-229104-3

Date Collected: 04/30/25 11:45
Matrix: Solid

Date Received: 04/30/25 16:56
Percent Solids: 77.2

Method: SW846 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate	ND		220	25	ug/Kg	☼	05/01/25 06:55	05/06/25 19:08	1
Fluoranthene	**210**	**J**	220	23	ug/Kg	☼	05/01/25 06:55	05/06/25 19:08	1
Fluorene	ND		220	25	ug/Kg	☼	05/01/25 06:55	05/06/25 19:08	1
Hexachlorobenzene	ND		220	29	ug/Kg	☼	05/01/25 06:55	05/06/25 19:08	1
Hexachlorobutadiene	ND		220	32	ug/Kg	☼	05/01/25 06:55	05/06/25 19:08	1
Hexachlorocyclopentadiene	ND		220	29	ug/Kg	☼	05/01/25 06:55	05/06/25 19:08	1
Hexachloroethane	ND		220	28	ug/Kg	☼	05/01/25 06:55	05/06/25 19:08	1
Indeno[1,2,3-cd]pyrene	**390**		220	27	ug/Kg	☼	05/01/25 06:55	05/06/25 19:08	1
Isophorone	ND		220	46	ug/Kg	☼	05/01/25 06:55	05/06/25 19:08	1
Naphthalene	**28**	**J**	220	28	ug/Kg	☼	05/01/25 06:55	05/06/25 19:08	1
Nitrobenzene	ND		220	24	ug/Kg	☼	05/01/25 06:55	05/06/25 19:08	1
N-Nitrosodi-n-propylamine	ND		220	37	ug/Kg	☼	05/01/25 06:55	05/06/25 19:08	1
N-Nitrosodiphenylamine	ND		220	180	ug/Kg	☼	05/01/25 06:55	05/06/25 19:08	1
Pentachlorophenol	ND		420	220	ug/Kg	☼	05/01/25 06:55	05/06/25 19:08	1
Phenanthrene	**170**	**J**	220	32	ug/Kg	☼	05/01/25 06:55	05/06/25 19:08	1
Phenol	ND		220	33	ug/Kg	☼	05/01/25 06:55	05/06/25 19:08	1
Pyrene	**270**		220	25	ug/Kg	☼	05/01/25 06:55	05/06/25 19:08	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Unknown	*12000*	*T J*	*ug/Kg*	☼	*1.98*	*N/A*	*05/01/25 06:55*	*05/06/25 19:08*	*1*
Unknown	*170*	*T J*	*ug/Kg*	☼	*2.77*	*N/A*	*05/01/25 06:55*	*05/06/25 19:08*	*1*
Unknown	*730*	*T J*	*ug/Kg*	☼	*3.49*	*N/A*	*05/01/25 06:55*	*05/06/25 19:08*	*1*
Unknown	*520*	*T J*	*ug/Kg*	☼	*3.60*	*N/A*	*05/01/25 06:55*	*05/06/25 19:08*	*1*
Unknown	*220*	*T J*	*ug/Kg*	☼	*11.48*	*N/A*	*05/01/25 06:55*	*05/06/25 19:08*	*1*
Unknown	*240*	*T J*	*ug/Kg*	☼	*13.46*	*N/A*	*05/01/25 06:55*	*05/06/25 19:08*	*1*
Benzo[e]pyrene	*210*	*T J N*	*ug/Kg*	☼	*14.22*	*192-97-2*	*05/01/25 06:55*	*05/06/25 19:08*	*1*
Perylene	*230*	*T J N*	*ug/Kg*	☼	*14.36*	*198-55-0*	*05/01/25 06:55*	*05/06/25 19:08*	*1*
Unknown	*250*	*T J*	*ug/Kg*	☼	*15.50*	*N/A*	*05/01/25 06:55*	*05/06/25 19:08*	*1*
Unknown	*190*	*T J*	*ug/Kg*	☼	*15.69*	*N/A*	*05/01/25 06:55*	*05/06/25 19:08*	*1*
Unknown	*400*	*T J*	*ug/Kg*	☼	*15.74*	*N/A*	*05/01/25 06:55*	*05/06/25 19:08*	*1*
Unknown	*360*	*T J*	*ug/Kg*	☼	*16.82*	*N/A*	*05/01/25 06:55*	*05/06/25 19:08*	*1*
3,4:9,10-Dibenzopyrene	*240*	*T J N*	*ug/Kg*	☼	*16.91*	*189-55-9*	*05/01/25 06:55*	*05/06/25 19:08*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol (Surr)	*63*		*26 - 143*	*05/01/25 06:55*	*05/06/25 19:08*	*1*
2-Fluorobiphenyl (Surr)	*89*		*50 - 121*	*05/01/25 06:55*	*05/06/25 19:08*	*1*
2-Fluorophenol (Surr)	*62*		*36 - 120*	*05/01/25 06:55*	*05/06/25 19:08*	*1*
Nitrobenzene-d5 (Surr)	*80*		*40 - 121*	*05/01/25 06:55*	*05/06/25 19:08*	*1*
Phenol-d5 (Surr)	*62*		*41 - 120*	*05/01/25 06:55*	*05/06/25 19:08*	*1*
p-Terphenyl-d14 (Surr)	*89*		*46 - 143*	*05/01/25 06:55*	*05/06/25 19:08*	*1*

Method: SW846 6010D - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**10300**		13.8	11.9	mg/Kg	☼	05/01/25 14:59	05/02/25 15:40	1
Antimony	ND		20.6	0.73	mg/Kg	☼	05/01/25 14:59	05/02/25 15:40	1
Arsenic	**6.4**		2.8	1.2	mg/Kg	☼	05/01/25 14:59	05/02/25 15:40	1
Barium	**126**		0.69	0.19	mg/Kg	☼	05/01/25 14:59	05/02/25 15:40	1
Beryllium	**1.0**		0.28	0.055	mg/Kg	☼	05/01/25 14:59	05/02/25 15:40	1
Cadmium	ND		0.28	0.096	mg/Kg	☼	05/01/25 14:59	05/02/25 15:40	1
Calcium	**26400**		68.8	37.1	mg/Kg	☼	05/01/25 14:59	05/02/25 15:40	1

Client Sample ID: HC-9 5-8 in
Lab Sample ID: 480-229104-3
Date Collected: 04/30/25 11:45
Matrix: Solid
Date Received: 04/30/25 16:56
Percent Solids: 77.2

Method: SW846 6010D - Metals (ICP) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium	12.9		0.69	0.50	mg/Kg	☼	05/01/25 14:59	05/02/25 15:40	1
Cobalt	7.8	^5+	0.69	0.14	mg/Kg	☼	05/01/25 14:59	05/02/25 15:40	1
Copper	31.3		1.4	0.78	mg/Kg	☼	05/01/25 14:59	05/02/25 15:40	1
Iron	19200		13.8	11.7	mg/Kg	☼	05/01/25 14:59	05/02/25 15:40	1
Lead	21.4	^5+	1.4	0.63	mg/Kg	☼	05/01/25 14:59	05/02/25 15:40	1
Magnesium	6090		27.5	11.7	mg/Kg	☼	05/01/25 14:59	05/02/25 15:40	1
Manganese	208		1.4	0.39	mg/Kg	☼	05/01/25 14:59	05/02/25 15:40	1
Nickel	28.8		6.9	0.34	mg/Kg	☼	05/01/25 14:59	05/02/25 15:40	1
Potassium	2130		41.3	33.4	mg/Kg	☼	05/01/25 14:59	05/02/25 15:40	1
Selenium	ND		5.5	1.1	mg/Kg	☼	05/01/25 14:59	05/02/25 15:40	1
Silver	ND	^5-	0.83	0.28	mg/Kg	☼	05/01/25 14:59	05/02/25 15:40	1
Sodium	301		193	84.4	mg/Kg	☼	05/01/25 14:59	05/02/25 15:40	1
Thallium	ND		8.3	1.0	mg/Kg	☼	05/01/25 14:59	05/02/25 15:40	1
Vanadium	24.9		0.69	0.18	mg/Kg	☼	05/01/25 14:59	05/02/25 15:40	1
Zinc	39.5		2.8	1.4	mg/Kg	☼	05/01/25 14:59	05/02/25 15:40	1

Method: SW846 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.029		0.025	0.0058	mg/Kg	☼	05/02/25 09:11	05/02/25 11:10	1

Client: Roux Environmental Engineering and Geology DPC
Job ID: 480-229104-1
Project/Site: BCP RI - 619 Exchange Street Site

Client Sample ID: HC-10 1-3 in
Lab Sample ID: 480-229104-4
Date Collected: 04/30/25 12:00
Matrix: Solid
Date Received: 04/30/25 16:56
Percent Solids: 78.0

Method: SW846 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	ND		130	70	ug/Kg	☼	05/01/25 06:55	05/06/25 19:33	1
2,4,5-Trichlorophenol	ND		220	58	ug/Kg	☼	05/01/25 06:55	05/06/25 19:33	1
2,4,6-Trichlorophenol	ND		220	43	ug/Kg	☼	05/01/25 06:55	05/06/25 19:33	1
2,4-Dichlorophenol	ND		220	23	ug/Kg	☼	05/01/25 06:55	05/06/25 19:33	1
2,4-Dimethylphenol	ND		220	52	ug/Kg	☼	05/01/25 06:55	05/06/25 19:33	1
2,4-Dinitrophenol	ND		2100	990	ug/Kg	☼	05/01/25 06:55	05/06/25 19:33	1
2,4-Dinitrotoluene	ND		220	44	ug/Kg	☼	05/01/25 06:55	05/06/25 19:33	1
2,6-Dinitrotoluene	ND		220	25	ug/Kg	☼	05/01/25 06:55	05/06/25 19:33	1
2-Chloronaphthalene	ND		220	36	ug/Kg	☼	05/01/25 06:55	05/06/25 19:33	1
2-Chlorophenol	ND		420	39	ug/Kg	☼	05/01/25 06:55	05/06/25 19:33	1
2-Methylnaphthalene	ND		220	43	ug/Kg	☼	05/01/25 06:55	05/06/25 19:33	1
2-Methylphenol	ND		220	25	ug/Kg	☼	05/01/25 06:55	05/06/25 19:33	1
2-Nitroaniline	ND		420	32	ug/Kg	☼	05/01/25 06:55	05/06/25 19:33	1
2-Nitrophenol	ND		220	61	ug/Kg	☼	05/01/25 06:55	05/06/25 19:33	1
3,3'-Dichlorobenzidine	ND		420	250	ug/Kg	☼	05/01/25 06:55	05/06/25 19:33	1
3-Nitroaniline	ND		420	60	ug/Kg	☼	05/01/25 06:55	05/06/25 19:33	1
4,6-Dinitro-2-methylphenol	ND		420	220	ug/Kg	☼	05/01/25 06:55	05/06/25 19:33	1
4-Bromophenyl phenyl ether	ND		220	30	ug/Kg	☼	05/01/25 06:55	05/06/25 19:33	1
4-Chloro-3-methylphenol	ND		220	53	ug/Kg	☼	05/01/25 06:55	05/06/25 19:33	1
4-Chloroaniline	ND		220	53	ug/Kg	☼	05/01/25 06:55	05/06/25 19:33	1
4-Chlorophenyl phenyl ether	ND		220	27	ug/Kg	☼	05/01/25 06:55	05/06/25 19:33	1
4-Methylphenol	ND		420	25	ug/Kg	☼	05/01/25 06:55	05/06/25 19:33	1
4-Nitroaniline	ND		420	110	ug/Kg	☼	05/01/25 06:55	05/06/25 19:33	1
4-Nitrophenol	ND		420	150	ug/Kg	☼	05/01/25 06:55	05/06/25 19:33	1
Acenaphthene	ND		220	32	ug/Kg	☼	05/01/25 06:55	05/06/25 19:33	1
Acenaphthylene	ND		220	28	ug/Kg	☼	05/01/25 06:55	05/06/25 19:33	1
Acetophenone	ND		220	29	ug/Kg	☼	05/01/25 06:55	05/06/25 19:33	1
Anthracene	ND		220	53	ug/Kg	☼	05/01/25 06:55	05/06/25 19:33	1
Atrazine	ND		220	75	ug/Kg	☼	05/01/25 06:55	05/06/25 19:33	1
Benzaldehyde	ND		220	170	ug/Kg	☼	05/01/25 06:55	05/06/25 19:33	1
Benzo[a]anthracene	**35**	**J**	220	22	ug/Kg	☼	05/01/25 06:55	05/06/25 19:33	1
Benzo[a]pyrene	**37**	**J**	220	32	ug/Kg	☼	05/01/25 06:55	05/06/25 19:33	1
Benzo[b]fluoranthene	ND		220	34	ug/Kg	☼	05/01/25 06:55	05/06/25 19:33	1
Benzo[g,h,i]perylene	**43**	**J**	220	23	ug/Kg	☼	05/01/25 06:55	05/06/25 19:33	1
Benzo[k]fluoranthene	**28**	**J**	220	28	ug/Kg	☼	05/01/25 06:55	05/06/25 19:33	1
Biphenyl	ND		220	32	ug/Kg	☼	05/01/25 06:55	05/06/25 19:33	1
bis (2-chloroisopropyl) ether	ND		220	43	ug/Kg	☼	05/01/25 06:55	05/06/25 19:33	1
Bis(2-chloroethoxy)methane	ND		220	46	ug/Kg	☼	05/01/25 06:55	05/06/25 19:33	1
Bis(2-chloroethyl)ether	ND		220	28	ug/Kg	☼	05/01/25 06:55	05/06/25 19:33	1
Bis(2-ethylhexyl) phthalate	ND		220	74	ug/Kg	☼	05/01/25 06:55	05/06/25 19:33	1
Butyl benzyl phthalate	ND		220	36	ug/Kg	☼	05/01/25 06:55	05/06/25 19:33	1
Caprolactam	ND		220	65	ug/Kg	☼	05/01/25 06:55	05/06/25 19:33	1
Carbazole	ND		220	25	ug/Kg	☼	05/01/25 06:55	05/06/25 19:33	1
Chrysene	ND		220	48	ug/Kg	☼	05/01/25 06:55	05/06/25 19:33	1
Dibenz(a,h)anthracene	ND		220	38	ug/Kg	☼	05/01/25 06:55	05/06/25 19:33	1
Dibenzofuran	ND		220	25	ug/Kg	☼	05/01/25 06:55	05/06/25 19:33	1
Diethyl phthalate	ND		220	28	ug/Kg	☼	05/01/25 06:55	05/06/25 19:33	1
Dimethyl phthalate	ND		220	25	ug/Kg	☼	05/01/25 06:55	05/06/25 19:33	1
Di-n-butyl phthalate	ND		220	37	ug/Kg	☼	05/01/25 06:55	05/06/25 19:33	1

Client Sample ID: HC-10 1-3 in
Lab Sample ID: 480-229104-4

Date Collected: 04/30/25 12:00
Matrix: Solid
Date Received: 04/30/25 16:56
Percent Solids: 78.0

Method: SW846 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate	ND		220	25	ug/Kg	☼	05/01/25 06:55	05/06/25 19:33	1
Fluoranthene	**39**	**J**	220	23	ug/Kg	☼	05/01/25 06:55	05/06/25 19:33	1
Fluorene	ND		220	25	ug/Kg	☼	05/01/25 06:55	05/06/25 19:33	1
Hexachlorobenzene	ND		220	29	ug/Kg	☼	05/01/25 06:55	05/06/25 19:33	1
Hexachlorobutadiene	ND		220	32	ug/Kg	☼	05/01/25 06:55	05/06/25 19:33	1
Hexachlorocyclopentadiene	ND		220	29	ug/Kg	☼	05/01/25 06:55	05/06/25 19:33	1
Hexachloroethane	ND		220	28	ug/Kg	☼	05/01/25 06:55	05/06/25 19:33	1
Indeno[1,2,3-cd]pyrene	**29**	**J**	220	27	ug/Kg	☼	05/01/25 06:55	05/06/25 19:33	1
Isophorone	ND		220	46	ug/Kg	☼	05/01/25 06:55	05/06/25 19:33	1
Naphthalene	ND		220	28	ug/Kg	☼	05/01/25 06:55	05/06/25 19:33	1
Nitrobenzene	ND		220	24	ug/Kg	☼	05/01/25 06:55	05/06/25 19:33	1
N-Nitrosodi-n-propylamine	ND		220	37	ug/Kg	☼	05/01/25 06:55	05/06/25 19:33	1
N-Nitrosodiphenylamine	ND		220	180	ug/Kg	☼	05/01/25 06:55	05/06/25 19:33	1
Pentachlorophenol	ND		420	220	ug/Kg	☼	05/01/25 06:55	05/06/25 19:33	1
Phenanthrene	**67**	**J**	220	32	ug/Kg	☼	05/01/25 06:55	05/06/25 19:33	1
Phenol	ND		220	33	ug/Kg	☼	05/01/25 06:55	05/06/25 19:33	1
Pyrene	**52**	**J**	220	25	ug/Kg	☼	05/01/25 06:55	05/06/25 19:33	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Unknown	*18000*	*T J*	*ug/Kg*	☼	*1.99*	*N/A*	*05/01/25 06:55*	*05/06/25 19:33*	*1*
Unknown	*640*	*T J*	*ug/Kg*	☼	*3.47*	*N/A*	*05/01/25 06:55*	*05/06/25 19:33*	*1*
Unknown	*300*	*T J*	*ug/Kg*	☼	*10.41*	*N/A*	*05/01/25 06:55*	*05/06/25 19:33*	*1*
Unknown	*210*	*T J*	*ug/Kg*	☼	*11.48*	*N/A*	*05/01/25 06:55*	*05/06/25 19:33*	*1*
Unknown	*180*	*T J*	*ug/Kg*	☼	*12.63*	*N/A*	*05/01/25 06:55*	*05/06/25 19:33*	*1*
Unknown	*200*	*T J*	*ug/Kg*	☼	*13.20*	*N/A*	*05/01/25 06:55*	*05/06/25 19:33*	*1*
Hexadecane	*380*	*T J N*	*ug/Kg*	☼	*13.46*	*544-76-3*	*05/01/25 06:55*	*05/06/25 19:33*	*1*
Docosane	*230*	*T J N*	*ug/Kg*	☼	*13.73*	*629-97-0*	*05/01/25 06:55*	*05/06/25 19:33*	*1*
Octadecane	*240*	*T J N*	*ug/Kg*	☼	*13.98*	*593-45-3*	*05/01/25 06:55*	*05/06/25 19:33*	*1*
Unknown	*170*	*T J*	*ug/Kg*	☼	*14.47*	*N/A*	*05/01/25 06:55*	*05/06/25 19:33*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol (Surr)	*112*		*26 - 143*	*05/01/25 06:55*	*05/06/25 19:33*	*1*
2-Fluorobiphenyl (Surr)	*113*		*50 - 121*	*05/01/25 06:55*	*05/06/25 19:33*	*1*
2-Fluorophenol (Surr)	*95*		*36 - 120*	*05/01/25 06:55*	*05/06/25 19:33*	*1*
Nitrobenzene-d5 (Surr)	*102*		*40 - 121*	*05/01/25 06:55*	*05/06/25 19:33*	*1*
Phenol-d5 (Surr)	*102*		*41 - 120*	*05/01/25 06:55*	*05/06/25 19:33*	*1*
p-Terphenyl-d14 (Surr)	*105*		*46 - 143*	*05/01/25 06:55*	*05/06/25 19:33*	*1*

Method: SW846 6010D - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**4360**		13.5	11.7	mg/Kg	☼	05/01/25 14:59	05/02/25 15:42	1
Antimony	ND		20.3	0.72	mg/Kg	☼	05/01/25 14:59	05/02/25 15:42	1
Arsenic	**9.5**		2.7	1.2	mg/Kg	☼	05/01/25 14:59	05/02/25 15:42	1
Barium	**68.8**		0.68	0.19	mg/Kg	☼	05/01/25 14:59	05/02/25 15:42	1
Beryllium	**0.32**		0.27	0.054	mg/Kg	☼	05/01/25 14:59	05/02/25 15:42	1
Cadmium	**0.13**	**J**	0.27	0.095	mg/Kg	☼	05/01/25 14:59	05/02/25 15:42	1
Calcium	**36200**		67.7	36.6	mg/Kg	☼	05/01/25 14:59	05/02/25 15:42	1
Chromium	**6.5**		0.68	0.49	mg/Kg	☼	05/01/25 14:59	05/02/25 15:42	1
Cobalt	**4.2**	**^5+**	0.68	0.14	mg/Kg	☼	05/01/25 14:59	05/02/25 15:42	1
Copper	**12.4**		1.4	0.77	mg/Kg	☼	05/01/25 14:59	05/02/25 15:42	1

Client Sample ID: HC-10 1-3 in
Lab Sample ID: 480-229104-4
Date Collected: 04/30/25 12:00
Matrix: Solid
Date Received: 04/30/25 16:56
Percent Solids: 78.0

Method: SW846 6010D - Metals (ICP) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	**10300**		13.5	11.5	mg/Kg	☼	05/01/25 14:59	05/02/25 15:42	1
Lead	**10.3**	**^5+**	1.4	0.62	mg/Kg	☼	05/01/25 14:59	05/02/25 15:42	1
Magnesium	**5340**		27.1	11.5	mg/Kg	☼	05/01/25 14:59	05/02/25 15:42	1
Manganese	**165**		1.4	0.38	mg/Kg	☼	05/01/25 14:59	05/02/25 15:42	1
Nickel	**12.8**		6.8	0.34	mg/Kg	☼	05/01/25 14:59	05/02/25 15:42	1
Potassium	**884**		40.6	32.8	mg/Kg	☼	05/01/25 14:59	05/02/25 15:42	1
Selenium	ND		5.4	1.1	mg/Kg	☼	05/01/25 14:59	05/02/25 15:42	1
Silver	ND	^5-	0.81	0.27	mg/Kg	☼	05/01/25 14:59	05/02/25 15:42	1
Sodium	**203**		190	83.1	mg/Kg	☼	05/01/25 14:59	05/02/25 15:42	1
Thallium	ND		8.1	1.0	mg/Kg	☼	05/01/25 14:59	05/02/25 15:42	1
Vanadium	**12.7**		0.68	0.18	mg/Kg	☼	05/01/25 14:59	05/02/25 15:42	1
Zinc	**26.3**		2.7	1.4	mg/Kg	☼	05/01/25 14:59	05/02/25 15:42	1

Method: SW846 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.11**		0.024	0.0056	mg/Kg	☼	05/02/25 09:11	05/02/25 11:11	1

Client: Roux Environmental Engineering and Geology DPC
Job ID: 480-229104-1
Project/Site: BCP RI - 619 Exchange Street Site

Client Sample ID: HC-11 0.25-0.5 Ft
Lab Sample ID: 480-229104-5
Date Collected: 04/30/25 12:30
Matrix: Solid
Date Received: 04/30/25 16:56
Percent Solids: 83.8

Method: SW846 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		4.8	0.35	ug/Kg	☼	04/30/25 17:43	05/01/25 00:39	1
1,1,2,2-Tetrachloroethane	ND		4.8	0.78	ug/Kg	☼	04/30/25 17:43	05/01/25 00:39	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		4.8	1.1	ug/Kg	☼	04/30/25 17:43	05/01/25 00:39	1
1,1,2-Trichloroethane	ND		4.8	0.62	ug/Kg	☼	04/30/25 17:43	05/01/25 00:39	1
1,1-Dichloroethane	ND		4.8	0.59	ug/Kg	☼	04/30/25 17:43	05/01/25 00:39	1
1,1-Dichloroethene	ND		4.8	0.59	ug/Kg	☼	04/30/25 17:43	05/01/25 00:39	1
1,2,4-Trichlorobenzene	ND		4.8	0.29	ug/Kg	☼	04/30/25 17:43	05/01/25 00:39	1
1,2,4-Trimethylbenzene	ND		4.8	0.92	ug/Kg	☼	04/30/25 17:43	05/01/25 00:39	1
1,2-Dibromo-3-Chloropropane	ND		4.8	2.4	ug/Kg	☼	04/30/25 17:43	05/01/25 00:39	1
1,2-Dibromoethane	ND		4.8	0.62	ug/Kg	☼	04/30/25 17:43	05/01/25 00:39	1
1,2-Dichlorobenzene	ND		4.8	0.38	ug/Kg	☼	04/30/25 17:43	05/01/25 00:39	1
1,2-Dichloroethane	ND		4.8	0.24	ug/Kg	☼	04/30/25 17:43	05/01/25 00:39	1
1,2-Dichloropropane	ND		4.8	2.4	ug/Kg	☼	04/30/25 17:43	05/01/25 00:39	1
1,3,5-Trimethylbenzene	ND		4.8	0.31	ug/Kg	☼	04/30/25 17:43	05/01/25 00:39	1
1,3-Dichlorobenzene	ND		4.8	0.25	ug/Kg	☼	04/30/25 17:43	05/01/25 00:39	1
1,4-Dichlorobenzene	ND		4.8	0.67	ug/Kg	☼	04/30/25 17:43	05/01/25 00:39	1
2-Butanone (MEK)	ND		24	1.8	ug/Kg	☼	04/30/25 17:43	05/01/25 00:39	1
2-Hexanone	ND		24	2.4	ug/Kg	☼	04/30/25 17:43	05/01/25 00:39	1
4-Isopropyltoluene	ND		4.8	0.38	ug/Kg	☼	04/30/25 17:43	05/01/25 00:39	1
4-Methyl-2-pentanone (MIBK)	ND		24	1.6	ug/Kg	☼	04/30/25 17:43	05/01/25 00:39	1
Acetone	ND		24	4.0	ug/Kg	☼	04/30/25 17:43	05/01/25 00:39	1
Benzene	ND		4.8	0.24	ug/Kg	☼	04/30/25 17:43	05/01/25 00:39	1
Bromodichloromethane	ND		4.8	0.64	ug/Kg	☼	04/30/25 17:43	05/01/25 00:39	1
Bromoform	ND		4.8	2.4	ug/Kg	☼	04/30/25 17:43	05/01/25 00:39	1
Bromomethane	ND		4.8	0.43	ug/Kg	☼	04/30/25 17:43	05/01/25 00:39	1
Carbon disulfide	ND		4.8	2.4	ug/Kg	☼	04/30/25 17:43	05/01/25 00:39	1
Carbon tetrachloride	ND		4.8	0.46	ug/Kg	☼	04/30/25 17:43	05/01/25 00:39	1
Chlorobenzene	ND		4.8	0.63	ug/Kg	☼	04/30/25 17:43	05/01/25 00:39	1
Chloroethane	ND		4.8	1.1	ug/Kg	☼	04/30/25 17:43	05/01/25 00:39	1
Chloroform	**1.1**	**J B**	4.8	0.30	ug/Kg	☼	04/30/25 17:43	05/01/25 00:39	1
Chloromethane	ND		4.8	0.29	ug/Kg	☼	04/30/25 17:43	05/01/25 00:39	1
cis-1,2-Dichloroethene	ND		4.8	0.61	ug/Kg	☼	04/30/25 17:43	05/01/25 00:39	1
cis-1,3-Dichloropropene	ND		4.8	0.69	ug/Kg	☼	04/30/25 17:43	05/01/25 00:39	1
Cyclohexane	ND		4.8	0.67	ug/Kg	☼	04/30/25 17:43	05/01/25 00:39	1
Dibromochloromethane	ND		4.8	0.61	ug/Kg	☼	04/30/25 17:43	05/01/25 00:39	1
Dichlorodifluoromethane	ND		4.8	0.40	ug/Kg	☼	04/30/25 17:43	05/01/25 00:39	1
Ethylbenzene	ND		4.8	0.33	ug/Kg	☼	04/30/25 17:43	05/01/25 00:39	1
Isopropylbenzene	ND		4.8	0.72	ug/Kg	☼	04/30/25 17:43	05/01/25 00:39	1
Methyl acetate	ND		24	2.9	ug/Kg	☼	04/30/25 17:43	05/01/25 00:39	1
Methyl tert-butyl ether	ND		4.8	0.47	ug/Kg	☼	04/30/25 17:43	05/01/25 00:39	1
Methylcyclohexane	ND		4.8	0.73	ug/Kg	☼	04/30/25 17:43	05/01/25 00:39	1
Methylene Chloride	ND		4.8	2.2	ug/Kg	☼	04/30/25 17:43	05/01/25 00:39	1
Naphthalene	ND		4.8	0.64	ug/Kg	☼	04/30/25 17:43	05/01/25 00:39	1
n-Butylbenzene	ND		4.8	0.42	ug/Kg	☼	04/30/25 17:43	05/01/25 00:39	1
N-Propylbenzene	ND		4.8	0.38	ug/Kg	☼	04/30/25 17:43	05/01/25 00:39	1
sec-Butylbenzene	ND		4.8	0.42	ug/Kg	☼	04/30/25 17:43	05/01/25 00:39	1
Styrene	ND		4.8	0.24	ug/Kg	☼	04/30/25 17:43	05/01/25 00:39	1
tert-Butylbenzene	ND		4.8	0.50	ug/Kg	☼	04/30/25 17:43	05/01/25 00:39	1
Tetrachloroethene	ND		4.8	0.64	ug/Kg	☼	04/30/25 17:43	05/01/25 00:39	1

Client Sample ID: HC-11 0.25-0.5 Ft
Lab Sample ID: 480-229104-5
Date Collected: 04/30/25 12:30
Matrix: Solid
Date Received: 04/30/25 16:56
Percent Solids: 83.8

Method: SW846 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Toluene	ND		4.8	0.36	ug/Kg	☼	04/30/25 17:43	05/01/25 00:39	1
trans-1,2-Dichloroethene	ND		4.8	0.50	ug/Kg	☼	04/30/25 17:43	05/01/25 00:39	1
trans-1,3-Dichloropropene	ND		4.8	2.1	ug/Kg	☼	04/30/25 17:43	05/01/25 00:39	1
Trichloroethene	ND		4.8	1.1	ug/Kg	☼	04/30/25 17:43	05/01/25 00:39	1
Trichlorofluoromethane	ND		4.8	0.45	ug/Kg	☼	04/30/25 17:43	05/01/25 00:39	1
Vinyl chloride	ND		4.8	0.59	ug/Kg	☼	04/30/25 17:43	05/01/25 00:39	1
Xylenes, Total	ND		9.6	0.81	ug/Kg	☼	04/30/25 17:43	05/01/25 00:39	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/Kg*	☼		*N/A*	*04/30/25 17:43*	*05/01/25 00:39*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*106*		*64 - 126*	*04/30/25 17:43*	*05/01/25 00:39*	*1*
4-Bromofluorobenzene (Surr)	*97*		*72 - 126*	*04/30/25 17:43*	*05/01/25 00:39*	*1*
Dibromofluoromethane (Surr)	*104*		*60 - 140*	*04/30/25 17:43*	*05/01/25 00:39*	*1*
Toluene-d8 (Surr)	*97*		*71 - 125*	*04/30/25 17:43*	*05/01/25 00:39*	*1*

Method: SW846 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	ND		120	65	ug/Kg	☼	05/01/25 06:55	05/06/25 19:57	1
2,4,5-Trichlorophenol	ND		200	54	ug/Kg	☼	05/01/25 06:55	05/06/25 19:57	1
2,4,6-Trichlorophenol	ND		200	40	ug/Kg	☼	05/01/25 06:55	05/06/25 19:57	1
2,4-Dichlorophenol	ND		200	21	ug/Kg	☼	05/01/25 06:55	05/06/25 19:57	1
2,4-Dimethylphenol	ND		200	48	ug/Kg	☼	05/01/25 06:55	05/06/25 19:57	1
2,4-Dinitrophenol	ND		2000	920	ug/Kg	☼	05/01/25 06:55	05/06/25 19:57	1
2,4-Dinitrotoluene	ND		200	41	ug/Kg	☼	05/01/25 06:55	05/06/25 19:57	1
2,6-Dinitrotoluene	ND		200	24	ug/Kg	☼	05/01/25 06:55	05/06/25 19:57	1
2-Chloronaphthalene	ND		200	33	ug/Kg	☼	05/01/25 06:55	05/06/25 19:57	1
2-Chlorophenol	ND		390	37	ug/Kg	☼	05/01/25 06:55	05/06/25 19:57	1
2-Methylnaphthalene	ND		200	40	ug/Kg	☼	05/01/25 06:55	05/06/25 19:57	1
2-Methylphenol	ND		200	24	ug/Kg	☼	05/01/25 06:55	05/06/25 19:57	1
2-Nitroaniline	ND		390	29	ug/Kg	☼	05/01/25 06:55	05/06/25 19:57	1
2-Nitrophenol	ND		200	57	ug/Kg	☼	05/01/25 06:55	05/06/25 19:57	1
3,3'-Dichlorobenzidine	ND		390	240	ug/Kg	☼	05/01/25 06:55	05/06/25 19:57	1
3-Nitroaniline	ND		390	55	ug/Kg	☼	05/01/25 06:55	05/06/25 19:57	1
4,6-Dinitro-2-methylphenol	ND		390	200	ug/Kg	☼	05/01/25 06:55	05/06/25 19:57	1
4-Bromophenyl phenyl ether	ND		200	28	ug/Kg	☼	05/01/25 06:55	05/06/25 19:57	1
4-Chloro-3-methylphenol	ND		200	50	ug/Kg	☼	05/01/25 06:55	05/06/25 19:57	1
4-Chloroaniline	ND		200	50	ug/Kg	☼	05/01/25 06:55	05/06/25 19:57	1
4-Chlorophenyl phenyl ether	ND		200	25	ug/Kg	☼	05/01/25 06:55	05/06/25 19:57	1
4-Methylphenol	ND		390	24	ug/Kg	☼	05/01/25 06:55	05/06/25 19:57	1
4-Nitroaniline	ND		390	100	ug/Kg	☼	05/01/25 06:55	05/06/25 19:57	1
4-Nitrophenol	ND		390	140	ug/Kg	☼	05/01/25 06:55	05/06/25 19:57	1
Acenaphthene	ND		200	29	ug/Kg	☼	05/01/25 06:55	05/06/25 19:57	1
Acenaphthylene	ND		200	26	ug/Kg	☼	05/01/25 06:55	05/06/25 19:57	1
Acetophenone	ND		200	27	ug/Kg	☼	05/01/25 06:55	05/06/25 19:57	1
Anthracene	**81**	**J**	200	50	ug/Kg	☼	05/01/25 06:55	05/06/25 19:57	1
Atrazine	ND		200	70	ug/Kg	☼	05/01/25 06:55	05/06/25 19:57	1
Benzaldehyde	ND		200	160	ug/Kg	☼	05/01/25 06:55	05/06/25 19:57	1
Benzo[a]anthracene	**130**	**J**	200	20	ug/Kg	☼	05/01/25 06:55	05/06/25 19:57	1

Client Sample ID: HC-11 0.25-0.5 Ft
Lab Sample ID: 480-229104-5
Date Collected: 04/30/25 12:30
Matrix: Solid
Date Received: 04/30/25 16:56
Percent Solids: 83.8

Method: SW846 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[a]pyrene	**130**	**J**	200	29	ug/Kg	☼	05/01/25 06:55	05/06/25 19:57	1
Benzo[b]fluoranthene	**140**	**J**	200	32	ug/Kg	☼	05/01/25 06:55	05/06/25 19:57	1
Benzo[g,h,i]perylene	**100**	**J**	200	21	ug/Kg	☼	05/01/25 06:55	05/06/25 19:57	1
Benzo[k]fluoranthene	**85**	**J**	200	26	ug/Kg	☼	05/01/25 06:55	05/06/25 19:57	1
Biphenyl	ND		200	29	ug/Kg	☼	05/01/25 06:55	05/06/25 19:57	1
bis (2-chloroisopropyl) ether	ND		200	40	ug/Kg	☼	05/01/25 06:55	05/06/25 19:57	1
Bis(2-chloroethoxy)methane	ND		200	42	ug/Kg	☼	05/01/25 06:55	05/06/25 19:57	1
Bis(2-chloroethyl)ether	ND		200	26	ug/Kg	☼	05/01/25 06:55	05/06/25 19:57	1
Bis(2-ethylhexyl) phthalate	**580**		200	68	ug/Kg	☼	05/01/25 06:55	05/06/25 19:57	1
Butyl benzyl phthalate	**91**	**J**	200	33	ug/Kg	☼	05/01/25 06:55	05/06/25 19:57	1
Caprolactam	ND		200	60	ug/Kg	☼	05/01/25 06:55	05/06/25 19:57	1
Carbazole	ND		200	24	ug/Kg	☼	05/01/25 06:55	05/06/25 19:57	1
Chrysene	**150**	**J**	200	45	ug/Kg	☼	05/01/25 06:55	05/06/25 19:57	1
Dibenz(a,h)anthracene	ND		200	35	ug/Kg	☼	05/01/25 06:55	05/06/25 19:57	1
Dibenzofuran	ND		200	24	ug/Kg	☼	05/01/25 06:55	05/06/25 19:57	1
Diethyl phthalate	ND		200	26	ug/Kg	☼	05/01/25 06:55	05/06/25 19:57	1
Dimethyl phthalate	ND		200	24	ug/Kg	☼	05/01/25 06:55	05/06/25 19:57	1
Di-n-butyl phthalate	ND		200	34	ug/Kg	☼	05/01/25 06:55	05/06/25 19:57	1
Di-n-octyl phthalate	ND		200	24	ug/Kg	☼	05/01/25 06:55	05/06/25 19:57	1
Fluoranthene	**300**		200	21	ug/Kg	☼	05/01/25 06:55	05/06/25 19:57	1
Fluorene	ND		200	24	ug/Kg	☼	05/01/25 06:55	05/06/25 19:57	1
Hexachlorobenzene	ND		200	27	ug/Kg	☼	05/01/25 06:55	05/06/25 19:57	1
Hexachlorobutadiene	ND		200	29	ug/Kg	☼	05/01/25 06:55	05/06/25 19:57	1
Hexachlorocyclopentadiene	ND		200	27	ug/Kg	☼	05/01/25 06:55	05/06/25 19:57	1
Hexachloroethane	ND		200	26	ug/Kg	☼	05/01/25 06:55	05/06/25 19:57	1
Indeno[1,2,3-cd]pyrene	**83**	**J**	200	25	ug/Kg	☼	05/01/25 06:55	05/06/25 19:57	1
Isophorone	ND		200	42	ug/Kg	☼	05/01/25 06:55	05/06/25 19:57	1
Naphthalene	ND		200	26	ug/Kg	☼	05/01/25 06:55	05/06/25 19:57	1
Nitrobenzene	ND		200	22	ug/Kg	☼	05/01/25 06:55	05/06/25 19:57	1
N-Nitrosodi-n-propylamine	ND		200	34	ug/Kg	☼	05/01/25 06:55	05/06/25 19:57	1
N-Nitrosodiphenylamine	ND		200	160	ug/Kg	☼	05/01/25 06:55	05/06/25 19:57	1
Pentachlorophenol	ND		390	200	ug/Kg	☼	05/01/25 06:55	05/06/25 19:57	1
Phenanthrene	**250**		200	29	ug/Kg	☼	05/01/25 06:55	05/06/25 19:57	1
Phenol	ND		200	31	ug/Kg	☼	05/01/25 06:55	05/06/25 19:57	1
Pyrene	**240**		200	24	ug/Kg	☼	05/01/25 06:55	05/06/25 19:57	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Unknown	*19000*	*T J*	*ug/Kg*	☼	*2.00*	*N/A*	*05/01/25 06:55*	*05/06/25 19:57*	*1*
Unknown	*510*	*T J*	*ug/Kg*	☼	*3.46*	*N/A*	*05/01/25 06:55*	*05/06/25 19:57*	*1*
Pyridine, 3-(1-methyl-2-pyrrolidinyl)-, (S)-	*180*	*T J N*	*ug/Kg*	☼	*8.39*	*54-11-5*	*05/01/25 06:55*	*05/06/25 19:57*	*1*
Unknown	*170*	*T J*	*ug/Kg*	☼	*10.41*	*N/A*	*05/01/25 06:55*	*05/06/25 19:57*	*1*
Tri(2-chloroethyl) phosphate	*310*	*T J N*	*ug/Kg*	☼	*10.66*	*115-96-8*	*05/01/25 06:55*	*05/06/25 19:57*	*1*
Unknown	*350*	*T J*	*ug/Kg*	☼	*12.19*	*N/A*	*05/01/25 06:55*	*05/06/25 19:57*	*1*
Heptadecane	*440*	*T J N*	*ug/Kg*	☼	*12.92*	*629-78-7*	*05/01/25 06:55*	*05/06/25 19:57*	*1*
Pentacosane	*680*	*T J N*	*ug/Kg*	☼	*13.20*	*629-99-2*	*05/01/25 06:55*	*05/06/25 19:57*	*1*
Docosane, 11-butyl-	*930*	*T J N*	*ug/Kg*	☼	*13.46*	*13475-76-8*	*05/01/25 06:55*	*05/06/25 19:57*	*1*
Heptacosane	*1000*	*T J N*	*ug/Kg*	☼	*13.73*	*593-49-7*	*05/01/25 06:55*	*05/06/25 19:57*	*1*
Docosane	*1300*	*T J N*	*ug/Kg*	☼	*13.98*	*629-97-0*	*05/01/25 06:55*	*05/06/25 19:57*	*1*
Hexacosane	*1500*	*T J N*	*ug/Kg*	☼	*14.22*	*630-01-3*	*05/01/25 06:55*	*05/06/25 19:57*	*1*

Client Sample ID: HC-11 0.25-0.5 Ft
Lab Sample ID: 480-229104-5

Date Collected: 04/30/25 12:30
Matrix: Solid
Date Received: 04/30/25 16:56
Percent Solids: 83.8

Method: SW846 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Tentatively Identified Compound	Est. Result	Qualifier	Unit	D	RT	CAS No.	Prepared	Analyzed	Dil Fac
Perylene	180	T J N	ug/Kg	☼	14.36	198-55-0	05/01/25 06:55	05/06/25 19:57	1
Eicosane	1200	T J N	ug/Kg	☼	14.47	112-95-8	05/01/25 06:55	05/06/25 19:57	1
Hexatriacontane	1000	T J N	ug/Kg	☼	14.75	630-06-8	05/01/25 06:55	05/06/25 19:57	1
Unknown	360	T J	ug/Kg	☼	14.91	N/A	05/01/25 06:55	05/06/25 19:57	1
Tricosane	580	T J N	ug/Kg	☼	15.03	638-67-5	05/01/25 06:55	05/06/25 19:57	1
Unknown	180	T J	ug/Kg	☼	15.45	N/A	05/01/25 06:55	05/06/25 19:57	1
Unknown	250	T J	ug/Kg	☼	15.96	N/A	05/01/25 06:55	05/06/25 19:57	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol (Surr)	65		26 - 143	05/01/25 06:55	05/06/25 19:57	1
2-Fluorobiphenyl (Surr)	68		50 - 121	05/01/25 06:55	05/06/25 19:57	1
2-Fluorophenol (Surr)	58		36 - 120	05/01/25 06:55	05/06/25 19:57	1
Nitrobenzene-d5 (Surr)	66		40 - 121	05/01/25 06:55	05/06/25 19:57	1
Phenol-d5 (Surr)	62		41 - 120	05/01/25 06:55	05/06/25 19:57	1
p-Terphenyl-d14 (Surr)	71		46 - 143	05/01/25 06:55	05/06/25 19:57	1

Method: SW846 8081B - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	**3.4**	**J**	3.8	0.74	ug/Kg	☼	05/02/25 06:59	05/05/25 12:05	1
4,4'-DDE	**1.3**	**J**	3.8	0.80	ug/Kg	☼	05/02/25 06:59	05/05/25 12:05	1
4,4'-DDT	**6.5**		3.8	0.90	ug/Kg	☼	05/02/25 06:59	05/05/25 12:05	1
Aldrin	ND		3.8	0.94	ug/Kg	☼	05/02/25 06:59	05/05/25 12:05	1
alpha-BHC	ND		3.8	0.69	ug/Kg	☼	05/02/25 06:59	05/05/25 12:05	1
cis-Chlordane	ND		3.8	1.9	ug/Kg	☼	05/02/25 06:59	05/05/25 12:05	1
beta-BHC	ND		3.8	0.69	ug/Kg	☼	05/02/25 06:59	05/05/25 12:05	1
delta-BHC	ND		3.8	0.71	ug/Kg	☼	05/02/25 06:59	05/05/25 12:05	1
Dieldrin	ND		3.8	0.92	ug/Kg	☼	05/02/25 06:59	05/05/25 12:05	1
Endosulfan I	ND		3.8	0.73	ug/Kg	☼	05/02/25 06:59	05/05/25 12:05	1
Endosulfan II	ND		3.8	0.69	ug/Kg	☼	05/02/25 06:59	05/05/25 12:05	1
Endosulfan sulfate	ND		3.8	0.71	ug/Kg	☼	05/02/25 06:59	05/05/25 12:05	1
Endrin	ND		3.8	0.76	ug/Kg	☼	05/02/25 06:59	05/05/25 12:05	1
Endrin aldehyde	ND		3.8	0.98	ug/Kg	☼	05/02/25 06:59	05/05/25 12:05	1
Endrin ketone	**1.8**	**J B**	3.8	0.94	ug/Kg	☼	05/02/25 06:59	05/05/25 12:05	1
gamma-BHC (Lindane)	**1.1**	**J**	3.8	0.70	ug/Kg	☼	05/02/25 06:59	05/05/25 12:05	1
trans-Chlordane	ND		3.8	1.2	ug/Kg	☼	05/02/25 06:59	05/05/25 12:05	1
Heptachlor	ND		3.8	0.83	ug/Kg	☼	05/02/25 06:59	05/05/25 12:05	1
Heptachlor epoxide	ND		3.8	0.99	ug/Kg	☼	05/02/25 06:59	05/05/25 12:05	1
Methoxychlor	**4.4**	**B**	3.8	0.78	ug/Kg	☼	05/02/25 06:59	05/05/25 12:05	1
Toxaphene	ND		38	22	ug/Kg	☼	05/02/25 06:59	05/05/25 12:05	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
DCB Decachlorobiphenyl	71		45 - 120	05/02/25 06:59	05/05/25 12:05	1
DCB Decachlorobiphenyl	77		45 - 120	05/02/25 06:59	05/05/25 12:05	1
Tetrachloro-m-xylene	53		30 - 124	05/02/25 06:59	05/05/25 12:05	1
Tetrachloro-m-xylene	48		30 - 124	05/02/25 06:59	05/05/25 12:05	1

Method: SW846 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		0.29	0.056	mg/Kg	☼	05/01/25 07:04	05/02/25 10:41	1
PCB-1221	ND		0.29	0.056	mg/Kg	☼	05/01/25 07:04	05/02/25 10:41	1

Client Sample ID: HC-11 0.25-0.5 Ft
Lab Sample ID: 480-229104-5

Date Collected: 04/30/25 12:30
Matrix: Solid
Date Received: 04/30/25 16:56
Percent Solids: 83.8

Method: SW846 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1232	ND		0.29	0.056	mg/Kg	☼	05/01/25 07:04	05/02/25 10:41	1
PCB-1242	ND		0.29	0.056	mg/Kg	☼	05/01/25 07:04	05/02/25 10:41	1
PCB-1248	ND		0.29	0.056	mg/Kg	☼	05/01/25 07:04	05/02/25 10:41	1
PCB-1254	ND		0.29	0.13	mg/Kg	☼	05/01/25 07:04	05/02/25 10:41	1
PCB-1260	**0.16**	**J**	0.29	0.13	mg/Kg	☼	05/01/25 07:04	05/02/25 10:41	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*119*		*65 - 174*	*05/01/25 07:04*	*05/02/25 10:41*	*1*
DCB Decachlorobiphenyl	*129*		*65 - 174*	*05/01/25 07:04*	*05/02/25 10:41*	*1*
Tetrachloro-m-xylene	*130*		*60 - 154*	*05/01/25 07:04*	*05/02/25 10:41*	*1*
Tetrachloro-m-xylene	*119*		*60 - 154*	*05/01/25 07:04*	*05/02/25 10:41*	*1*

Method: SW846 8151A - Herbicides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-T	ND		20	6.3	ug/Kg	☼	05/06/25 06:53	05/09/25 13:52	1
2,4-D	ND		20	12	ug/Kg	☼	05/06/25 06:53	05/09/25 13:52	1
Dichlorprop	ND		20	9.8	ug/Kg	☼	05/06/25 06:53	05/09/25 13:52	1
Pentachlorophenol	**100**		20	6.4	ug/Kg	☼	05/06/25 06:53	05/09/25 13:52	1
Picloram	ND		20	8.4	ug/Kg	☼	05/06/25 06:53	05/09/25 13:52	1
Silvex (2,4,5-TP)	ND		20	7.1	ug/Kg	☼	05/06/25 06:53	05/09/25 13:52	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4-Dichlorophenylacetic acid	*107*		*28 - 129*	*05/06/25 06:53*	*05/09/25 13:52*	*1*
2,4-Dichlorophenylacetic acid	*85*		*28 - 129*	*05/06/25 06:53*	*05/09/25 13:52*	*1*

Method: EPA Draft-3 1633 - Per- and Polyfluoroalkyl Substances by LC/MS/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)	ND		0.60	0.15	ug/Kg	☼	05/05/25 14:38	05/07/25 01:52	1
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2 FTS)	ND		0.60	0.15	ug/Kg	☼	05/05/25 14:38	05/07/25 01:52	1
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2 FTS)	ND		0.60	0.15	ug/Kg	☼	05/05/25 14:38	05/07/25 01:52	1
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2 FTS)	ND		0.60	0.15	ug/Kg	☼	05/05/25 14:38	05/07/25 01:52	1
3-Perfluoroheptylpropanoic acid (7:3 FTCA)	ND		3.7	0.94	ug/Kg	☼	05/05/25 14:38	05/07/25 01:52	1
3-Perfluoropentylpropanoic acid (5:3 FTCA)	ND		3.7	0.94	ug/Kg	☼	05/05/25 14:38	05/07/25 01:52	1
3-Perfluoropropylpropanoic acid (3:3 FTCA)	ND		0.75	0.19	ug/Kg	☼	05/05/25 14:38	05/07/25 01:52	1
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	ND		0.60	0.15	ug/Kg	☼	05/05/25 14:38	05/07/25 01:52	1
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9Cl-PF3ONS)	ND		0.60	0.15	ug/Kg	☼	05/05/25 14:38	05/07/25 01:52	1
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA)	ND		0.60	0.15	ug/Kg	☼	05/05/25 14:38	05/07/25 01:52	1
N-ethylperfluorooctane sulfonamide (NEtFOSA)	ND		0.15	0.037	ug/Kg	☼	05/05/25 14:38	05/07/25 01:52	1
N-ethylperfluorooctane sulfonamidoethanol (NEtFOSE)	ND		1.5	0.37	ug/Kg	☼	05/05/25 14:38	05/07/25 01:52	1
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	**0.21**		0.15	0.037	ug/Kg	☼	05/05/25 14:38	05/07/25 01:52	1

Client Sample ID: HC-11 0.25-0.5 Ft
Lab Sample ID: 480-229104-5

Date Collected: 04/30/25 12:30
Matrix: Solid
Date Received: 04/30/25 16:56
Percent Solids: 83.8

Method: EPA Draft-3 1633 - Per- and Polyfluoroalkyl Substances by LC/MS/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
N-methylperfluorooctane sulfonamide (NMeFOSA)	ND		0.15	0.037	ug/Kg	☼	05/05/25 14:38	05/07/25 01:52	1
N-methylperfluorooctane sulfonamidoethanol (NMeFOSE)	ND		1.5	0.37	ug/Kg	☼	05/05/25 14:38	05/07/25 01:52	1
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	**0.039**	**J**	0.15	0.037	ug/Kg	☼	05/05/25 14:38	05/07/25 01:52	1
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	ND		0.30	0.075	ug/Kg	☼	05/05/25 14:38	05/07/25 01:52	1
Perfluoro (2-ethoxyethane) sulfonic acid (PFEESA)	ND		0.30	0.075	ug/Kg	☼	05/05/25 14:38	05/07/25 01:52	1
Perfluoro-3-methoxypropanoic acid (PFMPA)	ND		0.30	0.075	ug/Kg	☼	05/05/25 14:38	05/07/25 01:52	1
Perfluoro-4-methoxybutanoic acid (PFMBA)	ND		0.30	0.075	ug/Kg	☼	05/05/25 14:38	05/07/25 01:52	1
Perfluorobutanesulfonic acid (PFBS)	ND		0.15	0.037	ug/Kg	☼	05/05/25 14:38	05/07/25 01:52	1
Perfluorobutanoic acid (PFBA)	ND		0.60	0.15	ug/Kg	☼	05/05/25 14:38	05/07/25 01:52	1
Perfluorodecanesulfonic acid (PFDS)	ND		0.15	0.037	ug/Kg	☼	05/05/25 14:38	05/07/25 01:52	1
Perfluorodecanoic acid (PFDA)	ND		0.15	0.037	ug/Kg	☼	05/05/25 14:38	05/07/25 01:52	1
Perfluorododecanesulfonic acid (PFDoS)	ND		0.15	0.037	ug/Kg	☼	05/05/25 14:38	05/07/25 01:52	1
Perfluorododecanoic acid (PFDoA)	ND		0.15	0.037	ug/Kg	☼	05/05/25 14:38	05/07/25 01:52	1
Perfluoroheptanesulfonic acid (PFHpS)	ND		0.15	0.037	ug/Kg	☼	05/05/25 14:38	05/07/25 01:52	1
Perfluoroheptanoic acid (PFHpA)	**0.040**	**J**	0.15	0.037	ug/Kg	☼	05/05/25 14:38	05/07/25 01:52	1
Perfluorohexanesulfonic acid (PFHxS)	ND		0.15	0.037	ug/Kg	☼	05/05/25 14:38	05/07/25 01:52	1
Perfluorohexanoic acid (PFHxA)	ND		0.15	0.037	ug/Kg	☼	05/05/25 14:38	05/07/25 01:52	1
Perfluorononanesulfonic acid (PFNS)	ND		0.15	0.037	ug/Kg	☼	05/05/25 14:38	05/07/25 01:52	1
Perfluorononanoic acid (PFNA)	ND		0.15	0.037	ug/Kg	☼	05/05/25 14:38	05/07/25 01:52	1
Perfluorooctanesulfonamide (PFOSA)	ND		0.15	0.037	ug/Kg	☼	05/05/25 14:38	05/07/25 01:52	1
Perfluorooctanesulfonic acid (PFOS)	**0.075**	**J**	0.15	0.037	ug/Kg	☼	05/05/25 14:38	05/07/25 01:52	1
Perfluorooctanoic acid (PFOA)	**0.11**	**J**	0.15	0.037	ug/Kg	☼	05/05/25 14:38	05/07/25 01:52	1
Perfluoropentanesulfonic acid (PFPeS)	ND		0.15	0.037	ug/Kg	☼	05/05/25 14:38	05/07/25 01:52	1
Perfluoropentanoic acid (PFPeA)	ND		0.30	0.075	ug/Kg	☼	05/05/25 14:38	05/07/25 01:52	1
Perfluorotetradecanoic acid (PFTeDA)	ND		0.15	0.037	ug/Kg	☼	05/05/25 14:38	05/07/25 01:52	1
Perfluorotridecanoic acid (PFTrDA)	ND		0.15	0.037	ug/Kg	☼	05/05/25 14:38	05/07/25 01:52	1
Perfluoroundecanoic acid (PFUnA)	ND		0.15	0.037	ug/Kg	☼	05/05/25 14:38	05/07/25 01:52	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C2 PFTeDA	*82.3*		*20 - 150*	*05/05/25 14:38*	*05/07/25 01:52*	*1*
13C2-PFDoDA	*93.8*		*20 - 150*	*05/05/25 14:38*	*05/07/25 01:52*	*1*
13C3 HFPO-DA	*92.0*		*20 - 150*	*05/05/25 14:38*	*05/07/25 01:52*	*1*
13C3 PFBS	*94.0*		*20 - 150*	*05/05/25 14:38*	*05/07/25 01:52*	*1*
13C3 PFHxS	*95.0*		*20 - 150*	*05/05/25 14:38*	*05/07/25 01:52*	*1*
13C4 PFBA	*94.9*		*20 - 150*	*05/05/25 14:38*	*05/07/25 01:52*	*1*
13C4 PFHpA	*93.4*		*20 - 150*	*05/05/25 14:38*	*05/07/25 01:52*	*1*
13C5 PFHxA	*94.6*		*20 - 150*	*05/05/25 14:38*	*05/07/25 01:52*	*1*
13C5 PFPeA	*102*		*20 - 150*	*05/05/25 14:38*	*05/07/25 01:52*	*1*
13C6 PFDA	*96.8*		*20 - 150*	*05/05/25 14:38*	*05/07/25 01:52*	*1*
13C7 PFUnA	*89.1*		*20 - 150*	*05/05/25 14:38*	*05/07/25 01:52*	*1*
13C8 PFOA	*97.9*		*20 - 150*	*05/05/25 14:38*	*05/07/25 01:52*	*1*
13C8 PFOS	*92.1*		*20 - 150*	*05/05/25 14:38*	*05/07/25 01:52*	*1*

Client Sample ID: HC-11 0.25-0.5 Ft
Lab Sample ID: 480-229104-5

Date Collected: 04/30/25 12:30
Matrix: Solid
Date Received: 04/30/25 16:56
Percent Solids: 83.8

Method: EPA Draft-3 1633 - Per- and Polyfluoroalkyl Substances by LC/MS/MS (Continued)

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C8 PFOSA	91.0		20 - 150	05/05/25 14:38	05/07/25 01:52	1
13C9 PFNA	94.9		20 - 150	05/05/25 14:38	05/07/25 01:52	1
D3-NMeFOSA	88.6		20 - 150	05/05/25 14:38	05/07/25 01:52	1
d3-NMeFOSAA	95.2		20 - 150	05/05/25 14:38	05/07/25 01:52	1
d5-NEtFOSAA	141		20 - 150	05/05/25 14:38	05/07/25 01:52	1
d5-NEtPFOSA	75.2		20 - 150	05/05/25 14:38	05/07/25 01:52	1
d7-N-MeFOSE-M	71.4		20 - 150	05/05/25 14:38	05/07/25 01:52	1
d9-N-EtFOSE-M	65.2		20 - 150	05/05/25 14:38	05/07/25 01:52	1
M2-4:2 FTS	173	*5+	20 - 150	05/05/25 14:38	05/07/25 01:52	1
M2-6:2 FTS	136		20 - 150	05/05/25 14:38	05/07/25 01:52	1
M2-8:2 FTS	115		20 - 150	05/05/25 14:38	05/07/25 01:52	1

Method: SW846 6010D - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**5160**		11.8	10.2	mg/Kg	☼	05/01/25 14:59	05/02/25 15:44	1
Antimony	ND		17.7	0.63	mg/Kg	☼	05/01/25 14:59	05/02/25 15:44	1
Arsenic	**6.3**		2.4	1.0	mg/Kg	☼	05/01/25 14:59	05/02/25 15:44	1
Barium	**6290**		2.9	0.83	mg/Kg	☼	05/01/25 14:59	05/05/25 11:00	5
Beryllium	**0.56**		0.24	0.047	mg/Kg	☼	05/01/25 14:59	05/02/25 15:44	1
Cadmium	**1.5**		0.24	0.083	mg/Kg	☼	05/01/25 14:59	05/02/25 15:44	1
Calcium	**23500**		59.0	31.8	mg/Kg	☼	05/01/25 14:59	05/02/25 15:44	1
Chromium	**8.5**		0.59	0.42	mg/Kg	☼	05/01/25 14:59	05/02/25 15:44	1
Cobalt	**6.4**	^5+	0.59	0.12	mg/Kg	☼	05/01/25 14:59	05/02/25 15:44	1
Copper	**168**		1.2	0.67	mg/Kg	☼	05/01/25 14:59	05/02/25 15:44	1
Iron	**11700**		11.8	10.0	mg/Kg	☼	05/01/25 14:59	05/02/25 15:44	1
Lead	**76.6**	^5+	1.2	0.54	mg/Kg	☼	05/01/25 14:59	05/02/25 15:44	1
Magnesium	**4520**		23.6	10.0	mg/Kg	☼	05/01/25 14:59	05/02/25 15:44	1
Manganese	**164**		1.2	0.33	mg/Kg	☼	05/01/25 14:59	05/02/25 15:44	1
Nickel	**11.8**		5.9	0.29	mg/Kg	☼	05/01/25 14:59	05/02/25 15:44	1
Potassium	**800**		35.4	28.6	mg/Kg	☼	05/01/25 14:59	05/02/25 15:44	1
Selenium	ND		4.7	0.94	mg/Kg	☼	05/01/25 14:59	05/02/25 15:44	1
Silver	ND	^5-	0.71	0.24	mg/Kg	☼	05/01/25 14:59	05/02/25 15:44	1
Sodium	**280**		165	72.3	mg/Kg	☼	05/01/25 14:59	05/02/25 15:44	1
Thallium	ND		7.1	0.90	mg/Kg	☼	05/01/25 14:59	05/02/25 15:44	1
Vanadium	**12.4**		0.59	0.15	mg/Kg	☼	05/01/25 14:59	05/02/25 15:44	1
Zinc	**3090**		11.8	6.0	mg/Kg	☼	05/01/25 14:59	05/05/25 11:00	5

Method: SW846 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.14**		0.023	0.0053	mg/Kg	☼	05/02/25 09:11	05/02/25 11:13	1

Client: Roux Environmental Engineering and Geology DPC
Job ID: 480-229104-1
Project/Site: BCP RI - 619 Exchange Street Site

Client Sample ID: BD-2
Lab Sample ID: 480-229104-6
Date Collected: 04/30/25 11:50
Matrix: Solid
Date Received: 04/30/25 16:56
Percent Solids: 84.4

Method: SW846 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	ND		120	65	ug/Kg	☼	05/01/25 06:55	05/06/25 20:22	1
2,4,5-Trichlorophenol	ND		200	54	ug/Kg	☼	05/01/25 06:55	05/06/25 20:22	1
2,4,6-Trichlorophenol	ND		200	40	ug/Kg	☼	05/01/25 06:55	05/06/25 20:22	1
2,4-Dichlorophenol	ND		200	21	ug/Kg	☼	05/01/25 06:55	05/06/25 20:22	1
2,4-Dimethylphenol	ND		200	48	ug/Kg	☼	05/01/25 06:55	05/06/25 20:22	1
2,4-Dinitrophenol	ND		2000	920	ug/Kg	☼	05/01/25 06:55	05/06/25 20:22	1
2,4-Dinitrotoluene	ND		200	41	ug/Kg	☼	05/01/25 06:55	05/06/25 20:22	1
2,6-Dinitrotoluene	ND		200	24	ug/Kg	☼	05/01/25 06:55	05/06/25 20:22	1
2-Chloronaphthalene	ND		200	33	ug/Kg	☼	05/01/25 06:55	05/06/25 20:22	1
2-Chlorophenol	ND		390	36	ug/Kg	☼	05/01/25 06:55	05/06/25 20:22	1
2-Methylnaphthalene	ND		200	40	ug/Kg	☼	05/01/25 06:55	05/06/25 20:22	1
2-Methylphenol	ND		200	24	ug/Kg	☼	05/01/25 06:55	05/06/25 20:22	1
2-Nitroaniline	ND		390	29	ug/Kg	☼	05/01/25 06:55	05/06/25 20:22	1
2-Nitrophenol	ND		200	57	ug/Kg	☼	05/01/25 06:55	05/06/25 20:22	1
3,3'-Dichlorobenzidine	ND		390	240	ug/Kg	☼	05/01/25 06:55	05/06/25 20:22	1
3-Nitroaniline	ND		390	55	ug/Kg	☼	05/01/25 06:55	05/06/25 20:22	1
4,6-Dinitro-2-methylphenol	ND		390	200	ug/Kg	☼	05/01/25 06:55	05/06/25 20:22	1
4-Bromophenyl phenyl ether	ND		200	28	ug/Kg	☼	05/01/25 06:55	05/06/25 20:22	1
4-Chloro-3-methylphenol	ND		200	49	ug/Kg	☼	05/01/25 06:55	05/06/25 20:22	1
4-Chloroaniline	ND		200	49	ug/Kg	☼	05/01/25 06:55	05/06/25 20:22	1
4-Chlorophenyl phenyl ether	ND		200	25	ug/Kg	☼	05/01/25 06:55	05/06/25 20:22	1
4-Methylphenol	ND		390	24	ug/Kg	☼	05/01/25 06:55	05/06/25 20:22	1
4-Nitroaniline	ND		390	100	ug/Kg	☼	05/01/25 06:55	05/06/25 20:22	1
4-Nitrophenol	ND		390	140	ug/Kg	☼	05/01/25 06:55	05/06/25 20:22	1
Acenaphthene	**93**	**J**	200	29	ug/Kg	☼	05/01/25 06:55	05/06/25 20:22	1
Acenaphthylene	ND		200	26	ug/Kg	☼	05/01/25 06:55	05/06/25 20:22	1
Acetophenone	ND		200	27	ug/Kg	☼	05/01/25 06:55	05/06/25 20:22	1
Anthracene	**200**		200	49	ug/Kg	☼	05/01/25 06:55	05/06/25 20:22	1
Atrazine	ND		200	69	ug/Kg	☼	05/01/25 06:55	05/06/25 20:22	1
Benzaldehyde	ND		200	160	ug/Kg	☼	05/01/25 06:55	05/06/25 20:22	1
Benzo[a]anthracene	**800**		200	20	ug/Kg	☼	05/01/25 06:55	05/06/25 20:22	1
Benzo[a]pyrene	**1300**		200	29	ug/Kg	☼	05/01/25 06:55	05/06/25 20:22	1
Benzo[b]fluoranthene	**1200**		200	32	ug/Kg	☼	05/01/25 06:55	05/06/25 20:22	1
Benzo[g,h,i]perylene	**1200**		200	21	ug/Kg	☼	05/01/25 06:55	05/06/25 20:22	1
Benzo[k]fluoranthene	**580**		200	26	ug/Kg	☼	05/01/25 06:55	05/06/25 20:22	1
Biphenyl	ND		200	29	ug/Kg	☼	05/01/25 06:55	05/06/25 20:22	1
bis (2-chloroisopropyl) ether	ND		200	40	ug/Kg	☼	05/01/25 06:55	05/06/25 20:22	1
Bis(2-chloroethoxy)methane	ND		200	42	ug/Kg	☼	05/01/25 06:55	05/06/25 20:22	1
Bis(2-chloroethyl)ether	ND		200	26	ug/Kg	☼	05/01/25 06:55	05/06/25 20:22	1
Bis(2-ethylhexyl) phthalate	ND		200	68	ug/Kg	☼	05/01/25 06:55	05/06/25 20:22	1
Butyl benzyl phthalate	ND		200	33	ug/Kg	☼	05/01/25 06:55	05/06/25 20:22	1
Caprolactam	ND		200	60	ug/Kg	☼	05/01/25 06:55	05/06/25 20:22	1
Carbazole	**82**	**J**	200	24	ug/Kg	☼	05/01/25 06:55	05/06/25 20:22	1
Chrysene	**710**		200	45	ug/Kg	☼	05/01/25 06:55	05/06/25 20:22	1
Dibenz(a,h)anthracene	**350**		200	35	ug/Kg	☼	05/01/25 06:55	05/06/25 20:22	1
Dibenzofuran	**40**	**J**	200	24	ug/Kg	☼	05/01/25 06:55	05/06/25 20:22	1
Diethyl phthalate	ND		200	26	ug/Kg	☼	05/01/25 06:55	05/06/25 20:22	1
Dimethyl phthalate	ND		200	24	ug/Kg	☼	05/01/25 06:55	05/06/25 20:22	1
Di-n-butyl phthalate	ND		200	34	ug/Kg	☼	05/01/25 06:55	05/06/25 20:22	1

Client Sample ID: BD-2
Date Collected: 04/30/25 11:50
Date Received: 04/30/25 16:56

Lab Sample ID: 480-229104-6
Matrix: Solid
Percent Solids: 84.4

Method: SW846 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate	ND		200	24	ug/Kg	☼	05/01/25 06:55	05/06/25 20:22	1
Fluoranthene	**720**		200	21	ug/Kg	☼	05/01/25 06:55	05/06/25 20:22	1
Fluorene	**44**	**J**	200	24	ug/Kg	☼	05/01/25 06:55	05/06/25 20:22	1
Hexachlorobenzene	ND		200	27	ug/Kg	☼	05/01/25 06:55	05/06/25 20:22	1
Hexachlorobutadiene	ND		200	29	ug/Kg	☼	05/01/25 06:55	05/06/25 20:22	1
Hexachlorocyclopentadiene	ND		200	27	ug/Kg	☼	05/01/25 06:55	05/06/25 20:22	1
Hexachloroethane	ND		200	26	ug/Kg	☼	05/01/25 06:55	05/06/25 20:22	1
Indeno[1,2,3-cd]pyrene	**940**		200	25	ug/Kg	☼	05/01/25 06:55	05/06/25 20:22	1
Isophorone	ND		200	42	ug/Kg	☼	05/01/25 06:55	05/06/25 20:22	1
Naphthalene	ND		200	26	ug/Kg	☼	05/01/25 06:55	05/06/25 20:22	1
Nitrobenzene	ND		200	22	ug/Kg	☼	05/01/25 06:55	05/06/25 20:22	1
N-Nitrosodi-n-propylamine	ND		200	34	ug/Kg	☼	05/01/25 06:55	05/06/25 20:22	1
N-Nitrosodiphenylamine	ND		200	160	ug/Kg	☼	05/01/25 06:55	05/06/25 20:22	1
Pentachlorophenol	ND		390	200	ug/Kg	☼	05/01/25 06:55	05/06/25 20:22	1
Phenanthrene	**560**		200	29	ug/Kg	☼	05/01/25 06:55	05/06/25 20:22	1
Phenol	ND		200	31	ug/Kg	☼	05/01/25 06:55	05/06/25 20:22	1
Pyrene	**750**		200	24	ug/Kg	☼	05/01/25 06:55	05/06/25 20:22	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Unknown	*13000*	*T J*	*ug/Kg*	☼	*1.99*	*N/A*	*05/01/25 06:55*	*05/06/25 20:22*	*1*
Unknown	*460*	*T J*	*ug/Kg*	☼	*2.77*	*N/A*	*05/01/25 06:55*	*05/06/25 20:22*	*1*
Unknown	*400*	*T J*	*ug/Kg*	☼	*3.27*	*N/A*	*05/01/25 06:55*	*05/06/25 20:22*	*1*
Unknown	*510*	*T J*	*ug/Kg*	☼	*3.48*	*N/A*	*05/01/25 06:55*	*05/06/25 20:22*	*1*
Unknown	*340*	*T J*	*ug/Kg*	☼	*11.50*	*N/A*	*05/01/25 06:55*	*05/06/25 20:22*	*1*
1,3,5-Triazine-2(1H)-thione, 4-(diethylamino)-6-(ethylamino)	*160*	*T J N*	*ug/Kg*	☼	*13.38*	*23613-02-7*	*05/01/25 06:55*	*05/06/25 20:22*	*1*
Unknown	*210*	*T J*	*ug/Kg*	☼	*13.48*	*N/A*	*05/01/25 06:55*	*05/06/25 20:22*	*1*
Unknown	*220*	*T J*	*ug/Kg*	☼	*13.73*	*N/A*	*05/01/25 06:55*	*05/06/25 20:22*	*1*
Unknown	*170*	*T J*	*ug/Kg*	☼	*13.91*	*N/A*	*05/01/25 06:55*	*05/06/25 20:22*	*1*
Unknown	*310*	*T J*	*ug/Kg*	☼	*14.23*	*N/A*	*05/01/25 06:55*	*05/06/25 20:22*	*1*
Perylene	*530*	*T J N*	*ug/Kg*	☼	*14.36*	*198-55-0*	*05/01/25 06:55*	*05/06/25 20:22*	*1*
Unknown	*260*	*T J*	*ug/Kg*	☼	*14.59*	*N/A*	*05/01/25 06:55*	*05/06/25 20:22*	*1*
Unknown	*190*	*T J*	*ug/Kg*	☼	*15.24*	*N/A*	*05/01/25 06:55*	*05/06/25 20:22*	*1*
Pentacene	*310*	*T J N*	*ug/Kg*	☼	*15.46*	*135-48-8*	*05/01/25 06:55*	*05/06/25 20:22*	*1*
Benzo[b]triphenylene	*310*	*T J N*	*ug/Kg*	☼	*15.49*	*215-58-7*	*05/01/25 06:55*	*05/06/25 20:22*	*1*
Unknown	*320*	*T J*	*ug/Kg*	☼	*15.69*	*N/A*	*05/01/25 06:55*	*05/06/25 20:22*	*1*
Dibenzo[def,mno]chrysene	*500*	*T J N*	*ug/Kg*	☼	*15.75*	*191-26-4*	*05/01/25 06:55*	*05/06/25 20:22*	*1*
Dibenz(a,e)aceanthrylene	*410*	*T J N*	*ug/Kg*	☼	*16.83*	*5385-75-1*	*05/01/25 06:55*	*05/06/25 20:22*	*1*
1,2:3,4-Dibenzopyrene	*360*	*T J N*	*ug/Kg*	☼	*16.93*	*191-30-0*	*05/01/25 06:55*	*05/06/25 20:22*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol (Surr)	*65*		*26 - 143*	*05/01/25 06:55*	*05/06/25 20:22*	*1*
2-Fluorobiphenyl (Surr)	*89*		*50 - 121*	*05/01/25 06:55*	*05/06/25 20:22*	*1*
2-Fluorophenol (Surr)	*64*		*36 - 120*	*05/01/25 06:55*	*05/06/25 20:22*	*1*
Nitrobenzene-d5 (Surr)	*79*		*40 - 121*	*05/01/25 06:55*	*05/06/25 20:22*	*1*
Phenol-d5 (Surr)	*73*		*41 - 120*	*05/01/25 06:55*	*05/06/25 20:22*	*1*
p-Terphenyl-d14 (Surr)	*83*		*46 - 143*	*05/01/25 06:55*	*05/06/25 20:22*	*1*

Client: Roux Environmental Engineering and Geology DPC
Job ID: 480-229104-1
Project/Site: BCP RI - 619 Exchange Street Site

Client Sample ID: BD-2
Lab Sample ID: 480-229104-6

Date Collected: 04/30/25 11:50
Matrix: Solid

Date Received: 04/30/25 16:56
Percent Solids: 84.4

Method: SW846 6010D - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	8910		11.4	9.9	mg/Kg	☼	05/01/25 14:59	05/02/25 15:46	1
Antimony	ND		17.2	0.61	mg/Kg	☼	05/01/25 14:59	05/02/25 15:46	1
Arsenic	4.8		2.3	1.0	mg/Kg	☼	05/01/25 14:59	05/02/25 15:46	1
Barium	406		0.57	0.16	mg/Kg	☼	05/01/25 14:59	05/02/25 15:46	1
Beryllium	0.79		0.23	0.046	mg/Kg	☼	05/01/25 14:59	05/02/25 15:46	1
Cadmium	ND		0.23	0.080	mg/Kg	☼	05/01/25 14:59	05/02/25 15:46	1
Calcium	35700		57.2	30.9	mg/Kg	☼	05/01/25 14:59	05/02/25 15:46	1
Chromium	13.7		0.57	0.41	mg/Kg	☼	05/01/25 14:59	05/02/25 15:46	1
Cobalt	6.6	^5+	0.57	0.11	mg/Kg	☼	05/01/25 14:59	05/02/25 15:46	1
Copper	17.9		1.1	0.65	mg/Kg	☼	05/01/25 14:59	05/02/25 15:46	1
Iron	16200		11.4	9.7	mg/Kg	☼	05/01/25 14:59	05/02/25 15:46	1
Lead	15.1	^5+	1.1	0.53	mg/Kg	☼	05/01/25 14:59	05/02/25 15:46	1
Magnesium	8500		22.9	9.7	mg/Kg	☼	05/01/25 14:59	05/02/25 15:46	1
Manganese	236		1.1	0.32	mg/Kg	☼	05/01/25 14:59	05/02/25 15:46	1
Nickel	20.6		5.7	0.29	mg/Kg	☼	05/01/25 14:59	05/02/25 15:46	1
Potassium	2100		34.3	27.7	mg/Kg	☼	05/01/25 14:59	05/02/25 15:46	1
Selenium	ND		4.6	0.92	mg/Kg	☼	05/01/25 14:59	05/02/25 15:46	1
Silver	0.24	J ^5-	0.69	0.23	mg/Kg	☼	05/01/25 14:59	05/02/25 15:46	1
Sodium	255		160	70.2	mg/Kg	☼	05/01/25 14:59	05/02/25 15:46	1
Thallium	ND		6.9	0.87	mg/Kg	☼	05/01/25 14:59	05/02/25 15:46	1
Vanadium	20.9		0.57	0.15	mg/Kg	☼	05/01/25 14:59	05/02/25 15:46	1
Zinc	45.2		2.3	1.2	mg/Kg	☼	05/01/25 14:59	05/02/25 15:46	1

Method: SW846 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.023	J	0.024	0.0055	mg/Kg	☼	05/02/25 09:11	05/02/25 11:17	1

Client: Roux Environmental Engineering and Geology DPC
Job ID: 480-229104-1
Project/Site: BCP RI - 619 Exchange Street Site

Client Sample ID: MW-2 16-20 Ft
Lab Sample ID: 480-229104-7
Date Collected: 04/30/25 15:00
Matrix: Solid
Date Received: 04/30/25 16:56
Percent Solids: 80.0

Method: SW846 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		5.0	0.37	ug/Kg	☼	04/30/25 17:43	05/01/25 01:03	1
1,1,2,2-Tetrachloroethane	ND		5.0	0.82	ug/Kg	☼	04/30/25 17:43	05/01/25 01:03	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		5.0	1.1	ug/Kg	☼	04/30/25 17:43	05/01/25 01:03	1
1,1,2-Trichloroethane	ND		5.0	0.65	ug/Kg	☼	04/30/25 17:43	05/01/25 01:03	1
1,1-Dichloroethane	ND		5.0	0.61	ug/Kg	☼	04/30/25 17:43	05/01/25 01:03	1
1,1-Dichloroethene	ND		5.0	0.62	ug/Kg	☼	04/30/25 17:43	05/01/25 01:03	1
1,2,4-Trichlorobenzene	ND		5.0	0.31	ug/Kg	☼	04/30/25 17:43	05/01/25 01:03	1
1,2,4-Trimethylbenzene	ND		5.0	0.97	ug/Kg	☼	04/30/25 17:43	05/01/25 01:03	1
1,2-Dibromo-3-Chloropropane	ND		5.0	2.5	ug/Kg	☼	04/30/25 17:43	05/01/25 01:03	1
1,2-Dibromoethane	ND		5.0	0.65	ug/Kg	☼	04/30/25 17:43	05/01/25 01:03	1
1,2-Dichlorobenzene	ND		5.0	0.39	ug/Kg	☼	04/30/25 17:43	05/01/25 01:03	1
1,2-Dichloroethane	ND		5.0	0.25	ug/Kg	☼	04/30/25 17:43	05/01/25 01:03	1
1,2-Dichloropropane	ND		5.0	2.5	ug/Kg	☼	04/30/25 17:43	05/01/25 01:03	1
1,3,5-Trimethylbenzene	ND		5.0	0.32	ug/Kg	☼	04/30/25 17:43	05/01/25 01:03	1
1,3-Dichlorobenzene	ND		5.0	0.26	ug/Kg	☼	04/30/25 17:43	05/01/25 01:03	1
1,4-Dichlorobenzene	ND		5.0	0.70	ug/Kg	☼	04/30/25 17:43	05/01/25 01:03	1
2-Butanone (MEK)	ND		25	1.8	ug/Kg	☼	04/30/25 17:43	05/01/25 01:03	1
2-Hexanone	ND		25	2.5	ug/Kg	☼	04/30/25 17:43	05/01/25 01:03	1
4-Isopropyltoluene	ND		5.0	0.40	ug/Kg	☼	04/30/25 17:43	05/01/25 01:03	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.7	ug/Kg	☼	04/30/25 17:43	05/01/25 01:03	1
Acetone	**4.9**	**J**	25	4.2	ug/Kg	☼	04/30/25 17:43	05/01/25 01:03	1
Benzene	ND		5.0	0.25	ug/Kg	☼	04/30/25 17:43	05/01/25 01:03	1
Bromodichloromethane	ND		5.0	0.67	ug/Kg	☼	04/30/25 17:43	05/01/25 01:03	1
Bromoform	ND		5.0	2.5	ug/Kg	☼	04/30/25 17:43	05/01/25 01:03	1
Bromomethane	ND		5.0	0.45	ug/Kg	☼	04/30/25 17:43	05/01/25 01:03	1
Carbon disulfide	ND		5.0	2.5	ug/Kg	☼	04/30/25 17:43	05/01/25 01:03	1
Carbon tetrachloride	ND		5.0	0.49	ug/Kg	☼	04/30/25 17:43	05/01/25 01:03	1
Chlorobenzene	ND		5.0	0.66	ug/Kg	☼	04/30/25 17:43	05/01/25 01:03	1
Chloroethane	ND		5.0	1.1	ug/Kg	☼	04/30/25 17:43	05/01/25 01:03	1
Chloroform	**1.1**	**J B**	5.0	0.31	ug/Kg	☼	04/30/25 17:43	05/01/25 01:03	1
Chloromethane	ND		5.0	0.30	ug/Kg	☼	04/30/25 17:43	05/01/25 01:03	1
cis-1,2-Dichloroethene	ND		5.0	0.64	ug/Kg	☼	04/30/25 17:43	05/01/25 01:03	1
cis-1,3-Dichloropropene	ND		5.0	0.72	ug/Kg	☼	04/30/25 17:43	05/01/25 01:03	1
Cyclohexane	ND		5.0	0.70	ug/Kg	☼	04/30/25 17:43	05/01/25 01:03	1
Dibromochloromethane	ND		5.0	0.64	ug/Kg	☼	04/30/25 17:43	05/01/25 01:03	1
Dichlorodifluoromethane	ND		5.0	0.42	ug/Kg	☼	04/30/25 17:43	05/01/25 01:03	1
Ethylbenzene	ND		5.0	0.35	ug/Kg	☼	04/30/25 17:43	05/01/25 01:03	1
Isopropylbenzene	ND		5.0	0.76	ug/Kg	☼	04/30/25 17:43	05/01/25 01:03	1
Methyl acetate	ND		25	3.0	ug/Kg	☼	04/30/25 17:43	05/01/25 01:03	1
Methyl tert-butyl ether	ND		5.0	0.49	ug/Kg	☼	04/30/25 17:43	05/01/25 01:03	1
Methylcyclohexane	ND		5.0	0.77	ug/Kg	☼	04/30/25 17:43	05/01/25 01:03	1
Methylene Chloride	ND		5.0	2.3	ug/Kg	☼	04/30/25 17:43	05/01/25 01:03	1
Naphthalene	ND		5.0	0.67	ug/Kg	☼	04/30/25 17:43	05/01/25 01:03	1
n-Butylbenzene	ND		5.0	0.44	ug/Kg	☼	04/30/25 17:43	05/01/25 01:03	1
N-Propylbenzene	ND		5.0	0.40	ug/Kg	☼	04/30/25 17:43	05/01/25 01:03	1
sec-Butylbenzene	ND		5.0	0.44	ug/Kg	☼	04/30/25 17:43	05/01/25 01:03	1
Styrene	ND		5.0	0.25	ug/Kg	☼	04/30/25 17:43	05/01/25 01:03	1
tert-Butylbenzene	ND		5.0	0.52	ug/Kg	☼	04/30/25 17:43	05/01/25 01:03	1
Tetrachloroethene	ND		5.0	0.68	ug/Kg	☼	04/30/25 17:43	05/01/25 01:03	1

Client Sample ID: MW-2 16-20 Ft
Lab Sample ID: 480-229104-7
Date Collected: 04/30/25 15:00
Matrix: Solid
Date Received: 04/30/25 16:56
Percent Solids: 80.0

Method: SW846 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Toluene	ND		5.0	0.38	ug/Kg	☼	04/30/25 17:43	05/01/25 01:03	1
trans-1,2-Dichloroethene	ND		5.0	0.52	ug/Kg	☼	04/30/25 17:43	05/01/25 01:03	1
trans-1,3-Dichloropropene	ND		5.0	2.2	ug/Kg	☼	04/30/25 17:43	05/01/25 01:03	1
Trichloroethene	ND		5.0	1.1	ug/Kg	☼	04/30/25 17:43	05/01/25 01:03	1
Trichlorofluoromethane	ND		5.0	0.48	ug/Kg	☼	04/30/25 17:43	05/01/25 01:03	1
Vinyl chloride	ND		5.0	0.61	ug/Kg	☼	04/30/25 17:43	05/01/25 01:03	1
Xylenes, Total	ND		10	0.85	ug/Kg	☼	04/30/25 17:43	05/01/25 01:03	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/Kg*	☼		*N/A*	*04/30/25 17:43*	*05/01/25 01:03*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*107*		*64 - 126*	*04/30/25 17:43*	*05/01/25 01:03*	*1*
4-Bromofluorobenzene (Surr)	*97*		*72 - 126*	*04/30/25 17:43*	*05/01/25 01:03*	*1*
Dibromofluoromethane (Surr)	*103*		*60 - 140*	*04/30/25 17:43*	*05/01/25 01:03*	*1*
Toluene-d8 (Surr)	*96*		*71 - 125*	*04/30/25 17:43*	*05/01/25 01:03*	*1*

Method: SW846 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	ND		120	68	ug/Kg	☼	05/01/25 06:55	05/06/25 20:46	1
2,4,5-Trichlorophenol	ND		210	57	ug/Kg	☼	05/01/25 06:55	05/06/25 20:46	1
2,4,6-Trichlorophenol	ND		210	42	ug/Kg	☼	05/01/25 06:55	05/06/25 20:46	1
2,4-Dichlorophenol	ND		210	22	ug/Kg	☼	05/01/25 06:55	05/06/25 20:46	1
2,4-Dimethylphenol	ND		210	51	ug/Kg	☼	05/01/25 06:55	05/06/25 20:46	1
2,4-Dinitrophenol	ND		2000	970	ug/Kg	☼	05/01/25 06:55	05/06/25 20:46	1
2,4-Dinitrotoluene	ND		210	43	ug/Kg	☼	05/01/25 06:55	05/06/25 20:46	1
2,6-Dinitrotoluene	ND		210	25	ug/Kg	☼	05/01/25 06:55	05/06/25 20:46	1
2-Chloronaphthalene	ND		210	35	ug/Kg	☼	05/01/25 06:55	05/06/25 20:46	1
2-Chlorophenol	ND		410	38	ug/Kg	☼	05/01/25 06:55	05/06/25 20:46	1
2-Methylnaphthalene	ND		210	42	ug/Kg	☼	05/01/25 06:55	05/06/25 20:46	1
2-Methylphenol	ND		210	25	ug/Kg	☼	05/01/25 06:55	05/06/25 20:46	1
2-Nitroaniline	ND		410	31	ug/Kg	☼	05/01/25 06:55	05/06/25 20:46	1
2-Nitrophenol	ND		210	59	ug/Kg	☼	05/01/25 06:55	05/06/25 20:46	1
3,3'-Dichlorobenzidine	ND		410	250	ug/Kg	☼	05/01/25 06:55	05/06/25 20:46	1
3-Nitroaniline	ND		410	58	ug/Kg	☼	05/01/25 06:55	05/06/25 20:46	1
4,6-Dinitro-2-methylphenol	ND		410	210	ug/Kg	☼	05/01/25 06:55	05/06/25 20:46	1
4-Bromophenyl phenyl ether	ND		210	30	ug/Kg	☼	05/01/25 06:55	05/06/25 20:46	1
4-Chloro-3-methylphenol	ND		210	52	ug/Kg	☼	05/01/25 06:55	05/06/25 20:46	1
4-Chloroaniline	ND		210	52	ug/Kg	☼	05/01/25 06:55	05/06/25 20:46	1
4-Chlorophenyl phenyl ether	ND		210	26	ug/Kg	☼	05/01/25 06:55	05/06/25 20:46	1
4-Methylphenol	ND		410	25	ug/Kg	☼	05/01/25 06:55	05/06/25 20:46	1
4-Nitroaniline	ND		410	110	ug/Kg	☼	05/01/25 06:55	05/06/25 20:46	1
4-Nitrophenol	ND		410	150	ug/Kg	☼	05/01/25 06:55	05/06/25 20:46	1
Acenaphthene	ND		210	31	ug/Kg	☼	05/01/25 06:55	05/06/25 20:46	1
Acenaphthylene	ND		210	27	ug/Kg	☼	05/01/25 06:55	05/06/25 20:46	1
Acetophenone	ND		210	28	ug/Kg	☼	05/01/25 06:55	05/06/25 20:46	1
Anthracene	ND		210	52	ug/Kg	☼	05/01/25 06:55	05/06/25 20:46	1
Atrazine	ND		210	73	ug/Kg	☼	05/01/25 06:55	05/06/25 20:46	1
Benzaldehyde	ND		210	170	ug/Kg	☼	05/01/25 06:55	05/06/25 20:46	1
Benzo[a]anthracene	ND		210	21	ug/Kg	☼	05/01/25 06:55	05/06/25 20:46	1

Client Sample ID: MW-2 16-20 Ft
Lab Sample ID: 480-229104-7
Date Collected: 04/30/25 15:00
Matrix: Solid
Date Received: 04/30/25 16:56
Percent Solids: 80.0

Method: SW846 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[a]pyrene	ND		210	31	ug/Kg	☼	05/01/25 06:55	05/06/25 20:46	1
Benzo[b]fluoranthene	ND		210	33	ug/Kg	☼	05/01/25 06:55	05/06/25 20:46	1
Benzo[g,h,i]perylene	ND		210	22	ug/Kg	☼	05/01/25 06:55	05/06/25 20:46	1
Benzo[k]fluoranthene	ND		210	27	ug/Kg	☼	05/01/25 06:55	05/06/25 20:46	1
Biphenyl	ND		210	31	ug/Kg	☼	05/01/25 06:55	05/06/25 20:46	1
bis (2-chloroisopropyl) ether	ND		210	42	ug/Kg	☼	05/01/25 06:55	05/06/25 20:46	1
Bis(2-chloroethoxy)methane	ND		210	44	ug/Kg	☼	05/01/25 06:55	05/06/25 20:46	1
Bis(2-chloroethyl)ether	ND		210	27	ug/Kg	☼	05/01/25 06:55	05/06/25 20:46	1
Bis(2-ethylhexyl) phthalate	ND		210	72	ug/Kg	☼	05/01/25 06:55	05/06/25 20:46	1
Butyl benzyl phthalate	ND		210	35	ug/Kg	☼	05/01/25 06:55	05/06/25 20:46	1
Caprolactam	ND		210	63	ug/Kg	☼	05/01/25 06:55	05/06/25 20:46	1
Carbazole	ND		210	25	ug/Kg	☼	05/01/25 06:55	05/06/25 20:46	1
Chrysene	ND		210	47	ug/Kg	☼	05/01/25 06:55	05/06/25 20:46	1
Dibenz(a,h)anthracene	ND		210	37	ug/Kg	☼	05/01/25 06:55	05/06/25 20:46	1
Dibenzofuran	ND		210	25	ug/Kg	☼	05/01/25 06:55	05/06/25 20:46	1
Diethyl phthalate	ND		210	27	ug/Kg	☼	05/01/25 06:55	05/06/25 20:46	1
Dimethyl phthalate	ND		210	25	ug/Kg	☼	05/01/25 06:55	05/06/25 20:46	1
Di-n-butyl phthalate	ND		210	36	ug/Kg	☼	05/01/25 06:55	05/06/25 20:46	1
Di-n-octyl phthalate	ND		210	25	ug/Kg	☼	05/01/25 06:55	05/06/25 20:46	1
Fluoranthene	ND		210	22	ug/Kg	☼	05/01/25 06:55	05/06/25 20:46	1
Fluorene	ND		210	25	ug/Kg	☼	05/01/25 06:55	05/06/25 20:46	1
Hexachlorobenzene	ND		210	28	ug/Kg	☼	05/01/25 06:55	05/06/25 20:46	1
Hexachlorobutadiene	ND		210	31	ug/Kg	☼	05/01/25 06:55	05/06/25 20:46	1
Hexachlorocyclopentadiene	ND		210	28	ug/Kg	☼	05/01/25 06:55	05/06/25 20:46	1
Hexachloroethane	ND		210	27	ug/Kg	☼	05/01/25 06:55	05/06/25 20:46	1
Indeno[1,2,3-cd]pyrene	ND		210	26	ug/Kg	☼	05/01/25 06:55	05/06/25 20:46	1
Isophorone	ND		210	44	ug/Kg	☼	05/01/25 06:55	05/06/25 20:46	1
Naphthalene	ND		210	27	ug/Kg	☼	05/01/25 06:55	05/06/25 20:46	1
Nitrobenzene	ND		210	23	ug/Kg	☼	05/01/25 06:55	05/06/25 20:46	1
N-Nitrosodi-n-propylamine	ND		210	36	ug/Kg	☼	05/01/25 06:55	05/06/25 20:46	1
N-Nitrosodiphenylamine	ND		210	170	ug/Kg	☼	05/01/25 06:55	05/06/25 20:46	1
Pentachlorophenol	ND		410	210	ug/Kg	☼	05/01/25 06:55	05/06/25 20:46	1
Phenanthrene	ND		210	31	ug/Kg	☼	05/01/25 06:55	05/06/25 20:46	1
Phenol	ND		210	32	ug/Kg	☼	05/01/25 06:55	05/06/25 20:46	1
Pyrene	ND		210	25	ug/Kg	☼	05/01/25 06:55	05/06/25 20:46	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Unknown	*19000*	*T J*	*ug/Kg*	☼	*1.99*	*N/A*	*05/01/25 06:55*	*05/06/25 20:46*	*1*
Unknown	*560*	*T J*	*ug/Kg*	☼	*3.47*	*N/A*	*05/01/25 06:55*	*05/06/25 20:46*	*1*
Octadecane	*190*	*T J N*	*ug/Kg*	☼	*13.20*	*593-45-3*	*05/01/25 06:55*	*05/06/25 20:46*	*1*
Unknown	*210*	*T J*	*ug/Kg*	☼	*13.48*	*N/A*	*05/01/25 06:55*	*05/06/25 20:46*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol (Surr)	*82*		*26 - 143*	*05/01/25 06:55*	*05/06/25 20:46*	*1*
2-Fluorobiphenyl (Surr)	*89*		*50 - 121*	*05/01/25 06:55*	*05/06/25 20:46*	*1*
2-Fluorophenol (Surr)	*79*		*36 - 120*	*05/01/25 06:55*	*05/06/25 20:46*	*1*
Nitrobenzene-d5 (Surr)	*87*		*40 - 121*	*05/01/25 06:55*	*05/06/25 20:46*	*1*
Phenol-d5 (Surr)	*85*		*41 - 120*	*05/01/25 06:55*	*05/06/25 20:46*	*1*
p-Terphenyl-d14 (Surr)	*87*		*46 - 143*	*05/01/25 06:55*	*05/06/25 20:46*	*1*

Client Sample ID: MW-2 16-20 Ft
Lab Sample ID: 480-229104-7

Date Collected: 04/30/25 15:00
Matrix: Solid

Date Received: 04/30/25 16:56
Percent Solids: 80.0

Method: SW846 8081B - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	ND		4.0	0.77	ug/Kg	☼	05/02/25 06:59	05/05/25 12:25	1
4,4'-DDE	ND		4.0	0.83	ug/Kg	☼	05/02/25 06:59	05/05/25 12:25	1
4,4'-DDT	**3.3**	**J**	4.0	0.93	ug/Kg	☼	05/02/25 06:59	05/05/25 12:25	1
Aldrin	ND		4.0	0.97	ug/Kg	☼	05/02/25 06:59	05/05/25 12:25	1
alpha-BHC	ND		4.0	0.71	ug/Kg	☼	05/02/25 06:59	05/05/25 12:25	1
cis-Chlordane	ND		4.0	2.0	ug/Kg	☼	05/02/25 06:59	05/05/25 12:25	1
beta-BHC	ND		4.0	0.71	ug/Kg	☼	05/02/25 06:59	05/05/25 12:25	1
delta-BHC	ND		4.0	0.74	ug/Kg	☼	05/02/25 06:59	05/05/25 12:25	1
Dieldrin	ND		4.0	0.95	ug/Kg	☼	05/02/25 06:59	05/05/25 12:25	1
Endosulfan I	ND		4.0	0.76	ug/Kg	☼	05/02/25 06:59	05/05/25 12:25	1
Endosulfan II	ND		4.0	0.71	ug/Kg	☼	05/02/25 06:59	05/05/25 12:25	1
Endosulfan sulfate	ND		4.0	0.74	ug/Kg	☼	05/02/25 06:59	05/05/25 12:25	1
Endrin	ND		4.0	0.78	ug/Kg	☼	05/02/25 06:59	05/05/25 12:25	1
Endrin aldehyde	ND		4.0	1.0	ug/Kg	☼	05/02/25 06:59	05/05/25 12:25	1
Endrin ketone	ND		4.0	0.97	ug/Kg	☼	05/02/25 06:59	05/05/25 12:25	1
gamma-BHC (Lindane)	**0.84**	**J**	4.0	0.73	ug/Kg	☼	05/02/25 06:59	05/05/25 12:25	1
trans-Chlordane	ND		4.0	1.3	ug/Kg	☼	05/02/25 06:59	05/05/25 12:25	1
Heptachlor	ND		4.0	0.86	ug/Kg	☼	05/02/25 06:59	05/05/25 12:25	1
Heptachlor epoxide	ND		4.0	1.0	ug/Kg	☼	05/02/25 06:59	05/05/25 12:25	1
Methoxychlor	**4.0**	**B**	4.0	0.81	ug/Kg	☼	05/02/25 06:59	05/05/25 12:25	1
Toxaphene	ND		40	23	ug/Kg	☼	05/02/25 06:59	05/05/25 12:25	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*76*		*45 - 120*	*05/02/25 06:59*	*05/05/25 12:25*	*1*
DCB Decachlorobiphenyl	*85*		*45 - 120*	*05/02/25 06:59*	*05/05/25 12:25*	*1*
Tetrachloro-m-xylene	*66*		*30 - 124*	*05/02/25 06:59*	*05/05/25 12:25*	*1*
Tetrachloro-m-xylene	*72*		*30 - 124*	*05/02/25 06:59*	*05/05/25 12:25*	*1*

Method: SW846 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		0.27	0.052	mg/Kg	☼	05/01/25 07:04	05/02/25 10:59	1
PCB-1221	ND		0.27	0.052	mg/Kg	☼	05/01/25 07:04	05/02/25 10:59	1
PCB-1232	ND		0.27	0.052	mg/Kg	☼	05/01/25 07:04	05/02/25 10:59	1
PCB-1242	ND		0.27	0.052	mg/Kg	☼	05/01/25 07:04	05/02/25 10:59	1
PCB-1248	ND		0.27	0.052	mg/Kg	☼	05/01/25 07:04	05/02/25 10:59	1
PCB-1254	ND		0.27	0.13	mg/Kg	☼	05/01/25 07:04	05/02/25 10:59	1
PCB-1260	ND		0.27	0.13	mg/Kg	☼	05/01/25 07:04	05/02/25 10:59	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*119*		*65 - 174*	*05/01/25 07:04*	*05/02/25 10:59*	*1*
DCB Decachlorobiphenyl	*123*		*65 - 174*	*05/01/25 07:04*	*05/02/25 10:59*	*1*
Tetrachloro-m-xylene	*129*		*60 - 154*	*05/01/25 07:04*	*05/02/25 10:59*	*1*
Tetrachloro-m-xylene	*119*		*60 - 154*	*05/01/25 07:04*	*05/02/25 10:59*	*1*

Method: SW846 8151A - Herbicides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-T	ND		20	6.5	ug/Kg	☼	05/06/25 06:53	05/09/25 14:11	1
2,4-D	ND		20	13	ug/Kg	☼	05/06/25 06:53	05/09/25 14:11	1
Dichlorprop	ND		20	10	ug/Kg	☼	05/06/25 06:53	05/09/25 14:11	1
Pentachlorophenol	ND		20	6.6	ug/Kg	☼	05/06/25 06:53	05/09/25 14:11	1

Client Sample ID: MW-2 16-20 Ft
Lab Sample ID: 480-229104-7

Date Collected: 04/30/25 15:00
Matrix: Solid

Date Received: 04/30/25 16:56
Percent Solids: 80.0

Method: SW846 8151A - Herbicides (GC) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Picloram	ND		20	8.7	ug/Kg	☼	05/06/25 06:53	05/09/25 14:11	1
Silvex (2,4,5-TP)	ND		20	7.3	ug/Kg	☼	05/06/25 06:53	05/09/25 14:11	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4-Dichlorophenylacetic acid	*81*		*28 - 129*	*05/06/25 06:53*	*05/09/25 14:11*	*1*
2,4-Dichlorophenylacetic acid	*74*		*28 - 129*	*05/06/25 06:53*	*05/09/25 14:11*	*1*

Method: EPA Draft-3 1633 - Per- and Polyfluoroalkyl Substances by LC/MS/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)	ND		0.61	0.15	ug/Kg	☼	05/05/25 14:38	05/07/25 02:08	1
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2 FTS)	ND		0.61	0.15	ug/Kg	☼	05/05/25 14:38	05/07/25 02:08	1
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2 FTS)	ND		0.61	0.15	ug/Kg	☼	05/05/25 14:38	05/07/25 02:08	1
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2 FTS)	ND		0.61	0.15	ug/Kg	☼	05/05/25 14:38	05/07/25 02:08	1
3-Perfluoroheptylpropanoic acid (7:3 FTCA)	ND		3.8	0.95	ug/Kg	☼	05/05/25 14:38	05/07/25 02:08	1
3-Perfluoropentylpropanoic acid (5:3 FTCA)	ND		3.8	0.95	ug/Kg	☼	05/05/25 14:38	05/07/25 02:08	1
3-Perfluoropropylpropanoic acid (3:3 FTCA)	ND		0.76	0.19	ug/Kg	☼	05/05/25 14:38	05/07/25 02:08	1
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	ND		0.61	0.15	ug/Kg	☼	05/05/25 14:38	05/07/25 02:08	1
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9Cl-PF3ONS)	ND		0.61	0.15	ug/Kg	☼	05/05/25 14:38	05/07/25 02:08	1
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA)	ND		0.61	0.15	ug/Kg	☼	05/05/25 14:38	05/07/25 02:08	1
N-ethylperfluorooctane sulfonamide (NEtFOSA)	ND		0.15	0.038	ug/Kg	☼	05/05/25 14:38	05/07/25 02:08	1
N-ethylperfluorooctane sulfonamidoethanol (NEtFOSE)	ND		1.5	0.38	ug/Kg	☼	05/05/25 14:38	05/07/25 02:08	1
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	ND		0.15	0.038	ug/Kg	☼	05/05/25 14:38	05/07/25 02:08	1
N-methylperfluorooctane sulfonamide (NMeFOSA)	ND		0.15	0.038	ug/Kg	☼	05/05/25 14:38	05/07/25 02:08	1
N-methylperfluorooctane sulfonamidoethanol (NMeFOSE)	ND		1.5	0.38	ug/Kg	☼	05/05/25 14:38	05/07/25 02:08	1
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	ND		0.15	0.038	ug/Kg	☼	05/05/25 14:38	05/07/25 02:08	1
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	ND		0.30	0.076	ug/Kg	☼	05/05/25 14:38	05/07/25 02:08	1
Perfluoro (2-ethoxyethane) sulfonic acid (PFEESA)	ND		0.30	0.076	ug/Kg	☼	05/05/25 14:38	05/07/25 02:08	1
Perfluoro-3-methoxypropanoic acid (PFMPA)	ND		0.30	0.076	ug/Kg	☼	05/05/25 14:38	05/07/25 02:08	1
Perfluoro-4-methoxybutanoic acid (PFMBA)	ND		0.30	0.076	ug/Kg	☼	05/05/25 14:38	05/07/25 02:08	1
Perfluorobutanesulfonic acid (PFBS)	ND		0.15	0.038	ug/Kg	☼	05/05/25 14:38	05/07/25 02:08	1
Perfluorobutanoic acid (PFBA)	ND		0.61	0.15	ug/Kg	☼	05/05/25 14:38	05/07/25 02:08	1
Perfluorodecanesulfonic acid (PFDS)	ND		0.15	0.038	ug/Kg	☼	05/05/25 14:38	05/07/25 02:08	1
Perfluorodecanoic acid (PFDA)	ND		0.15	0.038	ug/Kg	☼	05/05/25 14:38	05/07/25 02:08	1
Perfluorododecanesulfonic acid (PFDoS)	ND		0.15	0.038	ug/Kg	☼	05/05/25 14:38	05/07/25 02:08	1

Client Sample ID: MW-2 16-20 Ft
Lab Sample ID: 480-229104-7
Date Collected: 04/30/25 15:00
Matrix: Solid
Date Received: 04/30/25 16:56
Percent Solids: 80.0

Method: EPA Draft-3 1633 - Per- and Polyfluoroalkyl Substances by LC/MS/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorododecanoic acid (PFDoA)	ND		0.15	0.038	ug/Kg	☼	05/05/25 14:38	05/07/25 02:08	1
Perfluoroheptanesulfonic acid (PFHpS)	ND		0.15	0.038	ug/Kg	☼	05/05/25 14:38	05/07/25 02:08	1
Perfluoroheptanoic acid (PFHpA)	ND		0.15	0.038	ug/Kg	☼	05/05/25 14:38	05/07/25 02:08	1
Perfluorohexanesulfonic acid (PFHxS)	ND		0.15	0.038	ug/Kg	☼	05/05/25 14:38	05/07/25 02:08	1
Perfluorohexanoic acid (PFHxA)	ND		0.15	0.038	ug/Kg	☼	05/05/25 14:38	05/07/25 02:08	1
Perfluorononanesulfonic acid (PFNS)	ND		0.15	0.038	ug/Kg	☼	05/05/25 14:38	05/07/25 02:08	1
Perfluorononanoic acid (PFNA)	ND		0.15	0.038	ug/Kg	☼	05/05/25 14:38	05/07/25 02:08	1
Perfluorooctanesulfonamide (PFOSA)	ND		0.15	0.038	ug/Kg	☼	05/05/25 14:38	05/07/25 02:08	1
Perfluorooctanesulfonic acid (PFOS)	ND		0.15	0.038	ug/Kg	☼	05/05/25 14:38	05/07/25 02:08	1
Perfluorooctanoic acid (PFOA)	ND		0.15	0.038	ug/Kg	☼	05/05/25 14:38	05/07/25 02:08	1
Perfluoropentanesulfonic acid (PFPeS)	ND		0.15	0.038	ug/Kg	☼	05/05/25 14:38	05/07/25 02:08	1
Perfluoropentanoic acid (PFPeA)	ND		0.30	0.076	ug/Kg	☼	05/05/25 14:38	05/07/25 02:08	1
Perfluorotetradecanoic acid (PFTeDA)	ND		0.15	0.038	ug/Kg	☼	05/05/25 14:38	05/07/25 02:08	1
Perfluorotridecanoic acid (PFTrDA)	ND		0.15	0.038	ug/Kg	☼	05/05/25 14:38	05/07/25 02:08	1
Perfluoroundecanoic acid (PFUnA)	ND		0.15	0.038	ug/Kg	☼	05/05/25 14:38	05/07/25 02:08	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C2 PFTeDA	*63.3*		*20 - 150*	*05/05/25 14:38*	*05/07/25 02:08*	*1*
13C2-PFDoDA	*65.0*		*20 - 150*	*05/05/25 14:38*	*05/07/25 02:08*	*1*
13C3 HFPO-DA	*73.2*		*20 - 150*	*05/05/25 14:38*	*05/07/25 02:08*	*1*
13C3 PFBS	*66.8*		*20 - 150*	*05/05/25 14:38*	*05/07/25 02:08*	*1*
13C3 PFHxS	*57.3*		*20 - 150*	*05/05/25 14:38*	*05/07/25 02:08*	*1*
13C4 PFBA	*73.1*		*20 - 150*	*05/05/25 14:38*	*05/07/25 02:08*	*1*
13C4 PFHpA	*74.1*		*20 - 150*	*05/05/25 14:38*	*05/07/25 02:08*	*1*
13C5 PFHxA	*76.4*		*20 - 150*	*05/05/25 14:38*	*05/07/25 02:08*	*1*
13C5 PFPeA	*84.1*		*20 - 150*	*05/05/25 14:38*	*05/07/25 02:08*	*1*
13C6 PFDA	*63.7*		*20 - 150*	*05/05/25 14:38*	*05/07/25 02:08*	*1*
13C7 PFUnA	*61.0*		*20 - 150*	*05/05/25 14:38*	*05/07/25 02:08*	*1*
13C8 PFOA	*57.6*		*20 - 150*	*05/05/25 14:38*	*05/07/25 02:08*	*1*
13C8 PFOS	*51.4*		*20 - 150*	*05/05/25 14:38*	*05/07/25 02:08*	*1*
13C8 PFOSA	*58.0*		*20 - 150*	*05/05/25 14:38*	*05/07/25 02:08*	*1*
13C9 PFNA	*57.8*		*20 - 150*	*05/05/25 14:38*	*05/07/25 02:08*	*1*
D3-NMeFOSA	*69.7*		*20 - 150*	*05/05/25 14:38*	*05/07/25 02:08*	*1*
d3-NMeFOSAA	*56.0*		*20 - 150*	*05/05/25 14:38*	*05/07/25 02:08*	*1*
d5-NEtFOSAA	*106*		*20 - 150*	*05/05/25 14:38*	*05/07/25 02:08*	*1*
d5-NEtPFOSA	*55.3*		*20 - 150*	*05/05/25 14:38*	*05/07/25 02:08*	*1*
d7-N-MeFOSE-M	*44.9*		*20 - 150*	*05/05/25 14:38*	*05/07/25 02:08*	*1*
d9-N-EtFOSE-M	*41.5*		*20 - 150*	*05/05/25 14:38*	*05/07/25 02:08*	*1*
M2-4:2 FTS	*59.3*		*20 - 150*	*05/05/25 14:38*	*05/07/25 02:08*	*1*
M2-6:2 FTS	*51.4*		*20 - 150*	*05/05/25 14:38*	*05/07/25 02:08*	*1*
M2-8:2 FTS	*57.6*		*20 - 150*	*05/05/25 14:38*	*05/07/25 02:08*	*1*

Method: SW846 6010D - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**12200**		13.0	11.2	mg/Kg	☼	05/01/25 14:59	05/02/25 15:48	1
Antimony	ND		19.4	0.69	mg/Kg	☼	05/01/25 14:59	05/02/25 15:48	1
Arsenic	**2.9**		2.6	1.1	mg/Kg	☼	05/01/25 14:59	05/02/25 15:48	1
Barium	**85.9**		0.65	0.18	mg/Kg	☼	05/01/25 14:59	05/02/25 15:48	1
Beryllium	**0.55**		0.26	0.052	mg/Kg	☼	05/01/25 14:59	05/02/25 15:48	1

Client Sample ID: MW-2 16-20 Ft
Lab Sample ID: 480-229104-7
Date Collected: 04/30/25 15:00
Matrix: Solid
Date Received: 04/30/25 16:56
Percent Solids: 80.0

Method: SW846 6010D - Metals (ICP) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	0.11	J	0.26	0.091	mg/Kg	☼	05/01/25 14:59	05/02/25 15:48	1
Calcium	75800		64.8	35.0	mg/Kg	☼	05/01/25 14:59	05/02/25 15:48	1
Chromium	16.1		0.65	0.47	mg/Kg	☼	05/01/25 14:59	05/02/25 15:48	1
Cobalt	7.5	^5+	0.65	0.13	mg/Kg	☼	05/01/25 14:59	05/02/25 15:48	1
Copper	16.6		1.3	0.74	mg/Kg	☼	05/01/25 14:59	05/02/25 15:48	1
Iron	16200		13.0	11.0	mg/Kg	☼	05/01/25 14:59	05/02/25 15:48	1
Lead	12.6	^5+	1.3	0.60	mg/Kg	☼	05/01/25 14:59	05/02/25 15:48	1
Magnesium	17900		25.9	11.0	mg/Kg	☼	05/01/25 14:59	05/02/25 15:48	1
Manganese	338		1.3	0.36	mg/Kg	☼	05/01/25 14:59	05/02/25 15:48	1
Nickel	17.6		6.5	0.32	mg/Kg	☼	05/01/25 14:59	05/02/25 15:48	1
Potassium	3720		38.9	31.4	mg/Kg	☼	05/01/25 14:59	05/02/25 15:48	1
Selenium	ND		5.2	1.0	mg/Kg	☼	05/01/25 14:59	05/02/25 15:48	1
Silver	ND	^5-	0.78	0.26	mg/Kg	☼	05/01/25 14:59	05/02/25 15:48	1
Sodium	336		182	79.5	mg/Kg	☼	05/01/25 14:59	05/02/25 15:48	1
Thallium	ND		7.8	0.99	mg/Kg	☼	05/01/25 14:59	05/02/25 15:48	1
Vanadium	23.9		0.65	0.17	mg/Kg	☼	05/01/25 14:59	05/02/25 15:48	1
Zinc	50.3		2.6	1.3	mg/Kg	☼	05/01/25 14:59	05/02/25 15:48	1

Method: SW846 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.023	J	0.024	0.0056	mg/Kg	☼	05/02/25 09:11	05/02/25 11:18	1

Surrogate Summary

Client: Roux Environmental Engineering and Geology DPC
Job ID: 480-229104-1
Project/Site: BCP RI - 619 Exchange Street Site

Method: 8260C - Volatile Organic Compounds by GC/MS

Matrix: Solid **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)			
		DCA	BFB	DBFM	TOL
Lab Sample ID	Client Sample ID	(64-126)	(72-126)	(60-140)	(71-125)
480-229104-1	MW-1 18-20 Ft	105	98	103	97
480-229104-1 MS	MW-1 18-20 Ft	92	96	101	101
480-229104-1 MSD	MW-1 18-20 Ft	90	94	99	100
480-229104-5	HC-11 0.25-0.5 Ft	106	97	104	97
480-229104-7	MW-2 16-20 Ft	107	97	103	96
LCS 480-744922/1-A	Lab Control Sample	103	97	103	99
MB 480-744922/2-A	Method Blank	102	98	105	97

Surrogate Legend

DCA = 1,2-Dichloroethane-d4 (Surr)
BFB = 4-Bromofluorobenzene (Surr)
DBFM = Dibromofluoromethane (Surr)
TOL = Toluene-d8 (Surr)

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Matrix: Solid **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)					
		TBP	FBP	2FP	NBZ	PHL	TPHd14
Lab Sample ID	Client Sample ID	(26-143)	(50-121)	(36-120)	(40-121)	(41-120)	(46-143)
480-229104-1	MW-1 18-20 Ft	92	91	84	90	93	99
480-229104-1 MS	MW-1 18-20 Ft	98	91	77	91	94	104
480-229104-1 MSD	MW-1 18-20 Ft	105	104	84	85	91	107
480-229104-2	HC-8 1-3 in	69	84	74	79	79	85
480-229104-3	HC-9 5-8 in	63	89	62	80	62	89
480-229104-4	HC-10 1-3 in	112	113	95	102	102	105
480-229104-5	HC-11 0.25-0.5 Ft	65	68	58	66	62	71
480-229104-6	BD-2	65	89	64	79	73	83
480-229104-7	MW-2 16-20 Ft	82	89	79	87	85	87
LCS 480-744941/2-A	Lab Control Sample	98	92	80	86	89	95
MB 480-744941/1-A	Method Blank	86	85	77	88	83	97

Surrogate Legend

TBP = 2,4,6-Tribromophenol (Surr)
FBP = 2-Fluorobiphenyl (Surr)
2FP = 2-Fluorophenol (Surr)
NBZ = Nitrobenzene-d5 (Surr)
PHL = Phenol-d5 (Surr)
TPHd14 = p-Terphenyl-d14 (Surr)

Method: 8081B - Organochlorine Pesticides (GC)

Matrix: Solid **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)			
		DCBP1	DCBP2	TCX1	TCX2
Lab Sample ID	Client Sample ID	(45-120)	(45-120)	(30-124)	(30-124)
480-229104-1	MW-1 18-20 Ft	76	77	60	57
480-229104-1 MS	MW-1 18-20 Ft	71	76	58	55
480-229104-1 MSD	MW-1 18-20 Ft	75	89	65	61
480-229104-5	HC-11 0.25-0.5 Ft	71	77	53	48
480-229104-7	MW-2 16-20 Ft	76	85	66	72

Surrogate Summary

Client: Roux Environmental Engineering and Geology DPC
Job ID: 480-229104-1
Project/Site: BCP RI - 619 Exchange Street Site

Method: 8081B - Organochlorine Pesticides (GC) (Continued)

Matrix: Solid **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)			
		DCBP1	DCBP2	TCX1	TCX2
Lab Sample ID	Client Sample ID	(45-120)	(45-120)	(30-124)	(30-124)
LCS 480-745050/2-A	Lab Control Sample	87	88	67	64
MB 480-745050/1-A	Method Blank	83	79	65	60

Surrogate Legend

DCBP = DCB Decachlorobiphenyl
TCX = Tetrachloro-m-xylene

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Matrix: Solid **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)			
		DCBP1	DCBP2	TCX1	TCX2
Lab Sample ID	Client Sample ID	(65-174)	(65-174)	(60-154)	(60-154)
480-229104-1	MW-1 18-20 Ft	99	106	109	103
480-229104-1 MS	MW-1 18-20 Ft	146	146	141	132
480-229104-1 MSD	MW-1 18-20 Ft	102	110	108	99
480-229104-5	HC-11 0.25-0.5 Ft	119	129	130	119
480-229104-7	MW-2 16-20 Ft	119	123	129	119
LCS 480-744942/2-A	Lab Control Sample	169	167	156 S1+	150
MB 480-744942/1-A	Method Blank	136	139	133	123

Surrogate Legend

DCBP = DCB Decachlorobiphenyl
TCX = Tetrachloro-m-xylene

Method: 8151A - Herbicides (GC)

Matrix: Solid **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)	
		DCPAA1	DCPAA2
Lab Sample ID	Client Sample ID	(28-129)	(28-129)
480-229104-1	MW-1 18-20 Ft	81	77
480-229104-1 MS	MW-1 18-20 Ft	86	84
480-229104-1 MSD	MW-1 18-20 Ft	72	74
480-229104-5	HC-11 0.25-0.5 Ft	107	85
480-229104-7	MW-2 16-20 Ft	81	74
LCS 480-745263/2-A	Lab Control Sample	74	71
MB 480-745263/1-A	Method Blank	74	72

Surrogate Legend

DCPAA = 2,4-Dichlorophenylacetic acid

Isotope Dilution Summary

Client: Roux Environmental Engineering and Geology DPC
Job ID: 480-229104-1
Project/Site: BCP RI - 619 Exchange Street Site

Method: Draft-3 1633 - Per- and Polyfluoroalkyl Substances by LC/MS/MS

Matrix: Solid **Prep Type: Total/NA**

		Percent Isotope Dilution Recovery (Acceptance Limits)							
Lab Sample ID	Client Sample ID	PFTDA (20-150)	PFDoDA (20-150)	HFPODA (20-150)	C3PFBS (20-150)	C3PFHS (20-150)	PFBA (20-150)	C4PFHA (20-150)	13C5PHA (20-150)
480-229104-1	MW-1 18-20 Ft	62.9	66.2	71.0	61.2	56.6	64.7	68.5	67.5
480-229104-1 MS	MW-1 18-20 Ft	81.9	84.0	98.6	90.9	88.3	90.9	94.4	95.4
480-229104-1 MSD	MW-1 18-20 Ft	70.0	75.1	88.9	77.5	74.7	80.8	82.2	79.5
480-229104-5	HC-11 0.25-0.5 Ft	82.3	93.8	92.0	94.0	95.0	94.9	93.4	94.6
480-229104-7	MW-2 16-20 Ft	63.3	65.0	73.2	66.8	57.3	73.1	74.1	76.4
LCS 240-654795/3-A	Lab Control Sample	79.3	84.3	91.9	90.0	85.2	89.3	91.3	90.2
LLCS 240-654795/2-A	Lab Control Sample	87.3	82.9	102	95.0	94.4	94.0	102	100
MB 240-654795/1-A	Method Blank	78.6	81.4	92.8	93.4	88.5	92.1	95.0	96.1

		Percent Isotope Dilution Recovery (Acceptance Limits)							
Lab Sample ID	Client Sample ID	PFPeA (20-150)	C6PFDA (20-150)	13C7PUA (20-150)	C8PFOA (20-150)	C8PFOS (20-150)	PFOSA (20-150)	C9PFNA (20-150)	d3NMFSA (20-150)
480-229104-1	MW-1 18-20 Ft	73.7	72.7	67.5	64.3	59.8	58.5	69.5	63.3
480-229104-1 MS	MW-1 18-20 Ft	104	90.8	84.1	90.0	86.5	85.9	91.5	79.1
480-229104-1 MSD	MW-1 18-20 Ft	90.9	78.8	74.2	77.9	67.9	66.7	78.0	66.3
480-229104-5	HC-11 0.25-0.5 Ft	102	96.8	89.1	97.9	92.1	91.0	94.9	88.6
480-229104-7	MW-2 16-20 Ft	84.1	63.7	61.0	57.6	51.4	58.0	57.8	69.7
LCS 240-654795/3-A	Lab Control Sample	94.0	86.5	82.0	86.9	84.9	84.3	87.1	78.2
LLCS 240-654795/2-A	Lab Control Sample	106	93.4	84.6	95.8	89.9	84.3	92.0	76.9
MB 240-654795/1-A	Method Blank	98.8	87.5	83.4	95.4	85.8	84.3	92.3	73.7

		Percent Isotope Dilution Recovery (Acceptance Limits)							
Lab Sample ID	Client Sample ID	d3NMFOS (20-150)	d5NEFOS (20-150)	d5NPFSA (20-150)	NMFM (20-150)	NEFM (20-150)	M242FTS (20-150)	M262FTS (20-150)	M282FTS (20-150)
480-229104-1	MW-1 18-20 Ft	58.8	102	53.3	44.4	40.2	58.7	55.7	62.3
480-229104-1 MS	MW-1 18-20 Ft	85.0	144	71.3	62.7	57.3	86.3	83.6	80.3
480-229104-1 MSD	MW-1 18-20 Ft	65.0	106	56.4	47.0	43.0	72.4	71.6	70.6
480-229104-5	HC-11 0.25-0.5 Ft	95.2	141	75.2	71.4	65.2	173 *5+	136	115
480-229104-7	MW-2 16-20 Ft	56.0	106	55.3	44.9	41.5	59.3	51.4	57.6
LCS 240-654795/3-A	Lab Control Sample	80.2	143	66.6	61.6	53.1	89.2	86.0	83.1
LLCS 240-654795/2-A	Lab Control Sample	83.2	146	68.3	66.6	68.4	92.4	94.2	92.2
MB 240-654795/1-A	Method Blank	79.6	132	65.0	50.0	45.4	92.1	93.2	85.3

Surrogate Legend

PFTDA = 13C2 PFTeDA
PFDoDA = 13C2-PFDoDA
HFPODA = 13C3 HFPO-DA
C3PFBS = 13C3 PFBS
C3PFHS = 13C3 PFHxS
PFBA = 13C4 PFBA
C4PFHA = 13C4 PFHpA
13C5PHA = 13C5 PFHxA
PFPeA = 13C5 PFPeA
C6PFDA = 13C6 PFDA
13C7PUA = 13C7 PFUnA
C8PFOA = 13C8 PFOA
C8PFOS = 13C8 PFOS
PFOSA = 13C8 PFOSA
C9PFNA = 13C9 PFNA
d3NMFSA = D3-NMeFOSA
d3NMFOS = d3-NMeFOSAA

Isotope Dilution Summary

Client: Roux Environmental Engineering and Geology DPC
Job ID: 480-229104-1
Project/Site: BCP RI - 619 Exchange Street Site

d5NEFOS = d5-NEtFOSAA
d5NPFSA = d5-NEtPFOSA
NMFM = d7-N-MeFOSE-M
NEFM = d9-N-EtFOSE-M
M242FTS = M2-4:2 FTS
M262FTS = M2-6:2 FTS
M282FTS = M2-8:2 FTS

Method: 8260C - Volatile Organic Compounds by GC/MS

Lab Sample ID: MB 480-744922/2-A
Matrix: Solid
Analysis Batch: 744923

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 744922

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		5.0	0.36	ug/Kg		04/30/25 17:43	04/30/25 21:40	1
1,1,2,2-Tetrachloroethane	ND		5.0	0.81	ug/Kg		04/30/25 17:43	04/30/25 21:40	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		5.0	1.1	ug/Kg		04/30/25 17:43	04/30/25 21:40	1
1,1,2-Trichloroethane	ND		5.0	0.65	ug/Kg		04/30/25 17:43	04/30/25 21:40	1
1,1-Dichloroethane	ND		5.0	0.61	ug/Kg		04/30/25 17:43	04/30/25 21:40	1
1,1-Dichloroethene	ND		5.0	0.61	ug/Kg		04/30/25 17:43	04/30/25 21:40	1
1,2,4-Trichlorobenzene	ND		5.0	0.30	ug/Kg		04/30/25 17:43	04/30/25 21:40	1
1,2,4-Trimethylbenzene	ND		5.0	0.96	ug/Kg		04/30/25 17:43	04/30/25 21:40	1
1,2-Dibromo-3-Chloropropane	ND		5.0	2.5	ug/Kg		04/30/25 17:43	04/30/25 21:40	1
1,2-Dibromoethane	ND		5.0	0.64	ug/Kg		04/30/25 17:43	04/30/25 21:40	1
1,2-Dichlorobenzene	ND		5.0	0.39	ug/Kg		04/30/25 17:43	04/30/25 21:40	1
1,2-Dichloroethane	ND		5.0	0.25	ug/Kg		04/30/25 17:43	04/30/25 21:40	1
1,2-Dichloropropane	ND		5.0	2.5	ug/Kg		04/30/25 17:43	04/30/25 21:40	1
1,3,5-Trimethylbenzene	ND		5.0	0.32	ug/Kg		04/30/25 17:43	04/30/25 21:40	1
1,3-Dichlorobenzene	ND		5.0	0.26	ug/Kg		04/30/25 17:43	04/30/25 21:40	1
1,4-Dichlorobenzene	ND		5.0	0.70	ug/Kg		04/30/25 17:43	04/30/25 21:40	1
2-Butanone (MEK)	ND		25	1.8	ug/Kg		04/30/25 17:43	04/30/25 21:40	1
2-Hexanone	ND		25	2.5	ug/Kg		04/30/25 17:43	04/30/25 21:40	1
4-Isopropyltoluene	ND		5.0	0.40	ug/Kg		04/30/25 17:43	04/30/25 21:40	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.6	ug/Kg		04/30/25 17:43	04/30/25 21:40	1
Acetone	ND		25	4.2	ug/Kg		04/30/25 17:43	04/30/25 21:40	1
Benzene	ND		5.0	0.25	ug/Kg		04/30/25 17:43	04/30/25 21:40	1
Bromodichloromethane	ND		5.0	0.67	ug/Kg		04/30/25 17:43	04/30/25 21:40	1
Bromoform	ND		5.0	2.5	ug/Kg		04/30/25 17:43	04/30/25 21:40	1
Bromomethane	ND		5.0	0.45	ug/Kg		04/30/25 17:43	04/30/25 21:40	1
Carbon disulfide	ND		5.0	2.5	ug/Kg		04/30/25 17:43	04/30/25 21:40	1
Carbon tetrachloride	ND		5.0	0.48	ug/Kg		04/30/25 17:43	04/30/25 21:40	1
Chlorobenzene	ND		5.0	0.66	ug/Kg		04/30/25 17:43	04/30/25 21:40	1
Chloroethane	ND		5.0	1.1	ug/Kg		04/30/25 17:43	04/30/25 21:40	1
Chloroform	1.25	J	5.0	0.31	ug/Kg		04/30/25 17:43	04/30/25 21:40	1
Chloromethane	ND		5.0	0.30	ug/Kg		04/30/25 17:43	04/30/25 21:40	1
cis-1,2-Dichloroethene	ND		5.0	0.64	ug/Kg		04/30/25 17:43	04/30/25 21:40	1
cis-1,3-Dichloropropene	ND		5.0	0.72	ug/Kg		04/30/25 17:43	04/30/25 21:40	1
Cyclohexane	ND		5.0	0.70	ug/Kg		04/30/25 17:43	04/30/25 21:40	1
Dibromochloromethane	ND		5.0	0.64	ug/Kg		04/30/25 17:43	04/30/25 21:40	1
Dichlorodifluoromethane	ND		5.0	0.41	ug/Kg		04/30/25 17:43	04/30/25 21:40	1
Ethylbenzene	ND		5.0	0.35	ug/Kg		04/30/25 17:43	04/30/25 21:40	1
Isopropylbenzene	ND		5.0	0.75	ug/Kg		04/30/25 17:43	04/30/25 21:40	1
Methyl acetate	ND		25	3.0	ug/Kg		04/30/25 17:43	04/30/25 21:40	1
Methyl tert-butyl ether	ND		5.0	0.49	ug/Kg		04/30/25 17:43	04/30/25 21:40	1
Methylcyclohexane	ND		5.0	0.76	ug/Kg		04/30/25 17:43	04/30/25 21:40	1
Methylene Chloride	ND		5.0	2.3	ug/Kg		04/30/25 17:43	04/30/25 21:40	1
Naphthalene	ND		5.0	0.67	ug/Kg		04/30/25 17:43	04/30/25 21:40	1
n-Butylbenzene	ND		5.0	0.44	ug/Kg		04/30/25 17:43	04/30/25 21:40	1
N-Propylbenzene	ND		5.0	0.40	ug/Kg		04/30/25 17:43	04/30/25 21:40	1
sec-Butylbenzene	ND		5.0	0.44	ug/Kg		04/30/25 17:43	04/30/25 21:40	1
Styrene	ND		5.0	0.25	ug/Kg		04/30/25 17:43	04/30/25 21:40	1
tert-Butylbenzene	ND		5.0	0.52	ug/Kg		04/30/25 17:43	04/30/25 21:40	1

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: MB 480-744922/2-A
Matrix: Solid
Analysis Batch: 744923

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 744922

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Tetrachloroethene	ND		5.0	0.67	ug/Kg		04/30/25 17:43	04/30/25 21:40	1
Toluene	ND		5.0	0.38	ug/Kg		04/30/25 17:43	04/30/25 21:40	1
trans-1,2-Dichloroethene	ND		5.0	0.52	ug/Kg		04/30/25 17:43	04/30/25 21:40	1
trans-1,3-Dichloropropene	ND		5.0	2.2	ug/Kg		04/30/25 17:43	04/30/25 21:40	1
Trichloroethene	ND		5.0	1.1	ug/Kg		04/30/25 17:43	04/30/25 21:40	1
Trichlorofluoromethane	ND		5.0	0.47	ug/Kg		04/30/25 17:43	04/30/25 21:40	1
Vinyl chloride	ND		5.0	0.61	ug/Kg		04/30/25 17:43	04/30/25 21:40	1
Xylenes, Total	ND		10	0.84	ug/Kg		04/30/25 17:43	04/30/25 21:40	1

Tentatively Identified Compound	*MB Est. Result*	*MB Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/Kg*			*N/A*	*04/30/25 17:43*	*04/30/25 21:40*	*1*

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*102*		*64 - 126*	*04/30/25 17:43*	*04/30/25 21:40*	*1*
4-Bromofluorobenzene (Surr)	*98*		*72 - 126*	*04/30/25 17:43*	*04/30/25 21:40*	*1*
Dibromofluoromethane (Surr)	*105*		*60 - 140*	*04/30/25 17:43*	*04/30/25 21:40*	*1*
Toluene-d8 (Surr)	*97*		*71 - 125*	*04/30/25 17:43*	*04/30/25 21:40*	*1*

Lab Sample ID: LCS 480-744922/1-A
Matrix: Solid
Analysis Batch: 744923

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 744922

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
1,1,1-Trichloroethane	50.0	53.4		ug/Kg		107	77 - 121
1,1,2,2-Tetrachloroethane	50.0	49.4		ug/Kg		99	80 - 120
1,1,2-Trichloro-1,2,2-trifluoroethane	50.0	50.9		ug/Kg		102	60 - 140
1,1,2-Trichloroethane	50.0	50.0		ug/Kg		100	78 - 122
1,1-Dichloroethane	50.0	51.6		ug/Kg		103	73 - 126
1,1-Dichloroethene	50.0	50.7		ug/Kg		101	59 - 125
1,2,4-Trichlorobenzene	50.0	47.1		ug/Kg		94	64 - 120
1,2,4-Trimethylbenzene	50.0	49.6		ug/Kg		99	74 - 120
1,2-Dibromo-3-Chloropropane	50.0	51.1		ug/Kg		102	63 - 124
1,2-Dibromoethane	50.0	49.2		ug/Kg		98	78 - 120
1,2-Dichlorobenzene	50.0	48.1		ug/Kg		96	75 - 120
1,2-Dichloroethane	50.0	51.2		ug/Kg		102	77 - 122
1,2-Dichloropropane	50.0	51.8		ug/Kg		104	75 - 124
1,3,5-Trimethylbenzene	50.0	50.4		ug/Kg		101	74 - 120
1,3-Dichlorobenzene	50.0	47.8		ug/Kg		96	74 - 120
1,4-Dichlorobenzene	50.0	47.2		ug/Kg		94	73 - 120
2-Butanone (MEK)	250	273		ug/Kg		109	70 - 134
2-Hexanone	250	265		ug/Kg		106	59 - 130
4-Isopropyltoluene	50.0	50.8		ug/Kg		102	74 - 120
4-Methyl-2-pentanone (MIBK)	250	267		ug/Kg		107	65 - 133
Acetone	250	266		ug/Kg		106	61 - 137
Benzene	50.0	50.4		ug/Kg		101	79 - 127
Bromodichloromethane	50.0	51.3		ug/Kg		103	80 - 122
Bromoform	50.0	50.3		ug/Kg		101	68 - 126

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCS 480-744922/1-A
Matrix: Solid
Analysis Batch: 744923

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 744922

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Bromomethane	50.0	49.7		ug/Kg		99	37 - 149
Carbon disulfide	50.0	48.1		ug/Kg		96	64 - 131
Carbon tetrachloride	50.0	52.5		ug/Kg		105	75 - 135
Chlorobenzene	50.0	48.3		ug/Kg		97	76 - 124
Chloroethane	50.0	50.7		ug/Kg		101	69 - 135
Chloroform	50.0	49.3		ug/Kg		99	80 - 120
Chloromethane	50.0	50.5		ug/Kg		101	63 - 127
cis-1,2-Dichloroethene	50.0	50.6		ug/Kg		101	81 - 120
cis-1,3-Dichloropropene	50.0	52.6		ug/Kg		105	80 - 120
Cyclohexane	50.0	53.6		ug/Kg		107	65 - 120
Dibromochloromethane	50.0	50.4		ug/Kg		101	76 - 125
Dichlorodifluoromethane	50.0	47.2		ug/Kg		94	57 - 142
Ethylbenzene	50.0	48.4		ug/Kg		97	80 - 120
Isopropylbenzene	50.0	51.2		ug/Kg		102	72 - 120
Methyl acetate	100	104		ug/Kg		104	55 - 136
Methyl tert-butyl ether	50.0	50.6		ug/Kg		101	63 - 125
Methylcyclohexane	50.0	51.6		ug/Kg		103	60 - 140
Methylene Chloride	50.0	53.9		ug/Kg		108	61 - 127
Naphthalene	50.0	49.0		ug/Kg		98	38 - 137
n-Butylbenzene	50.0	49.9		ug/Kg		100	70 - 120
N-Propylbenzene	50.0	50.4		ug/Kg		101	70 - 130
sec-Butylbenzene	50.0	51.5		ug/Kg		103	74 - 120
Styrene	50.0	46.4		ug/Kg		93	80 - 120
tert-Butylbenzene	50.0	52.2		ug/Kg		104	73 - 120
Tetrachloroethene	50.0	48.8		ug/Kg		98	74 - 122
Toluene	50.0	48.0		ug/Kg		96	74 - 128
trans-1,2-Dichloroethene	50.0	51.2		ug/Kg		102	78 - 126
trans-1,3-Dichloropropene	50.0	50.0		ug/Kg		100	73 - 123
Trichloroethene	50.0	50.2		ug/Kg		100	77 - 129
Trichlorofluoromethane	50.0	53.6		ug/Kg		107	65 - 146
Vinyl chloride	50.0	51.0		ug/Kg		102	61 - 133
Xylenes, Total	100	98.1		ug/Kg		98	70 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*103*		*64 - 126*
4-Bromofluorobenzene (Surr)	*97*		*72 - 126*
Dibromofluoromethane (Surr)	*103*		*60 - 140*
Toluene-d8 (Surr)	*99*		*71 - 125*

Lab Sample ID: 480-229104-1 MS
Matrix: Solid
Analysis Batch: 744923

Client Sample ID: MW-1 18-20 Ft
Prep Type: Total/NA
Prep Batch: 744922

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
1,1,1-Trichloroethane	ND		56.9	50.8		ug/Kg	☼	89	77 - 121
1,1,2,2-Tetrachloroethane	ND	F1	56.9	33.1	F1	ug/Kg	☼	58	80 - 120
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		56.9	46.7		ug/Kg	☼	82	60 - 140
1,1,2-Trichloroethane	ND	F1	56.9	39.8	F1	ug/Kg	☼	70	78 - 122

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: 480-229104-1 MS
Matrix: Solid
Analysis Batch: 744923

Client Sample ID: MW-1 18-20 Ft
Prep Type: Total/NA
Prep Batch: 744922

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
1,1-Dichloroethane	ND		56.9	51.4		ug/Kg	☼	90	73 - 126
1,1-Dichloroethene	ND		56.9	48.3		ug/Kg	☼	85	59 - 125
1,2,4-Trichlorobenzene	ND	F1	56.9	22.9	F1	ug/Kg	☼	40	64 - 120
1,2,4-Trimethylbenzene	ND	F1	56.9	36.5	F1	ug/Kg	☼	64	74 - 120
1,2-Dibromo-3-Chloropropane	ND	F1	56.9	26.9	F1	ug/Kg	☼	47	63 - 124
1,2-Dibromoethane	ND	F1	56.9	34.1	F1	ug/Kg	☼	60	78 - 120
1,2-Dichlorobenzene	ND	F1	56.9	32.1	F1	ug/Kg	☼	56	75 - 120
1,2-Dichloroethane	ND	F1	56.9	43.8		ug/Kg	☼	77	77 - 122
1,2-Dichloropropane	ND		56.9	48.1		ug/Kg	☼	84	75 - 124
1,3,5-Trimethylbenzene	ND	F1	56.9	37.0	F1	ug/Kg	☼	65	74 - 120
1,3-Dichlorobenzene	ND	F1	56.9	31.9	F1	ug/Kg	☼	56	74 - 120
1,4-Dichlorobenzene	ND	F1	56.9	31.2	F1	ug/Kg	☼	55	73 - 120
2-Butanone (MEK)	ND	F1	284	172	F1	ug/Kg	☼	60	70 - 134
2-Hexanone	ND	F1	284	160	F1	ug/Kg	☼	56	59 - 130
4-Isopropyltoluene	ND	F1	56.9	32.7	F1	ug/Kg	☼	57	74 - 120
4-Methyl-2-pentanone (MIBK)	ND	F1	284	175	F1	ug/Kg	☼	62	65 - 133
Acetone	5.8	J F1	284	181		ug/Kg	☼	62	61 - 137
Benzene	ND	F1	56.9	47.4		ug/Kg	☼	83	79 - 127
Bromodichloromethane	ND	F1	56.9	44.5	F1	ug/Kg	☼	78	80 - 122
Bromoform	ND	F1	56.9	31.9	F1	ug/Kg	☼	56	68 - 126
Bromomethane	ND		56.9	50.4		ug/Kg	☼	89	37 - 149
Carbon disulfide	ND	F1	56.9	42.7		ug/Kg	☼	75	64 - 131
Carbon tetrachloride	ND		56.9	46.8		ug/Kg	☼	82	75 - 135
Chlorobenzene	ND	F1	56.9	39.3	F1	ug/Kg	☼	69	76 - 124
Chloroethane	ND		56.9	51.3		ug/Kg	☼	90	69 - 135
Chloroform	1.4	J F1 B	56.9	47.9		ug/Kg	☼	82	80 - 120
Chloromethane	ND		56.9	53.3		ug/Kg	☼	94	63 - 127
cis-1,2-Dichloroethene	ND	F1	56.9	46.5		ug/Kg	☼	82	80 - 120
cis-1,3-Dichloropropene	ND	F1	56.9	40.6	F1	ug/Kg	☼	71	80 - 120
Cyclohexane	ND		56.9	43.0		ug/Kg	☼	76	65 - 120
Dibromochloromethane	ND	F1	56.9	39.6	F1	ug/Kg	☼	70	76 - 125
Dichlorodifluoromethane	ND		56.9	47.7		ug/Kg	☼	84	57 - 142
Ethylbenzene	ND	F1	56.9	38.7	F1	ug/Kg	☼	68	80 - 120
Isopropylbenzene	ND	F1	56.9	39.5	F1	ug/Kg	☼	69	72 - 120
Methyl acetate	ND		114	69.8		ug/Kg	☼	61	55 - 136
Methyl tert-butyl ether	ND		56.9	44.4		ug/Kg	☼	78	63 - 125
Methylcyclohexane	ND		56.9	36.1		ug/Kg	☼	63	60 - 140
Methylene Chloride	ND		56.9	52.8		ug/Kg	☼	93	61 - 127
Naphthalene	ND		56.9	23.4		ug/Kg	☼	41	38 - 137
n-Butylbenzene	ND	F1	56.9	27.5	F1	ug/Kg	☼	48	70 - 120
N-Propylbenzene	ND	F1	56.9	35.4	F1	ug/Kg	☼	62	70 - 130
sec-Butylbenzene	ND	F1	56.9	33.0	F1	ug/Kg	☼	58	74 - 120
Styrene	ND	F1	56.9	36.1	F1	ug/Kg	☼	64	80 - 120
tert-Butylbenzene	ND	F1	56.9	38.8	F1	ug/Kg	☼	68	73 - 120
Tetrachloroethene	ND	F1	56.9	37.6	F1	ug/Kg	☼	66	74 - 122
Toluene	ND	F1	56.9	43.0		ug/Kg	☼	76	74 - 128
trans-1,2-Dichloroethene	ND	F1	56.9	47.2		ug/Kg	☼	83	78 - 126
trans-1,3-Dichloropropene	ND	F1	56.9	36.6	F1	ug/Kg	☼	64	73 - 123
Trichloroethene	ND	F1	56.9	42.5	F1	ug/Kg	☼	75	77 - 129

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: 480-229104-1 MS
Matrix: Solid
Analysis Batch: 744923

Client Sample ID: MW-1 18-20 Ft
Prep Type: Total/NA
Prep Batch: 744922

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Trichlorofluoromethane	ND		56.9	51.0		ug/Kg	☼	90	65 - 146
Vinyl chloride	ND	F2	56.9	51.2		ug/Kg	☼	90	61 - 133
Xylenes, Total	ND	F1	114	79.9		ug/Kg	☼	70	70 - 130

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*92*		*64 - 126*
4-Bromofluorobenzene (Surr)	*96*		*72 - 126*
Dibromofluoromethane (Surr)	*101*		*60 - 140*
Toluene-d8 (Surr)	*101*		*71 - 125*

Lab Sample ID: 480-229104-1 MSD
Matrix: Solid
Analysis Batch: 744923

Client Sample ID: MW-1 18-20 Ft
Prep Type: Total/NA
Prep Batch: 744922

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
1,1,1-Trichloroethane	ND		53.2	44.5		ug/Kg	☼	84	77 - 121	13	30
1,1,2,2-Tetrachloroethane	ND	F1	53.2	30.5	F1	ug/Kg	☼	57	80 - 120	8	30
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		53.2	38.7		ug/Kg	☼	73	60 - 140	19	30
1,1,2-Trichloroethane	ND	F1	53.2	35.5	F1	ug/Kg	☼	67	78 - 122	11	30
1,1-Dichloroethane	ND		53.2	44.3		ug/Kg	☼	83	73 - 126	15	30
1,1-Dichloroethene	ND		53.2	38.7		ug/Kg	☼	73	59 - 125	22	30
1,2,4-Trichlorobenzene	ND	F1	53.2	22.9	F1	ug/Kg	☼	43	64 - 120	0	30
1,2,4-Trimethylbenzene	ND	F1	53.2	33.2	F1	ug/Kg	☼	62	74 - 120	9	30
1,2-Dibromo-3-Chloropropane	ND	F1	53.2	25.1	F1	ug/Kg	☼	47	63 - 124	7	30
1,2-Dibromoethane	ND	F1	53.2	30.3	F1	ug/Kg	☼	57	78 - 120	12	30
1,2-Dichlorobenzene	ND	F1	53.2	30.0	F1	ug/Kg	☼	56	75 - 120	7	30
1,2-Dichloroethane	ND	F1	53.2	38.2	F1	ug/Kg	☼	72	77 - 122	14	30
1,2-Dichloropropane	ND		53.2	42.3		ug/Kg	☼	79	75 - 124	13	30
1,3,5-Trimethylbenzene	ND	F1	53.2	34.6	F1	ug/Kg	☼	65	74 - 120	7	30
1,3-Dichlorobenzene	ND	F1	53.2	29.9	F1	ug/Kg	☼	56	74 - 120	6	30
1,4-Dichlorobenzene	ND	F1	53.2	29.2	F1	ug/Kg	☼	55	73 - 120	7	30
2-Butanone (MEK)	ND	F1	266	153	F1	ug/Kg	☼	58	70 - 134	12	30
2-Hexanone	ND	F1	266	136	F1	ug/Kg	☼	51	59 - 130	17	30
4-Isopropyltoluene	ND	F1	53.2	31.9	F1	ug/Kg	☼	60	74 - 120	2	30
4-Methyl-2-pentanone (MIBK)	ND	F1	266	149	F1	ug/Kg	☼	56	65 - 133	16	30
Acetone	5.8	J F1	266	161	F1	ug/Kg	☼	59	61 - 137	11	30
Benzene	ND	F1	53.2	40.0	F1	ug/Kg	☼	75	79 - 127	17	30
Bromodichloromethane	ND	F1	53.2	40.7	F1	ug/Kg	☼	76	80 - 122	9	30
Bromoform	ND	F1	53.2	30.4	F1	ug/Kg	☼	57	68 - 126	5	30
Bromomethane	ND		53.2	39.5		ug/Kg	☼	74	37 - 149	24	30
Carbon disulfide	ND	F1	53.2	32.2	F1	ug/Kg	☼	60	64 - 131	28	30
Carbon tetrachloride	ND		53.2	41.3		ug/Kg	☼	78	75 - 135	12	30
Chlorobenzene	ND	F1	53.2	33.7	F1	ug/Kg	☼	63	76 - 124	15	30
Chloroethane	ND		53.2	40.1		ug/Kg	☼	75	69 - 135	24	30
Chloroform	1.4	J F1 B	53.2	41.7	F1	ug/Kg	☼	76	80 - 120	14	30
Chloromethane	ND		53.2	41.5		ug/Kg	☼	78	63 - 127	25	30
cis-1,2-Dichloroethene	ND	F1	53.2	37.8	F1	ug/Kg	☼	71	80 - 120	21	30
cis-1,3-Dichloropropene	ND	F1	53.2	35.9	F1	ug/Kg	☼	67	80 - 120	12	30

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: 480-229104-1 MSD
Matrix: Solid
Analysis Batch: 744923

Client Sample ID: MW-1 18-20 Ft
Prep Type: Total/NA
Prep Batch: 744922

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Cyclohexane	ND		53.2	38.3		ug/Kg	☼	72	65 - 120	12	30
Dibromochloromethane	ND	F1	53.2	36.0	F1	ug/Kg	☼	68	76 - 125	9	30
Dichlorodifluoromethane	ND		53.2	37.1		ug/Kg	☼	70	57 - 142	25	30
Ethylbenzene	ND	F1	53.2	33.4	F1	ug/Kg	☼	63	80 - 120	15	30
Isopropylbenzene	ND	F1	53.2	35.7	F1	ug/Kg	☼	67	72 - 120	10	30
Methyl acetate	ND		106	61.6		ug/Kg	☼	58	55 - 136	12	30
Methyl tert-butyl ether	ND		53.2	40.5		ug/Kg	☼	76	63 - 125	9	30
Methylcyclohexane	ND		53.2	32.6		ug/Kg	☼	61	60 - 140	10	30
Methylene Chloride	ND		53.2	43.5		ug/Kg	☼	82	61 - 127	19	30
Naphthalene	ND		53.2	21.6		ug/Kg	☼	41	38 - 137	8	30
n-Butylbenzene	ND	F1	53.2	27.5	F1	ug/Kg	☼	52	70 - 120	0	30
N-Propylbenzene	ND	F1	53.2	32.6	F1	ug/Kg	☼	61	70 - 130	8	30
sec-Butylbenzene	ND	F1	53.2	32.1	F1	ug/Kg	☼	60	74 - 120	3	30
Styrene	ND	F1	53.2	31.0	F1	ug/Kg	☼	58	80 - 120	15	30
tert-Butylbenzene	ND	F1	53.2	35.7	F1	ug/Kg	☼	67	73 - 120	8	30
Tetrachloroethene	ND	F1	53.2	33.0	F1	ug/Kg	☼	62	74 - 122	13	30
Toluene	ND	F1	53.2	36.0	F1	ug/Kg	☼	68	74 - 128	18	30
trans-1,2-Dichloroethene	ND	F1	53.2	35.1	F1	ug/Kg	☼	66	78 - 126	29	30
trans-1,3-Dichloropropene	ND	F1	53.2	31.7	F1	ug/Kg	☼	60	73 - 123	14	30
Trichloroethene	ND	F1	53.2	36.6	F1	ug/Kg	☼	69	77 - 129	15	30
Trichlorofluoromethane	ND		53.2	41.9		ug/Kg	☼	79	65 - 146	20	30
Vinyl chloride	ND	F2	53.2	37.7	F2	ug/Kg	☼	71	61 - 133	31	30
Xylenes, Total	ND	F1	106	68.3	F1	ug/Kg	☼	64	70 - 130	16	30

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*90*		*64 - 126*
4-Bromofluorobenzene (Surr)	*94*		*72 - 126*
Dibromofluoromethane (Surr)	*99*		*60 - 140*
Toluene-d8 (Surr)	*100*		*71 - 125*

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Lab Sample ID: MB 480-744941/1-A
Matrix: Solid
Analysis Batch: 745287

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 744941

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	ND		100	55	ug/Kg		05/01/25 06:55	05/06/25 13:00	1
2,4,5-Trichlorophenol	ND		170	46	ug/Kg		05/01/25 06:55	05/06/25 13:00	1
2,4,6-Trichlorophenol	ND		170	34	ug/Kg		05/01/25 06:55	05/06/25 13:00	1
2,4-Dichlorophenol	ND		170	18	ug/Kg		05/01/25 06:55	05/06/25 13:00	1
2,4-Dimethylphenol	ND		170	41	ug/Kg		05/01/25 06:55	05/06/25 13:00	1
2,4-Dinitrophenol	ND		1700	780	ug/Kg		05/01/25 06:55	05/06/25 13:00	1
2,4-Dinitrotoluene	ND		170	35	ug/Kg		05/01/25 06:55	05/06/25 13:00	1
2,6-Dinitrotoluene	ND		170	20	ug/Kg		05/01/25 06:55	05/06/25 13:00	1
2-Chloronaphthalene	ND		170	28	ug/Kg		05/01/25 06:55	05/06/25 13:00	1
2-Chlorophenol	ND		330	31	ug/Kg		05/01/25 06:55	05/06/25 13:00	1
2-Methylnaphthalene	ND		170	34	ug/Kg		05/01/25 06:55	05/06/25 13:00	1
2-Methylphenol	ND		170	20	ug/Kg		05/01/25 06:55	05/06/25 13:00	1

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 480-744941/1-A
Matrix: Solid
Analysis Batch: 745287

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 744941

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Nitroaniline	ND		330	25	ug/Kg		05/01/25 06:55	05/06/25 13:00	1
2-Nitrophenol	ND		170	48	ug/Kg		05/01/25 06:55	05/06/25 13:00	1
3,3'-Dichlorobenzidine	ND		330	200	ug/Kg		05/01/25 06:55	05/06/25 13:00	1
3-Nitroaniline	ND		330	47	ug/Kg		05/01/25 06:55	05/06/25 13:00	1
4,6-Dinitro-2-methylphenol	ND		330	170	ug/Kg		05/01/25 06:55	05/06/25 13:00	1
4-Bromophenyl phenyl ether	ND		170	24	ug/Kg		05/01/25 06:55	05/06/25 13:00	1
4-Chloro-3-methylphenol	ND		170	42	ug/Kg		05/01/25 06:55	05/06/25 13:00	1
4-Chloroaniline	ND		170	42	ug/Kg		05/01/25 06:55	05/06/25 13:00	1
4-Chlorophenyl phenyl ether	ND		170	21	ug/Kg		05/01/25 06:55	05/06/25 13:00	1
4-Methylphenol	ND		330	20	ug/Kg		05/01/25 06:55	05/06/25 13:00	1
4-Nitroaniline	ND		330	89	ug/Kg		05/01/25 06:55	05/06/25 13:00	1
4-Nitrophenol	ND		330	120	ug/Kg		05/01/25 06:55	05/06/25 13:00	1
Acenaphthene	ND		170	25	ug/Kg		05/01/25 06:55	05/06/25 13:00	1
Acenaphthylene	ND		170	22	ug/Kg		05/01/25 06:55	05/06/25 13:00	1
Acetophenone	ND		170	23	ug/Kg		05/01/25 06:55	05/06/25 13:00	1
Anthracene	ND		170	42	ug/Kg		05/01/25 06:55	05/06/25 13:00	1
Atrazine	ND		170	59	ug/Kg		05/01/25 06:55	05/06/25 13:00	1
Benzaldehyde	ND		170	140	ug/Kg		05/01/25 06:55	05/06/25 13:00	1
Benzo[a]anthracene	ND		170	17	ug/Kg		05/01/25 06:55	05/06/25 13:00	1
Benzo[a]pyrene	ND		170	25	ug/Kg		05/01/25 06:55	05/06/25 13:00	1
Benzo[b]fluoranthene	ND		170	27	ug/Kg		05/01/25 06:55	05/06/25 13:00	1
Benzo[g,h,i]perylene	ND		170	18	ug/Kg		05/01/25 06:55	05/06/25 13:00	1
Benzo[k]fluoranthene	ND		170	22	ug/Kg		05/01/25 06:55	05/06/25 13:00	1
Biphenyl	ND		170	25	ug/Kg		05/01/25 06:55	05/06/25 13:00	1
bis (2-chloroisopropyl) ether	ND		170	34	ug/Kg		05/01/25 06:55	05/06/25 13:00	1
Bis(2-chloroethoxy)methane	ND		170	36	ug/Kg		05/01/25 06:55	05/06/25 13:00	1
Bis(2-chloroethyl)ether	ND		170	22	ug/Kg		05/01/25 06:55	05/06/25 13:00	1
Bis(2-ethylhexyl) phthalate	ND		170	58	ug/Kg		05/01/25 06:55	05/06/25 13:00	1
Butyl benzyl phthalate	ND		170	28	ug/Kg		05/01/25 06:55	05/06/25 13:00	1
Caprolactam	ND		170	51	ug/Kg		05/01/25 06:55	05/06/25 13:00	1
Carbazole	ND		170	20	ug/Kg		05/01/25 06:55	05/06/25 13:00	1
Chrysene	ND		170	38	ug/Kg		05/01/25 06:55	05/06/25 13:00	1
Dibenz(a,h)anthracene	ND		170	30	ug/Kg		05/01/25 06:55	05/06/25 13:00	1
Dibenzofuran	ND		170	20	ug/Kg		05/01/25 06:55	05/06/25 13:00	1
Diethyl phthalate	ND		170	22	ug/Kg		05/01/25 06:55	05/06/25 13:00	1
Dimethyl phthalate	ND		170	20	ug/Kg		05/01/25 06:55	05/06/25 13:00	1
Di-n-butyl phthalate	ND		170	29	ug/Kg		05/01/25 06:55	05/06/25 13:00	1
Di-n-octyl phthalate	ND		170	20	ug/Kg		05/01/25 06:55	05/06/25 13:00	1
Fluoranthene	ND		170	18	ug/Kg		05/01/25 06:55	05/06/25 13:00	1
Fluorene	ND		170	20	ug/Kg		05/01/25 06:55	05/06/25 13:00	1
Hexachlorobenzene	ND		170	23	ug/Kg		05/01/25 06:55	05/06/25 13:00	1
Hexachlorobutadiene	ND		170	25	ug/Kg		05/01/25 06:55	05/06/25 13:00	1
Hexachlorocyclopentadiene	ND		170	23	ug/Kg		05/01/25 06:55	05/06/25 13:00	1
Hexachloroethane	ND		170	22	ug/Kg		05/01/25 06:55	05/06/25 13:00	1
Indeno[1,2,3-cd]pyrene	ND		170	21	ug/Kg		05/01/25 06:55	05/06/25 13:00	1
Isophorone	ND		170	36	ug/Kg		05/01/25 06:55	05/06/25 13:00	1
Naphthalene	ND		170	22	ug/Kg		05/01/25 06:55	05/06/25 13:00	1
Nitrobenzene	ND		170	19	ug/Kg		05/01/25 06:55	05/06/25 13:00	1
N-Nitrosodi-n-propylamine	ND		170	29	ug/Kg		05/01/25 06:55	05/06/25 13:00	1

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 480-744941/1-A
Matrix: Solid
Analysis Batch: 745287

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 744941

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
N-Nitrosodiphenylamine	ND		170	140	ug/Kg		05/01/25 06:55	05/06/25 13:00	1
Pentachlorophenol	ND		330	170	ug/Kg		05/01/25 06:55	05/06/25 13:00	1
Phenanthrene	ND		170	25	ug/Kg		05/01/25 06:55	05/06/25 13:00	1
Phenol	ND		170	26	ug/Kg		05/01/25 06:55	05/06/25 13:00	1
Pyrene	ND		170	20	ug/Kg		05/01/25 06:55	05/06/25 13:00	1

Tentatively Identified Compound	*MB Est. Result*	*MB Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Unknown	*276*	*T J*	*ug/Kg*		*3.46*	*N/A*	*05/01/25 06:55*	*05/06/25 13:00*	*1*
Unknown	*146*	*T J*	*ug/Kg*		*13.48*	*N/A*	*05/01/25 06:55*	*05/06/25 13:00*	*1*

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol (Surr)	*86*		*26 - 143*	*05/01/25 06:55*	*05/06/25 13:00*	*1*
2-Fluorobiphenyl (Surr)	*85*		*50 - 121*	*05/01/25 06:55*	*05/06/25 13:00*	*1*
2-Fluorophenol (Surr)	*77*		*36 - 120*	*05/01/25 06:55*	*05/06/25 13:00*	*1*
Nitrobenzene-d5 (Surr)	*88*		*40 - 121*	*05/01/25 06:55*	*05/06/25 13:00*	*1*
Phenol-d5 (Surr)	*83*		*41 - 120*	*05/01/25 06:55*	*05/06/25 13:00*	*1*
p-Terphenyl-d14 (Surr)	*97*		*46 - 143*	*05/01/25 06:55*	*05/06/25 13:00*	*1*

Lab Sample ID: LCS 480-744941/2-A
Matrix: Solid
Analysis Batch: 745287

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 744941

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
1,4-Dioxane	1330	705		ug/Kg		53	23 - 120
2,4,5-Trichlorophenol	1330	1400		ug/Kg		105	59 - 126
2,4,6-Trichlorophenol	1330	1280		ug/Kg		96	59 - 123
2,4-Dichlorophenol	1330	1140		ug/Kg		86	61 - 120
2,4-Dimethylphenol	1330	1180		ug/Kg		89	59 - 120
2,4-Dinitrophenol	2670	2660		ug/Kg		100	41 - 146
2,4-Dinitrotoluene	1330	1280		ug/Kg		96	63 - 120
2,6-Dinitrotoluene	1330	1300		ug/Kg		97	66 - 120
2-Chloronaphthalene	1330	1170		ug/Kg		88	57 - 120
2-Chlorophenol	1330	1080		ug/Kg		81	53 - 120
2-Methylnaphthalene	1330	1080		ug/Kg		81	59 - 120
2-Methylphenol	1330	1120		ug/Kg		84	54 - 120
2-Nitroaniline	1330	1320		ug/Kg		99	61 - 120
2-Nitrophenol	1330	1070		ug/Kg		80	56 - 120
3,3'-Dichlorobenzidine	1330	1020		ug/Kg		76	54 - 120
3-Nitroaniline	1330	839		ug/Kg		63	48 - 120
4,6-Dinitro-2-methylphenol	2670	2590		ug/Kg		97	49 - 122
4-Bromophenyl phenyl ether	1330	1270		ug/Kg		95	58 - 120
4-Chloro-3-methylphenol	1330	1190		ug/Kg		90	61 - 120
4-Chloroaniline	1330	788		ug/Kg		59	38 - 120
4-Chlorophenyl phenyl ether	1330	1230		ug/Kg		92	63 - 124
4-Methylphenol	1330	1120		ug/Kg		84	55 - 120
4-Nitroaniline	1330	1120		ug/Kg		84	56 - 120
4-Nitrophenol	2670	2580		ug/Kg		97	43 - 147
Acenaphthene	1330	1290		ug/Kg		97	62 - 120

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 480-744941/2-A
Matrix: Solid
Analysis Batch: 745287

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 744941

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Acenaphthylene	1330	1240		ug/Kg		93	58 - 121
Acetophenone	1330	1090		ug/Kg		82	54 - 120
Anthracene	1330	1230		ug/Kg		92	62 - 120
Atrazine	1330	846		ug/Kg		63	60 - 127
Benzaldehyde	1330	683		ug/Kg		51	10 - 150
Benzo[a]anthracene	1330	1220		ug/Kg		91	65 - 120
Benzo[a]pyrene	1330	1290		ug/Kg		97	64 - 120
Benzo[b]fluoranthene	1330	1220		ug/Kg		91	64 - 120
Benzo[g,h,i]perylene	1330	1400		ug/Kg		105	45 - 145
Benzo[k]fluoranthene	1330	1350		ug/Kg		101	65 - 120
Biphenyl	1330	1210		ug/Kg		91	59 - 120
bis (2-chloroisopropyl) ether	1330	1080		ug/Kg		81	44 - 120
Bis(2-chloroethoxy)methane	1330	1180		ug/Kg		89	55 - 120
Bis(2-chloroethyl)ether	1330	1080		ug/Kg		81	45 - 120
Bis(2-ethylhexyl) phthalate	1330	1270		ug/Kg		95	61 - 133
Butyl benzyl phthalate	1330	1220		ug/Kg		91	61 - 129
Caprolactam	1330	849		ug/Kg		64	47 - 120
Carbazole	1330	1310		ug/Kg		98	65 - 120
Chrysene	1330	1210		ug/Kg		91	64 - 120
Dibenz(a,h)anthracene	1330	1370		ug/Kg		103	54 - 132
Dibenzofuran	1330	1230		ug/Kg		92	63 - 120
Diethyl phthalate	1330	1310		ug/Kg		98	66 - 120
Dimethyl phthalate	1330	1280		ug/Kg		96	65 - 124
Di-n-butyl phthalate	1330	1190		ug/Kg		89	58 - 130
Di-n-octyl phthalate	1330	1230		ug/Kg		92	57 - 133
Fluoranthene	1330	1270		ug/Kg		95	62 - 120
Fluorene	1330	1310		ug/Kg		98	63 - 120
Hexachlorobenzene	1330	1250		ug/Kg		94	60 - 120
Hexachlorobutadiene	1330	1080		ug/Kg		81	45 - 120
Hexachlorocyclopentadiene	1330	1190		ug/Kg		89	47 - 120
Hexachloroethane	1330	977		ug/Kg		73	41 - 120
Indeno[1,2,3-cd]pyrene	1330	1360		ug/Kg		102	56 - 134
Isophorone	1330	1170		ug/Kg		87	56 - 120
Naphthalene	1330	1080		ug/Kg		81	55 - 120
Nitrobenzene	1330	1090		ug/Kg		82	54 - 120
N-Nitrosodi-n-propylamine	1330	1130		ug/Kg		85	52 - 120
N-Nitrosodiphenylamine	1330	1310		ug/Kg		98	51 - 128
Pentachlorophenol	2670	2620		ug/Kg		98	10 - 120
Phenanthrene	1330	1270		ug/Kg		95	60 - 120
Phenol	1330	1090		ug/Kg		82	53 - 120
Pyrene	1330	1250		ug/Kg		94	61 - 133

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2,4,6-Tribromophenol (Surr)	*98*		*26 - 143*
2-Fluorobiphenyl (Surr)	*92*		*50 - 121*
2-Fluorophenol (Surr)	*80*		*36 - 120*
Nitrobenzene-d5 (Surr)	*86*		*40 - 121*
Phenol-d5 (Surr)	*89*		*41 - 120*

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 480-744941/2-A
Matrix: Solid
Analysis Batch: 745287

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 744941

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
p-Terphenyl-d14 (Surr)	*95*		*46 - 143*

Lab Sample ID: 480-229104-1 MS
Matrix: Solid
Analysis Batch: 745287

Client Sample ID: MW-1 18-20 Ft
Prep Type: Total/NA
Prep Batch: 744941

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
1,4-Dioxane	ND		1620	882		ug/Kg	☼	54	13 - 120
2,4,5-Trichlorophenol	ND		1620	1660		ug/Kg	☼	102	46 - 120
2,4,6-Trichlorophenol	ND		1620	1580		ug/Kg	☼	98	41 - 123
2,4-Dichlorophenol	ND		1620	1490		ug/Kg	☼	92	45 - 120
2,4-Dimethylphenol	ND		1620	1590		ug/Kg	☼	98	52 - 120
2,4-Dinitrophenol	ND		3240	2760		ug/Kg	☼	85	41 - 146
2,4-Dinitrotoluene	ND		1620	1480		ug/Kg	☼	91	63 - 125
2,6-Dinitrotoluene	ND		1620	1600		ug/Kg	☼	99	66 - 120
2-Chloronaphthalene	ND		1620	1450		ug/Kg	☼	89	57 - 120
2-Chlorophenol	ND		1620	1350		ug/Kg	☼	83	43 - 120
2-Methylnaphthalene	ND		1620	1440		ug/Kg	☼	89	55 - 120
2-Methylphenol	ND		1620	1500		ug/Kg	☼	93	48 - 120
2-Nitroaniline	ND		1620	1590		ug/Kg	☼	98	61 - 120
2-Nitrophenol	ND		1620	1470		ug/Kg	☼	91	37 - 120
3,3'-Dichlorobenzidine	ND		1620	1510		ug/Kg	☼	93	37 - 126
3-Nitroaniline	ND		1620	1390		ug/Kg	☼	86	48 - 120
4,6-Dinitro-2-methylphenol	ND		3240	3350		ug/Kg	☼	103	23 - 149
4-Bromophenyl phenyl ether	ND		1620	1700		ug/Kg	☼	105	58 - 120
4-Chloro-3-methylphenol	ND		1620	1600		ug/Kg	☼	98	49 - 125
4-Chloroaniline	ND		1620	1360		ug/Kg	☼	84	38 - 120
4-Chlorophenyl phenyl ether	ND		1620	1480		ug/Kg	☼	91	63 - 124
4-Methylphenol	ND		1620	1520		ug/Kg	☼	94	50 - 120
4-Nitroaniline	ND		1620	1520		ug/Kg	☼	94	47 - 120
4-Nitrophenol	ND		3240	3070		ug/Kg	☼	95	31 - 147
Acenaphthene	ND		1620	1580		ug/Kg	☼	97	60 - 120
Acenaphthylene	ND		1620	1490		ug/Kg	☼	92	58 - 121
Acetophenone	ND		1620	1390		ug/Kg	☼	86	47 - 120
Anthracene	ND		1620	1600		ug/Kg	☼	99	62 - 120
Atrazine	ND		1620	1180		ug/Kg	☼	73	60 - 150
Benzaldehyde	ND		1620	1030		ug/Kg	☼	63	10 - 150
Benzo[a]anthracene	ND		1620	1580		ug/Kg	☼	97	65 - 120
Benzo[a]pyrene	ND		1620	1590		ug/Kg	☼	98	64 - 120
Benzo[b]fluoranthene	ND		1620	1510		ug/Kg	☼	93	10 - 150
Benzo[g,h,i]perylene	ND		1620	1720		ug/Kg	☼	106	45 - 145
Benzo[k]fluoranthene	ND		1620	1660		ug/Kg	☼	102	23 - 150
Biphenyl	ND		1620	1500		ug/Kg	☼	93	58 - 120
bis (2-chloroisopropyl) ether	ND		1620	1350		ug/Kg	☼	83	31 - 120
Bis(2-chloroethoxy)methane	ND		1620	1480		ug/Kg	☼	91	52 - 120
Bis(2-chloroethyl)ether	ND		1620	1380		ug/Kg	☼	85	45 - 120
Bis(2-ethylhexyl) phthalate	ND		1620	1660		ug/Kg	☼	102	61 - 133
Butyl benzyl phthalate	ND		1620	1600		ug/Kg	☼	99	61 - 120

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 480-229104-1 MS
Matrix: Solid
Analysis Batch: 745287

Client Sample ID: MW-1 18-20 Ft
Prep Type: Total/NA
Prep Batch: 744941

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Caprolactam	ND		1620	1110		ug/Kg	☼	68	37 - 133
Carbazole	ND		1620	1650		ug/Kg	☼	102	59 - 120
Chrysene	ND		1620	1570		ug/Kg	☼	97	64 - 120
Dibenz(a,h)anthracene	ND		1620	1620		ug/Kg	☼	100	54 - 132
Dibenzofuran	ND		1620	1490		ug/Kg	☼	92	62 - 120
Diethyl phthalate	ND		1620	1530		ug/Kg	☼	94	66 - 120
Dimethyl phthalate	ND		1620	1560		ug/Kg	☼	96	65 - 124
Di-n-butyl phthalate	ND		1620	1530		ug/Kg	☼	95	58 - 130
Di-n-octyl phthalate	ND		1620	1560		ug/Kg	☼	96	57 - 133
Fluoranthene	ND		1620	1630		ug/Kg	☼	101	62 - 120
Fluorene	ND		1620	1510		ug/Kg	☼	93	63 - 120
Hexachlorobenzene	ND		1620	1690		ug/Kg	☼	104	60 - 120
Hexachlorobutadiene	ND		1620	1400		ug/Kg	☼	86	45 - 120
Hexachlorocyclopentadiene	ND		1620	1390		ug/Kg	☼	86	31 - 120
Hexachloroethane	ND		1620	1300		ug/Kg	☼	80	21 - 120
Indeno[1,2,3-cd]pyrene	ND		1620	1640		ug/Kg	☼	101	56 - 134
Isophorone	ND		1620	1560		ug/Kg	☼	96	56 - 120
Naphthalene	ND		1620	1450		ug/Kg	☼	90	46 - 120
Nitrobenzene	ND		1620	1430		ug/Kg	☼	88	49 - 120
N-Nitrosodi-n-propylamine	ND		1620	1500		ug/Kg	☼	93	46 - 120
N-Nitrosodiphenylamine	ND		1620	1640		ug/Kg	☼	101	20 - 128
Pentachlorophenol	ND		3240	3200		ug/Kg	☼	99	10 - 136
Phenanthrene	ND		1620	1610		ug/Kg	☼	100	60 - 122
Phenol	ND		1620	1420		ug/Kg	☼	88	50 - 120
Pyrene	ND		1620	1640		ug/Kg	☼	101	61 - 133

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
2,4,6-Tribromophenol (Surr)	*98*		*26 - 143*
2-Fluorobiphenyl (Surr)	*91*		*50 - 121*
2-Fluorophenol (Surr)	*77*		*36 - 120*
Nitrobenzene-d5 (Surr)	*91*		*40 - 121*
Phenol-d5 (Surr)	*94*		*41 - 120*
p-Terphenyl-d14 (Surr)	*104*		*46 - 143*

Lab Sample ID: 480-229104-1 MSD
Matrix: Solid
Analysis Batch: 745287

Client Sample ID: MW-1 18-20 Ft
Prep Type: Total/NA
Prep Batch: 744941

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
1,4-Dioxane	ND		1630	958		ug/Kg	☼	59	13 - 120	8	50
2,4,5-Trichlorophenol	ND		1630	1730		ug/Kg	☼	106	46 - 120	4	18
2,4,6-Trichlorophenol	ND		1630	1670		ug/Kg	☼	103	41 - 123	5	19
2,4-Dichlorophenol	ND		1630	1440		ug/Kg	☼	88	45 - 120	4	19
2,4-Dimethylphenol	ND		1630	1440		ug/Kg	☼	89	52 - 120	10	42
2,4-Dinitrophenol	ND		3250	2760		ug/Kg	☼	85	41 - 146	0	22
2,4-Dinitrotoluene	ND		1630	1640		ug/Kg	☼	101	63 - 125	11	20
2,6-Dinitrotoluene	ND		1630	1610		ug/Kg	☼	99	66 - 120	1	15
2-Chloronaphthalene	ND		1630	1620		ug/Kg	☼	99	57 - 120	11	21

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 480-229104-1 MSD
Matrix: Solid
Analysis Batch: 745287

Client Sample ID: MW-1 18-20 Ft
Prep Type: Total/NA
Prep Batch: 744941

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
2-Chlorophenol	ND		1630	1380		ug/Kg	☼	85	43 - 120	2	25
2-Methylnaphthalene	ND		1630	1360		ug/Kg	☼	84	55 - 120	6	21
2-Methylphenol	ND		1630	1450		ug/Kg	☼	89	48 - 120	4	27
2-Nitroaniline	ND		1630	1670		ug/Kg	☼	103	61 - 120	5	15
2-Nitrophenol	ND		1630	1530		ug/Kg	☼	94	37 - 120	4	18
3,3'-Dichlorobenzidine	ND		1630	1420		ug/Kg	☼	87	37 - 126	6	25
3-Nitroaniline	ND		1630	1300		ug/Kg	☼	80	48 - 120	7	19
4,6-Dinitro-2-methylphenol	ND		3250	3290		ug/Kg	☼	101	23 - 149	2	15
4-Bromophenyl phenyl ether	ND		1630	1730		ug/Kg	☼	106	58 - 120	2	15
4-Chloro-3-methylphenol	ND		1630	1420		ug/Kg	☼	87	49 - 125	12	27
4-Chloroaniline	ND		1630	1200		ug/Kg	☼	74	38 - 120	12	22
4-Chlorophenyl phenyl ether	ND		1630	1610		ug/Kg	☼	99	63 - 124	9	16
4-Methylphenol	ND		1630	1400		ug/Kg	☼	86	50 - 120	9	24
4-Nitroaniline	ND		1630	1540		ug/Kg	☼	94	47 - 120	1	24
4-Nitrophenol	ND		3250	3020		ug/Kg	☼	93	31 - 147	2	25
Acenaphthene	ND		1630	1620		ug/Kg	☼	100	60 - 120	3	35
Acenaphthylene	ND		1630	1620		ug/Kg	☼	100	58 - 121	9	18
Acetophenone	ND		1630	1380		ug/Kg	☼	85	47 - 120	1	20
Anthracene	ND		1630	1520		ug/Kg	☼	93	62 - 120	5	15
Atrazine	ND		1630	1180		ug/Kg	☼	73	60 - 150	0	20
Benzaldehyde	ND		1630	1090		ug/Kg	☼	67	10 - 150	6	20
Benzo[a]anthracene	ND		1630	1560		ug/Kg	☼	96	65 - 120	1	15
Benzo[a]pyrene	ND		1630	1630		ug/Kg	☼	100	64 - 120	2	15
Benzo[b]fluoranthene	ND		1630	1540		ug/Kg	☼	94	10 - 150	2	15
Benzo[g,h,i]perylene	ND		1630	1860		ug/Kg	☼	115	45 - 145	8	15
Benzo[k]fluoranthene	ND		1630	1650		ug/Kg	☼	101	23 - 150	1	22
Biphenyl	ND		1630	1660		ug/Kg	☼	102	58 - 120	10	20
bis (2-chloroisopropyl) ether	ND		1630	1370		ug/Kg	☼	84	31 - 120	1	24
Bis(2-chloroethoxy)methane	ND		1630	1420		ug/Kg	☼	87	52 - 120	4	17
Bis(2-chloroethyl)ether	ND		1630	1340		ug/Kg	☼	82	45 - 120	3	21
Bis(2-ethylhexyl) phthalate	ND		1630	1560		ug/Kg	☼	96	61 - 133	6	15
Butyl benzyl phthalate	ND		1630	1520		ug/Kg	☼	93	61 - 120	5	16
Caprolactam	ND		1630	977		ug/Kg	☼	60	37 - 133	13	20
Carbazole	ND		1630	1570		ug/Kg	☼	96	59 - 120	5	20
Chrysene	ND		1630	1520		ug/Kg	☼	93	64 - 120	3	15
Dibenz(a,h)anthracene	ND		1630	1780		ug/Kg	☼	110	54 - 132	10	15
Dibenzofuran	ND		1630	1560		ug/Kg	☼	96	62 - 120	5	15
Diethyl phthalate	ND		1630	1520		ug/Kg	☼	94	66 - 120	0	15
Dimethyl phthalate	ND		1630	1580		ug/Kg	☼	97	65 - 124	1	15
Di-n-butyl phthalate	ND		1630	1450		ug/Kg	☼	89	58 - 130	5	15
Di-n-octyl phthalate	ND		1630	1450		ug/Kg	☼	89	57 - 133	7	16
Fluoranthene	ND		1630	1470		ug/Kg	☼	90	62 - 120	10	15
Fluorene	ND		1630	1670		ug/Kg	☼	103	63 - 120	11	15
Hexachlorobenzene	ND		1630	1570		ug/Kg	☼	96	60 - 120	8	15
Hexachlorobutadiene	ND		1630	1330		ug/Kg	☼	82	45 - 120	5	44
Hexachlorocyclopentadiene	ND		1630	1680		ug/Kg	☼	103	31 - 120	19	49
Hexachloroethane	ND		1630	1280		ug/Kg	☼	79	21 - 120	1	46
Indeno[1,2,3-cd]pyrene	ND		1630	1750		ug/Kg	☼	107	56 - 134	6	15
Isophorone	ND		1630	1440		ug/Kg	☼	88	56 - 120	8	17

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 480-229104-1 MSD
Matrix: Solid
Analysis Batch: 745287

Client Sample ID: MW-1 18-20 Ft
Prep Type: Total/NA
Prep Batch: 744941

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Naphthalene	ND		1630	1380		ug/Kg	☼	85	46 - 120	5	29
Nitrobenzene	ND		1630	1400		ug/Kg	☼	86	49 - 120	2	24
N-Nitrosodi-n-propylamine	ND		1630	1480		ug/Kg	☼	91	46 - 120	2	31
N-Nitrosodiphenylamine	ND		1630	1730		ug/Kg	☼	106	20 - 128	5	15
Pentachlorophenol	ND		3250	3180		ug/Kg	☼	98	10 - 136	1	35
Phenanthrene	ND		1630	1590		ug/Kg	☼	98	60 - 122	1	15
Phenol	ND		1630	1400		ug/Kg	☼	86	50 - 120	1	35
Pyrene	ND		1630	1640		ug/Kg	☼	101	61 - 133	0	35

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
2,4,6-Tribromophenol (Surr)	*105*		*26 - 143*
2-Fluorobiphenyl (Surr)	*104*		*50 - 121*
2-Fluorophenol (Surr)	*84*		*36 - 120*
Nitrobenzene-d5 (Surr)	*85*		*40 - 121*
Phenol-d5 (Surr)	*91*		*41 - 120*
p-Terphenyl-d14 (Surr)	*107*		*46 - 143*

Method: 8081B - Organochlorine Pesticides (GC)

Lab Sample ID: MB 480-745050/1-A
Matrix: Solid
Analysis Batch: 745178

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 745050

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	ND		3.3	0.65	ug/Kg		05/02/25 06:59	05/05/25 10:28	1
4,4'-DDE	ND		3.3	0.70	ug/Kg		05/02/25 06:59	05/05/25 10:28	1
4,4'-DDT	ND		3.3	0.78	ug/Kg		05/02/25 06:59	05/05/25 10:28	1
Aldrin	ND		3.3	0.82	ug/Kg		05/02/25 06:59	05/05/25 10:28	1
alpha-BHC	ND		3.3	0.60	ug/Kg		05/02/25 06:59	05/05/25 10:28	1
cis-Chlordane	ND		3.3	1.7	ug/Kg		05/02/25 06:59	05/05/25 10:28	1
beta-BHC	ND		3.3	0.60	ug/Kg		05/02/25 06:59	05/05/25 10:28	1
delta-BHC	ND		3.3	0.62	ug/Kg		05/02/25 06:59	05/05/25 10:28	1
Dieldrin	ND		3.3	0.80	ug/Kg		05/02/25 06:59	05/05/25 10:28	1
Endosulfan I	ND		3.3	0.64	ug/Kg		05/02/25 06:59	05/05/25 10:28	1
Endosulfan II	ND		3.3	0.60	ug/Kg		05/02/25 06:59	05/05/25 10:28	1
Endosulfan sulfate	ND		3.3	0.62	ug/Kg		05/02/25 06:59	05/05/25 10:28	1
Endrin	ND		3.3	0.66	ug/Kg		05/02/25 06:59	05/05/25 10:28	1
Endrin aldehyde	ND		3.3	0.85	ug/Kg		05/02/25 06:59	05/05/25 10:28	1
Endrin ketone	1.51	J	3.3	0.82	ug/Kg		05/02/25 06:59	05/05/25 10:28	1
gamma-BHC (Lindane)	ND		3.3	0.61	ug/Kg		05/02/25 06:59	05/05/25 10:28	1
trans-Chlordane	ND		3.3	1.1	ug/Kg		05/02/25 06:59	05/05/25 10:28	1
Heptachlor	ND		3.3	0.72	ug/Kg		05/02/25 06:59	05/05/25 10:28	1
Heptachlor epoxide	ND		3.3	0.86	ug/Kg		05/02/25 06:59	05/05/25 10:28	1
Methoxychlor	3.02	J	3.3	0.68	ug/Kg		05/02/25 06:59	05/05/25 10:28	1
Toxaphene	ND		33	19	ug/Kg		05/02/25 06:59	05/05/25 10:28	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*83*		*45 - 120*	*05/02/25 06:59*	*05/05/25 10:28*	*1*

Method: 8081B - Organochlorine Pesticides (GC) (Continued)

Lab Sample ID: MB 480-745050/1-A
Matrix: Solid
Analysis Batch: 745178

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 745050

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
DCB Decachlorobiphenyl	79		45 - 120	05/02/25 06:59	05/05/25 10:28	1
Tetrachloro-m-xylene	65		30 - 124	05/02/25 06:59	05/05/25 10:28	1
Tetrachloro-m-xylene	60		30 - 124	05/02/25 06:59	05/05/25 10:28	1

Lab Sample ID: LCS 480-745050/2-A
Matrix: Solid
Analysis Batch: 745178

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 745050

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
4,4'-DDD	33.3	29.3		ug/Kg		88	56 - 120
4,4'-DDE	33.3	25.2		ug/Kg		76	44 - 120
4,4'-DDT	33.3	30.1		ug/Kg		90	38 - 120
Aldrin	33.3	26.2		ug/Kg		78	38 - 120
alpha-BHC	33.3	23.2		ug/Kg		69	39 - 120
cis-Chlordane	33.3	25.1		ug/Kg		75	47 - 120
beta-BHC	33.3	26.1		ug/Kg		78	40 - 120
delta-BHC	33.3	26.9		ug/Kg		81	45 - 120
Dieldrin	33.3	29.4		ug/Kg		88	58 - 120
Endosulfan I	33.3	28.9		ug/Kg		87	49 - 120
Endosulfan II	33.3	31.4		ug/Kg		94	55 - 120
Endosulfan sulfate	33.3	27.4		ug/Kg		82	49 - 124
Endrin	33.3	29.8		ug/Kg		89	58 - 120
Endrin aldehyde	33.3	23.0		ug/Kg		69	37 - 121
Endrin ketone	33.3	32.0		ug/Kg		96	46 - 123
gamma-BHC (Lindane)	33.3	24.9		ug/Kg		75	50 - 120
trans-Chlordane	33.3	23.5		ug/Kg		71	48 - 120
Heptachlor	33.3	28.1		ug/Kg		84	50 - 120
Heptachlor epoxide	33.3	28.5		ug/Kg		86	50 - 120
Methoxychlor	33.3	34.1		ug/Kg		102	58 - 133

Surrogate	LCS %Recovery	LCS Qualifier	Limits
DCB Decachlorobiphenyl	87		45 - 120
DCB Decachlorobiphenyl	88		45 - 120
Tetrachloro-m-xylene	67		30 - 124
Tetrachloro-m-xylene	64		30 - 124

Lab Sample ID: 480-229104-1 MS
Matrix: Solid
Analysis Batch: 745178

Client Sample ID: MW-1 18-20 Ft
Prep Type: Total/NA
Prep Batch: 745050

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
4,4'-DDD	ND		41.4	29.7		ug/Kg	☼	72	37 - 126
4,4'-DDE	ND		41.4	26.5		ug/Kg	☼	64	34 - 120
4,4'-DDT	3.4	J	41.4	33.5		ug/Kg	☼	73	43 - 123
Aldrin	ND		41.4	26.7		ug/Kg	☼	64	37 - 125
alpha-BHC	ND		41.4	24.4		ug/Kg	☼	59	39 - 120
cis-Chlordane	ND		41.4	26.1		ug/Kg	☼	63	35 - 120
beta-BHC	ND		41.4	27.4		ug/Kg	☼	66	36 - 120

Client: Roux Environmental Engineering and Geology DPC
Job ID: 480-229104-1
Project/Site: BCP RI - 619 Exchange Street Site

Method: 8081B - Organochlorine Pesticides (GC) (Continued)

Lab Sample ID: 480-229104-1 MS
Matrix: Solid
Analysis Batch: 745178

Client Sample ID: MW-1 18-20 Ft
Prep Type: Total/NA
Prep Batch: 745050

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
delta-BHC	ND		41.4	28.2		ug/Kg	☼	68	34 - 120
Dieldrin	ND		41.4	30.0		ug/Kg	☼	73	45 - 120
Endosulfan I	ND		41.4	29.5		ug/Kg	☼	71	39 - 120
Endosulfan II	ND		41.4	32.9		ug/Kg	☼	80	34 - 126
Endosulfan sulfate	ND		41.4	31.5		ug/Kg	☼	76	27 - 130
Endrin	ND		41.4	30.6		ug/Kg	☼	74	47 - 121
Endrin aldehyde	ND		41.4	25.1		ug/Kg	☼	61	33 - 123
Endrin ketone	2.4	J B	41.4	34.6		ug/Kg	☼	78	43 - 126
gamma-BHC (Lindane)	ND		41.4	26.1		ug/Kg	☼	63	50 - 120
trans-Chlordane	ND		41.4	23.9		ug/Kg	☼	58	31 - 120
Heptachlor	ND		41.4	29.3		ug/Kg	☼	71	42 - 120
Heptachlor epoxide	ND		41.4	29.1		ug/Kg	☼	70	40 - 120
Methoxychlor	ND		41.4	38.6		ug/Kg	☼	93	44 - 150

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
DCB Decachlorobiphenyl	*71*		*45 - 120*
DCB Decachlorobiphenyl	*76*		*45 - 120*
Tetrachloro-m-xylene	*58*		*30 - 124*
Tetrachloro-m-xylene	*55*		*30 - 124*

Lab Sample ID: 480-229104-1 MSD
Matrix: Solid
Analysis Batch: 745178

Client Sample ID: MW-1 18-20 Ft
Prep Type: Total/NA
Prep Batch: 745050

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
4,4'-DDD	ND		40.8	29.2		ug/Kg	☼	72	37 - 126	2	21
4,4'-DDE	ND		40.8	28.4		ug/Kg	☼	70	34 - 120	7	18
4,4'-DDT	3.4	J	40.8	33.5		ug/Kg	☼	74	43 - 123	0	25
Aldrin	ND		40.8	28.4		ug/Kg	☼	70	37 - 125	6	12
alpha-BHC	ND		40.8	26.3		ug/Kg	☼	64	39 - 120	8	15
cis-Chlordane	ND		40.8	28.4		ug/Kg	☼	70	35 - 120	8	23
beta-BHC	ND		40.8	28.5		ug/Kg	☼	70	36 - 120	4	19
delta-BHC	ND		40.8	28.6		ug/Kg	☼	70	34 - 120	1	14
Dieldrin	ND		40.8	30.2		ug/Kg	☼	74	45 - 120	0	12
Endosulfan I	ND		40.8	30.3		ug/Kg	☼	74	39 - 120	2	18
Endosulfan II	ND		40.8	31.8		ug/Kg	☼	78	34 - 126	4	26
Endosulfan sulfate	ND		40.8	31.8		ug/Kg	☼	78	27 - 130	1	35
Endrin	ND		40.8	30.5		ug/Kg	☼	75	47 - 121	0	20
Endrin aldehyde	ND		40.8	25.4		ug/Kg	☼	62	33 - 123	1	47
Endrin ketone	2.4	J B	40.8	34.6		ug/Kg	☼	79	43 - 126	0	37
gamma-BHC (Lindane)	ND		40.8	27.1		ug/Kg	☼	66	50 - 120	4	12
trans-Chlordane	ND		40.8	25.4		ug/Kg	☼	62	31 - 120	6	15
Heptachlor	ND		40.8	31.2		ug/Kg	☼	77	42 - 120	6	22
Heptachlor epoxide	ND		40.8	30.2		ug/Kg	☼	74	40 - 120	4	15
Methoxychlor	ND		40.8	38.7		ug/Kg	☼	95	44 - 150	0	24

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
DCB Decachlorobiphenyl	*75*		*45 - 120*

Method: 8081B - Organochlorine Pesticides (GC) (Continued)

Lab Sample ID: 480-229104-1 MSD
Matrix: Solid
Analysis Batch: 745178

Client Sample ID: MW-1 18-20 Ft
Prep Type: Total/NA
Prep Batch: 745050

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
DCB Decachlorobiphenyl	*89*		*45 - 120*
Tetrachloro-m-xylene	*65*		*30 - 124*
Tetrachloro-m-xylene	*61*		*30 - 124*

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Lab Sample ID: MB 480-744942/1-A
Matrix: Solid
Analysis Batch: 745005

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 744942

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		0.25	0.049	mg/Kg		05/01/25 07:04	05/01/25 15:07	1
PCB-1221	ND		0.25	0.049	mg/Kg		05/01/25 07:04	05/01/25 15:07	1
PCB-1232	ND		0.25	0.049	mg/Kg		05/01/25 07:04	05/01/25 15:07	1
PCB-1242	ND		0.25	0.049	mg/Kg		05/01/25 07:04	05/01/25 15:07	1
PCB-1248	ND		0.25	0.049	mg/Kg		05/01/25 07:04	05/01/25 15:07	1
PCB-1254	ND		0.25	0.12	mg/Kg		05/01/25 07:04	05/01/25 15:07	1
PCB-1260	ND		0.25	0.12	mg/Kg		05/01/25 07:04	05/01/25 15:07	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*136*		*65 - 174*	*05/01/25 07:04*	*05/01/25 15:07*	*1*
DCB Decachlorobiphenyl	*139*		*65 - 174*	*05/01/25 07:04*	*05/01/25 15:07*	*1*
Tetrachloro-m-xylene	*133*		*60 - 154*	*05/01/25 07:04*	*05/01/25 15:07*	*1*
Tetrachloro-m-xylene	*123*		*60 - 154*	*05/01/25 07:04*	*05/01/25 15:07*	*1*

Lab Sample ID: LCS 480-744942/2-A
Matrix: Solid
Analysis Batch: 745005

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 744942

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
PCB-1016	2.50	3.42		mg/Kg		137	51 - 185
PCB-1260	2.50	3.51		mg/Kg		141	61 - 184

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
DCB Decachlorobiphenyl	*169*		*65 - 174*
DCB Decachlorobiphenyl	*167*		*65 - 174*
Tetrachloro-m-xylene	*156*	*S1+*	*60 - 154*
Tetrachloro-m-xylene	*150*		*60 - 154*

Lab Sample ID: 480-229104-1 MS
Matrix: Solid
Analysis Batch: 745005

Client Sample ID: MW-1 18-20 Ft
Prep Type: Total/NA
Prep Batch: 744942

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
PCB-1016	ND		2.74	3.11		mg/Kg	☼	114	50 - 177
PCB-1260	ND		2.74	3.22		mg/Kg	☼	117	33 - 200

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography (Continued)

Lab Sample ID: 480-229104-1 MS
Matrix: Solid
Analysis Batch: 745005

Client Sample ID: MW-1 18-20 Ft
Prep Type: Total/NA
Prep Batch: 744942

Surrogate	MS %Recovery	MS Qualifier	Limits
DCB Decachlorobiphenyl	146		65 - 174
DCB Decachlorobiphenyl	146		65 - 174
Tetrachloro-m-xylene	141		60 - 154
Tetrachloro-m-xylene	132		60 - 154

Lab Sample ID: 480-229104-1 MSD
Matrix: Solid
Analysis Batch: 745005

Client Sample ID: MW-1 18-20 Ft
Prep Type: Total/NA
Prep Batch: 744942

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
PCB-1016	ND		2.32	2.46		mg/Kg	☼	106	50 - 177	24	50
PCB-1260	ND		2.32	2.47		mg/Kg	☼	106	33 - 200	26	50

Surrogate	MSD %Recovery	MSD Qualifier	Limits
DCB Decachlorobiphenyl	102		65 - 174
DCB Decachlorobiphenyl	110		65 - 174
Tetrachloro-m-xylene	108		60 - 154
Tetrachloro-m-xylene	99		60 - 154

Method: 8151A - Herbicides (GC)

Lab Sample ID: MB 480-745263/1-A
Matrix: Solid
Analysis Batch: 745627

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 745263

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-T	ND		17	5.3	ug/Kg		05/06/25 06:53	05/09/25 12:23	1
2,4-D	ND		17	11	ug/Kg		05/06/25 06:53	05/09/25 12:23	1
Dichlorprop	ND		17	8.3	ug/Kg		05/06/25 06:53	05/09/25 12:23	1
Pentachlorophenol	ND		17	5.4	ug/Kg		05/06/25 06:53	05/09/25 12:23	1
Picloram	ND		17	7.2	ug/Kg		05/06/25 06:53	05/09/25 12:23	1
Silvex (2,4,5-TP)	ND		17	6.0	ug/Kg		05/06/25 06:53	05/09/25 12:23	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
2,4-Dichlorophenylacetic acid	74		28 - 129	05/06/25 06:53	05/09/25 12:23	1
2,4-Dichlorophenylacetic acid	72		28 - 129	05/06/25 06:53	05/09/25 12:23	1

Lab Sample ID: LCS 480-745263/2-A
Matrix: Solid
Analysis Batch: 745627

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 745263

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
2,4,5-T	66.7	48.6		ug/Kg		73	41 - 120
2,4-D	66.7	48.8		ug/Kg		73	40 - 120
Dichlorprop	66.7	50.8		ug/Kg		76	34 - 121
Pentachlorophenol	66.7	18.4		ug/Kg		28	10 - 120
Picloram	66.7	48.5		ug/Kg		73	22 - 149
Silvex (2,4,5-TP)	66.7	48.9		ug/Kg		73	39 - 125

Method: 8151A - Herbicides (GC) (Continued)

Lab Sample ID: LCS 480-745263/2-A
Matrix: Solid
Analysis Batch: 745627

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 745263

Surrogate	LCS %Recovery	LCS Qualifier	Limits
2,4-Dichlorophenylacetic acid	74		28 - 129
2,4-Dichlorophenylacetic acid	71		28 - 129

Lab Sample ID: 480-229104-1 MS
Matrix: Solid
Analysis Batch: 745627

Client Sample ID: MW-1 18-20 Ft
Prep Type: Total/NA
Prep Batch: 745263

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
2,4,5-T	ND		81.6	68.5		ug/Kg	☼	84	29 - 123
2,4-D	ND		81.6	72.4		ug/Kg	☼	89	32 - 115
Dichlorprop	ND		81.6	76.0		ug/Kg	☼	93	28 - 125
Pentachlorophenol	ND		81.6	34.5		ug/Kg	☼	42	10 - 130
Picloram	ND		81.6	62.2		ug/Kg	☼	76	10 - 150
Silvex (2,4,5-TP)	ND		81.6	71.9		ug/Kg	☼	88	22 - 140

Surrogate	MS %Recovery	MS Qualifier	Limits
2,4-Dichlorophenylacetic acid	86		28 - 129
2,4-Dichlorophenylacetic acid	84		28 - 129

Lab Sample ID: 480-229104-1 MSD
Matrix: Solid
Analysis Batch: 745627

Client Sample ID: MW-1 18-20 Ft
Prep Type: Total/NA
Prep Batch: 745263

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
2,4,5-T	ND		81.9	62.6		ug/Kg	☼	76	29 - 123	9	50
2,4-D	ND		81.9	65.6		ug/Kg	☼	80	32 - 115	10	50
Dichlorprop	ND		81.9	74.4		ug/Kg	☼	91	28 - 125	2	50
Pentachlorophenol	ND		81.9	25.8		ug/Kg	☼	31	10 - 130	29	50
Picloram	ND		81.9	54.6		ug/Kg	☼	67	10 - 150	13	50
Silvex (2,4,5-TP)	ND		81.9	64.3		ug/Kg	☼	79	22 - 140	11	50

Surrogate	MSD %Recovery	MSD Qualifier	Limits
2,4-Dichlorophenylacetic acid	72		28 - 129
2,4-Dichlorophenylacetic acid	74		28 - 129

Method: Draft-3 1633 - Per- and Polyfluoroalkyl Substances by LC/MS/MS

Lab Sample ID: MB 240-654795/1-A
Matrix: Solid
Analysis Batch: 654947

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 654795

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)	ND		0.50	0.13	ug/Kg		05/05/25 14:38	05/06/25 23:39	1
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2 FTS)	ND		0.50	0.13	ug/Kg		05/05/25 14:38	05/06/25 23:39	1
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2 FTS)	ND		0.50	0.13	ug/Kg		05/05/25 14:38	05/06/25 23:39	1

Method: Draft-3 1633 - Per- and Polyfluoroalkyl Substances by LC/MS/MS (Continued)

Lab Sample ID: MB 240-654795/1-A
Matrix: Solid
Analysis Batch: 654947

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 654795

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2 FTS)	ND		0.50	0.13	ug/Kg		05/05/25 14:38	05/06/25 23:39	1
3-Perfluoroheptylpropanoic acid (7:3 FTCA)	ND		3.1	0.78	ug/Kg		05/05/25 14:38	05/06/25 23:39	1
3-Perfluoropentylpropanoic acid (5:3 FTCA)	ND		3.1	0.78	ug/Kg		05/05/25 14:38	05/06/25 23:39	1
3-Perfluoropropylpropanoic acid (3:3 FTCA)	ND		0.63	0.16	ug/Kg		05/05/25 14:38	05/06/25 23:39	1
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	ND		0.50	0.13	ug/Kg		05/05/25 14:38	05/06/25 23:39	1
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9Cl-PF3ONS)	ND		0.50	0.13	ug/Kg		05/05/25 14:38	05/06/25 23:39	1
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA)	ND		0.50	0.13	ug/Kg		05/05/25 14:38	05/06/25 23:39	1
N-ethylperfluorooctane sulfonamide (NEtFOSA)	ND		0.13	0.031	ug/Kg		05/05/25 14:38	05/06/25 23:39	1
N-ethylperfluorooctane sulfonamidoethanol (NEtFOSE)	ND		1.3	0.31	ug/Kg		05/05/25 14:38	05/06/25 23:39	1
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	ND		0.13	0.031	ug/Kg		05/05/25 14:38	05/06/25 23:39	1
N-methylperfluorooctane sulfonamide (NMeFOSA)	ND		0.13	0.031	ug/Kg		05/05/25 14:38	05/06/25 23:39	1
N-methylperfluorooctane sulfonamidoethanol (NMeFOSE)	ND		1.3	0.31	ug/Kg		05/05/25 14:38	05/06/25 23:39	1
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	ND		0.13	0.031	ug/Kg		05/05/25 14:38	05/06/25 23:39	1
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	ND		0.25	0.063	ug/Kg		05/05/25 14:38	05/06/25 23:39	1
Perfluoro (2-ethoxyethane) sulfonic acid (PFEESA)	ND		0.25	0.063	ug/Kg		05/05/25 14:38	05/06/25 23:39	1
Perfluoro-3-methoxypropanoic acid (PFMPA)	ND		0.25	0.063	ug/Kg		05/05/25 14:38	05/06/25 23:39	1
Perfluoro-4-methoxybutanoic acid (PFMBA)	ND		0.25	0.063	ug/Kg		05/05/25 14:38	05/06/25 23:39	1
Perfluorobutanesulfonic acid (PFBS)	ND		0.13	0.031	ug/Kg		05/05/25 14:38	05/06/25 23:39	1
Perfluorobutanoic acid (PFBA)	ND		0.50	0.13	ug/Kg		05/05/25 14:38	05/06/25 23:39	1
Perfluorodecanesulfonic acid (PFDS)	ND		0.13	0.031	ug/Kg		05/05/25 14:38	05/06/25 23:39	1
Perfluorodecanoic acid (PFDA)	ND		0.13	0.031	ug/Kg		05/05/25 14:38	05/06/25 23:39	1
Perfluorododecanesulfonic acid (PFDoS)	ND		0.13	0.031	ug/Kg		05/05/25 14:38	05/06/25 23:39	1
Perfluorododecanoic acid (PFDoA)	ND		0.13	0.031	ug/Kg		05/05/25 14:38	05/06/25 23:39	1
Perfluoroheptanesulfonic acid (PFHpS)	ND		0.13	0.031	ug/Kg		05/05/25 14:38	05/06/25 23:39	1
Perfluoroheptanoic acid (PFHpA)	ND		0.13	0.031	ug/Kg		05/05/25 14:38	05/06/25 23:39	1
Perfluorohexanesulfonic acid (PFHxS)	ND		0.13	0.031	ug/Kg		05/05/25 14:38	05/06/25 23:39	1
Perfluorohexanoic acid (PFHxA)	ND		0.13	0.031	ug/Kg		05/05/25 14:38	05/06/25 23:39	1
Perfluorononanesulfonic acid (PFNS)	ND		0.13	0.031	ug/Kg		05/05/25 14:38	05/06/25 23:39	1
Perfluorononanoic acid (PFNA)	ND		0.13	0.031	ug/Kg		05/05/25 14:38	05/06/25 23:39	1
Perfluorooctanesulfonamide (PFOSA)	ND		0.13	0.031	ug/Kg		05/05/25 14:38	05/06/25 23:39	1
Perfluorooctanesulfonic acid (PFOS)	ND		0.13	0.031	ug/Kg		05/05/25 14:38	05/06/25 23:39	1
Perfluorooctanoic acid (PFOA)	ND		0.13	0.031	ug/Kg		05/05/25 14:38	05/06/25 23:39	1
Perfluoropentanesulfonic acid (PFPeS)	ND		0.13	0.031	ug/Kg		05/05/25 14:38	05/06/25 23:39	1
Perfluoropentanoic acid (PFPeA)	ND		0.25	0.063	ug/Kg		05/05/25 14:38	05/06/25 23:39	1

Method: Draft-3 1633 - Per- and Polyfluoroalkyl Substances by LC/MS/MS (Continued)

Lab Sample ID: MB 240-654795/1-A
Matrix: Solid
Analysis Batch: 654947

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 654795

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorotetradecanoic acid (PFTeDA)	ND		0.13	0.031	ug/Kg		05/05/25 14:38	05/06/25 23:39	1
Perfluorotridecanoic acid (PFTrDA)	ND		0.13	0.031	ug/Kg		05/05/25 14:38	05/06/25 23:39	1
Perfluoroundecanoic acid (PFUnA)	ND		0.13	0.031	ug/Kg		05/05/25 14:38	05/06/25 23:39	1

Isotope Dilution	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C2 PFTeDA	*78.6*		*20 - 150*	*05/05/25 14:38*	*05/06/25 23:39*	*1*
13C2-PFDoDA	*81.4*		*20 - 150*	*05/05/25 14:38*	*05/06/25 23:39*	*1*
13C3 HFPO-DA	*92.8*		*20 - 150*	*05/05/25 14:38*	*05/06/25 23:39*	*1*
13C3 PFBS	*93.4*		*20 - 150*	*05/05/25 14:38*	*05/06/25 23:39*	*1*
13C3 PFHxS	*88.5*		*20 - 150*	*05/05/25 14:38*	*05/06/25 23:39*	*1*
13C4 PFBA	*92.1*		*20 - 150*	*05/05/25 14:38*	*05/06/25 23:39*	*1*
13C4 PFHpA	*95.0*		*20 - 150*	*05/05/25 14:38*	*05/06/25 23:39*	*1*
13C5 PFHxA	*96.1*		*20 - 150*	*05/05/25 14:38*	*05/06/25 23:39*	*1*
13C5 PFPeA	*98.8*		*20 - 150*	*05/05/25 14:38*	*05/06/25 23:39*	*1*
13C6 PFDA	*87.5*		*20 - 150*	*05/05/25 14:38*	*05/06/25 23:39*	*1*
13C7 PFUnA	*83.4*		*20 - 150*	*05/05/25 14:38*	*05/06/25 23:39*	*1*
13C8 PFOA	*95.4*		*20 - 150*	*05/05/25 14:38*	*05/06/25 23:39*	*1*
13C8 PFOS	*85.8*		*20 - 150*	*05/05/25 14:38*	*05/06/25 23:39*	*1*
13C8 PFOSA	*84.3*		*20 - 150*	*05/05/25 14:38*	*05/06/25 23:39*	*1*
13C9 PFNA	*92.3*		*20 - 150*	*05/05/25 14:38*	*05/06/25 23:39*	*1*
D3-NMeFOSA	*73.7*		*20 - 150*	*05/05/25 14:38*	*05/06/25 23:39*	*1*
d3-NMeFOSAA	*79.6*		*20 - 150*	*05/05/25 14:38*	*05/06/25 23:39*	*1*
d5-NEtFOSAA	*132*		*20 - 150*	*05/05/25 14:38*	*05/06/25 23:39*	*1*
d5-NEtPFOSA	*65.0*		*20 - 150*	*05/05/25 14:38*	*05/06/25 23:39*	*1*
d7-N-MeFOSE-M	*50.0*		*20 - 150*	*05/05/25 14:38*	*05/06/25 23:39*	*1*
d9-N-EtFOSE-M	*45.4*		*20 - 150*	*05/05/25 14:38*	*05/06/25 23:39*	*1*
M2-4:2 FTS	*92.1*		*20 - 150*	*05/05/25 14:38*	*05/06/25 23:39*	*1*
M2-6:2 FTS	*93.2*		*20 - 150*	*05/05/25 14:38*	*05/06/25 23:39*	*1*
M2-8:2 FTS	*85.3*		*20 - 150*	*05/05/25 14:38*	*05/06/25 23:39*	*1*

Lab Sample ID: LCS 240-654795/3-A
Matrix: Solid
Analysis Batch: 654947

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 654795

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)	5.90	5.67		ug/Kg		96	40 - 150
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2 FTS)	6.00	6.52		ug/Kg		109	40 - 150
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2 FTS)	5.86	5.08		ug/Kg		87	40 - 150
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2 FTS)	5.95	5.77		ug/Kg		97	40 - 150
3-Perfluoroheptylpropanoic acid (7:3 FTCA)	39.1	35.7		ug/Kg		91	40 - 150
3-Perfluoropentylpropanoic acid (5:3 FTCA)	39.1	38.9		ug/Kg		100	40 - 150
3-Perfluoropropylpropanoic acid (3:3 FTCA)	7.81	6.99		ug/Kg		89	40 - 150

Method: Draft-3 1633 - Per- and Polyfluoroalkyl Substances by LC/MS/MS (Continued)

Lab Sample ID: LCS 240-654795/3-A
Matrix: Solid
Analysis Batch: 654947

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 654795

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	5.91	5.83		ug/Kg		99	40 - 150
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9Cl-PF3ONS)	5.84	5.52		ug/Kg		94	40 - 150
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA)	6.25	5.88		ug/Kg		94	40 - 150
N-ethylperfluorooctane sulfonamide (NEtFOSA)	1.56	1.52		ug/Kg		97	40 - 150
N-ethylperfluorooctane sulfonamidoethanol (NEtFOSE)	15.6	16.7		ug/Kg		107	40 - 150
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	1.56	1.31		ug/Kg		84	40 - 150
N-methylperfluorooctane sulfonamide (NMeFOSA)	1.56	1.13		ug/Kg		72	40 - 150
N-methylperfluorooctane sulfonamidoethanol (NMeFOSE)	15.6	14.5		ug/Kg		93	40 - 150
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	1.56	1.61		ug/Kg		103	40 - 150
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	3.13	3.10		ug/Kg		99	40 - 150
Perfluoro (2-ethoxyethane) sulfonic acid (PFEESA)	2.79	2.60		ug/Kg		93	40 - 150
Perfluoro-3-methoxypropanoic acid (PFMPA)	3.13	2.77		ug/Kg		89	40 - 150
Perfluoro-4-methoxybutanoic acid (PFMBA)	3.13	2.67		ug/Kg		85	40 - 150
Perfluorobutanesulfonic acid (PFBS)	1.39	1.26		ug/Kg		91	40 - 150
Perfluorobutanoic acid (PFBA)	6.25	6.23		ug/Kg		100	40 - 150
Perfluorodecanesulfonic acid (PFDS)	1.51	1.31		ug/Kg		87	40 - 150
Perfluorodecanoic acid (PFDA)	1.56	1.59		ug/Kg		101	40 - 150
Perfluorododecanesulfonic acid (PFDoS)	1.52	1.32		ug/Kg		87	40 - 150
Perfluorododecanoic acid (PFDoA)	1.56	1.45		ug/Kg		93	40 - 150
Perfluoroheptanesulfonic acid (PFHpS)	1.49	1.58		ug/Kg		106	40 - 150
Perfluoroheptanoic acid (PFHpA)	1.56	1.77		ug/Kg		113	40 - 150
Perfluorohexanesulfonic acid (PFHxS)	1.43	1.28		ug/Kg		89	40 - 150
Perfluorohexanoic acid (PFHxA)	1.56	1.47		ug/Kg		94	40 - 150
Perfluorononanesulfonic acid (PFNS)	1.50	1.47		ug/Kg		98	40 - 150
Perfluorononanoic acid (PFNA)	1.56	1.38		ug/Kg		88	40 - 150
Perfluorooctanesulfonamide (PFOSA)	1.56	1.41		ug/Kg		90	40 - 150
Perfluorooctanesulfonic acid (PFOS)	1.45	1.48		ug/Kg		102	40 - 150
Perfluorooctanoic acid (PFOA)	1.56	1.56		ug/Kg		100	40 - 150
Perfluoropentanesulfonic acid (PFPeS)	1.47	1.55		ug/Kg		106	40 - 150
Perfluoropentanoic acid (PFPeA)	3.13	2.85		ug/Kg		91	40 - 150

Method: Draft-3 1633 - Per- and Polyfluoroalkyl Substances by LC/MS/MS (Continued)

Lab Sample ID: LCS 240-654795/3-A
Matrix: Solid
Analysis Batch: 654947

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 654795

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Perfluorotetradecanoic acid (PFTeDA)	1.56	1.56		ug/Kg		100	40 - 150
Perfluorotridecanoic acid (PFTrDA)	1.56	1.51		ug/Kg		97	40 - 150
Perfluoroundecanoic acid (PFUnA)	1.56	1.62		ug/Kg		104	40 - 150

Isotope Dilution	*LCS %Recovery*	*LCS Qualifier*	*Limits*
13C2 PFTeDA	*79.3*		*20 - 150*
13C2-PFDoDA	*84.3*		*20 - 150*
13C3 HFPO-DA	*91.9*		*20 - 150*
13C3 PFBS	*90.0*		*20 - 150*
13C3 PFHxS	*85.2*		*20 - 150*
13C4 PFBA	*89.3*		*20 - 150*
13C4 PFHpA	*91.3*		*20 - 150*
13C5 PFHxA	*90.2*		*20 - 150*
13C5 PFPeA	*94.0*		*20 - 150*
13C6 PFDA	*86.5*		*20 - 150*
13C7 PFUnA	*82.0*		*20 - 150*
13C8 PFOA	*86.9*		*20 - 150*
13C8 PFOS	*84.9*		*20 - 150*
13C8 PFOSA	*84.3*		*20 - 150*
13C9 PFNA	*87.1*		*20 - 150*
D3-NMeFOSA	*78.2*		*20 - 150*
d3-NMeFOSAA	*80.2*		*20 - 150*
d5-NEtFOSAA	*143*		*20 - 150*
d5-NEtPFOSA	*66.6*		*20 - 150*
d7-N-MeFOSE-M	*61.6*		*20 - 150*
d9-N-EtFOSE-M	*53.1*		*20 - 150*
M2-4:2 FTS	*89.2*		*20 - 150*
M2-6:2 FTS	*86.0*		*20 - 150*
M2-8:2 FTS	*83.1*		*20 - 150*

Lab Sample ID: LLCS 240-654795/2-A
Matrix: Solid
Analysis Batch: 654947

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 654795

Analyte	Spike Added	LLCS Result	LLCS Qualifier	Unit	D	%Rec	%Rec Limits
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)	0.472	0.492	J	ug/Kg		104	40 - 150
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2 FTS)	0.480	0.540		ug/Kg		112	40 - 150
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2 FTS)	0.469	0.587		ug/Kg		125	40 - 150
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2 FTS)	0.476	0.521		ug/Kg		109	40 - 150
3-Perfluoroheptylpropanoic acid (7:3 FTCA)	3.13	3.23		ug/Kg		103	40 - 150
3-Perfluoropentylpropanoic acid (5:3 FTCA)	3.13	3.24		ug/Kg		104	40 - 150

Method: Draft-3 1633 - Per- and Polyfluoroalkyl Substances by LC/MS/MS (Continued)

Lab Sample ID: LLCS 240-654795/2-A
Matrix: Solid
Analysis Batch: 654947

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 654795

Analyte	Spike Added	LLCS Result	LLCS Qualifier	Unit	D	%Rec	%Rec Limits
3-Perfluoropropylpropanoic acid (3:3 FTCA)	0.625	0.629	J	ug/Kg		101	40 - 150
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	0.473	0.541		ug/Kg		114	40 - 150
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9Cl-PF3ONS)	0.467	0.502		ug/Kg		108	40 - 150
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA)	0.500	0.536		ug/Kg		107	40 - 150
N-ethylperfluorooctane sulfonamide (NEtFOSA)	0.125	0.138		ug/Kg		110	40 - 150
N-ethylperfluorooctane sulfonamidoethanol (NEtFOSE)	1.25	1.20	J	ug/Kg		96	40 - 150
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	0.125	0.115	J	ug/Kg		92	40 - 150
N-methylperfluorooctane sulfonamide (NMeFOSA)	0.125	0.132		ug/Kg		106	40 - 150
N-methylperfluorooctane sulfonamidoethanol (NMeFOSE)	1.25	1.42		ug/Kg		113	40 - 150
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	0.125	0.129	J	ug/Kg		104	40 - 150
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	0.250	0.283		ug/Kg		113	40 - 150
Perfluoro (2-ethoxyethane) sulfonic acid (PFEESA)	0.223	0.242	J	ug/Kg		108	40 - 150
Perfluoro-3-methoxypropanoic acid (PFMPA)	0.250	0.258		ug/Kg		103	40 - 150
Perfluoro-4-methoxybutanoic acid (PFMBA)	0.250	0.262		ug/Kg		105	40 - 150
Perfluorobutanesulfonic acid (PFBS)	0.111	0.139		ug/Kg		125	40 - 150
Perfluorobutanoic acid (PFBA)	0.500	0.545		ug/Kg		109	40 - 150
Perfluorodecanesulfonic acid (PFDS)	0.121	0.117	J	ug/Kg		97	40 - 150
Perfluorodecanoic acid (PFDA)	0.125	0.127	J	ug/Kg		102	40 - 150
Perfluorododecanesulfonic acid (PFDoS)	0.121	0.112	J	ug/Kg		92	40 - 150
Perfluorododecanoic acid (PFDoA)	0.125	0.128	J	ug/Kg		102	40 - 150
Perfluoroheptanesulfonic acid (PFHpS)	0.119	0.133		ug/Kg		111	40 - 150
Perfluoroheptanoic acid (PFHpA)	0.125	0.138		ug/Kg		110	40 - 150
Perfluorohexanesulfonic acid (PFHxS)	0.114	0.170		ug/Kg		149	40 - 150
Perfluorohexanoic acid (PFHxA)	0.125	0.154		ug/Kg		123	40 - 150
Perfluorononanesulfonic acid (PFNS)	0.120	0.123	J	ug/Kg		103	40 - 150
Perfluorononanoic acid (PFNA)	0.125	0.127	J	ug/Kg		102	40 - 150
Perfluorooctanesulfonamide (PFOSA)	0.125	0.133		ug/Kg		106	40 - 150
Perfluorooctanesulfonic acid (PFOS)	0.116	0.169		ug/Kg		146	40 - 150
Perfluorooctanoic acid (PFOA)	0.125	0.154		ug/Kg		123	40 - 150
Perfluoropentanesulfonic acid (PFPeS)	0.118	0.140		ug/Kg		120	40 - 150

Method: Draft-3 1633 - Per- and Polyfluoroalkyl Substances by LC/MS/MS (Continued)

Lab Sample ID: LLCS 240-654795/2-A
Matrix: Solid
Analysis Batch: 654947

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 654795

Analyte			Spike Added	LLCS Result	LLCS Qualifier	Unit	D	%Rec	%Rec Limits		
Perfluoropentanoic acid (PFPeA)			0.250	0.277		ug/Kg		111	40 - 150		
Perfluorotetradecanoic acid (PFTeDA)			0.125	0.136		ug/Kg		109	40 - 150		
Perfluorotridecanoic acid (PFTrDA)			0.125	0.127	J	ug/Kg		102	40 - 150		
Perfluoroundecanoic acid (PFUnA)			0.125	0.127	J	ug/Kg		101	40 - 150		

Isotope Dilution	*LLCS %Recovery*	*LLCS Qualifier*	*Limits*
13C2 PFTeDA	*87.3*		*20 - 150*
13C2-PFDoDA	*82.9*		*20 - 150*
13C3 HFPO-DA	*102*		*20 - 150*
13C3 PFBS	*95.0*		*20 - 150*
13C3 PFHxS	*94.4*		*20 - 150*
13C4 PFBA	*94.0*		*20 - 150*
13C4 PFHpA	*102*		*20 - 150*
13C5 PFHxA	*100*		*20 - 150*
13C5 PFPeA	*106*		*20 - 150*
13C6 PFDA	*93.4*		*20 - 150*
13C7 PFUnA	*84.6*		*20 - 150*
13C8 PFOA	*95.8*		*20 - 150*
13C8 PFOS	*89.9*		*20 - 150*
13C8 PFOSA	*84.3*		*20 - 150*
13C9 PFNA	*92.0*		*20 - 150*
D3-NMeFOSA	*76.9*		*20 - 150*
d3-NMeFOSAA	*83.2*		*20 - 150*
d5-NEtFOSAA	*146*		*20 - 150*
d5-NEtPFOSA	*68.3*		*20 - 150*
d7-N-MeFOSE-M	*66.6*		*20 - 150*
d9-N-EtFOSE-M	*68.4*		*20 - 150*
M2-4:2 FTS	*92.4*		*20 - 150*
M2-6:2 FTS	*94.2*		*20 - 150*
M2-8:2 FTS	*92.2*		*20 - 150*

Lab Sample ID: 480-229104-1 MS
Matrix: Solid
Analysis Batch: 654947

Client Sample ID: MW-1 18-20 Ft
Prep Type: Total/NA
Prep Batch: 654795

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)	ND		7.31	6.82		ug/Kg	☼	93	40 - 150		
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2 FTS)	ND		7.43	7.88		ug/Kg	☼	106	40 - 150		
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2 FTS)	ND		7.26	6.25		ug/Kg	☼	86	40 - 150		
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2 FTS)	ND		7.37	7.06		ug/Kg	☼	96	40 - 150		
3-Perfluoroheptylpropanoic acid (7:3 FTCA)	ND		48.4	42.8		ug/Kg	☼	88	40 - 150		

Method: Draft-3 1633 - Per- and Polyfluoroalkyl Substances by LC/MS/MS (Continued)

Lab Sample ID: 480-229104-1 MS
Matrix: Solid
Analysis Batch: 654947

Client Sample ID: MW-1 18-20 Ft
Prep Type: Total/NA
Prep Batch: 654795

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
3-Perfluoropentylpropanoic acid (5:3 FTCA)	ND		48.4	47.6		ug/Kg	☼	98	40 - 150
3-Perfluoropropylpropanoic acid (3:3 FTCA)	ND		9.68	8.32		ug/Kg	☼	86	40 - 150
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	ND		7.32	7.56		ug/Kg	☼	103	40 - 150
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9Cl-PF3ONS)	ND		7.23	6.74		ug/Kg	☼	93	40 - 150
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA)	ND		7.74	7.81		ug/Kg	☼	101	40 - 150
N-ethylperfluorooctane sulfonamide (NEtFOSA)	ND		1.94	1.82		ug/Kg	☼	94	40 - 150
N-ethylperfluorooctane sulfonamidoethanol (NEtFOSE)	ND		19.4	18.7		ug/Kg	☼	96	40 - 150
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	ND		1.94	1.58		ug/Kg	☼	82	40 - 150
N-methylperfluorooctane sulfonamide (NMeFOSA)	ND		1.94	1.56		ug/Kg	☼	81	40 - 150
N-methylperfluorooctane sulfonamidoethanol (NMeFOSE)	ND		19.4	18.8		ug/Kg	☼	97	40 - 150
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	ND		1.94	1.87		ug/Kg	☼	97	40 - 150
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	ND		3.87	3.88		ug/Kg	☼	100	40 - 150
Perfluoro (2-ethoxyethane) sulfonic acid (PFEESA)	ND		3.45	3.24		ug/Kg	☼	94	40 - 150
Perfluoro-3-methoxypropanoic acid (PFMPA)	ND		3.87	3.28		ug/Kg	☼	85	40 - 150
Perfluoro-4-methoxybutanoic acid (PFMBA)	ND		3.87	3.30		ug/Kg	☼	85	40 - 150
Perfluorobutanesulfonic acid (PFBS)	ND		1.72	1.51		ug/Kg	☼	88	40 - 150
Perfluorobutanoic acid (PFBA)	ND		7.74	7.78		ug/Kg	☼	101	40 - 150
Perfluorodecanesulfonic acid (PFDS)	ND		1.87	1.53		ug/Kg	☼	82	40 - 150
Perfluorodecanoic acid (PFDA)	ND		1.94	1.91		ug/Kg	☼	98	40 - 150
Perfluorododecanesulfonic acid (PFDoS)	ND		1.88	1.64		ug/Kg	☼	88	40 - 150
Perfluorododecanoic acid (PFDoA)	ND		1.94	1.78		ug/Kg	☼	92	40 - 150
Perfluoroheptanesulfonic acid (PFHpS)	ND		1.85	1.97		ug/Kg	☼	107	40 - 150
Perfluoroheptanoic acid (PFHpA)	ND		1.94	2.28		ug/Kg	☼	118	40 - 150
Perfluorohexanesulfonic acid (PFHxS)	ND		1.77	1.58		ug/Kg	☼	90	40 - 150
Perfluorohexanoic acid (PFHxA)	ND		1.94	1.86		ug/Kg	☼	96	40 - 150
Perfluorononanesulfonic acid (PFNS)	ND		1.86	1.77		ug/Kg	☼	95	40 - 150
Perfluorononanoic acid (PFNA)	ND		1.94	1.84		ug/Kg	☼	95	40 - 150
Perfluorooctanesulfonamide (PFOSA)	ND		1.94	1.75		ug/Kg	☼	90	40 - 150
Perfluorooctanesulfonic acid (PFOS)	ND		1.80	1.77		ug/Kg	☼	98	40 - 150
Perfluorooctanoic acid (PFOA)	ND		1.94	1.90		ug/Kg	☼	98	40 - 150

Method: Draft-3 1633 - Per- and Polyfluoroalkyl Substances by LC/MS/MS (Continued)

Lab Sample ID: 480-229104-1 MS
Matrix: Solid
Analysis Batch: 654947

Client Sample ID: MW-1 18-20 Ft
Prep Type: Total/NA
Prep Batch: 654795

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Perfluoropentanesulfonic acid (PFPeS)	ND		1.82	1.87		ug/Kg	☼	103	40 - 150
Perfluoropentanoic acid (PFPeA)	ND		3.87	3.40		ug/Kg	☼	88	40 - 150
Perfluorotetradecanoic acid (PFTeDA)	ND		1.94	1.99		ug/Kg	☼	103	40 - 150
Perfluorotridecanoic acid (PFTrDA)	ND		1.94	1.85		ug/Kg	☼	95	40 - 150
Perfluoroundecanoic acid (PFUnA)	ND		1.94	1.99		ug/Kg	☼	103	40 - 150

Isotope Dilution	*MS %Recovery*	*MS Qualifier*	*Limits*
13C2 PFTeDA	*81.9*		*20 - 150*
13C2-PFDoDA	*84.0*		*20 - 150*
13C3 HFPO-DA	*98.6*		*20 - 150*
13C3 PFBS	*90.9*		*20 - 150*
13C3 PFHxS	*88.3*		*20 - 150*
13C4 PFBA	*90.9*		*20 - 150*
13C4 PFHpA	*94.4*		*20 - 150*
13C5 PFHxA	*95.4*		*20 - 150*
13C5 PFPeA	*104*		*20 - 150*
13C6 PFDA	*90.8*		*20 - 150*
13C7 PFUnA	*84.1*		*20 - 150*
13C8 PFOA	*90.0*		*20 - 150*
13C8 PFOS	*86.5*		*20 - 150*
13C8 PFOSA	*85.9*		*20 - 150*
13C9 PFNA	*91.5*		*20 - 150*
D3-NMeFOSA	*79.1*		*20 - 150*
d3-NMeFOSAA	*85.0*		*20 - 150*
d5-NEtFOSAA	*144*		*20 - 150*
d5-NEtPFOSA	*71.3*		*20 - 150*
d7-N-MeFOSE-M	*62.7*		*20 - 150*
d9-N-EtFOSE-M	*57.3*		*20 - 150*
M2-4:2 FTS	*86.3*		*20 - 150*
M2-6:2 FTS	*83.6*		*20 - 150*
M2-8:2 FTS	*80.3*		*20 - 150*

Lab Sample ID: 480-229104-1 MSD
Matrix: Solid
Analysis Batch: 654947

Client Sample ID: MW-1 18-20 Ft
Prep Type: Total/NA
Prep Batch: 654795

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)	ND		7.57	6.56		ug/Kg	☼	87	40 - 150	4	30
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2 FTS)	ND		7.70	7.95		ug/Kg	☼	103	40 - 150	1	30
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2 FTS)	ND		7.52	6.70		ug/Kg	☼	89	40 - 150	7	30
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2 FTS)	ND		7.64	7.26		ug/Kg	☼	95	40 - 150	3	30

Method: Draft-3 1633 - Per- and Polyfluoroalkyl Substances by LC/MS/MS (Continued)

Lab Sample ID: 480-229104-1 MSD
Matrix: Solid
Analysis Batch: 654947

Client Sample ID: MW-1 18-20 Ft
Prep Type: Total/NA
Prep Batch: 654795

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
3-Perfluoroheptylpropanoic acid (7:3 FTCA)	ND		50.1	46.1		ug/Kg	☼	92	40 - 150	7	30
3-Perfluoropentylpropanoic acid (5:3 FTCA)	ND		50.1	51.8		ug/Kg	☼	103	40 - 150	8	30
3-Perfluoropropylpropanoic acid (3:3 FTCA)	ND		10.0	8.65		ug/Kg	☼	86	40 - 150	4	30
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	ND		7.59	7.58		ug/Kg	☼	100	40 - 150	0	30
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9Cl-PF3ONS)	ND		7.49	6.58		ug/Kg	☼	88	40 - 150	2	30
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA)	ND		8.02	7.69		ug/Kg	☼	96	40 - 150	2	30
N-ethylperfluorooctane sulfonamide (NEtFOSA)	ND		2.01	1.87		ug/Kg	☼	93	40 - 150	3	30
N-ethylperfluorooctane sulfonamidoethanol (NEtFOSE)	ND		20.1	20.9		ug/Kg	☼	104	40 - 150	11	30
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	ND		2.01	1.73		ug/Kg	☼	86	40 - 150	9	30
N-methylperfluorooctane sulfonamide (NMeFOSA)	ND		2.01	1.69		ug/Kg	☼	84	40 - 150	8	30
N-methylperfluorooctane sulfonamidoethanol (NMeFOSE)	ND		20.1	21.4		ug/Kg	☼	107	40 - 150	13	30
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	ND		2.01	2.04		ug/Kg	☼	102	40 - 150	9	30
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	ND		4.01	4.32		ug/Kg	☼	108	40 - 150	11	30
Perfluoro (2-ethoxyethane) sulfonic acid (PFEESA)	ND		3.58	3.54		ug/Kg	☼	99	40 - 150	9	30
Perfluoro-3-methoxypropanoic acid (PFMPA)	ND		4.01	3.45		ug/Kg	☼	86	40 - 150	5	30
Perfluoro-4-methoxybutanoic acid (PFMBA)	ND		4.01	3.40		ug/Kg	☼	85	40 - 150	3	30
Perfluorobutanesulfonic acid (PFBS)	ND		1.78	1.67		ug/Kg	☼	94	40 - 150	10	30
Perfluorobutanoic acid (PFBA)	ND		8.02	8.08		ug/Kg	☼	101	40 - 150	4	30
Perfluorodecanesulfonic acid (PFDS)	ND		1.93	1.71		ug/Kg	☼	89	40 - 150	11	30
Perfluorodecanoic acid (PFDA)	ND		2.01	2.06		ug/Kg	☼	103	40 - 150	8	30
Perfluorododecanesulfonic acid (PFDoS)	ND		1.94	1.73		ug/Kg	☼	89	40 - 150	5	30
Perfluorododecanoic acid (PFDoA)	ND		2.01	1.85		ug/Kg	☼	92	40 - 150	4	30
Perfluoroheptanesulfonic acid (PFHpS)	ND		1.91	2.02		ug/Kg	☼	106	40 - 150	3	30
Perfluoroheptanoic acid (PFHpA)	ND		2.01	2.25		ug/Kg	☼	112	40 - 150	1	30
Perfluorohexanesulfonic acid (PFHxS)	ND		1.83	1.65		ug/Kg	☼	90	40 - 150	4	30
Perfluorohexanoic acid (PFHxA)	ND		2.01	1.92		ug/Kg	☼	96	40 - 150	3	30
Perfluorononanesulfonic acid (PFNS)	ND		1.93	1.90		ug/Kg	☼	98	40 - 150	7	30
Perfluorononanoic acid (PFNA)	ND		2.01	1.85		ug/Kg	☼	92	40 - 150	1	30
Perfluorooctanesulfonamide (PFOSA)	ND		2.01	1.85		ug/Kg	☼	92	40 - 150	5	30

Method: Draft-3 1633 - Per- and Polyfluoroalkyl Substances by LC/MS/MS (Continued)

Lab Sample ID: 480-229104-1 MSD
Matrix: Solid
Analysis Batch: 654947

Client Sample ID: MW-1 18-20 Ft
Prep Type: Total/NA
Prep Batch: 654795

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Perfluorooctanesulfonic acid (PFOS)	ND		1.86	1.88		ug/Kg	☼	101	40 - 150	6	30
Perfluorooctanoic acid (PFOA)	ND		2.01	2.09		ug/Kg	☼	104	40 - 150	10	30
Perfluoropentanesulfonic acid (PFPeS)	ND		1.88	2.00		ug/Kg	☼	106	40 - 150	7	30
Perfluoropentanoic acid (PFPeA)	ND		4.01	3.37		ug/Kg	☼	84	40 - 150	1	30
Perfluorotetradecanoic acid (PFTeDA)	ND		2.01	2.04		ug/Kg	☼	102	40 - 150	2	30
Perfluorotridecanoic acid (PFTrDA)	ND		2.01	1.87		ug/Kg	☼	93	40 - 150	1	30
Perfluoroundecanoic acid (PFUnA)	ND		2.01	2.03		ug/Kg	☼	101	40 - 150	2	30

Isotope Dilution	*MSD %Recovery*	*MSD Qualifier*	*Limits*
13C2 PFTeDA	*70.0*		*20 - 150*
13C2-PFDoDA	*75.1*		*20 - 150*
13C3 HFPO-DA	*88.9*		*20 - 150*
13C3 PFBS	*77.5*		*20 - 150*
13C3 PFHxS	*74.7*		*20 - 150*
13C4 PFBA	*80.8*		*20 - 150*
13C4 PFHpA	*82.2*		*20 - 150*
13C5 PFHxA	*79.5*		*20 - 150*
13C5 PFPeA	*90.9*		*20 - 150*
13C6 PFDA	*78.8*		*20 - 150*
13C7 PFUnA	*74.2*		*20 - 150*
13C8 PFOA	*77.9*		*20 - 150*
13C8 PFOS	*67.9*		*20 - 150*
13C8 PFOSA	*66.7*		*20 - 150*
13C9 PFNA	*78.0*		*20 - 150*
D3-NMeFOSA	*66.3*		*20 - 150*
d3-NMeFOSAA	*65.0*		*20 - 150*
d5-NEtFOSAA	*106*		*20 - 150*
d5-NEtPFOSA	*56.4*		*20 - 150*
d7-N-MeFOSE-M	*47.0*		*20 - 150*
d9-N-EtFOSE-M	*43.0*		*20 - 150*
M2-4:2 FTS	*72.4*		*20 - 150*
M2-6:2 FTS	*71.6*		*20 - 150*
M2-8:2 FTS	*70.6*		*20 - 150*

Method: 6010D - Metals (ICP)

Lab Sample ID: MB 480-744967/1-A
Matrix: Solid
Analysis Batch: 745141

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 744967

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	ND		10	8.6	mg/Kg		05/01/25 14:59	05/02/25 15:11	1
Antimony	ND		15.0	0.53	mg/Kg		05/01/25 14:59	05/02/25 15:11	1
Arsenic	ND		2.0	0.88	mg/Kg		05/01/25 14:59	05/02/25 15:11	1
Barium	ND		0.50	0.14	mg/Kg		05/01/25 14:59	05/02/25 15:11	1

Method: 6010D - Metals (ICP) (Continued)

Lab Sample ID: MB 480-744967/1-A
Matrix: Solid
Analysis Batch: 745141

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 744967

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Beryllium	ND		0.20	0.040	mg/Kg		05/01/25 14:59	05/02/25 15:11	1
Cadmium	ND		0.20	0.070	mg/Kg		05/01/25 14:59	05/02/25 15:11	1
Calcium	ND		49.9	26.9	mg/Kg		05/01/25 14:59	05/02/25 15:11	1
Chromium	ND		0.50	0.36	mg/Kg		05/01/25 14:59	05/02/25 15:11	1
Cobalt	ND	^5+	0.50	0.10	mg/Kg		05/01/25 14:59	05/02/25 15:11	1
Copper	ND		1.0	0.57	mg/Kg		05/01/25 14:59	05/02/25 15:11	1
Iron	ND		10	8.5	mg/Kg		05/01/25 14:59	05/02/25 15:11	1
Lead	ND	^5+	1.0	0.46	mg/Kg		05/01/25 14:59	05/02/25 15:11	1
Magnesium	ND		19.9	8.5	mg/Kg		05/01/25 14:59	05/02/25 15:11	1
Manganese	ND		1.0	0.28	mg/Kg		05/01/25 14:59	05/02/25 15:11	1
Nickel	ND		5.0	0.25	mg/Kg		05/01/25 14:59	05/02/25 15:11	1
Potassium	ND		29.9	24.2	mg/Kg		05/01/25 14:59	05/02/25 15:11	1
Selenium	ND		4.0	0.80	mg/Kg		05/01/25 14:59	05/02/25 15:11	1
Silver	ND	^5-	0.60	0.20	mg/Kg		05/01/25 14:59	05/02/25 15:11	1
Sodium	ND		140	61.2	mg/Kg		05/01/25 14:59	05/02/25 15:11	1
Thallium	ND		6.0	0.76	mg/Kg		05/01/25 14:59	05/02/25 15:11	1
Vanadium	ND		0.50	0.13	mg/Kg		05/01/25 14:59	05/02/25 15:11	1
Zinc	ND		2.0	1.0	mg/Kg		05/01/25 14:59	05/02/25 15:11	1

Lab Sample ID: LCSSRM 480-744967/2-A
Matrix: Solid
Analysis Batch: 745141

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 744967

Analyte	Spike Added	LCSSRM Result	LCSSRM Qualifier	Unit	D	%Rec	%Rec Limits
Aluminum	7680	6517		mg/Kg		84.9	47.4 - 130.2
Antimony	201	69.46		mg/Kg		34.6	0.06 - 100.0
Beryllium	270	207.9		mg/Kg		77.0	73.0 - 104.4
Calcium	4280	3442		mg/Kg		80.4	77.3 - 111.0
Chromium	149	113.6		mg/Kg		76.3	71.8 - 105.4
Cobalt	142	113.0		mg/Kg		79.6	73.2 - 104.2
Copper	264	195.2		mg/Kg		73.9	73.5 - 104.2
Iron	7360	5515		mg/Kg		74.9	55.4 - 130.3
Lead	106	82.62		mg/Kg		77.9	76.1 - 109.4
Magnesium	2170	1686		mg/Kg		77.7	68.7 - 112.0
Nickel	177	139.4		mg/Kg		78.7	71.8 - 103.4
Potassium	2340	1835		mg/Kg		78.4	62.8 - 113.7
Silver	59.9	46.72		mg/Kg		78.0	72.8 - 110.7
Sodium	306	244.8		mg/Kg		80.0	66.0 - 113.4

Method: 6010D - Metals (ICP) (Continued)

Lab Sample ID: LCSSRM 480-744967/2-A
Matrix: Solid
Analysis Batch: 745141

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 744967

Analyte	Spike Added	LCSSRM Result	LCSSRM Qualifier	Unit	D	%Rec	%Rec Limits
Thallium	205	156.7		mg/Kg		76.5	71.7 - 106.8
Vanadium	155	115.9		mg/Kg		74.8	69.0 - 107.7
Zinc	398	292.2		mg/Kg		73.4	68.8 - 104.5

Lab Sample ID: LCSSRM 480-744967/2-A
Matrix: Solid
Analysis Batch: 745220

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 744967

Analyte	Spike Added	LCSSRM Result	LCSSRM Qualifier	Unit	D	%Rec	%Rec Limits
Arsenic	181	122.4		mg/Kg		67.6	66.3 - 97.8
Barium	211	167.7		mg/Kg		79.5	73.9 - 107.1
Cadmium	221	156.3		mg/Kg		70.7	70.6 - 101.8
Manganese	270	202.6		mg/Kg		75.1	73.0 - 107.8
Selenium	139	101.2		mg/Kg		72.8	70.0 - 107.9

Lab Sample ID: 480-229104-1 MS
Matrix: Solid
Analysis Batch: 745141

Client Sample ID: MW-1 18-20 Ft
Prep Type: Total/NA
Prep Batch: 744967

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Aluminum	15100	F2	1330	21050	4	mg/Kg	☼	445	75 - 125
Antimony	ND	F1	130	55.81	F1	mg/Kg	☼	43	75 - 125
Arsenic	4.1		261	205.8		mg/Kg	☼	77	75 - 125
Barium	96.2		261	314.3		mg/Kg	☼	84	75 - 125
Beryllium	0.68		129	106.5		mg/Kg	☼	82	75 - 125
Cadmium	0.12	J	130	102.6		mg/Kg	☼	79	75 - 125
Calcium	62400		6520	61760	4	mg/Kg	☼	-11	75 - 125
Chromium	19.6		130	126.1		mg/Kg	☼	82	75 - 125
Cobalt	9.7	^5+	130	119.7	^5+	mg/Kg	☼	84	75 - 125
Copper	16.0		130	119.4		mg/Kg	☼	79	75 - 125
Iron	19400	F2	1330	19610	4	mg/Kg	☼	18	75 - 125
Lead	13.9	^5+	130	125.7	^5+	mg/Kg	☼	86	75 - 125
Magnesium	23300	F1	6510	26200	F1	mg/Kg	☼	44	75 - 125
Manganese	454	F1	130	483.8	F1	mg/Kg	☼	23	75 - 125
Nickel	22.5		130	134.2		mg/Kg	☼	86	75 - 125
Potassium	4780	F1	6520	11820		mg/Kg	☼	108	75 - 125
Selenium	ND	F1	261	193.6	F1	mg/Kg	☼	74	75 - 125
Silver	ND	^5-	13.0	11.91	^5-	mg/Kg	☼	91	75 - 125
Sodium	314		6520	5621		mg/Kg	☼	81	75 - 125
Thallium	ND		261	223.1		mg/Kg	☼	86	75 - 125
Vanadium	28.7		130	138.8		mg/Kg	☼	84	75 - 125
Zinc	58.8		130	156.3		mg/Kg	☼	75	75 - 125

Method: 6010D - Metals (ICP) (Continued)

Lab Sample ID: 480-229104-1 MSD
Matrix: Solid
Analysis Batch: 745141

Client Sample ID: MW-1 18-20 Ft
Prep Type: Total/NA
Prep Batch: 744967

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Aluminum	15100	F2	1300	26160	4 F2	mg/Kg	☼	849	75 - 125	22	20
Antimony	ND	F1	127	45.47	F1	mg/Kg	☼	36	75 - 125	20	20
Arsenic	4.1		255	200.6		mg/Kg	☼	77	75 - 125	3	20
Barium	96.2		255	324.7		mg/Kg	☼	90	75 - 125	3	20
Beryllium	0.68		126	102.6		mg/Kg	☼	81	75 - 125	4	20
Cadmium	0.12	J	127	99.08		mg/Kg	☼	78	75 - 125	4	20
Calcium	62400		6370	50780	4	mg/Kg	☼	-183	75 - 125	20	20
Chromium	19.6		127	129.3		mg/Kg	☼	86	75 - 125	2	20
Cobalt	9.7	^5+	127	119.8	^5+	mg/Kg	☼	86	75 - 125	0	20
Copper	16.0		127	120.7		mg/Kg	☼	82	75 - 125	1	20
Iron	19400	F2	1300	24390	4 F2	mg/Kg	☼	387	75 - 125	22	20
Lead	13.9	^5+	127	123.9	^5+	mg/Kg	☼	86	75 - 125	1	20
Magnesium	23300	F1	6360	23230	F1	mg/Kg	☼	-1	75 - 125	12	20
Manganese	454	F1	127	499.8	F1	mg/Kg	☼	36	75 - 125	3	20
Nickel	22.5		127	137.5		mg/Kg	☼	90	75 - 125	2	20
Potassium	4780	F1	6370	13310	F1	mg/Kg	☼	134	75 - 125	12	20
Selenium	ND	F1	255	188.2	F1	mg/Kg	☼	74	75 - 125	3	20
Silver	ND	^5-	12.7	11.45	^5-	mg/Kg	☼	90	75 - 125	4	20
Sodium	295		6370	5388		mg/Kg	☼	80	75 - 125	4	20
Thallium	ND		255	216.1		mg/Kg	☼	85	75 - 125	3	20
Vanadium	28.7		127	144.7		mg/Kg	☼	91	75 - 125	4	20
Zinc	58.8		127	158.9		mg/Kg	☼	79	75 - 125	2	20

Method: 7471B - Mercury (CVAA)

Lab Sample ID: MB 480-744978/1-A
Matrix: Solid
Analysis Batch: 745103

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 744978

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.019	0.0044	mg/Kg		05/02/25 09:11	05/02/25 11:01	1

Lab Sample ID: LCSSRM 480-744978/2-A ^10
Matrix: Solid
Analysis Batch: 745103

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 744978

Analyte	Spike Added	LCSSRM Result	LCSSRM Qualifier	Unit	D	%Rec	%Rec Limits
Mercury	24.0	19.20		mg/Kg		80.0	55.8 - 109.6

Lab Sample ID: 480-229104-1 MS
Matrix: Solid
Analysis Batch: 745103

Client Sample ID: MW-1 18-20 Ft
Prep Type: Total/NA
Prep Batch: 744978

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Mercury	0.019	J	0.400	0.402		mg/Kg	☼	96	80 - 120

Method: 7471B - Mercury (CVAA) (Continued)

Lab Sample ID: 480-229104-1 MSD
Matrix: Solid
Analysis Batch: 745103

Client Sample ID: MW-1 18-20 Ft
Prep Type: Total/NA
Prep Batch: 744978

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Mercury	0.019	J	0.416	0.422		mg/Kg	☼	97	80 - 120	5	20

GC/MS VOA

Prep Batch: 744922

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-229104-1	MW-1 18-20 Ft	Total/NA	Solid	5035A_L	
480-229104-5	HC-11 0.25-0.5 Ft	Total/NA	Solid	5035A_L	
480-229104-7	MW-2 16-20 Ft	Total/NA	Solid	5035A_L	
MB 480-744922/2-A	Method Blank	Total/NA	Solid	5035A_L	
LCS 480-744922/1-A	Lab Control Sample	Total/NA	Solid	5035A_L	
480-229104-1 MS	MW-1 18-20 Ft	Total/NA	Solid	5035A_L	
480-229104-1 MSD	MW-1 18-20 Ft	Total/NA	Solid	5035A_L	

Analysis Batch: 744923

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-229104-1	MW-1 18-20 Ft	Total/NA	Solid	8260C	744922
480-229104-5	HC-11 0.25-0.5 Ft	Total/NA	Solid	8260C	744922
480-229104-7	MW-2 16-20 Ft	Total/NA	Solid	8260C	744922
MB 480-744922/2-A	Method Blank	Total/NA	Solid	8260C	744922
LCS 480-744922/1-A	Lab Control Sample	Total/NA	Solid	8260C	744922
480-229104-1 MS	MW-1 18-20 Ft	Total/NA	Solid	8260C	744922
480-229104-1 MSD	MW-1 18-20 Ft	Total/NA	Solid	8260C	744922

GC/MS Semi VOA

Prep Batch: 744941

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-229104-1	MW-1 18-20 Ft	Total/NA	Solid	3550C	
480-229104-2	HC-8 1-3 in	Total/NA	Solid	3550C	
480-229104-3	HC-9 5-8 in	Total/NA	Solid	3550C	
480-229104-4	HC-10 1-3 in	Total/NA	Solid	3550C	
480-229104-5	HC-11 0.25-0.5 Ft	Total/NA	Solid	3550C	
480-229104-6	BD-2	Total/NA	Solid	3550C	
480-229104-7	MW-2 16-20 Ft	Total/NA	Solid	3550C	
MB 480-744941/1-A	Method Blank	Total/NA	Solid	3550C	
LCS 480-744941/2-A	Lab Control Sample	Total/NA	Solid	3550C	
480-229104-1 MS	MW-1 18-20 Ft	Total/NA	Solid	3550C	
480-229104-1 MSD	MW-1 18-20 Ft	Total/NA	Solid	3550C	

Analysis Batch: 745287

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-229104-1	MW-1 18-20 Ft	Total/NA	Solid	8270D	744941
480-229104-2	HC-8 1-3 in	Total/NA	Solid	8270D	744941
480-229104-3	HC-9 5-8 in	Total/NA	Solid	8270D	744941
480-229104-4	HC-10 1-3 in	Total/NA	Solid	8270D	744941
480-229104-5	HC-11 0.25-0.5 Ft	Total/NA	Solid	8270D	744941
480-229104-6	BD-2	Total/NA	Solid	8270D	744941
480-229104-7	MW-2 16-20 Ft	Total/NA	Solid	8270D	744941
MB 480-744941/1-A	Method Blank	Total/NA	Solid	8270D	744941
LCS 480-744941/2-A	Lab Control Sample	Total/NA	Solid	8270D	744941
480-229104-1 MS	MW-1 18-20 Ft	Total/NA	Solid	8270D	744941
480-229104-1 MSD	MW-1 18-20 Ft	Total/NA	Solid	8270D	744941

GC Semi VOA

Prep Batch: 744942

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-229104-1	MW-1 18-20 Ft	Total/NA	Solid	3550C	
480-229104-5	HC-11 0.25-0.5 Ft	Total/NA	Solid	3550C	
480-229104-7	MW-2 16-20 Ft	Total/NA	Solid	3550C	
MB 480-744942/1-A	Method Blank	Total/NA	Solid	3550C	
LCS 480-744942/2-A	Lab Control Sample	Total/NA	Solid	3550C	
480-229104-1 MS	MW-1 18-20 Ft	Total/NA	Solid	3550C	
480-229104-1 MSD	MW-1 18-20 Ft	Total/NA	Solid	3550C	

Analysis Batch: 745005

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-229104-1	MW-1 18-20 Ft	Total/NA	Solid	8082A	744942
MB 480-744942/1-A	Method Blank	Total/NA	Solid	8082A	744942
LCS 480-744942/2-A	Lab Control Sample	Total/NA	Solid	8082A	744942
480-229104-1 MS	MW-1 18-20 Ft	Total/NA	Solid	8082A	744942
480-229104-1 MSD	MW-1 18-20 Ft	Total/NA	Solid	8082A	744942

Prep Batch: 745050

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-229104-1	MW-1 18-20 Ft	Total/NA	Solid	3546	
480-229104-5	HC-11 0.25-0.5 Ft	Total/NA	Solid	3546	
480-229104-7	MW-2 16-20 Ft	Total/NA	Solid	3546	
MB 480-745050/1-A	Method Blank	Total/NA	Solid	3546	
LCS 480-745050/2-A	Lab Control Sample	Total/NA	Solid	3546	
480-229104-1 MS	MW-1 18-20 Ft	Total/NA	Solid	3546	
480-229104-1 MSD	MW-1 18-20 Ft	Total/NA	Solid	3546	

Analysis Batch: 745053

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-229104-5	HC-11 0.25-0.5 Ft	Total/NA	Solid	8082A	744942
480-229104-7	MW-2 16-20 Ft	Total/NA	Solid	8082A	744942

Analysis Batch: 745178

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-229104-1	MW-1 18-20 Ft	Total/NA	Solid	8081B	745050
480-229104-5	HC-11 0.25-0.5 Ft	Total/NA	Solid	8081B	745050
480-229104-7	MW-2 16-20 Ft	Total/NA	Solid	8081B	745050
MB 480-745050/1-A	Method Blank	Total/NA	Solid	8081B	745050
LCS 480-745050/2-A	Lab Control Sample	Total/NA	Solid	8081B	745050
480-229104-1 MS	MW-1 18-20 Ft	Total/NA	Solid	8081B	745050
480-229104-1 MSD	MW-1 18-20 Ft	Total/NA	Solid	8081B	745050

Prep Batch: 745263

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-229104-1	MW-1 18-20 Ft	Total/NA	Solid	8151A	
480-229104-5	HC-11 0.25-0.5 Ft	Total/NA	Solid	8151A	
480-229104-7	MW-2 16-20 Ft	Total/NA	Solid	8151A	
MB 480-745263/1-A	Method Blank	Total/NA	Solid	8151A	
LCS 480-745263/2-A	Lab Control Sample	Total/NA	Solid	8151A	
480-229104-1 MS	MW-1 18-20 Ft	Total/NA	Solid	8151A	
480-229104-1 MSD	MW-1 18-20 Ft	Total/NA	Solid	8151A	

GC Semi VOA

Analysis Batch: 745627

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-229104-1	MW-1 18-20 Ft	Total/NA	Solid	8151A	745263
480-229104-5	HC-11 0.25-0.5 Ft	Total/NA	Solid	8151A	745263
480-229104-7	MW-2 16-20 Ft	Total/NA	Solid	8151A	745263
MB 480-745263/1-A	Method Blank	Total/NA	Solid	8151A	745263
LCS 480-745263/2-A	Lab Control Sample	Total/NA	Solid	8151A	745263
480-229104-1 MS	MW-1 18-20 Ft	Total/NA	Solid	8151A	745263
480-229104-1 MSD	MW-1 18-20 Ft	Total/NA	Solid	8151A	745263

LCMS

Prep Batch: 654795

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-229104-1	MW-1 18-20 Ft	Total/NA	Solid	1633 Shake	
480-229104-5	HC-11 0.25-0.5 Ft	Total/NA	Solid	1633 Shake	
480-229104-7	MW-2 16-20 Ft	Total/NA	Solid	1633 Shake	
MB 240-654795/1-A	Method Blank	Total/NA	Solid	1633 Shake	
LCS 240-654795/3-A	Lab Control Sample	Total/NA	Solid	1633 Shake	
LLCS 240-654795/2-A	Lab Control Sample	Total/NA	Solid	1633 Shake	
480-229104-1 MS	MW-1 18-20 Ft	Total/NA	Solid	1633 Shake	
480-229104-1 MSD	MW-1 18-20 Ft	Total/NA	Solid	1633 Shake	

Analysis Batch: 654947

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-229104-1	MW-1 18-20 Ft	Total/NA	Solid	Draft-3 1633	654795
480-229104-5	HC-11 0.25-0.5 Ft	Total/NA	Solid	Draft-3 1633	654795
480-229104-7	MW-2 16-20 Ft	Total/NA	Solid	Draft-3 1633	654795
MB 240-654795/1-A	Method Blank	Total/NA	Solid	Draft-3 1633	654795
LCS 240-654795/3-A	Lab Control Sample	Total/NA	Solid	Draft-3 1633	654795
LLCS 240-654795/2-A	Lab Control Sample	Total/NA	Solid	Draft-3 1633	654795
480-229104-1 MS	MW-1 18-20 Ft	Total/NA	Solid	Draft-3 1633	654795
480-229104-1 MSD	MW-1 18-20 Ft	Total/NA	Solid	Draft-3 1633	654795

Metals

Prep Batch: 744967

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-229104-1	MW-1 18-20 Ft	Total/NA	Solid	3050B	
480-229104-2	HC-8 1-3 in	Total/NA	Solid	3050B	
480-229104-3	HC-9 5-8 in	Total/NA	Solid	3050B	
480-229104-4	HC-10 1-3 in	Total/NA	Solid	3050B	
480-229104-5	HC-11 0.25-0.5 Ft	Total/NA	Solid	3050B	
480-229104-6	BD-2	Total/NA	Solid	3050B	
480-229104-7	MW-2 16-20 Ft	Total/NA	Solid	3050B	
MB 480-744967/1-A	Method Blank	Total/NA	Solid	3050B	
LCSSRM 480-744967/2-A	Lab Control Sample	Total/NA	Solid	3050B	
480-229104-1 MS	MW-1 18-20 Ft	Total/NA	Solid	3050B	
480-229104-1 MSD	MW-1 18-20 Ft	Total/NA	Solid	3050B	

Prep Batch: 744978

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-229104-1	MW-1 18-20 Ft	Total/NA	Solid	7471B	
480-229104-2	HC-8 1-3 in	Total/NA	Solid	7471B	

Metals (Continued)

Prep Batch: 744978 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-229104-3	HC-9 5-8 in	Total/NA	Solid	7471B	
480-229104-4	HC-10 1-3 in	Total/NA	Solid	7471B	
480-229104-5	HC-11 0.25-0.5 Ft	Total/NA	Solid	7471B	
480-229104-6	BD-2	Total/NA	Solid	7471B	
480-229104-7	MW-2 16-20 Ft	Total/NA	Solid	7471B	
MB 480-744978/1-A	Method Blank	Total/NA	Solid	7471B	
LCSSRM 480-744978/2-A ^1	Lab Control Sample	Total/NA	Solid	7471B	
480-229104-1 MS	MW-1 18-20 Ft	Total/NA	Solid	7471B	
480-229104-1 MSD	MW-1 18-20 Ft	Total/NA	Solid	7471B	

Analysis Batch: 745103

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-229104-1	MW-1 18-20 Ft	Total/NA	Solid	7471B	744978
480-229104-2	HC-8 1-3 in	Total/NA	Solid	7471B	744978
480-229104-3	HC-9 5-8 in	Total/NA	Solid	7471B	744978
480-229104-4	HC-10 1-3 in	Total/NA	Solid	7471B	744978
480-229104-5	HC-11 0.25-0.5 Ft	Total/NA	Solid	7471B	744978
480-229104-6	BD-2	Total/NA	Solid	7471B	744978
480-229104-7	MW-2 16-20 Ft	Total/NA	Solid	7471B	744978
MB 480-744978/1-A	Method Blank	Total/NA	Solid	7471B	744978
LCSSRM 480-744978/2-A ^1	Lab Control Sample	Total/NA	Solid	7471B	744978
480-229104-1 MS	MW-1 18-20 Ft	Total/NA	Solid	7471B	744978
480-229104-1 MSD	MW-1 18-20 Ft	Total/NA	Solid	7471B	744978

Analysis Batch: 745141

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-229104-1	MW-1 18-20 Ft	Total/NA	Solid	6010D	744967
480-229104-2	HC-8 1-3 in	Total/NA	Solid	6010D	744967
480-229104-3	HC-9 5-8 in	Total/NA	Solid	6010D	744967
480-229104-4	HC-10 1-3 in	Total/NA	Solid	6010D	744967
480-229104-5	HC-11 0.25-0.5 Ft	Total/NA	Solid	6010D	744967
480-229104-6	BD-2	Total/NA	Solid	6010D	744967
480-229104-7	MW-2 16-20 Ft	Total/NA	Solid	6010D	744967
MB 480-744967/1-A	Method Blank	Total/NA	Solid	6010D	744967
LCSSRM 480-744967/2-A	Lab Control Sample	Total/NA	Solid	6010D	744967
480-229104-1 MS	MW-1 18-20 Ft	Total/NA	Solid	6010D	744967
480-229104-1 MSD	MW-1 18-20 Ft	Total/NA	Solid	6010D	744967

Analysis Batch: 745220

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-229104-5	HC-11 0.25-0.5 Ft	Total/NA	Solid	6010D	744967
LCSSRM 480-744967/2-A	Lab Control Sample	Total/NA	Solid	6010D	744967

General Chemistry

Analysis Batch: 745034

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-229104-1	MW-1 18-20 Ft	Total/NA	Solid	Moisture	
480-229104-2	HC-8 1-3 in	Total/NA	Solid	Moisture	
480-229104-3	HC-9 5-8 in	Total/NA	Solid	Moisture	
480-229104-4	HC-10 1-3 in	Total/NA	Solid	Moisture	

General Chemistry (Continued)

Analysis Batch: 745034 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-229104-5	HC-11 0.25-0.5 Ft	Total/NA	Solid	Moisture	
480-229104-6	BD-2	Total/NA	Solid	Moisture	
480-229104-7	MW-2 16-20 Ft	Total/NA	Solid	Moisture	
480-229104-1 MS	MW-1 18-20 Ft	Total/NA	Solid	Moisture	
480-229104-1 MSD	MW-1 18-20 Ft	Total/NA	Solid	Moisture	

Lab Chronicle

Client: Roux Environmental Engineering and Geology DPC
Job ID: 480-229104-1
Project/Site: BCP RI - 619 Exchange Street Site

Client Sample ID: MW-1 18-20 Ft
Lab Sample ID: 480-229104-1
Date Collected: 04/30/25 10:30
Matrix: Solid
Date Received: 04/30/25 16:56

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	Moisture		1	745034	JMM	EET BUF	05/01/25 15:43

Client Sample ID: MW-1 18-20 Ft
Lab Sample ID: 480-229104-1
Date Collected: 04/30/25 10:30
Matrix: Solid
Date Received: 04/30/25 16:56
Percent Solids: 79.9

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5035A_L			744922	CDC	EET BUF	04/30/25 17:43
Total/NA	Analysis	8260C		1	744923	CDC	EET BUF	05/01/25 00:16
Total/NA	Prep	3550C			744941	SMP	EET BUF	05/01/25 06:55
Total/NA	Analysis	8270D		1	745287	JMM	EET BUF	05/06/25 14:39
Total/NA	Prep	3546			745050	SMP	EET BUF	05/02/25 06:59
Total/NA	Analysis	8081B		1	745178	JLS	EET BUF	05/05/25 11:46
Total/NA	Prep	3550C			744942	SMP	EET BUF	05/01/25 07:04
Total/NA	Analysis	8082A		1	745005	W1T	EET BUF	05/01/25 17:16
Total/NA	Prep	8151A			745263	SMP	EET BUF	05/06/25 06:53
Total/NA	Analysis	8151A		1	745627	JLS	EET BUF	05/09/25 13:34
Total/NA	Prep	1633 Shake			654795	CLB	EET CLE	05/05/25 14:38
Total/NA	Analysis	Draft-3 1633		1	654947	MRL	EET CLE	05/07/25 01:02
Total/NA	Prep	3050B			744967	EMO	EET BUF	05/01/25 14:59
Total/NA	Analysis	6010D		1	745141	BMB	EET BUF	05/02/25 15:20
Total/NA	Prep	7471B			744978	ESB	EET BUF	05/02/25 09:11
Total/NA	Analysis	7471B		1	745103	BMB	EET BUF	05/02/25 11:04

Client Sample ID: HC-8 1-3 in
Lab Sample ID: 480-229104-2
Date Collected: 04/30/25 11:15
Matrix: Solid
Date Received: 04/30/25 16:56

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	Moisture		1	745034	JMM	EET BUF	05/01/25 15:43

Client Sample ID: HC-8 1-3 in
Lab Sample ID: 480-229104-2
Date Collected: 04/30/25 11:15
Matrix: Solid
Date Received: 04/30/25 16:56
Percent Solids: 84.1

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	3550C			744941	SMP	EET BUF	05/01/25 06:55
Total/NA	Analysis	8270D		1	745287	JMM	EET BUF	05/06/25 18:44
Total/NA	Prep	3050B			744967	EMO	EET BUF	05/01/25 14:59
Total/NA	Analysis	6010D		1	745141	BMB	EET BUF	05/02/25 15:38
Total/NA	Prep	7471B			744978	ESB	EET BUF	05/02/25 09:11
Total/NA	Analysis	7471B		1	745103	BMB	EET BUF	05/02/25 11:09

Lab Chronicle

Client: Roux Environmental Engineering and Geology DPC
Job ID: 480-229104-1
Project/Site: BCP RI - 619 Exchange Street Site

Client Sample ID: HC-9 5-8 in
Lab Sample ID: 480-229104-3
Date Collected: 04/30/25 11:45
Matrix: Solid
Date Received: 04/30/25 16:56

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	Moisture		1	745034	JMM	EET BUF	05/01/25 15:43

Client Sample ID: HC-9 5-8 in
Lab Sample ID: 480-229104-3
Date Collected: 04/30/25 11:45
Matrix: Solid
Date Received: 04/30/25 16:56
Percent Solids: 77.2

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	3550C			744941	SMP	EET BUF	05/01/25 06:55
Total/NA	Analysis	8270D		1	745287	JMM	EET BUF	05/06/25 19:08
Total/NA	Prep	3050B			744967	EMO	EET BUF	05/01/25 14:59
Total/NA	Analysis	6010D		1	745141	BMB	EET BUF	05/02/25 15:40
Total/NA	Prep	7471B			744978	ESB	EET BUF	05/02/25 09:11
Total/NA	Analysis	7471B		1	745103	BMB	EET BUF	05/02/25 11:10

Client Sample ID: HC-10 1-3 in
Lab Sample ID: 480-229104-4
Date Collected: 04/30/25 12:00
Matrix: Solid
Date Received: 04/30/25 16:56

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	Moisture		1	745034	JMM	EET BUF	05/01/25 15:43

Client Sample ID: HC-10 1-3 in
Lab Sample ID: 480-229104-4
Date Collected: 04/30/25 12:00
Matrix: Solid
Date Received: 04/30/25 16:56
Percent Solids: 78.0

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	3550C			744941	SMP	EET BUF	05/01/25 06:55
Total/NA	Analysis	8270D		1	745287	JMM	EET BUF	05/06/25 19:33
Total/NA	Prep	3050B			744967	EMO	EET BUF	05/01/25 14:59
Total/NA	Analysis	6010D		1	745141	BMB	EET BUF	05/02/25 15:42
Total/NA	Prep	7471B			744978	ESB	EET BUF	05/02/25 09:11
Total/NA	Analysis	7471B		1	745103	BMB	EET BUF	05/02/25 11:11

Client Sample ID: HC-11 0.25-0.5 Ft
Lab Sample ID: 480-229104-5
Date Collected: 04/30/25 12:30
Matrix: Solid
Date Received: 04/30/25 16:56

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	Moisture		1	745034	JMM	EET BUF	05/01/25 15:43

Client Sample ID: HC-11 0.25-0.5 Ft
Lab Sample ID: 480-229104-5
Date Collected: 04/30/25 12:30
Matrix: Solid
Date Received: 04/30/25 16:56
Percent Solids: 83.8

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5035A_L			744922	CDC	EET BUF	04/30/25 17:43
Total/NA	Analysis	8260C		1	744923	CDC	EET BUF	05/01/25 00:39
Total/NA	Prep	3550C			744941	SMP	EET BUF	05/01/25 06:55
Total/NA	Analysis	8270D		1	745287	JMM	EET BUF	05/06/25 19:57
Total/NA	Prep	3546			745050	SMP	EET BUF	05/02/25 06:59
Total/NA	Analysis	8081B		1	745178	JLS	EET BUF	05/05/25 12:05
Total/NA	Prep	3550C			744942	SMP	EET BUF	05/01/25 07:04
Total/NA	Analysis	8082A		1	745053	H9RU	EET BUF	05/02/25 10:41
Total/NA	Prep	8151A			745263	SMP	EET BUF	05/06/25 06:53
Total/NA	Analysis	8151A		1	745627	JLS	EET BUF	05/09/25 13:52
Total/NA	Prep	1633 Shake			654795	CLB	EET CLE	05/05/25 14:38
Total/NA	Analysis	Draft-3 1633		1	654947	MRL	EET CLE	05/07/25 01:52
Total/NA	Prep	3050B			744967	EMO	EET BUF	05/01/25 14:59
Total/NA	Analysis	6010D		1	745141	BMB	EET BUF	05/02/25 15:44
Total/NA	Prep	3050B			744967	EMO	EET BUF	05/01/25 14:59
Total/NA	Analysis	6010D		5	745220	BMB	EET BUF	05/05/25 11:00
Total/NA	Prep	7471B			744978	ESB	EET BUF	05/02/25 09:11
Total/NA	Analysis	7471B		1	745103	BMB	EET BUF	05/02/25 11:13

Client Sample ID: BD-2
Lab Sample ID: 480-229104-6
Date Collected: 04/30/25 11:50
Matrix: Solid
Date Received: 04/30/25 16:56

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	Moisture		1	745034	JMM	EET BUF	05/01/25 15:43

Client Sample ID: BD-2
Lab Sample ID: 480-229104-6
Date Collected: 04/30/25 11:50
Matrix: Solid
Date Received: 04/30/25 16:56
Percent Solids: 84.4

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	3550C			744941	SMP	EET BUF	05/01/25 06:55
Total/NA	Analysis	8270D		1	745287	JMM	EET BUF	05/06/25 20:22
Total/NA	Prep	3050B			744967	EMO	EET BUF	05/01/25 14:59
Total/NA	Analysis	6010D		1	745141	BMB	EET BUF	05/02/25 15:46
Total/NA	Prep	7471B			744978	ESB	EET BUF	05/02/25 09:11
Total/NA	Analysis	7471B		1	745103	BMB	EET BUF	05/02/25 11:17

Client Sample ID: MW-2 16-20 Ft
Lab Sample ID: 480-229104-7
Date Collected: 04/30/25 15:00
Matrix: Solid
Date Received: 04/30/25 16:56

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	Moisture		1	745034	JMM	EET BUF	05/01/25 15:43

Lab Chronicle

Client: Roux Environmental Engineering and Geology DPC
Job ID: 480-229104-1
Project/Site: BCP RI - 619 Exchange Street Site

Client Sample ID: MW-2 16-20 Ft
Lab Sample ID: 480-229104-7

Date Collected: 04/30/25 15:00
Matrix: Solid

Date Received: 04/30/25 16:56
Percent Solids: 80.0

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5035A_L			744922	CDC	EET BUF	04/30/25 17:43
Total/NA	Analysis	8260C		1	744923	CDC	EET BUF	05/01/25 01:03
Total/NA	Prep	3550C			744941	SMP	EET BUF	05/01/25 06:55
Total/NA	Analysis	8270D		1	745287	JMM	EET BUF	05/06/25 20:46
Total/NA	Prep	3546			745050	SMP	EET BUF	05/02/25 06:59
Total/NA	Analysis	8081B		1	745178	JLS	EET BUF	05/05/25 12:25
Total/NA	Prep	3550C			744942	SMP	EET BUF	05/01/25 07:04
Total/NA	Analysis	8082A		1	745053	H9RU	EET BUF	05/02/25 10:59
Total/NA	Prep	8151A			745263	SMP	EET BUF	05/06/25 06:53
Total/NA	Analysis	8151A		1	745627	JLS	EET BUF	05/09/25 14:11
Total/NA	Prep	1633 Shake			654795	CLB	EET CLE	05/05/25 14:38
Total/NA	Analysis	Draft-3 1633		1	654947	MRL	EET CLE	05/07/25 02:08
Total/NA	Prep	3050B			744967	EMO	EET BUF	05/01/25 14:59
Total/NA	Analysis	6010D		1	745141	BMB	EET BUF	05/02/25 15:48
Total/NA	Prep	7471B			744978	ESB	EET BUF	05/02/25 09:11
Total/NA	Analysis	7471B		1	745103	BMB	EET BUF	05/02/25 11:18

Laboratory References:

EET BUF = Eurofins Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600

EET CLE = Eurofins Cleveland, 180 S. Van Buren Avenue, Barberton, OH 44203, TEL (330)497-9396

Accreditation/Certification Summary

Client: Roux Environmental Engineering and Geology DPC
Job ID: 480-229104-1
Project/Site: BCP RI - 619 Exchange Street Site

Laboratory: Eurofins Buffalo

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	Identification Number	Expiration Date
New York	NELAP	10026	03-31-26

The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

Analysis Method	Prep Method	Matrix	Analyte
8151A	8151A	Solid	Picloram
Moisture		Solid	Percent Moisture
Moisture		Solid	Percent Solids

Laboratory: Eurofins Cleveland

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Connecticut	State	PH-0806	12-31-26
Georgia	State	4062	02-27-26
Illinois	NELAP	200004	08-31-25
Iowa	State	421	06-01-25
Kansas	NELAP	E-10336	01-31-26
Kentucky (UST)	State	112225	02-28-26
Kentucky (WW)	State	KY98016	12-31-25
Minnesota	NELAP	039-999-348	12-31-25
New Hampshire	NELAP	225024	09-30-25
New Jersey	NELAP	OH001	07-03-25
New York	NELAP	10975	04-01-26
North Dakota	State	R-244	02-27-26
Ohio	State	8303	11-04-25
Ohio VAP	State	ORELAP 4062	02-28-26
Oregon	NELAP	4062	02-27-26
Pennsylvania	NELAP	68-00340	08-31-25
Texas	NELAP	T104704517-22-19	08-31-25
US Fish & Wildlife	US Federal Programs	A26406	02-28-26
USDA	US Federal Programs	P330-18-00281	01-05-27
Virginia	NELAP	460175	09-14-25
West Virginia DEP	State	210	12-31-25
Wisconsin	State	399167560	08-31-25

Method Summary

Client: Roux Environmental Engineering and Geology DPC
Job ID: 480-229104-1
Project/Site: BCP RI - 619 Exchange Street Site

Method	Method Description	Protocol	Laboratory
8260C	Volatile Organic Compounds by GC/MS	SW846	EET BUF
8270D	Semivolatile Organic Compounds (GC/MS)	SW846	EET BUF
8081B	Organochlorine Pesticides (GC)	SW846	EET BUF
8082A	Polychlorinated Biphenyls (PCBs) by Gas Chromatography	SW846	EET BUF
8151A	Herbicides (GC)	SW846	EET BUF
Draft-3 1633	Per- and Polyfluoroalkyl Substances by LC/MS/MS	EPA	EET CLE
6010D	Metals (ICP)	SW846	EET BUF
7471B	Mercury (CVAA)	SW846	EET BUF
Moisture	Percent Moisture	EPA	EET BUF
1633 Shake	Shake Extraction with SPE	EPA	EET CLE
3050B	Preparation, Metals	SW846	EET BUF
3546	Microwave Extraction	SW846	EET BUF
3550C	Ultrasonic Extraction	SW846	EET BUF
5035A_L	Closed System Purge and Trap	SW846	EET BUF
7471B	Preparation, Mercury	SW846	EET BUF
8151A	Extraction (Herbicides)	SW846	EET BUF

Protocol References:

EPA = US Environmental Protection Agency

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

EET BUF = Eurofins Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600

EET CLE = Eurofins Cleveland, 180 S. Van Buren Avenue, Barberton, OH 44203, TEL (330)497-9396

Sample Summary

Client: Roux Environmental Engineering and Geology DPC
Job ID: 480-229104-1
Project/Site: BCP RI - 619 Exchange Street Site

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
480-229104-1	MW-1 18-20 Ft	Solid	04/30/25 10:30	04/30/25 16:56
480-229104-2	HC-8 1-3 in	Solid	04/30/25 11:15	04/30/25 16:56
480-229104-3	HC-9 5-8 in	Solid	04/30/25 11:45	04/30/25 16:56
480-229104-4	HC-10 1-3 in	Solid	04/30/25 12:00	04/30/25 16:56
480-229104-5	HC-11 0.25-0.5 Ft	Solid	04/30/25 12:30	04/30/25 16:56
480-229104-6	BD-2	Solid	04/30/25 11:50	04/30/25 16:56
480-229104-7	MW-2 16-20 Ft	Solid	04/30/25 15:00	04/30/25 16:56

10 Hazelwood Drive
Amherst, NY 14228-2298
Phone: 716-691-2600 Fax: 716-691-7991

Chain of Custody Record

eurofins | Environment Testing

Client Information

Client Contact: Bryan Mayback	Sampler: Nick Surati
Company: Roux Environmental Engineering and Geology DPC	Phone: 716-713-3937
Address: 2558 Hamburg Turnpike Suite 300	PWSID:
City: Lackawanna	Due Date Requested:
State, Zip: NY, 14218	TAT Requested (days): Standard
Phone:	Compliance Project: Δ Yes Δ No
Email: bmayback@rouxinc.com	PO #: Purchase Order Requested 4374.0004602
Project Name: BCP RI - 619 Exchange Street Site- soil	WO #:
Site:	Project #: 48028561
	SSOW#:

Lab PM: Fischer, Brian J	Carrier Tracking No(s):
E-Mail: Brian.Fischer@et.eurofinsus.com	State of Origin:

COC No: 480-204352-41691.3
Page: Page 3 of 4
Job #:

Analysis Requested

Preservation Codes: N - None
Other:

Sample Identification	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)	1633_Final - PFAS	8081B, 8082A, 8151A, Moisture	8260C - VOC	6010D, 7471B, 8270D	TCL SVOC's + TICs	TAL Metals	Total Number of containers	Special Instructions/Note:
	Preservation Code:						N	N	N	N				
MW-1 19-20 Ft	4/30/25	1030	C	Solid			X	X	X	X	X			
HC-8 1-3 in		11:15		Solid							X	X		ENCores, MS-2, MSD-2
HC-9 5-8 in		11:45		Solid							X	X		
HC-10 1-3 in		1200		Solid							X	X		
HC-11 0.25-0.5 Ft		1230		Solid			X	X	X	X				
BD-2		11:50		Solid							X	X		ENCores
MW-2 16-20 Ft		1500		Solid			X	X	X	X				
				Solid										
				Solid										
				Solid										
				Solid										

480-229104 Chain of Custody

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Deliverable Requested: I, II, III, IV, Other (specify) Cat B, NYS Pkg Eqvls

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months

Special Instructions/QC Requirements: Cat B, NYS Pkg Eqvls

Empty Kit Relinquished by:		Date:	Time:	Method of Shipment:	
Relinquished by:	Date/Time: 4/30/25 1654	Company	Received by:	Date/Time: 4-30-25 1654	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
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: 10.6, 11.3 #2 #3 Ice

Ver: 10/10/2024

Eurofins Buffalo
10 Hazelwood Drive
Amherst, NY 14228-2298
Phone: 716-691-2600 Fax: 716-691 7991

Chain of Custody Record

eurofins
Environment Testing

Client Information (Sub Contract Lab)	Sampler: N/A	Lab PM: Schove, John R	Carrier Tracking No(s): N/A	COC No: 480-92336.1
Client Contact: Shipping/Receiving	Phone: N/A	E-Mail: John.Schove@et.eurofinsus.com	State of Origin: New York	Page: Page 1 of 1
Company: Eurofins Environment Testing North Centr		Accreditations Required (See note): NELAP New York		Job #: 480-229104-1
Address: 180 S. Van Buren Avenue,	Due Date Requested: 5/14/2025			
City: Barberton	TAT Requested (days): N/A			
State, Zip: OH, 44203				
Phone: 330-497-9396(Tel) 330-497-0772(Fax)	PO #: N/A			
Email: N/A	WO #: N/A			
Project Name: BCP RI 619 Exchange Street Site	Project #: 48028561			
Site: N/A	SSOW#: N/A			

Analysis Requested

Preservation Codes:

Other: N/A

PFAS 2081-10

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)	1633/1633_Shake PFAS NY Standard 40 Analyte List	Total Number of containers	Special Instructions/Note:
			Preservation Code:						
MW-1 18-20 Ft (480-229104-1)	4/30/25	10:30 Eastern	G	Solid			X	1	
MW-1 18-20 Ft (480-229104-1MS)	4/30/25	10:30 Eastern	G	Solid			X	1	
MW-1 18-20 Ft (480-229104-1MSD)	4/30/25	10:30 Eastern	G	Solid			X	1	
HC-11 0.25-0.5 Ft (480-229104-5)	4/30/25	12:30 Eastern	G	Solid			X	1	
MW-2 16-20 Ft (480-229104-7)	4/30/25	15:00 Eastern	G	Solid			X	1	

Note: Since laboratory accreditations are subject to change, Eurofins Environment Testing Northeast, 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 Northeast, LLC laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins Environment Testing Northeast, 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 Northeast, 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
	5-1-25 1600			5-2-25 900	
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
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:

Eurofins – Cleveland Sample Receipt Form/Narrative **Login # :** _____
Barberton Facility

Client Eurofins Buffalo Site Name _____

Cooler Received on 5-2-25 Opened on 5-3-25

Cooler unpacked by: MBB

FedEx: 1st Grd Exp UPS FAS Waypoint Client Drop Off Eurofins Courier Other _____

Receipt After-hours: Drop-off Date/Time _____ Storage Location _____

Eurofins Cooler # 6C Foam Box Client Cooler Box Other _____

Packing material used: Bubble Wrap Foam Plastic Bag None Other _____

COOLANT: Wet Ice Blue Ice Dry Ice Water None

1. Cooler temperature upon receipt ☐ See Multiple Cooler Form

IR GUN # 18 (CF -0.7 °C) Observed Cooler Temp. 2.7 °C Corrected Cooler Temp. 2.0 °C

2. Were tamper/custody seals on the outside of the cooler(s)? If Yes Quantity_____	Yes	No
-Were the seals on the outside of the cooler(s) signed & dated?	Yes	No NA
-Were tamper/custody seals on the bottle(s) or bottle kits (LLHg/MeHg)?	Yes	No
-Were tamper/custody seals intact and uncompromised?	Yes	No NA
3. Shippers' packing slip attached to the cooler(s)?	Yes	No
4. Did custody papers accompany the sample(s)?	Yes	No
5. Were the custody papers relinquished & signed in the appropriate place?	Yes	No
6. Was/were the person(s) who collected the samples clearly identified on the COC?	Yes	No
7. Did all bottles arrive in good condition (Unbroken)?	Yes	No
8. Could all bottle labels (ID/Date/Time) be reconciled with the COC?	Yes	No
9. For each sample, does the COC specify preservatives (Y/N), # of containers (Y/N), and sample type of grab/comp (Y/N)?		
10. Were correct bottle(s) used for the test(s) indicated?	Yes	No
11. Sufficient quantity received to perform indicated analyses?	Yes	No
12. Are these work share samples and all listed on the COC?	Yes	No
If yes, Questions 13-17 have been checked at the originating laboratory.		
13. Were all preserved sample(s) at the correct pH upon receipt?	Yes	No NA pH Strip Lot# HC457151
14. Were VOAs on the COC?	Yes	No
15. Were air bubbles >6 mm in any VOA vials? ● ← Larger than this.	Yes	No NA
16. Was a VOA trip blank present in the cooler(s)? Trip Blank Lot #_____	Yes	No
17. Was a LL Hg or Me Hg trip blank present? _____	Yes	No

Tests that are not checked for pH by Receiving:

VOAs
Oil and Grease
TOC

Contacted PM _____ Date _____ by _____ via Verbal Voice Mail Other

Concerning _____

18. CHAIN OF CUSTODY & SAMPLE DISCREPANCIES ☐ additional next page

Labeled by:

Labels Verified by:

_____

_____

_____

_____

19. SAMPLE CONDITION

Sample(s) _____ were received after the recommended holding time had expired.

Sample(s) _____ were received in a broken container.

Sample(s) _____ were received with bubble >6 mm in diameter. (Notify PM)

20. SAMPLE PRESERVATION

Sample(s) _____ were further preserved in the laboratory.

Time preserved: _____ Preservative(s) added/Lot number(s): _____

VOA Sample Preservation - Date/Time VOAs Frozen: _____

SAMPLE CONTROL
EUROFINS ENVIRONMENT TESTING
10 HAZELWOOD DRIVE

BUFFALO, NY 142282223
UNITED STATES US

ACTWGT 24.35 LB
CAD 0759273/CAFE3855
DIMS 15x12x11 IN

BILL SENDER

TO **SAMPLE RECEIPT**
EUROFINS CLEVELAND
180 S VAN BUREN AVE

BARBERTON OH 442033543
(330) 497-9396
REF. BARBERTON

FedEx Express

TRK# 0201 **7463 0663 8773**

FRI - 02 MAY 10:30
PRIORITY OVERNIGH

XP CAKA

4420
OH-US **CL**

Login Sample Receipt Checklist

Client: Roux Environmental Engineering and Geology DPC

Job Number: 480-229104-1

Login Number: 229104
List Number: 1
Creator: Stapleton, Kaitlyn

List Source: Eurofins Buffalo

Question	Answer	Comment
Radioactivity either was not measured or, if measured, is at or below background	True	
The cooler's custody seal, if present, is intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	10.6, 11.3 IR#SC ice
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the sample IDs on the containers and the COC.	True	
Samples are received within Holding Time (Excluding tests with immediate HTs)..	True	Encores frozen at 1743 on 4/30/25
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
VOA sample vials do not have headspace or bubble is <6mm (1/4") in diameter.	N/A	
If necessary, staff have been informed of any short hold time or quick TAT needs	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Sampling Company provided.	True	Roux Environmental
Samples received within 48 hours of sampling.	True	
Samples requiring field filtration have been filtered in the field.	True	
Chlorine Residual checked.	N/A	

eurofins | Environment Testing

ANALYTICAL REPORT

PREPARED FOR

Attn: Bryan Mayback
Roux Environmental Engineering and Geology DPC
2558 Hamburg Turnpike
Suite 300
Lackawanna, New York 14218

Generated 5/12/2025 1:24:05 PM

JOB DESCRIPTION

BCP RI - 619 Exchange Street Site

JOB NUMBER

480-229138-1

Eurofins Buffalo
10 Hazelwood Drive
Amherst NY 14228-2298

See page two for job notes and contact information.

Job Notes

This report may not be reproduced except in full, and with written approval from the laboratory. The results relate only to the samples tested. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

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 Northeast, LLC Project Manager.

Authorization



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5/12/2025 1:24:05 PM

Authorized for release by
John Schove, Project Manager II
John.Schove@et.eurofinsus.com
(716)504-9838

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Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
B	Compound was found in the blank and sample.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

GC/MS Semi VOA

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

GC/MS Semi VOA TICs

Qualifier	Qualifier Description
J	Indicates an Estimated Value for TICs
N	Presumptive evidence of material.
T	Result is a tentatively identified compound (TIC) and an estimated value.

GC Semi VOA

Qualifier	Qualifier Description
B	Compound was found in the blank and sample.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
S1+	Surrogate recovery exceeds control limits, high biased.

LCMS

Qualifier	Qualifier Description
*5+	Isotope dilution analyte is outside acceptance limits, high biased.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Metals

Qualifier	Qualifier Description
^5-	Linear Range Check (LRC) is outside acceptance limits, low biased.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

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

Glossary (Continued)

Abbreviation	These commonly used abbreviations may or may not be present in this report.
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

Job ID: 480-229138-1 Eurofins Buffalo

Job Narrative
480-229138-1

Receipt
The sample was received on 5/1/2025 3:40 PM. Unless otherwise noted below, the sample arrived in good condition, and where required, properly preserved and on ice. The temperature of the cooler at receipt was 3.2º C.

GC/MS VOA
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

GC/MS Semi VOA
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

GC Semi VOA
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Metals
Method 6010D: The linear range check (LRC) standard recovery associated with 480-745226 is outside the acceptance criteria for the following analytes: Silver. The concentration of these analyte(s) in the sample(s) are below the highest standard of the calibration curve; therefore, the data have been reported.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

LCMS
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Organic Prep
Method 3546: The following sample required a Florisil clean-up, via EPA Method 3620C, to reduce matrix interferences: SB-11 0.25-2Ft (480-229138-1).

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Detection Summary

Client: Roux Environmental Engineering and Geology DPC
Job ID: 480-229138-1
Project/Site: BCP RI - 619 Exchange Street Site

Client Sample ID: SB-11 0.25-2Ft
Lab Sample ID: 480-229138-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	9.8	J	25	4.2	ug/Kg	1	☼	8260C	Total/NA
Chloroform	1.1	J B	5.0	0.31	ug/Kg	1	☼	8260C	Total/NA
2-Methylnaphthalene	55	J	220	45	ug/Kg	1	☼	8270D	Total/NA
Anthracene	68	J	220	56	ug/Kg	1	☼	8270D	Total/NA
Benzo[a]anthracene	160	J	220	22	ug/Kg	1	☼	8270D	Total/NA
Benzo[a]pyrene	120	J	220	33	ug/Kg	1	☼	8270D	Total/NA
Benzo[b]fluoranthene	200	J	220	36	ug/Kg	1	☼	8270D	Total/NA
Benzo[g,h,i]perylene	160	J	220	24	ug/Kg	1	☼	8270D	Total/NA
Benzo[k]fluoranthene	76	J	220	29	ug/Kg	1	☼	8270D	Total/NA
Carbazole	28	J	220	26	ug/Kg	1	☼	8270D	Total/NA
Chrysene	200	J	220	50	ug/Kg	1	☼	8270D	Total/NA
Dibenzofuran	39	J	220	26	ug/Kg	1	☼	8270D	Total/NA
Fluoranthene	330		220	24	ug/Kg	1	☼	8270D	Total/NA
Fluorene	33	J	220	26	ug/Kg	1	☼	8270D	Total/NA
Indeno[1,2,3-cd]pyrene	99	J	220	28	ug/Kg	1	☼	8270D	Total/NA
Naphthalene	69	J	220	29	ug/Kg	1	☼	8270D	Total/NA
Phenanthrene	340		220	33	ug/Kg	1	☼	8270D	Total/NA
Pyrene	270		220	26	ug/Kg	1	☼	8270D	Total/NA
4,4'-DDD	4.6	J	21	4.1	ug/Kg	5	☼	8081B	Total/NA
Endrin aldehyde	8.9	J	21	5.4	ug/Kg	5	☼	8081B	Total/NA
gamma-BHC (Lindane)	6.5	J	21	3.9	ug/Kg	5	☼	8081B	Total/NA
Methoxychlor	23	B	21	4.3	ug/Kg	5	☼	8081B	Total/NA
Pentachlorophenol	35		22	7.1	ug/Kg	1	☼	8151A	Total/NA
Aluminum	4940		12.8	11.1	mg/Kg	1	☼	6010D	Total/NA
Arsenic	5.4		2.6	1.1	mg/Kg	1	☼	6010D	Total/NA
Barium	139		0.64	0.18	mg/Kg	1	☼	6010D	Total/NA
Beryllium	0.51		0.26	0.051	mg/Kg	1	☼	6010D	Total/NA
Cadmium	0.25	J	0.26	0.090	mg/Kg	1	☼	6010D	Total/NA
Calcium	9530		64.2	34.7	mg/Kg	1	☼	6010D	Total/NA
Chromium	8.4		0.64	0.46	mg/Kg	1	☼	6010D	Total/NA
Cobalt	4.2		0.64	0.13	mg/Kg	1	☼	6010D	Total/NA
Copper	167		1.3	0.73	mg/Kg	1	☼	6010D	Total/NA
Iron	13300		12.8	10.9	mg/Kg	1	☼	6010D	Total/NA
Lead	145		1.3	0.59	mg/Kg	1	☼	6010D	Total/NA
Magnesium	1530		25.7	10.9	mg/Kg	1	☼	6010D	Total/NA
Manganese	80.2		1.3	0.36	mg/Kg	1	☼	6010D	Total/NA
Nickel	10.6		6.4	0.32	mg/Kg	1	☼	6010D	Total/NA
Potassium	821		38.5	31.1	mg/Kg	1	☼	6010D	Total/NA
Selenium	4.6	J	5.1	1.0	mg/Kg	1	☼	6010D	Total/NA
Sodium	155	J	180	78.8	mg/Kg	1	☼	6010D	Total/NA
Vanadium	10.9		0.64	0.17	mg/Kg	1	☼	6010D	Total/NA
Zinc	171		2.6	1.3	mg/Kg	1	☼	6010D	Total/NA
Mercury	0.46		0.025	0.0058	mg/Kg	1	☼	7471B	Total/NA

This Detection Summary does not include radiochemical test results.

Client: Roux Environmental Engineering and Geology DPC
Job ID: 480-229138-1
Project/Site: BCP RI - 619 Exchange Street Site

Client Sample ID: SB-11 0.25-2Ft
Lab Sample ID: 480-229138-1
Date Collected: 05/01/25 10:00
Matrix: Solid
Date Received: 05/01/25 15:40
Percent Solids: 75.2

Method: SW846 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		5.0	0.36	ug/Kg	☼	05/01/25 17:40	05/01/25 21:59	1
1,1,2,2-Tetrachloroethane	ND		5.0	0.81	ug/Kg	☼	05/01/25 17:40	05/01/25 21:59	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		5.0	1.1	ug/Kg	☼	05/01/25 17:40	05/01/25 21:59	1
1,1,2-Trichloroethane	ND		5.0	0.65	ug/Kg	☼	05/01/25 17:40	05/01/25 21:59	1
1,1-Dichloroethane	ND		5.0	0.61	ug/Kg	☼	05/01/25 17:40	05/01/25 21:59	1
1,1-Dichloroethene	ND		5.0	0.61	ug/Kg	☼	05/01/25 17:40	05/01/25 21:59	1
1,2,4-Trichlorobenzene	ND		5.0	0.30	ug/Kg	☼	05/01/25 17:40	05/01/25 21:59	1
1,2,4-Trimethylbenzene	ND		5.0	0.95	ug/Kg	☼	05/01/25 17:40	05/01/25 21:59	1
1,2-Dibromo-3-Chloropropane	ND		5.0	2.5	ug/Kg	☼	05/01/25 17:40	05/01/25 21:59	1
1,2-Dibromoethane	ND		5.0	0.64	ug/Kg	☼	05/01/25 17:40	05/01/25 21:59	1
1,2-Dichlorobenzene	ND		5.0	0.39	ug/Kg	☼	05/01/25 17:40	05/01/25 21:59	1
1,2-Dichloroethane	ND		5.0	0.25	ug/Kg	☼	05/01/25 17:40	05/01/25 21:59	1
1,2-Dichloropropane	ND		5.0	2.5	ug/Kg	☼	05/01/25 17:40	05/01/25 21:59	1
1,3,5-Trimethylbenzene	ND		5.0	0.32	ug/Kg	☼	05/01/25 17:40	05/01/25 21:59	1
1,3-Dichlorobenzene	ND		5.0	0.26	ug/Kg	☼	05/01/25 17:40	05/01/25 21:59	1
1,4-Dichlorobenzene	ND		5.0	0.69	ug/Kg	☼	05/01/25 17:40	05/01/25 21:59	1
2-Butanone (MEK)	ND		25	1.8	ug/Kg	☼	05/01/25 17:40	05/01/25 21:59	1
2-Hexanone	ND		25	2.5	ug/Kg	☼	05/01/25 17:40	05/01/25 21:59	1
4-Isopropyltoluene	ND		5.0	0.40	ug/Kg	☼	05/01/25 17:40	05/01/25 21:59	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.6	ug/Kg	☼	05/01/25 17:40	05/01/25 21:59	1
Acetone	**9.8**	**J**	25	4.2	ug/Kg	☼	05/01/25 17:40	05/01/25 21:59	1
Benzene	ND		5.0	0.24	ug/Kg	☼	05/01/25 17:40	05/01/25 21:59	1
Bromodichloromethane	ND		5.0	0.67	ug/Kg	☼	05/01/25 17:40	05/01/25 21:59	1
Bromoform	ND		5.0	2.5	ug/Kg	☼	05/01/25 17:40	05/01/25 21:59	1
Bromomethane	ND		5.0	0.45	ug/Kg	☼	05/01/25 17:40	05/01/25 21:59	1
Carbon disulfide	ND		5.0	2.5	ug/Kg	☼	05/01/25 17:40	05/01/25 21:59	1
Carbon tetrachloride	ND		5.0	0.48	ug/Kg	☼	05/01/25 17:40	05/01/25 21:59	1
Chlorobenzene	ND		5.0	0.66	ug/Kg	☼	05/01/25 17:40	05/01/25 21:59	1
Chloroethane	ND		5.0	1.1	ug/Kg	☼	05/01/25 17:40	05/01/25 21:59	1
Chloroform	**1.1**	**J B**	5.0	0.31	ug/Kg	☼	05/01/25 17:40	05/01/25 21:59	1
Chloromethane	ND		5.0	0.30	ug/Kg	☼	05/01/25 17:40	05/01/25 21:59	1
cis-1,2-Dichloroethene	ND		5.0	0.64	ug/Kg	☼	05/01/25 17:40	05/01/25 21:59	1
cis-1,3-Dichloropropene	ND		5.0	0.71	ug/Kg	☼	05/01/25 17:40	05/01/25 21:59	1
Cyclohexane	ND		5.0	0.69	ug/Kg	☼	05/01/25 17:40	05/01/25 21:59	1
Dibromochloromethane	ND		5.0	0.64	ug/Kg	☼	05/01/25 17:40	05/01/25 21:59	1
Dichlorodifluoromethane	ND		5.0	0.41	ug/Kg	☼	05/01/25 17:40	05/01/25 21:59	1
Ethylbenzene	ND		5.0	0.34	ug/Kg	☼	05/01/25 17:40	05/01/25 21:59	1
Isopropylbenzene	ND		5.0	0.75	ug/Kg	☼	05/01/25 17:40	05/01/25 21:59	1
Methyl acetate	ND		25	3.0	ug/Kg	☼	05/01/25 17:40	05/01/25 21:59	1
Methyl tert-butyl ether	ND		5.0	0.49	ug/Kg	☼	05/01/25 17:40	05/01/25 21:59	1
Methylcyclohexane	ND		5.0	0.75	ug/Kg	☼	05/01/25 17:40	05/01/25 21:59	1
Methylene Chloride	ND		5.0	2.3	ug/Kg	☼	05/01/25 17:40	05/01/25 21:59	1
Naphthalene	ND		5.0	0.67	ug/Kg	☼	05/01/25 17:40	05/01/25 21:59	1
n-Butylbenzene	ND		5.0	0.43	ug/Kg	☼	05/01/25 17:40	05/01/25 21:59	1
N-Propylbenzene	ND		5.0	0.40	ug/Kg	☼	05/01/25 17:40	05/01/25 21:59	1
sec-Butylbenzene	ND		5.0	0.43	ug/Kg	☼	05/01/25 17:40	05/01/25 21:59	1
Styrene	ND		5.0	0.25	ug/Kg	☼	05/01/25 17:40	05/01/25 21:59	1
tert-Butylbenzene	ND		5.0	0.52	ug/Kg	☼	05/01/25 17:40	05/01/25 21:59	1
Tetrachloroethene	ND		5.0	0.67	ug/Kg	☼	05/01/25 17:40	05/01/25 21:59	1

Client Sample ID: SB-11 0.25-2Ft
Lab Sample ID: 480-229138-1
Date Collected: 05/01/25 10:00
Matrix: Solid
Date Received: 05/01/25 15:40
Percent Solids: 75.2

Method: SW846 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Toluene	ND		5.0	0.38	ug/Kg	☼	05/01/25 17:40	05/01/25 21:59	1
trans-1,2-Dichloroethene	ND		5.0	0.51	ug/Kg	☼	05/01/25 17:40	05/01/25 21:59	1
trans-1,3-Dichloropropene	ND		5.0	2.2	ug/Kg	☼	05/01/25 17:40	05/01/25 21:59	1
Trichloroethene	ND		5.0	1.1	ug/Kg	☼	05/01/25 17:40	05/01/25 21:59	1
Trichlorofluoromethane	ND		5.0	0.47	ug/Kg	☼	05/01/25 17:40	05/01/25 21:59	1
Vinyl chloride	ND		5.0	0.61	ug/Kg	☼	05/01/25 17:40	05/01/25 21:59	1
Xylenes, Total	ND		9.9	0.83	ug/Kg	☼	05/01/25 17:40	05/01/25 21:59	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/Kg*	☼		*N/A*	*05/01/25 17:40*	*05/01/25 21:59*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*108*		*64 - 126*	*05/01/25 17:40*	*05/01/25 21:59*	*1*
4-Bromofluorobenzene (Surr)	*99*		*72 - 126*	*05/01/25 17:40*	*05/01/25 21:59*	*1*
Dibromofluoromethane (Surr)	*104*		*60 - 140*	*05/01/25 17:40*	*05/01/25 21:59*	*1*
Toluene-d8 (Surr)	*97*		*71 - 125*	*05/01/25 17:40*	*05/01/25 21:59*	*1*

Method: SW846 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	ND		130	73	ug/Kg	☼	05/02/25 13:45	05/06/25 14:11	1
2,4,5-Trichlorophenol	ND		220	61	ug/Kg	☼	05/02/25 13:45	05/06/25 14:11	1
2,4,6-Trichlorophenol	ND		220	45	ug/Kg	☼	05/02/25 13:45	05/06/25 14:11	1
2,4-Dichlorophenol	ND		220	24	ug/Kg	☼	05/02/25 13:45	05/06/25 14:11	1
2,4-Dimethylphenol	ND		220	54	ug/Kg	☼	05/02/25 13:45	05/06/25 14:11	1
2,4-Dinitrophenol	ND		2200	1000	ug/Kg	☼	05/02/25 13:45	05/06/25 14:11	1
2,4-Dinitrotoluene	ND		220	46	ug/Kg	☼	05/02/25 13:45	05/06/25 14:11	1
2,6-Dinitrotoluene	ND		220	26	ug/Kg	☼	05/02/25 13:45	05/06/25 14:11	1
2-Chloronaphthalene	ND		220	37	ug/Kg	☼	05/02/25 13:45	05/06/25 14:11	1
2-Chlorophenol	ND		440	41	ug/Kg	☼	05/02/25 13:45	05/06/25 14:11	1
2-Methylnaphthalene	**55**	**J**	220	45	ug/Kg	☼	05/02/25 13:45	05/06/25 14:11	1
2-Methylphenol	ND		220	26	ug/Kg	☼	05/02/25 13:45	05/06/25 14:11	1
2-Nitroaniline	ND		440	33	ug/Kg	☼	05/02/25 13:45	05/06/25 14:11	1
2-Nitrophenol	ND		220	63	ug/Kg	☼	05/02/25 13:45	05/06/25 14:11	1
3,3'-Dichlorobenzidine	ND		440	260	ug/Kg	☼	05/02/25 13:45	05/06/25 14:11	1
3-Nitroaniline	ND		440	62	ug/Kg	☼	05/02/25 13:45	05/06/25 14:11	1
4,6-Dinitro-2-methylphenol	ND		440	220	ug/Kg	☼	05/02/25 13:45	05/06/25 14:11	1
4-Bromophenyl phenyl ether	ND		220	32	ug/Kg	☼	05/02/25 13:45	05/06/25 14:11	1
4-Chloro-3-methylphenol	ND		220	56	ug/Kg	☼	05/02/25 13:45	05/06/25 14:11	1
4-Chloroaniline	ND		220	56	ug/Kg	☼	05/02/25 13:45	05/06/25 14:11	1
4-Chlorophenyl phenyl ether	ND		220	28	ug/Kg	☼	05/02/25 13:45	05/06/25 14:11	1
4-Methylphenol	ND		440	26	ug/Kg	☼	05/02/25 13:45	05/06/25 14:11	1
4-Nitroaniline	ND		440	120	ug/Kg	☼	05/02/25 13:45	05/06/25 14:11	1
4-Nitrophenol	ND		440	160	ug/Kg	☼	05/02/25 13:45	05/06/25 14:11	1
Acenaphthene	ND		220	33	ug/Kg	☼	05/02/25 13:45	05/06/25 14:11	1
Acenaphthylene	ND		220	29	ug/Kg	☼	05/02/25 13:45	05/06/25 14:11	1
Acetophenone	ND		220	30	ug/Kg	☼	05/02/25 13:45	05/06/25 14:11	1
Anthracene	**68**	**J**	220	56	ug/Kg	☼	05/02/25 13:45	05/06/25 14:11	1
Atrazine	ND		220	78	ug/Kg	☼	05/02/25 13:45	05/06/25 14:11	1
Benzaldehyde	ND		220	180	ug/Kg	☼	05/02/25 13:45	05/06/25 14:11	1
Benzo[a]anthracene	**160**	**J**	220	22	ug/Kg	☼	05/02/25 13:45	05/06/25 14:11	1

Client: Roux Environmental Engineering and Geology DPC
Job ID: 480-229138-1
Project/Site: BCP RI - 619 Exchange Street Site

Client Sample ID: SB-11 0.25-2Ft
Lab Sample ID: 480-229138-1
Date Collected: 05/01/25 10:00
Matrix: Solid
Date Received: 05/01/25 15:40
Percent Solids: 75.2

Method: SW846 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[a]pyrene	120	J	220	33	ug/Kg	☼	05/02/25 13:45	05/06/25 14:11	1
Benzo[b]fluoranthene	200	J	220	36	ug/Kg	☼	05/02/25 13:45	05/06/25 14:11	1
Benzo[g,h,i]perylene	160	J	220	24	ug/Kg	☼	05/02/25 13:45	05/06/25 14:11	1
Benzo[k]fluoranthene	76	J	220	29	ug/Kg	☼	05/02/25 13:45	05/06/25 14:11	1
Biphenyl	ND		220	33	ug/Kg	☼	05/02/25 13:45	05/06/25 14:11	1
bis (2-chloroisopropyl) ether	ND		220	45	ug/Kg	☼	05/02/25 13:45	05/06/25 14:11	1
Bis(2-chloroethoxy)methane	ND		220	48	ug/Kg	☼	05/02/25 13:45	05/06/25 14:11	1
Bis(2-chloroethyl)ether	ND		220	29	ug/Kg	☼	05/02/25 13:45	05/06/25 14:11	1
Bis(2-ethylhexyl) phthalate	ND		220	77	ug/Kg	☼	05/02/25 13:45	05/06/25 14:11	1
Butyl benzyl phthalate	ND		220	37	ug/Kg	☼	05/02/25 13:45	05/06/25 14:11	1
Caprolactam	ND		220	67	ug/Kg	☼	05/02/25 13:45	05/06/25 14:11	1
Carbazole	28	J	220	26	ug/Kg	☼	05/02/25 13:45	05/06/25 14:11	1
Chrysene	200	J	220	50	ug/Kg	☼	05/02/25 13:45	05/06/25 14:11	1
Dibenz(a,h)anthracene	ND		220	40	ug/Kg	☼	05/02/25 13:45	05/06/25 14:11	1
Dibenzofuran	39	J	220	26	ug/Kg	☼	05/02/25 13:45	05/06/25 14:11	1
Diethyl phthalate	ND		220	29	ug/Kg	☼	05/02/25 13:45	05/06/25 14:11	1
Dimethyl phthalate	ND		220	26	ug/Kg	☼	05/02/25 13:45	05/06/25 14:11	1
Di-n-butyl phthalate	ND		220	38	ug/Kg	☼	05/02/25 13:45	05/06/25 14:11	1
Di-n-octyl phthalate	ND		220	26	ug/Kg	☼	05/02/25 13:45	05/06/25 14:11	1
Fluoranthene	330		220	24	ug/Kg	☼	05/02/25 13:45	05/06/25 14:11	1
Fluorene	33	J	220	26	ug/Kg	☼	05/02/25 13:45	05/06/25 14:11	1
Hexachlorobenzene	ND		220	30	ug/Kg	☼	05/02/25 13:45	05/06/25 14:11	1
Hexachlorobutadiene	ND		220	33	ug/Kg	☼	05/02/25 13:45	05/06/25 14:11	1
Hexachlorocyclopentadiene	ND		220	30	ug/Kg	☼	05/02/25 13:45	05/06/25 14:11	1
Hexachloroethane	ND		220	29	ug/Kg	☼	05/02/25 13:45	05/06/25 14:11	1
Indeno[1,2,3-cd]pyrene	99	J	220	28	ug/Kg	☼	05/02/25 13:45	05/06/25 14:11	1
Isophorone	ND		220	48	ug/Kg	☼	05/02/25 13:45	05/06/25 14:11	1
Naphthalene	69	J	220	29	ug/Kg	☼	05/02/25 13:45	05/06/25 14:11	1
Nitrobenzene	ND		220	25	ug/Kg	☼	05/02/25 13:45	05/06/25 14:11	1
N-Nitrosodi-n-propylamine	ND		220	38	ug/Kg	☼	05/02/25 13:45	05/06/25 14:11	1
N-Nitrosodiphenylamine	ND		220	180	ug/Kg	☼	05/02/25 13:45	05/06/25 14:11	1
Pentachlorophenol	ND		440	220	ug/Kg	☼	05/02/25 13:45	05/06/25 14:11	1
Phenanthrene	340		220	33	ug/Kg	☼	05/02/25 13:45	05/06/25 14:11	1
Phenol	ND		220	34	ug/Kg	☼	05/02/25 13:45	05/06/25 14:11	1
Pyrene	270		220	26	ug/Kg	☼	05/02/25 13:45	05/06/25 14:11	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Unknown	*3500*	*T J*	*ug/Kg*	☼	*1.88*	*N/A*	*05/02/25 13:45*	*05/06/25 14:11*	*1*
Unknown	*5500*	*T J*	*ug/Kg*	☼	*1.99*	*N/A*	*05/02/25 13:45*	*05/06/25 14:11*	*1*
Unknown	*240*	*T J*	*ug/Kg*	☼	*2.14*	*N/A*	*05/02/25 13:45*	*05/06/25 14:11*	*1*
Hexanal	*210*	*T J N*	*ug/Kg*	☼	*2.80*	*66-25-1*	*05/02/25 13:45*	*05/06/25 14:11*	*1*
Unknown	*1600*	*T J*	*ug/Kg*	☼	*3.45*	*N/A*	*05/02/25 13:45*	*05/06/25 14:11*	*1*
Unknown	*840*	*T J*	*ug/Kg*	☼	*9.62*	*N/A*	*05/02/25 13:45*	*05/06/25 14:11*	*1*
Heptadecane, 2,6-dimethyl-	*210*	*T J N*	*ug/Kg*	☼	*10.44*	*54105-67-8*	*05/02/25 13:45*	*05/06/25 14:11*	*1*
Anthracene, 2-methyl-	*190*	*T J N*	*ug/Kg*	☼	*11.46*	*613-12-7*	*05/02/25 13:45*	*05/06/25 14:11*	*1*
Unknown	*220*	*T J*	*ug/Kg*	☼	*11.54*	*N/A*	*05/02/25 13:45*	*05/06/25 14:11*	*1*
Heptadecane	*220*	*T J N*	*ug/Kg*	☼	*13.23*	*629-78-7*	*05/02/25 13:45*	*05/06/25 14:11*	*1*
Nonadecane	*280*	*T J N*	*ug/Kg*	☼	*13.77*	*629-92-5*	*05/02/25 13:45*	*05/06/25 14:11*	*1*
Eicosane	*200*	*T J N*	*ug/Kg*	☼	*14.27*	*112-95-8*	*05/02/25 13:45*	*05/06/25 14:11*	*1*

Client Sample ID: SB-11 0.25-2Ft
Lab Sample ID: 480-229138-1
Date Collected: 05/01/25 10:00
Matrix: Solid
Date Received: 05/01/25 15:40
Percent Solids: 75.2

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol (Surr)	92		26 - 143	05/02/25 13:45	05/06/25 14:11	1
2-Fluorobiphenyl (Surr)	88		50 - 121	05/02/25 13:45	05/06/25 14:11	1
2-Fluorophenol (Surr)	76		36 - 120	05/02/25 13:45	05/06/25 14:11	1
Nitrobenzene-d5 (Surr)	83		40 - 121	05/02/25 13:45	05/06/25 14:11	1
Phenol-d5 (Surr)	81		41 - 120	05/02/25 13:45	05/06/25 14:11	1
p-Terphenyl-d14 (Surr)	91		46 - 143	05/02/25 13:45	05/06/25 14:11	1

Method: SW846 8081B - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	**4.6**	**J**	21	4.1	ug/Kg	☼	05/02/25 06:59	05/05/25 13:23	5
4,4'-DDE	ND		21	4.4	ug/Kg	☼	05/02/25 06:59	05/05/25 13:23	5
4,4'-DDT	ND		21	4.9	ug/Kg	☼	05/02/25 06:59	05/05/25 13:23	5
Aldrin	ND		21	5.2	ug/Kg	☼	05/02/25 06:59	05/05/25 13:23	5
alpha-BHC	ND		21	3.8	ug/Kg	☼	05/02/25 06:59	05/05/25 13:23	5
beta-BHC	ND		21	3.8	ug/Kg	☼	05/02/25 06:59	05/05/25 13:23	5
cis-Chlordane	ND		21	10	ug/Kg	☼	05/02/25 06:59	05/05/25 13:23	5
delta-BHC	ND		21	3.9	ug/Kg	☼	05/02/25 06:59	05/05/25 13:23	5
Dieldrin	ND		21	5.1	ug/Kg	☼	05/02/25 06:59	05/05/25 13:23	5
Endosulfan I	ND		21	4.0	ug/Kg	☼	05/02/25 06:59	05/05/25 13:23	5
Endosulfan II	ND		21	3.8	ug/Kg	☼	05/02/25 06:59	05/05/25 13:23	5
Endosulfan sulfate	ND		21	3.9	ug/Kg	☼	05/02/25 06:59	05/05/25 13:23	5
Endrin	ND		21	4.2	ug/Kg	☼	05/02/25 06:59	05/05/25 13:23	5
Endrin aldehyde	**8.9**	**J**	21	5.4	ug/Kg	☼	05/02/25 06:59	05/05/25 13:23	5
Endrin ketone	ND		21	5.2	ug/Kg	☼	05/02/25 06:59	05/05/25 13:23	5
gamma-BHC (Lindane)	**6.5**	**J**	21	3.9	ug/Kg	☼	05/02/25 06:59	05/05/25 13:23	5
Heptachlor	ND		21	4.6	ug/Kg	☼	05/02/25 06:59	05/05/25 13:23	5
Heptachlor epoxide	ND		21	5.4	ug/Kg	☼	05/02/25 06:59	05/05/25 13:23	5
Methoxychlor	**23**	**B**	21	4.3	ug/Kg	☼	05/02/25 06:59	05/05/25 13:23	5
Toxaphene	ND		210	120	ug/Kg	☼	05/02/25 06:59	05/05/25 13:23	5
trans-Chlordane	ND		21	6.7	ug/Kg	☼	05/02/25 06:59	05/05/25 13:23	5

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
DCB Decachlorobiphenyl	165	S1+	45 - 120	05/02/25 06:59	05/05/25 13:23	5
DCB Decachlorobiphenyl	305	S1+	45 - 120	05/02/25 06:59	05/05/25 13:23	5
Tetrachloro-m-xylene	158	S1+	30 - 124	05/02/25 06:59	05/05/25 13:23	5
Tetrachloro-m-xylene	77		30 - 124	05/02/25 06:59	05/05/25 13:23	5

Method: SW846 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		0.29	0.057	mg/Kg	☼	05/05/25 06:46	05/06/25 11:42	1
PCB-1221	ND		0.29	0.057	mg/Kg	☼	05/05/25 06:46	05/06/25 11:42	1
PCB-1232	ND		0.29	0.057	mg/Kg	☼	05/05/25 06:46	05/06/25 11:42	1
PCB-1242	ND		0.29	0.057	mg/Kg	☼	05/05/25 06:46	05/06/25 11:42	1
PCB-1248	ND		0.29	0.057	mg/Kg	☼	05/05/25 06:46	05/06/25 11:42	1
PCB-1254	ND		0.29	0.14	mg/Kg	☼	05/05/25 06:46	05/06/25 11:42	1
PCB-1260	ND		0.29	0.14	mg/Kg	☼	05/05/25 06:46	05/06/25 11:42	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
DCB Decachlorobiphenyl	96		65 - 174	05/05/25 06:46	05/06/25 11:42	1
DCB Decachlorobiphenyl	95		65 - 174	05/05/25 06:46	05/06/25 11:42	1
Tetrachloro-m-xylene	93		60 - 154	05/05/25 06:46	05/06/25 11:42	1

Client Sample ID: SB-11 0.25-2Ft
Lab Sample ID: 480-229138-1
Date Collected: 05/01/25 10:00
Matrix: Solid
Date Received: 05/01/25 15:40
Percent Solids: 75.2

Method: SW846 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography (Continued)

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*95*		*60 - 154*	*05/05/25 06:46*	*05/06/25 11:42*	*1*

Method: SW846 8151A - Herbicides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-T	ND		22	7.0	ug/Kg	☼	05/06/25 06:53	05/09/25 15:06	1
2,4-D	ND		22	14	ug/Kg	☼	05/06/25 06:53	05/09/25 15:06	1
Dichlorprop	ND		22	11	ug/Kg	☼	05/06/25 06:53	05/09/25 15:06	1
Pentachlorophenol	**35**		22	7.1	ug/Kg	☼	05/06/25 06:53	05/09/25 15:06	1
Picloram	ND		22	9.4	ug/Kg	☼	05/06/25 06:53	05/09/25 15:06	1
Silvex (2,4,5-TP)	ND		22	7.9	ug/Kg	☼	05/06/25 06:53	05/09/25 15:06	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4-Dichlorophenylacetic acid	*82*		*28 - 129*	*05/06/25 06:53*	*05/09/25 15:06*	*1*
2,4-Dichlorophenylacetic acid	*77*		*28 - 129*	*05/06/25 06:53*	*05/09/25 15:06*	*1*

Method: EPA Draft-3 1633 - Per- and Polyfluoroalkyl Substances by LC/MS/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)	ND		0.68	0.17	ug/Kg	☼	05/05/25 14:38	05/07/25 02:58	1
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2 FTS)	ND		0.68	0.17	ug/Kg	☼	05/05/25 14:38	05/07/25 02:58	1
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2 FTS)	ND		0.68	0.17	ug/Kg	☼	05/05/25 14:38	05/07/25 02:58	1
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2 FTS)	ND		0.68	0.17	ug/Kg	☼	05/05/25 14:38	05/07/25 02:58	1
3-Perfluoroheptylpropanoic acid (7:3 FTCA)	ND		4.2	1.1	ug/Kg	☼	05/05/25 14:38	05/07/25 02:58	1
3-Perfluoropentylpropanoic acid (5:3 FTCA)	ND		4.2	1.1	ug/Kg	☼	05/05/25 14:38	05/07/25 02:58	1
3-Perfluoropropylpropanoic acid (3:3 FTCA)	ND		0.84	0.21	ug/Kg	☼	05/05/25 14:38	05/07/25 02:58	1
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	ND		0.68	0.17	ug/Kg	☼	05/05/25 14:38	05/07/25 02:58	1
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9Cl-PF3ONS)	ND		0.68	0.17	ug/Kg	☼	05/05/25 14:38	05/07/25 02:58	1
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA)	ND		0.68	0.17	ug/Kg	☼	05/05/25 14:38	05/07/25 02:58	1
N-ethylperfluorooctane sulfonamide (NEtFOSA)	ND		0.17	0.042	ug/Kg	☼	05/05/25 14:38	05/07/25 02:58	1
N-ethylperfluorooctane sulfonamidoethanol (NEtFOSE)	ND		1.7	0.42	ug/Kg	☼	05/05/25 14:38	05/07/25 02:58	1
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	ND		0.17	0.042	ug/Kg	☼	05/05/25 14:38	05/07/25 02:58	1
N-methylperfluorooctane sulfonamide (NMeFOSA)	ND		0.17	0.042	ug/Kg	☼	05/05/25 14:38	05/07/25 02:58	1
N-methylperfluorooctane sulfonamidoethanol (NMeFOSE)	ND		1.7	0.42	ug/Kg	☼	05/05/25 14:38	05/07/25 02:58	1
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	ND		0.17	0.042	ug/Kg	☼	05/05/25 14:38	05/07/25 02:58	1
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	ND		0.34	0.084	ug/Kg	☼	05/05/25 14:38	05/07/25 02:58	1
Perfluoro (2-ethoxyethane) sulfonic acid (PFEESA)	ND		0.34	0.084	ug/Kg	☼	05/05/25 14:38	05/07/25 02:58	1

Client Sample ID: SB-11 0.25-2Ft
Lab Sample ID: 480-229138-1
Date Collected: 05/01/25 10:00
Matrix: Solid
Date Received: 05/01/25 15:40
Percent Solids: 75.2

Method: EPA Draft-3 1633 - Per- and Polyfluoroalkyl Substances by LC/MS/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluoro-3-methoxypropanoic acid (PFMPA)	ND		0.34	0.084	ug/Kg	☼	05/05/25 14:38	05/07/25 02:58	1
Perfluoro-4-methoxybutanoic acid (PFMBA)	ND		0.34	0.084	ug/Kg	☼	05/05/25 14:38	05/07/25 02:58	1
Perfluorobutanesulfonic acid (PFBS)	ND		0.17	0.042	ug/Kg	☼	05/05/25 14:38	05/07/25 02:58	1
Perfluorobutanoic acid (PFBA)	ND		0.68	0.17	ug/Kg	☼	05/05/25 14:38	05/07/25 02:58	1
Perfluorodecanesulfonic acid (PFDS)	ND		0.17	0.042	ug/Kg	☼	05/05/25 14:38	05/07/25 02:58	1
Perfluorodecanoic acid (PFDA)	ND		0.17	0.042	ug/Kg	☼	05/05/25 14:38	05/07/25 02:58	1
Perfluorododecanesulfonic acid (PFDoS)	ND		0.17	0.042	ug/Kg	☼	05/05/25 14:38	05/07/25 02:58	1
Perfluorododecanoic acid (PFDoA)	ND		0.17	0.042	ug/Kg	☼	05/05/25 14:38	05/07/25 02:58	1
Perfluoroheptanesulfonic acid (PFHpS)	ND		0.17	0.042	ug/Kg	☼	05/05/25 14:38	05/07/25 02:58	1
Perfluoroheptanoic acid (PFHpA)	ND		0.17	0.042	ug/Kg	☼	05/05/25 14:38	05/07/25 02:58	1
Perfluorohexanesulfonic acid (PFHxS)	ND		0.17	0.042	ug/Kg	☼	05/05/25 14:38	05/07/25 02:58	1
Perfluorohexanoic acid (PFHxA)	ND		0.17	0.042	ug/Kg	☼	05/05/25 14:38	05/07/25 02:58	1
Perfluorononanesulfonic acid (PFNS)	ND		0.17	0.042	ug/Kg	☼	05/05/25 14:38	05/07/25 02:58	1
Perfluorononanoic acid (PFNA)	ND		0.17	0.042	ug/Kg	☼	05/05/25 14:38	05/07/25 02:58	1
Perfluorooctanesulfonamide (PFOSA)	ND		0.17	0.042	ug/Kg	☼	05/05/25 14:38	05/07/25 02:58	1
Perfluorooctanesulfonic acid (PFOS)	ND		0.17	0.042	ug/Kg	☼	05/05/25 14:38	05/07/25 02:58	1
Perfluorooctanoic acid (PFOA)	ND		0.17	0.042	ug/Kg	☼	05/05/25 14:38	05/07/25 02:58	1
Perfluoropentanesulfonic acid (PFPeS)	ND		0.17	0.042	ug/Kg	☼	05/05/25 14:38	05/07/25 02:58	1
Perfluoropentanoic acid (PFPeA)	ND		0.34	0.084	ug/Kg	☼	05/05/25 14:38	05/07/25 02:58	1
Perfluorotetradecanoic acid (PFTeDA)	ND		0.17	0.042	ug/Kg	☼	05/05/25 14:38	05/07/25 02:58	1
Perfluorotridecanoic acid (PFTrDA)	ND		0.17	0.042	ug/Kg	☼	05/05/25 14:38	05/07/25 02:58	1
Perfluoroundecanoic acid (PFUnA)	ND		0.17	0.042	ug/Kg	☼	05/05/25 14:38	05/07/25 02:58	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C2 PFTeDA	*75.3*		*20 - 150*	*05/05/25 14:38*	*05/07/25 02:58*	*1*
13C2-PFDoDA	*77.2*		*20 - 150*	*05/05/25 14:38*	*05/07/25 02:58*	*1*
13C3 HFPO-DA	*80.8*		*20 - 150*	*05/05/25 14:38*	*05/07/25 02:58*	*1*
13C3 PFBS	*72.3*		*20 - 150*	*05/05/25 14:38*	*05/07/25 02:58*	*1*
13C3 PFHxS	*69.1*		*20 - 150*	*05/05/25 14:38*	*05/07/25 02:58*	*1*
13C4 PFBA	*75.1*		*20 - 150*	*05/05/25 14:38*	*05/07/25 02:58*	*1*
13C4 PFHpA	*78.8*		*20 - 150*	*05/05/25 14:38*	*05/07/25 02:58*	*1*
13C5 PFHxA	*74.2*		*20 - 150*	*05/05/25 14:38*	*05/07/25 02:58*	*1*
13C5 PFPeA	*83.5*		*20 - 150*	*05/05/25 14:38*	*05/07/25 02:58*	*1*
13C6 PFDA	*76.0*		*20 - 150*	*05/05/25 14:38*	*05/07/25 02:58*	*1*
13C7 PFUnA	*72.4*		*20 - 150*	*05/05/25 14:38*	*05/07/25 02:58*	*1*
13C8 PFOA	*79.3*		*20 - 150*	*05/05/25 14:38*	*05/07/25 02:58*	*1*
13C8 PFOS	*68.1*		*20 - 150*	*05/05/25 14:38*	*05/07/25 02:58*	*1*
13C8 PFOSA	*79.2*		*20 - 150*	*05/05/25 14:38*	*05/07/25 02:58*	*1*
13C9 PFNA	*73.3*		*20 - 150*	*05/05/25 14:38*	*05/07/25 02:58*	*1*
D3-NMeFOSA	*70.3*		*20 - 150*	*05/05/25 14:38*	*05/07/25 02:58*	*1*
d3-NMeFOSAA	*66.0*		*20 - 150*	*05/05/25 14:38*	*05/07/25 02:58*	*1*
d5-NEtFOSAA	*116*		*20 - 150*	*05/05/25 14:38*	*05/07/25 02:58*	*1*
d5-NEtPFOSA	*63.7*		*20 - 150*	*05/05/25 14:38*	*05/07/25 02:58*	*1*
d7-N-MeFOSE-M	*59.3*		*20 - 150*	*05/05/25 14:38*	*05/07/25 02:58*	*1*
d9-N-EtFOSE-M	*56.2*		*20 - 150*	*05/05/25 14:38*	*05/07/25 02:58*	*1*
M2-4:2 FTS	*153*	**5+*	*20 - 150*	*05/05/25 14:38*	*05/07/25 02:58*	*1*

Client Sample ID: SB-11 0.25-2Ft
Lab Sample ID: 480-229138-1
Date Collected: 05/01/25 10:00
Matrix: Solid
Date Received: 05/01/25 15:40
Percent Solids: 75.2

Method: EPA Draft-3 1633 - Per- and Polyfluoroalkyl Substances by LC/MS/MS (Continued)

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
M2-6:2 FTS	*76.0*		*20 - 150*	*05/05/25 14:38*	*05/07/25 02:58*	*1*
M2-8:2 FTS	*69.9*		*20 - 150*	*05/05/25 14:38*	*05/07/25 02:58*	*1*

Method: SW846 6010D - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**4940**		12.8	11.1	mg/Kg	☼	05/02/25 13:52	05/05/25 11:34	1
Antimony	ND		19.3	0.68	mg/Kg	☼	05/02/25 13:52	05/05/25 11:34	1
Arsenic	**5.4**		2.6	1.1	mg/Kg	☼	05/02/25 13:52	05/05/25 11:34	1
Barium	**139**		0.64	0.18	mg/Kg	☼	05/02/25 13:52	05/05/25 11:34	1
Beryllium	**0.51**		0.26	0.051	mg/Kg	☼	05/02/25 13:52	05/05/25 11:34	1
Cadmium	**0.25**	**J**	0.26	0.090	mg/Kg	☼	05/02/25 13:52	05/05/25 11:34	1
Calcium	**9530**		64.2	34.7	mg/Kg	☼	05/02/25 13:52	05/05/25 11:34	1
Chromium	**8.4**		0.64	0.46	mg/Kg	☼	05/02/25 13:52	05/05/25 11:34	1
Cobalt	**4.2**		0.64	0.13	mg/Kg	☼	05/02/25 13:52	05/05/25 11:34	1
Copper	**167**		1.3	0.73	mg/Kg	☼	05/02/25 13:52	05/05/25 11:34	1
Iron	**13300**		12.8	10.9	mg/Kg	☼	05/02/25 13:52	05/05/25 11:34	1
Lead	**145**		1.3	0.59	mg/Kg	☼	05/02/25 13:52	05/05/25 11:34	1
Magnesium	**1530**		25.7	10.9	mg/Kg	☼	05/02/25 13:52	05/05/25 11:34	1
Manganese	**80.2**		1.3	0.36	mg/Kg	☼	05/02/25 13:52	05/05/25 11:34	1
Nickel	**10.6**		6.4	0.32	mg/Kg	☼	05/02/25 13:52	05/05/25 11:34	1
Potassium	**821**		38.5	31.1	mg/Kg	☼	05/02/25 13:52	05/05/25 11:34	1
Selenium	**4.6**	**J**	5.1	1.0	mg/Kg	☼	05/02/25 13:52	05/05/25 11:34	1
Silver	ND	^5-	0.77	0.26	mg/Kg	☼	05/02/25 13:52	05/05/25 11:34	1
Sodium	**155**	**J**	180	78.8	mg/Kg	☼	05/02/25 13:52	05/05/25 11:34	1
Thallium	ND		7.7	0.98	mg/Kg	☼	05/02/25 13:52	05/05/25 11:34	1
Vanadium	**10.9**		0.64	0.17	mg/Kg	☼	05/02/25 13:52	05/05/25 11:34	1
Zinc	**171**		2.6	1.3	mg/Kg	☼	05/02/25 13:52	05/05/25 11:34	1

Method: SW846 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.46**		0.025	0.0058	mg/Kg	☼	05/05/25 08:53	05/05/25 14:50	1

Surrogate Summary

Client: Roux Environmental Engineering and Geology DPC
Job ID: 480-229138-1
Project/Site: BCP RI - 619 Exchange Street Site

Method: 8260C - Volatile Organic Compounds by GC/MS

Matrix: Solid **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)			
		DCA	BFB	DBFM	TOL
Lab Sample ID	Client Sample ID	(64-126)	(72-126)	(60-140)	(71-125)
480-229138-1	SB-11 0.25-2Ft	108	99	104	97
LCS 480-745043/1-A	Lab Control Sample	101	95	101	98
LCSD 480-745043/2-A	Lab Control Sample Dup	102	96	103	97
MB 480-745043/3-A	Method Blank	108	99	105	96

Surrogate Legend

DCA = 1,2-Dichloroethane-d4 (Surr)
BFB = 4-Bromofluorobenzene (Surr)
DBFM = Dibromofluoromethane (Surr)
TOL = Toluene-d8 (Surr)

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Matrix: Solid **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)					
		TBP	FBP	2FP	NBZ	PHL	TPHd14
Lab Sample ID	Client Sample ID	(26-143)	(50-121)	(36-120)	(40-121)	(41-120)	(46-143)
480-229138-1	SB-11 0.25-2Ft	92	88	76	83	81	91
LCS 480-745124/2-A	Lab Control Sample	106	93	84	89	91	99
MB 480-745124/1-A	Method Blank	92	93	82	85	87	99

Surrogate Legend

TBP = 2,4,6-Tribromophenol (Surr)
FBP = 2-Fluorobiphenyl (Surr)
2FP = 2-Fluorophenol (Surr)
NBZ = Nitrobenzene-d5 (Surr)
PHL = Phenol-d5 (Surr)
TPHd14 = p-Terphenyl-d14 (Surr)

Method: 8081B - Organochlorine Pesticides (GC)

Matrix: Solid **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)			
		DCBP1	DCBP2	TCX1	TCX2
Lab Sample ID	Client Sample ID	(45-120)	(45-120)	(30-124)	(30-124)
480-229138-1	SB-11 0.25-2Ft	165 S1+	305 S1+	158 S1+	77
LCS 480-745050/2-A	Lab Control Sample	87	88	67	64
MB 480-745050/1-A	Method Blank	83	79	65	60

Surrogate Legend

DCBP = DCB Decachlorobiphenyl
TCX = Tetrachloro-m-xylene

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Matrix: Solid **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)			
		DCBP1	DCBP2	TCX1	TCX2
Lab Sample ID	Client Sample ID	(65-174)	(65-174)	(60-154)	(60-154)
480-229138-1	SB-11 0.25-2Ft	96	95	93	95
LCS 480-745174/2-A	Lab Control Sample	161	150	148	150
MB 480-745174/1-A	Method Blank	138	126	120	119

Surrogate Summary

Client: Roux Environmental Engineering and Geology DPC
Job ID: 480-229138-1
Project/Site: BCP RI - 619 Exchange Street Site

Surrogate Legend

DCBP = DCB Decachlorobiphenyl
TCX = Tetrachloro-m-xylene

Method: 8151A - Herbicides (GC)

Matrix: Solid **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)											
		DCPAA1	DCPAA2										
Lab Sample ID	Client Sample ID	(28-129)	(28-129)										
480-229138-1	SB-11 0.25-2Ft	82	77										
LCS 480-745263/2-A	Lab Control Sample	74	71										
MB 480-745263/1-A	Method Blank	74	72										

Surrogate Legend

DCPAA = 2,4-Dichlorophenylacetic acid

Isotope Dilution Summary

Client: Roux Environmental Engineering and Geology DPC
Job ID: 480-229138-1
Project/Site: BCP RI - 619 Exchange Street Site

Method: Draft-3 1633 - Per- and Polyfluoroalkyl Substances by LC/MS/MS

Matrix: Solid **Prep Type: Total/NA**

		Percent Isotope Dilution Recovery (Acceptance Limits)							
		PFTDA	PFDoDA	HFPODA	C3PFBS	C3PFHS	PFBA	C4PFHA	13C5PHA
Lab Sample ID	Client Sample ID	(20-150)	(20-150)	(20-150)	(20-150)	(20-150)	(20-150)	(20-150)	(20-150)
480-229138-1	SB-11 0.25-2Ft	75.3	77.2	80.8	72.3	69.1	75.1	78.8	74.2
LCS 240-654795/3-A	Lab Control Sample	79.3	84.3	91.9	90.0	85.2	89.3	91.3	90.2
LLCS 240-654795/2-A	Lab Control Sample	87.3	82.9	102	95.0	94.4	94.0	102	100
MB 240-654795/1-A	Method Blank	78.6	81.4	92.8	93.4	88.5	92.1	95.0	96.1

		Percent Isotope Dilution Recovery (Acceptance Limits)							
		PFPeA	C6PFDA	13C7PUA	C8PFOA	C8PFOS	PFOSA	C9PFNA	d3NMFSA
Lab Sample ID	Client Sample ID	(20-150)	(20-150)	(20-150)	(20-150)	(20-150)	(20-150)	(20-150)	(20-150)
480-229138-1	SB-11 0.25-2Ft	83.5	76.0	72.4	79.3	68.1	79.2	73.3	70.3
LCS 240-654795/3-A	Lab Control Sample	94.0	86.5	82.0	86.9	84.9	84.3	87.1	78.2
LLCS 240-654795/2-A	Lab Control Sample	106	93.4	84.6	95.8	89.9	84.3	92.0	76.9
MB 240-654795/1-A	Method Blank	98.8	87.5	83.4	95.4	85.8	84.3	92.3	73.7

		Percent Isotope Dilution Recovery (Acceptance Limits)							
		d3NMFOS	d5NEFOS	d5NPFSA	NMFM	NEFM	M242FTS	M262FTS	M282FTS
Lab Sample ID	Client Sample ID	(20-150)	(20-150)	(20-150)	(20-150)	(20-150)	(20-150)	(20-150)	(20-150)
480-229138-1	SB-11 0.25-2Ft	66.0	116	63.7	59.3	56.2	153 *5+	76.0	69.9
LCS 240-654795/3-A	Lab Control Sample	80.2	143	66.6	61.6	53.1	89.2	86.0	83.1
LLCS 240-654795/2-A	Lab Control Sample	83.2	146	68.3	66.6	68.4	92.4	94.2	92.2
MB 240-654795/1-A	Method Blank	79.6	132	65.0	50.0	45.4	92.1	93.2	85.3

Surrogate Legend

PFTDA = 13C2 PFTeDA
PFDoDA = 13C2-PFDoDA
HFPODA = 13C3 HFPO-DA
C3PFBS = 13C3 PFBS
C3PFHS = 13C3 PFHxS
PFBA = 13C4 PFBA
C4PFHA = 13C4 PFHpA
13C5PHA = 13C5 PFHxA
PFPeA = 13C5 PFPeA
C6PFDA = 13C6 PFDA
13C7PUA = 13C7 PFUnA
C8PFOA = 13C8 PFOA
C8PFOS = 13C8 PFOS
PFOSA = 13C8 PFOSA
C9PFNA = 13C9 PFNA
d3NMFSA = D3-NMeFOSA
d3NMFOS = d3-NMeFOSAA
d5NEFOS = d5-NEtFOSAA
d5NPFSA = d5-NEtPFOSA
NMFM = d7-N-MeFOSE-M
NEFM = d9-N-EtFOSE-M
M242FTS = M2-4:2 FTS
M262FTS = M2-6:2 FTS
M282FTS = M2-8:2 FTS

Client: Roux Environmental Engineering and Geology DPC
Job ID: 480-229138-1
Project/Site: BCP RI - 619 Exchange Street Site

Method: 8260C - Volatile Organic Compounds by GC/MS

Lab Sample ID: MB 480-745043/3-A
Matrix: Solid
Analysis Batch: 745044

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 745043

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		5.0	0.36	ug/Kg		05/01/25 17:40	05/01/25 21:35	1
1,1,2,2-Tetrachloroethane	ND		5.0	0.81	ug/Kg		05/01/25 17:40	05/01/25 21:35	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		5.0	1.1	ug/Kg		05/01/25 17:40	05/01/25 21:35	1
1,1,2-Trichloroethane	ND		5.0	0.65	ug/Kg		05/01/25 17:40	05/01/25 21:35	1
1,1-Dichloroethane	ND		5.0	0.61	ug/Kg		05/01/25 17:40	05/01/25 21:35	1
1,1-Dichloroethene	ND		5.0	0.61	ug/Kg		05/01/25 17:40	05/01/25 21:35	1
1,2,4-Trichlorobenzene	ND		5.0	0.30	ug/Kg		05/01/25 17:40	05/01/25 21:35	1
1,2,4-Trimethylbenzene	ND		5.0	0.96	ug/Kg		05/01/25 17:40	05/01/25 21:35	1
1,2-Dibromo-3-Chloropropane	ND		5.0	2.5	ug/Kg		05/01/25 17:40	05/01/25 21:35	1
1,2-Dibromoethane	ND		5.0	0.64	ug/Kg		05/01/25 17:40	05/01/25 21:35	1
1,2-Dichlorobenzene	ND		5.0	0.39	ug/Kg		05/01/25 17:40	05/01/25 21:35	1
1,2-Dichloroethane	ND		5.0	0.25	ug/Kg		05/01/25 17:40	05/01/25 21:35	1
1,2-Dichloropropane	ND		5.0	2.5	ug/Kg		05/01/25 17:40	05/01/25 21:35	1
1,3,5-Trimethylbenzene	ND		5.0	0.32	ug/Kg		05/01/25 17:40	05/01/25 21:35	1
1,3-Dichlorobenzene	ND		5.0	0.26	ug/Kg		05/01/25 17:40	05/01/25 21:35	1
1,4-Dichlorobenzene	ND		5.0	0.70	ug/Kg		05/01/25 17:40	05/01/25 21:35	1
2-Butanone (MEK)	ND		25	1.8	ug/Kg		05/01/25 17:40	05/01/25 21:35	1
2-Hexanone	ND		25	2.5	ug/Kg		05/01/25 17:40	05/01/25 21:35	1
4-Isopropyltoluene	ND		5.0	0.40	ug/Kg		05/01/25 17:40	05/01/25 21:35	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.6	ug/Kg		05/01/25 17:40	05/01/25 21:35	1
Acetone	ND		25	4.2	ug/Kg		05/01/25 17:40	05/01/25 21:35	1
Benzene	ND		5.0	0.25	ug/Kg		05/01/25 17:40	05/01/25 21:35	1
Bromodichloromethane	ND		5.0	0.67	ug/Kg		05/01/25 17:40	05/01/25 21:35	1
Bromoform	ND		5.0	2.5	ug/Kg		05/01/25 17:40	05/01/25 21:35	1
Bromomethane	ND		5.0	0.45	ug/Kg		05/01/25 17:40	05/01/25 21:35	1
Carbon disulfide	ND		5.0	2.5	ug/Kg		05/01/25 17:40	05/01/25 21:35	1
Carbon tetrachloride	ND		5.0	0.48	ug/Kg		05/01/25 17:40	05/01/25 21:35	1
Chlorobenzene	ND		5.0	0.66	ug/Kg		05/01/25 17:40	05/01/25 21:35	1
Chloroethane	ND		5.0	1.1	ug/Kg		05/01/25 17:40	05/01/25 21:35	1
Chloroform	1.12	J	5.0	0.31	ug/Kg		05/01/25 17:40	05/01/25 21:35	1
Chloromethane	ND		5.0	0.30	ug/Kg		05/01/25 17:40	05/01/25 21:35	1
cis-1,2-Dichloroethene	ND		5.0	0.64	ug/Kg		05/01/25 17:40	05/01/25 21:35	1
cis-1,3-Dichloropropene	ND		5.0	0.72	ug/Kg		05/01/25 17:40	05/01/25 21:35	1
Cyclohexane	ND		5.0	0.70	ug/Kg		05/01/25 17:40	05/01/25 21:35	1
Dibromochloromethane	ND		5.0	0.64	ug/Kg		05/01/25 17:40	05/01/25 21:35	1
Dichlorodifluoromethane	ND		5.0	0.41	ug/Kg		05/01/25 17:40	05/01/25 21:35	1
Ethylbenzene	ND		5.0	0.35	ug/Kg		05/01/25 17:40	05/01/25 21:35	1
Isopropylbenzene	ND		5.0	0.75	ug/Kg		05/01/25 17:40	05/01/25 21:35	1
Methyl acetate	ND		25	3.0	ug/Kg		05/01/25 17:40	05/01/25 21:35	1
Methyl tert-butyl ether	ND		5.0	0.49	ug/Kg		05/01/25 17:40	05/01/25 21:35	1
Methylcyclohexane	ND		5.0	0.76	ug/Kg		05/01/25 17:40	05/01/25 21:35	1
Methylene Chloride	ND		5.0	2.3	ug/Kg		05/01/25 17:40	05/01/25 21:35	1
Naphthalene	ND		5.0	0.67	ug/Kg		05/01/25 17:40	05/01/25 21:35	1
n-Butylbenzene	ND		5.0	0.44	ug/Kg		05/01/25 17:40	05/01/25 21:35	1
N-Propylbenzene	ND		5.0	0.40	ug/Kg		05/01/25 17:40	05/01/25 21:35	1
sec-Butylbenzene	ND		5.0	0.44	ug/Kg		05/01/25 17:40	05/01/25 21:35	1
Styrene	ND		5.0	0.25	ug/Kg		05/01/25 17:40	05/01/25 21:35	1
tert-Butylbenzene	ND		5.0	0.52	ug/Kg		05/01/25 17:40	05/01/25 21:35	1

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: MB 480-745043/3-A
Matrix: Solid
Analysis Batch: 745044

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 745043

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Tetrachloroethene	ND		5.0	0.67	ug/Kg		05/01/25 17:40	05/01/25 21:35	1
Toluene	ND		5.0	0.38	ug/Kg		05/01/25 17:40	05/01/25 21:35	1
trans-1,2-Dichloroethene	ND		5.0	0.52	ug/Kg		05/01/25 17:40	05/01/25 21:35	1
trans-1,3-Dichloropropene	ND		5.0	2.2	ug/Kg		05/01/25 17:40	05/01/25 21:35	1
Trichloroethene	ND		5.0	1.1	ug/Kg		05/01/25 17:40	05/01/25 21:35	1
Trichlorofluoromethane	ND		5.0	0.47	ug/Kg		05/01/25 17:40	05/01/25 21:35	1
Vinyl chloride	ND		5.0	0.61	ug/Kg		05/01/25 17:40	05/01/25 21:35	1
Xylenes, Total	ND		10	0.84	ug/Kg		05/01/25 17:40	05/01/25 21:35	1

Tentatively Identified Compound	*MB Est. Result*	*MB Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/Kg*			*N/A*	*05/01/25 17:40*	*05/01/25 21:35*	*1*

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*108*		*64 - 126*	*05/01/25 17:40*	*05/01/25 21:35*	*1*
4-Bromofluorobenzene (Surr)	*99*		*72 - 126*	*05/01/25 17:40*	*05/01/25 21:35*	*1*
Dibromofluoromethane (Surr)	*105*		*60 - 140*	*05/01/25 17:40*	*05/01/25 21:35*	*1*
Toluene-d8 (Surr)	*96*		*71 - 125*	*05/01/25 17:40*	*05/01/25 21:35*	*1*

Lab Sample ID: LCS 480-745043/1-A
Matrix: Solid
Analysis Batch: 745044

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 745043

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
1,1,1-Trichloroethane	50.0	48.3		ug/Kg		97	77 - 121
1,1,2,2-Tetrachloroethane	50.0	45.6		ug/Kg		91	80 - 120
1,1,2-Trichloro-1,2,2-trifluoroethane	50.0	44.3		ug/Kg		89	60 - 140
1,1,2-Trichloroethane	50.0	45.9		ug/Kg		92	78 - 122
1,1-Dichloroethane	50.0	47.9		ug/Kg		96	73 - 126
1,1-Dichloroethene	50.0	45.7		ug/Kg		91	59 - 125
1,2,4-Trichlorobenzene	50.0	44.1		ug/Kg		88	64 - 120
1,2,4-Trimethylbenzene	50.0	46.1		ug/Kg		92	74 - 120
1,2-Dibromo-3-Chloropropane	50.0	47.1		ug/Kg		94	63 - 124
1,2-Dibromoethane	50.0	45.2		ug/Kg		90	78 - 120
1,2-Dichlorobenzene	50.0	43.8		ug/Kg		88	75 - 120
1,2-Dichloroethane	50.0	48.6		ug/Kg		97	77 - 122
1,2-Dichloropropane	50.0	48.1		ug/Kg		96	75 - 124
1,3,5-Trimethylbenzene	50.0	47.3		ug/Kg		95	74 - 120
1,3-Dichlorobenzene	50.0	44.6		ug/Kg		89	74 - 120
1,4-Dichlorobenzene	50.0	44.0		ug/Kg		88	73 - 120
2-Butanone (MEK)	250	267		ug/Kg		107	70 - 134
2-Hexanone	250	247		ug/Kg		99	59 - 130
4-Isopropyltoluene	50.0	47.0		ug/Kg		94	74 - 120
4-Methyl-2-pentanone (MIBK)	250	244		ug/Kg		98	65 - 133
Acetone	250	261		ug/Kg		105	61 - 137
Benzene	50.0	46.5		ug/Kg		93	79 - 127
Bromodichloromethane	50.0	48.0		ug/Kg		96	80 - 122
Bromoform	50.0	45.3		ug/Kg		91	68 - 126

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCS 480-745043/1-A
Matrix: Solid
Analysis Batch: 745044

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 745043

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Bromomethane			50.0	43.9		ug/Kg		88	37 - 149		
Carbon disulfide			50.0	43.0		ug/Kg		86	64 - 131		
Carbon tetrachloride			50.0	46.0		ug/Kg		92	75 - 135		
Chlorobenzene			50.0	44.7		ug/Kg		89	76 - 124		
Chloroethane			50.0	45.8		ug/Kg		92	69 - 135		
Chloroform			50.0	45.0		ug/Kg		90	80 - 120		
Chloromethane			50.0	43.6		ug/Kg		87	63 - 127		
cis-1,2-Dichloroethene			50.0	45.7		ug/Kg		91	81 - 120		
cis-1,3-Dichloropropene			50.0	49.2		ug/Kg		98	80 - 120		
Cyclohexane			50.0	47.2		ug/Kg		94	65 - 120		
Dibromochloromethane			50.0	46.6		ug/Kg		93	76 - 125		
Dichlorodifluoromethane			50.0	37.3		ug/Kg		75	57 - 142		
Ethylbenzene			50.0	44.5		ug/Kg		89	80 - 120		
Isopropylbenzene			50.0	47.5		ug/Kg		95	72 - 120		
Methyl acetate			100	96.0		ug/Kg		96	55 - 136		
Methyl tert-butyl ether			50.0	45.7		ug/Kg		91	63 - 125		
Methylcyclohexane			50.0	46.9		ug/Kg		94	60 - 140		
Methylene Chloride			50.0	48.6		ug/Kg		97	61 - 127		
Naphthalene			50.0	44.7		ug/Kg		89	38 - 137		
n-Butylbenzene			50.0	46.9		ug/Kg		94	70 - 120		
N-Propylbenzene			50.0	47.0		ug/Kg		94	70 - 130		
sec-Butylbenzene			50.0	47.5		ug/Kg		95	74 - 120		
Styrene			50.0	42.8		ug/Kg		86	80 - 120		
tert-Butylbenzene			50.0	48.4		ug/Kg		97	73 - 120		
Tetrachloroethene			50.0	44.6		ug/Kg		89	74 - 122		
Toluene			50.0	44.5		ug/Kg		89	74 - 128		
trans-1,2-Dichloroethene			50.0	45.8		ug/Kg		92	78 - 126		
trans-1,3-Dichloropropene			50.0	46.6		ug/Kg		93	73 - 123		
Trichloroethene			50.0	47.4		ug/Kg		95	77 - 129		
Trichlorofluoromethane			50.0	48.5		ug/Kg		97	65 - 146		
Vinyl chloride			50.0	44.9		ug/Kg		90	61 - 133		
Xylenes, Total			100	89.2		ug/Kg		89	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*101*		*64 - 126*
4-Bromofluorobenzene (Surr)	*95*		*72 - 126*
Dibromofluoromethane (Surr)	*101*		*60 - 140*
Toluene-d8 (Surr)	*98*		*71 - 125*

Lab Sample ID: LCSD 480-745043/2-A
Matrix: Solid
Analysis Batch: 745044

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 745043

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
1,1,1-Trichloroethane			50.0	45.2		ug/Kg		90	77 - 121	7	20
1,1,2,2-Tetrachloroethane			50.0	47.3		ug/Kg		95	80 - 120	4	20
1,1,2-Trichloro-1,2,2-trifluoroetha ne			50.0	43.4		ug/Kg		87	60 - 140	2	20
1,1,2-Trichloroethane			50.0	47.4		ug/Kg		95	78 - 122	3	20

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCSD 480-745043/2-A
Matrix: Solid
Analysis Batch: 745044

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 745043

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
1,1-Dichloroethane	50.0	46.5		ug/Kg		93	73 - 126	3	20
1,1-Dichloroethene	50.0	43.4		ug/Kg		87	59 - 125	5	20
1,2,4-Trichlorobenzene	50.0	45.1		ug/Kg		90	64 - 120	2	20
1,2,4-Trimethylbenzene	50.0	44.7		ug/Kg		89	74 - 120	3	20
1,2-Dibromo-3-Chloropropane	50.0	48.3		ug/Kg		97	63 - 124	3	20
1,2-Dibromoethane	50.0	47.4		ug/Kg		95	78 - 120	5	20
1,2-Dichlorobenzene	50.0	44.5		ug/Kg		89	75 - 120	2	20
1,2-Dichloroethane	50.0	50.1		ug/Kg		100	77 - 122	3	20
1,2-Dichloropropane	50.0	48.6		ug/Kg		97	75 - 124	1	20
1,3,5-Trimethylbenzene	50.0	45.8		ug/Kg		92	74 - 120	3	20
1,3-Dichlorobenzene	50.0	44.3		ug/Kg		89	74 - 120	1	20
1,4-Dichlorobenzene	50.0	44.4		ug/Kg		89	73 - 120	1	20
2-Butanone (MEK)	250	277		ug/Kg		111	70 - 134	4	20
2-Hexanone	250	259		ug/Kg		104	59 - 130	5	20
4-Isopropyltoluene	50.0	45.3		ug/Kg		91	74 - 120	4	20
4-Methyl-2-pentanone (MIBK)	250	255		ug/Kg		102	65 - 133	5	20
Acetone	250	265		ug/Kg		106	61 - 137	1	20
Benzene	50.0	45.9		ug/Kg		92	79 - 127	1	20
Bromodichloromethane	50.0	49.0		ug/Kg		98	80 - 122	2	20
Bromoform	50.0	46.4		ug/Kg		93	68 - 126	2	20
Bromomethane	50.0	42.9		ug/Kg		86	37 - 149	2	20
Carbon disulfide	50.0	41.1		ug/Kg		82	64 - 131	5	20
Carbon tetrachloride	50.0	44.8		ug/Kg		90	75 - 135	3	20
Chlorobenzene	50.0	44.4		ug/Kg		89	76 - 124	1	20
Chloroethane	50.0	43.8		ug/Kg		88	69 - 135	4	20
Chloroform	50.0	44.4		ug/Kg		89	80 - 120	1	20
Chloromethane	50.0	42.2		ug/Kg		84	63 - 127	3	20
cis-1,2-Dichloroethene	50.0	45.4		ug/Kg		91	81 - 120	1	20
cis-1,3-Dichloropropene	50.0	50.5		ug/Kg		101	80 - 120	2	20
Cyclohexane	50.0	44.4		ug/Kg		89	65 - 120	6	20
Dibromochloromethane	50.0	48.1		ug/Kg		96	76 - 125	3	20
Dichlorodifluoromethane	50.0	35.1		ug/Kg		70	57 - 142	6	20
Ethylbenzene	50.0	43.1		ug/Kg		86	80 - 120	3	20
Isopropylbenzene	50.0	45.8		ug/Kg		92	72 - 120	4	20
Methyl acetate	100	99.5		ug/Kg		100	55 - 136	4	20
Methyl tert-butyl ether	50.0	46.9		ug/Kg		94	63 - 125	3	20
Methylcyclohexane	50.0	44.8		ug/Kg		90	60 - 140	5	20
Methylene Chloride	50.0	49.1		ug/Kg		98	61 - 127	1	20
Naphthalene	50.0	46.7		ug/Kg		93	38 - 137	4	20
n-Butylbenzene	50.0	44.7		ug/Kg		89	70 - 120	5	20
N-Propylbenzene	50.0	45.4		ug/Kg		91	70 - 130	3	20
sec-Butylbenzene	50.0	45.2		ug/Kg		90	74 - 120	5	20
Styrene	50.0	43.0		ug/Kg		86	80 - 120	1	20
tert-Butylbenzene	50.0	46.9		ug/Kg		94	73 - 120	3	20
Tetrachloroethene	50.0	42.9		ug/Kg		86	74 - 122	4	20
Toluene	50.0	43.2		ug/Kg		86	74 - 128	3	20
trans-1,2-Dichloroethene	50.0	44.2		ug/Kg		88	78 - 126	3	20
trans-1,3-Dichloropropene	50.0	48.8		ug/Kg		98	73 - 123	5	20
Trichloroethene	50.0	46.6		ug/Kg		93	77 - 129	2	20

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCSD 480-745043/2-A
Client Sample ID: Lab Control Sample Dup
Matrix: Solid
Prep Type: Total/NA
Analysis Batch: 745044
Prep Batch: 745043

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Trichlorofluoromethane			50.0	45.8		ug/Kg		92	65 - 146	6	20
Vinyl chloride			50.0	42.2		ug/Kg		84	61 - 133	6	20
Xylenes, Total			100	88.4		ug/Kg		88	70 - 130	1	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*102*		*64 - 126*
4-Bromofluorobenzene (Surr)	*96*		*72 - 126*
Dibromofluoromethane (Surr)	*103*		*60 - 140*
Toluene-d8 (Surr)	*97*		*71 - 125*

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Lab Sample ID: MB 480-745124/1-A
Client Sample ID: Method Blank
Matrix: Solid
Prep Type: Total/NA
Analysis Batch: 745191
Prep Batch: 745124

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	ND		100	55	ug/Kg		05/02/25 13:45	05/06/25 05:24	1
2,4,5-Trichlorophenol	ND		170	46	ug/Kg		05/02/25 13:45	05/06/25 05:24	1
2,4,6-Trichlorophenol	ND		170	34	ug/Kg		05/02/25 13:45	05/06/25 05:24	1
2,4-Dichlorophenol	ND		170	18	ug/Kg		05/02/25 13:45	05/06/25 05:24	1
2,4-Dimethylphenol	ND		170	41	ug/Kg		05/02/25 13:45	05/06/25 05:24	1
2,4-Dinitrophenol	ND		1700	780	ug/Kg		05/02/25 13:45	05/06/25 05:24	1
2,4-Dinitrotoluene	ND		170	35	ug/Kg		05/02/25 13:45	05/06/25 05:24	1
2,6-Dinitrotoluene	ND		170	20	ug/Kg		05/02/25 13:45	05/06/25 05:24	1
2-Chloronaphthalene	ND		170	28	ug/Kg		05/02/25 13:45	05/06/25 05:24	1
2-Chlorophenol	ND		330	31	ug/Kg		05/02/25 13:45	05/06/25 05:24	1
2-Methylnaphthalene	ND		170	34	ug/Kg		05/02/25 13:45	05/06/25 05:24	1
2-Methylphenol	ND		170	20	ug/Kg		05/02/25 13:45	05/06/25 05:24	1
2-Nitroaniline	ND		330	25	ug/Kg		05/02/25 13:45	05/06/25 05:24	1
2-Nitrophenol	ND		170	48	ug/Kg		05/02/25 13:45	05/06/25 05:24	1
3,3'-Dichlorobenzidine	ND		330	200	ug/Kg		05/02/25 13:45	05/06/25 05:24	1
3-Nitroaniline	ND		330	47	ug/Kg		05/02/25 13:45	05/06/25 05:24	1
4,6-Dinitro-2-methylphenol	ND		330	170	ug/Kg		05/02/25 13:45	05/06/25 05:24	1
4-Bromophenyl phenyl ether	ND		170	24	ug/Kg		05/02/25 13:45	05/06/25 05:24	1
4-Chloro-3-methylphenol	ND		170	42	ug/Kg		05/02/25 13:45	05/06/25 05:24	1
4-Chloroaniline	ND		170	42	ug/Kg		05/02/25 13:45	05/06/25 05:24	1
4-Chlorophenyl phenyl ether	ND		170	21	ug/Kg		05/02/25 13:45	05/06/25 05:24	1
4-Methylphenol	ND		330	20	ug/Kg		05/02/25 13:45	05/06/25 05:24	1
4-Nitroaniline	ND		330	89	ug/Kg		05/02/25 13:45	05/06/25 05:24	1
4-Nitrophenol	ND		330	120	ug/Kg		05/02/25 13:45	05/06/25 05:24	1
Acenaphthene	ND		170	25	ug/Kg		05/02/25 13:45	05/06/25 05:24	1
Acenaphthylene	ND		170	22	ug/Kg		05/02/25 13:45	05/06/25 05:24	1
Acetophenone	ND		170	23	ug/Kg		05/02/25 13:45	05/06/25 05:24	1
Anthracene	ND		170	42	ug/Kg		05/02/25 13:45	05/06/25 05:24	1
Atrazine	ND		170	59	ug/Kg		05/02/25 13:45	05/06/25 05:24	1
Benzaldehyde	ND		170	140	ug/Kg		05/02/25 13:45	05/06/25 05:24	1
Benzo[a]anthracene	ND		170	17	ug/Kg		05/02/25 13:45	05/06/25 05:24	1
Benzo[a]pyrene	ND		170	25	ug/Kg		05/02/25 13:45	05/06/25 05:24	1

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 480-745124/1-A
Matrix: Solid
Analysis Batch: 745191

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 745124

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[b]fluoranthene	ND		170	27	ug/Kg		05/02/25 13:45	05/06/25 05:24	1
Benzo[g,h,i]perylene	ND		170	18	ug/Kg		05/02/25 13:45	05/06/25 05:24	1
Benzo[k]fluoranthene	ND		170	22	ug/Kg		05/02/25 13:45	05/06/25 05:24	1
Biphenyl	ND		170	25	ug/Kg		05/02/25 13:45	05/06/25 05:24	1
bis (2-chloroisopropyl) ether	ND		170	34	ug/Kg		05/02/25 13:45	05/06/25 05:24	1
Bis(2-chloroethoxy)methane	ND		170	36	ug/Kg		05/02/25 13:45	05/06/25 05:24	1
Bis(2-chloroethyl)ether	ND		170	22	ug/Kg		05/02/25 13:45	05/06/25 05:24	1
Bis(2-ethylhexyl) phthalate	ND		170	58	ug/Kg		05/02/25 13:45	05/06/25 05:24	1
Butyl benzyl phthalate	ND		170	28	ug/Kg		05/02/25 13:45	05/06/25 05:24	1
Caprolactam	ND		170	51	ug/Kg		05/02/25 13:45	05/06/25 05:24	1
Carbazole	ND		170	20	ug/Kg		05/02/25 13:45	05/06/25 05:24	1
Chrysene	ND		170	38	ug/Kg		05/02/25 13:45	05/06/25 05:24	1
Dibenz(a,h)anthracene	ND		170	30	ug/Kg		05/02/25 13:45	05/06/25 05:24	1
Dibenzofuran	ND		170	20	ug/Kg		05/02/25 13:45	05/06/25 05:24	1
Diethyl phthalate	ND		170	22	ug/Kg		05/02/25 13:45	05/06/25 05:24	1
Dimethyl phthalate	ND		170	20	ug/Kg		05/02/25 13:45	05/06/25 05:24	1
Di-n-butyl phthalate	ND		170	29	ug/Kg		05/02/25 13:45	05/06/25 05:24	1
Di-n-octyl phthalate	ND		170	20	ug/Kg		05/02/25 13:45	05/06/25 05:24	1
Fluoranthene	ND		170	18	ug/Kg		05/02/25 13:45	05/06/25 05:24	1
Fluorene	ND		170	20	ug/Kg		05/02/25 13:45	05/06/25 05:24	1
Hexachlorobenzene	ND		170	23	ug/Kg		05/02/25 13:45	05/06/25 05:24	1
Hexachlorobutadiene	ND		170	25	ug/Kg		05/02/25 13:45	05/06/25 05:24	1
Hexachlorocyclopentadiene	ND		170	23	ug/Kg		05/02/25 13:45	05/06/25 05:24	1
Hexachloroethane	ND		170	22	ug/Kg		05/02/25 13:45	05/06/25 05:24	1
Indeno[1,2,3-cd]pyrene	ND		170	21	ug/Kg		05/02/25 13:45	05/06/25 05:24	1
Isophorone	ND		170	36	ug/Kg		05/02/25 13:45	05/06/25 05:24	1
Naphthalene	ND		170	22	ug/Kg		05/02/25 13:45	05/06/25 05:24	1
Nitrobenzene	ND		170	19	ug/Kg		05/02/25 13:45	05/06/25 05:24	1
N-Nitrosodi-n-propylamine	ND		170	29	ug/Kg		05/02/25 13:45	05/06/25 05:24	1
N-Nitrosodiphenylamine	ND		170	140	ug/Kg		05/02/25 13:45	05/06/25 05:24	1
Pentachlorophenol	ND		330	170	ug/Kg		05/02/25 13:45	05/06/25 05:24	1
Phenanthrene	ND		170	25	ug/Kg		05/02/25 13:45	05/06/25 05:24	1
Phenol	ND		170	26	ug/Kg		05/02/25 13:45	05/06/25 05:24	1
Pyrene	ND		170	20	ug/Kg		05/02/25 13:45	05/06/25 05:24	1

Tentatively Identified Compound	*MB Est. Result*	*MB Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Unknown	*9090*	*T J*	*ug/Kg*		*1.99*	*N/A*	*05/02/25 13:45*	*05/06/25 05:24*	*1*
Unknown	*1130*	*T J*	*ug/Kg*		*3.45*	*N/A*	*05/02/25 13:45*	*05/06/25 05:24*	*1*
1,2:3,4-Dibenzopyrene	*171*	*T J N*	*ug/Kg*		*12.96*	*191-30-0*	*05/02/25 13:45*	*05/06/25 05:24*	*1*

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol (Surr)	*92*		*26 - 143*	*05/02/25 13:45*	*05/06/25 05:24*	*1*
2-Fluorobiphenyl (Surr)	*93*		*50 - 121*	*05/02/25 13:45*	*05/06/25 05:24*	*1*
2-Fluorophenol (Surr)	*82*		*36 - 120*	*05/02/25 13:45*	*05/06/25 05:24*	*1*
Nitrobenzene-d5 (Surr)	*85*		*40 - 121*	*05/02/25 13:45*	*05/06/25 05:24*	*1*
Phenol-d5 (Surr)	*87*		*41 - 120*	*05/02/25 13:45*	*05/06/25 05:24*	*1*
p-Terphenyl-d14 (Surr)	*99*		*46 - 143*	*05/02/25 13:45*	*05/06/25 05:24*	*1*

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 480-745124/2-A
Matrix: Solid
Analysis Batch: 745191

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 745124

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
1,4-Dioxane	1330	657		ug/Kg		49	23 - 120
2,4,5-Trichlorophenol	1330	1340		ug/Kg		100	59 - 126
2,4,6-Trichlorophenol	1330	1320		ug/Kg		99	59 - 123
2,4-Dichlorophenol	1330	1260		ug/Kg		95	61 - 120
2,4-Dimethylphenol	1330	1250		ug/Kg		94	59 - 120
2,4-Dinitrophenol	2670	2930		ug/Kg		110	41 - 146
2,4-Dinitrotoluene	1330	1380		ug/Kg		103	63 - 120
2,6-Dinitrotoluene	1330	1330		ug/Kg		99	66 - 120
2-Chloronaphthalene	1330	1210		ug/Kg		91	57 - 120
2-Chlorophenol	1330	1140		ug/Kg		86	53 - 120
2-Methylnaphthalene	1330	1190		ug/Kg		89	59 - 120
2-Methylphenol	1330	1150		ug/Kg		86	54 - 120
2-Nitroaniline	1330	1290		ug/Kg		97	61 - 120
2-Nitrophenol	1330	1240		ug/Kg		93	56 - 120
3,3'-Dichlorobenzidine	1330	1130		ug/Kg		85	54 - 120
3-Nitroaniline	1330	1210		ug/Kg		90	48 - 120
4,6-Dinitro-2-methylphenol	2670	2930		ug/Kg		110	49 - 122
4-Bromophenyl phenyl ether	1330	1310		ug/Kg		99	58 - 120
4-Chloro-3-methylphenol	1330	1340		ug/Kg		100	61 - 120
4-Chloroaniline	1330	1080		ug/Kg		81	38 - 120
4-Chlorophenyl phenyl ether	1330	1300		ug/Kg		97	63 - 124
4-Methylphenol	1330	1220		ug/Kg		91	55 - 120
4-Nitroaniline	1330	1280		ug/Kg		96	56 - 120
4-Nitrophenol	2670	2790		ug/Kg		105	43 - 147
Acenaphthene	1330	1250		ug/Kg		94	62 - 120
Acenaphthylene	1330	1230		ug/Kg		92	58 - 121
Acetophenone	1330	1130		ug/Kg		85	54 - 120
Anthracene	1330	1330		ug/Kg		100	62 - 120
Atrazine	1330	1050		ug/Kg		79	60 - 127
Benzaldehyde	1330	882		ug/Kg		66	10 - 150
Benzo[a]anthracene	1330	1330		ug/Kg		99	65 - 120
Benzo[a]pyrene	1330	1370		ug/Kg		103	64 - 120
Benzo[b]fluoranthene	1330	1410		ug/Kg		106	64 - 120
Benzo[g,h,i]perylene	1330	1410		ug/Kg		106	45 - 145
Benzo[k]fluoranthene	1330	1270		ug/Kg		95	65 - 120
Biphenyl	1330	1240		ug/Kg		93	59 - 120
bis (2-chloroisopropyl) ether	1330	1050		ug/Kg		79	44 - 120
Bis(2-chloroethoxy)methane	1330	1180		ug/Kg		88	55 - 120
Bis(2-chloroethyl)ether	1330	1090		ug/Kg		81	45 - 120
Bis(2-ethylhexyl) phthalate	1330	1270		ug/Kg		96	61 - 133
Butyl benzyl phthalate	1330	1220		ug/Kg		92	61 - 129
Caprolactam	1330	1020		ug/Kg		76	47 - 120
Carbazole	1330	1350		ug/Kg		101	65 - 120
Chrysene	1330	1300		ug/Kg		97	64 - 120
Dibenz(a,h)anthracene	1330	1370		ug/Kg		103	54 - 132
Dibenzofuran	1330	1290		ug/Kg		97	63 - 120
Diethyl phthalate	1330	1340		ug/Kg		100	66 - 120
Dimethyl phthalate	1330	1290		ug/Kg		96	65 - 124

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 480-745124/2-A
Matrix: Solid
Analysis Batch: 745191

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 745124

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Di-n-butyl phthalate	1330	1220		ug/Kg		91	58 - 130
Di-n-octyl phthalate	1330	1190		ug/Kg		90	57 - 133
Fluoranthene	1330	1370		ug/Kg		103	62 - 120
Fluorene	1330	1320		ug/Kg		99	63 - 120
Hexachlorobenzene	1330	1350		ug/Kg		101	60 - 120
Hexachlorobutadiene	1330	1150		ug/Kg		86	45 - 120
Hexachlorocyclopentadiene	1330	1120		ug/Kg		84	47 - 120
Hexachloroethane	1330	1040		ug/Kg		78	41 - 120
Indeno[1,2,3-cd]pyrene	1330	1380		ug/Kg		103	56 - 134
Isophorone	1330	1180		ug/Kg		88	56 - 120
Naphthalene	1330	1170		ug/Kg		88	55 - 120
Nitrobenzene	1330	1130		ug/Kg		85	54 - 120
N-Nitrosodi-n-propylamine	1330	1140		ug/Kg		86	52 - 120
N-Nitrosodiphenylamine	1330	1310		ug/Kg		98	51 - 128
Pentachlorophenol	2670	2410		ug/Kg		90	10 - 120
Phenanthrene	1330	1310		ug/Kg		98	60 - 120
Phenol	1330	1160		ug/Kg		87	53 - 120
Pyrene	1330	1330		ug/Kg		100	61 - 133

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2,4,6-Tribromophenol (Surr)	*106*		*26 - 143*
2-Fluorobiphenyl (Surr)	*93*		*50 - 121*
2-Fluorophenol (Surr)	*84*		*36 - 120*
Nitrobenzene-d5 (Surr)	*89*		*40 - 121*
Phenol-d5 (Surr)	*91*		*41 - 120*
p-Terphenyl-d14 (Surr)	*99*		*46 - 143*

Method: 8081B - Organochlorine Pesticides (GC)

Lab Sample ID: MB 480-745050/1-A
Matrix: Solid
Analysis Batch: 745178

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 745050

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	ND		3.3	0.65	ug/Kg		05/02/25 06:59	05/05/25 10:28	1
4,4'-DDD	ND		3.3	0.65	ug/Kg		05/02/25 06:59	05/05/25 10:28	1
4,4'-DDE	ND		3.3	0.70	ug/Kg		05/02/25 06:59	05/05/25 10:28	1
4,4'-DDT	ND		3.3	0.78	ug/Kg		05/02/25 06:59	05/05/25 10:28	1
Aldrin	ND		3.3	0.82	ug/Kg		05/02/25 06:59	05/05/25 10:28	1
alpha-BHC	ND		3.3	0.60	ug/Kg		05/02/25 06:59	05/05/25 10:28	1
beta-BHC	ND		3.3	0.60	ug/Kg		05/02/25 06:59	05/05/25 10:28	1
cis-Chlordane	ND		3.3	1.7	ug/Kg		05/02/25 06:59	05/05/25 10:28	1
delta-BHC	ND		3.3	0.62	ug/Kg		05/02/25 06:59	05/05/25 10:28	1
Dieldrin	ND		3.3	0.80	ug/Kg		05/02/25 06:59	05/05/25 10:28	1
Endosulfan I	ND		3.3	0.64	ug/Kg		05/02/25 06:59	05/05/25 10:28	1
Endosulfan II	ND		3.3	0.60	ug/Kg		05/02/25 06:59	05/05/25 10:28	1
Endosulfan sulfate	ND		3.3	0.62	ug/Kg		05/02/25 06:59	05/05/25 10:28	1
Endrin	ND		3.3	0.66	ug/Kg		05/02/25 06:59	05/05/25 10:28	1
Endrin aldehyde	ND		3.3	0.85	ug/Kg		05/02/25 06:59	05/05/25 10:28	1

Method: 8081B - Organochlorine Pesticides (GC) (Continued)

Lab Sample ID: MB 480-745050/1-A
Matrix: Solid
Analysis Batch: 745178

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 745050

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Endrin ketone	1.51	J	3.3	0.82	ug/Kg		05/02/25 06:59	05/05/25 10:28	1
gamma-BHC (Lindane)	ND		3.3	0.61	ug/Kg		05/02/25 06:59	05/05/25 10:28	1
Heptachlor	ND		3.3	0.72	ug/Kg		05/02/25 06:59	05/05/25 10:28	1
Heptachlor epoxide	ND		3.3	0.86	ug/Kg		05/02/25 06:59	05/05/25 10:28	1
Methoxychlor	3.02	J	3.3	0.68	ug/Kg		05/02/25 06:59	05/05/25 10:28	1
Toxaphene	ND		33	19	ug/Kg		05/02/25 06:59	05/05/25 10:28	1
trans-Chlordane	ND		3.3	1.1	ug/Kg		05/02/25 06:59	05/05/25 10:28	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*83*		*45 - 120*	*05/02/25 06:59*	*05/05/25 10:28*	*1*
DCB Decachlorobiphenyl	*79*		*45 - 120*	*05/02/25 06:59*	*05/05/25 10:28*	*1*
Tetrachloro-m-xylene	*65*		*30 - 124*	*05/02/25 06:59*	*05/05/25 10:28*	*1*
Tetrachloro-m-xylene	*60*		*30 - 124*	*05/02/25 06:59*	*05/05/25 10:28*	*1*

Lab Sample ID: LCS 480-745050/2-A
Matrix: Solid
Analysis Batch: 745178

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 745050

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
4,4'-DDD	33.3	29.3		ug/Kg		88	56 - 120
4,4'-DDE	33.3	25.2		ug/Kg		76	44 - 120
4,4'-DDT	33.3	30.1		ug/Kg		90	38 - 120
Aldrin	33.3	26.2		ug/Kg		78	38 - 120
alpha-BHC	33.3	23.2		ug/Kg		69	39 - 120
beta-BHC	33.3	26.1		ug/Kg		78	40 - 120
cis-Chlordane	33.3	25.1		ug/Kg		75	47 - 120
delta-BHC	33.3	26.9		ug/Kg		81	45 - 120
Dieldrin	33.3	29.4		ug/Kg		88	58 - 120
Endosulfan I	33.3	28.9		ug/Kg		87	49 - 120
Endosulfan II	33.3	31.4		ug/Kg		94	55 - 120
Endosulfan sulfate	33.3	27.4		ug/Kg		82	49 - 124
Endrin	33.3	29.8		ug/Kg		89	58 - 120
Endrin aldehyde	33.3	23.0		ug/Kg		69	37 - 121
Endrin ketone	33.3	32.0		ug/Kg		96	46 - 123
gamma-BHC (Lindane)	33.3	24.9		ug/Kg		75	50 - 120
Heptachlor	33.3	28.1		ug/Kg		84	50 - 120
Heptachlor epoxide	33.3	28.5		ug/Kg		86	50 - 120
Methoxychlor	33.3	34.1		ug/Kg		102	58 - 133
trans-Chlordane	33.3	23.5		ug/Kg		71	48 - 120

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
DCB Decachlorobiphenyl	*87*		*45 - 120*
DCB Decachlorobiphenyl	*88*		*45 - 120*
Tetrachloro-m-xylene	*67*		*30 - 124*
Tetrachloro-m-xylene	*64*		*30 - 124*

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Lab Sample ID: MB 480-745174/1-A
Matrix: Solid
Analysis Batch: 745272

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 745174

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		0.25	0.049	mg/Kg		05/05/25 06:46	05/06/25 09:15	1
PCB-1221	ND		0.25	0.049	mg/Kg		05/05/25 06:46	05/06/25 09:15	1
PCB-1232	ND		0.25	0.049	mg/Kg		05/05/25 06:46	05/06/25 09:15	1
PCB-1242	ND		0.25	0.049	mg/Kg		05/05/25 06:46	05/06/25 09:15	1
PCB-1248	ND		0.25	0.049	mg/Kg		05/05/25 06:46	05/06/25 09:15	1
PCB-1254	ND		0.25	0.12	mg/Kg		05/05/25 06:46	05/06/25 09:15	1
PCB-1260	ND		0.25	0.12	mg/Kg		05/05/25 06:46	05/06/25 09:15	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*138*		*65 - 174*	*05/05/25 06:46*	*05/06/25 09:15*	*1*
DCB Decachlorobiphenyl	*126*		*65 - 174*	*05/05/25 06:46*	*05/06/25 09:15*	*1*
Tetrachloro-m-xylene	*120*		*60 - 154*	*05/05/25 06:46*	*05/06/25 09:15*	*1*
Tetrachloro-m-xylene	*119*		*60 - 154*	*05/05/25 06:46*	*05/06/25 09:15*	*1*

Lab Sample ID: LCS 480-745174/2-A
Matrix: Solid
Analysis Batch: 745272

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 745174

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
PCB-1016	2.50	3.51		mg/Kg		140	51 - 185
PCB-1260	2.50	3.68		mg/Kg		147	61 - 184

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
DCB Decachlorobiphenyl	*161*		*65 - 174*
DCB Decachlorobiphenyl	*150*		*65 - 174*
Tetrachloro-m-xylene	*148*		*60 - 154*
Tetrachloro-m-xylene	*150*		*60 - 154*

Method: 8151A - Herbicides (GC)

Lab Sample ID: MB 480-745263/1-A
Matrix: Solid
Analysis Batch: 745627

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 745263

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-T	ND		17	5.3	ug/Kg		05/06/25 06:53	05/09/25 12:23	1
2,4-D	ND		17	11	ug/Kg		05/06/25 06:53	05/09/25 12:23	1
Dichlorprop	ND		17	8.3	ug/Kg		05/06/25 06:53	05/09/25 12:23	1
Pentachlorophenol	ND		17	5.4	ug/Kg		05/06/25 06:53	05/09/25 12:23	1
Picloram	ND		17	7.2	ug/Kg		05/06/25 06:53	05/09/25 12:23	1
Silvex (2,4,5-TP)	ND		17	6.0	ug/Kg		05/06/25 06:53	05/09/25 12:23	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4-Dichlorophenylacetic acid	*74*		*28 - 129*	*05/06/25 06:53*	*05/09/25 12:23*	*1*
2,4-Dichlorophenylacetic acid	*72*		*28 - 129*	*05/06/25 06:53*	*05/09/25 12:23*	*1*

Method: 8151A - Herbicides (GC) (Continued)

Lab Sample ID: LCS 480-745263/2-A
Matrix: Solid
Analysis Batch: 745627

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 745263

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
2,4,5-T			66.7	48.6		ug/Kg		73	41 - 120		
2,4-D			66.7	48.8		ug/Kg		73	40 - 120		
Dichlorprop			66.7	50.8		ug/Kg		76	34 - 121		
Pentachlorophenol			66.7	18.4		ug/Kg		28	10 - 120		
Picloram			66.7	48.5		ug/Kg		73	22 - 149		
Silvex (2,4,5-TP)			66.7	48.9		ug/Kg		73	39 - 125		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2,4-Dichlorophenylacetic acid	*74*		*28 - 129*
2,4-Dichlorophenylacetic acid	*71*		*28 - 129*

Method: Draft-3 1633 - Per- and Polyfluoroalkyl Substances by LC/MS/MS

Lab Sample ID: MB 240-654795/1-A
Matrix: Solid
Analysis Batch: 654947

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 654795

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)	ND		0.50	0.13	ug/Kg		05/05/25 14:38	05/06/25 23:39	1
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2 FTS)	ND		0.50	0.13	ug/Kg		05/05/25 14:38	05/06/25 23:39	1
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2 FTS)	ND		0.50	0.13	ug/Kg		05/05/25 14:38	05/06/25 23:39	1
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2 FTS)	ND		0.50	0.13	ug/Kg		05/05/25 14:38	05/06/25 23:39	1
3-Perfluoroheptylpropanoic acid (7:3 FTCA)	ND		3.1	0.78	ug/Kg		05/05/25 14:38	05/06/25 23:39	1
3-Perfluoropentylpropanoic acid (5:3 FTCA)	ND		3.1	0.78	ug/Kg		05/05/25 14:38	05/06/25 23:39	1
3-Perfluoropropylpropanoic acid (3:3 FTCA)	ND		0.63	0.16	ug/Kg		05/05/25 14:38	05/06/25 23:39	1
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	ND		0.50	0.13	ug/Kg		05/05/25 14:38	05/06/25 23:39	1
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9Cl-PF3ONS)	ND		0.50	0.13	ug/Kg		05/05/25 14:38	05/06/25 23:39	1
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA)	ND		0.50	0.13	ug/Kg		05/05/25 14:38	05/06/25 23:39	1
N-ethylperfluorooctane sulfonamide (NEtFOSA)	ND		0.13	0.031	ug/Kg		05/05/25 14:38	05/06/25 23:39	1
N-ethylperfluorooctane sulfonamidoethanol (NEtFOSE)	ND		1.3	0.31	ug/Kg		05/05/25 14:38	05/06/25 23:39	1
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	ND		0.13	0.031	ug/Kg		05/05/25 14:38	05/06/25 23:39	1
N-methylperfluorooctane sulfonamide (NMeFOSA)	ND		0.13	0.031	ug/Kg		05/05/25 14:38	05/06/25 23:39	1
N-methylperfluorooctane sulfonamidoethanol (NMeFOSE)	ND		1.3	0.31	ug/Kg		05/05/25 14:38	05/06/25 23:39	1
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	ND		0.13	0.031	ug/Kg		05/05/25 14:38	05/06/25 23:39	1
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	ND		0.25	0.063	ug/Kg		05/05/25 14:38	05/06/25 23:39	1

Method: Draft-3 1633 - Per- and Polyfluoroalkyl Substances by LC/MS/MS (Continued)

Lab Sample ID: MB 240-654795/1-A
Matrix: Solid
Analysis Batch: 654947

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 654795

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluoro (2-ethoxyethane) sulfonic acid (PFEESA)	ND		0.25	0.063	ug/Kg		05/05/25 14:38	05/06/25 23:39	1
Perfluoro-3-methoxypropanoic acid (PFMPA)	ND		0.25	0.063	ug/Kg		05/05/25 14:38	05/06/25 23:39	1
Perfluoro-4-methoxybutanoic acid (PFMBA)	ND		0.25	0.063	ug/Kg		05/05/25 14:38	05/06/25 23:39	1
Perfluorobutanesulfonic acid (PFBS)	ND		0.13	0.031	ug/Kg		05/05/25 14:38	05/06/25 23:39	1
Perfluorobutanoic acid (PFBA)	ND		0.50	0.13	ug/Kg		05/05/25 14:38	05/06/25 23:39	1
Perfluorodecanesulfonic acid (PFDS)	ND		0.13	0.031	ug/Kg		05/05/25 14:38	05/06/25 23:39	1
Perfluorodecanoic acid (PFDA)	ND		0.13	0.031	ug/Kg		05/05/25 14:38	05/06/25 23:39	1
Perfluorododecanesulfonic acid (PFDoS)	ND		0.13	0.031	ug/Kg		05/05/25 14:38	05/06/25 23:39	1
Perfluorododecanoic acid (PFDoA)	ND		0.13	0.031	ug/Kg		05/05/25 14:38	05/06/25 23:39	1
Perfluoroheptanesulfonic acid (PFHpS)	ND		0.13	0.031	ug/Kg		05/05/25 14:38	05/06/25 23:39	1
Perfluoroheptanoic acid (PFHpA)	ND		0.13	0.031	ug/Kg		05/05/25 14:38	05/06/25 23:39	1
Perfluorohexanesulfonic acid (PFHxS)	ND		0.13	0.031	ug/Kg		05/05/25 14:38	05/06/25 23:39	1
Perfluorohexanoic acid (PFHxA)	ND		0.13	0.031	ug/Kg		05/05/25 14:38	05/06/25 23:39	1
Perfluorononanesulfonic acid (PFNS)	ND		0.13	0.031	ug/Kg		05/05/25 14:38	05/06/25 23:39	1
Perfluorononanoic acid (PFNA)	ND		0.13	0.031	ug/Kg		05/05/25 14:38	05/06/25 23:39	1
Perfluorooctanesulfonamide (PFOSA)	ND		0.13	0.031	ug/Kg		05/05/25 14:38	05/06/25 23:39	1
Perfluorooctanesulfonic acid (PFOS)	ND		0.13	0.031	ug/Kg		05/05/25 14:38	05/06/25 23:39	1
Perfluorooctanoic acid (PFOA)	ND		0.13	0.031	ug/Kg		05/05/25 14:38	05/06/25 23:39	1
Perfluoropentanesulfonic acid (PFPeS)	ND		0.13	0.031	ug/Kg		05/05/25 14:38	05/06/25 23:39	1
Perfluoropentanoic acid (PFPeA)	ND		0.25	0.063	ug/Kg		05/05/25 14:38	05/06/25 23:39	1
Perfluorotetradecanoic acid (PFTeDA)	ND		0.13	0.031	ug/Kg		05/05/25 14:38	05/06/25 23:39	1
Perfluorotridecanoic acid (PFTrDA)	ND		0.13	0.031	ug/Kg		05/05/25 14:38	05/06/25 23:39	1
Perfluoroundecanoic acid (PFUnA)	ND		0.13	0.031	ug/Kg		05/05/25 14:38	05/06/25 23:39	1

Isotope Dilution	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C2 PFTeDA	*78.6*		*20 - 150*	*05/05/25 14:38*	*05/06/25 23:39*	*1*
13C2-PFDoDA	*81.4*		*20 - 150*	*05/05/25 14:38*	*05/06/25 23:39*	*1*
13C3 HFPO-DA	*92.8*		*20 - 150*	*05/05/25 14:38*	*05/06/25 23:39*	*1*
13C3 PFBS	*93.4*		*20 - 150*	*05/05/25 14:38*	*05/06/25 23:39*	*1*
13C3 PFHxS	*88.5*		*20 - 150*	*05/05/25 14:38*	*05/06/25 23:39*	*1*
13C4 PFBA	*92.1*		*20 - 150*	*05/05/25 14:38*	*05/06/25 23:39*	*1*
13C4 PFHpA	*95.0*		*20 - 150*	*05/05/25 14:38*	*05/06/25 23:39*	*1*
13C5 PFHxA	*96.1*		*20 - 150*	*05/05/25 14:38*	*05/06/25 23:39*	*1*
13C5 PFPeA	*98.8*		*20 - 150*	*05/05/25 14:38*	*05/06/25 23:39*	*1*
13C6 PFDA	*87.5*		*20 - 150*	*05/05/25 14:38*	*05/06/25 23:39*	*1*
13C7 PFUnA	*83.4*		*20 - 150*	*05/05/25 14:38*	*05/06/25 23:39*	*1*
13C8 PFOA	*95.4*		*20 - 150*	*05/05/25 14:38*	*05/06/25 23:39*	*1*
13C8 PFOS	*85.8*		*20 - 150*	*05/05/25 14:38*	*05/06/25 23:39*	*1*
13C8 PFOSA	*84.3*		*20 - 150*	*05/05/25 14:38*	*05/06/25 23:39*	*1*
13C9 PFNA	*92.3*		*20 - 150*	*05/05/25 14:38*	*05/06/25 23:39*	*1*
D3-NMeFOSA	*73.7*		*20 - 150*	*05/05/25 14:38*	*05/06/25 23:39*	*1*
d3-NMeFOSAA	*79.6*		*20 - 150*	*05/05/25 14:38*	*05/06/25 23:39*	*1*
d5-NEtFOSAA	*132*		*20 - 150*	*05/05/25 14:38*	*05/06/25 23:39*	*1*
d5-NEtPFOSA	*65.0*		*20 - 150*	*05/05/25 14:38*	*05/06/25 23:39*	*1*

Method: Draft-3 1633 - Per- and Polyfluoroalkyl Substances by LC/MS/MS (Continued)

Lab Sample ID: MB 240-654795/1-A
Matrix: Solid
Analysis Batch: 654947

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 654795

Isotope Dilution	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
d7-N-MeFOSE-M	50.0		20 - 150	05/05/25 14:38	05/06/25 23:39	1
d9-N-EtFOSE-M	45.4		20 - 150	05/05/25 14:38	05/06/25 23:39	1
M2-4:2 FTS	92.1		20 - 150	05/05/25 14:38	05/06/25 23:39	1
M2-6:2 FTS	93.2		20 - 150	05/05/25 14:38	05/06/25 23:39	1
M2-8:2 FTS	85.3		20 - 150	05/05/25 14:38	05/06/25 23:39	1

Lab Sample ID: LCS 240-654795/3-A
Matrix: Solid
Analysis Batch: 654947

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 654795

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)	5.90	5.67		ug/Kg		96	40 - 150
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2 FTS)	6.00	6.52		ug/Kg		109	40 - 150
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2 FTS)	5.86	5.08		ug/Kg		87	40 - 150
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2 FTS)	5.95	5.77		ug/Kg		97	40 - 150
3-Perfluoroheptylpropanoic acid (7:3 FTCA)	39.1	35.7		ug/Kg		91	40 - 150
3-Perfluoropentylpropanoic acid (5:3 FTCA)	39.1	38.9		ug/Kg		100	40 - 150
3-Perfluoropropylpropanoic acid (3:3 FTCA)	7.81	6.99		ug/Kg		89	40 - 150
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	5.91	5.83		ug/Kg		99	40 - 150
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9Cl-PF3ONS)	5.84	5.52		ug/Kg		94	40 - 150
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA)	6.25	5.88		ug/Kg		94	40 - 150
N-ethylperfluorooctane sulfonamide (NEtFOSA)	1.56	1.52		ug/Kg		97	40 - 150
N-ethylperfluorooctane sulfonamidoethanol (NEtFOSE)	15.6	16.7		ug/Kg		107	40 - 150
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	1.56	1.31		ug/Kg		84	40 - 150
N-methylperfluorooctane sulfonamide (NMeFOSA)	1.56	1.13		ug/Kg		72	40 - 150
N-methylperfluorooctane sulfonamidoethanol (NMeFOSE)	15.6	14.5		ug/Kg		93	40 - 150
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	1.56	1.61		ug/Kg		103	40 - 150
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	3.13	3.10		ug/Kg		99	40 - 150
Perfluoro (2-ethoxyethane) sulfonic acid (PFEESA)	2.79	2.60		ug/Kg		93	40 - 150
Perfluoro-3-methoxypropanoic acid (PFMPA)	3.13	2.77		ug/Kg		89	40 - 150
Perfluoro-4-methoxybutanoic acid (PFMBA)	3.13	2.67		ug/Kg		85	40 - 150

Method: Draft-3 1633 - Per- and Polyfluoroalkyl Substances by LC/MS/MS (Continued)

Lab Sample ID: LCS 240-654795/3-A
Matrix: Solid
Analysis Batch: 654947

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 654795

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Perfluorobutanesulfonic acid (PFBS)	1.39	1.26		ug/Kg		91	40 - 150
Perfluorobutanoic acid (PFBA)	6.25	6.23		ug/Kg		100	40 - 150
Perfluorodecanesulfonic acid (PFDS)	1.51	1.31		ug/Kg		87	40 - 150
Perfluorodecanoic acid (PFDA)	1.56	1.59		ug/Kg		101	40 - 150
Perfluorododecanesulfonic acid (PFDoS)	1.52	1.32		ug/Kg		87	40 - 150
Perfluorododecanoic acid (PFDoA)	1.56	1.45		ug/Kg		93	40 - 150
Perfluoroheptanesulfonic acid (PFHpS)	1.49	1.58		ug/Kg		106	40 - 150
Perfluoroheptanoic acid (PFHpA)	1.56	1.77		ug/Kg		113	40 - 150
Perfluorohexanesulfonic acid (PFHxS)	1.43	1.28		ug/Kg		89	40 - 150
Perfluorohexanoic acid (PFHxA)	1.56	1.47		ug/Kg		94	40 - 150
Perfluorononanesulfonic acid (PFNS)	1.50	1.47		ug/Kg		98	40 - 150
Perfluorononanoic acid (PFNA)	1.56	1.38		ug/Kg		88	40 - 150
Perfluorooctanesulfonamide (PFOSA)	1.56	1.41		ug/Kg		90	40 - 150
Perfluorooctanesulfonic acid (PFOS)	1.45	1.48		ug/Kg		102	40 - 150
Perfluorooctanoic acid (PFOA)	1.56	1.56		ug/Kg		100	40 - 150
Perfluoropentanesulfonic acid (PFPeS)	1.47	1.55		ug/Kg		106	40 - 150
Perfluoropentanoic acid (PFPeA)	3.13	2.85		ug/Kg		91	40 - 150
Perfluorotetradecanoic acid (PFTeDA)	1.56	1.56		ug/Kg		100	40 - 150
Perfluorotridecanoic acid (PFTrDA)	1.56	1.51		ug/Kg		97	40 - 150
Perfluoroundecanoic acid (PFUnA)	1.56	1.62		ug/Kg		104	40 - 150

Isotope Dilution	*LCS %Recovery*	*LCS Qualifier*	*Limits*
13C2 PFTeDA	*79.3*		*20 - 150*
13C2-PFDoDA	*84.3*		*20 - 150*
13C3 HFPO-DA	*91.9*		*20 - 150*
13C3 PFBS	*90.0*		*20 - 150*
13C3 PFHxS	*85.2*		*20 - 150*
13C4 PFBA	*89.3*		*20 - 150*
13C4 PFHpA	*91.3*		*20 - 150*
13C5 PFHxA	*90.2*		*20 - 150*
13C5 PFPeA	*94.0*		*20 - 150*
13C6 PFDA	*86.5*		*20 - 150*
13C7 PFUnA	*82.0*		*20 - 150*
13C8 PFOA	*86.9*		*20 - 150*
13C8 PFOS	*84.9*		*20 - 150*
13C8 PFOSA	*84.3*		*20 - 150*
13C9 PFNA	*87.1*		*20 - 150*
D3-NMeFOSA	*78.2*		*20 - 150*
d3-NMeFOSAA	*80.2*		*20 - 150*

Method: Draft-3 1633 - Per- and Polyfluoroalkyl Substances by LC/MS/MS (Continued)

Lab Sample ID: LCS 240-654795/3-A
Matrix: Solid
Analysis Batch: 654947

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 654795

Isotope Dilution	LCS %Recovery	LCS Qualifier	Limits
d5-NEtFOSAA	143		20 - 150
d5-NEtPFOSA	66.6		20 - 150
d7-N-MeFOSE-M	61.6		20 - 150
d9-N-EtFOSE-M	53.1		20 - 150
M2-4:2 FTS	89.2		20 - 150
M2-6:2 FTS	86.0		20 - 150
M2-8:2 FTS	83.1		20 - 150

Lab Sample ID: LLCS 240-654795/2-A
Matrix: Solid
Analysis Batch: 654947

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 654795

Analyte	Spike Added	LLCS Result	LLCS Qualifier	Unit	D	%Rec	%Rec Limits
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)	0.472	0.492	J	ug/Kg		104	40 - 150
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2 FTS)	0.480	0.540		ug/Kg		112	40 - 150
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2 FTS)	0.469	0.587		ug/Kg		125	40 - 150
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2 FTS)	0.476	0.521		ug/Kg		109	40 - 150
3-Perfluoroheptylpropanoic acid (7:3 FTCA)	3.13	3.23		ug/Kg		103	40 - 150
3-Perfluoropentylpropanoic acid (5:3 FTCA)	3.13	3.24		ug/Kg		104	40 - 150
3-Perfluoropropylpropanoic acid (3:3 FTCA)	0.625	0.629	J	ug/Kg		101	40 - 150
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	0.473	0.541		ug/Kg		114	40 - 150
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9Cl-PF3ONS)	0.467	0.502		ug/Kg		108	40 - 150
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA)	0.500	0.536		ug/Kg		107	40 - 150
N-ethylperfluorooctane sulfonamide (NEtFOSA)	0.125	0.138		ug/Kg		110	40 - 150
N-ethylperfluorooctane sulfonamidoethanol (NEtFOSE)	1.25	1.20	J	ug/Kg		96	40 - 150
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	0.125	0.115	J	ug/Kg		92	40 - 150
N-methylperfluorooctane sulfonamide (NMeFOSA)	0.125	0.132		ug/Kg		106	40 - 150
N-methylperfluorooctane sulfonamidoethanol (NMeFOSE)	1.25	1.42		ug/Kg		113	40 - 150
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	0.125	0.129	J	ug/Kg		104	40 - 150
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	0.250	0.283		ug/Kg		113	40 - 150
Perfluoro (2-ethoxyethane) sulfonic acid (PFEESA)	0.223	0.242	J	ug/Kg		108	40 - 150
Perfluoro-3-methoxypropanoic acid (PFMPA)	0.250	0.258		ug/Kg		103	40 - 150

Method: Draft-3 1633 - Per- and Polyfluoroalkyl Substances by LC/MS/MS (Continued)

Lab Sample ID: LLCS 240-654795/2-A
Matrix: Solid
Analysis Batch: 654947

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 654795

Analyte	Spike Added	LLCS Result	LLCS Qualifier	Unit	D	%Rec	%Rec Limits
Perfluoro-4-methoxybutanoic acid (PFMBA)	0.250	0.262		ug/Kg		105	40 - 150
Perfluorobutanesulfonic acid (PFBS)	0.111	0.139		ug/Kg		125	40 - 150
Perfluorobutanoic acid (PFBA)	0.500	0.545		ug/Kg		109	40 - 150
Perfluorodecanesulfonic acid (PFDS)	0.121	0.117	J	ug/Kg		97	40 - 150
Perfluorodecanoic acid (PFDA)	0.125	0.127	J	ug/Kg		102	40 - 150
Perfluorododecanesulfonic acid (PFDoS)	0.121	0.112	J	ug/Kg		92	40 - 150
Perfluorododecanoic acid (PFDoA)	0.125	0.128	J	ug/Kg		102	40 - 150
Perfluoroheptanesulfonic acid (PFHpS)	0.119	0.133		ug/Kg		111	40 - 150
Perfluoroheptanoic acid (PFHpA)	0.125	0.138		ug/Kg		110	40 - 150
Perfluorohexanesulfonic acid (PFHxS)	0.114	0.170		ug/Kg		149	40 - 150
Perfluorohexanoic acid (PFHxA)	0.125	0.154		ug/Kg		123	40 - 150
Perfluorononanesulfonic acid (PFNS)	0.120	0.123	J	ug/Kg		103	40 - 150
Perfluorononanoic acid (PFNA)	0.125	0.127	J	ug/Kg		102	40 - 150
Perfluorooctanesulfonamide (PFOSA)	0.125	0.133		ug/Kg		106	40 - 150
Perfluorooctanesulfonic acid (PFOS)	0.116	0.169		ug/Kg		146	40 - 150
Perfluorooctanoic acid (PFOA)	0.125	0.154		ug/Kg		123	40 - 150
Perfluoropentanesulfonic acid (PFPeS)	0.118	0.140		ug/Kg		120	40 - 150
Perfluoropentanoic acid (PFPeA)	0.250	0.277		ug/Kg		111	40 - 150
Perfluorotetradecanoic acid (PFTeDA)	0.125	0.136		ug/Kg		109	40 - 150
Perfluorotridecanoic acid (PFTrDA)	0.125	0.127	J	ug/Kg		102	40 - 150
Perfluoroundecanoic acid (PFUnA)	0.125	0.127	J	ug/Kg		101	40 - 150

Isotope Dilution	*LLCS %Recovery*	*LLCS Qualifier*	*Limits*
13C2 PFTeDA	*87.3*		*20 - 150*
13C2-PFDoDA	*82.9*		*20 - 150*
13C3 HFPO-DA	*102*		*20 - 150*
13C3 PFBS	*95.0*		*20 - 150*
13C3 PFHxS	*94.4*		*20 - 150*
13C4 PFBA	*94.0*		*20 - 150*
13C4 PFHpA	*102*		*20 - 150*
13C5 PFHxA	*100*		*20 - 150*
13C5 PFPeA	*106*		*20 - 150*
13C6 PFDA	*93.4*		*20 - 150*
13C7 PFUnA	*84.6*		*20 - 150*
13C8 PFOA	*95.8*		*20 - 150*
13C8 PFOS	*89.9*		*20 - 150*
13C8 PFOSA	*84.3*		*20 - 150*
13C9 PFNA	*92.0*		*20 - 150*

Method: Draft-3 1633 - Per- and Polyfluoroalkyl Substances by LC/MS/MS (Continued)

Lab Sample ID: LLCS 240-654795/2-A
Matrix: Solid
Analysis Batch: 654947

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 654795

Isotope Dilution	LLCS %Recovery	LLCS Qualifier	Limits
D3-NMeFOSA	76.9		20 - 150
d3-NMeFOSAA	83.2		20 - 150
d5-NEtFOSAA	146		20 - 150
d5-NEtPFOSA	68.3		20 - 150
d7-N-MeFOSE-M	66.6		20 - 150
d9-N-EtFOSE-M	68.4		20 - 150
M2-4:2 FTS	92.4		20 - 150
M2-6:2 FTS	94.2		20 - 150
M2-8:2 FTS	92.2		20 - 150

Method: 6010D - Metals (ICP)

Lab Sample ID: MB 480-745061/1-A
Matrix: Solid
Analysis Batch: 745226

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 745061

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	ND		10	8.6	mg/Kg		05/02/25 13:52	05/05/25 11:30	1
Antimony	ND		15.0	0.53	mg/Kg		05/02/25 13:52	05/05/25 11:30	1
Arsenic	ND		2.0	0.88	mg/Kg		05/02/25 13:52	05/05/25 11:30	1
Barium	ND		0.50	0.14	mg/Kg		05/02/25 13:52	05/05/25 11:30	1
Beryllium	ND		0.20	0.040	mg/Kg		05/02/25 13:52	05/05/25 11:30	1
Cadmium	ND		0.20	0.070	mg/Kg		05/02/25 13:52	05/05/25 11:30	1
Calcium	ND		50.0	27.0	mg/Kg		05/02/25 13:52	05/05/25 11:30	1
Chromium	ND		0.50	0.36	mg/Kg		05/02/25 13:52	05/05/25 11:30	1
Cobalt	ND		0.50	0.10	mg/Kg		05/02/25 13:52	05/05/25 11:30	1
Copper	ND		1.0	0.57	mg/Kg		05/02/25 13:52	05/05/25 11:30	1
Iron	ND		10	8.5	mg/Kg		05/02/25 13:52	05/05/25 11:30	1
Lead	ND		1.0	0.46	mg/Kg		05/02/25 13:52	05/05/25 11:30	1
Magnesium	ND		20.0	8.5	mg/Kg		05/02/25 13:52	05/05/25 11:30	1
Manganese	ND		1.0	0.28	mg/Kg		05/02/25 13:52	05/05/25 11:30	1
Nickel	ND		5.0	0.25	mg/Kg		05/02/25 13:52	05/05/25 11:30	1
Potassium	ND		30.0	24.2	mg/Kg		05/02/25 13:52	05/05/25 11:30	1
Selenium	ND		4.0	0.80	mg/Kg		05/02/25 13:52	05/05/25 11:30	1
Silver	ND	^5-	0.60	0.20	mg/Kg		05/02/25 13:52	05/05/25 11:30	1
Sodium	ND		140	61.3	mg/Kg		05/02/25 13:52	05/05/25 11:30	1
Thallium	ND		6.0	0.76	mg/Kg		05/02/25 13:52	05/05/25 11:30	1
Vanadium	ND		0.50	0.13	mg/Kg		05/02/25 13:52	05/05/25 11:30	1
Zinc	ND		2.0	1.0	mg/Kg		05/02/25 13:52	05/05/25 11:30	1

Lab Sample ID: LCSSRM 480-745061/2-A
Matrix: Solid
Analysis Batch: 745226

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 745061

Analyte	Spike Added	LCSSRM Result	LCSSRM Qualifier	Unit	D	%Rec	%Rec Limits
Aluminum	7680	6865		mg/Kg		89.4	47.4 - 130.2
Antimony	201	72.44		mg/Kg		36.0	0.06 - 100.0
Arsenic	181	123.0		mg/Kg		67.9	66.3 - 97.8

Method: 6010D - Metals (ICP) (Continued)

Lab Sample ID: LCSSRM 480-745061/2-A
Matrix: Solid
Analysis Batch: 745226

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 745061

Analyte	Spike Added	LCSSRM Result	LCSSRM Qualifier	Unit	D	%Rec	%Rec Limits
Barium	211	178.4		mg/Kg		84.5	73.9 - 107.1
Beryllium	270	220.3		mg/Kg		81.6	73.0 - 104.4
Cadmium	221	176.2		mg/Kg		79.7	70.6 - 101.8
Calcium	4280	3601		mg/Kg		84.1	77.3 - 111.0
Chromium	149	117.3		mg/Kg		78.7	71.8 - 105.4
Cobalt	142	117.5		mg/Kg		82.7	73.2 - 104.2
Copper	264	202.9		mg/Kg		76.8	73.5 - 104.2
Iron	7360	5844		mg/Kg		79.4	55.4 - 130.3
Lead	106	84.34		mg/Kg		79.6	76.1 - 109.4
Magnesium	2170	1771		mg/Kg		81.6	68.7 - 112.0
Manganese	270	199.5		mg/Kg		73.9	73.0 - 107.8
Nickel	177	144.6		mg/Kg		81.7	71.8 - 103.4
Potassium	2340	1919		mg/Kg		82.0	62.8 - 113.7
Selenium	139	99.39		mg/Kg		71.5	70.0 - 107.9
Sodium	306	256.3		mg/Kg		83.7	66.0 - 113.4
Thallium	205	172.6		mg/Kg		84.2	71.7 - 106.8
Vanadium	155	120.5		mg/Kg		77.8	69.0 - 107.7
Zinc	398	305.2		mg/Kg		76.7	68.8 - 104.5

Lab Sample ID: LCSSRM 480-745061/2-A
Matrix: Solid
Analysis Batch: 745233

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 745061

Analyte	Spike Added	LCSSRM Result	LCSSRM Qualifier	Unit	D	%Rec	%Rec Limits
Silver	59.9	44.29		mg/Kg		73.9	72.8 - 110.7

Method: 7471B - Mercury (CVAA)

Lab Sample ID: MB 480-745180/1-A
Matrix: Solid
Analysis Batch: 745256

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 745180

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.020	0.0045	mg/Kg		05/05/25 08:53	05/05/25 14:47	1

Method: 7471B - Mercury (CVAA) (Continued)

Lab Sample ID: LCSSRM 480-745180/2-A ^10
Client Sample ID: Lab Control Sample
Matrix: Solid
Prep Type: Total/NA
Analysis Batch: 745256
Prep Batch: 745180

Analyte			Spike Added	LCSSRM Result	LCSSRM Qualifier	Unit	D	%Rec	%Rec Limits		
Mercury			24.0	18.05		mg/Kg		75.2	55.8 - 109.6		

GC/MS VOA

Prep Batch: 745043

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-229138-1	SB-11 0.25-2Ft	Total/NA	Solid	5035A_L	
MB 480-745043/3-A	Method Blank	Total/NA	Solid	5035A_L	
LCS 480-745043/1-A	Lab Control Sample	Total/NA	Solid	5035A_L	
LCSD 480-745043/2-A	Lab Control Sample Dup	Total/NA	Solid	5035A_L	

Analysis Batch: 745044

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-229138-1	SB-11 0.25-2Ft	Total/NA	Solid	8260C	745043
MB 480-745043/3-A	Method Blank	Total/NA	Solid	8260C	745043
LCS 480-745043/1-A	Lab Control Sample	Total/NA	Solid	8260C	745043
LCSD 480-745043/2-A	Lab Control Sample Dup	Total/NA	Solid	8260C	745043

GC/MS Semi VOA

Prep Batch: 745124

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-229138-1	SB-11 0.25-2Ft	Total/NA	Solid	3550C	
MB 480-745124/1-A	Method Blank	Total/NA	Solid	3550C	
LCS 480-745124/2-A	Lab Control Sample	Total/NA	Solid	3550C	

Analysis Batch: 745191

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-229138-1	SB-11 0.25-2Ft	Total/NA	Solid	8270D	745124
MB 480-745124/1-A	Method Blank	Total/NA	Solid	8270D	745124
LCS 480-745124/2-A	Lab Control Sample	Total/NA	Solid	8270D	745124

GC Semi VOA

Prep Batch: 745050

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-229138-1	SB-11 0.25-2Ft	Total/NA	Solid	3546	
MB 480-745050/1-A	Method Blank	Total/NA	Solid	3546	
LCS 480-745050/2-A	Lab Control Sample	Total/NA	Solid	3546	

Prep Batch: 745174

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-229138-1	SB-11 0.25-2Ft	Total/NA	Solid	3550C	
MB 480-745174/1-A	Method Blank	Total/NA	Solid	3550C	
LCS 480-745174/2-A	Lab Control Sample	Total/NA	Solid	3550C	

Analysis Batch: 745178

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-229138-1	SB-11 0.25-2Ft	Total/NA	Solid	8081B	745050
MB 480-745050/1-A	Method Blank	Total/NA	Solid	8081B	745050
LCS 480-745050/2-A	Lab Control Sample	Total/NA	Solid	8081B	745050

Prep Batch: 745263

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-229138-1	SB-11 0.25-2Ft	Total/NA	Solid	8151A	
MB 480-745263/1-A	Method Blank	Total/NA	Solid	8151A	
LCS 480-745263/2-A	Lab Control Sample	Total/NA	Solid	8151A	

GC Semi VOA

Analysis Batch: 745272

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-229138-1	SB-11 0.25-2Ft	Total/NA	Solid	8082A	745174
MB 480-745174/1-A	Method Blank	Total/NA	Solid	8082A	745174
LCS 480-745174/2-A	Lab Control Sample	Total/NA	Solid	8082A	745174

Analysis Batch: 745627

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-229138-1	SB-11 0.25-2Ft	Total/NA	Solid	8151A	745263
MB 480-745263/1-A	Method Blank	Total/NA	Solid	8151A	745263
LCS 480-745263/2-A	Lab Control Sample	Total/NA	Solid	8151A	745263

LCMS

Prep Batch: 654795

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-229138-1	SB-11 0.25-2Ft	Total/NA	Solid	1633 Shake	
MB 240-654795/1-A	Method Blank	Total/NA	Solid	1633 Shake	
LCS 240-654795/3-A	Lab Control Sample	Total/NA	Solid	1633 Shake	
LLCS 240-654795/2-A	Lab Control Sample	Total/NA	Solid	1633 Shake	

Analysis Batch: 654947

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-229138-1	SB-11 0.25-2Ft	Total/NA	Solid	Draft-3 1633	654795
MB 240-654795/1-A	Method Blank	Total/NA	Solid	Draft-3 1633	654795
LCS 240-654795/3-A	Lab Control Sample	Total/NA	Solid	Draft-3 1633	654795
LLCS 240-654795/2-A	Lab Control Sample	Total/NA	Solid	Draft-3 1633	654795

Metals

Prep Batch: 745061

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-229138-1	SB-11 0.25-2Ft	Total/NA	Solid	3050B	
MB 480-745061/1-A	Method Blank	Total/NA	Solid	3050B	
LCSSRM 480-745061/2-A	Lab Control Sample	Total/NA	Solid	3050B	

Prep Batch: 745180

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-229138-1	SB-11 0.25-2Ft	Total/NA	Solid	7471B	
MB 480-745180/1-A	Method Blank	Total/NA	Solid	7471B	
LCSSRM 480-745180/2-A ^10	Lab Control Sample	Total/NA	Solid	7471B	

Analysis Batch: 745226

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-229138-1	SB-11 0.25-2Ft	Total/NA	Solid	6010D	745061
MB 480-745061/1-A	Method Blank	Total/NA	Solid	6010D	745061
LCSSRM 480-745061/2-A	Lab Control Sample	Total/NA	Solid	6010D	745061

Analysis Batch: 745233

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCSSRM 480-745061/2-A	Lab Control Sample	Total/NA	Solid	6010D	745061

QC Association Summary

Client: Roux Environmental Engineering and Geology DPC
Job ID: 480-229138-1
Project/Site: BCP RI - 619 Exchange Street Site

Metals

Analysis Batch: 745256

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-229138-1	SB-11 0.25-2Ft	Total/NA	Solid	7471B	745180
MB 480-745180/1-A	Method Blank	Total/NA	Solid	7471B	745180
LCSSRM 480-745180/2-A ^10	Lab Control Sample	Total/NA	Solid	7471B	745180

General Chemistry

Analysis Batch: 745137

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-229138-1	SB-11 0.25-2Ft	Total/NA	Solid	Moisture	

Lab Chronicle

Client: Roux Environmental Engineering and Geology DPC
Job ID: 480-229138-1
Project/Site: BCP RI - 619 Exchange Street Site

Client Sample ID: SB-11 0.25-2Ft
Lab Sample ID: 480-229138-1
Date Collected: 05/01/25 10:00
Matrix: Solid
Date Received: 05/01/25 15:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	Moisture		1	745137	AF	EET BUF	05/02/25 14:48

Client Sample ID: SB-11 0.25-2Ft
Lab Sample ID: 480-229138-1
Date Collected: 05/01/25 10:00
Matrix: Solid
Date Received: 05/01/25 15:40
Percent Solids: 75.2

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5035A_L			745043	CDC	EET BUF	05/01/25 17:40
Total/NA	Analysis	8260C		1	745044	CDC	EET BUF	05/01/25 21:59
Total/NA	Prep	3550C			745124	LSC	EET BUF	05/02/25 13:45
Total/NA	Analysis	8270D		1	745191	JMM	EET BUF	05/06/25 14:11
Total/NA	Prep	3546			745050	SMP	EET BUF	05/02/25 06:59
Total/NA	Analysis	8081B		5	745178	JLS	EET BUF	05/05/25 13:23
Total/NA	Prep	3550C			745174	SMP	EET BUF	05/05/25 06:46
Total/NA	Analysis	8082A		1	745272	W1T	EET BUF	05/06/25 11:42
Total/NA	Prep	8151A			745263	SMP	EET BUF	05/06/25 06:53
Total/NA	Analysis	8151A		1	745627	JLS	EET BUF	05/09/25 15:06
Total/NA	Prep	1633 Shake			654795	CLB	EET CLE	05/05/25 14:38
Total/NA	Analysis	Draft-3 1633		1	654947	MRL	EET CLE	05/07/25 02:58
Total/NA	Prep	3050B			745061	EMO	EET BUF	05/02/25 13:52
Total/NA	Analysis	6010D		1	745226	BMB	EET BUF	05/05/25 11:34
Total/NA	Prep	7471B			745180	ESB	EET BUF	05/05/25 08:53
Total/NA	Analysis	7471B		1	745256	ESB	EET BUF	05/05/25 14:50

Laboratory References:

EET BUF = Eurofins Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600

EET CLE = Eurofins Cleveland, 180 S. Van Buren Avenue, Barberton, OH 44203, TEL (330)497-9396

Accreditation/Certification Summary

Client: Roux Environmental Engineering and Geology DPC
Job ID: 480-229138-1
Project/Site: BCP RI - 619 Exchange Street Site

Laboratory: Eurofins Buffalo

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	Identification Number	Expiration Date
New York	NELAP	10026	03-31-26

The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

Analysis Method	Prep Method	Matrix	Analyte
8151A	8151A	Solid	Picloram
Moisture		Solid	Percent Moisture
Moisture		Solid	Percent Solids

Laboratory: Eurofins Cleveland

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Connecticut	State	PH-0806	12-31-26
Georgia	State	4062	02-27-26
Illinois	NELAP	200004	08-31-25
Iowa	State	421	06-01-25
Kansas	NELAP	E-10336	01-31-26
Kentucky (UST)	State	112225	02-28-26
Kentucky (WW)	State	KY98016	12-31-25
Minnesota	NELAP	039-999-348	12-31-25
New Hampshire	NELAP	225024	09-30-25
New Jersey	NELAP	OH001	07-03-25
New York	NELAP	10975	04-01-26
North Dakota	State	R-244	02-27-26
Ohio	State	8303	11-04-25
Ohio VAP	State	ORELAP 4062	02-28-26
Oregon	NELAP	4062	02-27-26
Pennsylvania	NELAP	68-00340	08-31-25
Texas	NELAP	T104704517-22-19	08-31-25
US Fish & Wildlife	US Federal Programs	A26406	02-28-26
USDA	US Federal Programs	P330-18-00281	01-05-27
Virginia	NELAP	460175	09-14-25
West Virginia DEP	State	210	12-31-25
Wisconsin	State	399167560	08-31-25

Method Summary

Client: Roux Environmental Engineering and Geology DPC
Job ID: 480-229138-1
Project/Site: BCP RI - 619 Exchange Street Site

Method	Method Description	Protocol	Laboratory
8260C	Volatile Organic Compounds by GC/MS	SW846	EET BUF
8270D	Semivolatile Organic Compounds (GC/MS)	SW846	EET BUF
8081B	Organochlorine Pesticides (GC)	SW846	EET BUF
8082A	Polychlorinated Biphenyls (PCBs) by Gas Chromatography	SW846	EET BUF
8151A	Herbicides (GC)	SW846	EET BUF
Draft-3 1633	Per- and Polyfluoroalkyl Substances by LC/MS/MS	EPA	EET CLE
6010D	Metals (ICP)	SW846	EET BUF
7471B	Mercury (CVAA)	SW846	EET BUF
Moisture	Percent Moisture	EPA	EET BUF
1633 Shake	Shake Extraction with SPE	EPA	EET CLE
3050B	Preparation, Metals	SW846	EET BUF
3546	Microwave Extraction	SW846	EET BUF
3550C	Ultrasonic Extraction	SW846	EET BUF
5035A_L	Closed System Purge and Trap	SW846	EET BUF
7471B	Preparation, Mercury	SW846	EET BUF
8151A	Extraction (Herbicides)	SW846	EET BUF

Protocol References:

EPA = US Environmental Protection Agency

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

EET BUF = Eurofins Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600

EET CLE = Eurofins Cleveland, 180 S. Van Buren Avenue, Barberton, OH 44203, TEL (330)497-9396

Sample Summary

Client: Roux Environmental Engineering and Geology DPC
Job ID: 480-229138-1
Project/Site: BCP RI - 619 Exchange Street Site

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
480-229138-1	SB-11 0.25-2Ft	Solid	05/01/25 10:00	05/01/25 15:40

Eurofins Buffalo
10 Hazelwood Drive
Amherst, NY 14228-2298
Phone: 716-691-2600 Fax: 716-691-7991

Chain of Custody Record

eurofins | Environment Testing

Client Information	Sampler: Nick Sinn	Lab PM: Fischer, Brian J	Carrier Tracking No(s):	COC No: 480-204352-41691.4
Client Contact: Bryan Mayback	Phone: 716-713-3937	E-Mail: Brian.Fischer@et.eurofinsus.com	State of Origin:	Page: Page 4 of 4
Company: Roux Environmental Engineering and Geology DPC	PWSID:			Job #:
Address: 2558 Hamburg Turnpike Suite 300	Due Date Requested:			
City: Lackawanna	TAT Requested (days): Standard			
State, Zip: NY, 14218	Compliance Project: Δ Yes Δ No			
Phone:	PO #: Purchase Order Requested			
Email: bmayback@rouxinc.com	WO #:			
Project Name: BCP RI - 619 Exchange Street Site- soil	Project #: 48028561			
Site:	SSOW#:			

Analysis Requested

Preservation Codes: N - None

Other:

Sample Identification	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)	1633_Final - PFAS	8081B, 8082A, 8151A, Moisture	8260C - VOC	6010D, 7471B, 8270D	Total Number of containers	Special Instructions/Note:
			Preservation Code:				N	N	N	N		
SB-11 0.25-2 Ft	5/1/25	1000	G	Solid			X	X	X	X		EnCores
				Solid								
				Solid								
				Solid								
				Solid								

480-229138 Chain of Custody

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

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) Cat B, NYSDEC EQuIS

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
	5/1/25 1540			5-1-25 1540	TAB
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
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: 3.2 ICE IR#5C

Ver: 10/10/2024

5/12/2025

Eurofins Buffalo
10 Hazelwood Drive
Amherst, NY 14228-2298
Phone: 716-691-2600 Fax: 716-691 7991

Chain of Custody Record

eurofins
Environment Testing

Client Information (Sub Contract Lab)	Sampler: N/A	Lab PM: Schove, John R	Carrier Tracking No(s): N/A	COC No: 480-92354.1
Client Contact: Shipping/Receiving	Phone: N/A	E-Mail: John.Schove@et.eurofinsus.com	State of Origin: New York	Page: Page 1 of 1
Company: Eurofins Environment Testing North Centr		Accreditations Required (See note): NELAP New York		Job #: 480-229138-1
Address: 180 S. Van Buren Avenue,	Due Date Requested: 5/14/2025			Preservation Codes:
City: Barberton	TAT Requested (days): N/A			
State, Zip: OH 44203				
Phone: 330-497-9396(Tel) 330-497-0772(Fax)	PO #: N/A			
Email: N/A	WO #: N/A			
Project Name: BCP RI 619 Exchange Street Site	Project #: 48028561			
Site: N/A	SSOW#: N/A			Other: N/A

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)	1633/1633_Shake PFAS NY Standard 40 Analyte List	Total Number of containers	Special Instructions/Note:
			Preservation Code:						
SB-11 0.25-2Ft (480-229138-1)	5/1/25	10:00 Eastern	G	Solid			X	1	

Note: Since laboratory accreditations are subject to change, Eurofins Environment Testing Northeast, 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 Northeast, LLC laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins Environment Testing Northeast, 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 Northeast, 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		5-2-25 1600			5/5/25 1024	EEC
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:

Eurofins – Cleveland Sample Receipt Form/Narrative **Login # :** _____
Barberton Facility

Client Eurofins Site Name _____ Cooler unpacked by:

Cooler Received on 5/5/25 Opened on 5/5/25

FedEx: 1st Grd (Exp) UPS FAS Waypoint Client Drop Off Eurofins Courier Other _____

Receipt After-hours Drop-off Date/Time _____ Storage Location _____

Eurofins Cooler # EC Foam Box Client Cooler Box Other _____

Packing material used. Bubble Wrap Foam (Plastic Bag) None Other _____

COOLANT (Wet Ice) Blue Ice Dry Ice Water None

1 Cooler temperature upon receipt ☐ See Multiple Cooler Form

IR GUN # 13 (CF +0.5 °C) Observed Cooler Temp. 0.2 °C Corrected Cooler Temp 0.7 °C

2.	Were tamper/custody seals on the outside of the cooler(s)? If Yes Quantity 1	(Yes)	No
	-Were the seals on the outside of the cooler(s) signed & dated?	Yes	(No) NA
	-Were tamper/custody seals on the bottle(s) or bottle kits (LLHg/MeHg)?	Yes	(No)
	-Were tamper/custody seals intact and uncompromised?	(Yes)	No NA
3	Shippers' packing slip attached to the cooler(s)?	(Yes)	No
4	Did custody papers accompany the sample(s)?	(Yes)	No
5	Were the custody papers relinquished & signed in the appropriate place?	(Yes)	No
6	Was/were the person(s) who collected the samples clearly identified on the COC?	Yes	(No)
7	Did all bottles arrive in good condition (Unbroken)?	(Yes)	No
8	Could all bottle labels (ID/Date/Time) be reconciled with the COC?	Yes	No
9	For each sample, does the COC specify preservatives (Y/N), # of containers (Y/N), and sample type of grab/comp(Y/N)?		
10	Were correct bottle(s) used for the test(s) indicated?	(Yes)	No
11	Sufficient quantity received to perform indicated analyses?	(Yes)	No
12	Are these work share samples and all listed on the COC?	(Yes)	No
	If yes, Questions 13-17 have been checked at the originating laboratory		
13	Were all preserved sample(s) at the correct pH upon receipt?	Yes	No NA pH Strip Lot# HC457151
14	Were VOAs on the COC?	Yes	No
15	Were air bubbles >6 mm in any VOA vials? ● ← Larger than this.	Yes	No NA
16	Was a VOA trip blank present in the cooler(s)? Trip Blank Lot # _____	Yes	No
17	Was a LL Hg or Me Hg trip blank present? _____	Yes	No

Tests that are not checked for pH by Receiving:
VOAs
Oil and Grease
TOC

Contacted PM _____ Date _____ by _____ via Verbal Voice Mail Other

Concerning _____

18. CHAIN OF CUSTODY & SAMPLE DISCREPANCIES ☐ additional next page

Labeled by:

Labels Verified by:

_____

_____

_____

_____

19 SAMPLE CONDITION

Sample(s) _____ were received after the recommended holding time had expired.

Sample(s) _____ were received in a broken container

Sample(s) _____ were received with bubble >6 mm in diameter (Notify PM)

20. SAMPLE PRESERVATION

Sample(s) _____ were further preserved in the laboratory

Time preserved. _____ Preservative(s) added/Lot number(s). _____

VOA Sample Preservation - Date/Time VOAs Frozen. _____

SAMPLE CONTROL
EUROFINS ENVIRONMENT TESTING
10 HAZELWOOD DRIVE

BUFFALO, NY 142282223
UNITED STATES US

ACTWGT 14.05 LB
CAD 0759273/CAFE3855
DIMS 15x12x11 IN

BILL SENDER

Part # 159469-434 MTW EXP 01/26

TO **SAMPLE RECEIPT**
EUROFINS CLEVELAND
180 S VAN BUREN AVE

BARBERTON OH 442033543
(330) 497-9396
REF. BARBERTON

FedEx Express

TRK# 0201 **7463 0663 9298**

SATURDAY 12:00P
PRIORITY OVERNIGHT

XO CAKA

44203
OH-US **CLE**

Login Sample Receipt Checklist

Client: Roux Environmental Engineering and Geology DPC

Job Number: 480-229138-1

Login Number: 229138

List Source: Eurofins Buffalo

List Number: 1

Creator: Yeager, Brian A

Question	Answer	Comment
Radioactivity either was not measured or, if measured, is at or below background	True	
The cooler's custody seal, if present, is intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	3.2 ICE IR# SC
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the sample IDs on the containers and the COC.	True	
Samples are received within Holding Time (Excluding tests with immediate HTs)..	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
VOA sample vials do not have headspace or bubble is <6mm (1/4") in diameter.	N/A	
If necessary, staff have been informed of any short hold time or quick TAT needs	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Sampling Company provided.	True	ROUX
Samples received within 48 hours of sampling.	True	
Samples requiring field filtration have been filtered in the field.	True	
Chlorine Residual checked.	N/A	

eurofins | Environment Testing

ANALYTICAL REPORT

PREPARED FOR

Attn: Bryan Mayback
Roux Environmental Engineering and Geology DPC
2558 Hamburg Turnpike
Suite 300
Lackawanna, New York 14218

Generated 5/16/2025 10:55:28 AM

JOB DESCRIPTION

BCP RI - 619 Exchange Street Site

JOB NUMBER

480-229348-1

Eurofins Buffalo
10 Hazelwood Drive
Amherst NY 14228-2298

See page two for job notes and contact information.

Eurofins Buffalo

Job Notes

This report may not be reproduced except in full, and with written approval from the laboratory. The results relate only to the samples tested. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

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 Northeast, LLC Project Manager.

Authorization



Generated
5/16/2025 10:55:28 AM

Authorized for release by
John Schove, Project Manager II
John.Schove@et.eurofinsus.com
(716)504-9838

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Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
F1	MS and/or MSD recovery exceeds control limits.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

GC/MS Semi VOA

Qualifier	Qualifier Description
F2	MS/MSD RPD exceeds control limits
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

GC/MS Semi VOA TICs

Qualifier	Qualifier Description
J	Indicates an Estimated Value for TICs
N	Presumptive evidence of material.
T	Result is a tentatively identified compound (TIC) and an estimated value.

GC Semi VOA

Qualifier	Qualifier Description
B	Compound was found in the blank and sample.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

LCMS

Qualifier	Qualifier Description
I	Value is EMPC (estimated maximum possible concentration).
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Metals

Qualifier	Qualifier Description
^5-	Linear Range Check (LRC) is outside acceptance limits, low biased.
4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.
B	Compound was found in the blank and sample.
F1	MS and/or MSD recovery exceeds control limits.
F2	MS/MSD RPD exceeds control limits
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

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

Glossary (Continued)

Abbreviation	These commonly used abbreviations may or may not be present in this report.
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

Job ID: 480-229348-1 Eurofins Buffalo

Job Narrative
480-229348-1

Receipt
The samples were received on 5/10/2025 9:00 AM. Unless otherwise noted below, the samples arrived in good condition, and where required, properly preserved and on ice. The temperatures of the 5 coolers at receipt time were 2.1º C, 2.9º C, 3.7º C, 4.3º C and 5.6º C.

GC/MS VOA
Method 8260C: The following volatiles sample was diluted due to foaming at the time of purging during the original sample analysis: MW-2 (480-229348-2). Elevated reporting limits (RLs) are provided.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

GC/MS Semi VOA
Methods 8270D, 8270D_LL_PAH: The continuing calibration verification (CCV) analyzed in batch 480-746001 was outside the method criteria for the following analyte(s): 2,4,6-Tribromophenol (Surr). A CCV standard at or below the reporting limit (RL) was analyzed with the affected samples and found to be acceptable. As indicated in the reference method, sample analysis may proceed; however, any detection for the affected analyte(s) is considered estimated.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

GC Semi VOA
Method 8081B: The method blank for preparation batch 480-745833 and analytical batch 480-745881 contained gamma-BHC (Lindane) above the method detection limit. This target analyte concentration was less than the reporting limit (RL) in the method blank; therefore, re-extraction and/or re-analysis of samples was not performed. The following associated samples are impacted: MW-1 (480-229348-1), MW-5 (480-229348-5) and BD (480-229348-7).

Method 8081B: The method blank for preparation batch 480-745833 contained alpha-BHC above the reporting limit (RL). None of the samples associated with this method blank contained the target compound; therefore, re-extraction and/or re-analysis of samples were not performed. MW-1 (480-229348-1), MW-5 (480-229348-5) and BD (480-229348-7)

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Metals
Method 6010D: The serial dilution (480-229348-K-1-A SD ^5) associated with batch 480-745947, exhibited results outside the quality control limits for total Iron. However, the post digestion spike (PDS) was compliant, therefore no corrective action was necessary.

Method 6010D: The recovery of post spike, (480-229348-K-1-A PDS), associated with batch 480-745947, exhibited results outside quality control limits for total Magnesium. However, the serial dilution (SD) of this sample was compliant, therefore no corrective action was necessary.

Method 6010D: The linear range check (LRC) standard recovery associated with 480-745947 is outside the acceptance criteria for the following analytes: total Silver. The concentration of these analyte(s) in the sample(s) are below the highest standard of the calibration curve; therefore, the data have been reported.

Method 6010D: The linear range check (LRC) standard recovery associated with 480-745964 is outside the acceptance criteria for the following analytes: dissolved Silver. The concentration of these analyte(s) in the sample(s) are below the highest standard of the calibration curve; therefore, the data have been reported.

Method 7470A: Due to interference with the sample matrix, the standard mercury preparation procedure was inadequate for the following samples(s): MW-1 (480-229348-1), MW-1 (480-229348-1[MS]) and MW-1 (480-229348-1[MSD]). This was demonstrated when the potassium permanganate reagent was added and the characteristic purple color faded rapidly. This loss of color indicates oxidizing conditions were not maintained. The sample(s) was prepared and analyzed at a 2x dilution, which maintained the purple color during digestion.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

LCMS
Method 1633: Label states sample is an equipment blank. There are particulates in this sample which is uncommon for EB samples (no DL was required). Laboratory proceeded with analysis.

Eurofins Buffalo

Job ID: 480-229348-1 (Continued) Eurofins Buffalo

EQUIPMENT BLANK (480-229348-9)

Method 1633: Dilution performed per analyst visual inspection due to high amount of particulate matter in sample. Aliquot taken. Laboratory proceeded with analysis.

MW-1 (480-229348-1), MW-1 (480-229348-1[MS]), MW-1 (480-229348-1[MSD]), MW-4 (480-229348-4), MW-5 (480-229348-5), BD (480-229348-7) and (480-229348-Q-5 DU)

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Organic Prep
Method 8151A: Elevated reporting limits are provided for the following sample due to insufficient sample provided for preparation: MW-4 (480-229348-4).

Method 3510C: Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate/sample duplicate (MS/MSD/DUP) associated with preparation batch 480-746048.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Detection Summary

Client: Roux Environmental Engineering and Geology DPC
Job ID: 480-229348-1
Project/Site: BCP RI - 619 Exchange Street Site

Client Sample ID: MW-1
Lab Sample ID: 480-229348-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	8.8	J	10	3.0	ug/L	1		8260C	Total/NA
Methylcyclohexane	0.20	J	1.0	0.16	ug/L	1		8260C	Total/NA
Di-n-butyl phthalate	0.56	J	6.3	0.39	ug/L	1		8270D	Total/NA
4,4'-DDE	0.015	J	0.050	0.012	ug/L	1		8081B	Total/NA
alpha-BHC	0.021	J B	0.050	0.0077	ug/L	1		8081B	Total/NA
delta-BHC	0.012	J	0.050	0.010	ug/L	1		8081B	Total/NA
Endrin aldehyde	0.022	J	0.050	0.016	ug/L	1		8081B	Total/NA
gamma-BHC (Lindane)	0.014	J B	0.050	0.0080	ug/L	1		8081B	Total/NA
Heptachlor	0.015	J	0.050	0.0085	ug/L	1		8081B	Total/NA
Perfluorohexanoic acid (PFHxA)	5.6	J I	13	3.1	ng/L	1		Draft-3 1633	Total/NA
Aluminum	130	F2	0.20	0.060	mg/L	1		6010D	Total/NA
Arsenic	0.049		0.015	0.0056	mg/L	1		6010D	Total/NA
Barium	1.0	F1	0.0020	0.00070	mg/L	1		6010D	Total/NA
Beryllium	0.0056		0.0020	0.00030	mg/L	1		6010D	Total/NA
Cadmium	0.0017	J	0.0020	0.00050	mg/L	1		6010D	Total/NA
Calcium	416	F2	0.50	0.10	mg/L	1		6010D	Total/NA
Chromium	0.18	F1	0.0040	0.0010	mg/L	1		6010D	Total/NA
Cobalt	0.080		0.0040	0.00063	mg/L	1		6010D	Total/NA
Copper	0.18	F1	0.010	0.0016	mg/L	1		6010D	Total/NA
Iron	175	F2	0.050	0.019	mg/L	1		6010D	Total/NA
Lead	0.18	F1	0.010	0.0030	mg/L	1		6010D	Total/NA
Magnesium	153		0.20	0.043	mg/L	1		6010D	Total/NA
Manganese	3.0	F2	0.0030	0.00040	mg/L	1		6010D	Total/NA
Nickel	0.19	F1	0.010	0.0013	mg/L	1		6010D	Total/NA
Potassium	33.7	F1	0.50	0.10	mg/L	1		6010D	Total/NA
Silver	0.0029	J ^5-	0.0060	0.0017	mg/L	1		6010D	Total/NA
Sodium	27.5		1.0	0.32	mg/L	1		6010D	Total/NA
Vanadium	0.24	F1	0.0050	0.0015	mg/L	1		6010D	Total/NA
Zinc	0.53	F1	0.010	0.0015	mg/L	1		6010D	Total/NA
Barium, Dissolved	0.17		0.0020	0.00070	mg/L	1		6010D	Dissolved
Calcium, Dissolved	75.9		0.50	0.10	mg/L	1		6010D	Dissolved
Copper, Dissolved	0.0022	J	0.010	0.0016	mg/L	1		6010D	Dissolved
Magnesium, Dissolved	40.6		0.20	0.043	mg/L	1		6010D	Dissolved
Manganese, Dissolved	0.026		0.0030	0.00040	mg/L	1		6010D	Dissolved
Potassium, Dissolved	6.0		0.50	0.10	mg/L	1		6010D	Dissolved
Sodium, Dissolved	31.8	F1	1.0	0.32	mg/L	1		6010D	Dissolved
Mercury	0.00064		0.00030	0.000063	mg/L	1		7470A	Total/NA

Client Sample ID: MW-2
Lab Sample ID: 480-229348-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	16	J	50	15	ug/L	5		8260C	Total/NA
Caprolactam	3.4	J	5.0	2.2	ug/L	1		8270D	Total/NA
Diethyl phthalate	0.50	J	5.0	0.22	ug/L	1		8270D	Total/NA
Di-n-butyl phthalate	0.53	J	5.0	0.31	ug/L	1		8270D	Total/NA
Pentachlorophenol	4.3	J	10	2.2	ug/L	1		8270D	Total/NA
Aluminum	9.4		0.20	0.060	mg/L	1		6010D	Total/NA
Arsenic	0.013	J	0.015	0.0056	mg/L	1		6010D	Total/NA
Barium	0.57		0.0020	0.00070	mg/L	1		6010D	Total/NA
Beryllium	0.00040	J	0.0020	0.00030	mg/L	1		6010D	Total/NA
Calcium	129		0.50	0.10	mg/L	1		6010D	Total/NA

This Detection Summary does not include radiochemical test results.

Eurofins Buffalo

Client Sample ID: MW-2 (Continued)
Lab Sample ID: 480-229348-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chromium	0.016		0.0040	0.0010	mg/L	1		6010D	Total/NA
Cobalt	0.0071		0.0040	0.00063	mg/L	1		6010D	Total/NA
Copper	0.059		0.010	0.0016	mg/L	1		6010D	Total/NA
Iron	14.2		0.050	0.019	mg/L	1		6010D	Total/NA
Lead	0.046		0.010	0.0030	mg/L	1		6010D	Total/NA
Magnesium	52.5		0.20	0.043	mg/L	1		6010D	Total/NA
Manganese	1.1		0.0030	0.00040	mg/L	1		6010D	Total/NA
Nickel	0.018		0.010	0.0013	mg/L	1		6010D	Total/NA
Potassium	19.6		0.50	0.10	mg/L	1		6010D	Total/NA
Sodium	80.4		1.0	0.32	mg/L	1		6010D	Total/NA
Vanadium	0.019		0.0050	0.0015	mg/L	1		6010D	Total/NA
Zinc	0.23		0.010	0.0015	mg/L	1		6010D	Total/NA
Arsenic, Dissolved	0.0066	J	0.015	0.0056	mg/L	1		6010D	Dissolved
Barium, Dissolved	0.11		0.0020	0.00070	mg/L	1		6010D	Dissolved
Calcium, Dissolved	114		0.50	0.10	mg/L	1		6010D	Dissolved
Cobalt, Dissolved	0.0025	J	0.0040	0.00063	mg/L	1		6010D	Dissolved
Copper, Dissolved	0.0042	J	0.010	0.0016	mg/L	1		6010D	Dissolved
Magnesium, Dissolved	47.1		0.20	0.043	mg/L	1		6010D	Dissolved
Manganese, Dissolved	0.82		0.0030	0.00040	mg/L	1		6010D	Dissolved
Nickel, Dissolved	0.0042	J	0.010	0.0013	mg/L	1		6010D	Dissolved
Potassium, Dissolved	16.9		0.50	0.10	mg/L	1		6010D	Dissolved
Sodium, Dissolved	79.3		1.0	0.32	mg/L	1		6010D	Dissolved
Zinc, Dissolved	0.017	B	0.010	0.0015	mg/L	1		6010D	Dissolved
Mercury	0.00037		0.00020	0.000042	mg/L	1		7470A	Total/NA

Client Sample ID: MW-3
Lab Sample ID: 480-229348-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	16		10	3.0	ug/L	1		8260C	Total/NA
Caprolactam	3.1	J	5.2	2.3	ug/L	1		8270D	Total/NA
Diethyl phthalate	0.26	J	5.2	0.23	ug/L	1		8270D	Total/NA
Aluminum	9.5		0.20	0.060	mg/L	1		6010D	Total/NA
Arsenic	0.0086	J	0.015	0.0056	mg/L	1		6010D	Total/NA
Barium	2.2		0.0020	0.00070	mg/L	1		6010D	Total/NA
Beryllium	0.00044	J	0.0020	0.00030	mg/L	1		6010D	Total/NA
Cadmium	0.0014	J	0.0020	0.00050	mg/L	1		6010D	Total/NA
Calcium	133		0.50	0.10	mg/L	1		6010D	Total/NA
Chromium	0.035		0.0040	0.0010	mg/L	1		6010D	Total/NA
Cobalt	0.0059		0.0040	0.00063	mg/L	1		6010D	Total/NA
Copper	0.028		0.010	0.0016	mg/L	1		6010D	Total/NA
Iron	11.5		0.050	0.019	mg/L	1		6010D	Total/NA
Lead	0.099		0.010	0.0030	mg/L	1		6010D	Total/NA
Magnesium	54.2		0.20	0.043	mg/L	1		6010D	Total/NA
Manganese	0.58		0.0030	0.00040	mg/L	1		6010D	Total/NA
Nickel	0.017		0.010	0.0013	mg/L	1		6010D	Total/NA
Potassium	9.9		0.50	0.10	mg/L	1		6010D	Total/NA
Sodium	80.3		1.0	0.32	mg/L	1		6010D	Total/NA
Vanadium	0.020		0.0050	0.0015	mg/L	1		6010D	Total/NA
Zinc	0.94		0.010	0.0015	mg/L	1		6010D	Total/NA
Barium, Dissolved	0.18		0.0020	0.00070	mg/L	1		6010D	Dissolved
Calcium, Dissolved	106		0.50	0.10	mg/L	1		6010D	Dissolved

This Detection Summary does not include radiochemical test results.

Client Sample ID: MW-3 (Continued)
Lab Sample ID: 480-229348-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Cobalt, Dissolved	0.00094	J	0.0040	0.00063	mg/L	1		6010D	Dissolved
Copper, Dissolved	0.0027	J	0.010	0.0016	mg/L	1		6010D	Dissolved
Magnesium, Dissolved	46.1		0.20	0.043	mg/L	1		6010D	Dissolved
Manganese, Dissolved	0.35		0.0030	0.00040	mg/L	1		6010D	Dissolved
Nickel, Dissolved	0.0029	J	0.010	0.0013	mg/L	1		6010D	Dissolved
Potassium, Dissolved	6.1		0.50	0.10	mg/L	1		6010D	Dissolved
Sodium, Dissolved	75.5		1.0	0.32	mg/L	1		6010D	Dissolved
Zinc, Dissolved	0.044	B	0.010	0.0015	mg/L	1		6010D	Dissolved
Mercury	0.0014		0.00020	0.000042	mg/L	1		7470A	Total/NA

Client Sample ID: MW-4
Lab Sample ID: 480-229348-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Diethyl phthalate	0.24	J	5.2	0.23	ug/L	1		8270D	Total/NA
Di-n-butyl phthalate	0.43	J	5.2	0.32	ug/L	1		8270D	Total/NA
Pentachlorophenol	4.6	J	10	2.3	ug/L	1		8270D	Total/NA
4,4'-DDD	0.019	J	0.063	0.012	ug/L	1		8081B	Total/NA
4,4'-DDE	0.023	J	0.063	0.015	ug/L	1		8081B	Total/NA
4,4'-DDT	0.060	J B	0.063	0.014	ug/L	1		8081B	Total/NA
alpha-BHC	0.013	J	0.063	0.0096	ug/L	1		8081B	Total/NA
delta-BHC	0.013	J	0.063	0.013	ug/L	1		8081B	Total/NA
Dieldrin	0.014	J	0.063	0.012	ug/L	1		8081B	Total/NA
Methoxychlor	0.079		0.063	0.018	ug/L	1		8081B	Total/NA
2,4-D	0.72		0.57	0.20	ug/L	1		8151A	Total/NA
Pentachlorophenol	1.1		0.57	0.056	ug/L	1		8151A	Total/NA
Perfluorooctanoic acid (PFOA)	6.4	J	17	4.2	ng/L	1		Draft-3 1633	Total/NA
Aluminum	17.2		0.20	0.060	mg/L	1		6010D	Total/NA
Arsenic	0.0080	J	0.015	0.0056	mg/L	1		6010D	Total/NA
Barium	1.6		0.0020	0.00070	mg/L	1		6010D	Total/NA
Beryllium	0.00070	J	0.0020	0.00030	mg/L	1		6010D	Total/NA
Cadmium	0.00060	J	0.0020	0.00050	mg/L	1		6010D	Total/NA
Calcium	109		0.50	0.10	mg/L	1		6010D	Total/NA
Chromium	0.024		0.0040	0.0010	mg/L	1		6010D	Total/NA
Cobalt	0.0059		0.0040	0.00063	mg/L	1		6010D	Total/NA
Copper	0.028		0.010	0.0016	mg/L	1		6010D	Total/NA
Iron	15.6		0.050	0.019	mg/L	1		6010D	Total/NA
Lead	0.050		0.010	0.0030	mg/L	1		6010D	Total/NA
Magnesium	45.8		0.20	0.043	mg/L	1		6010D	Total/NA
Manganese	0.28		0.0030	0.00040	mg/L	1		6010D	Total/NA
Nickel	0.017		0.010	0.0013	mg/L	1		6010D	Total/NA
Potassium	9.1		0.50	0.10	mg/L	1		6010D	Total/NA
Sodium	62.3		1.0	0.32	mg/L	1		6010D	Total/NA
Vanadium	0.030		0.0050	0.0015	mg/L	1		6010D	Total/NA
Zinc	0.76		0.010	0.0015	mg/L	1		6010D	Total/NA
Barium, Dissolved	0.072		0.0020	0.00070	mg/L	1		6010D	Dissolved
Calcium, Dissolved	70.7		0.50	0.10	mg/L	1		6010D	Dissolved
Copper, Dissolved	0.0027	J	0.010	0.0016	mg/L	1		6010D	Dissolved
Magnesium, Dissolved	36.9		0.20	0.043	mg/L	1		6010D	Dissolved
Manganese, Dissolved	0.030		0.0030	0.00040	mg/L	1		6010D	Dissolved
Nickel, Dissolved	0.0013	J	0.010	0.0013	mg/L	1		6010D	Dissolved
Potassium, Dissolved	2.4		0.50	0.10	mg/L	1		6010D	Dissolved

This Detection Summary does not include radiochemical test results.

Client Sample ID: MW-4 (Continued)
Lab Sample ID: 480-229348-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Sodium, Dissolved	55.3		1.0	0.32	mg/L	1		6010D	Dissolved
Zinc, Dissolved	0.011	B	0.010	0.0015	mg/L	1		6010D	Dissolved
Mercury	0.00024		0.00020	0.000042	mg/L	1		7470A	Total/NA

Client Sample ID: MW-5
Lab Sample ID: 480-229348-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Toluene	1.3		1.0	0.51	ug/L	1		8260C	Total/NA
Diethyl phthalate	0.27	J	5.0	0.22	ug/L	1		8270D	Total/NA
Dimethyl phthalate	0.40	J	5.0	0.36	ug/L	1		8270D	Total/NA
Isophorone	0.44	J	5.0	0.43	ug/L	1		8270D	Total/NA
Pentachlorophenol	4.6	J	10	2.2	ug/L	1		8270D	Total/NA
4,4'-DDT	0.011	J	0.050	0.011	ug/L	1		8081B	Total/NA
alpha-BHC	0.029	J B	0.050	0.0077	ug/L	1		8081B	Total/NA
gamma-BHC (Lindane)	0.020	J B	0.050	0.0080	ug/L	1		8081B	Total/NA
Pentachlorophenol	1.2		0.48	0.047	ug/L	1		8151A	Total/NA
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	8.1	J	8.3	2.2	ng/L	1		Draft-3 1633	Total/NA
Perfluorooctanesulfonic acid (PFOS)	2.3	J	8.3	2.1	ng/L	1		Draft-3 1633	Total/NA
Perfluorooctanoic acid (PFOA)	3.9	J	8.3	2.1	ng/L	1		Draft-3 1633	Total/NA
Aluminum	18.7		0.20	0.060	mg/L	1		6010D	Total/NA
Arsenic	0.012	J	0.015	0.0056	mg/L	1		6010D	Total/NA
Barium	0.61		0.0020	0.00070	mg/L	1		6010D	Total/NA
Beryllium	0.00077	J	0.0020	0.00030	mg/L	1		6010D	Total/NA
Calcium	155		0.50	0.10	mg/L	1		6010D	Total/NA
Chromium	0.031		0.0040	0.0010	mg/L	1		6010D	Total/NA
Cobalt	0.0088		0.0040	0.00063	mg/L	1		6010D	Total/NA
Copper	0.030		0.010	0.0016	mg/L	1		6010D	Total/NA
Iron	21.3		0.050	0.019	mg/L	1		6010D	Total/NA
Lead	0.018		0.010	0.0030	mg/L	1		6010D	Total/NA
Magnesium	74.6		0.20	0.043	mg/L	1		6010D	Total/NA
Manganese	0.38		0.0030	0.00040	mg/L	1		6010D	Total/NA
Nickel	0.025		0.010	0.0013	mg/L	1		6010D	Total/NA
Potassium	7.3		0.50	0.10	mg/L	1		6010D	Total/NA
Sodium	27.8		1.0	0.32	mg/L	1		6010D	Total/NA
Vanadium	0.034		0.0050	0.0015	mg/L	1		6010D	Total/NA
Zinc	0.25		0.010	0.0015	mg/L	1		6010D	Total/NA
Barium, Dissolved	0.061		0.0020	0.00070	mg/L	1		6010D	Dissolved
Calcium, Dissolved	106		0.50	0.10	mg/L	1		6010D	Dissolved
Copper, Dissolved	0.0032	J	0.010	0.0016	mg/L	1		6010D	Dissolved
Magnesium, Dissolved	61.6		0.20	0.043	mg/L	1		6010D	Dissolved
Manganese, Dissolved	0.051		0.0030	0.00040	mg/L	1		6010D	Dissolved
Nickel, Dissolved	0.0028	J	0.010	0.0013	mg/L	1		6010D	Dissolved
Potassium, Dissolved	2.8		0.50	0.10	mg/L	1		6010D	Dissolved
Sodium, Dissolved	29.1		1.0	0.32	mg/L	1		6010D	Dissolved
Zinc, Dissolved	0.0076	J B	0.010	0.0015	mg/L	1		6010D	Dissolved
Mercury	0.000043	J	0.00020	0.000042	mg/L	1		7470A	Total/NA

Client Sample ID: MW-6
Lab Sample ID: 480-229348-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Methylcyclohexane	0.18	J	1.0	0.16	ug/L	1		8260C	Total/NA

This Detection Summary does not include radiochemical test results.

Eurofins Buffalo

Client Sample ID: MW-6 (Continued)
Lab Sample ID: 480-229348-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
2,4-Dichlorophenol	0.70	J	5.0	0.51	ug/L	1		8270D	Total/NA
Dimethyl phthalate	0.43	J	5.0	0.36	ug/L	1		8270D	Total/NA
Isophorone	0.53	J	5.0	0.43	ug/L	1		8270D	Total/NA
Pentachlorophenol	4.3	J	10	2.2	ug/L	1		8270D	Total/NA
Aluminum	16.4		0.20	0.060	mg/L	1		6010D	Total/NA
Arsenic	0.0099	J	0.015	0.0056	mg/L	1		6010D	Total/NA
Barium	0.56		0.0020	0.00070	mg/L	1		6010D	Total/NA
Beryllium	0.00088	J	0.0020	0.00030	mg/L	1		6010D	Total/NA
Cadmium	0.00062	J	0.0020	0.00050	mg/L	1		6010D	Total/NA
Calcium	166		0.50	0.10	mg/L	1		6010D	Total/NA
Chromium	0.021		0.0040	0.0010	mg/L	1		6010D	Total/NA
Cobalt	0.023		0.0040	0.00063	mg/L	1		6010D	Total/NA
Copper	0.11		0.010	0.0016	mg/L	1		6010D	Total/NA
Iron	21.4		0.050	0.019	mg/L	1		6010D	Total/NA
Lead	0.029		0.010	0.0030	mg/L	1		6010D	Total/NA
Magnesium	83.1		0.20	0.043	mg/L	1		6010D	Total/NA
Manganese	0.54		0.0030	0.00040	mg/L	1		6010D	Total/NA
Nickel	0.036		0.010	0.0013	mg/L	1		6010D	Total/NA
Potassium	7.8		0.50	0.10	mg/L	1		6010D	Total/NA
Sodium	108		1.0	0.32	mg/L	1		6010D	Total/NA
Vanadium	0.030		0.0050	0.0015	mg/L	1		6010D	Total/NA
Zinc	0.26		0.010	0.0015	mg/L	1		6010D	Total/NA
Barium, Dissolved	0.098		0.0020	0.00070	mg/L	1		6010D	Dissolved
Calcium, Dissolved	75.9		0.50	0.10	mg/L	1		6010D	Dissolved
Cobalt, Dissolved	0.0011	J	0.0040	0.00063	mg/L	1		6010D	Dissolved
Copper, Dissolved	0.0051	J	0.010	0.0016	mg/L	1		6010D	Dissolved
Magnesium, Dissolved	58.5		0.20	0.043	mg/L	1		6010D	Dissolved
Manganese, Dissolved	0.031		0.0030	0.00040	mg/L	1		6010D	Dissolved
Nickel, Dissolved	0.0023	J	0.010	0.0013	mg/L	1		6010D	Dissolved
Potassium, Dissolved	3.1		0.50	0.10	mg/L	1		6010D	Dissolved
Sodium, Dissolved	107		1.0	0.32	mg/L	1		6010D	Dissolved

Client Sample ID: BD
Lab Sample ID: 480-229348-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Pentachlorophenol	4.3	J	10	2.2	ug/L	1		8270D	Total/NA
alpha-BHC	0.016	J B	0.050	0.0077	ug/L	1		8081B	Total/NA
2,4-D	0.67		0.54	0.18	ug/L	1		8151A	Total/NA
Pentachlorophenol	1.2		0.54	0.053	ug/L	1		8151A	Total/NA
Perfluorooctanoic acid (PFOA)	5.3	J	13	3.1	ng/L	1		Draft-3 1633	Total/NA
Aluminum	14.7		0.20	0.060	mg/L	1		6010D	Total/NA
Arsenic	0.0072	J	0.015	0.0056	mg/L	1		6010D	Total/NA
Barium	1.4		0.0020	0.00070	mg/L	1		6010D	Total/NA
Beryllium	0.00077	J	0.0020	0.00030	mg/L	1		6010D	Total/NA
Cadmium	0.0011	J	0.0020	0.00050	mg/L	1		6010D	Total/NA
Calcium	134		0.50	0.10	mg/L	1		6010D	Total/NA
Chromium	0.024		0.0040	0.0010	mg/L	1		6010D	Total/NA
Cobalt	0.0083		0.0040	0.00063	mg/L	1		6010D	Total/NA
Copper	0.038		0.010	0.0016	mg/L	1		6010D	Total/NA
Iron	19.6		0.050	0.019	mg/L	1		6010D	Total/NA
Lead	0.080		0.010	0.0030	mg/L	1		6010D	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: BD (Continued) — Lab Sample ID: 480-229348-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Magnesium	55.2		0.20	0.043	mg/L	1		6010D	Total/NA
Manganese	0.44		0.0030	0.00040	mg/L	1		6010D	Total/NA
Nickel	0.023		0.010	0.0013	mg/L	1		6010D	Total/NA
Potassium	7.2		0.50	0.10	mg/L	1		6010D	Total/NA
Sodium	58.1		1.0	0.32	mg/L	1		6010D	Total/NA
Vanadium	0.028		0.0050	0.0015	mg/L	1		6010D	Total/NA
Zinc	0.76		0.010	0.0015	mg/L	1		6010D	Total/NA
Barium, Dissolved	0.067		0.0020	0.00070	mg/L	1		6010D	Dissolved
Calcium, Dissolved	71.1		0.50	0.10	mg/L	1		6010D	Dissolved
Copper, Dissolved	0.0028	J	0.010	0.0016	mg/L	1		6010D	Dissolved
Magnesium, Dissolved	37.3		0.20	0.043	mg/L	1		6010D	Dissolved
Manganese, Dissolved	0.030		0.0030	0.00040	mg/L	1		6010D	Dissolved
Nickel, Dissolved	0.0015	J	0.010	0.0013	mg/L	1		6010D	Dissolved
Potassium, Dissolved	2.4		0.50	0.10	mg/L	1		6010D	Dissolved
Sodium, Dissolved	54.7		1.0	0.32	mg/L	1		6010D	Dissolved
Zinc, Dissolved	0.012	B	0.010	0.0015	mg/L	1		6010D	Dissolved
Mercury	0.00025		0.00020	0.000042	mg/L	1		7470A	Total/NA

Client Sample ID: FIELD BLANK — Lab Sample ID: 480-229348-8

No Detections.

Client Sample ID: EQUIPMENT BLANK — Lab Sample ID: 480-229348-9

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2 FTS)	4.4	J	6.6	1.6	ng/L	1		Draft-3 1633	Total/NA
Perfluoroheptanoic acid (PFHpA)	0.48	J	1.6	0.41	ng/L	1		Draft-3 1633	Total/NA
Perfluorohexanoic acid (PFHxA)	1.9		1.6	0.41	ng/L	1		Draft-3 1633	Total/NA
Perfluorooctanesulfonic acid (PFOS)	0.96	J I	1.6	0.41	ng/L	1		Draft-3 1633	Total/NA
Perfluorooctanoic acid (PFOA)	0.84	J	1.6	0.41	ng/L	1		Draft-3 1633	Total/NA

Client Sample ID: TRIP BLANK — Lab Sample ID: 480-229348-10

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloroform	0.36	J	1.0	0.34	ug/L	1		8260C	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: MW-1
Lab Sample ID: 480-229348-1
Date Collected: 05/08/25 15:00
Matrix: Water
Date Received: 05/10/25 09:00

Method: SW846 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND	F1	1.0	0.82	ug/L			05/14/25 14:33	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			05/14/25 14:33	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.31	ug/L			05/14/25 14:33	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			05/14/25 14:33	1
1,1-Dichloroethane	ND		1.0	0.38	ug/L			05/14/25 14:33	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			05/14/25 14:33	1
1,2,4-Trichlorobenzene	ND		1.0	0.41	ug/L			05/14/25 14:33	1
1,2,4-Trimethylbenzene	ND		1.0	0.75	ug/L			05/14/25 14:33	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.39	ug/L			05/14/25 14:33	1
1,2-Dibromoethane	ND		1.0	0.73	ug/L			05/14/25 14:33	1
1,2-Dichlorobenzene	ND		1.0	0.79	ug/L			05/14/25 14:33	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			05/14/25 14:33	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			05/14/25 14:33	1
1,3,5-Trimethylbenzene	ND		1.0	0.77	ug/L			05/14/25 14:33	1
1,3-Dichlorobenzene	ND		1.0	0.78	ug/L			05/14/25 14:33	1
1,4-Dichlorobenzene	ND		1.0	0.84	ug/L			05/14/25 14:33	1
2-Butanone (MEK)	ND		10	1.3	ug/L			05/14/25 14:33	1
2-Hexanone	ND		5.0	1.2	ug/L			05/14/25 14:33	1
4-Isopropyltoluene	ND		1.0	0.31	ug/L			05/14/25 14:33	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			05/14/25 14:33	1
Acetone	**8.8**	**J**	10	3.0	ug/L			05/14/25 14:33	1
Benzene	ND		1.0	0.41	ug/L			05/14/25 14:33	1
Bromodichloromethane	ND		1.0	0.39	ug/L			05/14/25 14:33	1
Bromoform	ND		1.0	0.26	ug/L			05/14/25 14:33	1
Bromomethane	ND	F1	1.0	0.69	ug/L			05/14/25 14:33	1
Carbon disulfide	ND		1.0	0.19	ug/L			05/14/25 14:33	1
Carbon tetrachloride	ND	F1	1.0	0.27	ug/L			05/14/25 14:33	1
Chlorobenzene	ND		1.0	0.75	ug/L			05/14/25 14:33	1
Chloroethane	ND		1.0	0.32	ug/L			05/14/25 14:33	1
Chloroform	ND		1.0	0.34	ug/L			05/14/25 14:33	1
Chloromethane	ND		1.0	0.35	ug/L			05/14/25 14:33	1
cis-1,2-Dichloroethene	ND		1.0	0.81	ug/L			05/14/25 14:33	1
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			05/14/25 14:33	1
Cyclohexane	ND		1.0	0.18	ug/L			05/14/25 14:33	1
Dibromochloromethane	ND		1.0	0.32	ug/L			05/14/25 14:33	1
Dichlorodifluoromethane	ND		1.0	0.68	ug/L			05/14/25 14:33	1
Ethylbenzene	ND		1.0	0.74	ug/L			05/14/25 14:33	1
Isopropylbenzene	ND		1.0	0.79	ug/L			05/14/25 14:33	1
m,p-Xylene	ND		2.0	0.66	ug/L			05/14/25 14:33	1
Methyl acetate	ND		2.5	1.3	ug/L			05/14/25 14:33	1
Methyl tert-butyl ether	ND		1.0	0.16	ug/L			05/14/25 14:33	1
Methylcyclohexane	**0.20**	**J**	1.0	0.16	ug/L			05/14/25 14:33	1
Methylene Chloride	ND		1.0	0.44	ug/L			05/14/25 14:33	1
Naphthalene	ND		1.0	0.43	ug/L			05/14/25 14:33	1
n-Butylbenzene	ND		1.0	0.64	ug/L			05/14/25 14:33	1
N-Propylbenzene	ND		1.0	0.69	ug/L			05/14/25 14:33	1
o-Xylene	ND		1.0	0.76	ug/L			05/14/25 14:33	1
sec-Butylbenzene	ND		1.0	0.75	ug/L			05/14/25 14:33	1
Styrene	ND		1.0	0.73	ug/L			05/14/25 14:33	1

Client Sample ID: MW-1
Lab Sample ID: 480-229348-1

Date Collected: 05/08/25 15:00
Matrix: Water

Date Received: 05/10/25 09:00

Method: SW846 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
tert-Butylbenzene	ND	F1	1.0	0.81	ug/L			05/14/25 14:33	1
Tetrachloroethene	ND		1.0	0.36	ug/L			05/14/25 14:33	1
Toluene	ND		1.0	0.51	ug/L			05/14/25 14:33	1
trans-1,2-Dichloroethene	ND		1.0	0.90	ug/L			05/14/25 14:33	1
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L			05/14/25 14:33	1
Trichloroethene	ND		1.0	0.46	ug/L			05/14/25 14:33	1
Trichlorofluoromethane	ND		1.0	0.88	ug/L			05/14/25 14:33	1
Vinyl chloride	ND		1.0	0.90	ug/L			05/14/25 14:33	1
Xylenes, Total	ND		2.0	0.66	ug/L			05/14/25 14:33	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*			*N/A*		*05/14/25 14:33*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*102*		*77 - 120*		*05/14/25 14:33*	*1*
4-Bromofluorobenzene (Surr)	*102*		*73 - 120*		*05/14/25 14:33*	*1*
Dibromofluoromethane (Surr)	*103*		*75 - 123*		*05/14/25 14:33*	*1*
Toluene-d8 (Surr)	*101*		*80 - 120*		*05/14/25 14:33*	*1*

Method: SW846 8270D SIM ID - Semivolatile Organic Compounds (GC/MS SIM / Isotope Dilution)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	ND		0.20	0.10	ug/L		05/13/25 13:38	05/14/25 13:55	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,4-Dioxane-d8	*36*		*15 - 110*	*05/13/25 13:38*	*05/14/25 13:55*	*1*

Method: SW846 8270D_LL_PAH - Semivolatile Organic Compounds (GC/MS) Low level PAH

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.63	0.38	ug/L		05/12/25 09:28	05/13/25 14:29	1
Acenaphthylene	ND		0.63	0.43	ug/L		05/12/25 09:28	05/13/25 14:29	1
Anthracene	ND		0.63	0.49	ug/L		05/12/25 09:28	05/13/25 14:29	1
Benzo[a]anthracene	ND	F2	0.63	0.50	ug/L		05/12/25 09:28	05/13/25 14:29	1
Benzo[a]pyrene	ND	F2	0.63	0.41	ug/L		05/12/25 09:28	05/13/25 14:29	1
Benzo[b]fluoranthene	ND	F2	0.63	0.38	ug/L		05/12/25 09:28	05/13/25 14:29	1
Benzo[g,h,i]perylene	ND	F2	0.63	0.46	ug/L		05/12/25 09:28	05/13/25 14:29	1
Benzo[k]fluoranthene	ND	F2	0.63	0.11	ug/L		05/12/25 09:28	05/13/25 14:29	1
Chrysene	ND		0.63	0.40	ug/L		05/12/25 09:28	05/13/25 14:29	1
Dibenz(a,h)anthracene	ND	F2	0.63	0.41	ug/L		05/12/25 09:28	05/13/25 14:29	1
Fluoranthene	ND		0.63	0.45	ug/L		05/12/25 09:28	05/13/25 14:29	1
Fluorene	ND		0.63	0.46	ug/L		05/12/25 09:28	05/13/25 14:29	1
Indeno[1,2,3-cd]pyrene	ND	F2	0.63	0.55	ug/L		05/12/25 09:28	05/13/25 14:29	1
Naphthalene	ND		0.63	0.53	ug/L		05/12/25 09:28	05/13/25 14:29	1
Phenanthrene	ND		0.63	0.48	ug/L		05/12/25 09:28	05/13/25 14:29	1
Pyrene	ND		0.63	0.45	ug/L		05/12/25 09:28	05/13/25 14:29	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*99*		*48 - 120*	*05/12/25 09:28*	*05/13/25 14:29*	*1*
Nitrobenzene-d5 (Surr)	*83*		*46 - 120*	*05/12/25 09:28*	*05/13/25 14:29*	*1*
p-Terphenyl-d14 (Surr)	*77*		*24 - 136*	*05/12/25 09:28*	*05/13/25 14:29*	*1*

Client: Roux Environmental Engineering and Geology DPC
Job ID: 480-229348-1
Project/Site: BCP RI - 619 Exchange Street Site

Client Sample ID: MW-1
Lab Sample ID: 480-229348-1
Date Collected: 05/08/25 15:00
Matrix: Water
Date Received: 05/10/25 09:00

Method: SW846 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	ND		6.3	0.60	ug/L		05/12/25 09:28	05/13/25 14:29	1
2,4,6-Trichlorophenol	ND		6.3	0.76	ug/L		05/12/25 09:28	05/13/25 14:29	1
2,4-Dichlorophenol	ND		6.3	0.64	ug/L		05/12/25 09:28	05/13/25 14:29	1
2,4-Dimethylphenol	ND		6.3	0.63	ug/L		05/12/25 09:28	05/13/25 14:29	1
2,4-Dinitrophenol	ND		13	2.8	ug/L		05/12/25 09:28	05/13/25 14:29	1
2,4-Dinitrotoluene	ND		6.3	0.56	ug/L		05/12/25 09:28	05/13/25 14:29	1
2,6-Dinitrotoluene	ND		6.3	0.50	ug/L		05/12/25 09:28	05/13/25 14:29	1
2-Chloronaphthalene	ND		6.3	0.58	ug/L		05/12/25 09:28	05/13/25 14:29	1
2-Chlorophenol	ND		6.3	0.66	ug/L		05/12/25 09:28	05/13/25 14:29	1
2-Methylnaphthalene	ND		6.3	0.75	ug/L		05/12/25 09:28	05/13/25 14:29	1
2-Methylphenol	ND		6.3	0.50	ug/L		05/12/25 09:28	05/13/25 14:29	1
2-Nitroaniline	ND		13	0.53	ug/L		05/12/25 09:28	05/13/25 14:29	1
2-Nitrophenol	ND		6.3	0.60	ug/L		05/12/25 09:28	05/13/25 14:29	1
3,3'-Dichlorobenzidine	ND	F2	6.3	0.50	ug/L		05/12/25 09:28	05/13/25 14:29	1
3-Nitroaniline	ND		13	0.60	ug/L		05/12/25 09:28	05/13/25 14:29	1
4,6-Dinitro-2-methylphenol	ND		13	2.8	ug/L		05/12/25 09:28	05/13/25 14:29	1
4-Bromophenyl phenyl ether	ND		6.3	0.56	ug/L		05/12/25 09:28	05/13/25 14:29	1
4-Chloro-3-methylphenol	ND		6.3	0.56	ug/L		05/12/25 09:28	05/13/25 14:29	1
4-Chloroaniline	ND		6.3	0.74	ug/L		05/12/25 09:28	05/13/25 14:29	1
4-Chlorophenyl phenyl ether	ND		6.3	0.44	ug/L		05/12/25 09:28	05/13/25 14:29	1
4-Methylphenol	ND		13	0.45	ug/L		05/12/25 09:28	05/13/25 14:29	1
4-Nitroaniline	ND		13	0.31	ug/L		05/12/25 09:28	05/13/25 14:29	1
4-Nitrophenol	ND		13	1.9	ug/L		05/12/25 09:28	05/13/25 14:29	1
Acetophenone	ND		6.3	0.68	ug/L		05/12/25 09:28	05/13/25 14:29	1
Atrazine	ND		6.3	0.58	ug/L		05/12/25 09:28	05/13/25 14:29	1
Benzaldehyde	ND		6.3	0.33	ug/L		05/12/25 09:28	05/13/25 14:29	1
Biphenyl	ND		6.3	0.82	ug/L		05/12/25 09:28	05/13/25 14:29	1
bis (2-chloroisopropyl) ether	ND		6.3	0.65	ug/L		05/12/25 09:28	05/13/25 14:29	1
Bis(2-chloroethoxy)methane	ND		6.3	0.44	ug/L		05/12/25 09:28	05/13/25 14:29	1
Bis(2-chloroethyl)ether	ND		6.3	0.50	ug/L		05/12/25 09:28	05/13/25 14:29	1
Bis(2-ethylhexyl) phthalate	ND	F2	6.3	2.8	ug/L		05/12/25 09:28	05/13/25 14:29	1
Butyl benzyl phthalate	ND		6.3	1.3	ug/L		05/12/25 09:28	05/13/25 14:29	1
Caprolactam	ND		6.3	2.8	ug/L		05/12/25 09:28	05/13/25 14:29	1
Carbazole	ND		6.3	0.38	ug/L		05/12/25 09:28	05/13/25 14:29	1
Dibenzofuran	ND		13	0.64	ug/L		05/12/25 09:28	05/13/25 14:29	1
Diethyl phthalate	ND		6.3	0.28	ug/L		05/12/25 09:28	05/13/25 14:29	1
Dimethyl phthalate	ND		6.3	0.45	ug/L		05/12/25 09:28	05/13/25 14:29	1
Di-n-butyl phthalate	**0.56**	**J**	6.3	0.39	ug/L		05/12/25 09:28	05/13/25 14:29	1
Di-n-octyl phthalate	ND	F2	6.3	0.59	ug/L		05/12/25 09:28	05/13/25 14:29	1
Hexachlorobenzene	ND		6.3	0.64	ug/L		05/12/25 09:28	05/13/25 14:29	1
Hexachlorobutadiene	ND		6.3	0.85	ug/L		05/12/25 09:28	05/13/25 14:29	1
Hexachlorocyclopentadiene	ND		6.3	0.74	ug/L		05/12/25 09:28	05/13/25 14:29	1
Hexachloroethane	ND		6.3	0.74	ug/L		05/12/25 09:28	05/13/25 14:29	1
Isophorone	ND		6.3	0.54	ug/L		05/12/25 09:28	05/13/25 14:29	1
Nitrobenzene	ND		6.3	0.36	ug/L		05/12/25 09:28	05/13/25 14:29	1
N-Nitrosodi-n-propylamine	ND		6.3	0.68	ug/L		05/12/25 09:28	05/13/25 14:29	1
N-Nitrosodiphenylamine	ND		6.3	0.64	ug/L		05/12/25 09:28	05/13/25 14:29	1
Pentachlorophenol	ND		13	2.8	ug/L		05/12/25 09:28	05/13/25 14:29	1
Phenol	ND		6.3	0.49	ug/L		05/12/25 09:28	05/13/25 14:29	1

Client Sample ID: MW-1
Lab Sample ID: 480-229348-1
Date Collected: 05/08/25 15:00
Matrix: Water
Date Received: 05/10/25 09:00

Tentatively Identified Compound	Est. Result	Qualifier	Unit	D	RT	CAS No.	Prepared	Analyzed	Dil Fac
Unknown	11	T J	ug/L		4.18	N/A	05/12/25 09:28	05/13/25 14:29	1
Unknown	3.3	T J	ug/L		4.39	N/A	05/12/25 09:28	05/13/25 14:29	1
Unknown	32	T J	ug/L		4.43	N/A	05/12/25 09:28	05/13/25 14:29	1
2-Hexene, 2,5,5-trimethyl-	17	T J N	ug/L		4.54	40467-04-7	05/12/25 09:28	05/13/25 14:29	1
2-Hexene, 3,5,5-trimethyl-	5.2	T J N	ug/L		4.61	26456-76-8	05/12/25 09:28	05/13/25 14:29	1
Unknown	70	T J	ug/L		4.66	N/A	05/12/25 09:28	05/13/25 14:29	1
Unknown	30	T J	ug/L		4.69	N/A	05/12/25 09:28	05/13/25 14:29	1
Unknown	4.2	T J	ug/L		5.01	N/A	05/12/25 09:28	05/13/25 14:29	1
Unknown	35	T J	ug/L		5.07	N/A	05/12/25 09:28	05/13/25 14:29	1
Unknown	8.8	T J	ug/L		5.19	N/A	05/12/25 09:28	05/13/25 14:29	1
Unknown	10	T J	ug/L		5.25	N/A	05/12/25 09:28	05/13/25 14:29	1
Unknown	81	T J	ug/L		5.37	N/A	05/12/25 09:28	05/13/25 14:29	1
Unknown	23	T J	ug/L		5.38	N/A	05/12/25 09:28	05/13/25 14:29	1
Unknown	4.4	T J	ug/L		5.45	N/A	05/12/25 09:28	05/13/25 14:29	1
Unknown	27	T J	ug/L		5.49	N/A	05/12/25 09:28	05/13/25 14:29	1
Unknown	4.6	T J	ug/L		5.57	N/A	05/12/25 09:28	05/13/25 14:29	1
Unknown	46	T J	ug/L		5.60	N/A	05/12/25 09:28	05/13/25 14:29	1
Unknown	50	T J	ug/L		5.63	N/A	05/12/25 09:28	05/13/25 14:29	1
Unknown	8.7	T J	ug/L		5.66	N/A	05/12/25 09:28	05/13/25 14:29	1
Phenol, 4-(1,1-dimethylpropyl)-	9.3	T J N	ug/L		8.38	80-46-6	05/12/25 09:28	05/13/25 14:29	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol (Surr)	98		25 - 144	05/12/25 09:28	05/13/25 14:29	1
2-Fluorobiphenyl (Surr)	99		53 - 126	05/12/25 09:28	05/13/25 14:29	1
2-Fluorophenol (Surr)	93		24 - 120	05/12/25 09:28	05/13/25 14:29	1
Nitrobenzene-d5 (Surr)	83		29 - 129	05/12/25 09:28	05/13/25 14:29	1
Phenol-d5 (Surr)	52		10 - 120	05/12/25 09:28	05/13/25 14:29	1
p-Terphenyl-d14 (Surr)	77		33 - 132	05/12/25 09:28	05/13/25 14:29	1

Method: SW846 8081B - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	ND		0.050	0.0092	ug/L		05/12/25 13:45	05/13/25 11:03	1
4,4'-DDE	**0.015**	**J**	0.050	0.012	ug/L		05/12/25 13:45	05/13/25 11:03	1
4,4'-DDT	ND		0.050	0.011	ug/L		05/12/25 13:45	05/13/25 11:03	1
Aldrin	ND		0.050	0.0081	ug/L		05/12/25 13:45	05/13/25 11:03	1
alpha-BHC	**0.021**	**J B**	0.050	0.0077	ug/L		05/12/25 13:45	05/13/25 11:03	1
beta-BHC	ND		0.050	0.025	ug/L		05/12/25 13:45	05/13/25 11:03	1
cis-Chlordane	ND		0.050	0.015	ug/L		05/12/25 13:45	05/13/25 11:03	1
delta-BHC	**0.012**	**J**	0.050	0.010	ug/L		05/12/25 13:45	05/13/25 11:03	1
Dieldrin	ND		0.050	0.0098	ug/L		05/12/25 13:45	05/13/25 11:03	1
Endosulfan I	ND		0.050	0.011	ug/L		05/12/25 13:45	05/13/25 11:03	1
Endosulfan II	ND		0.050	0.012	ug/L		05/12/25 13:45	05/13/25 11:03	1
Endosulfan sulfate	ND		0.050	0.016	ug/L		05/12/25 13:45	05/13/25 11:03	1
Endrin	ND		0.050	0.014	ug/L		05/12/25 13:45	05/13/25 11:03	1
Endrin aldehyde	**0.022**	**J**	0.050	0.016	ug/L		05/12/25 13:45	05/13/25 11:03	1
Endrin ketone	ND		0.050	0.012	ug/L		05/12/25 13:45	05/13/25 11:03	1
gamma-BHC (Lindane)	**0.014**	**J B**	0.050	0.0080	ug/L		05/12/25 13:45	05/13/25 11:03	1
Heptachlor	**0.015**	**J**	0.050	0.0085	ug/L		05/12/25 13:45	05/13/25 11:03	1
Heptachlor epoxide	ND		0.050	0.0074	ug/L		05/12/25 13:45	05/13/25 11:03	1
Methoxychlor	ND		0.050	0.014	ug/L		05/12/25 13:45	05/13/25 11:03	1

Client Sample ID: MW-1
Lab Sample ID: 480-229348-1
Date Collected: 05/08/25 15:00
Matrix: Water
Date Received: 05/10/25 09:00

Method: SW846 8081B - Organochlorine Pesticides (GC) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Toxaphene	ND		0.50	0.12	ug/L		05/12/25 13:45	05/13/25 11:03	1
trans-Chlordane	ND		0.050	0.011	ug/L		05/12/25 13:45	05/13/25 11:03	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*40*		*10 - 120*	*05/12/25 13:45*	*05/13/25 11:03*	*1*
DCB Decachlorobiphenyl	*38*		*10 - 120*	*05/12/25 13:45*	*05/13/25 11:03*	*1*
Tetrachloro-m-xylene	*75*		*10 - 120*	*05/12/25 13:45*	*05/13/25 11:03*	*1*
Tetrachloro-m-xylene	*97*		*10 - 120*	*05/12/25 13:45*	*05/13/25 11:03*	*1*

Method: SW846 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		0.50	0.18	ug/L		05/14/25 06:38	05/15/25 11:42	1
PCB-1221	ND		0.50	0.18	ug/L		05/14/25 06:38	05/15/25 11:42	1
PCB-1232	ND		0.50	0.18	ug/L		05/14/25 06:38	05/15/25 11:42	1
PCB-1242	ND		0.50	0.18	ug/L		05/14/25 06:38	05/15/25 11:42	1
PCB-1248	ND		0.50	0.18	ug/L		05/14/25 06:38	05/15/25 11:42	1
PCB-1254	ND		0.50	0.25	ug/L		05/14/25 06:38	05/15/25 11:42	1
PCB-1260	ND		0.50	0.25	ug/L		05/14/25 06:38	05/15/25 11:42	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*26*		*10 - 123*	*05/14/25 06:38*	*05/15/25 11:42*	*1*
DCB Decachlorobiphenyl	*21*		*10 - 123*	*05/14/25 06:38*	*05/15/25 11:42*	*1*
Tetrachloro-m-xylene	*72*		*10 - 145*	*05/14/25 06:38*	*05/15/25 11:42*	*1*
Tetrachloro-m-xylene	*66*		*10 - 145*	*05/14/25 06:38*	*05/15/25 11:42*	*1*

Method: SW846 8151A - Herbicides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-T	ND		0.54	0.073	ug/L		05/13/25 09:13	05/14/25 12:33	1
2,4-D	ND		0.54	0.18	ug/L		05/13/25 09:13	05/14/25 12:33	1
Dichlorprop	ND		0.54	0.12	ug/L		05/13/25 09:13	05/14/25 12:33	1
Pentachlorophenol	ND		0.54	0.053	ug/L		05/13/25 09:13	05/14/25 12:33	1
Picloram	ND		0.54	0.077	ug/L		05/13/25 09:13	05/14/25 12:33	1
Silvex (2,4,5-TP)	ND		0.54	0.054	ug/L		05/13/25 09:13	05/14/25 12:33	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4-Dichlorophenylacetic acid	*101*		*21 - 143*	*05/13/25 09:13*	*05/14/25 12:33*	*1*
2,4-Dichlorophenylacetic acid	*86*		*21 - 143*	*05/13/25 09:13*	*05/14/25 12:33*	*1*

Method: EPA Draft-3 1633 - Per- and Polyfluoroalkyl Substances by LC/MS/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)	ND		50	13	ng/L		05/14/25 09:16	05/14/25 17:13	1
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9Cl-PF3ONS)	ND		50	13	ng/L		05/14/25 09:16	05/14/25 17:13	1
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	ND		50	13	ng/L		05/14/25 09:16	05/14/25 17:13	1
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA)	ND		50	13	ng/L		05/14/25 09:16	05/14/25 17:13	1
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2 FTS)	ND		50	13	ng/L		05/14/25 09:16	05/14/25 17:13	1
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2 FTS)	ND		50	13	ng/L		05/14/25 09:16	05/14/25 17:13	1

Client Sample ID: MW-1
Lab Sample ID: 480-229348-1
Date Collected: 05/08/25 15:00
Matrix: Water
Date Received: 05/10/25 09:00

Method: EPA Draft-3 1633 - Per- and Polyfluoroalkyl Substances by LC/MS/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2 FTS)	ND		50	13	ng/L		05/14/25 09:16	05/14/25 17:13	1
N-ethylperfluorooctane sulfonamide (NEtFOSA)	ND		13	3.1	ng/L		05/14/25 09:16	05/14/25 17:13	1
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	ND		13	3.3	ng/L		05/14/25 09:16	05/14/25 17:13	1
N-ethylperfluorooctane sulfonamidoethanol (NEtFOSE)	ND		130	31	ng/L		05/14/25 09:16	05/14/25 17:13	1
N-methylperfluorooctane sulfonamide (NMeFOSA)	ND		13	3.1	ng/L		05/14/25 09:16	05/14/25 17:13	1
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	ND		13	3.9	ng/L		05/14/25 09:16	05/14/25 17:13	1
N-methylperfluorooctane sulfonamidoethanol (NMeFOSE)	ND		130	31	ng/L		05/14/25 09:16	05/14/25 17:13	1
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	ND		25	7.6	ng/L		05/14/25 09:16	05/14/25 17:13	1
Perfluorobutanesulfonic acid (PFBS)	ND		13	3.1	ng/L		05/14/25 09:16	05/14/25 17:13	1
Perfluorobutanoic acid (PFBA)	ND		50	13	ng/L		05/14/25 09:16	05/14/25 17:13	1
Perfluorodecanesulfonic acid (PFDS)	ND		13	3.1	ng/L		05/14/25 09:16	05/14/25 17:13	1
Perfluorodecanoic acid (PFDA)	ND		13	3.1	ng/L		05/14/25 09:16	05/14/25 17:13	1
Perfluorododecanesulfonic acid (PFDoS)	ND		13	3.1	ng/L		05/14/25 09:16	05/14/25 17:13	1
Perfluorododecanoic acid (PFDoA)	ND		13	3.1	ng/L		05/14/25 09:16	05/14/25 17:13	1
Perfluoro (2-ethoxyethane) sulfonic acid (PFEESA)	ND		25	6.3	ng/L		05/14/25 09:16	05/14/25 17:13	1
Perfluoroheptanesulfonic acid (PFHpS)	ND		13	3.1	ng/L		05/14/25 09:16	05/14/25 17:13	1
Perfluoroheptanoic acid (PFHpA)	ND		13	3.1	ng/L		05/14/25 09:16	05/14/25 17:13	1
3-Perfluoroheptylpropanoic acid (7:3 FTCA)	ND		310	93	ng/L		05/14/25 09:16	05/14/25 17:13	1
Perfluorohexanesulfonic acid (PFHxS)	ND		13	3.2	ng/L		05/14/25 09:16	05/14/25 17:13	1
Perfluorohexanoic acid (PFHxA)	**5.6**	**J I**	13	3.1	ng/L		05/14/25 09:16	05/14/25 17:13	1
Perfluoro-4-methoxybutanoic acid (PFMBA)	ND		25	6.3	ng/L		05/14/25 09:16	05/14/25 17:13	1
Perfluoro-3-methoxypropanoic acid (PFMPA)	ND		25	6.3	ng/L		05/14/25 09:16	05/14/25 17:13	1
Perfluorononanesulfonic acid (PFNS)	ND		13	3.1	ng/L		05/14/25 09:16	05/14/25 17:13	1
Perfluorononanoic acid (PFNA)	ND		13	3.1	ng/L		05/14/25 09:16	05/14/25 17:13	1
Perfluorooctanesulfonamide (PFOSA)	ND		13	3.1	ng/L		05/14/25 09:16	05/14/25 17:13	1
Perfluorooctanesulfonic acid (PFOS)	ND		13	3.1	ng/L		05/14/25 09:16	05/14/25 17:13	1
Perfluorooctanoic acid (PFOA)	ND		13	3.1	ng/L		05/14/25 09:16	05/14/25 17:13	1
Perfluoropentanesulfonic acid (PFPeS)	ND		13	3.1	ng/L		05/14/25 09:16	05/14/25 17:13	1
Perfluoropentanoic acid (PFPeA)	ND		25	6.3	ng/L		05/14/25 09:16	05/14/25 17:13	1
3-Perfluoropentylpropanoic acid (5:3 FTCA)	ND		310	78	ng/L		05/14/25 09:16	05/14/25 17:13	1
3-Perfluoropropylpropanoic acid (3:3 FTCA)	ND		63	16	ng/L		05/14/25 09:16	05/14/25 17:13	1
Perfluorotetradecanoic acid (PFTeDA)	ND		13	3.1	ng/L		05/14/25 09:16	05/14/25 17:13	1
Perfluorotridecanoic acid (PFTrDA)	ND		13	3.1	ng/L		05/14/25 09:16	05/14/25 17:13	1
Perfluoroundecanoic acid (PFUnA)	ND		13	3.1	ng/L		05/14/25 09:16	05/14/25 17:13	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C3 HFPO-DA	*102*		*25 - 160*	*05/14/25 09:16*	*05/14/25 17:13*	*1*

Client Sample ID: MW-1
Lab Sample ID: 480-229348-1

Date Collected: 05/08/25 15:00
Matrix: Water

Date Received: 05/10/25 09:00

Method: EPA Draft-3 1633 - Per- and Polyfluoroalkyl Substances by LC/MS/MS (Continued)

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C4 PFBA	114		10 - 130	05/14/25 09:16	05/14/25 17:13	1
13C3 PFBS	113		55 - 150	05/14/25 09:16	05/14/25 17:13	1
13C6 PFDA	77.6		50 - 140	05/14/25 09:16	05/14/25 17:13	1
13C2-PFDoDA	71.4		10 - 150	05/14/25 09:16	05/14/25 17:13	1
13C4 PFHpA	100		55 - 150	05/14/25 09:16	05/14/25 17:13	1
13C5 PFHxA	103		55 - 150	05/14/25 09:16	05/14/25 17:13	1
13C3 PFHxS	110		55 - 150	05/14/25 09:16	05/14/25 17:13	1
13C9 PFNA	90.2		55 - 140	05/14/25 09:16	05/14/25 17:13	1
13C8 PFOA	105		60 - 140	05/14/25 09:16	05/14/25 17:13	1
13C8 PFOS	85.4		45 - 140	05/14/25 09:16	05/14/25 17:13	1
13C8 PFOSA	76.3		30 - 130	05/14/25 09:16	05/14/25 17:13	1
13C5 PFPeA	105		35 - 150	05/14/25 09:16	05/14/25 17:13	1
13C2 PFTeDA	68.7		10 - 130	05/14/25 09:16	05/14/25 17:13	1
13C7 PFUnA	73.6		30 - 140	05/14/25 09:16	05/14/25 17:13	1
d5-NEtFOSAA	88.6		10 - 200	05/14/25 09:16	05/14/25 17:13	1
d9-N-EtFOSE-M	32.7		10 - 150	05/14/25 09:16	05/14/25 17:13	1
d5-NEtPFOSA	66.3		10 - 130	05/14/25 09:16	05/14/25 17:13	1
D3-NMeFOSA	69.7		15 - 130	05/14/25 09:16	05/14/25 17:13	1
d3-NMeFOSAA	70.6		45 - 200	05/14/25 09:16	05/14/25 17:13	1
d7-N-MeFOSE-M	44.8		10 - 150	05/14/25 09:16	05/14/25 17:13	1
M2-4:2 FTS	118		60 - 200	05/14/25 09:16	05/14/25 17:13	1
M2-6:2 FTS	111		60 - 200	05/14/25 09:16	05/14/25 17:13	1
M2-8:2 FTS	87.4		50 - 200	05/14/25 09:16	05/14/25 17:13	1

Method: SW846 6010D - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**130**	**F2**	0.20	0.060	mg/L		05/13/25 07:56	05/13/25 13:47	1
Antimony	ND		0.020	0.0068	mg/L		05/13/25 07:56	05/13/25 13:47	1
Arsenic	**0.049**		0.015	0.0056	mg/L		05/13/25 07:56	05/13/25 13:47	1
Barium	**1.0**	**F1**	0.0020	0.00070	mg/L		05/13/25 07:56	05/13/25 13:47	1
Beryllium	**0.0056**		0.0020	0.00030	mg/L		05/13/25 07:56	05/13/25 13:47	1
Cadmium	**0.0017**	**J**	0.0020	0.00050	mg/L		05/13/25 07:56	05/13/25 13:47	1
Calcium	**416**	**F2**	0.50	0.10	mg/L		05/13/25 07:56	05/13/25 13:47	1
Chromium	**0.18**	**F1**	0.0040	0.0010	mg/L		05/13/25 07:56	05/13/25 13:47	1
Cobalt	**0.080**		0.0040	0.00063	mg/L		05/13/25 07:56	05/13/25 13:47	1
Copper	**0.18**	**F1**	0.010	0.0016	mg/L		05/13/25 07:56	05/13/25 13:47	1
Iron	**175**	**F2**	0.050	0.019	mg/L		05/13/25 07:56	05/13/25 13:47	1
Lead	**0.18**	**F1**	0.010	0.0030	mg/L		05/13/25 07:56	05/13/25 13:47	1
Magnesium	**153**		0.20	0.043	mg/L		05/13/25 07:56	05/13/25 13:47	1
Manganese	**3.0**	**F2**	0.0030	0.00040	mg/L		05/13/25 07:56	05/13/25 13:47	1
Nickel	**0.19**	**F1**	0.010	0.0013	mg/L		05/13/25 07:56	05/13/25 13:47	1
Potassium	**33.7**	**F1**	0.50	0.10	mg/L		05/13/25 07:56	05/13/25 13:47	1
Selenium	ND		0.025	0.0087	mg/L		05/13/25 07:56	05/13/25 13:47	1
Silver	**0.0029**	**J ^5-**	0.0060	0.0017	mg/L		05/13/25 07:56	05/13/25 13:47	1
Sodium	**27.5**		1.0	0.32	mg/L		05/13/25 07:56	05/13/25 13:47	1
Thallium	ND	F1	0.020	0.010	mg/L		05/13/25 07:56	05/13/25 13:47	1
Vanadium	**0.24**	**F1**	0.0050	0.0015	mg/L		05/13/25 07:56	05/13/25 13:47	1
Zinc	**0.53**	**F1**	0.010	0.0015	mg/L		05/13/25 07:56	05/13/25 13:47	1

Client: Roux Environmental Engineering and Geology DPC
Job ID: 480-229348-1
Project/Site: BCP RI - 619 Exchange Street Site

Client Sample ID: MW-1
Lab Sample ID: 480-229348-1
Date Collected: 05/08/25 15:00
Matrix: Water
Date Received: 05/10/25 09:00

Method: SW846 6010D - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum, Dissolved	ND		0.20	0.060	mg/L		05/13/25 08:00	05/13/25 14:42	1
Antimony, Dissolved	ND		0.020	0.0068	mg/L		05/13/25 08:00	05/13/25 14:42	1
Arsenic, Dissolved	ND		0.015	0.0056	mg/L		05/13/25 08:00	05/13/25 14:42	1
Barium, Dissolved	**0.17**		0.0020	0.00070	mg/L		05/13/25 08:00	05/13/25 14:42	1
Beryllium, Dissolved	ND		0.0020	0.00030	mg/L		05/13/25 08:00	05/13/25 14:42	1
Cadmium, Dissolved	ND		0.0020	0.00050	mg/L		05/13/25 08:00	05/13/25 14:42	1
Calcium, Dissolved	**75.9**		0.50	0.10	mg/L		05/13/25 08:00	05/13/25 14:42	1
Chromium, Dissolved	ND		0.0040	0.0010	mg/L		05/13/25 08:00	05/13/25 14:42	1
Cobalt, Dissolved	ND		0.0040	0.00063	mg/L		05/13/25 08:00	05/13/25 14:42	1
Copper, Dissolved	**0.0022**	**J**	0.010	0.0016	mg/L		05/13/25 08:00	05/13/25 14:42	1
Iron, Dissolved	ND		0.050	0.019	mg/L		05/13/25 08:00	05/13/25 14:42	1
Lead, Dissolved	ND		0.010	0.0030	mg/L		05/13/25 08:00	05/13/25 14:42	1
Magnesium, Dissolved	**40.6**		0.20	0.043	mg/L		05/13/25 08:00	05/13/25 14:42	1
Manganese, Dissolved	**0.026**		0.0030	0.00040	mg/L		05/13/25 08:00	05/13/25 14:42	1
Nickel, Dissolved	ND		0.010	0.0013	mg/L		05/13/25 08:00	05/13/25 14:42	1
Potassium, Dissolved	**6.0**		0.50	0.10	mg/L		05/13/25 08:00	05/13/25 14:42	1
Selenium, Dissolved	ND		0.025	0.0087	mg/L		05/13/25 08:00	05/13/25 14:42	1
Silver, Dissolved	ND	^5-	0.0060	0.0017	mg/L		05/13/25 08:00	05/13/25 14:42	1
Sodium, Dissolved	**31.8**	**F1**	1.0	0.32	mg/L		05/13/25 08:00	05/13/25 14:42	1
Thallium, Dissolved	ND		0.020	0.010	mg/L		05/13/25 08:00	05/13/25 14:42	1
Vanadium, Dissolved	ND		0.0050	0.0015	mg/L		05/13/25 08:00	05/13/25 14:42	1
Zinc, Dissolved	ND		0.010	0.0015	mg/L		05/13/25 08:00	05/13/25 14:42	1

Method: SW846 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.00064**		0.00030	0.000063	mg/L		05/13/25 09:29	05/13/25 13:39	1

Method: SW846 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury, Dissolved	ND		0.00020	0.000042	mg/L		05/13/25 09:29	05/13/25 14:31	1

Client: Roux Environmental Engineering and Geology DPC
Job ID: 480-229348-1
Project/Site: BCP RI - 619 Exchange Street Site

Client Sample ID: MW-2
Lab Sample ID: 480-229348-2
Date Collected: 05/08/25 13:00
Matrix: Water
Date Received: 05/10/25 09:00

Method: SW846 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		5.0	4.1	ug/L			05/14/25 14:55	5
1,1,2,2-Tetrachloroethane	ND		5.0	1.1	ug/L			05/14/25 14:55	5
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		5.0	1.6	ug/L			05/14/25 14:55	5
1,1,2-Trichloroethane	ND		5.0	1.2	ug/L			05/14/25 14:55	5
1,1-Dichloroethane	ND		5.0	1.9	ug/L			05/14/25 14:55	5
1,1-Dichloroethene	ND		5.0	1.5	ug/L			05/14/25 14:55	5
1,2,4-Trichlorobenzene	ND		5.0	2.1	ug/L			05/14/25 14:55	5
1,2,4-Trimethylbenzene	ND		5.0	3.8	ug/L			05/14/25 14:55	5
1,2-Dibromo-3-Chloropropane	ND		5.0	2.0	ug/L			05/14/25 14:55	5
1,2-Dibromoethane	ND		5.0	3.7	ug/L			05/14/25 14:55	5
1,2-Dichlorobenzene	ND		5.0	4.0	ug/L			05/14/25 14:55	5
1,2-Dichloroethane	ND		5.0	1.1	ug/L			05/14/25 14:55	5
1,2-Dichloropropane	ND		5.0	3.6	ug/L			05/14/25 14:55	5
1,3,5-Trimethylbenzene	ND		5.0	3.9	ug/L			05/14/25 14:55	5
1,3-Dichlorobenzene	ND		5.0	3.9	ug/L			05/14/25 14:55	5
1,4-Dichlorobenzene	ND		5.0	4.2	ug/L			05/14/25 14:55	5
2-Butanone (MEK)	ND		50	6.6	ug/L			05/14/25 14:55	5
2-Hexanone	ND		25	6.2	ug/L			05/14/25 14:55	5
4-Isopropyltoluene	ND		5.0	1.6	ug/L			05/14/25 14:55	5
4-Methyl-2-pentanone (MIBK)	ND		25	11	ug/L			05/14/25 14:55	5
Acetone	**16**	**J**	50	15	ug/L			05/14/25 14:55	5
Benzene	ND		5.0	2.1	ug/L			05/14/25 14:55	5
Bromodichloromethane	ND		5.0	2.0	ug/L			05/14/25 14:55	5
Bromoform	ND		5.0	1.3	ug/L			05/14/25 14:55	5
Bromomethane	ND		5.0	3.5	ug/L			05/14/25 14:55	5
Carbon disulfide	ND		5.0	0.95	ug/L			05/14/25 14:55	5
Carbon tetrachloride	ND		5.0	1.4	ug/L			05/14/25 14:55	5
Chlorobenzene	ND		5.0	3.8	ug/L			05/14/25 14:55	5
Chloroethane	ND		5.0	1.6	ug/L			05/14/25 14:55	5
Chloroform	ND		5.0	1.7	ug/L			05/14/25 14:55	5
Chloromethane	ND		5.0	1.8	ug/L			05/14/25 14:55	5
cis-1,2-Dichloroethene	ND		5.0	4.1	ug/L			05/14/25 14:55	5
cis-1,3-Dichloropropene	ND		5.0	1.8	ug/L			05/14/25 14:55	5
Cyclohexane	ND		5.0	0.90	ug/L			05/14/25 14:55	5
Dibromochloromethane	ND		5.0	1.6	ug/L			05/14/25 14:55	5
Dichlorodifluoromethane	ND		5.0	3.4	ug/L			05/14/25 14:55	5
Ethylbenzene	ND		5.0	3.7	ug/L			05/14/25 14:55	5
Isopropylbenzene	ND		5.0	4.0	ug/L			05/14/25 14:55	5
m,p-Xylene	ND		10	3.3	ug/L			05/14/25 14:55	5
Methyl acetate	ND		13	6.5	ug/L			05/14/25 14:55	5
Methyl tert-butyl ether	ND		5.0	0.80	ug/L			05/14/25 14:55	5
Methylcyclohexane	ND		5.0	0.80	ug/L			05/14/25 14:55	5
Methylene Chloride	ND		5.0	2.2	ug/L			05/14/25 14:55	5
Naphthalene	ND		5.0	2.2	ug/L			05/14/25 14:55	5
n-Butylbenzene	ND		5.0	3.2	ug/L			05/14/25 14:55	5
N-Propylbenzene	ND		5.0	3.5	ug/L			05/14/25 14:55	5
o-Xylene	ND		5.0	3.8	ug/L			05/14/25 14:55	5
sec-Butylbenzene	ND		5.0	3.8	ug/L			05/14/25 14:55	5
Styrene	ND		5.0	3.7	ug/L			05/14/25 14:55	5

Client Sample ID: MW-2
Lab Sample ID: 480-229348-2
Date Collected: 05/08/25 13:00
Matrix: Water
Date Received: 05/10/25 09:00

Method: SW846 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
tert-Butylbenzene	ND		5.0	4.1	ug/L			05/14/25 14:55	5
Tetrachloroethene	ND		5.0	1.8	ug/L			05/14/25 14:55	5
Toluene	ND		5.0	2.6	ug/L			05/14/25 14:55	5
trans-1,2-Dichloroethene	ND		5.0	4.5	ug/L			05/14/25 14:55	5
trans-1,3-Dichloropropene	ND		5.0	1.9	ug/L			05/14/25 14:55	5
Trichloroethene	ND		5.0	2.3	ug/L			05/14/25 14:55	5
Trichlorofluoromethane	ND		5.0	4.4	ug/L			05/14/25 14:55	5
Vinyl chloride	ND		5.0	4.5	ug/L			05/14/25 14:55	5
Xylenes, Total	ND		10	3.3	ug/L			05/14/25 14:55	5

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*			*N/A*		*05/14/25 14:55*	*5*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*102*		*77 - 120*		*05/14/25 14:55*	*5*
4-Bromofluorobenzene (Surr)	*103*		*73 - 120*		*05/14/25 14:55*	*5*
Dibromofluoromethane (Surr)	*105*		*75 - 123*		*05/14/25 14:55*	*5*
Toluene-d8 (Surr)	*103*		*80 - 120*		*05/14/25 14:55*	*5*

Method: SW846 8270D_LL_PAH - Semivolatile Organic Compounds (GC/MS) Low level PAH

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.50	0.30	ug/L		05/12/25 09:28	05/13/25 19:34	1
Acenaphthylene	ND		0.50	0.34	ug/L		05/12/25 09:28	05/13/25 19:34	1
Anthracene	ND		0.50	0.39	ug/L		05/12/25 09:28	05/13/25 19:34	1
Benzo[a]anthracene	ND		0.50	0.40	ug/L		05/12/25 09:28	05/13/25 19:34	1
Benzo[a]pyrene	ND		0.50	0.33	ug/L		05/12/25 09:28	05/13/25 19:34	1
Benzo[b]fluoranthene	ND		0.50	0.30	ug/L		05/12/25 09:28	05/13/25 19:34	1
Benzo[g,h,i]perylene	ND		0.50	0.37	ug/L		05/12/25 09:28	05/13/25 19:34	1
Benzo[k]fluoranthene	ND		0.50	0.085	ug/L		05/12/25 09:28	05/13/25 19:34	1
Chrysene	ND		0.50	0.32	ug/L		05/12/25 09:28	05/13/25 19:34	1
Dibenz(a,h)anthracene	ND		0.50	0.33	ug/L		05/12/25 09:28	05/13/25 19:34	1
Fluoranthene	ND		0.50	0.36	ug/L		05/12/25 09:28	05/13/25 19:34	1
Fluorene	ND		0.50	0.37	ug/L		05/12/25 09:28	05/13/25 19:34	1
Indeno[1,2,3-cd]pyrene	ND		0.50	0.44	ug/L		05/12/25 09:28	05/13/25 19:34	1
Naphthalene	ND		0.50	0.42	ug/L		05/12/25 09:28	05/13/25 19:34	1
Phenanthrene	ND		0.50	0.38	ug/L		05/12/25 09:28	05/13/25 19:34	1
Pyrene	ND		0.50	0.36	ug/L		05/12/25 09:28	05/13/25 19:34	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*92*		*48 - 120*	*05/12/25 09:28*	*05/13/25 19:34*	*1*
Nitrobenzene-d5 (Surr)	*80*		*46 - 120*	*05/12/25 09:28*	*05/13/25 19:34*	*1*
p-Terphenyl-d14 (Surr)	*63*		*24 - 136*	*05/12/25 09:28*	*05/13/25 19:34*	*1*

Method: SW846 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	ND		5.0	0.48	ug/L		05/12/25 09:28	05/13/25 19:34	1
2,4,6-Trichlorophenol	ND		5.0	0.61	ug/L		05/12/25 09:28	05/13/25 19:34	1
2,4-Dichlorophenol	ND		5.0	0.51	ug/L		05/12/25 09:28	05/13/25 19:34	1
2,4-Dimethylphenol	ND		5.0	0.50	ug/L		05/12/25 09:28	05/13/25 19:34	1
2,4-Dinitrophenol	ND		10	2.2	ug/L		05/12/25 09:28	05/13/25 19:34	1
2,4-Dinitrotoluene	ND		5.0	0.45	ug/L		05/12/25 09:28	05/13/25 19:34	1

Client: Roux Environmental Engineering and Geology DPC
Job ID: 480-229348-1
Project/Site: BCP RI - 619 Exchange Street Site

Client Sample ID: MW-2
Lab Sample ID: 480-229348-2
Date Collected: 05/08/25 13:00
Matrix: Water
Date Received: 05/10/25 09:00

Method: SW846 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,6-Dinitrotoluene	ND		5.0	0.40	ug/L		05/12/25 09:28	05/13/25 19:34	1
2-Chloronaphthalene	ND		5.0	0.46	ug/L		05/12/25 09:28	05/13/25 19:34	1
2-Chlorophenol	ND		5.0	0.53	ug/L		05/12/25 09:28	05/13/25 19:34	1
2-Methylnaphthalene	ND		5.0	0.60	ug/L		05/12/25 09:28	05/13/25 19:34	1
2-Methylphenol	ND		5.0	0.40	ug/L		05/12/25 09:28	05/13/25 19:34	1
2-Nitroaniline	ND		10	0.42	ug/L		05/12/25 09:28	05/13/25 19:34	1
2-Nitrophenol	ND		5.0	0.48	ug/L		05/12/25 09:28	05/13/25 19:34	1
3,3'-Dichlorobenzidine	ND		5.0	0.40	ug/L		05/12/25 09:28	05/13/25 19:34	1
3-Nitroaniline	ND		10	0.48	ug/L		05/12/25 09:28	05/13/25 19:34	1
4,6-Dinitro-2-methylphenol	ND		10	2.2	ug/L		05/12/25 09:28	05/13/25 19:34	1
4-Bromophenyl phenyl ether	ND		5.0	0.45	ug/L		05/12/25 09:28	05/13/25 19:34	1
4-Chloro-3-methylphenol	ND		5.0	0.45	ug/L		05/12/25 09:28	05/13/25 19:34	1
4-Chloroaniline	ND		5.0	0.59	ug/L		05/12/25 09:28	05/13/25 19:34	1
4-Chlorophenyl phenyl ether	ND		5.0	0.35	ug/L		05/12/25 09:28	05/13/25 19:34	1
4-Methylphenol	ND		10	0.36	ug/L		05/12/25 09:28	05/13/25 19:34	1
4-Nitroaniline	ND		10	0.25	ug/L		05/12/25 09:28	05/13/25 19:34	1
4-Nitrophenol	ND		10	1.5	ug/L		05/12/25 09:28	05/13/25 19:34	1
Acetophenone	ND		5.0	0.54	ug/L		05/12/25 09:28	05/13/25 19:34	1
Atrazine	ND		5.0	0.46	ug/L		05/12/25 09:28	05/13/25 19:34	1
Benzaldehyde	ND		5.0	0.27	ug/L		05/12/25 09:28	05/13/25 19:34	1
Biphenyl	ND		5.0	0.65	ug/L		05/12/25 09:28	05/13/25 19:34	1
bis (2-chloroisopropyl) ether	ND		5.0	0.52	ug/L		05/12/25 09:28	05/13/25 19:34	1
Bis(2-chloroethoxy)methane	ND		5.0	0.35	ug/L		05/12/25 09:28	05/13/25 19:34	1
Bis(2-chloroethyl)ether	ND		5.0	0.40	ug/L		05/12/25 09:28	05/13/25 19:34	1
Bis(2-ethylhexyl) phthalate	ND		5.0	2.2	ug/L		05/12/25 09:28	05/13/25 19:34	1
Butyl benzyl phthalate	ND		5.0	1.0	ug/L		05/12/25 09:28	05/13/25 19:34	1
Caprolactam	**3.4**	**J**	5.0	2.2	ug/L		05/12/25 09:28	05/13/25 19:34	1
Carbazole	ND		5.0	0.30	ug/L		05/12/25 09:28	05/13/25 19:34	1
Dibenzofuran	ND		10	0.51	ug/L		05/12/25 09:28	05/13/25 19:34	1
Diethyl phthalate	**0.50**	**J**	5.0	0.22	ug/L		05/12/25 09:28	05/13/25 19:34	1
Dimethyl phthalate	ND		5.0	0.36	ug/L		05/12/25 09:28	05/13/25 19:34	1
Di-n-butyl phthalate	**0.53**	**J**	5.0	0.31	ug/L		05/12/25 09:28	05/13/25 19:34	1
Di-n-octyl phthalate	ND		5.0	0.47	ug/L		05/12/25 09:28	05/13/25 19:34	1
Hexachlorobenzene	ND		5.0	0.51	ug/L		05/12/25 09:28	05/13/25 19:34	1
Hexachlorobutadiene	ND		5.0	0.68	ug/L		05/12/25 09:28	05/13/25 19:34	1
Hexachlorocyclopentadiene	ND		5.0	0.59	ug/L		05/12/25 09:28	05/13/25 19:34	1
Hexachloroethane	ND		5.0	0.59	ug/L		05/12/25 09:28	05/13/25 19:34	1
Isophorone	ND		5.0	0.43	ug/L		05/12/25 09:28	05/13/25 19:34	1
Nitrobenzene	ND		5.0	0.29	ug/L		05/12/25 09:28	05/13/25 19:34	1
N-Nitrosodi-n-propylamine	ND		5.0	0.54	ug/L		05/12/25 09:28	05/13/25 19:34	1
N-Nitrosodiphenylamine	ND		5.0	0.51	ug/L		05/12/25 09:28	05/13/25 19:34	1
Pentachlorophenol	**4.3**	**J**	10	2.2	ug/L		05/12/25 09:28	05/13/25 19:34	1
Phenol	ND		5.0	0.39	ug/L		05/12/25 09:28	05/13/25 19:34	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Unknown	*6.3*	*T J*	*ug/L*		*4.17*	*N/A*	*05/12/25 09:28*	*05/13/25 19:34*	*1*
Unknown	*19*	*T J*	*ug/L*		*4.43*	*N/A*	*05/12/25 09:28*	*05/13/25 19:34*	*1*
2-Hexene, 2,5,5-trimethyl-	*9.3*	*T J N*	*ug/L*		*4.54*	*40467-04-7*	*05/12/25 09:28*	*05/13/25 19:34*	*1*
Unknown	*2.8*	*T J*	*ug/L*		*4.61*	*N/A*	*05/12/25 09:28*	*05/13/25 19:34*	*1*
Unknown	*22*	*T J*	*ug/L*		*4.65*	*N/A*	*05/12/25 09:28*	*05/13/25 19:34*	*1*

Client Sample ID: MW-2
Lab Sample ID: 480-229348-2
Date Collected: 05/08/25 13:00
Matrix: Water
Date Received: 05/10/25 09:00

Method: SW846 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Tentatively Identified Compound	Est. Result	Qualifier	Unit	D	RT	CAS No.	Prepared	Analyzed	Dil Fac
Unknown	18	T J	ug/L		4.69	N/A	05/12/25 09:28	05/13/25 19:34	1
Unknown	20	T J	ug/L		5.06	N/A	05/12/25 09:28	05/13/25 19:34	1
Unknown	5.1	T J	ug/L		5.19	N/A	05/12/25 09:28	05/13/25 19:34	1
Unknown	5.7	T J	ug/L		5.25	N/A	05/12/25 09:28	05/13/25 19:34	1
Unknown	62	T J	ug/L		5.37	N/A	05/12/25 09:28	05/13/25 19:34	1
Unknown	16	T J	ug/L		5.38	N/A	05/12/25 09:28	05/13/25 19:34	1
Unknown	2.9	T J	ug/L		5.45	N/A	05/12/25 09:28	05/13/25 19:34	1
Unknown	20	T J	ug/L		5.48	N/A	05/12/25 09:28	05/13/25 19:34	1
Unknown	3.5	T J	ug/L		5.57	N/A	05/12/25 09:28	05/13/25 19:34	1
Unknown	34	T J	ug/L		5.60	N/A	05/12/25 09:28	05/13/25 19:34	1
Unknown	37	T J	ug/L		5.63	N/A	05/12/25 09:28	05/13/25 19:34	1
Unknown	6.6	T J	ug/L		5.66	N/A	05/12/25 09:28	05/13/25 19:34	1
Unknown	4.0	T J	ug/L		6.22	N/A	05/12/25 09:28	05/13/25 19:34	1
Eucalyptol	3.1	T J N	ug/L		6.31	470-82-6	05/12/25 09:28	05/13/25 19:34	1
Butyl citrate	44	T J N	ug/L		11.75	77-94-1	05/12/25 09:28	05/13/25 19:34	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol (Surr)	103		25 - 144	05/12/25 09:28	05/13/25 19:34	1
2-Fluorobiphenyl (Surr)	92		53 - 126	05/12/25 09:28	05/13/25 19:34	1
2-Fluorophenol (Surr)	61		24 - 120	05/12/25 09:28	05/13/25 19:34	1
Nitrobenzene-d5 (Surr)	80		29 - 129	05/12/25 09:28	05/13/25 19:34	1
Phenol-d5 (Surr)	40		10 - 120	05/12/25 09:28	05/13/25 19:34	1
p-Terphenyl-d14 (Surr)	63		33 - 132	05/12/25 09:28	05/13/25 19:34	1

Method: SW846 6010D - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**9.4**		0.20	0.060	mg/L		05/13/25 07:56	05/13/25 13:56	1
Antimony	ND		0.020	0.0068	mg/L		05/13/25 07:56	05/13/25 13:56	1
Arsenic	**0.013**	**J**	0.015	0.0056	mg/L		05/13/25 07:56	05/13/25 13:56	1
Barium	**0.57**		0.0020	0.00070	mg/L		05/13/25 07:56	05/13/25 13:56	1
Beryllium	**0.00040**	**J**	0.0020	0.00030	mg/L		05/13/25 07:56	05/13/25 13:56	1
Cadmium	ND		0.0020	0.00050	mg/L		05/13/25 07:56	05/13/25 13:56	1
Calcium	**129**		0.50	0.10	mg/L		05/13/25 07:56	05/13/25 13:56	1
Chromium	**0.016**		0.0040	0.0010	mg/L		05/13/25 07:56	05/13/25 13:56	1
Cobalt	**0.0071**		0.0040	0.00063	mg/L		05/13/25 07:56	05/13/25 13:56	1
Copper	**0.059**		0.010	0.0016	mg/L		05/13/25 07:56	05/13/25 13:56	1
Iron	**14.2**		0.050	0.019	mg/L		05/13/25 07:56	05/13/25 13:56	1
Lead	**0.046**		0.010	0.0030	mg/L		05/13/25 07:56	05/13/25 13:56	1
Magnesium	**52.5**		0.20	0.043	mg/L		05/13/25 07:56	05/13/25 13:56	1
Manganese	**1.1**		0.0030	0.00040	mg/L		05/13/25 07:56	05/13/25 13:56	1
Nickel	**0.018**		0.010	0.0013	mg/L		05/13/25 07:56	05/13/25 13:56	1
Potassium	**19.6**		0.50	0.10	mg/L		05/13/25 07:56	05/13/25 13:56	1
Selenium	ND		0.025	0.0087	mg/L		05/13/25 07:56	05/13/25 13:56	1
Silver	ND	^5-	0.0060	0.0017	mg/L		05/13/25 07:56	05/13/25 13:56	1
Sodium	**80.4**		1.0	0.32	mg/L		05/13/25 07:56	05/13/25 13:56	1
Thallium	ND		0.020	0.010	mg/L		05/13/25 07:56	05/13/25 13:56	1
Vanadium	**0.019**		0.0050	0.0015	mg/L		05/13/25 07:56	05/13/25 13:56	1
Zinc	**0.23**		0.010	0.0015	mg/L		05/13/25 07:56	05/13/25 13:56	1

Client: Roux Environmental Engineering and Geology DPC
Job ID: 480-229348-1
Project/Site: BCP RI - 619 Exchange Street Site

Client Sample ID: MW-2
Lab Sample ID: 480-229348-2
Date Collected: 05/08/25 13:00
Matrix: Water
Date Received: 05/10/25 09:00

Method: SW846 6010D - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum, Dissolved	ND		0.20	0.060	mg/L		05/13/25 08:00	05/13/25 14:52	1
Antimony, Dissolved	ND		0.020	0.0068	mg/L		05/13/25 08:00	05/13/25 14:52	1
Arsenic, Dissolved	**0.0066**	**J**	0.015	0.0056	mg/L		05/13/25 08:00	05/13/25 14:52	1
Barium, Dissolved	**0.11**		0.0020	0.00070	mg/L		05/13/25 08:00	05/13/25 14:52	1
Beryllium, Dissolved	ND		0.0020	0.00030	mg/L		05/13/25 08:00	05/13/25 14:52	1
Cadmium, Dissolved	ND		0.0020	0.00050	mg/L		05/13/25 08:00	05/13/25 14:52	1
Calcium, Dissolved	**114**		0.50	0.10	mg/L		05/13/25 08:00	05/13/25 14:52	1
Chromium, Dissolved	ND		0.0040	0.0010	mg/L		05/13/25 08:00	05/13/25 14:52	1
Cobalt, Dissolved	**0.0025**	**J**	0.0040	0.00063	mg/L		05/13/25 08:00	05/13/25 14:52	1
Copper, Dissolved	**0.0042**	**J**	0.010	0.0016	mg/L		05/13/25 08:00	05/13/25 14:52	1
Iron, Dissolved	ND		0.050	0.019	mg/L		05/13/25 08:00	05/13/25 14:52	1
Lead, Dissolved	ND		0.010	0.0030	mg/L		05/13/25 08:00	05/13/25 14:52	1
Magnesium, Dissolved	**47.1**		0.20	0.043	mg/L		05/13/25 08:00	05/13/25 14:52	1
Manganese, Dissolved	**0.82**		0.0030	0.00040	mg/L		05/13/25 08:00	05/13/25 14:52	1
Nickel, Dissolved	**0.0042**	**J**	0.010	0.0013	mg/L		05/13/25 08:00	05/13/25 14:52	1
Potassium, Dissolved	**16.9**		0.50	0.10	mg/L		05/13/25 08:00	05/13/25 14:52	1
Selenium, Dissolved	ND		0.025	0.0087	mg/L		05/13/25 08:00	05/13/25 14:52	1
Silver, Dissolved	ND	^5-	0.0060	0.0017	mg/L		05/13/25 08:00	05/13/25 14:52	1
Sodium, Dissolved	**79.3**		1.0	0.32	mg/L		05/13/25 08:00	05/13/25 14:52	1
Thallium, Dissolved	ND		0.020	0.010	mg/L		05/13/25 08:00	05/13/25 14:52	1
Vanadium, Dissolved	ND		0.0050	0.0015	mg/L		05/13/25 08:00	05/13/25 14:52	1
Zinc, Dissolved	**0.017**	**B**	0.010	0.0015	mg/L		05/13/25 08:00	05/13/25 14:52	1

Method: SW846 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.00037**		0.00020	0.000042	mg/L		05/13/25 09:29	05/13/25 13:44	1

Method: SW846 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury, Dissolved	ND		0.00020	0.000042	mg/L		05/13/25 09:29	05/13/25 14:37	1

Client: Roux Environmental Engineering and Geology DPC
Job ID: 480-229348-1
Project/Site: BCP RI - 619 Exchange Street Site

Client Sample ID: MW-3
Lab Sample ID: 480-229348-3
Date Collected: 05/08/25 14:00
Matrix: Water
Date Received: 05/10/25 09:00

Method: SW846 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	0.82	ug/L			05/14/25 15:18	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			05/14/25 15:18	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.31	ug/L			05/14/25 15:18	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			05/14/25 15:18	1
1,1-Dichloroethane	ND		1.0	0.38	ug/L			05/14/25 15:18	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			05/14/25 15:18	1
1,2,4-Trichlorobenzene	ND		1.0	0.41	ug/L			05/14/25 15:18	1
1,2,4-Trimethylbenzene	ND		1.0	0.75	ug/L			05/14/25 15:18	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.39	ug/L			05/14/25 15:18	1
1,2-Dibromoethane	ND		1.0	0.73	ug/L			05/14/25 15:18	1
1,2-Dichlorobenzene	ND		1.0	0.79	ug/L			05/14/25 15:18	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			05/14/25 15:18	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			05/14/25 15:18	1
1,3,5-Trimethylbenzene	ND		1.0	0.77	ug/L			05/14/25 15:18	1
1,3-Dichlorobenzene	ND		1.0	0.78	ug/L			05/14/25 15:18	1
1,4-Dichlorobenzene	ND		1.0	0.84	ug/L			05/14/25 15:18	1
2-Butanone (MEK)	ND		10	1.3	ug/L			05/14/25 15:18	1
2-Hexanone	ND		5.0	1.2	ug/L			05/14/25 15:18	1
4-Isopropyltoluene	ND		1.0	0.31	ug/L			05/14/25 15:18	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			05/14/25 15:18	1
Acetone	**16**		10	3.0	ug/L			05/14/25 15:18	1
Benzene	ND		1.0	0.41	ug/L			05/14/25 15:18	1
Bromodichloromethane	ND		1.0	0.39	ug/L			05/14/25 15:18	1
Bromoform	ND		1.0	0.26	ug/L			05/14/25 15:18	1
Bromomethane	ND		1.0	0.69	ug/L			05/14/25 15:18	1
Carbon disulfide	ND		1.0	0.19	ug/L			05/14/25 15:18	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			05/14/25 15:18	1
Chlorobenzene	ND		1.0	0.75	ug/L			05/14/25 15:18	1
Chloroethane	ND		1.0	0.32	ug/L			05/14/25 15:18	1
Chloroform	ND		1.0	0.34	ug/L			05/14/25 15:18	1
Chloromethane	ND		1.0	0.35	ug/L			05/14/25 15:18	1
cis-1,2-Dichloroethene	ND		1.0	0.81	ug/L			05/14/25 15:18	1
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			05/14/25 15:18	1
Cyclohexane	ND		1.0	0.18	ug/L			05/14/25 15:18	1
Dibromochloromethane	ND		1.0	0.32	ug/L			05/14/25 15:18	1
Dichlorodifluoromethane	ND		1.0	0.68	ug/L			05/14/25 15:18	1
Ethylbenzene	ND		1.0	0.74	ug/L			05/14/25 15:18	1
Isopropylbenzene	ND		1.0	0.79	ug/L			05/14/25 15:18	1
m,p-Xylene	ND		2.0	0.66	ug/L			05/14/25 15:18	1
Methyl acetate	ND		2.5	1.3	ug/L			05/14/25 15:18	1
Methyl tert-butyl ether	ND		1.0	0.16	ug/L			05/14/25 15:18	1
Methylcyclohexane	ND		1.0	0.16	ug/L			05/14/25 15:18	1
Methylene Chloride	ND		1.0	0.44	ug/L			05/14/25 15:18	1
Naphthalene	ND		1.0	0.43	ug/L			05/14/25 15:18	1
n-Butylbenzene	ND		1.0	0.64	ug/L			05/14/25 15:18	1
N-Propylbenzene	ND		1.0	0.69	ug/L			05/14/25 15:18	1
o-Xylene	ND		1.0	0.76	ug/L			05/14/25 15:18	1
sec-Butylbenzene	ND		1.0	0.75	ug/L			05/14/25 15:18	1
Styrene	ND		1.0	0.73	ug/L			05/14/25 15:18	1

Client Sample ID: MW-3
Lab Sample ID: 480-229348-3
Date Collected: 05/08/25 14:00
Matrix: Water
Date Received: 05/10/25 09:00

Method: SW846 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
tert-Butylbenzene	ND		1.0	0.81	ug/L			05/14/25 15:18	1
Tetrachloroethene	ND		1.0	0.36	ug/L			05/14/25 15:18	1
Toluene	ND		1.0	0.51	ug/L			05/14/25 15:18	1
trans-1,2-Dichloroethene	ND		1.0	0.90	ug/L			05/14/25 15:18	1
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L			05/14/25 15:18	1
Trichloroethene	ND		1.0	0.46	ug/L			05/14/25 15:18	1
Trichlorofluoromethane	ND		1.0	0.88	ug/L			05/14/25 15:18	1
Vinyl chloride	ND		1.0	0.90	ug/L			05/14/25 15:18	1
Xylenes, Total	ND		2.0	0.66	ug/L			05/14/25 15:18	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*			*N/A*		*05/14/25 15:18*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*104*		*77 - 120*		*05/14/25 15:18*	*1*
4-Bromofluorobenzene (Surr)	*101*		*73 - 120*		*05/14/25 15:18*	*1*
Dibromofluoromethane (Surr)	*104*		*75 - 123*		*05/14/25 15:18*	*1*
Toluene-d8 (Surr)	*99*		*80 - 120*		*05/14/25 15:18*	*1*

Method: SW846 8270D_LL_PAH - Semivolatile Organic Compounds (GC/MS) Low level PAH

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.52	0.31	ug/L		05/12/25 09:28	05/13/25 20:02	1
Acenaphthylene	ND		0.52	0.35	ug/L		05/12/25 09:28	05/13/25 20:02	1
Anthracene	ND		0.52	0.41	ug/L		05/12/25 09:28	05/13/25 20:02	1
Benzo[a]anthracene	ND		0.52	0.42	ug/L		05/12/25 09:28	05/13/25 20:02	1
Benzo[a]pyrene	ND		0.52	0.34	ug/L		05/12/25 09:28	05/13/25 20:02	1
Benzo[b]fluoranthene	ND		0.52	0.31	ug/L		05/12/25 09:28	05/13/25 20:02	1
Benzo[g,h,i]perylene	ND		0.52	0.39	ug/L		05/12/25 09:28	05/13/25 20:02	1
Benzo[k]fluoranthene	ND		0.52	0.089	ug/L		05/12/25 09:28	05/13/25 20:02	1
Chrysene	ND		0.52	0.33	ug/L		05/12/25 09:28	05/13/25 20:02	1
Dibenz(a,h)anthracene	ND		0.52	0.34	ug/L		05/12/25 09:28	05/13/25 20:02	1
Fluoranthene	ND		0.52	0.38	ug/L		05/12/25 09:28	05/13/25 20:02	1
Fluorene	ND		0.52	0.39	ug/L		05/12/25 09:28	05/13/25 20:02	1
Indeno[1,2,3-cd]pyrene	ND		0.52	0.46	ug/L		05/12/25 09:28	05/13/25 20:02	1
Naphthalene	ND		0.52	0.44	ug/L		05/12/25 09:28	05/13/25 20:02	1
Phenanthrene	ND		0.52	0.40	ug/L		05/12/25 09:28	05/13/25 20:02	1
Pyrene	ND		0.52	0.38	ug/L		05/12/25 09:28	05/13/25 20:02	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*109*		*48 - 120*	*05/12/25 09:28*	*05/13/25 20:02*	*1*
Nitrobenzene-d5 (Surr)	*86*		*46 - 120*	*05/12/25 09:28*	*05/13/25 20:02*	*1*
p-Terphenyl-d14 (Surr)	*67*		*24 - 136*	*05/12/25 09:28*	*05/13/25 20:02*	*1*

Method: SW846 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	ND		5.2	0.50	ug/L		05/12/25 09:28	05/13/25 20:02	1
2,4,6-Trichlorophenol	ND		5.2	0.64	ug/L		05/12/25 09:28	05/13/25 20:02	1
2,4-Dichlorophenol	ND		5.2	0.53	ug/L		05/12/25 09:28	05/13/25 20:02	1
2,4-Dimethylphenol	ND		5.2	0.52	ug/L		05/12/25 09:28	05/13/25 20:02	1
2,4-Dinitrophenol	ND		10	2.3	ug/L		05/12/25 09:28	05/13/25 20:02	1
2,4-Dinitrotoluene	ND		5.2	0.47	ug/L		05/12/25 09:28	05/13/25 20:02	1

Client: Roux Environmental Engineering and Geology DPC
Job ID: 480-229348-1
Project/Site: BCP RI - 619 Exchange Street Site

Client Sample ID: MW-3
Lab Sample ID: 480-229348-3
Date Collected: 05/08/25 14:00
Matrix: Water
Date Received: 05/10/25 09:00

Method: SW846 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,6-Dinitrotoluene	ND		5.2	0.42	ug/L		05/12/25 09:28	05/13/25 20:02	1
2-Chloronaphthalene	ND		5.2	0.48	ug/L		05/12/25 09:28	05/13/25 20:02	1
2-Chlorophenol	ND		5.2	0.55	ug/L		05/12/25 09:28	05/13/25 20:02	1
2-Methylnaphthalene	ND		5.2	0.63	ug/L		05/12/25 09:28	05/13/25 20:02	1
2-Methylphenol	ND		5.2	0.42	ug/L		05/12/25 09:28	05/13/25 20:02	1
2-Nitroaniline	ND		10	0.44	ug/L		05/12/25 09:28	05/13/25 20:02	1
2-Nitrophenol	ND		5.2	0.50	ug/L		05/12/25 09:28	05/13/25 20:02	1
3,3'-Dichlorobenzidine	ND		5.2	0.42	ug/L		05/12/25 09:28	05/13/25 20:02	1
3-Nitroaniline	ND		10	0.50	ug/L		05/12/25 09:28	05/13/25 20:02	1
4,6-Dinitro-2-methylphenol	ND		10	2.3	ug/L		05/12/25 09:28	05/13/25 20:02	1
4-Bromophenyl phenyl ether	ND		5.2	0.47	ug/L		05/12/25 09:28	05/13/25 20:02	1
4-Chloro-3-methylphenol	ND		5.2	0.47	ug/L		05/12/25 09:28	05/13/25 20:02	1
4-Chloroaniline	ND		5.2	0.61	ug/L		05/12/25 09:28	05/13/25 20:02	1
4-Chlorophenyl phenyl ether	ND		5.2	0.36	ug/L		05/12/25 09:28	05/13/25 20:02	1
4-Methylphenol	ND		10	0.38	ug/L		05/12/25 09:28	05/13/25 20:02	1
4-Nitroaniline	ND		10	0.26	ug/L		05/12/25 09:28	05/13/25 20:02	1
4-Nitrophenol	ND		10	1.6	ug/L		05/12/25 09:28	05/13/25 20:02	1
Acetophenone	ND		5.2	0.56	ug/L		05/12/25 09:28	05/13/25 20:02	1
Atrazine	ND		5.2	0.48	ug/L		05/12/25 09:28	05/13/25 20:02	1
Benzaldehyde	ND		5.2	0.28	ug/L		05/12/25 09:28	05/13/25 20:02	1
Biphenyl	ND		5.2	0.68	ug/L		05/12/25 09:28	05/13/25 20:02	1
bis (2-chloroisopropyl) ether	ND		5.2	0.54	ug/L		05/12/25 09:28	05/13/25 20:02	1
Bis(2-chloroethoxy)methane	ND		5.2	0.36	ug/L		05/12/25 09:28	05/13/25 20:02	1
Bis(2-chloroethyl)ether	ND		5.2	0.42	ug/L		05/12/25 09:28	05/13/25 20:02	1
Bis(2-ethylhexyl) phthalate	ND		5.2	2.3	ug/L		05/12/25 09:28	05/13/25 20:02	1
Butyl benzyl phthalate	ND		5.2	1.0	ug/L		05/12/25 09:28	05/13/25 20:02	1
Caprolactam	**3.1**	**J**	5.2	2.3	ug/L		05/12/25 09:28	05/13/25 20:02	1
Carbazole	ND		5.2	0.31	ug/L		05/12/25 09:28	05/13/25 20:02	1
Dibenzofuran	ND		10	0.53	ug/L		05/12/25 09:28	05/13/25 20:02	1
Diethyl phthalate	**0.26**	**J**	5.2	0.23	ug/L		05/12/25 09:28	05/13/25 20:02	1
Dimethyl phthalate	ND		5.2	0.38	ug/L		05/12/25 09:28	05/13/25 20:02	1
Di-n-butyl phthalate	ND		5.2	0.32	ug/L		05/12/25 09:28	05/13/25 20:02	1
Di-n-octyl phthalate	ND		5.2	0.49	ug/L		05/12/25 09:28	05/13/25 20:02	1
Hexachlorobenzene	ND		5.2	0.53	ug/L		05/12/25 09:28	05/13/25 20:02	1
Hexachlorobutadiene	ND		5.2	0.71	ug/L		05/12/25 09:28	05/13/25 20:02	1
Hexachlorocyclopentadiene	ND		5.2	0.61	ug/L		05/12/25 09:28	05/13/25 20:02	1
Hexachloroethane	ND		5.2	0.61	ug/L		05/12/25 09:28	05/13/25 20:02	1
Isophorone	ND		5.2	0.45	ug/L		05/12/25 09:28	05/13/25 20:02	1
Nitrobenzene	ND		5.2	0.30	ug/L		05/12/25 09:28	05/13/25 20:02	1
N-Nitrosodi-n-propylamine	ND		5.2	0.56	ug/L		05/12/25 09:28	05/13/25 20:02	1
N-Nitrosodiphenylamine	ND		5.2	0.53	ug/L		05/12/25 09:28	05/13/25 20:02	1
Pentachlorophenol	ND		10	2.3	ug/L		05/12/25 09:28	05/13/25 20:02	1
Phenol	ND		5.2	0.41	ug/L		05/12/25 09:28	05/13/25 20:02	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Unknown	*7.7*	*T J*	*ug/L*		*4.18*	*N/A*	*05/12/25 09:28*	*05/13/25 20:02*	*1*
Unknown	*2.2*	*T J*	*ug/L*		*4.39*	*N/A*	*05/12/25 09:28*	*05/13/25 20:02*	*1*
Unknown	*23*	*T J*	*ug/L*		*4.43*	*N/A*	*05/12/25 09:28*	*05/13/25 20:02*	*1*
2-Hexene, 3,5,5-trimethyl-	*12*	*T J N*	*ug/L*		*4.54*	*26456-76-8*	*05/12/25 09:28*	*05/13/25 20:02*	*1*
Unknown	*3.7*	*T J*	*ug/L*		*4.62*	*N/A*	*05/12/25 09:28*	*05/13/25 20:02*	*1*

Client Sample ID: MW-3
Lab Sample ID: 480-229348-3
Date Collected: 05/08/25 14:00
Matrix: Water
Date Received: 05/10/25 09:00

Method: SW846 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Tentatively Identified Compound	Est. Result	Qualifier	Unit	D	RT	CAS No.	Prepared	Analyzed	Dil Fac
Unknown	31	T J	ug/L		4.66	N/A	05/12/25 09:28	05/13/25 20:02	1
Unknown	21	T J	ug/L		4.69	N/A	05/12/25 09:28	05/13/25 20:02	1
Unknown	2.8	T J	ug/L		5.01	N/A	05/12/25 09:28	05/13/25 20:02	1
Unknown	24	T J	ug/L		5.07	N/A	05/12/25 09:28	05/13/25 20:02	1
Unknown	6.1	T J	ug/L		5.19	N/A	05/12/25 09:28	05/13/25 20:02	1
Unknown	7.1	T J	ug/L		5.25	N/A	05/12/25 09:28	05/13/25 20:02	1
Unknown	72	T J	ug/L		5.37	N/A	05/12/25 09:28	05/13/25 20:02	1
Unknown	20	T J	ug/L		5.38	N/A	05/12/25 09:28	05/13/25 20:02	1
Unknown	4.0	T J	ug/L		5.45	N/A	05/12/25 09:28	05/13/25 20:02	1
Unknown	24	T J	ug/L		5.48	N/A	05/12/25 09:28	05/13/25 20:02	1
Unknown	4.0	T J	ug/L		5.57	N/A	05/12/25 09:28	05/13/25 20:02	1
Unknown	39	T J	ug/L		5.60	N/A	05/12/25 09:28	05/13/25 20:02	1
Unknown	43	T J	ug/L		5.63	N/A	05/12/25 09:28	05/13/25 20:02	1
Unknown	8.0	T J	ug/L		5.66	N/A	05/12/25 09:28	05/13/25 20:02	1
Phenol, 4-(1,1-dimethylpropyl)-	3.0	T J N	ug/L		8.39	80-46-6	05/12/25 09:28	05/13/25 20:02	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol (Surr)	99		25 - 144	05/12/25 09:28	05/13/25 20:02	1
2-Fluorobiphenyl (Surr)	109		53 - 126	05/12/25 09:28	05/13/25 20:02	1
2-Fluorophenol (Surr)	74		24 - 120	05/12/25 09:28	05/13/25 20:02	1
Nitrobenzene-d5 (Surr)	86		29 - 129	05/12/25 09:28	05/13/25 20:02	1
Phenol-d5 (Surr)	48		10 - 120	05/12/25 09:28	05/13/25 20:02	1
p-Terphenyl-d14 (Surr)	67		33 - 132	05/12/25 09:28	05/13/25 20:02	1

Method: SW846 6010D - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**9.5**		0.20	0.060	mg/L		05/13/25 07:56	05/13/25 13:58	1
Antimony	ND		0.020	0.0068	mg/L		05/13/25 07:56	05/13/25 13:58	1
Arsenic	**0.0086**	**J**	0.015	0.0056	mg/L		05/13/25 07:56	05/13/25 13:58	1
Barium	**2.2**		0.0020	0.00070	mg/L		05/13/25 07:56	05/13/25 13:58	1
Beryllium	**0.00044**	**J**	0.0020	0.00030	mg/L		05/13/25 07:56	05/13/25 13:58	1
Cadmium	**0.0014**	**J**	0.0020	0.00050	mg/L		05/13/25 07:56	05/13/25 13:58	1
Calcium	**133**		0.50	0.10	mg/L		05/13/25 07:56	05/13/25 13:58	1
Chromium	**0.035**		0.0040	0.0010	mg/L		05/13/25 07:56	05/13/25 13:58	1
Cobalt	**0.0059**		0.0040	0.00063	mg/L		05/13/25 07:56	05/13/25 13:58	1
Copper	**0.028**		0.010	0.0016	mg/L		05/13/25 07:56	05/13/25 13:58	1
Iron	**11.5**		0.050	0.019	mg/L		05/13/25 07:56	05/13/25 13:58	1
Lead	**0.099**		0.010	0.0030	mg/L		05/13/25 07:56	05/13/25 13:58	1
Magnesium	**54.2**		0.20	0.043	mg/L		05/13/25 07:56	05/13/25 13:58	1
Manganese	**0.58**		0.0030	0.00040	mg/L		05/13/25 07:56	05/13/25 13:58	1
Nickel	**0.017**		0.010	0.0013	mg/L		05/13/25 07:56	05/13/25 13:58	1
Potassium	**9.9**		0.50	0.10	mg/L		05/13/25 07:56	05/13/25 13:58	1
Selenium	ND		0.025	0.0087	mg/L		05/13/25 07:56	05/13/25 13:58	1
Silver	ND	^5-	0.0060	0.0017	mg/L		05/13/25 07:56	05/13/25 13:58	1
Sodium	**80.3**		1.0	0.32	mg/L		05/13/25 07:56	05/13/25 13:58	1
Thallium	ND		0.020	0.010	mg/L		05/13/25 07:56	05/13/25 13:58	1
Vanadium	**0.020**		0.0050	0.0015	mg/L		05/13/25 07:56	05/13/25 13:58	1
Zinc	**0.94**		0.010	0.0015	mg/L		05/13/25 07:56	05/13/25 13:58	1

Client: Roux Environmental Engineering and Geology DPC
Job ID: 480-229348-1
Project/Site: BCP RI - 619 Exchange Street Site

Client Sample ID: MW-3
Lab Sample ID: 480-229348-3
Date Collected: 05/08/25 14:00
Matrix: Water
Date Received: 05/10/25 09:00

Method: SW846 6010D - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum, Dissolved	ND		0.20	0.060	mg/L		05/13/25 08:00	05/13/25 15:11	1
Antimony, Dissolved	ND		0.020	0.0068	mg/L		05/13/25 08:00	05/13/25 15:11	1
Arsenic, Dissolved	ND		0.015	0.0056	mg/L		05/13/25 08:00	05/13/25 15:11	1
Barium, Dissolved	**0.18**		0.0020	0.00070	mg/L		05/13/25 08:00	05/13/25 15:11	1
Beryllium, Dissolved	ND		0.0020	0.00030	mg/L		05/13/25 08:00	05/13/25 15:11	1
Cadmium, Dissolved	ND		0.0020	0.00050	mg/L		05/13/25 08:00	05/13/25 15:11	1
Calcium, Dissolved	**106**		0.50	0.10	mg/L		05/13/25 08:00	05/13/25 15:11	1
Chromium, Dissolved	ND		0.0040	0.0010	mg/L		05/13/25 08:00	05/13/25 15:11	1
Cobalt, Dissolved	**0.00094**	**J**	0.0040	0.00063	mg/L		05/13/25 08:00	05/13/25 15:11	1
Copper, Dissolved	**0.0027**	**J**	0.010	0.0016	mg/L		05/13/25 08:00	05/13/25 15:11	1
Iron, Dissolved	ND		0.050	0.019	mg/L		05/13/25 08:00	05/13/25 15:11	1
Lead, Dissolved	ND		0.010	0.0030	mg/L		05/13/25 08:00	05/13/25 15:11	1
Magnesium, Dissolved	**46.1**		0.20	0.043	mg/L		05/13/25 08:00	05/13/25 15:11	1
Manganese, Dissolved	**0.35**		0.0030	0.00040	mg/L		05/13/25 08:00	05/13/25 15:11	1
Nickel, Dissolved	**0.0029**	**J**	0.010	0.0013	mg/L		05/13/25 08:00	05/13/25 15:11	1
Potassium, Dissolved	**6.1**		0.50	0.10	mg/L		05/13/25 08:00	05/13/25 15:11	1
Selenium, Dissolved	ND		0.025	0.0087	mg/L		05/13/25 08:00	05/13/25 15:11	1
Silver, Dissolved	ND	^5-	0.0060	0.0017	mg/L		05/13/25 08:00	05/13/25 15:11	1
Sodium, Dissolved	**75.5**		1.0	0.32	mg/L		05/13/25 08:00	05/13/25 15:11	1
Thallium, Dissolved	ND		0.020	0.010	mg/L		05/13/25 08:00	05/13/25 15:11	1
Vanadium, Dissolved	ND		0.0050	0.0015	mg/L		05/13/25 08:00	05/13/25 15:11	1
Zinc, Dissolved	**0.044**	**B**	0.010	0.0015	mg/L		05/13/25 08:00	05/13/25 15:11	1

Method: SW846 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.0014**		0.00020	0.000042	mg/L		05/13/25 09:29	05/13/25 13:46	1

Method: SW846 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury, Dissolved	ND		0.00020	0.000042	mg/L		05/13/25 09:29	05/13/25 14:38	1

Client: Roux Environmental Engineering and Geology DPC
Job ID: 480-229348-1
Project/Site: BCP RI - 619 Exchange Street Site

Client Sample ID: MW-4
Lab Sample ID: 480-229348-4
Date Collected: 05/08/25 12:00
Matrix: Water
Date Received: 05/10/25 09:00

Method: SW846 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	0.82	ug/L			05/14/25 15:41	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			05/14/25 15:41	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.31	ug/L			05/14/25 15:41	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			05/14/25 15:41	1
1,1-Dichloroethane	ND		1.0	0.38	ug/L			05/14/25 15:41	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			05/14/25 15:41	1
1,2,4-Trichlorobenzene	ND		1.0	0.41	ug/L			05/14/25 15:41	1
1,2,4-Trimethylbenzene	ND		1.0	0.75	ug/L			05/14/25 15:41	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.39	ug/L			05/14/25 15:41	1
1,2-Dibromoethane	ND		1.0	0.73	ug/L			05/14/25 15:41	1
1,2-Dichlorobenzene	ND		1.0	0.79	ug/L			05/14/25 15:41	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			05/14/25 15:41	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			05/14/25 15:41	1
1,3,5-Trimethylbenzene	ND		1.0	0.77	ug/L			05/14/25 15:41	1
1,3-Dichlorobenzene	ND		1.0	0.78	ug/L			05/14/25 15:41	1
1,4-Dichlorobenzene	ND		1.0	0.84	ug/L			05/14/25 15:41	1
2-Butanone (MEK)	ND		10	1.3	ug/L			05/14/25 15:41	1
2-Hexanone	ND		5.0	1.2	ug/L			05/14/25 15:41	1
4-Isopropyltoluene	ND		1.0	0.31	ug/L			05/14/25 15:41	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			05/14/25 15:41	1
Acetone	ND		10	3.0	ug/L			05/14/25 15:41	1
Benzene	ND		1.0	0.41	ug/L			05/14/25 15:41	1
Bromodichloromethane	ND		1.0	0.39	ug/L			05/14/25 15:41	1
Bromoform	ND		1.0	0.26	ug/L			05/14/25 15:41	1
Bromomethane	ND		1.0	0.69	ug/L			05/14/25 15:41	1
Carbon disulfide	ND		1.0	0.19	ug/L			05/14/25 15:41	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			05/14/25 15:41	1
Chlorobenzene	ND		1.0	0.75	ug/L			05/14/25 15:41	1
Chloroethane	ND		1.0	0.32	ug/L			05/14/25 15:41	1
Chloroform	ND		1.0	0.34	ug/L			05/14/25 15:41	1
Chloromethane	ND		1.0	0.35	ug/L			05/14/25 15:41	1
cis-1,2-Dichloroethene	ND		1.0	0.81	ug/L			05/14/25 15:41	1
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			05/14/25 15:41	1
Cyclohexane	ND		1.0	0.18	ug/L			05/14/25 15:41	1
Dibromochloromethane	ND		1.0	0.32	ug/L			05/14/25 15:41	1
Dichlorodifluoromethane	ND		1.0	0.68	ug/L			05/14/25 15:41	1
Ethylbenzene	ND		1.0	0.74	ug/L			05/14/25 15:41	1
Isopropylbenzene	ND		1.0	0.79	ug/L			05/14/25 15:41	1
m,p-Xylene	ND		2.0	0.66	ug/L			05/14/25 15:41	1
Methyl acetate	ND		2.5	1.3	ug/L			05/14/25 15:41	1
Methyl tert-butyl ether	ND		1.0	0.16	ug/L			05/14/25 15:41	1
Methylcyclohexane	ND		1.0	0.16	ug/L			05/14/25 15:41	1
Methylene Chloride	ND		1.0	0.44	ug/L			05/14/25 15:41	1
Naphthalene	ND		1.0	0.43	ug/L			05/14/25 15:41	1
n-Butylbenzene	ND		1.0	0.64	ug/L			05/14/25 15:41	1
N-Propylbenzene	ND		1.0	0.69	ug/L			05/14/25 15:41	1
o-Xylene	ND		1.0	0.76	ug/L			05/14/25 15:41	1
sec-Butylbenzene	ND		1.0	0.75	ug/L			05/14/25 15:41	1
Styrene	ND		1.0	0.73	ug/L			05/14/25 15:41	1

Client Sample ID: MW-4
Lab Sample ID: 480-229348-4
Date Collected: 05/08/25 12:00
Matrix: Water
Date Received: 05/10/25 09:00

Method: SW846 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
tert-Butylbenzene	ND		1.0	0.81	ug/L			05/14/25 15:41	1
Tetrachloroethene	ND		1.0	0.36	ug/L			05/14/25 15:41	1
Toluene	ND		1.0	0.51	ug/L			05/14/25 15:41	1
trans-1,2-Dichloroethene	ND		1.0	0.90	ug/L			05/14/25 15:41	1
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L			05/14/25 15:41	1
Trichloroethene	ND		1.0	0.46	ug/L			05/14/25 15:41	1
Trichlorofluoromethane	ND		1.0	0.88	ug/L			05/14/25 15:41	1
Vinyl chloride	ND		1.0	0.90	ug/L			05/14/25 15:41	1
Xylenes, Total	ND		2.0	0.66	ug/L			05/14/25 15:41	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*			*N/A*		*05/14/25 15:41*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*101*		*77 - 120*		*05/14/25 15:41*	*1*
4-Bromofluorobenzene (Surr)	*102*		*73 - 120*		*05/14/25 15:41*	*1*
Dibromofluoromethane (Surr)	*103*		*75 - 123*		*05/14/25 15:41*	*1*
Toluene-d8 (Surr)	*100*		*80 - 120*		*05/14/25 15:41*	*1*

Method: SW846 8270D SIM ID - Semivolatile Organic Compounds (GC/MS SIM / Isotope Dilution)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	ND		0.22	0.11	ug/L		05/13/25 13:38	05/14/25 14:16	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,4-Dioxane-d8	*37*		*15 - 110*	*05/13/25 13:38*	*05/14/25 14:16*	*1*

Method: SW846 8270D_LL_PAH - Semivolatile Organic Compounds (GC/MS) Low level PAH

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.52	0.31	ug/L		05/12/25 09:28	05/13/25 20:30	1
Acenaphthylene	ND		0.52	0.35	ug/L		05/12/25 09:28	05/13/25 20:30	1
Anthracene	ND		0.52	0.41	ug/L		05/12/25 09:28	05/13/25 20:30	1
Benzo[a]anthracene	ND		0.52	0.42	ug/L		05/12/25 09:28	05/13/25 20:30	1
Benzo[a]pyrene	ND		0.52	0.34	ug/L		05/12/25 09:28	05/13/25 20:30	1
Benzo[b]fluoranthene	ND		0.52	0.31	ug/L		05/12/25 09:28	05/13/25 20:30	1
Benzo[g,h,i]perylene	ND		0.52	0.39	ug/L		05/12/25 09:28	05/13/25 20:30	1
Benzo[k]fluoranthene	ND		0.52	0.089	ug/L		05/12/25 09:28	05/13/25 20:30	1
Chrysene	ND		0.52	0.33	ug/L		05/12/25 09:28	05/13/25 20:30	1
Dibenz(a,h)anthracene	ND		0.52	0.34	ug/L		05/12/25 09:28	05/13/25 20:30	1
Fluoranthene	ND		0.52	0.38	ug/L		05/12/25 09:28	05/13/25 20:30	1
Fluorene	ND		0.52	0.39	ug/L		05/12/25 09:28	05/13/25 20:30	1
Indeno[1,2,3-cd]pyrene	ND		0.52	0.46	ug/L		05/12/25 09:28	05/13/25 20:30	1
Naphthalene	ND		0.52	0.44	ug/L		05/12/25 09:28	05/13/25 20:30	1
Phenanthrene	ND		0.52	0.40	ug/L		05/12/25 09:28	05/13/25 20:30	1
Pyrene	ND		0.52	0.38	ug/L		05/12/25 09:28	05/13/25 20:30	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*97*		*48 - 120*	*05/12/25 09:28*	*05/13/25 20:30*	*1*
Nitrobenzene-d5 (Surr)	*87*		*46 - 120*	*05/12/25 09:28*	*05/13/25 20:30*	*1*
p-Terphenyl-d14 (Surr)	*81*		*24 - 136*	*05/12/25 09:28*	*05/13/25 20:30*	*1*

Client: Roux Environmental Engineering and Geology DPC
Job ID: 480-229348-1
Project/Site: BCP RI - 619 Exchange Street Site

Client Sample ID: MW-4
Lab Sample ID: 480-229348-4
Date Collected: 05/08/25 12:00
Matrix: Water
Date Received: 05/10/25 09:00

Method: SW846 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	ND		5.2	0.50	ug/L		05/12/25 09:28	05/13/25 20:30	1
2,4,6-Trichlorophenol	ND		5.2	0.64	ug/L		05/12/25 09:28	05/13/25 20:30	1
2,4-Dichlorophenol	ND		5.2	0.53	ug/L		05/12/25 09:28	05/13/25 20:30	1
2,4-Dimethylphenol	ND		5.2	0.52	ug/L		05/12/25 09:28	05/13/25 20:30	1
2,4-Dinitrophenol	ND		10	2.3	ug/L		05/12/25 09:28	05/13/25 20:30	1
2,4-Dinitrotoluene	ND		5.2	0.47	ug/L		05/12/25 09:28	05/13/25 20:30	1
2,6-Dinitrotoluene	ND		5.2	0.42	ug/L		05/12/25 09:28	05/13/25 20:30	1
2-Chloronaphthalene	ND		5.2	0.48	ug/L		05/12/25 09:28	05/13/25 20:30	1
2-Chlorophenol	ND		5.2	0.55	ug/L		05/12/25 09:28	05/13/25 20:30	1
2-Methylnaphthalene	ND		5.2	0.63	ug/L		05/12/25 09:28	05/13/25 20:30	1
2-Methylphenol	ND		5.2	0.42	ug/L		05/12/25 09:28	05/13/25 20:30	1
2-Nitroaniline	ND		10	0.44	ug/L		05/12/25 09:28	05/13/25 20:30	1
2-Nitrophenol	ND		5.2	0.50	ug/L		05/12/25 09:28	05/13/25 20:30	1
3,3'-Dichlorobenzidine	ND		5.2	0.42	ug/L		05/12/25 09:28	05/13/25 20:30	1
3-Nitroaniline	ND		10	0.50	ug/L		05/12/25 09:28	05/13/25 20:30	1
4,6-Dinitro-2-methylphenol	ND		10	2.3	ug/L		05/12/25 09:28	05/13/25 20:30	1
4-Bromophenyl phenyl ether	ND		5.2	0.47	ug/L		05/12/25 09:28	05/13/25 20:30	1
4-Chloro-3-methylphenol	ND		5.2	0.47	ug/L		05/12/25 09:28	05/13/25 20:30	1
4-Chloroaniline	ND		5.2	0.61	ug/L		05/12/25 09:28	05/13/25 20:30	1
4-Chlorophenyl phenyl ether	ND		5.2	0.36	ug/L		05/12/25 09:28	05/13/25 20:30	1
4-Methylphenol	ND		10	0.38	ug/L		05/12/25 09:28	05/13/25 20:30	1
4-Nitroaniline	ND		10	0.26	ug/L		05/12/25 09:28	05/13/25 20:30	1
4-Nitrophenol	ND		10	1.6	ug/L		05/12/25 09:28	05/13/25 20:30	1
Acetophenone	ND		5.2	0.56	ug/L		05/12/25 09:28	05/13/25 20:30	1
Atrazine	ND		5.2	0.48	ug/L		05/12/25 09:28	05/13/25 20:30	1
Benzaldehyde	ND		5.2	0.28	ug/L		05/12/25 09:28	05/13/25 20:30	1
Biphenyl	ND		5.2	0.68	ug/L		05/12/25 09:28	05/13/25 20:30	1
bis (2-chloroisopropyl) ether	ND		5.2	0.54	ug/L		05/12/25 09:28	05/13/25 20:30	1
Bis(2-chloroethoxy)methane	ND		5.2	0.36	ug/L		05/12/25 09:28	05/13/25 20:30	1
Bis(2-chloroethyl)ether	ND		5.2	0.42	ug/L		05/12/25 09:28	05/13/25 20:30	1
Bis(2-ethylhexyl) phthalate	ND		5.2	2.3	ug/L		05/12/25 09:28	05/13/25 20:30	1
Butyl benzyl phthalate	ND		5.2	1.0	ug/L		05/12/25 09:28	05/13/25 20:30	1
Caprolactam	ND		5.2	2.3	ug/L		05/12/25 09:28	05/13/25 20:30	1
Carbazole	ND		5.2	0.31	ug/L		05/12/25 09:28	05/13/25 20:30	1
Dibenzofuran	ND		10	0.53	ug/L		05/12/25 09:28	05/13/25 20:30	1
Diethyl phthalate	**0.24**	**J**	5.2	0.23	ug/L		05/12/25 09:28	05/13/25 20:30	1
Dimethyl phthalate	ND		5.2	0.38	ug/L		05/12/25 09:28	05/13/25 20:30	1
Di-n-butyl phthalate	**0.43**	**J**	5.2	0.32	ug/L		05/12/25 09:28	05/13/25 20:30	1
Di-n-octyl phthalate	ND		5.2	0.49	ug/L		05/12/25 09:28	05/13/25 20:30	1
Hexachlorobenzene	ND		5.2	0.53	ug/L		05/12/25 09:28	05/13/25 20:30	1
Hexachlorobutadiene	ND		5.2	0.71	ug/L		05/12/25 09:28	05/13/25 20:30	1
Hexachlorocyclopentadiene	ND		5.2	0.61	ug/L		05/12/25 09:28	05/13/25 20:30	1
Hexachloroethane	ND		5.2	0.61	ug/L		05/12/25 09:28	05/13/25 20:30	1
Isophorone	ND		5.2	0.45	ug/L		05/12/25 09:28	05/13/25 20:30	1
Nitrobenzene	ND		5.2	0.30	ug/L		05/12/25 09:28	05/13/25 20:30	1
N-Nitrosodi-n-propylamine	ND		5.2	0.56	ug/L		05/12/25 09:28	05/13/25 20:30	1
N-Nitrosodiphenylamine	ND		5.2	0.53	ug/L		05/12/25 09:28	05/13/25 20:30	1
Pentachlorophenol	**4.6**	**J**	10	2.3	ug/L		05/12/25 09:28	05/13/25 20:30	1
Phenol	ND		5.2	0.41	ug/L		05/12/25 09:28	05/13/25 20:30	1

Client Sample ID: MW-4
Lab Sample ID: 480-229348-4
Date Collected: 05/08/25 12:00
Matrix: Water
Date Received: 05/10/25 09:00

Tentatively Identified Compound	Est. Result	Qualifier	Unit	D	RT	CAS No.	Prepared	Analyzed	Dil Fac
Unknown	7.4	T J	ug/L		4.18	N/A	05/12/25 09:28	05/13/25 20:30	1
Unknown	2.4	T J	ug/L		4.40	N/A	05/12/25 09:28	05/13/25 20:30	1
Unknown	22	T J	ug/L		4.43	N/A	05/12/25 09:28	05/13/25 20:30	1
2-Hexene, 3,5,5-trimethyl-	11	T J N	ug/L		4.54	26456-76-8	05/12/25 09:28	05/13/25 20:30	1
Unknown	3.3	T J	ug/L		4.61	N/A	05/12/25 09:28	05/13/25 20:30	1
Unknown	37	T J	ug/L		4.66	N/A	05/12/25 09:28	05/13/25 20:30	1
Unknown	20	T J	ug/L		4.69	N/A	05/12/25 09:28	05/13/25 20:30	1
Unknown	2.6	T J	ug/L		5.01	N/A	05/12/25 09:28	05/13/25 20:30	1
Unknown	23	T J	ug/L		5.07	N/A	05/12/25 09:28	05/13/25 20:30	1
Unknown	5.8	T J	ug/L		5.19	N/A	05/12/25 09:28	05/13/25 20:30	1
Unknown	6.0	T J	ug/L		5.25	N/A	05/12/25 09:28	05/13/25 20:30	1
Unknown	70	T J	ug/L		5.36	N/A	05/12/25 09:28	05/13/25 20:30	1
Unknown	2.2	T J	ug/L		5.42	N/A	05/12/25 09:28	05/13/25 20:30	1
Unknown	3.8	T J	ug/L		5.45	N/A	05/12/25 09:28	05/13/25 20:30	1
Unknown	24	T J	ug/L		5.49	N/A	05/12/25 09:28	05/13/25 20:30	1
Unknown	4.3	T J	ug/L		5.58	N/A	05/12/25 09:28	05/13/25 20:30	1
Unknown	39	T J	ug/L		5.60	N/A	05/12/25 09:28	05/13/25 20:30	1
Unknown	42	T J	ug/L		5.62	N/A	05/12/25 09:28	05/13/25 20:30	1
Unknown	7.4	T J	ug/L		5.66	N/A	05/12/25 09:28	05/13/25 20:30	1
Butyl citrate	12	T J N	ug/L		11.74	77-94-1	05/12/25 09:28	05/13/25 20:30	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol (Surr)	99		25 - 144	05/12/25 09:28	05/13/25 20:30	1
2-Fluorobiphenyl (Surr)	97		53 - 126	05/12/25 09:28	05/13/25 20:30	1
2-Fluorophenol (Surr)	69		24 - 120	05/12/25 09:28	05/13/25 20:30	1
Nitrobenzene-d5 (Surr)	87		29 - 129	05/12/25 09:28	05/13/25 20:30	1
Phenol-d5 (Surr)	46		10 - 120	05/12/25 09:28	05/13/25 20:30	1
p-Terphenyl-d14 (Surr)	81		33 - 132	05/12/25 09:28	05/13/25 20:30	1

Method: SW846 8081B - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	**0.019**	**J**	0.063	0.012	ug/L		05/14/25 13:33	05/15/25 11:56	1
4,4'-DDE	**0.023**	**J**	0.063	0.015	ug/L		05/14/25 13:33	05/15/25 11:56	1
4,4'-DDT	**0.060**	**J B**	0.063	0.014	ug/L		05/14/25 13:33	05/15/25 11:56	1
Aldrin	ND		0.063	0.010	ug/L		05/14/25 13:33	05/15/25 11:56	1
alpha-BHC	**0.013**	**J**	0.063	0.0096	ug/L		05/14/25 13:33	05/15/25 11:56	1
beta-BHC	ND		0.063	0.031	ug/L		05/14/25 13:33	05/15/25 11:56	1
cis-Chlordane	ND		0.063	0.019	ug/L		05/14/25 13:33	05/15/25 11:56	1
delta-BHC	**0.013**	**J**	0.063	0.013	ug/L		05/14/25 13:33	05/15/25 11:56	1
Dieldrin	**0.014**	**J**	0.063	0.012	ug/L		05/14/25 13:33	05/15/25 11:56	1
Endosulfan I	ND		0.063	0.014	ug/L		05/14/25 13:33	05/15/25 11:56	1
Endosulfan II	ND		0.063	0.015	ug/L		05/14/25 13:33	05/15/25 11:56	1
Endosulfan sulfate	ND		0.063	0.020	ug/L		05/14/25 13:33	05/15/25 11:56	1
Endrin	ND		0.063	0.017	ug/L		05/14/25 13:33	05/15/25 11:56	1
Endrin aldehyde	ND		0.063	0.020	ug/L		05/14/25 13:33	05/15/25 11:56	1
Endrin ketone	ND		0.063	0.015	ug/L		05/14/25 13:33	05/15/25 11:56	1
gamma-BHC (Lindane)	ND		0.063	0.010	ug/L		05/14/25 13:33	05/15/25 11:56	1
Heptachlor	ND		0.063	0.011	ug/L		05/14/25 13:33	05/15/25 11:56	1
Heptachlor epoxide	ND		0.063	0.0093	ug/L		05/14/25 13:33	05/15/25 11:56	1
Methoxychlor	**0.079**		0.063	0.018	ug/L		05/14/25 13:33	05/15/25 11:56	1

Client Sample ID: MW-4
Lab Sample ID: 480-229348-4

Date Collected: 05/08/25 12:00
Matrix: Water

Date Received: 05/10/25 09:00

Method: SW846 8081B - Organochlorine Pesticides (GC) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Toxaphene	ND		0.63	0.15	ug/L		05/14/25 13:33	05/15/25 11:56	1
trans-Chlordane	ND		0.063	0.014	ug/L		05/14/25 13:33	05/15/25 11:56	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*34*		*10 - 120*	*05/14/25 13:33*	*05/15/25 11:56*	*1*
DCB Decachlorobiphenyl	*38*		*10 - 120*	*05/14/25 13:33*	*05/15/25 11:56*	*1*
Tetrachloro-m-xylene	*72*		*10 - 120*	*05/14/25 13:33*	*05/15/25 11:56*	*1*
Tetrachloro-m-xylene	*69*		*10 - 120*	*05/14/25 13:33*	*05/15/25 11:56*	*1*

Method: SW846 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		0.50	0.18	ug/L		05/14/25 06:38	05/15/25 13:15	1
PCB-1221	ND		0.50	0.18	ug/L		05/14/25 06:38	05/15/25 13:15	1
PCB-1232	ND		0.50	0.18	ug/L		05/14/25 06:38	05/15/25 13:15	1
PCB-1242	ND		0.50	0.18	ug/L		05/14/25 06:38	05/15/25 13:15	1
PCB-1248	ND		0.50	0.18	ug/L		05/14/25 06:38	05/15/25 13:15	1
PCB-1254	ND		0.50	0.25	ug/L		05/14/25 06:38	05/15/25 13:15	1
PCB-1260	ND		0.50	0.25	ug/L		05/14/25 06:38	05/15/25 13:15	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*23*		*10 - 123*	*05/14/25 06:38*	*05/15/25 13:15*	*1*
DCB Decachlorobiphenyl	*15*		*10 - 123*	*05/14/25 06:38*	*05/15/25 13:15*	*1*
Tetrachloro-m-xylene	*25*		*10 - 145*	*05/14/25 06:38*	*05/15/25 13:15*	*1*
Tetrachloro-m-xylene	*21*		*10 - 145*	*05/14/25 06:38*	*05/15/25 13:15*	*1*

Method: SW846 8151A - Herbicides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-T	ND		0.57	0.078	ug/L		05/13/25 09:13	05/14/25 12:52	1
2,4-D	**0.72**		0.57	0.20	ug/L		05/13/25 09:13	05/14/25 12:52	1
Dichlorprop	ND		0.57	0.13	ug/L		05/13/25 09:13	05/14/25 12:52	1
Pentachlorophenol	**1.1**		0.57	0.056	ug/L		05/13/25 09:13	05/14/25 12:52	1
Picloram	ND		0.57	0.083	ug/L		05/13/25 09:13	05/14/25 12:52	1
Silvex (2,4,5-TP)	ND		0.57	0.057	ug/L		05/13/25 09:13	05/14/25 12:52	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4-Dichlorophenylacetic acid	*108*		*21 - 143*	*05/13/25 09:13*	*05/14/25 12:52*	*1*
2,4-Dichlorophenylacetic acid	*80*		*21 - 143*	*05/13/25 09:13*	*05/14/25 12:52*	*1*

Method: EPA Draft-3 1633 - Per- and Polyfluoroalkyl Substances by LC/MS/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)	ND		67	17	ng/L		05/14/25 09:16	05/14/25 18:03	1
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9Cl-PF3ONS)	ND		67	17	ng/L		05/14/25 09:16	05/14/25 18:03	1
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	ND		67	17	ng/L		05/14/25 09:16	05/14/25 18:03	1
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA)	ND		67	17	ng/L		05/14/25 09:16	05/14/25 18:03	1
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2 FTS)	ND		67	17	ng/L		05/14/25 09:16	05/14/25 18:03	1
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2 FTS)	ND		67	17	ng/L		05/14/25 09:16	05/14/25 18:03	1

Client Sample ID: MW-4
Lab Sample ID: 480-229348-4
Date Collected: 05/08/25 12:00
Matrix: Water
Date Received: 05/10/25 09:00

Method: EPA Draft-3 1633 - Per- and Polyfluoroalkyl Substances by LC/MS/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2 FTS)	ND		67	17	ng/L		05/14/25 09:16	05/14/25 18:03	1
N-ethylperfluorooctane sulfonamide (NEtFOSA)	ND		17	4.2	ng/L		05/14/25 09:16	05/14/25 18:03	1
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	ND		17	4.3	ng/L		05/14/25 09:16	05/14/25 18:03	1
N-ethylperfluorooctane sulfonamidoethanol (NEtFOSE)	ND		170	42	ng/L		05/14/25 09:16	05/14/25 18:03	1
N-methylperfluorooctane sulfonamide (NMeFOSA)	ND		17	4.2	ng/L		05/14/25 09:16	05/14/25 18:03	1
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	ND		17	5.2	ng/L		05/14/25 09:16	05/14/25 18:03	1
N-methylperfluorooctane sulfonamidoethanol (NMeFOSE)	ND		170	42	ng/L		05/14/25 09:16	05/14/25 18:03	1
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	ND		33	10	ng/L		05/14/25 09:16	05/14/25 18:03	1
Perfluorobutanesulfonic acid (PFBS)	ND		17	4.2	ng/L		05/14/25 09:16	05/14/25 18:03	1
Perfluorobutanoic acid (PFBA)	ND		67	18	ng/L		05/14/25 09:16	05/14/25 18:03	1
Perfluorodecanesulfonic acid (PFDS)	ND		17	4.2	ng/L		05/14/25 09:16	05/14/25 18:03	1
Perfluorodecanoic acid (PFDA)	ND		17	4.2	ng/L		05/14/25 09:16	05/14/25 18:03	1
Perfluorododecanesulfonic acid (PFDoS)	ND		17	4.2	ng/L		05/14/25 09:16	05/14/25 18:03	1
Perfluorododecanoic acid (PFDoA)	ND		17	4.2	ng/L		05/14/25 09:16	05/14/25 18:03	1
Perfluoro (2-ethoxyethane) sulfonic acid (PFEESA)	ND		33	8.3	ng/L		05/14/25 09:16	05/14/25 18:03	1
Perfluoroheptanesulfonic acid (PFHpS)	ND		17	4.2	ng/L		05/14/25 09:16	05/14/25 18:03	1
Perfluoroheptanoic acid (PFHpA)	ND		17	4.2	ng/L		05/14/25 09:16	05/14/25 18:03	1
3-Perfluoroheptylpropanoic acid (7:3 FTCA)	ND		420	120	ng/L		05/14/25 09:16	05/14/25 18:03	1
Perfluorohexanesulfonic acid (PFHxS)	ND		17	4.3	ng/L		05/14/25 09:16	05/14/25 18:03	1
Perfluorohexanoic acid (PFHxA)	ND		17	4.2	ng/L		05/14/25 09:16	05/14/25 18:03	1
Perfluoro-4-methoxybutanoic acid (PFMBA)	ND		33	8.3	ng/L		05/14/25 09:16	05/14/25 18:03	1
Perfluoro-3-methoxypropanoic acid (PFMPA)	ND		33	8.3	ng/L		05/14/25 09:16	05/14/25 18:03	1
Perfluorononanesulfonic acid (PFNS)	ND		17	4.2	ng/L		05/14/25 09:16	05/14/25 18:03	1
Perfluorononanoic acid (PFNA)	ND		17	4.2	ng/L		05/14/25 09:16	05/14/25 18:03	1
Perfluorooctanesulfonamide (PFOSA)	ND		17	4.2	ng/L		05/14/25 09:16	05/14/25 18:03	1
Perfluorooctanesulfonic acid (PFOS)	ND		17	4.2	ng/L		05/14/25 09:16	05/14/25 18:03	1
Perfluorooctanoic acid (PFOA)	**6.4**	**J**	17	4.2	ng/L		05/14/25 09:16	05/14/25 18:03	1
Perfluoropentanesulfonic acid (PFPeS)	ND		17	4.2	ng/L		05/14/25 09:16	05/14/25 18:03	1
Perfluoropentanoic acid (PFPeA)	ND		33	8.3	ng/L		05/14/25 09:16	05/14/25 18:03	1
3-Perfluoropentylpropanoic acid (5:3 FTCA)	ND		420	100	ng/L		05/14/25 09:16	05/14/25 18:03	1
3-Perfluoropropylpropanoic acid (3:3 FTCA)	ND		83	21	ng/L		05/14/25 09:16	05/14/25 18:03	1
Perfluorotetradecanoic acid (PFTeDA)	ND		17	4.2	ng/L		05/14/25 09:16	05/14/25 18:03	1
Perfluorotridecanoic acid (PFTrDA)	ND		17	4.2	ng/L		05/14/25 09:16	05/14/25 18:03	1
Perfluoroundecanoic acid (PFUnA)	ND		17	4.2	ng/L		05/14/25 09:16	05/14/25 18:03	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C3 HFPO-DA	*99.1*		*25 - 160*	*05/14/25 09:16*	*05/14/25 18:03*	*1*

Client Sample ID: MW-4
Lab Sample ID: 480-229348-4
Date Collected: 05/08/25 12:00
Matrix: Water
Date Received: 05/10/25 09:00

Method: EPA Draft-3 1633 - Per- and Polyfluoroalkyl Substances by LC/MS/MS (Continued)

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C4 PFBA	108		10 - 130	05/14/25 09:16	05/14/25 18:03	1
13C3 PFBS	107		55 - 150	05/14/25 09:16	05/14/25 18:03	1
13C6 PFDA	77.3		50 - 140	05/14/25 09:16	05/14/25 18:03	1
13C2-PFDoDA	72.0		10 - 150	05/14/25 09:16	05/14/25 18:03	1
13C4 PFHpA	95.0		55 - 150	05/14/25 09:16	05/14/25 18:03	1
13C5 PFHxA	96.5		55 - 150	05/14/25 09:16	05/14/25 18:03	1
13C3 PFHxS	101		55 - 150	05/14/25 09:16	05/14/25 18:03	1
13C9 PFNA	84.9		55 - 140	05/14/25 09:16	05/14/25 18:03	1
13C8 PFOA	98.8		60 - 140	05/14/25 09:16	05/14/25 18:03	1
13C8 PFOS	83.3		45 - 140	05/14/25 09:16	05/14/25 18:03	1
13C8 PFOSA	70.9		30 - 130	05/14/25 09:16	05/14/25 18:03	1
13C5 PFPeA	99.5		35 - 150	05/14/25 09:16	05/14/25 18:03	1
13C2 PFTeDA	70.5		10 - 130	05/14/25 09:16	05/14/25 18:03	1
13C7 PFUnA	71.6		30 - 140	05/14/25 09:16	05/14/25 18:03	1
d5-NEtFOSAA	85.1		10 - 200	05/14/25 09:16	05/14/25 18:03	1
d9-N-EtFOSE-M	58.0		10 - 150	05/14/25 09:16	05/14/25 18:03	1
d5-NEtPFOSA	60.7		10 - 130	05/14/25 09:16	05/14/25 18:03	1
D3-NMeFOSA	61.5		15 - 130	05/14/25 09:16	05/14/25 18:03	1
d3-NMeFOSAA	64.4		45 - 200	05/14/25 09:16	05/14/25 18:03	1
d7-N-MeFOSE-M	59.9		10 - 150	05/14/25 09:16	05/14/25 18:03	1
M2-4:2 FTS	110		60 - 200	05/14/25 09:16	05/14/25 18:03	1
M2-6:2 FTS	103		60 - 200	05/14/25 09:16	05/14/25 18:03	1
M2-8:2 FTS	81.5		50 - 200	05/14/25 09:16	05/14/25 18:03	1

Method: SW846 6010D - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**17.2**		0.20	0.060	mg/L		05/13/25 07:56	05/13/25 14:13	1
Antimony	ND		0.020	0.0068	mg/L		05/13/25 07:56	05/13/25 14:13	1
Arsenic	**0.0080**	**J**	0.015	0.0056	mg/L		05/13/25 07:56	05/13/25 14:13	1
Barium	**1.6**		0.0020	0.00070	mg/L		05/13/25 07:56	05/13/25 14:13	1
Beryllium	**0.00070**	**J**	0.0020	0.00030	mg/L		05/13/25 07:56	05/13/25 14:13	1
Cadmium	**0.00060**	**J**	0.0020	0.00050	mg/L		05/13/25 07:56	05/13/25 14:13	1
Calcium	**109**		0.50	0.10	mg/L		05/13/25 07:56	05/13/25 14:13	1
Chromium	**0.024**		0.0040	0.0010	mg/L		05/13/25 07:56	05/13/25 14:13	1
Cobalt	**0.0059**		0.0040	0.00063	mg/L		05/13/25 07:56	05/13/25 14:13	1
Copper	**0.028**		0.010	0.0016	mg/L		05/13/25 07:56	05/13/25 14:13	1
Iron	**15.6**		0.050	0.019	mg/L		05/13/25 07:56	05/13/25 14:13	1
Lead	**0.050**		0.010	0.0030	mg/L		05/13/25 07:56	05/13/25 14:13	1
Magnesium	**45.8**		0.20	0.043	mg/L		05/13/25 07:56	05/13/25 14:13	1
Manganese	**0.28**		0.0030	0.00040	mg/L		05/13/25 07:56	05/13/25 14:13	1
Nickel	**0.017**		0.010	0.0013	mg/L		05/13/25 07:56	05/13/25 14:13	1
Potassium	**9.1**		0.50	0.10	mg/L		05/13/25 07:56	05/13/25 14:13	1
Selenium	ND		0.025	0.0087	mg/L		05/13/25 07:56	05/13/25 14:13	1
Silver	ND	^5-	0.0060	0.0017	mg/L		05/13/25 07:56	05/13/25 14:13	1
Sodium	**62.3**		1.0	0.32	mg/L		05/13/25 07:56	05/13/25 14:13	1
Thallium	ND		0.020	0.010	mg/L		05/13/25 07:56	05/13/25 14:13	1
Vanadium	**0.030**		0.0050	0.0015	mg/L		05/13/25 07:56	05/13/25 14:13	1
Zinc	**0.76**		0.010	0.0015	mg/L		05/13/25 07:56	05/13/25 14:13	1

Client: Roux Environmental Engineering and Geology DPC
Job ID: 480-229348-1
Project/Site: BCP RI - 619 Exchange Street Site

Client Sample ID: MW-4
Lab Sample ID: 480-229348-4
Date Collected: 05/08/25 12:00
Matrix: Water
Date Received: 05/10/25 09:00

Method: SW846 6010D - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum, Dissolved	ND		0.20	0.060	mg/L		05/13/25 08:00	05/13/25 15:13	1
Antimony, Dissolved	ND		0.020	0.0068	mg/L		05/13/25 08:00	05/13/25 15:13	1
Arsenic, Dissolved	ND		0.015	0.0056	mg/L		05/13/25 08:00	05/13/25 15:13	1
Barium, Dissolved	**0.072**		0.0020	0.00070	mg/L		05/13/25 08:00	05/13/25 15:13	1
Beryllium, Dissolved	ND		0.0020	0.00030	mg/L		05/13/25 08:00	05/13/25 15:13	1
Cadmium, Dissolved	ND		0.0020	0.00050	mg/L		05/13/25 08:00	05/13/25 15:13	1
Calcium, Dissolved	**70.7**		0.50	0.10	mg/L		05/13/25 08:00	05/13/25 15:13	1
Chromium, Dissolved	ND		0.0040	0.0010	mg/L		05/13/25 08:00	05/13/25 15:13	1
Cobalt, Dissolved	ND		0.0040	0.00063	mg/L		05/13/25 08:00	05/13/25 15:13	1
Copper, Dissolved	**0.0027**	**J**	0.010	0.0016	mg/L		05/13/25 08:00	05/13/25 15:13	1
Iron, Dissolved	ND		0.050	0.019	mg/L		05/13/25 08:00	05/13/25 15:13	1
Lead, Dissolved	ND		0.010	0.0030	mg/L		05/13/25 08:00	05/13/25 15:13	1
Magnesium, Dissolved	**36.9**		0.20	0.043	mg/L		05/13/25 08:00	05/13/25 15:13	1
Manganese, Dissolved	**0.030**		0.0030	0.00040	mg/L		05/13/25 08:00	05/13/25 15:13	1
Nickel, Dissolved	**0.0013**	**J**	0.010	0.0013	mg/L		05/13/25 08:00	05/13/25 15:13	1
Potassium, Dissolved	**2.4**		0.50	0.10	mg/L		05/13/25 08:00	05/13/25 15:13	1
Selenium, Dissolved	ND		0.025	0.0087	mg/L		05/13/25 08:00	05/13/25 15:13	1
Silver, Dissolved	ND	^5-	0.0060	0.0017	mg/L		05/13/25 08:00	05/13/25 15:13	1
Sodium, Dissolved	**55.3**		1.0	0.32	mg/L		05/13/25 08:00	05/13/25 15:13	1
Thallium, Dissolved	ND		0.020	0.010	mg/L		05/13/25 08:00	05/13/25 15:13	1
Vanadium, Dissolved	ND		0.0050	0.0015	mg/L		05/13/25 08:00	05/13/25 15:13	1
Zinc, Dissolved	**0.011**	**B**	0.010	0.0015	mg/L		05/13/25 08:00	05/13/25 15:13	1

Method: SW846 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.00024**		0.00020	0.000042	mg/L		05/13/25 09:29	05/13/25 13:47	1

Method: SW846 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury, Dissolved	ND		0.00020	0.000042	mg/L		05/13/25 09:29	05/13/25 14:39	1

Client: Roux Environmental Engineering and Geology DPC
Job ID: 480-229348-1
Project/Site: BCP RI - 619 Exchange Street Site

Client Sample ID: MW-5
Lab Sample ID: 480-229348-5
Date Collected: 05/08/25 10:00
Matrix: Water
Date Received: 05/10/25 09:00

Method: SW846 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	0.82	ug/L			05/14/25 16:04	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			05/14/25 16:04	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.31	ug/L			05/14/25 16:04	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			05/14/25 16:04	1
1,1-Dichloroethane	ND		1.0	0.38	ug/L			05/14/25 16:04	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			05/14/25 16:04	1
1,2,4-Trichlorobenzene	ND		1.0	0.41	ug/L			05/14/25 16:04	1
1,2,4-Trimethylbenzene	ND		1.0	0.75	ug/L			05/14/25 16:04	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.39	ug/L			05/14/25 16:04	1
1,2-Dibromoethane	ND		1.0	0.73	ug/L			05/14/25 16:04	1
1,2-Dichlorobenzene	ND		1.0	0.79	ug/L			05/14/25 16:04	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			05/14/25 16:04	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			05/14/25 16:04	1
1,3,5-Trimethylbenzene	ND		1.0	0.77	ug/L			05/14/25 16:04	1
1,3-Dichlorobenzene	ND		1.0	0.78	ug/L			05/14/25 16:04	1
1,4-Dichlorobenzene	ND		1.0	0.84	ug/L			05/14/25 16:04	1
2-Butanone (MEK)	ND		10	1.3	ug/L			05/14/25 16:04	1
2-Hexanone	ND		5.0	1.2	ug/L			05/14/25 16:04	1
4-Isopropyltoluene	ND		1.0	0.31	ug/L			05/14/25 16:04	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			05/14/25 16:04	1
Acetone	ND		10	3.0	ug/L			05/14/25 16:04	1
Benzene	ND		1.0	0.41	ug/L			05/14/25 16:04	1
Bromodichloromethane	ND		1.0	0.39	ug/L			05/14/25 16:04	1
Bromoform	ND		1.0	0.26	ug/L			05/14/25 16:04	1
Bromomethane	ND		1.0	0.69	ug/L			05/14/25 16:04	1
Carbon disulfide	ND		1.0	0.19	ug/L			05/14/25 16:04	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			05/14/25 16:04	1
Chlorobenzene	ND		1.0	0.75	ug/L			05/14/25 16:04	1
Chloroethane	ND		1.0	0.32	ug/L			05/14/25 16:04	1
Chloroform	ND		1.0	0.34	ug/L			05/14/25 16:04	1
Chloromethane	ND		1.0	0.35	ug/L			05/14/25 16:04	1
cis-1,2-Dichloroethene	ND		1.0	0.81	ug/L			05/14/25 16:04	1
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			05/14/25 16:04	1
Cyclohexane	ND		1.0	0.18	ug/L			05/14/25 16:04	1
Dibromochloromethane	ND		1.0	0.32	ug/L			05/14/25 16:04	1
Dichlorodifluoromethane	ND		1.0	0.68	ug/L			05/14/25 16:04	1
Ethylbenzene	ND		1.0	0.74	ug/L			05/14/25 16:04	1
Isopropylbenzene	ND		1.0	0.79	ug/L			05/14/25 16:04	1
m,p-Xylene	ND		2.0	0.66	ug/L			05/14/25 16:04	1
Methyl acetate	ND		2.5	1.3	ug/L			05/14/25 16:04	1
Methyl tert-butyl ether	ND		1.0	0.16	ug/L			05/14/25 16:04	1
Methylcyclohexane	ND		1.0	0.16	ug/L			05/14/25 16:04	1
Methylene Chloride	ND		1.0	0.44	ug/L			05/14/25 16:04	1
Naphthalene	ND		1.0	0.43	ug/L			05/14/25 16:04	1
n-Butylbenzene	ND		1.0	0.64	ug/L			05/14/25 16:04	1
N-Propylbenzene	ND		1.0	0.69	ug/L			05/14/25 16:04	1
o-Xylene	ND		1.0	0.76	ug/L			05/14/25 16:04	1
sec-Butylbenzene	ND		1.0	0.75	ug/L			05/14/25 16:04	1
Styrene	ND		1.0	0.73	ug/L			05/14/25 16:04	1

Client Sample ID: MW-5
Lab Sample ID: 480-229348-5
Date Collected: 05/08/25 10:00
Matrix: Water
Date Received: 05/10/25 09:00

Method: SW846 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
tert-Butylbenzene	ND		1.0	0.81	ug/L			05/14/25 16:04	1
Tetrachloroethene	ND		1.0	0.36	ug/L			05/14/25 16:04	1
Toluene	**1.3**		1.0	0.51	ug/L			05/14/25 16:04	1
trans-1,2-Dichloroethene	ND		1.0	0.90	ug/L			05/14/25 16:04	1
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L			05/14/25 16:04	1
Trichloroethene	ND		1.0	0.46	ug/L			05/14/25 16:04	1
Trichlorofluoromethane	ND		1.0	0.88	ug/L			05/14/25 16:04	1
Vinyl chloride	ND		1.0	0.90	ug/L			05/14/25 16:04	1
Xylenes, Total	ND		2.0	0.66	ug/L			05/14/25 16:04	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*			*N/A*		*05/14/25 16:04*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*102*		*77 - 120*		*05/14/25 16:04*	*1*
4-Bromofluorobenzene (Surr)	*103*		*73 - 120*		*05/14/25 16:04*	*1*
Dibromofluoromethane (Surr)	*102*		*75 - 123*		*05/14/25 16:04*	*1*
Toluene-d8 (Surr)	*100*		*80 - 120*		*05/14/25 16:04*	*1*

Method: SW846 8270D SIM ID - Semivolatile Organic Compounds (GC/MS SIM / Isotope Dilution)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	ND		0.20	0.10	ug/L		05/13/25 13:38	05/14/25 14:37	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,4-Dioxane-d8	*33*		*15 - 110*	*05/13/25 13:38*	*05/14/25 14:37*	*1*

Method: SW846 8270D_LL_PAH - Semivolatile Organic Compounds (GC/MS) Low level PAH

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.50	0.30	ug/L		05/12/25 09:28	05/13/25 20:58	1
Acenaphthylene	ND		0.50	0.34	ug/L		05/12/25 09:28	05/13/25 20:58	1
Anthracene	ND		0.50	0.39	ug/L		05/12/25 09:28	05/13/25 20:58	1
Benzo[a]anthracene	ND		0.50	0.40	ug/L		05/12/25 09:28	05/13/25 20:58	1
Benzo[a]pyrene	ND		0.50	0.33	ug/L		05/12/25 09:28	05/13/25 20:58	1
Benzo[b]fluoranthene	ND		0.50	0.30	ug/L		05/12/25 09:28	05/13/25 20:58	1
Benzo[g,h,i]perylene	ND		0.50	0.37	ug/L		05/12/25 09:28	05/13/25 20:58	1
Benzo[k]fluoranthene	ND		0.50	0.085	ug/L		05/12/25 09:28	05/13/25 20:58	1
Chrysene	ND		0.50	0.32	ug/L		05/12/25 09:28	05/13/25 20:58	1
Dibenz(a,h)anthracene	ND		0.50	0.33	ug/L		05/12/25 09:28	05/13/25 20:58	1
Fluoranthene	ND		0.50	0.36	ug/L		05/12/25 09:28	05/13/25 20:58	1
Fluorene	ND		0.50	0.37	ug/L		05/12/25 09:28	05/13/25 20:58	1
Indeno[1,2,3-cd]pyrene	ND		0.50	0.44	ug/L		05/12/25 09:28	05/13/25 20:58	1
Naphthalene	ND		0.50	0.42	ug/L		05/12/25 09:28	05/13/25 20:58	1
Phenanthrene	ND		0.50	0.38	ug/L		05/12/25 09:28	05/13/25 20:58	1
Pyrene	ND		0.50	0.36	ug/L		05/12/25 09:28	05/13/25 20:58	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*112*		*48 - 120*	*05/12/25 09:28*	*05/13/25 20:58*	*1*
Nitrobenzene-d5 (Surr)	*96*		*46 - 120*	*05/12/25 09:28*	*05/13/25 20:58*	*1*
p-Terphenyl-d14 (Surr)	*79*		*24 - 136*	*05/12/25 09:28*	*05/13/25 20:58*	*1*

Client: Roux Environmental Engineering and Geology DPC
Job ID: 480-229348-1
Project/Site: BCP RI - 619 Exchange Street Site

Client Sample ID: MW-5
Lab Sample ID: 480-229348-5
Date Collected: 05/08/25 10:00
Matrix: Water
Date Received: 05/10/25 09:00

Method: SW846 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	ND		5.0	0.48	ug/L		05/12/25 09:28	05/13/25 20:58	1
2,4,6-Trichlorophenol	ND		5.0	0.61	ug/L		05/12/25 09:28	05/13/25 20:58	1
2,4-Dichlorophenol	ND		5.0	0.51	ug/L		05/12/25 09:28	05/13/25 20:58	1
2,4-Dimethylphenol	ND		5.0	0.50	ug/L		05/12/25 09:28	05/13/25 20:58	1
2,4-Dinitrophenol	ND		10	2.2	ug/L		05/12/25 09:28	05/13/25 20:58	1
2,4-Dinitrotoluene	ND		5.0	0.45	ug/L		05/12/25 09:28	05/13/25 20:58	1
2,6-Dinitrotoluene	ND		5.0	0.40	ug/L		05/12/25 09:28	05/13/25 20:58	1
2-Chloronaphthalene	ND		5.0	0.46	ug/L		05/12/25 09:28	05/13/25 20:58	1
2-Chlorophenol	ND		5.0	0.53	ug/L		05/12/25 09:28	05/13/25 20:58	1
2-Methylnaphthalene	ND		5.0	0.60	ug/L		05/12/25 09:28	05/13/25 20:58	1
2-Methylphenol	ND		5.0	0.40	ug/L		05/12/25 09:28	05/13/25 20:58	1
2-Nitroaniline	ND		10	0.42	ug/L		05/12/25 09:28	05/13/25 20:58	1
2-Nitrophenol	ND		5.0	0.48	ug/L		05/12/25 09:28	05/13/25 20:58	1
3,3'-Dichlorobenzidine	ND		5.0	0.40	ug/L		05/12/25 09:28	05/13/25 20:58	1
3-Nitroaniline	ND		10	0.48	ug/L		05/12/25 09:28	05/13/25 20:58	1
4,6-Dinitro-2-methylphenol	ND		10	2.2	ug/L		05/12/25 09:28	05/13/25 20:58	1
4-Bromophenyl phenyl ether	ND		5.0	0.45	ug/L		05/12/25 09:28	05/13/25 20:58	1
4-Chloro-3-methylphenol	ND		5.0	0.45	ug/L		05/12/25 09:28	05/13/25 20:58	1
4-Chloroaniline	ND		5.0	0.59	ug/L		05/12/25 09:28	05/13/25 20:58	1
4-Chlorophenyl phenyl ether	ND		5.0	0.35	ug/L		05/12/25 09:28	05/13/25 20:58	1
4-Methylphenol	ND		10	0.36	ug/L		05/12/25 09:28	05/13/25 20:58	1
4-Nitroaniline	ND		10	0.25	ug/L		05/12/25 09:28	05/13/25 20:58	1
4-Nitrophenol	ND		10	1.5	ug/L		05/12/25 09:28	05/13/25 20:58	1
Acetophenone	ND		5.0	0.54	ug/L		05/12/25 09:28	05/13/25 20:58	1
Atrazine	ND		5.0	0.46	ug/L		05/12/25 09:28	05/13/25 20:58	1
Benzaldehyde	ND		5.0	0.27	ug/L		05/12/25 09:28	05/13/25 20:58	1
Biphenyl	ND		5.0	0.65	ug/L		05/12/25 09:28	05/13/25 20:58	1
bis (2-chloroisopropyl) ether	ND		5.0	0.52	ug/L		05/12/25 09:28	05/13/25 20:58	1
Bis(2-chloroethoxy)methane	ND		5.0	0.35	ug/L		05/12/25 09:28	05/13/25 20:58	1
Bis(2-chloroethyl)ether	ND		5.0	0.40	ug/L		05/12/25 09:28	05/13/25 20:58	1
Bis(2-ethylhexyl) phthalate	ND		5.0	2.2	ug/L		05/12/25 09:28	05/13/25 20:58	1
Butyl benzyl phthalate	ND		5.0	1.0	ug/L		05/12/25 09:28	05/13/25 20:58	1
Caprolactam	ND		5.0	2.2	ug/L		05/12/25 09:28	05/13/25 20:58	1
Carbazole	ND		5.0	0.30	ug/L		05/12/25 09:28	05/13/25 20:58	1
Dibenzofuran	ND		10	0.51	ug/L		05/12/25 09:28	05/13/25 20:58	1
Diethyl phthalate	**0.27**	**J**	5.0	0.22	ug/L		05/12/25 09:28	05/13/25 20:58	1
Dimethyl phthalate	**0.40**	**J**	5.0	0.36	ug/L		05/12/25 09:28	05/13/25 20:58	1
Di-n-butyl phthalate	ND		5.0	0.31	ug/L		05/12/25 09:28	05/13/25 20:58	1
Di-n-octyl phthalate	ND		5.0	0.47	ug/L		05/12/25 09:28	05/13/25 20:58	1
Hexachlorobenzene	ND		5.0	0.51	ug/L		05/12/25 09:28	05/13/25 20:58	1
Hexachlorobutadiene	ND		5.0	0.68	ug/L		05/12/25 09:28	05/13/25 20:58	1
Hexachlorocyclopentadiene	ND		5.0	0.59	ug/L		05/12/25 09:28	05/13/25 20:58	1
Hexachloroethane	ND		5.0	0.59	ug/L		05/12/25 09:28	05/13/25 20:58	1
Isophorone	**0.44**	**J**	5.0	0.43	ug/L		05/12/25 09:28	05/13/25 20:58	1
Nitrobenzene	ND		5.0	0.29	ug/L		05/12/25 09:28	05/13/25 20:58	1
N-Nitrosodi-n-propylamine	ND		5.0	0.54	ug/L		05/12/25 09:28	05/13/25 20:58	1
N-Nitrosodiphenylamine	ND		5.0	0.51	ug/L		05/12/25 09:28	05/13/25 20:58	1
Pentachlorophenol	**4.6**	**J**	10	2.2	ug/L		05/12/25 09:28	05/13/25 20:58	1
Phenol	ND		5.0	0.39	ug/L		05/12/25 09:28	05/13/25 20:58	1

Client: Roux Environmental Engineering and Geology DPC
Job ID: 480-229348-1
Project/Site: BCP RI - 619 Exchange Street Site

Client Sample ID: MW-5
Lab Sample ID: 480-229348-5
Date Collected: 05/08/25 10:00
Matrix: Water
Date Received: 05/10/25 09:00

Tentatively Identified Compound	Est. Result	Qualifier	Unit	D	RT	CAS No.	Prepared	Analyzed	Dil Fac
Unknown	7.5	T J	ug/L		4.18	N/A	05/12/25 09:28	05/13/25 20:58	1
Unknown	2.2	T J	ug/L		4.39	N/A	05/12/25 09:28	05/13/25 20:58	1
Unknown	22	T J	ug/L		4.43	N/A	05/12/25 09:28	05/13/25 20:58	1
2-Hexene, 2,5,5-trimethyl-	11	T J N	ug/L		4.54	40467-04-7	05/12/25 09:28	05/13/25 20:58	1
Unknown	3.4	T J	ug/L		4.62	N/A	05/12/25 09:28	05/13/25 20:58	1
Unknown	36	T J	ug/L		4.66	N/A	05/12/25 09:28	05/13/25 20:58	1
Unknown	21	T J	ug/L		4.69	N/A	05/12/25 09:28	05/13/25 20:58	1
Unknown	2.7	T J	ug/L		5.01	N/A	05/12/25 09:28	05/13/25 20:58	1
Unknown	24	T J	ug/L		5.07	N/A	05/12/25 09:28	05/13/25 20:58	1
Unknown	5.8	T J	ug/L		5.19	N/A	05/12/25 09:28	05/13/25 20:58	1
Unknown	7.1	T J	ug/L		5.25	N/A	05/12/25 09:28	05/13/25 20:58	1
Unknown	72	T J	ug/L		5.37	N/A	05/12/25 09:28	05/13/25 20:58	1
Unknown	21	T J	ug/L		5.38	N/A	05/12/25 09:28	05/13/25 20:58	1
Unknown	2.4	T J	ug/L		5.42	N/A	05/12/25 09:28	05/13/25 20:58	1
Unknown	4.0	T J	ug/L		5.45	N/A	05/12/25 09:28	05/13/25 20:58	1
Unknown	24	T J	ug/L		5.48	N/A	05/12/25 09:28	05/13/25 20:58	1
Unknown	3.9	T J	ug/L		5.57	N/A	05/12/25 09:28	05/13/25 20:58	1
Unknown	40	T J	ug/L		5.60	N/A	05/12/25 09:28	05/13/25 20:58	1
Unknown	44	T J	ug/L		5.63	N/A	05/12/25 09:28	05/13/25 20:58	1
Unknown	7.7	T J	ug/L		5.66	N/A	05/12/25 09:28	05/13/25 20:58	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol (Surr)	106		25 - 144	05/12/25 09:28	05/13/25 20:58	1
2-Fluorobiphenyl (Surr)	112		53 - 126	05/12/25 09:28	05/13/25 20:58	1
2-Fluorophenol (Surr)	73		24 - 120	05/12/25 09:28	05/13/25 20:58	1
Nitrobenzene-d5 (Surr)	96		29 - 129	05/12/25 09:28	05/13/25 20:58	1
Phenol-d5 (Surr)	49		10 - 120	05/12/25 09:28	05/13/25 20:58	1
p-Terphenyl-d14 (Surr)	79		33 - 132	05/12/25 09:28	05/13/25 20:58	1

Method: SW846 8081B - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	ND		0.050	0.0092	ug/L		05/12/25 13:45	05/13/25 15:38	1
4,4'-DDE	ND		0.050	0.012	ug/L		05/12/25 13:45	05/13/25 15:38	1
4,4'-DDT	**0.011**	**J**	0.050	0.011	ug/L		05/12/25 13:45	05/13/25 15:38	1
Aldrin	ND		0.050	0.0081	ug/L		05/12/25 13:45	05/13/25 15:38	1
alpha-BHC	**0.029**	**J B**	0.050	0.0077	ug/L		05/12/25 13:45	05/13/25 15:38	1
beta-BHC	ND		0.050	0.025	ug/L		05/12/25 13:45	05/13/25 15:38	1
cis-Chlordane	ND		0.050	0.015	ug/L		05/12/25 13:45	05/13/25 15:38	1
delta-BHC	ND		0.050	0.010	ug/L		05/12/25 13:45	05/13/25 15:38	1
Dieldrin	ND		0.050	0.0098	ug/L		05/12/25 13:45	05/13/25 15:38	1
Endosulfan I	ND		0.050	0.011	ug/L		05/12/25 13:45	05/13/25 15:38	1
Endosulfan II	ND		0.050	0.012	ug/L		05/12/25 13:45	05/13/25 15:38	1
Endosulfan sulfate	ND		0.050	0.016	ug/L		05/12/25 13:45	05/13/25 15:38	1
Endrin	ND		0.050	0.014	ug/L		05/12/25 13:45	05/13/25 15:38	1
Endrin aldehyde	ND		0.050	0.016	ug/L		05/12/25 13:45	05/13/25 15:38	1
Endrin ketone	ND		0.050	0.012	ug/L		05/12/25 13:45	05/13/25 15:38	1
gamma-BHC (Lindane)	**0.020**	**J B**	0.050	0.0080	ug/L		05/12/25 13:45	05/13/25 15:38	1
Heptachlor	ND		0.050	0.0085	ug/L		05/12/25 13:45	05/13/25 15:38	1
Heptachlor epoxide	ND		0.050	0.0074	ug/L		05/12/25 13:45	05/13/25 15:38	1
Methoxychlor	ND		0.050	0.014	ug/L		05/12/25 13:45	05/13/25 15:38	1

Client Sample ID: MW-5
Lab Sample ID: 480-229348-5
Date Collected: 05/08/25 10:00
Matrix: Water
Date Received: 05/10/25 09:00

Method: SW846 8081B - Organochlorine Pesticides (GC) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Toxaphene	ND		0.50	0.12	ug/L		05/12/25 13:45	05/13/25 15:38	1
trans-Chlordane	ND		0.050	0.011	ug/L		05/12/25 13:45	05/13/25 15:38	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*45*		*10 - 120*	*05/12/25 13:45*	*05/13/25 15:38*	*1*
DCB Decachlorobiphenyl	*43*		*10 - 120*	*05/12/25 13:45*	*05/13/25 15:38*	*1*
Tetrachloro-m-xylene	*77*		*10 - 120*	*05/12/25 13:45*	*05/13/25 15:38*	*1*
Tetrachloro-m-xylene	*81*		*10 - 120*	*05/12/25 13:45*	*05/13/25 15:38*	*1*

Method: SW846 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		0.50	0.18	ug/L		05/14/25 06:38	05/15/25 13:33	1
PCB-1221	ND		0.50	0.18	ug/L		05/14/25 06:38	05/15/25 13:33	1
PCB-1232	ND		0.50	0.18	ug/L		05/14/25 06:38	05/15/25 13:33	1
PCB-1242	ND		0.50	0.18	ug/L		05/14/25 06:38	05/15/25 13:33	1
PCB-1248	ND		0.50	0.18	ug/L		05/14/25 06:38	05/15/25 13:33	1
PCB-1254	ND		0.50	0.25	ug/L		05/14/25 06:38	05/15/25 13:33	1
PCB-1260	ND		0.50	0.25	ug/L		05/14/25 06:38	05/15/25 13:33	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*30*		*10 - 123*	*05/14/25 06:38*	*05/15/25 13:33*	*1*
DCB Decachlorobiphenyl	*31*		*10 - 123*	*05/14/25 06:38*	*05/15/25 13:33*	*1*
Tetrachloro-m-xylene	*107*		*10 - 145*	*05/14/25 06:38*	*05/15/25 13:33*	*1*
Tetrachloro-m-xylene	*96*		*10 - 145*	*05/14/25 06:38*	*05/15/25 13:33*	*1*

Method: SW846 8151A - Herbicides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-T	ND		0.48	0.065	ug/L		05/13/25 09:13	05/14/25 13:10	1
2,4-D	ND		0.48	0.17	ug/L		05/13/25 09:13	05/14/25 13:10	1
Dichlorprop	ND		0.48	0.11	ug/L		05/13/25 09:13	05/14/25 13:10	1
Pentachlorophenol	**1.2**		0.48	0.047	ug/L		05/13/25 09:13	05/14/25 13:10	1
Picloram	ND		0.48	0.069	ug/L		05/13/25 09:13	05/14/25 13:10	1
Silvex (2,4,5-TP)	ND		0.48	0.048	ug/L		05/13/25 09:13	05/14/25 13:10	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4-Dichlorophenylacetic acid	*92*		*21 - 143*	*05/13/25 09:13*	*05/14/25 13:10*	*1*
2,4-Dichlorophenylacetic acid	*74*		*21 - 143*	*05/13/25 09:13*	*05/14/25 13:10*	*1*

Method: EPA Draft-3 1633 - Per- and Polyfluoroalkyl Substances by LC/MS/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)	ND		33	8.3	ng/L		05/14/25 09:16	05/14/25 18:20	1
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9Cl-PF3ONS)	ND		33	8.3	ng/L		05/14/25 09:16	05/14/25 18:20	1
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	ND		33	8.3	ng/L		05/14/25 09:16	05/14/25 18:20	1
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA)	ND		33	8.3	ng/L		05/14/25 09:16	05/14/25 18:20	1
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2 FTS)	ND		33	8.3	ng/L		05/14/25 09:16	05/14/25 18:20	1
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2 FTS)	ND		33	8.3	ng/L		05/14/25 09:16	05/14/25 18:20	1

Client: Roux Environmental Engineering and Geology DPC
Job ID: 480-229348-1
Project/Site: BCP RI - 619 Exchange Street Site

Client Sample ID: MW-5
Lab Sample ID: 480-229348-5
Date Collected: 05/08/25 10:00
Matrix: Water
Date Received: 05/10/25 09:00

Method: EPA Draft-3 1633 - Per- and Polyfluoroalkyl Substances by LC/MS/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2 FTS)	ND		33	8.3	ng/L		05/14/25 09:16	05/14/25 18:20	1
N-ethylperfluorooctane sulfonamide (NEtFOSA)	ND		8.3	2.1	ng/L		05/14/25 09:16	05/14/25 18:20	1
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	**8.1**	**J**	8.3	2.2	ng/L		05/14/25 09:16	05/14/25 18:20	1
N-ethylperfluorooctane sulfonamidoethanol (NEtFOSE)	ND		83	21	ng/L		05/14/25 09:16	05/14/25 18:20	1
N-methylperfluorooctane sulfonamide (NMeFOSA)	ND		8.3	2.1	ng/L		05/14/25 09:16	05/14/25 18:20	1
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	ND		8.3	2.6	ng/L		05/14/25 09:16	05/14/25 18:20	1
N-methylperfluorooctane sulfonamidoethanol (NMeFOSE)	ND		83	21	ng/L		05/14/25 09:16	05/14/25 18:20	1
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	ND		17	5.1	ng/L		05/14/25 09:16	05/14/25 18:20	1
Perfluorobutanesulfonic acid (PFBS)	ND		8.3	2.1	ng/L		05/14/25 09:16	05/14/25 18:20	1
Perfluorobutanoic acid (PFBA)	ND		33	8.9	ng/L		05/14/25 09:16	05/14/25 18:20	1
Perfluorodecanesulfonic acid (PFDS)	ND		8.3	2.1	ng/L		05/14/25 09:16	05/14/25 18:20	1
Perfluorodecanoic acid (PFDA)	ND		8.3	2.1	ng/L		05/14/25 09:16	05/14/25 18:20	1
Perfluorododecanesulfonic acid (PFDoS)	ND		8.3	2.1	ng/L		05/14/25 09:16	05/14/25 18:20	1
Perfluorododecanoic acid (PFDoA)	ND		8.3	2.1	ng/L		05/14/25 09:16	05/14/25 18:20	1
Perfluoro (2-ethoxyethane) sulfonic acid (PFEESA)	ND		17	4.2	ng/L		05/14/25 09:16	05/14/25 18:20	1
Perfluoroheptanesulfonic acid (PFHpS)	ND		8.3	2.1	ng/L		05/14/25 09:16	05/14/25 18:20	1
Perfluoroheptanoic acid (PFHpA)	ND		8.3	2.1	ng/L		05/14/25 09:16	05/14/25 18:20	1
3-Perfluoroheptylpropanoic acid (7:3 FTCA)	ND		210	62	ng/L		05/14/25 09:16	05/14/25 18:20	1
Perfluorohexanesulfonic acid (PFHxS)	ND		8.3	2.2	ng/L		05/14/25 09:16	05/14/25 18:20	1
Perfluorohexanoic acid (PFHxA)	ND		8.3	2.1	ng/L		05/14/25 09:16	05/14/25 18:20	1
Perfluoro-4-methoxybutanoic acid (PFMBA)	ND		17	4.2	ng/L		05/14/25 09:16	05/14/25 18:20	1
Perfluoro-3-methoxypropanoic acid (PFMPA)	ND		17	4.2	ng/L		05/14/25 09:16	05/14/25 18:20	1
Perfluorononanesulfonic acid (PFNS)	ND		8.3	2.1	ng/L		05/14/25 09:16	05/14/25 18:20	1
Perfluorononanoic acid (PFNA)	ND		8.3	2.1	ng/L		05/14/25 09:16	05/14/25 18:20	1
Perfluorooctanesulfonamide (PFOSA)	ND		8.3	2.1	ng/L		05/14/25 09:16	05/14/25 18:20	1
Perfluorooctanesulfonic acid (PFOS)	**2.3**	**J**	8.3	2.1	ng/L		05/14/25 09:16	05/14/25 18:20	1
Perfluorooctanoic acid (PFOA)	**3.9**	**J**	8.3	2.1	ng/L		05/14/25 09:16	05/14/25 18:20	1
Perfluoropentanesulfonic acid (PFPeS)	ND		8.3	2.1	ng/L		05/14/25 09:16	05/14/25 18:20	1
Perfluoropentanoic acid (PFPeA)	ND		17	4.2	ng/L		05/14/25 09:16	05/14/25 18:20	1
3-Perfluoropentylpropanoic acid (5:3 FTCA)	ND		210	52	ng/L		05/14/25 09:16	05/14/25 18:20	1
3-Perfluoropropylpropanoic acid (3:3 FTCA)	ND		42	10	ng/L		05/14/25 09:16	05/14/25 18:20	1
Perfluorotetradecanoic acid (PFTeDA)	ND		8.3	2.1	ng/L		05/14/25 09:16	05/14/25 18:20	1
Perfluorotridecanoic acid (PFTrDA)	ND		8.3	2.1	ng/L		05/14/25 09:16	05/14/25 18:20	1
Perfluoroundecanoic acid (PFUnA)	ND		8.3	2.1	ng/L		05/14/25 09:16	05/14/25 18:20	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C3 HFPO-DA	*102*		*25 - 160*	*05/14/25 09:16*	*05/14/25 18:20*	*1*

Client Sample ID: MW-5

Lab Sample ID: 480-229348-5

Date Collected: 05/08/25 10:00

Matrix: Water

Date Received: 05/10/25 09:00

Method: EPA Draft-3 1633 - Per- and Polyfluoroalkyl Substances by LC/MS/MS (Continued)

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C4 PFBA	112		10 - 130	05/14/25 09:16	05/14/25 18:20	1
13C3 PFBS	118		55 - 150	05/14/25 09:16	05/14/25 18:20	1
13C6 PFDA	93.7		50 - 140	05/14/25 09:16	05/14/25 18:20	1
13C2-PFDoDA	86.2		10 - 150	05/14/25 09:16	05/14/25 18:20	1
13C4 PFHpA	97.0		55 - 150	05/14/25 09:16	05/14/25 18:20	1
13C5 PFHxA	98.1		55 - 150	05/14/25 09:16	05/14/25 18:20	1
13C3 PFHxS	116		55 - 150	05/14/25 09:16	05/14/25 18:20	1
13C9 PFNA	102		55 - 140	05/14/25 09:16	05/14/25 18:20	1
13C8 PFOA	106		60 - 140	05/14/25 09:16	05/14/25 18:20	1
13C8 PFOS	102		45 - 140	05/14/25 09:16	05/14/25 18:20	1
13C8 PFOSA	92.5		30 - 130	05/14/25 09:16	05/14/25 18:20	1
13C5 PFPeA	101		35 - 150	05/14/25 09:16	05/14/25 18:20	1
13C2 PFTeDA	78.0		10 - 130	05/14/25 09:16	05/14/25 18:20	1
13C7 PFUnA	90.2		30 - 140	05/14/25 09:16	05/14/25 18:20	1
d5-NEtFOSAA	109		10 - 200	05/14/25 09:16	05/14/25 18:20	1
d9-N-EtFOSE-M	49.9		10 - 150	05/14/25 09:16	05/14/25 18:20	1
d5-NEtPFOSA	74.9		10 - 130	05/14/25 09:16	05/14/25 18:20	1
D3-NMeFOSA	74.7		15 - 130	05/14/25 09:16	05/14/25 18:20	1
d3-NMeFOSAA	96.8		45 - 200	05/14/25 09:16	05/14/25 18:20	1
d7-N-MeFOSE-M	63.1		10 - 150	05/14/25 09:16	05/14/25 18:20	1
M2-4:2 FTS	117		60 - 200	05/14/25 09:16	05/14/25 18:20	1
M2-6:2 FTS	120		60 - 200	05/14/25 09:16	05/14/25 18:20	1
M2-8:2 FTS	109		50 - 200	05/14/25 09:16	05/14/25 18:20	1

Method: SW846 6010D - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**18.7**		0.20	0.060	mg/L		05/13/25 07:56	05/13/25 14:15	1
Antimony	ND		0.020	0.0068	mg/L		05/13/25 07:56	05/13/25 14:15	1
Arsenic	**0.012**	**J**	0.015	0.0056	mg/L		05/13/25 07:56	05/13/25 14:15	1
Barium	**0.61**		0.0020	0.00070	mg/L		05/13/25 07:56	05/13/25 14:15	1
Beryllium	**0.00077**	**J**	0.0020	0.00030	mg/L		05/13/25 07:56	05/13/25 14:15	1
Cadmium	ND		0.0020	0.00050	mg/L		05/13/25 07:56	05/13/25 14:15	1
Calcium	**155**		0.50	0.10	mg/L		05/13/25 07:56	05/13/25 14:15	1
Chromium	**0.031**		0.0040	0.0010	mg/L		05/13/25 07:56	05/13/25 14:15	1
Cobalt	**0.0088**		0.0040	0.00063	mg/L		05/13/25 07:56	05/13/25 14:15	1
Copper	**0.030**		0.010	0.0016	mg/L		05/13/25 07:56	05/13/25 14:15	1
Iron	**21.3**		0.050	0.019	mg/L		05/13/25 07:56	05/13/25 14:15	1
Lead	**0.018**		0.010	0.0030	mg/L		05/13/25 07:56	05/13/25 14:15	1
Magnesium	**74.6**		0.20	0.043	mg/L		05/13/25 07:56	05/13/25 14:15	1
Manganese	**0.38**		0.0030	0.00040	mg/L		05/13/25 07:56	05/13/25 14:15	1
Nickel	**0.025**		0.010	0.0013	mg/L		05/13/25 07:56	05/13/25 14:15	1
Potassium	**7.3**		0.50	0.10	mg/L		05/13/25 07:56	05/13/25 14:15	1
Selenium	ND		0.025	0.0087	mg/L		05/13/25 07:56	05/13/25 14:15	1
Silver	ND	^5-	0.0060	0.0017	mg/L		05/13/25 07:56	05/13/25 14:15	1
Sodium	**27.8**		1.0	0.32	mg/L		05/13/25 07:56	05/13/25 14:15	1
Thallium	ND		0.020	0.010	mg/L		05/13/25 07:56	05/13/25 14:15	1
Vanadium	**0.034**		0.0050	0.0015	mg/L		05/13/25 07:56	05/13/25 14:15	1
Zinc	**0.25**		0.010	0.0015	mg/L		05/13/25 07:56	05/13/25 14:15	1

Client: Roux Environmental Engineering and Geology DPC
Job ID: 480-229348-1
Project/Site: BCP RI - 619 Exchange Street Site

Client Sample ID: MW-5
Lab Sample ID: 480-229348-5
Date Collected: 05/08/25 10:00
Matrix: Water
Date Received: 05/10/25 09:00

Method: SW846 6010D - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum, Dissolved	ND		0.20	0.060	mg/L		05/13/25 08:00	05/13/25 15:15	1
Antimony, Dissolved	ND		0.020	0.0068	mg/L		05/13/25 08:00	05/13/25 15:15	1
Arsenic, Dissolved	ND		0.015	0.0056	mg/L		05/13/25 08:00	05/13/25 15:15	1
Barium, Dissolved	**0.061**		0.0020	0.00070	mg/L		05/13/25 08:00	05/13/25 15:15	1
Beryllium, Dissolved	ND		0.0020	0.00030	mg/L		05/13/25 08:00	05/13/25 15:15	1
Cadmium, Dissolved	ND		0.0020	0.00050	mg/L		05/13/25 08:00	05/13/25 15:15	1
Calcium, Dissolved	**106**		0.50	0.10	mg/L		05/13/25 08:00	05/13/25 15:15	1
Chromium, Dissolved	ND		0.0040	0.0010	mg/L		05/13/25 08:00	05/13/25 15:15	1
Cobalt, Dissolved	ND		0.0040	0.00063	mg/L		05/13/25 08:00	05/13/25 15:15	1
Copper, Dissolved	**0.0032**	**J**	0.010	0.0016	mg/L		05/13/25 08:00	05/13/25 15:15	1
Iron, Dissolved	ND		0.050	0.019	mg/L		05/13/25 08:00	05/13/25 15:15	1
Lead, Dissolved	ND		0.010	0.0030	mg/L		05/13/25 08:00	05/13/25 15:15	1
Magnesium, Dissolved	**61.6**		0.20	0.043	mg/L		05/13/25 08:00	05/13/25 15:15	1
Manganese, Dissolved	**0.051**		0.0030	0.00040	mg/L		05/13/25 08:00	05/13/25 15:15	1
Nickel, Dissolved	**0.0028**	**J**	0.010	0.0013	mg/L		05/13/25 08:00	05/13/25 15:15	1
Potassium, Dissolved	**2.8**		0.50	0.10	mg/L		05/13/25 08:00	05/13/25 15:15	1
Selenium, Dissolved	ND		0.025	0.0087	mg/L		05/13/25 08:00	05/13/25 15:15	1
Silver, Dissolved	ND	^5-	0.0060	0.0017	mg/L		05/13/25 08:00	05/13/25 15:15	1
Sodium, Dissolved	**29.1**		1.0	0.32	mg/L		05/13/25 08:00	05/13/25 15:15	1
Thallium, Dissolved	ND		0.020	0.010	mg/L		05/13/25 08:00	05/13/25 15:15	1
Vanadium, Dissolved	ND		0.0050	0.0015	mg/L		05/13/25 08:00	05/13/25 15:15	1
Zinc, Dissolved	**0.0076**	**J B**	0.010	0.0015	mg/L		05/13/25 08:00	05/13/25 15:15	1

Method: SW846 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.000043**	**J**	0.00020	0.000042	mg/L		05/13/25 09:29	05/13/25 13:48	1

Method: SW846 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury, Dissolved	ND		0.00020	0.000042	mg/L		05/13/25 09:29	05/13/25 14:43	1

Client Sample ID: MW-6
Lab Sample ID: 480-229348-6
Date Collected: 05/08/25 11:00
Matrix: Water
Date Received: 05/10/25 09:00

Method: SW846 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	0.82	ug/L			05/14/25 16:26	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			05/14/25 16:26	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.31	ug/L			05/14/25 16:26	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			05/14/25 16:26	1
1,1-Dichloroethane	ND		1.0	0.38	ug/L			05/14/25 16:26	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			05/14/25 16:26	1
1,2,4-Trichlorobenzene	ND		1.0	0.41	ug/L			05/14/25 16:26	1
1,2,4-Trimethylbenzene	ND		1.0	0.75	ug/L			05/14/25 16:26	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.39	ug/L			05/14/25 16:26	1
1,2-Dibromoethane	ND		1.0	0.73	ug/L			05/14/25 16:26	1
1,2-Dichlorobenzene	ND		1.0	0.79	ug/L			05/14/25 16:26	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			05/14/25 16:26	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			05/14/25 16:26	1
1,3,5-Trimethylbenzene	ND		1.0	0.77	ug/L			05/14/25 16:26	1
1,3-Dichlorobenzene	ND		1.0	0.78	ug/L			05/14/25 16:26	1
1,4-Dichlorobenzene	ND		1.0	0.84	ug/L			05/14/25 16:26	1
2-Butanone (MEK)	ND		10	1.3	ug/L			05/14/25 16:26	1
2-Hexanone	ND		5.0	1.2	ug/L			05/14/25 16:26	1
4-Isopropyltoluene	ND		1.0	0.31	ug/L			05/14/25 16:26	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			05/14/25 16:26	1
Acetone	ND		10	3.0	ug/L			05/14/25 16:26	1
Benzene	ND		1.0	0.41	ug/L			05/14/25 16:26	1
Bromodichloromethane	ND		1.0	0.39	ug/L			05/14/25 16:26	1
Bromoform	ND		1.0	0.26	ug/L			05/14/25 16:26	1
Bromomethane	ND		1.0	0.69	ug/L			05/14/25 16:26	1
Carbon disulfide	ND		1.0	0.19	ug/L			05/14/25 16:26	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			05/14/25 16:26	1
Chlorobenzene	ND		1.0	0.75	ug/L			05/14/25 16:26	1
Chloroethane	ND		1.0	0.32	ug/L			05/14/25 16:26	1
Chloroform	ND		1.0	0.34	ug/L			05/14/25 16:26	1
Chloromethane	ND		1.0	0.35	ug/L			05/14/25 16:26	1
cis-1,2-Dichloroethene	ND		1.0	0.81	ug/L			05/14/25 16:26	1
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			05/14/25 16:26	1
Cyclohexane	ND		1.0	0.18	ug/L			05/14/25 16:26	1
Dibromochloromethane	ND		1.0	0.32	ug/L			05/14/25 16:26	1
Dichlorodifluoromethane	ND		1.0	0.68	ug/L			05/14/25 16:26	1
Ethylbenzene	ND		1.0	0.74	ug/L			05/14/25 16:26	1
Isopropylbenzene	ND		1.0	0.79	ug/L			05/14/25 16:26	1
m,p-Xylene	ND		2.0	0.66	ug/L			05/14/25 16:26	1
Methyl acetate	ND		2.5	1.3	ug/L			05/14/25 16:26	1
Methyl tert-butyl ether	ND		1.0	0.16	ug/L			05/14/25 16:26	1
Methylcyclohexane	**0.18**	**J**	1.0	0.16	ug/L			05/14/25 16:26	1
Methylene Chloride	ND		1.0	0.44	ug/L			05/14/25 16:26	1
Naphthalene	ND		1.0	0.43	ug/L			05/14/25 16:26	1
n-Butylbenzene	ND		1.0	0.64	ug/L			05/14/25 16:26	1
N-Propylbenzene	ND		1.0	0.69	ug/L			05/14/25 16:26	1
o-Xylene	ND		1.0	0.76	ug/L			05/14/25 16:26	1
sec-Butylbenzene	ND		1.0	0.75	ug/L			05/14/25 16:26	1
Styrene	ND		1.0	0.73	ug/L			05/14/25 16:26	1

Client Sample ID: MW-6
Lab Sample ID: 480-229348-6
Date Collected: 05/08/25 11:00
Matrix: Water
Date Received: 05/10/25 09:00

Method: SW846 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
tert-Butylbenzene	ND		1.0	0.81	ug/L			05/14/25 16:26	1
Tetrachloroethene	ND		1.0	0.36	ug/L			05/14/25 16:26	1
Toluene	ND		1.0	0.51	ug/L			05/14/25 16:26	1
trans-1,2-Dichloroethene	ND		1.0	0.90	ug/L			05/14/25 16:26	1
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L			05/14/25 16:26	1
Trichloroethene	ND		1.0	0.46	ug/L			05/14/25 16:26	1
Trichlorofluoromethane	ND		1.0	0.88	ug/L			05/14/25 16:26	1
Vinyl chloride	ND		1.0	0.90	ug/L			05/14/25 16:26	1
Xylenes, Total	ND		2.0	0.66	ug/L			05/14/25 16:26	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*			*N/A*		*05/14/25 16:26*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*101*		*77 - 120*		*05/14/25 16:26*	*1*
4-Bromofluorobenzene (Surr)	*104*		*73 - 120*		*05/14/25 16:26*	*1*
Dibromofluoromethane (Surr)	*103*		*75 - 123*		*05/14/25 16:26*	*1*
Toluene-d8 (Surr)	*102*		*80 - 120*		*05/14/25 16:26*	*1*

Method: SW846 8270D_LL_PAH - Semivolatile Organic Compounds (GC/MS) Low level PAH

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.50	0.30	ug/L		05/12/25 09:28	05/13/25 21:26	1
Acenaphthylene	ND		0.50	0.34	ug/L		05/12/25 09:28	05/13/25 21:26	1
Anthracene	ND		0.50	0.39	ug/L		05/12/25 09:28	05/13/25 21:26	1
Benzo[a]anthracene	ND		0.50	0.40	ug/L		05/12/25 09:28	05/13/25 21:26	1
Benzo[a]pyrene	ND		0.50	0.33	ug/L		05/12/25 09:28	05/13/25 21:26	1
Benzo[b]fluoranthene	ND		0.50	0.30	ug/L		05/12/25 09:28	05/13/25 21:26	1
Benzo[g,h,i]perylene	ND		0.50	0.37	ug/L		05/12/25 09:28	05/13/25 21:26	1
Benzo[k]fluoranthene	ND		0.50	0.085	ug/L		05/12/25 09:28	05/13/25 21:26	1
Chrysene	ND		0.50	0.32	ug/L		05/12/25 09:28	05/13/25 21:26	1
Dibenz(a,h)anthracene	ND		0.50	0.33	ug/L		05/12/25 09:28	05/13/25 21:26	1
Fluoranthene	ND		0.50	0.36	ug/L		05/12/25 09:28	05/13/25 21:26	1
Fluorene	ND		0.50	0.37	ug/L		05/12/25 09:28	05/13/25 21:26	1
Indeno[1,2,3-cd]pyrene	ND		0.50	0.44	ug/L		05/12/25 09:28	05/13/25 21:26	1
Naphthalene	ND		0.50	0.42	ug/L		05/12/25 09:28	05/13/25 21:26	1
Phenanthrene	ND		0.50	0.38	ug/L		05/12/25 09:28	05/13/25 21:26	1
Pyrene	ND		0.50	0.36	ug/L		05/12/25 09:28	05/13/25 21:26	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*103*		*48 - 120*	*05/12/25 09:28*	*05/13/25 21:26*	*1*
Nitrobenzene-d5 (Surr)	*98*		*46 - 120*	*05/12/25 09:28*	*05/13/25 21:26*	*1*
p-Terphenyl-d14 (Surr)	*89*		*24 - 136*	*05/12/25 09:28*	*05/13/25 21:26*	*1*

Method: SW846 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	ND		5.0	0.48	ug/L		05/12/25 09:28	05/13/25 21:26	1
2,4,6-Trichlorophenol	ND		5.0	0.61	ug/L		05/12/25 09:28	05/13/25 21:26	1
2,4-Dichlorophenol	**0.70**	**J**	5.0	0.51	ug/L		05/12/25 09:28	05/13/25 21:26	1
2,4-Dimethylphenol	ND		5.0	0.50	ug/L		05/12/25 09:28	05/13/25 21:26	1
2,4-Dinitrophenol	ND		10	2.2	ug/L		05/12/25 09:28	05/13/25 21:26	1
2,4-Dinitrotoluene	ND		5.0	0.45	ug/L		05/12/25 09:28	05/13/25 21:26	1

Client Sample ID: MW-6
Lab Sample ID: 480-229348-6
Date Collected: 05/08/25 11:00
Matrix: Water
Date Received: 05/10/25 09:00

Method: SW846 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,6-Dinitrotoluene	ND		5.0	0.40	ug/L		05/12/25 09:28	05/13/25 21:26	1
2-Chloronaphthalene	ND		5.0	0.46	ug/L		05/12/25 09:28	05/13/25 21:26	1
2-Chlorophenol	ND		5.0	0.53	ug/L		05/12/25 09:28	05/13/25 21:26	1
2-Methylnaphthalene	ND		5.0	0.60	ug/L		05/12/25 09:28	05/13/25 21:26	1
2-Methylphenol	ND		5.0	0.40	ug/L		05/12/25 09:28	05/13/25 21:26	1
2-Nitroaniline	ND		10	0.42	ug/L		05/12/25 09:28	05/13/25 21:26	1
2-Nitrophenol	ND		5.0	0.48	ug/L		05/12/25 09:28	05/13/25 21:26	1
3,3'-Dichlorobenzidine	ND		5.0	0.40	ug/L		05/12/25 09:28	05/13/25 21:26	1
3-Nitroaniline	ND		10	0.48	ug/L		05/12/25 09:28	05/13/25 21:26	1
4,6-Dinitro-2-methylphenol	ND		10	2.2	ug/L		05/12/25 09:28	05/13/25 21:26	1
4-Bromophenyl phenyl ether	ND		5.0	0.45	ug/L		05/12/25 09:28	05/13/25 21:26	1
4-Chloro-3-methylphenol	ND		5.0	0.45	ug/L		05/12/25 09:28	05/13/25 21:26	1
4-Chloroaniline	ND		5.0	0.59	ug/L		05/12/25 09:28	05/13/25 21:26	1
4-Chlorophenyl phenyl ether	ND		5.0	0.35	ug/L		05/12/25 09:28	05/13/25 21:26	1
4-Methylphenol	ND		10	0.36	ug/L		05/12/25 09:28	05/13/25 21:26	1
4-Nitroaniline	ND		10	0.25	ug/L		05/12/25 09:28	05/13/25 21:26	1
4-Nitrophenol	ND		10	1.5	ug/L		05/12/25 09:28	05/13/25 21:26	1
Acetophenone	ND		5.0	0.54	ug/L		05/12/25 09:28	05/13/25 21:26	1
Atrazine	ND		5.0	0.46	ug/L		05/12/25 09:28	05/13/25 21:26	1
Benzaldehyde	ND		5.0	0.27	ug/L		05/12/25 09:28	05/13/25 21:26	1
Biphenyl	ND		5.0	0.65	ug/L		05/12/25 09:28	05/13/25 21:26	1
bis (2-chloroisopropyl) ether	ND		5.0	0.52	ug/L		05/12/25 09:28	05/13/25 21:26	1
Bis(2-chloroethoxy)methane	ND		5.0	0.35	ug/L		05/12/25 09:28	05/13/25 21:26	1
Bis(2-chloroethyl)ether	ND		5.0	0.40	ug/L		05/12/25 09:28	05/13/25 21:26	1
Bis(2-ethylhexyl) phthalate	ND		5.0	2.2	ug/L		05/12/25 09:28	05/13/25 21:26	1
Butyl benzyl phthalate	ND		5.0	1.0	ug/L		05/12/25 09:28	05/13/25 21:26	1
Caprolactam	ND		5.0	2.2	ug/L		05/12/25 09:28	05/13/25 21:26	1
Carbazole	ND		5.0	0.30	ug/L		05/12/25 09:28	05/13/25 21:26	1
Dibenzofuran	ND		10	0.51	ug/L		05/12/25 09:28	05/13/25 21:26	1
Diethyl phthalate	ND		5.0	0.22	ug/L		05/12/25 09:28	05/13/25 21:26	1
Dimethyl phthalate	**0.43**	**J**	5.0	0.36	ug/L		05/12/25 09:28	05/13/25 21:26	1
Di-n-butyl phthalate	ND		5.0	0.31	ug/L		05/12/25 09:28	05/13/25 21:26	1
Di-n-octyl phthalate	ND		5.0	0.47	ug/L		05/12/25 09:28	05/13/25 21:26	1
Hexachlorobenzene	ND		5.0	0.51	ug/L		05/12/25 09:28	05/13/25 21:26	1
Hexachlorobutadiene	ND		5.0	0.68	ug/L		05/12/25 09:28	05/13/25 21:26	1
Hexachlorocyclopentadiene	ND		5.0	0.59	ug/L		05/12/25 09:28	05/13/25 21:26	1
Hexachloroethane	ND		5.0	0.59	ug/L		05/12/25 09:28	05/13/25 21:26	1
Isophorone	**0.53**	**J**	5.0	0.43	ug/L		05/12/25 09:28	05/13/25 21:26	1
Nitrobenzene	ND		5.0	0.29	ug/L		05/12/25 09:28	05/13/25 21:26	1
N-Nitrosodi-n-propylamine	ND		5.0	0.54	ug/L		05/12/25 09:28	05/13/25 21:26	1
N-Nitrosodiphenylamine	ND		5.0	0.51	ug/L		05/12/25 09:28	05/13/25 21:26	1
Pentachlorophenol	**4.3**	**J**	10	2.2	ug/L		05/12/25 09:28	05/13/25 21:26	1
Phenol	ND		5.0	0.39	ug/L		05/12/25 09:28	05/13/25 21:26	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Unknown	*7.6*	*T J*	*ug/L*		*4.18*	*N/A*	*05/12/25 09:28*	*05/13/25 21:26*	*1*
Unknown	*2.4*	*T J*	*ug/L*		*4.40*	*N/A*	*05/12/25 09:28*	*05/13/25 21:26*	*1*
Unknown	*22*	*T J*	*ug/L*		*4.43*	*N/A*	*05/12/25 09:28*	*05/13/25 21:26*	*1*
2-Hexene, 3,5,5-trimethyl-	*11*	*T J N*	*ug/L*		*4.54*	*26456-76-8*	*05/12/25 09:28*	*05/13/25 21:26*	*1*
2-Hexene, 2,5,5-trimethyl-	*3.4*	*T J N*	*ug/L*		*4.61*	*40467-04-7*	*05/12/25 09:28*	*05/13/25 21:26*	*1*

Client Sample ID: MW-6
Lab Sample ID: 480-229348-6
Date Collected: 05/08/25 11:00
Matrix: Water
Date Received: 05/10/25 09:00

Method: SW846 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Tentatively Identified Compound	Est. Result	Qualifier	Unit	D	RT	CAS No.	Prepared	Analyzed	Dil Fac
Unknown	29	T J	ug/L		4.66	N/A	05/12/25 09:28	05/13/25 21:26	1
Unknown	21	T J	ug/L		4.69	N/A	05/12/25 09:28	05/13/25 21:26	1
Unknown	2.7	T J	ug/L		5.01	N/A	05/12/25 09:28	05/13/25 21:26	1
Unknown	24	T J	ug/L		5.07	N/A	05/12/25 09:28	05/13/25 21:26	1
Unknown	6.0	T J	ug/L		5.19	N/A	05/12/25 09:28	05/13/25 21:26	1
Unknown	7.0	T J	ug/L		5.25	N/A	05/12/25 09:28	05/13/25 21:26	1
Unknown	2.1	T J	ug/L		5.32	N/A	05/12/25 09:28	05/13/25 21:26	1
Unknown	73	T J	ug/L		5.36	N/A	05/12/25 09:28	05/13/25 21:26	1
Unknown	19	T J	ug/L		5.39	N/A	05/12/25 09:28	05/13/25 21:26	1
Unknown	3.6	T J	ug/L		5.45	N/A	05/12/25 09:28	05/13/25 21:26	1
Unknown	24	T J	ug/L		5.49	N/A	05/12/25 09:28	05/13/25 21:26	1
Unknown	4.5	T J	ug/L		5.58	N/A	05/12/25 09:28	05/13/25 21:26	1
Unknown	40	T J	ug/L		5.60	N/A	05/12/25 09:28	05/13/25 21:26	1
Unknown	42	T J	ug/L		5.62	N/A	05/12/25 09:28	05/13/25 21:26	1
Unknown	7.6	T J	ug/L		5.66	N/A	05/12/25 09:28	05/13/25 21:26	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol (Surr)	106		25 - 144	05/12/25 09:28	05/13/25 21:26	1
2-Fluorobiphenyl (Surr)	103		53 - 126	05/12/25 09:28	05/13/25 21:26	1
2-Fluorophenol (Surr)	70		24 - 120	05/12/25 09:28	05/13/25 21:26	1
Nitrobenzene-d5 (Surr)	98		29 - 129	05/12/25 09:28	05/13/25 21:26	1
Phenol-d5 (Surr)	48		10 - 120	05/12/25 09:28	05/13/25 21:26	1
p-Terphenyl-d14 (Surr)	89		33 - 132	05/12/25 09:28	05/13/25 21:26	1

Method: SW846 6010D - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**16.4**		0.20	0.060	mg/L		05/13/25 07:56	05/13/25 14:17	1
Antimony	ND		0.020	0.0068	mg/L		05/13/25 07:56	05/13/25 14:17	1
Arsenic	**0.0099**	**J**	0.015	0.0056	mg/L		05/13/25 07:56	05/13/25 14:17	1
Barium	**0.56**		0.0020	0.00070	mg/L		05/13/25 07:56	05/13/25 14:17	1
Beryllium	**0.00088**	**J**	0.0020	0.00030	mg/L		05/13/25 07:56	05/13/25 14:17	1
Cadmium	**0.00062**	**J**	0.0020	0.00050	mg/L		05/13/25 07:56	05/13/25 14:17	1
Calcium	**166**		0.50	0.10	mg/L		05/13/25 07:56	05/13/25 14:17	1
Chromium	**0.021**		0.0040	0.0010	mg/L		05/13/25 07:56	05/13/25 14:17	1
Cobalt	**0.023**		0.0040	0.00063	mg/L		05/13/25 07:56	05/13/25 14:17	1
Copper	**0.11**		0.010	0.0016	mg/L		05/13/25 07:56	05/13/25 14:17	1
Iron	**21.4**		0.050	0.019	mg/L		05/13/25 07:56	05/13/25 14:17	1
Lead	**0.029**		0.010	0.0030	mg/L		05/13/25 07:56	05/13/25 14:17	1
Magnesium	**83.1**		0.20	0.043	mg/L		05/13/25 07:56	05/13/25 14:17	1
Manganese	**0.54**		0.0030	0.00040	mg/L		05/13/25 07:56	05/13/25 14:17	1
Nickel	**0.036**		0.010	0.0013	mg/L		05/13/25 07:56	05/13/25 14:17	1
Potassium	**7.8**		0.50	0.10	mg/L		05/13/25 07:56	05/13/25 14:17	1
Selenium	ND		0.025	0.0087	mg/L		05/13/25 07:56	05/13/25 14:17	1
Silver	ND	^5-	0.0060	0.0017	mg/L		05/13/25 07:56	05/13/25 14:17	1
Sodium	**108**		1.0	0.32	mg/L		05/13/25 07:56	05/13/25 14:17	1
Thallium	ND		0.020	0.010	mg/L		05/13/25 07:56	05/13/25 14:17	1
Vanadium	**0.030**		0.0050	0.0015	mg/L		05/13/25 07:56	05/13/25 14:17	1
Zinc	**0.26**		0.010	0.0015	mg/L		05/13/25 07:56	05/13/25 14:17	1

Client: Roux Environmental Engineering and Geology DPC
Job ID: 480-229348-1
Project/Site: BCP RI - 619 Exchange Street Site

Client Sample ID: MW-6
Lab Sample ID: 480-229348-6
Date Collected: 05/08/25 11:00
Matrix: Water
Date Received: 05/10/25 09:00

Method: SW846 6010D - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum, Dissolved	ND		0.20	0.060	mg/L		05/13/25 08:00	05/13/25 15:17	1
Antimony, Dissolved	ND		0.020	0.0068	mg/L		05/13/25 08:00	05/13/25 15:17	1
Arsenic, Dissolved	ND		0.015	0.0056	mg/L		05/13/25 08:00	05/13/25 15:17	1
Barium, Dissolved	**0.098**		0.0020	0.00070	mg/L		05/13/25 08:00	05/13/25 15:17	1
Beryllium, Dissolved	ND		0.0020	0.00030	mg/L		05/13/25 08:00	05/13/25 15:17	1
Cadmium, Dissolved	ND		0.0020	0.00050	mg/L		05/13/25 08:00	05/13/25 15:17	1
Calcium, Dissolved	**75.9**		0.50	0.10	mg/L		05/13/25 08:00	05/13/25 15:17	1
Chromium, Dissolved	ND		0.0040	0.0010	mg/L		05/13/25 08:00	05/13/25 15:17	1
Cobalt, Dissolved	**0.0011**	**J**	0.0040	0.00063	mg/L		05/13/25 08:00	05/13/25 15:17	1
Copper, Dissolved	**0.0051**	**J**	0.010	0.0016	mg/L		05/13/25 08:00	05/13/25 15:17	1
Iron, Dissolved	ND		0.050	0.019	mg/L		05/13/25 08:00	05/13/25 15:17	1
Lead, Dissolved	ND		0.010	0.0030	mg/L		05/13/25 08:00	05/13/25 15:17	1
Magnesium, Dissolved	**58.5**		0.20	0.043	mg/L		05/13/25 08:00	05/13/25 15:17	1
Manganese, Dissolved	**0.031**		0.0030	0.00040	mg/L		05/13/25 08:00	05/13/25 15:17	1
Nickel, Dissolved	**0.0023**	**J**	0.010	0.0013	mg/L		05/13/25 08:00	05/13/25 15:17	1
Potassium, Dissolved	**3.1**		0.50	0.10	mg/L		05/13/25 08:00	05/13/25 15:17	1
Selenium, Dissolved	ND		0.025	0.0087	mg/L		05/13/25 08:00	05/13/25 15:17	1
Silver, Dissolved	ND	^5-	0.0060	0.0017	mg/L		05/13/25 08:00	05/13/25 15:17	1
Sodium, Dissolved	**107**		1.0	0.32	mg/L		05/13/25 08:00	05/13/25 15:17	1
Thallium, Dissolved	ND		0.020	0.010	mg/L		05/13/25 08:00	05/13/25 15:17	1
Vanadium, Dissolved	ND		0.0050	0.0015	mg/L		05/13/25 08:00	05/13/25 15:17	1
Zinc, Dissolved	ND		0.010	0.0015	mg/L		05/13/25 08:00	05/13/25 15:17	1

Method: SW846 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020	0.000042	mg/L		05/13/25 09:29	05/13/25 13:49	1

Method: SW846 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury, Dissolved	ND		0.00020	0.000042	mg/L		05/13/25 09:29	05/13/25 14:44	1

Client: Roux Environmental Engineering and Geology DPC
Job ID: 480-229348-1
Project/Site: BCP RI - 619 Exchange Street Site

Client Sample ID: BD
Lab Sample ID: 480-229348-7
Date Collected: 05/08/25 12:05
Matrix: Water
Date Received: 05/10/25 09:00

Method: SW846 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	0.82	ug/L			05/14/25 16:48	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			05/14/25 16:48	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.31	ug/L			05/14/25 16:48	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			05/14/25 16:48	1
1,1-Dichloroethane	ND		1.0	0.38	ug/L			05/14/25 16:48	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			05/14/25 16:48	1
1,2,4-Trichlorobenzene	ND		1.0	0.41	ug/L			05/14/25 16:48	1
1,2,4-Trimethylbenzene	ND		1.0	0.75	ug/L			05/14/25 16:48	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.39	ug/L			05/14/25 16:48	1
1,2-Dibromoethane	ND		1.0	0.73	ug/L			05/14/25 16:48	1
1,2-Dichlorobenzene	ND		1.0	0.79	ug/L			05/14/25 16:48	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			05/14/25 16:48	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			05/14/25 16:48	1
1,3,5-Trimethylbenzene	ND		1.0	0.77	ug/L			05/14/25 16:48	1
1,3-Dichlorobenzene	ND		1.0	0.78	ug/L			05/14/25 16:48	1
1,4-Dichlorobenzene	ND		1.0	0.84	ug/L			05/14/25 16:48	1
2-Butanone (MEK)	ND		10	1.3	ug/L			05/14/25 16:48	1
2-Hexanone	ND		5.0	1.2	ug/L			05/14/25 16:48	1
4-Isopropyltoluene	ND		1.0	0.31	ug/L			05/14/25 16:48	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			05/14/25 16:48	1
Acetone	ND		10	3.0	ug/L			05/14/25 16:48	1
Benzene	ND		1.0	0.41	ug/L			05/14/25 16:48	1
Bromodichloromethane	ND		1.0	0.39	ug/L			05/14/25 16:48	1
Bromoform	ND		1.0	0.26	ug/L			05/14/25 16:48	1
Bromomethane	ND		1.0	0.69	ug/L			05/14/25 16:48	1
Carbon disulfide	ND		1.0	0.19	ug/L			05/14/25 16:48	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			05/14/25 16:48	1
Chlorobenzene	ND		1.0	0.75	ug/L			05/14/25 16:48	1
Chloroethane	ND		1.0	0.32	ug/L			05/14/25 16:48	1
Chloroform	ND		1.0	0.34	ug/L			05/14/25 16:48	1
Chloromethane	ND		1.0	0.35	ug/L			05/14/25 16:48	1
cis-1,2-Dichloroethene	ND		1.0	0.81	ug/L			05/14/25 16:48	1
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			05/14/25 16:48	1
Cyclohexane	ND		1.0	0.18	ug/L			05/14/25 16:48	1
Dibromochloromethane	ND		1.0	0.32	ug/L			05/14/25 16:48	1
Dichlorodifluoromethane	ND		1.0	0.68	ug/L			05/14/25 16:48	1
Ethylbenzene	ND		1.0	0.74	ug/L			05/14/25 16:48	1
Isopropylbenzene	ND		1.0	0.79	ug/L			05/14/25 16:48	1
m,p-Xylene	ND		2.0	0.66	ug/L			05/14/25 16:48	1
Methyl acetate	ND		2.5	1.3	ug/L			05/14/25 16:48	1
Methyl tert-butyl ether	ND		1.0	0.16	ug/L			05/14/25 16:48	1
Methylcyclohexane	ND		1.0	0.16	ug/L			05/14/25 16:48	1
Methylene Chloride	ND		1.0	0.44	ug/L			05/14/25 16:48	1
Naphthalene	ND		1.0	0.43	ug/L			05/14/25 16:48	1
n-Butylbenzene	ND		1.0	0.64	ug/L			05/14/25 16:48	1
N-Propylbenzene	ND		1.0	0.69	ug/L			05/14/25 16:48	1
o-Xylene	ND		1.0	0.76	ug/L			05/14/25 16:48	1
sec-Butylbenzene	ND		1.0	0.75	ug/L			05/14/25 16:48	1
Styrene	ND		1.0	0.73	ug/L			05/14/25 16:48	1

Client Sample ID: BD
Lab Sample ID: 480-229348-7
Date Collected: 05/08/25 12:05
Matrix: Water
Date Received: 05/10/25 09:00

Method: SW846 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
tert-Butylbenzene	ND		1.0	0.81	ug/L			05/14/25 16:48	1
Tetrachloroethene	ND		1.0	0.36	ug/L			05/14/25 16:48	1
Toluene	ND		1.0	0.51	ug/L			05/14/25 16:48	1
trans-1,2-Dichloroethene	ND		1.0	0.90	ug/L			05/14/25 16:48	1
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L			05/14/25 16:48	1
Trichloroethene	ND		1.0	0.46	ug/L			05/14/25 16:48	1
Trichlorofluoromethane	ND		1.0	0.88	ug/L			05/14/25 16:48	1
Vinyl chloride	ND		1.0	0.90	ug/L			05/14/25 16:48	1
Xylenes, Total	ND		2.0	0.66	ug/L			05/14/25 16:48	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*			*N/A*		*05/14/25 16:48*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*103*		*77 - 120*		*05/14/25 16:48*	*1*
4-Bromofluorobenzene (Surr)	*101*		*73 - 120*		*05/14/25 16:48*	*1*
Dibromofluoromethane (Surr)	*104*		*75 - 123*		*05/14/25 16:48*	*1*
Toluene-d8 (Surr)	*101*		*80 - 120*		*05/14/25 16:48*	*1*

Method: SW846 8270D SIM ID - Semivolatile Organic Compounds (GC/MS SIM / Isotope Dilution)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	ND		0.20	0.10	ug/L		05/13/25 13:38	05/14/25 14:57	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,4-Dioxane-d8	*35*		*15 - 110*	*05/13/25 13:38*	*05/14/25 14:57*	*1*

Method: SW846 8270D_LL_PAH - Semivolatile Organic Compounds (GC/MS) Low level PAH

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.50	0.30	ug/L		05/12/25 09:28	05/14/25 12:29	1
Acenaphthylene	ND		0.50	0.34	ug/L		05/12/25 09:28	05/14/25 12:29	1
Anthracene	ND		0.50	0.39	ug/L		05/12/25 09:28	05/14/25 12:29	1
Benzo[a]anthracene	ND		0.50	0.40	ug/L		05/12/25 09:28	05/14/25 12:29	1
Benzo[a]pyrene	ND		0.50	0.33	ug/L		05/12/25 09:28	05/14/25 12:29	1
Benzo[b]fluoranthene	ND		0.50	0.30	ug/L		05/12/25 09:28	05/14/25 12:29	1
Benzo[g,h,i]perylene	ND		0.50	0.37	ug/L		05/12/25 09:28	05/14/25 12:29	1
Benzo[k]fluoranthene	ND		0.50	0.085	ug/L		05/12/25 09:28	05/14/25 12:29	1
Chrysene	ND		0.50	0.32	ug/L		05/12/25 09:28	05/14/25 12:29	1
Dibenz(a,h)anthracene	ND		0.50	0.33	ug/L		05/12/25 09:28	05/14/25 12:29	1
Fluoranthene	ND		0.50	0.36	ug/L		05/12/25 09:28	05/14/25 12:29	1
Fluorene	ND		0.50	0.37	ug/L		05/12/25 09:28	05/14/25 12:29	1
Indeno[1,2,3-cd]pyrene	ND		0.50	0.44	ug/L		05/12/25 09:28	05/14/25 12:29	1
Naphthalene	ND		0.50	0.42	ug/L		05/12/25 09:28	05/14/25 12:29	1
Phenanthrene	ND		0.50	0.38	ug/L		05/12/25 09:28	05/14/25 12:29	1
Pyrene	ND		0.50	0.36	ug/L		05/12/25 09:28	05/14/25 12:29	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*108*		*48 - 120*	*05/12/25 09:28*	*05/14/25 12:29*	*1*
Nitrobenzene-d5 (Surr)	*87*		*46 - 120*	*05/12/25 09:28*	*05/14/25 12:29*	*1*
p-Terphenyl-d14 (Surr)	*91*		*24 - 136*	*05/12/25 09:28*	*05/14/25 12:29*	*1*

Client: Roux Environmental Engineering and Geology DPC
Job ID: 480-229348-1
Project/Site: BCP RI - 619 Exchange Street Site

Client Sample ID: BD
Lab Sample ID: 480-229348-7
Date Collected: 05/08/25 12:05
Matrix: Water
Date Received: 05/10/25 09:00

Method: SW846 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	ND		5.0	0.48	ug/L		05/12/25 09:28	05/14/25 12:29	1
2,4,6-Trichlorophenol	ND		5.0	0.61	ug/L		05/12/25 09:28	05/14/25 12:29	1
2,4-Dichlorophenol	ND		5.0	0.51	ug/L		05/12/25 09:28	05/14/25 12:29	1
2,4-Dimethylphenol	ND		5.0	0.50	ug/L		05/12/25 09:28	05/14/25 12:29	1
2,4-Dinitrophenol	ND		10	2.2	ug/L		05/12/25 09:28	05/14/25 12:29	1
2,4-Dinitrotoluene	ND		5.0	0.45	ug/L		05/12/25 09:28	05/14/25 12:29	1
2,6-Dinitrotoluene	ND		5.0	0.40	ug/L		05/12/25 09:28	05/14/25 12:29	1
2-Chloronaphthalene	ND		5.0	0.46	ug/L		05/12/25 09:28	05/14/25 12:29	1
2-Chlorophenol	ND		5.0	0.53	ug/L		05/12/25 09:28	05/14/25 12:29	1
2-Methylnaphthalene	ND		5.0	0.60	ug/L		05/12/25 09:28	05/14/25 12:29	1
2-Methylphenol	ND		5.0	0.40	ug/L		05/12/25 09:28	05/14/25 12:29	1
2-Nitroaniline	ND		10	0.42	ug/L		05/12/25 09:28	05/14/25 12:29	1
2-Nitrophenol	ND		5.0	0.48	ug/L		05/12/25 09:28	05/14/25 12:29	1
3,3'-Dichlorobenzidine	ND		5.0	0.40	ug/L		05/12/25 09:28	05/14/25 12:29	1
3-Nitroaniline	ND		10	0.48	ug/L		05/12/25 09:28	05/14/25 12:29	1
4,6-Dinitro-2-methylphenol	ND		10	2.2	ug/L		05/12/25 09:28	05/14/25 12:29	1
4-Bromophenyl phenyl ether	ND		5.0	0.45	ug/L		05/12/25 09:28	05/14/25 12:29	1
4-Chloro-3-methylphenol	ND		5.0	0.45	ug/L		05/12/25 09:28	05/14/25 12:29	1
4-Chloroaniline	ND		5.0	0.59	ug/L		05/12/25 09:28	05/14/25 12:29	1
4-Chlorophenyl phenyl ether	ND		5.0	0.35	ug/L		05/12/25 09:28	05/14/25 12:29	1
4-Methylphenol	ND		10	0.36	ug/L		05/12/25 09:28	05/14/25 12:29	1
4-Nitroaniline	ND		10	0.25	ug/L		05/12/25 09:28	05/14/25 12:29	1
4-Nitrophenol	ND		10	1.5	ug/L		05/12/25 09:28	05/14/25 12:29	1
Acetophenone	ND		5.0	0.54	ug/L		05/12/25 09:28	05/14/25 12:29	1
Atrazine	ND		5.0	0.46	ug/L		05/12/25 09:28	05/14/25 12:29	1
Benzaldehyde	ND		5.0	0.27	ug/L		05/12/25 09:28	05/14/25 12:29	1
Biphenyl	ND		5.0	0.65	ug/L		05/12/25 09:28	05/14/25 12:29	1
bis (2-chloroisopropyl) ether	ND		5.0	0.52	ug/L		05/12/25 09:28	05/14/25 12:29	1
Bis(2-chloroethoxy)methane	ND		5.0	0.35	ug/L		05/12/25 09:28	05/14/25 12:29	1
Bis(2-chloroethyl)ether	ND		5.0	0.40	ug/L		05/12/25 09:28	05/14/25 12:29	1
Bis(2-ethylhexyl) phthalate	ND		5.0	2.2	ug/L		05/12/25 09:28	05/14/25 12:29	1
Butyl benzyl phthalate	ND		5.0	1.0	ug/L		05/12/25 09:28	05/14/25 12:29	1
Caprolactam	ND		5.0	2.2	ug/L		05/12/25 09:28	05/14/25 12:29	1
Carbazole	ND		5.0	0.30	ug/L		05/12/25 09:28	05/14/25 12:29	1
Dibenzofuran	ND		10	0.51	ug/L		05/12/25 09:28	05/14/25 12:29	1
Diethyl phthalate	ND		5.0	0.22	ug/L		05/12/25 09:28	05/14/25 12:29	1
Dimethyl phthalate	ND		5.0	0.36	ug/L		05/12/25 09:28	05/14/25 12:29	1
Di-n-butyl phthalate	ND		5.0	0.31	ug/L		05/12/25 09:28	05/14/25 12:29	1
Di-n-octyl phthalate	ND		5.0	0.47	ug/L		05/12/25 09:28	05/14/25 12:29	1
Hexachlorobenzene	ND		5.0	0.51	ug/L		05/12/25 09:28	05/14/25 12:29	1
Hexachlorobutadiene	ND		5.0	0.68	ug/L		05/12/25 09:28	05/14/25 12:29	1
Hexachlorocyclopentadiene	ND		5.0	0.59	ug/L		05/12/25 09:28	05/14/25 12:29	1
Hexachloroethane	ND		5.0	0.59	ug/L		05/12/25 09:28	05/14/25 12:29	1
Isophorone	ND		5.0	0.43	ug/L		05/12/25 09:28	05/14/25 12:29	1
Nitrobenzene	ND		5.0	0.29	ug/L		05/12/25 09:28	05/14/25 12:29	1
N-Nitrosodi-n-propylamine	ND		5.0	0.54	ug/L		05/12/25 09:28	05/14/25 12:29	1
N-Nitrosodiphenylamine	ND		5.0	0.51	ug/L		05/12/25 09:28	05/14/25 12:29	1
Pentachlorophenol	**4.3**	**J**	10	2.2	ug/L		05/12/25 09:28	05/14/25 12:29	1
Phenol	ND		5.0	0.39	ug/L		05/12/25 09:28	05/14/25 12:29	1

Client Sample ID: BD
Lab Sample ID: 480-229348-7
Date Collected: 05/08/25 12:05
Matrix: Water
Date Received: 05/10/25 09:00

Tentatively Identified Compound	Est. Result	Qualifier	Unit	D	RT	CAS No.	Prepared	Analyzed	Dil Fac
Unknown	7.0	T J	ug/L		4.18	N/A	05/12/25 09:28	05/14/25 12:29	1
Unknown	21	T J	ug/L		4.43	N/A	05/12/25 09:28	05/14/25 12:29	1
2-Hexene, 2,5,5-trimethyl-	10	T J N	ug/L		4.54	40467-04-7	05/12/25 09:28	05/14/25 12:29	1
Unknown	3.1	T J	ug/L		4.62	N/A	05/12/25 09:28	05/14/25 12:29	1
Unknown	35	T J	ug/L		4.66	N/A	05/12/25 09:28	05/14/25 12:29	1
Unknown	19	T J	ug/L		4.69	N/A	05/12/25 09:28	05/14/25 12:29	1
Unknown	2.4	T J	ug/L		5.01	N/A	05/12/25 09:28	05/14/25 12:29	1
Unknown	21	T J	ug/L		5.07	N/A	05/12/25 09:28	05/14/25 12:29	1
Unknown	5.2	T J	ug/L		5.19	N/A	05/12/25 09:28	05/14/25 12:29	1
Unknown	6.1	T J	ug/L		5.24	N/A	05/12/25 09:28	05/14/25 12:29	1
Unknown	67	T J	ug/L		5.36	N/A	05/12/25 09:28	05/14/25 12:29	1
Unknown	16	T J	ug/L		5.39	N/A	05/12/25 09:28	05/14/25 12:29	1
Unknown	3.3	T J	ug/L		5.45	N/A	05/12/25 09:28	05/14/25 12:29	1
Unknown	21	T J	ug/L		5.48	N/A	05/12/25 09:28	05/14/25 12:29	1
Unknown	3.1	T J	ug/L		5.57	N/A	05/12/25 09:28	05/14/25 12:29	1
Unknown	38	T J	ug/L		5.59	N/A	05/12/25 09:28	05/14/25 12:29	1
Unknown	37	T J	ug/L		5.62	N/A	05/12/25 09:28	05/14/25 12:29	1
Unknown	6.8	T J	ug/L		5.66	N/A	05/12/25 09:28	05/14/25 12:29	1
Unknown	3.0	T J	ug/L		5.74	N/A	05/12/25 09:28	05/14/25 12:29	1
Column Bleed	2.6	T J	ug/L		6.81	N/A	05/12/25 09:28	05/14/25 12:29	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol (Surr)	80		25 - 144	05/12/25 09:28	05/14/25 12:29	1
2-Fluorobiphenyl (Surr)	108		53 - 126	05/12/25 09:28	05/14/25 12:29	1
2-Fluorophenol (Surr)	66		24 - 120	05/12/25 09:28	05/14/25 12:29	1
Nitrobenzene-d5 (Surr)	87		29 - 129	05/12/25 09:28	05/14/25 12:29	1
Phenol-d5 (Surr)	41		10 - 120	05/12/25 09:28	05/14/25 12:29	1
p-Terphenyl-d14 (Surr)	91		33 - 132	05/12/25 09:28	05/14/25 12:29	1

Method: SW846 8081B - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	ND		0.050	0.0092	ug/L		05/12/25 13:45	05/13/25 15:58	1
4,4'-DDE	ND		0.050	0.012	ug/L		05/12/25 13:45	05/13/25 15:58	1
4,4'-DDT	ND		0.050	0.011	ug/L		05/12/25 13:45	05/13/25 15:58	1
Aldrin	ND		0.050	0.0081	ug/L		05/12/25 13:45	05/13/25 15:58	1
alpha-BHC	0.016	J B	0.050	0.0077	ug/L		05/12/25 13:45	05/13/25 15:58	1
beta-BHC	ND		0.050	0.025	ug/L		05/12/25 13:45	05/13/25 15:58	1
cis-Chlordane	ND		0.050	0.015	ug/L		05/12/25 13:45	05/13/25 15:58	1
delta-BHC	ND		0.050	0.010	ug/L		05/12/25 13:45	05/13/25 15:58	1
Dieldrin	ND		0.050	0.0098	ug/L		05/12/25 13:45	05/13/25 15:58	1
Endosulfan I	ND		0.050	0.011	ug/L		05/12/25 13:45	05/13/25 15:58	1
Endosulfan II	ND		0.050	0.012	ug/L		05/12/25 13:45	05/13/25 15:58	1
Endosulfan sulfate	ND		0.050	0.016	ug/L		05/12/25 13:45	05/13/25 15:58	1
Endrin	ND		0.050	0.014	ug/L		05/12/25 13:45	05/13/25 15:58	1
Endrin aldehyde	ND		0.050	0.016	ug/L		05/12/25 13:45	05/13/25 15:58	1
Endrin ketone	ND		0.050	0.012	ug/L		05/12/25 13:45	05/13/25 15:58	1
gamma-BHC (Lindane)	ND		0.050	0.0080	ug/L		05/12/25 13:45	05/13/25 15:58	1
Heptachlor	ND		0.050	0.0085	ug/L		05/12/25 13:45	05/13/25 15:58	1
Heptachlor epoxide	ND		0.050	0.0074	ug/L		05/12/25 13:45	05/13/25 15:58	1
Methoxychlor	ND		0.050	0.014	ug/L		05/12/25 13:45	05/13/25 15:58	1

Client Sample ID: BD
Lab Sample ID: 480-229348-7

Date Collected: 05/08/25 12:05
Matrix: Water

Date Received: 05/10/25 09:00

Method: SW846 8081B - Organochlorine Pesticides (GC) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Toxaphene	ND		0.50	0.12	ug/L		05/12/25 13:45	05/13/25 15:58	1
trans-Chlordane	ND		0.050	0.011	ug/L		05/12/25 13:45	05/13/25 15:58	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*53*		*10 - 120*	*05/12/25 13:45*	*05/13/25 15:58*	*1*
DCB Decachlorobiphenyl	*50*		*10 - 120*	*05/12/25 13:45*	*05/13/25 15:58*	*1*
Tetrachloro-m-xylene	*83*		*10 - 120*	*05/12/25 13:45*	*05/13/25 15:58*	*1*
Tetrachloro-m-xylene	*83*		*10 - 120*	*05/12/25 13:45*	*05/13/25 15:58*	*1*

Method: SW846 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		0.50	0.18	ug/L		05/14/25 06:38	05/15/25 13:51	1
PCB-1221	ND		0.50	0.18	ug/L		05/14/25 06:38	05/15/25 13:51	1
PCB-1232	ND		0.50	0.18	ug/L		05/14/25 06:38	05/15/25 13:51	1
PCB-1242	ND		0.50	0.18	ug/L		05/14/25 06:38	05/15/25 13:51	1
PCB-1248	ND		0.50	0.18	ug/L		05/14/25 06:38	05/15/25 13:51	1
PCB-1254	ND		0.50	0.25	ug/L		05/14/25 06:38	05/15/25 13:51	1
PCB-1260	ND		0.50	0.25	ug/L		05/14/25 06:38	05/15/25 13:51	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*28*		*10 - 123*	*05/14/25 06:38*	*05/15/25 13:51*	*1*
DCB Decachlorobiphenyl	*20*		*10 - 123*	*05/14/25 06:38*	*05/15/25 13:51*	*1*
Tetrachloro-m-xylene	*59*		*10 - 145*	*05/14/25 06:38*	*05/15/25 13:51*	*1*
Tetrachloro-m-xylene	*51*		*10 - 145*	*05/14/25 06:38*	*05/15/25 13:51*	*1*

Method: SW846 8151A - Herbicides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-T	ND		0.54	0.073	ug/L		05/13/25 09:13	05/14/25 13:29	1
2,4-D	**0.67**		0.54	0.18	ug/L		05/13/25 09:13	05/14/25 13:29	1
Dichlorprop	ND		0.54	0.12	ug/L		05/13/25 09:13	05/14/25 13:29	1
Pentachlorophenol	**1.2**		0.54	0.053	ug/L		05/13/25 09:13	05/14/25 13:29	1
Picloram	ND		0.54	0.077	ug/L		05/13/25 09:13	05/14/25 13:29	1
Silvex (2,4,5-TP)	ND		0.54	0.054	ug/L		05/13/25 09:13	05/14/25 13:29	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4-Dichlorophenylacetic acid	*87*		*21 - 143*	*05/13/25 09:13*	*05/14/25 13:29*	*1*
2,4-Dichlorophenylacetic acid	*86*		*21 - 143*	*05/13/25 09:13*	*05/14/25 13:29*	*1*

Method: EPA Draft-3 1633 - Per- and Polyfluoroalkyl Substances by LC/MS/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)	ND		50	13	ng/L		05/14/25 09:16	05/14/25 18:36	1
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9Cl-PF3ONS)	ND		50	13	ng/L		05/14/25 09:16	05/14/25 18:36	1
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	ND		50	13	ng/L		05/14/25 09:16	05/14/25 18:36	1
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA)	ND		50	13	ng/L		05/14/25 09:16	05/14/25 18:36	1
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2 FTS)	ND		50	13	ng/L		05/14/25 09:16	05/14/25 18:36	1
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2 FTS)	ND		50	13	ng/L		05/14/25 09:16	05/14/25 18:36	1

Client Sample ID: BD
Lab Sample ID: 480-229348-7
Date Collected: 05/08/25 12:05
Matrix: Water
Date Received: 05/10/25 09:00

Method: EPA Draft-3 1633 - Per- and Polyfluoroalkyl Substances by LC/MS/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2 FTS)	ND		50	13	ng/L		05/14/25 09:16	05/14/25 18:36	1
N-ethylperfluorooctane sulfonamide (NEtFOSA)	ND		13	3.1	ng/L		05/14/25 09:16	05/14/25 18:36	1
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	ND		13	3.3	ng/L		05/14/25 09:16	05/14/25 18:36	1
N-ethylperfluorooctane sulfonamidoethanol (NEtFOSE)	ND		130	31	ng/L		05/14/25 09:16	05/14/25 18:36	1
N-methylperfluorooctane sulfonamide (NMeFOSA)	ND		13	3.1	ng/L		05/14/25 09:16	05/14/25 18:36	1
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	ND		13	3.9	ng/L		05/14/25 09:16	05/14/25 18:36	1
N-methylperfluorooctane sulfonamidoethanol (NMeFOSE)	ND		130	31	ng/L		05/14/25 09:16	05/14/25 18:36	1
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	ND		25	7.6	ng/L		05/14/25 09:16	05/14/25 18:36	1
Perfluorobutanesulfonic acid (PFBS)	ND		13	3.1	ng/L		05/14/25 09:16	05/14/25 18:36	1
Perfluorobutanoic acid (PFBA)	ND		50	13	ng/L		05/14/25 09:16	05/14/25 18:36	1
Perfluorodecanesulfonic acid (PFDS)	ND		13	3.1	ng/L		05/14/25 09:16	05/14/25 18:36	1
Perfluorodecanoic acid (PFDA)	ND		13	3.1	ng/L		05/14/25 09:16	05/14/25 18:36	1
Perfluorododecanesulfonic acid (PFDoS)	ND		13	3.1	ng/L		05/14/25 09:16	05/14/25 18:36	1
Perfluorododecanoic acid (PFDoA)	ND		13	3.1	ng/L		05/14/25 09:16	05/14/25 18:36	1
Perfluoro (2-ethoxyethane) sulfonic acid (PFEESA)	ND		25	6.3	ng/L		05/14/25 09:16	05/14/25 18:36	1
Perfluoroheptanesulfonic acid (PFHpS)	ND		13	3.1	ng/L		05/14/25 09:16	05/14/25 18:36	1
Perfluoroheptanoic acid (PFHpA)	ND		13	3.1	ng/L		05/14/25 09:16	05/14/25 18:36	1
3-Perfluoroheptylpropanoic acid (7:3 FTCA)	ND		310	93	ng/L		05/14/25 09:16	05/14/25 18:36	1
Perfluorohexanesulfonic acid (PFHxS)	ND		13	3.2	ng/L		05/14/25 09:16	05/14/25 18:36	1
Perfluorohexanoic acid (PFHxA)	ND		13	3.1	ng/L		05/14/25 09:16	05/14/25 18:36	1
Perfluoro-4-methoxybutanoic acid (PFMBA)	ND		25	6.3	ng/L		05/14/25 09:16	05/14/25 18:36	1
Perfluoro-3-methoxypropanoic acid (PFMPA)	ND		25	6.3	ng/L		05/14/25 09:16	05/14/25 18:36	1
Perfluorononanesulfonic acid (PFNS)	ND		13	3.1	ng/L		05/14/25 09:16	05/14/25 18:36	1
Perfluorononanoic acid (PFNA)	ND		13	3.1	ng/L		05/14/25 09:16	05/14/25 18:36	1
Perfluorooctanesulfonamide (PFOSA)	ND		13	3.1	ng/L		05/14/25 09:16	05/14/25 18:36	1
Perfluorooctanesulfonic acid (PFOS)	ND		13	3.1	ng/L		05/14/25 09:16	05/14/25 18:36	1
Perfluorooctanoic acid (PFOA)	**5.3**	**J**	13	3.1	ng/L		05/14/25 09:16	05/14/25 18:36	1
Perfluoropentanesulfonic acid (PFPeS)	ND		13	3.1	ng/L		05/14/25 09:16	05/14/25 18:36	1
Perfluoropentanoic acid (PFPeA)	ND		25	6.3	ng/L		05/14/25 09:16	05/14/25 18:36	1
3-Perfluoropentylpropanoic acid (5:3 FTCA)	ND		310	78	ng/L		05/14/25 09:16	05/14/25 18:36	1
3-Perfluoropropylpropanoic acid (3:3 FTCA)	ND		63	16	ng/L		05/14/25 09:16	05/14/25 18:36	1
Perfluorotetradecanoic acid (PFTeDA)	ND		13	3.1	ng/L		05/14/25 09:16	05/14/25 18:36	1
Perfluorotridecanoic acid (PFTrDA)	ND		13	3.1	ng/L		05/14/25 09:16	05/14/25 18:36	1
Perfluoroundecanoic acid (PFUnA)	ND		13	3.1	ng/L		05/14/25 09:16	05/14/25 18:36	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C3 HFPO-DA	*102*		*25 - 160*	*05/14/25 09:16*	*05/14/25 18:36*	*1*

Client Sample ID: BD
Lab Sample ID: 480-229348-7

Date Collected: 05/08/25 12:05
Matrix: Water

Date Received: 05/10/25 09:00

Method: EPA Draft-3 1633 - Per- and Polyfluoroalkyl Substances by LC/MS/MS (Continued)

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C4 PFBA	112		10 - 130	05/14/25 09:16	05/14/25 18:36	1
13C3 PFBS	112		55 - 150	05/14/25 09:16	05/14/25 18:36	1
13C6 PFDA	89.4		50 - 140	05/14/25 09:16	05/14/25 18:36	1
13C2-PFDoDA	83.4		10 - 150	05/14/25 09:16	05/14/25 18:36	1
13C4 PFHpA	96.9		55 - 150	05/14/25 09:16	05/14/25 18:36	1
13C5 PFHxA	99.6		55 - 150	05/14/25 09:16	05/14/25 18:36	1
13C3 PFHxS	109		55 - 150	05/14/25 09:16	05/14/25 18:36	1
13C9 PFNA	94.8		55 - 140	05/14/25 09:16	05/14/25 18:36	1
13C8 PFOA	110		60 - 140	05/14/25 09:16	05/14/25 18:36	1
13C8 PFOS	98.9		45 - 140	05/14/25 09:16	05/14/25 18:36	1
13C8 PFOSA	89.5		30 - 130	05/14/25 09:16	05/14/25 18:36	1
13C5 PFPeA	102		35 - 150	05/14/25 09:16	05/14/25 18:36	1
13C2 PFTeDA	78.1		10 - 130	05/14/25 09:16	05/14/25 18:36	1
13C7 PFUnA	87.1		30 - 140	05/14/25 09:16	05/14/25 18:36	1
d5-NEtFOSAA	106		10 - 200	05/14/25 09:16	05/14/25 18:36	1
d9-N-EtFOSE-M	75.4		10 - 150	05/14/25 09:16	05/14/25 18:36	1
d5-NEtPFOSA	75.0		10 - 130	05/14/25 09:16	05/14/25 18:36	1
D3-NMeFOSA	77.4		15 - 130	05/14/25 09:16	05/14/25 18:36	1
d3-NMeFOSAA	93.8		45 - 200	05/14/25 09:16	05/14/25 18:36	1
d7-N-MeFOSE-M	79.0		10 - 150	05/14/25 09:16	05/14/25 18:36	1
M2-4:2 FTS	115		60 - 200	05/14/25 09:16	05/14/25 18:36	1
M2-6:2 FTS	107		60 - 200	05/14/25 09:16	05/14/25 18:36	1
M2-8:2 FTS	103		50 - 200	05/14/25 09:16	05/14/25 18:36	1

Method: SW846 6010D - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**14.7**		0.20	0.060	mg/L		05/13/25 07:56	05/13/25 14:19	1
Antimony	ND		0.020	0.0068	mg/L		05/13/25 07:56	05/13/25 14:19	1
Arsenic	**0.0072**	**J**	0.015	0.0056	mg/L		05/13/25 07:56	05/13/25 14:19	1
Barium	**1.4**		0.0020	0.00070	mg/L		05/13/25 07:56	05/13/25 14:19	1
Beryllium	**0.00077**	**J**	0.0020	0.00030	mg/L		05/13/25 07:56	05/13/25 14:19	1
Cadmium	**0.0011**	**J**	0.0020	0.00050	mg/L		05/13/25 07:56	05/13/25 14:19	1
Calcium	**134**		0.50	0.10	mg/L		05/13/25 07:56	05/13/25 14:19	1
Chromium	**0.024**		0.0040	0.0010	mg/L		05/13/25 07:56	05/13/25 14:19	1
Cobalt	**0.0083**		0.0040	0.00063	mg/L		05/13/25 07:56	05/13/25 14:19	1
Copper	**0.038**		0.010	0.0016	mg/L		05/13/25 07:56	05/13/25 14:19	1
Iron	**19.6**		0.050	0.019	mg/L		05/13/25 07:56	05/13/25 14:19	1
Lead	**0.080**		0.010	0.0030	mg/L		05/13/25 07:56	05/13/25 14:19	1
Magnesium	**55.2**		0.20	0.043	mg/L		05/13/25 07:56	05/13/25 14:19	1
Manganese	**0.44**		0.0030	0.00040	mg/L		05/13/25 07:56	05/13/25 14:19	1
Nickel	**0.023**		0.010	0.0013	mg/L		05/13/25 07:56	05/13/25 14:19	1
Potassium	**7.2**		0.50	0.10	mg/L		05/13/25 07:56	05/13/25 14:19	1
Selenium	ND		0.025	0.0087	mg/L		05/13/25 07:56	05/13/25 14:19	1
Silver	ND	^5-	0.0060	0.0017	mg/L		05/13/25 07:56	05/13/25 14:19	1
Sodium	**58.1**		1.0	0.32	mg/L		05/13/25 07:56	05/13/25 14:19	1
Thallium	ND		0.020	0.010	mg/L		05/13/25 07:56	05/13/25 14:19	1
Vanadium	**0.028**		0.0050	0.0015	mg/L		05/13/25 07:56	05/13/25 14:19	1
Zinc	**0.76**		0.010	0.0015	mg/L		05/13/25 07:56	05/13/25 14:19	1

Client: Roux Environmental Engineering and Geology DPC
Job ID: 480-229348-1
Project/Site: BCP RI - 619 Exchange Street Site

Client Sample ID: BD
Lab Sample ID: 480-229348-7
Date Collected: 05/08/25 12:05
Matrix: Water
Date Received: 05/10/25 09:00

Method: SW846 6010D - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum, Dissolved	ND		0.20	0.060	mg/L		05/13/25 08:00	05/13/25 15:19	1
Antimony, Dissolved	ND		0.020	0.0068	mg/L		05/13/25 08:00	05/13/25 15:19	1
Arsenic, Dissolved	ND		0.015	0.0056	mg/L		05/13/25 08:00	05/13/25 15:19	1
Barium, Dissolved	**0.067**		0.0020	0.00070	mg/L		05/13/25 08:00	05/13/25 15:19	1
Beryllium, Dissolved	ND		0.0020	0.00030	mg/L		05/13/25 08:00	05/13/25 15:19	1
Cadmium, Dissolved	ND		0.0020	0.00050	mg/L		05/13/25 08:00	05/13/25 15:19	1
Calcium, Dissolved	**71.1**		0.50	0.10	mg/L		05/13/25 08:00	05/13/25 15:19	1
Chromium, Dissolved	ND		0.0040	0.0010	mg/L		05/13/25 08:00	05/13/25 15:19	1
Cobalt, Dissolved	ND		0.0040	0.00063	mg/L		05/13/25 08:00	05/13/25 15:19	1
Copper, Dissolved	**0.0028**	**J**	0.010	0.0016	mg/L		05/13/25 08:00	05/13/25 15:19	1
Iron, Dissolved	ND		0.050	0.019	mg/L		05/13/25 08:00	05/13/25 15:19	1
Lead, Dissolved	ND		0.010	0.0030	mg/L		05/13/25 08:00	05/13/25 15:19	1
Magnesium, Dissolved	**37.3**		0.20	0.043	mg/L		05/13/25 08:00	05/13/25 15:19	1
Manganese, Dissolved	**0.030**		0.0030	0.00040	mg/L		05/13/25 08:00	05/13/25 15:19	1
Nickel, Dissolved	**0.0015**	**J**	0.010	0.0013	mg/L		05/13/25 08:00	05/13/25 15:19	1
Potassium, Dissolved	**2.4**		0.50	0.10	mg/L		05/13/25 08:00	05/13/25 15:19	1
Selenium, Dissolved	ND		0.025	0.0087	mg/L		05/13/25 08:00	05/13/25 15:19	1
Silver, Dissolved	ND	^5-	0.0060	0.0017	mg/L		05/13/25 08:00	05/13/25 15:19	1
Sodium, Dissolved	**54.7**		1.0	0.32	mg/L		05/13/25 08:00	05/13/25 15:19	1
Thallium, Dissolved	ND		0.020	0.010	mg/L		05/13/25 08:00	05/13/25 15:19	1
Vanadium, Dissolved	ND		0.0050	0.0015	mg/L		05/13/25 08:00	05/13/25 15:19	1
Zinc, Dissolved	**0.012**	**B**	0.010	0.0015	mg/L		05/13/25 08:00	05/13/25 15:19	1

Method: SW846 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.00025**		0.00020	0.000042	mg/L		05/13/25 09:29	05/13/25 13:51	1

Method: SW846 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury, Dissolved	ND		0.00020	0.000042	mg/L		05/13/25 09:29	05/13/25 14:47	1

Client: Roux Environmental Engineering and Geology DPC
Job ID: 480-229348-1
Project/Site: BCP RI - 619 Exchange Street Site

Client Sample ID: FIELD BLANK
Lab Sample ID: 480-229348-8
Date Collected: 05/08/25 09:30
Matrix: Water
Date Received: 05/10/25 09:00

Method: EPA Draft-3 1633 - Per- and Polyfluoroalkyl Substances by LC/MS/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)	ND		5.9	1.5	ng/L		05/14/25 09:16	05/14/25 18:53	1
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9Cl-PF3ONS)	ND		5.9	1.5	ng/L		05/14/25 09:16	05/14/25 18:53	1
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	ND		5.9	1.5	ng/L		05/14/25 09:16	05/14/25 18:53	1
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA)	ND		5.9	1.5	ng/L		05/14/25 09:16	05/14/25 18:53	1
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2 FTS)	ND		5.9	1.5	ng/L		05/14/25 09:16	05/14/25 18:53	1
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2 FTS)	ND		5.9	1.5	ng/L		05/14/25 09:16	05/14/25 18:53	1
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2 FTS)	ND		5.9	1.5	ng/L		05/14/25 09:16	05/14/25 18:53	1
N-ethylperfluorooctane sulfonamide (NEtFOSA)	ND		1.5	0.37	ng/L		05/14/25 09:16	05/14/25 18:53	1
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	ND		1.5	0.38	ng/L		05/14/25 09:16	05/14/25 18:53	1
N-ethylperfluorooctane sulfonamidoethanol (NEtFOSE)	ND		15	3.7	ng/L		05/14/25 09:16	05/14/25 18:53	1
N-methylperfluorooctane sulfonamide (NMeFOSA)	ND		1.5	0.37	ng/L		05/14/25 09:16	05/14/25 18:53	1
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	ND		1.5	0.46	ng/L		05/14/25 09:16	05/14/25 18:53	1
N-methylperfluorooctane sulfonamidoethanol (NMeFOSE)	ND		15	3.7	ng/L		05/14/25 09:16	05/14/25 18:53	1
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	ND		2.9	0.90	ng/L		05/14/25 09:16	05/14/25 18:53	1
Perfluorobutanesulfonic acid (PFBS)	ND		1.5	0.37	ng/L		05/14/25 09:16	05/14/25 18:53	1
Perfluorobutanoic acid (PFBA)	ND		5.9	1.6	ng/L		05/14/25 09:16	05/14/25 18:53	1
Perfluorodecanesulfonic acid (PFDS)	ND		1.5	0.37	ng/L		05/14/25 09:16	05/14/25 18:53	1
Perfluorodecanoic acid (PFDA)	ND		1.5	0.37	ng/L		05/14/25 09:16	05/14/25 18:53	1
Perfluorododecanesulfonic acid (PFDoS)	ND		1.5	0.37	ng/L		05/14/25 09:16	05/14/25 18:53	1
Perfluorododecanoic acid (PFDoA)	ND		1.5	0.37	ng/L		05/14/25 09:16	05/14/25 18:53	1
Perfluoro (2-ethoxyethane) sulfonic acid (PFEESA)	ND		2.9	0.74	ng/L		05/14/25 09:16	05/14/25 18:53	1
Perfluoroheptanesulfonic acid (PFHpS)	ND		1.5	0.37	ng/L		05/14/25 09:16	05/14/25 18:53	1
Perfluoroheptanoic acid (PFHpA)	ND		1.5	0.37	ng/L		05/14/25 09:16	05/14/25 18:53	1
3-Perfluoroheptylpropanoic acid (7:3 FTCA)	ND		37	11	ng/L		05/14/25 09:16	05/14/25 18:53	1
Perfluorohexanesulfonic acid (PFHxS)	ND		1.5	0.38	ng/L		05/14/25 09:16	05/14/25 18:53	1
Perfluorohexanoic acid (PFHxA)	ND		1.5	0.37	ng/L		05/14/25 09:16	05/14/25 18:53	1
Perfluoro-4-methoxybutanoic acid (PFMBA)	ND		2.9	0.74	ng/L		05/14/25 09:16	05/14/25 18:53	1
Perfluoro-3-methoxypropanoic acid (PFMPA)	ND		2.9	0.74	ng/L		05/14/25 09:16	05/14/25 18:53	1
Perfluorononanesulfonic acid (PFNS)	ND		1.5	0.37	ng/L		05/14/25 09:16	05/14/25 18:53	1
Perfluorononanoic acid (PFNA)	ND		1.5	0.37	ng/L		05/14/25 09:16	05/14/25 18:53	1
Perfluorooctanesulfonamide (PFOSA)	ND		1.5	0.37	ng/L		05/14/25 09:16	05/14/25 18:53	1
Perfluorooctanesulfonic acid (PFOS)	ND		1.5	0.37	ng/L		05/14/25 09:16	05/14/25 18:53	1
Perfluorooctanoic acid (PFOA)	ND		1.5	0.37	ng/L		05/14/25 09:16	05/14/25 18:53	1
Perfluoropentanesulfonic acid (PFPeS)	ND		1.5	0.37	ng/L		05/14/25 09:16	05/14/25 18:53	1

Client: Roux Environmental Engineering and Geology DPC
Job ID: 480-229348-1
Project/Site: BCP RI - 619 Exchange Street Site

Client Sample ID: FIELD BLANK
Lab Sample ID: 480-229348-8
Date Collected: 05/08/25 09:30
Matrix: Water
Date Received: 05/10/25 09:00

Method: EPA Draft-3 1633 - Per- and Polyfluoroalkyl Substances by LC/MS/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluoropentanoic acid (PFPeA)	ND		2.9	0.74	ng/L		05/14/25 09:16	05/14/25 18:53	1
3-Perfluoropentylpropanoic acid (5:3 FTCA)	ND		37	9.2	ng/L		05/14/25 09:16	05/14/25 18:53	1
3-Perfluoropropylpropanoic acid (3:3 FTCA)	ND		7.4	1.8	ng/L		05/14/25 09:16	05/14/25 18:53	1
Perfluorotetradecanoic acid (PFTeDA)	ND		1.5	0.37	ng/L		05/14/25 09:16	05/14/25 18:53	1
Perfluorotridecanoic acid (PFTrDA)	ND		1.5	0.37	ng/L		05/14/25 09:16	05/14/25 18:53	1
Perfluoroundecanoic acid (PFUnA)	ND		1.5	0.37	ng/L		05/14/25 09:16	05/14/25 18:53	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C3 HFPO-DA	*99.4*		*25 - 160*	*05/14/25 09:16*	*05/14/25 18:53*	*1*
13C4 PFBA	*114*		*10 - 130*	*05/14/25 09:16*	*05/14/25 18:53*	*1*
13C3 PFBS	*112*		*55 - 150*	*05/14/25 09:16*	*05/14/25 18:53*	*1*
13C6 PFDA	*91.1*		*50 - 140*	*05/14/25 09:16*	*05/14/25 18:53*	*1*
13C2-PFDoDA	*88.5*		*10 - 150*	*05/14/25 09:16*	*05/14/25 18:53*	*1*
13C4 PFHpA	*100*		*55 - 150*	*05/14/25 09:16*	*05/14/25 18:53*	*1*
13C5 PFHxA	*101*		*55 - 150*	*05/14/25 09:16*	*05/14/25 18:53*	*1*
13C3 PFHxS	*110*		*55 - 150*	*05/14/25 09:16*	*05/14/25 18:53*	*1*
13C9 PFNA	*104*		*55 - 140*	*05/14/25 09:16*	*05/14/25 18:53*	*1*
13C8 PFOA	*107*		*60 - 140*	*05/14/25 09:16*	*05/14/25 18:53*	*1*
13C8 PFOS	*104*		*45 - 140*	*05/14/25 09:16*	*05/14/25 18:53*	*1*
13C8 PFOSA	*98.3*		*30 - 130*	*05/14/25 09:16*	*05/14/25 18:53*	*1*
13C5 PFPeA	*101*		*35 - 150*	*05/14/25 09:16*	*05/14/25 18:53*	*1*
13C2 PFTeDA	*77.2*		*10 - 130*	*05/14/25 09:16*	*05/14/25 18:53*	*1*
13C7 PFUnA	*93.4*		*30 - 140*	*05/14/25 09:16*	*05/14/25 18:53*	*1*
d5-NEtFOSAA	*123*		*10 - 200*	*05/14/25 09:16*	*05/14/25 18:53*	*1*
d9-N-EtFOSE-M	*64.0*		*10 - 150*	*05/14/25 09:16*	*05/14/25 18:53*	*1*
d5-NEtPFOSA	*78.8*		*10 - 130*	*05/14/25 09:16*	*05/14/25 18:53*	*1*
D3-NMeFOSA	*82.2*		*15 - 130*	*05/14/25 09:16*	*05/14/25 18:53*	*1*
d3-NMeFOSAA	*98.1*		*45 - 200*	*05/14/25 09:16*	*05/14/25 18:53*	*1*
d7-N-MeFOSE-M	*72.0*		*10 - 150*	*05/14/25 09:16*	*05/14/25 18:53*	*1*
M2-4:2 FTS	*113*		*60 - 200*	*05/14/25 09:16*	*05/14/25 18:53*	*1*
M2-6:2 FTS	*113*		*60 - 200*	*05/14/25 09:16*	*05/14/25 18:53*	*1*
M2-8:2 FTS	*112*		*50 - 200*	*05/14/25 09:16*	*05/14/25 18:53*	*1*

Client: Roux Environmental Engineering and Geology DPC
Job ID: 480-229348-1
Project/Site: BCP RI - 619 Exchange Street Site

Client Sample ID: EQUIPMENT BLANK
Lab Sample ID: 480-229348-9
Date Collected: 05/08/25 09:15
Matrix: Water
Date Received: 05/10/25 09:00

Method: EPA Draft-3 1633 - Per- and Polyfluoroalkyl Substances by LC/MS/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)	ND		6.6	1.6	ng/L		05/14/25 09:16	05/14/25 19:43	1
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9Cl-PF3ONS)	ND		6.6	1.6	ng/L		05/14/25 09:16	05/14/25 19:43	1
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	ND		6.6	1.6	ng/L		05/14/25 09:16	05/14/25 19:43	1
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA)	ND		6.6	1.6	ng/L		05/14/25 09:16	05/14/25 19:43	1
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2 FTS)	ND		6.6	1.6	ng/L		05/14/25 09:16	05/14/25 19:43	1
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2 FTS)	ND		6.6	1.6	ng/L		05/14/25 09:16	05/14/25 19:43	1
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2 FTS)	**4.4**	**J**	6.6	1.6	ng/L		05/14/25 09:16	05/14/25 19:43	1
N-ethylperfluorooctane sulfonamide (NEtFOSA)	ND		1.6	0.41	ng/L		05/14/25 09:16	05/14/25 19:43	1
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	ND		1.6	0.43	ng/L		05/14/25 09:16	05/14/25 19:43	1
N-ethylperfluorooctane sulfonamidoethanol (NEtFOSE)	ND		16	4.1	ng/L		05/14/25 09:16	05/14/25 19:43	1
N-methylperfluorooctane sulfonamide (NMeFOSA)	ND		1.6	0.41	ng/L		05/14/25 09:16	05/14/25 19:43	1
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	ND		1.6	0.51	ng/L		05/14/25 09:16	05/14/25 19:43	1
N-methylperfluorooctane sulfonamidoethanol (NMeFOSE)	ND		16	4.1	ng/L		05/14/25 09:16	05/14/25 19:43	1
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	ND		3.3	1.0	ng/L		05/14/25 09:16	05/14/25 19:43	1
Perfluorobutanesulfonic acid (PFBS)	ND		1.6	0.41	ng/L		05/14/25 09:16	05/14/25 19:43	1
Perfluorobutanoic acid (PFBA)	ND		6.6	1.8	ng/L		05/14/25 09:16	05/14/25 19:43	1
Perfluorodecanesulfonic acid (PFDS)	ND		1.6	0.41	ng/L		05/14/25 09:16	05/14/25 19:43	1
Perfluorodecanoic acid (PFDA)	ND		1.6	0.41	ng/L		05/14/25 09:16	05/14/25 19:43	1
Perfluorododecanesulfonic acid (PFDoS)	ND		1.6	0.41	ng/L		05/14/25 09:16	05/14/25 19:43	1
Perfluorododecanoic acid (PFDoA)	ND		1.6	0.41	ng/L		05/14/25 09:16	05/14/25 19:43	1
Perfluoro (2-ethoxyethane) sulfonic acid (PFEESA)	ND		3.3	0.82	ng/L		05/14/25 09:16	05/14/25 19:43	1
Perfluoroheptanesulfonic acid (PFHpS)	ND		1.6	0.41	ng/L		05/14/25 09:16	05/14/25 19:43	1
Perfluoroheptanoic acid (PFHpA)	**0.48**	**J**	1.6	0.41	ng/L		05/14/25 09:16	05/14/25 19:43	1
3-Perfluoroheptylpropanoic acid (7:3 FTCA)	ND		41	12	ng/L		05/14/25 09:16	05/14/25 19:43	1
Perfluorohexanesulfonic acid (PFHxS)	ND		1.6	0.42	ng/L		05/14/25 09:16	05/14/25 19:43	1
Perfluorohexanoic acid (PFHxA)	**1.9**		1.6	0.41	ng/L		05/14/25 09:16	05/14/25 19:43	1
Perfluoro-4-methoxybutanoic acid (PFMBA)	ND		3.3	0.82	ng/L		05/14/25 09:16	05/14/25 19:43	1
Perfluoro-3-methoxypropanoic acid (PFMPA)	ND		3.3	0.82	ng/L		05/14/25 09:16	05/14/25 19:43	1
Perfluorononanesulfonic acid (PFNS)	ND		1.6	0.41	ng/L		05/14/25 09:16	05/14/25 19:43	1
Perfluorononanoic acid (PFNA)	ND		1.6	0.41	ng/L		05/14/25 09:16	05/14/25 19:43	1
Perfluorooctanesulfonamide (PFOSA)	ND		1.6	0.41	ng/L		05/14/25 09:16	05/14/25 19:43	1
Perfluorooctanesulfonic acid (PFOS)	**0.96**	**J I**	1.6	0.41	ng/L		05/14/25 09:16	05/14/25 19:43	1
Perfluorooctanoic acid (PFOA)	**0.84**	**J**	1.6	0.41	ng/L		05/14/25 09:16	05/14/25 19:43	1

Client Sample ID: EQUIPMENT BLANK
Lab Sample ID: 480-229348-9
Date Collected: 05/08/25 09:15
Matrix: Water
Date Received: 05/10/25 09:00

Method: EPA Draft-3 1633 - Per- and Polyfluoroalkyl Substances by LC/MS/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluoropentanesulfonic acid (PFPeS)	ND		1.6	0.41	ng/L		05/14/25 09:16	05/14/25 19:43	1
Perfluoropentanoic acid (PFPeA)	ND		3.3	0.82	ng/L		05/14/25 09:16	05/14/25 19:43	1
3-Perfluoropentylpropanoic acid (5:3 FTCA)	ND		41	10	ng/L		05/14/25 09:16	05/14/25 19:43	1
3-Perfluoropropylpropanoic acid (3:3 FTCA)	ND		8.2	2.1	ng/L		05/14/25 09:16	05/14/25 19:43	1
Perfluorotetradecanoic acid (PFTeDA)	ND		1.6	0.41	ng/L		05/14/25 09:16	05/14/25 19:43	1
Perfluorotridecanoic acid (PFTrDA)	ND		1.6	0.41	ng/L		05/14/25 09:16	05/14/25 19:43	1
Perfluoroundecanoic acid (PFUnA)	ND		1.6	0.41	ng/L		05/14/25 09:16	05/14/25 19:43	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C3 HFPO-DA	*87.5*		*25 - 160*	*05/14/25 09:16*	*05/14/25 19:43*	*1*
13C4 PFBA	*101*		*10 - 130*	*05/14/25 09:16*	*05/14/25 19:43*	*1*
13C3 PFBS	*91.0*		*55 - 150*	*05/14/25 09:16*	*05/14/25 19:43*	*1*
13C6 PFDA	*72.6*		*50 - 140*	*05/14/25 09:16*	*05/14/25 19:43*	*1*
13C2-PFDoDA	*77.4*		*10 - 150*	*05/14/25 09:16*	*05/14/25 19:43*	*1*
13C4 PFHpA	*82.8*		*55 - 150*	*05/14/25 09:16*	*05/14/25 19:43*	*1*
13C5 PFHxA	*85.1*		*55 - 150*	*05/14/25 09:16*	*05/14/25 19:43*	*1*
13C3 PFHxS	*88.3*		*55 - 150*	*05/14/25 09:16*	*05/14/25 19:43*	*1*
13C9 PFNA	*85.1*		*55 - 140*	*05/14/25 09:16*	*05/14/25 19:43*	*1*
13C8 PFOA	*87.5*		*60 - 140*	*05/14/25 09:16*	*05/14/25 19:43*	*1*
13C8 PFOS	*85.2*		*45 - 140*	*05/14/25 09:16*	*05/14/25 19:43*	*1*
13C8 PFOSA	*68.3*		*30 - 130*	*05/14/25 09:16*	*05/14/25 19:43*	*1*
13C5 PFPeA	*89.8*		*35 - 150*	*05/14/25 09:16*	*05/14/25 19:43*	*1*
13C2 PFTeDA	*63.7*		*10 - 130*	*05/14/25 09:16*	*05/14/25 19:43*	*1*
13C7 PFUnA	*82.9*		*30 - 140*	*05/14/25 09:16*	*05/14/25 19:43*	*1*
d5-NEtFOSAA	*86.5*		*10 - 200*	*05/14/25 09:16*	*05/14/25 19:43*	*1*
d9-N-EtFOSE-M	*48.2*		*10 - 150*	*05/14/25 09:16*	*05/14/25 19:43*	*1*
d5-NEtPFOSA	*61.4*		*10 - 130*	*05/14/25 09:16*	*05/14/25 19:43*	*1*
D3-NMeFOSA	*64.5*		*15 - 130*	*05/14/25 09:16*	*05/14/25 19:43*	*1*
d3-NMeFOSAA	*69.2*		*45 - 200*	*05/14/25 09:16*	*05/14/25 19:43*	*1*
d7-N-MeFOSE-M	*50.8*		*10 - 150*	*05/14/25 09:16*	*05/14/25 19:43*	*1*
M2-4:2 FTS	*117*		*60 - 200*	*05/14/25 09:16*	*05/14/25 19:43*	*1*
M2-6:2 FTS	*93.5*		*60 - 200*	*05/14/25 09:16*	*05/14/25 19:43*	*1*
M2-8:2 FTS	*78.4*		*50 - 200*	*05/14/25 09:16*	*05/14/25 19:43*	*1*

Client: Roux Environmental Engineering and Geology DPC
Job ID: 480-229348-1
Project/Site: BCP RI - 619 Exchange Street Site

Client Sample ID: TRIP BLANK
Lab Sample ID: 480-229348-10
Date Collected: 05/08/25 09:00
Matrix: Water
Date Received: 05/10/25 09:00

Method: SW846 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	0.82	ug/L			05/14/25 17:11	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			05/14/25 17:11	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.31	ug/L			05/14/25 17:11	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			05/14/25 17:11	1
1,1-Dichloroethane	ND		1.0	0.38	ug/L			05/14/25 17:11	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			05/14/25 17:11	1
1,2,4-Trichlorobenzene	ND		1.0	0.41	ug/L			05/14/25 17:11	1
1,2,4-Trimethylbenzene	ND		1.0	0.75	ug/L			05/14/25 17:11	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.39	ug/L			05/14/25 17:11	1
1,2-Dibromoethane	ND		1.0	0.73	ug/L			05/14/25 17:11	1
1,2-Dichlorobenzene	ND		1.0	0.79	ug/L			05/14/25 17:11	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			05/14/25 17:11	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			05/14/25 17:11	1
1,3,5-Trimethylbenzene	ND		1.0	0.77	ug/L			05/14/25 17:11	1
1,3-Dichlorobenzene	ND		1.0	0.78	ug/L			05/14/25 17:11	1
1,4-Dichlorobenzene	ND		1.0	0.84	ug/L			05/14/25 17:11	1
2-Butanone (MEK)	ND		10	1.3	ug/L			05/14/25 17:11	1
2-Hexanone	ND		5.0	1.2	ug/L			05/14/25 17:11	1
4-Isopropyltoluene	ND		1.0	0.31	ug/L			05/14/25 17:11	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			05/14/25 17:11	1
Acetone	ND		10	3.0	ug/L			05/14/25 17:11	1
Benzene	ND		1.0	0.41	ug/L			05/14/25 17:11	1
Bromodichloromethane	ND		1.0	0.39	ug/L			05/14/25 17:11	1
Bromoform	ND		1.0	0.26	ug/L			05/14/25 17:11	1
Bromomethane	ND		1.0	0.69	ug/L			05/14/25 17:11	1
Carbon disulfide	ND		1.0	0.19	ug/L			05/14/25 17:11	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			05/14/25 17:11	1
Chlorobenzene	ND		1.0	0.75	ug/L			05/14/25 17:11	1
Chloroethane	ND		1.0	0.32	ug/L			05/14/25 17:11	1
Chloroform	**0.36**	**J**	1.0	0.34	ug/L			05/14/25 17:11	1
Chloromethane	ND		1.0	0.35	ug/L			05/14/25 17:11	1
cis-1,2-Dichloroethene	ND		1.0	0.81	ug/L			05/14/25 17:11	1
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			05/14/25 17:11	1
Cyclohexane	ND		1.0	0.18	ug/L			05/14/25 17:11	1
Dibromochloromethane	ND		1.0	0.32	ug/L			05/14/25 17:11	1
Dichlorodifluoromethane	ND		1.0	0.68	ug/L			05/14/25 17:11	1
Ethylbenzene	ND		1.0	0.74	ug/L			05/14/25 17:11	1
Isopropylbenzene	ND		1.0	0.79	ug/L			05/14/25 17:11	1
m,p-Xylene	ND		2.0	0.66	ug/L			05/14/25 17:11	1
Methyl acetate	ND		2.5	1.3	ug/L			05/14/25 17:11	1
Methyl tert-butyl ether	ND		1.0	0.16	ug/L			05/14/25 17:11	1
Methylcyclohexane	ND		1.0	0.16	ug/L			05/14/25 17:11	1
Methylene Chloride	ND		1.0	0.44	ug/L			05/14/25 17:11	1
Naphthalene	ND		1.0	0.43	ug/L			05/14/25 17:11	1
n-Butylbenzene	ND		1.0	0.64	ug/L			05/14/25 17:11	1
N-Propylbenzene	ND		1.0	0.69	ug/L			05/14/25 17:11	1
o-Xylene	ND		1.0	0.76	ug/L			05/14/25 17:11	1
sec-Butylbenzene	ND		1.0	0.75	ug/L			05/14/25 17:11	1
Styrene	ND		1.0	0.73	ug/L			05/14/25 17:11	1

Client: Roux Environmental Engineering and Geology DPC
Job ID: 480-229348-1
Project/Site: BCP RI - 619 Exchange Street Site

Client Sample ID: TRIP BLANK
Lab Sample ID: 480-229348-10
Date Collected: 05/08/25 09:00
Matrix: Water
Date Received: 05/10/25 09:00

Method: SW846 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
tert-Butylbenzene	ND		1.0	0.81	ug/L			05/14/25 17:11	1
Tetrachloroethene	ND		1.0	0.36	ug/L			05/14/25 17:11	1
Toluene	ND		1.0	0.51	ug/L			05/14/25 17:11	1
trans-1,2-Dichloroethene	ND		1.0	0.90	ug/L			05/14/25 17:11	1
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L			05/14/25 17:11	1
Trichloroethene	ND		1.0	0.46	ug/L			05/14/25 17:11	1
Trichlorofluoromethane	ND		1.0	0.88	ug/L			05/14/25 17:11	1
Vinyl chloride	ND		1.0	0.90	ug/L			05/14/25 17:11	1
Xylenes, Total	ND		2.0	0.66	ug/L			05/14/25 17:11	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*			*N/A*		*05/14/25 17:11*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*103*		*77 - 120*		*05/14/25 17:11*	*1*
4-Bromofluorobenzene (Surr)	*102*		*73 - 120*		*05/14/25 17:11*	*1*
Dibromofluoromethane (Surr)	*105*		*75 - 123*		*05/14/25 17:11*	*1*
Toluene-d8 (Surr)	*101*		*80 - 120*		*05/14/25 17:11*	*1*

Surrogate Summary

Client: Roux Environmental Engineering and Geology DPC
Job ID: 480-229348-1
Project/Site: BCP RI - 619 Exchange Street Site

Method: 8260C - Volatile Organic Compounds by GC/MS

Matrix: Water **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)			
		DCA	BFB	DBFM	TOL
Lab Sample ID	Client Sample ID	(77-120)	(73-120)	(75-123)	(80-120)
480-229348-1	MW-1	102	102	103	101
480-229348-1 MS	MW-1	99	99	100	100
480-229348-1 MSD	MW-1	100	100	103	102
480-229348-2	MW-2	102	103	105	103
480-229348-3	MW-3	104	101	104	99
480-229348-4	MW-4	101	102	103	100
480-229348-5	MW-5	102	103	102	100
480-229348-6	MW-6	101	104	103	102
480-229348-7	BD	103	101	104	101
480-229348-10	TRIP BLANK	103	102	105	101
LCS 480-746022/6	Lab Control Sample	99	99	99	102
MB 480-746022/8	Method Blank	101	100	101	103

Surrogate Legend

DCA = 1,2-Dichloroethane-d4 (Surr)
BFB = 4-Bromofluorobenzene (Surr)
DBFM = Dibromofluoromethane (Surr)
TOL = Toluene-d8 (Surr)

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Matrix: Water **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)					
		TBP	FBP	2FP	NBZ	PHL	TPHd14
Lab Sample ID	Client Sample ID	(25-144)	(53-126)	(24-120)	(29-129)	(10-120)	(33-132)
480-229348-1	MW-1	98	99	93	83	52	77
480-229348-1 MS	MW-1	110	98	66	89	48	66
480-229348-1 MSD	MW-1	111	92	77	83	57	79
480-229348-2	MW-2	103	92	61	80	40	63
480-229348-3	MW-3	99	109	74	86	48	67
480-229348-4	MW-4	99	97	69	87	46	81
480-229348-5	MW-5	106	112	73	96	49	79
480-229348-6	MW-6	106	103	70	98	48	89
480-229348-7	BD	80	108	66	87	41	91
LCS 480-745798/2-A	Lab Control Sample	90	83	56	76	42	86
MB 480-745798/1-A	Method Blank	73	80	52	70	36	94

Surrogate Legend

TBP = 2,4,6-Tribromophenol (Surr)
FBP = 2-Fluorobiphenyl (Surr)
2FP = 2-Fluorophenol (Surr)
NBZ = Nitrobenzene-d5 (Surr)
PHL = Phenol-d5 (Surr)
TPHd14 = p-Terphenyl-d14 (Surr)

Surrogate Summary

Client: Roux Environmental Engineering and Geology DPC
Job ID: 480-229348-1
Project/Site: BCP RI - 619 Exchange Street Site

Method: 8270D_LL_PAH - Semivolatile Organic Compounds (GC/MS) Low level PAH

Matrix: Water **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)								
		FBP	NBZ	TPHd14						
Lab Sample ID	Client Sample ID	(48-120)	(46-120)	(24-136)						
480-229348-1	MW-1	99	83	77						
480-229348-1 MS	MW-1	98	89	66						
480-229348-1 MSD	MW-1	92	83	79						
480-229348-2	MW-2	92	80	63						
480-229348-3	MW-3	109	86	67						
480-229348-4	MW-4	97	87	81						
480-229348-5	MW-5	112	96	79						
480-229348-6	MW-6	103	98	89						
480-229348-7	BD	108	87	91						
LCS 480-745798/2-A	Lab Control Sample	83	76	86						
MB 480-745798/1-A	Method Blank	80	70	94						

Surrogate Legend

FBP = 2-Fluorobiphenyl (Surr)
NBZ = Nitrobenzene-d5 (Surr)
TPHd14 = p-Terphenyl-d14 (Surr)

Method: 8081B - Organochlorine Pesticides (GC)

Matrix: Water **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)								
		DCBP1	DCBP2	TCX1	TCX2					
Lab Sample ID	Client Sample ID	(10-120)	(10-120)	(10-120)	(10-120)					
480-229348-1	MW-1	40	38	75	97					
480-229348-1 MS	MW-1	39	38	76	77					
480-229348-1 MSD	MW-1	42	44	88	91					
480-229348-4	MW-4	34	38	72	69					
480-229348-5	MW-5	45	43	77	81					
480-229348-7	BD	53	50	83	83					
LCS 480-745833/2-A	Lab Control Sample	68	72	73	75					
LCS 480-746048/2-A	Lab Control Sample	71	64	75	67					
LCSD 480-746048/3-A	Lab Control Sample Dup	75	77	79	70					
MB 480-745833/1-A	Method Blank	79	81	84	77					
MB 480-746048/1-A	Method Blank	77	70	90	76					

Surrogate Legend

DCBP = DCB Decachlorobiphenyl
TCX = Tetrachloro-m-xylene

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Matrix: Water **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)								
		DCBP1	DCBP2	TCX1	TCX2					
Lab Sample ID	Client Sample ID	(10-123)	(10-123)	(10-145)	(10-145)					
480-229348-1	MW-1	26	21	72	66					
480-229348-1 MS	MW-1	36	27	101	90					
480-229348-1 MSD	MW-1	29	28	86	76					
480-229348-4	MW-4	23	15	25	21					
480-229348-5	MW-5	30	31	107	96					
480-229348-7	BD	28	20	59	51					
LCS 480-745975/2-A	Lab Control Sample	95	99	112	92					

Surrogate Summary

Client: Roux Environmental Engineering and Geology DPC
Job ID: 480-229348-1
Project/Site: BCP RI - 619 Exchange Street Site

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography (Continued)

Matrix: Water **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)			
		DCBP1	DCBP2	TCX1	TCX2
Lab Sample ID	Client Sample ID	(10-123)	(10-123)	(10-145)	(10-145)
MB 480-745975/1-A	Method Blank	110	98	106	93

Surrogate Legend

DCBP = DCB Decachlorobiphenyl

TCX = Tetrachloro-m-xylene

Method: 8151A - Herbicides (GC)

Matrix: Water **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)	
		DCPAA1	DCPAA2
Lab Sample ID	Client Sample ID	(21-143)	(21-143)
480-229348-1	MW-1	101	86
480-229348-1 MS	MW-1	86	81
480-229348-1 MSD	MW-1	96	86
480-229348-4	MW-4	108	80
480-229348-5	MW-5	92	74
480-229348-7	BD	87	86
LCS 480-745906/2-A	Lab Control Sample	80	86
MB 480-745906/1-A	Method Blank	79	81

Surrogate Legend

DCPAA = 2,4-Dichlorophenylacetic acid

Isotope Dilution Summary

Client: Roux Environmental Engineering and Geology DPC
Job ID: 480-229348-1
Project/Site: BCP RI - 619 Exchange Street Site

Method: 8270D SIM ID - Semivolatile Organic Compounds (GC/MS SIM / Isotope Dilution)

Matrix: Water **Prep Type: Total/NA**

		Percent Isotope Dilution Recovery (Acceptance Limits)
		DXE
Lab Sample ID	Client Sample ID	(15-110)
480-229348-1	MW-1	36
480-229348-1 MS	MW-1	34
480-229348-1 MSD	MW-1	33
480-229348-4	MW-4	37
480-229348-5	MW-5	33
480-229348-7	BD	35
LCS 480-745939/2-A	Lab Control Sample	33
MB 480-745939/1-A	Method Blank	32

Surrogate Legend

DXE = 1,4-Dioxane-d8

Method: Draft-3 1633 - Per- and Polyfluoroalkyl Substances by LC/MS/MS

Matrix: Water **Prep Type: Total/NA**

		Percent Isotope Dilution Recovery (Acceptance Limits)							
		HFPODA	PFBA	C3PFBS	C6PFDA	PFDoDA	C4PFHA	13C5PHA	C3PFHS
Lab Sample ID	Client Sample ID	(25-160)	(10-130)	(55-150)	(50-140)	(10-150)	(55-150)	(55-150)	(55-150)
480-229348-1	MW-1	102	114	113	77.6	71.4	100	103	110
480-229348-1 MS	MW-1	103	113	114	93.9	90.3	102	103	112
480-229348-1 MSD	MW-1	102	115	112	80.3	75.3	98.3	104	111
480-229348-4	MW-4	99.1	108	107	77.3	72.0	95.0	96.5	101
480-229348-5	MW-5	102	112	118	93.7	86.2	97.0	98.1	116
480-229348-5 DU	MW-5	103	113	114	91.0	78.6	101	105	107
480-229348-7	BD	102	112	112	89.4	83.4	96.9	99.6	109
480-229348-8	FIELD BLANK	99.4	114	112	91.1	88.5	100	101	110
480-229348-9	EQUIPMENT BLANK	87.5	101	91.0	72.6	77.4	82.8	85.1	88.3
MB 240-655949/1-A	Method Blank	108	116	116	91.2	83.0	105	109	113

		Percent Isotope Dilution Recovery (Acceptance Limits)							
		C9PFNA	C8PFOA	C8PFOS	PFOSA	PFPeA	PFTDA	13C7PUA	d5NEFOS
Lab Sample ID	Client Sample ID	(55-140)	(60-140)	(45-140)	(30-130)	(35-150)	(10-130)	(30-140)	(10-200)
480-229348-1	MW-1	90.2	105	85.4	76.3	105	68.7	73.6	88.6
480-229348-1 MS	MW-1	96.2	105	102	95.8	105	82.7	94.0	133
480-229348-1 MSD	MW-1	93.5	108	99.3	82.9	105	74.2	76.9	107
480-229348-4	MW-4	84.9	98.8	83.3	70.9	99.5	70.5	71.6	85.1
480-229348-5	MW-5	102	106	102	92.5	101	78.0	90.2	109
480-229348-5 DU	MW-5	96.5	106	95.1	90.1	105	71.2	83.2	115
480-229348-7	BD	94.8	110	98.9	89.5	102	78.1	87.1	106
480-229348-8	FIELD BLANK	104	107	104	98.3	101	77.2	93.4	123
480-229348-9	EQUIPMENT BLANK	85.1	87.5	85.2	68.3	89.8	63.7	82.9	86.5
MB 240-655949/1-A	Method Blank	101	110	103	98.6	112	75.4	87.8	147

		Percent Isotope Dilution Recovery (Acceptance Limits)							
		NEFM	d5NPFSA	d3NMFSA	d3NMFOS	NMFM	M242FTS	M262FTS	M282FTS
Lab Sample ID	Client Sample ID	(10-150)	(10-130)	(15-130)	(45-200)	(10-150)	(60-200)	(60-200)	(50-200)
480-229348-1	MW-1	32.7	66.3	69.7	70.6	44.8	118	111	87.4
480-229348-1 MS	MW-1	79.8	77.0	79.1	99.2	87.0	113	113	108
480-229348-1 MSD	MW-1	38.1	66.6	70.1	80.6	52.6	119	105	98.0
480-229348-4	MW-4	58.0	60.7	61.5	64.4	59.9	110	103	81.5
480-229348-5	MW-5	49.9	74.9	74.7	96.8	63.1	117	120	109
480-229348-5 DU	MW-5	66.4	70.5	75.9	91.1	72.4	121	106	98.5

Method: Draft-3 1633 - Per- and Polyfluoroalkyl Substances by LC/MS/MS (Continued)

Matrix: Water **Prep Type: Total/NA**

		Percent Isotope Dilution Recovery (Acceptance Limits)							
		NEFM	d5NPFSA	d3NMFSA	d3NMFOS	NMFM	M242FTS	M262FTS	M282FTS
Lab Sample ID	Client Sample ID	(10-150)	(10-130)	(15-130)	(45-200)	(10-150)	(60-200)	(60-200)	(50-200)
480-229348-7	BD	75.4	75.0	77.4	93.8	79.0	115	107	103
480-229348-8	FIELD BLANK	64.0	78.8	82.2	98.1	72.0	113	113	112
480-229348-9	EQUIPMENT BLANK	48.2	61.4	64.5	69.2	50.8	117	93.5	78.4
MB 240-655949/1-A	Method Blank	69.0	75.3	80.9	96.5	76.6	119	113	107

Surrogate Legend

HFPODA = 13C3 HFPO-DA
PFBA = 13C4 PFBA
C3PFBS = 13C3 PFBS
C6PFDA = 13C6 PFDA
PFDoDA = 13C2-PFDoDA
C4PFHA = 13C4 PFHpA
13C5PHA = 13C5 PFHxA
C3PFHS = 13C3 PFHxS
C9PFNA = 13C9 PFNA
C8PFOA = 13C8 PFOA
C8PFOS = 13C8 PFOS
PFOSA = 13C8 PFOSA
PFPeA = 13C5 PFPeA
PFTDA = 13C2 PFTeDA
13C7PUA = 13C7 PFUnA
d5NEFOS = d5-NEtFOSAA
NEFM = d9-N-EtFOSE-M
d5NPFSA = d5-NEtPFOSA
d3NMFSA = D3-NMeFOSA
d3NMFOS = d3-NMeFOSAA
NMFM = d7-N-MeFOSE-M
M242FTS = M2-4:2 FTS
M262FTS = M2-6:2 FTS
M282FTS = M2-8:2 FTS

Method: Draft-3 1633 - Per- and Polyfluoroalkyl Substances by LC/MS/MS

Matrix: Water **Prep Type: Total/NA**

		Percent Isotope Dilution Recovery (Acceptance Limits)							
		HFPODA	PFBA	C3PFBS	C6PFDA	PFDoDA	C4PFHA	13C5PHA	C3PFHS
Lab Sample ID	Client Sample ID	(25-160)	(10-130)	(25-150)	(20-140)	(10-150)	(40-150)	(40-150)	(25-150)
LCS 240-655949/3-A	Lab Control Sample	73.2	83.8	80.2	66.5	63.6	72.2	73.5	79.0
LLCS 240-655949/2-A	Lab Control Sample	107	115	116	93.4	84.2	100	103	114

		Percent Isotope Dilution Recovery (Acceptance Limits)							
		C9PFNA	C8PFOA	C8PFOS	PFOSA	PFPeA	PFTDA	13C7PUA	d5NEFOS
Lab Sample ID	Client Sample ID	(30-140)	(30-140)	(20-140)	(10-130)	(40-150)	(10-130)	(20-140)	(10-200)
LCS 240-655949/3-A	Lab Control Sample	72.3	77.4	74.4	70.8	73.5	64.6	66.0	95.0
LLCS 240-655949/2-A	Lab Control Sample	99.8	108	105	97.2	108	73.5	90.1	123

		Percent Isotope Dilution Recovery (Acceptance Limits)							
		NEFM	d5NPFSA	d3NMFSA	d3NMFOS	NMFM	M242FTS	M262FTS	M282FTS
Lab Sample ID	Client Sample ID	(10-150)	(10-130)	(10-130)	(10-200)	(10-150)	(25-200)	(25-200)	(25-200)
LCS 240-655949/3-A	Lab Control Sample	60.1	58.0	60.1	71.8	61.5	81.8	78.0	73.7
LLCS 240-655949/2-A	Lab Control Sample	75.7	76.6	80.2	93.4	84.0	116	112	98.1

Surrogate Legend

Isotope Dilution Summary

Client: Roux Environmental Engineering and Geology DPC
Job ID: 480-229348-1
Project/Site: BCP RI - 619 Exchange Street Site

HFPODA = 13C3 HFPO-DA
PFBA = 13C4 PFBA
C3PFBS = 13C3 PFBS
C6PFDA = 13C6 PFDA
PFDoDA = 13C2-PFDoDA
C4PFHA = 13C4 PFHpA
13C5PHA = 13C5 PFHxA
C3PFHS = 13C3 PFHxS
C9PFNA = 13C9 PFNA
C8PFOA = 13C8 PFOA
C8PFOS = 13C8 PFOS
PFOSA = 13C8 PFOSA
PFPeA = 13C5 PFPeA
PFTDA = 13C2 PFTeDA
13C7PUA = 13C7 PFUnA
d5NEFOS = d5-NEtFOSAA
NEFM = d9-N-EtFOSE-M
d5NPFSA = d5-NEtPFOSA
d3NMFSA = D3-NMeFOSA
d3NMFOS = d3-NMeFOSAA
NMFM = d7-N-MeFOSE-M
M242FTS = M2-4:2 FTS
M262FTS = M2-6:2 FTS
M282FTS = M2-8:2 FTS

Method: 8260C - Volatile Organic Compounds by GC/MS

Lab Sample ID: MB 480-746022/8
Matrix: Water
Analysis Batch: 746022

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	0.82	ug/L			05/14/25 13:03	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			05/14/25 13:03	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.31	ug/L			05/14/25 13:03	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			05/14/25 13:03	1
1,1-Dichloroethane	ND		1.0	0.38	ug/L			05/14/25 13:03	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			05/14/25 13:03	1
1,2,4-Trichlorobenzene	ND		1.0	0.41	ug/L			05/14/25 13:03	1
1,2,4-Trimethylbenzene	ND		1.0	0.75	ug/L			05/14/25 13:03	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.39	ug/L			05/14/25 13:03	1
1,2-Dibromoethane	ND		1.0	0.73	ug/L			05/14/25 13:03	1
1,2-Dichlorobenzene	ND		1.0	0.79	ug/L			05/14/25 13:03	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			05/14/25 13:03	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			05/14/25 13:03	1
1,3,5-Trimethylbenzene	ND		1.0	0.77	ug/L			05/14/25 13:03	1
1,3-Dichlorobenzene	ND		1.0	0.78	ug/L			05/14/25 13:03	1
1,4-Dichlorobenzene	ND		1.0	0.84	ug/L			05/14/25 13:03	1
2-Butanone (MEK)	ND		10	1.3	ug/L			05/14/25 13:03	1
2-Hexanone	ND		5.0	1.2	ug/L			05/14/25 13:03	1
4-Isopropyltoluene	ND		1.0	0.31	ug/L			05/14/25 13:03	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			05/14/25 13:03	1
Acetone	ND		10	3.0	ug/L			05/14/25 13:03	1
Benzene	ND		1.0	0.41	ug/L			05/14/25 13:03	1
Bromodichloromethane	ND		1.0	0.39	ug/L			05/14/25 13:03	1
Bromoform	ND		1.0	0.26	ug/L			05/14/25 13:03	1
Bromomethane	ND		1.0	0.69	ug/L			05/14/25 13:03	1
Carbon disulfide	ND		1.0	0.19	ug/L			05/14/25 13:03	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			05/14/25 13:03	1
Chlorobenzene	ND		1.0	0.75	ug/L			05/14/25 13:03	1
Chloroethane	ND		1.0	0.32	ug/L			05/14/25 13:03	1
Chloroform	ND		1.0	0.34	ug/L			05/14/25 13:03	1
Chloromethane	ND		1.0	0.35	ug/L			05/14/25 13:03	1
cis-1,2-Dichloroethene	ND		1.0	0.81	ug/L			05/14/25 13:03	1
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			05/14/25 13:03	1
Cyclohexane	ND		1.0	0.18	ug/L			05/14/25 13:03	1
Dibromochloromethane	ND		1.0	0.32	ug/L			05/14/25 13:03	1
Dichlorodifluoromethane	ND		1.0	0.68	ug/L			05/14/25 13:03	1
Ethylbenzene	ND		1.0	0.74	ug/L			05/14/25 13:03	1
Isopropylbenzene	ND		1.0	0.79	ug/L			05/14/25 13:03	1
m,p-Xylene	ND		2.0	0.66	ug/L			05/14/25 13:03	1
Methyl acetate	ND		2.5	1.3	ug/L			05/14/25 13:03	1
Methyl tert-butyl ether	ND		1.0	0.16	ug/L			05/14/25 13:03	1
Methylcyclohexane	ND		1.0	0.16	ug/L			05/14/25 13:03	1
Methylene Chloride	ND		1.0	0.44	ug/L			05/14/25 13:03	1
Naphthalene	ND		1.0	0.43	ug/L			05/14/25 13:03	1
n-Butylbenzene	ND		1.0	0.64	ug/L			05/14/25 13:03	1
N-Propylbenzene	ND		1.0	0.69	ug/L			05/14/25 13:03	1
o-Xylene	ND		1.0	0.76	ug/L			05/14/25 13:03	1
sec-Butylbenzene	ND		1.0	0.75	ug/L			05/14/25 13:03	1

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: MB 480-746022/8
Matrix: Water
Analysis Batch: 746022

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Styrene	ND		1.0	0.73	ug/L			05/14/25 13:03	1
tert-Butylbenzene	ND		1.0	0.81	ug/L			05/14/25 13:03	1
Tetrachloroethene	ND		1.0	0.36	ug/L			05/14/25 13:03	1
Toluene	ND		1.0	0.51	ug/L			05/14/25 13:03	1
trans-1,2-Dichloroethene	ND		1.0	0.90	ug/L			05/14/25 13:03	1
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L			05/14/25 13:03	1
Trichloroethene	ND		1.0	0.46	ug/L			05/14/25 13:03	1
Trichlorofluoromethane	ND		1.0	0.88	ug/L			05/14/25 13:03	1
Vinyl chloride	ND		1.0	0.90	ug/L			05/14/25 13:03	1
Xylenes, Total	ND		2.0	0.66	ug/L			05/14/25 13:03	1

Tentatively Identified Compound	*MB Est. Result*	*MB Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*			*N/A*		*05/14/25 13:03*	*1*

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*101*		*77 - 120*		*05/14/25 13:03*	*1*
4-Bromofluorobenzene (Surr)	*100*		*73 - 120*		*05/14/25 13:03*	*1*
Dibromofluoromethane (Surr)	*101*		*75 - 123*		*05/14/25 13:03*	*1*
Toluene-d8 (Surr)	*103*		*80 - 120*		*05/14/25 13:03*	*1*

Lab Sample ID: LCS 480-746022/6
Matrix: Water
Analysis Batch: 746022

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
1,1,1-Trichloroethane	25.0	25.1		ug/L		100	73 - 126
1,1,2,2-Tetrachloroethane	25.0	24.6		ug/L		99	76 - 120
1,1,2-Trichloro-1,2,2-trifluoroethane	25.0	25.4		ug/L		101	61 - 148
1,1,2-Trichloroethane	25.0	24.5		ug/L		98	76 - 122
1,1-Dichloroethane	25.0	24.0		ug/L		96	77 - 120
1,1-Dichloroethene	25.0	24.7		ug/L		99	66 - 127
1,2,4-Trichlorobenzene	25.0	23.6		ug/L		94	79 - 122
1,2,4-Trimethylbenzene	25.0	24.9		ug/L		100	76 - 121
1,2-Dibromo-3-Chloropropane	25.0	25.8		ug/L		103	56 - 134
1,2-Dibromoethane	25.0	24.3		ug/L		97	77 - 120
1,2-Dichlorobenzene	25.0	24.4		ug/L		98	80 - 124
1,2-Dichloroethane	25.0	24.3		ug/L		97	75 - 120
1,2-Dichloropropane	25.0	24.7		ug/L		99	76 - 120
1,3,5-Trimethylbenzene	25.0	25.4		ug/L		101	77 - 121
1,3-Dichlorobenzene	25.0	23.8		ug/L		95	77 - 120
1,4-Dichlorobenzene	25.0	24.0		ug/L		96	80 - 120
2-Butanone (MEK)	125	118		ug/L		94	57 - 140
2-Hexanone	125	117		ug/L		94	65 - 127
4-Isopropyltoluene	25.0	25.3		ug/L		101	73 - 120
4-Methyl-2-pentanone (MIBK)	125	121		ug/L		97	71 - 125
Acetone	125	122		ug/L		98	56 - 142
Benzene	25.0	24.3		ug/L		97	71 - 124

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCS 480-746022/6
Matrix: Water
Analysis Batch: 746022

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Bromodichloromethane	25.0	24.8		ug/L		99	80 - 122
Bromoform	25.0	26.4		ug/L		106	61 - 132
Bromomethane	25.0	25.4		ug/L		102	55 - 144
Carbon disulfide	25.0	24.3		ug/L		97	59 - 134
Carbon tetrachloride	25.0	26.9		ug/L		108	72 - 134
Chlorobenzene	25.0	24.5		ug/L		98	80 - 120
Chloroethane	25.0	23.5		ug/L		94	69 - 136
Chloroform	25.0	24.2		ug/L		97	73 - 127
Chloromethane	25.0	24.1		ug/L		96	68 - 124
cis-1,2-Dichloroethene	25.0	24.1		ug/L		96	74 - 124
cis-1,3-Dichloropropene	25.0	25.5		ug/L		102	74 - 124
Cyclohexane	25.0	24.5		ug/L		98	59 - 135
Dibromochloromethane	25.0	26.2		ug/L		105	75 - 125
Dichlorodifluoromethane	25.0	23.6		ug/L		94	59 - 135
Ethylbenzene	25.0	24.3		ug/L		97	77 - 123
Isopropylbenzene	25.0	25.6		ug/L		103	77 - 122
m,p-Xylene	25.0	24.5		ug/L		98	76 - 122
Methyl acetate	50.0	44.6		ug/L		89	74 - 133
Methyl tert-butyl ether	25.0	24.6		ug/L		99	77 - 120
Methylcyclohexane	25.0	24.8		ug/L		99	68 - 134
Methylene Chloride	25.0	24.4		ug/L		98	75 - 124
Naphthalene	25.0	23.9		ug/L		96	66 - 125
n-Butylbenzene	25.0	25.1		ug/L		100	71 - 128
N-Propylbenzene	25.0	25.4		ug/L		101	75 - 127
o-Xylene	25.0	24.4		ug/L		98	76 - 122
sec-Butylbenzene	25.0	25.3		ug/L		101	74 - 127
Styrene	25.0	24.7		ug/L		99	80 - 120
tert-Butylbenzene	25.0	26.3		ug/L		105	75 - 123
Tetrachloroethene	25.0	25.0		ug/L		100	74 - 122
Toluene	25.0	24.8		ug/L		99	80 - 122
trans-1,2-Dichloroethene	25.0	24.7		ug/L		99	73 - 127
trans-1,3-Dichloropropene	25.0	25.9		ug/L		104	80 - 120
Trichloroethene	25.0	24.4		ug/L		97	74 - 123
Trichlorofluoromethane	25.0	25.8		ug/L		103	62 - 150
Vinyl chloride	25.0	24.0		ug/L		96	65 - 133

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*99*		*77 - 120*
4-Bromofluorobenzene (Surr)	*99*		*73 - 120*
Dibromofluoromethane (Surr)	*99*		*75 - 123*
Toluene-d8 (Surr)	*102*		*80 - 120*

Lab Sample ID: 480-229348-1 MS
Matrix: Water
Analysis Batch: 746022

Client Sample ID: MW-1
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
1,1,1-Trichloroethane	ND	F1	25.0	30.9		ug/L		124	73 - 126

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: 480-229348-1 MS
Matrix: Water
Analysis Batch: 746022

Client Sample ID: MW-1
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
1,1,2,2-Tetrachloroethane	ND		25.0	28.2		ug/L		113	76 - 120
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		25.0	28.7		ug/L		115	61 - 148
1,1,2-Trichloroethane	ND		25.0	27.5		ug/L		110	76 - 122
1,1-Dichloroethane	ND		25.0	29.1		ug/L		116	77 - 120
1,1-Dichloroethene	ND		25.0	29.7		ug/L		119	66 - 127
1,2,4-Trichlorobenzene	ND		25.0	27.5		ug/L		110	79 - 122
1,2,4-Trimethylbenzene	ND		25.0	28.9		ug/L		116	76 - 121
1,2-Dibromo-3-Chloropropane	ND		25.0	29.6		ug/L		118	56 - 134
1,2-Dibromoethane	ND		25.0	26.8		ug/L		107	77 - 120
1,2-Dichlorobenzene	ND		25.0	28.2		ug/L		113	80 - 124
1,2-Dichloroethane	ND		25.0	27.9		ug/L		112	75 - 120
1,2-Dichloropropane	ND		25.0	28.2		ug/L		113	76 - 120
1,3,5-Trimethylbenzene	ND		25.0	29.7		ug/L		119	77 - 121
1,3-Dichlorobenzene	ND		25.0	26.4		ug/L		106	77 - 120
1,4-Dichlorobenzene	ND		25.0	26.7		ug/L		107	78 - 124
2-Butanone (MEK)	ND		125	141		ug/L		113	57 - 140
2-Hexanone	ND		125	126		ug/L		101	65 - 127
4-Isopropyltoluene	ND		25.0	29.8		ug/L		119	73 - 120
4-Methyl-2-pentanone (MIBK)	ND		125	140		ug/L		112	71 - 125
Acetone	8.8	J	125	185		ug/L		141	56 - 142
Benzene	ND		25.0	28.9		ug/L		116	71 - 124
Bromodichloromethane	ND		25.0	28.3		ug/L		113	80 - 122
Bromoform	ND		25.0	29.5		ug/L		118	61 - 132
Bromomethane	ND	F1	25.0	33.9		ug/L		136	55 - 144
Carbon disulfide	ND		25.0	29.2		ug/L		117	59 - 134
Carbon tetrachloride	ND	F1	25.0	32.6		ug/L		130	72 - 134
Chlorobenzene	ND		25.0	27.9		ug/L		112	80 - 120
Chloroethane	ND		25.0	28.8		ug/L		115	69 - 136
Chloroform	ND		25.0	28.6		ug/L		115	73 - 127
Chloromethane	ND		25.0	28.4		ug/L		113	68 - 124
cis-1,2-Dichloroethene	ND		25.0	29.1		ug/L		116	74 - 124
cis-1,3-Dichloropropene	ND		25.0	27.6		ug/L		110	74 - 124
Cyclohexane	ND		25.0	28.2		ug/L		113	59 - 135
Dibromochloromethane	ND		25.0	28.9		ug/L		116	75 - 125
Dichlorodifluoromethane	ND		25.0	26.6		ug/L		107	59 - 135
Ethylbenzene	ND		25.0	28.4		ug/L		114	77 - 123
Isopropylbenzene	ND		25.0	30.2		ug/L		121	77 - 122
m,p-Xylene	ND		25.0	28.8		ug/L		115	76 - 122
Methyl acetate	ND		50.0	57.6		ug/L		115	74 - 133
Methyl tert-butyl ether	ND		25.0	28.2		ug/L		113	77 - 120
Methylcyclohexane	0.20	J	25.0	28.4		ug/L		113	68 - 134
Methylene Chloride	ND		25.0	29.3		ug/L		117	75 - 124
Naphthalene	ND		25.0	28.7		ug/L		115	66 - 125
n-Butylbenzene	ND		25.0	29.1		ug/L		117	71 - 128
N-Propylbenzene	ND		25.0	29.0		ug/L		116	75 - 127
o-Xylene	ND		25.0	29.3		ug/L		117	76 - 122
sec-Butylbenzene	ND		25.0	29.7		ug/L		119	74 - 127
Styrene	ND		25.0	28.0		ug/L		112	80 - 120

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: 480-229348-1 MS
Matrix: Water
Analysis Batch: 746022

Client Sample ID: MW-1
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
tert-Butylbenzene	ND	F1	25.0	31.5	F1	ug/L		126	75 - 123
Tetrachloroethene	ND		25.0	28.8		ug/L		115	74 - 122
Toluene	ND		25.0	28.9		ug/L		116	80 - 122
trans-1,2-Dichloroethene	ND		25.0	29.9		ug/L		120	73 - 127
trans-1,3-Dichloropropene	ND		25.0	27.2		ug/L		109	80 - 120
Trichloroethene	ND		25.0	28.0		ug/L		112	74 - 123
Trichlorofluoromethane	ND		25.0	31.6		ug/L		126	62 - 150
Vinyl chloride	ND		25.0	30.2		ug/L		121	65 - 133

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*99*		*77 - 120*
4-Bromofluorobenzene (Surr)	*99*		*73 - 120*
Dibromofluoromethane (Surr)	*100*		*75 - 123*
Toluene-d8 (Surr)	*100*		*80 - 120*

Lab Sample ID: 480-229348-1 MSD
Matrix: Water
Analysis Batch: 746022

Client Sample ID: MW-1
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
1,1,1-Trichloroethane	ND	F1	25.0	33.2	F1	ug/L		133	73 - 126	7	15
1,1,2,2-Tetrachloroethane	ND		25.0	28.2		ug/L		113	76 - 120	0	15
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		25.0	29.3		ug/L		117	61 - 148	2	20
1,1,2-Trichloroethane	ND		25.0	28.1		ug/L		113	76 - 122	2	15
1,1-Dichloroethane	ND		25.0	30.0		ug/L		120	77 - 120	3	20
1,1-Dichloroethene	ND		25.0	30.5		ug/L		122	66 - 127	3	16
1,2,4-Trichlorobenzene	ND		25.0	26.9		ug/L		108	79 - 122	2	20
1,2,4-Trimethylbenzene	ND		25.0	29.0		ug/L		116	76 - 121	0	20
1,2-Dibromo-3-Chloropropane	ND		25.0	29.6		ug/L		118	56 - 134	0	15
1,2-Dibromoethane	ND		25.0	27.4		ug/L		109	77 - 120	2	15
1,2-Dichlorobenzene	ND		25.0	28.4		ug/L		114	80 - 124	1	20
1,2-Dichloroethane	ND		25.0	28.4		ug/L		113	75 - 120	1	20
1,2-Dichloropropane	ND		25.0	28.5		ug/L		114	76 - 120	1	20
1,3,5-Trimethylbenzene	ND		25.0	30.0		ug/L		120	77 - 121	1	20
1,3-Dichlorobenzene	ND		25.0	26.8		ug/L		107	77 - 120	1	20
1,4-Dichlorobenzene	ND		25.0	27.0		ug/L		108	78 - 124	1	20
2-Butanone (MEK)	ND		125	143		ug/L		115	57 - 140	1	20
2-Hexanone	ND		125	125		ug/L		100	65 - 127	1	15
4-Isopropyltoluene	ND		25.0	30.1		ug/L		120	73 - 120	1	20
4-Methyl-2-pentanone (MIBK)	ND		125	142		ug/L		114	71 - 125	2	35
Acetone	8.8	J	125	173		ug/L		132	56 - 142	7	15
Benzene	ND		25.0	29.5		ug/L		118	71 - 124	2	13
Bromodichloromethane	ND		25.0	29.4		ug/L		118	80 - 122	4	15
Bromoform	ND		25.0	30.3		ug/L		121	61 - 132	3	15
Bromomethane	ND	F1	25.0	36.5	F1	ug/L		146	55 - 144	7	15
Carbon disulfide	ND		25.0	31.0		ug/L		124	59 - 134	6	15
Carbon tetrachloride	ND	F1	25.0	34.9	F1	ug/L		139	72 - 134	7	15
Chlorobenzene	ND		25.0	28.4		ug/L		114	80 - 120	2	25

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: 480-229348-1 MSD
Matrix: Water
Analysis Batch: 746022

Client Sample ID: MW-1
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloroethane	ND		25.0	29.9		ug/L		120	69 - 136	4	15
Chloroform	ND		25.0	29.8		ug/L		119	73 - 127	4	20
Chloromethane	ND		25.0	28.7		ug/L		115	68 - 124	1	15
cis-1,2-Dichloroethene	ND		25.0	30.2		ug/L		121	74 - 124	4	15
cis-1,3-Dichloropropene	ND		25.0	28.2		ug/L		113	74 - 124	2	15
Cyclohexane	ND		25.0	29.2		ug/L		117	59 - 135	4	20
Dibromochloromethane	ND		25.0	29.6		ug/L		118	75 - 125	2	15
Dichlorodifluoromethane	ND		25.0	26.8		ug/L		107	59 - 135	0	20
Ethylbenzene	ND		25.0	29.4		ug/L		117	77 - 123	3	15
Isopropylbenzene	ND		25.0	30.1		ug/L		120	77 - 122	1	20
m,p-Xylene	ND		25.0	29.8		ug/L		119	76 - 122	3	16
Methyl acetate	ND		50.0	57.4		ug/L		115	74 - 133	0	20
Methyl tert-butyl ether	ND		25.0	29.5		ug/L		118	77 - 120	4	37
Methylcyclohexane	0.20	J	25.0	28.7		ug/L		114	68 - 134	1	20
Methylene Chloride	ND		25.0	30.3		ug/L		121	75 - 124	3	15
Naphthalene	ND		25.0	28.7		ug/L		115	66 - 125	0	20
n-Butylbenzene	ND		25.0	29.1		ug/L		117	71 - 128	0	15
N-Propylbenzene	ND		25.0	28.9		ug/L		116	75 - 127	0	15
o-Xylene	ND		25.0	30.2		ug/L		121	76 - 122	3	16
sec-Butylbenzene	ND		25.0	30.3		ug/L		121	74 - 127	2	15
Styrene	ND		25.0	28.5		ug/L		114	80 - 120	2	20
tert-Butylbenzene	ND	F1	25.0	31.2	F1	ug/L		125	75 - 123	1	15
Tetrachloroethene	ND		25.0	29.8		ug/L		119	74 - 122	4	20
Toluene	ND		25.0	29.5		ug/L		118	80 - 122	2	15
trans-1,2-Dichloroethene	ND		25.0	31.2		ug/L		125	73 - 127	4	20
trans-1,3-Dichloropropene	ND		25.0	27.7		ug/L		111	80 - 120	2	15
Trichloroethene	ND		25.0	28.6		ug/L		115	74 - 123	2	16
Trichlorofluoromethane	ND		25.0	32.9		ug/L		132	62 - 150	4	20
Vinyl chloride	ND		25.0	32.0		ug/L		128	65 - 133	6	15

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*100*		*77 - 120*
4-Bromofluorobenzene (Surr)	*100*		*73 - 120*
Dibromofluoromethane (Surr)	*103*		*75 - 123*
Toluene-d8 (Surr)	*102*		*80 - 120*

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Lab Sample ID: MB 480-745798/1-A
Matrix: Water
Analysis Batch: 745900

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 745798

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	ND		5.0	0.48	ug/L		05/12/25 09:28	05/13/25 11:15	1
2,4,6-Trichlorophenol	ND		5.0	0.61	ug/L		05/12/25 09:28	05/13/25 11:15	1
2,4-Dichlorophenol	ND		5.0	0.51	ug/L		05/12/25 09:28	05/13/25 11:15	1
2,4-Dimethylphenol	ND		5.0	0.50	ug/L		05/12/25 09:28	05/13/25 11:15	1
2,4-Dinitrophenol	ND		10	2.2	ug/L		05/12/25 09:28	05/13/25 11:15	1
2,4-Dinitrotoluene	ND		5.0	0.45	ug/L		05/12/25 09:28	05/13/25 11:15	1

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 480-745798/1-A
Matrix: Water
Analysis Batch: 745900

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 745798

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,6-Dinitrotoluene	ND		5.0	0.40	ug/L		05/12/25 09:28	05/13/25 11:15	1
2-Chloronaphthalene	ND		5.0	0.46	ug/L		05/12/25 09:28	05/13/25 11:15	1
2-Chlorophenol	ND		5.0	0.53	ug/L		05/12/25 09:28	05/13/25 11:15	1
2-Methylnaphthalene	ND		5.0	0.60	ug/L		05/12/25 09:28	05/13/25 11:15	1
2-Methylphenol	ND		5.0	0.40	ug/L		05/12/25 09:28	05/13/25 11:15	1
2-Nitroaniline	ND		10	0.42	ug/L		05/12/25 09:28	05/13/25 11:15	1
2-Nitrophenol	ND		5.0	0.48	ug/L		05/12/25 09:28	05/13/25 11:15	1
3,3'-Dichlorobenzidine	ND		5.0	0.40	ug/L		05/12/25 09:28	05/13/25 11:15	1
3-Nitroaniline	ND		10	0.48	ug/L		05/12/25 09:28	05/13/25 11:15	1
4,6-Dinitro-2-methylphenol	ND		10	2.2	ug/L		05/12/25 09:28	05/13/25 11:15	1
4-Bromophenyl phenyl ether	ND		5.0	0.45	ug/L		05/12/25 09:28	05/13/25 11:15	1
4-Chloro-3-methylphenol	ND		5.0	0.45	ug/L		05/12/25 09:28	05/13/25 11:15	1
4-Chloroaniline	ND		5.0	0.59	ug/L		05/12/25 09:28	05/13/25 11:15	1
4-Chlorophenyl phenyl ether	ND		5.0	0.35	ug/L		05/12/25 09:28	05/13/25 11:15	1
4-Methylphenol	ND		10	0.36	ug/L		05/12/25 09:28	05/13/25 11:15	1
4-Nitroaniline	ND		10	0.25	ug/L		05/12/25 09:28	05/13/25 11:15	1
4-Nitrophenol	ND		10	1.5	ug/L		05/12/25 09:28	05/13/25 11:15	1
Acetophenone	ND		5.0	0.54	ug/L		05/12/25 09:28	05/13/25 11:15	1
Atrazine	ND		5.0	0.46	ug/L		05/12/25 09:28	05/13/25 11:15	1
Benzaldehyde	ND		5.0	0.27	ug/L		05/12/25 09:28	05/13/25 11:15	1
Biphenyl	ND		5.0	0.65	ug/L		05/12/25 09:28	05/13/25 11:15	1
bis (2-chloroisopropyl) ether	ND		5.0	0.52	ug/L		05/12/25 09:28	05/13/25 11:15	1
Bis(2-chloroethoxy)methane	ND		5.0	0.35	ug/L		05/12/25 09:28	05/13/25 11:15	1
Bis(2-chloroethyl)ether	ND		5.0	0.40	ug/L		05/12/25 09:28	05/13/25 11:15	1
Bis(2-ethylhexyl) phthalate	ND		5.0	2.2	ug/L		05/12/25 09:28	05/13/25 11:15	1
Butyl benzyl phthalate	ND		5.0	1.0	ug/L		05/12/25 09:28	05/13/25 11:15	1
Caprolactam	ND		5.0	2.2	ug/L		05/12/25 09:28	05/13/25 11:15	1
Carbazole	ND		5.0	0.30	ug/L		05/12/25 09:28	05/13/25 11:15	1
Dibenzofuran	ND		10	0.51	ug/L		05/12/25 09:28	05/13/25 11:15	1
Diethyl phthalate	ND		5.0	0.22	ug/L		05/12/25 09:28	05/13/25 11:15	1
Dimethyl phthalate	ND		5.0	0.36	ug/L		05/12/25 09:28	05/13/25 11:15	1
Di-n-butyl phthalate	ND		5.0	0.31	ug/L		05/12/25 09:28	05/13/25 11:15	1
Di-n-octyl phthalate	ND		5.0	0.47	ug/L		05/12/25 09:28	05/13/25 11:15	1
Hexachlorobenzene	ND		5.0	0.51	ug/L		05/12/25 09:28	05/13/25 11:15	1
Hexachlorobutadiene	ND		5.0	0.68	ug/L		05/12/25 09:28	05/13/25 11:15	1
Hexachlorocyclopentadiene	ND		5.0	0.59	ug/L		05/12/25 09:28	05/13/25 11:15	1
Hexachloroethane	ND		5.0	0.59	ug/L		05/12/25 09:28	05/13/25 11:15	1
Isophorone	ND		5.0	0.43	ug/L		05/12/25 09:28	05/13/25 11:15	1
Nitrobenzene	ND		5.0	0.29	ug/L		05/12/25 09:28	05/13/25 11:15	1
N-Nitrosodi-n-propylamine	ND		5.0	0.54	ug/L		05/12/25 09:28	05/13/25 11:15	1
N-Nitrosodiphenylamine	ND		5.0	0.51	ug/L		05/12/25 09:28	05/13/25 11:15	1
Pentachlorophenol	ND		10	2.2	ug/L		05/12/25 09:28	05/13/25 11:15	1
Phenol	ND		5.0	0.39	ug/L		05/12/25 09:28	05/13/25 11:15	1

Tentatively Identified Compound	*MB Est. Result*	*MB Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Unknown	*5.83*	*T J*	*ug/L*		*4.17*	*N/A*	*05/12/25 09:28*	*05/13/25 11:15*	*1*
Unknown	*16.8*	*T J*	*ug/L*		*4.43*	*N/A*	*05/12/25 09:28*	*05/13/25 11:15*	*1*
2-Hexene, 2,5,5-trimethyl-	*8.40*	*T J N*	*ug/L*		*4.54*	*40467-04-7*	*05/12/25 09:28*	*05/13/25 11:15*	*1*

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 480-745798/1-A
Matrix: Water
Analysis Batch: 745900

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 745798

Tentatively Identified Compound	MB Est. Result	MB Qualifier	Unit	D	RT	CAS No.	Prepared	Analyzed	Dil Fac
Unknown	2.60	T J	ug/L		4.61	N/A	05/12/25 09:28	05/13/25 11:15	1
Unknown	23.8	T J	ug/L		4.65	N/A	05/12/25 09:28	05/13/25 11:15	1
Unknown	16.3	T J	ug/L		4.69	N/A	05/12/25 09:28	05/13/25 11:15	1
Unknown	2.07	T J	ug/L		5.01	N/A	05/12/25 09:28	05/13/25 11:15	1
Unknown	18.1	T J	ug/L		5.06	N/A	05/12/25 09:28	05/13/25 11:15	1
Unknown	4.71	T J	ug/L		5.19	N/A	05/12/25 09:28	05/13/25 11:15	1
Unknown	5.28	T J	ug/L		5.25	N/A	05/12/25 09:28	05/13/25 11:15	1
Unknown	1.65	T J	ug/L		5.32	N/A	05/12/25 09:28	05/13/25 11:15	1
Unknown	56.3	T J	ug/L		5.36	N/A	05/12/25 09:28	05/13/25 11:15	1
Unknown	15.2	T J	ug/L		5.38	N/A	05/12/25 09:28	05/13/25 11:15	1
Unknown	2.00	T J	ug/L		5.42	N/A	05/12/25 09:28	05/13/25 11:15	1
Unknown	2.82	T J	ug/L		5.45	N/A	05/12/25 09:28	05/13/25 11:15	1
Unknown	18.9	T J	ug/L		5.48	N/A	05/12/25 09:28	05/13/25 11:15	1
Unknown	3.32	T J	ug/L		5.57	N/A	05/12/25 09:28	05/13/25 11:15	1
Unknown	30.7	T J	ug/L		5.60	N/A	05/12/25 09:28	05/13/25 11:15	1
Unknown	33.6	T J	ug/L		5.62	N/A	05/12/25 09:28	05/13/25 11:15	1
Unknown	6.01	T J	ug/L		5.66	N/A	05/12/25 09:28	05/13/25 11:15	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol (Surr)	73		25 - 144	05/12/25 09:28	05/13/25 11:15	1
2-Fluorobiphenyl (Surr)	80		53 - 126	05/12/25 09:28	05/13/25 11:15	1
2-Fluorophenol (Surr)	52		24 - 120	05/12/25 09:28	05/13/25 11:15	1
Nitrobenzene-d5 (Surr)	70		29 - 129	05/12/25 09:28	05/13/25 11:15	1
Phenol-d5 (Surr)	36		10 - 120	05/12/25 09:28	05/13/25 11:15	1
p-Terphenyl-d14 (Surr)	94		33 - 132	05/12/25 09:28	05/13/25 11:15	1

Lab Sample ID: LCS 480-745798/2-A
Matrix: Water
Analysis Batch: 745900

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 745798

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
2,4,5-Trichlorophenol	32.0	27.4		ug/L		86	65 - 126
2,4,6-Trichlorophenol	32.0	27.1		ug/L		85	64 - 120
2,4-Dichlorophenol	32.0	26.1		ug/L		81	63 - 120
2,4-Dimethylphenol	32.0	25.6		ug/L		80	47 - 120
2,4-Dinitrophenol	64.0	62.9		ug/L		98	31 - 137
2,4-Dinitrotoluene	32.0	31.6		ug/L		99	69 - 120
2,6-Dinitrotoluene	32.0	30.5		ug/L		95	68 - 120
2-Chloronaphthalene	32.0	25.6		ug/L		80	58 - 120
2-Chlorophenol	32.0	24.6		ug/L		77	48 - 120
2-Methylnaphthalene	32.0	24.9		ug/L		78	59 - 120
2-Methylphenol	32.0	22.8		ug/L		71	39 - 120
2-Nitroaniline	32.0	27.2		ug/L		85	54 - 127
2-Nitrophenol	32.0	26.8		ug/L		84	52 - 125
3,3'-Dichlorobenzidine	32.0	30.8		ug/L		96	49 - 135
3-Nitroaniline	32.0	25.5		ug/L		80	51 - 120
4,6-Dinitro-2-methylphenol	64.0	68.3		ug/L		107	46 - 136
4-Bromophenyl phenyl ether	32.0	28.7		ug/L		90	65 - 120

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 480-745798/2-A
Matrix: Water
Analysis Batch: 745900

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 745798

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
4-Chloro-3-methylphenol	32.0	28.0		ug/L		87	61 - 123
4-Chloroaniline	32.0	20.6		ug/L		65	30 - 120
4-Chlorophenyl phenyl ether	32.0	27.4		ug/L		86	62 - 120
4-Methylphenol	32.0	22.0		ug/L		69	29 - 131
4-Nitroaniline	32.0	27.1		ug/L		85	65 - 120
4-Nitrophenol	64.0	41.6		ug/L		65	45 - 120
Acetophenone	32.0	26.0		ug/L		81	45 - 120
Atrazine	32.0	28.0		ug/L		88	71 - 130
Benzaldehyde	32.0	19.3		ug/L		60	10 - 140
Biphenyl	32.0	26.2		ug/L		82	59 - 120
bis (2-chloroisopropyl) ether	32.0	22.5		ug/L		70	21 - 136
Bis(2-chloroethoxy)methane	32.0	25.5		ug/L		80	50 - 128
Bis(2-chloroethyl)ether	32.0	25.7		ug/L		80	44 - 120
Bis(2-ethylhexyl) phthalate	32.0	25.7		ug/L		80	63 - 139
Butyl benzyl phthalate	32.0	29.5		ug/L		92	70 - 129
Caprolactam	32.0	7.55		ug/L		24	22 - 120
Carbazole	32.0	35.3		ug/L		110	66 - 123
Dibenzofuran	32.0	27.6		ug/L		86	66 - 120
Diethyl phthalate	32.0	31.5		ug/L		99	59 - 127
Dimethyl phthalate	32.0	30.3		ug/L		95	68 - 120
Di-n-butyl phthalate	32.0	29.6		ug/L		92	69 - 131
Di-n-octyl phthalate	32.0	24.7		ug/L		77	63 - 140
Hexachlorobenzene	32.0	29.6		ug/L		92	61 - 120
Hexachlorobutadiene	32.0	21.9		ug/L		68	35 - 120
Hexachlorocyclopentadiene	32.0	16.6		ug/L		52	31 - 120
Hexachloroethane	32.0	21.2		ug/L		66	33 - 120
Isophorone	32.0	25.3		ug/L		79	55 - 120
Nitrobenzene	32.0	24.7		ug/L		77	53 - 123
N-Nitrosodi-n-propylamine	32.0	25.4		ug/L		79	32 - 140
N-Nitrosodiphenylamine	32.0	28.2		ug/L		88	61 - 120
Pentachlorophenol	64.0	56.5		ug/L		88	10 - 136
Phenol	32.0	13.9		ug/L		43	17 - 120

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2,4,6-Tribromophenol (Surr)	*90*		*25 - 144*
2-Fluorobiphenyl (Surr)	*83*		*53 - 126*
2-Fluorophenol (Surr)	*56*		*24 - 120*
Nitrobenzene-d5 (Surr)	*76*		*29 - 129*
Phenol-d5 (Surr)	*42*		*10 - 120*
p-Terphenyl-d14 (Surr)	*86*		*33 - 132*

Lab Sample ID: 480-229348-1 MS
Matrix: Water
Analysis Batch: 745900

Client Sample ID: MW-1
Prep Type: Total/NA
Prep Batch: 745798

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
2,4,5-Trichlorophenol	ND		32.0	33.9		ug/L		106	65 - 126
2,4,6-Trichlorophenol	ND		32.0	34.2		ug/L		107	64 - 120

Client: Roux Environmental Engineering and Geology DPC
Job ID: 480-229348-1
Project/Site: BCP RI - 619 Exchange Street Site

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 480-229348-1 MS
Matrix: Water
Analysis Batch: 745900

Client Sample ID: MW-1
Prep Type: Total/NA
Prep Batch: 745798

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
2,4-Dichlorophenol	ND		32.0	31.9		ug/L		100	48 - 132
2,4-Dimethylphenol	ND		32.0	30.0		ug/L		94	39 - 130
2,4-Dinitrophenol	ND		64.0	74.6		ug/L		117	21 - 150
2,4-Dinitrotoluene	ND		32.0	36.2		ug/L		113	54 - 138
2,6-Dinitrotoluene	ND		32.0	35.5		ug/L		111	17 - 150
2-Chloronaphthalene	ND		32.0	29.4		ug/L		92	52 - 124
2-Chlorophenol	ND		32.0	28.7		ug/L		90	48 - 120
2-Methylnaphthalene	ND		32.0	29.1		ug/L		91	34 - 140
2-Methylphenol	ND		32.0	27.7		ug/L		86	46 - 120
2-Nitroaniline	ND		32.0	30.6		ug/L		96	44 - 136
2-Nitrophenol	ND		32.0	31.4		ug/L		98	38 - 141
3,3'-Dichlorobenzidine	ND	F2	32.0	20.6		ug/L		65	10 - 150
3-Nitroaniline	ND		32.0	27.7		ug/L		87	32 - 150
4,6-Dinitro-2-methylphenol	ND		64.0	77.9		ug/L		122	38 - 150
4-Bromophenyl phenyl ether	ND		32.0	33.2		ug/L		104	63 - 126
4-Chloro-3-methylphenol	ND		32.0	31.7		ug/L		99	64 - 127
4-Chloroaniline	ND		32.0	20.3		ug/L		64	16 - 124
4-Chlorophenyl phenyl ether	ND		32.0	32.4		ug/L		101	61 - 120
4-Methylphenol	ND		32.0	25.9		ug/L		81	36 - 120
4-Nitroaniline	ND		32.0	27.2		ug/L		85	32 - 150
4-Nitrophenol	ND		64.0	44.2		ug/L		69	23 - 132
Acetophenone	ND		32.0	30.3		ug/L		95	53 - 120
Atrazine	ND		32.0	28.7		ug/L		90	50 - 150
Benzaldehyde	ND		32.0	22.9		ug/L		72	10 - 150
Biphenyl	ND		32.0	30.7		ug/L		96	57 - 120
bis (2-chloroisopropyl) ether	ND		32.0	27.0		ug/L		84	28 - 121
Bis(2-chloroethoxy)methane	ND		32.0	29.9		ug/L		93	44 - 128
Bis(2-chloroethyl)ether	ND		32.0	28.0		ug/L		87	45 - 120
Bis(2-ethylhexyl) phthalate	ND	F2	32.0	17.9		ug/L		56	16 - 150
Butyl benzyl phthalate	ND		32.0	28.9		ug/L		90	51 - 140
Caprolactam	ND		32.0	8.12		ug/L		25	10 - 120
Carbazole	ND		32.0	41.4		ug/L		129	16 - 148
Dibenzofuran	ND		32.0	32.3		ug/L		101	60 - 120
Diethyl phthalate	ND		32.0	35.1		ug/L		110	53 - 133
Dimethyl phthalate	ND		32.0	34.7		ug/L		108	59 - 123
Di-n-butyl phthalate	0.56	J	32.0	29.7		ug/L		91	65 - 129
Di-n-octyl phthalate	ND	F2	32.0	17.2		ug/L		54	16 - 150
Hexachlorobenzene	ND		32.0	32.8		ug/L		102	57 - 121
Hexachlorobutadiene	ND		32.0	25.2		ug/L		79	37 - 120
Hexachlorocyclopentadiene	ND		32.0	23.3		ug/L		73	21 - 120
Hexachloroethane	ND		32.0	25.5		ug/L		80	16 - 130
Isophorone	ND		32.0	29.7		ug/L		93	48 - 133
Nitrobenzene	ND		32.0	29.2		ug/L		91	45 - 123
N-Nitrosodi-n-propylamine	ND		32.0	29.5		ug/L		92	49 - 120
N-Nitrosodiphenylamine	ND		32.0	31.6		ug/L		99	39 - 138
Pentachlorophenol	ND		64.0	66.3		ug/L		104	10 - 149
Phenol	ND		32.0	16.8		ug/L		52	16 - 120

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 480-229348-1 MS
Matrix: Water
Analysis Batch: 745900

Client Sample ID: MW-1
Prep Type: Total/NA
Prep Batch: 745798

Surrogate	MS %Recovery	MS Qualifier	Limits
2,4,6-Tribromophenol (Surr)	*110*		*25 - 144*
2-Fluorobiphenyl (Surr)	*98*		*53 - 126*
2-Fluorophenol (Surr)	*66*		*24 - 120*
Nitrobenzene-d5 (Surr)	*89*		*29 - 129*
Phenol-d5 (Surr)	*48*		*10 - 120*
p-Terphenyl-d14 (Surr)	*66*		*33 - 132*

Lab Sample ID: 480-229348-1 MSD
Matrix: Water
Analysis Batch: 745900

Client Sample ID: MW-1
Prep Type: Total/NA
Prep Batch: 745798

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
2,4,5-Trichlorophenol	ND		32.0	33.4		ug/L		104	65 - 126	2	18
2,4,6-Trichlorophenol	ND		32.0	31.5		ug/L		99	64 - 120	8	19
2,4-Dichlorophenol	ND		32.0	29.5		ug/L		92	48 - 132	8	19
2,4-Dimethylphenol	ND		32.0	27.5		ug/L		86	39 - 130	9	42
2,4-Dinitrophenol	ND		64.0	75.4		ug/L		118	21 - 150	1	22
2,4-Dinitrotoluene	ND		32.0	37.4		ug/L		117	54 - 138	3	20
2,6-Dinitrotoluene	ND		32.0	35.9		ug/L		112	17 - 150	1	15
2-Chloronaphthalene	ND		32.0	28.6		ug/L		89	52 - 124	3	21
2-Chlorophenol	ND		32.0	26.9		ug/L		84	48 - 120	7	25
2-Methylnaphthalene	ND		32.0	28.1		ug/L		88	34 - 140	3	21
2-Methylphenol	ND		32.0	25.1		ug/L		79	46 - 120	10	27
2-Nitroaniline	ND		32.0	30.9		ug/L		96	44 - 136	1	15
2-Nitrophenol	ND		32.0	30.3		ug/L		95	38 - 141	3	18
3,3'-Dichlorobenzidine	ND	F2	32.0	27.9	F2	ug/L		87	10 - 150	30	25
3-Nitroaniline	ND		32.0	28.2		ug/L		88	32 - 150	2	19
4,6-Dinitro-2-methylphenol	ND		64.0	81.5		ug/L		127	38 - 150	5	15
4-Bromophenyl phenyl ether	ND		32.0	32.8		ug/L		103	63 - 126	1	15
4-Chloro-3-methylphenol	ND		32.0	30.8		ug/L		96	64 - 127	3	27
4-Chloroaniline	ND		32.0	20.9		ug/L		65	16 - 124	3	22
4-Chlorophenyl phenyl ether	ND		32.0	32.8		ug/L		102	61 - 120	1	16
4-Methylphenol	ND		32.0	23.7		ug/L		74	36 - 120	9	24
4-Nitroaniline	ND		32.0	27.9		ug/L		87	32 - 150	2	24
4-Nitrophenol	ND		64.0	47.9		ug/L		75	23 - 132	8	48
Acetophenone	ND		32.0	28.3		ug/L		88	53 - 120	7	20
Atrazine	ND		32.0	30.5		ug/L		95	50 - 150	6	20
Benzaldehyde	ND		32.0	26.0		ug/L		81	10 - 150	13	20
Biphenyl	ND		32.0	30.1		ug/L		94	57 - 120	2	20
bis (2-chloroisopropyl) ether	ND		32.0	24.9		ug/L		78	28 - 121	8	24
Bis(2-chloroethoxy)methane	ND		32.0	28.2		ug/L		88	44 - 128	6	17
Bis(2-chloroethyl)ether	ND		32.0	34.6		ug/L		108	45 - 120	21	21
Bis(2-ethylhexyl) phthalate	ND	F2	32.0	22.7	F2	ug/L		71	16 - 150	23	15
Butyl benzyl phthalate	ND		32.0	30.6		ug/L		96	51 - 140	6	16
Caprolactam	ND		32.0	8.35		ug/L		26	10 - 120	3	20
Carbazole	ND		32.0	40.2		ug/L		126	16 - 148	3	20
Dibenzofuran	ND		32.0	31.6		ug/L		99	60 - 120	2	15
Diethyl phthalate	ND		32.0	35.9		ug/L		112	53 - 133	2	15

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 480-229348-1 MSD — **Client Sample ID: MW-1**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 745900 — **Prep Batch: 745798**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Dimethyl phthalate	ND		32.0	35.4		ug/L		111	59 - 123	2	15
Di-n-butyl phthalate	0.56	J	32.0	31.4		ug/L		96	65 - 129	5	15
Di-n-octyl phthalate	ND	F2	32.0	21.0	F2	ug/L		66	16 - 150	20	16
Hexachlorobenzene	ND		32.0	34.0		ug/L		106	57 - 121	4	15
Hexachlorobutadiene	ND		32.0	24.9		ug/L		78	37 - 120	1	44
Hexachlorocyclopentadiene	ND		32.0	22.7		ug/L		71	21 - 120	3	49
Hexachloroethane	ND		32.0	24.0		ug/L		75	16 - 130	6	46
Isophorone	ND		32.0	28.1		ug/L		88	48 - 133	6	17
Nitrobenzene	ND		32.0	27.1		ug/L		85	45 - 123	8	24
N-Nitrosodi-n-propylamine	ND		32.0	28.1		ug/L		88	49 - 120	5	31
N-Nitrosodiphenylamine	ND		32.0	32.2		ug/L		100	39 - 138	2	15
Pentachlorophenol	ND		64.0	68.7		ug/L		107	10 - 149	4	37
Phenol	ND		32.0	19.4		ug/L		61	16 - 120	14	34

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
2,4,6-Tribromophenol (Surr)	*111*		*25 - 144*
2-Fluorobiphenyl (Surr)	*92*		*53 - 126*
2-Fluorophenol (Surr)	*77*		*24 - 120*
Nitrobenzene-d5 (Surr)	*83*		*29 - 129*
Phenol-d5 (Surr)	*57*		*10 - 120*
p-Terphenyl-d14 (Surr)	*79*		*33 - 132*

Method: 8270D SIM ID - Semivolatile Organic Compounds (GC/MS SIM / Isotope Dilution)

Lab Sample ID: MB 480-745939/1-A — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 745997 — **Prep Batch: 745939**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	ND		0.20	0.10	ug/L		05/13/25 13:38	05/14/25 12:31	1

Isotope Dilution	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,4-Dioxane-d8	*32*		*15 - 110*	*05/13/25 13:38*	*05/14/25 12:31*	*1*

Lab Sample ID: LCS 480-745939/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 745997 — **Prep Batch: 745939**

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
1,4-Dioxane			2.00	2.21		ug/L		110	40 - 140		

Isotope Dilution	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,4-Dioxane-d8	*33*		*15 - 110*

Method: 8270D SIM ID - Semivolatile Organic Compounds (GC/MS SIM / Isotope Dilution) (Continued)

Lab Sample ID: 480-229348-1 MS
Matrix: Water
Analysis Batch: 745997

Client Sample ID: MW-1
Prep Type: Total/NA
Prep Batch: 745939

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
1,4-Dioxane	ND		2.00	2.22		ug/L		111	40 - 140

Isotope Dilution	*MS %Recovery*	*MS Qualifier*	*Limits*
1,4-Dioxane-d8	*34*		*15 - 110*

Lab Sample ID: 480-229348-1 MSD
Matrix: Water
Analysis Batch: 745997

Client Sample ID: MW-1
Prep Type: Total/NA
Prep Batch: 745939

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
1,4-Dioxane	ND		2.00	2.20		ug/L		110	40 - 140	1	20

Isotope Dilution	*MSD %Recovery*	*MSD Qualifier*	*Limits*
1,4-Dioxane-d8	*33*		*15 - 110*

Method: 8270D_LL_PAH - Semivolatile Organic Compounds (GC/MS) Low level PAH

Lab Sample ID: MB 480-745798/1-A
Matrix: Water
Analysis Batch: 746283

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 745798

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.50	0.30	ug/L		05/12/25 09:28	05/13/25 11:15	1
Acenaphthylene	ND		0.50	0.34	ug/L		05/12/25 09:28	05/13/25 11:15	1
Anthracene	ND		0.50	0.39	ug/L		05/12/25 09:28	05/13/25 11:15	1
Benzo[a]anthracene	ND		0.50	0.40	ug/L		05/12/25 09:28	05/13/25 11:15	1
Benzo[a]pyrene	ND		0.50	0.33	ug/L		05/12/25 09:28	05/13/25 11:15	1
Benzo[b]fluoranthene	ND		0.50	0.30	ug/L		05/12/25 09:28	05/13/25 11:15	1
Benzo[g,h,i]perylene	ND		0.50	0.37	ug/L		05/12/25 09:28	05/13/25 11:15	1
Benzo[k]fluoranthene	ND		0.50	0.085	ug/L		05/12/25 09:28	05/13/25 11:15	1
Chrysene	ND		0.50	0.32	ug/L		05/12/25 09:28	05/13/25 11:15	1
Dibenz(a,h)anthracene	ND		0.50	0.33	ug/L		05/12/25 09:28	05/13/25 11:15	1
Fluoranthene	ND		0.50	0.36	ug/L		05/12/25 09:28	05/13/25 11:15	1
Fluorene	ND		0.50	0.37	ug/L		05/12/25 09:28	05/13/25 11:15	1
Indeno[1,2,3-cd]pyrene	ND		0.50	0.44	ug/L		05/12/25 09:28	05/13/25 11:15	1
Naphthalene	ND		0.50	0.42	ug/L		05/12/25 09:28	05/13/25 11:15	1
Phenanthrene	ND		0.50	0.38	ug/L		05/12/25 09:28	05/13/25 11:15	1
Pyrene	ND		0.50	0.36	ug/L		05/12/25 09:28	05/13/25 11:15	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*80*		*48 - 120*	*05/12/25 09:28*	*05/13/25 11:15*	*1*
Nitrobenzene-d5 (Surr)	*70*		*46 - 120*	*05/12/25 09:28*	*05/13/25 11:15*	*1*
p-Terphenyl-d14 (Surr)	*94*		*24 - 136*	*05/12/25 09:28*	*05/13/25 11:15*	*1*

Method: 8270D_LL_PAH - Semivolatile Organic Compounds (GC/MS) Low level PAH (Continued)

Lab Sample ID: LCS 480-745798/2-A
Matrix: Water
Analysis Batch: 746283

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 745798

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Acenaphthene			32.0	26.9		ug/L		84	60 - 120		
Acenaphthylene			32.0	27.3		ug/L		85	63 - 120		
Anthracene			32.0	32.0		ug/L		100	69 - 131		
Benzo[a]anthracene			32.0	30.8		ug/L		96	62 - 142		
Benzo[a]pyrene			32.0	30.2		ug/L		94	46 - 156		
Benzo[b]fluoranthene			32.0	31.2		ug/L		98	50 - 149		
Benzo[g,h,i]perylene			32.0	30.7		ug/L		96	34 - 189		
Benzo[k]fluoranthene			32.0	31.1		ug/L		97	47 - 147		
Chrysene			32.0	31.3		ug/L		98	69 - 140		
Dibenz(a,h)anthracene			32.0	28.7		ug/L		90	35 - 176		
Fluoranthene			32.0	32.4		ug/L		101	67 - 133		
Fluorene			32.0	28.4		ug/L		89	66 - 129		
Indeno[1,2,3-cd]pyrene			32.0	28.6		ug/L		89	57 - 161		
Naphthalene			32.0	25.5		ug/L		80	48 - 120		
Phenanthrene			32.0	29.3		ug/L		92	67 - 130		
Pyrene			32.0	32.5		ug/L		101	58 - 136		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2-Fluorobiphenyl (Surr)	*83*		*48 - 120*
Nitrobenzene-d5 (Surr)	*76*		*46 - 120*
p-Terphenyl-d14 (Surr)	*86*		*24 - 136*

Lab Sample ID: 480-229348-1 MS
Matrix: Water
Analysis Batch: 746283

Client Sample ID: MW-1
Prep Type: Total/NA
Prep Batch: 745798

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Acenaphthene	ND		32.0	31.8		ug/L		99	60 - 120		
Acenaphthylene	ND		32.0	31.2		ug/L		98	63 - 120		
Anthracene	ND		32.0	33.2		ug/L		104	69 - 131		
Benzo[a]anthracene	ND	F2	32.0	25.8		ug/L		81	62 - 142		
Benzo[a]pyrene	ND	F2	32.0	21.6		ug/L		67	46 - 156		
Benzo[b]fluoranthene	ND	F2	32.0	21.9		ug/L		68	50 - 149		
Benzo[g,h,i]perylene	ND	F2	32.0	19.4		ug/L		61	34 - 189		
Benzo[k]fluoranthene	ND	F2	32.0	21.3		ug/L		67	47 - 147		
Chrysene	ND		32.0	26.4		ug/L		82	69 - 140		
Dibenz(a,h)anthracene	ND	F2	32.0	19.7		ug/L		62	35 - 176		
Fluoranthene	ND		32.0	33.4		ug/L		104	67 - 133		
Fluorene	ND		32.0	33.2		ug/L		104	66 - 129		
Indeno[1,2,3-cd]pyrene	ND	F2	32.0	18.8		ug/L		59	57 - 161		
Naphthalene	ND		32.0	29.8		ug/L		93	48 - 120		
Phenanthrene	ND		32.0	34.3		ug/L		107	67 - 130		
Pyrene	ND		32.0	33.4		ug/L		104	58 - 136		

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
2-Fluorobiphenyl (Surr)	*98*		*48 - 120*
Nitrobenzene-d5 (Surr)	*89*		*46 - 120*
p-Terphenyl-d14 (Surr)	*66*		*24 - 136*

Method: 8270D_LL_PAH - Semivolatile Organic Compounds (GC/MS) Low level PAH

Lab Sample ID: 480-229348-1 MSD
Client Sample ID: MW-1
Matrix: Water
Prep Type: Total/NA
Analysis Batch: 746283
Prep Batch: 745798

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Acenaphthene	ND		32.0	30.5		ug/L		95	60 - 120	4	24
Acenaphthylene	ND		32.0	30.3		ug/L		95	63 - 120	3	18
Anthracene	ND		32.0	34.5		ug/L		108	69 - 131	4	15
Benzo[a]anthracene	ND	F2	32.0	30.5	F2	ug/L		95	62 - 142	17	15
Benzo[a]pyrene	ND	F2	32.0	27.6	F2	ug/L		86	46 - 156	25	15
Benzo[b]fluoranthene	ND	F2	32.0	28.1	F2	ug/L		88	50 - 149	25	15
Benzo[g,h,i]perylene	ND	F2	32.0	26.1	F2	ug/L		82	34 - 189	30	15
Benzo[k]fluoranthene	ND	F2	32.0	27.3	F2	ug/L		85	47 - 147	25	22
Chrysene	ND		32.0	29.7		ug/L		93	69 - 140	12	15
Dibenz(a,h)anthracene	ND	F2	32.0	25.3	F2	ug/L		79	35 - 176	25	15
Fluoranthene	ND		32.0	35.2		ug/L		110	67 - 133	5	15
Fluorene	ND		32.0	33.2		ug/L		104	66 - 129	0	15
Indeno[1,2,3-cd]pyrene	ND	F2	32.0	25.3	F2	ug/L		79	57 - 161	29	15
Naphthalene	ND		32.0	28.0		ug/L		88	48 - 120	6	29
Phenanthrene	ND		32.0	34.4		ug/L		108	67 - 130	0	15
Pyrene	ND		32.0	33.6		ug/L		105	58 - 136	1	25

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
2-Fluorobiphenyl (Surr)	*92*		*48 - 120*
Nitrobenzene-d5 (Surr)	*83*		*46 - 120*
p-Terphenyl-d14 (Surr)	*79*		*24 - 136*

Method: 8081B - Organochlorine Pesticides (GC)

Lab Sample ID: MB 480-745833/1-A
Client Sample ID: Method Blank
Matrix: Water
Prep Type: Total/NA
Analysis Batch: 745881
Prep Batch: 745833

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	ND		0.050	0.0092	ug/L		05/12/25 13:45	05/13/25 09:45	1
4,4'-DDE	ND		0.050	0.012	ug/L		05/12/25 13:45	05/13/25 09:45	1
4,4'-DDT	ND		0.050	0.011	ug/L		05/12/25 13:45	05/13/25 09:45	1
Aldrin	ND		0.050	0.0081	ug/L		05/12/25 13:45	05/13/25 09:45	1
alpha-BHC	0.0513		0.050	0.0077	ug/L		05/12/25 13:45	05/13/25 09:45	1
beta-BHC	ND		0.050	0.025	ug/L		05/12/25 13:45	05/13/25 09:45	1
cis-Chlordane	ND		0.050	0.015	ug/L		05/12/25 13:45	05/13/25 09:45	1
delta-BHC	ND		0.050	0.010	ug/L		05/12/25 13:45	05/13/25 09:45	1
Dieldrin	ND		0.050	0.0098	ug/L		05/12/25 13:45	05/13/25 09:45	1
Endosulfan I	ND		0.050	0.011	ug/L		05/12/25 13:45	05/13/25 09:45	1
Endosulfan II	ND		0.050	0.012	ug/L		05/12/25 13:45	05/13/25 09:45	1
Endosulfan sulfate	ND		0.050	0.016	ug/L		05/12/25 13:45	05/13/25 09:45	1
Endrin	ND		0.050	0.014	ug/L		05/12/25 13:45	05/13/25 09:45	1
Endrin aldehyde	ND		0.050	0.016	ug/L		05/12/25 13:45	05/13/25 09:45	1
Endrin ketone	ND		0.050	0.012	ug/L		05/12/25 13:45	05/13/25 09:45	1
gamma-BHC (Lindane)	0.0261	J	0.050	0.0080	ug/L		05/12/25 13:45	05/13/25 09:45	1
Heptachlor	ND		0.050	0.0085	ug/L		05/12/25 13:45	05/13/25 09:45	1
Heptachlor epoxide	ND		0.050	0.0074	ug/L		05/12/25 13:45	05/13/25 09:45	1
Methoxychlor	ND		0.050	0.014	ug/L		05/12/25 13:45	05/13/25 09:45	1

Method: 8081B - Organochlorine Pesticides (GC) (Continued)

Lab Sample ID: MB 480-745833/1-A
Matrix: Water
Analysis Batch: 745881

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 745833

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Toxaphene	ND		0.50	0.12	ug/L		05/12/25 13:45	05/13/25 09:45	1
trans-Chlordane	ND		0.050	0.011	ug/L		05/12/25 13:45	05/13/25 09:45	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*79*		*10 - 120*	*05/12/25 13:45*	*05/13/25 09:45*	*1*
DCB Decachlorobiphenyl	*81*		*10 - 120*	*05/12/25 13:45*	*05/13/25 09:45*	*1*
Tetrachloro-m-xylene	*84*		*10 - 120*	*05/12/25 13:45*	*05/13/25 09:45*	*1*
Tetrachloro-m-xylene	*77*		*10 - 120*	*05/12/25 13:45*	*05/13/25 09:45*	*1*

Lab Sample ID: LCS 480-745833/2-A
Matrix: Water
Analysis Batch: 745881

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 745833

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
4,4'-DDD	0.400	0.362		ug/L		90	66 - 143
4,4'-DDE	0.400	0.320		ug/L		80	50 - 125
4,4'-DDT	0.400	0.360		ug/L		90	64 - 138
Aldrin	0.400	0.304		ug/L		76	26 - 120
alpha-BHC	0.400	0.363		ug/L		91	34 - 120
beta-BHC	0.400	0.350		ug/L		88	53 - 132
cis-Chlordane	0.400	0.283		ug/L		71	51 - 127
delta-BHC	0.400	0.354		ug/L		89	47 - 131
Dieldrin	0.400	0.347		ug/L		87	64 - 142
Endosulfan I	0.400	0.343		ug/L		86	48 - 140
Endosulfan II	0.400	0.370		ug/L		92	71 - 146
Endosulfan sulfate	0.400	0.355		ug/L		89	48 - 153
Endrin	0.400	0.353		ug/L		88	63 - 142
Endrin aldehyde	0.400	0.314		ug/L		78	50 - 142
Endrin ketone	0.400	0.355		ug/L		89	73 - 146
gamma-BHC (Lindane)	0.400	0.359		ug/L		90	42 - 128
Heptachlor	0.400	0.314		ug/L		78	44 - 125
Heptachlor epoxide	0.400	0.340		ug/L		85	63 - 142
Methoxychlor	0.400	0.384		ug/L		96	54 - 158
trans-Chlordane	0.400	0.314		ug/L		79	47 - 131

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
DCB Decachlorobiphenyl	*68*		*10 - 120*
DCB Decachlorobiphenyl	*72*		*10 - 120*
Tetrachloro-m-xylene	*73*		*10 - 120*
Tetrachloro-m-xylene	*75*		*10 - 120*

Lab Sample ID: 480-229348-1 MS
Matrix: Water
Analysis Batch: 745881

Client Sample ID: MW-1
Prep Type: Total/NA
Prep Batch: 745833

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
4,4'-DDD	ND		0.400	0.301		ug/L		75	57 - 130
4,4'-DDE	0.015	J	0.400	0.202		ug/L		47	39 - 120

Method: 8081B - Organochlorine Pesticides (GC) (Continued)

Lab Sample ID: 480-229348-1 MS
Matrix: Water
Analysis Batch: 745881

Client Sample ID: MW-1
Prep Type: Total/NA
Prep Batch: 745833

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
4,4'-DDT	ND		0.400	0.222		ug/L		55	37 - 130
Aldrin	ND		0.400	0.249		ug/L		62	39 - 125
alpha-BHC	0.021	J B	0.400	0.389		ug/L		92	48 - 120
beta-BHC	ND		0.400	0.334		ug/L		83	49 - 120
cis-Chlordane	ND		0.400	0.273		ug/L		68	44 - 120
delta-BHC	0.012	J	0.400	0.323		ug/L		78	50 - 120
Dieldrin	ND		0.400	0.332		ug/L		83	56 - 130
Endosulfan I	ND		0.400	0.333		ug/L		83	40 - 126
Endosulfan II	ND		0.400	0.360		ug/L		90	59 - 140
Endosulfan sulfate	ND		0.400	0.351		ug/L		88	60 - 134
Endrin	ND		0.400	0.340		ug/L		85	54 - 135
Endrin aldehyde	0.022	J	0.400	0.305		ug/L		71	50 - 142
Endrin ketone	ND		0.400	0.353		ug/L		88	57 - 138
gamma-BHC (Lindane)	0.014	J B	0.400	0.333		ug/L		80	50 - 120
Heptachlor	0.015	J	0.400	0.294		ug/L		70	56 - 120
Heptachlor epoxide	ND		0.400	0.316		ug/L		79	58 - 125
Methoxychlor	ND		0.400	0.340		ug/L		85	40 - 150
trans-Chlordane	ND		0.400	0.266		ug/L		67	42 - 120

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
DCB Decachlorobiphenyl	*39*		*10 - 120*
DCB Decachlorobiphenyl	*38*		*10 - 120*
Tetrachloro-m-xylene	*76*		*10 - 120*
Tetrachloro-m-xylene	*77*		*10 - 120*

Lab Sample ID: 480-229348-1 MSD
Matrix: Water
Analysis Batch: 745881

Client Sample ID: MW-1
Prep Type: Total/NA
Prep Batch: 745833

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
4,4'-DDD	ND		0.400	0.334		ug/L		83	57 - 130	10	23
4,4'-DDE	0.015	J	0.400	0.239		ug/L		56	39 - 120	17	22
4,4'-DDT	ND		0.400	0.268		ug/L		67	37 - 130	19	24
Aldrin	ND		0.400	0.275		ug/L		69	39 - 125	10	25
alpha-BHC	0.021	J B	0.400	0.341		ug/L		80	48 - 120	13	24
beta-BHC	ND		0.400	0.346		ug/L		86	49 - 120	3	24
cis-Chlordane	ND		0.400	0.282		ug/L		71	44 - 120	3	23
delta-BHC	0.012	J	0.400	0.336		ug/L		81	50 - 120	4	24
Dieldrin	ND		0.400	0.347		ug/L		87	56 - 130	4	24
Endosulfan I	ND		0.400	0.350		ug/L		87	40 - 126	5	30
Endosulfan II	ND		0.400	0.373		ug/L		93	59 - 140	4	40
Endosulfan sulfate	ND		0.400	0.357		ug/L		89	60 - 134	2	24
Endrin	ND		0.400	0.356		ug/L		89	54 - 135	5	24
Endrin aldehyde	0.022	J	0.400	0.312		ug/L		72	50 - 142	2	28
Endrin ketone	ND		0.400	0.363		ug/L		91	57 - 138	3	26
gamma-BHC (Lindane)	0.014	J B	0.400	0.332		ug/L		79	50 - 120	1	24
Heptachlor	0.015	J	0.400	0.319		ug/L		76	56 - 120	8	25
Heptachlor epoxide	ND		0.400	0.336		ug/L		84	58 - 125	6	23

Method: 8081B - Organochlorine Pesticides (GC) (Continued)

Lab Sample ID: 480-229348-1 MSD
Matrix: Water
Analysis Batch: 745881

Client Sample ID: MW-1
Prep Type: Total/NA
Prep Batch: 745833

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Methoxychlor	ND		0.400	0.368		ug/L		92	40 - 150	8	26
trans-Chlordane	ND		0.400	0.293		ug/L		73	42 - 120	9	24

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
DCB Decachlorobiphenyl	*42*		*10 - 120*
DCB Decachlorobiphenyl	*44*		*10 - 120*
Tetrachloro-m-xylene	*88*		*10 - 120*
Tetrachloro-m-xylene	*91*		*10 - 120*

Lab Sample ID: MB 480-746048/1-A
Matrix: Water
Analysis Batch: 746094

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 746048

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	ND		0.050	0.0092	ug/L		05/14/25 13:33	05/15/25 09:39	1
4,4'-DDE	ND		0.050	0.012	ug/L		05/14/25 13:33	05/15/25 09:39	1
4,4'-DDT	0.0316	J	0.050	0.011	ug/L		05/14/25 13:33	05/15/25 09:39	1
Aldrin	ND		0.050	0.0081	ug/L		05/14/25 13:33	05/15/25 09:39	1
alpha-BHC	ND		0.050	0.0077	ug/L		05/14/25 13:33	05/15/25 09:39	1
beta-BHC	ND		0.050	0.025	ug/L		05/14/25 13:33	05/15/25 09:39	1
cis-Chlordane	ND		0.050	0.015	ug/L		05/14/25 13:33	05/15/25 09:39	1
delta-BHC	ND		0.050	0.010	ug/L		05/14/25 13:33	05/15/25 09:39	1
Dieldrin	ND		0.050	0.0098	ug/L		05/14/25 13:33	05/15/25 09:39	1
Endosulfan I	ND		0.050	0.011	ug/L		05/14/25 13:33	05/15/25 09:39	1
Endosulfan II	ND		0.050	0.012	ug/L		05/14/25 13:33	05/15/25 09:39	1
Endosulfan sulfate	ND		0.050	0.016	ug/L		05/14/25 13:33	05/15/25 09:39	1
Endrin	ND		0.050	0.014	ug/L		05/14/25 13:33	05/15/25 09:39	1
Endrin aldehyde	ND		0.050	0.016	ug/L		05/14/25 13:33	05/15/25 09:39	1
Endrin ketone	ND		0.050	0.012	ug/L		05/14/25 13:33	05/15/25 09:39	1
gamma-BHC (Lindane)	ND		0.050	0.0080	ug/L		05/14/25 13:33	05/15/25 09:39	1
Heptachlor	ND		0.050	0.0085	ug/L		05/14/25 13:33	05/15/25 09:39	1
Heptachlor epoxide	ND		0.050	0.0074	ug/L		05/14/25 13:33	05/15/25 09:39	1
Methoxychlor	ND		0.050	0.014	ug/L		05/14/25 13:33	05/15/25 09:39	1
Toxaphene	ND		0.50	0.12	ug/L		05/14/25 13:33	05/15/25 09:39	1
trans-Chlordane	ND		0.050	0.011	ug/L		05/14/25 13:33	05/15/25 09:39	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*77*		*10 - 120*	*05/14/25 13:33*	*05/15/25 09:39*	*1*
DCB Decachlorobiphenyl	*70*		*10 - 120*	*05/14/25 13:33*	*05/15/25 09:39*	*1*
Tetrachloro-m-xylene	*90*		*10 - 120*	*05/14/25 13:33*	*05/15/25 09:39*	*1*
Tetrachloro-m-xylene	*76*		*10 - 120*	*05/14/25 13:33*	*05/15/25 09:39*	*1*

Lab Sample ID: LCS 480-746048/2-A
Matrix: Water
Analysis Batch: 746094

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 746048

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
4,4'-DDD			0.400	0.319		ug/L		80	66 - 143		

Method: 8081B - Organochlorine Pesticides (GC) (Continued)

Lab Sample ID: LCS 480-746048/2-A
Matrix: Water
Analysis Batch: 746094

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 746048

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
4,4'-DDE			0.400	0.307		ug/L		77	50 - 125		
4,4'-DDT			0.400	0.397		ug/L		99	64 - 138		
Aldrin			0.400	0.284		ug/L		71	26 - 120		
alpha-BHC			0.400	0.286		ug/L		72	34 - 120		
beta-BHC			0.400	0.310		ug/L		78	53 - 132		
cis-Chlordane			0.400	0.305		ug/L		76	51 - 127		
delta-BHC			0.400	0.267		ug/L		67	47 - 131		
Dieldrin			0.400	0.325		ug/L		81	64 - 142		
Endosulfan I			0.400	0.317		ug/L		79	48 - 140		
Endosulfan II			0.400	0.332		ug/L		83	71 - 146		
Endosulfan sulfate			0.400	0.330		ug/L		82	48 - 153		
Endrin			0.400	0.323		ug/L		81	63 - 142		
Endrin aldehyde			0.400	0.328		ug/L		82	50 - 142		
Endrin ketone			0.400	0.359		ug/L		90	73 - 146		
gamma-BHC (Lindane)			0.400	0.304		ug/L		76	42 - 128		
Heptachlor			0.400	0.309		ug/L		77	44 - 125		
Heptachlor epoxide			0.400	0.306		ug/L		76	63 - 142		
Methoxychlor			0.400	0.443		ug/L		111	54 - 158		
trans-Chlordane			0.400	0.296		ug/L		74	47 - 131		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
DCB Decachlorobiphenyl	*71*		*10 - 120*
DCB Decachlorobiphenyl	*64*		*10 - 120*
Tetrachloro-m-xylene	*75*		*10 - 120*
Tetrachloro-m-xylene	*67*		*10 - 120*

Lab Sample ID: LCSD 480-746048/3-A
Matrix: Water
Analysis Batch: 746094

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 746048

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
4,4'-DDD			0.400	0.336		ug/L		84	66 - 143	5	23
4,4'-DDE			0.400	0.322		ug/L		81	50 - 125	5	22
4,4'-DDT			0.400	0.416		ug/L		104	64 - 138	5	24
Aldrin			0.400	0.288		ug/L		72	26 - 120	1	25
alpha-BHC			0.400	0.296		ug/L		74	34 - 120	3	24
beta-BHC			0.400	0.331		ug/L		83	53 - 132	7	24
cis-Chlordane			0.400	0.316		ug/L		79	51 - 127	3	23
delta-BHC			0.400	0.282		ug/L		70	47 - 131	5	24
Dieldrin			0.400	0.343		ug/L		86	64 - 142	6	24
Endosulfan I			0.400	0.335		ug/L		84	48 - 140	6	30
Endosulfan II			0.400	0.350		ug/L		88	71 - 146	5	40
Endosulfan sulfate			0.400	0.349		ug/L		87	48 - 153	6	24
Endrin			0.400	0.339		ug/L		85	63 - 142	5	24
Endrin aldehyde			0.400	0.339		ug/L		85	50 - 142	3	28
Endrin ketone			0.400	0.377		ug/L		94	73 - 146	5	26
gamma-BHC (Lindane)			0.400	0.318		ug/L		79	42 - 128	5	24
Heptachlor			0.400	0.323		ug/L		81	44 - 125	5	25

Method: 8081B - Organochlorine Pesticides (GC) (Continued)

Lab Sample ID: LCSD 480-746048/3-A
Matrix: Water
Analysis Batch: 746094

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 746048

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Heptachlor epoxide			0.400	0.322		ug/L		81	63 - 142	5	23
Methoxychlor			0.400	0.462		ug/L		115	54 - 158	4	26
trans-Chlordane			0.400	0.308		ug/L		77	47 - 131	4	24

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
DCB Decachlorobiphenyl	*75*		*10 - 120*
DCB Decachlorobiphenyl	*77*		*10 - 120*
Tetrachloro-m-xylene	*79*		*10 - 120*
Tetrachloro-m-xylene	*70*		*10 - 120*

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Lab Sample ID: MB 480-745975/1-A
Matrix: Water
Analysis Batch: 746096

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 745975

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		0.50	0.18	ug/L		05/14/25 06:38	05/15/25 10:28	1
PCB-1221	ND		0.50	0.18	ug/L		05/14/25 06:38	05/15/25 10:28	1
PCB-1232	ND		0.50	0.18	ug/L		05/14/25 06:38	05/15/25 10:28	1
PCB-1242	ND		0.50	0.18	ug/L		05/14/25 06:38	05/15/25 10:28	1
PCB-1248	ND		0.50	0.18	ug/L		05/14/25 06:38	05/15/25 10:28	1
PCB-1254	ND		0.50	0.25	ug/L		05/14/25 06:38	05/15/25 10:28	1
PCB-1260	ND		0.50	0.25	ug/L		05/14/25 06:38	05/15/25 10:28	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*110*		*10 - 123*	*05/14/25 06:38*	*05/15/25 10:28*	*1*
DCB Decachlorobiphenyl	*98*		*10 - 123*	*05/14/25 06:38*	*05/15/25 10:28*	*1*
Tetrachloro-m-xylene	*106*		*10 - 145*	*05/14/25 06:38*	*05/15/25 10:28*	*1*
Tetrachloro-m-xylene	*93*		*10 - 145*	*05/14/25 06:38*	*05/15/25 10:28*	*1*

Lab Sample ID: LCS 480-745975/2-A
Matrix: Water
Analysis Batch: 746096

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 745975

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
PCB-1016			4.00	4.24		ug/L		106	62 - 130
PCB-1260			4.00	4.04		ug/L		101	56 - 123

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
DCB Decachlorobiphenyl	*95*		*10 - 123*
DCB Decachlorobiphenyl	*99*		*10 - 123*
Tetrachloro-m-xylene	*112*		*10 - 145*
Tetrachloro-m-xylene	*92*		*10 - 145*

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography (Continued)

Lab Sample ID: 480-229348-1 MS — **Client Sample ID: MW-1**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 746096 — **Prep Batch: 745975**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
PCB-1016	ND		4.00	3.79		ug/L		95	28 - 150
PCB-1260	ND		4.00	1.56		ug/L		39	25 - 131

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
DCB Decachlorobiphenyl	*36*		*10 - 123*
DCB Decachlorobiphenyl	*27*		*10 - 123*
Tetrachloro-m-xylene	*101*		*10 - 145*
Tetrachloro-m-xylene	*90*		*10 - 145*

Lab Sample ID: 480-229348-1 MSD — **Client Sample ID: MW-1**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 746096 — **Prep Batch: 745975**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
PCB-1016	ND		4.00	3.27		ug/L		82	28 - 150	15	50
PCB-1260	ND		4.00	1.29		ug/L		32	25 - 131	19	50

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
DCB Decachlorobiphenyl	*29*		*10 - 123*
DCB Decachlorobiphenyl	*28*		*10 - 123*
Tetrachloro-m-xylene	*86*		*10 - 145*
Tetrachloro-m-xylene	*76*		*10 - 145*

Method: 8151A - Herbicides (GC)

Lab Sample ID: MB 480-745906/1-A — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 746027 — **Prep Batch: 745906**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-T	ND		0.50	0.068	ug/L		05/13/25 09:13	05/14/25 11:22	1
2,4-D	ND		0.50	0.17	ug/L		05/13/25 09:13	05/14/25 11:22	1
Dichlorprop	ND		0.50	0.12	ug/L		05/13/25 09:13	05/14/25 11:22	1
Pentachlorophenol	ND		0.50	0.049	ug/L		05/13/25 09:13	05/14/25 11:22	1
Picloram	ND		0.50	0.072	ug/L		05/13/25 09:13	05/14/25 11:22	1
Silvex (2,4,5-TP)	ND		0.50	0.050	ug/L		05/13/25 09:13	05/14/25 11:22	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4-Dichlorophenylacetic acid	*79*		*21 - 143*	*05/13/25 09:13*	*05/14/25 11:22*	*1*
2,4-Dichlorophenylacetic acid	*81*		*21 - 143*	*05/13/25 09:13*	*05/14/25 11:22*	*1*

Lab Sample ID: LCS 480-745906/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 746027 — **Prep Batch: 745906**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
2,4,5-T	2.00	1.70		ug/L		85	41 - 150
2,4-D	2.00	1.91		ug/L		96	36 - 150

Method: 8151A - Herbicides (GC) (Continued)

Lab Sample ID: LCS 480-745906/2-A
Client Sample ID: Lab Control Sample
Matrix: Water
Prep Type: Total/NA
Analysis Batch: 746027
Prep Batch: 745906

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Dichlorprop	2.00	1.86		ug/L		93	33 - 150
Pentachlorophenol	2.00	1.62		ug/L		81	29 - 143
Picloram	2.00	1.79		ug/L		89	34 - 150
Silvex (2,4,5-TP)	2.00	1.73		ug/L		86	49 - 150

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2,4-Dichlorophenylacetic acid	*80*		*21 - 143*
2,4-Dichlorophenylacetic acid	*86*		*21 - 143*

Lab Sample ID: 480-229348-1 MS
Client Sample ID: MW-1
Matrix: Water
Prep Type: Total/NA
Analysis Batch: 746027
Prep Batch: 745906

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
2,4,5-T	ND		2.15	1.75		ug/L		81	34 - 138
2,4-D	ND		2.15	1.74		ug/L		81	31 - 150
Dichlorprop	ND		2.15	1.79		ug/L		83	26 - 150
Pentachlorophenol	ND		2.15	1.59		ug/L		74	27 - 122
Picloram	ND		2.15	1.96		ug/L		91	33 - 150
Silvex (2,4,5-TP)	ND		2.15	1.77		ug/L		83	25 - 146

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
2,4-Dichlorophenylacetic acid	*86*		*21 - 143*
2,4-Dichlorophenylacetic acid	*81*		*21 - 143*

Lab Sample ID: 480-229348-1 MSD
Client Sample ID: MW-1
Matrix: Water
Prep Type: Total/NA
Analysis Batch: 746027
Prep Batch: 745906

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
2,4,5-T	ND		2.08	1.71		ug/L		82	34 - 138	3	50
2,4-D	ND		2.08	1.78		ug/L		86	31 - 150	3	50
Dichlorprop	ND		2.08	1.76		ug/L		84	26 - 150	2	50
Pentachlorophenol	ND		2.08	1.66		ug/L		80	27 - 122	4	50
Picloram	ND		2.08	1.86		ug/L		89	33 - 150	5	50
Silvex (2,4,5-TP)	ND		2.08	1.76		ug/L		84	25 - 146	1	50

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
2,4-Dichlorophenylacetic acid	*96*		*21 - 143*
2,4-Dichlorophenylacetic acid	*86*		*21 - 143*

Client: Roux Environmental Engineering and Geology DPC
Job ID: 480-229348-1
Project/Site: BCP RI - 619 Exchange Street Site

Method: Draft-3 1633 - Per- and Polyfluoroalkyl Substances by LC/MS/MS

Lab Sample ID: MB 240-655949/1-A
Matrix: Water
Analysis Batch: 656011

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 655949

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)	ND		8.0	2.0	ng/L		05/14/25 09:16	05/14/25 16:23	1
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9Cl-PF3ONS)	ND		8.0	2.0	ng/L		05/14/25 09:16	05/14/25 16:23	1
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	ND		8.0	2.0	ng/L		05/14/25 09:16	05/14/25 16:23	1
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA)	ND		8.0	2.0	ng/L		05/14/25 09:16	05/14/25 16:23	1
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2 FTS)	ND		8.0	2.0	ng/L		05/14/25 09:16	05/14/25 16:23	1
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2 FTS)	ND		8.0	2.0	ng/L		05/14/25 09:16	05/14/25 16:23	1
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2 FTS)	ND		8.0	2.0	ng/L		05/14/25 09:16	05/14/25 16:23	1
N-ethylperfluorooctane sulfonamide (NEtFOSA)	ND		2.0	0.50	ng/L		05/14/25 09:16	05/14/25 16:23	1
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	ND		2.0	0.52	ng/L		05/14/25 09:16	05/14/25 16:23	1
N-ethylperfluorooctane sulfonamidoethanol (NEtFOSE)	ND		20	5.0	ng/L		05/14/25 09:16	05/14/25 16:23	1
N-methylperfluorooctane sulfonamide (NMeFOSA)	ND		2.0	0.50	ng/L		05/14/25 09:16	05/14/25 16:23	1
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	ND		2.0	0.62	ng/L		05/14/25 09:16	05/14/25 16:23	1
N-methylperfluorooctane sulfonamidoethanol (NMeFOSE)	ND		20	5.0	ng/L		05/14/25 09:16	05/14/25 16:23	1
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	ND		4.0	1.2	ng/L		05/14/25 09:16	05/14/25 16:23	1
Perfluorobutanesulfonic acid (PFBS)	ND		2.0	0.50	ng/L		05/14/25 09:16	05/14/25 16:23	1
Perfluorobutanoic acid (PFBA)	ND		8.0	2.1	ng/L		05/14/25 09:16	05/14/25 16:23	1
Perfluorodecanesulfonic acid (PFDS)	ND		2.0	0.50	ng/L		05/14/25 09:16	05/14/25 16:23	1
Perfluorodecanoic acid (PFDA)	ND		2.0	0.50	ng/L		05/14/25 09:16	05/14/25 16:23	1
Perfluorododecanesulfonic acid (PFDoS)	ND		2.0	0.50	ng/L		05/14/25 09:16	05/14/25 16:23	1
Perfluorododecanoic acid (PFDoA)	ND		2.0	0.50	ng/L		05/14/25 09:16	05/14/25 16:23	1
Perfluoro (2-ethoxyethane) sulfonic acid (PFEESA)	ND		4.0	1.0	ng/L		05/14/25 09:16	05/14/25 16:23	1
Perfluoroheptanesulfonic acid (PFHpS)	ND		2.0	0.50	ng/L		05/14/25 09:16	05/14/25 16:23	1
Perfluoroheptanoic acid (PFHpA)	ND		2.0	0.50	ng/L		05/14/25 09:16	05/14/25 16:23	1
3-Perfluoroheptylpropanoic acid (7:3 FTCA)	ND		50	15	ng/L		05/14/25 09:16	05/14/25 16:23	1
Perfluorohexanesulfonic acid (PFHxS)	ND		2.0	0.52	ng/L		05/14/25 09:16	05/14/25 16:23	1
Perfluorohexanoic acid (PFHxA)	ND		2.0	0.50	ng/L		05/14/25 09:16	05/14/25 16:23	1
Perfluoro-4-methoxybutanoic acid (PFMBA)	ND		4.0	1.0	ng/L		05/14/25 09:16	05/14/25 16:23	1
Perfluoro-3-methoxypropanoic acid (PFMPA)	ND		4.0	1.0	ng/L		05/14/25 09:16	05/14/25 16:23	1
Perfluorononanesulfonic acid (PFNS)	ND		2.0	0.50	ng/L		05/14/25 09:16	05/14/25 16:23	1
Perfluorononanoic acid (PFNA)	ND		2.0	0.50	ng/L		05/14/25 09:16	05/14/25 16:23	1
Perfluorooctanesulfonamide (PFOSA)	ND		2.0	0.50	ng/L		05/14/25 09:16	05/14/25 16:23	1
Perfluorooctanesulfonic acid (PFOS)	ND		2.0	0.50	ng/L		05/14/25 09:16	05/14/25 16:23	1
Perfluorooctanoic acid (PFOA)	ND		2.0	0.50	ng/L		05/14/25 09:16	05/14/25 16:23	1

Method: Draft-3 1633 - Per- and Polyfluoroalkyl Substances by LC/MS/MS (Continued)

Lab Sample ID: MB 240-655949/1-A
Matrix: Water
Analysis Batch: 656011

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 655949

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluoropentanesulfonic acid (PFPeS)	ND		2.0	0.50	ng/L		05/14/25 09:16	05/14/25 16:23	1
Perfluoropentanoic acid (PFPeA)	ND		4.0	1.0	ng/L		05/14/25 09:16	05/14/25 16:23	1
3-Perfluoropentylpropanoic acid (5:3 FTCA)	ND		50	13	ng/L		05/14/25 09:16	05/14/25 16:23	1
3-Perfluoropropylpropanoic acid (3:3 FTCA)	ND		10	2.5	ng/L		05/14/25 09:16	05/14/25 16:23	1
Perfluorotetradecanoic acid (PFTeDA)	ND		2.0	0.50	ng/L		05/14/25 09:16	05/14/25 16:23	1
Perfluorotridecanoic acid (PFTrDA)	ND		2.0	0.50	ng/L		05/14/25 09:16	05/14/25 16:23	1
Perfluoroundecanoic acid (PFUnA)	ND		2.0	0.50	ng/L		05/14/25 09:16	05/14/25 16:23	1

Isotope Dilution	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C3 HFPO-DA	*108*		*25 - 160*	*05/14/25 09:16*	*05/14/25 16:23*	*1*
13C4 PFBA	*116*		*10 - 130*	*05/14/25 09:16*	*05/14/25 16:23*	*1*
13C3 PFBS	*116*		*55 - 150*	*05/14/25 09:16*	*05/14/25 16:23*	*1*
13C6 PFDA	*91.2*		*50 - 140*	*05/14/25 09:16*	*05/14/25 16:23*	*1*
13C2-PFDoDA	*83.0*		*10 - 150*	*05/14/25 09:16*	*05/14/25 16:23*	*1*
13C4 PFHpA	*105*		*55 - 150*	*05/14/25 09:16*	*05/14/25 16:23*	*1*
13C5 PFHxA	*109*		*55 - 150*	*05/14/25 09:16*	*05/14/25 16:23*	*1*
13C3 PFHxS	*113*		*55 - 150*	*05/14/25 09:16*	*05/14/25 16:23*	*1*
13C9 PFNA	*101*		*55 - 140*	*05/14/25 09:16*	*05/14/25 16:23*	*1*
13C8 PFOA	*110*		*60 - 140*	*05/14/25 09:16*	*05/14/25 16:23*	*1*
13C8 PFOS	*103*		*45 - 140*	*05/14/25 09:16*	*05/14/25 16:23*	*1*
13C8 PFOSA	*98.6*		*30 - 130*	*05/14/25 09:16*	*05/14/25 16:23*	*1*
13C5 PFPeA	*112*		*35 - 150*	*05/14/25 09:16*	*05/14/25 16:23*	*1*
13C2 PFTeDA	*75.4*		*10 - 130*	*05/14/25 09:16*	*05/14/25 16:23*	*1*
13C7 PFUnA	*87.8*		*30 - 140*	*05/14/25 09:16*	*05/14/25 16:23*	*1*
d5-NEtFOSAA	*147*		*10 - 200*	*05/14/25 09:16*	*05/14/25 16:23*	*1*
d9-N-EtFOSE-M	*69.0*		*10 - 150*	*05/14/25 09:16*	*05/14/25 16:23*	*1*
d5-NEtPFOSA	*75.3*		*10 - 130*	*05/14/25 09:16*	*05/14/25 16:23*	*1*
D3-NMeFOSA	*80.9*		*15 - 130*	*05/14/25 09:16*	*05/14/25 16:23*	*1*
d3-NMeFOSAA	*96.5*		*45 - 200*	*05/14/25 09:16*	*05/14/25 16:23*	*1*
d7-N-MeFOSE-M	*76.6*		*10 - 150*	*05/14/25 09:16*	*05/14/25 16:23*	*1*
M2-4:2 FTS	*119*		*60 - 200*	*05/14/25 09:16*	*05/14/25 16:23*	*1*
M2-6:2 FTS	*113*		*60 - 200*	*05/14/25 09:16*	*05/14/25 16:23*	*1*
M2-8:2 FTS	*107*		*50 - 200*	*05/14/25 09:16*	*05/14/25 16:23*	*1*

Lab Sample ID: LCS 240-655949/3-A
Matrix: Water
Analysis Batch: 656011

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 655949

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)	94.4	82.9		ng/L		88	46 - 156
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9Cl-PF3ONS)	93.4	88.9		ng/L		95	56 - 156
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	94.6	91.0		ng/L		96	68 - 146

Method: Draft-3 1633 - Per- and Polyfluoroalkyl Substances by LC/MS/MS (Continued)

Lab Sample ID: LCS 240-655949/3-A
Matrix: Water
Analysis Batch: 656011

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 655949

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA)	100	97.4		ng/L		97	63 - 144
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2 FTS)	96.0	100		ng/L		104	63 - 152
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2 FTS)	93.8	80.1		ng/L		85	67 - 146
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2 FTS)	95.2	89.7		ng/L		94	61 - 151
N-ethylperfluorooctane sulfonamide (NEtFOSA)	25.0	24.3		ng/L		97	65 - 139
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	25.0	23.1		ng/L		93	59 - 146
N-ethylperfluorooctane sulfonamidoethanol (NEtFOSE)	250	248		ng/L		99	69 - 137
N-methylperfluorooctane sulfonamide (NMeFOSA)	25.0	21.7		ng/L		87	63 - 145
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	25.0	23.9		ng/L		95	58 - 144
N-methylperfluorooctane sulfonamidoethanol (NMeFOSE)	250	240		ng/L		96	71 - 136
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	50.0	47.2		ng/L		94	48 - 161
Perfluorobutanesulfonic acid (PFBS)	22.2	19.2		ng/L		86	62 - 144
Perfluorobutanoic acid (PFBA)	100	97.4		ng/L		97	58 - 148
Perfluorodecanesulfonic acid (PFDS)	24.1	20.2		ng/L		84	51 - 147
Perfluorodecanoic acid (PFDA)	25.0	25.5		ng/L		102	52 - 147
Perfluorododecanesulfonic acid (PFDoS)	24.3	21.3		ng/L		88	36 - 145
Perfluorododecanoic acid (PFDoA)	25.0	24.3		ng/L		97	64 - 142
Perfluoro (2-ethoxyethane) sulfonic acid (PFEESA)	44.6	41.1		ng/L		92	56 - 151
Perfluoroheptanesulfonic acid (PFHpS)	23.9	23.8		ng/L		100	55 - 152
Perfluoroheptanoic acid (PFHpA)	25.0	27.5		ng/L		110	54 - 154
3-Perfluoroheptylpropanoic acid (7:3 FTCA)	625	531		ng/L		85	50 - 138
Perfluorohexanesulfonic acid (PFHxS)	22.8	19.6		ng/L		86	57 - 146
Perfluorohexanoic acid (PFHxA)	25.0	22.2		ng/L		89	55 - 152
Perfluoro-4-methoxybutanoic acid (PFMBA)	50.0	43.9		ng/L		88	55 - 148
Perfluoro-3-methoxypropanoic acid (PFMPA)	50.0	43.4		ng/L		87	51 - 145
Perfluorononanesulfonic acid (PFNS)	24.1	22.8		ng/L		95	52 - 148
Perfluorononanoic acid (PFNA)	25.0	22.6		ng/L		90	59 - 149
Perfluorooctanesulfonamide (PFOSA)	25.0	22.8		ng/L		91	61 - 148
Perfluorooctanesulfonic acid (PFOS)	23.3	24.4		ng/L		105	58 - 149
Perfluorooctanoic acid (PFOA)	25.0	24.3		ng/L		97	52 - 161

Method: Draft-3 1633 - Per- and Polyfluoroalkyl Substances by LC/MS/MS (Continued)

Lab Sample ID: LCS 240-655949/3-A
Matrix: Water
Analysis Batch: 656011

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 655949

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Perfluoropentanesulfonic acid (PFPeS)	23.5	24.8		ng/L		105	59 - 151
Perfluoropentanoic acid (PFPeA)	50.0	44.2		ng/L		88	54 - 152
3-Perfluoropentylpropanoic acid (5:3 FTCA)	625	601		ng/L		96	63 - 134
3-Perfluoropropylpropanoic acid (3:3 FTCA)	125	111		ng/L		89	62 - 129
Perfluorotetradecanoic acid (PFTeDA)	25.0	23.7		ng/L		95	47 - 161
Perfluorotridecanoic acid (PFTrDA)	25.0	24.8		ng/L		99	49 - 148
Perfluoroundecanoic acid (PFUnA)	25.0	24.7		ng/L		99	48 - 159

Isotope Dilution	*LCS %Recovery*	*LCS Qualifier*	*Limits*
13C3 HFPO-DA	*73.2*		*25 - 160*
13C4 PFBA	*83.8*		*10 - 130*
13C3 PFBS	*80.2*		*25 - 150*
13C6 PFDA	*66.5*		*20 - 140*
13C2-PFDoDA	*63.6*		*10 - 150*
13C4 PFHpA	*72.2*		*40 - 150*
13C5 PFHxA	*73.5*		*40 - 150*
13C3 PFHxS	*79.0*		*25 - 150*
13C9 PFNA	*72.3*		*30 - 140*
13C8 PFOA	*77.4*		*30 - 140*
13C8 PFOS	*74.4*		*20 - 140*
13C8 PFOSA	*70.8*		*10 - 130*
13C5 PFPeA	*73.5*		*40 - 150*
13C2 PFTeDA	*64.6*		*10 - 130*
13C7 PFUnA	*66.0*		*20 - 140*
d5-NEtFOSAA	*95.0*		*10 - 200*
d9-N-EtFOSE-M	*60.1*		*10 - 150*
d5-NEtPFOSA	*58.0*		*10 - 130*
D3-NMeFOSA	*60.1*		*10 - 130*
d3-NMeFOSAA	*71.8*		*10 - 200*
d7-N-MeFOSE-M	*61.5*		*10 - 150*
M2-4:2 FTS	*81.8*		*25 - 200*
M2-6:2 FTS	*78.0*		*25 - 200*
M2-8:2 FTS	*73.7*		*25 - 200*

Lab Sample ID: LLCS 240-655949/2-A
Matrix: Water
Analysis Batch: 656011

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 655949

Analyte	Spike Added	LLCS Result	LLCS Qualifier	Unit	D	%Rec	%Rec Limits
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)	7.55	6.54	J	ng/L		87	36 - 158
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9Cl-PF3ONS)	7.47	6.76	J	ng/L		90	44 - 167

Method: Draft-3 1633 - Per- and Polyfluoroalkyl Substances by LC/MS/MS (Continued)

Lab Sample ID: LLCS 240-655949/2-A
Matrix: Water
Analysis Batch: 656011

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 655949

Analyte	Spike Added	LLCS Result	LLCS Qualifier	Unit	D	%Rec	%Rec Limits
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	7.57	7.28	J	ng/L		96	61 - 148
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA)	8.00	7.97	J	ng/L		100	58 - 154
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2 FTS)	7.68	8.37		ng/L		109	46 - 165
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2 FTS)	7.50	6.51	J	ng/L		87	52 - 158
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2 FTS)	7.62	7.86	J	ng/L		103	48 - 158
N-ethylperfluorooctane sulfonamide (NEtFOSA)	2.00	1.80	J	ng/L		90	49 - 156
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	2.00	2.15		ng/L		107	51 - 154
N-ethylperfluorooctane sulfonamidoethanol (NEtFOSE)	20.0	20.7		ng/L		103	60 - 147
N-methylperfluorooctane sulfonamide (NMeFOSA)	2.00	1.89	J	ng/L		94	54 - 155
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	2.00	1.96	J	ng/L		98	32 - 160
N-methylperfluorooctane sulfonamidoethanol (NMeFOSE)	20.0	19.8	J	ng/L		99	56 - 151
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	4.00	3.81	J	ng/L		95	47 - 160
Perfluorobutanesulfonic acid (PFBS)	1.78	1.58	J	ng/L		89	63 - 145
Perfluorobutanoic acid (PFBA)	8.00	8.01		ng/L		100	44 - 157
Perfluorodecanesulfonic acid (PFDS)	1.93	1.50	J	ng/L		78	50 - 144
Perfluorodecanoic acid (PFDA)	2.00	2.07		ng/L		104	43 - 158
Perfluorododecanesulfonic acid (PFDoS)	1.94	1.50	J	ng/L		77	30 - 138
Perfluorododecanoic acid (PFDoA)	2.00	1.97	J	ng/L		99	60 - 141
Perfluoro (2-ethoxyethane) sulfonic acid (PFEESA)	3.57	3.46	J	ng/L		97	56 - 144
Perfluoroheptanesulfonic acid (PFHpS)	1.91	1.94	J	ng/L		102	51 - 150
Perfluoroheptanoic acid (PFHpA)	2.00	2.39		ng/L		119	56 - 150
3-Perfluoroheptylpropanoic acid (7:3 FTCA)	50.0	43.4	J	ng/L		87	36 - 149
Perfluorohexanesulfonic acid (PFHxS)	1.82	1.68	J	ng/L		92	44 - 158
Perfluorohexanoic acid (PFHxA)	2.00	1.88	J	ng/L		94	62 - 149
Perfluoro-4-methoxybutanoic acid (PFMBA)	4.00	3.40	J	ng/L		85	49 - 154
Perfluoro-3-methoxypropanoic acid (PFMPA)	4.00	3.49	J	ng/L		87	48 - 150
Perfluorononanesulfonic acid (PFNS)	1.92	1.81	J	ng/L		94	46 - 151
Perfluorononanoic acid (PFNA)	2.00	1.80	J	ng/L		90	53 - 157
Perfluorooctanesulfonamide (PFOSA)	2.00	1.88	J	ng/L		94	47 - 163
Perfluorooctanesulfonic acid (PFOS)	1.86	2.00		ng/L		107	43 - 162

Method: Draft-3 1633 - Per- and Polyfluoroalkyl Substances by LC/MS/MS (Continued)

Lab Sample ID: LLCS 240-655949/2-A
Matrix: Water
Analysis Batch: 656011

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 655949

Analyte	Spike Added	LLCS Result	LLCS Qualifier	Unit	D	%Rec	%Rec Limits
Perfluorooctanoic acid (PFOA)	2.00	2.15		ng/L		107	57 - 161
Perfluoropentanesulfonic acid (PFPeS)	1.88	2.01		ng/L		107	58 - 144
Perfluoropentanoic acid (PFPeA)	4.00	3.49	J	ng/L		87	57 - 148
3-Perfluoropentylpropanoic acid (5:3 FTCA)	50.0	50.1		ng/L		100	39 - 156
3-Perfluoropropylpropanoic acid (3:3 FTCA)	10.0	9.86	J	ng/L		99	32 - 161
Perfluorotetradecanoic acid (PFTeDA)	2.00	1.92	J	ng/L		96	52 - 156
Perfluorotridecanoic acid (PFTrDA)	2.00	2.14		ng/L		107	52 - 140
Perfluoroundecanoic acid (PFUnA)	2.00	1.90	J	ng/L		95	50 - 155

Isotope Dilution	*LLCS %Recovery*	*LLCS Qualifier*	*Limits*
13C3 HFPO-DA	*107*		*25 - 160*
13C4 PFBA	*115*		*10 - 130*
13C3 PFBS	*116*		*25 - 150*
13C6 PFDA	*93.4*		*20 - 140*
13C2-PFDoDA	*84.2*		*10 - 150*
13C4 PFHpA	*100*		*40 - 150*
13C5 PFHxA	*103*		*40 - 150*
13C3 PFHxS	*114*		*25 - 150*
13C9 PFNA	*99.8*		*30 - 140*
13C8 PFOA	*108*		*30 - 140*
13C8 PFOS	*105*		*20 - 140*
13C8 PFOSA	*97.2*		*10 - 130*
13C5 PFPeA	*108*		*40 - 150*
13C2 PFTeDA	*73.5*		*10 - 130*
13C7 PFUnA	*90.1*		*20 - 140*
d5-NEtFOSAA	*123*		*10 - 200*
d9-N-EtFOSE-M	*75.7*		*10 - 150*
d5-NEtPFOSA	*76.6*		*10 - 130*
D3-NMeFOSA	*80.2*		*10 - 130*
d3-NMeFOSAA	*93.4*		*10 - 200*
d7-N-MeFOSE-M	*84.0*		*10 - 150*
M2-4:2 FTS	*116*		*25 - 200*
M2-6:2 FTS	*112*		*25 - 200*
M2-8:2 FTS	*98.1*		*25 - 200*

Lab Sample ID: 480-229348-1 MS
Matrix: Water
Analysis Batch: 656011

Client Sample ID: MW-1
Prep Type: Total/NA
Prep Batch: 655949

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)	ND		590	516		ng/L		88	46 - 156

Method: Draft-3 1633 - Per- and Polyfluoroalkyl Substances by LC/MS/MS (Continued)

Lab Sample ID: 480-229348-1 MS
Matrix: Water
Analysis Batch: 656011

Client Sample ID: MW-1
Prep Type: Total/NA
Prep Batch: 655949

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9Cl-PF3ONS)	ND		584	550		ng/L		94	56 - 156
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	ND		591	572		ng/L		97	68 - 146
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA)	ND		625	614		ng/L		98	63 - 144
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2 FTS)	ND		600	599		ng/L		100	63 - 152
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2 FTS)	ND		586	514		ng/L		88	67 - 146
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2 FTS)	ND		595	541		ng/L		91	61 - 151
N-ethylperfluorooctane sulfonamide (NEtFOSA)	ND		156	150		ng/L		96	65 - 139
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	ND		156	153		ng/L		98	59 - 146
N-ethylperfluorooctane sulfonamidoethanol (NEtFOSE)	ND		1560	1500		ng/L		96	69 - 137
N-methylperfluorooctane sulfonamide (NMeFOSA)	ND		156	138		ng/L		89	63 - 145
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	ND		156	150		ng/L		96	58 - 144
N-methylperfluorooctane sulfonamidoethanol (NMeFOSE)	ND		1560	1520		ng/L		97	71 - 136
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	ND		313	294		ng/L		94	48 - 161
Perfluorobutanesulfonic acid (PFBS)	ND		139	122		ng/L		88	62 - 144
Perfluorobutanoic acid (PFBA)	ND		625	629		ng/L		101	58 - 148
Perfluorodecanesulfonic acid (PFDS)	ND		151	125		ng/L		83	51 - 147
Perfluorodecanoic acid (PFDA)	ND		156	162		ng/L		103	52 - 147
Perfluorododecanesulfonic acid (PFDoS)	ND		152	127		ng/L		84	36 - 145
Perfluorododecanoic acid (PFDoA)	ND		156	145		ng/L		93	64 - 142
Perfluoro (2-ethoxyethane) sulfonic acid (PFEESA)	ND		279	266		ng/L		95	56 - 151
Perfluoroheptanesulfonic acid (PFHpS)	ND		149	151		ng/L		101	55 - 152
Perfluoroheptanoic acid (PFHpA)	ND		156	174		ng/L		111	54 - 154
3-Perfluoroheptylpropanoic acid (7:3 FTCA)	ND		3910	3360		ng/L		86	50 - 138
Perfluorohexanesulfonic acid (PFHxS)	ND		143	122		ng/L		85	57 - 146
Perfluorohexanoic acid (PFHxA)	5.6	J I	156	146		ng/L		90	55 - 152
Perfluoro-4-methoxybutanoic acid (PFMBA)	ND		313	272		ng/L		87	55 - 148
Perfluoro-3-methoxypropanoic acid (PFMPA)	ND		313	276		ng/L		88	51 - 145
Perfluorononanesulfonic acid (PFNS)	ND		150	143		ng/L		95	52 - 148
Perfluorononanoic acid (PFNA)	ND		156	139		ng/L		89	59 - 149

Method: Draft-3 1633 - Per- and Polyfluoroalkyl Substances by LC/MS/MS (Continued)

Lab Sample ID: 480-229348-1 MS
Matrix: Water
Analysis Batch: 656011

Client Sample ID: MW-1
Prep Type: Total/NA
Prep Batch: 655949

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Perfluorooctanesulfonamide (PFOSA)	ND		156	144		ng/L		92	61 - 148
Perfluorooctanesulfonic acid (PFOS)	ND		145	150		ng/L		103	58 - 149
Perfluorooctanoic acid (PFOA)	ND		156	159		ng/L		102	52 - 161
Perfluoropentanesulfonic acid (PFPeS)	ND		147	154		ng/L		105	59 - 151
Perfluoropentanoic acid (PFPeA)	ND		313	274		ng/L		88	54 - 152
3-Perfluoropentylpropanoic acid (5:3 FTCA)	ND		3910	3820		ng/L		98	63 - 134
3-Perfluoropropylpropanoic acid (3:3 FTCA)	ND		781	696		ng/L		89	62 - 129
Perfluorotetradecanoic acid (PFTeDA)	ND		156	155		ng/L		99	47 - 161
Perfluorotridecanoic acid (PFTrDA)	ND		156	158		ng/L		101	49 - 148
Perfluoroundecanoic acid (PFUnA)	ND		156	153		ng/L		98	48 - 159

Isotope Dilution	*MS %Recovery*	*MS Qualifier*	*Limits*
13C3 HFPO-DA	*103*		*25 - 160*
13C4 PFBA	*113*		*10 - 130*
13C3 PFBS	*114*		*55 - 150*
13C6 PFDA	*93.9*		*50 - 140*
13C2-PFDoDA	*90.3*		*10 - 150*
13C4 PFHpA	*102*		*55 - 150*
13C5 PFHxA	*103*		*55 - 150*
13C3 PFHxS	*112*		*55 - 150*
13C9 PFNA	*96.2*		*55 - 140*
13C8 PFOA	*105*		*60 - 140*
13C8 PFOS	*102*		*45 - 140*
13C8 PFOSA	*95.8*		*30 - 130*
13C5 PFPeA	*105*		*35 - 150*
13C2 PFTeDA	*82.7*		*10 - 130*
13C7 PFUnA	*94.0*		*30 - 140*
d5-NEtFOSAA	*133*		*10 - 200*
d9-N-EtFOSE-M	*79.8*		*10 - 150*
d5-NEtPFOSA	*77.0*		*10 - 130*
D3-NMeFOSA	*79.1*		*15 - 130*
d3-NMeFOSAA	*99.2*		*45 - 200*
d7-N-MeFOSE-M	*87.0*		*10 - 150*
M2-4:2 FTS	*113*		*60 - 200*
M2-6:2 FTS	*113*		*60 - 200*
M2-8:2 FTS	*108*		*50 - 200*

Method: Draft-3 1633 - Per- and Polyfluoroalkyl Substances by LC/MS/MS (Continued)

Lab Sample ID: 480-229348-1 MSD
Matrix: Water
Analysis Batch: 656011

Client Sample ID: MW-1
Prep Type: Total/NA
Prep Batch: 655949

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)	ND		590	471		ng/L		80	46 - 156	9	30
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9Cl-PF3ONS)	ND		584	506		ng/L		87	56 - 156	8	30
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	ND		591	578		ng/L		98	68 - 146	1	30
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA)	ND		625	619		ng/L		99	63 - 144	1	30
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2 FTS)	ND		600	590		ng/L		98	63 - 152	1	30
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2 FTS)	ND		586	504		ng/L		86	67 - 146	2	30
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2 FTS)	ND		595	574		ng/L		96	61 - 151	6	30
N-ethylperfluorooctane sulfonamide (NEtFOSA)	ND		156	158		ng/L		101	65 - 139	6	30
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	ND		156	171		ng/L		110	59 - 146	11	30
N-ethylperfluorooctane sulfonamidoethanol (NEtFOSE)	ND		1560	1680		ng/L		108	69 - 137	11	30
N-methylperfluorooctane sulfonamide (NMeFOSA)	ND		156	136		ng/L		87	63 - 145	2	30
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	ND		156	172		ng/L		110	58 - 144	13	30
N-methylperfluorooctane sulfonamidoethanol (NMeFOSE)	ND		1560	1650		ng/L		105	71 - 136	8	30
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	ND		313	284		ng/L		91	48 - 161	3	30
Perfluorobutanesulfonic acid (PFBS)	ND		139	123		ng/L		89	62 - 144	0	30
Perfluorobutanoic acid (PFBA)	ND		625	622		ng/L		100	58 - 148	1	30
Perfluorodecanesulfonic acid (PFDS)	ND		151	117		ng/L		77	51 - 147	7	30
Perfluorodecanoic acid (PFDA)	ND		156	170		ng/L		109	52 - 147	5	30
Perfluorododecanesulfonic acid (PFDoS)	ND		152	121		ng/L		80	36 - 145	5	30
Perfluorododecanoic acid (PFDoA)	ND		156	154		ng/L		98	64 - 142	6	30
Perfluoro (2-ethoxyethane) sulfonic acid (PFEESA)	ND		279	261		ng/L		94	56 - 151	2	30
Perfluoroheptanesulfonic acid (PFHpS)	ND		149	161		ng/L		108	55 - 152	6	30
Perfluoroheptanoic acid (PFHpA)	ND		156	184		ng/L		118	54 - 154	6	30
3-Perfluoroheptylpropanoic acid (7:3 FTCA)	ND		3910	2910		ng/L		75	50 - 138	14	30
Perfluorohexanesulfonic acid (PFHxS)	ND		143	126		ng/L		88	57 - 146	3	30
Perfluorohexanoic acid (PFHxA)	5.6	J I	156	153		ng/L		94	55 - 152	5	30
Perfluoro-4-methoxybutanoic acid (PFMBA)	ND		313	274		ng/L		88	55 - 148	1	30
Perfluoro-3-methoxypropanoic acid (PFMPA)	ND		313	262		ng/L		84	51 - 145	5	30

Method: Draft-3 1633 - Per- and Polyfluoroalkyl Substances by LC/MS/MS (Continued)

Lab Sample ID: 480-229348-1 MSD
Matrix: Water
Analysis Batch: 656011

Client Sample ID: MW-1
Prep Type: Total/NA
Prep Batch: 655949

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Perfluorononanesulfonic acid (PFNS)	ND		150	138		ng/L		92	52 - 148	4	30
Perfluorononanoic acid (PFNA)	ND		156	143		ng/L		92	59 - 149	3	30
Perfluorooctanesulfonamide (PFOSA)	ND		156	150		ng/L		96	61 - 148	4	30
Perfluorooctanesulfonic acid (PFOS)	ND		145	153		ng/L		105	58 - 149	2	30
Perfluorooctanoic acid (PFOA)	ND		156	155		ng/L		99	52 - 161	2	30
Perfluoropentanesulfonic acid (PFPeS)	ND		147	156		ng/L		106	59 - 151	1	30
Perfluoropentanoic acid (PFPeA)	ND		313	271		ng/L		87	54 - 152	1	30
3-Perfluoropentylpropanoic acid (5:3 FTCA)	ND		3910	3640		ng/L		93	63 - 134	5	30
3-Perfluoropropylpropanoic acid (3:3 FTCA)	ND		781	704		ng/L		90	62 - 129	1	30
Perfluorotetradecanoic acid (PFTeDA)	ND		156	155		ng/L		99	47 - 161	0	30
Perfluorotridecanoic acid (PFTrDA)	ND		156	163		ng/L		104	49 - 148	3	30
Perfluoroundecanoic acid (PFUnA)	ND		156	160		ng/L		103	48 - 159	4	30

Isotope Dilution	*MSD %Recovery*	*MSD Qualifier*	*Limits*
13C3 HFPO-DA	*102*		*25 - 160*
13C4 PFBA	*115*		*10 - 130*
13C3 PFBS	*112*		*55 - 150*
13C6 PFDA	*80.3*		*50 - 140*
13C2-PFDoDA	*75.3*		*10 - 150*
13C4 PFHpA	*98.3*		*55 - 150*
13C5 PFHxA	*104*		*55 - 150*
13C3 PFHxS	*111*		*55 - 150*
13C9 PFNA	*93.5*		*55 - 140*
13C8 PFOA	*108*		*60 - 140*
13C8 PFOS	*99.3*		*45 - 140*
13C8 PFOSA	*82.9*		*30 - 130*
13C5 PFPeA	*105*		*35 - 150*
13C2 PFTeDA	*74.2*		*10 - 130*
13C7 PFUnA	*76.9*		*30 - 140*
d5-NEtFOSAA	*107*		*10 - 200*
d9-N-EtFOSE-M	*38.1*		*10 - 150*
d5-NEtPFOSA	*66.6*		*10 - 130*
D3-NMeFOSA	*70.1*		*15 - 130*
d3-NMeFOSAA	*80.6*		*45 - 200*
d7-N-MeFOSE-M	*52.6*		*10 - 150*
M2-4:2 FTS	*119*		*60 - 200*
M2-6:2 FTS	*105*		*60 - 200*
M2-8:2 FTS	*98.0*		*50 - 200*

Method: Draft-3 1633 - Per- and Polyfluoroalkyl Substances by LC/MS/MS (Continued)

Lab Sample ID: 480-229348-5 DU
Matrix: Water
Analysis Batch: 656011

Client Sample ID: MW-5
Prep Type: Total/NA
Prep Batch: 655949

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)	ND		ND		ng/L		NC	30
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9Cl-PF3ONS)	ND		ND		ng/L		NC	30
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	ND		ND		ng/L		NC	30
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA)	ND		ND		ng/L		NC	30
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2 FTS)	ND		ND		ng/L		NC	30
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2 FTS)	ND		ND		ng/L		NC	30
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2 FTS)	ND		ND		ng/L		NC	30
N-ethylperfluorooctane sulfonamide (NEtFOSA)	ND		ND		ng/L		NC	30
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	8.1	J	6.11	J	ng/L		28	30
N-ethylperfluorooctane sulfonamidoethanol (NEtFOSE)	ND		ND		ng/L		NC	30
N-methylperfluorooctane sulfonamide (NMeFOSA)	ND		ND		ng/L		NC	30
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	ND		ND		ng/L		NC	30
N-methylperfluorooctane sulfonamidoethanol (NMeFOSE)	ND		ND		ng/L		NC	30
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	ND		ND		ng/L		NC	30
Perfluorobutanesulfonic acid (PFBS)	ND		ND		ng/L		NC	30
Perfluorobutanoic acid (PFBA)	ND		ND		ng/L		NC	30
Perfluorodecanesulfonic acid (PFDS)	ND		ND		ng/L		NC	30
Perfluorodecanoic acid (PFDA)	ND		ND		ng/L		NC	30
Perfluorododecanesulfonic acid (PFDoS)	ND		ND		ng/L		NC	30
Perfluorododecanoic acid (PFDoA)	ND		ND		ng/L		NC	30
Perfluoro (2-ethoxyethane) sulfonic acid (PFEESA)	ND		ND		ng/L		NC	30
Perfluoroheptanesulfonic acid (PFHpS)	ND		ND		ng/L		NC	30
Perfluoroheptanoic acid (PFHpA)	ND		ND		ng/L		NC	30
3-Perfluoroheptylpropanoic acid (7:3 FTCA)	ND		ND		ng/L		NC	30
Perfluorohexanesulfonic acid (PFHxS)	ND		ND		ng/L		NC	30
Perfluorohexanoic acid (PFHxA)	ND		ND		ng/L		NC	30
Perfluoro-4-methoxybutanoic acid (PFMBA)	ND		ND		ng/L		NC	30
Perfluoro-3-methoxypropanoic acid (PFMPA)	ND		ND		ng/L		NC	30

Method: Draft-3 1633 - Per- and Polyfluoroalkyl Substances by LC/MS/MS (Continued)

Lab Sample ID: 480-229348-5 DU
Matrix: Water
Analysis Batch: 656011

Client Sample ID: MW-5
Prep Type: Total/NA
Prep Batch: 655949

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Perfluorononanesulfonic acid (PFNS)	ND			ND		ng/L				NC	30
Perfluorononanoic acid (PFNA)	ND			ND		ng/L				NC	30
Perfluorooctanesulfonamide (PFOSA)	ND			ND		ng/L				NC	30
Perfluorooctanesulfonic acid (PFOS)	2.3	J		2.10	J	ng/L				7	30
Perfluorooctanoic acid (PFOA)	3.9	J		3.50	J	ng/L				11	30
Perfluoropentanesulfonic acid (PFPeS)	ND			ND		ng/L				NC	30
Perfluoropentanoic acid (PFPeA)	ND			ND		ng/L				NC	30
3-Perfluoropentylpropanoic acid (5:3 FTCA)	ND			ND		ng/L				NC	30
3-Perfluoropropylpropanoic acid (3:3 FTCA)	ND			ND		ng/L				NC	30
Perfluorotetradecanoic acid (PFTeDA)	ND			ND		ng/L				NC	30
Perfluorotridecanoic acid (PFTrDA)	ND			ND		ng/L				NC	30
Perfluoroundecanoic acid (PFUnA)	ND			ND		ng/L				NC	30

Isotope Dilution	*DU %Recovery*	*DU Qualifier*	*Limits*
13C3 HFPO-DA	*103*		*25 - 160*
13C4 PFBA	*113*		*10 - 130*
13C3 PFBS	*114*		*55 - 150*
13C6 PFDA	*91.0*		*50 - 140*
13C2-PFDoDA	*78.6*		*10 - 150*
13C4 PFHpA	*101*		*55 - 150*
13C5 PFHxA	*105*		*55 - 150*
13C3 PFHxS	*107*		*55 - 150*
13C9 PFNA	*96.5*		*55 - 140*
13C8 PFOA	*106*		*60 - 140*
13C8 PFOS	*95.1*		*45 - 140*
13C8 PFOSA	*90.1*		*30 - 130*
13C5 PFPeA	*105*		*35 - 150*
13C2 PFTeDA	*71.2*		*10 - 130*
13C7 PFUnA	*83.2*		*30 - 140*
d5-NEtFOSAA	*115*		*10 - 200*
d9-N-EtFOSE-M	*66.4*		*10 - 150*
d5-NEtPFOSA	*70.5*		*10 - 130*
D3-NMeFOSA	*75.9*		*15 - 130*
d3-NMeFOSAA	*91.1*		*45 - 200*
d7-N-MeFOSE-M	*72.4*		*10 - 150*
M2-4:2 FTS	*121*		*60 - 200*
M2-6:2 FTS	*106*		*60 - 200*
M2-8:2 FTS	*98.5*		*50 - 200*

Method: 6010D - Metals (ICP)

Lab Sample ID: MB 480-745846/1-A
Matrix: Water
Analysis Batch: 745947

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 745846

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	ND		0.20	0.060	mg/L		05/13/25 07:56	05/13/25 13:43	1
Antimony	ND		0.020	0.0068	mg/L		05/13/25 07:56	05/13/25 13:43	1
Arsenic	ND		0.015	0.0056	mg/L		05/13/25 07:56	05/13/25 13:43	1
Barium	ND		0.0020	0.00070	mg/L		05/13/25 07:56	05/13/25 13:43	1
Beryllium	ND		0.0020	0.00030	mg/L		05/13/25 07:56	05/13/25 13:43	1
Cadmium	ND		0.0020	0.00050	mg/L		05/13/25 07:56	05/13/25 13:43	1
Calcium	ND		0.50	0.10	mg/L		05/13/25 07:56	05/13/25 13:43	1
Chromium	ND		0.0040	0.0010	mg/L		05/13/25 07:56	05/13/25 13:43	1
Cobalt	ND		0.0040	0.00063	mg/L		05/13/25 07:56	05/13/25 13:43	1
Copper	ND		0.010	0.0016	mg/L		05/13/25 07:56	05/13/25 13:43	1
Iron	ND		0.050	0.019	mg/L		05/13/25 07:56	05/13/25 13:43	1
Lead	ND		0.010	0.0030	mg/L		05/13/25 07:56	05/13/25 13:43	1
Magnesium	ND		0.20	0.043	mg/L		05/13/25 07:56	05/13/25 13:43	1
Manganese	ND		0.0030	0.00040	mg/L		05/13/25 07:56	05/13/25 13:43	1
Nickel	ND		0.010	0.0013	mg/L		05/13/25 07:56	05/13/25 13:43	1
Potassium	ND		0.50	0.10	mg/L		05/13/25 07:56	05/13/25 13:43	1
Selenium	ND		0.025	0.0087	mg/L		05/13/25 07:56	05/13/25 13:43	1
Silver	ND	^5-	0.0060	0.0017	mg/L		05/13/25 07:56	05/13/25 13:43	1
Sodium	ND		1.0	0.32	mg/L		05/13/25 07:56	05/13/25 13:43	1
Thallium	ND		0.020	0.010	mg/L		05/13/25 07:56	05/13/25 13:43	1
Vanadium	ND		0.0050	0.0015	mg/L		05/13/25 07:56	05/13/25 13:43	1
Zinc	ND		0.010	0.0015	mg/L		05/13/25 07:56	05/13/25 13:43	1

Lab Sample ID: LCS 480-745846/2-A
Matrix: Water
Analysis Batch: 745947

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 745846

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Aluminum	5.10	4.94		mg/L		97	80 - 120
Antimony	0.500	0.479		mg/L		96	80 - 120
Arsenic	1.00	0.970		mg/L		97	80 - 120
Barium	1.00	1.01		mg/L		101	80 - 120
Beryllium	0.496	0.521		mg/L		105	80 - 120
Cadmium	0.500	0.452		mg/L		90	80 - 120
Calcium	25.0	25.10		mg/L		100	80 - 120
Chromium	0.500	0.501		mg/L		100	80 - 120
Cobalt	0.500	0.471		mg/L		94	80 - 120
Copper	0.500	0.505		mg/L		101	80 - 120
Iron	5.10	5.59		mg/L		110	80 - 120
Lead	0.500	0.477		mg/L		95	80 - 120
Magnesium	25.0	24.15		mg/L		97	80 - 120
Manganese	0.500	0.496		mg/L		99	80 - 120
Nickel	0.500	0.479		mg/L		96	80 - 120
Potassium	25.0	24.36		mg/L		97	80 - 120
Selenium	1.00	0.933		mg/L		93	80 - 120
Silver	0.0500	0.0500	^5-	mg/L		100	80 - 120
Sodium	25.0	24.93		mg/L		100	80 - 120
Thallium	1.00	0.982		mg/L		98	80 - 120
Vanadium	0.500	0.497		mg/L		99	80 - 120

Method: 6010D - Metals (ICP) (Continued)

Lab Sample ID: LCS 480-745846/2-A
Client Sample ID: Lab Control Sample
Matrix: Water
Prep Type: Total/NA
Analysis Batch: 745947
Prep Batch: 745846

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Zinc	0.500	0.495		mg/L		99	80 - 120

Lab Sample ID: 480-229348-1 MS
Client Sample ID: MW-1
Matrix: Water
Prep Type: Total/NA
Analysis Batch: 745947
Prep Batch: 745846

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Aluminum	130	F2	5.10	35.99	4	mg/L		-1840	75 - 125
Antimony	ND		0.500	0.465		mg/L		93	75 - 125
Arsenic	0.049		1.00	0.975		mg/L		93	75 - 125
Barium	1.0	F1	1.00	1.32	F1	mg/L		30	75 - 125
Beryllium	0.0056		0.496	0.508		mg/L		101	75 - 125
Cadmium	0.0017	J	0.500	0.448		mg/L		89	75 - 125
Calcium	416	F2	25.0	151.3	4	mg/L		-1060	75 - 125
Chromium	0.18	F1	0.500	0.520	F1	mg/L		68	75 - 125
Cobalt	0.080		0.500	0.480		mg/L		80	75 - 125
Copper	0.18	F1	0.500	0.525	F1	mg/L		70	75 - 125
Iron	159	^5- F2	5.10	27.61	4	mg/L		-2578	75 - 125
Lead	0.18	F1	0.500	0.493	F1	mg/L		63	75 - 125
Magnesium	153		25.0	80.81	4	mg/L		-289	75 - 125
Manganese	3.0	F2	0.500	0.857	4	mg/L		-430	75 - 125
Nickel	0.19	F1	0.500	0.498	F1	mg/L		61	75 - 125
Potassium	33.7	F1	25.0	37.28	F1	mg/L		14	75 - 125
Selenium	ND		1.00	0.925		mg/L		92	75 - 125
Silver	0.0029	J ^5-	0.0500	0.0505	^5-	mg/L		95	75 - 125
Sodium	27.5		25.0	56.52		mg/L		116	75 - 125
Thallium	ND	F1	1.00	0.741	F1	mg/L		74	75 - 125
Vanadium	0.24	F1	0.500	0.534	F1	mg/L		59	75 - 125
Zinc	0.53	F1	0.500	0.548	F1	mg/L		3	75 - 125

Lab Sample ID: 480-229348-1 MSD
Client Sample ID: MW-1
Matrix: Water
Prep Type: Total/NA
Analysis Batch: 745947
Prep Batch: 745846

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Aluminum	130	F2	5.10	65.40	4 F2	mg/L		-1264	75 - 125	58	20
Antimony	ND		0.500	0.419		mg/L		84	75 - 125	10	20
Arsenic	0.049		1.00	0.948		mg/L		90	75 - 125	3	20
Barium	1.0	F1	1.00	1.40	F1	mg/L		38	75 - 125	5	20
Beryllium	0.0056		0.496	0.491		mg/L		98	75 - 125	3	20
Cadmium	0.0017	J	0.500	0.434		mg/L		87	75 - 125	3	20
Calcium	416	F2	25.0	191.6	4 F2	mg/L		-899	75 - 125	24	20
Chromium	0.18	F1	0.500	0.537	F1	mg/L		71	75 - 125	3	20
Cobalt	0.080		0.500	0.480		mg/L		80	75 - 125	0	20
Copper	0.18	F1	0.500	0.537	F1	mg/L		72	75 - 125	2	20
Iron	175	F2	5.10	52.45	4 F2	mg/L		-2393	75 - 125	69	20
Lead	0.18	F1	0.500	0.510	F1	mg/L		66	75 - 125	3	20
Magnesium	153		25.0	91.68	4	mg/L		-246	75 - 125	13	20
Manganese	3.0	F2	0.500	1.23	4 F2	mg/L		-356	75 - 125	35	20

Method: 6010D - Metals (ICP) (Continued)

Lab Sample ID: 480-229348-1 MSD — **Client Sample ID: MW-1**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 745947 — **Prep Batch: 745846**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Nickel	0.19	F1	0.500	0.517	F1	mg/L		65	75 - 125	4	20
Potassium	33.7	F1	25.0	42.28	F1	mg/L		34	75 - 125	13	20
Selenium	ND		1.00	0.896		mg/L		90	75 - 125	3	20
Silver	0.0029	J ^5-	0.0500	0.0491	^5-	mg/L		92	75 - 125	3	20
Sodium	27.5		25.0	51.14		mg/L		94	75 - 125	10	20
Thallium	ND	F1	1.00	0.768		mg/L		77	75 - 125	4	20
Vanadium	0.24	F1	0.500	0.563	F1	mg/L		65	75 - 125	5	20
Zinc	0.53	F1	0.500	0.606	F1	mg/L		14	75 - 125	10	20

Lab Sample ID: MB 480-745809/1-B — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Dissolved**
Analysis Batch: 745964 — **Prep Batch: 745821**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum, Dissolved	ND		0.20	0.060	mg/L		05/13/25 08:00	05/13/25 14:37	1
Antimony, Dissolved	ND		0.020	0.0068	mg/L		05/13/25 08:00	05/13/25 14:37	1
Arsenic, Dissolved	ND		0.015	0.0056	mg/L		05/13/25 08:00	05/13/25 14:37	1
Barium, Dissolved	ND		0.0020	0.00070	mg/L		05/13/25 08:00	05/13/25 14:37	1
Beryllium, Dissolved	ND		0.0020	0.00030	mg/L		05/13/25 08:00	05/13/25 14:37	1
Cadmium, Dissolved	ND		0.0020	0.00050	mg/L		05/13/25 08:00	05/13/25 14:37	1
Calcium, Dissolved	ND		0.50	0.10	mg/L		05/13/25 08:00	05/13/25 14:37	1
Chromium, Dissolved	ND		0.0040	0.0010	mg/L		05/13/25 08:00	05/13/25 14:37	1
Cobalt, Dissolved	ND		0.0040	0.00063	mg/L		05/13/25 08:00	05/13/25 14:37	1
Copper, Dissolved	ND		0.010	0.0016	mg/L		05/13/25 08:00	05/13/25 14:37	1
Iron, Dissolved	ND		0.050	0.019	mg/L		05/13/25 08:00	05/13/25 14:37	1
Lead, Dissolved	ND		0.010	0.0030	mg/L		05/13/25 08:00	05/13/25 14:37	1
Magnesium, Dissolved	ND		0.20	0.043	mg/L		05/13/25 08:00	05/13/25 14:37	1
Manganese, Dissolved	ND		0.0030	0.00040	mg/L		05/13/25 08:00	05/13/25 14:37	1
Nickel, Dissolved	ND		0.010	0.0013	mg/L		05/13/25 08:00	05/13/25 14:37	1
Potassium, Dissolved	ND		0.50	0.10	mg/L		05/13/25 08:00	05/13/25 14:37	1
Selenium, Dissolved	ND		0.025	0.0087	mg/L		05/13/25 08:00	05/13/25 14:37	1
Silver, Dissolved	ND	^5-	0.0060	0.0017	mg/L		05/13/25 08:00	05/13/25 14:37	1
Sodium, Dissolved	ND		1.0	0.32	mg/L		05/13/25 08:00	05/13/25 14:37	1
Thallium, Dissolved	ND		0.020	0.010	mg/L		05/13/25 08:00	05/13/25 14:37	1
Vanadium, Dissolved	ND		0.0050	0.0015	mg/L		05/13/25 08:00	05/13/25 14:37	1
Zinc, Dissolved	0.00163	J	0.010	0.0015	mg/L		05/13/25 08:00	05/13/25 14:37	1

Lab Sample ID: LCS 480-745809/2-B — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Dissolved**
Analysis Batch: 745964 — **Prep Batch: 745821**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Aluminum, Dissolved	5.10	4.87		mg/L		96	80 - 120
Antimony, Dissolved	0.500	0.472		mg/L		94	80 - 120
Arsenic, Dissolved	1.00	0.947		mg/L		95	80 - 120
Barium, Dissolved	1.00	0.992		mg/L		99	80 - 120
Beryllium, Dissolved	0.496	0.511		mg/L		103	80 - 120
Cadmium, Dissolved	0.500	0.446		mg/L		89	80 - 120
Calcium, Dissolved	25.0	24.73		mg/L		99	80 - 120

Method: 6010D - Metals (ICP) (Continued)

Lab Sample ID: LCS 480-745809/2-B
Matrix: Water
Analysis Batch: 745964

Client Sample ID: Lab Control Sample
Prep Type: Dissolved
Prep Batch: 745821

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chromium, Dissolved	0.500	0.492		mg/L		98	80 - 120
Cobalt, Dissolved	0.500	0.462		mg/L		92	80 - 120
Copper, Dissolved	0.500	0.501		mg/L		100	80 - 120
Iron, Dissolved	5.10	5.53		mg/L		109	80 - 120
Lead, Dissolved	0.500	0.470		mg/L		94	80 - 120
Magnesium, Dissolved	25.0	23.84		mg/L		95	80 - 120
Manganese, Dissolved	0.500	0.487		mg/L		97	80 - 120
Nickel, Dissolved	0.500	0.469		mg/L		94	80 - 120
Potassium, Dissolved	25.0	23.98		mg/L		96	80 - 120
Selenium, Dissolved	1.00	0.911		mg/L		91	80 - 120
Silver, Dissolved	0.0500	0.0488	^5-	mg/L		98	80 - 120
Sodium, Dissolved	25.0	24.60		mg/L		98	80 - 120
Thallium, Dissolved	1.00	0.963		mg/L		96	80 - 120
Vanadium, Dissolved	0.500	0.489		mg/L		98	80 - 120
Zinc, Dissolved	0.500	0.483		mg/L		97	80 - 120

Lab Sample ID: LCSD 480-745809/3-B
Matrix: Water
Analysis Batch: 745964

Client Sample ID: Lab Control Sample Dup
Prep Type: Dissolved
Prep Batch: 745821

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Aluminum, Dissolved	5.10	4.81		mg/L		94	80 - 120	1	20
Antimony, Dissolved	0.500	0.466		mg/L		93	80 - 120	1	20
Arsenic, Dissolved	1.00	0.934		mg/L		93	80 - 120	1	20
Barium, Dissolved	1.00	0.985		mg/L		99	80 - 120	1	20
Beryllium, Dissolved	0.496	0.507		mg/L		102	80 - 120	1	20
Cadmium, Dissolved	0.500	0.441		mg/L		88	80 - 120	1	20
Calcium, Dissolved	25.0	24.55		mg/L		98	80 - 120	1	20
Chromium, Dissolved	0.500	0.488		mg/L		98	80 - 120	1	20
Cobalt, Dissolved	0.500	0.459		mg/L		92	80 - 120	1	20
Copper, Dissolved	0.500	0.496		mg/L		99	80 - 120	1	20
Iron, Dissolved	5.10	5.48		mg/L		108	80 - 120	1	20
Lead, Dissolved	0.500	0.467		mg/L		93	80 - 120	1	20
Magnesium, Dissolved	25.0	23.58		mg/L		94	80 - 120	1	20
Manganese, Dissolved	0.500	0.483		mg/L		97	80 - 120	1	20
Nickel, Dissolved	0.500	0.466		mg/L		93	80 - 120	1	20
Potassium, Dissolved	25.0	23.80		mg/L		95	80 - 120	1	20
Selenium, Dissolved	1.00	0.897		mg/L		90	80 - 120	2	20
Silver, Dissolved	0.0500	0.0484	^5-	mg/L		97	80 - 120	1	20
Sodium, Dissolved	25.0	24.28		mg/L		97	80 - 120	1	20
Thallium, Dissolved	1.00	0.955		mg/L		95	80 - 120	1	20
Vanadium, Dissolved	0.500	0.486		mg/L		97	80 - 120	1	20
Zinc, Dissolved	0.500	0.481		mg/L		96	80 - 120	0	20

Method: 6010D - Metals (ICP) (Continued)

Lab Sample ID: 480-229348-1 MS
Matrix: Water
Analysis Batch: 745964

Client Sample ID: MW-1
Prep Type: Dissolved
Prep Batch: 745821

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Aluminum, Dissolved	ND		5.10	4.79		mg/L		94	75 - 125
Antimony, Dissolved	ND		0.500	0.469		mg/L		94	75 - 125
Arsenic, Dissolved	ND		1.00	0.952		mg/L		95	75 - 125
Barium, Dissolved	0.17		1.00	1.15		mg/L		98	75 - 125
Beryllium, Dissolved	ND		0.496	0.503		mg/L		101	75 - 125
Cadmium, Dissolved	ND		0.500	0.445		mg/L		89	75 - 125
Calcium, Dissolved	75.9		25.0	98.84		mg/L		92	75 - 125
Chromium, Dissolved	ND		0.500	0.482		mg/L		96	75 - 125
Cobalt, Dissolved	ND		0.500	0.462		mg/L		92	75 - 125
Copper, Dissolved	0.0022	J	0.500	0.500		mg/L		99	75 - 125
Iron, Dissolved	ND		5.10	5.40		mg/L		106	75 - 125
Lead, Dissolved	ND		0.500	0.468		mg/L		94	75 - 125
Magnesium, Dissolved	40.6		25.0	64.28		mg/L		95	75 - 125
Manganese, Dissolved	0.026		0.500	0.498		mg/L		94	75 - 125
Nickel, Dissolved	ND		0.500	0.468		mg/L		94	75 - 125
Potassium, Dissolved	6.0		25.0	29.98		mg/L		96	75 - 125
Selenium, Dissolved	ND		1.00	0.916		mg/L		92	75 - 125
Silver, Dissolved	ND	^5-	0.0500	0.0493	^5-	mg/L		99	75 - 125
Sodium, Dissolved	31.8	F1	25.0	56.80		mg/L		100	75 - 125
Thallium, Dissolved	ND		1.00	0.949		mg/L		95	75 - 125
Vanadium, Dissolved	ND		0.500	0.486		mg/L		97	75 - 125
Zinc, Dissolved	ND		0.500	0.468		mg/L		94	75 - 125

Lab Sample ID: 480-229348-1 MSD
Matrix: Water
Analysis Batch: 745964

Client Sample ID: MW-1
Prep Type: Dissolved
Prep Batch: 745821

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Aluminum, Dissolved	ND		5.10	4.78		mg/L		94	75 - 125	0	20
Antimony, Dissolved	ND		0.500	0.464		mg/L		93	75 - 125	1	20
Arsenic, Dissolved	ND		1.00	0.943		mg/L		94	75 - 125	1	20
Barium, Dissolved	0.17		1.00	1.11		mg/L		94	75 - 125	3	20
Beryllium, Dissolved	ND		0.496	0.502		mg/L		101	75 - 125	0	20
Cadmium, Dissolved	ND		0.500	0.440		mg/L		88	75 - 125	1	20
Calcium, Dissolved	75.9		25.0	103.0		mg/L		108	75 - 125	4	20
Chromium, Dissolved	ND		0.500	0.480		mg/L		96	75 - 125	0	20
Cobalt, Dissolved	ND		0.500	0.459		mg/L		92	75 - 125	1	20
Copper, Dissolved	0.0022	J	0.500	0.493		mg/L		98	75 - 125	1	20
Iron, Dissolved	ND		5.10	5.37		mg/L		105	75 - 125	1	20
Lead, Dissolved	ND		0.500	0.466		mg/L		93	75 - 125	0	20
Magnesium, Dissolved	40.6		25.0	62.14		mg/L		86	75 - 125	3	20
Manganese, Dissolved	0.026		0.500	0.505		mg/L		96	75 - 125	1	20
Nickel, Dissolved	ND		0.500	0.465		mg/L		93	75 - 125	1	20
Potassium, Dissolved	6.0		25.0	28.92		mg/L		92	75 - 125	4	20
Selenium, Dissolved	ND		1.00	0.904		mg/L		90	75 - 125	1	20
Silver, Dissolved	ND	^5-	0.0500	0.0490	^5-	mg/L		98	75 - 125	0	20
Sodium, Dissolved	31.8	F1	25.0	50.06	F1	mg/L		73	75 - 125	13	20
Thallium, Dissolved	ND		1.00	0.942		mg/L		94	75 - 125	1	20
Vanadium, Dissolved	ND		0.500	0.481		mg/L		96	75 - 125	1	20

Method: 6010D - Metals (ICP) (Continued)

Lab Sample ID: 480-229348-1 MSD — **Client Sample ID: MW-1**
Matrix: Water — **Prep Type: Dissolved**
Analysis Batch: 745964 — **Prep Batch: 745821**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Zinc, Dissolved	ND		0.500	0.468		mg/L		94	75 - 125	0	20

Method: 7470A - Mercury (CVAA)

Lab Sample ID: MB 480-745884/1-A — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 745962 — **Prep Batch: 745884**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020	0.000042	mg/L		05/13/25 09:29	05/13/25 13:32	1

Lab Sample ID: LCS 480-745884/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 745962 — **Prep Batch: 745884**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Mercury	0.00669	0.00620		mg/L		93	80 - 120

Lab Sample ID: 480-229348-1 MS — **Client Sample ID: MW-1**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 745962 — **Prep Batch: 745884**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Mercury	0.00064		0.0100	0.00922		mg/L		85	80 - 120

Lab Sample ID: 480-229348-1 MSD — **Client Sample ID: MW-1**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 745962 — **Prep Batch: 745884**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Mercury	0.00064		0.0100	0.00920		mg/L		85	80 - 120	0	20

Lab Sample ID: MB 480-745809/1-C — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Dissolved**
Analysis Batch: 745962 — **Prep Batch: 745886**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury, Dissolved	ND		0.00020	0.000042	mg/L		05/13/25 09:29	05/13/25 14:27	1

Lab Sample ID: LCS 480-745809/2-C — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Dissolved**
Analysis Batch: 745962 — **Prep Batch: 745886**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Mercury, Dissolved	0.00669	0.00617		mg/L		92	80 - 120

Method: 7470A - Mercury (CVAA) (Continued)

Lab Sample ID: LCSD 480-745809/3-C
Client Sample ID: Lab Control Sample Dup
Matrix: Water
Prep Type: Dissolved
Analysis Batch: 745962
Prep Batch: 745886

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Mercury, Dissolved			0.00669	0.00606		mg/L		90	80 - 120	2	20

Lab Sample ID: 480-229348-1 MS
Client Sample ID: MW-1
Matrix: Water
Prep Type: Dissolved
Analysis Batch: 745962
Prep Batch: 745886

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Mercury, Dissolved	ND		0.00669	0.00615		mg/L		92	80 - 120		

Lab Sample ID: 480-229348-1 MSD
Client Sample ID: MW-1
Matrix: Water
Prep Type: Dissolved
Analysis Batch: 745962
Prep Batch: 745886

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Mercury, Dissolved	ND		0.00669	0.00628		mg/L		94	80 - 120	2	20

GC/MS VOA

Analysis Batch: 746022

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-229348-1	MW-1	Total/NA	Water	8260C	
480-229348-2	MW-2	Total/NA	Water	8260C	
480-229348-3	MW-3	Total/NA	Water	8260C	
480-229348-4	MW-4	Total/NA	Water	8260C	
480-229348-5	MW-5	Total/NA	Water	8260C	
480-229348-6	MW-6	Total/NA	Water	8260C	
480-229348-7	BD	Total/NA	Water	8260C	
480-229348-10	TRIP BLANK	Total/NA	Water	8260C	
MB 480-746022/8	Method Blank	Total/NA	Water	8260C	
LCS 480-746022/6	Lab Control Sample	Total/NA	Water	8260C	
480-229348-1 MS	MW-1	Total/NA	Water	8260C	
480-229348-1 MSD	MW-1	Total/NA	Water	8260C	

GC/MS Semi VOA

Prep Batch: 745798

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-229348-1	MW-1	Total/NA	Water	3510C	
480-229348-2	MW-2	Total/NA	Water	3510C	
480-229348-3	MW-3	Total/NA	Water	3510C	
480-229348-4	MW-4	Total/NA	Water	3510C	
480-229348-5	MW-5	Total/NA	Water	3510C	
480-229348-6	MW-6	Total/NA	Water	3510C	
480-229348-7	BD	Total/NA	Water	3510C	
MB 480-745798/1-A	Method Blank	Total/NA	Water	3510C	
LCS 480-745798/2-A	Lab Control Sample	Total/NA	Water	3510C	
480-229348-1 MS	MW-1	Total/NA	Water	3510C	
480-229348-1 MSD	MW-1	Total/NA	Water	3510C	

Analysis Batch: 745900

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-229348-1	MW-1	Total/NA	Water	8270D	745798
480-229348-2	MW-2	Total/NA	Water	8270D	745798
480-229348-3	MW-3	Total/NA	Water	8270D	745798
480-229348-4	MW-4	Total/NA	Water	8270D	745798
480-229348-5	MW-5	Total/NA	Water	8270D	745798
480-229348-6	MW-6	Total/NA	Water	8270D	745798
MB 480-745798/1-A	Method Blank	Total/NA	Water	8270D	745798
LCS 480-745798/2-A	Lab Control Sample	Total/NA	Water	8270D	745798
480-229348-1 MS	MW-1	Total/NA	Water	8270D	745798
480-229348-1 MSD	MW-1	Total/NA	Water	8270D	745798

Prep Batch: 745939

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-229348-1	MW-1	Total/NA	Water	3510C	
480-229348-4	MW-4	Total/NA	Water	3510C	
480-229348-5	MW-5	Total/NA	Water	3510C	
480-229348-7	BD	Total/NA	Water	3510C	
MB 480-745939/1-A	Method Blank	Total/NA	Water	3510C	
LCS 480-745939/2-A	Lab Control Sample	Total/NA	Water	3510C	
480-229348-1 MS	MW-1	Total/NA	Water	3510C	

GC/MS Semi VOA (Continued)

Prep Batch: 745939 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-229348-1 MSD	MW-1	Total/NA	Water	3510C	

Analysis Batch: 745997

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-229348-1	MW-1	Total/NA	Water	8270D SIM ID	745939
480-229348-4	MW-4	Total/NA	Water	8270D SIM ID	745939
480-229348-5	MW-5	Total/NA	Water	8270D SIM ID	745939
480-229348-7	BD	Total/NA	Water	8270D SIM ID	745939
MB 480-745939/1-A	Method Blank	Total/NA	Water	8270D SIM ID	745939
LCS 480-745939/2-A	Lab Control Sample	Total/NA	Water	8270D SIM ID	745939
480-229348-1 MS	MW-1	Total/NA	Water	8270D SIM ID	745939
480-229348-1 MSD	MW-1	Total/NA	Water	8270D SIM ID	745939

Analysis Batch: 746001

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-229348-7	BD	Total/NA	Water	8270D	745798

Analysis Batch: 746283

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-229348-1	MW-1	Total/NA	Water	8270D_LL_PAH	745798
480-229348-2	MW-2	Total/NA	Water	8270D_LL_PAH	745798
480-229348-3	MW-3	Total/NA	Water	8270D_LL_PAH	745798
480-229348-4	MW-4	Total/NA	Water	8270D_LL_PAH	745798
480-229348-5	MW-5	Total/NA	Water	8270D_LL_PAH	745798
480-229348-6	MW-6	Total/NA	Water	8270D_LL_PAH	745798
MB 480-745798/1-A	Method Blank	Total/NA	Water	8270D_LL_PAH	745798
LCS 480-745798/2-A	Lab Control Sample	Total/NA	Water	8270D_LL_PAH	745798
480-229348-1 MS	MW-1	Total/NA	Water	8270D_LL_PAH	745798
480-229348-1 MSD	MW-1	Total/NA	Water	8270D_LL_PAH	745798

Analysis Batch: 746286

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-229348-7	BD	Total/NA	Water	8270D_LL_PAH	745798

GC Semi VOA

Prep Batch: 745833

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-229348-1	MW-1	Total/NA	Water	3510C	
480-229348-5	MW-5	Total/NA	Water	3510C	
480-229348-7	BD	Total/NA	Water	3510C	
MB 480-745833/1-A	Method Blank	Total/NA	Water	3510C	
LCS 480-745833/2-A	Lab Control Sample	Total/NA	Water	3510C	
480-229348-1 MS	MW-1	Total/NA	Water	3510C	
480-229348-1 MSD	MW-1	Total/NA	Water	3510C	

Analysis Batch: 745881

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-229348-1	MW-1	Total/NA	Water	8081B	745833
480-229348-5	MW-5	Total/NA	Water	8081B	745833
480-229348-7	BD	Total/NA	Water	8081B	745833

GC Semi VOA (Continued)

Analysis Batch: 745881 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 480-745833/1-A	Method Blank	Total/NA	Water	8081B	745833
LCS 480-745833/2-A	Lab Control Sample	Total/NA	Water	8081B	745833
480-229348-1 MS	MW-1	Total/NA	Water	8081B	745833
480-229348-1 MSD	MW-1	Total/NA	Water	8081B	745833

Prep Batch: 745906

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-229348-1	MW-1	Total/NA	Water	8151A	
480-229348-4	MW-4	Total/NA	Water	8151A	
480-229348-5	MW-5	Total/NA	Water	8151A	
480-229348-7	BD	Total/NA	Water	8151A	
MB 480-745906/1-A	Method Blank	Total/NA	Water	8151A	
LCS 480-745906/2-A	Lab Control Sample	Total/NA	Water	8151A	
480-229348-1 MS	MW-1	Total/NA	Water	8151A	
480-229348-1 MSD	MW-1	Total/NA	Water	8151A	

Prep Batch: 745975

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-229348-1	MW-1	Total/NA	Water	3510C	
480-229348-4	MW-4	Total/NA	Water	3510C	
480-229348-5	MW-5	Total/NA	Water	3510C	
480-229348-7	BD	Total/NA	Water	3510C	
MB 480-745975/1-A	Method Blank	Total/NA	Water	3510C	
LCS 480-745975/2-A	Lab Control Sample	Total/NA	Water	3510C	
480-229348-1 MS	MW-1	Total/NA	Water	3510C	
480-229348-1 MSD	MW-1	Total/NA	Water	3510C	

Analysis Batch: 746027

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-229348-1	MW-1	Total/NA	Water	8151A	745906
480-229348-4	MW-4	Total/NA	Water	8151A	745906
480-229348-5	MW-5	Total/NA	Water	8151A	745906
480-229348-7	BD	Total/NA	Water	8151A	745906
MB 480-745906/1-A	Method Blank	Total/NA	Water	8151A	745906
LCS 480-745906/2-A	Lab Control Sample	Total/NA	Water	8151A	745906
480-229348-1 MS	MW-1	Total/NA	Water	8151A	745906
480-229348-1 MSD	MW-1	Total/NA	Water	8151A	745906

Prep Batch: 746048

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-229348-4	MW-4	Total/NA	Water	3510C	
MB 480-746048/1-A	Method Blank	Total/NA	Water	3510C	
LCS 480-746048/2-A	Lab Control Sample	Total/NA	Water	3510C	
LCSD 480-746048/3-A	Lab Control Sample Dup	Total/NA	Water	3510C	

Analysis Batch: 746094

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-229348-4	MW-4	Total/NA	Water	8081B	746048
MB 480-746048/1-A	Method Blank	Total/NA	Water	8081B	746048
LCS 480-746048/2-A	Lab Control Sample	Total/NA	Water	8081B	746048
LCSD 480-746048/3-A	Lab Control Sample Dup	Total/NA	Water	8081B	746048

GC Semi VOA

Analysis Batch: 746096

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-229348-1	MW-1	Total/NA	Water	8082A	745975
480-229348-4	MW-4	Total/NA	Water	8082A	745975
480-229348-5	MW-5	Total/NA	Water	8082A	745975
480-229348-7	BD	Total/NA	Water	8082A	745975
MB 480-745975/1-A	Method Blank	Total/NA	Water	8082A	745975
LCS 480-745975/2-A	Lab Control Sample	Total/NA	Water	8082A	745975
480-229348-1 MS	MW-1	Total/NA	Water	8082A	745975
480-229348-1 MSD	MW-1	Total/NA	Water	8082A	745975

LCMS

Prep Batch: 655949

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-229348-1	MW-1	Total/NA	Water	1633	
480-229348-4	MW-4	Total/NA	Water	1633	
480-229348-5	MW-5	Total/NA	Water	1633	
480-229348-7	BD	Total/NA	Water	1633	
480-229348-8	FIELD BLANK	Total/NA	Water	1633	
480-229348-9	EQUIPMENT BLANK	Total/NA	Water	1633	
MB 240-655949/1-A	Method Blank	Total/NA	Water	1633	
LCS 240-655949/3-A	Lab Control Sample	Total/NA	Water	1633	
LLCS 240-655949/2-A	Lab Control Sample	Total/NA	Water	1633	
480-229348-1 MS	MW-1	Total/NA	Water	1633	
480-229348-1 MSD	MW-1	Total/NA	Water	1633	
480-229348-5 DU	MW-5	Total/NA	Water	1633	

Analysis Batch: 656011

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-229348-1	MW-1	Total/NA	Water	Draft-3 1633	655949
480-229348-4	MW-4	Total/NA	Water	Draft-3 1633	655949
480-229348-5	MW-5	Total/NA	Water	Draft-3 1633	655949
480-229348-7	BD	Total/NA	Water	Draft-3 1633	655949
480-229348-8	FIELD BLANK	Total/NA	Water	Draft-3 1633	655949
480-229348-9	EQUIPMENT BLANK	Total/NA	Water	Draft-3 1633	655949
MB 240-655949/1-A	Method Blank	Total/NA	Water	Draft-3 1633	655949
LCS 240-655949/3-A	Lab Control Sample	Total/NA	Water	Draft-3 1633	655949
LLCS 240-655949/2-A	Lab Control Sample	Total/NA	Water	Draft-3 1633	655949
480-229348-1 MS	MW-1	Total/NA	Water	Draft-3 1633	655949
480-229348-1 MSD	MW-1	Total/NA	Water	Draft-3 1633	655949
480-229348-5 DU	MW-5	Total/NA	Water	Draft-3 1633	655949

Metals

Filtration Batch: 745809

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-229348-1	MW-1	Dissolved	Water	FILTRATION	
480-229348-2	MW-2	Dissolved	Water	FILTRATION	
480-229348-3	MW-3	Dissolved	Water	FILTRATION	
480-229348-4	MW-4	Dissolved	Water	FILTRATION	
480-229348-5	MW-5	Dissolved	Water	FILTRATION	
480-229348-6	MW-6	Dissolved	Water	FILTRATION	
480-229348-7	BD	Dissolved	Water	FILTRATION	

Metals (Continued)

Filtration Batch: 745809 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 480-745809/1-B	Method Blank	Dissolved	Water	FILTRATION	
MB 480-745809/1-C	Method Blank	Dissolved	Water	FILTRATION	
LCS 480-745809/2-B	Lab Control Sample	Dissolved	Water	FILTRATION	
LCS 480-745809/2-C	Lab Control Sample	Dissolved	Water	FILTRATION	
LCSD 480-745809/3-B	Lab Control Sample Dup	Dissolved	Water	FILTRATION	
LCSD 480-745809/3-C	Lab Control Sample Dup	Dissolved	Water	FILTRATION	
480-229348-1 MS	MW-1	Dissolved	Water	FILTRATION	
480-229348-1 MSD	MW-1	Dissolved	Water	FILTRATION	

Prep Batch: 745821

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-229348-1	MW-1	Dissolved	Water	3005A	745809
480-229348-2	MW-2	Dissolved	Water	3005A	745809
480-229348-3	MW-3	Dissolved	Water	3005A	745809
480-229348-4	MW-4	Dissolved	Water	3005A	745809
480-229348-5	MW-5	Dissolved	Water	3005A	745809
480-229348-6	MW-6	Dissolved	Water	3005A	745809
480-229348-7	BD	Dissolved	Water	3005A	745809
MB 480-745809/1-B	Method Blank	Dissolved	Water	3005A	745809
LCS 480-745809/2-B	Lab Control Sample	Dissolved	Water	3005A	745809
LCSD 480-745809/3-B	Lab Control Sample Dup	Dissolved	Water	3005A	745809
480-229348-1 MS	MW-1	Dissolved	Water	3005A	745809
480-229348-1 MSD	MW-1	Dissolved	Water	3005A	745809

Prep Batch: 745846

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-229348-1	MW-1	Total/NA	Water	3005A	
480-229348-2	MW-2	Total/NA	Water	3005A	
480-229348-3	MW-3	Total/NA	Water	3005A	
480-229348-4	MW-4	Total/NA	Water	3005A	
480-229348-5	MW-5	Total/NA	Water	3005A	
480-229348-6	MW-6	Total/NA	Water	3005A	
480-229348-7	BD	Total/NA	Water	3005A	
MB 480-745846/1-A	Method Blank	Total/NA	Water	3005A	
LCS 480-745846/2-A	Lab Control Sample	Total/NA	Water	3005A	
480-229348-1 MS	MW-1	Total/NA	Water	3005A	
480-229348-1 MSD	MW-1	Total/NA	Water	3005A	

Prep Batch: 745884

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-229348-1	MW-1	Total/NA	Water	7470A	
480-229348-2	MW-2	Total/NA	Water	7470A	
480-229348-3	MW-3	Total/NA	Water	7470A	
480-229348-4	MW-4	Total/NA	Water	7470A	
480-229348-5	MW-5	Total/NA	Water	7470A	
480-229348-6	MW-6	Total/NA	Water	7470A	
480-229348-7	BD	Total/NA	Water	7470A	
MB 480-745884/1-A	Method Blank	Total/NA	Water	7470A	
LCS 480-745884/2-A	Lab Control Sample	Total/NA	Water	7470A	
480-229348-1 MS	MW-1	Total/NA	Water	7470A	
480-229348-1 MSD	MW-1	Total/NA	Water	7470A	

Metals

Prep Batch: 745886

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-229348-1	MW-1	Dissolved	Water	7470A	745809
480-229348-2	MW-2	Dissolved	Water	7470A	745809
480-229348-3	MW-3	Dissolved	Water	7470A	745809
480-229348-4	MW-4	Dissolved	Water	7470A	745809
480-229348-5	MW-5	Dissolved	Water	7470A	745809
480-229348-6	MW-6	Dissolved	Water	7470A	745809
480-229348-7	BD	Dissolved	Water	7470A	745809
MB 480-745809/1-C	Method Blank	Dissolved	Water	7470A	745809
LCS 480-745809/2-C	Lab Control Sample	Dissolved	Water	7470A	745809
LCSD 480-745809/3-C	Lab Control Sample Dup	Dissolved	Water	7470A	745809
480-229348-1 MS	MW-1	Dissolved	Water	7470A	745809
480-229348-1 MSD	MW-1	Dissolved	Water	7470A	745809

Analysis Batch: 745947

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-229348-1	MW-1	Total/NA	Water	6010D	745846
480-229348-2	MW-2	Total/NA	Water	6010D	745846
480-229348-3	MW-3	Total/NA	Water	6010D	745846
480-229348-4	MW-4	Total/NA	Water	6010D	745846
480-229348-5	MW-5	Total/NA	Water	6010D	745846
480-229348-6	MW-6	Total/NA	Water	6010D	745846
480-229348-7	BD	Total/NA	Water	6010D	745846
MB 480-745846/1-A	Method Blank	Total/NA	Water	6010D	745846
LCS 480-745846/2-A	Lab Control Sample	Total/NA	Water	6010D	745846
480-229348-1 MS	MW-1	Total/NA	Water	6010D	745846
480-229348-1 MSD	MW-1	Total/NA	Water	6010D	745846

Analysis Batch: 745962

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-229348-1	MW-1	Dissolved	Water	7470A	745886
480-229348-1	MW-1	Total/NA	Water	7470A	745884
480-229348-2	MW-2	Dissolved	Water	7470A	745886
480-229348-2	MW-2	Total/NA	Water	7470A	745884
480-229348-3	MW-3	Dissolved	Water	7470A	745886
480-229348-3	MW-3	Total/NA	Water	7470A	745884
480-229348-4	MW-4	Dissolved	Water	7470A	745886
480-229348-4	MW-4	Total/NA	Water	7470A	745884
480-229348-5	MW-5	Dissolved	Water	7470A	745886
480-229348-5	MW-5	Total/NA	Water	7470A	745884
480-229348-6	MW-6	Dissolved	Water	7470A	745886
480-229348-6	MW-6	Total/NA	Water	7470A	745884
480-229348-7	BD	Dissolved	Water	7470A	745886
480-229348-7	BD	Total/NA	Water	7470A	745884
MB 480-745809/1-C	Method Blank	Dissolved	Water	7470A	745886
MB 480-745884/1-A	Method Blank	Total/NA	Water	7470A	745884
LCS 480-745809/2-C	Lab Control Sample	Dissolved	Water	7470A	745886
LCS 480-745884/2-A	Lab Control Sample	Total/NA	Water	7470A	745884
LCSD 480-745809/3-C	Lab Control Sample Dup	Dissolved	Water	7470A	745886
480-229348-1 MS	MW-1	Dissolved	Water	7470A	745886
480-229348-1 MS	MW-1	Total/NA	Water	7470A	745884
480-229348-1 MSD	MW-1	Dissolved	Water	7470A	745886

Metals (Continued)

Analysis Batch: 745962 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-229348-1 MSD	MW-1	Total/NA	Water	7470A	745884

Analysis Batch: 745964

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-229348-1	MW-1	Dissolved	Water	6010D	745821
480-229348-2	MW-2	Dissolved	Water	6010D	745821
480-229348-3	MW-3	Dissolved	Water	6010D	745821
480-229348-4	MW-4	Dissolved	Water	6010D	745821
480-229348-5	MW-5	Dissolved	Water	6010D	745821
480-229348-6	MW-6	Dissolved	Water	6010D	745821
480-229348-7	BD	Dissolved	Water	6010D	745821
MB 480-745809/1-B	Method Blank	Dissolved	Water	6010D	745821
LCS 480-745809/2-B	Lab Control Sample	Dissolved	Water	6010D	745821
LCSD 480-745809/3-B	Lab Control Sample Dup	Dissolved	Water	6010D	745821
480-229348-1 MS	MW-1	Dissolved	Water	6010D	745821
480-229348-1 MSD	MW-1	Dissolved	Water	6010D	745821

Client Sample ID: MW-1

Lab Sample ID: 480-229348-1

Date Collected: 05/08/25 15:00

Matrix: Water

Date Received: 05/10/25 09:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260C		1	746022	AXK	EET BUF	05/14/25 14:33
Total/NA	Prep	3510C			745798	JMP	EET BUF	05/12/25 09:28
Total/NA	Analysis	8270D		1	745900	JMM	EET BUF	05/13/25 14:29
Total/NA	Prep	3510C			745939	LSC	EET BUF	05/13/25 13:38
Total/NA	Analysis	8270D SIM ID		1	745997	JMM	EET BUF	05/14/25 13:55
Total/NA	Prep	3510C			745798	JMP	EET BUF	05/12/25 09:28
Total/NA	Analysis	8270D_LL_PAH		1	746283	RJS	EET BUF	05/13/25 14:29
Total/NA	Prep	3510C			745833	LSC	EET BUF	05/12/25 13:45
Total/NA	Analysis	8081B		1	745881	JLS	EET BUF	05/13/25 11:03
Total/NA	Prep	3510C			745975	SMP	EET BUF	05/14/25 06:38
Total/NA	Analysis	8082A		1	746096	W1T	EET BUF	05/15/25 11:42
Total/NA	Prep	8151A			745906	JMP	EET BUF	05/13/25 09:13
Total/NA	Analysis	8151A		1	746027	JLS	EET BUF	05/14/25 12:33
Total/NA	Prep	1633			655949	CLB	EET CLE	05/14/25 09:16
Total/NA	Analysis	Draft-3 1633		1	656011	LD	EET CLE	05/14/25 17:13
Dissolved	Filtration	FILTRATION			745809	EMO	EET BUF	05/12/25 10:17
Dissolved	Prep	3005A			745821	EMO	EET BUF	05/13/25 08:00
Dissolved	Analysis	6010D		1	745964	BMB	EET BUF	05/13/25 14:42
Total/NA	Prep	3005A			745846	EMO	EET BUF	05/13/25 07:56
Total/NA	Analysis	6010D		1	745947	BMB	EET BUF	05/13/25 13:47
Dissolved	Filtration	FILTRATION			745809	EMO	EET BUF	05/12/25 10:17
Dissolved	Prep	7470A			745886	ESB	EET BUF	05/13/25 09:29
Dissolved	Analysis	7470A		1	745962	ESB	EET BUF	05/13/25 14:31
Total/NA	Prep	7470A			745884	ESB	EET BUF	05/13/25 09:29
Total/NA	Analysis	7470A		1	745962	ESB	EET BUF	05/13/25 13:39

Client Sample ID: MW-2

Lab Sample ID: 480-229348-2

Date Collected: 05/08/25 13:00

Matrix: Water

Date Received: 05/10/25 09:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260C		5	746022	AXK	EET BUF	05/14/25 14:55
Total/NA	Prep	3510C			745798	JMP	EET BUF	05/12/25 09:28
Total/NA	Analysis	8270D		1	745900	JMM	EET BUF	05/13/25 19:34
Total/NA	Prep	3510C			745798	JMP	EET BUF	05/12/25 09:28
Total/NA	Analysis	8270D_LL_PAH		1	746283	RJS	EET BUF	05/13/25 19:34
Dissolved	Filtration	FILTRATION			745809	EMO	EET BUF	05/12/25 10:17
Dissolved	Prep	3005A			745821	EMO	EET BUF	05/13/25 08:00
Dissolved	Analysis	6010D		1	745964	BMB	EET BUF	05/13/25 14:52
Total/NA	Prep	3005A			745846	EMO	EET BUF	05/13/25 07:56
Total/NA	Analysis	6010D		1	745947	BMB	EET BUF	05/13/25 13:56
Dissolved	Filtration	FILTRATION			745809	EMO	EET BUF	05/12/25 10:17
Dissolved	Prep	7470A			745886	ESB	EET BUF	05/13/25 09:29
Dissolved	Analysis	7470A		1	745962	ESB	EET BUF	05/13/25 14:37

Lab Chronicle

Client: Roux Environmental Engineering and Geology DPC
Job ID: 480-229348-1
Project/Site: BCP RI - 619 Exchange Street Site

Client Sample ID: MW-2
Lab Sample ID: 480-229348-2
Date Collected: 05/08/25 13:00
Matrix: Water
Date Received: 05/10/25 09:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	7470A			745884	ESB	EET BUF	05/13/25 09:29
Total/NA	Analysis	7470A		1	745962	ESB	EET BUF	05/13/25 13:44

Client Sample ID: MW-3
Lab Sample ID: 480-229348-3
Date Collected: 05/08/25 14:00
Matrix: Water
Date Received: 05/10/25 09:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260C		1	746022	AXK	EET BUF	05/14/25 15:18
Total/NA	Prep	3510C			745798	JMP	EET BUF	05/12/25 09:28
Total/NA	Analysis	8270D		1	745900	JMM	EET BUF	05/13/25 20:02
Total/NA	Prep	3510C			745798	JMP	EET BUF	05/12/25 09:28
Total/NA	Analysis	8270D_LL_PAH		1	746283	RJS	EET BUF	05/13/25 20:02
Dissolved	Filtration	FILTRATION			745809	EMO	EET BUF	05/12/25 10:17
Dissolved	Prep	3005A			745821	EMO	EET BUF	05/13/25 08:00
Dissolved	Analysis	6010D		1	745964	BMB	EET BUF	05/13/25 15:11
Total/NA	Prep	3005A			745846	EMO	EET BUF	05/13/25 07:56
Total/NA	Analysis	6010D		1	745947	BMB	EET BUF	05/13/25 13:58
Dissolved	Filtration	FILTRATION			745809	EMO	EET BUF	05/12/25 10:17
Dissolved	Prep	7470A			745886	ESB	EET BUF	05/13/25 09:29
Dissolved	Analysis	7470A		1	745962	ESB	EET BUF	05/13/25 14:38
Total/NA	Prep	7470A			745884	ESB	EET BUF	05/13/25 09:29
Total/NA	Analysis	7470A		1	745962	ESB	EET BUF	05/13/25 13:46

Client Sample ID: MW-4
Lab Sample ID: 480-229348-4
Date Collected: 05/08/25 12:00
Matrix: Water
Date Received: 05/10/25 09:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260C		1	746022	AXK	EET BUF	05/14/25 15:41
Total/NA	Prep	3510C			745798	JMP	EET BUF	05/12/25 09:28
Total/NA	Analysis	8270D		1	745900	JMM	EET BUF	05/13/25 20:30
Total/NA	Prep	3510C			745939	LSC	EET BUF	05/13/25 13:38
Total/NA	Analysis	8270D SIM ID		1	745997	JMM	EET BUF	05/14/25 14:16
Total/NA	Prep	3510C			745798	JMP	EET BUF	05/12/25 09:28
Total/NA	Analysis	8270D_LL_PAH		1	746283	RJS	EET BUF	05/13/25 20:30
Total/NA	Prep	3510C			746048	LSC	EET BUF	05/14/25 13:33
Total/NA	Analysis	8081B		1	746094	JLS	EET BUF	05/15/25 11:56
Total/NA	Prep	3510C			745975	SMP	EET BUF	05/14/25 06:38
Total/NA	Analysis	8082A		1	746096	W1T	EET BUF	05/15/25 13:15
Total/NA	Prep	8151A			745906	JMP	EET BUF	05/13/25 09:13
Total/NA	Analysis	8151A		1	746027	JLS	EET BUF	05/14/25 12:52
Total/NA	Prep	1633			655949	CLB	EET CLE	05/14/25 09:16
Total/NA	Analysis	Draft-3 1633		1	656011	LD	EET CLE	05/14/25 18:03

Lab Chronicle

Client: Roux Environmental Engineering and Geology DPC
Job ID: 480-229348-1
Project/Site: BCP RI - 619 Exchange Street Site

Client Sample ID: MW-4
Lab Sample ID: 480-229348-4
Date Collected: 05/08/25 12:00
Matrix: Water
Date Received: 05/10/25 09:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Dissolved	Filtration	FILTRATION			745809	EMO	EET BUF	05/12/25 10:17
Dissolved	Prep	3005A			745821	EMO	EET BUF	05/13/25 08:00
Dissolved	Analysis	6010D		1	745964	BMB	EET BUF	05/13/25 15:13
Total/NA	Prep	3005A			745846	EMO	EET BUF	05/13/25 07:56
Total/NA	Analysis	6010D		1	745947	BMB	EET BUF	05/13/25 14:13
Dissolved	Filtration	FILTRATION			745809	EMO	EET BUF	05/12/25 10:17
Dissolved	Prep	7470A			745886	ESB	EET BUF	05/13/25 09:29
Dissolved	Analysis	7470A		1	745962	ESB	EET BUF	05/13/25 14:39
Total/NA	Prep	7470A			745884	ESB	EET BUF	05/13/25 09:29
Total/NA	Analysis	7470A		1	745962	ESB	EET BUF	05/13/25 13:47

Client Sample ID: MW-5
Lab Sample ID: 480-229348-5
Date Collected: 05/08/25 10:00
Matrix: Water
Date Received: 05/10/25 09:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260C		1	746022	AXK	EET BUF	05/14/25 16:04
Total/NA	Prep	3510C			745798	JMP	EET BUF	05/12/25 09:28
Total/NA	Analysis	8270D		1	745900	JMM	EET BUF	05/13/25 20:58
Total/NA	Prep	3510C			745939	LSC	EET BUF	05/13/25 13:38
Total/NA	Analysis	8270D SIM ID		1	745997	JMM	EET BUF	05/14/25 14:37
Total/NA	Prep	3510C			745798	JMP	EET BUF	05/12/25 09:28
Total/NA	Analysis	8270D_LL_PAH		1	746283	RJS	EET BUF	05/13/25 20:58
Total/NA	Prep	3510C			745833	LSC	EET BUF	05/12/25 13:45
Total/NA	Analysis	8081B		1	745881	JLS	EET BUF	05/13/25 15:38
Total/NA	Prep	3510C			745975	SMP	EET BUF	05/14/25 06:38
Total/NA	Analysis	8082A		1	746096	W1T	EET BUF	05/15/25 13:33
Total/NA	Prep	8151A			745906	JMP	EET BUF	05/13/25 09:13
Total/NA	Analysis	8151A		1	746027	JLS	EET BUF	05/14/25 13:10
Total/NA	Prep	1633			655949	CLB	EET CLE	05/14/25 09:16
Total/NA	Analysis	Draft-3 1633		1	656011	LD	EET CLE	05/14/25 18:20
Dissolved	Filtration	FILTRATION			745809	EMO	EET BUF	05/12/25 10:17
Dissolved	Prep	3005A			745821	EMO	EET BUF	05/13/25 08:00
Dissolved	Analysis	6010D		1	745964	BMB	EET BUF	05/13/25 15:15
Total/NA	Prep	3005A			745846	EMO	EET BUF	05/13/25 07:56
Total/NA	Analysis	6010D		1	745947	BMB	EET BUF	05/13/25 14:15
Dissolved	Filtration	FILTRATION			745809	EMO	EET BUF	05/12/25 10:17
Dissolved	Prep	7470A			745886	ESB	EET BUF	05/13/25 09:29
Dissolved	Analysis	7470A		1	745962	ESB	EET BUF	05/13/25 14:43
Total/NA	Prep	7470A			745884	ESB	EET BUF	05/13/25 09:29
Total/NA	Analysis	7470A		1	745962	ESB	EET BUF	05/13/25 13:48

Client Sample ID: MW-6

Lab Sample ID: 480-229348-6

Date Collected: 05/08/25 11:00

Matrix: Water

Date Received: 05/10/25 09:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260C		1	746022	AXK	EET BUF	05/14/25 16:26
Total/NA	Prep	3510C			745798	JMP	EET BUF	05/12/25 09:28
Total/NA	Analysis	8270D		1	745900	JMM	EET BUF	05/13/25 21:26
Total/NA	Prep	3510C			745798	JMP	EET BUF	05/12/25 09:28
Total/NA	Analysis	8270D_LL_PAH		1	746283	RJS	EET BUF	05/13/25 21:26
Dissolved	Filtration	FILTRATION			745809	EMO	EET BUF	05/12/25 10:17
Dissolved	Prep	3005A			745821	EMO	EET BUF	05/13/25 08:00
Dissolved	Analysis	6010D		1	745964	BMB	EET BUF	05/13/25 15:17
Total/NA	Prep	3005A			745846	EMO	EET BUF	05/13/25 07:56
Total/NA	Analysis	6010D		1	745947	BMB	EET BUF	05/13/25 14:17
Dissolved	Filtration	FILTRATION			745809	EMO	EET BUF	05/12/25 10:17
Dissolved	Prep	7470A			745886	ESB	EET BUF	05/13/25 09:29
Dissolved	Analysis	7470A		1	745962	ESB	EET BUF	05/13/25 14:44
Total/NA	Prep	7470A			745884	ESB	EET BUF	05/13/25 09:29
Total/NA	Analysis	7470A		1	745962	ESB	EET BUF	05/13/25 13:49

Client Sample ID: BD

Lab Sample ID: 480-229348-7

Date Collected: 05/08/25 12:05

Matrix: Water

Date Received: 05/10/25 09:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260C		1	746022	AXK	EET BUF	05/14/25 16:48
Total/NA	Prep	3510C			745798	JMP	EET BUF	05/12/25 09:28
Total/NA	Analysis	8270D		1	746001	JMM	EET BUF	05/14/25 12:29
Total/NA	Prep	3510C			745939	LSC	EET BUF	05/13/25 13:38
Total/NA	Analysis	8270D SIM ID		1	745997	JMM	EET BUF	05/14/25 14:57
Total/NA	Prep	3510C			745798	JMP	EET BUF	05/12/25 09:28
Total/NA	Analysis	8270D_LL_PAH		1	746286	RJS	EET BUF	05/14/25 12:29
Total/NA	Prep	3510C			745833	LSC	EET BUF	05/12/25 13:45
Total/NA	Analysis	8081B		1	745881	JLS	EET BUF	05/13/25 15:58
Total/NA	Prep	3510C			745975	SMP	EET BUF	05/14/25 06:38
Total/NA	Analysis	8082A		1	746096	W1T	EET BUF	05/15/25 13:51
Total/NA	Prep	8151A			745906	JMP	EET BUF	05/13/25 09:13
Total/NA	Analysis	8151A		1	746027	JLS	EET BUF	05/14/25 13:29
Total/NA	Prep	1633			655949	CLB	EET CLE	05/14/25 09:16
Total/NA	Analysis	Draft-3 1633		1	656011	LD	EET CLE	05/14/25 18:36
Dissolved	Filtration	FILTRATION			745809	EMO	EET BUF	05/12/25 10:17
Dissolved	Prep	3005A			745821	EMO	EET BUF	05/13/25 08:00
Dissolved	Analysis	6010D		1	745964	BMB	EET BUF	05/13/25 15:19
Total/NA	Prep	3005A			745846	EMO	EET BUF	05/13/25 07:56
Total/NA	Analysis	6010D		1	745947	BMB	EET BUF	05/13/25 14:19
Dissolved	Filtration	FILTRATION			745809	EMO	EET BUF	05/12/25 10:17
Dissolved	Prep	7470A			745886	ESB	EET BUF	05/13/25 09:29
Dissolved	Analysis	7470A		1	745962	ESB	EET BUF	05/13/25 14:47

Lab Chronicle

Client: Roux Environmental Engineering and Geology DPC
Job ID: 480-229348-1
Project/Site: BCP RI - 619 Exchange Street Site

Client Sample ID: BD
Lab Sample ID: 480-229348-7
Date Collected: 05/08/25 12:05
Matrix: Water
Date Received: 05/10/25 09:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	7470A			745884	ESB	EET BUF	05/13/25 09:29
Total/NA	Analysis	7470A		1	745962	ESB	EET BUF	05/13/25 13:51

Client Sample ID: FIELD BLANK
Lab Sample ID: 480-229348-8
Date Collected: 05/08/25 09:30
Matrix: Water
Date Received: 05/10/25 09:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	1633			655949	CLB	EET CLE	05/14/25 09:16
Total/NA	Analysis	Draft-3 1633		1	656011	LD	EET CLE	05/14/25 18:53

Client Sample ID: EQUIPMENT BLANK
Lab Sample ID: 480-229348-9
Date Collected: 05/08/25 09:15
Matrix: Water
Date Received: 05/10/25 09:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	1633			655949	CLB	EET CLE	05/14/25 09:16
Total/NA	Analysis	Draft-3 1633		1	656011	LD	EET CLE	05/14/25 19:43

Client Sample ID: TRIP BLANK
Lab Sample ID: 480-229348-10
Date Collected: 05/08/25 09:00
Matrix: Water
Date Received: 05/10/25 09:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260C		1	746022	AXK	EET BUF	05/14/25 17:11

Laboratory References:

EET BUF = Eurofins Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600

EET CLE = Eurofins Cleveland, 180 S. Van Buren Avenue, Barberton, OH 44203, TEL (330)497-9396

Accreditation/Certification Summary

Client: Roux Environmental Engineering and Geology DPC
Job ID: 480-229348-1
Project/Site: BCP RI - 619 Exchange Street Site

Laboratory: Eurofins Buffalo

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	Identification Number	Expiration Date
New York	NELAP	10026	03-31-26

The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

Analysis Method	Prep Method	Matrix	Analyte
8151A	8151A	Water	Picloram

Laboratory: Eurofins Cleveland

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Connecticut	State	PH-0806	12-31-26
Georgia	State	4062	02-27-26
Illinois	NELAP	200004	08-31-25
Iowa	State	421	06-01-25
Kansas	NELAP	E-10336	01-31-26
Kentucky (UST)	State	112225	02-28-26
Kentucky (WW)	State	KY98016	12-31-25
Minnesota	NELAP	039-999-348	12-31-25
New Hampshire	NELAP	225024	09-30-25
New Jersey	NELAP	OH001	07-03-25
New York	NELAP	10975	04-01-26
North Dakota	State	R-244	02-27-26
Ohio	State	8303	11-04-25
Ohio VAP	State	ORELAP 4062	02-28-26
Oregon	NELAP	4062	02-27-26
Pennsylvania	NELAP	68-00340	08-31-25
Texas	NELAP	T104704517-22-19	08-31-25
US Fish & Wildlife	US Federal Programs	A26406	02-28-26
USDA	US Federal Programs	P330-18-00281	01-05-27
Virginia	NELAP	460175	09-14-25
West Virginia DEP	State	210	12-31-25
Wisconsin	State	399167560	08-31-25

Method Summary

Client: Roux Environmental Engineering and Geology DPC
Job ID: 480-229348-1
Project/Site: BCP RI - 619 Exchange Street Site

Method	Method Description	Protocol	Laboratory
8260C	Volatile Organic Compounds by GC/MS	SW846	EET BUF
8270D	Semivolatile Organic Compounds (GC/MS)	SW846	EET BUF
8270D SIM ID	Semivolatile Organic Compounds (GC/MS SIM / Isotope Dilution)	SW846	EET BUF
8270D_LL_PAH	Semivolatile Organic Compounds (GC/MS) Low level PAH	SW846	EET BUF
8081B	Organochlorine Pesticides (GC)	SW846	EET BUF
8082A	Polychlorinated Biphenyls (PCBs) by Gas Chromatography	SW846	EET BUF
8151A	Herbicides (GC)	SW846	EET BUF
Draft-3 1633	Per- and Polyfluoroalkyl Substances by LC/MS/MS	EPA	EET CLE
6010D	Metals (ICP)	SW846	EET BUF
7470A	Mercury (CVAA)	SW846	EET BUF
1633	Solid-Phase Extraction (SPE)	EPA	EET CLE
3005A	Preparation, Total Metals	SW846	EET BUF
3005A	Preparation, Total Recoverable or Dissolved Metals	SW846	EET BUF
3510C	Liquid-Liquid Extraction (Separatory Funnel)	SW846	EET BUF
5030C	Purge and Trap	SW846	EET BUF
7470A	Preparation, Mercury	SW846	EET BUF
8151A	Extraction (Herbicides)	SW846	EET BUF
FILTRATION	Sample Filtration	None	EET BUF

Protocol References:

EPA = US Environmental Protection Agency

None = None

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

EET BUF = Eurofins Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600

EET CLE = Eurofins Cleveland, 180 S. Van Buren Avenue, Barberton, OH 44203, TEL (330)497-9396

Sample Summary

Client: Roux Environmental Engineering and Geology DPC
Job ID: 480-229348-1
Project/Site: BCP RI - 619 Exchange Street Site

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
480-229348-1	MW-1	Water	05/08/25 15:00	05/10/25 09:00
480-229348-2	MW-2	Water	05/08/25 13:00	05/10/25 09:00
480-229348-3	MW-3	Water	05/08/25 14:00	05/10/25 09:00
480-229348-4	MW-4	Water	05/08/25 12:00	05/10/25 09:00
480-229348-5	MW-5	Water	05/08/25 10:00	05/10/25 09:00
480-229348-6	MW-6	Water	05/08/25 11:00	05/10/25 09:00
480-229348-7	BD	Water	05/08/25 12:05	05/10/25 09:00
480-229348-8	FIELD BLANK	Water	05/08/25 09:30	05/10/25 09:00
480-229348-9	EQUIPMENT BLANK	Water	05/08/25 09:15	05/10/25 09:00
480-229348-10	TRIP BLANK	Water	05/08/25 09:00	05/10/25 09:00

Chain of Custody Record

599372 eurofins | Environment Testing TestAmerica

Address: _____

Regulatory Program: ☐ DW ☐ NPDES ☐ RCRA ☐ Other:

TAL-8210

Client Contact	Project Manager: John Schreiber	Site Contact: Nicole Sirois	Date:	COC No:
Company Name: Rock Inc	Tel/Email: BMcshane@Rockinc.com	Lab Contact: John Schreiber	Carrier:	____ of ____ COCs
Address: 255 Granby St Ste 1	Analysis Turnaround Time			Sampler:
City/State/Zip: Buffalo NY 14210	☐ CALENDAR DAYS ☐ WORKING DAYS			For Lab Use Only:
Phone: 716-713-3037	TAT if different from Below ____			Walk-in Client:
Fax:	☐ 2 weeks ☐ 1 week ☐ 2 days ☐ 1 day			Lab Sampling:
Project Name: 614 exchange				Job / SDG No.:
Site:				
PO# 4374.0004 B000				Sample Specific Notes:

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=Grab)	Matrix	# of Cont.	Filtered Sample (Y/N)	Perform MS/MSD (Y/N)	TCL+CP-S (Waterflow)	TCL Soils SIM (Flow)	TAL Metals Total	TAL Metals Dissolved	PCB's	Herbicides	Pesticides	1,4 Dioxane	PFAS	Sample Specific Notes
MW-1	5/8/25	1500	G	AQ			X	X	X	X	X	X	X	X	X	X	MS/MSD
MW-2		1300						X	X	X	X						
MW-3		1400						X	X	X	X						
MW-4		1200						X	X	X	X	X	X	X	X	X	
MW-5		1000						X	X	X	X	X	X	X	X	X	low volume herbicides
MW-6		1100						X	X	X	X						low volume herbicides
BD		1205						X	X	X	X	X	X	X	X	X	
Field Blank		930			2											X	low volume herbicides
Equipment Blank		9:15			2											X	
TRIP Blank		9:00			2			X									

Preservation Used: 1= Ice, 2= HCl; 3= H2SO4; 4=HNO3; 5=NaOH; 6= Other _____

Possible Hazard Identification:
Are any samples from a listed EPA Hazardous Waste? Please List any EPA Waste Codes for the sample in the Comments Section if the lab is to dispose of the sample.

☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)

☐ Return to Client ☐ Disposal by Lab ☐ Archive for _____ Months

Special Instructions/QC Requirements & Comments:

Cat B, MS/MSD on 1,4 Dioxane, PFAS 537 (Modified), 1,4 Dioxane 8270 SIM, 537 (Modified), 8270 SIM, 8081, 8151, 6010, 7470 IR HSC

Custody Seals Intact: ☐ Yes ☐ No	Custody Seal No.:	Cooler Temp. (°C): Obs'd: _____ Corr'd: _____ Therm ID No.: _____		
Relinquished by:	Company: Rock	Date/Time: 5/9/25 1200	Received by:	Company: GET	Date/Time: 5/9/25 1209
Relinquished by:	Company: GET	Date/Time: 5/9/25 15:17	Received by:	Company: Euro	Date/Time: 5/10/25 0900
Relinquished by:	Company:	Date/Time:	Received in Laboratory by:	Company:	Date/Time:

480-229348 Chain of Custody

5/16/2025

Eurofins Buffalo
10 Hazelwood Drive
Amherst, NY 14228-2298
Phone: 716-691-2600 Fax: 716-691-7991

Chain of Custody Record 5.0/14.3

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Client Information (Sub Contract Lab)	Sampler: N/A	Lab PM: Schove, John R	Carrier Tracking No(s): N/A	COC No: 480-92460.1
Client Contact: Shipping/Receiving	Phone: N/A	E-Mail: John.Schove@et.eurofinsus.com	State of Origin: New York	Page: Page 1 of 1
Company: Eurofins Environment Testing North Centr		Accreditations Required (See note): NELAP - New York		Job #: 480-229348-1
Address: 180 S. Van Buren Avenue, ,	Due Date Requested: 5/22/2025			Preservation Codes: -
City: Barberton	TAT Requested (days): N/A			
State, Zip: OH, 44203				
Phone: 330-497-9396(Tel) 330-497-0772(Fax)	PO #: N/A			
Email: N/A	WO #: N/A			
Project Name: BCP RI - 619 Exchange Street Site	Project #: 48028561			
Site: N/A	SSOW#: N/A			Other: N/A

Analysis Requested

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)	1633/1633_SPE PFAS - NY Standard 40 Analyte List	Total Number of containers	Special Instructions/Note:
			Preservation Code:						Pfas R083-14
MW-1 (480-229348-1)	5/8/25	15:00 Eastern	G	Water			X	2	
MW-1 (480-229348-1MS)	5/8/25	15:00 Eastern	G	Water			X	2	
MW-1 (480-229348-1MSD)	5/8/25	15:00 Eastern	G	Water			X	2	
MW-4 (480-229348-4)	5/8/25	12:00 Eastern	G	Water			X	2	
MW-5 (480-229348-5)	5/8/25	10:00 Eastern	G	Water			X	2	
BD (480-229348-7)	5/8/25	12:05 Eastern	G	Water			X	2	
FIELD BLANK (480-229348-8)	5/8/25	09:30 Eastern	G	Water			X	2	
EQUIPMENT BLANK (480-229348-9)	5/8/25	09:15 Eastern	G	Water			X	2	

Note: Since laboratory accreditations are subject to change, Eurofins Environment Testing Northeast, 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 Northeast, LLC laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins Environment Testing Northeast, 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 Northeast, 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
	5-12-25 1600		JAYDEN COLLINS	5/13/25 1000	
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Cooler Temperature(s) °C and Other Remarks:

Eurofins – Cleveland Sample Receipt Form/Narrative Login #
Barberton Facility

Client Eurofins Buffalo Site Name | Cooler unpacked by JAYDEN COLLINS

Cooler Received on 5-13-25 Opened on 5-13-25

FedEx 1st Grd Exp UPS FAS Waypoint Client Drop-Off Eurofins Courier Other

Receipt After-hours Drop-off Date/Time Storage Location

Eurofins Cooler # Foam Box Client Cooler Box Other

Packing material used Bubble Wrap Foam Plastic Bag None Other

COOLANT Wet Ice Blue Ice Dry Ice Water None

1 Cooler temperature upon receipt ☐ See Multiple Cooler Form

IR GUN # 18 (CF 0.7 °C) Observed Cooler Temp 5.0 °C Corrected Cooler Temp 4.3 °C

2. Were tamper/custody seals on the outside of the cooler(s)? If Yes Quantity	Yes	No
-Were the seals on the outside of the cooler(s) signed & dated?	Yes	No NA
-Were tamper/custody seals on the bottle(s) or bottle kits (LLHg/MeHg)?	Yes	No
-Were tamper/custody seals intact and uncompromised?	Yes	No NA
3 Shippers' packing slip attached to the cooler(s)?	Yes	No
4 Did custody papers accompany the sample(s)?	Yes	No
5 Were the custody papers relinquished & signed in the appropriate place?	Yes	No
6. Was/were the person(s) who collected the samples clearly identified on the COC?	Yes	No
7 Did all bottles arrive in good condition (Unbroken)?	Yes	No
8 Could all bottle labels (ID/Date/Time) be reconciled with the COC?	Yes	No
9 For each sample, does the COC specify preservatives (Y/N), # of containers (Y/N), and sample type of grab/comp (Y/N)?		
10 Were correct bottle(s) used for the test(s) indicated?	Yes	No
11 Sufficient quantity received to perform indicated analyses?	Yes	No
12. Are these work share samples and all listed on the COC?	Yes	No
If yes, Questions 13-17 have been checked at the originating laboratory		
13 Were all preserved sample(s) at the correct pH upon receipt?	Yes	No NA pH Strip Lot# HC457151
14 Were VOAs on the COC?	Yes	No
15 Were air bubbles >6 mm in any VOA vials? ● ← Larger than this	Yes	No NA
16. Was a VOA trip blank present in the cooler(s)? Trip Blank Lot #	Yes	No
17 Was a LL Hg or Me Hg trip blank present?	Yes	No

Tests that are not checked for pH by Receiving:
VOAs
Oil and Grease
TOC

Contacted PM Date by via Verbal Voice Mail Other

Concerning

18. CHAIN OF CUSTODY & SAMPLE DISCREPANCIES ☐ additional next page

Labeled by

Labels Verified by

19 SAMPLE CONDITION

Sample(s) were received after the recommended holding time had expired.

Sample(s) were received in a broken container

Sample(s) were received with bubble >6 mm in diameter (Notify PM)

20. SAMPLE PRESERVATION

Sample(s) were further preserved in the laboratory

Time preserved. Preservative(s) added/Lot number(s)

VOA Sample Preservation - Date/Time VOAs Frozen.

WI NC-099-042925 Cooler Receipt Form.doc

SAMPLE CONTROL
EUROFINS ENVIRONMENT TESTING
10 HAZELWOOD DRIVE
BUFFALO NY 142282223
UNITED STATES US

ACTWGT 30 55 LB
CAD 0759273/CAFE3855
DIMS 18x15x13 IN

BILL SENDER

TO SAMPLE RECEIPT
EUROFINS CLEVELAND
180 S VAN BUREN AVE

BARBERTON OH 442033543
(330) 497-9396
REF. BARBERTON

FedEx
Express

TRK# 0201 7463 0664 1313

TUE - 13 MAY 10:30
PRIORITY OVERNIGH

XP CAKA

44203
OH-US CLE

5/16/2025

Login Sample Receipt Checklist

Client: Roux Environmental Engineering and Geology DPC

Job Number: 480-229348-1

Login Number: 229348

List Source: Eurofins Buffalo

List Number: 1

Creator: Wallace, Cameron

Question	Answer	Comment
Radioactivity either was not measured or, if measured, is at or below background	True	
The cooler's custody seal, if present, is intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the sample IDs on the containers and the COC.	True	
Samples are received within Holding Time (Excluding tests with immediate HTs)..	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
VOA sample vials do not have headspace or bubble is <6mm (1/4") in diameter.	True	
If necessary, staff have been informed of any short hold time or quick TAT needs	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Sampling Company provided.	True	ROUX
Samples received within 48 hours of sampling.	True	
Samples requiring field filtration have been filtered in the field.	True	
Chlorine Residual checked.	N/A	

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ANALYTICAL REPORT

PREPARED FOR

Attn: Bryan Mayback
Roux Environmental Engineering and Geology DPC
2558 Hamburg Turnpike
Suite 300
Lackawanna, New York 14218

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JOB DESCRIPTION

BCP RI - 619 Exchange Street Site

JOB NUMBER

480-229350-1

Eurofins Buffalo
10 Hazelwood Drive
Amherst NY 14228-2298

See page two for job notes and contact information.

Job Notes

This report may not be reproduced except in full, and with written approval from the laboratory. The results relate only to the samples tested. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

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 Northeast, LLC Project Manager.

Authorization



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Authorized for release by
John Schove, Project Manager II
John.Schove@et.eurofinsus.com
(716)504-9838

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Definitions/Glossary

Client: Roux Environmental Engineering and Geology DPC
Job ID: 480-229350-1
Project/Site: BCP RI - 619 Exchange Street Site

Qualifiers

Air - GC/MS VOA

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

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

Job ID: 480-229350-1 Eurofins Buffalo

Job Narrative
480-229350-1

Analytical test results meet all requirements of the associated regulatory program listed on the Accreditation/Certification Summary Page unless otherwise noted under the individual analysis. Data qualifiers and/or narrative comments are included to explain any exceptions, if applicable.

- Matrix QC may not be reported if insufficient sample is provided or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD may be performed, unless otherwise specified in the method.
- Surrogate and/or isotope dilution analyte recoveries (if applicable) which are outside of the QC window are confirmed unless attributed to a dilution or otherwise noted in the narrative.

Regulated compliance samples (e.g. SDWA, NPDES) must comply with the associated agency requirements/permits.

Receipt
The samples were received on 5/10/2025 10:00 AM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice.

Air - GC/MS VOA
Method TO15_LL_PF: The continuing calibration verification (CCV) associated with batch 410-642840 recovered above the upper control limit for 4-Isopropyltoluene and sec-Butylbenzene. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported. The associated samples are:SV-1 (480-229350-1), OA-2 (480-229350-2) and OA-1 (480-229350-3).

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

Detection Summary

Client: Roux Environmental Engineering and Geology DPC
Job ID: 480-229350-1
Project/Site: BCP RI - 619 Exchange Street Site

Client Sample ID: SV-1 — Lab Sample ID: 480-229350-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1,1-Trichloroethane	2.1	J	2.7	0.65	ug/m3	1		TO 15 LL	Total/NA
4-Methyl-2-pentanone (Methyl isobutyl ketone)	1.1	J	20	0.61	ug/m3	1		TO 15 LL	Total/NA
Acetone	130		4.8	1.3	ug/m3	1		TO 15 LL	Total/NA
Benzene	4.1		1.6	0.35	ug/m3	1		TO 15 LL	Total/NA
Carbon disulfide	7.9		3.1	0.40	ug/m3	1		TO 15 LL	Total/NA
Chloroform	1.1	J	2.4	0.45	ug/m3	1		TO 15 LL	Total/NA
Dichlorodifluoromethane	2.5		2.5	0.64	ug/m3	1		TO 15 LL	Total/NA
Isopropyl alcohol	1.7	J	4.9	0.59	ug/m3	1		TO 15 LL	Total/NA
m,p-Xylene	1.2	J	4.3	1.1	ug/m3	1		TO 15 LL	Total/NA
Methyl Butyl Ketone (2-Hexanone)	1.3	J	8.2	0.74	ug/m3	1		TO 15 LL	Total/NA
Methyl Ethyl Ketone (2-Butanone)	52		5.9	0.62	ug/m3	1		TO 15 LL	Total/NA
n-Heptane	2.0		2.0	0.94	ug/m3	1		TO 15 LL	Total/NA
n-Hexane	12		1.8	0.46	ug/m3	1		TO 15 LL	Total/NA
tert-Butyl alcohol	15		3.0	0.64	ug/m3	1		TO 15 LL	Total/NA
Toluene	1.7	J	1.9	0.45	ug/m3	1		TO 15 LL	Total/NA
Trichloroethene	7.9		0.20	0.97	ug/m3	1		TO 15 LL	Total/NA
Trichlorofluoromethane	1.2	J	2.8	0.84	ug/m3	1		TO 15 LL	Total/NA

Client Sample ID: OA-2 — Lab Sample ID: 480-229350-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	11		4.8	1.3	ug/m3	1		TO 15 LL	Total/NA
Dichlorodifluoromethane	2.5		2.5	0.64	ug/m3	1		TO 15 LL	Total/NA
Isopropyl alcohol	0.78	J	4.9	0.59	ug/m3	1		TO 15 LL	Total/NA
Methyl Ethyl Ketone (2-Butanone)	0.76	J	5.9	0.62	ug/m3	1		TO 15 LL	Total/NA
Trichlorofluoromethane	1.3	J	2.8	0.84	ug/m3	1		TO 15 LL	Total/NA

Client Sample ID: OA-1 — Lab Sample ID: 480-229350-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	11		4.8	1.3	ug/m3	1		TO 15 LL	Total/NA
Benzene	0.37	J	1.6	0.35	ug/m3	1		TO 15 LL	Total/NA
Dichlorodifluoromethane	2.5		2.5	0.64	ug/m3	1		TO 15 LL	Total/NA
Isopropyl alcohol	0.89	J	4.9	0.59	ug/m3	1		TO 15 LL	Total/NA
Methyl Ethyl Ketone (2-Butanone)	1.8	J	5.9	0.62	ug/m3	1		TO 15 LL	Total/NA
Toluene	0.51	J	1.9	0.45	ug/m3	1		TO 15 LL	Total/NA
Trichlorofluoromethane	1.4	J	2.8	0.84	ug/m3	1		TO 15 LL	Total/NA

This Detection Summary does not include radiochemical test results.

Client: Roux Environmental Engineering and Geology DPC
Job ID: 480-229350-1
Project/Site: BCP RI - 619 Exchange Street Site

Client Sample ID: SV-1
Lab Sample ID: 480-229350-1
Date Collected: 05/08/25 13:00
Matrix: Air
Date Received: 05/10/25 10:00
Sample Container: Summa Canister 6L

Method: EPA TO 15 LL - Volatile Organic Compounds in Ambient Air, Low Concentration (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	**2.1**	**J**	2.7	0.65	ug/m3			05/13/25 11:37	1
1,1,2,2-Tetrachloroethane	ND		3.4	1.0	ug/m3			05/13/25 11:37	1
1,1,2-Trichloroethane	ND		2.7	0.65	ug/m3			05/13/25 11:37	1
1,1,2-Trichlorotrifluoroethane	ND		3.8	0.84	ug/m3			05/13/25 11:37	1
1,1-Dichloroethane	ND		2.0	0.36	ug/m3			05/13/25 11:37	1
1,1-Dichloroethene	ND		0.20	0.56	ug/m3			05/13/25 11:37	1
1,2,4-Trichlorobenzene	ND		15	2.8	ug/m3			05/13/25 11:37	1
1,2,4-Trimethylbenzene	ND		2.5	1.4	ug/m3			05/13/25 11:37	1
1,2-Dibromoethane	ND		3.8	1.0	ug/m3			05/13/25 11:37	1
1,2-Dichlorobenzene	ND		3.0	1.2	ug/m3			05/13/25 11:37	1
1,2-Dichloroethane	ND		2.0	0.32	ug/m3			05/13/25 11:37	1
1,2-Dichloropropane	ND		2.3	0.60	ug/m3			05/13/25 11:37	1
1,2-Dichlorotetrafluoroethane	ND		3.5	0.84	ug/m3			05/13/25 11:37	1
1,3,5-Trimethylbenzene	ND		2.5	1.6	ug/m3			05/13/25 11:37	1
1,3-Butadiene	ND		1.1	0.38	ug/m3			05/13/25 11:37	1
1,3-Dichlorobenzene	ND		3.0	1.1	ug/m3			05/13/25 11:37	1
1,4-Dichlorobenzene	ND		3.0	1.0	ug/m3			05/13/25 11:37	1
1,4-Dioxane	ND		7.2	0.61	ug/m3			05/13/25 11:37	1
2,2,4-Trimethylpentane	ND		4.7	0.61	ug/m3			05/13/25 11:37	1
2-Chlorotoluene	ND		2.6	1.1	ug/m3			05/13/25 11:37	1
3-Chloropropene	ND		1.6	0.47	ug/m3			05/13/25 11:37	1
4-Ethyltoluene	ND		2.5	0.88	ug/m3			05/13/25 11:37	1
4-Isopropyltoluene	ND		2.7	1.5	ug/m3			05/13/25 11:37	1
4-Methyl-2-pentanone (Methyl isobutyl ketone)	**1.1**	**J**	20	0.61	ug/m3			05/13/25 11:37	1
Acetone	**130**		4.8	1.3	ug/m3			05/13/25 11:37	1
Benzene	**4.1**		1.6	0.35	ug/m3			05/13/25 11:37	1
Benzyl chloride	ND		2.6	1.3	ug/m3			05/13/25 11:37	1
Bromodichloromethane	ND		3.4	0.80	ug/m3			05/13/25 11:37	1
Bromoethene(Vinyl Bromide)	ND		22	0.79	ug/m3			05/13/25 11:37	1
Bromoform	ND		5.2	1.8	ug/m3			05/13/25 11:37	1
Bromomethane	ND		1.9	0.70	ug/m3			05/13/25 11:37	1
Carbon disulfide	**7.9**		3.1	0.40	ug/m3			05/13/25 11:37	1
Carbon tetrachloride	ND		0.22	0.88	ug/m3			05/13/25 11:37	1
Chlorobenzene	ND		2.3	0.60	ug/m3			05/13/25 11:37	1
Chlorodifluoromethane	ND		1.8	0.53	ug/m3			05/13/25 11:37	1
Chloroethane	ND		1.3	0.50	ug/m3			05/13/25 11:37	1
Chloroform	**1.1**	**J**	2.4	0.45	ug/m3			05/13/25 11:37	1
Chloromethane	ND		4.1	0.50	ug/m3			05/13/25 11:37	1
cis-1,2-Dichloroethene	ND		0.20	0.48	ug/m3			05/13/25 11:37	1
cis-1,3-Dichloropropene	ND		2.3	0.45	ug/m3			05/13/25 11:37	1
Cumene	ND		2.5	1.2	ug/m3			05/13/25 11:37	1
Cyclohexane	ND		1.7	0.38	ug/m3			05/13/25 11:37	1
Dibromochloromethane	ND		4.3	1.1	ug/m3			05/13/25 11:37	1
Dichlorodifluoromethane	**2.5**		2.5	0.64	ug/m3			05/13/25 11:37	1
Ethylbenzene	ND		2.2	0.83	ug/m3			05/13/25 11:37	1
Hexachlorobutadiene	ND		21	5.0	ug/m3			05/13/25 11:37	1
Isopropyl alcohol	**1.7**	**J**	4.9	0.59	ug/m3			05/13/25 11:37	1
m,p-Xylene	**1.2**	**J**	4.3	1.1	ug/m3			05/13/25 11:37	1

Client: Roux Environmental Engineering and Geology DPC
Job ID: 480-229350-1
Project/Site: BCP RI - 619 Exchange Street Site

Client Sample ID: SV-1
Lab Sample ID: 480-229350-1
Date Collected: 05/08/25 13:00
Matrix: Air
Date Received: 05/10/25 10:00
Sample Container: Summa Canister 6L

Method: EPA TO 15 LL - Volatile Organic Compounds in Ambient Air, Low Concentration (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl Butyl Ketone (2-Hexanone)	**1.3**	**J**	8.2	0.74	ug/m3			05/13/25 11:37	1
Methyl Ethyl Ketone (2-Butanone)	**52**		5.9	0.62	ug/m3			05/13/25 11:37	1
Methyl methacrylate	ND		4.1	0.61	ug/m3			05/13/25 11:37	1
Methyl tert-butyl ether	ND		1.8	0.54	ug/m3			05/13/25 11:37	1
Methylene Chloride	ND		6.9	0.87	ug/m3			05/13/25 11:37	1
Naphthalene	ND		2.0	2.6	ug/m3			05/13/25 11:37	1
n-Butylbenzene	ND		2.7	1.4	ug/m3			05/13/25 11:37	1
n-Heptane	**2.0**		2.0	0.94	ug/m3			05/13/25 11:37	1
n-Hexane	**12**		1.8	0.46	ug/m3			05/13/25 11:37	1
n-Propylbenzene	ND		2.5	1.0	ug/m3			05/13/25 11:37	1
o-Xylene	ND		2.2	1.3	ug/m3			05/13/25 11:37	1
sec-Butylbenzene	ND		2.7	2.1	ug/m3			05/13/25 11:37	1
Styrene	ND		2.1	0.85	ug/m3			05/13/25 11:37	1
tert-Butyl alcohol	**15**		3.0	0.64	ug/m3			05/13/25 11:37	1
tert-Butylbenzene	ND		5.5	4.2	ug/m3			05/13/25 11:37	1
Tetrachloroethene	ND		3.4	1.7	ug/m3			05/13/25 11:37	1
Tetrahydrofuran	ND		1.5	0.71	ug/m3			05/13/25 11:37	1
Toluene	**1.7**	**J**	1.9	0.45	ug/m3			05/13/25 11:37	1
trans-1,2-Dichloroethene	ND		2.0	0.34	ug/m3			05/13/25 11:37	1
trans-1,3-Dichloropropene	ND		2.3	0.54	ug/m3			05/13/25 11:37	1
Trichloroethene	**7.9**		0.20	0.97	ug/m3			05/13/25 11:37	1
Trichlorofluoromethane	**1.2**	**J**	2.8	0.84	ug/m3			05/13/25 11:37	1
Vinyl chloride	ND		0.20	0.31	ug/m3			05/13/25 11:37	1

Client: Roux Environmental Engineering and Geology DPC
Job ID: 480-229350-1
Project/Site: BCP RI - 619 Exchange Street Site

Client Sample ID: OA-2
Lab Sample ID: 480-229350-2
Date Collected: 05/08/25 11:30
Matrix: Air
Date Received: 05/10/25 10:00
Sample Container: Summa Canister 6L

Method: EPA TO 15 LL - Volatile Organic Compounds in Ambient Air, Low Concentration (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		2.7	0.65	ug/m3			05/13/25 12:06	1
1,1,2,2-Tetrachloroethane	ND		3.4	1.0	ug/m3			05/13/25 12:06	1
1,1,2-Trichloroethane	ND		2.7	0.65	ug/m3			05/13/25 12:06	1
1,1,2-Trichlorotrifluoroethane	ND		3.8	0.84	ug/m3			05/13/25 12:06	1
1,1-Dichloroethane	ND		2.0	0.36	ug/m3			05/13/25 12:06	1
1,1-Dichloroethene	ND		0.20	0.56	ug/m3			05/13/25 12:06	1
1,2,4-Trichlorobenzene	ND		15	2.8	ug/m3			05/13/25 12:06	1
1,2,4-Trimethylbenzene	ND		2.5	1.4	ug/m3			05/13/25 12:06	1
1,2-Dibromoethane	ND		3.8	1.0	ug/m3			05/13/25 12:06	1
1,2-Dichlorobenzene	ND		3.0	1.2	ug/m3			05/13/25 12:06	1
1,2-Dichloroethane	ND		2.0	0.32	ug/m3			05/13/25 12:06	1
1,2-Dichloropropane	ND		2.3	0.60	ug/m3			05/13/25 12:06	1
1,2-Dichlorotetrafluoroethane	ND		3.5	0.84	ug/m3			05/13/25 12:06	1
1,3,5-Trimethylbenzene	ND		2.5	1.6	ug/m3			05/13/25 12:06	1
1,3-Butadiene	ND		1.1	0.38	ug/m3			05/13/25 12:06	1
1,3-Dichlorobenzene	ND		3.0	1.1	ug/m3			05/13/25 12:06	1
1,4-Dichlorobenzene	ND		3.0	1.0	ug/m3			05/13/25 12:06	1
1,4-Dioxane	ND		7.2	0.61	ug/m3			05/13/25 12:06	1
2,2,4-Trimethylpentane	ND		4.7	0.61	ug/m3			05/13/25 12:06	1
2-Chlorotoluene	ND		2.6	1.1	ug/m3			05/13/25 12:06	1
3-Chloropropene	ND		1.6	0.47	ug/m3			05/13/25 12:06	1
4-Ethyltoluene	ND		2.5	0.88	ug/m3			05/13/25 12:06	1
4-Isopropyltoluene	ND		2.7	1.5	ug/m3			05/13/25 12:06	1
4-Methyl-2-pentanone (Methyl isobutyl ketone)	ND		20	0.61	ug/m3			05/13/25 12:06	1
Acetone	**11**		4.8	1.3	ug/m3			05/13/25 12:06	1
Benzene	ND		1.6	0.35	ug/m3			05/13/25 12:06	1
Benzyl chloride	ND		2.6	1.3	ug/m3			05/13/25 12:06	1
Bromodichloromethane	ND		3.4	0.80	ug/m3			05/13/25 12:06	1
Bromoethene(Vinyl Bromide)	ND		22	0.79	ug/m3			05/13/25 12:06	1
Bromoform	ND		5.2	1.8	ug/m3			05/13/25 12:06	1
Bromomethane	ND		1.9	0.70	ug/m3			05/13/25 12:06	1
Carbon disulfide	ND		3.1	0.40	ug/m3			05/13/25 12:06	1
Carbon tetrachloride	ND		0.22	0.88	ug/m3			05/13/25 12:06	1
Chlorobenzene	ND		2.3	0.60	ug/m3			05/13/25 12:06	1
Chlorodifluoromethane	ND		1.8	0.53	ug/m3			05/13/25 12:06	1
Chloroethane	ND		1.3	0.50	ug/m3			05/13/25 12:06	1
Chloroform	ND		2.4	0.45	ug/m3			05/13/25 12:06	1
Chloromethane	ND		4.1	0.50	ug/m3			05/13/25 12:06	1
cis-1,2-Dichloroethene	ND		0.20	0.48	ug/m3			05/13/25 12:06	1
cis-1,3-Dichloropropene	ND		2.3	0.45	ug/m3			05/13/25 12:06	1
Cumene	ND		2.5	1.2	ug/m3			05/13/25 12:06	1
Cyclohexane	ND		1.7	0.38	ug/m3			05/13/25 12:06	1
Dibromochloromethane	ND		4.3	1.1	ug/m3			05/13/25 12:06	1
Dichlorodifluoromethane	**2.5**		2.5	0.64	ug/m3			05/13/25 12:06	1
Ethylbenzene	ND		2.2	0.83	ug/m3			05/13/25 12:06	1
Hexachlorobutadiene	ND		21	5.0	ug/m3			05/13/25 12:06	1
Isopropyl alcohol	**0.78**	**J**	4.9	0.59	ug/m3			05/13/25 12:06	1
m,p-Xylene	ND		4.3	1.1	ug/m3			05/13/25 12:06	1

Client: Roux Environmental Engineering and Geology DPC
Job ID: 480-229350-1
Project/Site: BCP RI - 619 Exchange Street Site

Client Sample ID: OA-2
Lab Sample ID: 480-229350-2
Date Collected: 05/08/25 11:30
Matrix: Air
Date Received: 05/10/25 10:00
Sample Container: Summa Canister 6L

Method: EPA TO 15 LL - Volatile Organic Compounds in Ambient Air, Low Concentration (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl Butyl Ketone (2-Hexanone)	ND		8.2	0.74	ug/m3			05/13/25 12:06	1
Methyl Ethyl Ketone (2-Butanone)	**0.76**	**J**	5.9	0.62	ug/m3			05/13/25 12:06	1
Methyl methacrylate	ND		4.1	0.61	ug/m3			05/13/25 12:06	1
Methyl tert-butyl ether	ND		1.8	0.54	ug/m3			05/13/25 12:06	1
Methylene Chloride	ND		6.9	0.87	ug/m3			05/13/25 12:06	1
Naphthalene	ND		2.0	2.6	ug/m3			05/13/25 12:06	1
n-Butylbenzene	ND		2.7	1.4	ug/m3			05/13/25 12:06	1
n-Heptane	ND		2.0	0.94	ug/m3			05/13/25 12:06	1
n-Hexane	ND		1.8	0.46	ug/m3			05/13/25 12:06	1
n-Propylbenzene	ND		2.5	1.0	ug/m3			05/13/25 12:06	1
o-Xylene	ND		2.2	1.3	ug/m3			05/13/25 12:06	1
sec-Butylbenzene	ND		2.7	2.1	ug/m3			05/13/25 12:06	1
Styrene	ND		2.1	0.85	ug/m3			05/13/25 12:06	1
tert-Butyl alcohol	ND		3.0	0.64	ug/m3			05/13/25 12:06	1
tert-Butylbenzene	ND		5.5	4.2	ug/m3			05/13/25 12:06	1
Tetrachloroethene	ND		3.4	1.7	ug/m3			05/13/25 12:06	1
Tetrahydrofuran	ND		1.5	0.71	ug/m3			05/13/25 12:06	1
Toluene	ND		1.9	0.45	ug/m3			05/13/25 12:06	1
trans-1,2-Dichloroethene	ND		2.0	0.34	ug/m3			05/13/25 12:06	1
trans-1,3-Dichloropropene	ND		2.3	0.54	ug/m3			05/13/25 12:06	1
Trichloroethene	ND		0.20	0.97	ug/m3			05/13/25 12:06	1
Trichlorofluoromethane	**1.3**	**J**	2.8	0.84	ug/m3			05/13/25 12:06	1
Vinyl chloride	ND		0.20	0.31	ug/m3			05/13/25 12:06	1

Client: Roux Environmental Engineering and Geology DPC
Job ID: 480-229350-1
Project/Site: BCP RI - 619 Exchange Street Site

Client Sample ID: OA-1
Lab Sample ID: 480-229350-3
Date Collected: 04/18/25 16:00
Matrix: Air
Date Received: 05/10/25 10:00
Sample Container: Summa Canister 6L

Method: EPA TO 15 LL - Volatile Organic Compounds in Ambient Air, Low Concentration (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		2.7	0.65	ug/m3			05/13/25 12:35	1
1,1,2,2-Tetrachloroethane	ND		3.4	1.0	ug/m3			05/13/25 12:35	1
1,1,2-Trichloroethane	ND		2.7	0.65	ug/m3			05/13/25 12:35	1
1,1,2-Trichlorotrifluoroethane	ND		3.8	0.84	ug/m3			05/13/25 12:35	1
1,1-Dichloroethane	ND		2.0	0.36	ug/m3			05/13/25 12:35	1
1,1-Dichloroethene	ND		0.20	0.56	ug/m3			05/13/25 12:35	1
1,2,4-Trichlorobenzene	ND		15	2.8	ug/m3			05/13/25 12:35	1
1,2,4-Trimethylbenzene	ND		2.5	1.4	ug/m3			05/13/25 12:35	1
1,2-Dibromoethane	ND		3.8	1.0	ug/m3			05/13/25 12:35	1
1,2-Dichlorobenzene	ND		3.0	1.2	ug/m3			05/13/25 12:35	1
1,2-Dichloroethane	ND		2.0	0.32	ug/m3			05/13/25 12:35	1
1,2-Dichloropropane	ND		2.3	0.60	ug/m3			05/13/25 12:35	1
1,2-Dichlorotetrafluoroethane	ND		3.5	0.84	ug/m3			05/13/25 12:35	1
1,3,5-Trimethylbenzene	ND		2.5	1.6	ug/m3			05/13/25 12:35	1
1,3-Butadiene	ND		1.1	0.38	ug/m3			05/13/25 12:35	1
1,3-Dichlorobenzene	ND		3.0	1.1	ug/m3			05/13/25 12:35	1
1,4-Dichlorobenzene	ND		3.0	1.0	ug/m3			05/13/25 12:35	1
1,4-Dioxane	ND		7.2	0.61	ug/m3			05/13/25 12:35	1
2,2,4-Trimethylpentane	ND		4.7	0.61	ug/m3			05/13/25 12:35	1
2-Chlorotoluene	ND		2.6	1.1	ug/m3			05/13/25 12:35	1
3-Chloropropene	ND		1.6	0.47	ug/m3			05/13/25 12:35	1
4-Ethyltoluene	ND		2.5	0.88	ug/m3			05/13/25 12:35	1
4-Isopropyltoluene	ND		2.7	1.5	ug/m3			05/13/25 12:35	1
4-Methyl-2-pentanone (Methyl isobutyl ketone)	ND		20	0.61	ug/m3			05/13/25 12:35	1
Acetone	**11**		4.8	1.3	ug/m3			05/13/25 12:35	1
Benzene	**0.37**	**J**	1.6	0.35	ug/m3			05/13/25 12:35	1
Benzyl chloride	ND		2.6	1.3	ug/m3			05/13/25 12:35	1
Bromodichloromethane	ND		3.4	0.80	ug/m3			05/13/25 12:35	1
Bromoethene(Vinyl Bromide)	ND		22	0.79	ug/m3			05/13/25 12:35	1
Bromoform	ND		5.2	1.8	ug/m3			05/13/25 12:35	1
Bromomethane	ND		1.9	0.70	ug/m3			05/13/25 12:35	1
Carbon disulfide	ND		3.1	0.40	ug/m3			05/13/25 12:35	1
Carbon tetrachloride	ND		0.22	0.88	ug/m3			05/13/25 12:35	1
Chlorobenzene	ND		2.3	0.60	ug/m3			05/13/25 12:35	1
Chlorodifluoromethane	ND		1.8	0.53	ug/m3			05/13/25 12:35	1
Chloroethane	ND		1.3	0.50	ug/m3			05/13/25 12:35	1
Chloroform	ND		2.4	0.45	ug/m3			05/13/25 12:35	1
Chloromethane	ND		4.1	0.50	ug/m3			05/13/25 12:35	1
cis-1,2-Dichloroethene	ND		0.20	0.48	ug/m3			05/13/25 12:35	1
cis-1,3-Dichloropropene	ND		2.3	0.45	ug/m3			05/13/25 12:35	1
Cumene	ND		2.5	1.2	ug/m3			05/13/25 12:35	1
Cyclohexane	ND		1.7	0.38	ug/m3			05/13/25 12:35	1
Dibromochloromethane	ND		4.3	1.1	ug/m3			05/13/25 12:35	1
Dichlorodifluoromethane	**2.5**		2.5	0.64	ug/m3			05/13/25 12:35	1
Ethylbenzene	ND		2.2	0.83	ug/m3			05/13/25 12:35	1
Hexachlorobutadiene	ND		21	5.0	ug/m3			05/13/25 12:35	1
Isopropyl alcohol	**0.89**	**J**	4.9	0.59	ug/m3			05/13/25 12:35	1
m,p-Xylene	ND		4.3	1.1	ug/m3			05/13/25 12:35	1

Client: Roux Environmental Engineering and Geology DPC
Job ID: 480-229350-1
Project/Site: BCP RI - 619 Exchange Street Site

Client Sample ID: OA-1
Lab Sample ID: 480-229350-3
Date Collected: 04/18/25 16:00
Matrix: Air
Date Received: 05/10/25 10:00
Sample Container: Summa Canister 6L

Method: EPA TO 15 LL - Volatile Organic Compounds in Ambient Air, Low Concentration (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl Butyl Ketone (2-Hexanone)	ND		8.2	0.74	ug/m3			05/13/25 12:35	1
Methyl Ethyl Ketone (2-Butanone)	**1.8**	**J**	5.9	0.62	ug/m3			05/13/25 12:35	1
Methyl methacrylate	ND		4.1	0.61	ug/m3			05/13/25 12:35	1
Methyl tert-butyl ether	ND		1.8	0.54	ug/m3			05/13/25 12:35	1
Methylene Chloride	ND		6.9	0.87	ug/m3			05/13/25 12:35	1
Naphthalene	ND		2.0	2.6	ug/m3			05/13/25 12:35	1
n-Butylbenzene	ND		2.7	1.4	ug/m3			05/13/25 12:35	1
n-Heptane	ND		2.0	0.94	ug/m3			05/13/25 12:35	1
n-Hexane	ND		1.8	0.46	ug/m3			05/13/25 12:35	1
n-Propylbenzene	ND		2.5	1.0	ug/m3			05/13/25 12:35	1
o-Xylene	ND		2.2	1.3	ug/m3			05/13/25 12:35	1
sec-Butylbenzene	ND		2.7	2.1	ug/m3			05/13/25 12:35	1
Styrene	ND		2.1	0.85	ug/m3			05/13/25 12:35	1
tert-Butyl alcohol	ND		3.0	0.64	ug/m3			05/13/25 12:35	1
tert-Butylbenzene	ND		5.5	4.2	ug/m3			05/13/25 12:35	1
Tetrachloroethene	ND		3.4	1.7	ug/m3			05/13/25 12:35	1
Tetrahydrofuran	ND		1.5	0.71	ug/m3			05/13/25 12:35	1
Toluene	**0.51**	**J**	1.9	0.45	ug/m3			05/13/25 12:35	1
trans-1,2-Dichloroethene	ND		2.0	0.34	ug/m3			05/13/25 12:35	1
trans-1,3-Dichloropropene	ND		2.3	0.54	ug/m3			05/13/25 12:35	1
Trichloroethene	ND		0.20	0.97	ug/m3			05/13/25 12:35	1
Trichlorofluoromethane	**1.4**	**J**	2.8	0.84	ug/m3			05/13/25 12:35	1
Vinyl chloride	ND		0.20	0.31	ug/m3			05/13/25 12:35	1

Client: Roux Environmental Engineering and Geology DPC
Job ID: 480-229350-1
Project/Site: BCP RI - 619 Exchange Street Site

Method: TO 15 LL - Volatile Organic Compounds in Ambient Air, Low Concentration (GC/MS)

Lab Sample ID: MB 410-642840/7
Matrix: Air
Analysis Batch: 642840

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		2.7	0.65	ug/m3			05/12/25 20:16	1
1,1,2,2-Tetrachloroethane	ND		3.4	1.0	ug/m3			05/12/25 20:16	1
1,1,2-Trichloroethane	ND		2.7	0.65	ug/m3			05/12/25 20:16	1
1,1,2-Trichlorotrifluoroethane	ND		3.8	0.84	ug/m3			05/12/25 20:16	1
1,1-Dichloroethane	ND		2.0	0.36	ug/m3			05/12/25 20:16	1
1,1-Dichloroethene	ND		0.20	0.56	ug/m3			05/12/25 20:16	1
1,2,4-Trichlorobenzene	ND		15	2.8	ug/m3			05/12/25 20:16	1
1,2,4-Trimethylbenzene	ND		2.5	1.4	ug/m3			05/12/25 20:16	1
1,2-Dibromoethane	ND		3.8	1.0	ug/m3			05/12/25 20:16	1
1,2-Dichlorobenzene	ND		3.0	1.2	ug/m3			05/12/25 20:16	1
1,2-Dichloroethane	ND		2.0	0.32	ug/m3			05/12/25 20:16	1
1,2-Dichloropropane	ND		2.3	0.60	ug/m3			05/12/25 20:16	1
1,2-Dichlorotetrafluoroethane	ND		3.5	0.84	ug/m3			05/12/25 20:16	1
1,3,5-Trimethylbenzene	ND		2.5	1.6	ug/m3			05/12/25 20:16	1
1,3-Butadiene	ND		1.1	0.38	ug/m3			05/12/25 20:16	1
1,3-Dichlorobenzene	ND		3.0	1.1	ug/m3			05/12/25 20:16	1
1,4-Dichlorobenzene	ND		3.0	1.0	ug/m3			05/12/25 20:16	1
1,4-Dioxane	ND		7.2	0.61	ug/m3			05/12/25 20:16	1
2,2,4-Trimethylpentane	ND		4.7	0.61	ug/m3			05/12/25 20:16	1
2-Chlorotoluene	ND		2.6	1.1	ug/m3			05/12/25 20:16	1
3-Chloropropene	ND		1.6	0.47	ug/m3			05/12/25 20:16	1
4-Ethyltoluene	ND		2.5	0.88	ug/m3			05/12/25 20:16	1
4-Isopropyltoluene	ND		2.7	1.5	ug/m3			05/12/25 20:16	1
4-Methyl-2-pentanone (Methyl isobutyl ketone)	ND		20	0.61	ug/m3			05/12/25 20:16	1
Acetone	ND		4.8	1.3	ug/m3			05/12/25 20:16	1
Benzene	ND		1.6	0.35	ug/m3			05/12/25 20:16	1
Benzyl chloride	ND		2.6	1.3	ug/m3			05/12/25 20:16	1
Bromodichloromethane	ND		3.4	0.80	ug/m3			05/12/25 20:16	1
Bromoethene(Vinyl Bromide)	ND		22	0.79	ug/m3			05/12/25 20:16	1
Bromoform	ND		5.2	1.8	ug/m3			05/12/25 20:16	1
Bromomethane	ND		1.9	0.70	ug/m3			05/12/25 20:16	1
Carbon disulfide	ND		3.1	0.40	ug/m3			05/12/25 20:16	1
Carbon tetrachloride	ND		0.22	0.88	ug/m3			05/12/25 20:16	1
Chlorobenzene	ND		2.3	0.60	ug/m3			05/12/25 20:16	1
Chlorodifluoromethane	ND		1.8	0.53	ug/m3			05/12/25 20:16	1
Chloroethane	ND		1.3	0.50	ug/m3			05/12/25 20:16	1
Chloroform	ND		2.4	0.45	ug/m3			05/12/25 20:16	1
Chloromethane	ND		4.1	0.50	ug/m3			05/12/25 20:16	1
cis-1,2-Dichloroethene	ND		0.20	0.48	ug/m3			05/12/25 20:16	1
cis-1,3-Dichloropropene	ND		2.3	0.45	ug/m3			05/12/25 20:16	1
Cumene	ND		2.5	1.2	ug/m3			05/12/25 20:16	1
Cyclohexane	ND		1.7	0.38	ug/m3			05/12/25 20:16	1
Dibromochloromethane	ND		4.3	1.1	ug/m3			05/12/25 20:16	1
Dichlorodifluoromethane	ND		2.5	0.64	ug/m3			05/12/25 20:16	1
Ethylbenzene	ND		2.2	0.83	ug/m3			05/12/25 20:16	1
Hexachlorobutadiene	ND		21	5.0	ug/m3			05/12/25 20:16	1
Isopropyl alcohol	ND		4.9	0.59	ug/m3			05/12/25 20:16	1
m,p-Xylene	ND		4.3	1.1	ug/m3			05/12/25 20:16	1

Method: TO 15 LL - Volatile Organic Compounds in Ambient Air, Low Concentration (GC/MS) (Continued)

Lab Sample ID: MB 410-642840/7
Matrix: Air
Analysis Batch: 642840

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl Butyl Ketone (2-Hexanone)	ND		8.2	0.74	ug/m3			05/12/25 20:16	1
Methyl Ethyl Ketone (2-Butanone)	ND		5.9	0.62	ug/m3			05/12/25 20:16	1
Methyl methacrylate	ND		4.1	0.61	ug/m3			05/12/25 20:16	1
Methyl tert-butyl ether	ND		1.8	0.54	ug/m3			05/12/25 20:16	1
Methylene Chloride	ND		6.9	0.87	ug/m3			05/12/25 20:16	1
Naphthalene	ND		2.0	2.6	ug/m3			05/12/25 20:16	1
n-Butylbenzene	ND		2.7	1.4	ug/m3			05/12/25 20:16	1
n-Heptane	ND		2.0	0.94	ug/m3			05/12/25 20:16	1
n-Hexane	ND		1.8	0.46	ug/m3			05/12/25 20:16	1
n-Propylbenzene	ND		2.5	1.0	ug/m3			05/12/25 20:16	1
o-Xylene	ND		2.2	1.3	ug/m3			05/12/25 20:16	1
sec-Butylbenzene	ND		2.7	2.1	ug/m3			05/12/25 20:16	1
Styrene	ND		2.1	0.85	ug/m3			05/12/25 20:16	1
tert-Butyl alcohol	ND		3.0	0.64	ug/m3			05/12/25 20:16	1
tert-Butylbenzene	ND		5.5	4.2	ug/m3			05/12/25 20:16	1
Tetrachloroethene	ND		3.4	1.7	ug/m3			05/12/25 20:16	1
Tetrahydrofuran	ND		1.5	0.71	ug/m3			05/12/25 20:16	1
Toluene	ND		1.9	0.45	ug/m3			05/12/25 20:16	1
trans-1,2-Dichloroethene	ND		2.0	0.34	ug/m3			05/12/25 20:16	1
trans-1,3-Dichloropropene	ND		2.3	0.54	ug/m3			05/12/25 20:16	1
Trichloroethene	ND		0.20	0.97	ug/m3			05/12/25 20:16	1
Trichlorofluoromethane	ND		2.8	0.84	ug/m3			05/12/25 20:16	1
Vinyl chloride	ND		0.20	0.31	ug/m3			05/12/25 20:16	1

Lab Sample ID: LCS 410-642840/4
Matrix: Air
Analysis Batch: 642840

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
1,1,1-Trichloroethane	54.6	56.2		ug/m3		103	70 - 130
1,1,2,2-Tetrachloroethane	68.7	56.1		ug/m3		82	61 - 130
1,1,2-Trichloroethane	54.6	43.8		ug/m3		80	70 - 130
1,1,2-Trichlorotrifluoroethane	76.6	81.5		ug/m3		106	70 - 130
1,1-Dichloroethane	40.5	40.1		ug/m3		99	70 - 130
1,1-Dichloroethene	39.6	47.4		ug/m3		120	70 - 131
1,2,4-Trichlorobenzene	74.2	71.5		ug/m3		96	31 - 132
1,2,4-Trimethylbenzene	49.2	58.7		ug/m3		119	65 - 146
1,2-Dibromoethane	76.8	68.6		ug/m3		89	70 - 130
1,2-Dichlorobenzene	60.1	55.0		ug/m3		92	61 - 139
1,2-Dichloroethane	40.5	38.2		ug/m3		95	70 - 131
1,2-Dichloropropane	46.2	36.0		ug/m3		78	70 - 130
1,2-Dichlorotetrafluoroethane	69.9	74.8		ug/m3		107	70 - 130
1,3,5-Trimethylbenzene	49.2	48.1		ug/m3		98	69 - 141
1,3-Butadiene	22.1	23.4		ug/m3		106	70 - 131
1,3-Dichlorobenzene	60.1	58.1		ug/m3		97	64 - 140
1,4-Dichlorobenzene	60.1	50.7		ug/m3		84	64 - 137
1,4-Dioxane	36.0	37.3		ug/m3		103	70 - 130
2,2,4-Trimethylpentane	46.7	44.3		ug/m3		95	70 - 130

Method: TO 15 LL - Volatile Organic Compounds in Ambient Air, Low Concentration (GC/MS) (Continued)

Lab Sample ID: LCS 410-642840/4
Matrix: Air
Analysis Batch: 642840

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
2-Chlorotoluene	51.8	51.4		ug/m3		99	70 - 130
3-Chloropropene	31.3	36.9		ug/m3		118	70 - 137
4-Ethyltoluene	49.2	52.1		ug/m3		106	69 - 139
4-Isopropyltoluene	54.9	57.7		ug/m3		105	60 - 148
4-Methyl-2-pentanone (Methyl isobutyl ketone)	41.0	44.0		ug/m3		107	68 - 133
Acetone	23.8	28.4		ug/m3		120	70 - 137
Benzene	31.9	26.5		ug/m3		83	70 - 130
Benzyl chloride	51.8	60.7		ug/m3		117	42 - 160
Bromodichloromethane	67.0	57.9		ug/m3		86	70 - 130
Bromoethene(Vinyl Bromide)	43.7	51.9		ug/m3		119	70 - 130
Bromoform	103	92.9		ug/m3		90	60 - 139
Bromomethane	38.8	41.3		ug/m3		106	70 - 134
Carbon disulfide	31.1	33.1		ug/m3		106	70 - 130
Carbon tetrachloride	62.9	70.9		ug/m3		113	70 - 130
Chlorobenzene	46.0	38.2		ug/m3		83	70 - 130
Chlorodifluoromethane	35.4	41.5		ug/m3		117	70 - 141
Chloroethane	26.4	24.9		ug/m3		94	70 - 131
Chloroform	48.8	49.7		ug/m3		102	70 - 130
Chloromethane	20.7	21.4		ug/m3		104	51 - 138
cis-1,2-Dichloroethene	39.6	43.2		ug/m3		109	70 - 130
cis-1,3-Dichloropropene	45.4	40.2		ug/m3		89	70 - 130
Cumene	49.2	50.4		ug/m3		102	70 - 131
Cyclohexane	34.4	36.3		ug/m3		106	70 - 130
Dibromochloromethane	85.2	74.7		ug/m3		88	70 - 130
Dichlorodifluoromethane	49.5	56.2		ug/m3		114	70 - 131
Ethylbenzene	43.4	41.3		ug/m3		95	70 - 130
Hexachlorobutadiene	107	106		ug/m3		99	34 - 157
Isopropyl alcohol	24.6	30.5		ug/m3		124	46 - 144
m,p-Xylene	43.4	41.6		ug/m3		96	70 - 130
Methyl Butyl Ketone (2-Hexanone)	41.0	37.0		ug/m3		90	63 - 130
Methyl Ethyl Ketone (2-Butanone)	29.5	35.8		ug/m3		121	70 - 130
Methyl methacrylate	40.9	39.2		ug/m3		96	70 - 130
Methyl tert-butyl ether	36.1	43.3		ug/m3		120	70 - 130
Methylene Chloride	34.7	34.4		ug/m3		99	70 - 130
Naphthalene	60.8	51.4		ug/m3		85	33 - 149
n-Butylbenzene	54.9	58.6		ug/m3		107	57 - 149
n-Heptane	41.0	38.8		ug/m3		95	70 - 130
n-Hexane	35.2	36.4		ug/m3		103	70 - 130
n-Propylbenzene	49.2	47.0		ug/m3		96	70 - 130
o-Xylene	43.4	41.9		ug/m3		96	70 - 130
sec-Butylbenzene	54.9	49.5		ug/m3		90	66 - 141
Styrene	42.6	43.7		ug/m3		103	70 - 133
tert-Butyl alcohol	33.6	35.4		ug/m3		105	50 - 145
tert-Butylbenzene	54.9	59.4		ug/m3		108	63 - 142
Tetrachloroethene	67.8	61.5		ug/m3		91	70 - 130

Method: TO 15 LL - Volatile Organic Compounds in Ambient Air, Low Concentration (GC/MS) (Continued)

Lab Sample ID: LCS 410-642840/4
Matrix: Air
Analysis Batch: 642840

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Tetrahydrofuran	29.5	31.0		ug/m3		105	70 - 131
Toluene	37.7	34.0		ug/m3		90	70 - 130
trans-1,2-Dichloroethene	39.6	43.8		ug/m3		111	70 - 130
trans-1,3-Dichloropropene	45.4	44.7		ug/m3		98	70 - 130
Trichloroethene	53.7	50.1		ug/m3		93	70 - 130
Trichlorofluoromethane	56.2	62.4		ug/m3		111	70 - 130
Vinyl chloride	25.6	29.0		ug/m3		113	70 - 135

Lab Sample ID: LCSD 410-642840/5
Matrix: Air
Analysis Batch: 642840

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
1,1,1-Trichloroethane	54.6	56.0		ug/m3		103	70 - 130	0	25
1,1,2,2-Tetrachloroethane	68.7	53.1		ug/m3		77	61 - 130	6	25
1,1,2-Trichloroethane	54.6	41.4		ug/m3		76	70 - 130	5	25
1,1,2-Trichlorotrifluoroethane	76.6	78.7		ug/m3		103	70 - 130	4	25
1,1-Dichloroethane	40.5	38.2		ug/m3		94	70 - 130	5	25
1,1-Dichloroethene	39.6	45.4		ug/m3		115	70 - 131	4	25
1,2,4-Trichlorobenzene	74.2	72.0		ug/m3		97	31 - 132	1	25
1,2,4-Trimethylbenzene	49.2	54.9		ug/m3		112	65 - 146	7	25
1,2-Dibromoethane	76.8	65.4		ug/m3		85	70 - 130	5	25
1,2-Dichlorobenzene	60.1	53.8		ug/m3		89	61 - 139	2	25
1,2-Dichloroethane	40.5	37.5		ug/m3		93	70 - 131	2	25
1,2-Dichloropropane	46.2	34.8		ug/m3		75	70 - 130	3	25
1,2-Dichlorotetrafluoroethane	69.9	71.6		ug/m3		102	70 - 130	4	25
1,3,5-Trimethylbenzene	49.2	45.7		ug/m3		93	69 - 141	5	25
1,3-Butadiene	22.1	22.3		ug/m3		101	70 - 131	5	25
1,3-Dichlorobenzene	60.1	55.3		ug/m3		92	64 - 140	5	25
1,4-Dichlorobenzene	60.1	44.8		ug/m3		75	64 - 137	12	25
1,4-Dioxane	36.0	35.3		ug/m3		98	70 - 130	5	25
2,2,4-Trimethylpentane	46.7	44.1		ug/m3		94	70 - 130	0	25
2-Chlorotoluene	51.8	48.3		ug/m3		93	70 - 130	6	25
3-Chloropropene	31.3	35.7		ug/m3		114	70 - 137	4	25
4-Ethyltoluene	49.2	50.3		ug/m3		102	69 - 139	3	25
4-Isopropyltoluene	54.9	53.7		ug/m3		98	60 - 148	7	25
4-Methyl-2-pentanone (Methyl isobutyl ketone)	41.0	42.7		ug/m3		104	68 - 133	3	25
Acetone	23.8	27.3		ug/m3		115	70 - 137	4	25
Benzene	31.9	26.1		ug/m3		82	70 - 130	2	25
Benzyl chloride	51.8	56.7		ug/m3		110	42 - 160	7	25
Bromodichloromethane	67.0	54.8		ug/m3		82	70 - 130	5	25
Bromoethene(Vinyl Bromide)	43.7	50.6		ug/m3		116	70 - 130	2	25
Bromoform	103	87.0		ug/m3		84	60 - 139	7	25
Bromomethane	38.8	39.4		ug/m3		101	70 - 134	5	25
Carbon disulfide	31.1	31.2		ug/m3		100	70 - 130	6	25
Carbon tetrachloride	62.9	70.8		ug/m3		113	70 - 130	0	25
Chlorobenzene	46.0	36.5		ug/m3		79	70 - 130	5	25

Method: TO 15 LL - Volatile Organic Compounds in Ambient Air, Low Concentration (GC/MS) (Continued)

Lab Sample ID: LCSD 410-642840/5
Matrix: Air
Analysis Batch: 642840

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
Chlorodifluoromethane	35.4	39.6		ug/m3		112	70 - 141	5	25
Chloroethane	26.4	23.8		ug/m3		90	70 - 131	5	25
Chloroform	48.8	48.5		ug/m3		99	70 - 130	2	25
Chloromethane	20.7	19.6		ug/m3		95	51 - 138	9	25
cis-1,2-Dichloroethene	39.6	41.3		ug/m3		104	70 - 130	5	25
cis-1,3-Dichloropropene	45.4	38.7		ug/m3		85	70 - 130	4	25
Cumene	49.2	48.4		ug/m3		99	70 - 131	4	25
Cyclohexane	34.4	37.7		ug/m3		110	70 - 130	4	25
Dibromochloromethane	85.2	72.2		ug/m3		85	70 - 130	3	25
Dichlorodifluoromethane	49.5	53.5		ug/m3		108	70 - 131	5	25
Ethylbenzene	43.4	39.4		ug/m3		91	70 - 130	5	25
Hexachlorobutadiene	107	101		ug/m3		95	34 - 157	4	25
Isopropyl alcohol	24.6	30.0		ug/m3		122	46 - 144	1	25
m,p-Xylene	43.4	40.0		ug/m3		92	70 - 130	4	25
Methyl Butyl Ketone (2-Hexanone)	41.0	36.1		ug/m3		88	63 - 130	2	25
Methyl Ethyl Ketone (2-Butanone)	29.5	34.0		ug/m3		115	70 - 130	5	25
Methyl methacrylate	40.9	38.7		ug/m3		95	70 - 130	1	25
Methyl tert-butyl ether	36.1	42.0		ug/m3		116	70 - 130	3	25
Methylene Chloride	34.7	33.2		ug/m3		96	70 - 130	4	25
Naphthalene	60.8	51.8		ug/m3		85	33 - 149	1	25
n-Butylbenzene	54.9	55.4		ug/m3		101	57 - 149	6	25
n-Heptane	41.0	37.5		ug/m3		91	70 - 130	3	25
n-Hexane	35.2	36.3		ug/m3		103	70 - 130	0	25
n-Propylbenzene	49.2	46.5		ug/m3		95	70 - 130	1	25
o-Xylene	43.4	41.4		ug/m3		95	70 - 130	1	25
sec-Butylbenzene	54.9	60.9		ug/m3		111	66 - 141	21	25
Styrene	42.6	42.5		ug/m3		100	70 - 133	3	25
tert-Butyl alcohol	33.6	34.3		ug/m3		102	50 - 145	3	25
tert-Butylbenzene	54.9	56.7		ug/m3		103	63 - 142	5	25
Tetrachloroethene	67.8	59.0		ug/m3		87	70 - 130	4	25
Tetrahydrofuran	29.5	30.3		ug/m3		103	70 - 131	2	25
Toluene	37.7	32.7		ug/m3		87	70 - 130	4	25
trans-1,2-Dichloroethene	39.6	42.3		ug/m3		107	70 - 130	4	25
trans-1,3-Dichloropropene	45.4	43.7		ug/m3		96	70 - 130	2	25
Trichloroethene	53.7	48.1		ug/m3		90	70 - 130	4	25
Trichlorofluoromethane	56.2	59.9		ug/m3		107	70 - 130	4	25
Vinyl chloride	25.6	27.1		ug/m3		106	70 - 135	7	25

QC Association Summary

Client: Roux Environmental Engineering and Geology DPC
Job ID: 480-229350-1
Project/Site: BCP RI - 619 Exchange Street Site

Air - GC/MS VOA

Analysis Batch: 642840

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-229350-1	SV-1	Total/NA	Air	TO 15 LL	
480-229350-2	OA-2	Total/NA	Air	TO 15 LL	
480-229350-3	OA-1	Total/NA	Air	TO 15 LL	
MB 410-642840/7	Method Blank	Total/NA	Air	TO 15 LL	
LCS 410-642840/4	Lab Control Sample	Total/NA	Air	TO 15 LL	
LCSD 410-642840/5	Lab Control Sample Dup	Total/NA	Air	TO 15 LL	

Lab Chronicle

Client: Roux Environmental Engineering and Geology DPC
Job ID: 480-229350-1
Project/Site: BCP RI - 619 Exchange Street Site

Client Sample ID: SV-1
Lab Sample ID: 480-229350-1
Date Collected: 05/08/25 13:00
Matrix: Air
Date Received: 05/10/25 10:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	TO 15 LL		1	642840	D7UM	ELLE	05/13/25 11:37

Client Sample ID: OA-2
Lab Sample ID: 480-229350-2
Date Collected: 05/08/25 11:30
Matrix: Air
Date Received: 05/10/25 10:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	TO 15 LL		1	642840	D7UM	ELLE	05/13/25 12:06

Client Sample ID: OA-1
Lab Sample ID: 480-229350-3
Date Collected: 04/18/25 16:00
Matrix: Air
Date Received: 05/10/25 10:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	TO 15 LL		1	642840	D7UM	ELLE	05/13/25 12:35

Laboratory References:

ELLE = Eurofins Lancaster Laboratories Environment Testing, LLC, 2425 New Holland Pike, Lancaster, PA 17601, TEL (717)656-2300

Accreditation/Certification Summary

Client: Roux Environmental Engineering and Geology DPC
Job ID: 480-229350-1
Project/Site: BCP RI - 619 Exchange Street Site

Laboratory: Eurofins Lancaster Laboratories Environment Testing, LLC

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
A2LA	Dept. of Defense ELAP	0001.01	11-30-26
A2LA	Dept. of Energy	0001.01	11-30-26
A2LA	ISO/IEC 17025	0001.01	11-30-26
Alabama	State	43200	01-31-26
Alaska	State	PA00009	06-30-25
Alaska (UST)	State	17-027	12-30-26
Arizona	State	AZ0780	03-12-26
Arkansas DEQ	State	88-00660	08-09-25
California	State	2792	01-31-26
Colorado	State	PA00009	06-30-25
Connecticut	State	PH-0746	06-30-25
DE Haz. Subst. Cleanup Act (HSCA)	State	019-006 (PA cert)	01-31-26
Delaware (DW)	State	N/A	01-31-26
Florida	NELAP	E87997	06-30-25
Georgia (DW)	State	C048	01-31-26
Illinois	NELAP	200027	01-31-26
Iowa	State	361	03-01-26
Kansas	NELAP	E-10151	10-31-25
Kentucky (DW)	State	KY90088	12-31-25
Kentucky (UST)	State	0001.01	11-30-26
Kentucky (WW)	State	KY90088	12-31-25
Louisiana (All)	NELAP	02055	06-30-25
Maine	State	2019012	03-12-27
Maryland	State	100	06-30-25
Massachusetts	State	M-PA009	06-30-25
Michigan	State	9930	01-31-26
Minnesota	NELAP	042-999-487	12-31-25
Mississippi	State	023	01-31-26
Missouri	State	450	01-31-28
Montana (DW)	State	0098	01-01-26
Nebraska	State	NE-OS-32-17	01-31-26
New Hampshire	NELAP	2730	01-10-26
New Jersey	NELAP	PA011	06-30-25
New York	NELAP	10670	04-01-26
North Carolina (DW)	State	42705	07-31-25
North Carolina (WW/SW)	State	521	05-18-25
North Dakota	State	R-205	01-31-24 *
Oklahoma	NELAP	9804	08-31-25
Oregon	NELAP	PA200001	09-11-25
Pennsylvania	NELAP	36-00037	01-31-26
Quebec Ministry of Environment and Fight against Climate Change	PALA	507	09-16-29
Rhode Island	State	LAO00338	12-30-25
South Carolina	State	89002	01-31-26
Tennessee	State	02838	01-31-26
Texas	NELAP	T104704194-23-46	08-31-25
USDA	US Federal Programs	525-22-298-19481	10-25-25
Vermont	State	VT - 36037	10-28-25
Virginia	NELAP	460182	06-14-26
Washington	State	C457	04-11-26

* Accreditation/Certification renewal pending - accreditation/certification considered valid.

Accreditation/Certification Summary

Client: Roux Environmental Engineering and Geology DPC
Job ID: 480-229350-1
Project/Site: BCP RI - 619 Exchange Street Site

Laboratory: Eurofins Lancaster Laboratories Environment Testing, LLC (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
West Virginia (DW)	State	9906 C	03-31-26
West Virginia DEP	State	055	07-31-25
Wyoming	State	8TMS-L	01-31-26
Wyoming (UST)	A2LA	0001.01	11-30-26

Method Summary

Client: Roux Environmental Engineering and Geology DPC
Job ID: 480-229350-1
Project/Site: BCP RI - 619 Exchange Street Site

Method	Method Description	Protocol	Laboratory
TO 15 LL	Volatile Organic Compounds in Ambient Air, Low Concentration (GC/MS)	EPA	ELLE

Protocol References:

EPA = US Environmental Protection Agency

Laboratory References:

ELLE = Eurofins Lancaster Laboratories Environment Testing, LLC, 2425 New Holland Pike, Lancaster, PA 17601, TEL (717)656-2300

Sample Summary

Client: Roux Environmental Engineering and Geology DPC
Job ID: 480-229350-1
Project/Site: BCP RI - 619 Exchange Street Site

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
480-229350-1	SV-1	Air	05/08/25 13:00	05/10/25 10:00	Air Canister (6-Liter) #1909
480-229350-2	OA-2	Air	05/08/25 11:30	05/10/25 10:00	Air Canister (6-Liter) #879
480-229350-3	OA-1	Air	04/18/25 16:00	05/10/25 10:00	Air Canister (6-Liter) #1346

Summa Canister Field Test Data/Chain of Custody

480-229350 Chain of Custody

For Eurofins Lancaster Laboratories Environmental use only

Acct. # _____ Group # _____ Sample # _____ Bottle Order (SCR) # 204818

Environmental

Client Information

Client: Rock NL — Account #:

Project Name/#: Cold Cutback Street — 4374.0004B000

Project Manager: Brian Maybach — P.O. #:

Sampler: Nick Suraci — Quote #:

Name of state where samples were collected: NY

Turnaround Time Requested (TAT) (circle one)

(Standard) Rush (specify) _____

Data Package Required? (Yes) No

EDD Required? (Yes) No

	Temperature (F)		Pressure ("Hg)	
	Start	Stop	Start	Stop
Ambient				
Maximum				
Minimum				

Analyses Requested

Sample Identification	Start Date/Time (24-hour clock)	Stop Date/Time (24-hour clock)	Canister Pressure in Field ("Hg) (Start)	Canister Pressure in Field ("Hg) (Stop)	Interior Temp. (F) (Start)	Interior Temp. (F) (Stop)	Flow Reg. ID	Can ID	Can Size (L)	Controller Flowrate (mL/min)	EPA TO - 15	EPA 18 ☐ MTBE ☐ BTEX	EPA 25 (select range below)	Helium as tracer	O2/CO2	Library Search
SV-1	5/8/25 1000	1306	-28.84	-7.49	40	47	A939015	1909	6	21.6	X					
OA-2	5/3/25 10:05	13:30	-28.07	-6.48	40	47	A937005	~~079~~	~~6~~	20.5	X					
OA-1	4/11/25 9:30	1600	-28	-3.02	52	52	A805011	1346	6		X					

Instructions/QC Requirements & Comments

Cat B, NYSDEC ELAPs

EPA 25 (check one) ☐ C1 - C4 ☐ C2 - C10 ☐ C1 - C10 ☐ C4 - C10 (GRO) ☐ C2 - C4

Canisters Shipped by:	Date/Time:	Canisters Received by:	Date/Time:	Relinquished by:	Date/Time:	Received by:	Date/Time:
AL109694	4/30/25 12:33			Nick Suraci	5/9/25 1200		5/9/25 1209
Relinquished by:	Date/Time:	Received by:	Date/Time:	Relinquished by:	Date/Time:	Received by:	Date/Time:
	5/9/25 1310						
Relinquished by:	Date/Time:	Received by:	Date/Time:	Relinquished by:	Date/Time:	Received by:	Date/Time:
							5/10/25 1000

CP

Eurofins Lancaster Laboratories Environmental, LLC • 2425 New Holland Pike, Lancaster, PA 17601 • 717-656-2300

The white copy should accompany samples to Eurofins Lancaster Laboratories Environmental. The yellow copy should be retained by the client.

7056 1015

Login Sample Receipt Checklist

Client: Roux Environmental Engineering and Geology DPC

Job Number: 480-229350-1

Login Number: 229350
List Number: 2
Creator: Burkholder, Conrad

List Source: Eurofins Lancaster Laboratories Environment Testing, LLC
List Creation: 05/12/25 03:32 PM

Question	Answer	Comment
The cooler's custody seal is intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	False	Thermal preservation not required.
Cooler Temperature acceptable,where thermal pres is required(</=6C, not frozen).	N/A	
Cooler Temperature is recorded.	N/A	
WV:Container Temp acceptable,where thermal pres is required (</=6C, not frozen).	N/A	
WV: Container Temperature is recorded.	N/A	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
There are no discrepancies between the containers received and the COC.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	N/A	
There is sufficient vol. for all requested analyses.	True	
Is the Field Sampler's name present on COC?	True	Received project as a subcontract.
Sample custody seals are intact.	N/A	
VOA sample vials do not have headspace >6mm in diameter (none, if from WV)?	N/A	

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC
Job No.: 410-215073-1

SDG No.:

Client Sample ID: 1613
Lab Sample ID: 410-215073-1

Matrix: Air
Lab File ID: 5M31X33.D

Analysis Method: TO-15
Date Collected: 04/01/2025 13:30

Sample wt/vol: 200(mL)
Date Analyzed: 04/01/2025 17:35

Soil Aliquot Vol:
Dilution Factor: 1

Soil Extract Vol.:
GC Column: DB-624 30m ID: 0.25(mm)

Purge Volume:
Heated Purge: (Y/N) pH:

% Moisture: % Solids:
Level: (low/med) Low

Analysis Batch No.: 624298
Units: ppb v/v

Preparation Batch No.:
Instrument ID: HP22820

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	ND		1.0	0.15
71-55-6	1,1,1-Trichloroethane	ND		1.0	0.12
79-34-5	1,1,2,2-Tetrachloroethane	ND		1.0	0.15
79-00-5	1,1,2-Trichloroethane	ND		1.0	0.12
75-34-3	1,1-Dichloroethane	ND		1.0	0.089
75-35-4	1,1-Dichloroethene	ND		1.0	0.14
96-18-4	1,2,3-Trichloropropane	ND		1.0	0.14
120-82-1	1,2,4-Trichlorobenzene	ND		2.0	0.50
95-63-6	1,2,4-Trimethylbenzene	ND	*+	2.0	0.28
106-93-4	1,2-Dibromoethane	ND		1.0	0.13
96-12-8	1,2-Dibromo-3-Chloropropane	ND		2.0	0.28
95-50-1	1,2-Dichlorobenzene	ND		1.0	0.20
107-06-2	1,2-Dichloroethane	ND		1.0	0.080
78-87-5	1,2-Dichloropropane	ND		1.0	0.13
108-67-8	1,3,5-Trimethylbenzene	ND		2.0	0.32
540-59-0	1,2-Dichloroethene (total)	ND		1.0	0.20
106-99-0	1,3-Butadiene	ND		1.0	0.17
541-73-1	1,3-Dichlorobenzene	ND		1.0	0.30
106-46-7	1,4-Dichlorobenzene	ND		1.0	0.30
78-93-3	2-Butanone	ND		1.0	0.21
591-78-6	2-Hexanone	ND		2.0	0.50
542-75-6	1,3-Dichloropropene, Total	ND		1.0	0.10
107-05-1	3-Chloroprene	ND		1.0	0.20
622-96-8	4-Ethyltoluene	ND		1.0	0.18
108-10-1	4-Methyl-2-pentanone	ND		1.0	0.15
67-64-1	Acetone	ND		5.0	1.0
71-43-2	Benzene	ND		1.0	0.11
108-86-1	Bromobenzene	ND		1.0	0.20
75-27-4	Bromodichloromethane	ND		1.0	0.40
75-25-2	Bromoform	ND		1.0	0.40
74-83-9	Bromomethane	ND		1.0	0.20
75-15-0	Carbon disulfide	ND		1.0	0.40

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC
Job No.: 410-215073-1

SDG No.:

Client Sample ID: 1613
Lab Sample ID: 410-215073-1

Matrix: Air
Lab File ID: 5M31X33.D

Analysis Method: TO-15
Date Collected: 04/01/2025 13:30

Sample wt/vol: 200(mL)
Date Analyzed: 04/01/2025 17:35

Soil Aliquot Vol:
Dilution Factor: 1

Soil Extract Vol.:
GC Column: DB-624 30m ID: 0.25(mm)

Purge Volume:
Heated Purge: (Y/N) pH:

% Moisture: % Solids:
Level: (low/med) Low

Analysis Batch No.: 624298
Units: ppb v/v

Preparation Batch No.:
Instrument ID: HP22820

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
56-23-5	Carbon tetrachloride	ND		1.0	0.14
108-90-7	Chlorobenzene	ND		1.0	0.13
75-45-6	Chlorodifluoromethane	ND		1.0	0.40
75-00-3	Chloroethane	ND		1.0	0.30
67-66-3	Chloroform	ND		1.0	0.092
74-87-3	Chloromethane	ND		1.0	0.40
156-59-2	cis-1,2-Dichloroethene	ND		1.0	0.20
10061-01-5	cis-1,3-Dichloropropene	ND		1.0	0.10
593-60-2	Bromoethene	ND		1.0	0.18
98-82-8	Cumene	ND		1.0	0.24
124-48-1	Dibromochloromethane	ND		1.0	0.40
74-95-3	Dibromomethane	ND		1.0	0.14
75-71-8	Dichlorodifluoromethane	ND		1.0	0.13
75-43-4	Dichlorofluoromethane	ND		1.0	0.11
100-41-4	Ethylbenzene	ND		1.0	0.19
76-13-1	Freon 113	ND		1.0	0.20
76-14-2	Freon-114	ND		1.0	0.12
142-82-5	Heptane	ND		1.0	0.23
67-72-1	Hexachloroethane	ND		2.0	0.27
110-54-3	Hexane	ND		1.0	0.30
540-84-1	Isooctane	ND		1.0	0.40
179601-23-1	m&p-Xylene	ND		1.0	0.26
1634-04-4	Methyl t-butyl ether	ND		1.0	0.15
75-09-2	Methylene Chloride	ND		2.0	0.25
95-47-6	o-Xylene	ND		1.0	0.19
111-65-9	Octane	ND		2.0	0.40
109-66-0	Pentane	ND		1.0	0.20
100-42-5	Styrene	ND		1.0	0.20
127-18-4	Tetrachloroethene	ND		2.0	0.25
108-88-3	Toluene	ND		1.0	0.40
156-60-5	trans-1,2-Dichloroethene	ND		1.0	0.20
10061-02-6	trans-1,3-Dichloropropene	ND		1.0	0.12

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC
Job No.: 410-215073-1

SDG No.:

Client Sample ID: 1613
Lab Sample ID: 410-215073-1

Matrix: Air
Lab File ID: 5M31X33.D

Analysis Method: TO-15
Date Collected: 04/01/2025 13:30

Sample wt/vol: 200(mL)
Date Analyzed: 04/01/2025 17:35

Soil Aliquot Vol:
Dilution Factor: 1

Soil Extract Vol.:
GC Column: DB-624 30m ID: 0.25(mm)

Purge Volume:
Heated Purge: (Y/N) pH:

% Moisture: % Solids:
Level: (low/med) Low

Analysis Batch No.: 624298
Units: ppb v/v

Preparation Batch No.:
Instrument ID: HP22820

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
79-01-6	Trichloroethene	ND		1.0	0.18
75-69-4	Trichlorofluoromethane	ND		1.0	0.15
75-01-4	Vinyl chloride	ND		1.0	0.12
67-63-0	Isopropanol	ND		1.0	0.60
91-20-3	Naphthalene	ND		2.0	1.0
1330-20-7	Xylenes, Total	ND		2.0	0.19
96-33-3	Methyl acrylate	ND		1.0	0.20
109-99-9	Tetrahydrofuran	ND		1.0	0.24
141-78-6	Ethyl acetate	ND		2.0	0.25
80-62-6	Methyl methacrylate	ND		1.0	0.15
75-65-0	tert-Butyl alcohol	ND		1.0	0.21
100-44-7	Benzyl chloride	ND		2.0	0.30
87-68-3	Hexachlorobutadiene	ND		2.0	0.47
104-51-8	n-Butylbenzene	ND		2.0	0.26
95-49-8	2-Chlorotoluene	ND		1.0	0.22
75-05-8	Acetonitrile	ND		5.0	0.83
115-07-1	Propene	ND		1.0	0.30
123-91-1	1,4-Dioxane	ND		1.0	0.17
74-88-4	Iodomethane	ND		1.0	0.20
107-13-1	Acrylonitrile	ND		1.0	0.20
98-83-9	Alpha Methyl Styrene	ND		1.0	0.20
97-63-2	Ethyl methacrylate	ND		1.0	0.19
135-98-8	sec-Butylbenzene	ND	*1	2.0	0.39
103-65-1	N-Propylbenzene	ND		1.0	0.21
637-92-3	Ethyl tert-butyl ether	ND		1.0	0.15
108-20-3	di-Isopropyl ether	ND		1.0	0.15
110-82-7	Cyclohexane	ND		1.0	0.20
107-02-8	Acrolein	ND		5.0	0.62
64-17-5	Ethanol	ND		5.0	2.0
99-87-6	p-Isopropyltoluene	ND		2.0	0.28
140-88-5	Ethyl acrylate	ND		1.0	0.16
994-05-8	Tert-amyl methyl ether	ND		1.0	0.11

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC
Job No.: 410-215073-1

SDG No.:

Client Sample ID: 1613
Lab Sample ID: 410-215073-1

Matrix: Air
Lab File ID: 5M31X33.D

Analysis Method: TO-15
Date Collected: 04/01/2025 13:30

Sample wt/vol: 200(mL)
Date Analyzed: 04/01/2025 17:35

Soil Aliquot Vol:
Dilution Factor: 1

Soil Extract Vol.:
GC Column: DB-624 30m ID: 0.25(mm)

Purge Volume:
Heated Purge: (Y/N) pH:

% Moisture: % Solids:
Level: (low/med) Low

Analysis Batch No.: 624298
Units: ppb v/v

Preparation Batch No.:
Instrument ID: HP22820

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
108-05-4	Vinyl acetate	ND		1.0	0.16
98-06-6	tert-Butylbenzene	ND		5.0	0.76

Eurofins Lancaster Laboratories Environment Testing, LLC
Target Compound Quantitation Report

Data File:	\\chromfs\Lancaster\ChromData\HP22820\20250331-142565.b\5M31X33.D				
Lims ID:	410-215073-A-1				
Client ID:	1613				
Sample Type:	Client				
Inject. Date:	01-Apr-2025 17:35:26	ALS Bottle#:	13	Worklist Smp#:	32
Purge Vol:	200.000 mL	Dil. Factor:	1.0000		
Sample Info:	cc1613				
Misc. Info.:	410-0142565-032				
Operator ID:	mcd07824	Instrument ID:	HP22820		
Method:	\\chromfs\Lancaster\ChromData\HP22820\20250331-142565.b\AirMS_TO15_HP22820.m				
Limit Group:	MSV - TO15				
Last Update:	02-Apr-2025 13:10:16	Calib Date:	03-Feb-2025 03:40:12		
Integrator:	Falcon	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Lancaster\ChromData\HP22820\20250202-137070.b\5F02X24.D				
Column 1 :	DB-624 30m .25mm (0.25 mm)		Det: MS Quad		
Process Host:	CTX1672				
First Level Reviewer: D7UM		Date:	02-Apr-2025 13:08:22		

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ppb v/v	Flags
* 39 Chlorobromomethane (IS)	130	5.177	5.177	-0.001	74	110926	10.0	
* 51 1,4-Difluorobenzene	114	6.007	6.007	0.000	92	310948	10.0	
* 72 Chlorobenzene-d5 (IS)	117	8.206	8.206	0.000	82	377578	10.0	

QC Flag Legend

Processing Flags

Reagents:

AIRIS200 ppb_00462 Amount Added: 10.00 Units: mL Run Reagent

Report Date: 02-Apr-2025 13:52:46 Chrom Revision: 2.3 21-Mar-2025 14:03:38

Eurofins Lancaster Laboratories Environment Testing, LLC

Data File: \\chromfs\Lancaster\ChromData\HP22820\20250331-142565.b\5M31X33.D

Injection Date: 01-Apr-2025 17:35:26 Instrument ID: HP22820

Lims ID: 410-215073-A-1 Lab Sample ID: 410-215073-1

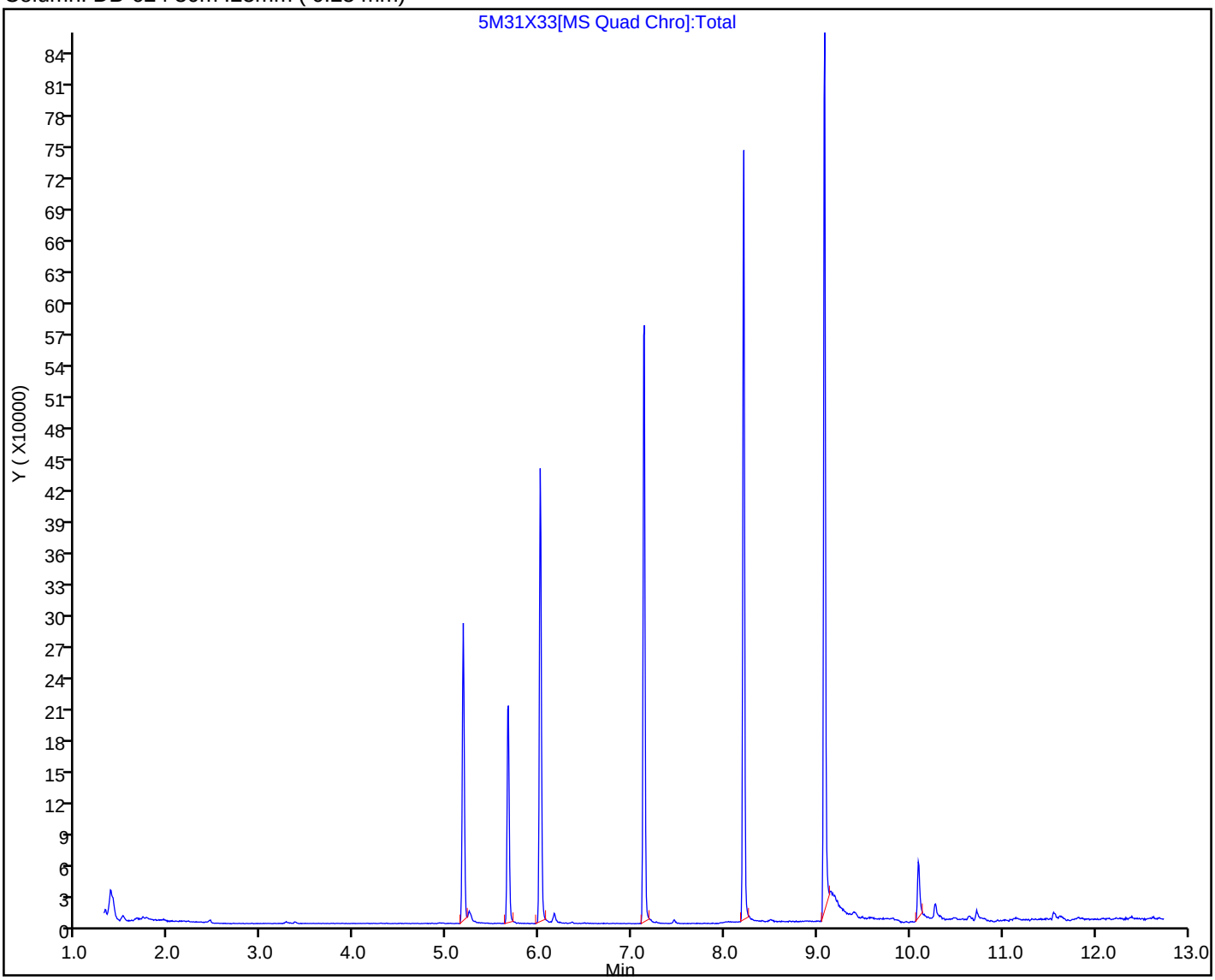
Client ID: 1613

Operator ID: mcd07824 ALS Bottle#: 13 Worklist Smp#: 32

Purge Vol: 200.000 mL Dil. Factor: 1.0000

Method: AirMS_TO15_HP22820 Limit Group: MSV - TO15

Column: DB-624 30m .25mm (0.25 mm)



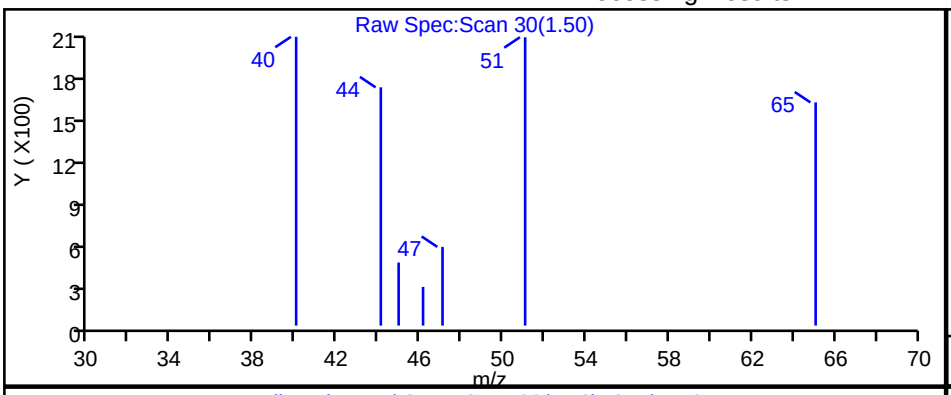
User Disabled Compound Report

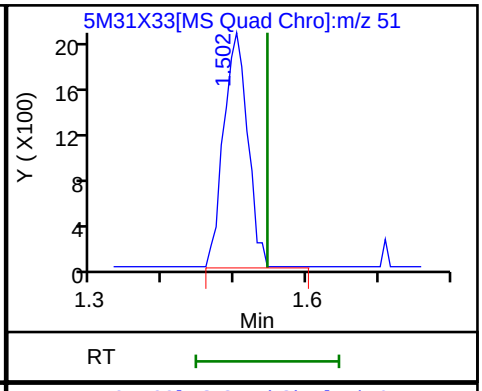
Eurofins Lancaster Laboratories Environment Testing, LLC

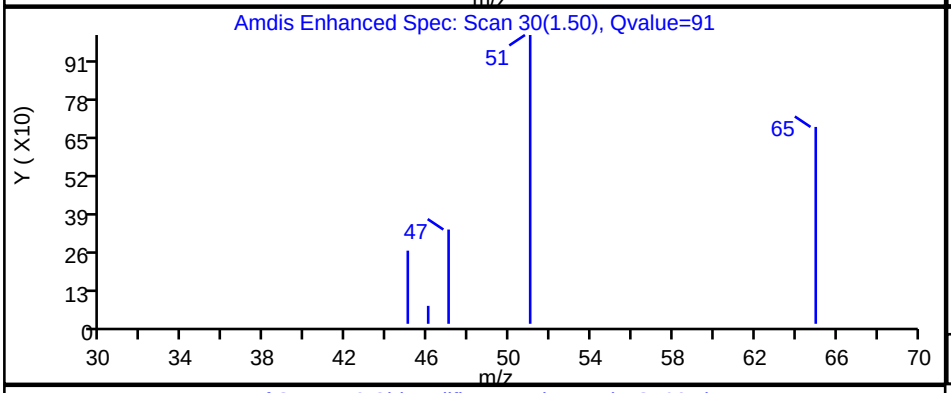
Data File:	\\chromfs\Lancaster\ChromData\HP22820\20250331-142565.b\5M31X33.D				
Injection Date:	01-Apr-2025 17:35:26	Instrument ID:	HP22820		
Lims ID:	410-215073-A-1	Lab Sample ID:	410-215073-1		
Client ID:	1613				
Operator ID:	mcd07824	ALS Bottle#:	13	Worklist Smp#:	32
Purge Vol:	200.000 mL	Dil. Factor:	1.0000		
Method:	AirMS_TO15_HP22820	Limit Group:	MSV - TO15		
Column:	DB-624 30m .25mm (0.25 mm)	Detector	MS Quad		

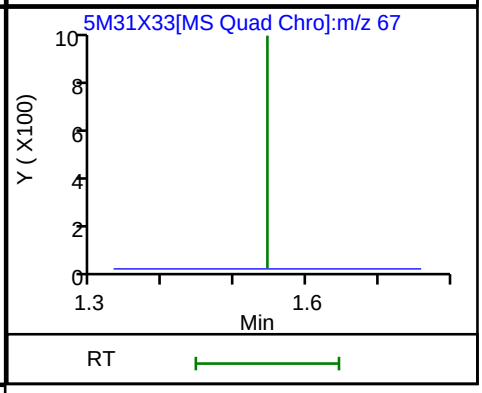
3 Chlorodifluoromethane, CAS: 75-45-6

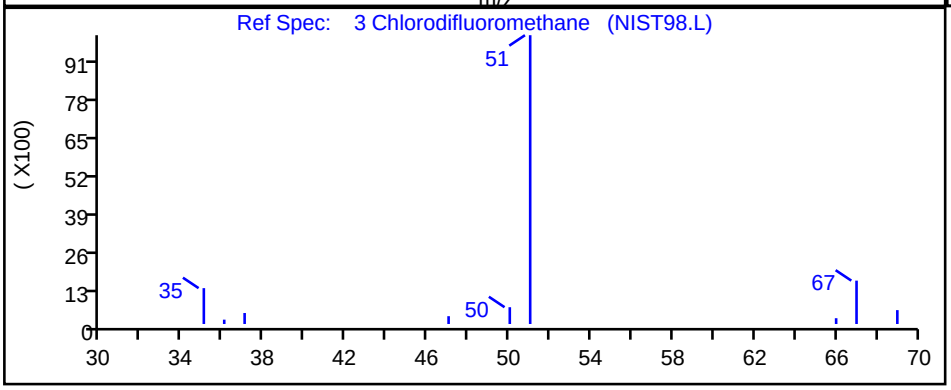
Processing Results











RT	Mass	Response	Amount
1.50	51.00	4704	0.276872
1.54	67.00	0	

Reviewer: D7UM, 02-Apr-2025 13:06:33 -04:00:00 (UTC)

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC
Job No.: 410-217686-1

SDG No.:

Client Sample ID: 1151
Lab Sample ID: 410-217686-1

Matrix: Air
Lab File ID: 5A16X16.D

Analysis Method: TO-15
Date Collected: 04/13/2025 13:53

Sample wt/vol: 200(mL)
Date Analyzed: 04/17/2025 00:18

Soil Aliquot Vol:
Dilution Factor: 1

Soil Extract Vol.:
GC Column: DB-624 30m ID: 0.25(mm)

Purge Volume:
Heated Purge: (Y/N) pH:

% Moisture: % Solids:
Level: (low/med) Low

Analysis Batch No.: 631625
Units: ppb v/v

Preparation Batch No.:
Instrument ID: HP22820

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	ND		1.0	0.15
71-55-6	1,1,1-Trichloroethane	ND		1.0	0.12
79-34-5	1,1,2,2-Tetrachloroethane	ND		1.0	0.15
79-00-5	1,1,2-Trichloroethane	ND		1.0	0.12
75-34-3	1,1-Dichloroethane	ND		1.0	0.089
75-35-4	1,1-Dichloroethene	ND		1.0	0.14
96-18-4	1,2,3-Trichloropropane	ND		1.0	0.14
120-82-1	1,2,4-Trichlorobenzene	ND		2.0	0.50
95-63-6	1,2,4-Trimethylbenzene	ND		2.0	0.28
106-93-4	1,2-Dibromoethane	ND		1.0	0.13
96-12-8	1,2-Dibromo-3-Chloropropane	ND		2.0	0.28
95-50-1	1,2-Dichlorobenzene	ND		1.0	0.20
107-06-2	1,2-Dichloroethane	ND		1.0	0.080
78-87-5	1,2-Dichloropropane	ND		1.0	0.13
108-67-8	1,3,5-Trimethylbenzene	ND		2.0	0.32
540-59-0	1,2-Dichloroethene (total)	ND		1.0	0.20
106-99-0	1,3-Butadiene	ND		1.0	0.17
541-73-1	1,3-Dichlorobenzene	ND		1.0	0.30
106-46-7	1,4-Dichlorobenzene	ND		1.0	0.30
78-93-3	2-Butanone	ND		1.0	0.21
591-78-6	2-Hexanone	ND		2.0	0.50
542-75-6	1,3-Dichloropropene, Total	ND		1.0	0.10
107-05-1	3-Chloroprene	ND		1.0	0.20
622-96-8	4-Ethyltoluene	ND		1.0	0.18
108-10-1	4-Methyl-2-pentanone	ND		1.0	0.15
67-64-1	Acetone	ND		5.0	1.0
71-43-2	Benzene	ND		1.0	0.11
108-86-1	Bromobenzene	ND		1.0	0.20
75-27-4	Bromodichloromethane	ND		1.0	0.40
75-25-2	Bromoform	ND		1.0	0.40
74-83-9	Bromomethane	ND		1.0	0.20
75-15-0	Carbon disulfide	ND		1.0	0.40

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC
Job No.: 410-217686-1

SDG No.:

Client Sample ID: 1151
Lab Sample ID: 410-217686-1

Matrix: Air
Lab File ID: 5A16X16.D

Analysis Method: TO-15
Date Collected: 04/13/2025 13:53

Sample wt/vol: 200(mL)
Date Analyzed: 04/17/2025 00:18

Soil Aliquot Vol:
Dilution Factor: 1

Soil Extract Vol.:
GC Column: DB-624 30m ID: 0.25(mm)

Purge Volume:
Heated Purge: (Y/N) pH:

% Moisture: % Solids:
Level: (low/med) Low

Analysis Batch No.: 631625
Units: ppb v/v

Preparation Batch No.:
Instrument ID: HP22820

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
56-23-5	Carbon tetrachloride	ND	*+	1.0	0.14
108-90-7	Chlorobenzene	ND		1.0	0.13
75-45-6	Chlorodifluoromethane	ND		1.0	0.40
75-00-3	Chloroethane	ND		1.0	0.30
67-66-3	Chloroform	ND		1.0	0.092
74-87-3	Chloromethane	ND		1.0	0.40
156-59-2	cis-1,2-Dichloroethene	ND		1.0	0.20
10061-01-5	cis-1,3-Dichloropropene	ND		1.0	0.10
593-60-2	Bromoethene	ND		1.0	0.18
98-82-8	Cumene	ND		1.0	0.24
124-48-1	Dibromochloromethane	ND		1.0	0.40
74-95-3	Dibromomethane	ND		1.0	0.14
75-71-8	Dichlorodifluoromethane	ND		1.0	0.13
75-43-4	Dichlorofluoromethane	ND		1.0	0.11
100-41-4	Ethylbenzene	ND		1.0	0.19
76-13-1	Freon 113	ND		1.0	0.20
76-14-2	Freon-114	ND		1.0	0.12
142-82-5	Heptane	ND		1.0	0.23
67-72-1	Hexachloroethane	ND		2.0	0.27
110-54-3	Hexane	ND		1.0	0.30
540-84-1	Isooctane	ND		1.0	0.40
179601-23-1	m&p-Xylene	ND		1.0	0.26
1634-04-4	Methyl t-butyl ether	ND		1.0	0.15
75-09-2	Methylene Chloride	ND		2.0	0.25
95-47-6	o-Xylene	ND		1.0	0.19
111-65-9	Octane	ND		2.0	0.40
109-66-0	Pentane	ND		1.0	0.20
100-42-5	Styrene	ND		1.0	0.20
127-18-4	Tetrachloroethene	ND		2.0	0.25
108-88-3	Toluene	ND		1.0	0.40
156-60-5	trans-1,2-Dichloroethene	ND		1.0	0.20
10061-02-6	trans-1,3-Dichloropropene	ND		1.0	0.12

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC
Job No.: 410-217686-1

SDG No.:

Client Sample ID: 1151
Lab Sample ID: 410-217686-1

Matrix: Air
Lab File ID: 5A16X16.D

Analysis Method: TO-15
Date Collected: 04/13/2025 13:53

Sample wt/vol: 200(mL)
Date Analyzed: 04/17/2025 00:18

Soil Aliquot Vol:
Dilution Factor: 1

Soil Extract Vol.:
GC Column: DB-624 30m ID: 0.25(mm)

Purge Volume:
Heated Purge: (Y/N) pH:

% Moisture: % Solids:
Level: (low/med) Low

Analysis Batch No.: 631625
Units: ppb v/v

Preparation Batch No.:
Instrument ID: HP22820

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
79-01-6	Trichloroethene	ND		1.0	0.18
75-69-4	Trichlorofluoromethane	ND		1.0	0.15
75-01-4	Vinyl chloride	ND		1.0	0.12
67-63-0	Isopropanol	ND		1.0	0.60
91-20-3	Naphthalene	ND		2.0	1.0
1330-20-7	Xylenes, Total	ND		2.0	0.19
96-33-3	Methyl acrylate	ND		1.0	0.20
109-99-9	Tetrahydrofuran	ND		1.0	0.24
141-78-6	Ethyl acetate	ND		2.0	0.25
80-62-6	Methyl methacrylate	ND		1.0	0.15
75-65-0	tert-Butyl alcohol	ND		1.0	0.21
100-44-7	Benzyl chloride	ND		2.0	0.30
87-68-3	Hexachlorobutadiene	ND		2.0	0.47
104-51-8	n-Butylbenzene	ND		2.0	0.26
95-49-8	2-Chlorotoluene	ND		1.0	0.22
75-05-8	Acetonitrile	ND		5.0	0.83
115-07-1	Propene	ND		1.0	0.30
123-91-1	1,4-Dioxane	ND		1.0	0.17
74-88-4	Iodomethane	ND		1.0	0.20
107-13-1	Acrylonitrile	ND		1.0	0.20
98-83-9	Alpha Methyl Styrene	ND		1.0	0.20
97-63-2	Ethyl methacrylate	ND		1.0	0.19
135-98-8	sec-Butylbenzene	ND		2.0	0.39
103-65-1	N-Propylbenzene	ND		1.0	0.21
637-92-3	Ethyl tert-butyl ether	ND		1.0	0.15
108-20-3	di-Isopropyl ether	ND		1.0	0.15
110-82-7	Cyclohexane	ND		1.0	0.20
107-02-8	Acrolein	ND		5.0	0.62
64-17-5	Ethanol	ND		5.0	2.0
99-87-6	p-Isopropyltoluene	ND		2.0	0.28
140-88-5	Ethyl acrylate	ND		1.0	0.16
994-05-8	Tert-amyl methyl ether	ND		1.0	0.11

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-217686-1

SDG No.:

Client Sample ID: 1151 Lab Sample ID: 410-217686-1

Matrix: Air Lab File ID: 5A16X16.D

Analysis Method: TO-15 Date Collected: 04/13/2025 13:53

Sample wt/vol: 200(mL) Date Analyzed: 04/17/2025 00:18

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 30m ID: 0.25(mm)

Purge Volume: Heated Purge: (Y/N) pH:

% Moisture: % Solids: Level: (low/med) Low

Analysis Batch No.: 631625 Units: ppb v/v

Preparation Batch No.: Instrument ID: HP22820

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
108-05-4	Vinyl acetate	ND		1.0	0.16
98-06-6	tert-Butylbenzene	ND		5.0	0.76

Eurofins Lancaster Laboratories Environment Testing, LLC
Target Compound Quantitation Report

Data File:	\\chromfs\Lancaster\ChromData\HP22820\20250416-144263.b\5A16X16.D				
Lims ID:	410-217686-A-1				
Client ID:	1151				
Sample Type:	Client				
Inject. Date:	17-Apr-2025 00:18:49	ALS Bottle#:	14	Worklist Smp#:	17
Purge Vol:	200.000 mL	Dil. Factor:	1.0000		
Sample Info:	cc1151				
Misc. Info.:	410-0144263-017				
Operator ID:	AL109694	Instrument ID:	HP22820		
Method:	\\chromfs\Lancaster\ChromData\HP22820\20250416-144263.b\AirMS_TO15_HP22820.m				
Limit Group:	MSV - TO15				
Last Update:	21-Apr-2025 15:21:32	Calib Date:	03-Feb-2025 03:40:12		
Integrator:	Falcon	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Lancaster\ChromData\HP22820\20250202-137070.b\5F02X24.D				
Column 1 :	DB-624 30m .25mm (0.25 mm)		Det: MS Quad		
Process Host:	CTX1629				
First Level Reviewer: JXC9		Date:	17-Apr-2025 10:22:30		

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ppb v/v	Flags
18 Acetone	43	3.278	3.236	0.043	98	8478	0.5893	
* 39 Chlorobromomethane (IS)	130	5.184	5.177	0.007	72	111112	10.0	
* 51 1,4-Difluorobenzene	114	6.015	6.007	0.008	92	361311	10.0	
* 72 Chlorobenzene-d5 (IS)	117	8.207	8.207	0.000	82	413436	10.0	

QC Flag Legend

Processing Flags

Reagents:

AIRIS200 ppb_00468 Amount Added: 10.00 Units: mL Run Reagent

Report Date: 21-Apr-2025 16:14:53 Chrom Revision: 2.3 08-Apr-2025 13:07:20

Eurofins Lancaster Laboratories Environment Testing, LLC

Data File: \\chromfs\Lancaster\ChromData\HP22820\20250416-144263.b\5A16X16.D

Injection Date: 17-Apr-2025 00:18:49 Instrument ID: HP22820

Lims ID: 410-217686-A-1 Lab Sample ID: 410-217686-1

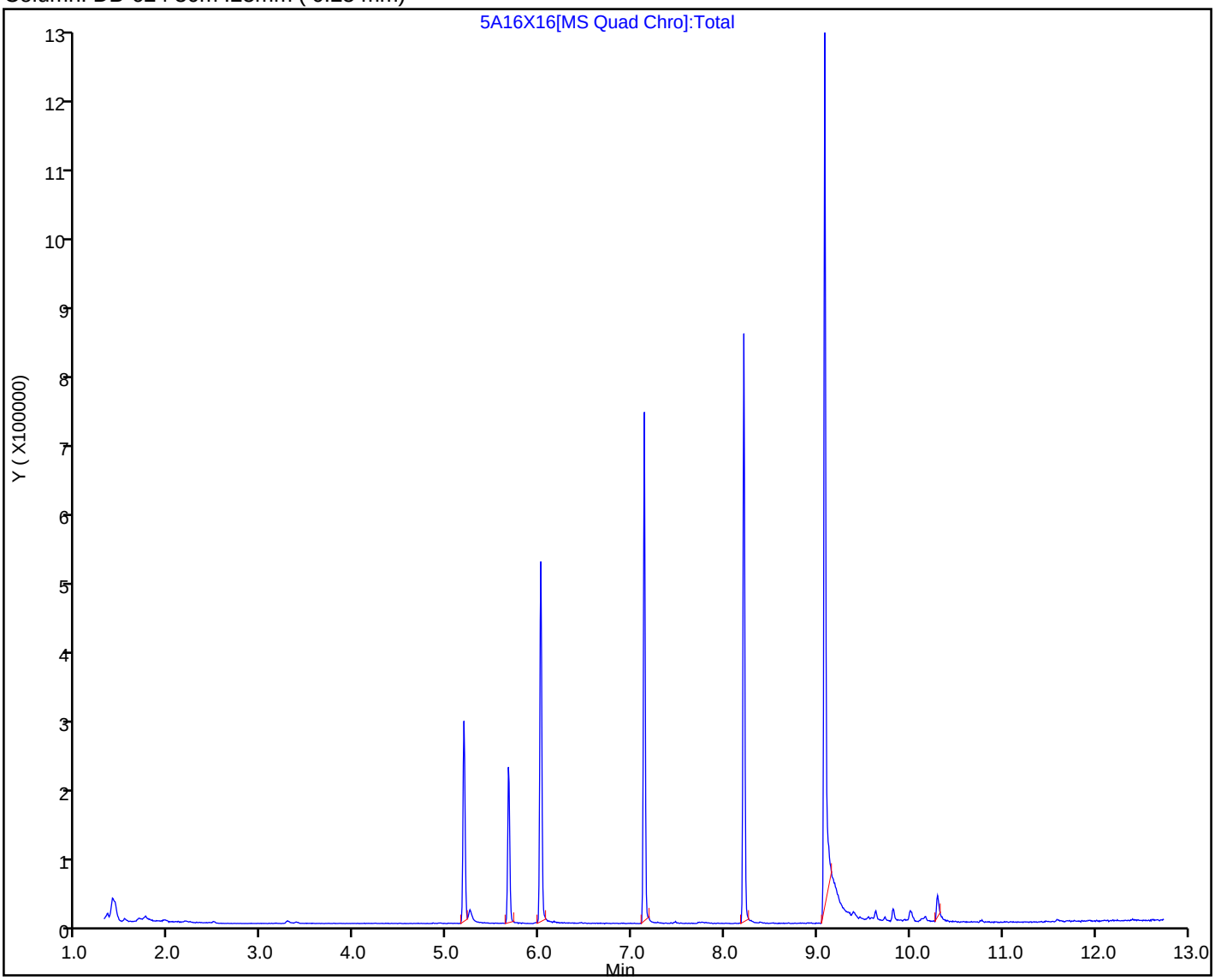
Client ID: 1151

Operator ID: AL109694 ALS Bottle#: 14 Worklist Smp#: 17

Purge Vol: 200.000 mL Dil. Factor: 1.0000

Method: AirMS_TO15_HP22820 Limit Group: MSV - TO15

Column: DB-624 30m .25mm (0.25 mm)



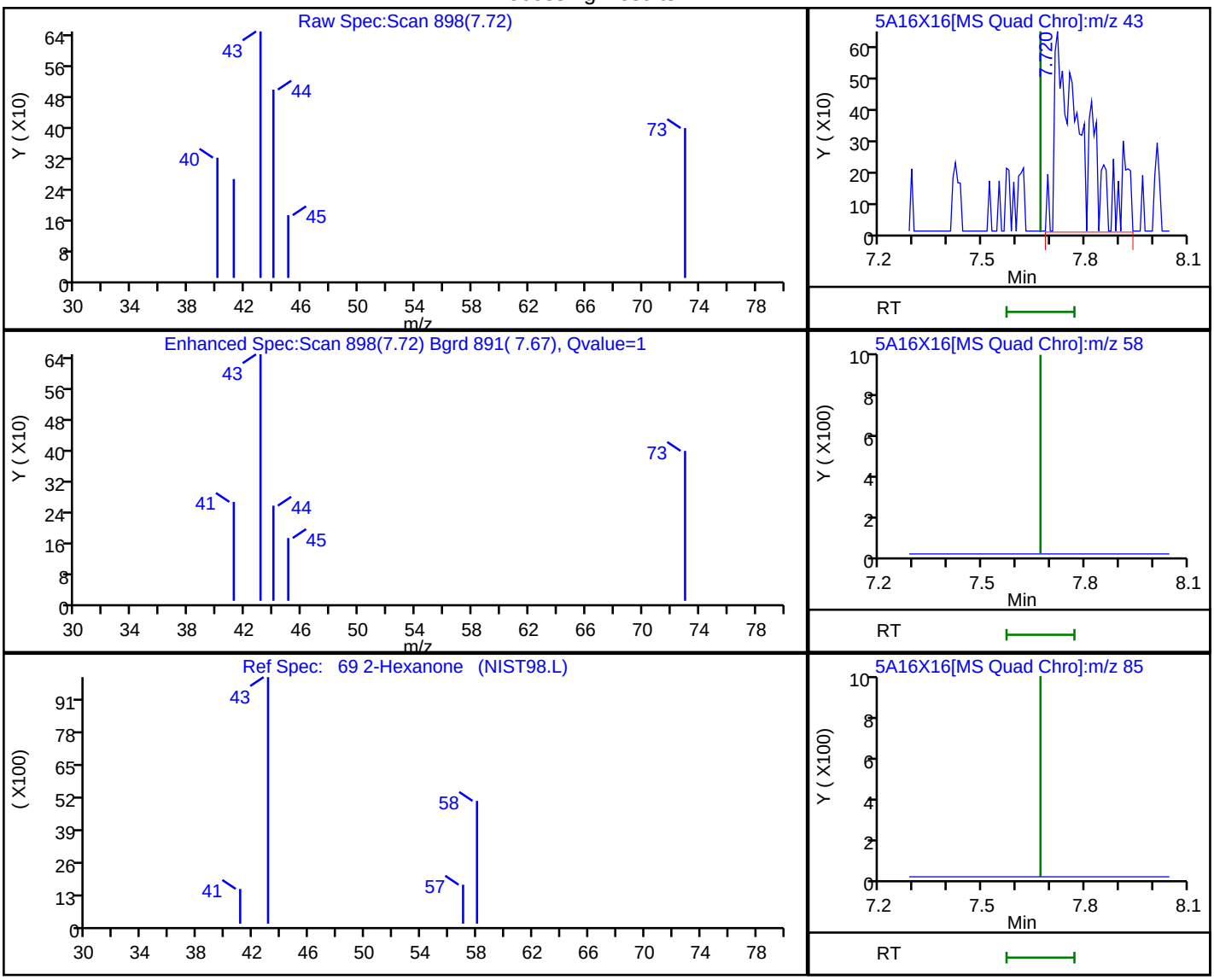
User Disabled Compound Report

Eurofins Lancaster Laboratories Environment Testing, LLC

Data File:	\\chromfs\Lancaster\ChromData\HP22820\20250416-144263.b\5A16X16.D				
Injection Date:	17-Apr-2025 00:18:49	Instrument ID:	HP22820		
Lims ID:	410-217686-A-1	Lab Sample ID:	410-217686-1		
Client ID:	1151				
Operator ID:	AL109694	ALS Bottle#:	14	Worklist Smp#:	17
Purge Vol:	200.000 mL	Dil. Factor:	1.0000		
Method:	AirMS_TO15_HP22820	Limit Group:	MSV - TO15		
Column:	DB-624 30m .25mm (0.25 mm)	Detector	MS Quad		

69 2-Hexanone, CAS: 591-78-6

Processing Results



RT	Mass	Response	Amount
7.72	43.00	3943	0.187088
7.67	58.00	0	
7.67	85.00	0	

Reviewer: JXC9, 17-Apr-2025 10:18:39 -04:00:00 (UTC)

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

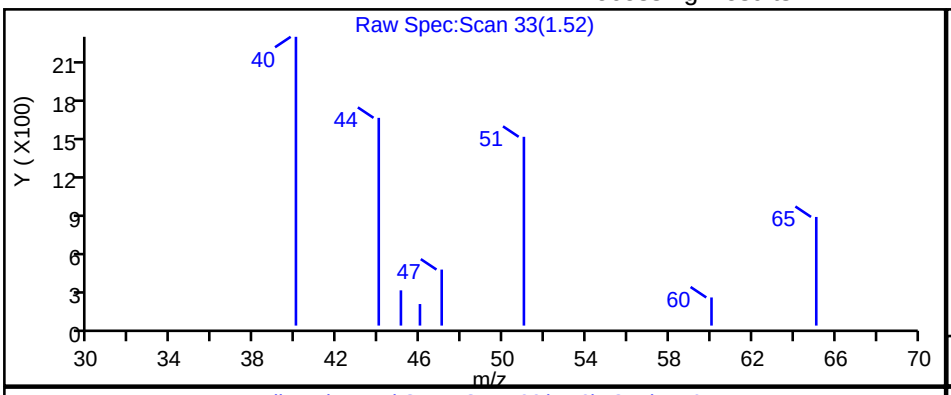
User Disabled Compound Report

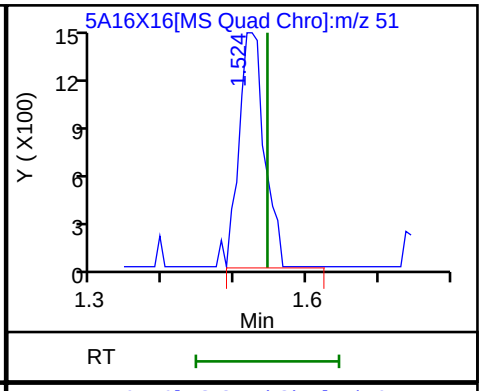
Eurofins Lancaster Laboratories Environment Testing, LLC

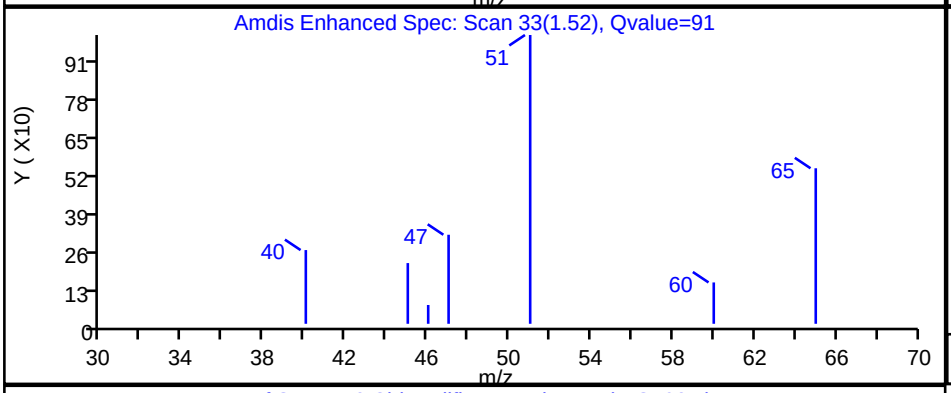
Data File:	\\chromfs\Lancaster\ChromData\HP22820\20250416-144263.b\5A16X16.D				
Injection Date:	17-Apr-2025 00:18:49	Instrument ID:	HP22820		
Lims ID:	410-217686-A-1	Lab Sample ID:	410-217686-1		
Client ID:	1151				
Operator ID:	AL109694	ALS Bottle#:	14	Worklist Smp#:	17
Purge Vol:	200.000 mL	Dil. Factor:	1.0000		
Method:	AirMS_TO15_HP22820	Limit Group:	MSV - TO15		
Column:	DB-624 30m .25mm (0.25 mm)	Detector	MS Quad		

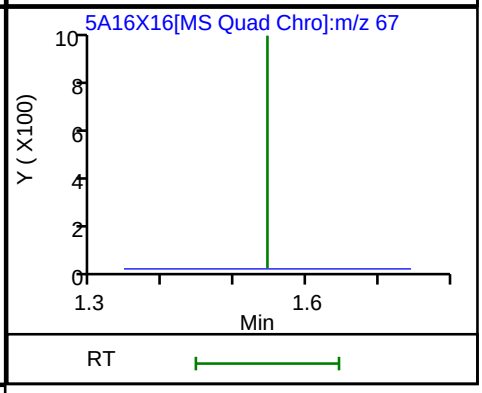
3 Chlorodifluoromethane, CAS: 75-45-6

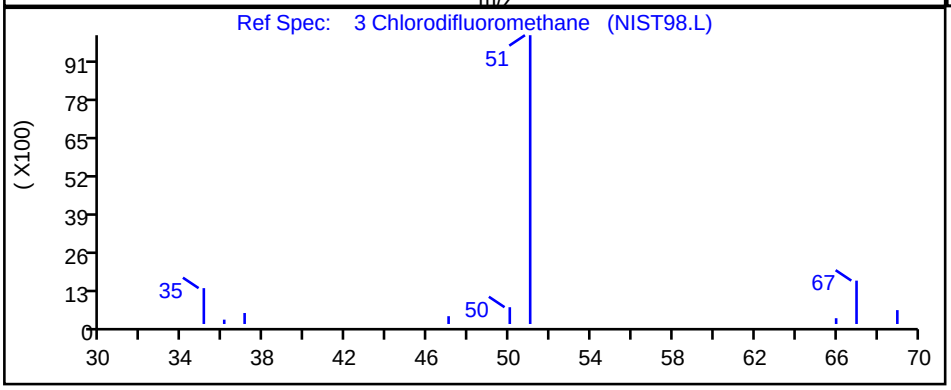
Processing Results











RT	Mass	Response	Amount
1.52	51.00	3567	0.209598
1.54	67.00	0	

Reviewer: JXC9, 17-Apr-2025 10:19:51 -04:00:00 (UTC)

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

Summa Canister Dilution Worksheet

Client: Roux Environmental Engineering and Geolo
Project/Site: BCP RI - 619 Exchange Street Site

Job No.: 480-229350-1

Lab Sample ID	Canister Volume (L)	Preadjusted Pressure ("Hg)	Preadjusted Pressure (atm)	Preadjusted Volume (L)	Adjusted Pressure (psig)	Adjusted Pressure (atm)	Adjusted Volume (L)	Initial Volume (mL)	Dilution Factor	Final Dilution Factor	Pressure Gauge ID	Date	Analyst Initals
480-229350-1	6	-7.2	0.76	4.56	7.6	1.52	9.10		2.00	2.00		05/13/25 10:25	D7UM
480-229350-2	6	-6	0.80	4.80	8.8	1.60	9.59		2.00	2.00		05/13/25 10:25	D7UM
480-229350-3	6	-3	0.90	5.40	11.7	1.80	10.78		2.00	2.00		05/13/25 10:25	D7UM

Formulae:

Preadjusted Volume (L) = ((Preadjusted Pressure ("Hg) + 29.92 "Hg) * Vol L) / 29.92 "Hg

Adjusted Volume (L) = ((Adjusted Pressure (psig) + 14.7 psig)* Vol L) / 14.7 psig

Dilution Factor = Adjusted Volume (L) / Preadjusted Volume (L)

Where:

29.92 "Hg = Standard atmospheric pressure in inches of Mercury (“Hg)

14.7 psig = Standard atmospheric pressure in pounds per square inch gauge (psig)

APPENDIX D

Groundwater Field Forms

ROUX

GROUNDWATER FIELD FORM

Project Name: 619 Exchange
Location: Buffalo, NY
Project No.:
Date: 6/1/25
Field Team: NS + ES

Well No. MW-1			Diameter (inches): 2			Sample Date / Time: 6/1/25			
Product Depth (fbTOR):			Water Column (ft): 11.13			DTW when sampled:			
DTW (static) (fbTOR): 7.68			One Well Volume (gal): 1.81			Purpose: ☒ Development ☐ Sample ☐ Purge & Sample			
Total Depth (fbTOR): 18.81			Total Volume Purged (gal):			Purge Method:			
Time	Water Level (fbTOR)	Acc. Volume (gallons)	pH (units)	Temp. (deg. C)	SC (uS)	Turbidity (NTU)	DO (mg/L)	ORP (mV)	Appearance & Odor
12:45	0 Initial	0	7.63	13.0	854.3	—	—	120	Clear, No odor
12:50	1 8.37	0.5	7.54	12.5	843.2	—	—	124	
13:00	2 9.15	1.0	7.48	12.4	838.1	—	—	131	
13:05	3 9.87	1.5	7.50	12.3	831.9	—	—	138	
13:30	4 10.45	2.5	7.63	12.8	822.5	—	—	163	
13:35	5 11.23	3.5	7.50	12.6	819.8	—	—	161	Cloudy, No odor
	6								
	7								
	8								
	9								
	10								
Sample Information:									
	S1								
	S2								

stop due to rain —

3WV 5.44

Well No.			Diameter (inches):			Sample Date / Time:			
Product Depth (fbTOR):			Water Column (ft):			DTW when sampled:			
DTW (static) (fbTOR):			One Well Volume (gal):			Purpose: ☐ Development ☐ Sample ☐ Purge & Sample			
Total Depth (fbTOR):			Total Volume Purged (gal):			Purge Method:			
Time	Water Level (fbTOR)	Acc. Volume (gallons)	pH (units)	Temp. (deg. C)	SC (uS)	Turbidity (NTU)	DO (mg/L)	ORP (mV)	Appearance & Odor
	0 Initial								
	1								
	2								
	3								
	4								
	5								
	6								
	7								
	8								
	9								
	10								
Sample Information:									
	S1								
	S2								

REMARKS:

Note: *All water level measurements are in feet, distance from top of riser.*

Volume Calculation

Diam.	Vol. (g/ft)
1"	0.041
2"	0.163
4"	0.653
6"	1.469

Stabilization Criteria

Parameter	Criteria
pH	± 0.1 unit
SC	± 3%
Turbidity	± 10%
DO	± 0.3 mg/L
ORP	± 10 mV

0000003700_20250430204426196
GWFF - BM

PREPARED BY:

sured from TOC

ROUX

GROUNDWATER FIELD FORM

Project Name: 619 Exchange
Location: Buffalo, NY
Project No.:
Date: 5/1/25
Field Team: NSTES

Well No. MW-2			Diameter (inches): 1			Sample Date / Time: 5/1/25				3WV = 1.52
Product Depth (fbTOR):			Water Column (ft): 12.36			DTW when sampled:				
DTW (static) (fbTOR): 5.56			One Well Volume (gal): 0.5			Purpose: ☒ Development ☐ Sample ☐ Purge & Sample				
Total Depth (fbTOR): 17.92			Total Volume Purged (gal): ~0.90			Purge Method: Bailer				
Time	Water Level (fbTOR)	Acc. Volume (gallons)	pH (units)	Temp. (deg. C)	SC (uS)	Turbidity (NTU)	DO (mg/L)	ORP (mV)	Appearance & Odor	
11:45	0 Initial	0	7.56	9.8	1093	—	—	176	Turbid, NO odors	
11:50	1 14.35	0.25	7.35	10.1	1003	—	—	34	very turbid	
11:55	2 16.39	~0.90	7.316	10.5	9885	—	—	70	DRY	
	3									
	4									
	5									
	6									
	7									
	8									
	9									
	10									
Sample Information:										
	S1									
	S2									

Well No. MW-3			Diameter (inches): 1			Sample Date / Time: 5/1/25				3WV = 1.82
Product Depth (fbTOR):			Water Column (ft): 14.80			DTW when sampled:				
DTW (static) (fbTOR): 4.12			One Well Volume (gal): 0.60			Purpose: ☒ Development ☐ Sample ☐ Purge & Sample				
Total Depth (fbTOR): 18.92			Total Volume Purged (gal):			Purge Method:				
Time	Water Level (fbTOR)	Acc. Volume (gallons)	pH (units)	Temp. (deg. C)	SC (uS)	Turbidity (NTU)	DO (mg/L)	ORP (mV)	Appearance & Odor	
12:10	0 Initial	0	7.46	9.0	1170	—	—	34	cloudy	
12:15	1 10.45	0.25	7.50	9.5	1187	—	—	73		
12:25	2 14.76	0.50	7.98	10.7	1194	—	—	95	DRY — very turbid	
12:35	3									
	4									
	5									
	6									
	7									
	8									
	9									
	10									
Sample Information:										
	S1									
	S2									

REMARKS:

Note: All water level measurements are in feet, distance from top of riser.

PREPARED BY:

Volume Calculation

Diam.	Vol. (gal)
1"	0.041
2"	0.163
4"	0.653
6"	1.469

Stabilization Criteria

Parameter	Criteria
pH	± 0.1 unit
SC	± 3%
Turbidity	± 10%
DO	± 0.3 mg/L
ORP	± 10 mV

ROUX

GROUNDWATER FIELD FORM

Project Name: 619 Exchange Date: 5/1/25

Location: Buffalo, NY Project No.: 4374.0004B000 Field Team: NS+ES

Well No. MW-4	Diameter (inches): 1	Sample Date / Time: 5/1/25
Product Depth (fbTOR): -	Water Column (ft): 13.11	DTW when sampled:
DTW (static) (fbTOR): 0.82	One Well Volume (gal): 0.53	Purpose: ☒ Development ☐ Sample ☐ Purge & Sample
Total Depth (fbTOR): 13.93	Total Volume Purged (gal): 1.25	Purge Method: Bailer

Time		Water Level (fbTOR)	Acc. Volume (gallons)	pH (units)	Temp. (deg. C)	SC (uS)	Turbidity (NTU)	DO (mg/L)	ORP (mV)	Appearance & Odor
09:30	0	Initial	0	3.61	9.2	1005	-	-	340	cloudy, no odor
09:40	1	2.95	0.25	3.61	9.4	978.4	-	-	341	Turbid
09:45	2	4.22	0.50	3.62	8.5	914.1	-	-	345	"
09:50	3	7.56	0.75	3.62	8.3	889.7	-	-	346	"
10:00	4	9.08	1.0	3.62	8.7	Slde.3	-	-	347	
10:10	5	10.25	1.25	7.84	9.1	960.3	-	-	256	
	6									
	7									
	8									
	9									
	10									

Sample Information:

S1	
S2	

3WVs = 1.5 *

2

Well No. MW-5	Diameter (inches): 1	Sample Date / Time: 5/1/25
Product Depth (fbTOR): -	Water Column (ft): 11.61	DTW when sampled:
DTW (static) (fbTOR): 1.10	One Well Volume (gal): 0.47	Purpose: ☒ Development ☐ Sample ☐ Purge & Sample
Total Depth (fbTOR): 12.71	Total Volume Purged (gal): ~0.75	Purge Method: Bailer

Time		Water Level (fbTOR)	Acc. Volume (gallons)	pH (units)	Temp. (deg. C)	SC (uS)	Turbidity (NTU)	DO (mg/L)	ORP (mV)	Appearance & Odor
10:15	0	Initial	0	7.74	10.2	1079	-	-	234	Turbid, NO ODOR
10:20	1	4.40	0.25	7.74	9.9	1086	-	-	220	
10:25	2	10.55	0.50	7.78	10.2	1079	-	-	217	
10:35	3	12.32	0.75	7.83	10.5	1072	-	-	211	
	4									
	5									
	6									
	7									
	8									
	9									
	10									

Sample Information:

S1	
S2	

3WV = 1.4 *

REMARKS:

Note: All water level measurements are in feet, distance from top of riser.

PREPARED BY:

Volume Calculation

Diam.	Vol. (g/ft)
1"	0.041
2"	0.163
4"	0.653
6"	1.469

Stabilization Criteria

Parameter	Criteria
pH	± 0.1 unit
SC	± 3%
Turbidity	± 10%
DO	± 0.3 mg/L
ORP	± 10 mV

0000003700_20250430204426196
GWFF - BM

BASEMENT

* = measured from TOC

ROUX

GROUNDWATER FIELD FORM

Project Name: 619 Exchange
Location: Buffalo, NY
Project No.:
Date: 5/1/25
Field Team: ES + NS

3WV = 1.48

Well No. MW-06			Diameter (inches): 1			Sample Date / Time: 5/1/25				
Product Depth (fbTOR): –			Water Column (ft): 12.07			DTW when sampled:				
DTW (static) (fbTOR): ~~7.05~~ 0.75			One Well Volume (gal): 0.49			Purpose: ☒ Development ☐ Sample ☐ Purge & Sample				
Total Depth (fbTOR): ~~12.91~~ 12.82			Total Volume Purged (gal): ~0.65			Purge Method: Bailer				
Time		Water Level (fbTOR)	Acc. Volume (gallons)	pH (units)	Temp. (deg. C)	SC (uS)	Turbidity (NTU)	DO (mg/L)	ORP (mV)	Appearance & Odor
11:00										
~~11:00~~	0	Initial	0	8.18	8.60	1439	–	–	201	Cloudy, NO odor
11:10	1	5.60	0.25	8.02	9.5	1412	–	–	197	
11:15	2	10.15	0.50	7.97	9.9	1415	–	–	196	
11:30	3	12.09	~0.65	8.06	10.4	1384	–	–	193	
	4									
	5									
	6									
	7									
	8									
	9									
	10									
Sample Information:										
	S1									
	S2									

Well No.			Diameter (inches):			Sample Date / Time:				
Product Depth (fbTOR):			Water Column (ft):			DTW when sampled:				
DTW (static) (fbTOR):			One Well Volume (gal):			Purpose: ☐ Development ☐ Sample ☐ Purge & Sample				
Total Depth (fbTOR):			Total Volume Purged (gal):			Purge Method:				
Time		Water Level (fbTOR)	Acc. Volume (gallons)	pH (units)	Temp. (deg. C)	SC (uS)	Turbidity (NTU)	DO (mg/L)	ORP (mV)	Appearance & Odor
	0	Initial								
	1									
	2									
	3									
	4									
	5									
	6									
	7									
	8									
	9									
	10									
Sample Information:										
	S1									
	S2									

REMARKS:

Note: All water level measurements are in feet, distance from top of riser.

Volume Calculation

Diam.	Vol. (g/ft)
1"	0.041
2"	0.163
4"	0.653
6"	1.469

Stabilization Criteria

Parameter	Criteria
pH	± 0.1 unit
SC	± 3%
Turbidity	± 10%
DO	± 0.3 mg/L
ORP	± 10 mV

PREPARED BY:

ROUX

GROUNDWATER FIELD FORM

Project Name: 619 exchange St Date:

Location: Project No.: Field Team:

Well No. MW-4			Diameter (inches): 1"			Sample Date / Time: 5/8/25			
Product Depth (fbTOR):			Water Column (ft):			DTW when sampled:			
DTW (static) (fbTOR): 0.0			One Well Volume (gal): 0.044			Purpose: ☐ Development ☒ Sample ☐ Purge & Sample			
Total Depth (fbTOR): 11.60			Total Volume Purged (gal):			Purge Method: Bailer			
Time	Water Level (fbTOR)	Acc. Volume (gallons)	pH (units)	Temp. (deg. C)	SC (uS)	Turbidity (NTU)	DO (mg/L)	ORP (mV)	Appearance & Odor
1145	0 Initial	0	7.95	8.6	952	500	3.80	20	Turbid No odor
1200	1 8.75	0.05	7.90	8.9	968	OR	3.62	30	Turbid No odor
12:10	2 Dry								
	3								
	4								
	5								
	6								
	7								
	8								
	9								
	10								
Sample Information:									
13:30	S1 10.01	0.05	7.81	8.9	925	OR	3.65	38	Turbid no odor
1400	S2 Dry								

Well No. MW1			Diameter (inches): 2			Sample Date / Time: 5/8/25 @ 3:00			
Product Depth (fbTOR): NA			Water Column (ft): 15.18			DTW when sampled:			
DTW (static) (fbTOR): 3.32			One Well Volume (gal): 2.47			Purpose: ☐ Development ☐ Sample ☒ Purge & Sample			
Total Depth (fbTOR): 18.50			Total Volume Purged (gal):			Purge Method: Low Flow pump			
Time	Water Level (fbTOR)	Acc. Volume (gallons)	pH (units)	Temp. (deg. C)	SC (uS)	Turbidity (NTU)	DO (mg/L)	ORP (mV)	Appearance & Odor
2:30	0 Initial	0.0	7.56	11.8	883.9	71000	4.34	68	Turbid / no odor
2:34	1 4.59	.50	7.36	12.3	777.5	71000	4.30	89	Turbid / no odor
2:38	2 7.98	1	7.38	12.2	723.4	71000	4.64	83	" "
2:40	3 9.78	1.50	7.59	12.2	610.1	804	6.60	67	" "
2:42	4 10.11	2.00	7.67	12.1	454.5	427	7.00	54	" "
2:45	5 11.84	3.00	7.62	12.3	400.8	400	5.11	62	" "
2:48	6 12.01	3.50	7.52	12.0	685.2	398	5.70	70	" "
2:52	7 13.33	4.00	7.53	12.2	678.3	399	5.63	70	
	8								
	9								
	10								
Sample Information:									
2:55	S1 13.89	4.50	7.58	12.6	678.3	401	5.70	72	" "
3130	S2 Dry								

REMARKS: BD MW-4

Note: All water level measurements are in feet, distance from top of riser.

Volume Calculation

Diam.	Vol. (g/ft)
1"	0.041
2"	0.163
4"	0.653
6"	1.469

Stabilization Criteria

Parameter	Criteria
pH	± 0.1 unit
SC	± 3%
Turbidity	± 10%
DO	± 0.3 mg/L
ORP	± 10 mV

PREPARED BY:

ROUX

GROUNDWATER FIELD FORM

Project Name: 614 exchange ST Date:

Location: Project No.: Field Team:

Well No. MW-2			Diameter (inches): 1			Sample Date / Time: 5/8/25 @ 12:00			
Product Depth (fbTOR): NA			Water Column (ft): 13.16			DTW when sampled: 9.34			
DTW (static) (fbTOR): 4.04			One Well Volume (gal): .54			Purpose: ☐ Development ☐ Sample ☒ Purge & Sample			
Total Depth (fbTOR): 17.20			Total Volume Purged (gal):			Purge Method: Bailer			
Time	Water Level (fbTOR)	Acc. Volume (gallons)	pH (units)	Temp. (deg. C)	SC (uS)	Turbidity (NTU)	DO (mg/L)	ORP (mV)	Appearance & Odor
11:55	0 Initial	0.0	7.42	9.8	1361	71000	2.18	-37	Turbid/no odor
	1								
	2								
	3								
	4								
	5								
	6								
	7								
	8								
	9								
	10								
Sample Information:									
12:00	S1 DRY	0.0							
12:30	S2 15.40	0.0	7.32	11.0	1334	71000	2.11	-52	Turbid/no odor

Well No. MW-3			Diameter (inches): 1			Sample Date / Time: 5/8/25 @ 2:00			
Product Depth (fbTOR): N/A			Water Column (ft): 13.56			DTW when sampled: 12.84			
DTW (static) (fbTOR): 4.54			One Well Volume (gal): .56			Purpose: ☐ Development ☐ Sample ☒ Purge & Sample			
Total Depth (fbTOR): 18.10			Total Volume Purged (gal):			Purge Method: Bailer			
Time	Water Level (fbTOR)	Acc. Volume (gallons)	pH (units)	Temp. (deg. C)	SC (uS)	Turbidity (NTU)	DO (mg/L)	ORP (mV)	Appearance & Odor
1:30	0 Initial	0.0	7.43	9.6	1186	71000	4.76	13	Turbid/no odor
	1								
	2								
	3								
	4								
	5								
	6								
	7								
	8								
	9								
	10								
Sample Information:									
1:35	S1 DRY						3.98		Turbid/no odor
1:15	S2 16.40	0.0	7.42	9.8	1342	71000			

REMARKS:

Note: All water level measurements are in feet, distance from top of riser.

Volume Calculation

Diam.	Vol. (g/ft)
1"	0.041
2"	0.163
4"	0.653
6"	1.469

Stabilization Criteria

Parameter	Criteria
pH	± 0.1 unit
SC	± 3%
Turbidity	± 10%
DO	± 0.3 mg/L
ORP	± 10 mV

PREPARED BY:

GROUNDWATER FIELD FORM

Project Name: 619 Academy ST Date: 5/8/25

Location: Project No.: Field Team: NAS

Well No. MW-5 | Diameter (inches): 1 | Sample Date / Time: 5/8/25 @ 10:00

Product Depth (fbTOR): NA | Water Column (ft): 11.47 | DTW when sampled: 3.85

DTW (static) (fbTOR): 3.75 | One Well Volume (gal): .47 | Purpose: ☐ Development ☐ Sample ☒ Purge & Sample

Total Depth (fbTOR): 12.25 | Total Volume Purged (gal): | Purge Method: Bailer 1inch

Time		Water Level (fbTOR)	Acc. Volume (gallons)	pH (units)	Temp. (deg. C)	SC (uS)	Turbidity (NTU)	DO (mg/L)	ORP (mV)	Appearance & Odor
9:50	0	Initial	0.0	6.42	11.1	2431	71000	4.16	265	Turbid/no odor
	1									
	2									
	3									
	4									
	5									
	6									
	7									
	8									
	9									
	10									
Sample Information:										
10:15	S1	DRY	.50							
1400	S2	10.75	.50	6.98	10.8	2018	>1000	4.57	259	Turbid no odor

Well No. MW-6 | Diameter (inches): 1 | Sample Date / Time: 5/8/25 @ 11:10am

Product Depth (fbTOR): NA | Water Column (ft): 11.72 | DTW when sampled: 5.98

DTW (static) (fbTOR): 5.65 | One Well Volume (gal): .48 | Purpose: ☐ Development ☐ Sample ☒ Purge & Sample

Total Depth (fbTOR): 12.37 | Total Volume Purged (gal): | Purge Method: Bailer 1inch

Time		Water Level (fbTOR)	Acc. Volume (gallons)	pH (units)	Temp. (deg. C)	SC (uS)	Turbidity (NTU)	DO (mg/L)	ORP (mV)	Appearance & Odor
10:28	0	Initial	0.0	8.03	9.9	1406	71000	2.49	154	Turbid/no odor
	1			8.03	9.9	1404	OR	5.07	80	
	2									
	3									
	4									
	5									
	6									
	7									
	8									
	9									
	10									
Sample Information:										
10:48	S1	DRY	0.0	8.14	9.7	1438	71000	2.78	160	Turbid/no odor
11:17	S2	10.89	↓	↓	↓	↓	↓	↓	↓	↓

REMARKS:

Note: All water level measurements are in feet, distance from top of riser.

Volume Calculation

Diam.	Vol. (g/ft)
1"	0.041
2"	0.163
4"	0.653
6"	1.469

Stabilization Criteria

Parameter	Criteria
pH	± 0.1 unit
SC	± 3%
Turbidity	± 10%
DO	± 0.3 mg/L
ORP	± 10 mV

PREPARED BY:

APPENDIX E

Building Inventory Form and Soil Vapor/SVI Field Forms

ROUX

INDOOR AIR QUALITY QUESTIONNAIRE & BUILDING INVENTORY

Project Name: 619 exchange | Project No.

Project Location: Buffalo NY | Client: ~~Pine Street~~ 619 exchange LLC

Preparer's Name: Nick Suraci | Date/Time: 9/17/25

Preparer's Affiliation: consultant | Phone No: 716-713-3937

Purpose of Investigation: Remedial Investigation

1. OCCUPANT: none

Interviewed: yes no

Last Name: First Name:

Address:

County:

Home Phone: Office Phone:

Number of Occupants/persons at this location: Age of Occupants:

2. OWNER OR LANDLORD: (check if same as occupant_____) 619 exchange LLC

Interviewed: yes (no)

Last Name: First Name:

Address:

County:

Home Phone: Office Phone:

3. BUILDING CHARACTERISTICS

Type of Building: check appropriate response)

☐ Residential	☐ School	☒ Commercial/Multi-use
☐ Industrial	☐ Church	☐ Other:

If the property is residential, type? (check appropriate response)

☐ Ranch	☐ 2-Family	☐ 3-Family
☐ Raised Ranch	☐ Split Level	☐ Colonial
☐ Cape Cod	☐ Contemporary	☐ Mobile Home
☐ Duplex	☐ Apartment House	☐ Townhouse/Condo
☐ Modular	☐ Log Home	☐ Other:

If multiple units, how many?

If the property is commercial, type? Vacant commercial

Business Type(s):

Does it include residences (i.e., multi-use)? yes (no) If yes, how many?

Other Characteristics:

Number of floors 4 Building age 1904

Is the building insulated? yes (no) How air tight? tight (average) (not tight)

4. AIR FLOW

ROUX

INDOOR AIR QUALITY QUESTIONNAIRE & BUILDING INVENTORY

Use air current tubes or tracer smoke to evaluate air flow patterns and qualitatively describe:

Airflow between floors minimal

Airflow near source N/A

Outdoor air infiltration some

Infiltration into air ducts N/A

5. BASEMENT AND CONSTRUCTION CHARACTERISTICS (check all that apply)

a. Above grade construction:	☐ wood frame	☒ concrete	☐ stone
b. Basement type:	☒ full	☐ crawlspace	☐ slab
c. Basement floor:	☒ concrete	☐ dirt	☐ stone
d. Basement floor:	☒ uncovered	☐ covered	☐ covered with
e. Concreter floor:	☒ unsealed	☐ sealed	☐ sealed with
f. Foundation walls:	☐ poured	☐ block	☒ stone
g. Foundation walls:	☒ unsealed	☐ sealed	☐ sealed with
h. The basement is:	☐ wet	☒ damp	☐ dry
i. The basement is:	☐ finished	☒ unfinished	☐ partially finished
j. Sump present?	☒ yes	☐ no	
k. Water in Sump?	☒ yes	☐ no	☐ not applicable

Basement/Lowest level depth below grade: ~15 Ft

Identify potential soil vapor entry points and approximate size (e.g., cracks, utility ports, drains)

6. HEATING, VENTING, and AIR CONDITIONING (check all that apply)

Type of heating system(s) used in this building: (check all that apply - note primary) Nat

ROUX

INDOOR AIR QUALITY QUESTIONNAIRE & BUILDING INVENTORY

- [x] Hot air circulation
- [ ] Space Heaters
- [ ] Electric baseboard
- [ ] Heat pump
- [ ] Steam radiation
- [ ] Wood stove
- [ ] Hot water baseboard
- [ ] Radiant floor
- [ ] Outdoor wood boiler
- [ ] Other

The primary type of fuel used is:

- [x] Natural Gas
- [ ] Electric
- [ ] Wood
- [ ] Fuel oil
- [ ] Propane
- [ ] Coal
- [ ] Kerosene
- [ ] Solar
- [ ] Other

Domestic hot water tank fueled by: N/A

Boiler/furnace located in:

- [x] Basement
- [ ] Outdoors
- [x] Main Floor
- [ ] Other

Air Conditioning:

- [ ] Central Air
- [ ] Window units
- [ ] Open Windows
- [ ] None

Are there air distribution ducts present? [ ] yes [x] no

Describe the supply and cold air return ductwork, and its condition where visible, including whether there is a cold air return and the tightness of duct joints. Indicate the locations on the floor plan diagram.

7. OCCUPANCY

Is basement/lowest level occupied? [ ] Full-time [ ] Occaisionally [ ] Seldom [x] Almost Never

Level	General Use of Each Floor (e.g., family room, bedroom, laundry, workshop, storage)
Basement	Vacant
First Floor	Vacant
Second Floor	Vacant
Third Floor	Vacant
Fourth Floor	Vacant

8. FACTORS THAT MAY INFLUENCE INDOOR AIR QUALITY

a. Is there an attached garage? [x] yes [ ] no

b. Does the garage have a separate heating unit? ☐ yes ☒ no ☐ NA

c. Are petroleum-powered machines or vehicles stored in the garage? ☒ yes ☐ no ☐ NA
(e.g., lawnmower, atv, car) If yes, please specify: generator

d. Has the building ever had a fire? ☐ yes ☒ no
If yes, when?

e. Is a kerosene or unvented gas space heater present? ☐ yes ☒ no
If yes, where?

f. Is there a workshop or hobby/craft area? ☐ yes ☒ no
If yes, where and type? _____

g. Is there smoking in the building? ☐ yes ☒ no
If yes, how frequently?

h. Have cleaning products been used recently? ☐ yes ☒ no
If yes, when & type? _____

i. Have cosmetic products been used recently? ☐ yes ☒ no
If yes, when & type?

j. Has painting/staining been done in the last 6 months? ☐ yes ☒ no
If yes, where & when?

k. Is there new carpet, drapes, or other textiles? ☐ yes ☒ no
If yes, where & when? _____

l. Have air fresheners been used recently? ☐ yes ☒ no
If yes, when & type?

m. Is there a kitchen exhaust fan? ☐ yes ☒ no
If yes, where vented? _____

n. Is there a bathroom exhaust fan? ☐ yes ☒ no
If yes, where vented?

8. FACTORS THAT MAY INFLUENCE INDOOR AIR QUALITY (continued)

o. Is there a clothes dryer? ☐ yes ☒ no
If yes, is it vented outside? yes no

ROUX

INDOOR AIR QUALITY QUESTIONNAIRE & BUILDING INVENTORY

p. Has there been a pesticide application? ☐ yes ☒ no

If yes, when & type? _____

q. Are there odors in the building? ☐ yes ☒ no

If yes, please describe? _____

r. Do any of the building occupants use solvents at work? ☐ yes ☒ no

(e.g., chemical manufacturing or laboratory, auto mechanic or auto body shop, painting, fuel oil delivery, boiler mechanic, pesticide application, cosmetologist)

If yes, what types of solvents are used?

If yes, are their clothes washed at work? ☐ yes ☐ no

s. Do any of the building occupants regularly use or work at a dry-cleaning service?

(check appropriate response)

☐ yes, use dry-cleaning regularly (weekly) ☒ no

☐ yes, use dry-cleaning infrequently (monthly or less) ☐ unknown

☐ yes, work at a dry-cleaning service

t. Is there a radon mitigation system for the building/structure? ☐ yes ☒ no

If yes, date of installation? _____

Is the system active or passive?

9. WATER AND SEWAGE

Water Supply: ☒ Public Water ☐ Drilled Well ☐ Driven Well ☐ Dug Well

☐ Other: _____

Sewage Disposal: ☒ Public Sewer ☐ Septic Tank ☐ Leach Field ☐ Dry Well

☐ Other: _____

10. RELOCATION INFORMATION (for oil spill residential emergency)

a. Provide reasons why relocation is recommended: _____

b. Residents choose to: ☐ remain in home ☐ relocate to friends/family ☐ relocate to hotel/motel

c. Responsibility for costs associated with reimbursement explained? ☐ yes ☐ no

d. Relocation package provided and explained to residents? ☐ yes ☐ no

11. FLOOR PLANS

Draw a plan view sketch of the basement and first floor of the building. Indicate air sampling locations, possible indoor air pollution sources and PID meter readings. If the building does not have a basement, please note.

ROUX

INDOOR AIR QUALITY QUESTIONNAIRE & BUILDING INVENTORY

Location	Product Description	Size (units)	Condition [1]	Chemical Ingredients	Field Instrument Reading (units)	Photo (Y/N)
Section 2	Fire Extinguishers	5	New	See Photos	0	Y
Section 2	Bondo Filler	1 can	Used		0	Y
Section 1	JM Single Ply Membrane Cleaner (low VOC)	4 Cans	New	Unknown VOC's	0	Y
	Ethylene 300 Curative	5-gal	D	Unknown	0	Y
	PPC 6	1 can	D	Solvents	0	Y
	Dutch Boy Paint	5-gal	U	See Photos	0	Y
	Plastic Roof Cement	5-gal	U	See Photos	0	Y
	Muriatic acid	1 gal	U	Muriatic acid	0	Y
	Hydraulic oil	5-gal	U	Oil	0	Y
	Boiled Linseed Oil	1 qt	U	Linseed	0	Y
	Rand A	1 gal	U	See Photos	0	Y
	Polyurethane 350 VOC Clear coat	2 cans	D	Unknown VOC's	0	Y
	Kure N Seal Sealant	15-gallons	Used	Unknown	0	Y
	Chrome Cleaner	1 can	Used	See Photos	0	Y
Roof	Flashing Cement	8-5-gallon buckets	Open		0	Y
	Lubricating oil	1 Qt	Used		0	Y

Notes:

1. Describe the condition of the product containers as **Unopened (UO), Used (U),** or **Deteriorated (D).**
2. Photographs of the **front and back** of product containers can replace the handwritten list of chemical ingredients. However, the photographs must be of good quality and ingredient labels must be legible.

APPENDIX F

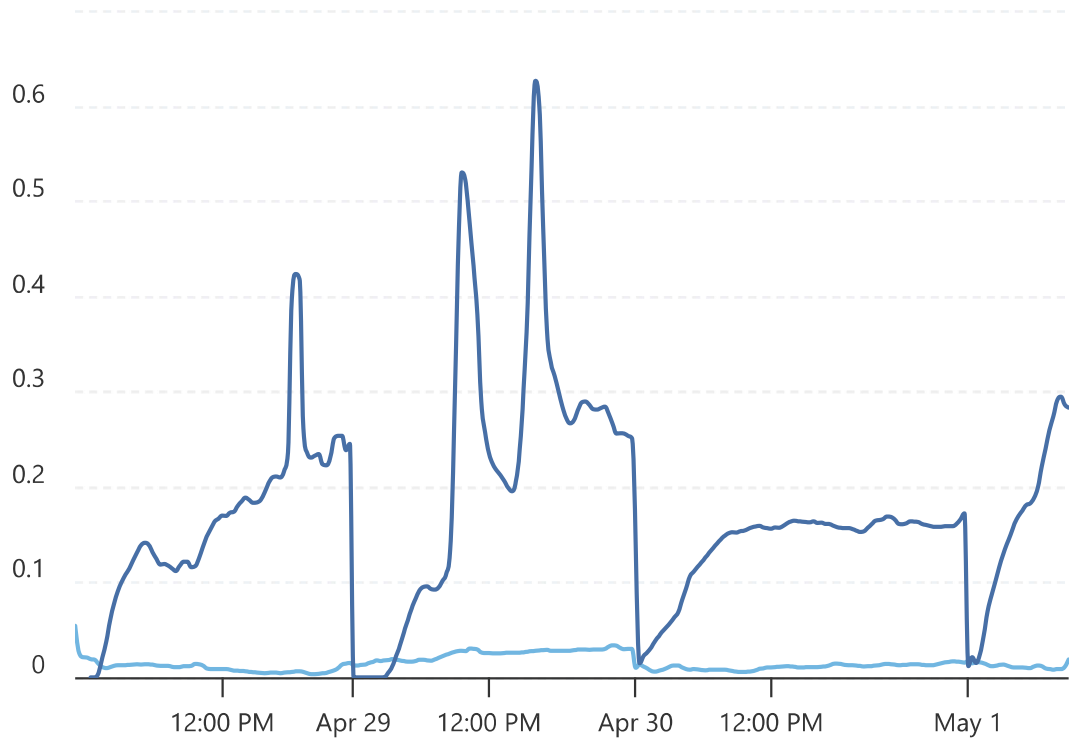
Community Air Monitoring Plan Summary

Roux #1 (FA05354)

2B021051

04/28/2025 08:00 - 05/02/2025 15:00

(GMT-05:00) Eastern Time (US & Canada)



Avg(Mass Conc. Total, mg/m^3, 15m)

MIN **0.003** AVG **0.015** MAX **0.054**

Avg(VOC, ppm, 15m)

MIN **0** AVG **0.174** MAX **0.648**

COMMUNITY AIR MONITORING DAILY LOG

Date: 4/28/2025
Project: 619 Exchange Street
Job No.:
Client:

LOCATION of ACTIVITIES/MONITORING STATIONS (Provide Sketch on Attached Map): Indoor, montoring station at NE corner of Site

WEATHER CONDITIONS:

Time of Day:	A.M.	P.M.
Ambient Air Temp.:	43	76
Wind Direction:	SSW	SSW
Wind Speed:	7	7
Precipitation:	None	None

DESCRIPTION OF SITE ACTIVITIES: RI soil borings, hand cores, well installation

PARTICULATE MONITORING	Location	Time	Value	Duration	Corrective Measures Taken (Eng Controls/Work Stoppage, etc.)
Exceedence of 100 ug/m3 [1]					
Exceedence of 150 ug/m3 [1]					
Visual Observation of Fugitive Dust			NA		
			NA		
			NA		

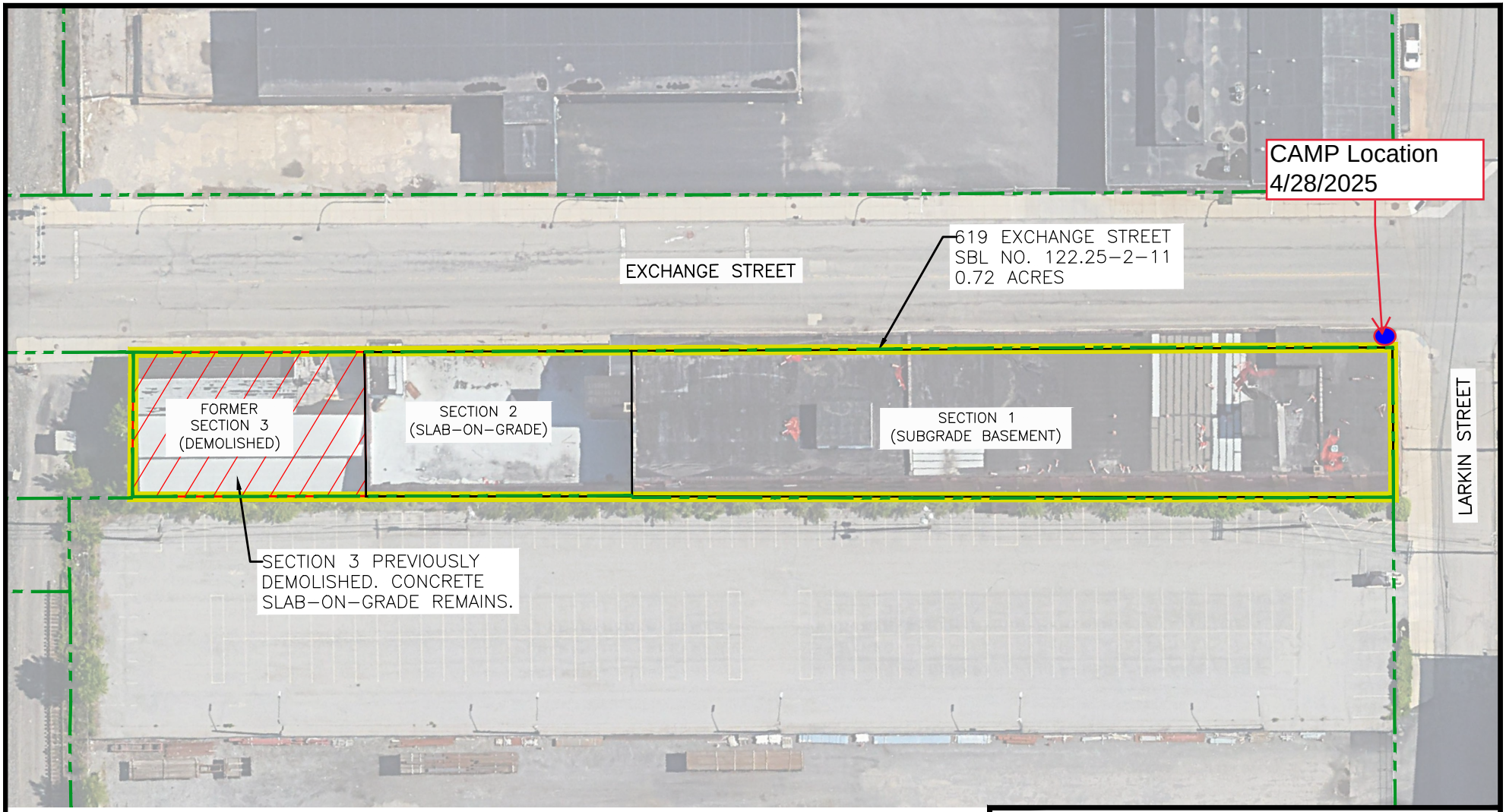
VOC MONITORING	Location	Time	Value	Duration	Corrective Measures Taken (Eng Controls/Work Stoppage, etc.)
Exceedence of 5 ppm [1]					Temporarily halt Work and continue monitoring
Reading of 5 to 25 ppm [1]					Temporarily halt Work, abate emissions with corrective actions and continue monitoring [3]
Exceedence of 25 ppm [2]					Shut Down Work Immediately and notify Site Safety & Health Officer

1. Above background for 15 minute moving average.
2. Above background at Site perimeter (indicate location on attached sketch)
3. Work may resume when total VOC conc. 200 ft downwind or half the distance to nearest receptor (whicever is less) is below 5 ppm for 15 min.

NOTE: All exceedences are to be reported to Roux within 15 minutes.

Prepared By: Nicholas Suraci Date: 4/28/2025
Checked By: Date:

F:\CAD\0-ROUX\PARK GROVE REALTY\619 EXCHANGE ST\RI WORK PLAN\FIGURE 2; SITE PLAN.DWG



LEGEND

- BCP SITE BOUNDARY
- PARCEL BOUNDARY
- BUILDING OUTLINE
- DEMOLISHED BUILDING SECTION

NOTE:
1. IMAGE SOURCE GOOGLE EARTH 2022.
2. NO PUBLIC SOURCE AERIALS CURRENTLY SHOW BUILDING DEMOLITION.

N

60' 0 60'

Title:

SITE PLAN (AERIAL)

REMEDIAL INVESTIGATION WORK PLAN

619 EXCHANGE STREET SITE
BUFFALO, NEW YORK

Prepared for:

PG LARKINVILLE, LLC

ROUX

Compiled by: CNK	Date: DECEMBER 2024	FIGURE
Prepared by: CNK	Scale: AS SHOWN	2
Project Mgr: BWM	Project: B0718-023-001	
File: FIGURE 2; SITE PLAN.DWG		

COMMUNITY AIR MONITORING DAILY LOG

Date: 4/29/2025
Project: 619 Exchange Street
Job No.:
Client:

LOCATION of ACTIVITIES/MONITORING STATIONS (Provide Sketch on Attached Map): Interior, exterior, montoring station at NE corner of Site

DESCRIPTION OF SITE ACTIVITIES: RI soil borings, hand cores, well installation

WEATHER CONDITIONS:

Time of Day:	A.M.	P.M.
Ambient Air Temp.:	73	76
Wind Direction:	SSW	SSW
Wind Speed:	17	22
Precipitation:	None	None

PARTICULATE MONITORING	Location	Time	Value	Duration	Corrective Measures Taken (Eng Controls/Work Stoppage, etc.)
Exceedence of 100 ug/m3 [1]					
Exceedence of 150 ug/m3 [1]					
Visual Observation of Fugitive Dust			NA		
			NA		
			NA		

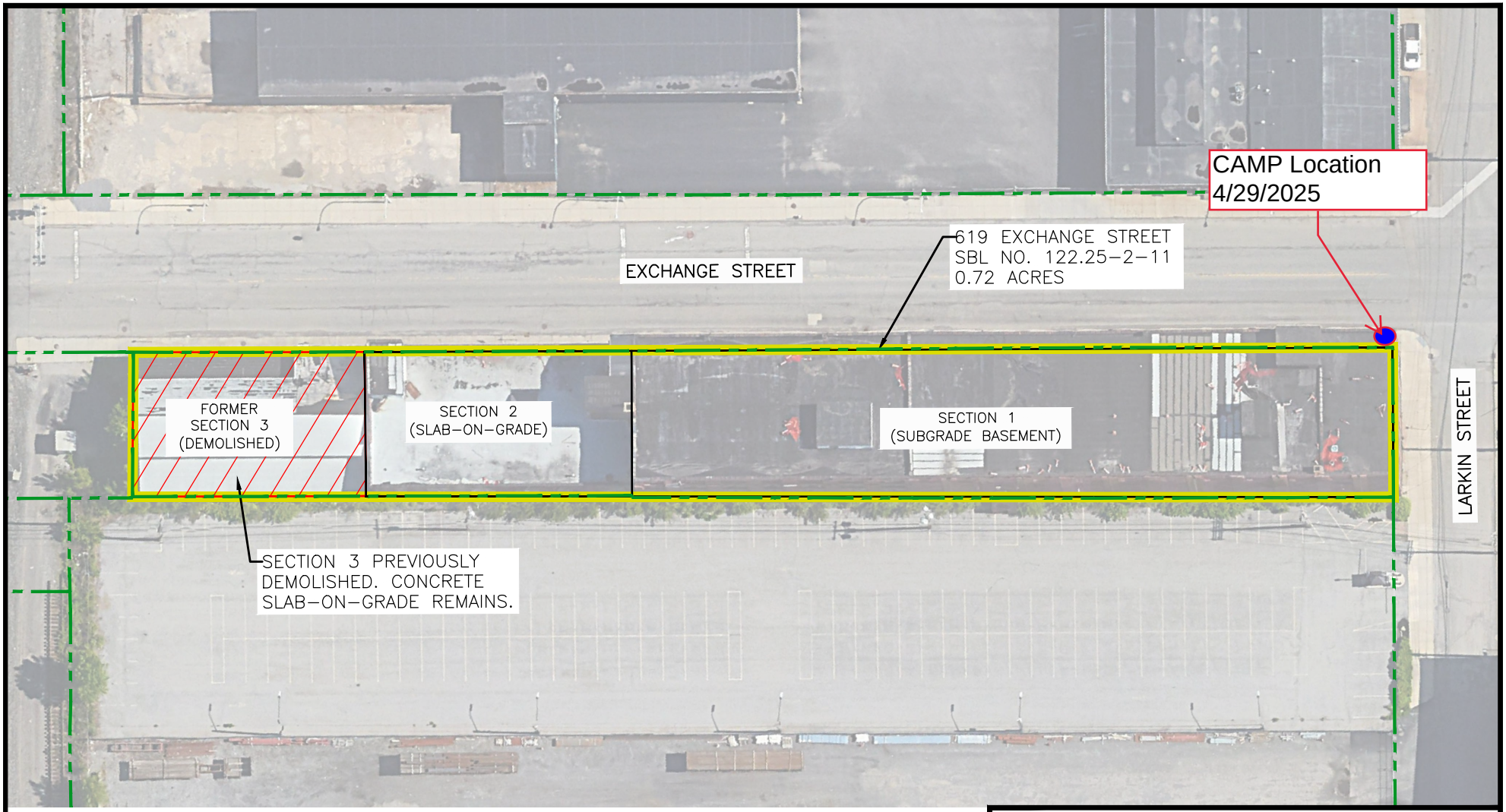
VOC MONITORING	Location	Time	Value	Duration	Corrective Measures Taken (Eng Controls/Work Stoppage, etc.)
Exceedence of 5 ppm [1]					Temporarily halt Work and continue monitoring
Reading of 5 to 25 ppm [1]					Temporarily halt Work, abate emissions with corrective actions and continue monitoring [3]
Exceedence of 25 ppm [2]					Shut Down Work Immediately and notify Site Safety & Health Officer

1. Above background for 15 minute moving average.
2. Above background at Site perimeter (indicate location on attached sketch)
3. Work may resume when total VOC conc. 200 ft downwind or half the distance to nearest receptor (whicever is less) is below 5 ppm for 15 min.

NOTE: All exceedences are to be reported to Roux within 15 minutes.

Prepared By: Nicholas Suraci Date: 4/29/2025
Checked By: Date:

F:\CAD\0-ROUX\PARK GROVE REALTY\619 EXCHANGE ST\RI WORK PLAN\FIGURE 2; SITE PLAN.DWG



LEGEND

- BCP SITE BOUNDARY
- PARCEL BOUNDARY
- BUILDING OUTLINE
- DEMOLISHED BUILDING SECTION

NOTE:
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N

60' 0 60'

Title:

SITE PLAN (AERIAL)

REMEDIAL INVESTIGATION WORK PLAN

619 EXCHANGE STREET SITE
BUFFALO, NEW YORK

Prepared for:

PG LARKINVILLE, LLC

ROUX

Compiled by: CNK	Date: DECEMBER 2024	FIGURE
Prepared by: CNK	Scale: AS SHOWN	2
Project Mgr: BWM	Project: B0718-023-001	
File: FIGURE 2; SITE PLAN.DWG		

COMMUNITY AIR MONITORING DAILY LOG

Date: 4/30/2025
Project: 619 Exchange Street
Job No.:
Client:

LOCATION of ACTIVITIES/MONITORING STATIONS (Provide Sketch on Attached Map): Indoor, montoring station at NE corner of Site

DESCRIPTION OF SITE ACTIVITIES: RI soil borings, hand cores, well installation

WEATHER CONDITIONS:

Time of Day:	A.M.	P.M.
Ambient Air Temp.:	42	55
Wind Direction:	NNW	SW
Wind Speed:	6	6
Precipitation:	None	None

PARTICULATE MONITORING	Location	Time	Value	Duration	Corrective Measures Taken (Eng Controls/Work Stoppage, etc.)
Exceedence of 100 ug/m3 [1]					
Exceedence of 150 ug/m3 [1]					
Visual Observation of Fugitive Dust			NA		
			NA		
			NA		

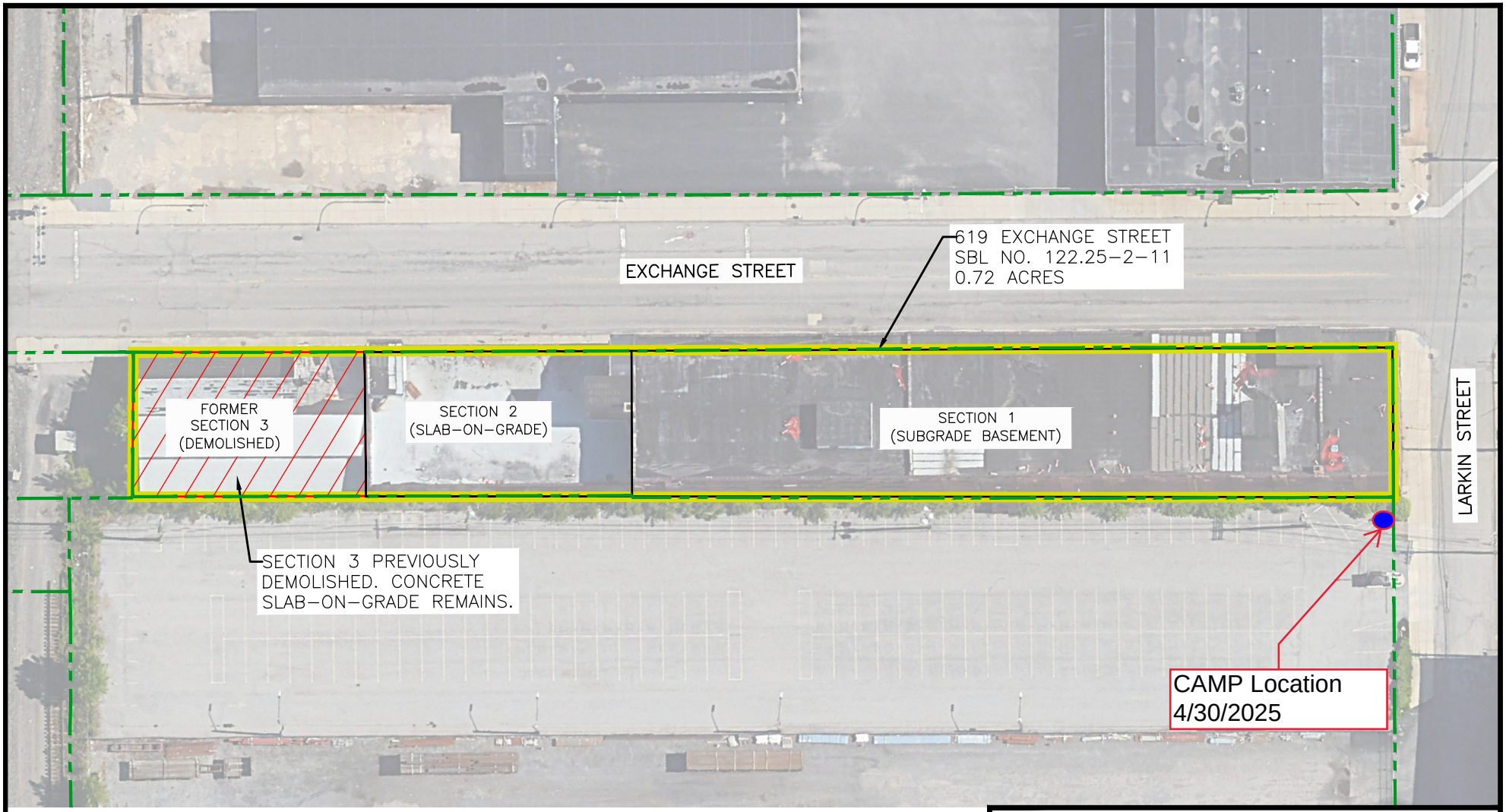
VOC MONITORING	Location	Time	Value	Duration	Corrective Measures Taken (Eng Controls/Work Stoppage, etc.)
Exceedence of 5 ppm [1]					Temporarily halt Work and continue monitoring
Reading of 5 to 25 ppm [1]					Temporarily halt Work, abate emissions with corrective actions and continue monitoring [3]
Exceedence of 25 ppm [2]					Shut Down Work Immediately and notify Site Safety & Health Officer

1. Above background for 15 minute moving average.
2. Above background at Site perimeter (indicate location on attached sketch)
3. Work may resume when total VOC conc. 200 ft downwind or half the distance to nearest receptor (whicever is less) is below 5 ppm for 15 min.

NOTE: All exceedences are to be reported to Roux within 15 minutes.

Prepared By: Nicholas Suraci Date: 4/30/2025
Checked By: Date:

F:\CAD\0-ROUX\PARK GROVE REALTY\619 EXCHANGE ST\RI WORK PLAN\FIGURE 2; SITE PLAN.DWG



LEGEND

- BCP SITE BOUNDARY
- PARCEL BOUNDARY
- BUILDING OUTLINE
- DEMOLISHED BUILDING SECTION

NOTE:
1. IMAGE SOURCE GOOGLE EARTH 2022.
2. NO PUBLIC SOURCE AERIALS CURRENTLY SHOW BUILDING DEMOLITION.

N

60' 0 60'

Title:

SITE PLAN (AERIAL)

REMEDIAL INVESTIGATION WORK PLAN

619 EXCHANGE STREET SITE
BUFFALO, NEW YORK

Prepared for:

PG LARKINVILLE, LLC

ROUX

Compiled by: CNK	Date: DECEMBER 2024	FIGURE
Prepared by: CNK	Scale: AS SHOWN	2
Project Mgr: BWM	Project: B0718-023-001	
File: FIGURE 2; SITE PLAN.DWG		

COMMUNITY AIR MONITORING DAILY LOG

Date: 5/1/2025
Project: 619 Exchange Street
Job No.:
Client:

LOCATION of ACTIVITIES/MONITORING STATIONS (Provide Sketch on Attached Map): Indoor, montoring station at NE corner of Site

WEATHER CONDITIONS:

Time of Day:	A.M.	P.M.
Ambient Air Temp.:	55	74
Wind Direction:	ENE	ENE
Wind Speed:	7	12
Precipitation:	None	Rain

DESCRIPTION OF SITE ACTIVITIES: RI soil borings, hand cores, well installation

PARTICULATE MONITORING	Location	Time	Value	Duration	Corrective Measures Taken (Eng Controls/Work Stoppage, etc.)
Exceedence of 100 ug/m3 [1]					
Exceedence of 150 ug/m3 [1]					
Visual Observation of Fugitive Dust			NA		
			NA		
			NA		

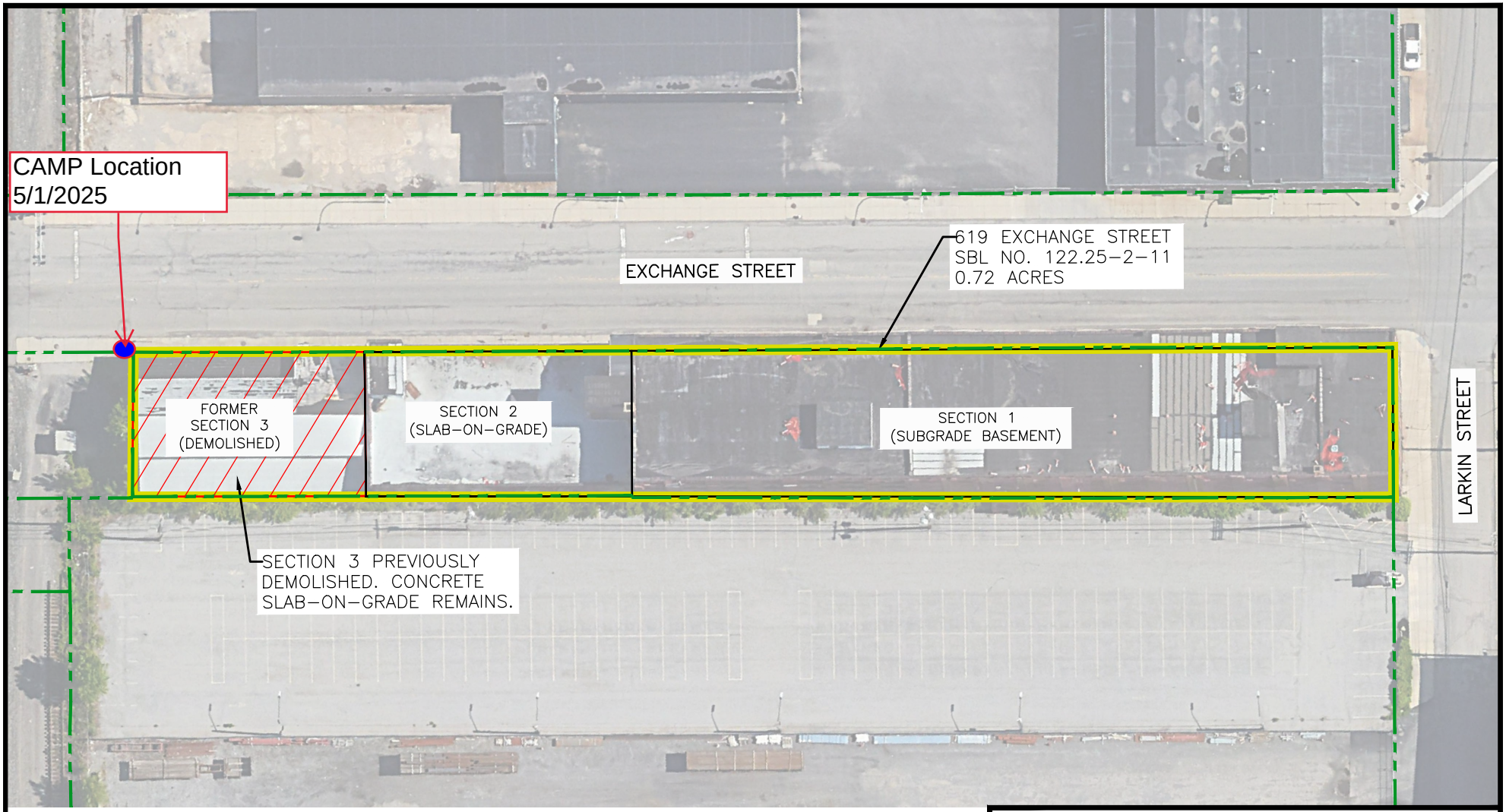
VOC MONITORING	Location	Time	Value	Duration	Corrective Measures Taken (Eng Controls/Work Stoppage, etc.)
Exceedence of 5 ppm [1]					Temporarily halt Work and continue monitoring
Reading of 5 to 25 ppm [1]					Temporarily halt Work, abate emissions with corrective actions and continue monitoring [3]
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NOTE: All exceedences are to be reported to Roux within 15 minutes.

Prepared By: Nicholas Suraci Date: 5/1/2025
Checked By: Date:

F:\CAD\0-ROUX\PARK GROVE REALTY\619 EXCHANGE ST\RI WORK PLAN\FIGURE 2; SITE PLAN.DWG



LEGEND

- BCP SITE BOUNDARY
- PARCEL BOUNDARY
- BUILDING OUTLINE
- DEMOLISHED BUILDING SECTION

NOTE:
1. IMAGE SOURCE GOOGLE EARTH 2022.
2. NO PUBLIC SOURCE AERIALS CURRENTLY SHOW BUILDING DEMOLITION.

N

60' 0 60'

Title:

SITE PLAN (AERIAL)

REMEDIAL INVESTIGATION WORK PLAN

619 EXCHANGE STREET SITE
BUFFALO, NEW YORK

Prepared for:

PG LARKINVILLE, LLC

ROUX

Compiled by: CNK	Date: DECEMBER 2024	FIGURE
Prepared by: CNK	Scale: AS SHOWN	2
Project Mgr: BWM	Project: B0718-023-001	
File: FIGURE 2; SITE PLAN.DWG		

APPENDIX G

Data Usability Summary Report (DUSR)

Data Validation Services

120 Cobble Creek Road P. O. Box
208 North Creek, NY 12853
Phone (518) 251-4429
harry@frontiernet.net

June 18, 2025

Bryan Mayback
Roux Environmental Engineering and Geology, D. P. C.
2558 Hamburg Turnpike Suite 300
Buffalo, NY 14218

RE: 619 Exchange Street Brownfield Cleanup Program (BCP) Site
Data Usability Summary Report (DUSR); Validation of Analytical Laboratory Data Packages
Eurofins SDG Nos. 480-228889-1, 480-229031-1, 480-229067-1, 480-229104-1, 480-229138-1, 480-229348-1, and 480-229350-1

Dear Mr. Mayback:

Review has been completed for the data packages generated by Eurofins TestAmerica that pertain to samples collected between 04/18/25 and 05/08/25 at the 619 Exchange Street BCP site. Twelve soil samples, three aqueous samples, and field duplicates of each matrix were processed for TCL and NYCRR Part 375 CP-51 volatile analytes, TCL semivolatiles, Tentatively Identified Compounds (TICs), 1,4-dioxane, TCL Aroclor PCBs (PCBs), TCL pesticides, TCL herbicides, per- and polyfluoroalkyl substances (PFAS), and TAL metals. Seven soil samples and a field duplicate were processed for TCL semivolatiles and TAL metals. Three aqueous samples were processed for TCL and CP-51 volatiles, TCL semivolatiles, and TAL metals. The aqueous samples were also processed for dissolved TAL metals. Eight 6 L air canisters and a field duplicate were processed for volatile analytes. Trip, equipment, and field blanks were also processed. The analytical methodologies are those of the USEPA SW846, USEPA draft method 1633, and USEPA method TO-15.

The data packages submitted by the laboratory contain full deliverables for validation, and this usability report is generated from review of the QC summary form information, with full review of sample raw data and limited review of associated QC raw data. The reported QC summary forms and sample raw data have been reviewed for application of validation qualifiers, with guidance from the USEPA national and regional validation documents, and in consideration for the specific requirements of the analytical methodology. The following items were reviewed:

* Data Completeness
* Case Narrative
* Custody Documentation/Sample Receipt
* Holding Times
* Surrogate, Isotopic Dilution, and Internal Standard Recoveries
* Method/Preparation/Canister/Calibration Blanks
* Matrix Spike Recoveries/Duplicate Correlations
* Blind Field Duplicate Correlations
* Laboratory Control Sample (LCS)
* Instrumental Tunes
* Initial and Continuing Calibration Standards
* Method Compliance
* Sample Result Verification

Those items listed above which show deficiencies are discussed within the text of this narrative. All of the other items were determined to be acceptable for the DUSR level review, as discussed in NYS DER-10 Appendix B Section 2.0 (c). Documentation of the outlying parameters cited in this report can be found in the laboratory data packages.

In summary, results for the samples are usable either as reported or with minor qualification.

Data completeness, accuracy and precision, representativeness, reproducibility, and comparability are acceptable. Matrix spike and field duplicate accuracy and precision determinations for the soil matrix show instances of numerous volatile analytes with outlying recoveries and/or correlations. These are detailed below, and should be considered by the end-user of the data when considering data of samples with similar matrix or field location.

Validation data qualifier definitions and client sample identifications are attached to this text. Also included with this report are the client EDDs with recommended qualifiers/edits applied in red.

Custody Forms/Sample Receipt

The samples collected 04/28/25 were logged in and reported by the laboratory with a date of 04/27/25.

The custody forms typically do not include the number of containers, and preservative entries are omitted for aqueous samples. Preservation was documented and confirmed in the laboratory raw data preparation and/or analysis logs.

Scratchouts on the custody forms should have been dated and initialed.

Blind Field Duplicates

The blind field duplicate evaluations were performed on locations HC-4 0.5-1.5Ft, HC-9 5-8 in, and MW-4. Correlations fall within validation guidelines with the exceptions of the following, the results for which have been qualified in the indicated parent samples and their field duplicates:

- Fluoranthene, phenanthrene, pyrene, arsenic, chromium, and lead in HC-4 0.5-1.5Ft
- Benzo(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, chrysene, fluoranthene, benzo(g,h,i)perylene, barium, and copper in HC-9 5-8 in
- Copper, lead, and manganese in the total fraction of MW-4

Volatile Analyses by EPA 8260D

Matrix spikes of MW-1 0.25-3 Ft and MW-1 18-20 Ft show outlying recoveries for eighteen and thirty nine analytes, respectively. The results for the affected analytes have been qualified as estimated in those parent samples.

Matrix spikes were also performed on MW-1, and show recoveries and correlations that are within validation guidelines.

Results for chloroform are considered external contamination and edited to non-detection due to presence in the associated blanks

Surrogate and internal standard recoveries are compliant. LCS recoveries are within validation guidelines. Calibration standards show responses within validation guidelines.

Results for TICs that are also present in associated blanks and analysis artifacts are considered external contamination, and have been removed from consideration as sample components.

Due to foaming of the undiluted matrix, MW-2 was processed at dilution, with subsequent elevated reporting limits.

TCL Semivolatile and 1,4-Dioxane Analyses by EPA8270E- Full Scan and SIM

Matrix spikes of MW-1 0.25-3Ft, MW-1 18-20 Ft, and MW-1 show recoveries and correlations within validation guidelines, with the following exceptions, results for which have been qualified in the indicated parent sample:

Parent Sample	Analyte	Outlying % Recoveries
MW-1 0.25-3Ft	3,3'-dichlorobenzidine	17,19
	phenanthrene	53,51

Surrogate standard, internal standard, and LCS recoveries are within validation guidelines. Calibration standards show responses within validation guidelines.

The method blank for the aqueous samples shows significant laboratory contamination (i.e. 20 reported TICs), primarily of hydrocarbons. These same TICs should have been flagged as "B" in the associated samples to alert the end-user of the data (the laboratory does not apply "B"s for TICs). Results for TICs that are also present in associated blanks and analysis artifacts (ex. aldol condensates and extraction solvents) are considered external contamination, and have been removed from consideration as sample components. It is noted that the extraction solvent methylene chloride, aldol condensates and hydrocarbons were often not identified by the analysts. The extraction solvents should not have been reported as TICs.

TCL Pesticides, TCL Herbicides, and Aroclor PCB Analyses by USEPA 8081B, 8082A, and 8151A

Some of the detected pesticide results exhibit elevated dual column quantitative correlations, and are qualified to reflect the uncertainty in identification and/or quantitation. The values have been either qualified as estimated ("J"), qualified as tentative in identification and estimated in value ("NJ"), or edited to non-detection ("U"), depending on the degree of variance. In some instances, the adjusted reporting limits are elevated over the original method reporting limits.

The soil method blanks show contamination of 4,4-DDT, endrin ketone, g-BHC, and methoxychlor at low concentrations. Results for samples that show concentrations of those analytes within validation action limits have been either edited to reflect non-detection or qualified as estimated, with a high bias due to contamination contribution.

The matrix spike evaluations for Aroclors 1016/1260 and pesticides were performed on MW-1 0.25-3 Ft, MW-1 18-20 Ft, and MW-1, and show recoveries and correlations within validation guidelines.

Surrogate and internal standard recoveries are within validation guidelines. Calibration standards show compliant recoveries. CLS recoveries are within laboratory acceptance ranges.

Many samples were processed at dilution, and reporting limits for those samples are therefore proportionally elevated.

PFAS by Draft EPA Method 1633

The result for PFOS is qualified as being Estimated Maximum Possible Concentrations due to the outlying ion ratio.

Due to presence in the equipment blank, the following results are considered external contamination and edited to reflect non-detection; it is noted by the laboratory that there was particulate in that equipment blank:

- PFHxA in MW-1
- PFOA and PFOS in MW-5

Matrix spikes of MW-1 0.25-3 Ft, MW-1 18-20 Ft, and MW-1 show recoveries and correlations within validation guidelines. LCS recoveries are compliant.

Isotopic dilution and internal standard recoveries are within validation guidelines. Calibration standard responses are compliant.

Volatile Air Analyses by USEPA Method TO-15 - Full Scan and SIM

Holding times were met. Internal standard recoveries are compliant. Calibration standards show responses within validation action levels.

LCS recoveries are within validation guidelines. Blanks show no contamination.

Canister pressures at laboratory receipt are not included in the full deliverables data packages, but are found in the summary packages.

TAL Metals by EPA 6010D, 6020B, 7271A, and 7471B

Matrix spikes and/or duplicate evaluations were performed for TAL analytes on MW-6 8-10 Ft, MW-1 0.25-3 Ft, MW-1 18-20 Ft, and total and dissolved fractions of MW-1, and show recoveries and correlations within validation guidelines, with the following exceptions, results for which have been qualified in the indicated parent samples:

Parent Sample	Element	Outlying % Recoveries	Outlying % RPD's
MW-6 8-10 Ft	antimony	48,46	
	potassium	134,129	
MW-1 0.25-3Ft	aluminum	347,176	29
	antimony	66,73	
	manganese	32,29	
	mercury	127,2297	165
MW-1-18-20 Ft	antimony	43, 36	
	magnesium	44,-1	
	manganese	23,127	
	selenium	74,74	

Parent Sample	Element	Outlying % Recoveries	Outlying % RPD's
MW-1-Total	barium	30,38	
	chromium	68,71	
	copper	70,72	
	lead	63,66	
	nickel	61,65	
	potassium	14,34	
	vanadium	59,65	
	zinc	3,14	

The detected result for mercury in HC-5 0.33-0.66 Ft is qualified as estimated, with a high bias, due to the fact that the sample following a project MSD that shows an anomalous highly elevated response.

The ICP serial dilution determinations were performed on TAL metals on MW-6 8-10 Ft, MW-1 18-20 Ft, and the total and dissolved fractions of MW-1 XXXXXXXXXCorrelations are within validation guidelines, with the following exceptions, results for which have been qualified in the indicated parent samples:.

Parent Sample	Element	%Difference
MW-6 8-10 Ft	iron	24
MW-1 18-20 Ft	barium	21
	calcium	18
	iron	33
	manganese	16
MW-1-Total	iron	24

Calibration and low level standard responses are compliant.

Total and dissolved fraction concentrations correlate well.

Please do not hesitate to contact me if questions or comments arise during your review of this report.

Very truly yours,

Judy Harry

Judy Harry

Attachments: Validation Data Qualifier Definitions
Sample Identifications
Qualified Laboratory EQuIS EDDs

VALIDATION DATA QUALIFIER DEFINITIONS

U	The analyte was analyzed for, but was not detected above the level of the associated reported quantitation limit.
J	The analyte was positively identified; the associated numerical value is an approximate concentration of the analyte in the sample.
J-	The analyte was positively identified; the associated numerical value is an estimated quantity that may be biased low.
J+	The analyte was positively identified; the associated numerical value is an estimated quantity that may be biased high.
UJ	The analyte was analyzed for, but was not detected. The associated reported quantitation limit is approximate and may be inaccurate or imprecise.
NJ	The detection is tentative in identification and estimated in value. Although there is presumptive evidence of the analyte, the result should be used with caution as a potential false positive and/or elevated quantitative value.
R	The data are unusable. The sample results are rejected due to serious deficiencies in meeting Quality Control limits. The analyte may or may not be present.
EMPC	The results do not meet all criteria for a confirmed identification. The quantitative value represents the Estimated Maximum Possible Concentration of the analyte in the sample.

Sample Identification Summary

Sample Summary

Client: Roux Environmental Engineering and Geology DPC
Project/Site: BCP RI - 619 Exchange Street Site

Job ID: 480-228889-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
480-228889-1	IA-4	Air	04/18/25 16:05	04/22/25 09:50	Air Canister (6-Liter) #1613
480-228889-2	SSV-2	Air	04/18/25 16:01	04/22/25 09:50	Air Canister (6-Liter) #1539
480-228889-3	SSV-1	Air	04/18/25 15:57	04/22/25 09:50	Air Canister (6-Liter) #1766
480-228889-4	SSV-3	Air	04/18/25 16:03	04/22/25 09:50	Air Canister (6-Liter) #504
480-228889-5	IA-3	Air	04/18/25 16:04	04/22/25 09:50	Air Canister (6-Liter) #1380
480-228889-6	IA-1	Air	04/18/25 15:58	04/22/25 09:50	Air Canister (6-Liter) #1492
480-228889-7	IA-2	Air	04/18/25 16:02	04/22/25 09:50	Air Canister (6-Liter) #805
480-228889-8	SSV-4	Air	04/18/25 16:06	04/22/25 09:50	Air Canister (6-Liter) #1232

Sample Summary

Client: Roux Environmental Engineering and Geology DPC
Project/Site: BCP RI - 619 Exchange Street Site

Job ID: 480-229031-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
480-229031-1	MW-6 0.5-0.75 Ft	Solid	04/28/25 ~~04/27/25~~ 09:30	04/28/25 16:25
480-229031-2	MW-6 8-10 Ft	Solid	04/28/25 ~~04/27/25~~ 12:00	04/28/25 16:25
480-229031-3	MW-5 0.33-0.75 Ft	Solid	04/28/25 ~~04/27/25~~ 10:30	04/28/25 16:25
480-229031-4	MW-4 0.25-1 Ft	Solid	04/28/25 ~~04/27/25~~ 11:00	04/28/25 16:25
480-229031-5	MW-4 12-14 Ft	Solid	04/28/25 ~~04/27/25~~ 13:30	04/28/25 16:25

GH

Sample Summary

Client: Roux Environmental Engineering and Geology DPC
Project/Site: BCP RI - 619 Exchange Street Site

Job ID: 480-229067-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
480-229067-1	HC-4 0.5-1.5Ft	Solid	04/29/25 09:30	04/29/25 15:43
480-229067-2	BD-1	Solid	04/29/25 09:45	04/29/25 15:43
480-229067-3	MW-2 0.75-2Ft	Solid	04/29/25 12:00	04/29/25 15:43
480-229067-4	MW-3 0.5-2.5Ft	Solid	04/29/25 13:30	04/29/25 15:43
480-229067-5	MW-1 0.25-3Ft	Solid	04/29/25 13:00	04/29/25 15:43
480-229067-6	HC-5 0.33-0.66Ft	Solid	04/29/25 14:30	04/29/25 15:43
480-229067-7	HC-6 2in-6in	Solid	04/29/25 15:00	04/29/25 15:43
480-229067-8	HC-7 0.25-0.75Ft	Solid	04/29/25 14:45	04/29/25 15:43

Sample Summary

Client: Roux Environmental Engineering and Geology DPC
Project/Site: BCP RI - 619 Exchange Street Site

Job ID: 480-229104-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
480-229104-1	MW-1 18-20 Ft	Solid	04/30/25 10:30	04/30/25 16:56
480-229104-2	HC-8 1-3 in	Solid	04/30/25 11:15	04/30/25 16:56
480-229104-3	HC-9 5-8 in	Solid	04/30/25 11:45	04/30/25 16:56
480-229104-4	HC-10 1-3 in	Solid	04/30/25 12:00	04/30/25 16:56
480-229104-5	HC-11 0.25-0.5 Ft	Solid	04/30/25 12:30	04/30/25 16:56
480-229104-6	BD-2	Solid	04/30/25 11:50	04/30/25 16:56
480-229104-7	MW-2 16-20 Ft	Solid	04/30/25 15:00	04/30/25 16:56

Sample Summary

Client: Roux Environmental Engineering and Geology DPC
Project/Site: BCP RI - 619 Exchange Street Site

Job ID: 480-229138-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
480-229138-1	SB-11 0.25-2Ft	Solid	05/01/25 10:00	05/01/25 15:40

Sample Summary

Client: Roux Environmental Engineering and Geology DPC
Job ID: 480-229348-1
Project/Site: BCP RI - 619 Exchange Street Site

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
480-229348-1	MW-1	Water	05/08/25 15:00	05/10/25 09:00
480-229348-2	MW-2	Water	05/08/25 13:00	05/10/25 09:00
480-229348-3	MW-3	Water	05/08/25 14:00	05/10/25 09:00
480-229348-4	MW-4	Water	05/08/25 12:00	05/10/25 09:00
480-229348-5	MW-5	Water	05/08/25 10:00	05/10/25 09:00
480-229348-6	MW-6	Water	05/08/25 11:00	05/10/25 09:00
480-229348-7	BD	Water	05/08/25 12:05	05/10/25 09:00
480-229348-8	FIELD BLANK	Water	05/08/25 09:30	05/10/25 09:00
480-229348-9	EQUIPMENT BLANK	Water	05/08/25 09:15	05/10/25 09:00
480-229348-10	TRIP BLANK	Water	05/08/25 09:00	05/10/25 09:00

Sample Summary

Client: Roux Environmental Engineering and Geology DPC
Job ID: 480-229350-1
Project/Site: BCP RI - 619 Exchange Street Site

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
480-229350-1	SV-1	Air	05/08/25 13:00	05/10/25 10:00	Air Canister (6-Liter) #1909
480-229350-2	OA-2	Air	05/08/25 11:30	05/10/25 10:00	Air Canister (6-Liter) #879
480-229350-3	OA-1	Air	04/18/25 16:00	05/10/25 10:00	Air Canister (6-Liter) #1346

APPENDIX H

Fish and Wildlife Resource Impact Analysis

Appendix 3C Fish and Wildlife Resources Impact Analysis Decision Key	If YES Go to:	If NO Go to:
1. Is the site or area of concern a discharge or spill event?	13	2
2. Is the site or area of concern a point source of contamination to the groundwater which will be prevented from discharging to surface water? Soil contamination is not widespread, or if widespread, is confined under buildings and paved areas.	13	3
3. Is the site and all adjacent property a developed area with buildings, paved surfaces and little or no vegetation? The entire site is covered with hardscape (former building slab and existing building). Surrounding properties are also primarily covered in hardscape, as the site is located in a highly developed area of the City of Buffalo	4	9
4. Does the site contain habitat of an endangered, threatened or special concern species?	Section 3.10.1	5
5. Has the contamination gone off-site? Off-site migration of soil contamination is not expected due to to the type of contamination (PAHs and metals), which are not mobile under hardscape cover	6	14
6. Is there any discharge or erosion of contamination to surface water or the potential for discharge or erosion of contamination?	7	14
7. Are the site contaminants PCBs, pesticides or other persistent, bioaccumulable substances?	Section 3.10.1	8
8. Does contamination exist at concentrations that could exceed ecological impact SCGs or be toxic to aquatic life if discharged to surface water?	Section 3.10.1	14
9. Does the site or any adjacent or downgradient property contain any of the following resources? i. Any endangered, threatened or special concern species or rare plants or their habitat ii. Any DEC designated significant habitats or rare NYS Ecological Communities iii. Tidal or freshwater wetlands iv. Stream, creek or river v. Pond, lake, lagoon vi. Drainage ditch or channel vii. Other surface water feature viii. Other marine or freshwater habitat ix. Forest x. Grassland or grassy field xi. Parkland or woodland xii. Shrubby area xiii. Urban wildlife habitat xiv. Other terrestrial habitat	11	10
10. Is the lack of resources due to the contamination?	3.10.1	14
11. Is the contamination a localized source which has not migrated and will not migrate from the source to impact any on-site or off-site resources?	14	12
12. Does the site have widespread surface soil contamination that is not confined under and around buildings or paved areas?	Section 3.10.1	12
13. Does the contamination at the site or area of concern have the potential to migrate to, erode into or otherwise impact any on-site or off-site habitat of endangered, threatened or special concern species or other fish and wildlife resource? (See #9 for list of potential resources. Contact DEC for information regarding endangered species.)	Section 3.10.1	14
14. No Fish and Wildlife Resources Impact Analysis needed.		

APPENDIX I

PBS Application and Pre-Work Notification for PBS Closure

New York State Department of Environmental Conservation Pre-work Notification for Bulk Storage (PBS and CBS) Tank Installation and Closure

This form provides notice to the Department of an upcoming tank installation and/or closure per 6 NYCRR 613-1.10(c)(6) and (7), 613-2.6(b)(1), 613-3.5(b)(1), and 613-4.5(b)(1) of the Petroleum Bulk Storage (PBS) Regulations and 6 NYCRR 598-1.14(a)(6) and (8), 598-2.6(b), and 598-3.6(b) of the Chemical Bulk Storage (CBS) Regulations.

Submit the completed form to the DEC regional office at least 30 days* prior to the scheduled start of work for tank installations** and permanent closures***. **If the schedule for work changes, you must notify the Department's Regional Office before work begins. Once the work is complete, the facility owner (property owner) is responsible for submitting a PBS or CBS application to the Department to add or remove the tank(s) from the registration**. Additionally, the Owner is responsible for ensuring all work is completed in compliance with the applicable PBS or CBS regulations (i.e., Parts 613 or 598). For questions, call the Regional Office in which the facility is located. Information on the PBS and CBS Programs can be found at: https://dec.ny.gov/environmental-protection/hazardous-substance-bulk-storage

* unless immediate action is required per 598-1.14(a)(8) ** not required for temporary tank systems *** unless in response to corrective action

Check applicable program: ☒ **PBS** ☐ **CBS** **Facility PBS or CBS Registration Number:** _____ **OR** ☒ **Unregistered**

Site Name: 619 Exchange Street Site	**Contractor:** TBD
Site Address: 619 Exchange Street	**Contractor Address:**
Site Address (cont.): Buffalo, New York, 14210	**Contractor Address (cont.):**
Site Contact: Andrew I. Crossed	**Contractor Contact:**
Site Phone: (585) 434-4762 **Cell:** (585) 434-4762	**Contractor Phone:** **Cell:**
Site Email: acrossed@parkgrovellc.com	**Contractor Email:**

Tank Number	Type of Action (Close & Remove, Close in Place, Install)	Proposed Date**** (mm/dd/yy)	Tank Type (AST/ UST, Single-wall/ Double-wall)	Product Stored	Capacity (gallons)	Spill Number (if applicable)	Reason for Action
1	Close & Remove	TBD	AST	Fuel Oil	5,000	N/A	
Comments							

**** Please notify the DEC regional office at least 3 days prior to the work beginning or if the proposed date changes

I hereby certify under penalty of law that the information provided on this form is true to the best of my knowledge and belief. False statements made herein are punishable as a Class A misdemeanor pursuant to Section 210.45 of the Penal Law.

Name of Owner or Authorized Representative (print): Andrew I. Crossed **Title:** Authorized Member

Signature:_____ **Date:**_____

Revised 4/25/2024

New York State Department of Environmental Conservation
Division of Environmental Remediation

Petroleum Bulk Storage Application

Pursuant to the Environmental Conservation Law: Article 17, Title 10; and
Regulations 6 NYCRR Part 613 and 6 NYCRR Subpart 374-2

(Please Type or Print Clearly and Complete All Items for Sections A, B & C)

PBS Number:

Return Completed Form & Fees To:

Expiration Date:

Section A - Facility/Property Owner/Contact Information

Transaction Type: 1

1) Initial/New Facility
2) Change of Ownership
3) Tank Installation, Closing, or Repair
4) Information Correction
5) Renewal

FACILITY

Facility Name: 619 Exchange Street Site
Tax Map Info: 122.25
Facility Address (Physical Address, No P.O. Boxes): 619 Exchange Street
Block: 2
Facility Address (cont.):
Lot: 11
City: Buffalo
State: NY
ZIP Code: 14210
County: Erie
Township/City:
Facility Phone Number: (585) 434-4762
Facility Operator: PG Larkinville, LLC

TYPE OF PETROLEUM FACILITY (Check only one)

- ☐ 01=Storage Terminal/Petrol. Distributor
- ☐ 02=Retail Gasoline Sales
- ☐ 03=Other Retail Sales
- ☐ 04=Manufacturing
- ☐ 05=Utility
- ☐ 06=Trucking/Transportation/Fleet
- ☐ 07=Apartment/Office Building
- ☐ 08=School
- ☐ 09=Farm
- ☐ 10=Private Residence
- ☐ 11=Airline/Air Taxi/Airport
- ☐ 12=Chemical Distributor
- ☐ 13=Municipality
- ☐ 15=Railroad
- ☐ 25=Auto Service/Repair (No Gasoline Sales)
- ☐ 28=Cemetery/Memorial
- ☐ 26=Religious (Church, Synagogue, Mosque, Temple, etc.)
- ☐ 27=Hospital/Nursing Home/Health Care
- ☐ 52=Marina
- ☐ 53=Nuclear Power Plant
- ■ 99=Other (Specify):

Emergency Contact Name: Andrew I. Crossed
Emergency Telephone Number: (585) 434-4762

NOTE:

Fill in Property Owner information here....>>>

Indicate Tank Owner in Section C.

OWNER

Facility (Property) Owner (from Deed): PG Larkinville, LLC
Facility Owner Address (Street and/or P.O. Box): 46 Prince Street, Suite 2003
City: Rochester
State: NY
ZIP Code: 14607
Owner Telephone Number: (585) 434-4762

Type of Owner (check only one):

- 1 ☐ Private Resident
- 2 ☐ State Government
- 3 ☐ Local Government
- 4 ☐ Federal Government
- 5 ■ Corporate/Commercial/Other

I hereby certify, under penalty of law, that all of the information provided on this form is true and correct. False statements made herein may be punishable as a criminal offense and/or a civil violation in accordance with applicable state and federal law.

Name of Owner or Authorized Representative: Andrew I. Crossed
Amount Enclosed: $
Title: Authorized Member
Signature:
Date:

CORRESPONDENCE

(Please keep this information up to date.)

Facility Contact Person Name: Andrew I. Crossed
Contact Person Company Name: PG Larkinville, LLC
Address: 46 Prince Street
Address (cont.): Suite 2003
City/State/ZIP Code: 14607
Tel. Number: (585) 434-4762
eMail Address: acrossed@parkgrovellc.com

Official Use Only
Date Received: ____/____/____
Date Processed: ____/____/____
Amount Received: $_____
Reviewed By: _____

Rev. 12/22/2022

PBS Number:

Section B - Tank Information

(Please use the key located on the last page to complete each item/column)

Registration Expiration Date:

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)	(21)
Action	Tank Number	Tank Location	Status	Installation, out-of-service, or Permanent ClosureDate (mm/dd/yyyy) **Application will be returned if blank**	Capacity (Gallons)	Product Stored (If Gasoline w/ethanol or Biodiesel, list % additive)	Tank Type	Tank Internal Protection	Tank External Protection	Tank Secondary Containment	Tank Leak Detection	Tank Overfill Prevention	Tank Spill Prevention	Pumping/Dispensing Method	Piping Location	Piping Type	Piping External Protection	Piping Secondary Containment	Piping Leak Detection	Under Dispenser Containment (UDC) (Check box if present)
1	1	2	2	TBD	5,000	0001	01	00	00	03	00	00	00	00	01	01	00	00	00	☐
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Note: If you need to add tanks to your registration, write them in using blank lines above. Attach additional sheets as needed.
Blank Section B is available at http:/www.dec.ny.gov/docs/remediation_hudson_pdf/pbsrenewal.pdf

PBS Number:

Petroleum Bulk Storage Application

Section C - Tank Ownership Information (for PBS tanks listed in Section B

Tank Owner Information

☑ Check box if same as Facility (Property) Owner.
If tank owner is different from property owner, fill out information below:

Tank Owner Name (Company/Individual):

Contact Person:

Tank Owner Address:

City: | State: | ZIP:

Contact Person Telephone Number: | Contact Person email:

Specific Tanks Owned

☑ Check box if this owner owns all tanks at this facility.
If not, list tanks owned by this owner below:

Tank Number:

Name of Class B (Daily On-Site) Operator: | Authorization No:

Name of Class A (Primary) Operator: | Authorization No:

Tank Owner Information

☐ Check box if same as Facility (Property) Owner.
If tank owner is different from property owner, fill out information below:

Tank Owner Name (Company/Individual):

Contact Person:

Tank Owner Address:

City: | State: | ZIP:

Contact Person Telephone Number: | Contact Person email:

Specific Tanks Owned

☐ Check box if this owner owns all tanks at this facility.
If not, list tanks owned by this owner below:

Tank Number:

Name of Class B (Daily On-Site) Operator: | Authorization No:

Name of Class A (Primary) Operator: | Authorization No:

PETROLEUM BULK STORAGE APPLICATION - SECTION B - TANK INFORMATION - CODE KEY

Action (1)

1. Initial Listing
2. Add Tank
3. Close/Remove Tank
4. Information Correction
5. Repair/Reline Tank

Tank Location (3)

1. Aboveground-contact w/soil
2. Aboveground-contact w/ impervious barrier
3. Aboveground on saddles, legs, stilts, rack or cradle
4. Partially buried tank (tank with 10% or more below ground)
5. Underground including vaulted with no access for inspection
6. Aboveground in Subterranean Vault w/access for inspections

Status (4)

1. In-service
2. Out-of-service
3. Closed-Removed
4. Closed- In Place
5. Tank converted to Non-Regulated use

Products Stored (7)

Heating Oils: On-Site Consumption

0001. #2 Fuel Oil
0002. #4 Fuel Oil
0259. #5 Fuel Oil
0003. #6 Fuel Oil
0012. Kerosene
0591. Clarified Oil
2711. Biodfuel Oil
2642. Used Oil (Heating)

Heating Oils: Resale/ Redistribution

2718. #2 Fuel Oil
2719. #4 Fuel Oil
2720. #5 Fuel Oil
2721. #6 Fuel Oil
2722. Kerosene
2723. Clarified Oil
2724. Biofuel Oil

Motor Fuels

0009. Gasoline
2712. Gasoline/Ethanol
0008. Diesel
2710. Biodiesel
0011. Jet Fuel
1044. Jet Fuel (Biofuel)
2641. Aviation Gasoline

Emergency Generator Fuels

0001. #2 Fuel Oil
2730. Biodiesel (E-Gen)
2731. Diesel (E-Gen)

Lubricating/Cutting Oils

0013. Lube Oil
0015. Motor Oil
1045. Gear/Spindle Oil
0010. Hydraulic Oil
0007. Cutting Oil
0021. Transmission Fluid
1836. Turbine Oil
0308. Petroleum Grease

Oils Used as Building Materials

2626. Asphaltic Emulsions
0748. Form Oil

Petroleum Spirits

0014. White/Mineral Spirits
1731. Naptha

Mineral/Insulating Oils

0020. Insulating Oil (e.g., Transformer, Cable Oil)
2630. Mineral Oil

Waste/Used/Other Oils

0022 Waste/Used Oil
9999. Other-Please list:*

Crude Oil

0006. Crude Oil
0701. Crude Oil Fractions

Tank Type (8)

01. Steel/Carbon Steel/Iron
02. Galvanized Steel Alloy
03. Stainless Steel Alloy
04. Fiberglass Coated Steel
05. Steel Tank in Concrete
06. Fiberglass Reinforced Plastic (FRP)
07. Plastic
08. Equivalent Technology
09. Concrete
10. Urethane Clad Steel
99. Other-Please list:*

Internal Protection (9)

00. None
01 Epoxy Liner
02. Rubber Liner
03. Fiberglass Liner (FRP)
04. Glass Liner
99. Other-Please list:*

External Protection (10/18)

00. None
01. Painted/Asphalt Coating
02. Original Sacrificial Anode
03. Original Impressed Current
04. Fiberglass
05. Jacketed
06. Wrapped (Piping)
07 Retrofitted Sacrificial Anode
08. Retrofitted Impressed Current
09. Urethane
99. Other-Please list:*

Tank Secondary Containment (11)

00. None
01. Diking (AST Only)
02. Vault (w/access)
03. Vault (w/o access)
04. Double-Walled (UST Only)
05. Synthetic Liner
06. Remote Impounding Area
07. Excavation Liner
09. Modified Double-Walled (AST Only)
10. Impervious Underlayment (AST Only)**
11. Double Bottom (AST Only)**
12. Double-Walled (AST Only)
99. Other - Please list*

Tank Leak Detection (12)

00. None
01. Interstitial Electronic Monitoring
02. Interstitial Manual Monitoring
03. Vapor Well
04. Groundwater Well
05. In-Tank System (Auto Tank
06. Impervious Barrier/Concrete Pad (AST Only)
07. Statistical Inventory Reconciliation (SIR)
08. Weep holes in vaults with no access for inspection
99. Other-Please list: *

Overfill Protection (13)

00. None
01. Float Vent Valve
02. High Level Alarm
03. Automatic Shut-Off
04. Product Level Gauge (AST Only)
05. Vent Whistle
99. Other-Please list:*

Spill Prevention (14)

00. None
01. Catch Basin
99. Other-Please list:*

Pumping/Dispensing Method (15)

00. None
01. Presurized Dispenser
02. Suction Dispenser
03. Gravity
04. On-Site Heating System (Suction)
05. On-Site Heating System (Supply/Return)
06. Tank-Mounted Dispenser
07. Loading Rack/Transfer Pump

Piping Location (16)

00. No Piping
01. Aboveground
02. Underground/On-ground
03. Aboveground/Underground Combination

Piping Type (17)

00. None
01. Steel/Carbon Steel/Iron
02. Galvanized Steel
03. Stainless Steel Alloy
04. Fiberglass Coated Steel
05. Steel Encased in Concrete
06. Fiberglass Reinforced Plastic (FRP)
07. Plastic
08. Equivalent Technology
09. Concrete
10. Copper
11. Flexible Piping
99. Other-Please list:*

Piping Secondary Containment (19)

00. None
01. Diking (Aboveground Only)
02. Vault (w/access)
04. Double-Walled (Underground Only)
06. Remote Impounding Area
07. Trench Liner
12. Double-Walled (Aboveground Only)
99. Other-Please list: *

Pipe Leak Detection (20)

00. None
01. Interstitial Electronic Monitoring
02. Insterstitial Manual Monitoring
03. Vapor Well
04. Groundwater Well
07. Pressurized Piping Leak Detector
09. Exempt Suction Piping
10. Statistical Inventory Reconciliation (SIR)
99. Other-Please list:*

Under Dispenser Containment (UDC) (21)

Check Box if Present

- - - - - - - - - - - - - -

* If other, please list on a separate sheet including tank number,

** Each of these codes must be combined with code 01 or 06 to meet compliance requirements.