PHASE TWO ENVIRONMENTAL SITE ASSESSMENT

THE OTTAWA HOSPITAL, RIVERSIDE CAMPUS

1967 RIVERSIDE DRIVE, OTTAWA, ONTARIO

PREPARED FOR:

The Ottawa Hospital | L'Hôpital d'Ottawa

Inspired by research. Driven by compassion. Inspiré par la recherche. Guidé par la compassion.

THE OTTAWA HOSPITAL
1053 CARLING AVENUE, BOX 814
OTTAWA ONTARIO, K1Y 4E9

PREPARED BY:

PARSONS

PARSONS INC.
1223 MICHAEL STREET NORTH, SUITE 100
OTTAWA, ONTARIO K1J 7T2
TEL: 613-691-1893

10-13184

FEBRUARY 26, 2025

Distribution:

The Ottawa Hospital

EXECUTIVE SUMMARY

Parsons Inc. (Parsons) was retained by The Ottawa Hospital to conduct a Phase Two Environmental Site Assessment (ESA) of two non-contiguous parcels of land located at the northeastern and southwestern portions of 1967 Riverside Drive in Ottawa, Ontario (collectively referred to as, the "Phase Two Property" or the "Site"). The purpose of this assessment was to investigate areas of potential environmental concern (APECs) identified in the Phase One ESA completed by Parsons in November 2024.

Parsons understands that the Phase Two ESA is required to support a Site Plan Control Application for constructing two new surface parking lots (Lot C and Lot D) on The Ottawa Hospital's Riverside Campus. Since the proposed development does not involve a change to a more sensitive property use, it is assumed that The Ottawa Hospital will not file a Record of Site Condition (RSC) in the Ontario Ministry of the Environment, Conservation and Parks (MECP) registry.

The Phase Two ESA activities included the following:

- On December 19 and 20, five boreholes were advanced (BH-101 to BH-105) to maximum depth of 6.1 metres below ground surface (mbgs). A monitoring well was installed in each of the boreholes. The primary area of potential environmental concern (APEC) included the former landfill within Lot D.
- Soil samples were submitted for the laboratory analysis of some or all of benzene, toluene, ethylbenzene, xylenes (BTEX); petroleum hydrocarbon fractions F1 to F4 (PHC F1 to F4); and volatile organic compounds (VOCs); polycyclic aromatic hydrocarbons (PAHs); polychlorinated biphenyls (PCBs) and metals.
- Groundwater samples collected on January 7th and 8th from four of the newly installed monitoring wells (one was found to be dry) and submitted for the laboratory analysis of some or all of BTEX; PHC F1 to F4; VOCs; PAHs; PCBs; OC Pesticides and metals.

The results of the Phase Two ESA are summarized as follows:

1. The stratigraphic profile encountered in the boreholes generally consisted of sand to depths of up to 6.1 mbgs. Two clay layers were present in BH-102 from 1.5 to 2.7 and 4.6 to 5.2 mbgs. Black staining and odour were noted in BH-102 from 2.7 to 4.6 mbgs; debris was noted in BH-103 below 3.0 mbgs, and debris and black staining were found in BH-105 below 0.9 mbgs.
2. In January 2025, the depth to groundwater ranged from 3.8 to 4.7 mbgs, the direction of groundwater flow was west to the Rideau River.
3. The 2011 MECP Table 3 non-potable groundwater Site Condition Standards (SCS), for an industrial/commercial/community property (ICC) use, and coarse textured soils, were selected for comparison to the soil and groundwater analytical results.
4. The soil analytical results met the MECP Table 3 SCSs for BTEX, PHC F1 to F4, VOCs, PAHs, metals including hydride-forming, ORPs namely HWSB and pH, and PCBs with the following exceptions:
    - BH-101 (central, western border of Lot D) - Four PAH parameters from 0.6 to 1.2 mbgs and PHC F1, F2 and F3, two VOC parameters, six PAH parameters and six metals parameters from 3.7 to 4.3 mbgs.
    - BH-102 (northern border of Lot D) - PHC F2 and F3, four PAH parameters and three metals parameters from 4.3 to 4.9 mbgs.
    - BH-103 (central, northern border of Lot D) - Four metal parameters from 2.4-3.1mbgs.

- BH-105 (south, western boarder of Lot D) - PHC F2 and F3, 2 VOC parameters, eight PAH parameters and two metals parameters from 1.8 to 2.4 mbgs.

The potential source of the contamination is expected to be the former Riverside Drive Landfill which extends onto the northwestern portion of Lot D. No exceedances were found on Lot C.

5. The groundwater analytical results generally met the MECP Table 3 SCSs for BTEX, PHC F1 to F4, VOCs, PAHs, metals including hydride-forming and sodium, and PCBs with the following exceptions:

    - BH-102 (northern border of Lot D) - PHC F2 and F3, vinyl chloride and mercury.

Elevated levels of sodium and chloride were identified in BH-101 and BH-103 at Lot D, but were not considered to exceed the applicable SCSs, in accordance with exemptions listed in Section 49.1 of O. Reg. 153/04. The presence of elevated levels of these parameters in groundwater is considered attributable to the application of road salt on adjacent municipal roadways for the safety of vehicular and pedestrian traffic under conditions of snow or ice.

In conclusion, the Phase Two ESA was conducted to support a Site Plan Control Application for the construction of two new surface parking lots (Lot C and Lot D) on The Ottawa Hospital's Riverside Campus, based on the assumption that the planned development will not require the filing of an RSC under O. Reg. 153/04.

In the absence of a regulatory obligation for RSC filing, it was agreed at the discretion of the QP_{ESA} and the City of Ottawa that the current Phase Two ESA sampling sufficiently characterized soil and groundwater conditions, provided that the identified contamination is addressed through a due diligence human health and ecological risk evaluation.

A screening-level risk evaluation is recommended to qualitatively assess human health and ecological exposure risks from identified soil and groundwater contaminants and determine the need for risk management measures (RMMs), based on existing environmental conditions and anticipated future land use.

Table of Contents

LIST OF TABLES

LIST OF FIGURES

LIST OF APPENDICES

1.0 INTRODUCTION

Parsons Inc. (Parsons) was retained by The Ottawa Hospital to conduct a Phase Two Environmental Site Assessment (ESA) of two non-contiguous parcels of land located at the northeastern and southwestern portions of 1967 Riverside Drive in Ottawa, Ontario (collectively referred to as, the "Phase Two Property" or the "Site"). The purpose of this assessment was to investigate areas of potential environmental concern (APECs) identified in the Phase One ESA completed by Parsons in November 2024.

Parsons understands that the Phase Two ESA is required to support a Site Plan Control Application for constructing two new surface parking lots (Lot C and Lot D) on The Ottawa Hospital's Riverside Campus. Since the proposed development does not involve a change to a more sensitive property use, it is assumed that The Ottawa Hospital will not file a Record of Site Condition (RSC) in the Ontario Ministry of the Environment, Conservation and Parks (MECP) registry.

This Phase Two ESA report was prepared in general accordance with Ontario Regulation (O. Reg.) 153/04 and the principles set out in the CSA Standard Z769-00 (R2023), *Phase II Environmental Site Assessment*. Limitations and exceptions of the Phase Two ESA are detailed in Section 7.1.

1.1 Phase Two Property Description

The municipal address of the Phase Two Property is:

- 1967 Riverside Drive, Ottawa Ontario K1H 1B9

The legal description is:

- Part of Lot 16 CON JG; Gloucester being parts 10, 13, 39, 40, 48, 49, 50, 53 to 58 Plan 4R19213; Ottawa subject to an easement in favour of rogers Ottawa Limited/Limitee as in OC166375.

The property identification number (PIN) is:

- 04201-0192 (LT) for Lot C and 04201-0191 for Lot D.

A legal survey plan of the Phase Two Property is presented in Appendix A.

The Phase Two Property location and boundaries are shown on Figures 1 to 3. The approximate total area of the Phase Two Property is 0.87 hectares, Lot C is approximately 0.22 ha (44 parking spaces) and Lot D is approximately 0.63 ha (126) parking spaces.

1.2 Property Ownership

The Phase Two Property is owned by The Ottawa Hospital. This Phase Two ESA has been undertaken for The Ottawa Hospital, with authorization to proceed provided by Dwight Breault, Director of Construction Management, The Ottawa Hospital, 1053 Carling Avenue, Ottawa, Ontario K1Y 4E9, 613-297-5289, dwbreault@toh.ca

1.3 Current and Proposed Future Uses

The current Phase Two Property usage and principal facilities are:

- Lot C - now vacant, but previously residential.
- Lot D – now vacant but previously residential/industrial.

The applicable municipality and current zoning are:

- According to the City of Ottawa, the Phase Two Property is zoned as major institutional (I2); and
- The applicable municipality is the City of Ottawa.

The future intended land use at the Phase Two Property is as a parking lot for the Riverside Campus of the Ottawa Hospital. This Phase Two ESA is used to support obtaining a Site Plan Control Application.

1.4 Applicable Site Condition Standards

The use of the generic MECP site condition standards (SCSs) from the MECP April 15, 2011 *Soil, Ground Water and Sediments Standards for Use Under Part XV.1 of the Environmental Protection Act* was selected for this Phase Two ESA. The rationale for selection of the applicable MECP SCSs is described below.

- The groundwater condition is non-potable as there are no known drinking water wells within 250 m of the Phase Two Property and it is not within a wellhead protection area.
- The Phase Two Property is not considered environmentally sensitive as no part thereof is on or within 30 m of an area of natural significance.
- pH values for surface and subsurface soil samples determined during this Phase Two ESA and previous subsurface investigations are not less than 5, or greater than 9 or 11, respectively.
- The Phase Two Property is not considered a shallow soil property based on available borehole logs that indicate less than one-third of the Phase Two Property consists of soil less than 2 m in depth beneath the soil surface, excluding any non-soil surface treatment greater than 0.5 m thick. The depth to groundwater ranged from 3.8 to 4.7 metres below ground surface (mbgs).
- A water body, in whole or part, is not on or within 30 m of the Phase Two Property.
- The soil texture for the Phase Two Property is coarse, as determined by the available borehole logs, geological maps and current and historical grain size analyses, which collectively indicate that more than two-thirds of the soil at the Phase Two Property, measured by volume, consists of 50 percent of particles that are more than 75 µm in diameter.
- The Phase Two Property use is industrial/community/commercial (ICC) based on current zoning and proposed future use.

Based on the above, the MECP Table 3 (non-potable groundwater) SCSs, for an ICC property use, and coarse textured soils were selected for comparison to the soil and groundwater laboratory analytical results.

2.0 BACKGROUND INFORMATION

The Phase Two Property location and regional topographic features are shown on Figures 1 and 2, respectively. A Phase Two Property Plan and the Preliminary Conceptual Site Model (CSM) are presented on Figures 3 and 4.

2.1 Physical Setting

2.1.1 Phase Two Property Facilities

There were no facilities on the Phase Two Property (i.e., a previously developed property that is now vacant).

2.1.2 Water Bodies and Areas of Natural Significance

The nearest surface water body, as defined by the MECP, is the Rideau River approximately 200 m west of the Phase Two Property.

The Phase One ESA review did not identify any Areas of Natural Significance within 250 m of the Phase Two Property (i.e., within the study area).

2.1.3 Topography, Hydrology and Geology

The topography at the Phase Two Property slopes to the west.

Surface water at the Phase Two Property infiltrates the ground or flows off the Phase Two Property.

Regional surface water drainage was anticipated to generally be to the west towards the Rideau River.

The local surficial and bedrock geology [and reference documents] are:

- Expected native surface soils: gravel, sand, silt and clay, deposited on modern flood plains (fluvial deposits) according to Ministry of Northern Development and Mines (MNDM) Map 2556 the Quaternary Geology of Ontario; and
- Expected bedrock geology: Georgian Bay, Blue Mountain, and Billings Formation and Collingwood and Eastview Members consisting of shale, limestone, dolostone and siltstone according to MNDM Map 2544 the Bedrock Geology of Ontario.

The stratigraphic profile encountered in the boreholes generally consisted of sand to depths of up to 6.1 mbgs. Two clay layers were present in BH-102 from 1.5 to 2.7 and 4.6 to 5.2 mbgs.

2.1.4 Neighbouring Properties

Property use surrounding the Phase Two Property was generally:

- A mixture of residential, institutional and parkland.

Adjacent properties are residential to the southeast and south, institutional to the east and parkland to the west.

2.2 Past Investigations

2.2.1 Available Reports

There were no past Phase Two investigation reports pertaining to the Phase Two Property.

3.0 SCOPE OF INVESTIGATION

3.1 Overview of Site (Phase Two Property) Investigation

The purpose of this Phase Two ESA was to assess soil and groundwater conditions within APECs identified by the Parsons' Phase One ESA.

The Phase Two ESA included:

- On December 19 and 20, 2025, 5 boreholes were advanced (BH-101 to BH-105) to maximum depth of 6.1 mbgs. A monitoring well was installed in each of the boreholes.

- Soil samples were submitted for the laboratory analysis of some or all of benzene, toluene, ethylbenzene, xylenes (BTEX); petroleum hydrocarbon fractions F1 to F4 (PHC F1 to F4); and volatile organic compounds (VOCs); polycyclic aromatic hydrocarbons (PAHs); polychlorinated biphenyls (PCBs) and metals.
- Groundwater samples collected on January 7 and 8, 2025 from four of the newly installed monitoring wells (one was found to be dry) and submitted for the laboratory analysis of some or all of BTEX; PHC F1 to F4; VOCs; PAHs; PCBs; OC Pesticides and metals.

The assessment locations are shown on Figure 6.

3.2 Media Investigation

Soil and groundwater were investigated at the Phase Two Property. Methane associated with the former landfill was previously investigated at the Phase Two Property. The sampling and analysis plan and rationale are summarized in Appendix B.

The Phase Two ESA included:

- Collecting soil samples from the boreholes for field screening and submitting selected samples for laboratory analysis of some or all of the COPCs, specifically: BTEX, PHC F1 to F4, VOCs, PAHs, metals including hydride-forming, organochlorinated Pesticides (ORPs) including HWSB and pH and PCBs.
- Collecting soil samples for ignitability testing and toxicity characteristic leaching procedure (TCLP) analysis, with the leachate being analyzed for inorganics and volatiles to facilitate disposal of excess soil.
- Collecting groundwater samples from all pre-existing and newly installed monitoring wells for laboratory analysis of BTEX, PHC F1 to F4, VOCs, PAHs, metals including hydride-forming and sodium, and PCBs.

3.3 Phase One Conceptual Site Model

APECs may exist on the Phase Two Property due to the following PCAs and associated COPCs:

APEC	Location of APEC	PCA	Location of PCA	COPCs	Media Potentially Impacted
1. Fill material of unknown quality	Whole Phase Two Property (Lot C and Lot D)	(30) Importation of Fill Material of Unknown Quality	On-site	BTEX, PHCs, VOCs, PAHs, metals (including hydride forming) and ORPs	Groundwater and Soil
2. UR-10 Riverside Drive Landfill (Closed)	Western portion of Alternate Lot and northwest portion of Lot D	(58) Waste Disposal and Waste Management, including thermal treatment, landfilling and transfer of waste, other than use of biosoils and conditioners	On-site	BTEX, PHCs, VOCs, PAHs, PCBs and Metals (including hydride forming)	Groundwater and Soil

APEC	Location of APEC	PCA	Location of PCA	COPCs	Media Potentially Impacted
3. Railway tracks	Eastern boundary of Lot C	(46) Rail Yards, Tracks and Spurs	Off-site	BTEX, PHCs, VOCs, PAHs, metals (including hydride forming) and ORPs	Groundwater and Soil

(28): MECP PCA Designation

This Phase Two ESA addresses the concerns of each of the above APECs.

3.4 Deviations from Sampling and Analysis Plan

There were no deviations from the Phase Two ESA sampling and analysis plan presented in Appendix B.

3.5 Impediments

All applicable investigation areas of the Phase Two Property were accessible.

4.0 INVESTIGATION METHOD

4.1 General

All field and laboratory procedures were conducted in accordance with the MECP *Guide for Completing Phase Two Environmental Site Assessments under Ontario Regulation 153/04* (as amended), the MECP *Protocol for Analytical Methods Used in the Assessment of Properties under Part XV.1 of the Environmental Protection Act* and standard industry practices.

The Phase Two ESA followed the sampling and analysis plan in Appendix B.

4.2 Drilling and Excavating

4.2.1 Contractors and Equipment

Strata Drilling was retained by Parsons to advance the boreholes and install monitoring wells on December 19 and 20, 2024. Parsons' personnel were on-site on a full-time basis to identify the borehole locations and complete the activities discussed below. A track mounted direct push drill rig was used to advance the boreholes.

4.2.2 Underground Utility Line Clearances

Prior to proceeding with the Phase Two ESA, utility company representatives and/or private utility locating contractors were retained by Parsons to identify underground utility locations on December 13, 2024.

4.2.3 Prevention of Cross Contamination (Soils)

The following measures were taken to limit cross-contamination that could potentially occur during the soil sampling procedures:

- Soil samples were collected from in-situ soils (i.e., undisturbed soils).
- The undisturbed soil samples were collected using stainless steel sidewall or split spoon sampling devices that were cleaned prior to each use.
- The field technician wore a new pair of nitrile gloves prior to handling each sample and minimized direct contact with the samples by using a stainless steel trowel to collect the samples. The trowel was also cleaned prior to each use.
- The field technician used clean laboratory supplied containers for each sample.

4.2.4 Soil Sample Frequency

The frequency of soil sample collection for field screening purposes was as necessary to distinguish geologic strata. The actual screening sample locations are shown on the field logs in Appendix C.

The frequency of soil samples collected for laboratory analysis was as set out in the sampling and analysis plan in Appendix B. The samples selected were:

- A shallow fill sample (i.e. 0-1.5mbgs);
- A “worst-case” sample within a vertical profile (i.e., the sample exhibiting the greatest apparent field evidence of contamination, if any, based on the field screening tests); and
- A deeper sample to vertically delineate apparent contamination, if required.

4.3 Soil Sampling

Soil samples collected from the boreholes using a split spoon sampler were separated into two portions. One portion was used for field screening purposes and the other, if selected for laboratory analysis, was promptly placed in jars provided by the laboratory.

4.4 Field and Screening Measurements

Soil sample field screening included the following:

- Determination of the textural classification of the sample and, where feasible, its geologic formation name or origin (e.g., till, fluvial, lacustrine, etc.).
- Visual inspection for evidence of chemical staining or free product.
- Measurement of the sample combustible headspace vapour concentration. The concentrations were measured using a combustible gas detector that was operated in methane elimination mode and bump-tested against a 40% n-hexane gas standard daily, and recalibrated if greater than 10% of the standard. The RKI Eagle 2 utilized had a minimum detection limit of 5 parts per million by volume (ppmv), and a range to 100% of the lower explosive limit (LEL). The accuracy of the measurement is +/- 5% or 2% of full scale, whichever is greater.
- Inspection for the absence of chemical odours. Where soil vapour concentrations were above typical background levels, as a health and safety precaution, sample odours were not inspected.

The remaining portions of the split soil samples selected for potential laboratory analysis were promptly placed in laboratory supplied containers and stored in a cooler with ice.

The selection of samples for laboratory analysis was based on the sampling and analysis plan, the field screening results (e.g., highest soil vapour concentration, staining, water table, fill etc.), sample locations within the vertical soil profile to provide delineation.

4.5 Groundwater Monitoring Well Installation

4.5.1 Contractors and Equipment

The contractor used for the monitoring well installation was Strata Drilling using a track mounted drill rig.

BH-101 to BH-105 were screened from approximately 3 to 6.1 mbgs. Monitoring well installation details are presented on the field logs in Appendix C.

Each monitoring well installed consisted of a new 51 mm diameter polyvinyl chloride (PVC) 10-slot screen, measuring approximately 3.0 m in length, and an unslotted riser. The annular space between the PVC well and the borehole wall was backfilled to approximately 0.3 m above the top of the screen with silica sand and then with hydrated bentonite pellets to approximately 0.1 mbgs. The monitoring wells were finished with a metal flush-mount bolt-down access casing set in concrete to protect them from damage.

MECP well registration records are presented in Appendix E.

4.5.2 Prevention of Cross-Contamination (Groundwater)

Monitoring well installation, well development, pre-sample purging, and groundwater sampling were conducted using the following equipment that limited the potential for cross-contamination:

- Un-used well materials including the PVC pipe and caps were supplied wrapped in plastic and installed directly into the drilled borehole.
- Commercially supplied bags of bentonite and silica sand were used to backfill the annular space around the monitoring well.
- A clean surge block with down-hole tubing that was dedicated to each well were used for development.
- An aboveground peristaltic pump with dedicated tubing to each well for groundwater purging and sample collection.
- The augers were cleaned between boreholes by brushing them free of soil.

The interface probe used to measure groundwater and free product levels was thoroughly washed using a solution of soapy water and then rinsed with potable water and allowed to air dry before each use.

No groundwater samples were collected during the monitoring well installations.

4.5.3 Well Development

The new monitoring wells were developed on December 23, 2024, using a surge block and down-hole tubing to remove turbidity and improve groundwater sample quality. The wells were developed until: (a) the water was observed to be reasonably free of turbidity after removing up to ten standing well-water volumes; or (b) the well became dry.

4.6 Groundwater Field Measurements of Water Quality Parameters

Prior to collecting the groundwater samples, the wells were purged using a low-flow methodology to reduce sample turbidity. Low-flow purging was completed using a variable-flow peristaltic pump to remove groundwater from the mid-point of the monitoring well's saturated screened zone.

The pump was connected to a flow-through cell equipped with a Horiba U22/U52 multimeter that measured pH, temperature (T), electrical conductivity (EC), dissolved oxygen (DO), reduction oxidation potential (REDOX), and turbidity. During low-flow purging the groundwater level in each well was continually monitored, and the purging rate was adjusted such that the overall drawdown from the static groundwater level did not exceed approximately 10 cm. The purging rates were approximately from 120 to 200 mL/minute.

A groundwater sample was collected when all of the measurements stabilized as noted below, over three consecutive readings. The measurements were taken at a minimum rate of at least one per every flow-through cell volume.

T -	± 3%
pH -	± 0.1 pH Units
EC -	± 3%
DO -	± 10%
REDOX -	± 10 mV
Turbidity -	± 10%

Detailed groundwater field measurements are presented in Appendix D.

4.7 Groundwater Sampling

Prior to purging and groundwater sampling, all accessible wells were monitored for the following parameters:

- Immediately after removing the well cap, the maximum subsurface vapour concentration in each well was measured using the combustible gas detector that was operated in methane elimination mode. This was done by inserting the collection tube of the gas detector into the un-slotted riser pipe and recording the peak instrument reading.
- The presence or absence of free product and, if detected, the thickness of the free product.

The depth to the groundwater and presence or absence of free product in the wells were determined with an electronic interface probe that was cleaned with a solution of soapy water and rinsed with potable water between monitoring wells. The probe has a reading accuracy of +/- 1 mm and is capable of detecting a free product thickness as small as 1 to 3 mm.

Groundwater samples were collected from the newly installed monitoring wells in January 2025. The wells were all accessible and in good condition.

The groundwater samples from BH-102 and BH-105 were collected using low-flow sampling methods using a peristaltic pump and clean dedicated tubing immediately following well purging. Due to cold temperatures the low flow equipment malfunctioned on the second day of sampling and BH-101 and BH-103 were sampled using bailers and were unable to be purged prior to sampling.

4.8 Sediment Sampling

No sediment sampling was required for this Phase Two ESA.

4.9 Analytical Testing

All laboratory analyses were conducted by Bureau Veritas in Mississauga, Ontario, which is accredited by the Standards Council of Canada for the testing of all parameters referenced herein.

Analytical methods used by the laboratories are referenced in the Certificates of Analysis presented in Appendix F.

4.10 Residue Management Procedures

The soil cuttings from the boreholes were temporarily placed in drums and were removed by Strata following the commencement of drilling.

The development, purge water and equipment cleaning water were temporarily stored in drums at the Phase Two Property.

4.11 Elevation Surveying

A vertical survey was not completed as part of this Phase Two ESA.

4.12 Quality Assurance and Quality Control Measures

A QA/QC program was implemented to reduce and quantify potential issues introduced during sample collection, handling, shipping, and analysis. The program included, but was not limited to, using dedicated sampling equipment, sample specific identification and labelling procedures, and chain of custody records.

Field QA/QC samples consisted of soil field duplicate and methanol soil field blank soil samples; and groundwater field duplicate, field blank, and trip blank samples. Field duplicates, collected at the same time as the original sample, were collected for every 10 samples submitted for laboratory analysis for each media.

There were no deviations from the sampling and analysis plan with respect to the QA/QC program.

4.12.1 Sample Containers, Labelling and Handling

The soil and groundwater samples were placed in clean new containers that were supplied by the laboratory with any required preservatives. The soil samples for BTEX, PHC fraction F1, and VOC analysis were methanol preserved in the field. Groundwater samples for analysis of metals were lab filtered. The samples were then immediately placed in coolers with ice.

Each sample was labelled with a unique sample name and custody seals were placed on every cooler and a chain-of-custody form was also placed in each cooler.

5.0 REVIEW AND EVALUATION

5.1 Geology

The stratigraphic profile encountered in the boreholes generally consisted of sand to depths of up to 6.1 mbgs. Two clay layers were present in BH-102 from 1.5 to 2.7 and 4.6 to 5.2 mbgs. Black staining and odour were noted in BH-102 from 2.7 to 4.6 mbgs; debris was noted in BH-103 below 3.0 mbgs, and debris and black staining were found in BH-105 below 0.9 mbgs. The detailed stratigraphy encountered at each borehole,

ground level and well survey elevations, and thickness of each interpreted geological unit are presented on the field logs in Appendix C.

According to geological maps, the Phase Two Property consists of gravel, sand, silt and clay, deposited on modern flood plains (fluvial deposits) (Quaternary Geology of Ontario, 1991).

The stratigraphic profile encountered in the boreholes generally consisted of sand to depths of up to 6.1 mbgs. Two clay layers were present in BH-102 from 1.5-2.7 and 4.6-5.2 mbgs.

Soil samples were submitted for grain size analysis and the samples were classified as coarse textured soils.

According to Geological maps, bedrock in the area of the Phase Two Property is Georgian Bay, Blue Mountain, and Billings Formation and Collingwood and Eastview Members consisting of shale, limestone, dolostone and siltstone. Bedrock was not encountered during this Phase Two ESA or historically by others.

In January 2025, the depth to groundwater ranged from 3.8 to 4.7-mbgs.

5.2 Groundwater Elevations and Flow Direction

5.2.1 Water Levels and Interpreted Aquifers

The sampling and analysis were conducted in accordance with the sampling and analysis plan presented in Appendix B.

The monitoring wells were installed to evaluate groundwater conditions at the Phase Two Property with well screens straddling the water table to allow for the presence of free-phase product.

During the monitoring events, the groundwater level at each accessible well at the Phase Two Property was measured using an interface probe. On January 7 and 8, 2025, the depth to groundwater ranged from 3.8to 4.7mbtwc.

The potentiometric surface elevations were not determined for this Phase Two Property as a vertical survey was not completed.

5.2.2 Free Product

As indicated by the field logs in Appendix C, there was no evidence of free product during advancement of the boreholes.

As indicated in Table 1, free product was not detected in any of the monitoring wells in January 2025.

5.2.3 Inferred Groundwater Flow Direction

The groundwater elevations in January 2025 are shown on Figure 7. The groundwater flow direction was west towards the Rideau River.

The reported groundwater levels and inferred direction of groundwater flow apply only on the date of monitoring. Groundwater depth and flow direction can vary over time due to various factors, including precipitation and surface runoff, variation in aquifer recharge or discharge, and changes made to surface or subsurface features.

There are no subsurface utilities at or near the Phase Two Property that are known to be influencing the groundwater table and direction of flow.

5.3 Groundwater Gradients

No gradients were determined as part of this Phase Two ESA.

5.4 Coarse Soil Texture

The applicable soil texture selected for the Phase Two Property was coarse as determined by the sieve (75µm) results.

5.5 Soil Field Screening

Soil vapour concentrations measured in the samples recovered from the boreholes are presented on the logs in Appendix C. The soil vapour concentrations ranged from not detected (i.e., <5 ppmv) to 100% LEL.

Black staining and odour were noted in BH-102 from 2.7 to 4.6 mbgs and black staining and debris was noted in BH-105 below 0.9 mbgs.

5.6 Soil Quality

Soil samples from the boreholes, excluding QA/QC samples, were submitted for laboratory analysis of some or all of BTEX, PHC F1 to F4, VOCs, PAHs, metals including hydride-forming, ORPs including HWSB and pH, and PCBs. Details regarding the locations and depths of the soil samples selected for laboratory analyses are presented in the sampling and analysis plan in Appendix B and on Figures 9 to 15.

The soil analytical results are presented and compared to the applicable MECP SCSs in Tables 2 to 8.

All soil analytical results met the Table 3 SCSs with the following exceptions:

- PHC parameters in BH-101 (3.7 to 4.3 mbgs), BH-102 (4.3 to 4.9 mbgs) and BH-105 (1.8 to 2.4 mbgs)
- VOC parameters in BH-101 (3.7 to 4.3 mbgs) and BH-105 (1.8 to 2.4 mbgs)
- PAH parameters in BH-101 (0.6 to 1.2 and 3.7 to 4.3 mbgs), BH-102 (4.3 to 4.9 mbgs), BH-103 (2.4 to 3.1 mbgs) and BH-105 (1.8 to 2.4 mbgs)
- Metals parameters in BH-101 (3.7 to 4.3 mbgs), BH-102 (4.3 to 4.9 mbgs), BH-103 (2.4 to 3.1 mbgs) and BH-105 (1.8 to 2.4 mbgs)

The soil analytical results for pH are presented and compared to the Ontario Regulation 153/04 (as amended) criteria for site sensitivity assessment in Table 8. All of the results met the applicable criteria.

Two grain size samples were analyzed from BH-104 at 3.7 to 4.3 mbgs and BH-105 at 3.7-4.3 mbgs with the results both classified as coarse textured.

There is no indication of the occurrence of contaminants related to the chemical or biological transformation of the above contaminants.

The laboratory Certificates of Analysis are included in Appendix F.

5.7 Groundwater Quality

Groundwater samples from the monitoring wells, excluding QA/QC samples, were submitted for laboratory analysis of some or all of BTEX, PHC F1 to F4, VOCs, PAHs, metals including hydride-forming and sodium, and PCBs. Details regarding the locations of all groundwater samples selected for laboratory analyses are presented in the sampling and analysis plan in Appendix B and on Figures 16 to 21

Field filtering of groundwater samples was conducted in accordance with standard industry protocols and laboratory guidance.

The groundwater analytical results are presented and compared to the MECP SCSs in Tables 9 to 13.

All groundwater analytical results met the Table 3 SCSs with the following exceptions:

- PHC parameters in BH-102 and DUP-01
- Vinyl Chloride in BH-102 and DUP-01
- Sodium in BH-101 and BH-103
- Other regulated parameters in BH-101, BH-102, DUP-01 and BH-103

Free product was not detected in any of the monitoring wells.

BH-104 was found to be dry during both the well development and groundwater sampling events.

The laboratory Certificates of Analysis are included in Appendix F.

5.8 Sediment Quality

No sediment sampling was required for this Phase Two ESA, as sediment is not present at the Site.

5.9 Quality Assurance and Quality Control Results

5.9.1 Types of QA/QC Samples and Importance

The importance and intent of the QA/QC program was to determine the reliability of the analytical results in the determination of the Phase Two Property soil and groundwater quality.

The laboratory QA/QC analyses included instrument and extraction surrogate recovery, method blanks, matrix duplicates, matrix spikes, and/or laboratory control samples.

The field QA/QC sample results (trip blanks, field blanks and field duplicates) are included in the laboratory Certificates of Analysis in Appendix F. For the field duplicate samples, evaluations of the QA/QC results were determined by calculating the relative percent difference (RPD) between the field duplicate and original sample results, and comparison of the RPD to designated alert limits and presented in the tables in Appendix F. Consistent with laboratory practices and to permit reliable calculations, an RPD was only calculated when the original and duplicate sample concentrations were at least five times the reported detection limit.

No field or laboratory QA/QC issues were identified that call into question the reliability of the laboratory data reported.

5.9.2 Deviations from Analytical Protocol

There were no instances where a sample was not handled in accordance with the sampling and analysis plan with respect to holding time, preservation method, storage requirements, or container type and, therefore, did not deviate from the MECP's *Protocol for Analytical Methods Used in the Assessment of Properties under XV.1 of the Environmental Protection Act and Excess Soil Quality*.

5.9.3 Reference to Regulation Subsection 47(3)

It is hereby confirmed that, with respect to subsection 47(3) of Ontario Regulation 153/04:

- All Certificates of Analysis or analytical reports received pursuant to clause 47(2) (b) of the Regulation comply with subsection 47(3);
- A Certificate of Analysis or analytical report has been received for each sample submitted for analysis; and
- All Certificates of Analysis or analytical reports have been included in full in Appendix F.

5.9.4 Laboratory Qualifications or Remarks

The laboratory QA/QC analysis for each sample submission is presented on the Certificates of Analysis in Appendix F. No laboratory QA/QC issues were identified that would affect the reliability of the data.

5.10 Phase Two Conceptual Site Model

The Phase Two Property location and regional topography are presented on Figures 1 and 2, respectively. A Phase Two Property Plan is presented on Figure 3.

5.10.1 Areas of Potential Contaminating Activity and Areas of Potential Environmental Concern

Based on the Phase One ESA, the following potentially contaminating activities (PCAs) were identified at the Phase Two Property and are shown on Figures 4 and 5:

- 30 - Importation of Fill Material of Unknown Quality
- 46 – Rail Yards, Tracks and Spurs
- 58 – Waste Disposal and Waste Management, including thermal treatment, landfilling and transfer of waste, other than use of biosoils and conditioners

Based on the Phase One ESA, no PCAs were identified on properties surrounding the Phase Two Property that may affect the Phase Two Property as shown on Figures 4 to 6.

Based on the Phase One ESA, the areas of potential environmental concern (APECs) identified at the Phase Two Property were:

- APEC 1: Fill material of unknown quantity covering the entire Phase Two Property from construction of the Riverside Campus of the Ottawa Hospital.
- APEC 2: UR-10 Riverside Drive Landfill (closed) located on the western portion of Lot D.
- APEC 3: Railway tracks (operational) located at the eastern edge of Lot C.

Deeper subsurface utilities, such as water and sewer infrastructure near the Phase Two Property may influence groundwater flow patterns on, or from, the Phase Two Property.

5.10.2 Physical Setting and Hydrogeology

The stratigraphic profile encountered in the boreholes generally consisted of sand to depths of up to 6.1 mbgs. Two clay layers were present in BH-102 from 1.5 to 2.7 and 4.6 to 5.2 mbgs. The assessment locations are presented on Figure 6.

The hydrogeologic characteristics of the Phase Two Property are:

- The groundwater flow direction was westerly for towards the Rideau River.
- The depth to groundwater ranged from 3.8 to 4.7 mbgs.
- The approximate depth to bedrock in the area based on water well records and the environmental assessments, is greater than 10 mbgs.
- Section 35, Subsection 41 and Section 43.1 of Ontario Regulation 153/04 (as amended) regarding non potable water supply, sensitivity, shallow soil property and proximity to a water body do not apply to the Phase Two Property.

- The Property will be redeveloped into two asphalt surface parking lots for the adjacent Riverside Campus of the Ottawa Hospital and is presented in Appendix I.

5.10.3 Contaminants Exceeding Site Condition Standards

The contaminant, location, and medium for which the concentrations were found to exceed the applicable MECP SCSs are described below and summarized in Appendix H. The maximum soil and groundwater analytical results are presented in Tables H1 and H2 in Appendix H.

The following is a discussion of the contaminant location, distribution, source and migration:

Soil

- BH-101 (central, western border of Lot D) - Four PAH parameters from 0.6 to 1.2 mbgs and PHC F1, F2 and F3, two VOC parameters, six PAH parameters and six metals parameters from 3.7 to 4.3 mbgs.
- BH-102 (northern border of Lot D) - PHC F2 and F3, four PAH parameters and three metals parameters from 4.3 to 4.9 mbgs.
- BH-103 (central, northern border of Lot D) - Four metals parameters from 2.4 to 3.1mbgs.
- BH-105 (south, western boarder of Lot D) - PHC F2 and F3, 2 VOC parameters, eight PAH parameters and two metals parameters from 1.8 to 2.4 mbgs.
- The potential source of the contamination is expected to be the former Riverside Drive Landfill which extends onto the northwestern portion of Lot D.

Groundwater

The following are the monitoring wells where groundwater exceeded the MECP SCSs:

- PHC F2 and F3, vinyl chloride and mercury in BH-102 and DUP-01; and,
- Sodium and chloride in BH-101 and BH-103.

The potential source of the contamination is expected to be the former Riverside Drive Landfill which extends onto the northwestern portion of Lot D.

5.10.4 Contaminant Pathways and Receptors

Human and ecological conceptual exposure models have been developed for the Site by considering the potential human and ecological receptors, contaminant release and transport mechanisms, and exposure pathways.

For there to be unacceptable risks to human health at a contaminated site, the following three conditions must exist:

- A chemical must be present at a concentration sufficient to cause an adverse effect;
- A receptor (human or ecological) must be present; and
- A complete exposure pathway must exist through which the receptor could come into contact with the chemical.

The Phase Two human health and ecological conceptual exposure models are illustrated in Figure 22 and 23, respectively.

5.11 Former Landfill Sites

An Impact Assessment Study for Former Landfill Sites is required by the City of Ottawa for a proposed development within 500 m of a former landfill. The policy basis for protecting the public and the environment from hazards associated with waste disposal sites is Section 10.1.6 of the Official Plan for former landfill sites or non-operating waste disposal sites.

5.11.1 Confirmation of Waste Disposal Activities

As indicated in the CSM, a former landfill (Riverside Drive Ur-10) within Lot D was indicated within the Geottawa environmental map layer. The findings from this Phase Two ESA provides confirmation of the former landfill. There was evidence of landfill debris encountered in several boreholes where black staining and odour were noted in BH-102 from 2.7 to 4.6 mbgs; debris was noted in BH-103 below 3.0 mbgs, and debris and black staining were found in BH-105 below 0.9 mbgs.

5.11.2 Confirmation of Rehabilitation

The former landfill was not fully rehabilitated, and the extents of the former landfill could not be determined during this assessment.

5.11.3 Environmental Considerations

A methane gas monitoring program is already in place within Lot D operating under the Certificate of Approval 6970-7YRSYH issued on January 24, 2010. The program consists of twelve methane gas probes installed in 2005 along a sub-surface barrier, the data collection is routed through two monitoring systems that directly save data to a computer. A value greater than 10% LEL triggers a “low alarm” state, value greater than 50% will trigger an “alarm” state. Data is reviewed monthly by Greenough Environmental Consulting Inc. (GEC).

6.0 CONCLUSIONS

The results of the Phase Two ESA are summarized as follows:

1. The stratigraphic profile encountered in the boreholes generally consisted of sand to depths of up to 6.1 mbgs. Two clay layers were present in BH-102 from 1.5 to 2.7 and 4.6 to 5.2 mbgs. Black staining and odour were noted in BH-102 from 2.7 to 4.6 mbgs; debris was noted in BH-103 below 3.0 mbgs, and debris and black staining were found in BH-105 below 0.9 mbgs.
2. In January 2025, the depth to groundwater ranged from 3.8 to 4.7 mbgs, the direction of groundwater flow was west to the Rideau River.
3. The 2011 MECP Table 3 non-potable groundwater Site Condition Standards (SCS), for an industrial/commercial/community property (ICC) use, and coarse textured soils, were selected for comparison to the soil and groundwater analytical results.
4. The soil analytical results met the MECP Table 3 SCSs for BTEX, PHC F1 to F4, VOCs, PAHs, metals including hydride-forming, ORPs namely HWSB and pH, and PCBs with the following exceptions:
    - BH-101 (central, western border of Lot D) - Four PAH parameters from 0.6 to 1.2 mbgs and PHC F1, F2 and F3, two VOC parameters, six PAH parameters and six metals parameters from 3.7 to 4.3 mbgs.
    - BH-102 (northern border of Lot D) - PHC F2 and F3, four PAH parameters and three metals parameters from 4.3 to 4.9 mbgs.
    - BH-103 (central, northern border of Lot D) - Four metal parameters from 2.4-3.1mbgs.

- BH-105 (south, western boarder of Lot D) - PHC F2 and F3, 2 VOC parameters, eight PAH parameters and two metals parameters from 1.8 to 2.4 mbgs.

The potential source of the contamination is expected to be the former Riverside Drive Landfill which extends onto the northwestern portion of Lot D. No exceedances were found on Lot C.

5. The groundwater analytical results generally met the MECP Table 3 SCSs for BTEX, PHC F1 to F4, VOCs, PAHs, metals including hydride-forming and sodium, and PCBs with the following exceptions:

    - BH-102 (northern border of Lot D) - PHC F2 and F3, vinyl chloride and mercury.

Elevated levels of sodium and chloride were identified in BH-101 and BH-103 at Lot D, but were not considered to exceed the applicable SCSs, in accordance with exemptions listed in Section 49.1 of O. Reg. 153/04. The presence of elevated levels of these parameters in groundwater is considered attributable to the application of road salt on adjacent municipal roadways for the safety of vehicular and pedestrian traffic under conditions of snow or ice.

In conclusion, the Phase Two ESA was conducted to support a Site Plan Control Application for the construction of two new surface parking lots (Lot C and Lot D) on The Ottawa Hospital's Riverside Campus, based on the assumption that the planned development will not require the filing of an RSC under O. Reg. 153/04.

In the absence of a regulatory obligation for RSC filing, it was agreed at the discretion of the QP_{ESA} and the City of Ottawa that the current Phase Two ESA sampling sufficiently characterized soil and groundwater conditions, provided that the identified contamination is addressed through a due diligence human health and ecological risk evaluation.

A screening-level risk evaluation is recommended to qualitatively assess human health and ecological exposure risks from identified soil and groundwater contaminants and determine the need for risk management measures (RMMs), based on existing environmental conditions and anticipated future land use.

7.0 SIGNATURES

We trust the foregoing information is satisfactory for your requirements. If there are any questions or concerns, please do not hesitate to contact the undersigned.

PARSONS INC.

Kelsy Marois, P.Eng.

KM:af

W:\13000-13999\13184\1318400025.R01(P2 ESA)f.docx

Chris Roach, P.Eng., QP$_{ESA|RA}$

Senior QP Reviewer

7.1 Limitations and Expectations of the Phase Two ESA

This Phase Two ESA has been prepared for the exclusive use of The Ottawa Hospital and its financial lenders. Any uses which another party makes of this report, or any reliance on, or decisions made, based on the report are the responsibility of such other party.

Parsons makes no representation or warranty to any other person with regard to this report and the work referred to in this report and they accept no duty of care to any other person or any liability or responsibility whatsoever for any losses, expenses, damages, fines, penalties or other harm that may be suffered or incurred by any other person as a result of the use of, reliance on, any decision made or any action taken based on this report or the work referred to in this report.

The investigations undertaken by Parsons with respect to this report and any conclusions or recommendations made in this report reflect Parsons' judgment based on the Phase Two Property conditions observed at the time of the Phase Two Property inspection on the date(s) set out in this report and on information examined at the time of preparation of this report. This report has been prepared for specific application to this Phase Two Property and it is based, in part, upon visual observation of the Phase Two Property and historical records obtained, all as described in this report. Nothing in this report is intended to constitute or provide a legal opinion.

Other than by The Ottawa Hospital, copying or distribution of this report or use of or reliance on the information contained herein, in whole or in part, is not permitted without the express written permission of Parsons. Nothing in this report is intended to constitute or provide a legal opinion.

The Phase Two ESA was conducted in general accordance with the agreed upon scope of work and Ontario Regulation 153/04, as amended.

8.0 REFERENCES

City of Ottawa, GeoOttawa: Accessed May –February 2025
http://maps.ottawa.ca/geoottawa/ GeoOttawa: Accessed February 2025

Ontario Geological Survey 2000. Quaternary geology, seamless coverage of the Province of Ontario; Ontario Geological Survey, Data Set 14---Revised.

Ontario Geological Survey 2011. 1:250 000 scale bedrock geology of Ontario; Ontario Geological Survey, Miscellaneous Release---Data 126-Revision 1.

Ontario Regulation 153/04 made under Part XV.1 of the Environmental Protection Act, April 15, 2011

Ontario Ministry of the Environment, Guidance on Sampling and Analytical Methods for Use at Contaminated Sites in Ontario, December 1996

Ontario Ministry of the Environment, Groundwater and Sediment Standards for Use Under Part XV.1 of the Environmental Protection Act, April 15, 2011

Phase One ESA, The Ottawa Hospital Riverside Campus 1967 Riverside Drive, Ottawa Ontario, prepared for The Ottawa Hospital by Parsons dated November 7, 2024.

Annual Report 2019-2020 Methane Gas Monitoring Program, The Ottawa Hospital Riverside Campus 1967 Riverside Drive, Ottawa Ontario, prepared for Glenn Clayton, Manager, Property & Operations. by Greenough Environmental Consulting Inc. (GEC), dated April 14, 2020.

TABLE 1
GROUNDWATER MONITORING RESULTS

ASSESSMENT LOCATION	TOP OF PIPE ELEVATION (m)	GROUND SURFACE ELEVATION (m)	SCREEN INTERVAL (mbgs)	DATE (yyyy/mm/dd)	SUBSURFACE VAPOUR CONCENTRATIONS[1,2]	FREE PRODUCT THICKNESSES (mm)	GROUNDWATER DEPTH (mbtpc)	POTENTIOMETRIC ELEVATION (m)
BH-101	NS	NS	3.0 - 6.1	2025/01/07	65	ND	3.792	NS
BH-102	NS	NS	3.0 - 6.1	2025/01/07	>100%	ND	4.153	NS
BH-103	NS	NS	3.0 - 6.1	2025/01/07	>100%	ND	3.809	NS
BH-104	NS	NS	3.0 - 6.1	2025/01/07	Dry	Dry	Dry	Dry
BH-105	NS	NS	3.0 - 6.1	2025/01/08	>100%	ND	4.743	NS

1 - ppmv if not indicated, or % LEL if indicated
2 - Volatile organic vapours measured within the well head-space using a combustible gas detector
m - metres
mbgs - metres below ground surface
mm - millimetres
ND - Not detected
* - Water level above top of screen

TABLE 2

SOIL ANALYTICAL RESULTS
PETROLEUM HYDROCARBON PARAMETERS

SAMPLE LOCATIONS	BH-101(0.6-1.2)	BH-101(3.7-4.3)	BH-101(5.5-6.1)	BH-102(1.2-1.8)	BH-102(4.3-4.9)	BH-102(4.9-5.5)	BH-103(2.4-3.1)	TABLE 3 STANDARDS[a]
Certificate of Analysis No.	C4BP635	C4BP635	C4BP635	C4BP635	C4BP635	C4BP635	C4BP635	
Sample ID	AMLF15	AMLF16	AMLF17	AMLF18	AMLF19	AMLF20	AMLF21	
Sample Depth (mbgs)	0.6-1.2	3.7-4.3	5.5-6.1	1.2-1.8	4.3-4.9	4.9-5.5	2.4-3.1	
Date Sampled (yyyy/mm/dd)	2024/12/19	2024/12/19	2024/12/19	2024/12/19	2024/12/19	2024/12/19	2024/12/19	
PARAMETERS								
Benzene	< 0.0060	0.20	< 0.0060	< 0.0060	0.087	< 0.0060	0.015	0.32
Toluene	< 0.020	0.30	< 0.020	< 0.020	0.14	< 0.020	0.11	68
Ethylbenzene	< 0.010	0.17	< 0.010	< 0.010	0.035	< 0.010	0.029	9.5
Xylenes	< 0.020	1.1	< 0.020	< 0.020	0.92	0.057	0.14	26
PHC F1 (C6 - C10)[b]	< 10	**100**	< 10	< 10	< 30	< 10	< 10	55
PHC F2 (>C10 - C16)[c]	10	**1500**	< 7.0	< 7.0	**250**	< 7.0	9.5	230
PHC F3 (>C16 - C34)[d]	180	**3600**	57	71	**1400**	< 50	270	1700
PHC F4 (>C34 - C50)	110	640	< 50	< 50	1300	< 50	130	3300

a - MECP Soil, Ground Water and Sediment Standards for Use Under Part XV.1 of the EPA (2011), non-potable, industrial/commercial/community property use, coarse textured soils

b - BTEX have been subtracted from the fraction

c - Naphthalene has not been subtracted from the fraction

d - PAHs have not been subtracted from the fraction

mbgs - metres below ground surface

BOLD - Exceeds applicable standard

BOLD - Detection limit exceeds referenced standards

Results for all parameters are reported in micrograms per gram (µg/g) on a dry weight basis

The specific date each sample was analyzed is presented in the laboratory Certificates of Analysis.

TABLE 2

SOIL ANALYTICAL RESULTS
PETROLEUM HYDROCARBON PARAMETERS

SAMPLE LOCATIONS	BH-104(1.2-1.8)	BH-104(3.7-4.3)	BH-104(4.3-5.0)	BH-105(1.8-2.4)	BH-105(4.9-5.5)	DUP-01 DUPLICATE BH-105(4.9-5.5)	BH-105(5.5-6.1)	TABLE 3 STANDARDS[a]
Certificate of Analysis No.	C4BP635	C4BP635	C4BP637	C4BP637	C4BP637	C4BP637	C4BP637	
Sample ID	AMLF23	AMLF24	AMLF40	AMLF41	AMLF43	AMLF44	AMLF45	
Sample Depth (mbgs)	1.2-1.8	3.7-4.3	4.3-5.0	1.8-2.4	4.9-5.5	4.9-5.5	5.5-6.1	
Date Sampled (yyyy/mm/dd)	2024/12/19	2024/12/19	2024/12/20	2024/12/20	2024/12/20	2024/12/20	2024/12/20	
PARAMETERS								
Benzene	< 0.0060	< 0.0060	< 0.0060	0.066	< 0.0060	< 0.0060	< 0.0060	0.32
Toluene	0.030	< 0.020	< 0.020	0.27	< 0.020	< 0.020	< 0.020	68
Ethylbenzene	< 0.010	< 0.010	< 0.010	0.11	< 0.010	< 0.010	< 0.010	9.5
Xylenes	< 0.020	< 0.020	< 0.020	0.50	< 0.020	< 0.020	< 0.020	26
PHC F1 (C6 - C10)[b]	< 10	< 10	< 10	16	< 10	< 10	< 10	55
PHC F2 (>C10 - C16)[c]	< 7.0	< 7.0	< 7.0	**310**	< 14	14	< 7.0	230
PHC F3 (>C16 - C34)[d]	140	< 50	64	**4200**	140	160	< 50	1700
PHC F4 (>C34 - C50)	330	< 50	59	1800	170	280	< 50	3300

a - MECP Soil, Ground Water and Sediment Standards for Use Under Part XV.1 of the EPA (2011), non-potable, industrial/commercial/community property use, coarse textured soils

b - BTEX have been subtracted from the fraction

c - Naphthalene has not been subtracted from the fraction

d - PAHs have not been subtracted from the fraction

mbgs - metres below ground surface

BOLD - Exceeds applicable standard

BOLD - Detection limit exceeds referenced standards

Results for all parameters are reported in micrograms per gram (µg/g) on a dry weight basis

The specific date each sample was analyzed is presented in the laboratory Certificates of Analysis.

TABLE 3

SOIL ANALYTICAL RESULTS
VOLATILE ORGANIC COMPOUNDS EXCLUDING BTEX

SAMPLE LOCATIONS	BH-101(0.6-1.2)	BH-101(3.7-4.3)	BH-101(5.5-6.1)	BH-102(1.2-1.8)	BH-102(4.3-4.9)	BH-102(4.9-5.5)	BH-103(2.4-3.1)	TABLE 3 STANDARDS[a]
Certificate of Analysis No.	C4BP635	C4BP635	C4BP635	C4BP635	C4BP635	C4BP635	C4BP635	
Sample ID	AMLF15	AMLF16	AMLF17	AMLF18	AMLF19	AMLF20	AMLF21	
Sample Depth (mbgs)	0.6-1.2	3.7-4.3	5.5-6.1	1.2-1.8	4.3-4.9	4.9-5.5	2.4-3.1	
Date Sampled (yyyy/mm/dd)	2024/12/19	2024/12/19	2024/12/19	2024/12/19	2024/12/19	2024/12/19	2024/12/19	
PARAMETERS								
Acetone	< 0.49	1.1	< 0.49	< 0.49	< 1.5	< 0.49	< 0.49	16
Bromodichloromethane	< 0.040	< 0.040	< 0.040	< 0.040	< 0.12	< 0.040	< 0.040	18
Bromoform	< 0.040	< 0.040	< 0.040	< 0.040	< 0.12	< 0.040	< 0.040	0.61
Bromomethane	< 0.040	< 0.040	< 0.040	< 0.040	***< 0.12***	< 0.040	< 0.040	0.05
Carbon Tetrachloride	< 0.040	< 0.040	< 0.040	< 0.040	< 0.12	< 0.040	< 0.040	0.21
Chlorobenzene	< 0.040	0.089	< 0.040	< 0.040	< 0.12	< 0.040	< 0.040	2.4
Chloroform	< 0.040	< 0.040	< 0.040	< 0.040	< 0.12	< 0.040	< 0.040	0.47
Dibromochloromethane	< 0.040	< 0.040	< 0.040	< 0.040	< 0.12	< 0.040	< 0.040	13
Ethylene Dibromide	< 0.040	< 0.040	< 0.040	< 0.040	***< 0.12***	< 0.040	< 0.040	0.05
1,2-Dichlorobenzene	< 0.040	< 0.040	< 0.040	< 0.040	< 0.12	< 0.040	< 0.040	6.8
1,3-Dichlorobenzene	< 0.040	< 0.040	< 0.040	< 0.040	< 0.12	< 0.040	< 0.040	9.6
1,4-Dichlorobenzene	< 0.040	**0.64**	< 0.040	< 0.040	0.16	< 0.040	< 0.040	0.2
Dichlorodifluoromethane	< 0.040	< 0.040	< 0.040	< 0.040	< 0.12	< 0.040	< 0.040	16
1,1-Dichloroethane	< 0.040	< 0.040	< 0.040	< 0.040	< 0.12	< 0.040	< 0.040	17
1,2-Dichloroethane	< 0.049	< 0.049	< 0.049	< 0.049	***< 0.15***	< 0.049	< 0.049	0.05
1,1-Dichloroethylene	< 0.040	< 0.040	< 0.040	< 0.040	***< 0.12***	< 0.040	< 0.040	0.064
cis-1,2-Dichloroethylene	0.053	0.74	< 0.040	< 0.040	< 0.12	< 0.040	< 0.040	55
trans-1,2-Dichloroethylene	< 0.040	0.049	< 0.040	< 0.040	< 0.12	< 0.040	< 0.040	1.3
1,2-Dichloropropane	< 0.040	< 0.040	< 0.040	< 0.040	< 0.12	< 0.040	< 0.040	0.16
cis-1,3-Dichloropropene	< 0.030	< 0.030	< 0.030	< 0.030	< 0.090	< 0.030	< 0.030	NS
trans-1,3-Dichloropropene	< 0.040	< 0.040	< 0.040	< 0.040	< 0.12	< 0.040	< 0.040	NS
1,3-Dichloropropene	< 0.050	< 0.050	< 0.050	< 0.050	< 0.15	< 0.050	< 0.050	0.18
Hexane	< 0.040	< 0.040	< 0.040	< 0.040	< 0.12	0.29	0.14	46
Methyl ethyl ketone	< 0.40	< 0.40	< 0.40	< 0.40	< 1.2	< 0.40	< 0.40	70
Methyl isobutyl ketone	< 0.40	< 0.40	< 0.40	< 0.40	< 1.2	< 0.40	< 0.40	31
Methyl t-butyl ether	< 0.040	< 0.040	< 0.040	< 0.040	< 0.12	< 0.040	< 0.040	11
Methylene Chloride	< 0.049	0.056	< 0.049	< 0.049	< 0.15	< 0.049	< 0.049	1.6
Styrene	< 0.040	< 0.040	< 0.040	< 0.040	< 0.12	< 0.040	< 0.040	34
1,1,1,2-Tetrachloroethane	< 0.040	< 0.040	< 0.040	< 0.040	***< 0.12***	< 0.040	< 0.040	0.087
1,1,2,2-Tetrachloroethane	< 0.040	< 0.040	< 0.040	< 0.040	***< 0.12***	< 0.040	< 0.040	0.05
Tetrachloroethylene	< 0.040	0.47	< 0.040	< 0.040	< 0.12	< 0.040	< 0.040	4.5
1,1,1-Trichloroethane	< 0.040	< 0.040	< 0.040	< 0.040	< 0.12	< 0.040	< 0.040	6.1
1,1,2-Trichloroethane	< 0.040	< 0.040	< 0.040	< 0.040	***< 0.12***	< 0.040	< 0.040	0.05
Trichloroethylene	< 0.010	0.33	< 0.010	< 0.010	0.048	< 0.010	< 0.010	0.91
Trichlorofluoromethane	< 0.040	< 0.040	< 0.040	< 0.040	< 0.12	< 0.040	< 0.040	4
Vinyl Chloride	< 0.019	**0.13**	< 0.019	< 0.019	***< 0.057***	< 0.019	< 0.019	0.032

a - MECP Soil, Ground Water and Sediment Standards for Use Under Part XV.1 of the EPA (2011), non-potable, industrial/commercial/community property use, coarse textured soils

mbgs - metres below ground surface

BOLD - Exceeds applicable standard

BOLD - Detection limit exceeds referenced standards

Results for all parameters are reported in micrograms per gram (µg/g) on a dry weight basis

The specific date each sample was analyzed is presented in the laboratory Certificates of Analysis.

NS - No standard

TABLE 3

SOIL ANALYTICAL RESULTS
VOLATILE ORGANIC COMPOUNDS EXCLUDING BTEX

SAMPLE LOCATIONS	BH-104(1.2-1.8)	BH-104(3.7-4.3)	BH-104(4.3-5.0)	BH-105(1.8-2.4)	BH-105(4.9-5.5)	DUP-01 DUPLICATE BH-105(4.9-5.5)	BH-105(5.5-6.1)	TABLE 3 STANDARDS[a]
Certificate of Analysis No.	C4BP635	C4BP635	C4BP637	C4BP637	C4BP637	C4BP637	C4BP637	
Sample ID	AMLF23	AMLF24	AMLF40	AMLF41	AMLF43	AMLF44	AMLF45	
Sample Depth (mbgs)	1.2-1.8	3.7-4.3	4.3-5.0	1.8-2.4	4.9-5.5	4.9-5.5	5.5-6.1	
Date Sampled (yyyy/mm/dd)	2024/12/19	2024/12/19	2024/12/20	2024/12/20	2024/12/20	2024/12/20	2024/12/20	
PARAMETERS								
Acetone	< 0.49	< 0.49	< 0.49	0.75	< 0.49	< 0.49	< 0.49	16
Bromodichloromethane	< 0.040	< 0.040	< 0.040	< 0.040	< 0.040	< 0.040	< 0.040	18
Bromoform	< 0.040	< 0.040	< 0.040	< 0.040	< 0.040	< 0.040	< 0.040	0.61
Bromomethane	< 0.040	< 0.040	< 0.040	< 0.040	< 0.040	< 0.040	< 0.040	0.05
Carbon Tetrachloride	< 0.040	< 0.040	< 0.040	< 0.040	< 0.040	< 0.040	< 0.040	0.21
Chlorobenzene	< 0.040	< 0.040	< 0.040	< 0.040	< 0.040	< 0.040	< 0.040	2.4
Chloroform	< 0.040	< 0.040	< 0.040	< 0.040	< 0.040	< 0.040	< 0.040	0.47
Dibromochloromethane	< 0.040	< 0.040	< 0.040	< 0.040	< 0.040	< 0.040	< 0.040	13
Ethylene Dibromide	< 0.040	< 0.040	< 0.040	< 0.040	< 0.040	< 0.040	< 0.040	0.05
1,2-Dichlorobenzene	< 0.040	< 0.040	< 0.040	< 0.040	< 0.040	< 0.040	< 0.040	6.8
1,3-Dichlorobenzene	< 0.040	< 0.040	< 0.040	< 0.040	< 0.040	< 0.040	< 0.040	9.6
1,4-Dichlorobenzene	< 0.040	< 0.040	< 0.040	**0.66**	< 0.040	< 0.040	< 0.040	0.2
Dichlorodifluoromethane	< 0.040	< 0.040	< 0.040	< 0.040	< 0.040	< 0.040	< 0.040	16
1,1-Dichloroethane	< 0.040	< 0.040	< 0.040	< 0.040	< 0.040	< 0.040	< 0.040	17
1,2-Dichloroethane	< 0.049	< 0.049	< 0.049	< 0.049	< 0.049	< 0.049	< 0.049	0.05
1,1-Dichloroethylene	< 0.040	< 0.040	< 0.040	< 0.040	< 0.040	< 0.040	< 0.040	0.064
cis-1,2-Dichloroethylene	< 0.040	< 0.040	< 0.040	0.18	< 0.040	< 0.040	< 0.040	55
trans-1,2-Dichloroethylene	< 0.040	< 0.040	< 0.040	< 0.040	< 0.040	< 0.040	< 0.040	1.3
1,2-Dichloropropane	< 0.040	< 0.040	< 0.040	< 0.040	< 0.040	< 0.040	< 0.040	0.16
cis-1,3-Dichloropropene	< 0.030	< 0.030	< 0.030	< 0.030	< 0.030	< 0.030	< 0.030	NS
trans-1,3-Dichloropropene	< 0.040	< 0.040	< 0.040	< 0.040	< 0.040	< 0.040	< 0.040	NS
1,3-Dichloropropene	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	0.18
Hexane	< 0.040	< 0.040	< 0.040	< 0.040	< 0.040	< 0.040	< 0.040	46
Methyl ethyl ketone	< 0.40	< 0.40	< 0.40	< 0.40	< 0.40	< 0.40	< 0.40	70
Methyl isobutyl ketone	< 0.40	< 0.40	< 0.40	< 0.40	< 0.40	< 0.40	< 0.40	31
Methyl t-butyl ether	< 0.040	< 0.040	< 0.040	< 0.040	< 0.040	< 0.040	< 0.040	11
Methylene Chloride	< 0.049	< 0.049	< 0.049	< 0.049	< 0.049	< 0.049	< 0.049	1.6
Styrene	< 0.040	< 0.040	< 0.040	< 0.040	< 0.040	< 0.040	< 0.040	34
1,1,1,2-Tetrachloroethane	< 0.040	< 0.040	< 0.040	< 0.040	< 0.040	< 0.040	< 0.040	0.087
1,1,2,2-Tetrachloroethane	< 0.040	< 0.040	< 0.040	< 0.040	< 0.040	< 0.040	< 0.040	0.05
Tetrachloroethylene	< 0.040	< 0.040	< 0.040	< 0.040	< 0.040	< 0.040	< 0.040	4.5
1,1,1-Trichloroethane	< 0.040	< 0.040	< 0.040	< 0.040	< 0.040	< 0.040	< 0.040	6.1
1,1,2-Trichloroethane	< 0.040	< 0.040	< 0.040	< 0.040	< 0.040	< 0.040	< 0.040	0.05
Trichloroethylene	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	0.91
Trichlorofluoromethane	< 0.040	< 0.040	< 0.040	< 0.040	< 0.040	< 0.040	< 0.040	4
Vinyl Chloride	< 0.019	< 0.019	< 0.019	**0.073**	< 0.019	< 0.019	< 0.019	0.032

a - MECP Soil, Ground Water and Sediment Standards for Use Under Part XV.1 of the EPA (2011), non-potable, industrial/commercial/community property use, coarse textured soils
mbgs - metres below ground surface
BOLD - Exceeds applicable standard
BOLD - Detection limit exceeds referenced standards
Results for all parameters are reported in micrograms per gram (µg/g) on a dry weight basis
The specific date each sample was analyzed is presented in the laboratory Certificates of Analysis.
NS - No standard

TABLE 4

SOIL ANALYTICAL RESULTS
POLYCYCLIC AROMATIC HYDROCARBONS

SAMPLE LOCATIONS	BH-101(0.6-1.2)	BH-101(3.7-4.3)	BH-101(5.5-6.1)	BH-102(1.2-1.8)	BH-102(4.3-4.9)	BH-102(4.9-5.5)	BH-103(2.4-3.1)	TABLE 3 STANDARDS[a]
Certificate of Analysis No.	C4BP635	C4BP635	C4BP635	C4BP635	C4BP635	C4BP635	C4BP635	
Sample ID	AMLF15	AMLF16	AMLF17	AMLF18	AMLF19	AMLF20	AMLF21	
Sample Depth (mbgs)	0.6-1.2	3.7-4.3	5.5-6.1	1.2-1.8	4.3-4.9	4.9-5.5	2.4-3.1	
Date Sampled (yyyy/mm/dd)	2024/12/19	2024/12/19	2024/12/19	2024/12/19	2024/12/19	2024/12/19	2024/12/19	
PARAMETERS								
Acenaphthene	0.23	0.62	0.042	0.014	0.39	0.0096	0.096	96
Acenaphthylene	0.053	*< 0.10*	< 0.0050	0.030	0.085	< 0.0050	0.023	0.15
Anthracene	0.56	**1.2**	0.094	0.057	0.54	< 0.0050	0.18	0.67
Benzo(a)anthracene	**1.0**	**2.2**	0.20	0.17	**1.1**	0.0064	0.46	0.96
Benzo(a)pyrene	**0.93**	**1.9**	0.17	0.19	**1.0**	0.0081	**0.47**	0.3
Benzo(b/j)fluoranthene	**1.1**	**2.5**	0.22	0.22	**1.1**	0.0066	0.54	0.96
Benzo(g,h,i)perylene	0.52	0.88	0.083	0.11	0.91	0.013	0.25	9.6
Benzo(k)fluoranthene	0.39	0.90	0.081	0.081	0.37	< 0.0050	0.21	0.96
Chrysene	0.77	2.0	0.17	0.13	1.1	0.0094	0.38	9.6
Dibenz(a,h)anthracene	**0.13**	**0.26**	0.024	0.029	**0.16**	< 0.0050	0.068	0.1
Fluoranthene	2.2	5.9	0.46	0.33	2.3	0.011	0.99	9.6
Fluorene	0.26	0.87	0.058	0.024	0.49	0.010	0.095	62
Indeno(1,2,3-cd)pyrene	0.55	**1.1**	0.095	0.12	0.51	< 0.0050	0.29	0.76
1-Methylnaphthalene	0.029	1.0	0.010	0.012	1.3	0.057	0.025	76
2-Methylnaphthalene	0.036	1.7	0.018	0.017	2.3	0.11	0.028	76
Total Methylnaphthalenes	0.065	2.7	0.028	0.029	3.6	0.17	0.053	76
Naphthalene	0.074	2.5	0.042	0.015	0.92	0.019	0.052	9.6
Phenanthrene	1.7	5.6	0.41	0.16	2.3	0.025	0.71	12
Pyrene	1.8	4.6	0.34	0.28	2.1	0.014	0.80	96

a - MECP Soil, Ground Water and Sediment Standards for Use Under Part XV.1 of the EPA (2011), non-potable, industrial/commercial/community property use, coarse textured soils

mbgs - metres below ground surface

BOLD - Exceeds applicable standard

BOLD - Detection limit exceeds referenced standards

Results for all parameters are reported in micrograms per gram (µg/g) on a dry weight basis

The specific date each sample was analyzed is presented in the laboratory Certificates of Analysis.

TABLE 4

SOIL ANALYTICAL RESULTS
POLYCYCLIC AROMATIC HYDROCARBONS

SAMPLE LOCATIONS	BH-104(1.2-1.8)	BH-104(3.7-4.3)	BH-104(4.3-5.0)	BH-105(1.8-2.4)	BH-105(4.9-5.5)	DUP-01 DUPLICATE BH-105(4.9-5.5)	BH-105(5.5-6.1)	TABLE 3 STANDARDS[a]
Certificate of Analysis No.	C4BP635	C4BP635	C4BP637	C4BP637	C4BP637	C4BP637	C4BP637	
Sample ID	AMLF23	AMLF24	AMLF40	AMLF41	AMLF43	AMLF44	AMLF45	
Sample Depth (mbgs)	1.2-1.8	3.7-4.3	4.3-5.0	1.8-2.4	4.9-5.5	4.9-5.5	5.5-6.1	
Date Sampled (yyyy/mm/dd)	2024/12/19	2024/12/19	2024/12/20	2024/12/20	2024/12/20	2024/12/20	2024/12/20	
PARAMETERS								
Acenaphthene	< 0.050	< 0.0050	< 0.0050	0.73	0.019	0.0090	< 0.0050	96
Acenaphthylene	< 0.050	< *0.0050*	< 0.0050	**1.0**	< 0.010	< 0.0050	< 0.0050	0.15
Anthracene	< 0.050	< 0.0050	< 0.0050	**1.9**	0.038	0.016	< 0.0050	0.67
Benzo(a)anthracene	< 0.050	< 0.0050	< 0.0050	**6.3**	0.074	0.030	< 0.0050	0.96
Benzo(a)pyrene	< 0.050	< 0.0050	< 0.0050	**6.0**	0.042	0.024	< 0.0050	0.3
Benzo(b/j)fluoranthene	< 0.050	< 0.0050	< 0.0050	**7.3**	0.074	0.039	< 0.0050	0.96
Benzo(g,h,i)perylene	< 0.050	< 0.0050	< 0.0050	2.8	0.024	0.013	< 0.0050	9.6
Benzo(k)fluoranthene	< 0.050	< 0.0050	< 0.0050	**2.8**	0.022	0.014	< 0.0050	0.96
Chrysene	< 0.050	< 0.0050	< 0.0050	5.3	0.067	0.026	< 0.0050	9.6
Dibenz(a,h)anthracene	< 0.050	< 0.0050	< 0.0050	0.97	< 0.010	< 0.0050	< 0.0050	0.1
Fluoranthene	< 0.050	< 0.0050	< 0.0050	**11**	0.35	0.10	< 0.0050	9.6
Fluorene	< 0.050	< 0.0050	< 0.0050	1.2	0.029	0.014	< 0.0050	62
Indeno(1,2,3-cd)pyrene	< 0.050	< 0.0050	< 0.0050	**3.5**	0.022	0.013	< 0.0050	0.76
1-Methylnaphthalene	< 0.050	< 0.0050	< 0.0050	0.47	< 0.010	< 0.0050	< 0.0050	76
2-Methylnaphthalene	< 0.050	< 0.0050	< 0.0050	0.29	< 0.010	< 0.0050	< 0.0050	76
Total Methylnaphthalenes	< 0.071	< 0.0071	< 0.0071	0.76	< 0.014	< 0.0071	< 0.0071	76
Naphthalene	< 0.050	< 0.0050	< 0.0050	0.85	0.011	0.0080	< 0.0050	9.6
Phenanthrene	< 0.050	< 0.0050	< 0.0050	7.0	0.13	0.048	< 0.0050	12
Pyrene	< 0.050	< 0.0050	< 0.0050	8.6	0.31	0.088	0.011	96

a - MECP Soil, Ground Water and Sediment Standards for Use Under Part XV.1 of the EPA (2011), non-potable, industrial/commercial/community property use, coarse textured soils

mbgs - metres below ground surface

BOLD - Exceeds applicable standard

BOLD - Detection limit exceeds referenced standards

Results for all parameters are reported in micrograms per gram (µg/g) on a dry weight basis

The specific date each sample was analyzed is presented in the laboratory Certificates of Analysis.

TABLE 5

SOIL ANALYTICAL RESULTS
METALS INCLUDING HYDRIDE-FORMING

SAMPLE LOCATIONS	BH-101(0.6-1.2)	BH-101(3.7-4.3)	BH-101(5.5-6.1)	BH-102(1.2-1.8)	BH-102(4.3-4.9)	BH-102(4.9-5.5)	BH-103(2.4-3.1)	TABLE 3 STANDARDS[a]
Certificate of Analysis No.	C4BP635	C4BP635	C4BP635	C4BP635	C4BP635	C4BP635	C4BP635	
Sample ID	AMLF15	AMLF16	AMLF17	AMLF18	AMLF19	AMLF20	AMLF21	
Sample Depth (mbgs)	0.6-1.2	3.7-4.3	5.5-6.1	1.2-1.8	4.3-4.9	4.9-5.5	2.4-3.1	
Date Sampled (yyyy/mm/dd)	2024/12/19	2024/12/19	2024/12/19	2024/12/19	2024/12/19	2024/12/19	2024/12/19	
PARAMETERS								
Antimony	2.1	9.7	0.28	0.75	4.3	< 0.20	11	40
Arsenic	6.0	**42**	1.7	1.9	**20**	< 1.0	**32**	18
Barium	91	610	84	75	460	62	200	670
Beryllium	0.39	0.64	0.41	0.35	0.30	0.25	0.48	8
Boron	5.3	21	< 5.0	< 5.0	27	< 5.0	7.5	120
Cadmium	0.28	**3.0**	< 0.10	0.14	1.6	< 0.10	0.74	1.9
Chromium	29	53	31	27	38	21	52	160
Cobalt	9.0	18	8.0	7.5	6.8	5.8	22	80
Copper	97	**250**	19	21	110	11	**330**	230
Lead	92	**640**	13	29	**460**	3.5	**400**	120
Molybdenum	3.9	15	< 0.50	2.1	5.0	< 0.50	3.5	40
Nickel	36	130	19	17	20	13	130	270
Selenium	< 0.50	**11**	< 0.50	< 0.50	2.7	< 0.50	0.94	5.5
Silver	0.28	1.2	< 0.20	< 0.20	2.9	< 0.20	0.66	40
Thallium	0.13	0.46	0.091	0.14	0.19	0.090	0.18	3.3
Uranium	0.82	0.66	1.1	0.78	1.1	0.84	6.2	33
Vanadium	25	24	29	30	21	28	38	86
Zinc	140	**1200**	83	57	**770**	32	**570**	340

a - MECP Soil, Ground Water and Sediment Standards for Use Under Part XV.1 of the EPA (2011), non-potable, industrial/commercial/community property use, coarse textured soils

mbgs - metres below ground surface

BOLD - Exceeds applicable standard

BOLD - Detection limit exceeds referenced standards

Results for all parameters are reported in micrograms per gram (µg/g) on a dry weight basis

The specific date each sample was analyzed is presented in the laboratory Certificates of Analysis.

TABLE 5

SOIL ANALYTICAL RESULTS
METALS INCLUDING HYDRIDE-FORMING

SAMPLE LOCATIONS	BH-104(1.2-1.8)	BH-104(3.7-4.3)	BH-104(4.3-5.0)	BH-105(1.8-2.4)	BH-105(4.9-5.5)	BH-105(5.5-6.1)	TABLE 3 STANDARDS[a]
Certificate of Analysis No.	C4BP635	C4BP635	C4BP637	C4BP637	C4BP637	C4BP637	
Sample ID	AMLF23	AMLF24	AMLF40	AMLF41	AMLF43	AMLF45	
Sample Depth (mbgs)	1.2-1.8	3.7-4.3	4.3-5.0	1.8-2.4	4.9-5.5	5.5-6.1	
Date Sampled (yyyy/mm/dd)	2024/12/19	2024/12/19	2024/12/20	2024/12/20	2024/12/20	2024/12/20	
PARAMETERS							
Antimony	< 0.20	< 0.20	< 0.20	4.3	0.63	< 0.20	40
Arsenic	< 1.0	< 1.0	< 1.0	11	5.5	< 1.0	18
Barium	15	15	18	280	39	37	670
Beryllium	< 0.20	< 0.20	< 0.20	0.35	0.27	0.23	8
Boron	< 5.0	< 5.0	< 5.0	11	6.0	< 5.0	120
Cadmium	< 0.10	< 0.10	< 0.10	1.2	0.14	< 0.10	1.9
Chromium	6.9	11	11	32	18	11	160
Cobalt	3.3	3.9	5.2	7.9	5.7	4.1	80
Copper	7.6	12	12	180	96	17	230
Lead	3.2	3.4	3.5	**280**	42	3.3	120
Molybdenum	0.70	< 0.50	0.61	4.2	1.4	< 0.50	40
Nickel	6.0	5.5	5.9	28	52	8.6	270
Selenium	< 0.50	< 0.50	< 0.50	0.68	0.68	< 0.50	5.5
Silver	< 0.20	< 0.20	< 0.20	1.4	< 0.20	< 0.20	40
Thallium	0.068	< 0.050	0.057	0.17	0.080	0.089	3.3
Uranium	0.33	0.67	0.54	0.63	1.3	0.53	33
Vanadium	15	41	37	24	16	20	86
Zinc	14	15	16	**570**	69	16	340

a - MECP Soil, Ground Water and Sediment Standards for Use Under Part XV.1 of the EPA (2011), non-potable, industrial/commercial/community property use, coarse textured soils

mbgs - metres below ground surface

BOLD - Exceeds applicable standard

BOLD - Detection limit exceeds referenced standards

Results for all parameters are reported in micrograms per gram (µg/g) on a dry weight basis

The specific date each sample was analyzed is presented in the laboratory Certificates of Analysis.

TABLE 6

SOIL ANALYTICAL RESULTS
ORGANOCHLORINE PESTICIDES

SAMPLE LOCATIONS	BH-101(0.6-1.2)	BH-101(3.7-4.3)	BH-101(5.5-6.1)	BH-103(2.4-3.1)	TABLE 3 STANDARDS[a]
Certificate of Analysis No.	C4BP635	C4BP635	C4BP635	C4BP635	
Sample ID	AMLF15	AMLF16	AMLF17	AMLF21	
Sample Depth (mbgs)	0.6-1.2	3.7-4.3	5.5-6.1	2.4-3.1	
Date Sampled (yyyy/mm/dd)	2024/12/19	2024/12/19	2024/12/19	2024/12/19	
PARAMETERS					
Aldrin	< 0.010	< 0.020	< 0.0020	< 0.0020	0.088
a-Chlordane	< 0.010	< 0.020	< 0.0020	< 0.0020	NS
g-Chlordane	< 0.010	< 0.020	< 0.0020	< 0.0020	NS
Chlordane	< 0.010	< 0.020	< 0.0020	< 0.0020	0.05
o,p-DDD	< 0.010	0.11	< 0.0020	0.0042	NS
p,p-DDD	0.011	0.48	< 0.0020	0.014	NS
o,p-DDD + p,p-DDD	0.011	0.59	< 0.0020	0.018	4.6
o,p-DDE	< 0.010	0.028	< 0.0020	< 0.0020	NS
p,p-DDE	< 0.010	0.073	< 0.0020	0.0044	NS
o,p-DDE + p,p-DDE	< 0.010	0.10	< 0.0020	0.0044	0.52
o,p-DDT	< 0.010	< 0.020	< 0.0020	< 0.0020	NS
p,p-DDT	< 0.010	< 0.020	< 0.0020	< 0.0020	NS
o,p-DDT + p,p-DDT	< 0.010	< 0.020	< 0.0020	< 0.0020	1.4
Dieldrin	< 0.010	< 0.020	< 0.0020	< 0.0020	0.088
Endosulfan I (alpha)	< 0.010	< 0.020	< 0.0020	< 0.0020	NS
Endosulfan II (beta)	< 0.010	< 0.020	< 0.0020	< 0.0020	NS
Endosulfan	< 0.010	< 0.020	< 0.0020	< 0.0020	0.3
Endrin	< 0.010	< 0.020	< 0.0020	< 0.0020	0.04
Heptachlor	< 0.010	< 0.020	< 0.0020	< 0.0020	0.19
Heptachlor epoxide	< 0.010	< 0.020	< 0.0020	< 0.0020	0.05
Hexachlorobenzene	< 0.010	< 0.020	< 0.0020	< 0.0020	0.66
Hexachlorobutadiene	< 0.010	***< 0.020***	< 0.0020	< 0.0020	0.031
Hexachloroethane	< 0.010	< 0.020	< 0.0020	< 0.0020	0.21
Lindane	< 0.010	< 0.020	< 0.0020	< 0.0020	0.056
Methoxychlor	< 0.025	< 0.050	< 0.0050	< 0.0050	1.6

a - MECP Soil, Ground Water and Sediment Standards for Use Under Part XV.1 of the EPA (2011), non-potable, industrial/commercial/community property use, coarse textured soils

mbgs - metres below ground surface

BOLD - Exceeds applicable standard

BOLD - Detection limit exceeds referenced standards

Results for all parameters are reported in micrograms per gram (µg/g) on a dry weight basis

The specific date each sample was analyzed is presented in the laboratory Certificates of Analysis.

NS - No standard

TABLE 7

SOIL ANALYTICAL RESULTS
POLYCHLORINATED BIPHENYLS

SAMPLE LOCATIONS	BH-101(0.6-1.2)	BH-101(3.7-4.3)	BH-101(5.5-6.1)	BH-103(2.4-3.1)	TABLE 3 STANDARDS[a]
Certificate of Analysis No.	C4BP635	C4BP635	C4BP635	C4BP635	
Sample ID	AMLF15	AMLF16	AMLF17	AMLF21	
Sample Depth (mbgs)	0.6-1.2	3.7-4.3	5.5-6.1	2.4-3.1	
Date Sampled (yyyy/mm/dd)	2024/12/19	2024/12/19	2024/12/19	2024/12/19	
PARAMETERS					
Aroclor 1242	< 0.075	< 0.15	< 0.015	< 0.020	NS
Aroclor 1248	< 0.075	< 0.15	< 0.015	< 0.020	NS
Aroclor 1254	< 0.075	< 0.15	< 0.015	< 0.020	NS
Aroclor 1260	< 0.075	< 0.15	< 0.015	< 0.020	NS
Total Polychlorinated Biphenyls	< 0.075	< 0.15	< 0.015	< 0.020	1.1

a - MECP Soil, Ground Water and Sediment Standards for Use Under Part XV.1 of the EPA (2011), non-potable, industrial/commercial/community property use, coarse textured soils

mbgs - metres below ground surface

BOLD - Exceeds applicable standard

BOLD - Detection limit exceeds referenced standards

Results for all parameters are reported in micrograms per gram (µg/g) on a dry weight basis

The specific date each sample was analyzed is presented in the laboratory Certificates of Analysis.

NS - No standard

TABLE 8

SOIL ANALYTICAL RESULTS
OTHER REGULATED PARAMETERS - pH

SAMPLE LOCATIONS	BH-103(0.6-1.2)	BH-103(2.4-3.1)	BH-104(1.2-1.8)	BH-105(5.5-6.1)	O.REG 153/04 STANDARDS[a]
Certificate of Analysis No.	C4BP635	C4BP635	C4BP635	C4BP637	
Sample ID	AMLF22	AMLF21	AMLF23	AMLF45	
Sample Depth (mbgs)	0.6-1.2	2.4-3.1	1.2-1.8	5.5-6.1	
Date Sampled (yyyy/mm/dd)	2024/12/19	2024/12/19	2024/12/19	2024/12/20	
PARAMETERS					
pH	7.57	NA	8.01	NA	5.0 to 9.0[b]
	NA	7.35	NA	7.81	5.0 to 11.0[c]

a - Ontario Regulation 153/04 (as amended), Section 41 (1) (b), Under Part XV.1 of the EPA (2011).

b - For surface soil ≤1.5 m

c - For subsurface soil

NA - Not applicable

mbgs - metres below ground surface

BOLD - Exceeds applicable standard

Results for all parameters are reported in pH Units

The specific date each sample was analyzed is presented in the laboratory Certificates of Analysis.

TABLE 9

GROUNDWATER ANALYTICAL RESULTS
PETROLEUM HYDROCARBON PARAMETERS

SAMPLE LOCATIONS	BH-101	BH-102	DUP-01 DUPLICATE BH-102	BH-103	BH-105	TABLE 3 STANDARDS[a]
Certificate of Analysis No.	C502765	C502765	C502765	C502765	C502765	
Sample ID	ANCD19	ANCD22	ANCD23	ANCD20	ANCD21	
Date Sampled (yyyy/mm/dd)	2025/01/07	2025/01/08	2025/01/08	2025/01/07	2025/01/08	
PARAMETERS						
Benzene	< 0.20	1.4	1.3	0.19	2.9	44
Toluene	< 0.20	0.88	0.63	< 0.20	0.26	18 000
Ethylbenzene	< 0.20	2.7	2.1	< 0.20	< 0.20	2300
Xylenes	< 0.40	20	14	< 0.20	1.9	4200
PHC F1 (C6 - C10)[b]	< 25	130	120	< 25	*< 25*	750
PHC F2 (>C10 - C16)[c]	< 90	**2800**	**6400**	< 90	110	150
PHC F3 (>C16 - C34)[d]	< 200	**1800**	**4700**	< 200	400	500
PHC F4 (>C34 - C50)	< 200	< 200	< 200	< 200	< 200	500

a - MECP Soil, Ground Water and Sediment Standards for Use Under Part XV.1 of the EPA (2011), non-potable, all types of property use, coarse textured soils .

b - BTEX have been subtracted from the fraction

c - Naphthalene has not been subtracted from the fraction

d - PAHs have not been subtracted from the fraction

mbgs - metres below ground surface

BOLD - Exceeds applicable standard

BOLD - Detection limit exceeds referenced standards

Results for all parameters are reported in micrograms per litre (µg/L)

The specific date each sample was analyzed is presented in the laboratory Certificates of Analysis.

TABLE 10

GROUNDWATER ANALYTICAL RESULTS
VOLATILE ORGANIC COMPOUNDS EXCLUDING BTEX

SAMPLE LOCATIONS	BH-102	DUP-01 DUPLICATE BH-102	BH-103	BH-105	TABLE 3 STANDARDS[a]
Certificate of Analysis No.	C502765	C502765	C502765	C502765	
Sample ID	ANCD22	ANCD23	ANCD20	ANCD21	
Date Sampled (yyyy/mm/dd)	2025/01/08	2025/01/08	2025/01/07	2025/01/08	
PARAMETERS					
Acetone	< 10	< 10	< 10	*< 10*	130 000
Bromodichloromethane	< 0.50	< 0.50	< 0.50	*< 0.50*	85 000
Bromoform	< 1.0	< 1.0	< 1.0	*< 1.0*	380
Bromomethane	< 0.50	< 0.50	< 0.50	*< 0.50*	5.6
Carbon Tetrachloride	< 0.20	< 0.20	< 0.20	*< 0.20*	0.79
Chlorobenzene	0.82	1.1	< 0.20	1.0	630
Chloroform	< 0.50	< 0.50	< 0.50	*< 0.50*	82 000
Dibromochloromethane	< 0.20	< 0.20	< 0.20	*< 0.20*	2.4
Ethylene Dibromide	< 0.20	< 0.20	< 0.20	*< 0.20*	0.25
1,2-Dichlorobenzene	< 0.50	< 0.50	< 0.50	*< 0.50*	4600
1,3-Dichlorobenzene	< 0.50	< 0.50	< 0.50	*< 0.50*	9600
1,4-Dichlorobenzene	< 0.50	0.53	< 0.50	1.1	8
Dichlorodifluoromethane	< 1.0	< 1.0	< 1.0	*< 1.0*	4400
1,1-Dichloroethane	< 0.20	< 0.20	< 0.20	*< 0.20*	320
1,2-Dichloroethane	< 0.50	< 0.50	< 0.50	*< 0.50*	1.6
1,1-Dichloroethylene	< 0.20	< 0.20	< 0.20	*< 0.20*	1.6
cis-1,2-Dichloroethylene	1.2	1.3	< 0.50	*< 0.50*	1.6
trans-1,2-Dichloroethylene	< 0.50	< 0.50	< 0.50	*< 0.50*	1.6
1,2-Dichloropropane	< 0.20	< 0.20	< 0.20	*< 0.20*	16
cis-1,3-Dichloropropene	< 0.30	< 0.30	< 0.30	< 0.30	NS
trans-1,3-Dichloropropene	< 0.40	< 0.40	< 0.40	< 0.40	NS
1,3-Dichloropropene	< 0.50	< 0.50	< 0.50	*< 0.50*	5.2
Hexane	< 1.0	< 1.0	< 1.0	*< 1.0*	51
Methyl ethyl ketone	< 10	< 10	< 10	*< 10*	470 000
Methyl isobutyl ketone	< 5.0	< 5.0	< 5.0	*< 5.0*	140 000
Methyl t-butyl ether	< 0.50	< 0.50	< 0.50	*< 0.50*	190
Methylene Chloride	< 2.0	< 2.0	< 2.0	*< 2.0*	610
Styrene	< 0.50	< 0.50	< 0.50	*< 0.50*	1300
1,1,1,2-Tetrachloroethane	< 0.50	< 0.50	< 0.50	*< 0.50*	3.3
1,1,2,2-Tetrachloroethane	< 0.50	< 0.50	< 0.50	*< 0.50*	3.2
Tetrachloroethylene	< 0.20	< 0.20	< 0.20	*< 0.20*	1.6
1,1,1-Trichloroethane	< 0.20	< 0.20	< 0.20	*< 0.20*	640
1,1,2-Trichloroethane	< 0.50	< 0.50	< 0.50	*< 0.50*	4.7
Trichloroethylene	< 0.20	< 0.20	< 0.20	< 0.20	1.6
Trichlorofluoromethane	< 0.50	< 0.50	< 0.50	< 0.50	2500
Vinyl Chloride	**0.53**	**0.60**	< 0.20	*0.25*	0.5

a - MECP Soil, Ground Water and Sediment Standards for Use Under Part XV.1 of the EPA (2011), non-potable, all types of property use, coarse textured soils .

mbgs - metres below ground surface

BOLD - Exceeds applicable standard

BOLD - Detection limit exceeds referenced standards

Results for all parameters are reported in micrograms per litre (µg/L)

The specific date each sample was analyzed is presented in the laboratory Certificates of Analysis.

NS - No standard

TABLE 11

GROUNDWATER ANALYTICAL RESULTS
POLYCYCLIC AROMATIC HYDROCARBONS

SAMPLE LOCATIONS	BH-101	BH-102	DUP-01 DUPLICATE BH-102	BH-103	BH-105	TABLE 3 STANDARDS[a]
Certificate of Analysis No.	C502765	C502765	C502765	C502765	C502765	
Sample ID	ANCD19	ANCD22	ANCD23	ANCD20	ANCD21	
Date Sampled (yyyy/mm/dd)	2025/01/07	2025/01/08	2025/01/08	2025/01/07	2025/01/08	
PARAMETERS						
Acenaphthene	0.10	1.0	1.0	< 0.050	0.66	600
Acenaphthylene	< 0.050	*0.15*	< 0.20	< 0.050	< 0.050	1.8
Anthracene	0.079	0.43	0.57	< 0.050	0.22	2.4
Benzo(a)anthracene	0.078	0.14	0.098	< 0.050	0.18	4.7
Benzo(a)pyrene	0.066	0.091	0.068	< 0.0090	0.16	0.81
Benzo(b/j)fluoranthene	0.084	0.12	0.096	< 0.050	0.20	0.75
Benzo(g,h,i)perylene	< 0.050	0.059	0.077	< 0.050	0.089	0.2
Benzo(k)fluoranthene	< 0.050	< 0.050	< 0.050	< 0.050	0.080	0.4
Chrysene	0.059	0.12	0.10	< 0.050	0.17	1
Dibenz(a,h)anthracene	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	0.52
Fluoranthene	0.24	0.68	0.56	< 0.050	0.68	130
Fluorene	0.14	< 1.5	1.1	< 0.050	0.78	400
Indeno(1,2,3-cd)pyrene	< 0.050	< 0.050	< 0.050	< 0.050	0.092	0.2
1-Methylnaphthalene	< 0.050	6.9	5.1	< 0.050	0.99	1800
2-Methylnaphthalene	0.059	10	8.0	0.064	1.1	1800
Total Methylnaphthalenes	< 0.071	17	13	< 0.071	2.1	1800
Naphthalene	0.10	6.1	3.7	0.083	9.5	1400
Phenanthrene	0.44	1.8	2.2	0.070	1.5	580
Pyrene	0.17	1.7	2.4	< 0.050	0.50	68

a - MECP Soil, Ground Water and Sediment Standards for Use Under Part XV.1 of the EPA (2011), non-potable, all types of property use, coarse textured soils .

mbgs - metres below ground surface

BOLD - Exceeds applicable standard

Results for all parameters are reported in micrograms per litre (µg/L)

The specific date each sample was analyzed is presented in the laboratory Certificates of Analysis.

TABLE 12

GROUNDWATER ANALYTICAL RESULTS
METALS INCLUDING HYDRIDE-FORMING

SAMPLE LOCATIONS	BH-101	BH-102	DUP-01 DUPLICATE BH-102	BH-103	BH-105	TABLE 3 STANDARDS[a]
Certificate of Analysis No.	C502765	C502765	C502765	C502765	C502765	
Sample ID	ANCD19	ANCD22	ANCD23	ANCD20	ANCD21	
Date Sampled (yyyy/mm/dd)	2025/01/07	2025/01/08	2025/01/08	2025/01/07	2025/01/08	
PARAMETERS						
Antimony	0.84	0.74	0.58	< 0.50	< 0.50	20 000
Arsenic	< 1.0	< 1.0	< 1.0	1.0	< 1.0	1900
Barium	370	510	580	200	500	29 000
Beryllium	< 0.40	< 0.40	< 0.40	< 0.40	< 0.40	67
Boron	35	90	62	48	320	45 000
Cadmium	< 0.090	< 0.090	< 0.090	< 0.090	< 0.090	2.7
Chromium	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	810
Cobalt	1.7	2.2	2.1	7.7	2.5	66
Copper	3.0	1.1	1.7	< 0.90	2.4	87
Lead	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	25
Molybdenum	1.0	2.7	2.0	0.52	3.0	9200
Nickel	5.4	3.9	4.7	9.2	4.5	490
Selenium	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	63
Silver	< 0.090	< 0.090	< 0.090	< 0.090	< 0.090	1.5
Sodium	**4 400 000**	690 000	730 000	**2 700 000**	580 000	2 300 000
Thallium	< 0.050	< 0.050	< 0.050	0.066	< 0.050	510
Uranium	1.9	0.94	1.0	1.8	0.42	420
Vanadium	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	250
Zinc	19	5.2	14	< 5.0	25	1100

a - MECP Soil, Ground Water and Sediment Standards for Use Under Part XV.1 of the EPA (2011), non-potable, all types of property use, coarse textured soils .

mbgs - metres below ground surface

BOLD - Exceeds applicable standard

Results for all parameters are reported in micrograms per litre (µg/L)

The specific date each sample was analyzed is presented in the laboratory Certificates of Analysis.

TABLE 13

GROUNDWATER ANALYTICAL RESULTS
POLYCHLORINATED BIPHENYLS

SAMPLE LOCATIONS	BH-102	DUP-01 DUPLICATE BH-102	BH-105	TABLE 3 STANDARDS[a]
Certificate of Analysis No.	C502765	C502765	C502765	
Sample ID	ANCD22	ANCD23	ANCD21	
Date Sampled (yyyy/mm/dd)	2025/01/08	2025/01/08	2025/01/08	
PARAMETERS				
Aroclor 1242	< 0.05	< 0.5	< 0.3	NS
Aroclor 1248	< 0.05	< 0.5	< 0.3	NS
Aroclor 1254	< 0.05	< 0.5	< 0.3	NS
Aroclor 1260	< 0.05	< 0.5	< 0.3	NS
Total Polychlorinated Biphenyls	< 0.05	< 0.5	< 0.3	7.8

a - MECP Soil, Ground Water and Sediment Standards for Use Under Part XV.1 of the EPA (2011), non-potable, all types of property use, coarse textured soils .

mbgs - metres below ground surface

BOLD - Exceeds applicable standard

BOLD - Detection limit exceeds referenced standards

Results for all parameters are reported in micrograms per litre (µg/L)

The specific date each sample was analyzed is presented in the laboratory Certificates of Analysis.

NS - No standard

TABLE 14

GROUNDWATER ANALYTICAL RESULTS
OTHER REGULATED PARAMETERS - Cl, Cr (VI), CN, Hg

SAMPLE LOCATIONS	BH-101	BH-102	DUP-01 DUPLICATE BH-102	BH-103	BH-105	TABLE 3 STANDARDS[a]
Certificate of Analysis No.	C502765	C502765	C502765	C502765	C502765	
Sample ID	ANCD19	ANCD22	ANCD23	ANCD20	ANCD21	
Date Sampled (yyyy/mm/dd)	2025/01/07	2025/01/08	2025/01/08	2025/01/07	2025/01/08	
PARAMETERS						
Chloride	7700	1500	1500	5600	1100	2 300 000
Chromium (VI)	< 2.5	< 1.0	< 1.0	< 1.0	< 0.50	140
Cyanide	1	< 1	< 1	< 1	< 1	66
Mercury	-	**0.33**	**0.38**	< 0.10	0.21	0.29

a - MECP Soil, Ground Water and Sediment Standards for Use Under Part XV.1 of the EPA (2011), non-potable, all types of property use, coarse textured soils .

"- " - Not analyzed

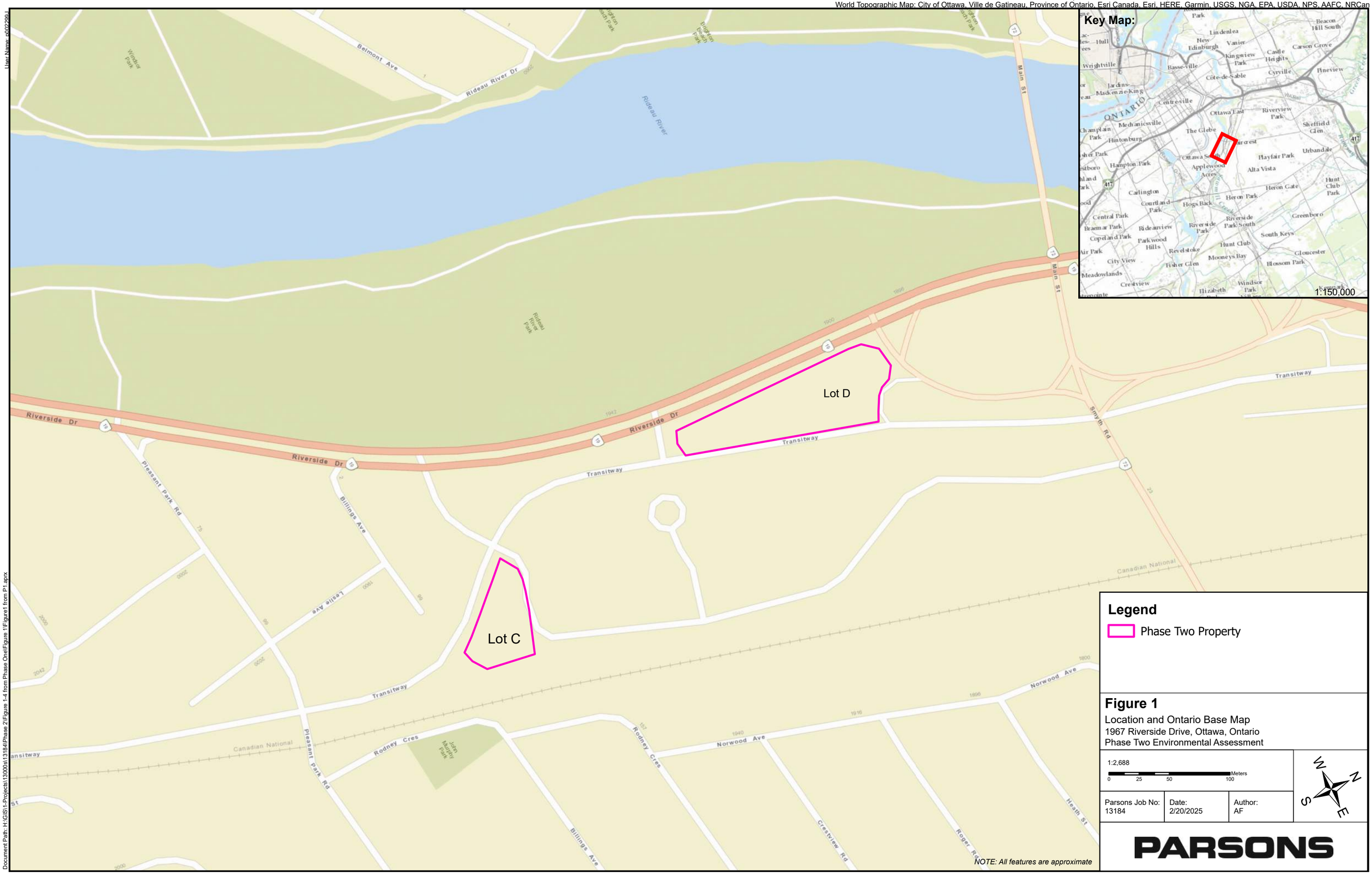
BOLD - Exceeds applicable standard

BOLD - Detection limit exceeds referenced standards

Results for all parameters are reported in micrograms per litre (µg/L)

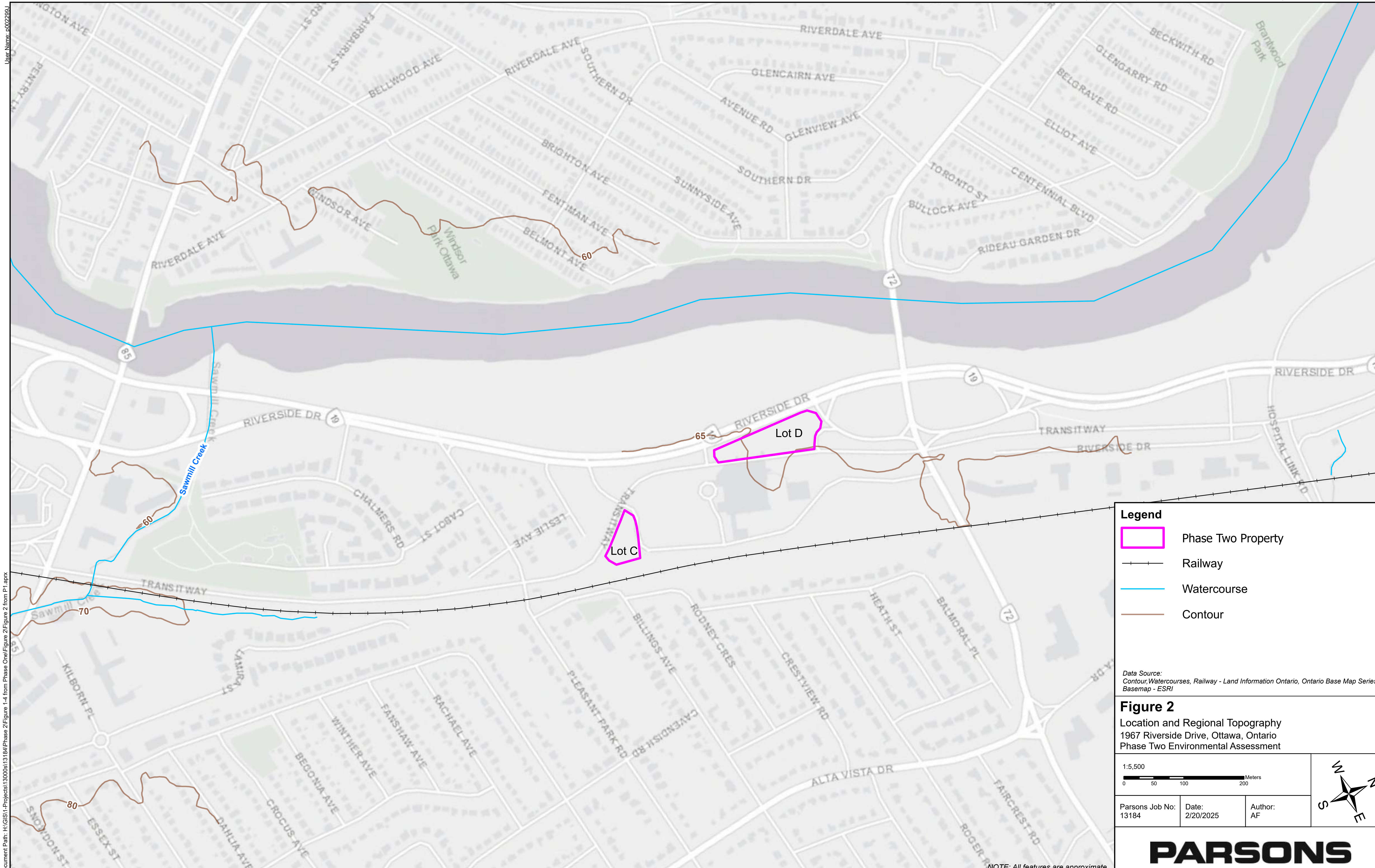
The specific date each sample was analyzed is presented in the laboratory Certificates of Analysis.

NS - No standard



Service Layer Credits: World Light Gray Canvas Base: Esri, HERE, Garmin, GeoTechnologies, Inc., USGS, EPA, NRCan

User Name: n002299J



Lot D
Lot C
65
60
70
80
Sawmill Creek
RIVERSIDE DR
TRANSITWAY
RIVERDALE AVE
GLENCAIRN AVE
GLENVIEW AVE
SOUTHERN DR
AVENUE RD
BRIGHTON AVE
FENTIMAN AVE
SUNNYSIDE AVE
BELMONT AVE
WINDSOR AVE
BELLWOOD AVE
FAIRBAIRN ST
BECKWITH RD
GLENGARRY RD
BELGRAVE RD
ELLIOT AVE
TORONTO ST
CENTENNIAL BLVD
BULLOCK AVE
RIDEAU GARDEN DR
Brantwood Park
Windsor Park Ottawa
HOSPITAL LINK RD
CHALMERS RD
CABOT ST
LESLIE AVE
BILLINGS AVE
RODNEY CRES
HEATH ST
BALMORAL PL
CRESTVIEW RD
PLEASANT PARK RD
CAVENDISH RD
ALTA VISTA DR
FAIRCREST RD
KILBORN PL
LAMIRA ST
WINTHER AVE
FANSHAW AVE
RACHAEL AVE
BEGONIA AVE
CROCUS AVE
DAHLIA AVE
ESSEX ST
SNOWDON ST
Legend
Phase Two Property
Railway
Watercourse
Contour
Data Source:
Contour,Watercourses, Railway - Land Information Ontario, Ontario Base Map Series; Basemap - ESRI
1:5,500
0 50 100 200 Meters
N
E
S
W
NOTE: All features are approximate

Figure 2
Location and Regional Topography
1967 Riverside Drive, Ottawa, Ontario
Phase Two Environmental Assessment

Parsons Job No:	Date:	Author:
13184	2/20/2025	AF

PARSONS

Document Path: H:\GIS\1-Projects\13000s\13184\Phase 2\Figure 1-4 from Phase One\Figure 2\Figure 2 from P1.aprx

Service Layer Credits: World Imagery: Maxar, Microsoft

User Name: g0022691

Lot D

Lot C

RIVERSIDE DRIVE

RIVERSIDE DRIVE

SMYTH ROAD

SMYTH ROAD

SMYTH ROAD

SMYTH ROAD

SMYTH ROAD

SMYTH ROAD

CABOT STREET

SARAH BILLINGS PLACE

LESLIE AVENUE

PLEASANT PARK ROAD

RODNEY CRESCENT

NORWOOD AVENUE

BILLINGS AVENUE

CRESTVIEW ROAD

ROGER ROAD

Legend

Phase Two Property

Railway

Data Source:
Railway, Roads - Land Information Ontario
Basemap - ESRI

NOTE: All features are approximate

Figure 3

Phase Two Property Plan
1967 Riverside Drive, Ottawa, Ontario
Phase Two Environmental Assessment

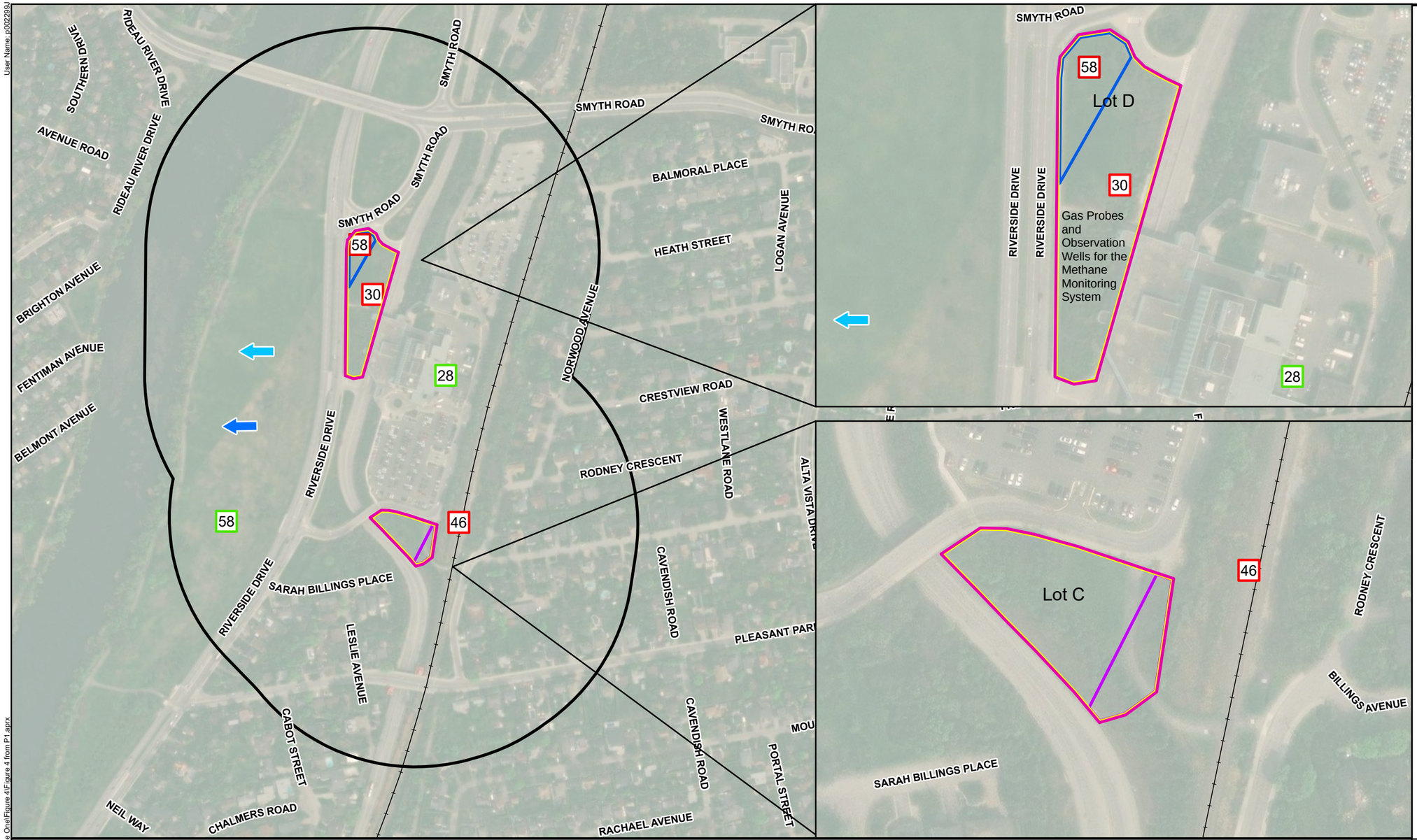
1:2,000
Meters
0 25 50

Parsons Job No:	Date:	Author:
13184	2/20/2025	AF

N W E S

PARSONS

Document Path: H:\GIS\1-Projects\13000s\13184\Phase 2\Figure 1-4 from Phase One\Figure 3\Figure 3 from P1.aprx



Legend
Area of Potential Environmental Concern (APEC)
APEC 1 (PCA 30)
BTEX, PHCs, VOCs, PAHs, metals, ORPs
APEC 2 (PCA 58)
BTEX, PHCs, VOCs, PAHs, metals, ORPs, PCBs
APEC 3 (PCA 46)
BTEX, PHCs, VOCs, PAHs, metals, ORPs

Potential Contaminating Activity MECP Designation
28- Gasoline and Associated Products Storage in Fixed Tanks
30-Importation of Fill Material of Unknown Quality
46 - Rail Yards, Tracks and Spurs
58 - Waste Disposal and Waste Management, including thermal treatment, landfilling and transfer of waste, other than use of biosoils and conditioners

Legend

- Phase Two Property
- Study Area (250m)
- Inferred Groundwater Flow Direction
- Inferred Surface Water Flow Direction
- Railway

Area of Potential Environmental Concern
- APEC 1
- APEC 2
- APEC 3

Potentially Contaminating Activity
- PCA did not result in an APEC
- PCA resulted in an APEC

Geological and Hydrological Information

Depth to Groundwater: variable ~ 2-7 mbgs
Soil Type: sand, sand and gravel, sandy silt and silty sand
Bedrock: Shale
Depth to Bedrock: ~ 8 mbgs

Data Source:
Roads, Railway - Land Information Ontario. Basemap - ESRI

Figure 4

Phase Two Conceptual Site Model
1967 Riverside Drive, Ottawa, Ontario
Phase Two Environmental Site Assessment

0 5 10 20 30 40 50 Meters

N W E S

Parsons Job No:	Date:	Author:
13184	2/20/2025	AF

PARSONS

Legend

- Phase Two Property
- Railway

Potentially Contaminating Activity

- PCA did not result in an APEC
- PCA resulted in an APEC

Area of Potential Environmental Concern

- APEC 1
- APEC 2
- APEC 3

NOTE: All features are approximate

Data Source:
Basemap - ESRI, Roads, Railway - Land Information Ontario

Figure 5

Phase Two Property Plan and PCAs and APECs

1967 Riverside Drive, Ottawa, Ontario
Phase Two Environmental Assessment

1:1,400
0 25 50 Meters

Parsons Job No:	Date:	Author:
13184	2/20/2025	AF

PARSONS

BH-102

BH-103

BH-101

BH-105

RIVERSIDE DRIVE

SARAH BILLINGS PLACE

BH-104

LESLIE AVENUE

NORWOOD AVEN

CRESTVIEW ROAD

NOTE: All features are approximate

Legend

- Phase Two Property
- Monitoring Well
- Railway

Data Source:
Basemap - ESRI, Roads, Railway - Land Information Ontario

Figure 6

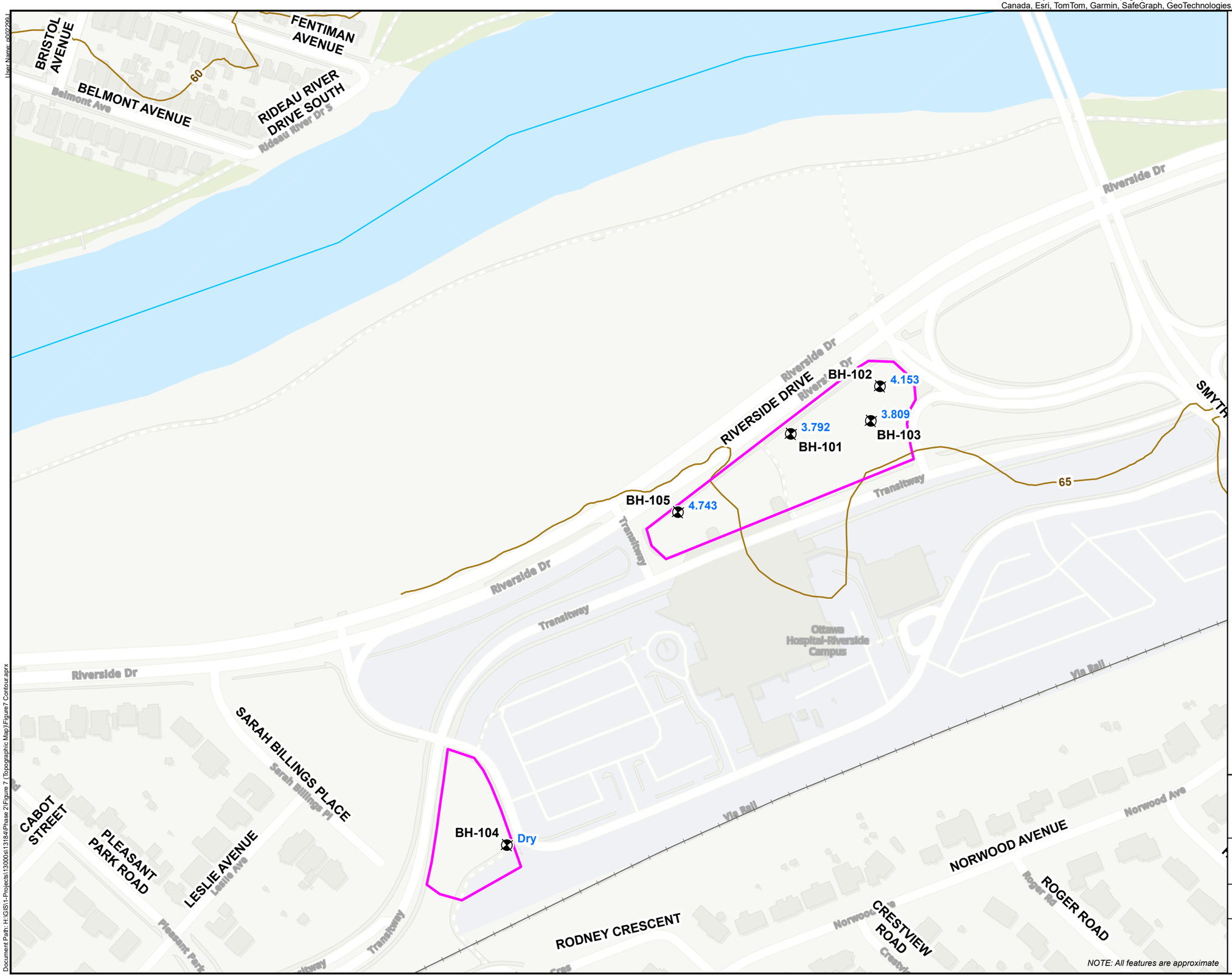
Phase Two Property Plan with Assessment Locations

1967 Riverside Drive, Ottawa, Ontario
Phase Two Environmental Assessment

1:1,400
0 25 50 Meters

Parsons Job No:	Date:	Author:
13184	2/20/2025	AF

PARSONS



Legend

- Phase Two Property
- Monitoring Well
- Railway
- Contour
- Watercourse
- 1234 Water Level Readings on January 7-8, 2025

Data Source:
Roadways, Contours, Permanent Watercourse - Land Information Ontario
Basemap - ESRI

Figure 7

Groundwater Levels - 2025/01/07 and 2025/01/08
1967 Riverside Drive, Ottawa, Ontario
Phase Two Environmental Assessment

1:2,200
0 30 60 90 Meters

Parsons Job No:	Date:	Author:
13184	2/21/2025	af

NOTE: All features are approximate

PARSONS

Parameters	B	T	E	X	F1	F2	F3	F4
Standard µg/g	0.32	68	9.5	26	55	230	1700	3300

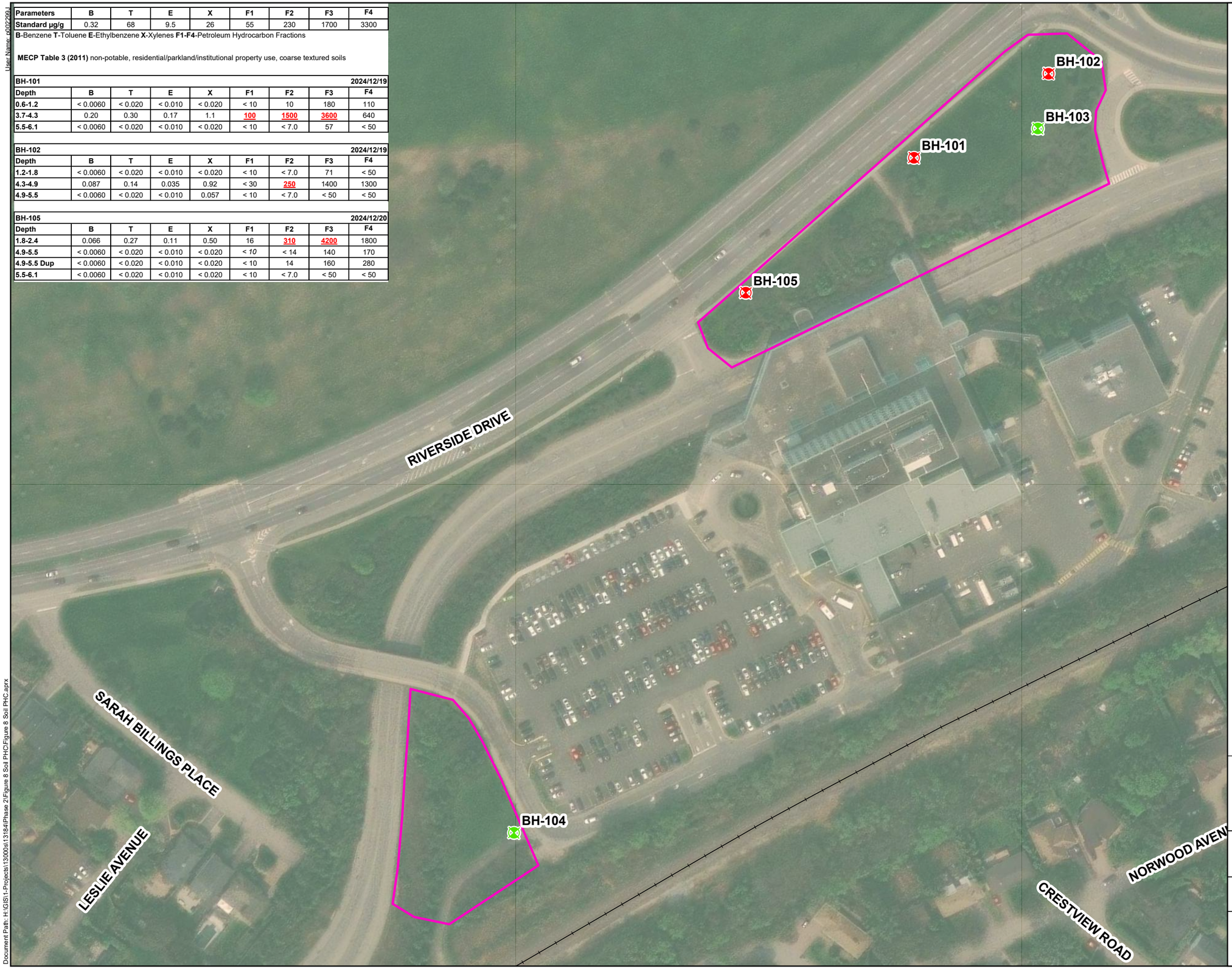
B-Benzene **T**-Toluene **E**-Ethylbenzene **X**-Xylenes **F1**-**F4**-Petroleum Hydrocarbon Fractions

MECP Table 3 (2011) non-potable, residential/parkland/institutional property use, coarse textured soils

BH-101								2024/12/19
Depth	B	T	E	X	F1	F2	F3	F4
0.6-1.2	< 0.0060	< 0.020	< 0.010	< 0.020	< 10	10	180	110
3.7-4.3	0.20	0.30	0.17	1.1	100	1500	3600	640
5.5-6.1	< 0.0060	< 0.020	< 0.010	< 0.020	< 10	< 7.0	57	< 50

BH-102								2024/12/19
Depth	B	T	E	X	F1	F2	F3	F4
1.2-1.8	< 0.0060	< 0.020	< 0.010	< 0.020	< 10	< 7.0	71	< 50
4.3-4.9	0.087	0.14	0.035	0.92	< 30	250	1400	1300
4.9-5.5	< 0.0060	< 0.020	< 0.010	0.057	< 10	< 7.0	< 50	< 50

BH-105								2024/12/20
Depth	B	T	E	X	F1	F2	F3	F4
1.8-2.4	0.066	0.27	0.11	0.50	16	310	4200	1800
4.9-5.5	< 0.0060	< 0.020	< 0.010	< 0.020	< *10*	< 14	140	170
4.9-5.5 Dup	< 0.0060	< 0.020	< 0.010	< 0.020	< 10	14	160	280
5.5-6.1	< 0.0060	< 0.020	< 0.010	< 0.020	< 10	< 7.0	< 50	< 50



Legend

Phase Two Property

Railway

Analytical Results

Soil Samples Met Standards for All Parameters, Shown in Green

At Least One Soil Sample Exceeded Standards for at least One Parameter, Shown in Red

NOTE: All features are approximate

Data Source:
Basemap - ESRI, Roads, Railway - Land Information Ontario

Figure 8

Soil Analytical Results - BTEX and PHC F1 to F4

1967 Riverside Drive, Ottawa, Ontario
Phase Two Environmental Assessment

1:1,400
0 25 50 Meters

Parsons Job No:	Date:	Author:
13184	2/20/2025	AF

PARSONS

Service Layer Credits: World_Imagery: Source: Esri, Maxar, Earthstar

User Name: p0022991

Parameters	OMK	BDCM	TBM	BM	CTC	MCB	TCM	DBCM	EDB	1,2-DCB	1,3-DCB	1,4-DCB	DCDFM	1,1-DCA	1,2-DCA	1,1-DCE	cis-1,2-DCE	trans-1,2-DCE	1,2-DCP	1,3-DCP	HX	MEK	MIBK	MTBE	DCM	STYR	1,1,1,2-PCA	1,1,2,2-PCA	PCE	1,1,1-TCA	1,1,2-TCA	TCE	TCFM	VC
Standard µg/g	16	18	0.61	0.05	0.21	2.4	0.47	13	0.05	6.8	9.6	0.2	16	17	0.05	0.064	55	1.3	0.16	0.18	46	70	31	11	1.6	34	0.087	0.05	4.5	6.1	0.05	0.91	4	0.032

DMK-Acetone **BDCM**-Bromodichloromethane**TBM**-Bromoform **BM**-Bromomethane**CTC**-Carbon Tetrachloride **MCB**-Chlorobenzene**TCM**-Chloroform **DBCM**-Dibromochloromethane**EDB**-Ethylene Dibromide**1,2-DCB**-1,2-Dichlorobenzene**1,3-DCB**-1,3-Dichlorobenzene**1,4-DCB**-1,4-Dichlorobenzene **DCDFM**-Dichlorodifluoromethane
1,1-DCA-1,1-Dichloroethane**1,2-DCA**-1,2-Dichloroethane **1,1-DCE**-1,1-Dichloroethylene**cis-1,2-DCE**-cis-1,2-Dichloroethylene**trans-1,2-DCE**-trans-1,2-Dichloroethylene**1,2-DCP**- 1,2-Dichloropropane **1,3-DCP**- **1,3**-Dichloropropene**HX**-Hexane **MEK**-Methyl ethyl ketone **MIBK**-Methyl isobutyl ketone
MTBE-Methyl t-butyl ether **DCM**-Methylene Chloride**STYR**-Styrene **1,1,1,2-PCA**-1,1,1,2-Tetrachloroethane **1,1,2,2-PCA**-1,1,2,2-Tetrachloroethane **PCE**-Tetrachloroethylene**1,1,1-TCA**-1,1,1-Trichloroethane **1,1,2-TCA**-1,1,2-Trichloroethane **TCE**-Trichloroethylene **TCFM**-Trichlorofluoromethane**VC**-Vinyl Chloride

MECP Table 3 (2011) non-potable, residential/parkland/institutional property use, coarse textured soils

BH-101 — **Date: 2024/12/19**

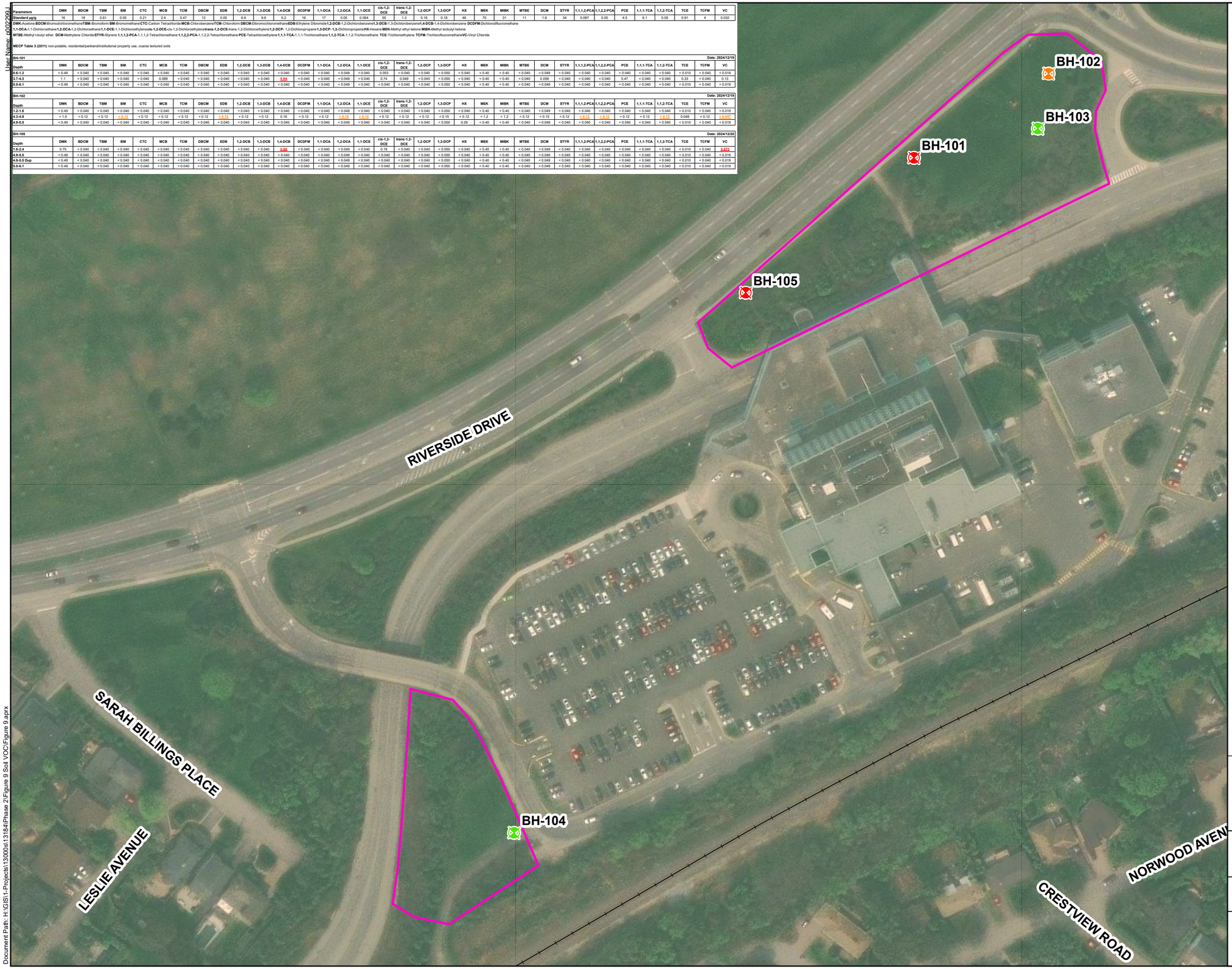
Depth	OMK	BDCM	TBM	BM	CTC	MCB	TCM	DBCM	EDB	1,2-DCB	1,3-DCB	1,4-DCB	DCDFM	1,1-DCA	1,2-DCA	1,1-DCE	cis-1,2-DCE	trans-1,2-DCE	1,2-DCP	1,3-DCP	HX	MEK	MIBK	MTBE	DCM	STYR	1,1,1,2-PCA	1,1,2,2-PCA	PCE	1,1,1-TCA	1,1,2-TCA	TCE	TCFM	VC
0.6-1.2	< 0.49	< 0.040	< 0.040	< 0.040	< 0.040	< 0.040	< 0.040	< 0.040	< 0.040	< 0.040	< 0.040	< 0.040	< 0.040	< 0.040	< 0.049	< 0.040	0.053	< 0.040	< 0.040	< 0.050	< 0.040	< 0.40	< 0.40	< 0.040	< 0.049	< 0.040	< 0.040	< 0.040	< 0.040	< 0.040	< 0.040	< 0.010	< 0.040	< 0.019
3.7-4.3	1.1	< 0.040	< 0.040	< 0.040	< 0.040	0.089	< 0.040	< 0.040	< 0.040	< 0.040	< 0.040	8.44	< 0.040	< 0.040	< 0.049	< 0.040	0.74	0.049	< 0.040	< 0.050	< 0.040	< 0.40	< 0.40	< 0.040	0.056	< 0.040	< 0.040	< 0.040	0.47	< 0.040	< 0.040	0.33	< 0.040	0.13
5.6-6.1	< 0.49	< 0.040	< 0.040	< 0.040	< 0.040	< 0.040	< 0.040	< 0.040	< 0.040	< 0.040	< 0.040	< 0.040	< 0.040	< 0.040	< 0.049	< 0.040	< 0.040	< 0.040	< 0.040	< 0.050	< 0.040	< 0.40	< 0.40	< 0.040	< 0.049	< 0.040	< 0.040	< 0.040	< 0.040	< 0.040	< 0.040	< 0.010	< 0.040	< 0.019

BH-102 — **Date: 2024/12/19**

Depth	OMK	BDCM	TBM	BM	CTC	MCB	TCM	DBCM	EDB	1,2-DCB	1,3-DCB	1,4-DCB	DCDFM	1,1-DCA	1,2-DCA	1,1-DCE	cis-1,2-DCE	trans-1,2-DCE	1,2-DCP	1,3-DCP	HX	MEK	MIBK	MTBE	DCM	STYR	1,1,1,2-PCA	1,1,2,2-PCA	PCE	1,1,1-TCA	1,1,2-TCA	TCE	TCFM	VC
1.2-1.8	< 0.49	< 0.040	< 0.040	< 0.040	< 0.040	< 0.040	< 0.040	< 0.040	< 0.040	< 0.040	< 0.040	< 0.040	< 0.040	< 0.040	< 0.049	< 0.040	< 0.040	< 0.040	< 0.040	< 0.050	< 0.040	< 0.40	< 0.40	< 0.040	< 0.049	< 0.040	< 0.040	< 0.040	< 0.040	< 0.040	< 0.040	< 0.010	< 0.040	< 0.019
4.3-4.9	< 1.5	< 0.12	< 0.12	< 0.12	< 0.12	< 0.12	< 0.12	< 0.12	< 0.12	< 0.12	< 0.12	0.16	< 0.12	< 0.12	< 0.12	< 0.12	< 0.12	< 0.12	< 0.12	< 0.15	< 0.12	< 1.2	< 1.2	< 0.12	< 0.15	< 0.12	< 0.12	< 0.12	< 0.12	< 0.12	< 0.12	0.048	< 0.12	< 0.057
4.9-5.5	< 0.49	< 0.040	< 0.040	< 0.040	< 0.040	< 0.040	< 0.040	< 0.040	< 0.040	< 0.040	< 0.040	< 0.040	< 0.040	< 0.040	< 0.049	< 0.040	< 0.040	< 0.040	< 0.040	< 0.050	0.29	< 0.40	< 0.40	< 0.040	< 0.049	< 0.040	< 0.040	< 0.040	< 0.040	< 0.040	< 0.040	< 0.010	< 0.040	< 0.019

BH-105 — **Date: 2024/12/20**

Depth	OMK	BDCM	TBM	BM	CTC	MCB	TCM	DBCM	EDB	1,2-DCB	1,3-DCB	1,4-DCB	DCDFM	1,1-DCA	1,2-DCA	1,1-DCE	cis-1,2-DCE	trans-1,2-DCE	1,2-DCP	1,3-DCP	HX	MEK	MIBK	MTBE	DCM	STYR	1,1,1,2-PCA	1,1,2,2-PCA	PCE	1,1,1-TCA	1,1,2-TCA	TCE	TCFM	VC
1.9-2.4	0.75	< 0.040	< 0.040	< 0.040	< 0.040	< 0.040	< 0.040	< 0.040	< 0.040	< 0.040	< 0.040	0.66	< 0.040	< 0.040	< 0.049	< 0.040	0.18	< 0.040	< 0.040	< 0.050	< 0.040	< 0.40	< 0.40	< 0.040	< 0.049	< 0.040	< 0.040	< 0.040	< 0.040	< 0.040	< 0.040	< 0.010	< 0.040	0.073
4.9-5.5	< 0.49	< 0.040	< 0.040	< 0.040	< 0.040	< 0.040	< 0.040	< 0.040	< 0.040	< 0.040	< 0.040	< 0.040	< 0.040	< 0.040	< 0.049	< 0.040	< 0.040	< 0.040	< 0.040	< 0.050	< 0.040	< 0.40	< 0.40	< 0.040	< 0.049	< 0.040	< 0.040	< 0.040	< 0.040	< 0.040	< 0.040	< 0.010	< 0.040	< 0.019
4.9-5.5 Dup	< 0.49	< 0.040	< 0.040	< 0.040	< 0.040	< 0.040	< 0.040	< 0.040	< 0.040	< 0.040	< 0.040	< 0.040	< 0.040	< 0.040	< 0.049	< 0.040	< 0.040	< 0.040	< 0.040	< 0.050	< 0.040	< 0.40	< 0.40	< 0.040	< 0.049	< 0.040	< 0.040	< 0.040	< 0.040	< 0.040	< 0.040	< 0.010	< 0.040	< 0.019
5.5-6.1	< 0.49	< 0.040	< 0.040	< 0.040	< 0.040	< 0.040	< 0.040	< 0.040	< 0.040	< 0.040	< 0.040	< 0.040	< 0.040	< 0.040	< 0.049	< 0.040	< 0.040	< 0.040	< 0.040	< 0.050	< 0.040	< 0.40	< 0.40	< 0.040	< 0.049	< 0.040	< 0.040	< 0.040	< 0.040	< 0.040	< 0.040	< 0.010	< 0.040	< 0.019



Legend

Phase Two Property

Railway

Analytical Results

Soil Samples Met Standards for All Parameters, Shown in Green

At Least One Soil Sample Exceeded Standards for at least One Parameter, Shown in Red

Detection Limit Above Standard, Shown in Orange

NOTE: All features are approximate

Data Source:
Basemap - ESRI, Roads, Railway - Land Information Ontario

Figure 9

Soil Analytical Results - VOCs Excluding BTEX

1967 Riverside Drive, Ottawa, Ontario
Phase Two Environmental Assessment

1:1,400
0 25 50 Meters

Parsons Job No:	Date:	Author:
13184	2/21/2025	AF

PARSONS

Document Path: H:\GIS\1-Projects\13000s\13184\Phase 2\Figure 9 Soil VOC\Figure 9.aprx

User Name: g0022991

Parameters	ANA	AC	ANTH	B[a]ANTH	B[a]P	B[b/j]FLAN	B[ghi]PERY	B[k]FLAN	CH	D[a,h]AN	FLAN	FL	I[123-CD]PY	1-MNA	2-MNA	MNA	NA	PH	PY
Standard µg/g	96	0.15	0.67	0.96	0.3	0.96	9.6	0.96	9.6	0.1	9.6	62	0.76	76	76	76	9.6	12	96

ANA-Acenaphthene **AC**-Acenaphthylene **ANTH**-Anthracene **B[a]ANTH**-Benzo(a)anthracene **B[a]P**-Benzo(a)pyrene **B[b/j]FLAN**-Benzo(b/j)fluoranthene **B[ghi]PERY**-Benzo(g,h,i)perylene **B[k]FLAN**-Benzo(k)fluoranthene
CH-Chrysene **D[a,h]AN**-Dibenz(a,h)anthracene **FLAN**-Fluoranthene **FL**-Fluorene **I[123-CD]PY**-Indeno(1,2,3-cd)pyrene **1-MNA**-1-Methylnaphthalene **2-MNA**-2-Methylnaphthalene **MNA**-Total-Methylnaphthalenes
NA-Naphthalene **PH**-Phenanthrene **PY**-Pyrene

MECP Table 3 (2011) non-potable, residential/parkland/institutional property use, coarse textured soils

BH-101 — **Date: 2024/12/19**

Depth	ANA	AC	ANTH	B[a]ANTH	B[a]P	B[b/j]FLAN	B[ghi]PERY	B[k]FLAN	CH	D[a,h]AN	FLAN	FL	I[123-CD]PY	1-MNA	2-MNA	MNA	NA	PH	PY
0.6-1.2	0.23	0.053	0.56	1.0	0.93	1.1	0.52	0.39	0.77	0.13	2.2	0.26	0.55	0.029	0.036	0.065	0.074	1.7	1.8
3.7-4.3	0.62	*< 0.10*	1.2	2.2	1.9	2.5	0.88	0.90	2.0	0.26	5.9	0.87	1.1	1.0	1.7	2.7	2.5	5.6	4.6
5.5-6.1	0.042	< 0.0050	0.094	0.20	0.17	0.22	0.083	0.081	0.17	0.024	0.46	0.058	0.095	0.010	0.018	0.028	0.042	0.41	0.34

BH-102 — **Date: 2024/12/19**

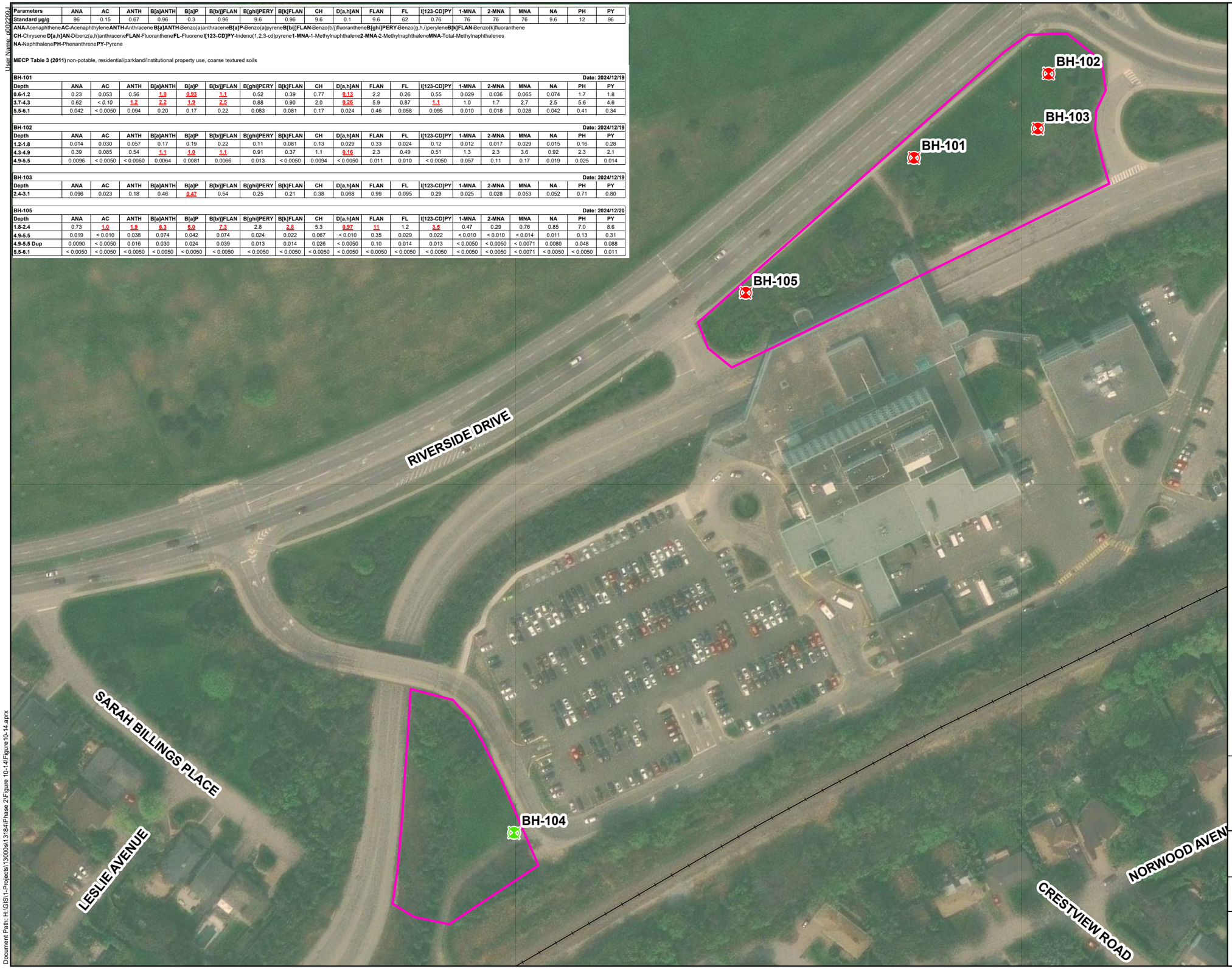
Depth	ANA	AC	ANTH	B[a]ANTH	B[a]P	B[b/j]FLAN	B[ghi]PERY	B[k]FLAN	CH	D[a,h]AN	FLAN	FL	I[123-CD]PY	1-MNA	2-MNA	MNA	NA	PH	PY
1.2-1.8	0.014	0.030	0.057	0.17	0.19	0.22	0.11	0.081	0.13	0.029	0.33	0.024	0.12	0.012	0.017	0.029	0.015	0.16	0.28
4.3-4.9	0.39	0.085	0.54	1.1	1.0	1.1	0.91	0.37	1.1	0.16	2.3	0.49	0.51	1.3	2.3	3.6	0.92	2.3	2.1
4.9-5.5	0.0096	< 0.0050	< 0.0050	0.0064	0.0081	0.0066	0.013	< 0.0050	0.0094	< 0.0050	0.011	0.010	< 0.0050	0.057	0.11	0.17	0.019	0.025	0.014

BH-103 — **Date: 2024/12/19**

Depth	ANA	AC	ANTH	B[a]ANTH	B[a]P	B[b/j]FLAN	B[ghi]PERY	B[k]FLAN	CH	D[a,h]AN	FLAN	FL	I[123-CD]PY	1-MNA	2-MNA	MNA	NA	PH	PY
2.4-3.1	0.096	0.023	0.18	0.46	0.47	0.54	0.25	0.21	0.38	0.068	0.99	0.095	0.29	0.025	0.028	0.053	0.052	0.71	0.80

BH-105 — **Date: 2024/12/20**

Depth	ANA	AC	ANTH	B[a]ANTH	B[a]P	B[b/j]FLAN	B[ghi]PERY	B[k]FLAN	CH	D[a,h]AN	FLAN	FL	I[123-CD]PY	1-MNA	2-MNA	MNA	NA	PH	PY
1.8-2.4	0.73	1.0	1.9	6.3	6.0	7.3	2.8	2.8	5.3	0.97	11	1.2	3.5	0.47	0.29	0.76	0.85	7.0	8.6
4.9-5.5	0.019	< 0.010	0.038	0.074	0.042	0.074	0.024	0.022	0.067	< 0.010	0.35	0.029	0.022	< 0.010	< 0.010	< 0.014	0.011	0.13	0.31
4.9-5.5 Dup	0.0090	< 0.0050	0.016	0.030	0.024	0.039	0.013	0.014	0.026	< 0.0050	0.10	0.014	0.013	< 0.0050	< 0.0050	< 0.0071	0.0080	0.048	0.088
5.5-6.1	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0071	< 0.0050	< 0.0050	0.011



Service Layer Credits: World_Imagery: Source: Esri, Maxar, Earthstar

Legend

Phase Two Property

Railway

Analytical Results

Soil Samples Met Standards for All Parameters, Shown in Green

At Least One Soil Sample Exceeded Standards for at least One Parameter, Shown in Red

NOTE: All features are approximate

Data Source:
Basemap - ESRI, Roads, Railway - Land Information Ontario

Figure 10

Soil Analytical Results - PAHs

1967 Riverside Drive, Ottawa, Ontario
Phase Two Environmental Assessment

1:1,400
0 25 50 Meters

Parsons Job No:	Date:	Author:
13184	2/20/2025	AF

PARSONS

Document Path: H:\GIS\1-Projects\13000s\13184\Phase 2\Figure 10-14\Figure 10-14.aprx

User Name: a0022991

Parameters	Sb	As	Ba	Be	B	Cd	Cr	Co	Cu	Pb	Mo	Ni	Se	Ag	Tl	U	V	Zn
Standard µg/g	40	18	670	8	120	1.9	160	80	230	120	40	270	5.5	40	3.3	33	86	340

Sb-Antimony **As**-Arsenic **Ba**-Barium **Be**-Beryllium **B** - Boron (Total) **Cd**-Cadmium **Ca**-Calcium **Cr**-Chromium **Co**-Cobalt **Cu**-Copper **Pb**-Lead **Mo**-Molybdenum **Ni**-Nickel **Se**-Selenium **Ag**-Silver **Tl**-Thallium **U**-Uranium **V**-Vanadium **Zn**-Zinc

MECP Table 3 (2011) non-potable, residential/parkland/institutional property use, coarse textured soils

BH-101 — **Date: 2024/12/19**

Depth	Sb	As	Ba	Be	B	Cd	Cr	Co	Cu	Pb	Mo	Ni	Se	Ag	Tl	U	V	Zn
0.6-1.2	2.1	6.0	91	0.39	5.3	0.28	29	9.0	97	92	3.9	36	< 0.50	0.28	0.13	0.82	25	140
3.7-4.3	9.7	42	610	0.64	21	3.0	53	18	250	640	15	130	11	1.2	0.46	0.66	24	1200
5.5-6.1	0.28	1.7	84	0.41	< 5.0	< 0.10	31	8.0	19	13	< 0.50	19	< 0.50	< 0.20	0.091	1.1	29	83

BH-102 — **Date: 2024/12/19**

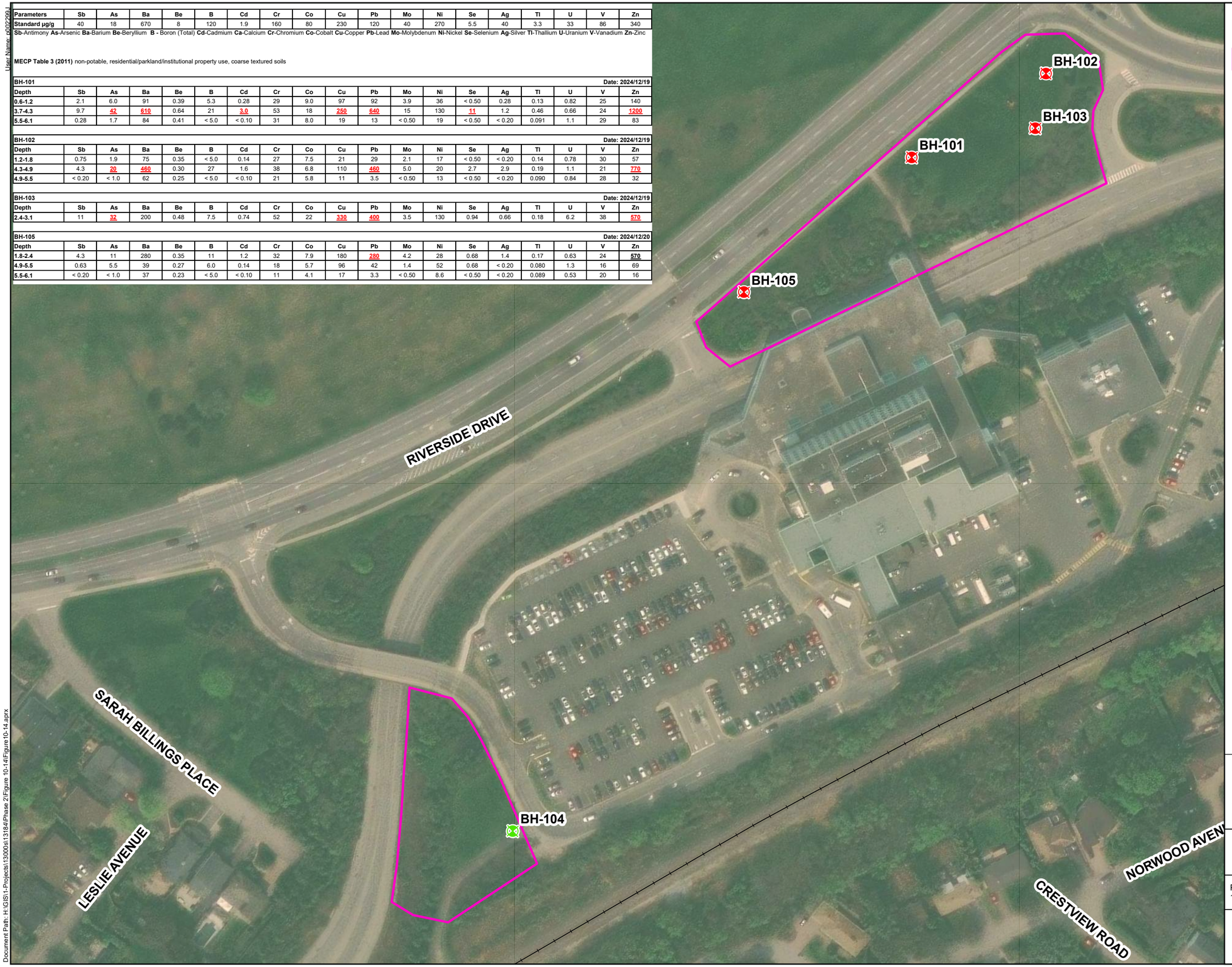
Depth	Sb	As	Ba	Be	B	Cd	Cr	Co	Cu	Pb	Mo	Ni	Se	Ag	Tl	U	V	Zn
1.2-1.8	0.75	1.9	75	0.35	< 5.0	0.14	27	7.5	21	29	2.1	17	< 0.50	< 0.20	0.14	0.78	30	57
4.3-4.9	4.3	20	460	0.30	27	1.6	38	6.8	110	460	5.0	20	2.7	2.9	0.19	1.1	21	770
4.9-5.5	< 0.20	< 1.0	62	0.25	< 5.0	< 0.10	21	5.8	11	3.5	< 0.50	13	< 0.50	< 0.20	0.090	0.84	28	32

BH-103 — **Date: 2024/12/19**

Depth	Sb	As	Ba	Be	B	Cd	Cr	Co	Cu	Pb	Mo	Ni	Se	Ag	Tl	U	V	Zn
2.4-3.1	11	32	200	0.48	7.5	0.74	52	22	330	400	3.5	130	0.94	0.66	0.18	6.2	38	570

BH-105 — **Date: 2024/12/20**

Depth	Sb	As	Ba	Be	B	Cd	Cr	Co	Cu	Pb	Mo	Ni	Se	Ag	Tl	U	V	Zn
1.8-2.4	4.3	11	280	0.35	11	1.2	32	7.9	180	280	4.2	28	0.68	1.4	0.17	0.63	24	570
4.9-5.5	0.63	5.5	39	0.27	6.0	0.14	18	5.7	96	42	1.4	52	0.68	< 0.20	0.080	1.3	16	69
5.5-6.1	< 0.20	< 1.0	37	0.23	< 5.0	< 0.10	11	4.1	17	3.3	< 0.50	8.6	< 0.50	< 0.20	0.089	0.53	20	16



Legend

Phase Two Property

Railway

Analytical Results

Soil Samples Met Standards for All Parameters, Shown in Green

At Least One Soil Sample Exceeded Standards for at least One Parameter, Shown in Red

NOTE: All features are approximate

Data Source:
Basemap - ESRI, Roads, Railway - Land Information Ontario

Figure 11

Soil Analytical Results - Metals including Hydride Forming

1967 Riverside Drive, Ottawa, Ontario
Phase Two Environmental Assessment

1:1,400
0 25 50 Meters

Parsons Job No:	Date:	Author:
13184	2/20/2025	AF

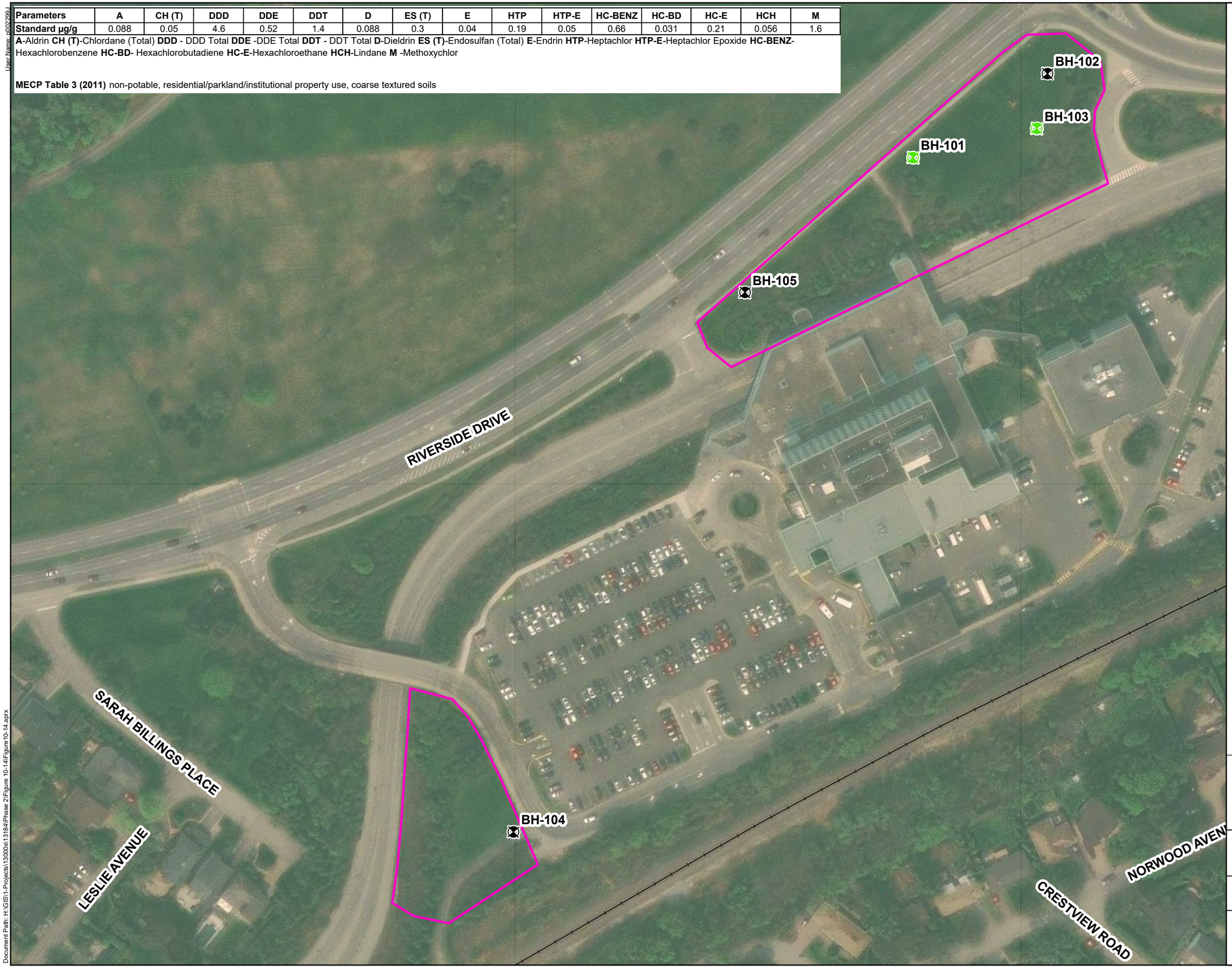
PARSONS

Document Path: H:\GIS\1-Projects\13000s\13184\Phase 2\Figure 10-14\Figure10-14.aprx

Parameters	A	CH (T)	DDD	DDE	DDT	D	ES (T)	E	HTP	HTP-E	HC-BENZ	HC-BD	HC-E	HCH	M
Standard µg/g	0.088	0.05	4.6	0.52	1.4	0.088	0.3	0.04	0.19	0.05	0.66	0.031	0.21	0.056	1.6

A-Aldrin **CH (T)**-Chlordane (Total) **DDD** - DDD Total **DDE** -DDE Total **DDT** - DDT Total **D**-Dieldrin **ES (T)**-Endosulfan (Total) **E**-Endrin **HTP**-Heptachlor **HTP-E**-Heptachlor Epoxide **HC-BENZ**-Hexachlorobenzene **HC-BD**- Hexachlorobutadiene **HC-E**-Hexachloroethane **HCH**-Lindane **M** -Methoxychlor

MECP Table 3 (2011) non-potable, residential/parkland/institutional property use, coarse textured soils



Legend

Phase Two Property

Railway

Analytical Results

Soil Samples Not Sampled

Soil Samples Met Standards for All Parameters, Shown in Green

NOTE: All features are approximate

Data Source:
Basemap - ESRI, Roads, Railway - Land Information Ontario

Figure 12

Soil Analytical Results - Organochlorine Pesticides

1967 Riverside Drive, Ottawa, Ontario
Phase Two Environmental Assessment

1:1,400
0 25 50 Meters

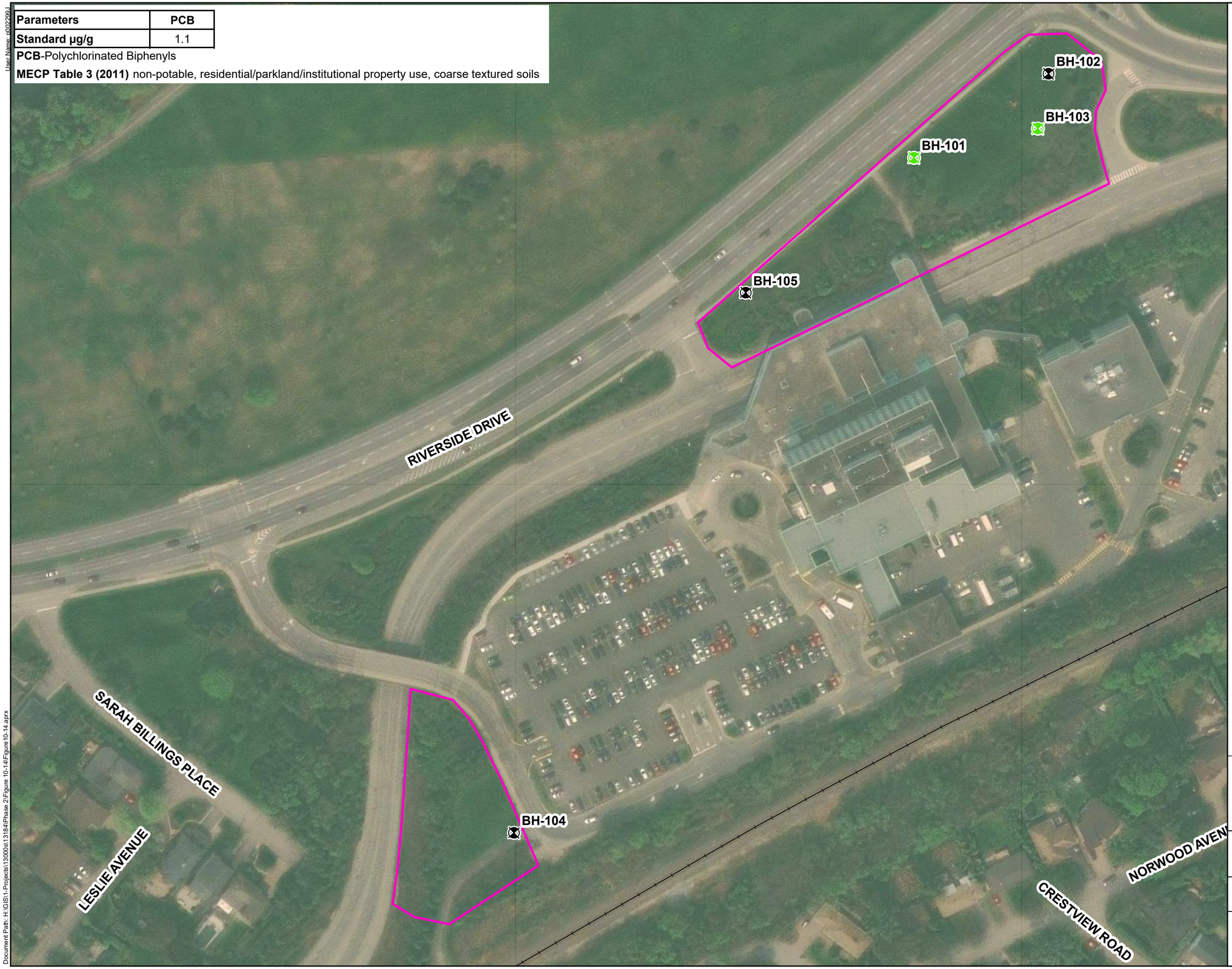
Parsons Job No:	Date:	Author:
13184	2/21/2025	AF

PARSONS

Parameters	PCB
Standard µg/g	1.1

PCB-Polychlorinated Biphenyls

MECP Table 3 (2011) non-potable, residential/parkland/institutional property use, coarse textured soils



Legend

Phase Two Property

Railway

Analytical Results

Soil Samples Not Sampled

Soil Samples Met Standards for All Parameters, Shown in Green

NOTE: All features are approximate

Data Source:
Basemap - ESRI, Roads, Railway - Land Information Ontario

Figure 13

Soil Analytical Results - Polychlorinated Biphenyls

1967 Riverside Drive, Ottawa, Ontario
Phase Two Environmental Assessment

1:1,400
0 25 50 Meters

Parsons Job No:	Date:	Author:
13184	2/20/2025	AF

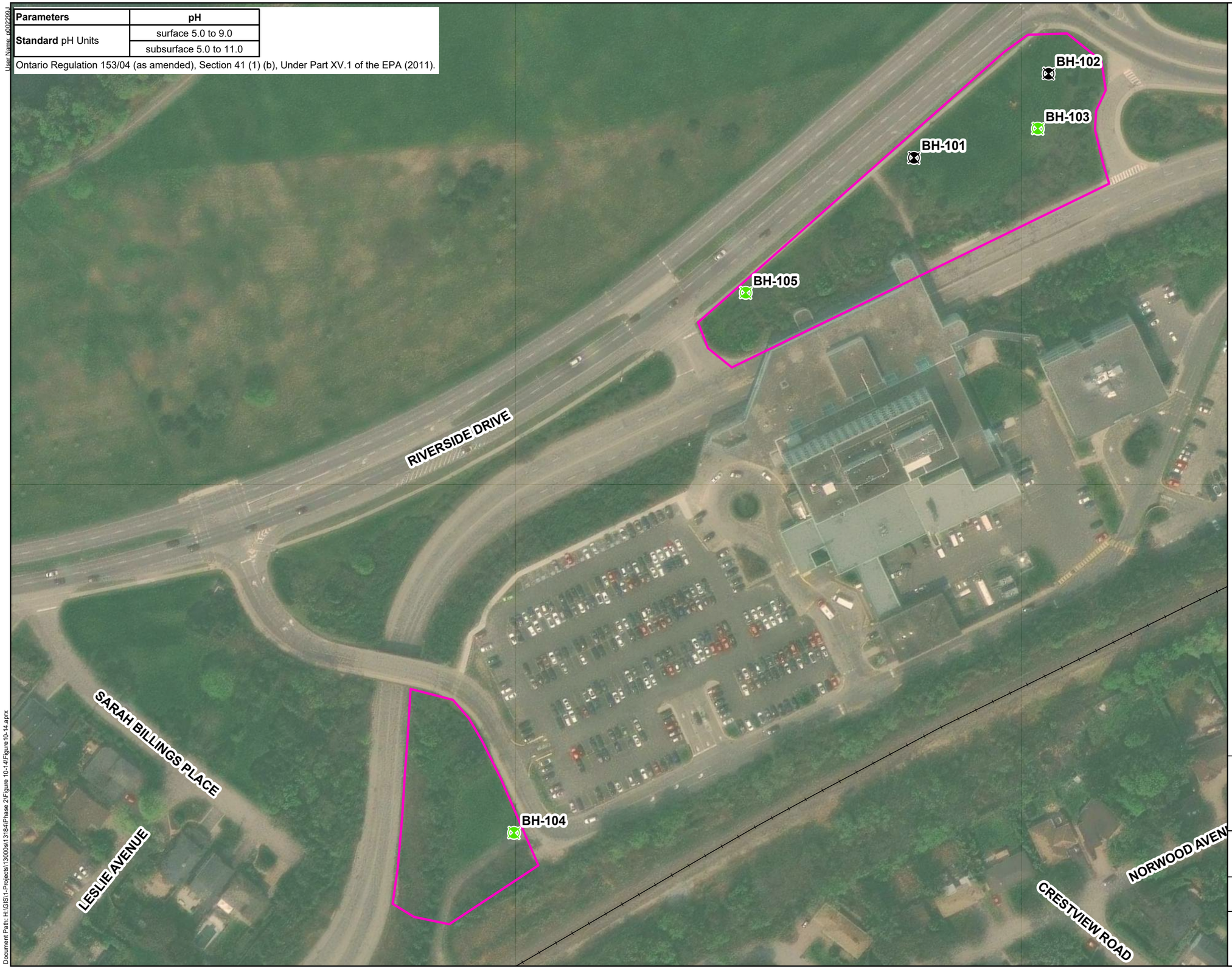
PARSONS

Service Layer Credits: World_Imagery: Source: Esri, Maxar, Earthstar

User Name: g0022991

Parameters	pH
Standard pH Units	surface 5.0 to 9.0
	subsurface 5.0 to 11.0

Ontario Regulation 153/04 (as amended), Section 41 (1) (b), Under Part XV.1 of the EPA (2011).



Legend

Phase Two Property

Railway

Analytical Results

Soil Samples Not Sampled

Soil Samples Met Standards for All Parameters, Shown in Green

NOTE: All features are approximate

Data Source:
Basemap - ESRI, Roads, Railway - Land Information Ontario

Figure 14

Soil Analytical Results - pH

1967 Riverside Drive, Ottawa, Ontario
Phase Two Environmental Assessment

1:1,400
0 25 50 Meters

Parsons Job No:	Date:	Author:
13184	2/20/2025	AF

PARSONS

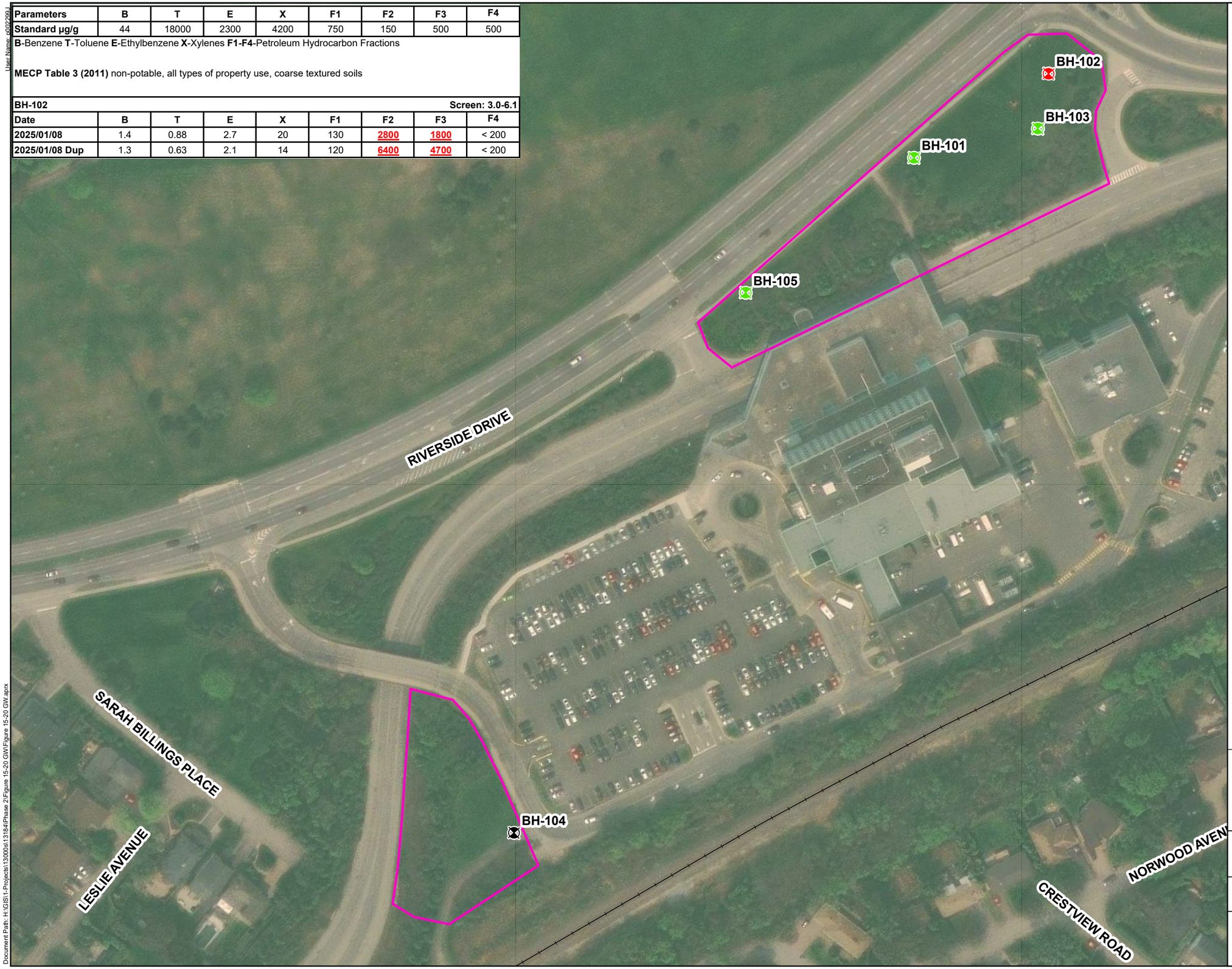
Document Path: H:\GIS\1-Projects\13000s\13184\Phase 2\Figure 10-14\Figure 10-14.aprx

Parameters	B	T	E	X	F1	F2	F3	F4
Standard µg/g	44	18000	2300	4200	750	150	500	500

B-Benzene **T**-Toluene **E**-Ethylbenzene **X**-Xylenes **F1-F4**-Petroleum Hydrocarbon Fractions

MECP Table 3 (2011) non-potable, all types of property use, coarse textured soils

BH-102							Screen: 3.0-6.1	
Date	B	T	E	X	F1	F2	F3	F4
2025/01/08	1.4	0.88	2.7	20	130	2800	1800	< 200
2025/01/08 Dup	1.3	0.63	2.1	14	120	6400	4700	< 200



Legend

Phase Two Property

Railway

Analytical Results

- Groundwater Samples Not Sampled
- Groundwater Samples Met Standards for All Parameters, Shown in Green
- At Least One Groundwater Sample Exceeded Standards for at least One Parameter, Shown in Red

NOTE: All features are approximate

Data Source:
Basemap - ESRI, Roads, Railway - Land Information Ontario

Figure 15
Groundwater Analytical Results -
BTEX and PHC F1 to F4

1967 Riverside Drive, Ottawa, Ontario
Phase Two Environmental Assessment

1:1,400
0 25 50 Meters

Parsons Job No:	Date:	Author:
13184	2/20/2025	AF

PARSONS

Service Layer Credits: World_Imagery: Source: Esri, Maxar, Earthstar

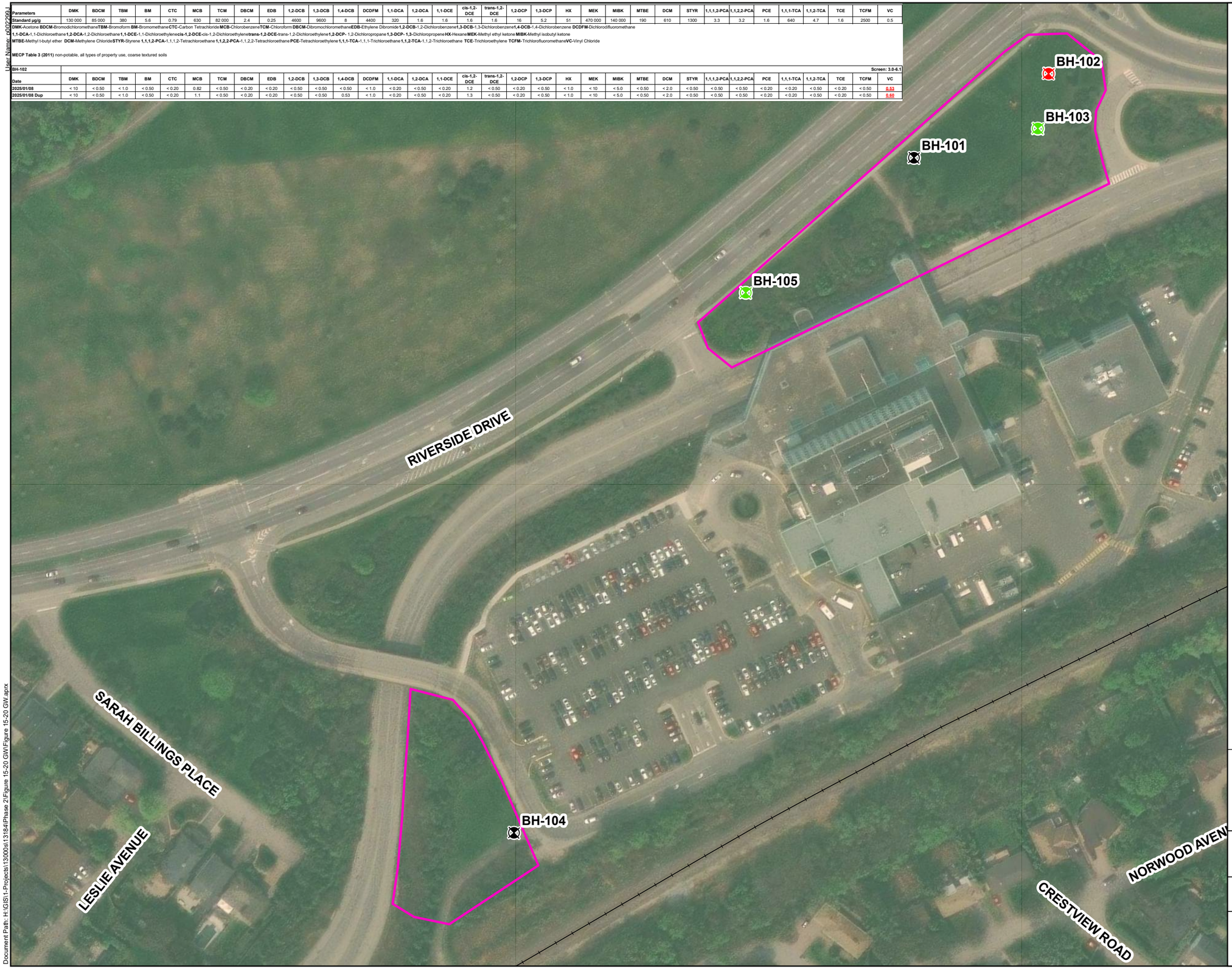
User Name: gD022960

Parameters	DMK	BDCM	TBM	BM	CTC	MCB	TCM	DBCM	EDB	1,2-DCB	1,3-DCB	1,4-DCB	DCDFM	1,1-DCA	1,2-DCA	1,1-DCE	cis-1,2-DCE	trans-1,2-DCE	1,2-DCP	1,3-DCP	HX	MEK	MIBK	MTBE	DCM	STYR	1,1,1,2-PCA	1,1,2,2-PCA	PCE	1,1,1-TCA	1,1,2-TCA	TCE	TCFM	VC
Standard µg/g	130 000	85 000	380	5.6	0.79	630	82 000	2.4	0.25	4600	9600	8	4400	320	1.6	1.6	1.6	1.6	16	5.2	51	470 000	140 000	190	610	1300	3.3	3.2	1.6	640	4.7	1.6	2500	0.5

DMK-Acetone **BDCM**-Bromodichloromethane**TBM**-Bromoform **BM**-Bromomethane**CTC**-Carbon Tetrachloride **MCB**-Chlorobenzene**TCM**-Chloroform **DBCM**-Dibromochloromethane**EDB**-Ethylene Dibromide **1,2-DCB**-1,2-Dichlorobenzene**1,3-DCB**-1,3-Dichlorobenzene**1,4-DCB**-1,4-Dichlorobenzene **DCDFM**-Dichlorodifluoromethane
1,1-DCA-1,1-Dichloroethane **1,2-DCA**-1,2-Dichloroethane **1,1-DCE**-1,1-Dichloroethylene**cis-1,2-DCE**-cis-1,2-Dichloroethylene**trans-1,2-DCE**-trans-1,2-Dichloroethylene**1,2-DCP**- 1,2-Dichloropropane **1,3-DCP**- **1,3**-Dichloropropene **HX**-Hexane **MEK**-Methyl ethyl ketone **MIBK**-Methyl isobutyl ketone
MTBE-Methyl t-butyl ether **DCM**-Methylene Chloride **STYR**-Styrene **1,1,1,2-PCA**-1,1,1,2-Tetrachloroethane **1,1,2,2-PCA**-1,1,2,2-Tetrachloroethane **PCE**-Tetrachloroethylene **1,1,1-TCA**-1,1,1-Trichloroethane **1,1,2-TCA**-1,1,2-Trichloroethane **TCE**-Trichloroethylene **TCFM**-Trichlorofluoromethane **VC**-Vinyl Chloride

MECP Table 3 (2011) non-potable, all types of property use, coarse textured soils

BH-102																																		Screen: 3.0-6.1
Date	DMK	BDCM	TBM	BM	CTC	MCB	TCM	DBCM	EDB	1,2-DCB	1,3-DCB	1,4-DCB	DCDFM	1,1-DCA	1,2-DCA	1,1-DCE	cis-1,2-DCE	trans-1,2-DCE	1,2-DCP	1,3-DCP	HX	MEK	MIBK	MTBE	DCM	STYR	1,1,1,2-PCA	1,1,2,2-PCA	PCE	1,1,1-TCA	1,1,2-TCA	TCE	TCFM	VC
2025/01/08	< 10	< 0.50	< 1.0	< 0.50	< 0.20	0.82	< 0.50	< 0.20	< 0.20	< 0.50	< 0.50	< 0.50	< 1.0	< 0.20	< 0.50	< 0.20	1.2	< 0.50	< 0.20	< 0.50	< 1.0	< 10	< 5.0	< 0.50	< 2.0	< 0.50	< 0.50	< 0.50	< 0.20	< 0.20	< 0.50	< 0.20	< 0.50	0.53
2025/01/08 Dup	< 10	< 0.50	< 1.0	< 0.50	< 0.20	1.1	< 0.50	< 0.20	< 0.20	< 0.50	< 0.50	0.53	< 1.0	< 0.20	< 0.50	< 0.20	1.3	< 0.50	< 0.20	< 0.50	< 1.0	< 10	< 5.0	< 0.50	< 2.0	< 0.50	< 0.50	< 0.50	< 0.20	< 0.20	< 0.50	< 0.20	< 0.50	0.60



Legend

Phase Two Property

Railway

Analytical Results

Groundwater Samples Not Sampled

Groundwater Samples Met Standards for All Parameters, Shown in Green

At Least One Groundwater Sample Exceeded Standards for at least One Parameter, Shown in Red

NOTE: All features are approximate

Data Source:
Basemap - ESRI, Roads, Railway - Land Information Ontario

Figure 16
Groundwater Analytical Results - VOCs Excluding BTEX
1967 Riverside Drive, Ottawa, Ontario
Phase Two Environmental Assessment

1:1,400
0 25 50 Meters

Parsons Job No:	Date:	Author:
13184	2/20/2025	AF

PARSONS

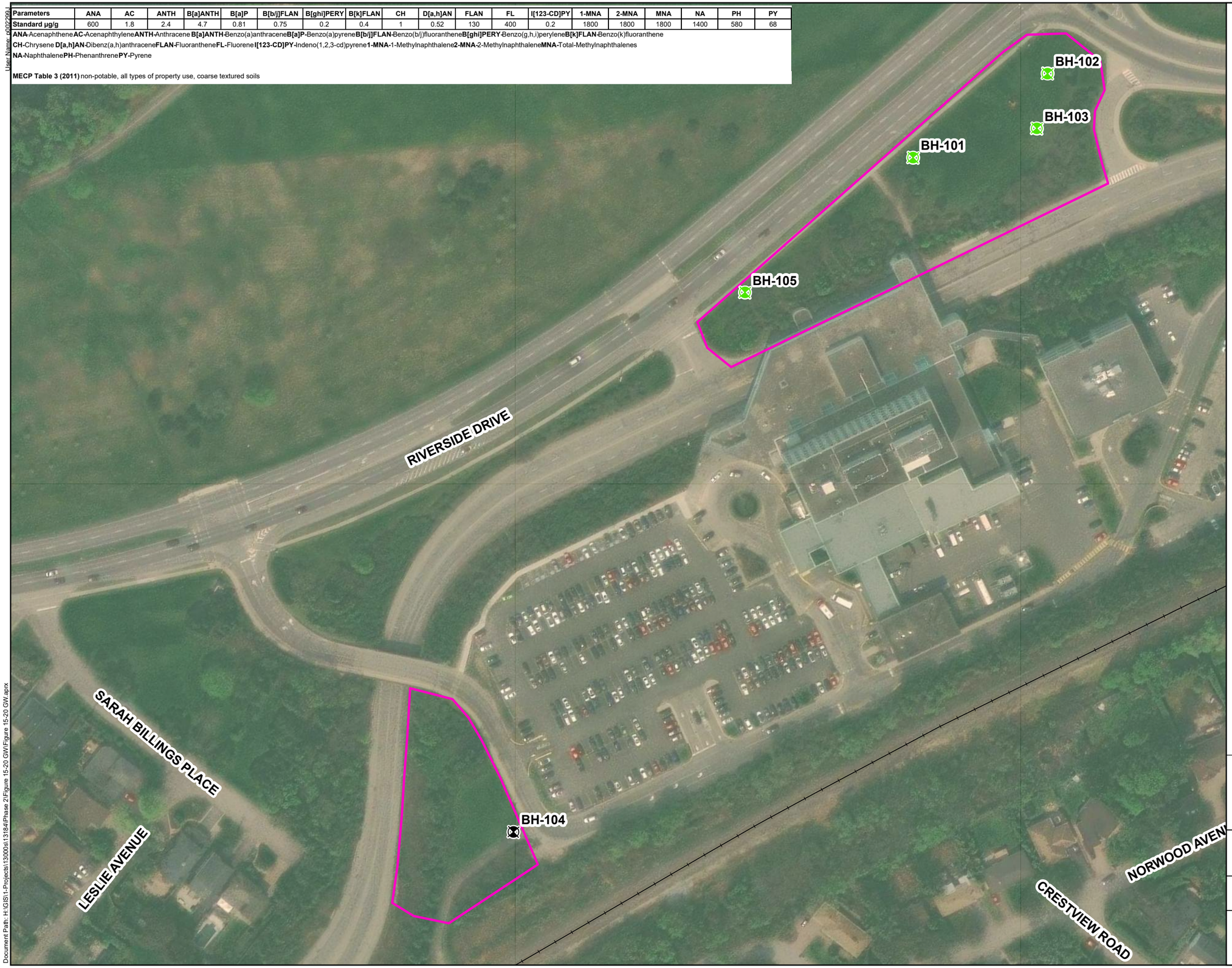
Document Path: H:\GIS\1-Projects\13000s\13184\Phase 2\Figure 15-20 GW\Figure 15-20 GW.aprx

Service Layer Credits: World_Imagery: Source: Esri, Maxar, Earthstar

Parameters	ANA	AC	ANTH	B[a]ANTH	B[a]P	B[b/j]FLAN	B[ghi]PERY	B[k]FLAN	CH	D[a,h]AN	FLAN	FL	I[123-CD]PY	1-MNA	2-MNA	MNA	NA	PH	PY
Standard µg/g	600	1.8	2.4	4.7	0.81	0.75	0.2	0.4	1	0.52	130	400	0.2	1800	1800	1800	1400	580	68

ANA-Acenaphthene **AC**-Acenaphthylene **ANTH**-Anthracene **B[a]ANTH**-Benzo(a)anthracene **B[a]P**-Benzo(a)pyrene **B[b/j]FLAN**-Benzo(b/j)fluoranthene **B[ghi]PERY**-Benzo(g,h,i)perylene **B[k]FLAN**-Benzo(k)fluoranthene
CH-Chrysene **D[a,h]AN**-Dibenz(a,h)anthracene **FLAN**-Fluoranthene **FL**-Fluorene **I[123-CD]PY**-Indeno(1,2,3-cd)pyrene **1-MNA**-1-Methylnaphthalene **2-MNA**-2-Methylnaphthalene **MNA**-Total-Methylnaphthalenes
NA-Naphthalene **PH**-Phenanthrene **PY**-Pyrene

MECP Table 3 (2011) non-potable, all types of property use, coarse textured soils



Legend

Phase Two Property

Railway

Analytical Results

Groundwater Samples Not Sampled

Groundwater Samples Met Standards for All Parameters, Shown in Green

NOTE: All features are approximate

Data Source:
Basemap - ESRI, Roads, Railway - Land Information Ontario

Figure 17

Groundwater Analytical Results - PAHs

1967 Riverside Drive, Ottawa, Ontario
Phase Two Environmental Assessment

1:1,400
0 25 50 Meters

Parsons Job No:	Date:	Author:
13184	2/20/2025	AF

PARSONS

User Name: g002290

Document Path: H:\GIS\1-Projects\13000s\13184\Phase 2\Figure 15-20 GW\Figure 15-20 GW.aprx

Service Layer Credits: World_Imagery: Source: Esri, Maxar, Earthstar

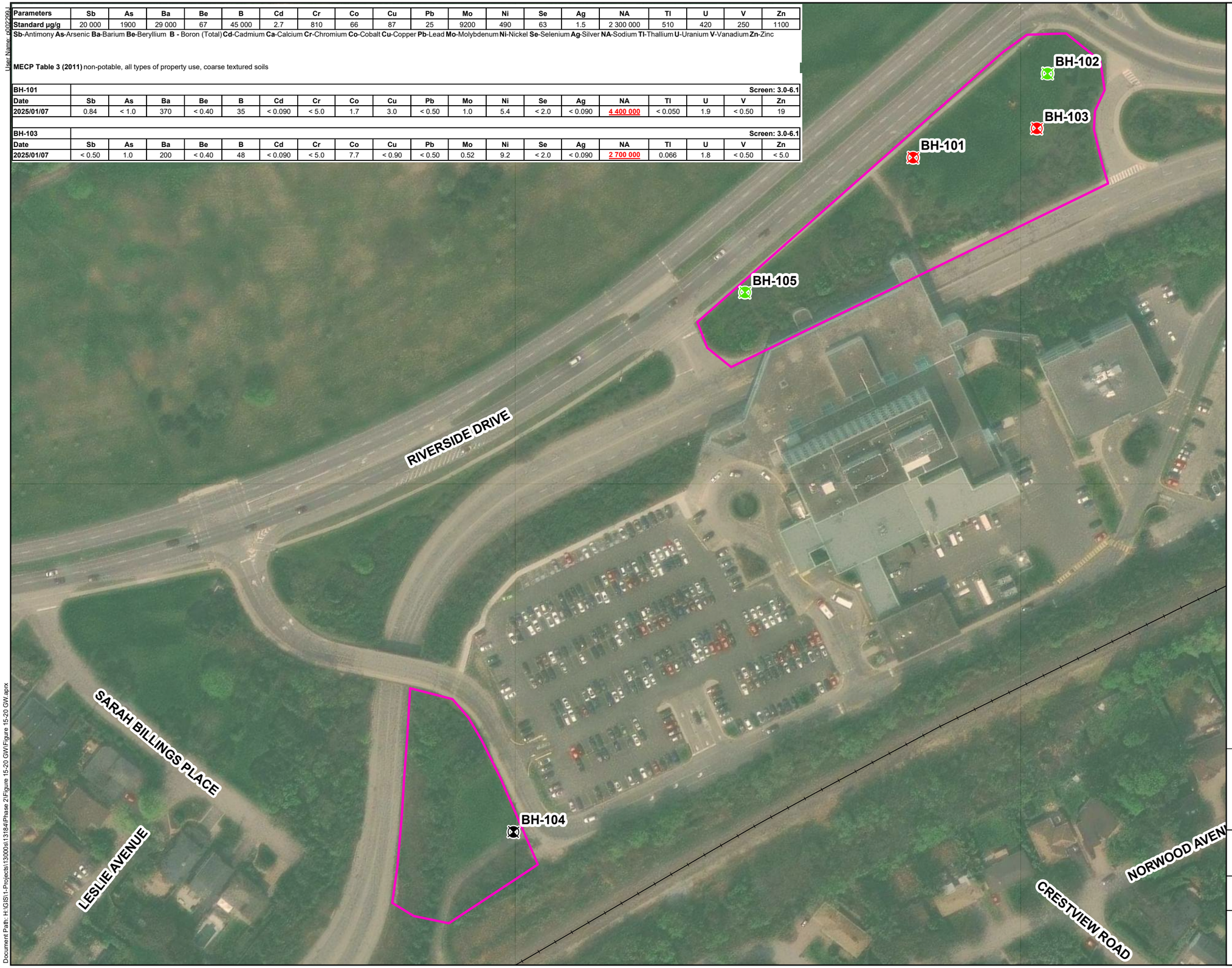
Parameters	Sb	As	Ba	Be	B	Cd	Cr	Co	Cu	Pb	Mo	Ni	Se	Ag	NA	Tl	U	V	Zn
Standard µg/g	20 000	1900	29 000	67	45 000	2.7	810	66	87	25	9200	490	63	1.5	2 300 000	510	420	250	1100

Sb-Antimony **As**-Arsenic **Ba**-Barium **Be**-Beryllium **B** - Boron (Total) **Cd**-Cadmium **Ca**-Calcium **Cr**-Chromium **Co**-Cobalt **Cu**-Copper **Pb**-Lead **Mo**-Molybdenum **Ni**-Nickel **Se**-Selenium **Ag**-Silver **NA**-Sodium **Tl**-Thallium **U**-Uranium **V**-Vanadium **Zn**-Zinc

MECP Table 3 (2011) non-potable, all types of property use, coarse textured soils

BH-101																			Screen: 3.0-6.1
Date	Sb	As	Ba	Be	B	Cd	Cr	Co	Cu	Pb	Mo	Ni	Se	Ag	NA	Tl	U	V	Zn
2025/01/07	0.84	< 1.0	370	< 0.40	35	< 0.090	< 5.0	1.7	3.0	< 0.50	1.0	5.4	< 2.0	< 0.090	4 400 000	< 0.050	1.9	< 0.50	19

BH-103																			Screen: 3.0-6.1
Date	Sb	As	Ba	Be	B	Cd	Cr	Co	Cu	Pb	Mo	Ni	Se	Ag	NA	Tl	U	V	Zn
2025/01/07	< 0.50	1.0	200	< 0.40	48	< 0.090	< 5.0	7.7	< 0.90	< 0.50	0.52	9.2	< 2.0	< 0.090	2 700 000	0.066	1.8	< 0.50	< 5.0



Legend

Phase Two Property

Railway

Analytical Results

- Groundwater Samples Not Sampled
- Groundwater Samples Met Standards for All Parameters, Shown in Green
- At Least One Groundwater Sample Exceeded Standards for at least One Parameter, Shown in Red

NOTE: All features are approximate

Data Source:
Basemap - ESRI, Roads, Railway - Land Information Ontario

Figure 18
Groundwater Analytical Results -
Metals Including Hydride Forming and Sodium
1967 Riverside Drive, Ottawa, Ontario
Phase Two Environmental Assessment

1:1,400
0 25 50 Meters

Parsons Job No:	Date:	Author:
13184	2/20/2025	AF

PARSONS

User Name: p002990

Document Path: H:\GIS\1-Projects\13000s\13184\Phase 2\Figure 15-20 GW\Figure 15-20 GW.aprx

Service Layer Credits: World_Imagery: Source: Esri, Maxar, Earthstar

Parameters	PCB
Standard µg/g	7.8

PCB-Polychlorinated Biphenyls

MECP Table 3 (2011) non-potable, all types of property use, coarse textured soils

BH-102
BH-103
BH-101
BH-105
BH-104
RIVERSIDE DRIVE
SARAH BILLINGS PLACE
LESLIE AVENUE
NORWOOD AVEN
CRESTVIEW ROAD

Legend

Phase Two Property

Railway

Analytical Results

Groundwater Samples Not Sampled

Groundwater Samples Met Standards for All Parameters, Shown in Green

NOTE: All features are approximate

Data Source:
Basemap - ESRI, Roads, Railway - Land Information Ontario

Figure 19
Groundwater Analytical Results - Polychlorinated Biphenyls
1967 Riverside Drive, Ottawa, Ontario
Phase Two Environmental Assessment

1:1,400
0 25 50 Meters

Parsons Job No:	Date:	Author:
13184	2/20/2025	AF

PARSONS

User Name: p0022991

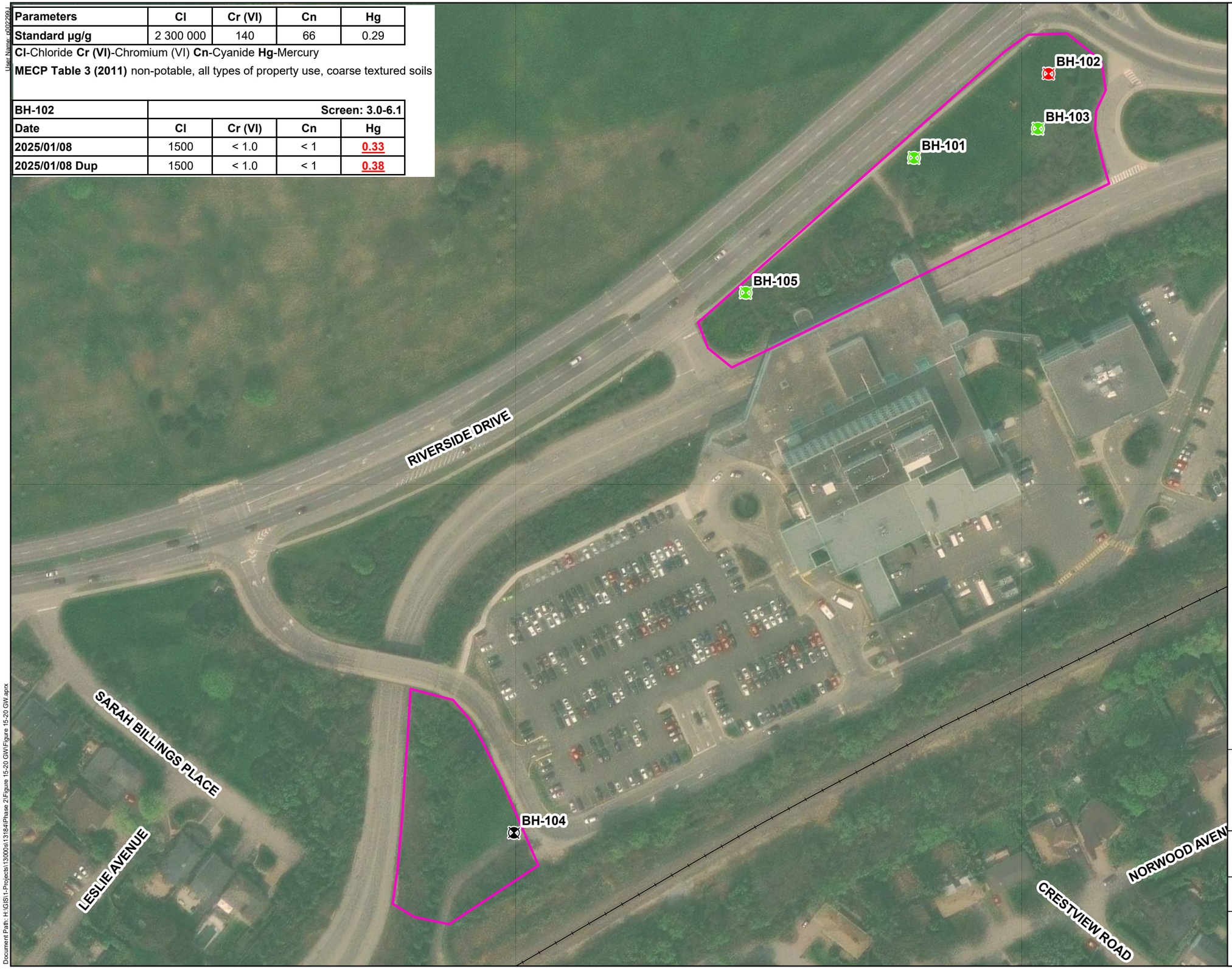
Document Path: H:\GIS\1-Projects\13000s\13184\Phase 2\Figure 15-20 GW\Figure 15-20 GW.aprx

Parameters	Cl	Cr (VI)	Cn	Hg
Standard µg/g	2 300 000	140	66	0.29

Cl-Chloride **Cr (VI)**-Chromium (VI) **Cn**-Cyanide **Hg**-Mercury

MECP Table 3 (2011) non-potable, all types of property use, coarse textured soils

BH-102				Screen: 3.0-6.1
Date	Cl	Cr (VI)	Cn	Hg
2025/01/08	1500	< 1.0	< 1	0.33
2025/01/08 Dup	1500	< 1.0	< 1	0.38



Legend

- Phase Two Property
- Railway

Analytical Results

- Groundwater Samples Not Sampled
- Groundwater Samples Met Standards for All Parameters, Shown in Green
- At Least One Groundwater Sample Exceeded Standards for at least One Parameter, Shown in Red

NOTE: All features are approximate

Data Source:
Basemap - ESRI, Roads, Railway - Land Information Ontario

Figure 20
Groundwater Analytical Results -
Other Regulated Parameters

1967 Riverside Drive, Ottawa, Ontario
Phase Two Environmental Assessment

1:1,400
0 25 50 Meters

Parsons Job No:	Date:	Author:
13184	2/21/2025	AF

PARSONS

Primary Source	Release & Transport Mechanism	Secondary Source	Exposure Pathway	On-Site Human Receptors: Indoor Worker	Outdoor Worker	Subsurface Worker	Property Visitor
COCs in Soil	Root Uptake	Vegetation	Dermal Contact & Ingestion	×	✓	✓	✓
			Ingestion of Garden Produce	×	×	×	×
	Wind Erosion	Outdoor Air	Inhalation of Dust	×	✓	✓	✓
			Vapour Skin Contact	×	✓	✓	✓
			Inhalation of Vapours	×	✓	✓	✓
	Volatilization	Trench Air	Vapour Skin Contact	×	×	✓	×
			Inhalation of Vapours	×	×	✓	×
		Indoor Air	Vapour Skin Contact	×	×	×	×
			Inhalation of Vapours	×	×	×	×
	Leaching	Outdoor Air	Ingestion of Potable Groundwater	×	×	×	×
			Dermal Contact & Ingestion	×	×	✓	×
			Vapour Skin Contact	×	✓	✓	✓
			Inhalation of Vapours	×	✓	✓	✓
COCs in Groundwater	Volatilization	Trench Air	Vapour Skin Contact	×	×	✓	×
			Inhalation of Vapours	×	×	✓	×
		Indoor Air	Vapour Skin Contact	×	×	×	×
			Inhalation of Vapours	×	×	×	×
	Migration	Surface Water	Dermal Contact & Ingestion	×	×	×	×

Legend

✓ Complete Exposure Pathway

× Incomplete Exposure Pathway

Figure 21

Human Health Conceptual Site Model without Risk Management Measures

1967 Riverside Drive, Ottawa, Ontario
Phase Two Environmental Assessment

Parsons Job No:	Date:	Author:
13184	2/26/2025	AF

PARSONS

Primary Source	Release & Transport Mechanism	Secondary Source	Exposure Pathway	On-Site Ecological Receptors: Terrestrial Vegetation	Soil Organisms	Terrestrial Mammals	Terrestrial Birds
COCs in Soil	Dietary Uptake	Food/Prey	Ingestion	×	×	✓	✓
	Wind Erosion	Outdoor Air	Inhalation of Dust	×	×	✓	✓
			Stem/Foliar Uptake	✓	×	×	×
	Volatilization		Inhalation of Vapours	×	✓	✓	✓
		Soil	Ingestion	×	✓	✓	✓
			Dermal Contact	×	✓	✓	✓
	Leaching		Root Uptake	✓	×	×	×
COCs in Groundwater**		Groundwater	Ingestion	×	×	×	×
			Dermal Contact	×	×	×	×
			Root Uptake	×	×	×	×
	Volatalization	Outdoor Air	Inhalation of Vapours	×	×	×	×
			Foliar Uptake	×	×	×	×
	Migration	Surface Water	Ingestion	×	×	×	×
			Dermal Contact	×	×	×	×
			Stem/Foliar Uptake	×	×	×	×
			Root Uptake of Sediment	×	×	×	×
			Gill Uptake	×	×	×	×
			Ingestion of Fish/Livestock	×	×	×	×

Legend

✓ Complete Exposure Pathway

× Incomplete Exposure Pathway

** Exposure pathways are incomplete, as COCs are inaccessible to ecological receptors due to the depth of groundwater (>1.5 mbgs)

Figure 22

Ecological Conceptual Site Model without Risk Management Measures

1967 Riverside Drive, Ottawa, Ontario
Phase Two Environmental Assessment

Parsons Job No:	Date:	Author:
13184	2/26/2025	AF

PARSONS

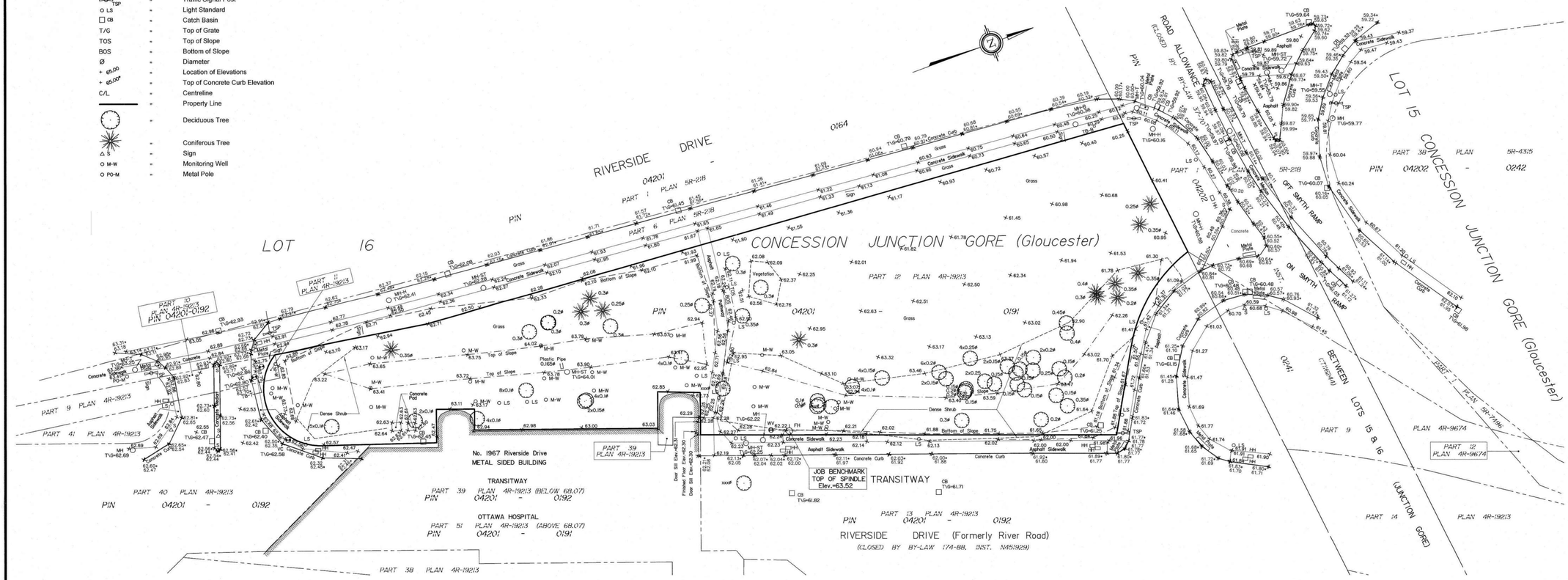
APPENDIX A

Legal Survey of Phase Two Property

Notes & Legend

Denotes

MH-ST	=	Maintenance Hole (Storm Sewer)
MH-B	=	Maintenance Hole (Bell)
MH-T	=	Maintenance Hole (Traffic)
MH-H	=	Maintenance Hole (Hydro)
MH	=	Maintenance Hole (Unidentified)
VC	=	Valve Chamber (Watermain)
FH	=	Fire Hydrant
WV	=	Water Valve
HH	=	Handhole
TB-B	=	Bell Terminal Box
TB-T	=	Traffic Terminal Box
TSP	=	Traffic Signal Post
LS	=	Light Standard
CB	=	Catch Basin
T/G	=	Top of Grate
TOS	=	Top of Slope
BOS	=	Bottom of Slope
Ø	=	Diameter
+ 65.00	=	Location of Elevations
+ 65.00*	=	Top of Concrete Curb Elevation
C/L	=	Centreline
	=	Property Line
	=	Deciduous Tree
	=	Coniferous Tree
S	=	Sign
M-W	=	Monitoring Well
PO-M	=	Metal Pole



TOPOGRAPHICAL SKETCH OF

THE NORTHERLY PART OF PIN 04201-0191

Being PART OF LOT 16 CONCESSION JUNCTION GORE
GEOGRAPHIC TOWNSHIP OF GLOUCESTER
CITY OF OTTAWA

Prepared by Annis, O'Sullivan, Vollebekk Ltd.
Fieldwork completed May 28, 2024
Added 33 trees June 27, 2024

Scale 1 : 400

16 12 8 4 0 8 16 Metres

Metric

DISTANCES AND COORDINATES SHOWN ON THIS PLAN ARE IN METRES AND CAN BE CONVERTED TO FEET BY DIVIDING BY 0.3048.

June 27, 2024
Date

E. H. Herweyer
Ontario Land Surveyor

BOUNDARY INFORMATION COMPILED FROM PLANS 4R-19213, 4R-35573 AND 4R-36051.

ELEVATION NOTES

1. Elevations shown are geodetic and are referred to the CGVD28 geodetic datum and are derived from the Vertical Control Monument 019680274 having an elevation of 66.322 metres.
2. It is the responsibility of the user of this information to verify that the job benchmark has not been altered or disturbed and that it's relative elevation and description agrees with the information shown on this drawing.

UTILITY NOTES

1. This drawing cannot be accepted as acknowledging all of the utilities and it will be the responsibility of the user to contact the respective utility authorities for confirmation.
2. Only visible surface utilities were located.
3. Underground utility data derived from City of Ottawa utility sheet reference
4. Sanitary and storm sewer grades and inverts were derived from
5. A field location of underground plant by the pertinent utility authority is mandatory before any work involving breaking ground, probing, excavating etc.

ANNIS, O'SULLIVAN, VOLLEBEKK LTD.
14 Concourse Gate, Suite 500
Nepean, Ont. K2E 7S6
Phone: (613) 727-0850 / Fax: (613) 727-1079
Email: Nepean@annvoll.com
Ontario Land Surveyors

Job No. 24416-24 Parson Riverside Dr T2 02

TOPOGRAPHICAL SKETCH OF

THE SOUTHERLY PART OF PIN 04201-0191

Being PART OF LOT 16 CONCESSION JUNCTION GORE GEOGRAPHIC TOWNSHIP OF GLOUCESTER CITY OF OTTAWA

Prepared by Annis, O'Sullivan, Vollebekk Ltd.
Fieldwork completed March 21, 2024

Metric

DISTANCES AND COORDINATES SHOWN ON THIS PLAN ARE IN METRES AND CAN BE CONVERTED TO FEET BY DIVIDING BY 0.3048.

Date

E. H. Herweyer
Ontario Land Surveyor

Notes & Legend

Denotes		
MH-ST	=	Maintenance Hole (Storm Sewer)
MH-S	=	Maintenance Hole (Sanitary)
MH-T	=	Maintenance Hole (Traffic)
MH-H	=	Maintenance Hole (Hydro)
VC	=	Valve Chamber (Watermain)
CBI	=	Catch Basin Inlet
CB	=	Catch Basin
FH	=	Fire Hydrant
WV	=	Water Valve
TB-T	=	Traffic Terminal Box
TB	=	Unidentified Terminal Box
TSP	=	Traffic Signal Post
LS	=	Light Standard
B	=	Bollard
S	=	Sign
CLF	=	Chain Link Fence
TOS	=	Top of Slope
BOS	=	Bottom of Slope
TSL	=	Traffic Light
SB	=	Sound Barrier
GU	=	Guard Rail
W	=	Underground Water (Marked by Others)
Ø	=	Diameter
+ 65.00	=	Location of Elevations
+ 65.00*	=	Top of Concrete Curb Elevation
C/L	=	Centreline
	=	Property Line
	=	Deciduous Tree
	=	Coniferous Tree

BOUNDARY INFORMATION COMPILED FROM PLANS 4R-19213, 4R-35573 AND 4R-36051.

Distances shown on this plan are ground distances and can be converted to grid distances by multiplying by the combined scale factor of 0.999947.

Bearings are grid, derived from the easterly limit of Part 31 Plan 4R-19213 shown to be N19°57'30"E thereon, MTM Zone 9 (76°30' West Longitude) NAD-83 (original).

Coordinates are derived from Can-Net 2016 Real Time Network GPS observations referenced to Specified Control Points 01919680105 and 01918434761, MTM Zone 9 (76°30' West Longitude) NAD-83 (original).

Coordinate values are to urban accuracy in accordance with O. Reg. 216/10.

. 01919680105	Northing	5024915.16	Easting	373971.65
. 01919843476 1	Northing	5036178.12	Easting	372436.11

Caution: Coordinates cannot, in themselves, be used to re-establish corners or boundaries shown on this plan.

ELEVATION NOTES

1. Elevations shown are geodetic and are referred to the CGVD28 geodetic datum and are derived from the Vertical Control Monument 0196802 74 having an elevation of 66.322 metres.
2. It is the responsibility of the user of this information to verify that the job benchmark has not been altered or disturbed and that it's relative elevation and description agrees with the information shown on this drawing.

UTILITY NOTES

1. This drawing cannot be accepted as acknowledging all of the utilities and it will be the responsibility of the user to contact the respective utility authorities for confirmation.
2. Only visible surface utilities were located.
3. A field location of underground plant by the pertinent utility authority is mandatory before any work involving breaking ground, probing, excavating etc.

Caution

This is NOT a Plan of Survey and shall not be used except for the purpose indicated in the title block.

ANNIS, O'SULLIVAN, VOLLEBEKK LTD.
14 Concourse Gate, Suite 500
Nepean, Ont. K2E 7S6
Phone: (613) 727-0850 / Fax: (613) 727-1079
Email: Nepean@aovltd.com
Ontario Land Surveyors

Job No. 24616-24 Parsonsinc PTL116 JG GL T DI

APPENDIX B

Sampling and Analysis Plan

PARSONS

Sampling and Analysis Plan

Location (Depth)	Well Screen Interval	Rationale	Location of Soil Samples	Depth Soil Samples Required (mbgs)	Soil Parameters	Groundwater Parameters
BH-1 (~6 mbgs)	~3-6	Assess APEC #3 railway & APEC #1 fill	1 sample (fill material) 1 sample (highest impact/water table) 1 sample (vertical delineation, on hold)	Shallow fill (<1.5 mbgs) water table/impacted zone delineation/BOH	BTEX, PHCs, VOCs, PAHs, metals, ORPs PAHs, metals, ORPs, OCPs BTEX, PHCs, PAHs, metals, ORPs, OCPs (on hold)	BTEX, PHCs, PAHs, metals
BH-2 (~6 mbgs)	~3-6	Assess APEC #2 former landfill & APEC #1 fill	1 sample (fill material) 1 sample (highest impact/water table) 1 sample (vertical delineation, on hold)	Shallow fill (<1.5 mbgs) water table/impacted zone delineation/BOH	BTEX, PHCs, VOCs, PAHs, metals, ORPs BTEX, PHCs, VOCs, PAHs, metals, ORPs, PCBs BTEX, PHCs, VOCs, PAHs, metals, ORPs, PCBs (on hold)	BTEX, PHCs, VOCs, PAHs, metals, ORPs, PCBs
BH-3 (~6 mbgs)	~3-6	Assess APEC #1 fill	1 sample (fill material) 1 sample (vertical delineation, on hold)	Shallow fill (<1.5 mbgs) delineation/BOH	BTEX, PHCs, VOCs, PAHs, metals, ORPs BTEX, PHCs, VOCs, PAHs, metals, ORPs (on hold)	BTEX, PHCs, VOCs, PAHs, metals, ORPs
BH-4 (~6 mbgs)	~3-6	Assess APEC #2 former landfill & APEC #1 fill	1 sample (fill material) 1 sample (highest impact/water table) 1 sample (vertical delineation, on hold)	Shallow fill (<1.5 mbgs) water table/impacted zone delineation/BOH	BTEX, PHCs, VOCs, PAHs, metals, ORPs BTEX, PHCs, VOCs, PAHs, metals, ORPs, PCBs BTEX, PHCs, VOCs, PAHs, metals, ORPs, PCBs (on hold)	BTEX, PHCs, VOCs, PAHs, metals, ORPs, PCBs
BH-5 (~6 mbgs)	~3-6	Assess APEC #1 fill	1 sample (fill material) 1 sample (vertical delineation, on hold)	Shallow fill (<1.5 mbgs) delineation/BOH	BTEX, PHCs, VOCs, PAHs, metals, ORPs BTEX, PHCs, VOCs, PAHs, metals, ORPs (on hold)	BTEX, PHCs, VOCs, PAHs, metals, ORPs
Other		pH as per Regulation 153/04 as amended for standards selection and RA requirements	4 - pH	2 for surface soils <1.5 m 2 for subsurface soils > 1.5 m	pH	N/A
Other		QA/QC - Field Duplicate	1 sample / 10 samples per media	N/A	BTEX, PHCs, VOCs, PAHs, metals, ORPs	N/A
Other		QA/QC - Field Blank	1 sample/event per media	N/A	VOCs, PHC F1	BTEX, PHCs, VOCs

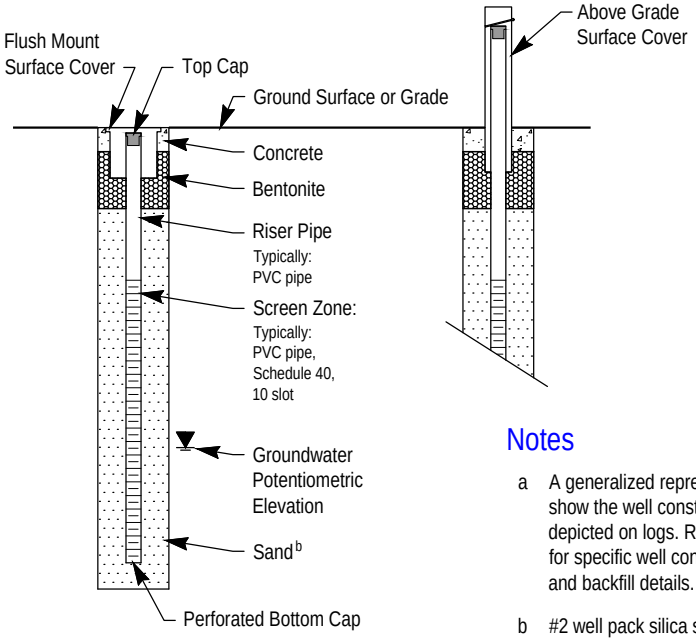
Notes:
metals- hydride forming & HWSB; ORP - SAR & EC
mbgs: metres below ground surface
BOH: bottom of hole
COPC: contaminated of potential concern
BTEX: benzene, toluene, ethylbenzene and xylenes
VOCs: volatile organic compounds
PHCs: petroleum hydrocarbon fractions 1 to 4
PAHs: polycyclic aromatic hydrocarbons
PCBs: polychlorinated biphenyls

APPENDIX C

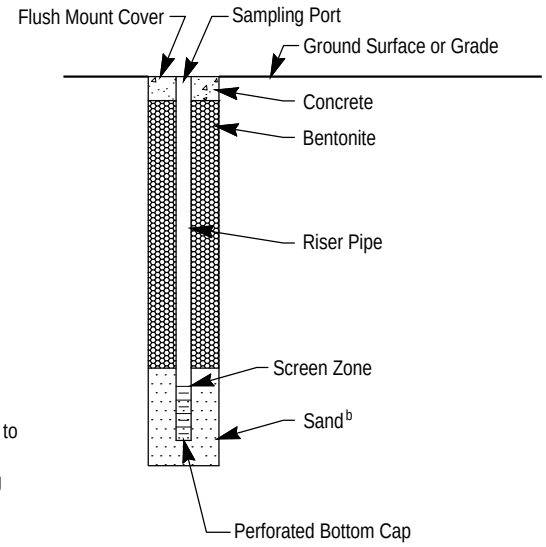
Field Logs

BOREHOLE LOG LEGEND

Monitoring Well Details [a]



Soil Gas Monitoring Well (SGMW) Details [a]



Notes

a A generalized representation to show the well construction depicted on logs. Refer to log for specific well construction and backfill details.

b #2 well pack silica sand

Backfill and Stratigraphy Legend

The most common soil types and combinations are shown here.

- ASPHALT
- BENTONITE
- BOULDERS
- COBBLES
- Concrete
- Clay
- Drill Cuttings
- Gravel
- Grout
- Peat
- Sand [b]
- Slough
- Silt
- Topsoil

Bedrock Legend

- Other Overburden
- Other Bedrock
- Conglomerate
- Dolostone
- Limestone
- Shale
- Sandstone
- Siltstone
- Igneous Intrusive
- Metamorphic
- Mudstone
- Igneous Extrusive

Sample Type

DC	Drill Cutting
G	Grab
SL	Sleeved Tube
SS	Split Spoon
ST	Shelby Tube
OS	Other
RC	Rock Core

Miscellaneous

W	Moisture Content
LL	Liquid Limit
PL	Plastic Limit
R	Refusal
NR	No Recovery

Soil Descriptions

Soil descriptions are based on the Unified Soils Classification System using standard soil classification techniques that are employed in the field.

Grab Samples are obtained by a stainless steel spoon, side wall sampler, hand auger or other sampling tool.

'N' Value is determined from a Standard Penetration Test. R represents a blow count of 50 or greater for a drive distance of 150 mm or less.

Templates: 64
Updated: 2024-08-27

BOREHOLE LOG

BOREHOLE LOCATION: 1967 Riverside Drive, Ottawa	REF. NO: 10-13184	BOREHOLE NO: **BH-101**
CLIENT: The Ottawa Hospital		START DATE: 2024/12/19
		COMPLETION DATE: 2024/12/19
		PAGE 1 of 1

Depth (ft)	Depth (m)	DESCRIPTION: STRATIGRAPHY	SYMBOL	SAMPLING: SAMPLE TYPE	SAMPLE RUN	SAMPLE COLLECTED FOR LABORATORY ANALYSES	▲ SOIL VAPOUR CONCENTRATION (ppmv) 100 200 300 400	COMMENTS AND MONITORING WELL NOTES: ▼ Groundwater Potentiometric Surface on date noted	MONITORING WELL
0	0	GROUND SURFACE						Surface Cover: Flush Mount	
		ORGANIC MATERIAL - grass.							
		SAND - brown, fine grained, silty, trace gravel, damp.		SL			▲		
	1			SL		Sample Collected & Analyzed	▲		
5				SL			▲		
	2			NR					
10	3			SL			▲		
▼				SL		Sample Collected & Analyzed	▲	2024/12/19 ▼	
	4			SL					
15		- wet below 4.9 m.		SL			▲		
	5			SL		Sample Collected & Analyzed	▲		
20	6	END OF BOREHOLE at 6.1 m						Monitoring Well Installed Well Diameter 51 mm Well Material PVC Screen Type 10 Slot Screened From 3.0 m Screened To 6.1 m	
		No Daylighting Performed							
25	7								
	8								

START DEPTH	HOLE SIZE	EQUIPMENT	CONTRACTOR	Gas Detector: RKI Eagle		
0.0 m	102 mm	MI3; Direct Push	Strata	LOGGED: PP	REVIEW: KM	DRAFTED: LW

PARSONS

BOREHOLE LOG

BOREHOLE LOCATION: 1967 Riverside Drive, Ottawa	REF. NO: 10-13184	BOREHOLE NO: **BH-102**
CLIENT: The Ottawa Hospital		START DATE: 2024/12/19
		COMPLETION DATE: 2024/12/19
		PAGE 1 of 1

Depth (ft)	Depth (m)	DESCRIPTION: STRATIGRAPHY	SYMBOL	SAMPLING: SAMPLE TYPE	SAMPLE RUN	SAMPLE COLLECTED FOR LABORATORY ANALYSES	▲ SOIL VAPOUR CONCENTRATION (ppmv) 100 200 300 400	◆ SOIL VAPOUR CONCENTRATION (%LEL) 20 40 60 80	COMMENTS AND MONITORING WELL NOTES	MONITORING WELL
0	0	GROUND SURFACE							Surface Cover: Flush Mount	
		ORGANIC MATERIAL - grass.								
		SAND - brown, fine grained, silty, damp.		SL						
	1			SL						
5				SL		Sample Collected & Analyzed				
		CLAY - brown, lenses of clay.								
	2			SL						
		SAND - brown, fine grained, silty, trace gravel, damp.		SL						
10	3			SL						
		- black, wet, black staining and odour below 3.4 m.								
				SL						
	4								2024/12/19 ▼	
15		CLAY - gray, damp.		SL		Sample Collected & Analyzed				
	5			SL		Sample Collected & Analyzed				
		SAND - fine grained, moist.								
		END OF BOREHOLE (REFUSAL) at 5.5 m							Monitoring Well Installed	
20	6	No Daylighting Performed							Well Diameter 51 mm Well Material PVC Screen Type 10 Slot Screened From 2.4 m Screened To 3.0 m	
	7									
25										
	8									

START DEPTH	HOLE SIZE	EQUIPMENT	CONTRACTOR	Gas Detector: RKI Eagle		
0.0 m	102 mm	MI3; Direct Push	Strata	LOGGED: PP	REVIEW: KM	DRAFTED: LW

PARSONS

BOREHOLE LOG

BOREHOLE LOCATION: 1967 Riverside Drive, Ottawa	REF. NO: 10-13184	BOREHOLE NO: **BH-103**
CLIENT: The Ottawa Hospital		START DATE: 2024/12/19
		COMPLETION DATE: 2024/12/19
		PAGE 1 of 1

Depth (ft)	Depth (m)	DESCRIPTION: STRATIGRAPHY	SYMBOL	SAMPLING: SAMPLE TYPE	SAMPLE RUN	SAMPLE COLLECTED FOR LABORATORY ANALYSES	▲ SOIL VAPOUR CONCENTRATION (ppmv) 100 200 300 400	COMMENTS AND MONITORING WELL NOTES ▼ Groundwater Potentiometric Surface on date noted	MONITORING WELL
0	0	GROUND SURFACE						Surface Cover: Flush Mount	
		ORGANIC MATERIAL - grass.							
		SAND (Fill) - brown, fine grained, some silt, trace gravel, damp, grass.		SL			▲		
				SL		Sample Collected & Analyzed	▲		
5	1			SL			▲		
	2			SL			▲		
10	3	- no recovery below 3.0 m due to debris.		SL		Sample Collected & Analyzed	▲		
								2024/12/19 ▼	
	4								
15				NR					
	5								
20	6	END OF BOREHOLE at 6.1 m						Monitoring Well Installed Well Diameter 51 mm Well Material PVC Screen Type 10 Slot Screened From 3.0 m Screened To 6.1 m	
		No Daylighting Performed							
	7								
25									
	8								

START DEPTH	HOLE SIZE	EQUIPMENT	CONTRACTOR	Gas Detector: RKI Eagle		
0.0 m	102 mm	MI3; Direct Push	Strata	LOGGED: PP	REVIEW: KM	DRAFTED: LW

PARSONS

BOREHOLE LOG

BOREHOLE LOCATION: 1967 Riverside Drive, Ottawa	REF. NO: 10-13184	BOREHOLE NO: **BH-104**
CLIENT: The Ottawa Hospital		START DATE: 2024/12/20
		COMPLETION DATE: 2024/12/20
		PAGE 1 of 1

Depth (ft)	Depth (m)	DESCRIPTION: STRATIGRAPHY	SYMBOL	SAMPLING: SAMPLE TYPE	SAMPLE RUN	SAMPLE COLLECTED FOR LABORATORY ANALYSES	▲ SOIL VAPOUR CONCENTRATION (ppmv) 100 200 300 400	COMMENTS AND MONITORING WELL NOTES	MONITORING WELL
0	0	GROUND SURFACE						Surface Cover: Flush Mount	
		ASPHALT							
		SAND - brown, medium grained, dry.		SL			▲		
	1			SL			▲		
5				SL		Sample Collected & Analyzed	▲		
	2			SL			▲		
				SL			▲		
10	3			SL			▲		
				SL		Sample Collected & Analyzed	▲		
	4	- some silt below 4.4 m.		SL		Sample Collected & Analyzed	▲		
15								Well Dry on 2024/12/19	
	5	END OF BOREHOLE (REFUSAL) at 5.0 m							
		No Daylighting Performed						Monitoring Well Installed Well Diameter 51 mm Well Material PVC Screen Type 10 Slot Screened From 1.8 m Screened To 4.9 m	
20	6								
	7								
25									
	8								

START DEPTH	HOLE SIZE	EQUIPMENT	CONTRACTOR	Gas Detector: RKI Eagle		
0.0 m	102 mm	MI3; Direct Push	Strata	LOGGED: PP	REVIEW: KM	DRAFTED: LW

PARSONS

BOREHOLE LOG

BOREHOLE LOCATION: 1967 Riverside Drive, Ottawa	REF. NO: 10-13184	BOREHOLE NO: **BH-105**
CLIENT: The Ottawa Hospital		START DATE: 2024/12/20
		COMPLETION DATE: 2024/12/20
		PAGE 1 of 1

Depth (ft)	Depth (m)	DESCRIPTION: STRATIGRAPHY	SYMBOL	SAMPLING: SAMPLE TYPE	SAMPLE RUN	SAMPLE COLLECTED FOR LABORATORY ANALYSES	▲ SOIL VAPOUR CONCENTRATION (ppmv) 100 200 300 400	COMMENTS AND MONITORING WELL NOTES ▼ Groundwater Potentiometric Surface on date noted	MONITORING WELL
0	0	GROUND SURFACE						Surface Cover: Flush Mount	
		ORGANIC MATERIAL - grass.							
		SAND (Fill) - brown, fine grained, some silt, damp.		SL			▲		
	1	- black, black staining, and pieces of broken glass and wood below 0.9 m.		SL			▲		
5				SL			▲		
	2			SL		Sample Collected & Analyzed	▲		
				SL			▲		
10	3			NR					
				SL		Sample Collected & Analyzed	▲		
	4			NR				2024/12/19 ▼	
15				SL		Sample Collected & Analyzed	▲		
	5	SAND - brown, fine grained, damp.		SL		Sample Collected & Analyzed	▲		
20	6	END OF BOREHOLE at 6.1 m						Monitoring Well Installed Well Diameter 51 mm Well Material PVC Screen Type 10 Slot Screened From 3.0 m Screened To 6.1 m	
		No Daylighting Performed							
25	7								
	8								

START DEPTH	HOLE SIZE	EQUIPMENT	CONTRACTOR	Gas Detector: RKI Eagle		
0.0 m	102 mm	MI3; Direct Push	Strata	LOGGED: PP	REVIEW: KM	DRAFTED: LW

PARSONS

APPENDIX D

Field Data

PARSONS

PARSONS

LOW-FLOW SAMPLING DATA SHEET INCLUDING CORROSIVITY PARAMETERS

Job Number: 10-13184 **Date:** 2025/01/07

Site Address: 1967 Riverside Drive, Ottawa **Technician(s):** Daniel Nahir

BOREHOLE DATA BH ID: BH-101 BOH: 6.1 Top of Screen: 3

LOW-FLOW SAMPLING

Sampling Pump: Perisaltic Multi-Parameter Probe: Horiba

Flow-Through Cell: Yes Tubing: 1/4" LDPE

Water Reading (mbtpc): 3.792 Probe No:

Depth of Intake Tube (m): 5.7

Total Volume Removed (L):

Product Reading (m):

Time (hh:mm)	Water Level (mbtpc)	Flow Rate (mL/min)	Temp (°C)	pH	EC (mS/cm)	DO (mg/L)	ORP (mV)	Turbidity (NTU)	Salinity (%)	Total Dissolved Solids (g/L)
13:46	3.955	120	4.31	9.33	22.3	7.35	20	1000		
13:49	3.963	120	7.39	8.56	20.4	11.7	56	891		
13:52	3.972	120	7.71	8.5	20.2	11.69	60	865		
13:55	3.984	120	8.18	8.28	20.7	11.08	57	824		
13:58	3.996	120	8.25	8.27	20.7	10.98	60	718		
14:01	4.002	120	8.45	8.24	20.4	10.8	67	758		

Comments: mbtpc = metres below top of pipe casing

PARSONS

LOW-FLOW SAMPLING DATA SHEET INCLUDING CORROSIVITY PARAMETERS

Job Number: 10-13184 **Date:** 2025/01/07

Site Address: 1967 Riverside Drive, Ottawa **Technician(s):** Daniel Nahir

BOREHOLE DATA BH ID: BH-103 BOH: 6.1 Top of Screen: 3

LOW-FLOW SAMPLING

Sampling Pump: Perisaltic Multi-Parameter Probe: Horiba

Flow-Through Cell: Yes Tubing: 1/4" LDPE

Water Reading (mbtpc): 3.809 Probe No:

Depth of Intake Tube (m): 5.5

Total Volume Removed (L):

Product Reading (m):

Time (hh:mm)	Water Level (mbtpc)	Flow Rate (mL/min)	Temp (°C)	pH	EC (mS/cm)	DO (mg/L)	ORP (mV)	Turbidity (NTU)	Salinity (%)	Total Dissolved Solids (g/L)
16:25	4.022	120	3.52	9.32	17	5.92	88	700		
16:28	4.036	120	8.24	8.29	16.2	2.18	86	303		
16:31	4.052	120	8.23	8.28	16.3	2.1	86	295		
16:34	4.063	120	8.2	8.27	16.2	1.92	86	289		

Comments: mbtpc = metres below top of pipe casing

APPENDIX E

MECP Well Records

Ontario — Ministry of the Environment, Conservation and Parks

Well Record

Regulation 903 Ontario Water Resources Act

Measurements recorded in: ☐ Metric ☑ Imperial

Well Tag No. (Place Sticker and/or Print Below) A407812 Tag#:A407812

Page ____ of ____

Well Owner's Information

First Name	Last Name/Organization	E-mail Address	☐ Well Constructed by Well Owner
	Ottawa Hospital		

Mailing Address (Street Number/Name)	Municipality	Province	Postal Code	Telephone No. (inc. area code)
1053 Carling Ave Box 814	Ottawa	ON	K1Y 4E9	

Well Location

Address of Well Location (Street Number/Name)	Township	Lot	Concession
1967 Riverside Dr.			

County/District/Municipality	City/Town/Village	Province	Postal Code
	Ottawa	Ontario	

UTM Coordinates	Zone	Easting	Northing	Municipal Plan and Sublot Number	Other
NAD 83	18	447577	5027290		

Overburden and Bedrock Materials/Abandonment Sealing Record (see instructions on the back of this form)

General Colour	Most Common Material	Other Materials	General Description	Depth (m/ft) From	Depth (m/ft) To
BRN	top soil		loose	0	1
BRN	sand	silt	soft	1	5
BLK	muck	garbage (cans, plastics)	soft	5	18
GRY	silt	sand	soft	18	20

Annular Space

Depth Set at (m/ft) From	To	Type of Sealant Used (Material and Type)	Volume Placed (m^3/ft^3)
0	1	concrete/flush mount	
1	9	bentonite	
9	20	filter sand	

Method of Construction

☐ Cable Tool ☐ Diamond
☐ Rotary (Conventional) ☐ Jetting
☐ Rotary (Reverse) ☐ Driving
☐ Boring ☐ Digging
☑ Air percussion
☐ Other, specify

Well Use

☐ Public ☐ Commercial ☐ Not used
☐ Domestic ☐ Municipal ☐ Dewatering
☐ Livestock ☑ Test Hole ☑ Monitoring
☐ Irrigation ☐ Cooling & Air Conditioning
☐ Industrial
☐ Other, specify

Construction Record - Casing

Inside Diameter (cm/in)	Open Hole OR Material (Galvanized, Fibreglass, Concrete, Plastic, Steel)	Wall Thickness (cm/in)	Depth (m/ft) From	Depth (m/ft) To
2	PVC	.154	0	10

Construction Record - Screen

Outside Diameter (cm/in)	Material (Plastic, Galvanized, Steel)	Slot No.	Depth (m/ft) From	Depth (m/ft) To
2.37	PVC	10	10	20

Status of Well

☐ Water Supply
☐ Replacement Well
☐ Test Hole
☐ Recharge Well
☐ Dewatering Well
☐ Observation and/or Monitoring Hole
☐ Alteration (Construction)
☐ Abandoned, Insufficient Supply
☐ Abandoned, Poor Water Quality
☐ Abandoned, other, specify
☐ Other, specify

Results of Well Yield Testing

After test of well yield, water was:
☐ Clear and sand free
☐ Other, specify

If pumping discontinued, give reason:

Pump intake set at (m/ft)

Pumping rate (l/min / GPM)

Duration of pumping ____ hrs + ____ min

Final water level end of pumping (m/ft)

If flowing give rate (l/min/GPM)

Recommended pump depth (m/ft)

Recommended pump rate (l/min/GPM)

Well production (l/min/GPM)

Disinfected? ☐ Yes ☐ No

	Draw Down Time (min)	Draw Down Water Level (m/ft)	Recovery Time (min)	Recovery Water Level (m/ft)
Static Level				
1			1	
2			2	
3			3	
4			4	
5			5	
10			10	
15			15	
20			20	
25			25	
30			30	
40			40	
50			50	
60			60	

Water Details

Water found at Depth (m/ft)	Gas	Kind of Water: ☐ Fresh ☐ Untested ☐ Other, specify

Hole Diameter

Depth (m/ft) From	Depth (m/ft) To	Diameter (cm/in)
0	20	5"

Map of Well Location

Please provide a map below following instructions on the back.

See Map in W1

Comments:

Well Contractor and Well Technician Information

Business Name of Well Contractor	Well Contractor's Licence No.
Strata Soil Sampling	7241

Business Address (Street Number/Name)	Municipality	Province	Postal Code
129 Ringwood Drive	Stouffville	ON	L4A8C1

Business E-mail Address	Bus. Telephone No. (inc. area code)	Name of Well Technician (Last Name, First Name)
wrecord@stratasoil.com	9059407919	McCoy James

Well Technician's Licence No.	Signature of Technician and/or Contractor	Date Submitted
71073		2025/01/14

Well owner's information package delivered: ☐ Yes ☐ No

Date Package Delivered: Y Y Y Y M M D D

Date Work Completed: 2025/01/07

Ministry Use Only

Audit No. Z443998

Received

Ministry's Copy

Ontario — Ministry of the Environment, Conservation and Parks

Well Record

Regulation 903 Ontario Water Resources Act

Measurements recorded in: ☐ Metric ☑ Imperial

Well Tag No. (Place Sticker and/or Print Below) A407815 Tag#:A407815

Page ____ of ____

Well Owner's Information

First Name	Last Name/Organization	E-mail Address	☐ Well Constructed by Well Owner
	Ottawa Hospital		

Mailing Address (Street Number/Name)	Municipality	Province	Postal Code	Telephone No. (inc. area code)
1053 Carling Ave Box 814	Ottawa	ON	K1Y4E9	

Well Location

Address of Well Location (Street Number/Name)	Township	Lot	Concession
1961 Riverside Drive			

County/District/Municipality	City/Town/Village	Province	Postal Code
	Ottawa	Ontario	

UTM Coordinates	Zone	Easting	Northing	Municipal Plan and Sublot Number	Other
NAD 8 3	18	445892	5027348		

Overburden and Bedrock Materials/Abandonment Sealing Record (see instructions on the back of this form)

General Colour	Most Common Material	Other Materials	General Description	Depth (m/ft) From	Depth (m/ft) To
BRN	top soil		loose,	0	1
BRN	sand	silt	soft	1	7
BLK	muck	garbage(glass,metal,plastic)	loose	7	18
GRY	silt	sand	dense	18	20

Annular Space

Depth Set at (m/ft) From	To	Type of Sealant Used (Material and Type)	Volume Placed (m³/ft³)
0	1	concrete/flush mount	
1	9	bentonite	
9	20	filter sand	

Method of Construction

☐ Cable Tool ☐ Diamond
☐ Rotary (Conventional) ☐ Jetting
☐ Rotary (Reverse) ☐ Driving
☐ Boring ☐ Digging
☑ Air percussion
☐ Other, specify ____

Well Use

☐ Public ☐ Commercial ☐ Not used
☐ Domestic ☐ Municipal ☐ Dewatering
☐ Livestock ☑ Test Hole ☑ Monitoring
☐ Irrigation ☐ Cooling & Air Conditioning
☐ Industrial
☐ Other, specify ____

Construction Record - Casing

Inside Diameter (cm/in)	Open Hole OR Material (Galvanized, Fibreglass, Concrete, Plastic, Steel)	Wall Thickness (cm/in)	Depth (m/ft) From	Depth (m/ft) To
2.37	PVC	.154	0	10

Construction Record - Screen

Outside Diameter (cm/in)	Material (Plastic, Galvanized, Steel)	Slot No.	Depth (m/ft) From	Depth (m/ft) To
2	PVC	10	10	20

Status of Well

☐ Water Supply
☐ Replacement Well
☑ Test Hole
☐ Recharge Well
☐ Dewatering Well
☑ Observation and/or Monitoring Hole
☐ Alteration (Construction)
☐ Abandoned, Insufficient Supply
☐ Abandoned, Poor Water Quality
☐ Abandoned, other, specify
☐ Other, specify

Water Details

Water found at Depth (m/ft)	☐ Gas	Kind of Water: ☐ Fresh ☐ Untested ☐ Other, specify

Hole Diameter

Depth (m/ft) From	Depth (m/ft) To	Diameter (cm/in)
0	20	5"

Results of Well Yield Testing

After test of well yield, water was: ☐ Clear and sand free ☐ Other, specify ____

If pumping discontinued, give reason:

Pump intake set at (m/ft)

Pumping rate (l/min / GPM)

Duration of pumping ____ hrs + ____ min

Final water level end of pumping (m/ft)

If flowing give rate (l/min/GPM)

Recommended pump depth (m/ft)

Recommended pump rate (l/min/GPM)

Well production (l/min/GPM)

Disinfected? ☐ Yes ☐ No

	Draw Down Time (min)	Draw Down Water Level (m/ft)	Recovery Time (min)	Recovery Water Level (m/ft)
Static Level				
1			1	
2			2	
3			3	
4			4	
5			5	
10			10	
15			15	
20			20	
25			25	
30			30	
40			40	
50			50	
60			60	

Map of Well Location

Please provide a map below following instructions on the back.

See Map

MW2

Comments:

Well Contractor and Well Technician Information

Business Name of Well Contractor	Well Contractor's Licence No.
Strata Soil Sampling	7241

Business Address (Street Number/Name)	Municipality	Province	Postal Code
129 Ringwood Drive	Stouffville	ON	L4A8C1

Business E-mail Address	Bus. Telephone No. (inc. area code)	Name of Well Technician (Last Name, First Name)
wrecord@stratasoil.com	9059407919	McCoy James

Well Technician's Licence No.	Signature of Technician and/or Contractor	Date Submitted
7107		2025/01/14

Well owner's information package delivered	Date Package Delivered	Date Work Completed
☐ Yes ☐ No	Y Y Y Y M M D D	2024/12/20

Ministry Use Only

Audit No. Z 443997

Received

0506E (2023/09) © King's Printer for Ontario, 2023

Ministry's Copy

Ontario — Ministry of the Environment, Conservation and Parks

Well Record

Regulation 903 Ontario Water Resources Act

Measurements recorded in: ☐ Metric ☑ Imperial

Well Tag No. (Place Sticker and/or Tag#:A418094) A418094 Tag#:A418094

Page ____ of ____

Well Owner's Information

First Name	Last Name/Organization	E-mail Address	☐ Well Constructed by Well Owner
	Ottawa Hospital		

Mailing Address (Street Number/Name)	Municipality	Province	Postal Code	Telephone No. (inc. area code)
1053 Carling Ave Box 814	Ottawa	ON	K1Y4E9	

Well Location

Address of Well Location (Street Number/Name)	Township	Lot	Concession
1967 Riverside Dr.			

County/District/Municipality	City/Town/Village	Province	Postal Code
	Ottawa	Ontario	

UTM Coordinates	Zone	Easting	Northing	Municipal Plan and Sublot Number	Other
NAD 8 3	18	447605	5027329		

Overburden and Bedrock Materials/Abandonment Sealing Record (see instructions on the back of this form)

General Colour	Most Common Material	Other Materials	General Description	Depth (m/ft) From	Depth (m/ft) To
BRN	top soil		loose	0	1
BRN	sand	silt	soft	1	12
BLK	muck	garbage (glass, metal, plastic)	soft, loose	12	17
GRY	silt	sand	dense	17	20

Annular Space

Depth Set at (m/ft) From	Depth Set at (m/ft) To	Type of Sealant Used (Material and Type)	Volume Placed (m³/ft³)
0	1	concrete/flushmount	
1	9	bentonite	
9	20	Litter sand	

Method of Construction

☐ Cable Tool ☐ Diamond
☐ Rotary (Conventional) ☐ Jetting
☐ Rotary (Reverse) ☐ Driving
☐ Boring ☐ Digging
☑ Air percussion
☐ Other, specify

Well Use

☐ Public ☐ Commercial ☐ Not used
☐ Domestic ☐ Municipal ☐ Dewatering
☐ Livestock ☑ Test Hole ☐ Monitoring
☐ Irrigation ☐ Cooling & Air Conditioning
☐ Industrial
☐ Other, specify

Construction Record - Casing

Inside Diameter (cm/in)	Open Hole OR Material (Galvanized, Fibreglass, Concrete, Plastic, Steel)	Wall Thickness (cm/in)	Depth (m/ft) From	Depth (m/ft) To
2	PVC	.154	0	10

Construction Record - Screen

Outside Diameter (cm/in)	Material (Plastic, Galvanized, Steel)	Slot No.	Depth (m/ft) From	Depth (m/ft) To
2.37	PVC	10	10	20

Status of Well

☐ Water Supply
☐ Replacement Well
☑ Test Hole
☐ Recharge Well
☐ Dewatering Well
☑ Observation and/or Monitoring Hole
☐ Alteration (Construction)
☐ Abandoned, Insufficient Supply
☐ Abandoned, Poor Water Quality
☐ Abandoned, other, specify
☐ Other, specify

Water Details

Water found at Depth (m/ft)	Gas	Kind of Water: ☐ Fresh ☐ Untested ☐ Other, specify
	☐	
Water found at Depth (m/ft)	☐ Gas	Kind of Water: ☐ Fresh ☐ Untested ☐ Other, specify
	☐	
Water found at Depth (m/ft)	☐ Gas	Kind of Water: ☐ Fresh ☐ Untested ☐ Other, specify
	☐	

Hole Diameter

Depth (m/ft) From	Depth (m/ft) To	Diameter (cm/in)
0	20	5"

Results of Well Yield Testing

After test of well yield, water was:
☐ Clear and sand free
☐ Other, specify

If pumping discontinued, give reason:

Pump intake set at (m/ft)

Pumping rate (l/min / GPM)

Duration of pumping ____ hrs + ____ min

Final water level end of pumping (m/ft)

If flowing give rate (l/min/GPM)

Recommended pump depth (m/ft)

Recommended pump rate (l/min/GPM)

Well production (l/min/GPM)

Disinfected? ☐ Yes ☐ No

	Draw Down Time (min)	Draw Down Water Level (m/ft)	Recovery Time (min)	Recovery Water Level (m/ft)
Static Level				
1			1	
2			2	
3			3	
4			4	
5			5	
10			10	
15			15	
20			20	
25			25	
30			30	
40			40	
50			50	
60			60	

Map of Well Location

Please provide a map below following instructions on the back.

See Map

Well Contractor and Well Technician Information

Business Name of Well Contractor	Well Contractor's Licence No.
Strata Soil Sampling	7241

Business Address (Street Number/Name)	Municipality
1 ngwood Drive	Stouffville

Province	Postal Code	Business E-mail Address
	4A8C1	wrecord@stratasoil.com

area code)	Name of Well Technician (Last Name, First Name)
919	M cCoy JAMES

o.	Signature of Technician and/or Contractor	Date Submitted
		2025/04/16

Comments:

Well owner's information package delivered	Date Package Delivered	Date Work Completed
☐ Yes ☐ No	Y Y Y Y M M D D	2024/12/20

Ministry Use Only

Audit No. Z416597

Received

ter for Ontario, 2020

Ministry's Copy

Ontario — Ministry of the Environment, Conservation and Parks

Measurements recorded in: ☐ Metric ☑ Imperial

Well Tag No. (Place Sticker and/or Print Below) A418095 Tag#:A418095

Well Record

Regulation 903 Ontario Water Resources Act

Page ____ of ____

Well Owner's Information

First Name	Last Name/Organization	E-mail Address	☐ Well Constructed by Well Owner
	Ottawa Hospital		

Mailing Address (Street Number/Name)	Municipality	Province	Postal Code	Telephone No. (inc. area code)
1053 Carling Ave Box 814	Ottawa	ON	K1Y 4E9	

Well Location

Address of Well Location (Street Number/Name)	Township	Lot	Concession
1961 Riverside Dr.			

County/District/Municipality	City/Town/Village	Province	Postal Code
	Ottawa	Ontario	

UTM Coordinates	Zone	Easting	Northing	Municipal Plan and Sublot Number	Other
NAD 8 3	18	447640	5026992		

Overburden and Bedrock Materials/Abandonment Sealing Record (see instructions on the back of this form)

General Colour	Most Common Material	Other Materials	General Description	Depth (m/ft) From	To
GRY	gravel		loose	0	1
BRN	sand	silt	soft	1	12
GRY	silt	clay	dense	12	20

Annular Space

Depth Set at (m/ft) From	To	Type of Sealant Used (Material and Type)	Volume Placed (m³/ft³)
0	1	concrete/flushmount	
1	9	bentonite	
9	20	filter sand	

Method of Construction

☐ Cable Tool ☐ Diamond ☐ Rotary (Conventional) ☐ Jetting ☐ Rotary (Reverse) ☐ Driving ☐ Boring ☐ Digging ☑ Air percussion ☐ Other, specify

Well Use

☐ Public ☐ Commercial ☐ Not used ☐ Domestic ☐ Municipal ☐ Dewatering ☐ Livestock ☑ Test Hole ☑ Monitoring ☐ Irrigation ☐ Cooling & Air Conditioning ☐ Industrial ☐ Other, specify

Construction Record - Casing

Inside Diameter (cm/in)	Open Hole OR Material (Galvanized, Fibreglass, Concrete, Plastic, Steel)	Wall Thickness (cm/in)	Depth (m/ft) From	To
2	PVC	.154	0	10

Construction Record - Screen

Outside Diameter (cm/in)	Material (Plastic, Galvanized, Steel)	Slot No.	Depth (m/ft) From	To
2.37	PVC	10	10	20

Status of Well

☐ Water Supply ☐ Replacement Well ☑ Test Hole ☐ Recharge Well ☐ Dewatering Well ☑ Observation and/or Monitoring Hole ☐ Alteration (Construction) ☐ Abandoned, Insufficient Supply ☐ Abandoned, Poor Water Quality ☐ Abandoned, other, specify ☐ Other, specify

Water Details

Water found at Depth (m/ft)	☐ Gas	Kind of Water: ☐ Fresh ☐ Untested ☐ Other, specify
Water found at Depth (m/ft)	☐ Gas	Kind of Water: ☐ Fresh ☐ Untested ☐ Other, specify
Water found at Depth (m/ft)	☐ Gas	Kind of Water: ☐ Fresh ☐ Untested ☐ Other, specify

Hole Diameter

Depth (m/ft) From	To	Diameter (cm/in)
0	20	5"

Results of Well Yield Testing

After test of well yield, water was: ☐ Clear and sand free ☐ Other, specify

If pumping discontinued, give reason:

Pump intake set at (m/ft)

Pumping rate (l/min / GPM)

Duration of pumping ____ hrs + ____ min

Final water level end of pumping (m/ft)

If flowing give rate (l/min/GPM)

Recommended pump depth (m/ft)

Recommended pump rate (l/min/GPM)

Well production (l/min/GPM)

Disinfected? ☐ Yes ☐ No

	Draw Down Time (min)	Draw Down Water Level (m/ft)	Recovery Time (min)	Recovery Water Level (m/ft)
Static Level				
1			1	
2			2	
3			3	
4			4	
5			5	
10			10	
15			15	
20			20	
25			25	
30			30	
40			40	
50			50	
60			60	

Map of Well Location

Please provide a map below following instructions on the back.

See Map MWY

Comments:

Well Contractor and Well Technician Information

Business Name of Well Contractor	Well Contractor's Licence No.
Strata Soil Sampling	7241

Business Address (Street Number/Name)	Municipality
1[illegible]ingwood Drive	Stouffville

Province	Postal Code	Business E-mail Address
ON	L4A8C1	wrecord@stratasoil.com

Bus. Telephone No. (inc. area code)	Name of Well Technician (Last Name, First Name)
9059407919	McCoy James

Well Technician's Licence No.	Signature of Technician and/or Contractor	Date Submitted
7107		2024/06/19

Well owner's information package delivered ☐ Yes ☐ No

Date Package Delivered: Y Y Y Y M M D D

Date Work Completed: 2024/12/9

Ministry Use Only

Audit No. Z416598

Received

Ministry's Copy

Ontario | Ministry of the Environment, Conservation and Parks

Well Tag No. (Place Sticker and/or Print Below) A418096 Tag#:A418096

Well Record

Regulation 903 Ontario Water Resources Act

Measurements recorded in: ☐ Metric ☑ Imperial

Page ____ of ____

Well Owner's Information

First Name	Last Name/Organization	E-mail Address	☐ Well Constructed by Well Owner
	Ottawa Hospital		

Mailing Address (Street Number/Name)	Municipality	Province	Postal Code	Telephone No. (inc. area code)
1053 Carling Ave Box 814	Ottawa	ON	K1Y4E9	

Well Location

Address of Well Location (Street Number/Name)	Township	Lot	Concession
1967 Riverside Dr.			

County/District/Municipality	City/Town/Village	Province	Postal Code
	Ottawa	Ontario	

UTM Coordinates	Zone	Easting	Northing	Municipal Plan and Sublot Number	Other
NAD 83	18	447568	5027189		

Overburden and Bedrock Materials/Abandonment Sealing Record (see instructions on the back of this form)

General Colour	Most Common Material	Other Materials	General Description	Depth (m/ft) From	Depth (m/ft) To
BRN	top soil		loose	0	1
BRN	sand	clay	soft	1	12
BRN	clay	silt	soft	12	16
GRY	silt	sand	dense	16	20

Annular Space

Depth Set at (m/ft) From	To	Type of Sealant Used (Material and Type)	Volume Placed (m³/ft³)
0	1	concrete/flushmou[nt]	
1	9	bentonite	
9	20	filter sand	

Results of Well Yield Testing

After test of well yield, water was: ☐ Clear and sand free ☐ Other, specify

If pumping discontinued, give reason:

Pump intake set at (m/ft)

Pumping rate (l/min / GPM)

Duration of pumping ___ hrs + ___ min

Final water level end of pumping (m/ft)

If flowing give rate (l/min/GPM)

Recommended pump depth (m/ft)

Recommended pump rate (l/min/GPM)

Well production (l/min/GPM)

Disinfected? ☐ Yes ☐ No

Draw Down Time (min)	Water Level (m/ft)	Recovery Time (min)	Water Level (m/ft)
Static Level			
1		1	
2		2	
3		3	
4		4	
5		5	
10		10	
15		15	
20		20	
25		25	
30		30	
40		40	
50		50	
60		60	

Method of Construction

☐ Cable Tool ☐ Diamond ☐ Rotary (Conventional) ☐ Jetting ☐ Rotary (Reverse) ☐ Driving ☐ Boring ☐ Digging ☑ Air percussion ☐ Other, specify

Well Use

☐ Public ☐ Domestic ☐ Livestock ☐ Irrigation ☐ Industrial ☐ Other, specify ☐ Commercial ☐ Municipal ☑ Test Hole ☐ Cooling & Air Conditioning ☐ Not used ☑ Dewatering ☑ Monitoring

Construction Record - Casing

Inside Diameter (cm/in)	Open Hole OR Material (Galvanized, Fibreglass, Concrete, Plastic, Steel)	Wall Thickness (cm/in)	Depth (m/ft) From	To
2	PVC	.154	0	10

Status of Well

☐ Water Supply ☐ Replacement Well ☑ Test Hole ☐ Recharge Well ☐ Dewatering Well ☑ Observation and/or Monitoring Hole ☐ Alteration (Construction) ☐ Abandoned, Insufficient Supply ☐ Abandoned, Poor Water Quality ☐ Abandoned, other, specify ☐ Other, specify

Construction Record - Screen

Outside Diameter (cm/in)	Material (Plastic, Galvanized, Steel)	Slot No.	Depth (m/ft) From	To
2.37	PVC	10	10	20

Map of Well Location

Please provide a map below following instructions on the back.

See Map
MWS

Water Details

Water found at Depth (m/ft) ☐ Gas | Kind of Water: ☐ Fresh ☐ Untested ☐ Other, specify

Water found at Depth (m/ft) ☐ Gas | Kind of Water: ☐ Fresh ☐ Untested ☐ Other, specify

Water found at Depth (m/ft) ☐ Gas | Kind of Water: ☐ Fresh ☐ Untested ☐ Other, specify

Hole Diameter

Depth (m/ft) From	To	Diameter (cm/in)
0	20	5

Well Contractor and Well Technician Information

Business Name of Well Contractor	Well Contractor's Licence No.
Strata Soil Sampling	7241

Business Address (Street Number/Name)	Municipality
129 Ringwood Drive	Stouffville

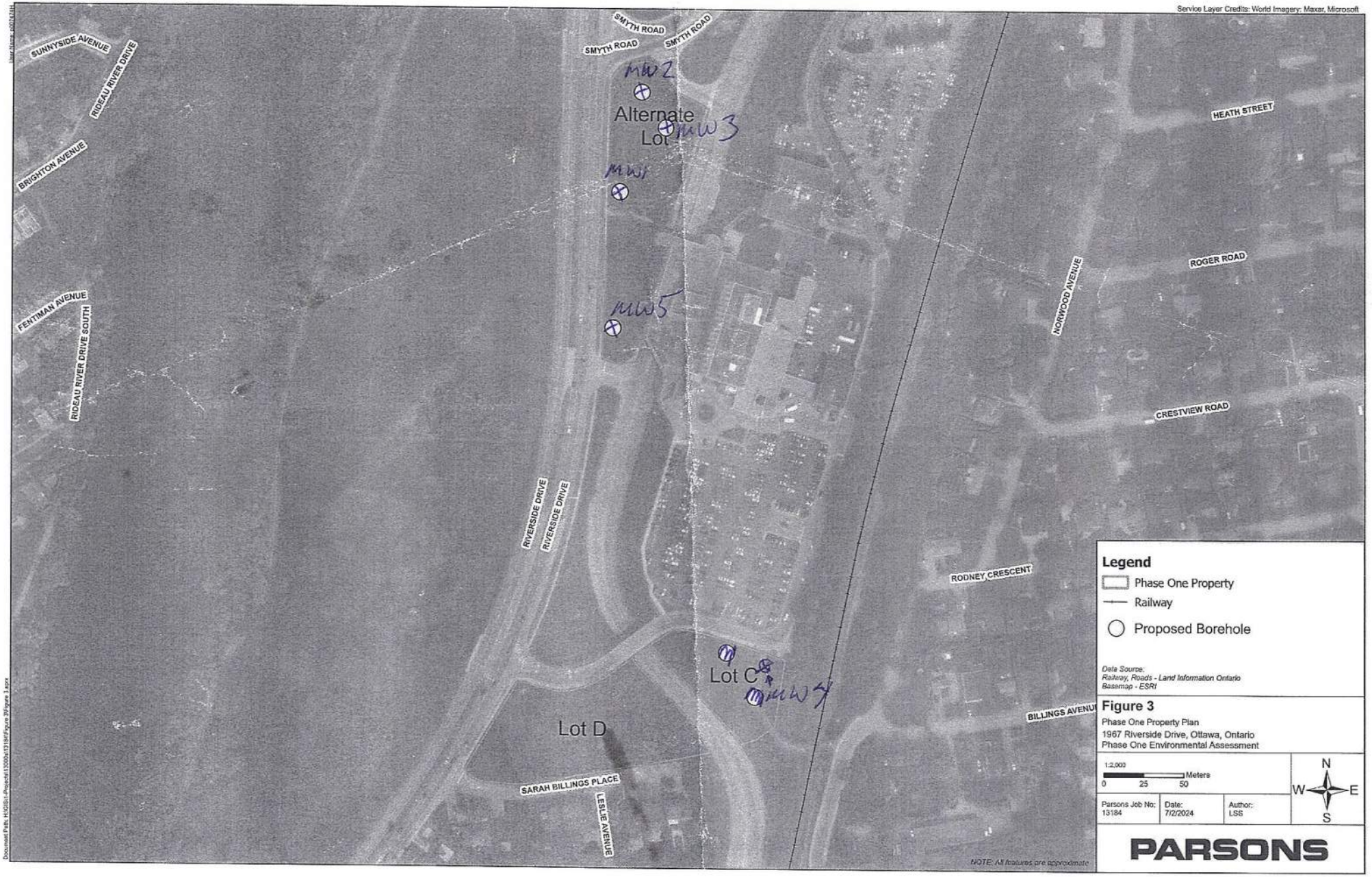
Postal Code	Business E-mail Address
...8C1	wrecord@stratasoil.com

Bus. Telephone No. (inc. area code)	Name of Well Technician (Last Name, First Name)
...919	McLay, James

...No.	Signature of Technician and/or Contractor	Date Submitted
	[signature]	20230106

Comments:

Well owner's information package delivered	Date Package Delivered	Ministry Use Only
☐ Yes ☐ No	Y Y Y Y M M D D	Audit No. Z416599
	Date Work Completed: 20221220	Received


Service Layer Credits: World Imagery: Maxar, Microsoft
SUNNYSIDE AVENUE
RIDEAU RIVER DRIVE
BRIGHTON AVENUE
FENTIMAN AVENUE
RIDEAU RIVER DRIVE SOUTH
SMYTH ROAD
SMYTH ROAD
SMYTH ROAD
MW2
Alternate Lot
MW3
MW1
MW5
HEATH STREET
ROGER ROAD
NORWOOD AVENUE
CRESTVIEW ROAD
RIVERSIDE DRIVE
RIVERSIDE DRIVE
RODNEY CRESCENT
Lot C
MW4
Lot D
BILLINGS AVENUE
SARAH BILLINGS PLACE
LESLIE AVENUE
NOTE: All features are approximate
Legend
Phase One Property
Railway
Proposed Borehole
Data Source:
Railway, Roads - Land Information Ontario
Basemap - ESRI
Figure 3
Phase One Property Plan
1967 Riverside Drive, Ottawa, Ontario
Phase One Environmental Assessment
1:2,000
0 25 50 Meters
N
W E
S
Parsons Job No: 13184
Date: 7/2/2024
Author: LSS
PARSONS

APPENDIX F

Laboratory Certificates of Analysis

C4BP635
2024/12/20 15:05

BUREAU VERITAS

Bureau Veritas
6740 Campobello Road, Mississauga, Ontario Canada L5N 2L8 Tel:(905) 817-5700 Toll-free:800-563-6266 Fax:(905) 817-5777 www.bvna.com

SDB

Page 1 of 1

NONT-2024-12-4535

INVOICE TO:		REPORT TO:		PROJECT INFORMATION:		Laboratory Use Only:
Company Name:	#39369 Parsons Inc.	Company Name:	Parsons Inc	Quotation #:	C35677	Bottle Order #: 1028193
Attention:	Accounts Payable	Attention:	Kelsy Marois	P.O. #:	479008.02000	
Address:	Unit 100 1223 Michael Street North	Address:		Project:	10-13148	COC #: C#1028193-01-01
	Gloucester ON K1J 7T2			Project Name:		Project Manager:
Tel:	(613) 738-4160 Fax:	Tel:	Fax:	Site #:		Katherine Szozda
Email:	ParsonsIncAP.Parsons@parsons.com	Email:	kelsy.marois@parsons.com	Sampled By:	Parth Patel	

MOE REGULATED DRINKING WATER OR WATER INTENDED FOR HUMAN CONSUMPTION MUST BE SUBMITTED ON THE BUREAU VERITAS DRINKING WATER CHAIN OF CUSTODY

Regulation 153 (2011): [x] Table 1 [x] Res/Park [ ] Medium/Fine [ ] Table 2 [ ] Ind/Comm [x] Coarse [x] Table 3 [ ] Agri/Other [ ] For RSC [ ] Table ___

Other Regulations: [ ] CCME [ ] Sanitary Sewer Bylaw [ ] Reg 558 [ ] Storm Sewer Bylaw [ ] MISA Municipality ___ [ ] PWQO [ ] Reg 406 Table ___ [ ] Other ___

Special Instructions

Include Criteria on Certificate of Analysis (Y/N)? ___

ANALYSIS REQUESTED (PLEASE BE SPECIFIC)

Turnaround Time (TAT) Required: Please provide advance notice for rush projects

Regular (Standard) TAT: [ ]
(will be applied if Rush TAT is not specified):
Standard TAT = 5-7 Working days for most tests.
Please note: Standard TAT for certain tests such as BOD and Dioxins/Furans are > 5 days - contact your Project Manager for details.

Job Specific Rush TAT (if applies to entire submission)
Date Required: ___ Time Required: ___ [ ]
Rush Confirmation Number: ___ *(call lab for #)*

#	Sample Barcode Label	Sample (Location) Identification	Date Sampled	Time Sampled	Matrix	Field Filtered (please circle): Metals / Hg / Cr VI	O.Reg 153 VOCs by HS & F1-F4 (Soil)	O.Reg 153 PAHs (Soil)	O.Reg 153 ICPMS Metals (Soil)	O.Reg 153 OC Pesticides & PCBs (Soil)	pH CaCl2 EXTRACT	Grain Size				# of Bottles	Comments
1		241219 BH-101 (0.6-1.2)	12/19/24	09:32	SOIL		X	X	X	X						4	
2		241219 BH-101 (3.7-4.3)	12/19/24	09:41	SOIL		X	X	X	X						4	
3		241219 BH-101 (5.5-6.1)	12/19/24	09:58	SOIL		X	X	X	X						4	
4		241219 BH-102 (1.2-1.8)	12/19/24	11:49	SOIL		X	X	X							4	
5		241219 BH-102 (4.3-4.9)	12/19/24	12:11	SOIL		X	X	X							4	
6		241219 BH-102 (4.9-5.5)	12/19/24	12:36	SOIL		X	X	X							4	
7		241219 BH-103 (2.4-3.1)	12/19/24	13:54	SOIL		X	X	X	X	X					5	
8		241219 BH-103 (0.6-1.2)	12/19/24	13:59	SOIL						X					1	Custody Seal Present Intact / Cooling Media Yes No
9		241220 BH-104 (1.2-1.8)	12/20/24	09:21	SOIL		X	X	X		X					5	
10		241220 BH-104 (3.7-4.3)	12/20/24	09:44	SOIL		X	X	X			X				5	none

* RELINQUISHED BY: (Signature/Print)	Date: (YY/MM/DD)	Time	RECEIVED BY: (Signature/Print)	Date: (YY/MM/DD)	Time	# jars used and not submitted	Time Sensitive	Laboratory Use Only
Parth Patel	24/12/20	15:00	Pedro da Silva	2024/12/20	15:05			Temperature (°C) on Receipt: 11/4/8 10/0/1
			SUGAR SAWYER	2024/12/21	09:29			Custody Seal: Present / Intact — Yes / No

* UNLESS OTHERWISE AGREED TO IN WRITING, WORK SUBMITTED ON THIS CHAIN OF CUSTODY IS SUBJECT TO BUREAU VERITAS'S STANDARD TERMS AND CONDITIONS. SIGNING OF THIS CHAIN OF CUSTODY DOCUMENT IS ACKNOWLEDGMENT AND ACCEPTANCE OF OUR TERMS WHICH ARE AVAILABLE FOR VIEWING AT WWW.BVNA.COM/ENVIRONMENTAL-LABORATORIES/RESOURCES/COC-TERMS-AND-CONDITIONS.

* IT IS THE RESPONSIBILITY OF THE RELINQUISHER TO ENSURE THE ACCURACY OF THE CHAIN OF CUSTODY RECORD. AN INCOMPLETE CHAIN OF CUSTODY MAY RESULT IN ANALYTICAL TAT DELAYS.

** SAMPLE CONTAINER, PRESERVATION, HOLD TIME AND PACKAGE INFORMATION CAN BE VIEWED AT WWW.BVNA.COM/ENVIRONMENTAL-LABORATORIES/RESOURCES/CHAIN-CUSTODY-FORMS-COCS.

2/2/3
0/2/1

SAMPLES MUST BE KEPT COOL (< 10° C) FROM TIME OF SAMPLING UNTIL DELIVERY TO BUREAU VERITAS

White: Bureau Veritas Yellow: Client

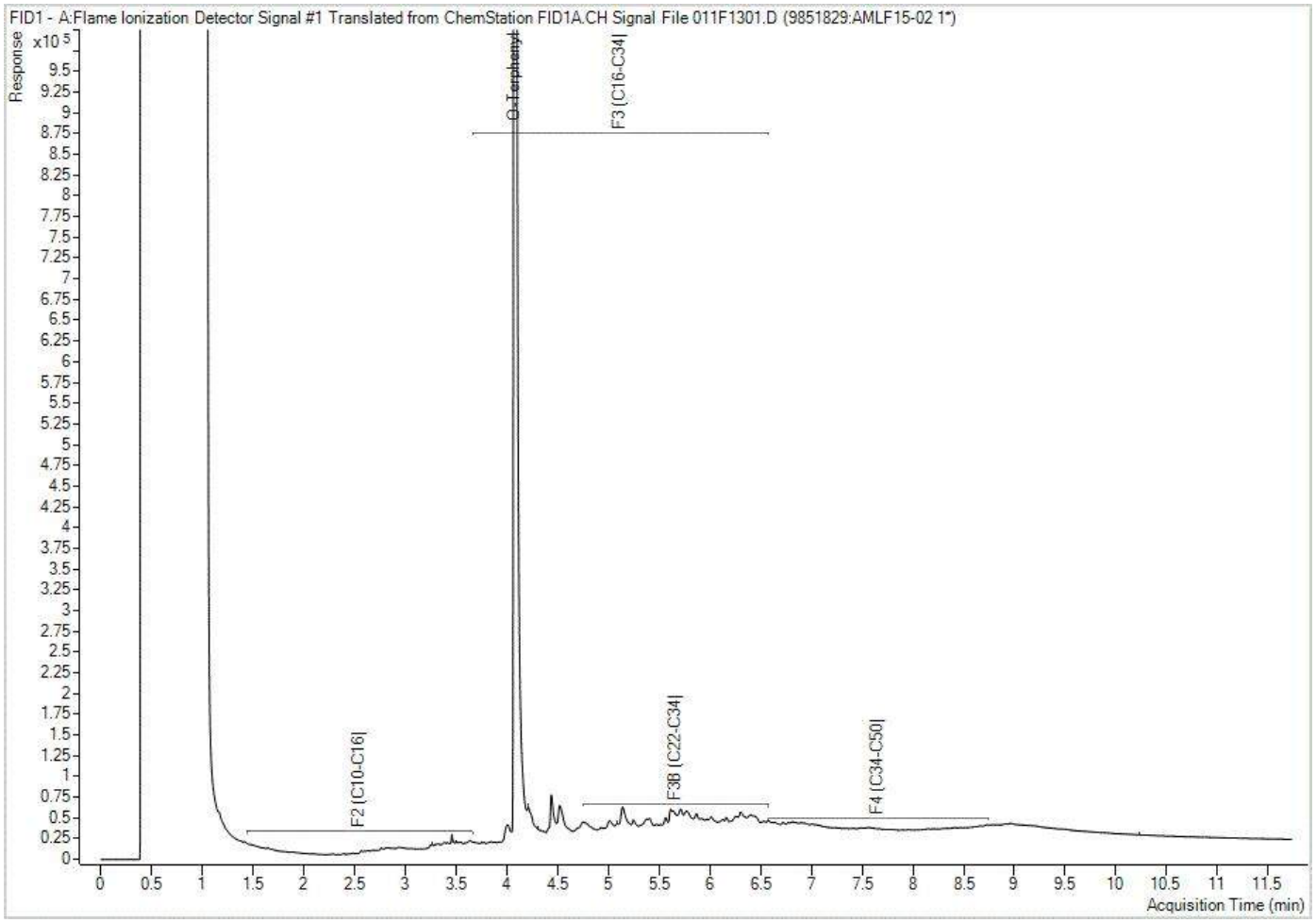
Received in Ottawa

Bureau Veritas Canada (2019) Inc.

Bureau Veritas Job #: C4BP635
Report Date: 2025/01/07
Bureau Veritas Sample: AMLF15

Parsons Inc.
Client Project #: 10-13148
Client ID: 241219BH-101(0.6-1.2)

Petroleum Hydrocarbons F2-F4 in Soil Chromatogram

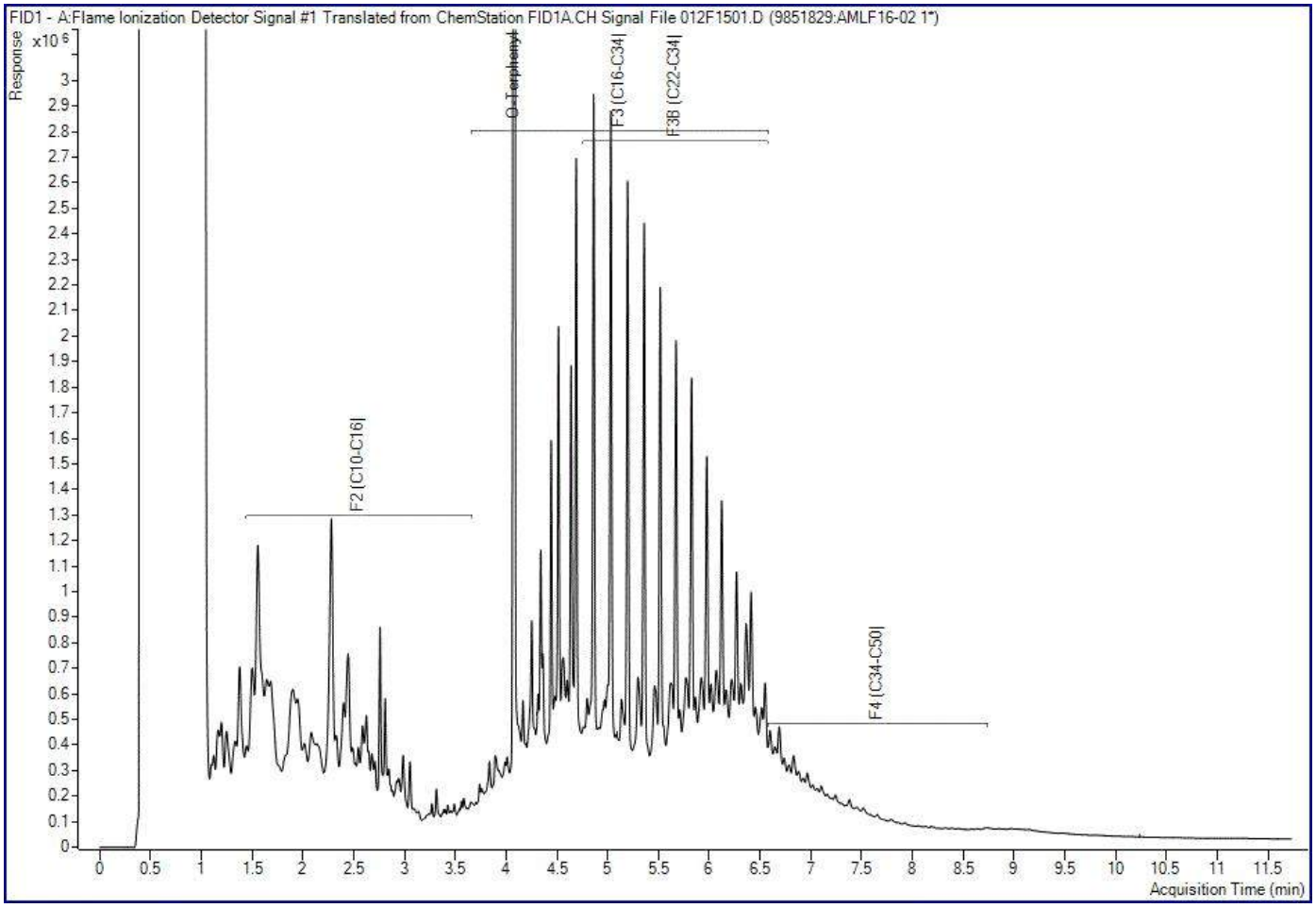


Note: This information is provided for reference purposes only. Should detailed chemist interpretation or fingerprinting be required, please contact the laboratory.

Bureau Veritas Job #: C4BP635
Report Date: 2025/01/07
Bureau Veritas Sample: AMLF16

Parsons Inc.
Client Project #: 10-13148
Client ID: 241219BH-101(3.7-4.3)

Petroleum Hydrocarbons F2-F4 in Soil Chromatogram

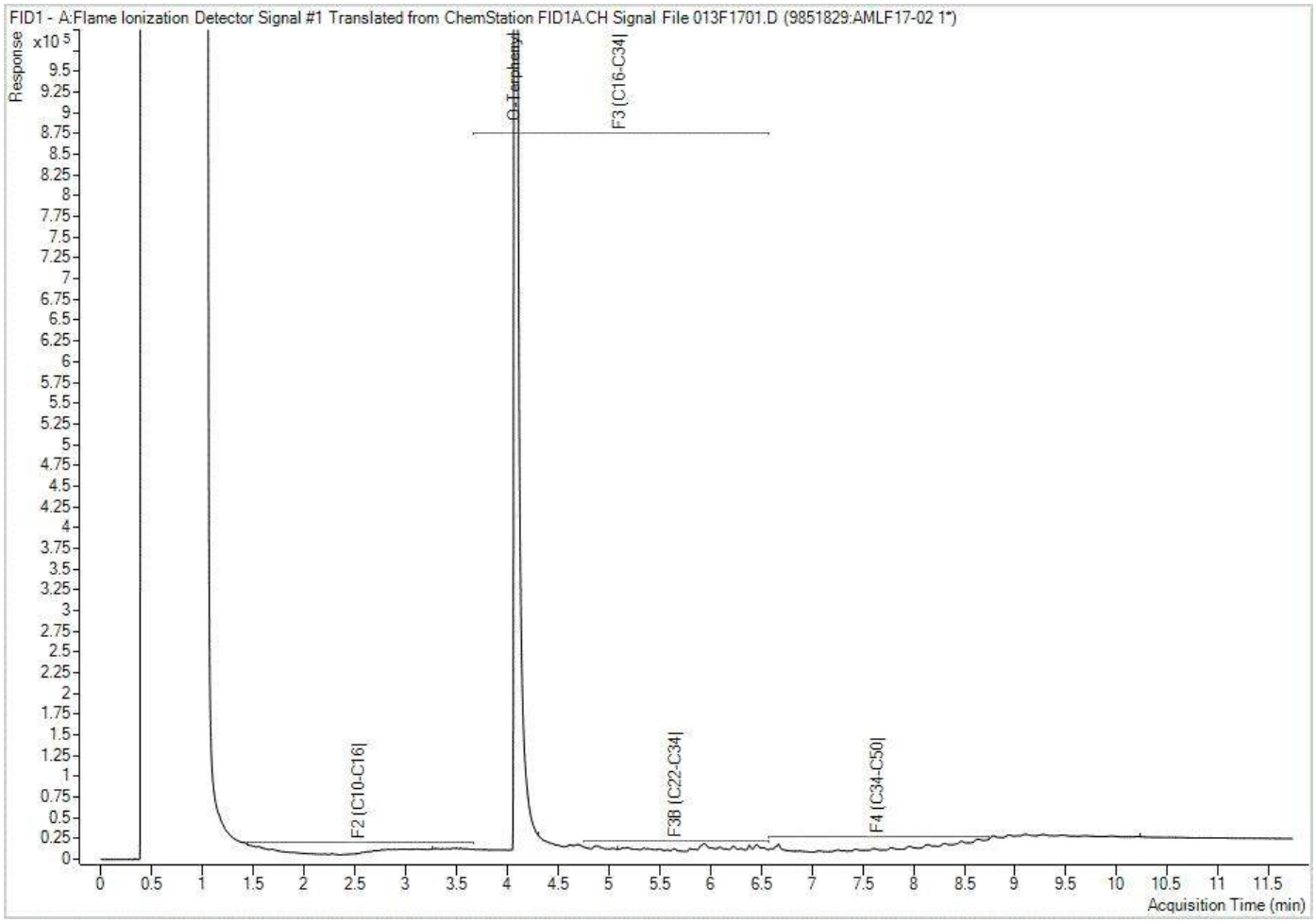


Note: This information is provided for reference purposes only. Should detailed chemist interpretation or fingerprinting be required, please contact the laboratory.

Bureau Veritas Job #: C4BP635
Report Date: 2025/01/07
Bureau Veritas Sample: AMLF17

Parsons Inc.
Client Project #: 10-13148
Client ID: 241219BH-101(5.5-6.1)

Petroleum Hydrocarbons F2-F4 in Soil Chromatogram

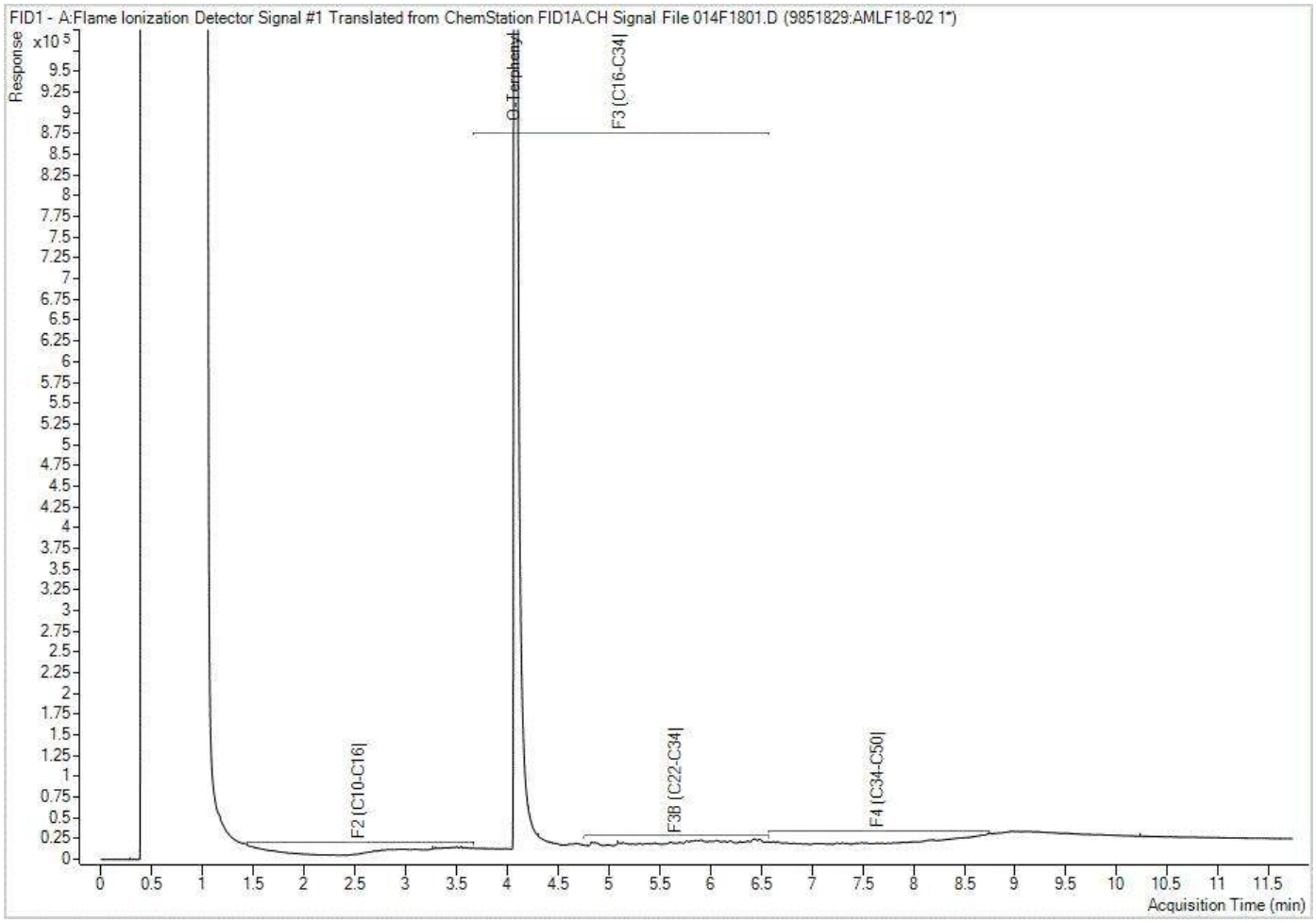


Note: This information is provided for reference purposes only. Should detailed chemist interpretation or fingerprinting be required, please contact the laboratory.

Bureau Veritas Job #: C4BP635
Report Date: 2025/01/07
Bureau Veritas Sample: AMLF18

Parsons Inc.
Client Project #: 10-13148
Client ID: 241219BH-102(1.2-1.8)

Petroleum Hydrocarbons F2-F4 in Soil Chromatogram

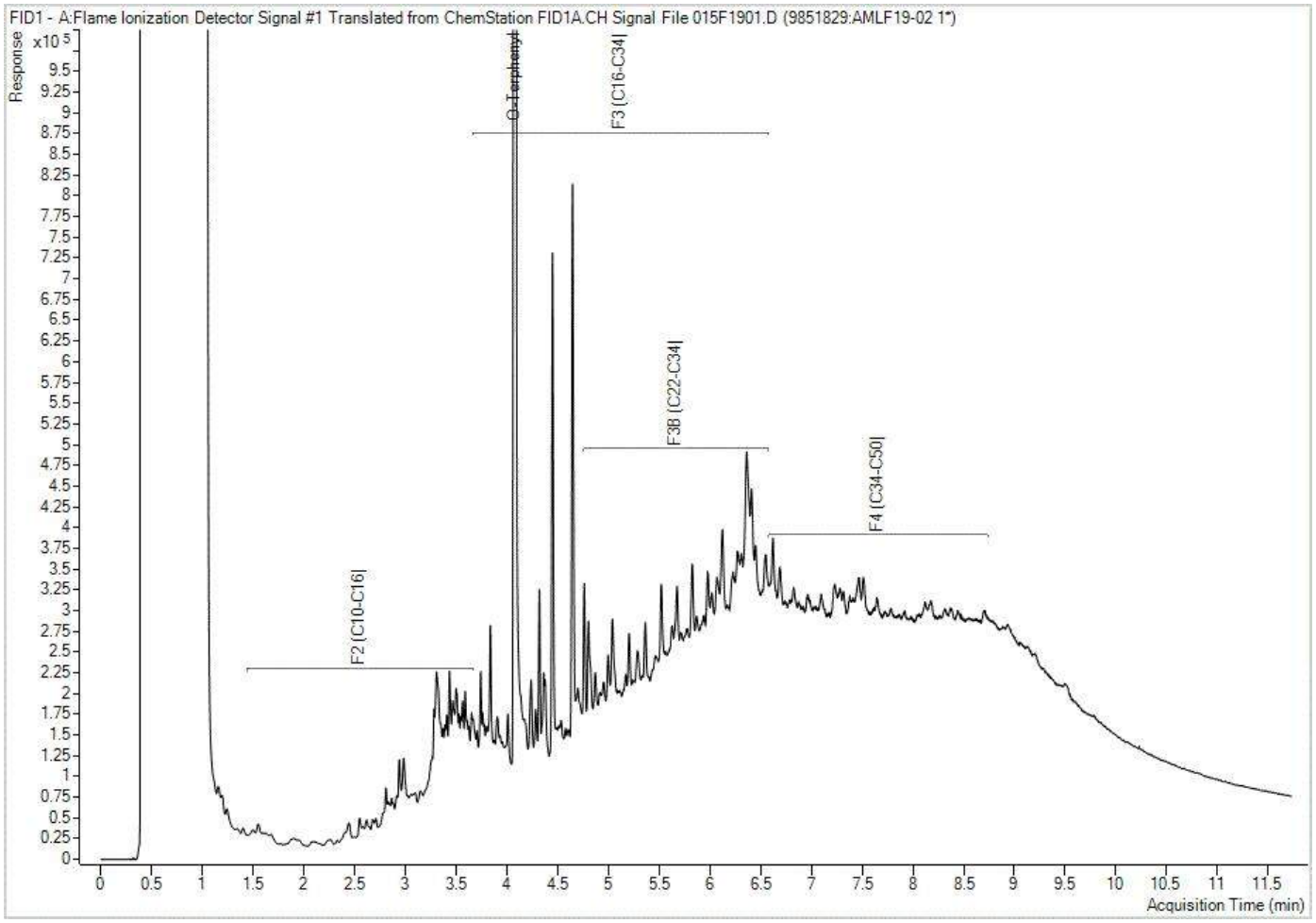


Note: This information is provided for reference purposes only. Should detailed chemist interpretation or fingerprinting be required, please contact the laboratory.

Bureau Veritas Job #: C4BP635
Report Date: 2025/01/07
Bureau Veritas Sample: AMLF19

Parsons Inc.
Client Project #: 10-13148
Client ID: 241219BH-102(4.3-4.9)

Petroleum Hydrocarbons F2-F4 in Soil Chromatogram

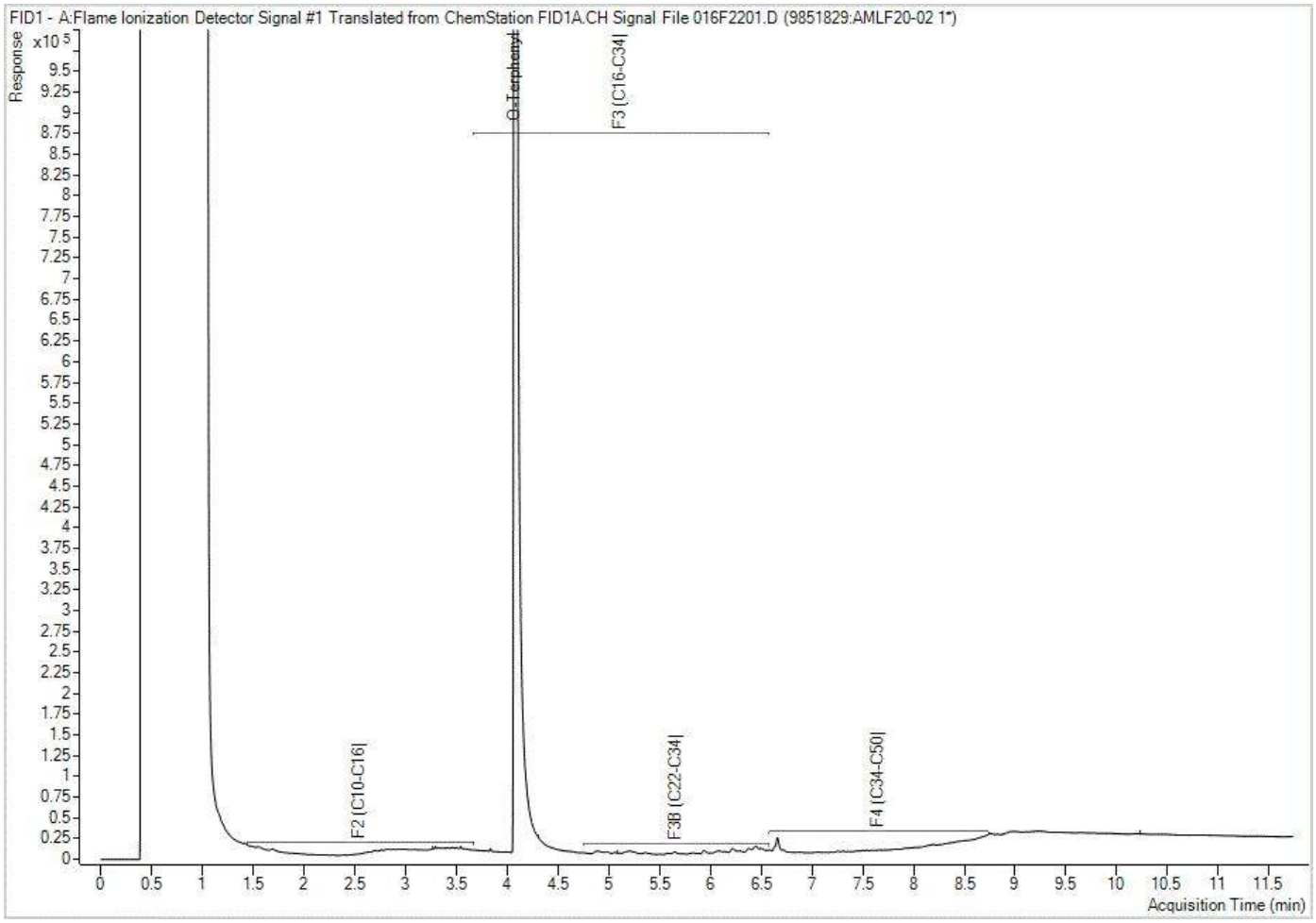


Note: This information is provided for reference purposes only. Should detailed chemist interpretation or fingerprinting be required, please contact the laboratory.

Bureau Veritas Job #: C4BP635
Report Date: 2025/01/07
Bureau Veritas Sample: AMLF20

Parsons Inc.
Client Project #: 10-13148
Client ID: 241219BH-102(4.9-5.5)

Petroleum Hydrocarbons F2-F4 in Soil Chromatogram

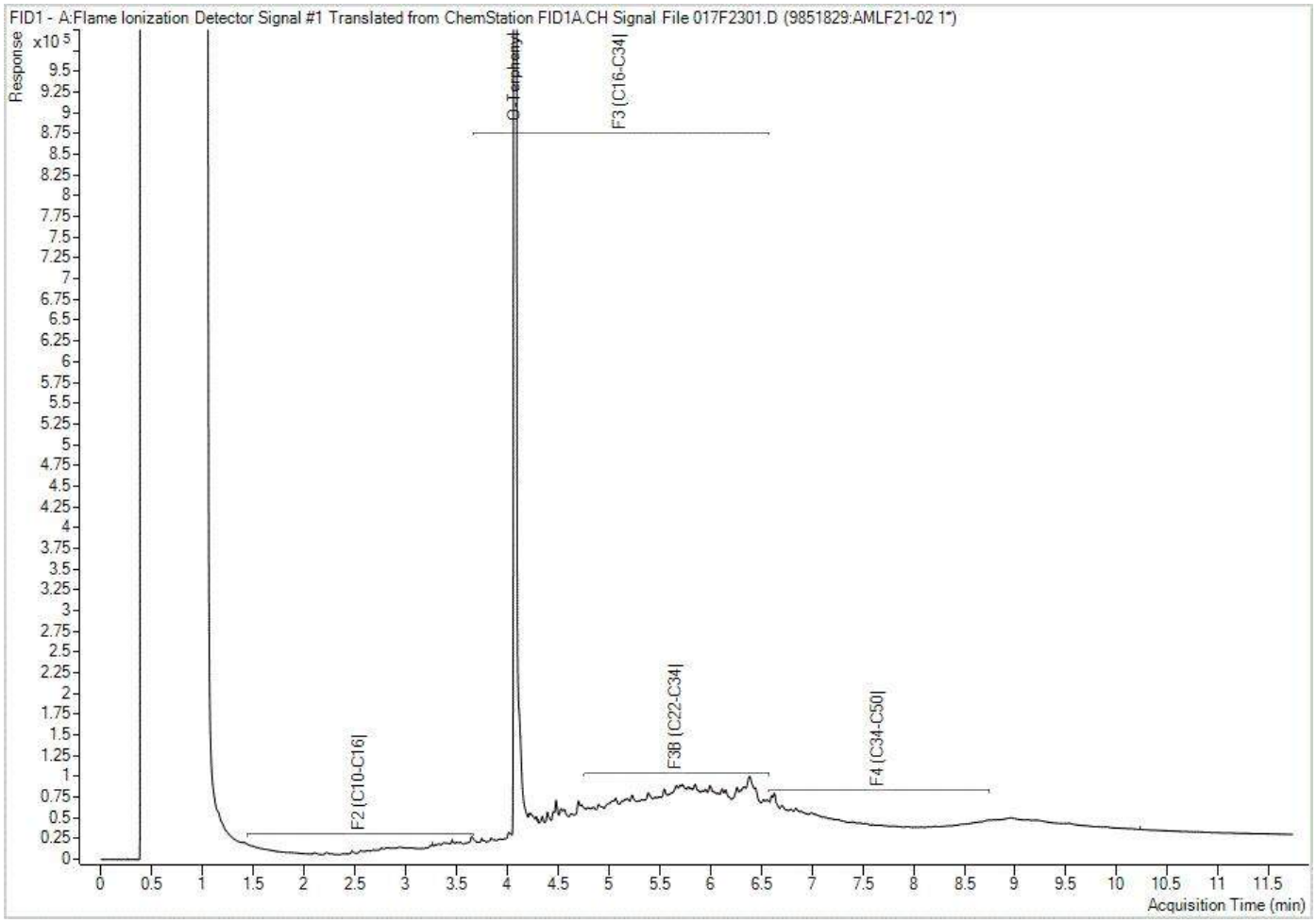


Note: This information is provided for reference purposes only. Should detailed chemist interpretation or fingerprinting be required, please contact the laboratory.

Bureau Veritas Job #: C4BP635
Report Date: 2025/01/07
Bureau Veritas Sample: AMLF21

Parsons Inc.
Client Project #: 10-13148
Client ID: 241219BH-103(2.4-3.1)

Petroleum Hydrocarbons F2-F4 in Soil Chromatogram

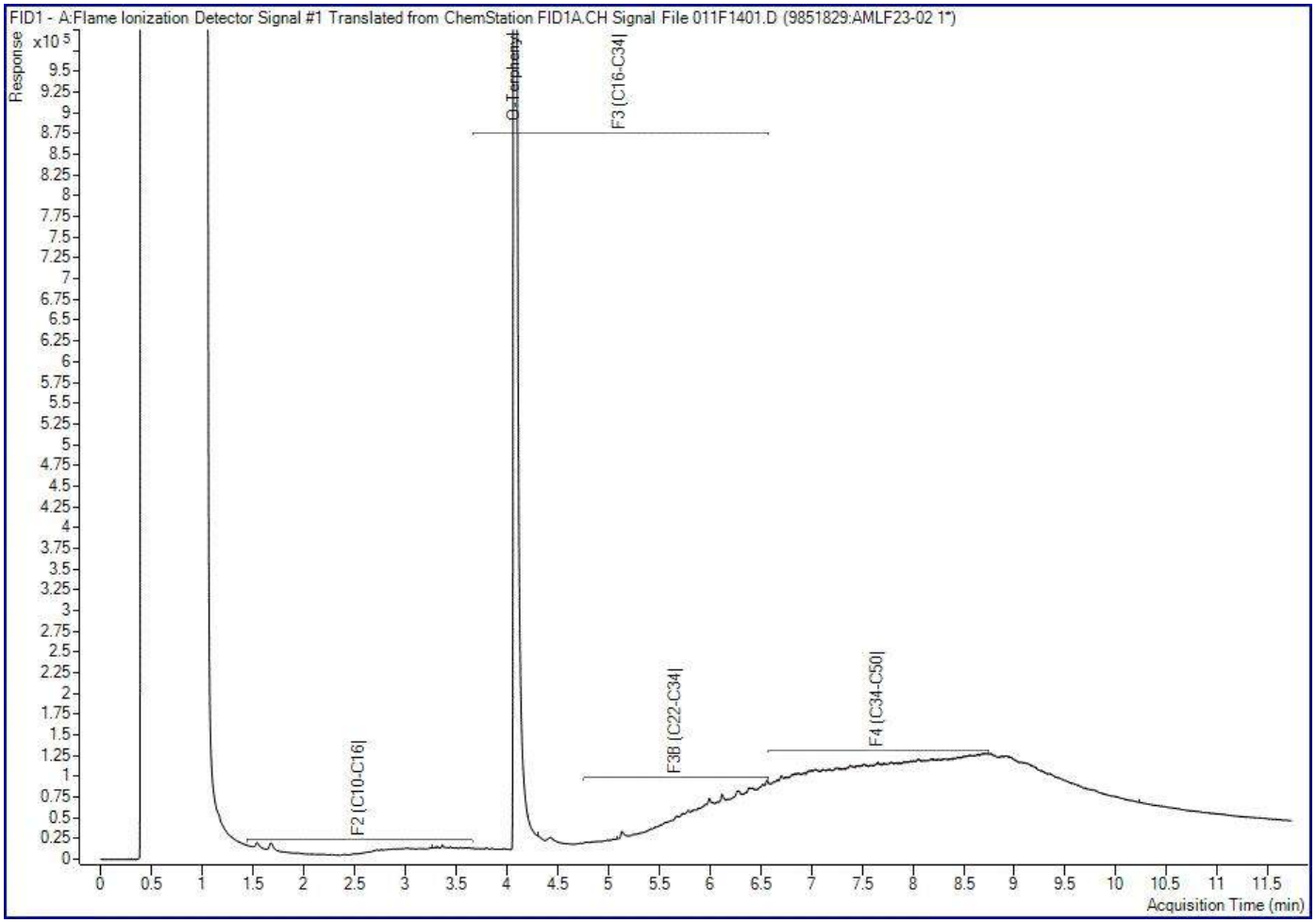


Note: This information is provided for reference purposes only. Should detailed chemist interpretation or fingerprinting be required, please contact the laboratory.

Bureau Veritas Job #: C4BP635
Report Date: 2025/01/07
Bureau Veritas Sample: AMLF23

Parsons Inc.
Client Project #: 10-13148
Client ID: 241219BH-104(1.2-1.8)

Petroleum Hydrocarbons F2-F4 in Soil Chromatogram

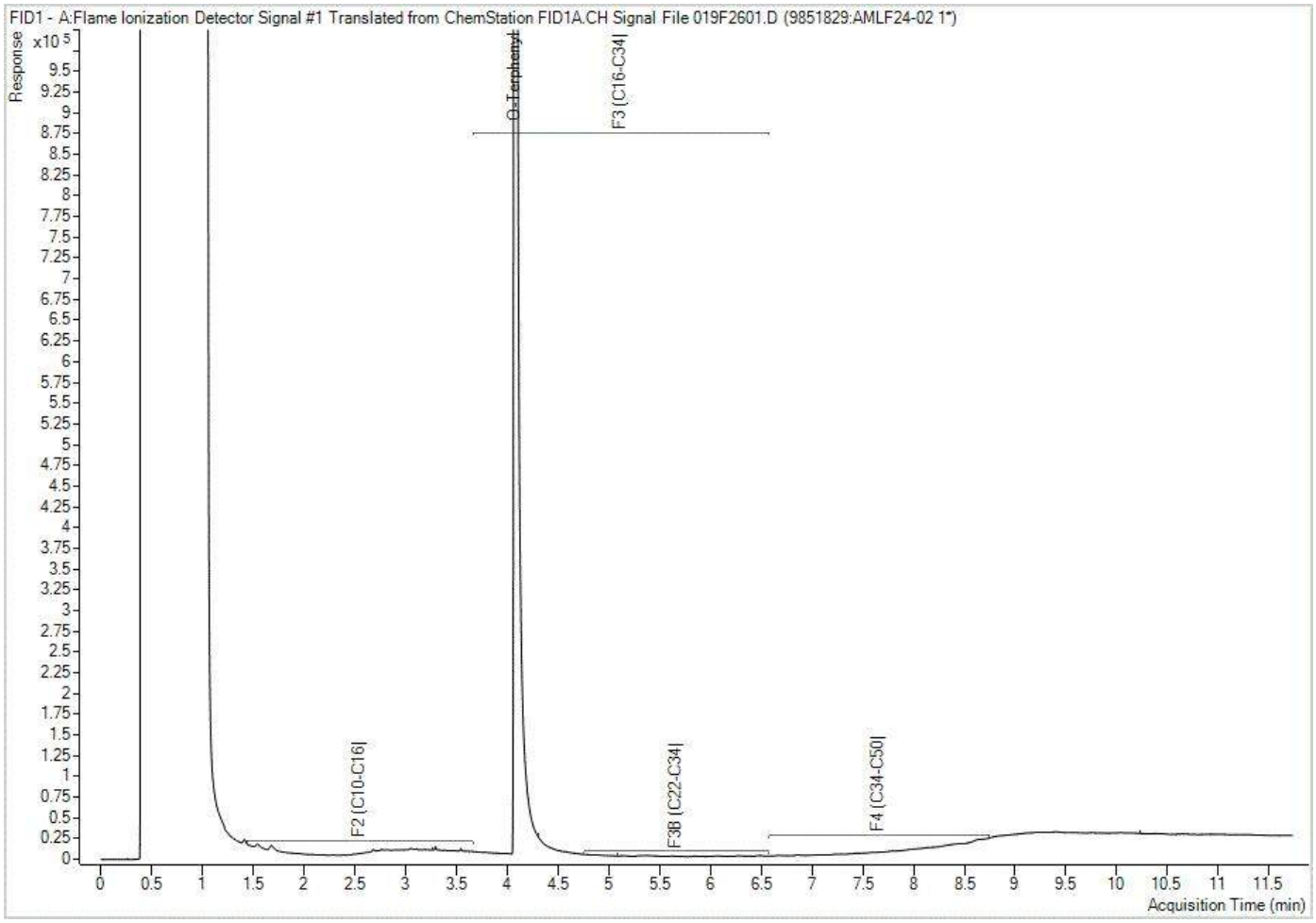


Note: This information is provided for reference purposes only. Should detailed chemist interpretation or fingerprinting be required, please contact the laboratory.

Bureau Veritas Job #: C4BP635
Report Date: 2025/01/07
Bureau Veritas Sample: AMLF24

Parsons Inc.
Client Project #: 10-13148
Client ID: 241219BH-104(3.7-4.3)

Petroleum Hydrocarbons F2-F4 in Soil Chromatogram



Note: This information is provided for reference purposes only. Should detailed chemist interpretation or fingerprinting be required, please contact the laboratory.

Your P.O. #: 479008.02000
Your Project #: 10-13148
Your C.O.C. #: C#1028193-01-01

Attention: Kelsy Marois

Parsons Inc.
Ottawa
Unit 100
1223 Michael Street North
Gloucester, ON
CANADA K1J 7T2

Report Date: 2025/01/07
Report #: R8467141
Version: 1 - Final

CERTIFICATE OF ANALYSIS

BUREAU VERITAS JOB #: C4BP635
Received: 2024/12/20, 15:05

Sample Matrix: Soil
Samples Received: 10

Analyses	Quantity	Date Extracted	Date Analyzed	Laboratory Method	Analytical Method
Methylnaphthalene Sum (1)	9	N/A	2025/01/02	CAM SOP-00301	EPA 8270D m
1,3-Dichloropropene Sum (1)	9	N/A	2024/12/30		EPA 8260C m
Petroleum Hydrocarbons F2-F4 in Soil (1, 2)	1	2024/12/31	2025/01/02	CAM SOP-00316	CCME CWS m
Petroleum Hydrocarbons F2-F4 in Soil (1, 2)	8	2024/12/31	2024/12/31	CAM SOP-00316	CCME CWS m
F4G (CCME Hydrocarbons Gravimetric) (1)	2	2025/01/03	2025/01/03	CAM SOP-00316	CCME PHC-CWS m
Acid Extractable Metals by ICPMS (1)	7	2025/01/02	2025/01/02	CAM SOP-00447	EPA 6020B m
Acid Extractable Metals by ICPMS (1)	2	2025/01/02	2025/01/03	CAM SOP-00447	EPA 6020B m
Moisture (1)	9	N/A	2024/12/23	CAM SOP-00445	Carter 2nd ed 70.2 m
OC Pesticides (Selected) & PCB (1, 3)	4	2025/01/02	2025/01/03	CAM SOP-00307	EPA 8081B/ 8082A
OC Pesticides Summed Parameters (1)	4	N/A	2024/12/24	CAM SOP-00307	EPA 8081B/ 8082A
PAH Compounds in Soil by GC/MS (SIM) (1)	1	2024/12/31	2025/01/02	CAM SOP-00318	EPA 8270E
PAH Compounds in Soil by GC/MS (SIM) (1)	8	2024/12/31	2024/12/31	CAM SOP-00318	EPA 8270E
pH CaCl2 EXTRACT (1)	3	2024/12/31	2024/12/31	CAM SOP-00413	EPA 9045 D m
Sieve, 75um (1)	1	N/A	2024/12/27	CAM SOP-00467	ASTM D1140 -17 m
Volatile Organic Compounds and F1 PHCs (1)	9	N/A	2024/12/24	CAM SOP-00230	EPA 8260C m

Remarks:

Bureau Veritas is accredited to ISO/IEC 17025 for specific parameters on scopes of accreditation. Unless otherwise noted, procedures used by Bureau Veritas are based upon recognized Provincial, Federal or US method compendia such as CCME, EPA, APHA or the Quebec Ministry of Environment.

All work recorded herein has been done in accordance with procedures and practices ordinarily exercised by professionals in Bureau Veritas' profession using accepted testing methodologies, quality assurance and quality control procedures (except where otherwise agreed by the client and Bureau Veritas in writing). All data is in statistical control and has met quality control and method performance criteria unless otherwise noted. All method blanks are reported; unless indicated otherwise, associated sample data are not blank corrected. Where applicable, unless otherwise noted, Measurement Uncertainty has not been accounted for when stating conformity to the referenced standard.

Bureau Veritas liability is limited to the actual cost of the requested analyses, unless otherwise agreed in writing. There is no other warranty expressed or implied. Bureau Veritas has been retained to provide analysis of samples provided by the Client using the testing methodology referenced in this report. Interpretation and use of test results are the sole responsibility of the Client and are not within the scope of services provided by Bureau Veritas, unless otherwise agreed in writing. Bureau Veritas is not responsible for the accuracy or any data impacts, that result from the information provided by the customer or their agent.

Your P.O. #: 479008.02000
Your Project #: 10-13148
Your C.O.C. #: C#1028193-01-01

Attention: Kelsy Marois

Parsons Inc.
Ottawa
Unit 100
1223 Michael Street North
Gloucester, ON
CANADA K1J 7T2

Report Date: 2025/01/07
Report #: R8467141
Version: 1 - Final

CERTIFICATE OF ANALYSIS

BUREAU VERITAS JOB #: C4BP635

Received: 2024/12/20, 15:05

Solid sample results, except biota, are based on dry weight unless otherwise indicated. Organic analyses are not recovery corrected except for isotope dilution methods.

Results relate to samples tested. When sampling is not conducted by Bureau Veritas, results relate to the supplied samples tested.

Reference Method suffix "m" indicates test methods incorporate validated modifications from specific reference methods to improve performance.

* RPDs calculated using raw data. The rounding of final results may result in the apparent difference.

(1) This test was performed by Bureau Veritas Mississauga, 6740 Campobello Rd , Mississauga, ON, L5N 2L8

(2) All CCME PHC results met required criteria unless otherwise stated in the report. The CWS PHC methods employed by Bureau Veritas conform to all prescribed elements of the reference method and performance based elements have been validated. All modifications have been validated and proven equivalent following "Alberta Environment's Interpretation of the Reference Method for the Canada-Wide Standard for Petroleum Hydrocarbons in Soil Validation of Performance-Based Alternative Methods September 2003". Documentation is available upon request. Modifications from Reference Method for the Canada-wide Standard for Petroleum Hydrocarbons in Soil-Tier 1 Method: F2/F3/F4 data reported using validated cold solvent extraction instead of Soxhlet extraction.

(3) Chlordane (Total) = Alpha Chlordane + Gamma Chlordane

Encryption Key

Bureau Veritas
07 Jan 2025 14:29:39

Please direct all questions regarding this Certificate of Analysis to:
Katherine Szozda, Project Manager
Email: Katherine.Szozda@bureauveritas.com
Phone# (613)274-0573 Ext:7063633

==========

This report has been generated and distributed using a secure automated process.

Bureau Veritas has procedures in place to guard against improper use of the electronic signature and have the required "signatories", as per ISO/IEC 17025, signing the reports. For Service Group specific validation, please refer to the Validation Signatures page if included, otherwise available by request. For Department specific Analyst/Supervisor validation names, please refer to the Test Summary section if included, otherwise available by request. This report is authorized by Rodney Major, General Manager responsible for Ontario Environmental laboratory operations.

Bureau Veritas Job #: C4BP635
Report Date: 2025/01/07

Parsons Inc.
Client Project #: 10-13148
Your P.O. #: 479008.02000
Sampler Initials: PP

RESULTS OF ANALYSES OF SOIL

Bureau Veritas ID		AMLF15	AMLF16	AMLF17	AMLF18		
Sampling Date		2024/12/19 09:32	2024/12/19 09:41	2024/12/19 09:58	2024/12/19 11:49		
COC Number		C#1028193-01-01	C#1028193-01-01	C#1028193-01-01	C#1028193-01-01		
	UNITS	241219BH-101(0.6-1.2)	241219BH-101(3.7-4.3)	241219BH-101(5.5-6.1)	241219BH-102(1.2-1.8)	RDL	QC Batch
Inorganics							
Moisture	%	11	38	25	14	1.0	9844915

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch

Bureau Veritas ID		AMLF19	AMLF20		AMLF21		
Sampling Date		2024/12/19 12:11	2024/12/19 12:36		2024/12/19 13:54		
COC Number		C#1028193-01-01	C#1028193-01-01		C#1028193-01-01		
	UNITS	241219BH-102(4.3-4.9)	241219BH-102(4.9-5.5)	QC Batch	241219BH-103(2.4-3.1)	RDL	QC Batch
Inorganics							
Moisture	%	59	25	9844915	15	1.0	9844915
Available (CaCl2) pH	pH				7.35		9852535

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch

Bureau Veritas ID		AMLF22		AMLF23		
Sampling Date		2024/12/19 13:59		2024/12/20 09:21		
COC Number		C#1028193-01-01		C#1028193-01-01		
	UNITS	241219BH-103(0.6-1.2)	QC Batch	241219BH-104(1.2-1.8)	RDL	QC Batch
Inorganics						
Moisture	%			4.1	1.0	9844915
Available (CaCl2) pH	pH	7.57	9852535	8.01		9852563

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch

Bureau Veritas Job #: C4BP635
Report Date: 2025/01/07

Parsons Inc.
Client Project #: 10-13148
Your P.O. #: 479008.02000
Sampler Initials: PP

RESULTS OF ANALYSES OF SOIL

Bureau Veritas ID		AMLF24		
Sampling Date		2024/12/20 09:44		
COC Number		C#1028193-01-01		
	UNITS	**241219BH-104(3.7-4.3)**	**RDL**	**QC Batch**
Inorganics				
Moisture	%	3.6	1.0	9844915
Miscellaneous Parameters				
Grain Size	%	COARSE	N/A	9845808
Sieve - #200 (<0.075mm)	%	7	1	9845808
Sieve - #200 (>0.075mm)	%	93	1	9845808

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch
N/A = Not Applicable

ELEMENTS BY ATOMIC SPECTROSCOPY (SOIL)

Bureau Veritas ID		AMLF15	AMLF16		AMLF17		
Sampling Date		2024/12/19 09:32	2024/12/19 09:41		2024/12/19 09:58		
COC Number		C#1028193-01-01	C#1028193-01-01		C#1028193-01-01		
	UNITS	241219BH-101(0.6-1.2)	241219BH-101(3.7-4.3)	QC Batch	241219BH-101(5.5-6.1)	RDL	QC Batch
Metals							
Acid Extractable Antimony (Sb)	ug/g	2.1	9.7	9853533	0.28	0.20	9853497
Acid Extractable Arsenic (As)	ug/g	6.0	42	9853533	1.7	1.0	9853497
Acid Extractable Barium (Ba)	ug/g	91	610	9853533	84	0.50	9853497
Acid Extractable Beryllium (Be)	ug/g	0.39	0.64	9853533	0.41	0.20	9853497
Acid Extractable Boron (B)	ug/g	5.3	21	9853533	<5.0	5.0	9853497
Acid Extractable Cadmium (Cd)	ug/g	0.28	3.0	9853533	<0.10	0.10	9853497
Acid Extractable Chromium (Cr)	ug/g	29	53	9853533	31	1.0	9853497
Acid Extractable Cobalt (Co)	ug/g	9.0	18	9853533	8.0	0.10	9853497
Acid Extractable Copper (Cu)	ug/g	97	250	9853533	19	0.50	9853497
Acid Extractable Lead (Pb)	ug/g	92	640	9853533	13	1.0	9853497
Acid Extractable Molybdenum (Mo)	ug/g	3.9	15	9853533	<0.50	0.50	9853497
Acid Extractable Nickel (Ni)	ug/g	36	130	9853533	19	0.50	9853497
Acid Extractable Selenium (Se)	ug/g	<0.50	11	9853533	<0.50	0.50	9853497
Acid Extractable Silver (Ag)	ug/g	0.28	1.2	9853533	<0.20	0.20	9853497
Acid Extractable Thallium (Tl)	ug/g	0.13	0.46	9853533	0.091	0.050	9853497
Acid Extractable Uranium (U)	ug/g	0.82	0.66	9853533	1.1	0.050	9853497
Acid Extractable Vanadium (V)	ug/g	25	24	9853533	29	5.0	9853497
Acid Extractable Zinc (Zn)	ug/g	140	1200	9853533	83	5.0	9853497

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch

ELEMENTS BY ATOMIC SPECTROSCOPY (SOIL)

Bureau Veritas ID		AMLF18	AMLF19	AMLF20		
Sampling Date		2024/12/19 11:49	2024/12/19 12:11	2024/12/19 12:36		
COC Number		C#1028193-01-01	C#1028193-01-01	C#1028193-01-01		
	UNITS	241219BH-102(1.2-1.8)	241219BH-102(4.3-4.9)	241219BH-102(4.9-5.5)	RDL	QC Batch
Metals						
Acid Extractable Antimony (Sb)	ug/g	0.75	4.3	<0.20	0.20	9853497
Acid Extractable Arsenic (As)	ug/g	1.9	20	<1.0	1.0	9853497
Acid Extractable Barium (Ba)	ug/g	75	460	62	0.50	9853497
Acid Extractable Beryllium (Be)	ug/g	0.35	0.30	0.25	0.20	9853497
Acid Extractable Boron (B)	ug/g	<5.0	27	<5.0	5.0	9853497
Acid Extractable Cadmium (Cd)	ug/g	0.14	1.6	<0.10	0.10	9853497
Acid Extractable Chromium (Cr)	ug/g	27	38	21	1.0	9853497
Acid Extractable Cobalt (Co)	ug/g	7.5	6.8	5.8	0.10	9853497
Acid Extractable Copper (Cu)	ug/g	21	110	11	0.50	9853497
Acid Extractable Lead (Pb)	ug/g	29	460	3.5	1.0	9853497
Acid Extractable Molybdenum (Mo)	ug/g	2.1	5.0	<0.50	0.50	9853497
Acid Extractable Nickel (Ni)	ug/g	17	20	13	0.50	9853497
Acid Extractable Selenium (Se)	ug/g	<0.50	2.7	<0.50	0.50	9853497
Acid Extractable Silver (Ag)	ug/g	<0.20	2.9	<0.20	0.20	9853497
Acid Extractable Thallium (Tl)	ug/g	0.14	0.19	0.090	0.050	9853497
Acid Extractable Uranium (U)	ug/g	0.78	1.1	0.84	0.050	9853497
Acid Extractable Vanadium (V)	ug/g	30	21	28	5.0	9853497
Acid Extractable Zinc (Zn)	ug/g	57	770	32	5.0	9853497

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch

Bureau Veritas Job #: C4BP635
Report Date: 2025/01/07

Parsons Inc.
Client Project #: 10-13148
Your P.O. #: 479008.02000
Sampler Initials: PP

ELEMENTS BY ATOMIC SPECTROSCOPY (SOIL)

Bureau Veritas ID		AMLF21	AMLF23	AMLF24		
Sampling Date		2024/12/19 13:54	2024/12/20 09:21	2024/12/20 09:44		
COC Number		C#1028193-01-01	C#1028193-01-01	C#1028193-01-01		
	UNITS	241219BH-103(2.4-3.1)	241219BH-104(1.2-1.8)	241219BH-104(3.7-4.3)	RDL	QC Batch
Metals						
Acid Extractable Antimony (Sb)	ug/g	11	<0.20	<0.20	0.20	9853497
Acid Extractable Arsenic (As)	ug/g	32	<1.0	<1.0	1.0	9853497
Acid Extractable Barium (Ba)	ug/g	200	15	15	0.50	9853497
Acid Extractable Beryllium (Be)	ug/g	0.48	<0.20	<0.20	0.20	9853497
Acid Extractable Boron (B)	ug/g	7.5	<5.0	<5.0	5.0	9853497
Acid Extractable Cadmium (Cd)	ug/g	0.74	<0.10	<0.10	0.10	9853497
Acid Extractable Chromium (Cr)	ug/g	52	6.9	11	1.0	9853497
Acid Extractable Cobalt (Co)	ug/g	22	3.3	3.9	0.10	9853497
Acid Extractable Copper (Cu)	ug/g	330	7.6	12	0.50	9853497
Acid Extractable Lead (Pb)	ug/g	400	3.2	3.4	1.0	9853497
Acid Extractable Molybdenum (Mo)	ug/g	3.5	0.70	<0.50	0.50	9853497
Acid Extractable Nickel (Ni)	ug/g	130	6.0	5.5	0.50	9853497
Acid Extractable Selenium (Se)	ug/g	0.94	<0.50	<0.50	0.50	9853497
Acid Extractable Silver (Ag)	ug/g	0.66	<0.20	<0.20	0.20	9853497
Acid Extractable Thallium (Tl)	ug/g	0.18	0.068	<0.050	0.050	9853497
Acid Extractable Uranium (U)	ug/g	6.2	0.33	0.67	0.050	9853497
Acid Extractable Vanadium (V)	ug/g	38	15	41	5.0	9853497
Acid Extractable Zinc (Zn)	ug/g	570	14	15	5.0	9853497

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch

SEMI-VOLATILE ORGANICS BY GC-MS (SOIL)

Bureau Veritas ID		AMLF15		AMLF16		AMLF17		
Sampling Date		2024/12/19 09:32		2024/12/19 09:41		2024/12/19 09:58		
COC Number		C#1028193-01-01		C#1028193-01-01		C#1028193-01-01		
	UNITS	241219BH-101(0.6-1.2)	RDL	241219BH-101(3.7-4.3)	RDL	241219BH-101(5.5-6.1)	RDL	QC Batch
Calculated Parameters								
Methylnaphthalene, 2-(1-)	ug/g	0.065	0.0071	2.7	0.14	0.028	0.0071	9842156
Polyaromatic Hydrocarbons								
Acenaphthene	ug/g	0.23	0.0050	0.62	0.10	0.042	0.0050	9851841
Acenaphthylene	ug/g	0.053	0.0050	<0.10	0.10	<0.0050	0.0050	9851841
Anthracene	ug/g	0.56	0.0050	1.2	0.10	0.094	0.0050	9851841
Benzo(a)anthracene	ug/g	1.0	0.0050	2.2	0.10	0.20	0.0050	9851841
Benzo(a)pyrene	ug/g	0.93	0.0050	1.9	0.10	0.17	0.0050	9851841
Benzo(b/j)fluoranthene	ug/g	1.1	0.0050	2.5	0.10	0.22	0.0050	9851841
Benzo(g,h,i)perylene	ug/g	0.52	0.0050	0.88	0.10	0.083	0.0050	9851841
Benzo(k)fluoranthene	ug/g	0.39	0.0050	0.90	0.10	0.081	0.0050	9851841
Chrysene	ug/g	0.77	0.0050	2.0	0.10	0.17	0.0050	9851841
Dibenzo(a,h)anthracene	ug/g	0.13	0.0050	0.26	0.10	0.024	0.0050	9851841
Fluoranthene	ug/g	2.2	0.0050	5.9	0.10	0.46	0.0050	9851841
Fluorene	ug/g	0.26	0.0050	0.87	0.10	0.058	0.0050	9851841
Indeno(1,2,3-cd)pyrene	ug/g	0.55	0.0050	1.1	0.10	0.095	0.0050	9851841
1-Methylnaphthalene	ug/g	0.029	0.0050	1.0	0.10	0.010	0.0050	9851841
2-Methylnaphthalene	ug/g	0.036	0.0050	1.7	0.10	0.018	0.0050	9851841
Naphthalene	ug/g	0.074	0.0050	2.5	0.10	0.042	0.0050	9851841
Phenanthrene	ug/g	1.7	0.0050	5.6	0.10	0.41	0.0050	9851841
Pyrene	ug/g	1.8	0.0050	4.6	0.10	0.34	0.0050	9851841
Surrogate Recovery (%)								
D10-Anthracene	%	93		101		92		9851841
D14-Terphenyl (FS)	%	105		103		99		9851841
D8-Acenaphthylene	%	89		86		84		9851841

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch

SEMI-VOLATILE ORGANICS BY GC-MS (SOIL)

Bureau Veritas ID		AMLF18	AMLF19	AMLF20		
Sampling Date		2024/12/19 11:49	2024/12/19 12:11	2024/12/19 12:36		
COC Number		C#1028193-01-01	C#1028193-01-01	C#1028193-01-01		
	UNITS	241219BH-102(1.2-1.8)	241219BH-102(4.3-4.9)	241219BH-102(4.9-5.5)	RDL	QC Batch
Calculated Parameters						
Methylnaphthalene, 2-(1-)	ug/g	0.029	3.6	0.17	0.0071	9842156
Polyaromatic Hydrocarbons						
Acenaphthene	ug/g	0.014	0.39	0.0096	0.0050	9851841
Acenaphthylene	ug/g	0.030	0.085	<0.0050	0.0050	9851841
Anthracene	ug/g	0.057	0.54	<0.0050	0.0050	9851841
Benzo(a)anthracene	ug/g	0.17	1.1	0.0064	0.0050	9851841
Benzo(a)pyrene	ug/g	0.19	1.0	0.0081	0.0050	9851841
Benzo(b/j)fluoranthene	ug/g	0.22	1.1	0.0066	0.0050	9851841
Benzo(g,h,i)perylene	ug/g	0.11	0.91	0.013	0.0050	9851841
Benzo(k)fluoranthene	ug/g	0.081	0.37	<0.0050	0.0050	9851841
Chrysene	ug/g	0.13	1.1	0.0094	0.0050	9851841
Dibenzo(a,h)anthracene	ug/g	0.029	0.16	<0.0050	0.0050	9851841
Fluoranthene	ug/g	0.33	2.3	0.011	0.0050	9851841
Fluorene	ug/g	0.024	0.49	0.010	0.0050	9851841
Indeno(1,2,3-cd)pyrene	ug/g	0.12	0.51	<0.0050	0.0050	9851841
1-Methylnaphthalene	ug/g	0.012	1.3	0.057	0.0050	9851841
2-Methylnaphthalene	ug/g	0.017	2.3	0.11	0.0050	9851841
Naphthalene	ug/g	0.015	0.92	0.019	0.0050	9851841
Phenanthrene	ug/g	0.16	2.3	0.025	0.0050	9851841
Pyrene	ug/g	0.28	2.1	0.014	0.0050	9851841
Surrogate Recovery (%)						
D10-Anthracene	%	94	105	95		9851841
D14-Terphenyl (FS)	%	100	109	101		9851841
D8-Acenaphthylene	%	86	93	86		9851841

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch

SEMI-VOLATILE ORGANICS BY GC-MS (SOIL)

Bureau Veritas ID		AMLF21		AMLF23		AMLF24		
Sampling Date		2024/12/19 13:54		2024/12/20 09:21		2024/12/20 09:44		
COC Number		C#1028193-01-01		C#1028193-01-01		C#1028193-01-01		
	UNITS	241219BH-103(2.4-3.1)	RDL	241219BH-104(1.2-1.8)	RDL	241219BH-104(3.7-4.3)	RDL	QC Batch
Calculated Parameters								
Methylnaphthalene, 2-(1-)	ug/g	0.053	0.0071	<0.071	0.071	<0.0071	0.0071	9842156
Polyaromatic Hydrocarbons								
Acenaphthene	ug/g	0.096	0.0050	<0.050	0.050	<0.0050	0.0050	9851841
Acenaphthylene	ug/g	0.023	0.0050	<0.050	0.050	<0.0050	0.0050	9851841
Anthracene	ug/g	0.18	0.0050	<0.050	0.050	<0.0050	0.0050	9851841
Benzo(a)anthracene	ug/g	0.46	0.0050	<0.050	0.050	<0.0050	0.0050	9851841
Benzo(a)pyrene	ug/g	0.47	0.0050	<0.050	0.050	<0.0050	0.0050	9851841
Benzo(b/j)fluoranthene	ug/g	0.54	0.0050	<0.050	0.050	<0.0050	0.0050	9851841
Benzo(g,h,i)perylene	ug/g	0.25	0.0050	<0.050	0.050	<0.0050	0.0050	9851841
Benzo(k)fluoranthene	ug/g	0.21	0.0050	<0.050	0.050	<0.0050	0.0050	9851841
Chrysene	ug/g	0.38	0.0050	<0.050	0.050	<0.0050	0.0050	9851841
Dibenzo(a,h)anthracene	ug/g	0.068	0.0050	<0.050	0.050	<0.0050	0.0050	9851841
Fluoranthene	ug/g	0.99	0.0050	<0.050	0.050	<0.0050	0.0050	9851841
Fluorene	ug/g	0.095	0.0050	<0.050	0.050	<0.0050	0.0050	9851841
Indeno(1,2,3-cd)pyrene	ug/g	0.29	0.0050	<0.050	0.050	<0.0050	0.0050	9851841
1-Methylnaphthalene	ug/g	0.025	0.0050	<0.050	0.050	<0.0050	0.0050	9851841
2-Methylnaphthalene	ug/g	0.028	0.0050	<0.050	0.050	<0.0050	0.0050	9851841
Naphthalene	ug/g	0.052	0.0050	<0.050	0.050	<0.0050	0.0050	9851841
Phenanthrene	ug/g	0.71	0.0050	<0.050	0.050	<0.0050	0.0050	9851841
Pyrene	ug/g	0.80	0.0050	<0.050	0.050	<0.0050	0.0050	9851841
Surrogate Recovery (%)								
D10-Anthracene	%	92		105		94		9851841
D14-Terphenyl (FS)	%	104		100		100		9851841
D8-Acenaphthylene	%	85		91		80		9851841

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch

VOLATILE ORGANICS BY GC/MS (SOIL)

Bureau Veritas ID		AMLF15	AMLF16	AMLF17		
Sampling Date		2024/12/19 09:32	2024/12/19 09:41	2024/12/19 09:58		
COC Number		C#1028193-01-01	C#1028193-01-01	C#1028193-01-01		
	UNITS	241219BH-101(0.6-1.2)	241219BH-101(3.7-4.3)	241219BH-101(5.5-6.1)	RDL	QC Batch
Calculated Parameters						
1,3-Dichloropropene (cis+trans)	ug/g	<0.050	<0.050	<0.050	0.050	9842157
Volatile Organics						
Acetone (2-Propanone)	ug/g	<0.49	1.1	<0.49	0.49	9844140
Benzene	ug/g	<0.0060	0.20	<0.0060	0.0060	9844140
Bromodichloromethane	ug/g	<0.040	<0.040	<0.040	0.040	9844140
Bromoform	ug/g	<0.040	<0.040	<0.040	0.040	9844140
Bromomethane	ug/g	<0.040	<0.040	<0.040	0.040	9844140
Carbon Tetrachloride	ug/g	<0.040	<0.040	<0.040	0.040	9844140
Chlorobenzene	ug/g	<0.040	0.089	<0.040	0.040	9844140
Chloroform	ug/g	<0.040	<0.040	<0.040	0.040	9844140
Dibromochloromethane	ug/g	<0.040	<0.040	<0.040	0.040	9844140
1,2-Dichlorobenzene	ug/g	<0.040	<0.040	<0.040	0.040	9844140
1,3-Dichlorobenzene	ug/g	<0.040	<0.040	<0.040	0.040	9844140
1,4-Dichlorobenzene	ug/g	<0.040	0.64	<0.040	0.040	9844140
Dichlorodifluoromethane (FREON 12)	ug/g	<0.040	<0.040	<0.040	0.040	9844140
1,1-Dichloroethane	ug/g	<0.040	<0.040	<0.040	0.040	9844140
1,2-Dichloroethane	ug/g	<0.049	<0.049	<0.049	0.049	9844140
1,1-Dichloroethylene	ug/g	<0.040	<0.040	<0.040	0.040	9844140
cis-1,2-Dichloroethylene	ug/g	0.053	0.74	<0.040	0.040	9844140
trans-1,2-Dichloroethylene	ug/g	<0.040	0.049	<0.040	0.040	9844140
1,2-Dichloropropane	ug/g	<0.040	<0.040	<0.040	0.040	9844140
cis-1,3-Dichloropropene	ug/g	<0.030	<0.030	<0.030	0.030	9844140
trans-1,3-Dichloropropene	ug/g	<0.040	<0.040	<0.040	0.040	9844140
Ethylbenzene	ug/g	<0.010	0.17	<0.010	0.010	9844140
Ethylene Dibromide	ug/g	<0.040	<0.040	<0.040	0.040	9844140
Hexane	ug/g	<0.040	<0.040	<0.040	0.040	9844140
Methylene Chloride(Dichloromethane)	ug/g	<0.049	0.056	<0.049	0.049	9844140
Methyl Ethyl Ketone (2-Butanone)	ug/g	<0.40	<0.40	<0.40	0.40	9844140
Methyl Isobutyl Ketone	ug/g	<0.40	<0.40	<0.40	0.40	9844140
Methyl t-butyl ether (MTBE)	ug/g	<0.040	<0.040	<0.040	0.040	9844140
Styrene	ug/g	<0.040	<0.040	<0.040	0.040	9844140

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch

VOLATILE ORGANICS BY GC/MS (SOIL)

Bureau Veritas ID		AMLF15	AMLF16	AMLF17		
Sampling Date		2024/12/19 09:32	2024/12/19 09:41	2024/12/19 09:58		
COC Number		C#1028193-01-01	C#1028193-01-01	C#1028193-01-01		
	UNITS	241219BH-101(0.6-1.2)	241219BH-101(3.7-4.3)	241219BH-101(5.5-6.1)	RDL	QC Batch
1,1,1,2-Tetrachloroethane	ug/g	<0.040	<0.040	<0.040	0.040	9844140
1,1,2,2-Tetrachloroethane	ug/g	<0.040	<0.040	<0.040	0.040	9844140
Tetrachloroethylene	ug/g	<0.040	0.47	<0.040	0.040	9844140
Toluene	ug/g	<0.020	0.30	<0.020	0.020	9844140
1,1,1-Trichloroethane	ug/g	<0.040	<0.040	<0.040	0.040	9844140
1,1,2-Trichloroethane	ug/g	<0.040	<0.040	<0.040	0.040	9844140
Trichloroethylene	ug/g	<0.010	0.33	<0.010	0.010	9844140
Trichlorofluoromethane (FREON 11)	ug/g	<0.040	<0.040	<0.040	0.040	9844140
Vinyl Chloride	ug/g	<0.019	0.13	<0.019	0.019	9844140
p+m-Xylene	ug/g	<0.020	0.78	<0.020	0.020	9844140
o-Xylene	ug/g	<0.020	0.31	<0.020	0.020	9844140
Total Xylenes	ug/g	<0.020	1.1	<0.020	0.020	9844140
F1 (C6-C10)	ug/g	<10	100	<10	10	9844140
F1 (C6-C10) - BTEX	ug/g	<10	100	<10	10	9844140
Surrogate Recovery (%)						
4-Bromofluorobenzene	%	106	104	104		9844140
D10-o-Xylene	%	112	119	111		9844140
D4-1,2-Dichloroethane	%	111	112	107		9844140
D8-Toluene	%	100	100	99		9844140

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch

VOLATILE ORGANICS BY GC/MS (SOIL)

Bureau Veritas ID		AMLF18		AMLF19		
Sampling Date		2024/12/19 11:49		2024/12/19 12:11		
COC Number		C#1028193-01-01		C#1028193-01-01		
	UNITS	241219BH-102(1.2-1.8)	RDL	241219BH-102(4.3-4.9)	RDL	QC Batch
Calculated Parameters						
1,3-Dichloropropene (cis+trans)	ug/g	<0.050	0.050	<0.15	0.15	9842157
Volatile Organics						
Acetone (2-Propanone)	ug/g	<0.49	0.49	<1.5	1.5	9844140
Benzene	ug/g	<0.0060	0.0060	0.087	0.018	9844140
Bromodichloromethane	ug/g	<0.040	0.040	<0.12	0.12	9844140
Bromoform	ug/g	<0.040	0.040	<0.12	0.12	9844140
Bromomethane	ug/g	<0.040	0.040	<0.12	0.12	9844140
Carbon Tetrachloride	ug/g	<0.040	0.040	<0.12	0.12	9844140
Chlorobenzene	ug/g	<0.040	0.040	<0.12	0.12	9844140
Chloroform	ug/g	<0.040	0.040	<0.12	0.12	9844140
Dibromochloromethane	ug/g	<0.040	0.040	<0.12	0.12	9844140
1,2-Dichlorobenzene	ug/g	<0.040	0.040	<0.12	0.12	9844140
1,3-Dichlorobenzene	ug/g	<0.040	0.040	<0.12	0.12	9844140
1,4-Dichlorobenzene	ug/g	<0.040	0.040	0.16	0.12	9844140
Dichlorodifluoromethane (FREON 12)	ug/g	<0.040	0.040	<0.12	0.12	9844140
1,1-Dichloroethane	ug/g	<0.040	0.040	<0.12	0.12	9844140
1,2-Dichloroethane	ug/g	<0.049	0.049	<0.15	0.15	9844140
1,1-Dichloroethylene	ug/g	<0.040	0.040	<0.12	0.12	9844140
cis-1,2-Dichloroethylene	ug/g	<0.040	0.040	<0.12	0.12	9844140
trans-1,2-Dichloroethylene	ug/g	<0.040	0.040	<0.12	0.12	9844140
1,2-Dichloropropane	ug/g	<0.040	0.040	<0.12	0.12	9844140
cis-1,3-Dichloropropene	ug/g	<0.030	0.030	<0.090	0.090	9844140
trans-1,3-Dichloropropene	ug/g	<0.040	0.040	<0.12	0.12	9844140
Ethylbenzene	ug/g	<0.010	0.010	0.035	0.030	9844140
Ethylene Dibromide	ug/g	<0.040	0.040	<0.12	0.12	9844140
Hexane	ug/g	<0.040	0.040	<0.12	0.12	9844140
Methylene Chloride(Dichloromethane)	ug/g	<0.049	0.049	<0.15	0.15	9844140
Methyl Ethyl Ketone (2-Butanone)	ug/g	<0.40	0.40	<1.2	1.2	9844140
Methyl Isobutyl Ketone	ug/g	<0.40	0.40	<1.2	1.2	9844140
Methyl t-butyl ether (MTBE)	ug/g	<0.040	0.040	<0.12	0.12	9844140
Styrene	ug/g	<0.040	0.040	<0.12	0.12	9844140

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch

VOLATILE ORGANICS BY GC/MS (SOIL)

Bureau Veritas ID		AMLF18		AMLF19		
Sampling Date		2024/12/19 11:49		2024/12/19 12:11		
COC Number		C#1028193-01-01		C#1028193-01-01		
	UNITS	241219BH-102(1.2-1.8)	RDL	241219BH-102(4.3-4.9)	RDL	QC Batch
1,1,1,2-Tetrachloroethane	ug/g	<0.040	0.040	<0.12	0.12	9844140
1,1,2,2-Tetrachloroethane	ug/g	<0.040	0.040	<0.12	0.12	9844140
Tetrachloroethylene	ug/g	<0.040	0.040	<0.12	0.12	9844140
Toluene	ug/g	<0.020	0.020	0.14	0.060	9844140
1,1,1-Trichloroethane	ug/g	<0.040	0.040	<0.12	0.12	9844140
1,1,2-Trichloroethane	ug/g	<0.040	0.040	<0.12	0.12	9844140
Trichloroethylene	ug/g	<0.010	0.010	0.048	0.030	9844140
Trichlorofluoromethane (FREON 11)	ug/g	<0.040	0.040	<0.12	0.12	9844140
Vinyl Chloride	ug/g	<0.019	0.019	<0.057	0.057	9844140
p+m-Xylene	ug/g	<0.020	0.020	0.78	0.060	9844140
o-Xylene	ug/g	<0.020	0.020	0.14	0.060	9844140
Total Xylenes	ug/g	<0.020	0.020	0.92	0.060	9844140
F1 (C6-C10)	ug/g	<10	10	<30	30	9844140
F1 (C6-C10) - BTEX	ug/g	<10	10	<30	30	9844140
Surrogate Recovery (%)						
4-Bromofluorobenzene	%	103		104		9844140
D10-o-Xylene	%	111		102		9844140
D4-1,2-Dichloroethane	%	109		112		9844140
D8-Toluene	%	98		98		9844140

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch

VOLATILE ORGANICS BY GC/MS (SOIL)

Bureau Veritas ID		AMLF20	AMLF21	AMLF23		
Sampling Date		2024/12/19 12:36	2024/12/19 13:54	2024/12/20 09:21		
COC Number		C#1028193-01-01	C#1028193-01-01	C#1028193-01-01		
	UNITS	241219BH-102(4.9-5.5)	241219BH-103(2.4-3.1)	241219BH-104(1.2-1.8)	RDL	QC Batch
Calculated Parameters						
1,3-Dichloropropene (cis+trans)	ug/g	<0.050	<0.050	<0.050	0.050	9842157
Volatile Organics						
Acetone (2-Propanone)	ug/g	<0.49	<0.49	<0.49	0.49	9844140
Benzene	ug/g	<0.0060	0.015	<0.0060	0.0060	9844140
Bromodichloromethane	ug/g	<0.040	<0.040	<0.040	0.040	9844140
Bromoform	ug/g	<0.040	<0.040	<0.040	0.040	9844140
Bromomethane	ug/g	<0.040	<0.040	<0.040	0.040	9844140
Carbon Tetrachloride	ug/g	<0.040	<0.040	<0.040	0.040	9844140
Chlorobenzene	ug/g	<0.040	<0.040	<0.040	0.040	9844140
Chloroform	ug/g	<0.040	<0.040	<0.040	0.040	9844140
Dibromochloromethane	ug/g	<0.040	<0.040	<0.040	0.040	9844140
1,2-Dichlorobenzene	ug/g	<0.040	<0.040	<0.040	0.040	9844140
1,3-Dichlorobenzene	ug/g	<0.040	<0.040	<0.040	0.040	9844140
1,4-Dichlorobenzene	ug/g	<0.040	<0.040	<0.040	0.040	9844140
Dichlorodifluoromethane (FREON 12)	ug/g	<0.040	<0.040	<0.040	0.040	9844140
1,1-Dichloroethane	ug/g	<0.040	<0.040	<0.040	0.040	9844140
1,2-Dichloroethane	ug/g	<0.049	<0.049	<0.049	0.049	9844140
1,1-Dichloroethylene	ug/g	<0.040	<0.040	<0.040	0.040	9844140
cis-1,2-Dichloroethylene	ug/g	<0.040	<0.040	<0.040	0.040	9844140
trans-1,2-Dichloroethylene	ug/g	<0.040	<0.040	<0.040	0.040	9844140
1,2-Dichloropropane	ug/g	<0.040	<0.040	<0.040	0.040	9844140
cis-1,3-Dichloropropene	ug/g	<0.030	<0.030	<0.030	0.030	9844140
trans-1,3-Dichloropropene	ug/g	<0.040	<0.040	<0.040	0.040	9844140
Ethylbenzene	ug/g	<0.010	0.029	<0.010	0.010	9844140
Ethylene Dibromide	ug/g	<0.040	<0.040	<0.040	0.040	9844140
Hexane	ug/g	0.29	0.14	<0.040	0.040	9844140
Methylene Chloride(Dichloromethane)	ug/g	<0.049	<0.049	<0.049	0.049	9844140
Methyl Ethyl Ketone (2-Butanone)	ug/g	<0.40	<0.40	<0.40	0.40	9844140
Methyl Isobutyl Ketone	ug/g	<0.40	<0.40	<0.40	0.40	9844140
Methyl t-butyl ether (MTBE)	ug/g	<0.040	<0.040	<0.040	0.040	9844140
Styrene	ug/g	<0.040	<0.040	<0.040	0.040	9844140

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch

VOLATILE ORGANICS BY GC/MS (SOIL)

Bureau Veritas ID		AMLF20	AMLF21	AMLF23		
Sampling Date		2024/12/19 12:36	2024/12/19 13:54	2024/12/20 09:21		
COC Number		C#1028193-01-01	C#1028193-01-01	C#1028193-01-01		
	UNITS	241219BH-102(4.9-5.5)	241219BH-103(2.4-3.1)	241219BH-104(1.2-1.8)	RDL	QC Batch
1,1,1,2-Tetrachloroethane	ug/g	<0.040	<0.040	<0.040	0.040	9844140
1,1,2,2-Tetrachloroethane	ug/g	<0.040	<0.040	<0.040	0.040	9844140
Tetrachloroethylene	ug/g	<0.040	<0.040	<0.040	0.040	9844140
Toluene	ug/g	<0.020	0.11	0.030	0.020	9844140
1,1,1-Trichloroethane	ug/g	<0.040	<0.040	<0.040	0.040	9844140
1,1,2-Trichloroethane	ug/g	<0.040	<0.040	<0.040	0.040	9844140
Trichloroethylene	ug/g	<0.010	<0.010	<0.010	0.010	9844140
Trichlorofluoromethane (FREON 11)	ug/g	<0.040	<0.040	<0.040	0.040	9844140
Vinyl Chloride	ug/g	<0.019	<0.019	<0.019	0.019	9844140
p+m-Xylene	ug/g	0.057	0.081	<0.020	0.020	9844140
o-Xylene	ug/g	<0.020	0.054	<0.020	0.020	9844140
Total Xylenes	ug/g	0.057	0.14	<0.020	0.020	9844140
F1 (C6-C10)	ug/g	<10	<10	<10	10	9844140
F1 (C6-C10) - BTEX	ug/g	<10	<10	<10	10	9844140
Surrogate Recovery (%)						
4-Bromofluorobenzene	%	104	104	104		9844140
D10-o-Xylene	%	115	115	109		9844140
D4-1,2-Dichloroethane	%	109	111	109		9844140
D8-Toluene	%	99	101	98		9844140

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch

VOLATILE ORGANICS BY GC/MS (SOIL)

Bureau Veritas ID		AMLF24		
Sampling Date		2024/12/20 09:44		
COC Number		C#1028193-01-01		
	UNITS	241219BH-104(3.7-4.3)	RDL	QC Batch
Calculated Parameters				
1,3-Dichloropropene (cis+trans)	ug/g	<0.050	0.050	9842157
Volatile Organics				
Acetone (2-Propanone)	ug/g	<0.49	0.49	9844140
Benzene	ug/g	<0.0060	0.0060	9844140
Bromodichloromethane	ug/g	<0.040	0.040	9844140
Bromoform	ug/g	<0.040	0.040	9844140
Bromomethane	ug/g	<0.040	0.040	9844140
Carbon Tetrachloride	ug/g	<0.040	0.040	9844140
Chlorobenzene	ug/g	<0.040	0.040	9844140
Chloroform	ug/g	<0.040	0.040	9844140
Dibromochloromethane	ug/g	<0.040	0.040	9844140
1,2-Dichlorobenzene	ug/g	<0.040	0.040	9844140
1,3-Dichlorobenzene	ug/g	<0.040	0.040	9844140
1,4-Dichlorobenzene	ug/g	<0.040	0.040	9844140
Dichlorodifluoromethane (FREON 12)	ug/g	<0.040	0.040	9844140
1,1-Dichloroethane	ug/g	<0.040	0.040	9844140
1,2-Dichloroethane	ug/g	<0.049	0.049	9844140
1,1-Dichloroethylene	ug/g	<0.040	0.040	9844140
cis-1,2-Dichloroethylene	ug/g	<0.040	0.040	9844140
trans-1,2-Dichloroethylene	ug/g	<0.040	0.040	9844140
1,2-Dichloropropane	ug/g	<0.040	0.040	9844140
cis-1,3-Dichloropropene	ug/g	<0.030	0.030	9844140
trans-1,3-Dichloropropene	ug/g	<0.040	0.040	9844140
Ethylbenzene	ug/g	<0.010	0.010	9844140
Ethylene Dibromide	ug/g	<0.040	0.040	9844140
Hexane	ug/g	<0.040	0.040	9844140
Methylene Chloride(Dichloromethane)	ug/g	<0.049	0.049	9844140
Methyl Ethyl Ketone (2-Butanone)	ug/g	<0.40	0.40	9844140
Methyl Isobutyl Ketone	ug/g	<0.40	0.40	9844140
Methyl t-butyl ether (MTBE)	ug/g	<0.040	0.040	9844140
Styrene	ug/g	<0.040	0.040	9844140

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch

Parsons Inc.
Client Project #: 10-13148
Your P.O. #: 479008.02000
Sampler Initials: PP

VOLATILE ORGANICS BY GC/MS (SOIL)

Bureau Veritas ID		AMLF24		
Sampling Date		2024/12/20 09:44		
COC Number		C#1028193-01-01		
	UNITS	**241219BH-104(3.7-4.3)**	**RDL**	**QC Batch**
1,1,1,2-Tetrachloroethane	ug/g	<0.040	0.040	9844140
1,1,2,2-Tetrachloroethane	ug/g	<0.040	0.040	9844140
Tetrachloroethylene	ug/g	<0.040	0.040	9844140
Toluene	ug/g	<0.020	0.020	9844140
1,1,1-Trichloroethane	ug/g	<0.040	0.040	9844140
1,1,2-Trichloroethane	ug/g	<0.040	0.040	9844140
Trichloroethylene	ug/g	<0.010	0.010	9844140
Trichlorofluoromethane (FREON 11)	ug/g	<0.040	0.040	9844140
Vinyl Chloride	ug/g	<0.019	0.019	9844140
p+m-Xylene	ug/g	<0.020	0.020	9844140
o-Xylene	ug/g	<0.020	0.020	9844140
Total Xylenes	ug/g	<0.020	0.020	9844140
F1 (C6-C10)	ug/g	<10	10	9844140
F1 (C6-C10) - BTEX	ug/g	<10	10	9844140
Surrogate Recovery (%)				
4-Bromofluorobenzene	%	105		9844140
D10-o-Xylene	%	112		9844140
D4-1,2-Dichloroethane	%	111		9844140
D8-Toluene	%	100		9844140

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch

PETROLEUM HYDROCARBONS (CCME)

Bureau Veritas ID		AMLF15	AMLF16	AMLF17		
Sampling Date		2024/12/19 09:32	2024/12/19 09:41	2024/12/19 09:58		
COC Number		C#1028193-01-01	C#1028193-01-01	C#1028193-01-01		
	UNITS	241219BH-101(0.6-1.2)	241219BH-101(3.7-4.3)	241219BH-101(5.5-6.1)	RDL	QC Batch
F2-F4 Hydrocarbons						
F2 (C10-C16 Hydrocarbons)	ug/g	10	1500	<7.0	7.0	9851829
F3 (C16-C34 Hydrocarbons)	ug/g	180	3600	57	50	9851829
F4 (C34-C50 Hydrocarbons)	ug/g	110	640	<50	50	9851829
Reached Baseline at C50	ug/g	Yes	Yes	Yes		9851829
Surrogate Recovery (%)						
o-Terphenyl	%	95	98	98		9851829

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch

Bureau Veritas ID		AMLF18			AMLF19		
Sampling Date		2024/12/19 11:49			2024/12/19 12:11		
COC Number		C#1028193-01-01			C#1028193-01-01		
	UNITS	241219BH-102(1.2-1.8)	RDL	QC Batch	241219BH-102(4.3-4.9)	RDL	QC Batch
F2-F4 Hydrocarbons							
F4G-sg (Grav. Heavy Hydrocarbons)	ug/g				3900	100	9853940
F2 (C10-C16 Hydrocarbons)	ug/g	<7.0	7.0	9851829	250	7.0	9851829
F3 (C16-C34 Hydrocarbons)	ug/g	71	50	9851829	1400	50	9851829
F4 (C34-C50 Hydrocarbons)	ug/g	<50	50	9851829	1300	50	9851829
Reached Baseline at C50	ug/g	Yes		9851829	No		9851829
Surrogate Recovery (%)							
o-Terphenyl	%	94		9851829	110		9851829

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch

Bureau Veritas Job #: C4BP635
Report Date: 2025/01/07

Parsons Inc.
Client Project #: 10-13148
Your P.O. #: 479008.02000
Sampler Initials: PP

PETROLEUM HYDROCARBONS (CCME)

Bureau Veritas ID		AMLF20	AMLF21			AMLF23		
Sampling Date		2024/12/19 12:36	2024/12/19 13:54			2024/12/20 09:21		
COC Number		C#1028193-01-01	C#1028193-01-01			C#1028193-01-01		
	UNITS	241219BH-102(4.9-5.5)	241219BH-103(2.4-3.1)	RDL	QC Batch	241219BH-104(1.2-1.8)	RDL	QC Batch
F2-F4 Hydrocarbons								
F4G-sg (Grav. Heavy Hydrocarbons)	ug/g					1300	100	9853940
F2 (C10-C16 Hydrocarbons)	ug/g	<7.0	9.5	7.0	9851829	<7.0	7.0	9851829
F3 (C16-C34 Hydrocarbons)	ug/g	<50	270	50	9851829	140	50	9851829
F4 (C34-C50 Hydrocarbons)	ug/g	<50	130	50	9851829	330	50	9851829
Reached Baseline at C50	ug/g	Yes	Yes		9851829	No		9851829
Surrogate Recovery (%)								
o-Terphenyl	%	101	101		9851829	100		9851829

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch

Bureau Veritas ID		AMLF24		
Sampling Date		2024/12/20 09:44		
COC Number		C#1028193-01-01		
	UNITS	241219BH-104(3.7-4.3)	RDL	QC Batch
F2-F4 Hydrocarbons				
F2 (C10-C16 Hydrocarbons)	ug/g	<7.0	7.0	9851829
F3 (C16-C34 Hydrocarbons)	ug/g	<50	50	9851829
F4 (C34-C50 Hydrocarbons)	ug/g	<50	50	9851829
Reached Baseline at C50	ug/g	Yes		9851829
Surrogate Recovery (%)				
o-Terphenyl	%	101		9851829

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch

ORGANOCHLORINATED PESTICIDES BY GC-ECD (SOIL)

Bureau Veritas ID		AMLF15		AMLF16		AMLF17		
Sampling Date		2024/12/19 09:32		2024/12/19 09:41		2024/12/19 09:58		
COC Number		C#1028193-01-01		C#1028193-01-01		C#1028193-01-01		
	UNITS	241219BH-101(0.6-1.2)	RDL	241219BH-101(3.7-4.3)	RDL	241219BH-101(5.5-6.1)	RDL	QC Batch
Calculated Parameters								
Chlordane (Total)	ug/g	<0.010	0.010	<0.020	0.020	<0.0020	0.0020	9842444
o,p-DDD + p,p-DDD	ug/g	0.011	0.010	0.59	0.10	<0.0020	0.0020	9842444
o,p-DDE + p,p-DDE	ug/g	<0.010	0.010	0.10	0.020	<0.0020	0.0020	9842444
o,p-DDT + p,p-DDT	ug/g	<0.010	0.010	<0.020	0.020	<0.0020	0.0020	9842444
Total Endosulfan	ug/g	<0.010	0.010	<0.020	0.020	<0.0020	0.0020	9842444
Total PCB	ug/g	<0.075	0.075	<0.15	0.15	<0.015	0.015	9842444
Pesticides & Herbicides								
Aldrin	ug/g	<0.010	0.010	<0.020	0.020	<0.0020	0.0020	9853458
a-Chlordane	ug/g	<0.010	0.010	<0.020	0.020	<0.0020	0.0020	9853458
g-Chlordane	ug/g	<0.010	0.010	<0.020	0.020	<0.0020	0.0020	9853458
o,p-DDD	ug/g	<0.010	0.010	0.11	0.020	<0.0020	0.0020	9853458
p,p-DDD	ug/g	0.011	0.010	0.48	0.10	<0.0020	0.0020	9853458
o,p-DDE	ug/g	<0.010	0.010	0.028	0.020	<0.0020	0.0020	9853458
p,p-DDE	ug/g	<0.010	0.010	0.073	0.020	<0.0020	0.0020	9853458
o,p-DDT	ug/g	<0.010	0.010	<0.020	0.020	<0.0020	0.0020	9853458
p,p-DDT	ug/g	<0.010	0.010	<0.020	0.020	<0.0020	0.0020	9853458
Dieldrin	ug/g	<0.010	0.010	<0.020	0.020	<0.0020	0.0020	9853458
Lindane	ug/g	<0.010	0.010	<0.020	0.020	<0.0020	0.0020	9853458
Endosulfan I (alpha)	ug/g	<0.010	0.010	<0.020	0.020	<0.0020	0.0020	9853458
Endosulfan II (beta)	ug/g	<0.010	0.010	<0.020	0.020	<0.0020	0.0020	9853458
Endrin	ug/g	<0.010	0.010	<0.020	0.020	<0.0020	0.0020	9853458
Heptachlor	ug/g	<0.010	0.010	<0.020	0.020	<0.0020	0.0020	9853458
Heptachlor epoxide	ug/g	<0.010	0.010	<0.020	0.020	<0.0020	0.0020	9853458
Hexachlorobenzene	ug/g	<0.010	0.010	<0.020	0.020	<0.0020	0.0020	9853458
Hexachlorobutadiene	ug/g	<0.010	0.010	<0.020	0.020	<0.0020	0.0020	9853458
Hexachloroethane	ug/g	<0.010	0.010	<0.020	0.020	<0.0020	0.0020	9853458
Methoxychlor	ug/g	<0.025	0.025	<0.050	0.050	<0.0050	0.0050	9853458
Aroclor 1242	ug/g	<0.075	0.075	<0.15	0.15	<0.015	0.015	9853458
Aroclor 1248	ug/g	<0.075	0.075	<0.15	0.15	<0.015	0.015	9853458
Aroclor 1254	ug/g	<0.075	0.075	<0.15	0.15	<0.015	0.015	9853458
Aroclor 1260	ug/g	<0.075	0.075	<0.15	0.15	<0.015	0.015	9853458

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch

ORGANOCHLORINATED PESTICIDES BY GC-ECD (SOIL)

Bureau Veritas ID		AMLF15		AMLF16		AMLF17		
Sampling Date		2024/12/19 09:32		2024/12/19 09:41		2024/12/19 09:58		
COC Number		C#1028193-01-01		C#1028193-01-01		C#1028193-01-01		
	UNITS	241219BH-101(0.6-1.2)	RDL	241219BH-101(3.7-4.3)	RDL	241219BH-101(5.5-6.1)	RDL	QC Batch
Surrogate Recovery (%)								
2,4,5,6-Tetrachloro-m-xylene	%	113		126		100		9853458
Decachlorobiphenyl	%	127		164 (1)		81		9853458

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch
(1) Surrogate recovery was above the upper control limit due to matrix interference. This may represent a high bias in some results.

ORGANOCHLORINATED PESTICIDES BY GC-ECD (SOIL)

Bureau Veritas ID		AMLF21		
Sampling Date		2024/12/19 13:54		
COC Number		C#1028193-01-01		
	UNITS	241219BH-103(2.4-3.1)	RDL	QC Batch
Calculated Parameters				
Chlordane (Total)	ug/g	<0.0020	0.0020	9842444
o,p-DDD + p,p-DDD	ug/g	0.018	0.0020	9842444
o,p-DDE + p,p-DDE	ug/g	0.0044	0.0020	9842444
o,p-DDT + p,p-DDT	ug/g	<0.0020	0.0020	9842444
Total Endosulfan	ug/g	<0.0020	0.0020	9842444
Total PCB	ug/g	<0.020	0.020	9842444
Pesticides & Herbicides				
Aldrin	ug/g	<0.0020	0.0020	9853458
a-Chlordane	ug/g	<0.0020	0.0020	9853458
g-Chlordane	ug/g	<0.0020	0.0020	9853458
o,p-DDD	ug/g	0.0042	0.0020	9853458
p,p-DDD	ug/g	0.014	0.0020	9853458
o,p-DDE	ug/g	<0.0020	0.0020	9853458
p,p-DDE	ug/g	0.0044	0.0020	9853458
o,p-DDT	ug/g	<0.0020	0.0020	9853458
p,p-DDT	ug/g	<0.0020	0.0020	9853458
Dieldrin	ug/g	<0.0020	0.0020	9853458
Lindane	ug/g	<0.0020	0.0020	9853458
Endosulfan I (alpha)	ug/g	<0.0020	0.0020	9853458
Endosulfan II (beta)	ug/g	<0.0020	0.0020	9853458
Endrin	ug/g	<0.0020	0.0020	9853458
Heptachlor	ug/g	<0.0020	0.0020	9853458
Heptachlor epoxide	ug/g	<0.0020	0.0020	9853458
Hexachlorobenzene	ug/g	<0.0020	0.0020	9853458
Hexachlorobutadiene	ug/g	<0.0020	0.0020	9853458
Hexachloroethane	ug/g	<0.0020	0.0020	9853458
Methoxychlor	ug/g	<0.0050	0.0050	9853458
Aroclor 1242	ug/g	<0.020	0.020	9853458
Aroclor 1248	ug/g	<0.020	0.020	9853458
Aroclor 1254	ug/g	<0.020	0.020	9853458
Aroclor 1260	ug/g	<0.020	0.020	9853458

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch

Parsons Inc.
Client Project #: 10-13148
Your P.O. #: 479008.02000
Sampler Initials: PP

ORGANOCHLORINATED PESTICIDES BY GC-ECD (SOIL)

Bureau Veritas ID		AMLF21		
Sampling Date		2024/12/19 13:54		
COC Number		C#1028193-01-01		
	UNITS	**241219BH-103(2.4-3.1)**	**RDL**	**QC Batch**
Surrogate Recovery (%)				
2,4,5,6-Tetrachloro-m-xylene	%	88		9853458
Decachlorobiphenyl	%	77		9853458

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch

GENERAL COMMENTS

Sample AMLF15 [241219BH-101(0.6-1.2)] : OC Pesticide Analysis: Due to the sample matrix, sample required dilution. Detection limits were adjusted accordingly.

Sample AMLF16 [241219BH-101(3.7-4.3)] : PAH ANALYSIS: Detection limits were adjusted for high moisture content.
PAH ANALYSIS: Due to the sample matrix, sample required dilution. Detection limits were adjusted accordingly.

OC Pesticide Analysis: Due to the sample matrix, sample required dilution. Detection limits were adjusted accordingly. Detection limits were adjusted for high moisture content.

Sample AMLF19 [241219BH-102(4.3-4.9)] : PAH ANALYSIS: Due to the sample matrix, sample required dilution. Detection limits were adjusted accordingly.

Sample AMLF19 [241219BH-102(4.3-4.9)] : VOC/F1 Analysis: Detection limits were raised due to high moisture content and/or low weight of soil provided.

Sample AMLF21 [241219BH-103(2.4-3.1)] : OC Pesticide Analysis: Detection Limits were raised due to matrix interferences.

Sample AMLF23 [241219BH-104(1.2-1.8)] : PAH ANALYSIS: Due to the sample matrix, sample required dilution. Detection limits were adjusted accordingly.

Results relate only to the items tested.

QUALITY ASSURANCE REPORT

QA/QC Batch	Init	QC Type	Parameter	Date Analyzed	Value	Recovery	UNITS	QC Limits
9844140	DW5	Matrix Spike	4-Bromofluorobenzene	2024/12/24		106	%	60 - 140
			D10-o-Xylene	2024/12/24		118	%	60 - 130
			D4-1,2-Dichloroethane	2024/12/24		112	%	60 - 140
			D8-Toluene	2024/12/24		101	%	60 - 140
			Acetone (2-Propanone)	2024/12/24		106	%	60 - 140
			Benzene	2024/12/24		104	%	60 - 140
			Bromodichloromethane	2024/12/24		105	%	60 - 140
			Bromoform	2024/12/24		101	%	60 - 140
			Bromomethane	2024/12/24		106	%	60 - 140
			Carbon Tetrachloride	2024/12/24		124	%	60 - 140
			Chlorobenzene	2024/12/24		93	%	60 - 140
			Chloroform	2024/12/24		109	%	60 - 140
			Dibromochloromethane	2024/12/24		104	%	60 - 140
			1,2-Dichlorobenzene	2024/12/24		101	%	60 - 140
			1,3-Dichlorobenzene	2024/12/24		102	%	60 - 140
			1,4-Dichlorobenzene	2024/12/24		103	%	60 - 140
			Dichlorodifluoromethane (FREON 12)	2024/12/24		163 (1)	%	60 - 140
			1,1-Dichloroethane	2024/12/24		101	%	60 - 140
			1,2-Dichloroethane	2024/12/24		118	%	60 - 140
			1,1-Dichloroethylene	2024/12/24		109	%	60 - 140
			cis-1,2-Dichloroethylene	2024/12/24		111	%	60 - 140
			trans-1,2-Dichloroethylene	2024/12/24		111	%	60 - 140
			1,2-Dichloropropane	2024/12/24		100	%	60 - 140
			cis-1,3-Dichloropropene	2024/12/24		94	%	60 - 140
			trans-1,3-Dichloropropene	2024/12/24		100	%	60 - 140
			Ethylbenzene	2024/12/24		98	%	60 - 140
			Ethylene Dibromide	2024/12/24		97	%	60 - 140
			Hexane	2024/12/24		113	%	60 - 140
			Methylene Chloride(Dichloromethane)	2024/12/24		98	%	60 - 140
			Methyl Ethyl Ketone (2-Butanone)	2024/12/24		96	%	60 - 140
			Methyl Isobutyl Ketone	2024/12/24		95	%	60 - 140
			Methyl t-butyl ether (MTBE)	2024/12/24		106	%	60 - 140
			Styrene	2024/12/24		96	%	60 - 140
			1,1,1,2-Tetrachloroethane	2024/12/24		110	%	60 - 140
			1,1,2,2-Tetrachloroethane	2024/12/24		88	%	60 - 140
			Tetrachloroethylene	2024/12/24		105	%	60 - 140
			Toluene	2024/12/24		98	%	60 - 140
			1,1,1-Trichloroethane	2024/12/24		109	%	60 - 140
			1,1,2-Trichloroethane	2024/12/24		106	%	60 - 140
			Trichloroethylene	2024/12/24		110	%	60 - 140
			Trichlorofluoromethane (FREON 11)	2024/12/24		116	%	60 - 140
			Vinyl Chloride	2024/12/24		106	%	60 - 140
			p+m-Xylene	2024/12/24		95	%	60 - 140
			o-Xylene	2024/12/24		104	%	60 - 140
			F1 (C6-C10)	2024/12/24		100	%	60 - 140
9844140	DW5	Spiked Blank	4-Bromofluorobenzene	2024/12/24		106	%	60 - 140
			D10-o-Xylene	2024/12/24		108	%	60 - 130
			D4-1,2-Dichloroethane	2024/12/24		111	%	60 - 140
			D8-Toluene	2024/12/24		101	%	60 - 140
			Acetone (2-Propanone)	2024/12/24		102	%	60 - 140
			Benzene	2024/12/24		100	%	60 - 130
			Bromodichloromethane	2024/12/24		101	%	60 - 130
			Bromoform	2024/12/24		99	%	60 - 130

QUALITY ASSURANCE REPORT(CONT'D)

QA/QC Batch	Init	QC Type	Parameter	Date Analyzed	Value	Recovery	UNITS	QC Limits
			Bromomethane	2024/12/24		104	%	60 - 140
			Carbon Tetrachloride	2024/12/24		118	%	60 - 130
			Chlorobenzene	2024/12/24		90	%	60 - 130
			Chloroform	2024/12/24		105	%	60 - 130
			Dibromochloromethane	2024/12/24		101	%	60 - 130
			1,2-Dichlorobenzene	2024/12/24		98	%	60 - 130
			1,3-Dichlorobenzene	2024/12/24		98	%	60 - 130
			1,4-Dichlorobenzene	2024/12/24		100	%	60 - 130
			Dichlorodifluoromethane (FREON 12)	2024/12/24		161 (1)	%	60 - 140
			1,1-Dichloroethane	2024/12/24		98	%	60 - 130
			1,2-Dichloroethane	2024/12/24		113	%	60 - 130
			1,1-Dichloroethylene	2024/12/24		106	%	60 - 130
			cis-1,2-Dichloroethylene	2024/12/24		108	%	60 - 130
			trans-1,2-Dichloroethylene	2024/12/24		108	%	60 - 130
			1,2-Dichloropropane	2024/12/24		97	%	60 - 130
			cis-1,3-Dichloropropene	2024/12/24		94	%	60 - 130
			trans-1,3-Dichloropropene	2024/12/24		100	%	60 - 130
			Ethylbenzene	2024/12/24		96	%	60 - 130
			Ethylene Dibromide	2024/12/24		96	%	60 - 130
			Hexane	2024/12/24		109	%	60 - 130
			Methylene Chloride(Dichloromethane)	2024/12/24		96	%	60 - 130
			Methyl Ethyl Ketone (2-Butanone)	2024/12/24		93	%	60 - 140
			Methyl Isobutyl Ketone	2024/12/24		93	%	60 - 130
			Methyl t-butyl ether (MTBE)	2024/12/24		104	%	60 - 130
			Styrene	2024/12/24		94	%	60 - 130
			1,1,1,2-Tetrachloroethane	2024/12/24		107	%	60 - 130
			1,1,2,2-Tetrachloroethane	2024/12/24		86	%	60 - 130
			Tetrachloroethylene	2024/12/24		103	%	60 - 130
			Toluene	2024/12/24		96	%	60 - 130
			1,1,1-Trichloroethane	2024/12/24		106	%	60 - 130
			1,1,2-Trichloroethane	2024/12/24		103	%	60 - 130
			Trichloroethylene	2024/12/24		106	%	60 - 130
			Trichlorofluoromethane (FREON 11)	2024/12/24		113	%	60 - 130
			Vinyl Chloride	2024/12/24		104	%	60 - 130
			p+m-Xylene	2024/12/24		94	%	60 - 130
			o-Xylene	2024/12/24		101	%	60 - 130
			F1 (C6-C10)	2024/12/24		93	%	80 - 120
9844140	DW5	Method Blank	4-Bromofluorobenzene	2024/12/24		105	%	60 - 140
			D10-o-Xylene	2024/12/24		110	%	60 - 130
			D4-1,2-Dichloroethane	2024/12/24		106	%	60 - 140
			D8-Toluene	2024/12/24		100	%	60 - 140
			Acetone (2-Propanone)	2024/12/24	<0.49		ug/g	
			Benzene	2024/12/24	<0.0060		ug/g	
			Bromodichloromethane	2024/12/24	<0.040		ug/g	
			Bromoform	2024/12/24	<0.040		ug/g	
			Bromomethane	2024/12/24	<0.040		ug/g	
			Carbon Tetrachloride	2024/12/24	<0.040		ug/g	
			Chlorobenzene	2024/12/24	<0.040		ug/g	
			Chloroform	2024/12/24	<0.040		ug/g	
			Dibromochloromethane	2024/12/24	<0.040		ug/g	
			1,2-Dichlorobenzene	2024/12/24	<0.040		ug/g	
			1,3-Dichlorobenzene	2024/12/24	<0.040		ug/g	
			1,4-Dichlorobenzene	2024/12/24	<0.040		ug/g	

QUALITY ASSURANCE REPORT(CONT'D)

QA/QC Batch	Init	QC Type	Parameter	Date Analyzed	Value	Recovery	UNITS	QC Limits
			Dichlorodifluoromethane (FREON 12)	2024/12/24	<0.040		ug/g	
			1,1-Dichloroethane	2024/12/24	<0.040		ug/g	
			1,2-Dichloroethane	2024/12/24	<0.049		ug/g	
			1,1-Dichloroethylene	2024/12/24	<0.040		ug/g	
			cis-1,2-Dichloroethylene	2024/12/24	<0.040		ug/g	
			trans-1,2-Dichloroethylene	2024/12/24	<0.040		ug/g	
			1,2-Dichloropropane	2024/12/24	<0.040		ug/g	
			cis-1,3-Dichloropropene	2024/12/24	<0.030		ug/g	
			trans-1,3-Dichloropropene	2024/12/24	<0.040		ug/g	
			Ethylbenzene	2024/12/24	<0.010		ug/g	
			Ethylene Dibromide	2024/12/24	<0.040		ug/g	
			Hexane	2024/12/24	<0.040		ug/g	
			Methylene Chloride(Dichloromethane)	2024/12/24	<0.049		ug/g	
			Methyl Ethyl Ketone (2-Butanone)	2024/12/24	<0.40		ug/g	
			Methyl Isobutyl Ketone	2024/12/24	<0.40		ug/g	
			Methyl t-butyl ether (MTBE)	2024/12/24	<0.040		ug/g	
			Styrene	2024/12/24	<0.040		ug/g	
			1,1,1,2-Tetrachloroethane	2024/12/24	<0.040		ug/g	
			1,1,2,2-Tetrachloroethane	2024/12/24	<0.040		ug/g	
			Tetrachloroethylene	2024/12/24	<0.040		ug/g	
			Toluene	2024/12/24	<0.020		ug/g	
			1,1,1-Trichloroethane	2024/12/24	<0.040		ug/g	
			1,1,2-Trichloroethane	2024/12/24	<0.040		ug/g	
			Trichloroethylene	2024/12/24	<0.010		ug/g	
			Trichlorofluoromethane (FREON 11)	2024/12/24	<0.040		ug/g	
			Vinyl Chloride	2024/12/24	<0.019		ug/g	
			p+m-Xylene	2024/12/24	<0.020		ug/g	
			o-Xylene	2024/12/24	<0.020		ug/g	
			Total Xylenes	2024/12/24	<0.020		ug/g	
			F1 (C6-C10)	2024/12/24	<10		ug/g	
			F1 (C6-C10) - BTEX	2024/12/24	<10		ug/g	
9844140	DW5	RPD	Acetone (2-Propanone)	2024/12/24	NC		%	50
			Benzene	2024/12/24	NC		%	50
			Bromodichloromethane	2024/12/24	NC		%	50
			Bromoform	2024/12/24	NC		%	50
			Bromomethane	2024/12/24	NC		%	50
			Carbon Tetrachloride	2024/12/24	NC		%	50
			Chlorobenzene	2024/12/24	NC		%	50
			Chloroform	2024/12/24	NC		%	50
			Dibromochloromethane	2024/12/24	NC		%	50
			1,2-Dichlorobenzene	2024/12/24	NC		%	50
			1,3-Dichlorobenzene	2024/12/24	NC		%	50
			1,4-Dichlorobenzene	2024/12/24	NC		%	50
			Dichlorodifluoromethane (FREON 12)	2024/12/24	NC		%	50
			1,1-Dichloroethane	2024/12/24	NC		%	50
			1,2-Dichloroethane	2024/12/24	NC		%	50
			1,1-Dichloroethylene	2024/12/24	NC		%	50
			cis-1,2-Dichloroethylene	2024/12/24	NC		%	50
			trans-1,2-Dichloroethylene	2024/12/24	NC		%	50
			1,2-Dichloropropane	2024/12/24	NC		%	50
			cis-1,3-Dichloropropene	2024/12/24	NC		%	50
			trans-1,3-Dichloropropene	2024/12/24	NC		%	50
			Ethylbenzene	2024/12/24	NC		%	50

QUALITY ASSURANCE REPORT(CONT'D)

QA/QC Batch	Init	QC Type	Parameter	Date Analyzed	Value	Recovery	UNITS	QC Limits
			Ethylene Dibromide	2024/12/24	NC		%	50
			Hexane	2024/12/24	NC		%	50
			Methylene Chloride(Dichloromethane)	2024/12/24	NC		%	50
			Methyl Ethyl Ketone (2-Butanone)	2024/12/24	NC		%	50
			Methyl Isobutyl Ketone	2024/12/24	NC		%	50
			Methyl t-butyl ether (MTBE)	2024/12/24	NC		%	50
			Styrene	2024/12/24	NC		%	50
			1,1,1,2-Tetrachloroethane	2024/12/24	NC		%	50
			1,1,2,2-Tetrachloroethane	2024/12/24	NC		%	50
			Tetrachloroethylene	2024/12/24	NC		%	50
			Toluene	2024/12/24	NC		%	50
			1,1,1-Trichloroethane	2024/12/24	NC		%	50
			1,1,2-Trichloroethane	2024/12/24	NC		%	50
			Trichloroethylene	2024/12/24	NC		%	50
			Trichlorofluoromethane (FREON 11)	2024/12/24	NC		%	50
			Vinyl Chloride	2024/12/24	NC		%	50
			p+m-Xylene	2024/12/24	NC		%	50
			o-Xylene	2024/12/24	NC		%	50
			Total Xylenes	2024/12/24	NC		%	50
			F1 (C6-C10)	2024/12/24	NC		%	30
			F1 (C6-C10) - BTEX	2024/12/24	NC		%	30
9844915	MUC	RPD [AMLF17-02]	Moisture	2024/12/23	5.4		%	20
9845808	MUC	QC Standard	Sieve - #200 (<0.075mm)	2024/12/27		58	%	53 - 58
			Sieve - #200 (>0.075mm)	2024/12/27		42	%	42 - 47
9845808	MUC	RPD	Sieve - #200 (<0.075mm)	2024/12/27	2.1		%	20
			Sieve - #200 (>0.075mm)	2024/12/27	2.5		%	20
9851829	ABS	Matrix Spike	o-Terphenyl	2024/12/31		106	%	60 - 140
			F2 (C10-C16 Hydrocarbons)	2024/12/31		106	%	60 - 140
			F3 (C16-C34 Hydrocarbons)	2024/12/31		106	%	60 - 140
			F4 (C34-C50 Hydrocarbons)	2024/12/31		99	%	60 - 140
9851829	ABS	Spiked Blank	o-Terphenyl	2024/12/31		109	%	60 - 140
			F2 (C10-C16 Hydrocarbons)	2024/12/31		107	%	80 - 120
			F3 (C16-C34 Hydrocarbons)	2024/12/31		108	%	80 - 120
			F4 (C34-C50 Hydrocarbons)	2024/12/31		100	%	80 - 120
9851829	ABS	Method Blank	o-Terphenyl	2024/12/31		106	%	60 - 140
			F2 (C10-C16 Hydrocarbons)	2024/12/31	<7.0		ug/g	
			F3 (C16-C34 Hydrocarbons)	2024/12/31	<50		ug/g	
			F4 (C34-C50 Hydrocarbons)	2024/12/31	<50		ug/g	
9851829	ABS	RPD	F2 (C10-C16 Hydrocarbons)	2024/12/31	NC		%	30
			F3 (C16-C34 Hydrocarbons)	2024/12/31	NC		%	30
			F4 (C34-C50 Hydrocarbons)	2024/12/31	NC		%	30
9851841	BLZ	Matrix Spike [AMLF24-02]	D10-Anthracene	2024/12/31		94	%	50 - 130
			D14-Terphenyl (FS)	2024/12/31		99	%	50 - 130
			D8-Acenaphthylene	2024/12/31		83	%	50 - 130
			Acenaphthene	2024/12/31		88	%	50 - 130
			Acenaphthylene	2024/12/31		83	%	50 - 130
			Anthracene	2024/12/31		92	%	50 - 130
			Benzo(a)anthracene	2024/12/31		98	%	50 - 130
			Benzo(a)pyrene	2024/12/31		99	%	50 - 130
			Benzo(b/j)fluoranthene	2024/12/31		98	%	50 - 130
			Benzo(g,h,i)perylene	2024/12/31		97	%	50 - 130
			Benzo(k)fluoranthene	2024/12/31		104	%	50 - 130

QUALITY ASSURANCE REPORT(CONT'D)

QA/QC Batch	Init	QC Type	Parameter	Date Analyzed	Value	Recovery	UNITS	QC Limits
			Chrysene	2024/12/31		91	%	50 - 130
			Dibenzo(a,h)anthracene	2024/12/31		93	%	50 - 130
			Fluoranthene	2024/12/31		96	%	50 - 130
			Fluorene	2024/12/31		90	%	50 - 130
			Indeno(1,2,3-cd)pyrene	2024/12/31		99	%	50 - 130
			1-Methylnaphthalene	2024/12/31		83	%	50 - 130
			2-Methylnaphthalene	2024/12/31		82	%	50 - 130
			Naphthalene	2024/12/31		76	%	50 - 130
			Phenanthrene	2024/12/31		93	%	50 - 130
			Pyrene	2024/12/31		97	%	50 - 130
9851841	BLZ	Spiked Blank	D10-Anthracene	2024/12/31		95	%	50 - 130
			D14-Terphenyl (FS)	2024/12/31		100	%	50 - 130
			D8-Acenaphthylene	2024/12/31		84	%	50 - 130
			Acenaphthene	2024/12/31		89	%	50 - 130
			Acenaphthylene	2024/12/31		83	%	50 - 130
			Anthracene	2024/12/31		90	%	50 - 130
			Benzo(a)anthracene	2024/12/31		93	%	50 - 130
			Benzo(a)pyrene	2024/12/31		97	%	50 - 130
			Benzo(b/j)fluoranthene	2024/12/31		96	%	50 - 130
			Benzo(g,h,i)perylene	2024/12/31		96	%	50 - 130
			Benzo(k)fluoranthene	2024/12/31		102	%	50 - 130
			Chrysene	2024/12/31		90	%	50 - 130
			Dibenzo(a,h)anthracene	2024/12/31		90	%	50 - 130
			Fluoranthene	2024/12/31		95	%	50 - 130
			Fluorene	2024/12/31		89	%	50 - 130
			Indeno(1,2,3-cd)pyrene	2024/12/31		99	%	50 - 130
			1-Methylnaphthalene	2024/12/31		88	%	50 - 130
			2-Methylnaphthalene	2024/12/31		87	%	50 - 130
			Naphthalene	2024/12/31		85	%	50 - 130
			Phenanthrene	2024/12/31		92	%	50 - 130
			Pyrene	2024/12/31		95	%	50 - 130
9851841	BLZ	Method Blank	D10-Anthracene	2024/12/31		94	%	50 - 130
			D14-Terphenyl (FS)	2024/12/31		100	%	50 - 130
			D8-Acenaphthylene	2024/12/31		85	%	50 - 130
			Acenaphthene	2024/12/31	<0.0050		ug/g	
			Acenaphthylene	2024/12/31	<0.0050		ug/g	
			Anthracene	2024/12/31	<0.0050		ug/g	
			Benzo(a)anthracene	2024/12/31	<0.0050		ug/g	
			Benzo(a)pyrene	2024/12/31	<0.0050		ug/g	
			Benzo(b/j)fluoranthene	2024/12/31	<0.0050		ug/g	
			Benzo(g,h,i)perylene	2024/12/31	<0.0050		ug/g	
			Benzo(k)fluoranthene	2024/12/31	<0.0050		ug/g	
			Chrysene	2024/12/31	<0.0050		ug/g	
			Dibenzo(a,h)anthracene	2024/12/31	<0.0050		ug/g	
			Fluoranthene	2024/12/31	<0.0050		ug/g	
			Fluorene	2024/12/31	<0.0050		ug/g	
			Indeno(1,2,3-cd)pyrene	2024/12/31	<0.0050		ug/g	
			1-Methylnaphthalene	2024/12/31	<0.0050		ug/g	
			2-Methylnaphthalene	2024/12/31	<0.0050		ug/g	
			Naphthalene	2024/12/31	<0.0050		ug/g	
			Phenanthrene	2024/12/31	<0.0050		ug/g	
			Pyrene	2024/12/31	<0.0050		ug/g	
9851841	BLZ	RPD [AMLF24-02]	Acenaphthene	2024/12/31	NC		%	40

QUALITY ASSURANCE REPORT(CONT'D)

QA/QC Batch	Init	QC Type	Parameter	Date Analyzed	Value	Recovery	UNITS	QC Limits
			Acenaphthylene	2024/12/31	NC		%	40
			Anthracene	2024/12/31	NC		%	40
			Benzo(a)anthracene	2024/12/31	NC		%	40
			Benzo(a)pyrene	2024/12/31	NC		%	40
			Benzo(b/j)fluoranthene	2024/12/31	NC		%	40
			Benzo(g,h,i)perylene	2024/12/31	NC		%	40
			Benzo(k)fluoranthene	2024/12/31	NC		%	40
			Chrysene	2024/12/31	NC		%	40
			Dibenzo(a,h)anthracene	2024/12/31	NC		%	40
			Fluoranthene	2024/12/31	NC		%	40
			Fluorene	2024/12/31	NC		%	40
			Indeno(1,2,3-cd)pyrene	2024/12/31	NC		%	40
			1-Methylnaphthalene	2024/12/31	NC		%	40
			2-Methylnaphthalene	2024/12/31	NC		%	40
			Naphthalene	2024/12/31	NC		%	40
			Phenanthrene	2024/12/31	NC		%	40
			Pyrene	2024/12/31	NC		%	40
9852535	SRT	Spiked Blank	Available (CaCl2) pH	2024/12/31		100	%	97 - 103
9852535	SRT	RPD	Available (CaCl2) pH	2024/12/31	0.33		%	N/A
9852563	SRT	Spiked Blank	Available (CaCl2) pH	2024/12/31		100	%	97 - 103
9852563	SRT	RPD	Available (CaCl2) pH	2024/12/31	0.29		%	N/A
9853458	LPG	Matrix Spike	2,4,5,6-Tetrachloro-m-xylene	2025/01/03		94	%	50 - 130
			Decachlorobiphenyl	2025/01/03		116	%	50 - 130
			Aldrin	2025/01/03		100	%	50 - 130
			a-Chlordane	2025/01/03		102	%	50 - 130
			g-Chlordane	2025/01/03		101	%	50 - 130
			o,p-DDD	2025/01/03		111	%	50 - 130
			p,p-DDD	2025/01/03		115	%	50 - 130
			o,p-DDE	2025/01/03		102	%	50 - 130
			p,p-DDE	2025/01/03		110	%	50 - 130
			o,p-DDT	2025/01/03		110	%	50 - 130
			p,p-DDT	2025/01/03		116	%	50 - 130
			Dieldrin	2025/01/03		101	%	50 - 130
			Lindane	2025/01/03		89	%	50 - 130
			Endosulfan I (alpha)	2025/01/03		108	%	50 - 130
			Endosulfan II (beta)	2025/01/03		86	%	50 - 130
			Endrin	2025/01/03		127	%	50 - 130
			Heptachlor	2025/01/03		106	%	50 - 130
			Heptachlor epoxide	2025/01/03		92	%	50 - 130
			Hexachlorobenzene	2025/01/03		89	%	50 - 130
			Hexachlorobutadiene	2025/01/03		95	%	50 - 130
			Hexachloroethane	2025/01/03		73	%	50 - 130
			Methoxychlor	2025/01/03		102	%	50 - 130
9853458	LPG	Spiked Blank	2,4,5,6-Tetrachloro-m-xylene	2025/01/03		88	%	50 - 130
			Decachlorobiphenyl	2025/01/03		109	%	50 - 130
			Aldrin	2025/01/03		93	%	50 - 130
			a-Chlordane	2025/01/03		97	%	50 - 130
			g-Chlordane	2025/01/03		100	%	50 - 130
			o,p-DDD	2025/01/03		107	%	50 - 130
			p,p-DDD	2025/01/03		116	%	50 - 130
			o,p-DDE	2025/01/03		95	%	50 - 130
			p,p-DDE	2025/01/03		96	%	50 - 130
			o,p-DDT	2025/01/03		103	%	50 - 130

QUALITY ASSURANCE REPORT(CONT'D)

QA/QC Batch	Init	QC Type	Parameter	Date Analyzed	Value	Recovery	UNITS	QC Limits
			p,p-DDT	2025/01/03		113	%	50 - 130
			Dieldrin	2025/01/03		104	%	50 - 130
			Lindane	2025/01/03		95	%	50 - 130
			Endosulfan I (alpha)	2025/01/03		115	%	50 - 130
			Endosulfan II (beta)	2025/01/03		98	%	50 - 130
			Endrin	2025/01/03		129	%	50 - 130
			Heptachlor	2025/01/03		101	%	50 - 130
			Heptachlor epoxide	2025/01/03		96	%	50 - 130
			Hexachlorobenzene	2025/01/03		84	%	50 - 130
			Hexachlorobutadiene	2025/01/03		96	%	50 - 130
			Hexachloroethane	2025/01/03		83	%	50 - 130
			Methoxychlor	2025/01/03		113	%	50 - 130
9853458	LPG	RPD	Aldrin	2025/01/03	6.4		%	40
			a-Chlordane	2025/01/03	6.3		%	40
			g-Chlordane	2025/01/03	7.8		%	40
			o,p-DDD	2025/01/03	8.4		%	40
			p,p-DDD	2025/01/03	11		%	40
			o,p-DDE	2025/01/03	8.5		%	40
			p,p-DDE	2025/01/03	12		%	40
			o,p-DDT	2025/01/03	4.2		%	40
			p,p-DDT	2025/01/03	7.1		%	40
			Dieldrin	2025/01/03	8.5		%	40
			Lindane	2025/01/03	10		%	40
			Endosulfan I (alpha)	2025/01/03	11		%	40
			Endosulfan II (beta)	2025/01/03	12		%	40
			Endrin	2025/01/03	4.6		%	40
			Heptachlor	2025/01/03	7.9		%	40
			Heptachlor epoxide	2025/01/03	7.0		%	40
			Hexachlorobenzene	2025/01/03	6.3		%	40
			Hexachlorobutadiene	2025/01/03	6.4		%	40
			Hexachloroethane	2025/01/03	7.3		%	40
			Methoxychlor	2025/01/03	11		%	40
			Aldrin	2025/01/03	NC		%	40
			a-Chlordane	2025/01/03	NC		%	40
			g-Chlordane	2025/01/03	NC		%	40
			o,p-DDD	2025/01/03	NC		%	40
			p,p-DDD	2025/01/03	NC		%	40
			o,p-DDE	2025/01/03	NC		%	40
			p,p-DDE	2025/01/03	NC		%	40
			o,p-DDT	2025/01/03	NC		%	40
			p,p-DDT	2025/01/03	NC		%	40
			Dieldrin	2025/01/03	NC		%	40
			Lindane	2025/01/03	NC		%	40
			Endosulfan I (alpha)	2025/01/03	NC		%	40
			Endosulfan II (beta)	2025/01/03	NC		%	40
			Endrin	2025/01/03	NC		%	40
			Heptachlor	2025/01/03	NC		%	40
			Heptachlor epoxide	2025/01/03	NC		%	40
			Hexachlorobenzene	2025/01/03	NC		%	40
			Hexachlorobutadiene	2025/01/03	NC		%	40
			Hexachloroethane	2025/01/03	NC		%	40
			Methoxychlor	2025/01/03	NC		%	40
			Aroclor 1242	2025/01/03	NC		%	40

QUALITY ASSURANCE REPORT(CONT'D)

QA/QC Batch	Init	QC Type	Parameter	Date Analyzed	Value	Recovery	UNITS	QC Limits
			Aroclor 1248	2025/01/03	NC		%	40
			Aroclor 1254	2025/01/03	NC		%	40
			Aroclor 1260	2025/01/03	NC		%	40
9853458	LPG	Method Blank	2,4,5,6-Tetrachloro-m-xylene	2025/01/03		86	%	50 - 130
			Decachlorobiphenyl	2025/01/03		103	%	50 - 130
			Aldrin	2025/01/03	<0.0020		ug/g	
			a-Chlordane	2025/01/03	<0.0020		ug/g	
			g-Chlordane	2025/01/03	<0.0020		ug/g	
			o,p-DDD	2025/01/03	<0.0020		ug/g	
			p,p-DDD	2025/01/03	<0.0020		ug/g	
			o,p-DDE	2025/01/03	<0.0020		ug/g	
			p,p-DDE	2025/01/03	<0.0020		ug/g	
			o,p-DDT	2025/01/03	<0.0020		ug/g	
			p,p-DDT	2025/01/03	<0.0020		ug/g	
			Dieldrin	2025/01/03	<0.0020		ug/g	
			Lindane	2025/01/03	<0.0020		ug/g	
			Endosulfan I (alpha)	2025/01/03	<0.0020		ug/g	
			Endosulfan II (beta)	2025/01/03	<0.0020		ug/g	
			Endrin	2025/01/03	<0.0020		ug/g	
			Heptachlor	2025/01/03	<0.0020		ug/g	
			Heptachlor epoxide	2025/01/03	<0.0020		ug/g	
			Hexachlorobenzene	2025/01/03	<0.0020		ug/g	
			Hexachlorobutadiene	2025/01/03	<0.0020		ug/g	
			Hexachloroethane	2025/01/03	<0.0020		ug/g	
			Methoxychlor	2025/01/03	<0.0050		ug/g	
			Aroclor 1242	2025/01/03	<0.015		ug/g	
			Aroclor 1248	2025/01/03	<0.015		ug/g	
			Aroclor 1254	2025/01/03	<0.015		ug/g	
			Aroclor 1260	2025/01/03	<0.015		ug/g	
9853497	DT1	Matrix Spike	Acid Extractable Antimony (Sb)	2025/01/02		115	%	75 - 125
			Acid Extractable Arsenic (As)	2025/01/02		102	%	75 - 125
			Acid Extractable Barium (Ba)	2025/01/02		97	%	75 - 125
			Acid Extractable Beryllium (Be)	2025/01/02		100	%	75 - 125
			Acid Extractable Boron (B)	2025/01/02		100	%	75 - 125
			Acid Extractable Cadmium (Cd)	2025/01/02		101	%	75 - 125
			Acid Extractable Chromium (Cr)	2025/01/02		103	%	75 - 125
			Acid Extractable Cobalt (Co)	2025/01/02		103	%	75 - 125
			Acid Extractable Copper (Cu)	2025/01/02		97	%	75 - 125
			Acid Extractable Lead (Pb)	2025/01/02		105	%	75 - 125
			Acid Extractable Molybdenum (Mo)	2025/01/02		99	%	75 - 125
			Acid Extractable Nickel (Ni)	2025/01/02		102	%	75 - 125
			Acid Extractable Selenium (Se)	2025/01/02		106	%	75 - 125
			Acid Extractable Silver (Ag)	2025/01/02		102	%	75 - 125
			Acid Extractable Thallium (Tl)	2025/01/02		107	%	75 - 125
			Acid Extractable Uranium (U)	2025/01/02		108	%	75 - 125
			Acid Extractable Vanadium (V)	2025/01/02		101	%	75 - 125
			Acid Extractable Zinc (Zn)	2025/01/02		102	%	75 - 125
9853497	DT1	Spiked Blank	Acid Extractable Antimony (Sb)	2025/01/02		119	%	80 - 120
			Acid Extractable Arsenic (As)	2025/01/02		104	%	80 - 120
			Acid Extractable Barium (Ba)	2025/01/02		101	%	80 - 120
			Acid Extractable Beryllium (Be)	2025/01/02		101	%	80 - 120
			Acid Extractable Boron (B)	2025/01/02		101	%	80 - 120
			Acid Extractable Cadmium (Cd)	2025/01/02		102	%	80 - 120

QUALITY ASSURANCE REPORT(CONT'D)

QA/QC Batch	Init	QC Type	Parameter	Date Analyzed	Value	Recovery	UNITS	QC Limits
			Acid Extractable Chromium (Cr)	2025/01/02		100	%	80 - 120
			Acid Extractable Cobalt (Co)	2025/01/02		103	%	80 - 120
			Acid Extractable Copper (Cu)	2025/01/02		99	%	80 - 120
			Acid Extractable Lead (Pb)	2025/01/02		105	%	80 - 120
			Acid Extractable Molybdenum (Mo)	2025/01/02		99	%	80 - 120
			Acid Extractable Nickel (Ni)	2025/01/02		106	%	80 - 120
			Acid Extractable Selenium (Se)	2025/01/02		106	%	80 - 120
			Acid Extractable Silver (Ag)	2025/01/02		101	%	80 - 120
			Acid Extractable Thallium (Tl)	2025/01/02		107	%	80 - 120
			Acid Extractable Uranium (U)	2025/01/02		105	%	80 - 120
			Acid Extractable Vanadium (V)	2025/01/02		102	%	80 - 120
			Acid Extractable Zinc (Zn)	2025/01/02		107	%	80 - 120
9853497	DT1	Method Blank	Acid Extractable Antimony (Sb)	2025/01/02	<0.20		ug/g	
			Acid Extractable Arsenic (As)	2025/01/02	<1.0		ug/g	
			Acid Extractable Barium (Ba)	2025/01/02	<0.50		ug/g	
			Acid Extractable Beryllium (Be)	2025/01/02	<0.20		ug/g	
			Acid Extractable Boron (B)	2025/01/02	<5.0		ug/g	
			Acid Extractable Cadmium (Cd)	2025/01/02	<0.10		ug/g	
			Acid Extractable Chromium (Cr)	2025/01/02	<1.0		ug/g	
			Acid Extractable Cobalt (Co)	2025/01/02	<0.10		ug/g	
			Acid Extractable Copper (Cu)	2025/01/02	<0.50		ug/g	
			Acid Extractable Lead (Pb)	2025/01/02	<1.0		ug/g	
			Acid Extractable Molybdenum (Mo)	2025/01/02	<0.50		ug/g	
			Acid Extractable Nickel (Ni)	2025/01/02	<0.50		ug/g	
			Acid Extractable Selenium (Se)	2025/01/02	<0.50		ug/g	
			Acid Extractable Silver (Ag)	2025/01/02	<0.20		ug/g	
			Acid Extractable Thallium (Tl)	2025/01/02	<0.050		ug/g	
			Acid Extractable Uranium (U)	2025/01/02	<0.050		ug/g	
			Acid Extractable Vanadium (V)	2025/01/02	<5.0		ug/g	
			Acid Extractable Zinc (Zn)	2025/01/02	<5.0		ug/g	
9853497	DT1	RPD	Acid Extractable Antimony (Sb)	2025/01/02	NC		%	30
			Acid Extractable Arsenic (As)	2025/01/02	2.6		%	30
			Acid Extractable Barium (Ba)	2025/01/02	0.24		%	30
			Acid Extractable Beryllium (Be)	2025/01/02	NC		%	30
			Acid Extractable Boron (B)	2025/01/02	5.8		%	30
			Acid Extractable Cadmium (Cd)	2025/01/02	NC		%	30
			Acid Extractable Chromium (Cr)	2025/01/02	0.88		%	30
			Acid Extractable Cobalt (Co)	2025/01/02	2.1		%	30
			Acid Extractable Copper (Cu)	2025/01/02	5.8		%	30
			Acid Extractable Lead (Pb)	2025/01/02	0.75		%	30
			Acid Extractable Molybdenum (Mo)	2025/01/02	NC		%	30
			Acid Extractable Nickel (Ni)	2025/01/02	4.9		%	30
			Acid Extractable Selenium (Se)	2025/01/02	NC		%	30
			Acid Extractable Silver (Ag)	2025/01/02	NC		%	30
			Acid Extractable Thallium (Tl)	2025/01/02	4.2		%	30
			Acid Extractable Uranium (U)	2025/01/02	1.9		%	30
			Acid Extractable Vanadium (V)	2025/01/02	0.36		%	30
			Acid Extractable Zinc (Zn)	2025/01/02	0.59		%	30
9853533	DT1	Matrix Spike	Acid Extractable Antimony (Sb)	2025/01/03		117	%	75 - 125
			Acid Extractable Arsenic (As)	2025/01/03		101	%	75 - 125
			Acid Extractable Barium (Ba)	2025/01/03		99	%	75 - 125
			Acid Extractable Beryllium (Be)	2025/01/03		101	%	75 - 125
			Acid Extractable Boron (B)	2025/01/03		97	%	75 - 125

QUALITY ASSURANCE REPORT(CONT'D)

QA/QC Batch	Init	QC Type	Parameter	Date Analyzed	Value	Recovery	UNITS	QC Limits
			Acid Extractable Cadmium (Cd)	2025/01/03		100	%	75 - 125
			Acid Extractable Chromium (Cr)	2025/01/03		97	%	75 - 125
			Acid Extractable Cobalt (Co)	2025/01/03		101	%	75 - 125
			Acid Extractable Copper (Cu)	2025/01/03		98	%	75 - 125
			Acid Extractable Lead (Pb)	2025/01/03		100	%	75 - 125
			Acid Extractable Molybdenum (Mo)	2025/01/03		97	%	75 - 125
			Acid Extractable Nickel (Ni)	2025/01/03		105	%	75 - 125
			Acid Extractable Selenium (Se)	2025/01/03		102	%	75 - 125
			Acid Extractable Silver (Ag)	2025/01/03		100	%	75 - 125
			Acid Extractable Thallium (Tl)	2025/01/03		101	%	75 - 125
			Acid Extractable Uranium (U)	2025/01/03		103	%	75 - 125
			Acid Extractable Vanadium (V)	2025/01/03		97	%	75 - 125
			Acid Extractable Zinc (Zn)	2025/01/03		NC	%	75 - 125
9853533	DT1	Spiked Blank	Acid Extractable Antimony (Sb)	2025/01/02		125 (2)	%	80 - 120
			Acid Extractable Arsenic (As)	2025/01/02		110	%	80 - 120
			Acid Extractable Barium (Ba)	2025/01/02		99	%	80 - 120
			Acid Extractable Beryllium (Be)	2025/01/02		103	%	80 - 120
			Acid Extractable Boron (B)	2025/01/02		102	%	80 - 120
			Acid Extractable Cadmium (Cd)	2025/01/02		105	%	80 - 120
			Acid Extractable Chromium (Cr)	2025/01/02		106	%	80 - 120
			Acid Extractable Cobalt (Co)	2025/01/02		110	%	80 - 120
			Acid Extractable Copper (Cu)	2025/01/02		101	%	80 - 120
			Acid Extractable Lead (Pb)	2025/01/02		108	%	80 - 120
			Acid Extractable Molybdenum (Mo)	2025/01/02		101	%	80 - 120
			Acid Extractable Nickel (Ni)	2025/01/02		112	%	80 - 120
			Acid Extractable Selenium (Se)	2025/01/02		106	%	80 - 120
			Acid Extractable Silver (Ag)	2025/01/02		105	%	80 - 120
			Acid Extractable Thallium (Tl)	2025/01/02		110	%	80 - 120
			Acid Extractable Uranium (U)	2025/01/02		112	%	80 - 120
			Acid Extractable Vanadium (V)	2025/01/02		104	%	80 - 120
			Acid Extractable Zinc (Zn)	2025/01/02		111	%	80 - 120
9853533	DT1	Method Blank	Acid Extractable Antimony (Sb)	2025/01/02	<0.20		ug/g	
			Acid Extractable Arsenic (As)	2025/01/02	<1.0		ug/g	
			Acid Extractable Barium (Ba)	2025/01/02	<0.50		ug/g	
			Acid Extractable Beryllium (Be)	2025/01/02	<0.20		ug/g	
			Acid Extractable Boron (B)	2025/01/02	<5.0		ug/g	
			Acid Extractable Cadmium (Cd)	2025/01/02	<0.10		ug/g	
			Acid Extractable Chromium (Cr)	2025/01/02	<1.0		ug/g	
			Acid Extractable Cobalt (Co)	2025/01/02	<0.10		ug/g	
			Acid Extractable Copper (Cu)	2025/01/02	<0.50		ug/g	
			Acid Extractable Lead (Pb)	2025/01/02	<1.0		ug/g	
			Acid Extractable Molybdenum (Mo)	2025/01/02	<0.50		ug/g	
			Acid Extractable Nickel (Ni)	2025/01/02	<0.50		ug/g	
			Acid Extractable Selenium (Se)	2025/01/02	<0.50		ug/g	
			Acid Extractable Silver (Ag)	2025/01/02	<0.20		ug/g	
			Acid Extractable Thallium (Tl)	2025/01/02	<0.050		ug/g	
			Acid Extractable Uranium (U)	2025/01/02	<0.050		ug/g	
			Acid Extractable Vanadium (V)	2025/01/02	<5.0		ug/g	
			Acid Extractable Zinc (Zn)	2025/01/02	<5.0		ug/g	
9853533	DT1	RPD	Acid Extractable Antimony (Sb)	2025/01/03	NC		%	30
			Acid Extractable Arsenic (As)	2025/01/03	6.0		%	30
			Acid Extractable Barium (Ba)	2025/01/03	1.5		%	30
			Acid Extractable Beryllium (Be)	2025/01/03	21		%	30

QUALITY ASSURANCE REPORT(CONT'D)

QA/QC Batch	Init	QC Type	Parameter	Date Analyzed	Value	Recovery	UNITS	QC Limits
			Acid Extractable Boron (B)	2025/01/03	NC		%	30
			Acid Extractable Cadmium (Cd)	2025/01/03	0.14		%	30
			Acid Extractable Chromium (Cr)	2025/01/03	1.6		%	30
			Acid Extractable Cobalt (Co)	2025/01/03	1.1		%	30
			Acid Extractable Copper (Cu)	2025/01/03	2.7		%	30
			Acid Extractable Lead (Pb)	2025/01/03	8.3		%	30
			Acid Extractable Molybdenum (Mo)	2025/01/03	16		%	30
			Acid Extractable Nickel (Ni)	2025/01/03	4.4		%	30
			Acid Extractable Selenium (Se)	2025/01/03	NC		%	30
			Acid Extractable Silver (Ag)	2025/01/03	NC		%	30
			Acid Extractable Thallium (Tl)	2025/01/03	NC		%	30
			Acid Extractable Uranium (U)	2025/01/03	12		%	30
			Acid Extractable Vanadium (V)	2025/01/03	3.4		%	30
			Acid Extractable Zinc (Zn)	2025/01/03	2.8		%	30
9853940	RDU	Matrix Spike	F4G-sg (Grav. Heavy Hydrocarbons)	2025/01/03		103	%	65 - 135
9853940	RDU	Spiked Blank	F4G-sg (Grav. Heavy Hydrocarbons)	2025/01/03		101	%	65 - 135
9853940	RDU	Method Blank	F4G-sg (Grav. Heavy Hydrocarbons)	2025/01/03	<100		ug/g	
9853940	RDU	RPD	F4G-sg (Grav. Heavy Hydrocarbons)	2025/01/03	6.9		%	50

N/A = Not Applicable

Duplicate: Paired analysis of a separate portion of the same sample. Used to evaluate the variance in the measurement.

Matrix Spike: A sample to which a known amount of the analyte of interest has been added. Used to evaluate sample matrix interference.

QC Standard: A sample of known concentration prepared by an external agency under stringent conditions. Used as an independent check of method accuracy.

Spiked Blank: A blank matrix sample to which a known amount of the analyte, usually from a second source, has been added. Used to evaluate method accuracy.

Method Blank: A blank matrix containing all reagents used in the analytical procedure. Used to identify laboratory contamination.

Surrogate: A pure or isotopically labeled compound whose behavior mirrors the analytes of interest. Used to evaluate extraction efficiency.

NC (Matrix Spike): The recovery in the matrix spike was not calculated. The relative difference between the concentration in the parent sample and the spike amount was too small to permit a reliable recovery calculation (matrix spike concentration was less than the native sample concentration)

NC (Duplicate RPD): The duplicate RPD was not calculated. The concentration in the sample and/or duplicate was too low to permit a reliable RPD calculation (absolute difference <= 2x RDL).

(1) The recovery was above the upper control limit. This may represent a high bias in some results for this specific analyte. For results that were not detected (ND), this potential bias has no impact.

(2) Recovery or RPD for this parameter is outside control limits. The overall quality control for this analysis meets acceptability criteria.

VALIDATION SIGNATURE PAGE

The analytical data and all QC contained in this report were reviewed and validated by:

Cristina Carriere

Cristina Carriere, Senior Scientific Specialist

Bureau Veritas has procedures in place to guard against improper use of the electronic signature and have the required "signatories", as per ISO/IEC 17025, signing the reports. For Service Group specific validation, please refer to the Validation Signatures page if included, otherwise available by request. For Department specific Analyst/Supervisor validation names, please refer to the Test Summary section if included, otherwise available by request. This report is authorized by Rodney Major, General Manager responsible for Ontario Environmental laboratory operations.

Bureau Veritas 100 – 36 Antares Dr. Nepean, ON, K2E 7W5 Phone: 613-274-0573 Website: www.bvna.com

C4BP637
2024/12/20 15:05

BUREAU VERITAS

Bureau Veritas
6740 Campobello Road, Mississauga, Ontario Canada L5N 2L8 Tel:(905) 817-5700 Toll-free:800-563-6266 Fax:(905) 817-5777 www.bvna.com

Page 1 of 1

NONT-2024-12-4495

INVOICE TO:		REPORT TO:		PROJECT INFORMATION:		Lab Use Only:	
Company Name:	#39369 Parsons Inc.	Company Name:	Parsons Inc	Quotation #:	C35677	Bottle Order #:	1028193
Attention:	Accounts Payable	Attention:	Kelsy Marois	P.O. #:	479008.02000		
Address:	Unit 100 1223 Michael Street North Gloucester ON K1J 7T2	Address:		Project:	10-13148	COC #:	C#1028193-02-01
				Project Name:		Project Manager:	Katherine Szozda
Tel:	(613) 738-4160 Fax:	Tel:	Fax:	Site #:			
Email:	ParsonsIncAP.Parsons@parsons.com	Email:	kelsy.marois@parsons.com	Sampled By:	Parth Patel		

MOE REGULATED DRINKING WATER OR WATER INTENDED FOR HUMAN CONSUMPTION MUST BE SUBMITTED ON THE BUREAU VERITAS DRINKING WATER CHAIN OF CUSTODY

Regulation 153 (2011)
- [x] Table 1
- [ ] Table 2
- [x] Table 3
- [ ] Table ___
- [x] Res/Park
- [ ] Ind/Comm
- [ ] Agri/Other
- [ ] Medium/Fine
- [x] Coarse
- [ ] For RSC

Other Regulations
- [ ] CCME
- [ ] Reg 558
- [ ] MISA
- [ ] PWQO
- [ ] Other
- [ ] Sanitary Sewer Bylaw
- [ ] Storm Sewer Bylaw
- Municipality ______
- [ ] Reg 406 Table ______

Special Instructions

Include Criteria on Certificate of Analysis (Y/N)? ______

ANALYSIS REQUESTED (PLEASE BE SPECIFIC)

	Sample Barcode Label	Sample (Location) Identification	Date Sampled	Time Sampled	Matrix	Field Filtered (please circle): Metals / Hg / Cr VI	O.Reg 153 VOCs by HS & F1-F4 (Soil)	O.Reg 153 PAHs (Soil)	O.Reg 153 ICPMS Metals (Soil)	O.Reg 153 OC Pesticides & PCBs (Soil)	pH CaCl2 EXTRACT	Grain Size	Limited Sample	VOCs, F1			# of Bottles	Comments
1		241220BH-104(4.3-5.0)	12/20/24	10:07	SOIL		X	X	X								4	
2		241220BH-105(1.8-2.4)	12/20/24	12:11	SOIL		X	X	X								4	
3		241220BH-105(3.7-4.3)	12/20/24	12:28	SOIL							X					1	
4		241220BH-105(4.9-5.5)	12/20/24	13:01	SOIL		X	X	X								4	
5		241220DUP-01	12/20/24	13:01	SOIL		X	X					X				3	
6		241220BH-105(5.5-6.1)	12/20/24	13:31	SOIL		X	X	X		X						5	
7		241220 TB-01	12/20/24	14:30	Other									X				
8																		Custody Seal: Present / Intact; Cooling Media: Yes / No
9																		
10																		

Turnaround Time (TAT) Required:
Please provide advance notice for rush projects

Regular (Standard) TAT: [ ]
(will be applied if Rush TAT is not specified):
Standard TAT = 5-7 Working days for most tests.
Please note: Standard TAT for certain tests such as BOD and Dioxins/Furans are > 5 days - contact your Project Manager for details.

Job Specific Rush TAT (if applies to entire submission) [ ]
Date Required: ______ Time Required: ______
Rush Confirmation Number: ______ *(call lab for #)*

* RELINQUISHED BY: (Signature/Print)	Date: (YY/MM/DD)	Time	RECEIVED BY: (Signature/Print)	Date: (YY/MM/DD)	Time	# jars used and not submitted	Time Sensitive
Parth Patel / Patel	24/12/20	15:00	Pedro da Silva / [signature]	2024/12/20	15:05		
			SA Sucan Sawan	2024/12/21	08:29		

Laboratory Use Only

Temperature (°C) on Recei	Custody Seal	Yes	No
11/9/8 10/0/4	Present		✓
	Intact		✓

none

* UNLESS OTHERWISE AGREED TO IN WRITING, WORK SUBMITTED ON THIS CHAIN OF CUSTODY IS SUBJECT TO BUREAU VERITAS'S STANDARD TERMS AND CONDITIONS. SIGNING OF THIS CHAIN OF CUSTODY DOCUMENT IS ACKNOWLEDGMENT AND ACCEPTANCE OF OUR TERMS WHICH ARE AVAILABLE FOR VIEWING AT WWW.BVNA.COM/ENVIRONMENTAL-LABORATORIES/RESOURCES/COC-TERMS-AND-CONDITIONS.

* IT IS THE RESPONSIBILITY OF THE RELINQUISHER TO ENSURE THE ACCURACY OF THE CHAIN OF CUSTODY RECORD. AN INCOMPLETE CHAIN OF CUSTODY MAY RESULT IN ANALYTICAL TAT DELAYS.

** SAMPLE CONTAINER, PRESERVATION, HOLD TIME AND PACKAGE INFORMATION CAN BE VIEWED AT WWW.BVNA.COM/ENVIRONMENTAL-LABORATORIES/RESOURCES/CHAIN-CUSTODY-FORMS-COCS.

2/2/3
0/2/1

SAMPLES MUST BE KEPT COOL (< 10° C) FROM TIME OF SAMPLING UNTIL DELIVERY TO BUREAU VERITAS

White: Bureau Veritas Yellow: Client

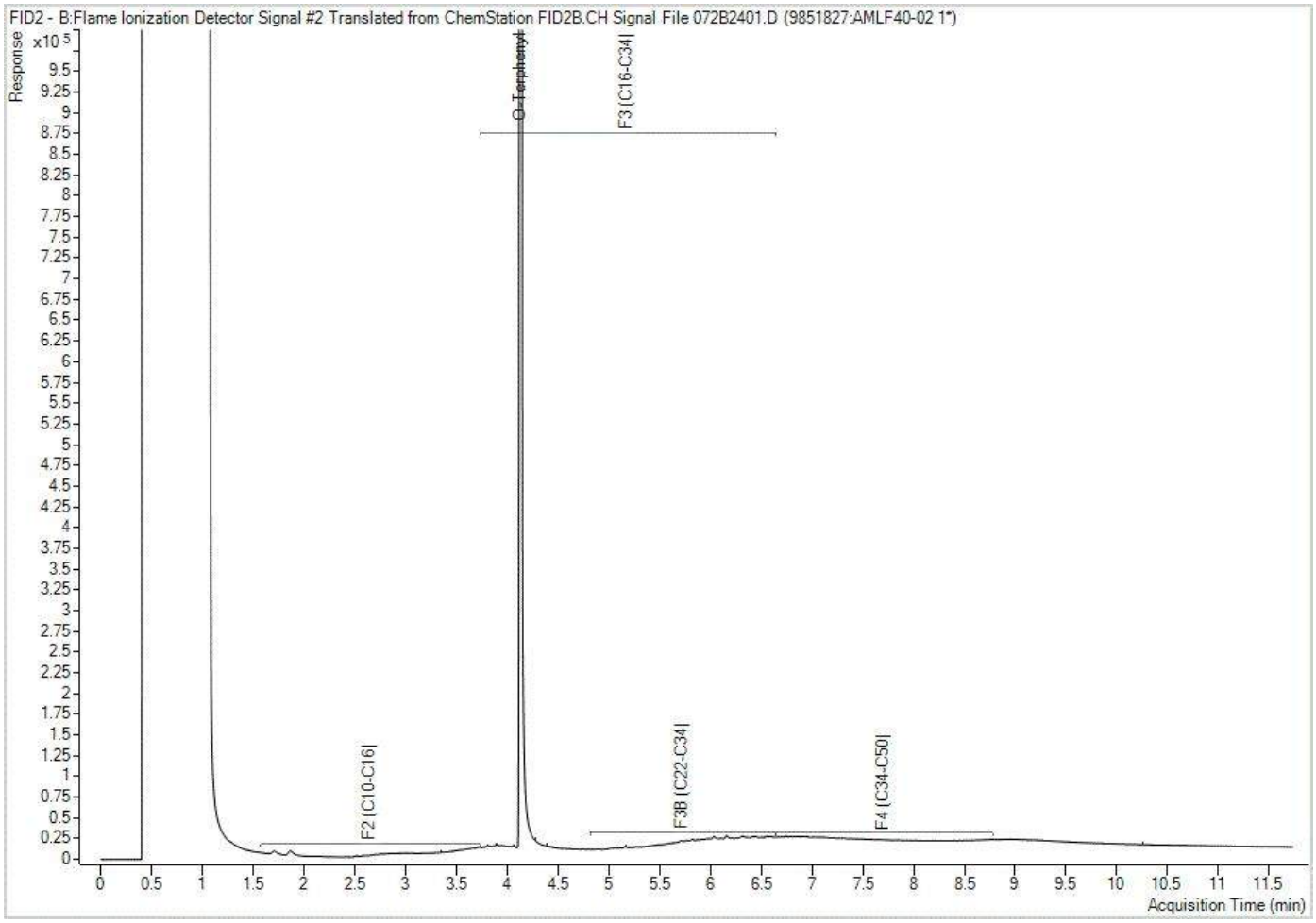
Received in Ottawa

Bureau Veritas Canada (2019) Inc.

Bureau Veritas Job #: C4BP637
Report Date: 2025/01/03
Bureau Veritas Sample: AMLF40

Parsons Inc.
Client Project #: 10-13148
Client ID: 241220BH-104(4.3-5.0)

Petroleum Hydrocarbons F2-F4 in Soil Chromatogram

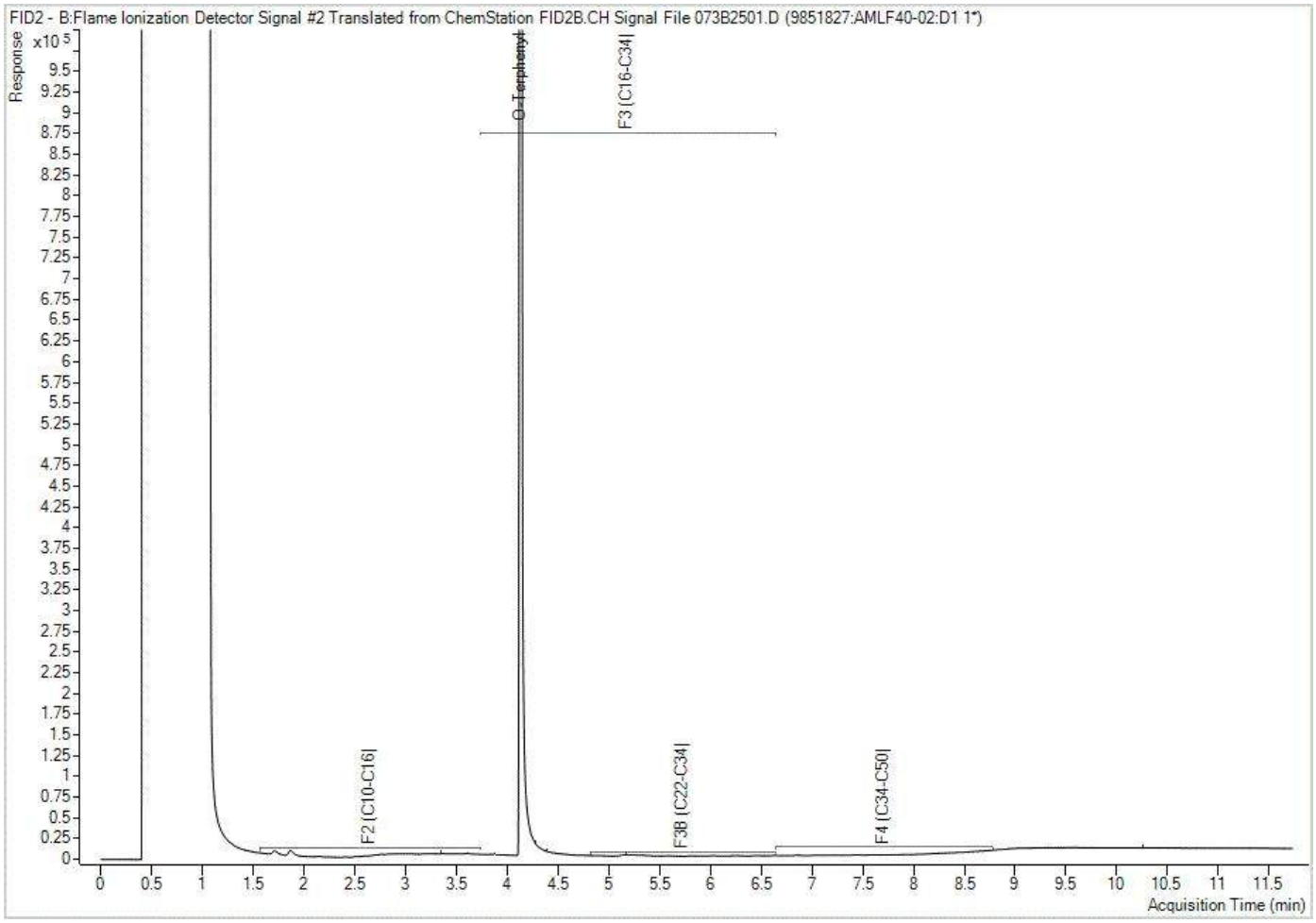


Note: This information is provided for reference purposes only. Should detailed chemist interpretation or fingerprinting be required, please contact the laboratory.

Bureau Veritas Job #: C4BP637
Report Date: 2025/01/03
Bureau Veritas Sample: AMLF40 Lab-Dup

Parsons Inc.
Client Project #: 10-13148
Client ID: 241220BH-104(4.3-5.0)

Petroleum Hydrocarbons F2-F4 in Soil Chromatogram

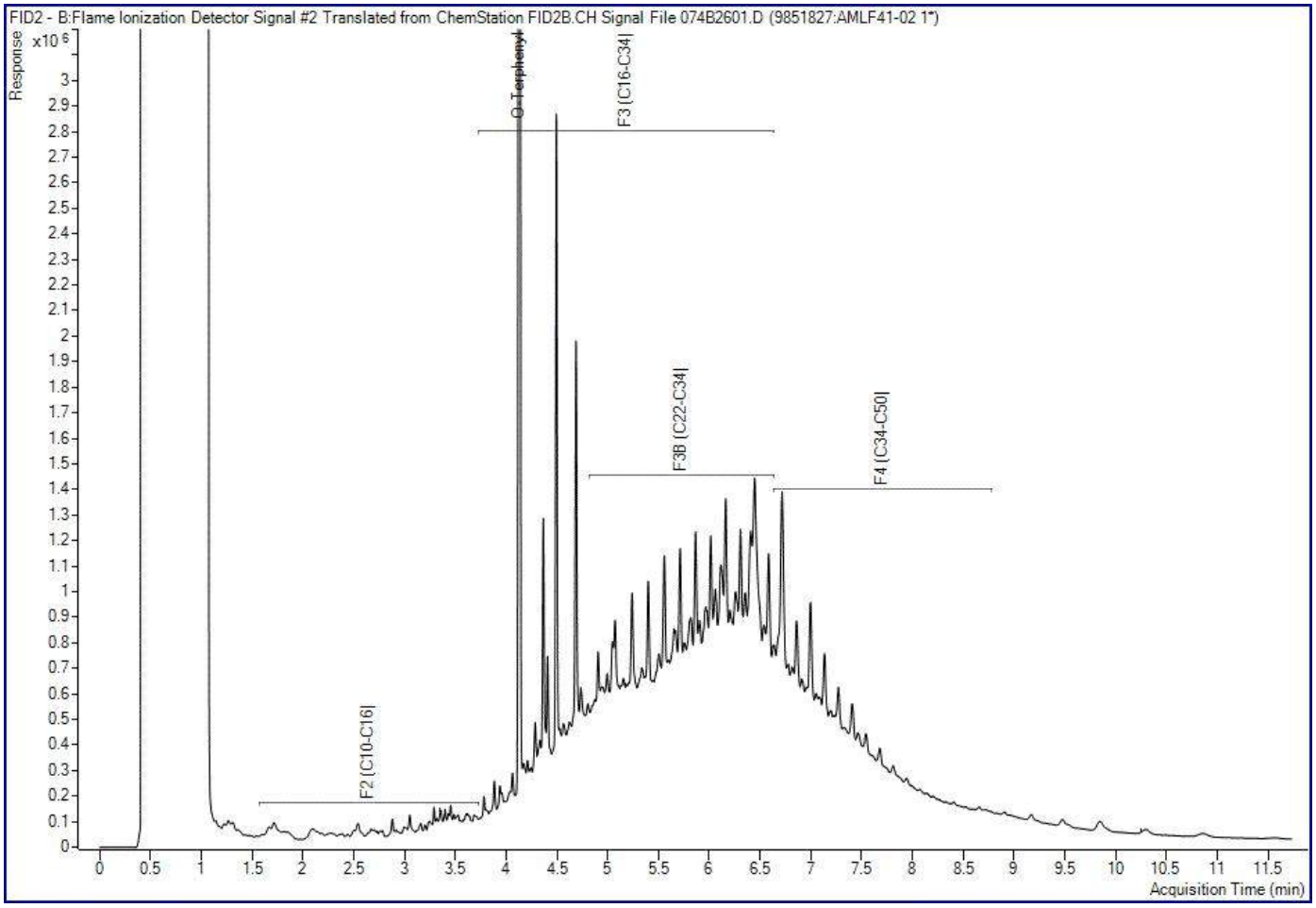


Note: This information is provided for reference purposes only. Should detailed chemist interpretation or fingerprinting be required, please contact the laboratory.

Bureau Veritas Job #: C4BP637
Report Date: 2025/01/03
Bureau Veritas Sample: AMLF41

Parsons Inc.
Client Project #: 10-13148
Client ID: 241220BH-105(1.8-2.4)

Petroleum Hydrocarbons F2-F4 in Soil Chromatogram

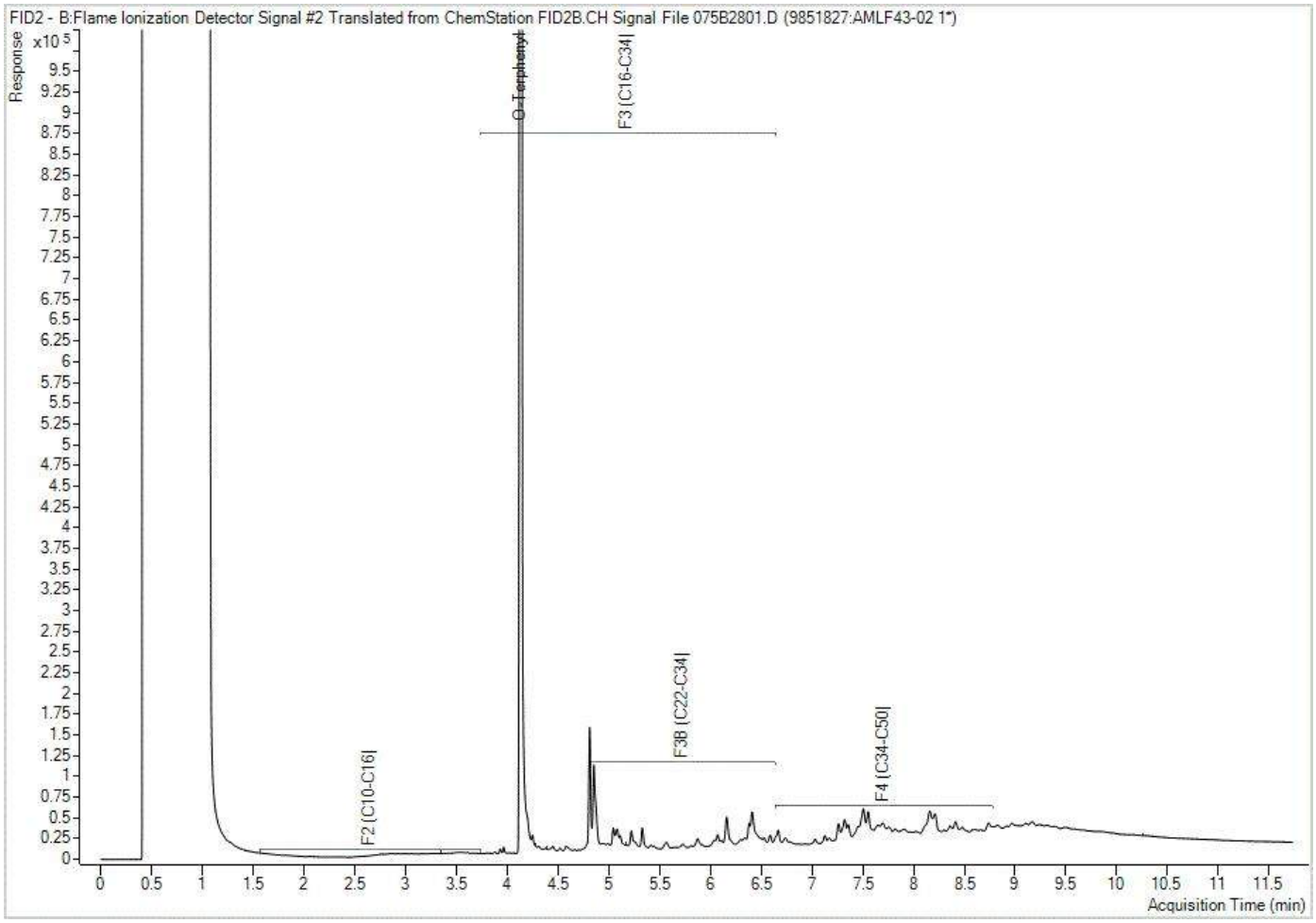


Note: This information is provided for reference purposes only. Should detailed chemist interpretation or fingerprinting be required, please contact the laboratory.

Bureau Veritas Job #: C4BP637
Report Date: 2025/01/03
Bureau Veritas Sample: AMLF43

Parsons Inc.
Client Project #: 10-13148
Client ID: 241220BH-105(4.9-5.5)

Petroleum Hydrocarbons F2-F4 in Soil Chromatogram

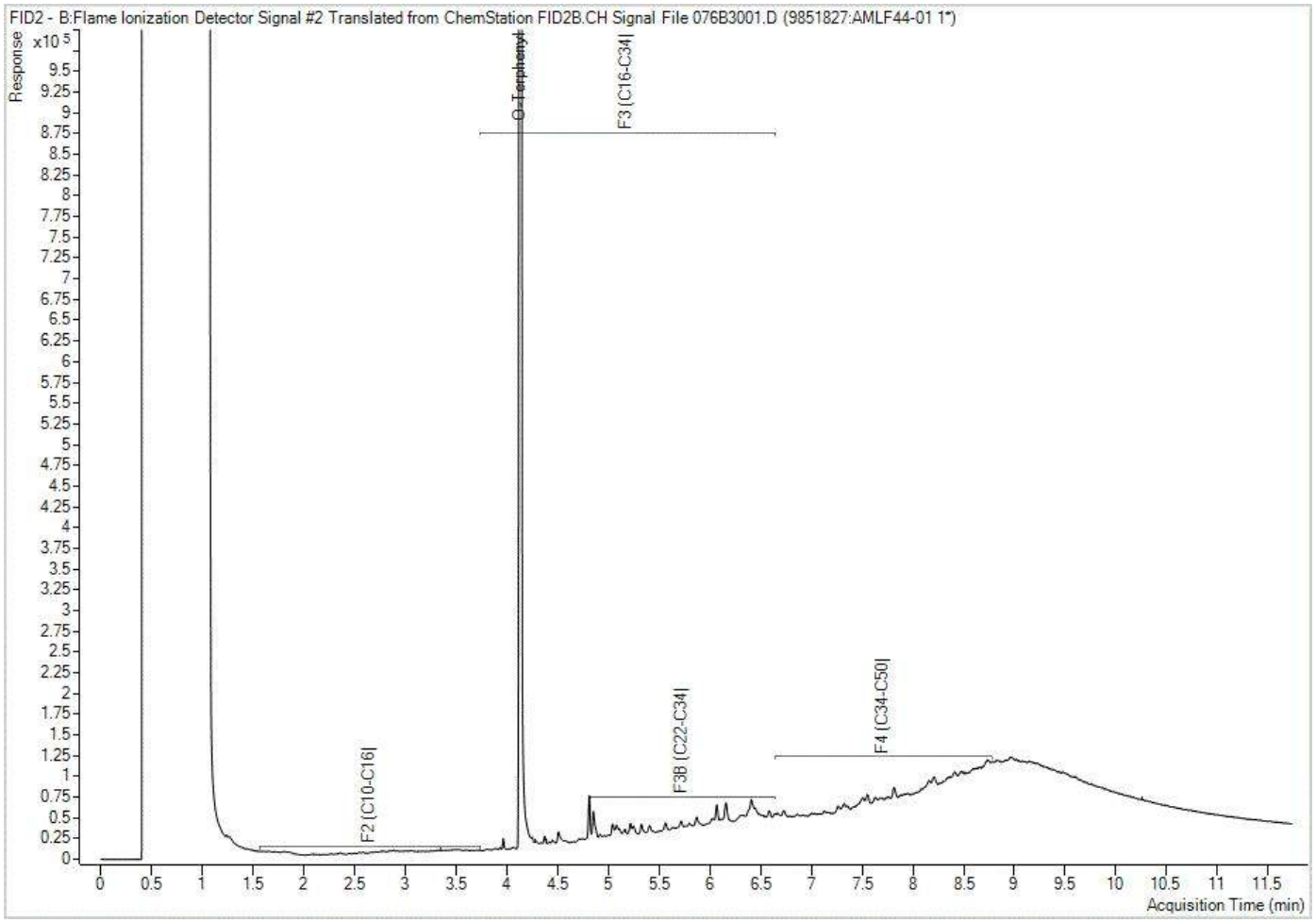


Note: This information is provided for reference purposes only. Should detailed chemist interpretation or fingerprinting be required, please contact the laboratory.

Bureau Veritas Job #: C4BP637
Report Date: 2025/01/03
Bureau Veritas Sample: AMLF44

Parsons Inc.
Client Project #: 10-13148
Client ID: 241220DUP-01

Petroleum Hydrocarbons F2-F4 in Soil Chromatogram

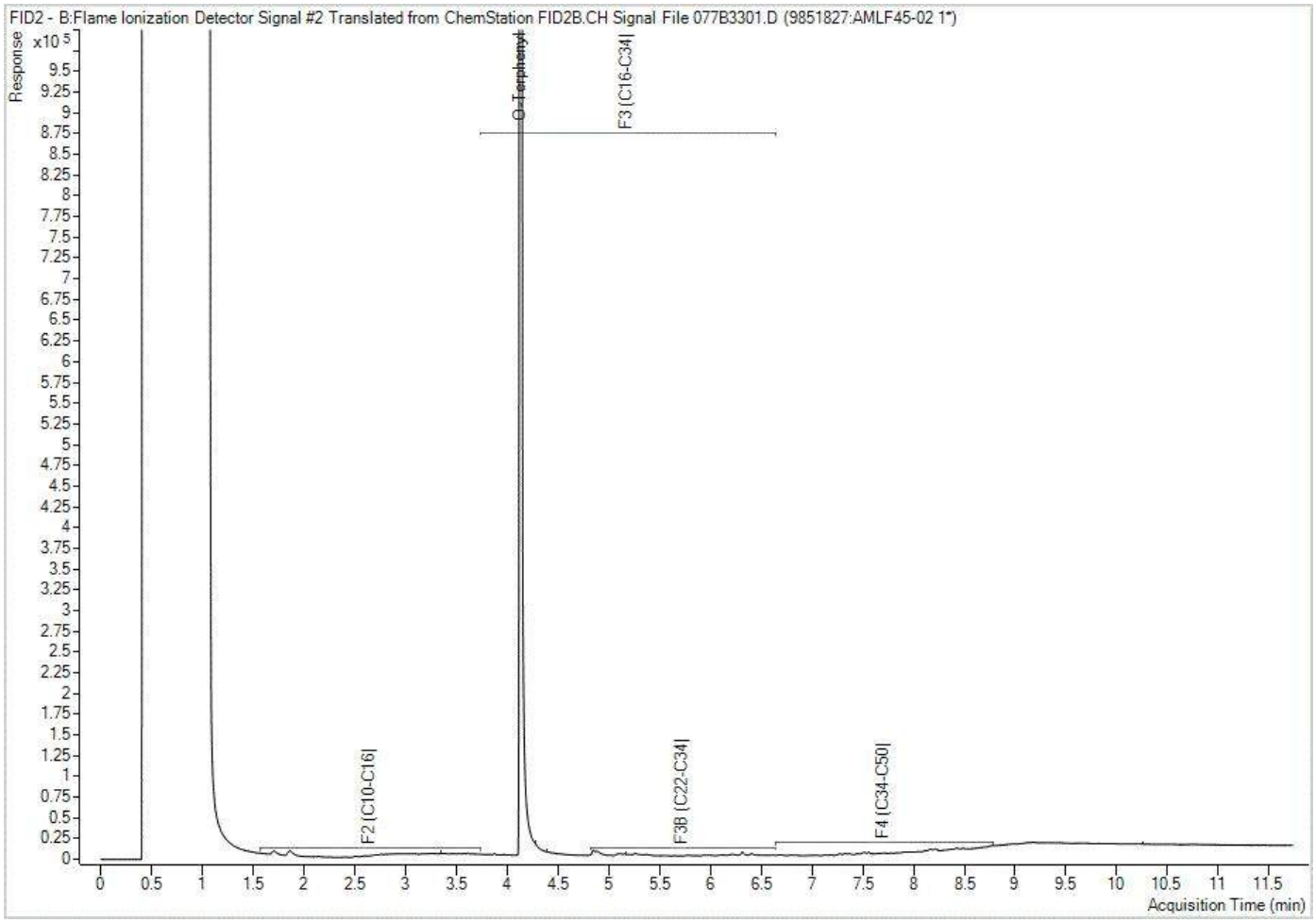


Note: This information is provided for reference purposes only. Should detailed chemist interpretation or fingerprinting be required, please contact the laboratory.

Bureau Veritas Job #: C4BP637
Report Date: 2025/01/03
Bureau Veritas Sample: AMLF45

Parsons Inc.
Client Project #: 10-13148
Client ID: 241220BH-105(5.5-6.1)

Petroleum Hydrocarbons F2-F4 in Soil Chromatogram



Note: This information is provided for reference purposes only. Should detailed chemist interpretation or fingerprinting be required, please contact the laboratory.

Your P.O. #: 479008.020000
Your Project #: 10-13148
Your C.O.C. #: C#1028193-02-01

Attention: Kelsy Marois

Parsons Inc.
Ottawa
Unit 100
1223 Michael Street North
Gloucester, ON
CANADA K1J 7T2

Report Date: 2025/01/03
Report #: R8465853
Version: 1 - Final

CERTIFICATE OF ANALYSIS

BUREAU VERITAS JOB #: C4BP637
Received: 2024/12/20, 15:05

Sample Matrix: Soil
Samples Received: 7

Analyses	Quantity	Date Extracted	Date Analyzed	Laboratory Method	Analytical Method
Methylnaphthalene Sum (1)	5	N/A	2025/01/02	CAM SOP-00301	EPA 8270D m
1,3-Dichloropropene Sum (1)	1	N/A	2025/01/02		EPA 8260C m
1,3-Dichloropropene Sum (1)	5	N/A	2024/12/30		EPA 8260C m
Petroleum Hydrocarbons F2-F4 in Soil (1, 2)	5	2024/12/31	2024/12/31	CAM SOP-00316	CCME CWS m
F4G (CCME Hydrocarbons Gravimetric) (1)	2	2025/01/03	2025/01/03	CAM SOP-00316	CCME PHC-CWS m
Acid Extractable Metals by ICPMS (1)	4	2025/01/02	2025/01/02	CAM SOP-00447	EPA 6020B m
Moisture (1)	5	N/A	2024/12/23	CAM SOP-00445	Carter 2nd ed 70.2 m
PAH Compounds in Soil by GC/MS (SIM) (1)	1	2024/12/31	2025/01/02	CAM SOP-00318	EPA 8270E
PAH Compounds in Soil by GC/MS (SIM) (1)	4	2024/12/31	2024/12/31	CAM SOP-00318	EPA 8270E
pH CaCl2 EXTRACT (1)	1	2024/12/31	2024/12/31	CAM SOP-00413	EPA 9045 D m
Sieve, 75um (1)	1	N/A	2024/12/27	CAM SOP-00467	ASTM D1140 -17 m
Volatile Organic Compounds and F1 PHCs (1)	6	N/A	2024/12/24	CAM SOP-00230	EPA 8260C m

Remarks:

Bureau Veritas is accredited to ISO/IEC 17025 for specific parameters on scopes of accreditation. Unless otherwise noted, procedures used by Bureau Veritas are based upon recognized Provincial, Federal or US method compendia such as CCME, EPA, APHA or the Quebec Ministry of Environment.

All work recorded herein has been done in accordance with procedures and practices ordinarily exercised by professionals in Bureau Veritas' profession using accepted testing methodologies, quality assurance and quality control procedures (except where otherwise agreed by the client and Bureau Veritas in writing). All data is in statistical control and has met quality control and method performance criteria unless otherwise noted. All method blanks are reported; unless indicated otherwise, associated sample data are not blank corrected. Where applicable, unless otherwise noted, Measurement Uncertainty has not been accounted for when stating conformity to the referenced standard.

Bureau Veritas liability is limited to the actual cost of the requested analyses, unless otherwise agreed in writing. There is no other warranty expressed or implied. Bureau Veritas has been retained to provide analysis of samples provided by the Client using the testing methodology referenced in this report. Interpretation and use of test results are the sole responsibility of the Client and are not within the scope of services provided by Bureau Veritas, unless otherwise agreed in writing. Bureau Veritas is not responsible for the accuracy or any data impacts, that result from the information provided by the customer or their agent.

Solid sample results, except biota, are based on dry weight unless otherwise indicated. Organic analyses are not recovery corrected except for isotope dilution methods.
Results relate to samples tested. When sampling is not conducted by Bureau Veritas, results relate to the supplied samples tested.

Your P.O. #: 479008.020000
Your Project #: 10-13148
Your C.O.C. #: C#1028193-02-01

Attention: Kelsy Marois

Parsons Inc.
Ottawa
Unit 100
1223 Michael Street North
Gloucester, ON
CANADA K1J 7T2

Report Date: 2025/01/03
Report #: R8465853
Version: 1 - Final

CERTIFICATE OF ANALYSIS

BUREAU VERITAS JOB #: C4BP637
Received: 2024/12/20, 15:05

Reference Method suffix "m" indicates test methods incorporate validated modifications from specific reference methods to improve performance.

* RPDs calculated using raw data. The rounding of final results may result in the apparent difference.

(1) This test was performed by Bureau Veritas Mississauga, 6740 Campobello Rd , Mississauga, ON, L5N 2L8

(2) All CCME PHC results met required criteria unless otherwise stated in the report. The CWS PHC methods employed by Bureau Veritas conform to all prescribed elements of the reference method and performance based elements have been validated. All modifications have been validated and proven equivalent following "Alberta Environment's Interpretation of the Reference Method for the Canada-Wide Standard for Petroleum Hydrocarbons in Soil Validation of Performance-Based Alternative Methods September 2003". Documentation is available upon request. Modifications from Reference Method for the Canada-wide Standard for Petroleum Hydrocarbons in Soil-Tier 1 Method: F2/F3/F4 data reported using validated cold solvent extraction instead of Soxhlet extraction.

Encryption Key

AUTHORIZED REPORT
RAPPORT AUTORISÉ

Bureau Veritas
03 Jan 2025 16:44:33

Please direct all questions regarding this Certificate of Analysis to:
Katherine Szozda, Project Manager
Email: Katherine.Szozda@bureauveritas.com
Phone# (613)274-0573 Ext:7063633

==========

This report has been generated and distributed using a secure automated process.
Bureau Veritas has procedures in place to guard against improper use of the electronic signature and have the required "signatories", as per ISO/IEC 17025, signing the reports. For Service Group specific validation, please refer to the Validation Signatures page if included, otherwise available by request. For Department specific Analyst/Supervisor validation names, please refer to the Test Summary section if included, otherwise available by request. This report is authorized by Rodney Major, General Manager responsible for Ontario Environmental laboratory operations.

Bureau Veritas Job #: C4BP637
Report Date: 2025/01/03

Parsons Inc.
Client Project #: 10-13148
Your P.O. #: 479008.020000
Sampler Initials: PP

RESULTS OF ANALYSES OF SOIL

Bureau Veritas ID		AMLF40	AMLF41			AMLF42		
Sampling Date		2024/12/20 10:07	2024/12/20 12:11			2024/12/20 12:28		
COC Number		C#1028193-02-01	C#1028193-02-01			C#1028193-02-01		
	UNITS	241220BH-104(4.3-5.0)	241220BH-105(1.8-2.4)	RDL	QC Batch	241220BH-105(3.7-4.3)	RDL	QC Batch
Inorganics								
Moisture	%	7.2	35	1.0	9844915			
Miscellaneous Parameters								
Grain Size	%					COARSE	N/A	9845808
Sieve - #200 (<0.075mm)	%					46	1	9845808
Sieve - #200 (>0.075mm)	%					54	1	9845808

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch
N/A = Not Applicable

Bureau Veritas ID		AMLF43	AMLF44		AMLF45		
Sampling Date		2024/12/20 13:01	2024/12/20 13:01		2024/12/20 13:31		
COC Number		C#1028193-02-01	C#1028193-02-01		C#1028193-02-01		
	UNITS	241220BH-105(4.9-5.5)	241220DUP-01	QC Batch	241220BH-105(5.5-6.1)	RDL	QC Batch
Inorganics							
Moisture	%	52	28	9844915	25	1.0	9844915
Available (CaCl2) pH	pH				7.81		9852535

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch

Bureau Veritas Job #: C4BP637
Report Date: 2025/01/03

Parsons Inc.
Client Project #: 10-13148
Your P.O. #: 479008.020000
Sampler Initials: PP

ELEMENTS BY ATOMIC SPECTROSCOPY (SOIL)

Bureau Veritas ID		AMLF40	AMLF41	AMLF43		
Sampling Date		2024/12/20 10:07	2024/12/20 12:11	2024/12/20 13:01		
COC Number		C#1028193-02-01	C#1028193-02-01	C#1028193-02-01		
	UNITS	241220BH-104(4.3-5.0)	241220BH-105(1.8-2.4)	241220BH-105(4.9-5.5)	RDL	QC Batch
Metals						
Acid Extractable Antimony (Sb)	ug/g	<0.20	4.3	0.63	0.20	9853351
Acid Extractable Arsenic (As)	ug/g	<1.0	11	5.5	1.0	9853351
Acid Extractable Barium (Ba)	ug/g	18	280	39	0.50	9853351
Acid Extractable Beryllium (Be)	ug/g	<0.20	0.35	0.27	0.20	9853351
Acid Extractable Boron (B)	ug/g	<5.0	11	6.0	5.0	9853351
Acid Extractable Cadmium (Cd)	ug/g	<0.10	1.2	0.14	0.10	9853351
Acid Extractable Chromium (Cr)	ug/g	11	32	18	1.0	9853351
Acid Extractable Cobalt (Co)	ug/g	5.2	7.9	5.7	0.10	9853351
Acid Extractable Copper (Cu)	ug/g	12	180	96	0.50	9853351
Acid Extractable Lead (Pb)	ug/g	3.5	280	42	1.0	9853351
Acid Extractable Molybdenum (Mo)	ug/g	0.61	4.2	1.4	0.50	9853351
Acid Extractable Nickel (Ni)	ug/g	5.9	28	52	0.50	9853351
Acid Extractable Selenium (Se)	ug/g	<0.50	0.68	0.68	0.50	9853351
Acid Extractable Silver (Ag)	ug/g	<0.20	1.4	<0.20	0.20	9853351
Acid Extractable Thallium (Tl)	ug/g	0.057	0.17	0.080	0.050	9853351
Acid Extractable Uranium (U)	ug/g	0.54	0.63	1.3	0.050	9853351
Acid Extractable Vanadium (V)	ug/g	37	24	16	5.0	9853351
Acid Extractable Zinc (Zn)	ug/g	16	570	69	5.0	9853351

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch

Parsons Inc.
Client Project #: 10-13148
Your P.O. #: 479008.020000
Sampler Initials: PP

ELEMENTS BY ATOMIC SPECTROSCOPY (SOIL)

Bureau Veritas ID		AMLF45		
Sampling Date		2024/12/20 13:31		
COC Number		C#1028193-02-01		
	UNITS	241220BH-105(5.5-6.1)	RDL	QC Batch
Metals				
Acid Extractable Antimony (Sb)	ug/g	<0.20	0.20	9853351
Acid Extractable Arsenic (As)	ug/g	<1.0	1.0	9853351
Acid Extractable Barium (Ba)	ug/g	37	0.50	9853351
Acid Extractable Beryllium (Be)	ug/g	0.23	0.20	9853351
Acid Extractable Boron (B)	ug/g	<5.0	5.0	9853351
Acid Extractable Cadmium (Cd)	ug/g	<0.10	0.10	9853351
Acid Extractable Chromium (Cr)	ug/g	11	1.0	9853351
Acid Extractable Cobalt (Co)	ug/g	4.1	0.10	9853351
Acid Extractable Copper (Cu)	ug/g	17	0.50	9853351
Acid Extractable Lead (Pb)	ug/g	3.3	1.0	9853351
Acid Extractable Molybdenum (Mo)	ug/g	<0.50	0.50	9853351
Acid Extractable Nickel (Ni)	ug/g	8.6	0.50	9853351
Acid Extractable Selenium (Se)	ug/g	<0.50	0.50	9853351
Acid Extractable Silver (Ag)	ug/g	<0.20	0.20	9853351
Acid Extractable Thallium (Tl)	ug/g	0.089	0.050	9853351
Acid Extractable Uranium (U)	ug/g	0.53	0.050	9853351
Acid Extractable Vanadium (V)	ug/g	20	5.0	9853351
Acid Extractable Zinc (Zn)	ug/g	16	5.0	9853351

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch

SEMI-VOLATILE ORGANICS BY GC-MS (SOIL)

Bureau Veritas ID		AMLF40		AMLF41		AMLF43		
Sampling Date		2024/12/20 10:07		2024/12/20 12:11		2024/12/20 13:01		
COC Number		C#1028193-02-01		C#1028193-02-01		C#1028193-02-01		
	UNITS	241220BH-104(4.3-5.0)	RDL	241220BH-105(1.8-2.4)	RDL	241220BH-105(4.9-5.5)	RDL	QC Batch
Calculated Parameters								
Methylnaphthalene, 2-(1-)	ug/g	<0.0071	0.0071	0.76	0.14	<0.014	0.014	9842890
Polyaromatic Hydrocarbons								
Acenaphthene	ug/g	<0.0050	0.0050	0.73	0.10	0.019	0.010	9851831
Acenaphthylene	ug/g	<0.0050	0.0050	1.0	0.10	<0.010	0.010	9851831
Anthracene	ug/g	<0.0050	0.0050	1.9	0.10	0.038	0.010	9851831
Benzo(a)anthracene	ug/g	<0.0050	0.0050	6.3	0.10	0.074	0.010	9851831
Benzo(a)pyrene	ug/g	<0.0050	0.0050	6.0	0.10	0.042	0.010	9851831
Benzo(b/j)fluoranthene	ug/g	<0.0050	0.0050	7.3	0.10	0.074	0.010	9851831
Benzo(g,h,i)perylene	ug/g	<0.0050	0.0050	2.8	0.10	0.024	0.010	9851831
Benzo(k)fluoranthene	ug/g	<0.0050	0.0050	2.8	0.10	0.022	0.010	9851831
Chrysene	ug/g	<0.0050	0.0050	5.3	0.10	0.067	0.010	9851831
Dibenzo(a,h)anthracene	ug/g	<0.0050	0.0050	0.97	0.10	<0.010	0.010	9851831
Fluoranthene	ug/g	<0.0050	0.0050	11	0.10	0.35	0.010	9851831
Fluorene	ug/g	<0.0050	0.0050	1.2	0.10	0.029	0.010	9851831
Indeno(1,2,3-cd)pyrene	ug/g	<0.0050	0.0050	3.5	0.10	0.022	0.010	9851831
1-Methylnaphthalene	ug/g	<0.0050	0.0050	0.47	0.10	<0.010	0.010	9851831
2-Methylnaphthalene	ug/g	<0.0050	0.0050	0.29	0.10	<0.010	0.010	9851831
Naphthalene	ug/g	<0.0050	0.0050	0.85	0.10	0.011	0.010	9851831
Phenanthrene	ug/g	<0.0050	0.0050	7.0	0.10	0.13	0.010	9851831
Pyrene	ug/g	<0.0050	0.0050	8.6	0.10	0.31	0.010	9851831
Surrogate Recovery (%)								
D10-Anthracene	%	108		93		101		9851831
D14-Terphenyl (FS)	%	113		113		105		9851831
D8-Acenaphthylene	%	89		96		90		9851831

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch

SEMI-VOLATILE ORGANICS BY GC-MS (SOIL)

Bureau Veritas ID		AMLF44	AMLF45		
Sampling Date		2024/12/20 13:01	2024/12/20 13:31		
COC Number		C#1028193-02-01	C#1028193-02-01		
	UNITS	241220DUP-01	241220BH-105(5.5-6.1)	RDL	QC Batch
Calculated Parameters					
Methylnaphthalene, 2-(1-)	ug/g	<0.0071	<0.0071	0.0071	9842890
Polyaromatic Hydrocarbons					
Acenaphthene	ug/g	0.0090	<0.0050	0.0050	9851831
Acenaphthylene	ug/g	<0.0050	<0.0050	0.0050	9851831
Anthracene	ug/g	0.016	<0.0050	0.0050	9851831
Benzo(a)anthracene	ug/g	0.030	<0.0050	0.0050	9851831
Benzo(a)pyrene	ug/g	0.024	<0.0050	0.0050	9851831
Benzo(b/j)fluoranthene	ug/g	0.039	<0.0050	0.0050	9851831
Benzo(g,h,i)perylene	ug/g	0.013	<0.0050	0.0050	9851831
Benzo(k)fluoranthene	ug/g	0.014	<0.0050	0.0050	9851831
Chrysene	ug/g	0.026	<0.0050	0.0050	9851831
Dibenzo(a,h)anthracene	ug/g	<0.0050	<0.0050	0.0050	9851831
Fluoranthene	ug/g	0.10	<0.0050	0.0050	9851831
Fluorene	ug/g	0.014	<0.0050	0.0050	9851831
Indeno(1,2,3-cd)pyrene	ug/g	0.013	<0.0050	0.0050	9851831
1-Methylnaphthalene	ug/g	<0.0050	<0.0050	0.0050	9851831
2-Methylnaphthalene	ug/g	<0.0050	<0.0050	0.0050	9851831
Naphthalene	ug/g	0.0080	<0.0050	0.0050	9851831
Phenanthrene	ug/g	0.048	<0.0050	0.0050	9851831
Pyrene	ug/g	0.088	0.011	0.0050	9851831
Surrogate Recovery (%)					
D10-Anthracene	%	101	91		9851831
D14-Terphenyl (FS)	%	108	96		9851831
D8-Acenaphthylene	%	89	72		9851831

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch

VOLATILE ORGANICS BY GC/MS (SOIL)

Bureau Veritas ID		AMLF40	AMLF41	AMLF43		
Sampling Date		2024/12/20 10:07	2024/12/20 12:11	2024/12/20 13:01		
COC Number		C#1028193-02-01	C#1028193-02-01	C#1028193-02-01		
	UNITS	241220BH-104(4.3-5.0)	241220BH-105(1.8-2.4)	241220BH-105(4.9-5.5)	RDL	QC Batch
Calculated Parameters						
1,3-Dichloropropene (cis+trans)	ug/g	<0.050	<0.050	<0.050	0.050	9842891
Volatile Organics						
Acetone (2-Propanone)	ug/g	<0.49	0.75	<0.49	0.49	9844399
Benzene	ug/g	<0.0060	0.066	<0.0060	0.0060	9844399
Bromodichloromethane	ug/g	<0.040	<0.040	<0.040	0.040	9844399
Bromoform	ug/g	<0.040	<0.040	<0.040	0.040	9844399
Bromomethane	ug/g	<0.040	<0.040	<0.040	0.040	9844399
Carbon Tetrachloride	ug/g	<0.040	<0.040	<0.040	0.040	9844399
Chlorobenzene	ug/g	<0.040	<0.040	<0.040	0.040	9844399
Chloroform	ug/g	<0.040	<0.040	<0.040	0.040	9844399
Dibromochloromethane	ug/g	<0.040	<0.040	<0.040	0.040	9844399
1,2-Dichlorobenzene	ug/g	<0.040	<0.040	<0.040	0.040	9844399
1,3-Dichlorobenzene	ug/g	<0.040	<0.040	<0.040	0.040	9844399
1,4-Dichlorobenzene	ug/g	<0.040	0.66	<0.040	0.040	9844399
Dichlorodifluoromethane (FREON 12)	ug/g	<0.040	<0.040	<0.040	0.040	9844399
1,1-Dichloroethane	ug/g	<0.040	<0.040	<0.040	0.040	9844399
1,2-Dichloroethane	ug/g	<0.049	<0.049	<0.049	0.049	9844399
1,1-Dichloroethylene	ug/g	<0.040	<0.040	<0.040	0.040	9844399
cis-1,2-Dichloroethylene	ug/g	<0.040	0.18	<0.040	0.040	9844399
trans-1,2-Dichloroethylene	ug/g	<0.040	<0.040	<0.040	0.040	9844399
1,2-Dichloropropane	ug/g	<0.040	<0.040	<0.040	0.040	9844399
cis-1,3-Dichloropropene	ug/g	<0.030	<0.030	<0.030	0.030	9844399
trans-1,3-Dichloropropene	ug/g	<0.040	<0.040	<0.040	0.040	9844399
Ethylbenzene	ug/g	<0.010	0.11	<0.010	0.010	9844399
Ethylene Dibromide	ug/g	<0.040	<0.040	<0.040	0.040	9844399
Hexane	ug/g	<0.040	<0.040	<0.040	0.040	9844399
Methylene Chloride(Dichloromethane)	ug/g	<0.049	<0.049	<0.049	0.049	9844399
Methyl Ethyl Ketone (2-Butanone)	ug/g	<0.40	<0.40	<0.40	0.40	9844399
Methyl Isobutyl Ketone	ug/g	<0.40	<0.40	<0.40	0.40	9844399
Methyl t-butyl ether (MTBE)	ug/g	<0.040	<0.040	<0.040	0.040	9844399
Styrene	ug/g	<0.040	<0.040	<0.040	0.040	9844399

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch

Bureau Veritas Job #: C4BP637
Report Date: 2025/01/03

Parsons Inc.
Client Project #: 10-13148
Your P.O. #: 479008.020000
Sampler Initials: PP

VOLATILE ORGANICS BY GC/MS (SOIL)

Bureau Veritas ID		AMLF40	AMLF41	AMLF43		
Sampling Date		2024/12/20 10:07	2024/12/20 12:11	2024/12/20 13:01		
COC Number		C#1028193-02-01	C#1028193-02-01	C#1028193-02-01		
	UNITS	241220BH-104(4.3-5.0)	241220BH-105(1.8-2.4)	241220BH-105(4.9-5.5)	RDL	QC Batch
1,1,1,2-Tetrachloroethane	ug/g	<0.040	<0.040	<0.040	0.040	9844399
1,1,2,2-Tetrachloroethane	ug/g	<0.040	<0.040	<0.040	0.040	9844399
Tetrachloroethylene	ug/g	<0.040	<0.040	<0.040	0.040	9844399
Toluene	ug/g	<0.020	0.27	<0.020	0.020	9844399
1,1,1-Trichloroethane	ug/g	<0.040	<0.040	<0.040	0.040	9844399
1,1,2-Trichloroethane	ug/g	<0.040	<0.040	<0.040	0.040	9844399
Trichloroethylene	ug/g	<0.010	<0.010	<0.010	0.010	9844399
Trichlorofluoromethane (FREON 11)	ug/g	<0.040	<0.040	<0.040	0.040	9844399
Vinyl Chloride	ug/g	<0.019	0.073	<0.019	0.019	9844399
p+m-Xylene	ug/g	<0.020	0.31	<0.020	0.020	9844399
o-Xylene	ug/g	<0.020	0.19	<0.020	0.020	9844399
Total Xylenes	ug/g	<0.020	0.50	<0.020	0.020	9844399
F1 (C6-C10)	ug/g	<10	17	<10	10	9844399
F1 (C6-C10) - BTEX	ug/g	<10	16	<10	10	9844399
Surrogate Recovery (%)						
4-Bromofluorobenzene	%	104	103	106		9844399
D10-o-Xylene	%	115	128	127		9844399
D4-1,2-Dichloroethane	%	112	117	118		9844399
D8-Toluene	%	101	100	99		9844399

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch

VOLATILE ORGANICS BY GC/MS (SOIL)

Bureau Veritas ID		AMLF44	AMLF45	AMLF46		
Sampling Date		2024/12/20 13:01	2024/12/20 13:31	2024/12/20 14:30		
COC Number		C#1028193-02-01	C#1028193-02-01	C#1028193-02-01		
	UNITS	**241220DUP-01**	**241220BH-105(5.5-6.1)**	**241220 TB-01**	**RDL**	**QC Batch**
Calculated Parameters						
1,3-Dichloropropene (cis+trans)	ug/g	<0.050	<0.050	<0.050	0.050	9842891
Volatile Organics						
Acetone (2-Propanone)	ug/g	<0.49	<0.49	<0.49	0.49	9844399
Benzene	ug/g	<0.0060	<0.0060	<0.0060	0.0060	9844399
Bromodichloromethane	ug/g	<0.040	<0.040	<0.040	0.040	9844399
Bromoform	ug/g	<0.040	<0.040	<0.040	0.040	9844399
Bromomethane	ug/g	<0.040	<0.040	<0.040	0.040	9844399
Carbon Tetrachloride	ug/g	<0.040	<0.040	<0.040	0.040	9844399
Chlorobenzene	ug/g	<0.040	<0.040	<0.040	0.040	9844399
Chloroform	ug/g	<0.040	<0.040	<0.040	0.040	9844399
Dibromochloromethane	ug/g	<0.040	<0.040	<0.040	0.040	9844399
1,2-Dichlorobenzene	ug/g	<0.040	<0.040	<0.040	0.040	9844399
1,3-Dichlorobenzene	ug/g	<0.040	<0.040	<0.040	0.040	9844399
1,4-Dichlorobenzene	ug/g	<0.040	<0.040	<0.040	0.040	9844399
Dichlorodifluoromethane (FREON 12)	ug/g	<0.040	<0.040	<0.040	0.040	9844399
1,1-Dichloroethane	ug/g	<0.040	<0.040	<0.040	0.040	9844399
1,2-Dichloroethane	ug/g	<0.049	<0.049	<0.049	0.049	9844399
1,1-Dichloroethylene	ug/g	<0.040	<0.040	<0.040	0.040	9844399
cis-1,2-Dichloroethylene	ug/g	<0.040	<0.040	<0.040	0.040	9844399
trans-1,2-Dichloroethylene	ug/g	<0.040	<0.040	<0.040	0.040	9844399
1,2-Dichloropropane	ug/g	<0.040	<0.040	<0.040	0.040	9844399
cis-1,3-Dichloropropene	ug/g	<0.030	<0.030	<0.030	0.030	9844399
trans-1,3-Dichloropropene	ug/g	<0.040	<0.040	<0.040	0.040	9844399
Ethylbenzene	ug/g	<0.010	<0.010	<0.010	0.010	9844399
Ethylene Dibromide	ug/g	<0.040	<0.040	<0.040	0.040	9844399
Hexane	ug/g	<0.040	<0.040	<0.040	0.040	9844399
Methylene Chloride(Dichloromethane)	ug/g	<0.049	<0.049	<0.049	0.049	9844399
Methyl Ethyl Ketone (2-Butanone)	ug/g	<0.40	<0.40	<0.40	0.40	9844399
Methyl Isobutyl Ketone	ug/g	<0.40	<0.40	<0.40	0.40	9844399
Methyl t-butyl ether (MTBE)	ug/g	<0.040	<0.040	<0.040	0.040	9844399
Styrene	ug/g	<0.040	<0.040	<0.040	0.040	9844399

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch

VOLATILE ORGANICS BY GC/MS (SOIL)

Bureau Veritas ID		AMLF44	AMLF45	AMLF46		
Sampling Date		2024/12/20 13:01	2024/12/20 13:31	2024/12/20 14:30		
COC Number		C#1028193-02-01	C#1028193-02-01	C#1028193-02-01		
	UNITS	241220DUP-01	241220BH-105(5.5-6.1)	241220 TB-01	RDL	QC Batch
1,1,1,2-Tetrachloroethane	ug/g	<0.040	<0.040	<0.040	0.040	9844399
1,1,2,2-Tetrachloroethane	ug/g	<0.040	<0.040	<0.040	0.040	9844399
Tetrachloroethylene	ug/g	<0.040	<0.040	<0.040	0.040	9844399
Toluene	ug/g	<0.020	<0.020	<0.020	0.020	9844399
1,1,1-Trichloroethane	ug/g	<0.040	<0.040	<0.040	0.040	9844399
1,1,2-Trichloroethane	ug/g	<0.040	<0.040	<0.040	0.040	9844399
Trichloroethylene	ug/g	<0.010	<0.010	<0.010	0.010	9844399
Trichlorofluoromethane (FREON 11)	ug/g	<0.040	<0.040	<0.040	0.040	9844399
Vinyl Chloride	ug/g	<0.019	<0.019	<0.019	0.019	9844399
p+m-Xylene	ug/g	<0.020	<0.020	<0.020	0.020	9844399
o-Xylene	ug/g	<0.020	<0.020	<0.020	0.020	9844399
Total Xylenes	ug/g	<0.020	<0.020	<0.020	0.020	9844399
F1 (C6-C10)	ug/g	<10	<10	<10	10	9844399
F1 (C6-C10) - BTEX	ug/g	<10	<10	<10	10	9844399
Surrogate Recovery (%)						
4-Bromofluorobenzene	%	103	104	104		9844399
D10-o-Xylene	%	113	124	122		9844399
D4-1,2-Dichloroethane	%	116	115	115		9844399
D8-Toluene	%	100	100	101		9844399

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch

PETROLEUM HYDROCARBONS (CCME)

Bureau Veritas ID		AMLF40			AMLF41		
Sampling Date		2024/12/20 10:07			2024/12/20 12:11		
COC Number		C#1028193-02-01			C#1028193-02-01		
	UNITS	241220BH-104(4.3-5.0)	RDL	QC Batch	241220BH-105(1.8-2.4)	RDL	QC Batch
F2-F4 Hydrocarbons							
F4G-sg (Grav. Heavy Hydrocarbons)	ug/g				6100	100	9853940
F2 (C10-C16 Hydrocarbons)	ug/g	<7.0	7.0	9851827	310	7.0	9851827
F3 (C16-C34 Hydrocarbons)	ug/g	64	50	9851827	4200	50	9851827
F4 (C34-C50 Hydrocarbons)	ug/g	59	50	9851827	1800	50	9851827
Reached Baseline at C50	ug/g	Yes		9851827	No		9851827
Surrogate Recovery (%)							
o-Terphenyl	%	94		9851827	94		9851827

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch

Bureau Veritas ID		AMLF43			AMLF44		
Sampling Date		2024/12/20 13:01			2024/12/20 13:01		
COC Number		C#1028193-02-01			C#1028193-02-01		
	UNITS	241220BH-105(4.9-5.5)	RDL	QC Batch	241220DUP-01	RDL	QC Batch
F2-F4 Hydrocarbons							
F4G-sg (Grav. Heavy Hydrocarbons)	ug/g				1400	100	9853940
F2 (C10-C16 Hydrocarbons)	ug/g	<14	14	9851827	14	7.0	9851827
F3 (C16-C34 Hydrocarbons)	ug/g	140	100	9851827	160	50	9851827
F4 (C34-C50 Hydrocarbons)	ug/g	170	100	9851827	280	50	9851827
Reached Baseline at C50	ug/g	Yes		9851827	No		9851827
Surrogate Recovery (%)							
o-Terphenyl	%	94		9851827	101		9851827

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch

Parsons Inc.
Client Project #: 10-13148
Your P.O. #: 479008.020000
Sampler Initials: PP

PETROLEUM HYDROCARBONS (CCME)

Bureau Veritas ID		AMLF45		
Sampling Date		2024/12/20 13:31		
COC Number		C#1028193-02-01		
	UNITS	**241220BH-105(5.5-6.1)**	**RDL**	**QC Batch**
F2-F4 Hydrocarbons				
F2 (C10-C16 Hydrocarbons)	ug/g	<7.0	7.0	9851827
F3 (C16-C34 Hydrocarbons)	ug/g	<50	50	9851827
F4 (C34-C50 Hydrocarbons)	ug/g	<50	50	9851827
Reached Baseline at C50	ug/g	Yes		9851827
Surrogate Recovery (%)				
o-Terphenyl	%	93		9851827

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch

GENERAL COMMENTS

Sample AMLF41 [241220BH-105(1.8-2.4)] : PAH Analysis: Due to the sample matrix, sample required dilution. Detection limits were adjusted accordingly.
PAH Analysis: Detection limits were adjusted for high moisture content.

Sample AMLF43 [241220BH-105(4.9-5.5)] : F2-F4 Analysis: Detection limits were adjusted for high moisture content.

PAH Analysis: Detection limits were adjusted for high moisture content.

Results relate only to the items tested.

Bureau Veritas 100 – 36 Antares Dr. Nepean, ON, K2E 7W5 Phone: 613-274-0573 Website: www.bvna.com

QUALITY ASSURANCE REPORT

QA/QC Batch	Init	QC Type	Parameter	Date Analyzed	Value	Recovery	UNITS	QC Limits
9844399	DW5	Matrix Spike [AMLF40-03]	4-Bromofluorobenzene	2024/12/24		104	%	60 - 140
			D10-o-Xylene	2024/12/24		115	%	60 - 130
			D4-1,2-Dichloroethane	2024/12/24		115	%	60 - 140
			D8-Toluene	2024/12/24		101	%	60 - 140
			Acetone (2-Propanone)	2024/12/24		108	%	60 - 140
			Benzene	2024/12/24		103	%	60 - 140
			Bromodichloromethane	2024/12/24		105	%	60 - 140
			Bromoform	2024/12/24		103	%	60 - 140
			Bromomethane	2024/12/24		102	%	60 - 140
			Carbon Tetrachloride	2024/12/24		124	%	60 - 140
			Chlorobenzene	2024/12/24		92	%	60 - 140
			Chloroform	2024/12/24		109	%	60 - 140
			Dibromochloromethane	2024/12/24		105	%	60 - 140
			1,2-Dichlorobenzene	2024/12/24		102	%	60 - 140
			1,3-Dichlorobenzene	2024/12/24		101	%	60 - 140
			1,4-Dichlorobenzene	2024/12/24		102	%	60 - 140
			Dichlorodifluoromethane (FREON 12)	2024/12/24		162 (1)	%	60 - 140
			1,1-Dichloroethane	2024/12/24		100	%	60 - 140
			1,2-Dichloroethane	2024/12/24		119	%	60 - 140
			1,1-Dichloroethylene	2024/12/24		109	%	60 - 140
			cis-1,2-Dichloroethylene	2024/12/24		110	%	60 - 140
			trans-1,2-Dichloroethylene	2024/12/24		109	%	60 - 140
			1,2-Dichloropropane	2024/12/24		100	%	60 - 140
			cis-1,3-Dichloropropene	2024/12/24		87	%	60 - 140
			trans-1,3-Dichloropropene	2024/12/24		93	%	60 - 140
			Ethylbenzene	2024/12/24		98	%	60 - 140
			Ethylene Dibromide	2024/12/24		99	%	60 - 140
			Hexane	2024/12/24		112	%	60 - 140
			Methylene Chloride(Dichloromethane)	2024/12/24		98	%	60 - 140
			Methyl Ethyl Ketone (2-Butanone)	2024/12/24		97	%	60 - 140
			Methyl Isobutyl Ketone	2024/12/24		95	%	60 - 140
			Methyl t-butyl ether (MTBE)	2024/12/24		107	%	60 - 140
			Styrene	2024/12/24		96	%	60 - 140
			1,1,1,2-Tetrachloroethane	2024/12/24		111	%	60 - 140
			1,1,2,2-Tetrachloroethane	2024/12/24		90	%	60 - 140
			Tetrachloroethylene	2024/12/24		104	%	60 - 140
			Toluene	2024/12/24		97	%	60 - 140
			1,1,1-Trichloroethane	2024/12/24		111	%	60 - 140
			1,1,2-Trichloroethane	2024/12/24		108	%	60 - 140
			Trichloroethylene	2024/12/24		109	%	60 - 140
			Trichlorofluoromethane (FREON 11)	2024/12/24		117	%	60 - 140
			Vinyl Chloride	2024/12/24		103	%	60 - 140
			p+m-Xylene	2024/12/24		94	%	60 - 140
			o-Xylene	2024/12/24		104	%	60 - 140
			F1 (C6-C10)	2024/12/24		107	%	60 - 140
9844399	DW5	Spiked Blank	4-Bromofluorobenzene	2024/12/24		104	%	60 - 140
			D10-o-Xylene	2024/12/24		95	%	60 - 130
			D4-1,2-Dichloroethane	2024/12/24		115	%	60 - 140
			D8-Toluene	2024/12/24		100	%	60 - 140
			Acetone (2-Propanone)	2024/12/24		106	%	60 - 140
			Benzene	2024/12/24		100	%	60 - 130
			Bromodichloromethane	2024/12/24		103	%	60 - 130

QUALITY ASSURANCE REPORT(CONT'D)

QA/QC Batch	Init	QC Type	Parameter	Date Analyzed	Value	Recovery	UNITS	QC Limits
			Bromoform	2024/12/24		100	%	60 - 130
			Bromomethane	2024/12/24		100	%	60 - 140
			Carbon Tetrachloride	2024/12/24		121	%	60 - 130
			Chlorobenzene	2024/12/24		89	%	60 - 130
			Chloroform	2024/12/24		106	%	60 - 130
			Dibromochloromethane	2024/12/24		102	%	60 - 130
			1,2-Dichlorobenzene	2024/12/24		98	%	60 - 130
			1,3-Dichlorobenzene	2024/12/24		98	%	60 - 130
			1,4-Dichlorobenzene	2024/12/24		98	%	60 - 130
			Dichlorodifluoromethane (FREON 12)	2024/12/24		157 (1)	%	60 - 140
			1,1-Dichloroethane	2024/12/24		97	%	60 - 130
			1,2-Dichloroethane	2024/12/24		116	%	60 - 130
			1,1-Dichloroethylene	2024/12/24		105	%	60 - 130
			cis-1,2-Dichloroethylene	2024/12/24		107	%	60 - 130
			trans-1,2-Dichloroethylene	2024/12/24		106	%	60 - 130
			1,2-Dichloropropane	2024/12/24		98	%	60 - 130
			cis-1,3-Dichloropropene	2024/12/24		88	%	60 - 130
			trans-1,3-Dichloropropene	2024/12/24		92	%	60 - 130
			Ethylbenzene	2024/12/24		94	%	60 - 130
			Ethylene Dibromide	2024/12/24		96	%	60 - 130
			Hexane	2024/12/24		109	%	60 - 130
			Methylene Chloride(Dichloromethane)	2024/12/24		97	%	60 - 130
			Methyl Ethyl Ketone (2-Butanone)	2024/12/24		96	%	60 - 140
			Methyl Isobutyl Ketone	2024/12/24		95	%	60 - 130
			Methyl t-butyl ether (MTBE)	2024/12/24		105	%	60 - 130
			Styrene	2024/12/24		93	%	60 - 130
			1,1,1,2-Tetrachloroethane	2024/12/24		108	%	60 - 130
			1,1,2,2-Tetrachloroethane	2024/12/24		87	%	60 - 130
			Tetrachloroethylene	2024/12/24		100	%	60 - 130
			Toluene	2024/12/24		94	%	60 - 130
			1,1,1-Trichloroethane	2024/12/24		107	%	60 - 130
			1,1,2-Trichloroethane	2024/12/24		104	%	60 - 130
			Trichloroethylene	2024/12/24		107	%	60 - 130
			Trichlorofluoromethane (FREON 11)	2024/12/24		113	%	60 - 130
			Vinyl Chloride	2024/12/24		101	%	60 - 130
			p+m-Xylene	2024/12/24		92	%	60 - 130
			o-Xylene	2024/12/24		101	%	60 - 130
			F1 (C6-C10)	2024/12/24		97	%	80 - 120
9844399	DW5	Method Blank	4-Bromofluorobenzene	2024/12/24		104	%	60 - 140
			D10-o-Xylene	2024/12/24		111	%	60 - 130
			D4-1,2-Dichloroethane	2024/12/24		114	%	60 - 140
			D8-Toluene	2024/12/24		99	%	60 - 140
			Acetone (2-Propanone)	2024/12/24	<0.49		ug/g	
			Benzene	2024/12/24	<0.0060		ug/g	
			Bromodichloromethane	2024/12/24	<0.040		ug/g	
			Bromoform	2024/12/24	<0.040		ug/g	
			Bromomethane	2024/12/24	<0.040		ug/g	
			Carbon Tetrachloride	2024/12/24	<0.040		ug/g	
			Chlorobenzene	2024/12/24	<0.040		ug/g	
			Chloroform	2024/12/24	<0.040		ug/g	
			Dibromochloromethane	2024/12/24	<0.040		ug/g	
			1,2-Dichlorobenzene	2024/12/24	<0.040		ug/g	
			1,3-Dichlorobenzene	2024/12/24	<0.040		ug/g	

QUALITY ASSURANCE REPORT(CONT'D)

QA/QC Batch	Init	QC Type	Parameter	Date Analyzed	Value	Recovery	UNITS	QC Limits
			1,4-Dichlorobenzene	2024/12/24	<0.040		ug/g	
			Dichlorodifluoromethane (FREON 12)	2024/12/24	<0.040		ug/g	
			1,1-Dichloroethane	2024/12/24	<0.040		ug/g	
			1,2-Dichloroethane	2024/12/24	<0.049		ug/g	
			1,1-Dichloroethylene	2024/12/24	<0.040		ug/g	
			cis-1,2-Dichloroethylene	2024/12/24	<0.040		ug/g	
			trans-1,2-Dichloroethylene	2024/12/24	<0.040		ug/g	
			1,2-Dichloropropane	2024/12/24	<0.040		ug/g	
			cis-1,3-Dichloropropene	2024/12/24	<0.030		ug/g	
			trans-1,3-Dichloropropene	2024/12/24	<0.040		ug/g	
			Ethylbenzene	2024/12/24	<0.010		ug/g	
			Ethylene Dibromide	2024/12/24	<0.040		ug/g	
			Hexane	2024/12/24	<0.040		ug/g	
			Methylene Chloride(Dichloromethane)	2024/12/24	<0.049		ug/g	
			Methyl Ethyl Ketone (2-Butanone)	2024/12/24	<0.40		ug/g	
			Methyl Isobutyl Ketone	2024/12/24	<0.40		ug/g	
			Methyl t-butyl ether (MTBE)	2024/12/24	<0.040		ug/g	
			Styrene	2024/12/24	<0.040		ug/g	
			1,1,1,2-Tetrachloroethane	2024/12/24	<0.040		ug/g	
			1,1,2,2-Tetrachloroethane	2024/12/24	<0.040		ug/g	
			Tetrachloroethylene	2024/12/24	<0.040		ug/g	
			Toluene	2024/12/24	<0.020		ug/g	
			1,1,1-Trichloroethane	2024/12/24	<0.040		ug/g	
			1,1,2-Trichloroethane	2024/12/24	<0.040		ug/g	
			Trichloroethylene	2024/12/24	<0.010		ug/g	
			Trichlorofluoromethane (FREON 11)	2024/12/24	<0.040		ug/g	
			Vinyl Chloride	2024/12/24	<0.019		ug/g	
			p+m-Xylene	2024/12/24	<0.020		ug/g	
			o-Xylene	2024/12/24	<0.020		ug/g	
			Total Xylenes	2024/12/24	<0.020		ug/g	
			F1 (C6-C10)	2024/12/24	<10		ug/g	
			F1 (C6-C10) - BTEX	2024/12/24	<10		ug/g	
9844399	DW5	RPD [AMLF40-03]	Acetone (2-Propanone)	2024/12/24	NC		%	50
			Benzene	2024/12/24	NC		%	50
			Bromodichloromethane	2024/12/24	NC		%	50
			Bromoform	2024/12/24	NC		%	50
			Bromomethane	2024/12/24	NC		%	50
			Carbon Tetrachloride	2024/12/24	NC		%	50
			Chlorobenzene	2024/12/24	NC		%	50
			Chloroform	2024/12/24	NC		%	50
			Dibromochloromethane	2024/12/24	NC		%	50
			1,2-Dichlorobenzene	2024/12/24	NC		%	50
			1,3-Dichlorobenzene	2024/12/24	NC		%	50
			1,4-Dichlorobenzene	2024/12/24	NC		%	50
			Dichlorodifluoromethane (FREON 12)	2024/12/24	NC		%	50
			1,1-Dichloroethane	2024/12/24	NC		%	50
			1,2-Dichloroethane	2024/12/24	NC		%	50
			1,1-Dichloroethylene	2024/12/24	NC		%	50
			cis-1,2-Dichloroethylene	2024/12/24	NC		%	50
			trans-1,2-Dichloroethylene	2024/12/24	NC		%	50
			1,2-Dichloropropane	2024/12/24	NC		%	50
			cis-1,3-Dichloropropene	2024/12/24	NC		%	50
			trans-1,3-Dichloropropene	2024/12/24	NC		%	50

QUALITY ASSURANCE REPORT(CONT'D)

QA/QC Batch	Init	QC Type	Parameter	Date Analyzed	Value	Recovery	UNITS	QC Limits
			Ethylbenzene	2024/12/24	NC		%	50
			Ethylene Dibromide	2024/12/24	NC		%	50
			Hexane	2024/12/24	NC		%	50
			Methylene Chloride(Dichloromethane)	2024/12/24	NC		%	50
			Methyl Ethyl Ketone (2-Butanone)	2024/12/24	NC		%	50
			Methyl Isobutyl Ketone	2024/12/24	NC		%	50
			Methyl t-butyl ether (MTBE)	2024/12/24	NC		%	50
			Styrene	2024/12/24	NC		%	50
			1,1,1,2-Tetrachloroethane	2024/12/24	NC		%	50
			1,1,2,2-Tetrachloroethane	2024/12/24	NC		%	50
			Tetrachloroethylene	2024/12/24	NC		%	50
			Toluene	2024/12/24	NC		%	50
			1,1,1-Trichloroethane	2024/12/24	NC		%	50
			1,1,2-Trichloroethane	2024/12/24	NC		%	50
			Trichloroethylene	2024/12/24	NC		%	50
			Trichlorofluoromethane (FREON 11)	2024/12/24	NC		%	50
			Vinyl Chloride	2024/12/24	NC		%	50
			p+m-Xylene	2024/12/24	NC		%	50
			o-Xylene	2024/12/24	NC		%	50
			Total Xylenes	2024/12/24	NC		%	50
			F1 (C6-C10)	2024/12/24	NC		%	30
			F1 (C6-C10) - BTEX	2024/12/24	NC		%	30
9844915	MUC	RPD	Moisture	2024/12/23	5.4		%	20
9845808	MUC	QC Standard	Sieve - #200 (<0.075mm)	2024/12/27		58	%	53 - 58
			Sieve - #200 (>0.075mm)	2024/12/27		42	%	42 - 47
9845808	MUC	RPD	Sieve - #200 (<0.075mm)	2024/12/27	2.1		%	20
			Sieve - #200 (>0.075mm)	2024/12/27	2.5		%	20
9851827	ABS	Matrix Spike [AMLF40-02]	o-Terphenyl	2024/12/31		108	%	60 - 140
			F2 (C10-C16 Hydrocarbons)	2024/12/31		106	%	60 - 140
			F3 (C16-C34 Hydrocarbons)	2024/12/31		104	%	60 - 140
			F4 (C34-C50 Hydrocarbons)	2024/12/31		91	%	60 - 140
9851827	ABS	Spiked Blank	o-Terphenyl	2024/12/31		107	%	60 - 140
			F2 (C10-C16 Hydrocarbons)	2024/12/31		104	%	80 - 120
			F3 (C16-C34 Hydrocarbons)	2024/12/31		105	%	80 - 120
			F4 (C34-C50 Hydrocarbons)	2024/12/31		98	%	80 - 120
9851827	ABS	Method Blank	o-Terphenyl	2024/12/31		108	%	60 - 140
			F2 (C10-C16 Hydrocarbons)	2024/12/31	<7.0		ug/g	
			F3 (C16-C34 Hydrocarbons)	2024/12/31	<50		ug/g	
			F4 (C34-C50 Hydrocarbons)	2024/12/31	<50		ug/g	
9851827	ABS	RPD [AMLF40-02]	F2 (C10-C16 Hydrocarbons)	2024/12/31	NC		%	30
			F3 (C16-C34 Hydrocarbons)	2024/12/31	25		%	30
			F4 (C34-C50 Hydrocarbons)	2024/12/31	16		%	30
9851831	JET	Matrix Spike [AMLF40-02]	D10-Anthracene	2024/12/31		101	%	50 - 130
			D14-Terphenyl (FS)	2024/12/31		108	%	50 - 130
			D8-Acenaphthylene	2024/12/31		89	%	50 - 130
			Acenaphthene	2024/12/31		92	%	50 - 130
			Acenaphthylene	2024/12/31		88	%	50 - 130
			Anthracene	2024/12/31		94	%	50 - 130
			Benzo(a)anthracene	2024/12/31		96	%	50 - 130
			Benzo(a)pyrene	2024/12/31		95	%	50 - 130
			Benzo(b/j)fluoranthene	2024/12/31		101	%	50 - 130

QUALITY ASSURANCE REPORT(CONT'D)

QA/QC Batch	Init	QC Type	Parameter	Date Analyzed	Value	Recovery	UNITS	QC Limits
			Benzo(g,h,i)perylene	2024/12/31		80	%	50 - 130
			Benzo(k)fluoranthene	2024/12/31		97	%	50 - 130
			Chrysene	2024/12/31		91	%	50 - 130
			Dibenzo(a,h)anthracene	2024/12/31		75	%	50 - 130
			Fluoranthene	2024/12/31		99	%	50 - 130
			Fluorene	2024/12/31		90	%	50 - 130
			Indeno(1,2,3-cd)pyrene	2024/12/31		85	%	50 - 130
			1-Methylnaphthalene	2024/12/31		84	%	50 - 130
			2-Methylnaphthalene	2024/12/31		83	%	50 - 130
			Naphthalene	2024/12/31		78	%	50 - 130
			Phenanthrene	2024/12/31		93	%	50 - 130
			Pyrene	2024/12/31		100	%	50 - 130
9851831	JET	Spiked Blank	D10-Anthracene	2024/12/31		103	%	50 - 130
			D14-Terphenyl (FS)	2024/12/31		110	%	50 - 130
			D8-Acenaphthylene	2024/12/31		93	%	50 - 130
			Acenaphthene	2024/12/31		92	%	50 - 130
			Acenaphthylene	2024/12/31		89	%	50 - 130
			Anthracene	2024/12/31		94	%	50 - 130
			Benzo(a)anthracene	2024/12/31		96	%	50 - 130
			Benzo(a)pyrene	2024/12/31		95	%	50 - 130
			Benzo(b/j)fluoranthene	2024/12/31		100	%	50 - 130
			Benzo(g,h,i)perylene	2024/12/31		81	%	50 - 130
			Benzo(k)fluoranthene	2024/12/31		99	%	50 - 130
			Chrysene	2024/12/31		91	%	50 - 130
			Dibenzo(a,h)anthracene	2024/12/31		74	%	50 - 130
			Fluoranthene	2024/12/31		100	%	50 - 130
			Fluorene	2024/12/31		91	%	50 - 130
			Indeno(1,2,3-cd)pyrene	2024/12/31		86	%	50 - 130
			1-Methylnaphthalene	2024/12/31		88	%	50 - 130
			2-Methylnaphthalene	2024/12/31		88	%	50 - 130
			Naphthalene	2024/12/31		86	%	50 - 130
			Phenanthrene	2024/12/31		94	%	50 - 130
			Pyrene	2024/12/31		101	%	50 - 130
9851831	JET	Method Blank	D10-Anthracene	2024/12/31		106	%	50 - 130
			D14-Terphenyl (FS)	2024/12/31		109	%	50 - 130
			D8-Acenaphthylene	2024/12/31		91	%	50 - 130
			Acenaphthene	2024/12/31	<0.0050		ug/g	
			Acenaphthylene	2024/12/31	<0.0050		ug/g	
			Anthracene	2024/12/31	<0.0050		ug/g	
			Benzo(a)anthracene	2024/12/31	<0.0050		ug/g	
			Benzo(a)pyrene	2024/12/31	<0.0050		ug/g	
			Benzo(b/j)fluoranthene	2024/12/31	<0.0050		ug/g	
			Benzo(g,h,i)perylene	2024/12/31	<0.0050		ug/g	
			Benzo(k)fluoranthene	2024/12/31	<0.0050		ug/g	
			Chrysene	2024/12/31	<0.0050		ug/g	
			Dibenzo(a,h)anthracene	2024/12/31	<0.0050		ug/g	
			Fluoranthene	2024/12/31	<0.0050		ug/g	
			Fluorene	2024/12/31	<0.0050		ug/g	
			Indeno(1,2,3-cd)pyrene	2024/12/31	<0.0050		ug/g	
			1-Methylnaphthalene	2024/12/31	<0.0050		ug/g	
			2-Methylnaphthalene	2024/12/31	<0.0050		ug/g	
			Naphthalene	2024/12/31	<0.0050		ug/g	
			Phenanthrene	2024/12/31	<0.0050		ug/g	

QUALITY ASSURANCE REPORT(CONT'D)

QA/QC Batch	Init	QC Type	Parameter	Date Analyzed	Value	Recovery	UNITS	QC Limits
			Pyrene	2024/12/31	<0.0050		ug/g	
9851831	JET	RPD [AMLF40-02]	Acenaphthene	2024/12/31	NC		%	40
			Acenaphthylene	2024/12/31	NC		%	40
			Anthracene	2024/12/31	NC		%	40
			Benzo(a)anthracene	2024/12/31	NC		%	40
			Benzo(a)pyrene	2024/12/31	NC		%	40
			Benzo(b/j)fluoranthene	2024/12/31	NC		%	40
			Benzo(g,h,i)perylene	2024/12/31	NC		%	40
			Benzo(k)fluoranthene	2024/12/31	NC		%	40
			Chrysene	2024/12/31	NC		%	40
			Dibenzo(a,h)anthracene	2024/12/31	NC		%	40
			Fluoranthene	2024/12/31	NC		%	40
			Fluorene	2024/12/31	NC		%	40
			Indeno(1,2,3-cd)pyrene	2024/12/31	NC		%	40
			1-Methylnaphthalene	2024/12/31	NC		%	40
			2-Methylnaphthalene	2024/12/31	NC		%	40
			Naphthalene	2024/12/31	NC		%	40
			Phenanthrene	2024/12/31	NC		%	40
			Pyrene	2024/12/31	NC		%	40
9852535	SRT	Spiked Blank	Available (CaCl2) pH	2024/12/31		100	%	97 - 103
9852535	SRT	RPD	Available (CaCl2) pH	2024/12/31	0.33		%	N/A
9853351	TLG	Matrix Spike	Acid Extractable Antimony (Sb)	2025/01/02		83	%	75 - 125
			Acid Extractable Arsenic (As)	2025/01/02		NC	%	75 - 125
			Acid Extractable Barium (Ba)	2025/01/02		NC	%	75 - 125
			Acid Extractable Beryllium (Be)	2025/01/02		98	%	75 - 125
			Acid Extractable Boron (B)	2025/01/02		102	%	75 - 125
			Acid Extractable Cadmium (Cd)	2025/01/02		100	%	75 - 125
			Acid Extractable Chromium (Cr)	2025/01/02		NC	%	75 - 125
			Acid Extractable Cobalt (Co)	2025/01/02		NC	%	75 - 125
			Acid Extractable Copper (Cu)	2025/01/02		NC	%	75 - 125
			Acid Extractable Lead (Pb)	2025/01/02		NC	%	75 - 125
			Acid Extractable Molybdenum (Mo)	2025/01/02		97	%	75 - 125
			Acid Extractable Nickel (Ni)	2025/01/02		NC	%	75 - 125
			Acid Extractable Selenium (Se)	2025/01/02		100	%	75 - 125
			Acid Extractable Silver (Ag)	2025/01/02		100	%	75 - 125
			Acid Extractable Thallium (Tl)	2025/01/02		103	%	75 - 125
			Acid Extractable Uranium (U)	2025/01/02		104	%	75 - 125
			Acid Extractable Vanadium (V)	2025/01/02		NC	%	75 - 125
			Acid Extractable Zinc (Zn)	2025/01/02		NC	%	75 - 125
9853351	TLG	Spiked Blank	Acid Extractable Antimony (Sb)	2025/01/02		97	%	80 - 120
			Acid Extractable Arsenic (As)	2025/01/02		101	%	80 - 120
			Acid Extractable Barium (Ba)	2025/01/02		97	%	80 - 120
			Acid Extractable Beryllium (Be)	2025/01/02		100	%	80 - 120
			Acid Extractable Boron (B)	2025/01/02		101	%	80 - 120
			Acid Extractable Cadmium (Cd)	2025/01/02		96	%	80 - 120
			Acid Extractable Chromium (Cr)	2025/01/02		98	%	80 - 120
			Acid Extractable Cobalt (Co)	2025/01/02		98	%	80 - 120
			Acid Extractable Copper (Cu)	2025/01/02		96	%	80 - 120
			Acid Extractable Lead (Pb)	2025/01/02		97	%	80 - 120
			Acid Extractable Molybdenum (Mo)	2025/01/02		95	%	80 - 120
			Acid Extractable Nickel (Ni)	2025/01/02		99	%	80 - 120
			Acid Extractable Selenium (Se)	2025/01/02		100	%	80 - 120
			Acid Extractable Silver (Ag)	2025/01/02		96	%	80 - 120

QUALITY ASSURANCE REPORT(CONT'D)

QA/QC Batch	Init	QC Type	Parameter	Date Analyzed	Value	Recovery	UNITS	QC Limits
			Acid Extractable Thallium (Tl)	2025/01/02		100	%	80 - 120
			Acid Extractable Uranium (U)	2025/01/02		99	%	80 - 120
			Acid Extractable Vanadium (V)	2025/01/02		96	%	80 - 120
			Acid Extractable Zinc (Zn)	2025/01/02		100	%	80 - 120
9853351	TLG	Method Blank	Acid Extractable Antimony (Sb)	2025/01/02	<0.20		ug/g	
			Acid Extractable Arsenic (As)	2025/01/02	<1.0		ug/g	
			Acid Extractable Barium (Ba)	2025/01/02	<0.50		ug/g	
			Acid Extractable Beryllium (Be)	2025/01/02	<0.20		ug/g	
			Acid Extractable Boron (B)	2025/01/02	<5.0		ug/g	
			Acid Extractable Cadmium (Cd)	2025/01/02	<0.10		ug/g	
			Acid Extractable Chromium (Cr)	2025/01/02	<1.0		ug/g	
			Acid Extractable Cobalt (Co)	2025/01/02	<0.10		ug/g	
			Acid Extractable Copper (Cu)	2025/01/02	<0.50		ug/g	
			Acid Extractable Lead (Pb)	2025/01/02	<1.0		ug/g	
			Acid Extractable Molybdenum (Mo)	2025/01/02	<0.50		ug/g	
			Acid Extractable Nickel (Ni)	2025/01/02	<0.50		ug/g	
			Acid Extractable Selenium (Se)	2025/01/02	<0.50		ug/g	
			Acid Extractable Silver (Ag)	2025/01/02	<0.20		ug/g	
			Acid Extractable Thallium (Tl)	2025/01/02	<0.050		ug/g	
			Acid Extractable Uranium (U)	2025/01/02	<0.050		ug/g	
			Acid Extractable Vanadium (V)	2025/01/02	<5.0		ug/g	
			Acid Extractable Zinc (Zn)	2025/01/02	<5.0		ug/g	
9853351	TLG	RPD	Acid Extractable Antimony (Sb)	2025/01/02	7.5		%	30
			Acid Extractable Arsenic (As)	2025/01/02	1.5		%	30
			Acid Extractable Barium (Ba)	2025/01/02	1.8		%	30
			Acid Extractable Beryllium (Be)	2025/01/02	1.9		%	30
			Acid Extractable Boron (B)	2025/01/02	1.7		%	30
			Acid Extractable Cadmium (Cd)	2025/01/02	13		%	30
			Acid Extractable Chromium (Cr)	2025/01/02	2.2		%	30
			Acid Extractable Cobalt (Co)	2025/01/02	0.32		%	30
			Acid Extractable Copper (Cu)	2025/01/02	5.4		%	30
			Acid Extractable Lead (Pb)	2025/01/02	2.9		%	30
			Acid Extractable Molybdenum (Mo)	2025/01/02	1.5		%	30
			Acid Extractable Nickel (Ni)	2025/01/02	2.5		%	30
			Acid Extractable Selenium (Se)	2025/01/02	NC		%	30
			Acid Extractable Silver (Ag)	2025/01/02	2.7		%	30
			Acid Extractable Thallium (Tl)	2025/01/02	6.1		%	30
			Acid Extractable Uranium (U)	2025/01/02	2.9		%	30
			Acid Extractable Vanadium (V)	2025/01/02	1.4		%	30
			Acid Extractable Zinc (Zn)	2025/01/02	0.38		%	30
9853940	RDU	Matrix Spike [AMLF44-01]	F4G-sg (Grav. Heavy Hydrocarbons)	2025/01/03		103	%	65 - 135
9853940	RDU	Spiked Blank	F4G-sg (Grav. Heavy Hydrocarbons)	2025/01/03		101	%	65 - 135
9853940	RDU	Method Blank	F4G-sg (Grav. Heavy Hydrocarbons)	2025/01/03	<100		ug/g	

QUALITY ASSURANCE REPORT(CONT'D)

QA/QC Batch	Init	QC Type	Parameter	Date Analyzed	Value	Recovery	UNITS	QC Limits
9853940	RDU	RPD	F4G-sg (Grav. Heavy Hydrocarbons)	2025/01/03	6.9		%	50

N/A = Not Applicable

Duplicate: Paired analysis of a separate portion of the same sample. Used to evaluate the variance in the measurement.

Matrix Spike: A sample to which a known amount of the analyte of interest has been added. Used to evaluate sample matrix interference.

QC Standard: A sample of known concentration prepared by an external agency under stringent conditions. Used as an independent check of method accuracy.

Spiked Blank: A blank matrix sample to which a known amount of the analyte, usually from a second source, has been added. Used to evaluate method accuracy.

Method Blank: A blank matrix containing all reagents used in the analytical procedure. Used to identify laboratory contamination.

Surrogate: A pure or isotopically labeled compound whose behavior mirrors the analytes of interest. Used to evaluate extraction efficiency.

NC (Matrix Spike): The recovery in the matrix spike was not calculated. The relative difference between the concentration in the parent sample and the spike amount was too small to permit a reliable recovery calculation (matrix spike concentration was less than the native sample concentration)

NC (Duplicate RPD): The duplicate RPD was not calculated. The concentration in the sample and/or duplicate was too low to permit a reliable RPD calculation (absolute difference <= 2x RDL).

(1) The recovery was above the upper control limit. This may represent a high bias in some results for this specific analyte. For results that were not detected (ND), this potential bias has no impact.

Bureau Veritas 100 – 36 Antares Dr. Nepean, ON, K2E 7W5 Phone: 613-274-0573 Website: www.bvna.com

VALIDATION SIGNATURE PAGE

The analytical data and all QC contained in this report were reviewed and validated by:

Cristina Carriere

Cristina Carriere, Senior Scientific Specialist

Bureau Veritas has procedures in place to guard against improper use of the electronic signature and have the required "signatories", as per ISO/IEC 17025, signing the reports. For Service Group specific validation, please refer to the Validation Signatures page if included, otherwise available by request. For Department specific Analyst/Supervisor validation names, please refer to the Test Summary section if included, otherwise available by request. This report is authorized by Rodney Major, General Manager responsible for Ontario Environmental laboratory operations.

Bureau Veritas 100 – 36 Antares Dr. Nepean, ON, K2E 7W5 Phone: 613-274-0573 Website: www.bvna.com

C502765
2025/01/09 13:17

BUREAU VERITAS

Bureau Veritas
6740 Campobello Road, Mississauga, Ontario Canada L5N 2L8 Tel:(905) 817-5700 Toll-free:800-563-6266 Fax:(905) 817-5777 www.bvna.com

Page 1 of 1

NONT-2025-01-1175

Bottle Order #: 1028780

COC #: C#1028780-01-01

Project Manager: Katherine Szozda

INVOICE TO:		REPORT TO:		PROJECT INFORMATION:	
Company Name:	#39369 Parsons Inc.	Company Name:	Parsons Inc.	Quotation #:	C35677
Attention:	Accounts Payable	Attention:	Kelsy Marois	P.O. #:	
Address:	Unit 100 1223 Michael Street North	Address:		Project:	10-13184
	Gloucester ON K1J 7T2			Project Name:	
Tel:	(613) 738-4160 Fax:	Tel:	Fax:	Site #:	
Email:	ParsonsIncAP.Parsons@parsons.com	Email:	kelsy.marois@parsons.com	Sampled By:	Daniel Nahir

MOE REGULATED DRINKING WATER OR WATER INTENDED FOR HUMAN CONSUMPTION MUST BE SUBMITTED ON THE BUREAU VERITAS DRINKING WATER CHAIN OF CUSTODY

Regulation 153 (2011): ☑ Table 1 ☑ Res/Park ☐ Medium/Fine ☐ Table 2 ☐ Ind/Comm ☑ Coarse ☑ Table 3 ☐ Agri/Other ☐ For RSC ☐ Table ___

Other Regulations: ☐ CCME ☐ Reg 558 ☐ MISA ☐ PWQO ☐ Other ☐ Sanitary Sewer Bylaw ☐ Storm Sewer Bylaw Municipality ___ ☐ Reg 406 Table ___

Special Instructions:

Include Criteria on Certificate of Analysis (Y/N)? ___

ANALYSIS REQUESTED (PLEASE BE SPECIFIC)

Turnaround Time (TAT) Required: Please provide advance notice for rush projects

Regular (Standard) TAT: ☐
(will be applied if Rush TAT is not specified):
Standard TAT = 5-7 Working days for most tests.
Please note: Standard TAT for certain tests such as BOD and Dioxins/Furans are > 5 days - contact your Project Manager for details.

Job Specific Rush TAT (if applies to entire submission) ☐
Date Required: ___ Time Required: ___
Rush Confirmation Number: ___ (call lab for #)

	Sample Barcode Label	Sample (Location) Identification	Date Sampled	Time Sampled	Matrix	Field Filtered (please circle): Metals / Hg / Cr VI	O Reg 153 PCBs	O Reg 153 VOCs by HS & F1-F4	O Reg 153 Metals & Inorganics Pkg	O Reg 153 PHCs, BTEX/F1-F4	O Reg 153 PAHs					# of Bottles	Comments
1		250107MW-101	01/07/25	13:27	GW	D.N			X	X	X					9	
2		250107MW-103	01/07/25	14:42	GW	D.N		X	X	X	X					9	
3		250108MW-104	01/08/25	15:20	GW	D.N	X	X	X	X	X					11	
4		250108MW-102	01/08/25	16:30	GW		X	X	X	X	X					11	
5		250108DUP-01	01/08/25	16:30	GW		X	X	X	X	X					11	
6		250108TB-01	01/08/25	17:00	water			X		X						2	
7		250108FB-01	01/08/25	17:05	water			X		X						4	
8																	
9																	
10																	

Received in Ottawa

* RELINQUISHED BY: (Signature/Print)	Date: (YY/MM/DD)	Time	RECEIVED BY: (Signature/Print)	Date: (YY/MM/DD)	Time	# jars used and not submitted	Time Sensitive	Laboratory Use Only
Daniel Nahir	25/01/08	18:00	Angela Samhood	2025/01/09	13:17			Temperature (°C) on Receipt: 2,0,1 No ice
			SUGAR SARVAN	2025/01/10	08:50			Custody Seal Present ✓ Intact ✓

* UNLESS OTHERWISE AGREED TO IN WRITING, WORK SUBMITTED ON THIS CHAIN OF CUSTODY IS SUBJECT TO BUREAU VERITAS'S STANDARD TERMS AND CONDITIONS. SIGNING OF THIS CHAIN OF CUSTODY DOCUMENT IS ACKNOWLEDGMENT AND ACCEPTANCE OF OUR TERMS WHICH ARE AVAILABLE FOR VIEWING AT WWW.BVNA.COM/ENVIRONMENTAL-LABORATORIES/RESOURCES/COC-TERMS-AND-CONDITIONS.

* IT IS THE RESPONSIBILITY OF THE RELINQUISHER TO ENSURE THE ACCURACY OF THE CHAIN OF CUSTODY RECORD. AN INCOMPLETE CHAIN OF CUSTODY MAY RESULT IN ANALYTICAL TAT DELAYS.

** CONTAINER, PRESERVATION, HOLD TIME AND PACKAGE INFORMATION CAN BE VIEWED AT WWW.BVNA.COM/ENVIRONMENTAL-LABORATORIES/RESOURCES/CHAIN-CUSTODY-FORMS-COCS.

5.7/1.0/2.0
4.6/6.4/3.8

SAMPLES MUST BE KEPT COOL (< 10° C) FROM TIME OF SAMPLING UNTIL DELIVERY TO BUREAU VERITAS

White: Bureau Veritas Yellow: Client

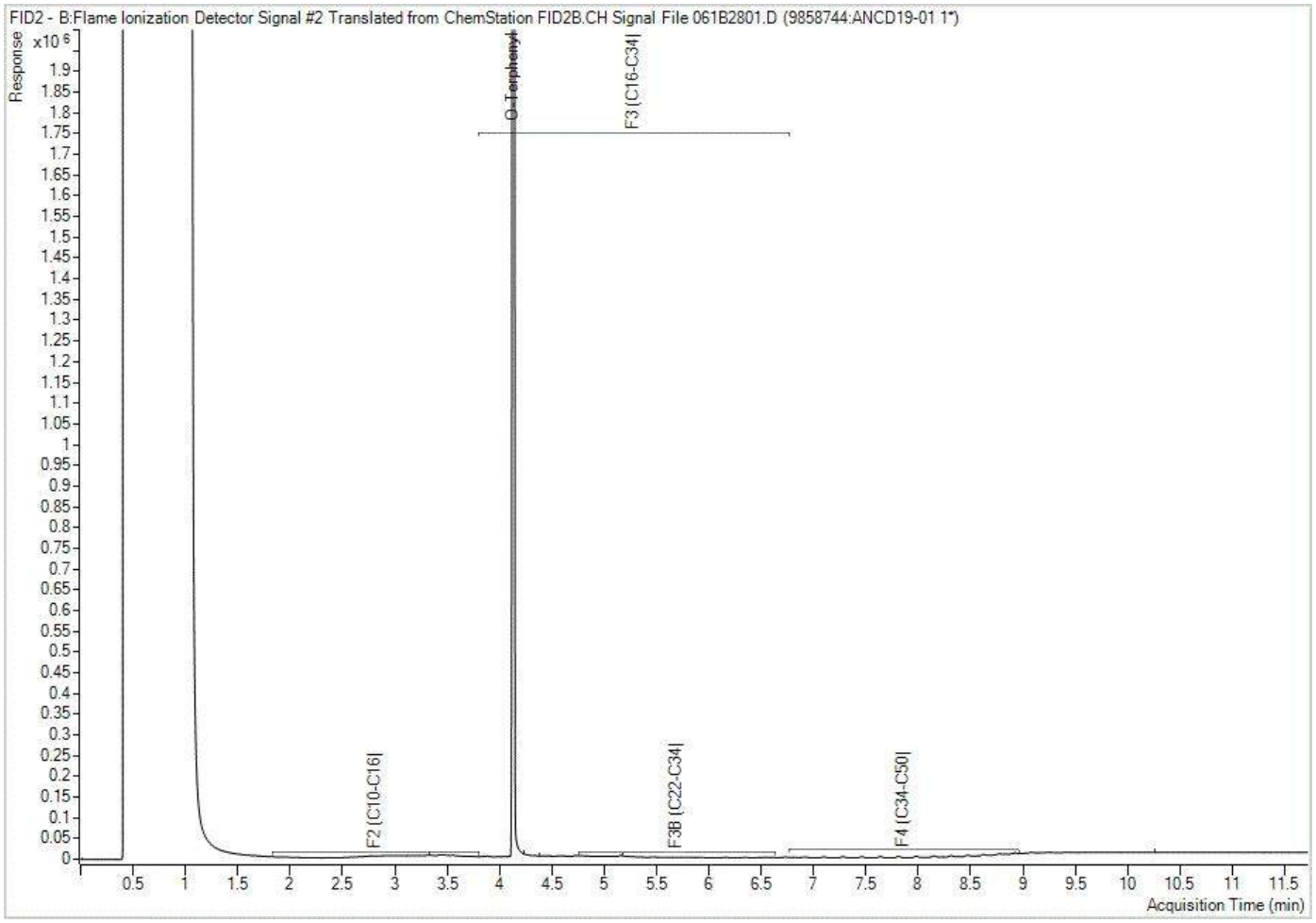
Custody Seal Present ✓ Intact
Cooling Media Yes No

Bureau Veritas Canada (2019) Inc.

Bureau Veritas Job #: C502765
Report Date: 2025/02/21
Bureau Veritas Sample: ANCD19

Parsons Inc.
Client Project #: 10-13184
Client ID: 250107 BH-101

Petroleum Hydrocarbons F2-F4 in Water Chromatogram

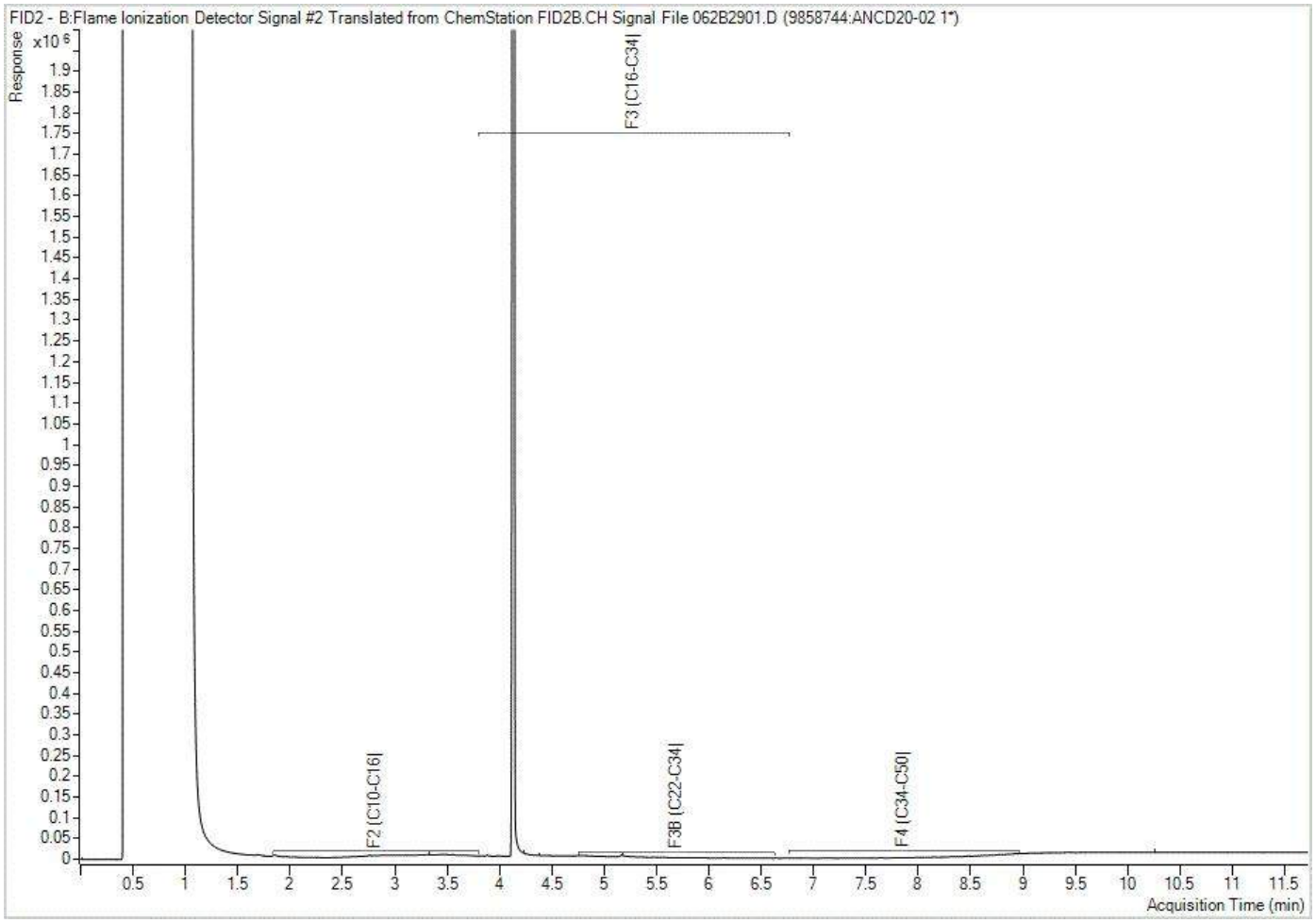


Note: This information is provided for reference purposes only. Should detailed chemist interpretation or fingerprinting be required, please contact the laboratory.

Bureau Veritas Job #: C502765
Report Date: 2025/02/21
Bureau Veritas Sample: ANCD20

Parsons Inc.
Client Project #: 10-13184
Client ID: 250107 BH-103

Petroleum Hydrocarbons F2-F4 in Water Chromatogram

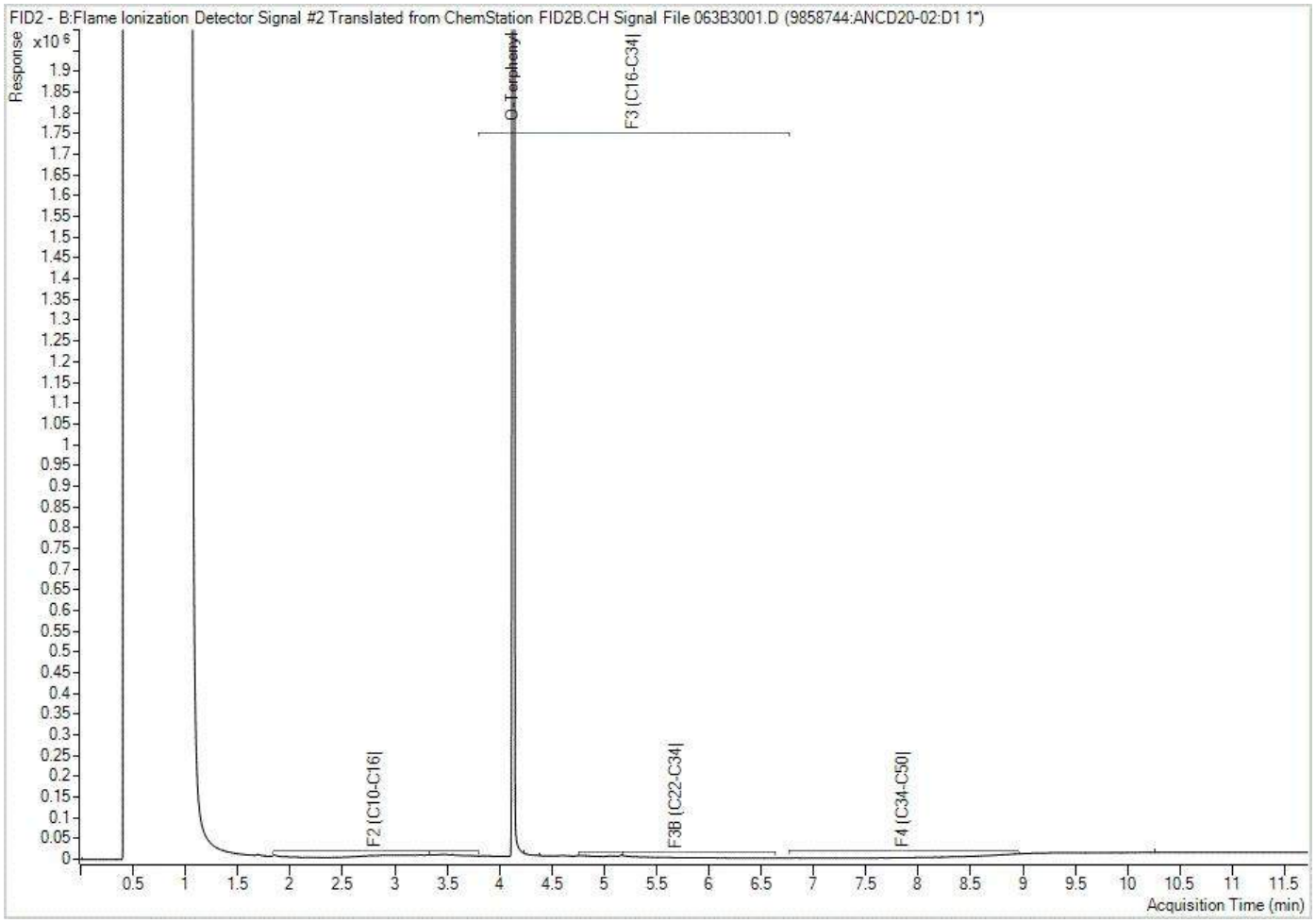


Note: This information is provided for reference purposes only. Should detailed chemist interpretation or fingerprinting be required, please contact the laboratory.

Bureau Veritas Job #: C502765
Report Date: 2025/02/21
Bureau Veritas Sample: ANCD20 Lab-Dup

Parsons Inc.
Client Project #: 10-13184
Client ID: 250107 BH-103

Petroleum Hydrocarbons F2-F4 in Water Chromatogram

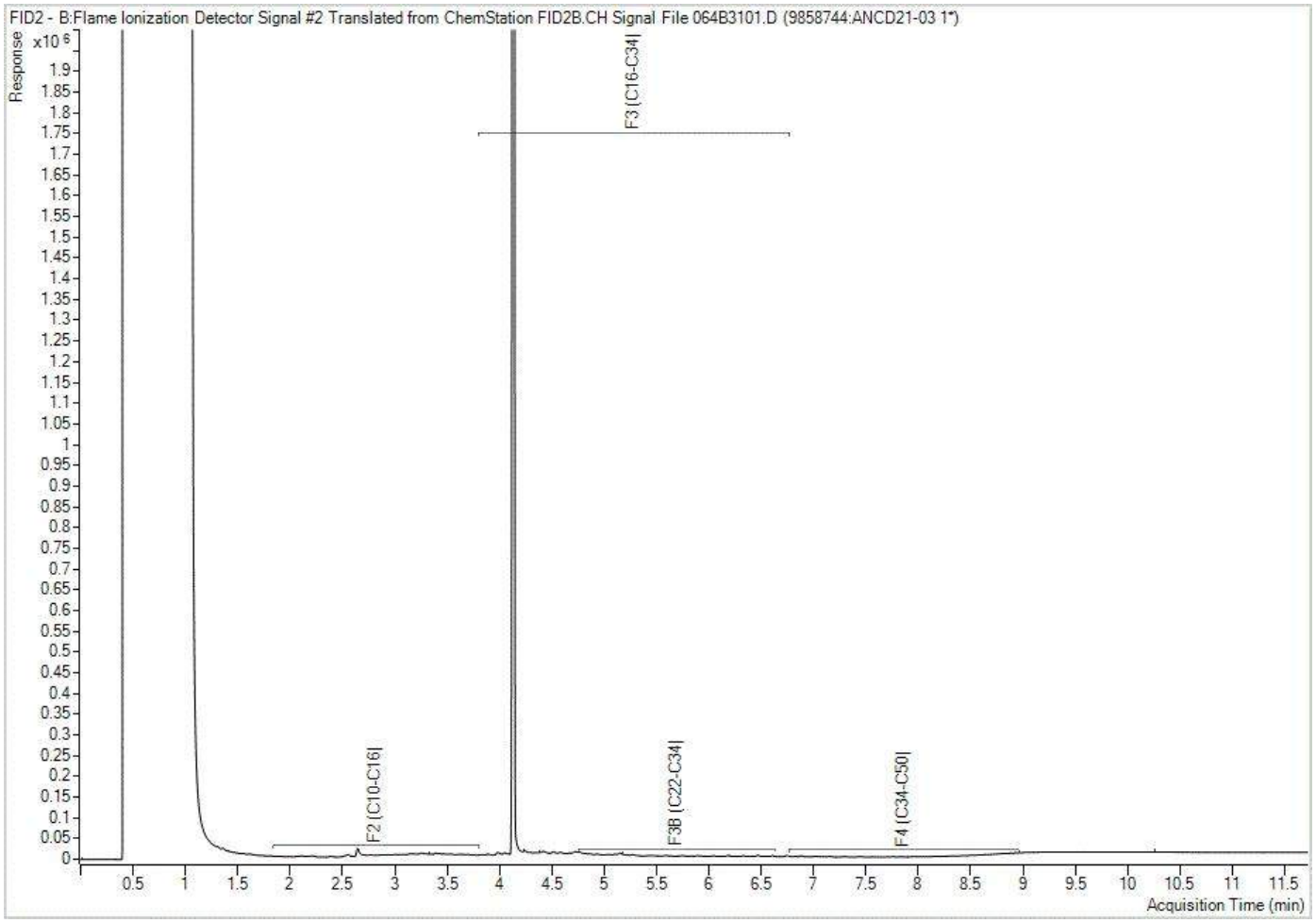


Note: This information is provided for reference purposes only. Should detailed chemist interpretation or fingerprinting be required, please contact the laboratory.

Bureau Veritas Job #: C502765
Report Date: 2025/02/21
Bureau Veritas Sample: ANCD21

Parsons Inc.
Client Project #: 10-13184
Client ID: 250108 BH-105

Petroleum Hydrocarbons F2-F4 in Water Chromatogram

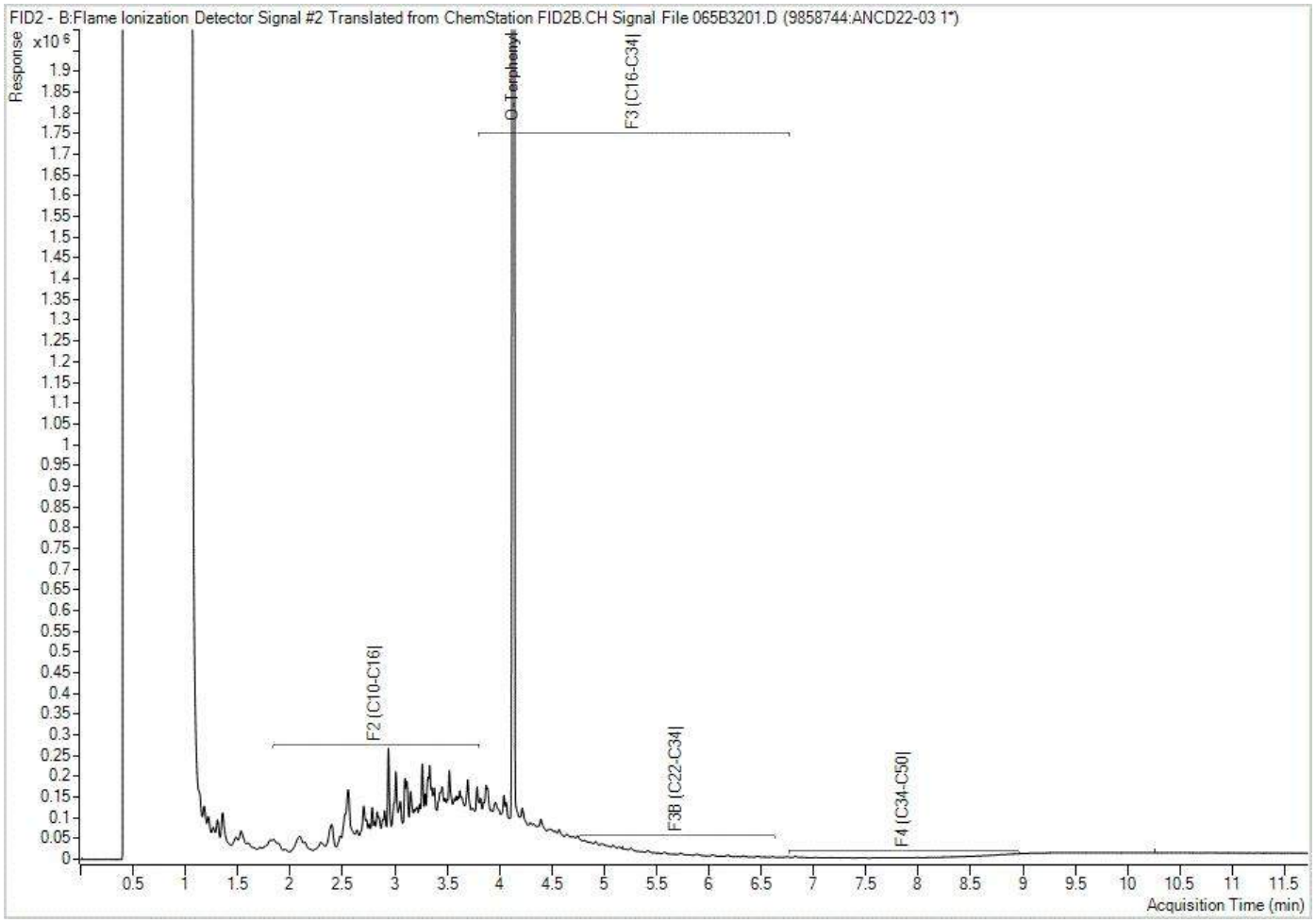


Note: This information is provided for reference purposes only. Should detailed chemist interpretation or fingerprinting be required, please contact the laboratory.

Bureau Veritas Job #: C502765
Report Date: 2025/02/21
Bureau Veritas Sample: ANCD22

Parsons Inc.
Client Project #: 10-13184
Client ID: 250108 BH-102

Petroleum Hydrocarbons F2-F4 in Water Chromatogram

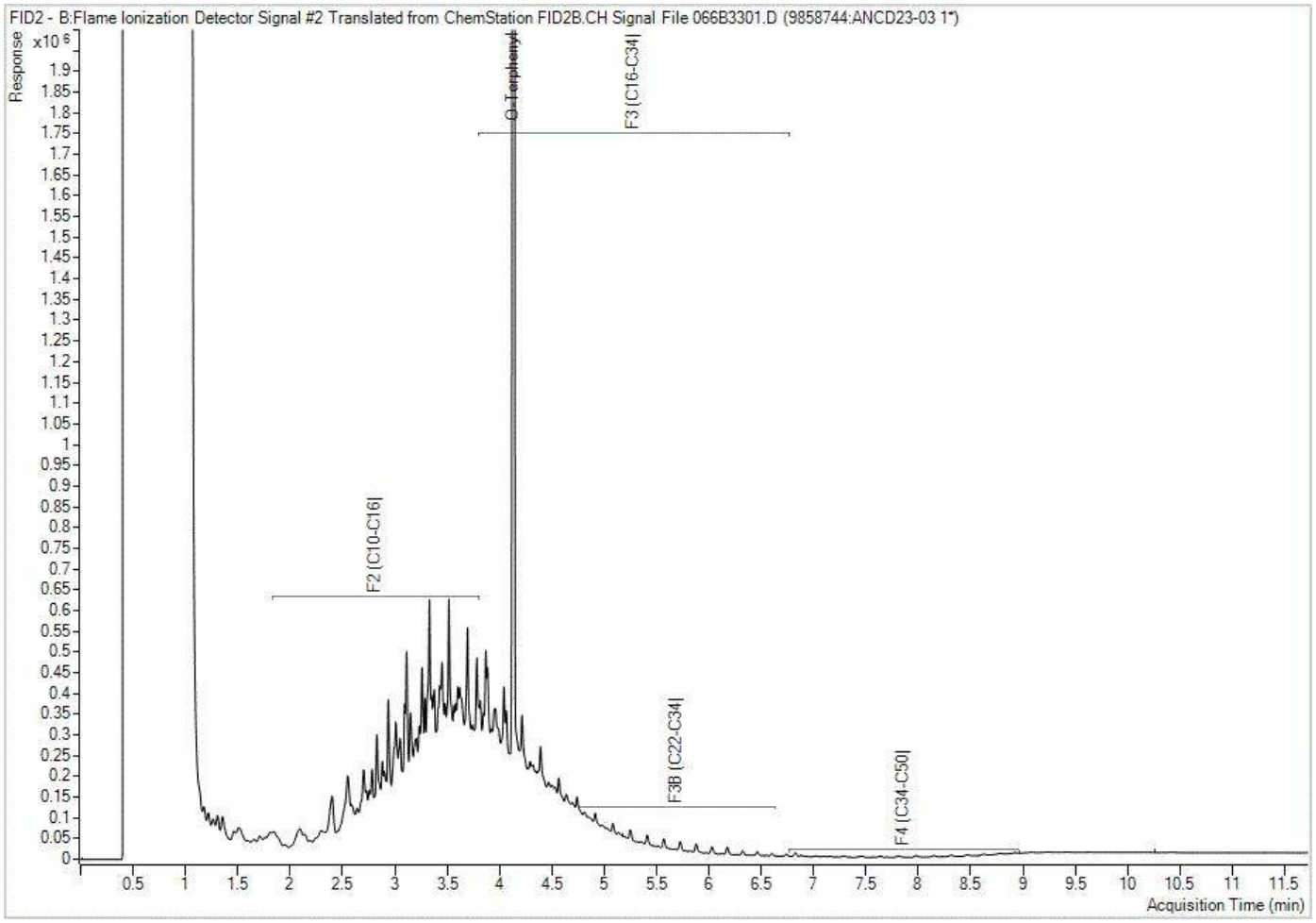


Note: This information is provided for reference purposes only. Should detailed chemist interpretation or fingerprinting be required, please contact the laboratory.

Bureau Veritas Job #: C502765
Report Date: 2025/02/21
Bureau Veritas Sample: ANCD23

Parsons Inc.
Client Project #: 10-13184
Client ID: 250108 DUP-01

Petroleum Hydrocarbons F2-F4 in Water Chromatogram

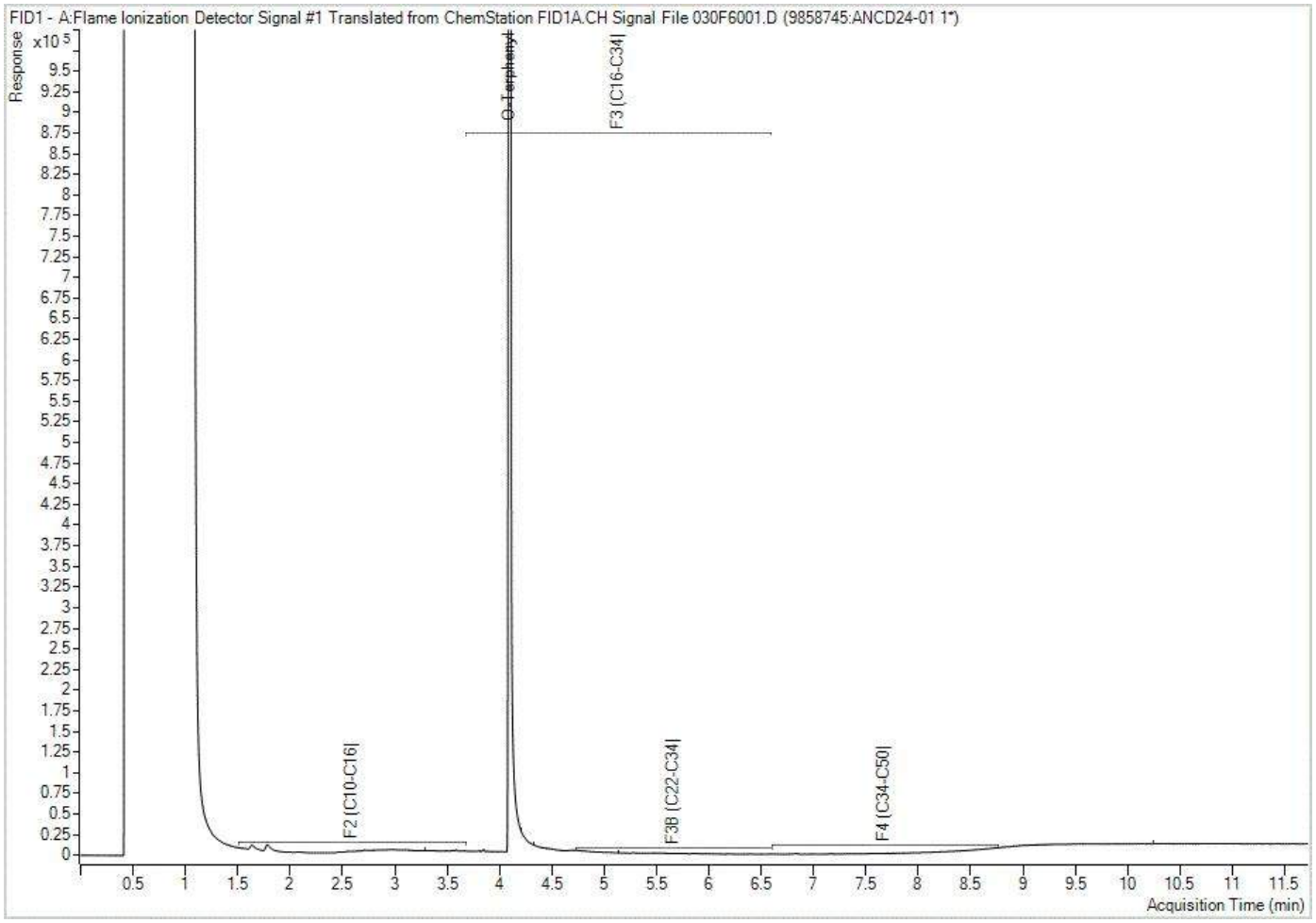


Note: This information is provided for reference purposes only. Should detailed chemist interpretation or fingerprinting be required, please contact the laboratory.

Bureau Veritas Job #: C502765
Report Date: 2025/02/21
Bureau Veritas Sample: ANCD24

Parsons Inc.
Client Project #: 10-13184
Client ID: 250108 FB-01

Petroleum Hydrocarbons F2-F4 in Water Chromatogram



Note: This information is provided for reference purposes only. Should detailed chemist interpretation or fingerprinting be required, please contact the laboratory.

Your Project #: 10-13184
Your C.O.C. #: C#1028780-01-01

Attention: Kelsy Marois

Parsons Inc.
Ottawa
Unit 100
1223 Michael Street North
Gloucester, ON
CANADA K1J 7T2

Report Date: 2025/02/21
Report #: R8491171
Version: 3 - Revision

CERTIFICATE OF ANALYSIS – REVISED REPORT

BUREAU VERITAS JOB #: C502765
Received: 2025/01/09, 13:17

Sample Matrix: Ground Water
Samples Received: 6

Analyses	Quantity	Date Extracted	Date Analyzed	Laboratory Method	Analytical Method
Methylnaphthalene Sum	5	N/A	2025/01/15	CAM SOP-00301	EPA 8270D m
1,3-Dichloropropene Sum	5	N/A	2025/01/16		EPA 8260C m
Chloride by Automated Colourimetry	5	N/A	2025/01/16	CAM SOP-00463	SM 24 4500-Cl E m
Chromium (VI) in Water	5	N/A	2025/01/15	CAM SOP-00436	EPA 7199 m
Free (WAD) Cyanide	5	N/A	2025/01/14	CAM SOP-00457	OMOE E3015 m
Petroleum Hydro. CCME F1 & BTEX in Water	1	N/A	2025/01/14	CAM SOP-00315	CCME PHC-CWS m
Petroleum Hydrocarbons F2-F4 in Water (1)	2	2025/01/14	2025/01/14	CAM SOP-00316	CCME PHC-CWS m
Petroleum Hydrocarbons F2-F4 in Water (1)	4	2025/01/14	2025/01/15	CAM SOP-00316	CCME PHC-CWS m
Mercury	4	2025/01/14	2025/01/14	CAM SOP-00453	EPA 7470A m
Lab Filtered Metals by ICPMS	5	2025/01/15	2025/01/16	CAM SOP-00447	EPA 6020B m
PAH Compounds in Water by GC/MS (SIM)	4	2025/01/14	2025/01/14	CAM SOP-00318	EPA 8270E
PAH Compounds in Water by GC/MS (SIM)	1	2025/01/14	2025/01/15	CAM SOP-00318	EPA 8270E
Polychlorinated Biphenyl in Water	2	2025/01/14	2025/01/16	CAM SOP-00309	EPA 8082A m
Polychlorinated Biphenyl in Water	1	2025/01/14	2025/01/17	CAM SOP-00309	EPA 8082A m
Volatile Organic Compounds and F1 PHCs	5	N/A	2025/01/15	CAM SOP-00230	EPA 8260C m

Remarks:

Bureau Veritas is accredited to ISO/IEC 17025 for specific parameters on scopes of accreditation. Unless otherwise noted, procedures used by Bureau Veritas are based upon recognized Provincial, Federal or US method compendia such as CCME, EPA, APHA or the Quebec Ministry of Environment.

All work recorded herein has been done in accordance with procedures and practices ordinarily exercised by professionals in Bureau Veritas' profession using accepted testing methodologies, quality assurance and quality control procedures (except where otherwise agreed by the client and Bureau Veritas in writing). All data is in statistical control and has met quality control and method performance criteria unless otherwise noted. All method blanks are reported; unless indicated otherwise, associated sample data are not blank corrected. Where applicable, unless otherwise noted, Measurement Uncertainty has not been accounted for when stating conformity to the referenced standard.

Bureau Veritas liability is limited to the actual cost of the requested analyses, unless otherwise agreed in writing. There is no other warranty expressed or implied. Bureau Veritas has been retained to provide analysis of samples provided by the Client using the testing methodology referenced in this report. Interpretation and use of test results are the sole responsibility of the Client and are not within the scope of services provided by Bureau Veritas, unless otherwise agreed in writing. Bureau Veritas is not responsible for the accuracy or any data impacts, that result from the information provided by the customer or their agent.

Your Project #: 10-13184
Your C.O.C. #: C#1028780-01-01

Attention: Kelsy Marois

Parsons Inc.
Ottawa
Unit 100
1223 Michael Street North
Gloucester, ON
CANADA K1J 7T2

Report Date: 2025/02/21
Report #: R8491171
Version: 3 - Revision

CERTIFICATE OF ANALYSIS – REVISED REPORT

BUREAU VERITAS JOB #: C502765
Received: 2025/01/09, 13:17

Solid sample results, except biota, are based on dry weight unless otherwise indicated. Organic analyses are not recovery corrected except for isotope dilution methods.
Results relate to samples tested. When sampling is not conducted by Bureau Veritas, results relate to the supplied samples tested.
This Certificate shall not be reproduced except in full, without the written approval of the laboratory.
Reference Method suffix "m" indicates test methods incorporate validated modifications from specific reference methods to improve performance.
* RPDs calculated using raw data. The rounding of final results may result in the apparent difference.
(1) All CCME PHC results met required criteria unless otherwise stated in the report. The CWS PHC methods employed by Bureau Veritas conform to all prescribed elements of the reference method and performance based elements have been validated. All modifications have been validated and proven equivalent following "Alberta Environment's Interpretation of the Reference Method for the Canada-Wide Standard for Petroleum Hydrocarbons in Soil Validation of Performance-Based Alternative Methods September 2003". Documentation is available upon request. Modifications from Reference Method for the Canada-wide Standard for Petroleum Hydrocarbons in Soil-Tier 1 Method: F2/F3/F4 data reported using validated cold solvent extraction instead of Soxhlet extraction.

Encryption Key

Katherine Szozda
Project Manager
21 Feb 2025 16:23:20

Please direct all questions regarding this Certificate of Analysis to:
Katherine Szozda, Project Manager
Email: Katherine.Szozda@bureauveritas.com
Phone# (613)274-0573 Ext:7063633
==========
Bureau Veritas has procedures in place to guard against improper use of the electronic signature and have the required "signatories", as per ISO/IEC 17025, signing the reports. For Service Group specific validation, please refer to the Validation Signatures page if included, otherwise available by request. For Department specific Analyst/Supervisor validation names, please refer to the Test Summary section if included, otherwise available by request. This report is authorized by Rodney Major, General Manager responsible for Ontario Environmental laboratory operations.

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Bureau Veritas Job #: C502765
Report Date: 2025/02/21

Parsons Inc.
Client Project #: 10-13184
Sampler Initials: DM

RESULTS OF ANALYSES OF GROUND WATER

Bureau Veritas ID		ANCD19	ANCD20		ANCD21		ANCD22		
Sampling Date		2025/01/07 13:27	2025/01/07 14:42		2025/01/08 15:20		2025/01/08 16:30		
COC Number		C#1028780-01-01	C#1028780-01-01		C#1028780-01-01		C#1028780-01-01		
	UNITS	**250107 BH-101**	**250107 BH-103**	**RDL**	**250108 BH-105**	**RDL**	**250108 BH-102**	**RDL**	**QC Batch**
Inorganics									
WAD Cyanide (Free)	ug/L	1	<1	1	<1	1	<1	1	9858423
Dissolved Chloride (Cl-)	mg/L	7700	5600	70	1100	10	1500	20	9858996

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch

Bureau Veritas ID		ANCD23		
Sampling Date		2025/01/08 16:30		
COC Number		C#1028780-01-01		
	UNITS	**250108 DUP-01**	**RDL**	**QC Batch**
Inorganics				
WAD Cyanide (Free)	ug/L	<1	1	9858423
Dissolved Chloride (Cl-)	mg/L	1500	20	9858996

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

ELEMENTS BY ATOMIC SPECTROSCOPY (GROUND WATER)

Bureau Veritas ID		ANCD19			ANCD20		ANCD21		
Sampling Date		2025/01/07 13:27			2025/01/07 14:42		2025/01/08 15:20		
COC Number		C#1028780-01-01			C#1028780-01-01		C#1028780-01-01		
	UNITS	250107 BH-101	RDL	QC Batch	250107 BH-103	RDL	250108 BH-105	RDL	QC Batch
Metals									
Chromium (VI)	ug/L	<2.5 (1)	2.5	9858618	<1.0 (1)	1.0	<0.50	0.50	9858618
Mercury (Hg)	ug/L				<0.10	0.10	0.21	0.10	9858551
Dissolved Aluminum (Al)	ug/L	<4.9	4.9	9859581	<4.9	4.9	<4.9	4.9	9859581
Dissolved Antimony (Sb)	ug/L	0.84	0.50	9859581	<0.50	0.50	<0.50	0.50	9859581
Dissolved Arsenic (As)	ug/L	<1.0	1.0	9859581	1.0	1.0	<1.0	1.0	9859581
Dissolved Barium (Ba)	ug/L	370	2.0	9859581	200	2.0	500	2.0	9859581
Dissolved Beryllium (Be)	ug/L	<0.40	0.40	9859581	<0.40	0.40	<0.40	0.40	9859581
Dissolved Bismuth (Bi)	ug/L	<1.0	1.0	9859581	<1.0	1.0	<1.0	1.0	9859581
Dissolved Boron (B)	ug/L	35	10	9859581	48	10	320	10	9859581
Dissolved Cadmium (Cd)	ug/L	<0.090	0.090	9859581	<0.090	0.090	<0.090	0.090	9859581
Dissolved Calcium (Ca)	ug/L	440000	200	9859581	860000	2000	280000	200	9859581
Dissolved Chromium (Cr)	ug/L	<5.0	5.0	9859581	<5.0	5.0	<5.0	5.0	9859581
Dissolved Cobalt (Co)	ug/L	1.7	0.50	9859581	7.7	0.50	2.5	0.50	9859581
Dissolved Copper (Cu)	ug/L	3.0	0.90	9859581	<0.90	0.90	2.4	0.90	9859581
Dissolved Iron (Fe)	ug/L	<100	100	9859581	<100	100	<100	100	9859581
Dissolved Lead (Pb)	ug/L	<0.50	0.50	9859581	<0.50	0.50	<0.50	0.50	9859581
Dissolved Lithium (Li)	ug/L	13	5.0	9859581	34	5.0	31	5.0	9859581
Dissolved Magnesium (Mg)	ug/L	66000	50	9859581	120000	50	63000	50	9859581
Dissolved Manganese (Mn)	ug/L	500	2.0	9859581	9400	20	2000	2.0	9859581
Dissolved Molybdenum (Mo)	ug/L	1.0	0.50	9859581	0.52	0.50	3.0	0.50	9859581
Dissolved Nickel (Ni)	ug/L	5.4	1.0	9859581	9.2	1.0	4.5	1.0	9859581
Dissolved Phosphorus (P)	ug/L	<100	100	9859581	<100	100	<100	100	9859581
Dissolved Potassium (K)	ug/L	21000	200	9859581	15000	200	12000	200	9859581
Dissolved Selenium (Se)	ug/L	<2.0	2.0	9859581	<2.0	2.0	<2.0	2.0	9859581
Dissolved Silicon (Si)	ug/L	6500	50	9859581	11000	50	13000	50	9859581
Dissolved Silver (Ag)	ug/L	<0.090	0.090	9859581	<0.090	0.090	<0.090	0.090	9859581
Dissolved Sodium (Na)	ug/L	4400000	1000	9859581	2700000	1000	580000	100	9859581
Dissolved Strontium (Sr)	ug/L	2100	1.0	9859581	2700	1.0	1100	1.0	9859581
Dissolved Tellurium (Te)	ug/L	<1.0	1.0	9859581	<1.0	1.0	<1.0	1.0	9859581
Dissolved Thallium (Tl)	ug/L	<0.050	0.050	9859581	0.066	0.050	<0.050	0.050	9859581
Dissolved Tin (Sn)	ug/L	<1.0	1.0	9859581	<1.0	1.0	15	1.0	9859581

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch
(1) Due to the sample matrix, sample required dilution. Detection limits were adjusted accordingly.

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

ELEMENTS BY ATOMIC SPECTROSCOPY (GROUND WATER)

Bureau Veritas ID		ANCD19			ANCD20		ANCD21		
Sampling Date		2025/01/07 13:27			2025/01/07 14:42		2025/01/08 15:20		
COC Number		C#1028780-01-01			C#1028780-01-01		C#1028780-01-01		
	UNITS	**250107 BH-101**	**RDL**	**QC Batch**	**250107 BH-103**	**RDL**	**250108 BH-105**	**RDL**	**QC Batch**
Dissolved Titanium (Ti)	ug/L	<5.0	5.0	9859581	<5.0	5.0	<5.0	5.0	9859581
Dissolved Tungsten (W)	ug/L	<1.0	1.0	9859581	<1.0	1.0	<1.0	1.0	9859581
Dissolved Uranium (U)	ug/L	1.9	0.10	9859581	1.8	0.10	0.42	0.10	9859581
Dissolved Vanadium (V)	ug/L	<0.50	0.50	9859581	<0.50	0.50	<0.50	0.50	9859581
Dissolved Zinc (Zn)	ug/L	19	5.0	9859581	<5.0	5.0	25	5.0	9859581
Dissolved Zirconium (Zr)	ug/L	<1.0	1.0	9859581	<1.0	1.0	<1.0	1.0	9859581

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

ELEMENTS BY ATOMIC SPECTROSCOPY (GROUND WATER)

Bureau Veritas ID		ANCD22	ANCD23		
Sampling Date		2025/01/08 16:30	2025/01/08 16:30		
COC Number		C#1028780-01-01	C#1028780-01-01		
	UNITS	250108 BH-102	250108 DUP-01	RDL	QC Batch
Metals					
Chromium (VI)	ug/L	<1.0 (1)	<1.0 (1)	1.0	9858618
Mercury (Hg)	ug/L	0.33	0.38	0.10	9858551
Dissolved Aluminum (Al)	ug/L	<4.9	<4.9	4.9	9859581
Dissolved Antimony (Sb)	ug/L	0.74	0.58	0.50	9859581
Dissolved Arsenic (As)	ug/L	<1.0	<1.0	1.0	9859581
Dissolved Barium (Ba)	ug/L	510	580	2.0	9859581
Dissolved Beryllium (Be)	ug/L	<0.40	<0.40	0.40	9859581
Dissolved Bismuth (Bi)	ug/L	<1.0	<1.0	1.0	9859581
Dissolved Boron (B)	ug/L	90	62	10	9859581
Dissolved Cadmium (Cd)	ug/L	<0.090	<0.090	0.090	9859581
Dissolved Calcium (Ca)	ug/L	410000	420000	200	9859581
Dissolved Chromium (Cr)	ug/L	<5.0	<5.0	5.0	9859581
Dissolved Cobalt (Co)	ug/L	2.2	2.1	0.50	9859581
Dissolved Copper (Cu)	ug/L	1.1	1.7	0.90	9859581
Dissolved Iron (Fe)	ug/L	<100	<100	100	9859581
Dissolved Lead (Pb)	ug/L	<0.50	<0.50	0.50	9859581
Dissolved Lithium (Li)	ug/L	6.9	<5.0	5.0	9859581
Dissolved Magnesium (Mg)	ug/L	60000	58000	50	9859581
Dissolved Manganese (Mn)	ug/L	4300	3900	2.0	9859581
Dissolved Molybdenum (Mo)	ug/L	2.7	2.0	0.50	9859581
Dissolved Nickel (Ni)	ug/L	3.9	4.7	1.0	9859581
Dissolved Phosphorus (P)	ug/L	<100	<100	100	9859581
Dissolved Potassium (K)	ug/L	24000	20000	200	9859581
Dissolved Selenium (Se)	ug/L	<2.0	<2.0	2.0	9859581
Dissolved Silicon (Si)	ug/L	8500	6800	50	9859581
Dissolved Silver (Ag)	ug/L	<0.090	<0.090	0.090	9859581
Dissolved Sodium (Na)	ug/L	690000	730000	500	9859581
Dissolved Strontium (Sr)	ug/L	1400	1500	1.0	9859581
Dissolved Tellurium (Te)	ug/L	<1.0	<1.0	1.0	9859581
Dissolved Thallium (Tl)	ug/L	<0.050	<0.050	0.050	9859581

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch
(1) Due to the sample matrix, sample required dilution. Detection limits were adjusted accordingly.

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

ELEMENTS BY ATOMIC SPECTROSCOPY (GROUND WATER)

Bureau Veritas ID		ANCD22	ANCD23		
Sampling Date		2025/01/08 16:30	2025/01/08 16:30		
COC Number		C#1028780-01-01	C#1028780-01-01		
	UNITS	**250108 BH-102**	**250108 DUP-01**	**RDL**	**QC Batch**
Dissolved Tin (Sn)	ug/L	2.9	2.2	1.0	9859581
Dissolved Titanium (Ti)	ug/L	<5.0	<5.0	5.0	9859581
Dissolved Tungsten (W)	ug/L	<1.0	<1.0	1.0	9859581
Dissolved Uranium (U)	ug/L	0.94	1.0	0.10	9859581
Dissolved Vanadium (V)	ug/L	<0.50	<0.50	0.50	9859581
Dissolved Zinc (Zn)	ug/L	5.2	14	5.0	9859581
Dissolved Zirconium (Zr)	ug/L	<1.0	<1.0	1.0	9859581

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

SEMI-VOLATILE ORGANICS BY GC-MS (GROUND WATER)

Bureau Veritas ID		ANCD19	ANCD20	ANCD21		ANCD22		
Sampling Date		2025/01/07 13:27	2025/01/07 14:42	2025/01/08 15:20		2025/01/08 16:30		
COC Number		C#1028780-01-01	C#1028780-01-01	C#1028780-01-01		C#1028780-01-01		
	UNITS	250107 BH-101	250107 BH-103	250108 BH-105	RDL	250108 BH-102	RDL	QC Batch
Calculated Parameters								
Methylnaphthalene, 2-(1-)	ug/L	<0.071	<0.071	2.1	0.071	17	0.071	9857235
Polyaromatic Hydrocarbons								
Acenaphthene	ug/L	0.10	<0.050	0.66	0.050	1.0	0.050	9858743
Acenaphthylene	ug/L	<0.050	<0.050	<0.050	0.050	0.15	0.050	9858743
Anthracene	ug/L	0.079	<0.050	0.22	0.050	0.43	0.050	9858743
Benzo(a)anthracene	ug/L	0.078	<0.050	0.18	0.050	0.14	0.050	9858743
Benzo(a)pyrene	ug/L	0.066	<0.0090	0.16	0.0090	0.091	0.0090	9858743
Benzo(b/j)fluoranthene	ug/L	0.084	<0.050	0.20	0.050	0.12	0.050	9858743
Benzo(g,h,i)perylene	ug/L	<0.050	<0.050	0.089	0.050	0.059	0.050	9858743
Benzo(k)fluoranthene	ug/L	<0.050	<0.050	0.080	0.050	<0.050	0.050	9858743
Chrysene	ug/L	0.059	<0.050	0.17	0.050	0.12	0.050	9858743
Dibenzo(a,h)anthracene	ug/L	<0.050	<0.050	<0.050	0.050	<0.050	0.050	9858743
Fluoranthene	ug/L	0.24	<0.050	0.68	0.050	0.68	0.050	9858743
Fluorene	ug/L	0.14	<0.050	0.78	0.050	<1.5 (1)	1.5	9858743
Indeno(1,2,3-cd)pyrene	ug/L	<0.050	<0.050	0.092	0.050	<0.050	0.050	9858743
1-Methylnaphthalene	ug/L	<0.050	<0.050	0.99	0.050	6.9	0.050	9858743
2-Methylnaphthalene	ug/L	0.059	0.064	1.1	0.050	10	0.050	9858743
Naphthalene	ug/L	0.10	0.083	9.5	0.050	6.1	0.050	9858743
Phenanthrene	ug/L	0.44	0.070	1.5	0.030	1.8	0.030	9858743
Pyrene	ug/L	0.17	<0.050	0.50	0.050	1.7	0.050	9858743
Surrogate Recovery (%)								
D10-Anthracene	%	108	111	105		103		9858743
D14-Terphenyl (FS)	%	104	107	104		87		9858743
D8-Acenaphthylene	%	101	104	98		103		9858743

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch
(1) Detection Limit was raised due to matrix interferences.

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

SEMI-VOLATILE ORGANICS BY GC-MS (GROUND WATER)

Bureau Veritas ID		ANCD23		
Sampling Date		2025/01/08 16:30		
COC Number		C#1028780-01-01		
	UNITS	250108 DUP-01	RDL	QC Batch
Calculated Parameters				
Methylnaphthalene, 2-(1-)	ug/L	13	0.071	9857235
Polyaromatic Hydrocarbons				
Acenaphthene	ug/L	1.0	0.050	9858743
Acenaphthylene	ug/L	<0.20 (1)	0.20	9858743
Anthracene	ug/L	0.57	0.050	9858743
Benzo(a)anthracene	ug/L	0.098	0.050	9858743
Benzo(a)pyrene	ug/L	0.068	0.0090	9858743
Benzo(b/j)fluoranthene	ug/L	0.096	0.050	9858743
Benzo(g,h,i)perylene	ug/L	0.077	0.050	9858743
Benzo(k)fluoranthene	ug/L	<0.050	0.050	9858743
Chrysene	ug/L	0.10	0.050	9858743
Dibenzo(a,h)anthracene	ug/L	<0.050	0.050	9858743
Fluoranthene	ug/L	0.56	0.050	9858743
Fluorene	ug/L	1.1	0.050	9858743
Indeno(1,2,3-cd)pyrene	ug/L	<0.050	0.050	9858743
1-Methylnaphthalene	ug/L	5.1	0.050	9858743
2-Methylnaphthalene	ug/L	8.0	0.050	9858743
Naphthalene	ug/L	3.7	0.050	9858743
Phenanthrene	ug/L	2.2	0.030	9858743
Pyrene	ug/L	2.4	0.050	9858743
Surrogate Recovery (%)				
D10-Anthracene	%	96		9858743
D14-Terphenyl (FS)	%	79		9858743
D8-Acenaphthylene	%	102		9858743

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch
(1) Detection Limit was raised due to matrix interferences.

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

VOLATILE ORGANICS BY GC/MS (GROUND WATER)

Bureau Veritas ID		ANCD20	ANCD21	ANCD22	ANCD23		
Sampling Date		2025/01/07 14:42	2025/01/08 15:20	2025/01/08 16:30	2025/01/08 16:30		
COC Number		C#1028780-01-01	C#1028780-01-01	C#1028780-01-01	C#1028780-01-01		
	UNITS	250107 BH-103	250108 BH-105	250108 BH-102	250108 DUP-01	RDL	QC Batch
Calculated Parameters							
1,3-Dichloropropene (cis+trans)	ug/L	<0.50	<0.50	<0.50	<0.50	0.50	9857237
Volatile Organics							
Acetone (2-Propanone)	ug/L	<10	<10	<10	<10	10	9858823
Benzene	ug/L	0.19	2.9	1.4	1.3	0.17	9858823
Bromodichloromethane	ug/L	<0.50	<0.50	<0.50	<0.50	0.50	9858823
Bromoform	ug/L	<1.0	<1.0	<1.0	<1.0	1.0	9858823
Bromomethane	ug/L	<0.50	<0.50	<0.50	<0.50	0.50	9858823
Carbon Tetrachloride	ug/L	<0.20	<0.20	<0.20	<0.20	0.20	9858823
Chlorobenzene	ug/L	<0.20	1.0	0.82	1.1	0.20	9858823
Chloroform	ug/L	<0.20	<0.20	<0.20	<0.20	0.20	9858823
Dibromochloromethane	ug/L	<0.50	<0.50	<0.50	<0.50	0.50	9858823
1,2-Dichlorobenzene	ug/L	<0.50	<0.50	<0.50	<0.50	0.50	9858823
1,3-Dichlorobenzene	ug/L	<0.50	<0.50	<0.50	<0.50	0.50	9858823
1,4-Dichlorobenzene	ug/L	<0.50	1.1	<0.50	0.53	0.50	9858823
Dichlorodifluoromethane (FREON 12)	ug/L	<1.0	<1.0	<1.0	<1.0	1.0	9858823
1,1-Dichloroethane	ug/L	<0.20	<0.20	<0.20	<0.20	0.20	9858823
1,2-Dichloroethane	ug/L	<0.50	<0.50	<0.50	<0.50	0.50	9858823
1,1-Dichloroethylene	ug/L	<0.20	<0.20	<0.20	<0.20	0.20	9858823
cis-1,2-Dichloroethylene	ug/L	<0.50	<0.50	1.2	1.3	0.50	9858823
trans-1,2-Dichloroethylene	ug/L	<0.50	<0.50	<0.50	<0.50	0.50	9858823
1,2-Dichloropropane	ug/L	<0.20	<0.20	<0.20	<0.20	0.20	9858823
cis-1,3-Dichloropropene	ug/L	<0.30	<0.30	<0.30	<0.30	0.30	9858823
trans-1,3-Dichloropropene	ug/L	<0.40	<0.40	<0.40	<0.40	0.40	9858823
Ethylbenzene	ug/L	<0.20	<0.20	2.7	2.1	0.20	9858823
Ethylene Dibromide	ug/L	<0.20	<0.20	<0.20	<0.20	0.20	9858823
Hexane	ug/L	<1.0	<1.0	<1.0	<1.0	1.0	9858823
Methylene Chloride(Dichloromethane)	ug/L	<2.0	<2.0	<2.0	<2.0	2.0	9858823
Methyl Ethyl Ketone (2-Butanone)	ug/L	<10	<10	<10	<10	10	9858823
Methyl Isobutyl Ketone	ug/L	<5.0	<5.0	<5.0	<5.0	5.0	9858823
Methyl t-butyl ether (MTBE)	ug/L	<0.50	<0.50	<0.50	<0.50	0.50	9858823
Styrene	ug/L	<0.50	<0.50	<0.50	<0.50	0.50	9858823

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

VOLATILE ORGANICS BY GC/MS (GROUND WATER)

Bureau Veritas ID		ANCD20	ANCD21	ANCD22	ANCD23		
Sampling Date		2025/01/07 14:42	2025/01/08 15:20	2025/01/08 16:30	2025/01/08 16:30		
COC Number		C#1028780-01-01	C#1028780-01-01	C#1028780-01-01	C#1028780-01-01		
	UNITS	250107 BH-103	250108 BH-105	250108 BH-102	250108 DUP-01	RDL	QC Batch
1,1,1,2-Tetrachloroethane	ug/L	<0.50	<0.50	<0.50	<0.50	0.50	9858823
1,1,2,2-Tetrachloroethane	ug/L	<0.50	<0.50	<0.50	<0.50	0.50	9858823
Tetrachloroethylene	ug/L	<0.20	<0.20	<0.20	<0.20	0.20	9858823
Toluene	ug/L	<0.20	0.26	0.88	0.63	0.20	9858823
1,1,1-Trichloroethane	ug/L	<0.20	<0.20	<0.20	<0.20	0.20	9858823
1,1,2-Trichloroethane	ug/L	<0.50	<0.50	<0.50	<0.50	0.50	9858823
Trichloroethylene	ug/L	<0.20	<0.20	<0.20	<0.20	0.20	9858823
Trichlorofluoromethane (FREON 11)	ug/L	<0.50	<0.50	<0.50	<0.50	0.50	9858823
Vinyl Chloride	ug/L	<0.20	0.25	0.53	0.60	0.20	9858823
p+m-Xylene	ug/L	<0.20	1.6	11	7.6	0.20	9858823
o-Xylene	ug/L	<0.20	0.26	9.5	6.5	0.20	9858823
Total Xylenes	ug/L	<0.20	1.9	20	14	0.20	9858823
F1 (C6-C10)	ug/L	<25	<25	160	140	25	9858823
F1 (C6-C10) - BTEX	ug/L	<25	<25	130	120	25	9858823
Surrogate Recovery (%)							
4-Bromofluorobenzene	%	97	96	100	109		9858823
D4-1,2-Dichloroethane	%	110	116	113	110		9858823
D8-Toluene	%	95	92	92	102		9858823

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

VOLATILE ORGANICS BY GC/MS (GROUND WATER)

Bureau Veritas ID		ANCD24		
Sampling Date		2025/01/08 17:05		
COC Number		C#1028780-01-01		
	UNITS	250108 FB-01	RDL	QC Batch
Calculated Parameters				
1,3-Dichloropropene (cis+trans)	ug/L	<0.50	0.50	9857237
Volatile Organics				
Acetone (2-Propanone)	ug/L	<10	10	9858823
Benzene	ug/L	<0.17	0.17	9858823
Bromodichloromethane	ug/L	<0.50	0.50	9858823
Bromoform	ug/L	<1.0	1.0	9858823
Bromomethane	ug/L	<0.50	0.50	9858823
Carbon Tetrachloride	ug/L	<0.20	0.20	9858823
Chlorobenzene	ug/L	<0.20	0.20	9858823
Chloroform	ug/L	3.5	0.20	9858823
Dibromochloromethane	ug/L	<0.50	0.50	9858823
1,2-Dichlorobenzene	ug/L	<0.50	0.50	9858823
1,3-Dichlorobenzene	ug/L	<0.50	0.50	9858823
1,4-Dichlorobenzene	ug/L	<0.50	0.50	9858823
Dichlorodifluoromethane (FREON 12)	ug/L	<1.0	1.0	9858823
1,1-Dichloroethane	ug/L	<0.20	0.20	9858823
1,2-Dichloroethane	ug/L	<0.50	0.50	9858823
1,1-Dichloroethylene	ug/L	<0.20	0.20	9858823
cis-1,2-Dichloroethylene	ug/L	<0.50	0.50	9858823
trans-1,2-Dichloroethylene	ug/L	<0.50	0.50	9858823
1,2-Dichloropropane	ug/L	<0.20	0.20	9858823
cis-1,3-Dichloropropene	ug/L	<0.30	0.30	9858823
trans-1,3-Dichloropropene	ug/L	<0.40	0.40	9858823
Ethylbenzene	ug/L	<0.20	0.20	9858823
Ethylene Dibromide	ug/L	<0.20	0.20	9858823
Hexane	ug/L	<1.0	1.0	9858823
Methylene Chloride(Dichloromethane)	ug/L	<2.0	2.0	9858823
Methyl Ethyl Ketone (2-Butanone)	ug/L	<10	10	9858823
Methyl Isobutyl Ketone	ug/L	<5.0	5.0	9858823
Methyl t-butyl ether (MTBE)	ug/L	<0.50	0.50	9858823
Styrene	ug/L	<0.50	0.50	9858823

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

VOLATILE ORGANICS BY GC/MS (GROUND WATER)

Bureau Veritas ID		ANCD24		
Sampling Date		2025/01/08 17:05		
COC Number		C#1028780-01-01		
	UNITS	**250108 FB-01**	**RDL**	**QC Batch**
1,1,1,2-Tetrachloroethane	ug/L	<0.50	0.50	9858823
1,1,2,2-Tetrachloroethane	ug/L	<0.50	0.50	9858823
Tetrachloroethylene	ug/L	<0.20	0.20	9858823
Toluene	ug/L	<0.20	0.20	9858823
1,1,1-Trichloroethane	ug/L	<0.20	0.20	9858823
1,1,2-Trichloroethane	ug/L	<0.50	0.50	9858823
Trichloroethylene	ug/L	<0.20	0.20	9858823
Trichlorofluoromethane (FREON 11)	ug/L	<0.50	0.50	9858823
Vinyl Chloride	ug/L	<0.20	0.20	9858823
p+m-Xylene	ug/L	<0.20	0.20	9858823
o-Xylene	ug/L	<0.20	0.20	9858823
Total Xylenes	ug/L	<0.20	0.20	9858823
F1 (C6-C10)	ug/L	<25	25	9858823
F1 (C6-C10) - BTEX	ug/L	<25	25	9858823
Surrogate Recovery (%)				
4-Bromofluorobenzene	%	97		9858823
D4-1,2-Dichloroethane	%	110		9858823
D8-Toluene	%	94		9858823

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

PETROLEUM HYDROCARBONS (CCME)

Bureau Veritas ID		ANCD19			ANCD20	ANCD21	ANCD22		
Sampling Date		2025/01/07 13:27			2025/01/07 14:42	2025/01/08 15:20	2025/01/08 16:30		
COC Number		C#1028780-01-01			C#1028780-01-01	C#1028780-01-01	C#1028780-01-01		
	UNITS	**250107 BH-101**	**RDL**	**QC Batch**	**250107 BH-103**	**250108 BH-105**	**250108 BH-102**	**RDL**	**QC Batch**
BTEX & F1 Hydrocarbons									
Benzene	ug/L	<0.20	0.20	9859033					
Toluene	ug/L	<0.20	0.20	9859033					
Ethylbenzene	ug/L	<0.20	0.20	9859033					
o-Xylene	ug/L	<0.20	0.20	9859033					
p+m-Xylene	ug/L	<0.40	0.40	9859033					
Total Xylenes	ug/L	<0.40	0.40	9859033					
F1 (C6-C10)	ug/L	<25	25	9859033					
F1 (C6-C10) - BTEX	ug/L	<25	25	9859033					
F2-F4 Hydrocarbons									
F2 (C10-C16 Hydrocarbons)	ug/L	<90	90	9858744	<90	110	2800	90	9858744
F3 (C16-C34 Hydrocarbons)	ug/L	<200	200	9858744	<200	400	1800	200	9858744
F4 (C34-C50 Hydrocarbons)	ug/L	<200	200	9858744	<200	<200	<200	200	9858744
Reached Baseline at C50	ug/L	Yes		9858744	Yes	Yes	Yes		9858744
Surrogate Recovery (%)									
1,4-Difluorobenzene	%	104		9859033					
4-Bromofluorobenzene	%	101		9859033					
D10-o-Xylene	%	89		9859033					
D4-1,2-Dichloroethane	%	108		9859033					
o-Terphenyl	%	88		9858744	88	89	89		9858744

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

PETROLEUM HYDROCARBONS (CCME)

Bureau Veritas ID		ANCD23		ANCD24		
Sampling Date		2025/01/08 16:30		2025/01/08 17:05		
COC Number		C#1028780-01-01		C#1028780-01-01		
	UNITS	250108 DUP-01	QC Batch	250108 FB-01	RDL	QC Batch
F2-F4 Hydrocarbons						
F2 (C10-C16 Hydrocarbons)	ug/L	6400	9858744	<90	90	9858745
F3 (C16-C34 Hydrocarbons)	ug/L	4700	9858744	<200	200	9858745
F4 (C34-C50 Hydrocarbons)	ug/L	<200	9858744	<200	200	9858745
Reached Baseline at C50	ug/L	Yes	9858744	Yes		9858745
Surrogate Recovery (%)						
o-Terphenyl	%	87	9858744	97		9858745

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

POLYCHLORINATED BIPHENYLS BY GC-ECD (GROUND WATER)

Bureau Veritas ID		ANCD21		ANCD22		ANCD23		
Sampling Date		2025/01/08 15:20		2025/01/08 16:30		2025/01/08 16:30		
COC Number		C#1028780-01-01		C#1028780-01-01		C#1028780-01-01		
	UNITS	250108 BH-105	RDL	250108 BH-102	RDL	250108 DUP-01	RDL	QC Batch
PCBs								
Aroclor 1242	ug/L	<0.3	0.3	<0.05	0.05	<0.5 (1)	0.5	9858406
Aroclor 1248	ug/L	<0.3	0.3	<0.05	0.05	<0.5	0.5	9858406
Aroclor 1254	ug/L	<0.3	0.3	<0.05	0.05	<0.5	0.5	9858406
Aroclor 1260	ug/L	<0.3	0.3	<0.05	0.05	<0.5	0.5	9858406
Total PCB	ug/L	<0.3	0.3	<0.05	0.05	<0.5	0.5	9858406
Surrogate Recovery (%)								
Decachlorobiphenyl	%	116		109		110		9858406

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch
(1) Test Group: Due to the sample matrix, sample required dilution. Detection limits were adjusted accordingly.

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

GENERAL COMMENTS

Revised Report [2025/02/21]: Sample IDs amended to contain BH per client request.
Revised Report [2025/02/20]: Sample ID amended to 250108 MW-105 per client request.

Sample ANCD23 [250108 DUP-01] : PCB Analysis: Due to the sample matrix, sample required dilution. Detection limits were adjusted accordingly.

Results relate only to the items tested.

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

QUALITY ASSURANCE REPORT

QA/QC Batch	Init	QC Type	Parameter	Date Analyzed	Value	Recovery	UNITS	QC Limits
9858406	FMA	Matrix Spike	Decachlorobiphenyl	2025/01/14		76	%	60 - 130
			Aroclor 1260	2025/01/14		84	%	60 - 130
			Total PCB	2025/01/14		84	%	60 - 130
9858406	FMA	Spiked Blank	Decachlorobiphenyl	2025/01/14		77	%	60 - 130
			Aroclor 1260	2025/01/14		90	%	60 - 130
			Total PCB	2025/01/14		90	%	60 - 130
9858406	FMA	Method Blank	Decachlorobiphenyl	2025/01/14		70	%	60 - 130
			Aroclor 1242	2025/01/14	<0.05		ug/L	
			Aroclor 1248	2025/01/14	<0.05		ug/L	
			Aroclor 1254	2025/01/14	<0.05		ug/L	
			Aroclor 1260	2025/01/14	<0.05		ug/L	
			Total PCB	2025/01/14	<0.05		ug/L	
9858406	FMA	RPD	Aroclor 1242	2025/01/14	NC		%	30
			Aroclor 1248	2025/01/14	NC		%	30
			Aroclor 1254	2025/01/14	NC		%	30
			Aroclor 1260	2025/01/14	NC		%	30
			Total PCB	2025/01/14	NC		%	40
9858423	GYA	Matrix Spike	WAD Cyanide (Free)	2025/01/14		98	%	80 - 120
9858423	GYA	Spiked Blank	WAD Cyanide (Free)	2025/01/14		99	%	80 - 120
9858423	GYA	Method Blank	WAD Cyanide (Free)	2025/01/14	<1		ug/L	
9858423	GYA	RPD	WAD Cyanide (Free)	2025/01/14	NC		%	20
9858551	M3K	Matrix Spike [ANCD21-02]	Mercury (Hg)	2025/01/14		91	%	75 - 125
9858551	M3K	Spiked Blank	Mercury (Hg)	2025/01/14		94	%	80 - 120
9858551	M3K	Method Blank	Mercury (Hg)	2025/01/14	<0.10		ug/L	
9858551	M3K	RPD [ANCD21-02]	Mercury (Hg)	2025/01/14	4.3		%	20
9858618	RSU	Matrix Spike	Chromium (VI)	2025/01/15		99	%	80 - 120
9858618	RSU	Spiked Blank	Chromium (VI)	2025/01/15		102	%	80 - 120
9858618	RSU	Method Blank	Chromium (VI)	2025/01/15	<0.50		ug/L	
9858618	RSU	RPD	Chromium (VI)	2025/01/15	NC		%	20
9858743	RAJ	Matrix Spike [ANCD19-01]	D10-Anthracene	2025/01/14		109	%	50 - 130
			D14-Terphenyl (FS)	2025/01/14		107	%	50 - 130
			D8-Acenaphthylene	2025/01/14		102	%	50 - 130
			Acenaphthene	2025/01/14		108	%	50 - 130
			Acenaphthylene	2025/01/14		107	%	50 - 130
			Anthracene	2025/01/14		107	%	50 - 130
			Benzo(a)anthracene	2025/01/14		101	%	50 - 130
			Benzo(a)pyrene	2025/01/14		99	%	50 - 130
			Benzo(b/j)fluoranthene	2025/01/14		98	%	50 - 130
			Benzo(g,h,i)perylene	2025/01/14		94	%	50 - 130
			Benzo(k)fluoranthene	2025/01/14		98	%	50 - 130
			Chrysene	2025/01/14		92	%	50 - 130
			Dibenzo(a,h)anthracene	2025/01/14		85	%	50 - 130
			Fluoranthene	2025/01/14		112	%	50 - 130
			Fluorene	2025/01/14		109	%	50 - 130
			Indeno(1,2,3-cd)pyrene	2025/01/14		95	%	50 - 130
			1-Methylnaphthalene	2025/01/14		105	%	50 - 130
			2-Methylnaphthalene	2025/01/14		105	%	50 - 130
			Naphthalene	2025/01/14		104	%	50 - 130
			Phenanthrene	2025/01/14		109	%	50 - 130
			Pyrene	2025/01/14		111	%	50 - 130

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

QUALITY ASSURANCE REPORT(CONT'D)

QA/QC Batch	Init	QC Type	Parameter	Date Analyzed	Value	Recovery	UNITS	QC Limits
9858743	RAJ	Spiked Blank	D10-Anthracene	2025/01/14		111	%	50 - 130
			D14-Terphenyl (FS)	2025/01/14		105	%	50 - 130
			D8-Acenaphthylene	2025/01/14		105	%	50 - 130
			Acenaphthene	2025/01/14		106	%	50 - 130
			Acenaphthylene	2025/01/14		106	%	50 - 130
			Anthracene	2025/01/14		107	%	50 - 130
			Benzo(a)anthracene	2025/01/14		109	%	50 - 130
			Benzo(a)pyrene	2025/01/14		108	%	50 - 130
			Benzo(b/j)fluoranthene	2025/01/14		106	%	50 - 130
			Benzo(g,h,i)perylene	2025/01/14		102	%	50 - 130
			Benzo(k)fluoranthene	2025/01/14		108	%	50 - 130
			Chrysene	2025/01/14		99	%	50 - 130
			Dibenzo(a,h)anthracene	2025/01/14		94	%	50 - 130
			Fluoranthene	2025/01/14		113	%	50 - 130
			Fluorene	2025/01/14		107	%	50 - 130
			Indeno(1,2,3-cd)pyrene	2025/01/14		104	%	50 - 130
			1-Methylnaphthalene	2025/01/14		104	%	50 - 130
			2-Methylnaphthalene	2025/01/14		104	%	50 - 130
			Naphthalene	2025/01/14		103	%	50 - 130
			Phenanthrene	2025/01/14		106	%	50 - 130
			Pyrene	2025/01/14		113	%	50 - 130
9858743	RAJ	Method Blank	D10-Anthracene	2025/01/14		108	%	50 - 130
			D14-Terphenyl (FS)	2025/01/14		101	%	50 - 130
			D8-Acenaphthylene	2025/01/14		102	%	50 - 130
			Acenaphthene	2025/01/14	<0.050		ug/L	
			Acenaphthylene	2025/01/14	<0.050		ug/L	
			Anthracene	2025/01/14	<0.050		ug/L	
			Benzo(a)anthracene	2025/01/14	<0.050		ug/L	
			Benzo(a)pyrene	2025/01/14	<0.0090		ug/L	
			Benzo(b/j)fluoranthene	2025/01/14	<0.050		ug/L	
			Benzo(g,h,i)perylene	2025/01/14	<0.050		ug/L	
			Benzo(k)fluoranthene	2025/01/14	<0.050		ug/L	
			Chrysene	2025/01/14	<0.050		ug/L	
			Dibenzo(a,h)anthracene	2025/01/14	<0.050		ug/L	
			Fluoranthene	2025/01/14	<0.050		ug/L	
			Fluorene	2025/01/14	<0.050		ug/L	
			Indeno(1,2,3-cd)pyrene	2025/01/14	<0.050		ug/L	
			1-Methylnaphthalene	2025/01/14	<0.050		ug/L	
			2-Methylnaphthalene	2025/01/14	<0.050		ug/L	
			Naphthalene	2025/01/14	<0.050		ug/L	
			Phenanthrene	2025/01/14	<0.030		ug/L	
			Pyrene	2025/01/14	<0.050		ug/L	
9858743	RAJ	RPD [ANCD20-02]	Acenaphthene	2025/01/14	NC		%	30
			Acenaphthylene	2025/01/14	NC		%	30
			Anthracene	2025/01/14	NC		%	30
			Benzo(a)anthracene	2025/01/14	NC		%	30
			Benzo(a)pyrene	2025/01/14	NC		%	30
			Benzo(b/j)fluoranthene	2025/01/14	NC		%	30
			Benzo(g,h,i)perylene	2025/01/14	NC		%	30
			Benzo(k)fluoranthene	2025/01/14	NC		%	30
			Chrysene	2025/01/14	NC		%	30
			Dibenzo(a,h)anthracene	2025/01/14	NC		%	30

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

QUALITY ASSURANCE REPORT(CONT'D)

QA/QC Batch	Init	QC Type	Parameter	Date Analyzed	Value	Recovery	UNITS	QC Limits
			Fluoranthene	2025/01/14	NC		%	30
			Fluorene	2025/01/14	NC		%	30
			Indeno(1,2,3-cd)pyrene	2025/01/14	NC		%	30
			1-Methylnaphthalene	2025/01/14	NC		%	30
			2-Methylnaphthalene	2025/01/14	6.8		%	30
			Naphthalene	2025/01/14	15		%	30
			Phenanthrene	2025/01/14	4.9		%	30
			Pyrene	2025/01/14	NC		%	30
9858744	MSZ	Matrix Spike [ANCD21-03]	o-Terphenyl	2025/01/14		93	%	60 - 140
			F2 (C10-C16 Hydrocarbons)	2025/01/14		92	%	60 - 140
			F3 (C16-C34 Hydrocarbons)	2025/01/14		96	%	60 - 140
			F4 (C34-C50 Hydrocarbons)	2025/01/14		71	%	60 - 140
9858744	MSZ	Spiked Blank	o-Terphenyl	2025/01/15		96	%	60 - 140
			F2 (C10-C16 Hydrocarbons)	2025/01/15		90	%	60 - 140
			F3 (C16-C34 Hydrocarbons)	2025/01/15		100	%	60 - 140
			F4 (C34-C50 Hydrocarbons)	2025/01/15		79	%	60 - 140
9858744	MSZ	Method Blank	o-Terphenyl	2025/01/14		87	%	60 - 140
			F2 (C10-C16 Hydrocarbons)	2025/01/14	<90		ug/L	
			F3 (C16-C34 Hydrocarbons)	2025/01/14	<200		ug/L	
			F4 (C34-C50 Hydrocarbons)	2025/01/14	<200		ug/L	
9858744	MSZ	RPD [ANCD20-02]	F2 (C10-C16 Hydrocarbons)	2025/01/15	NC		%	30
			F3 (C16-C34 Hydrocarbons)	2025/01/15	NC		%	30
			F4 (C34-C50 Hydrocarbons)	2025/01/15	NC		%	30
9858744	MSZ	RPD	F2 (C10-C16 Hydrocarbons)	2025/01/15	NC		%	30
			F3 (C16-C34 Hydrocarbons)	2025/01/15	NC		%	30
			F4 (C34-C50 Hydrocarbons)	2025/01/15	NC		%	30
9858745	MSZ	Matrix Spike	o-Terphenyl	2025/01/14		97	%	60 - 140
			F2 (C10-C16 Hydrocarbons)	2025/01/14		NC	%	60 - 140
			F3 (C16-C34 Hydrocarbons)	2025/01/14		102	%	60 - 140
			F4 (C34-C50 Hydrocarbons)	2025/01/14		97	%	60 - 140
9858745	MSZ	Spiked Blank	o-Terphenyl	2025/01/14		97	%	60 - 140
			F2 (C10-C16 Hydrocarbons)	2025/01/14		93	%	60 - 140
			F3 (C16-C34 Hydrocarbons)	2025/01/14		99	%	60 - 140
			F4 (C34-C50 Hydrocarbons)	2025/01/14		85	%	60 - 140
9858745	MSZ	Method Blank	o-Terphenyl	2025/01/14		96	%	60 - 140
			F2 (C10-C16 Hydrocarbons)	2025/01/14	<90		ug/L	
			F3 (C16-C34 Hydrocarbons)	2025/01/14	<200		ug/L	
			F4 (C34-C50 Hydrocarbons)	2025/01/14	<200		ug/L	
9858745	MSZ	RPD	F2 (C10-C16 Hydrocarbons)	2025/01/15	NC		%	30
			F3 (C16-C34 Hydrocarbons)	2025/01/15	NC		%	30
			F4 (C34-C50 Hydrocarbons)	2025/01/15	NC		%	30
9858823	XJI	Matrix Spike	4-Bromofluorobenzene	2025/01/15		100	%	70 - 130
			D4-1,2-Dichloroethane	2025/01/15		106	%	70 - 130
			D8-Toluene	2025/01/15		103	%	70 - 130
			Acetone (2-Propanone)	2025/01/15		98	%	60 - 140
			Benzene	2025/01/15		103	%	70 - 130
			Bromodichloromethane	2025/01/15		108	%	70 - 130
			Bromoform	2025/01/15		112	%	70 - 130
			Bromomethane	2025/01/15		110	%	60 - 140
			Carbon Tetrachloride	2025/01/15		120	%	70 - 130
			Chlorobenzene	2025/01/15		93	%	70 - 130

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

QUALITY ASSURANCE REPORT(CONT'D)

QA/QC Batch	Init	QC Type	Parameter	Date Analyzed	Value	Recovery	UNITS	QC Limits
			Chloroform	2025/01/15		113	%	70 - 130
			Dibromochloromethane	2025/01/15		116	%	70 - 130
			1,2-Dichlorobenzene	2025/01/15		105	%	70 - 130
			1,3-Dichlorobenzene	2025/01/15		106	%	70 - 130
			1,4-Dichlorobenzene	2025/01/15		104	%	70 - 130
			Dichlorodifluoromethane (FREON 12)	2025/01/15		113	%	60 - 140
			1,1-Dichloroethane	2025/01/15		107	%	70 - 130
			1,2-Dichloroethane	2025/01/15		107	%	70 - 130
			1,1-Dichloroethylene	2025/01/15		102	%	70 - 130
			cis-1,2-Dichloroethylene	2025/01/15		109	%	70 - 130
			trans-1,2-Dichloroethylene	2025/01/15		114	%	70 - 130
			1,2-Dichloropropane	2025/01/15		104	%	70 - 130
			cis-1,3-Dichloropropene	2025/01/15		87	%	70 - 130
			trans-1,3-Dichloropropene	2025/01/15		100	%	70 - 130
			Ethylbenzene	2025/01/15		87	%	70 - 130
			Ethylene Dibromide	2025/01/15		106	%	70 - 130
			Hexane	2025/01/15		102	%	70 - 130
			Methylene Chloride(Dichloromethane)	2025/01/15		111	%	70 - 130
			Methyl Ethyl Ketone (2-Butanone)	2025/01/15		101	%	60 - 140
			Methyl Isobutyl Ketone	2025/01/15		83	%	70 - 130
			Methyl t-butyl ether (MTBE)	2025/01/15		87	%	70 - 130
			Styrene	2025/01/15		85	%	70 - 130
			1,1,1,2-Tetrachloroethane	2025/01/15		121	%	70 - 130
			1,1,2,2-Tetrachloroethane	2025/01/15		107	%	70 - 130
			Tetrachloroethylene	2025/01/15		113	%	70 - 130
			Toluene	2025/01/15		104	%	70 - 130
			1,1,1-Trichloroethane	2025/01/15		107	%	70 - 130
			1,1,2-Trichloroethane	2025/01/15		114	%	70 - 130
			Trichloroethylene	2025/01/15		110	%	70 - 130
			Trichlorofluoromethane (FREON 11)	2025/01/15		110	%	70 - 130
			Vinyl Chloride	2025/01/15		105	%	70 - 130
			p+m-Xylene	2025/01/15		84	%	70 - 130
			o-Xylene	2025/01/15		92	%	70 - 130
			F1 (C6-C10)	2025/01/15		88	%	60 - 140
9858823	XJI	Spiked Blank	4-Bromofluorobenzene	2025/01/15		102	%	70 - 130
			D4-1,2-Dichloroethane	2025/01/15		104	%	70 - 130
			D8-Toluene	2025/01/15		103	%	70 - 130
			Acetone (2-Propanone)	2025/01/15		86	%	60 - 140
			Benzene	2025/01/15		96	%	70 - 130
			Bromodichloromethane	2025/01/15		97	%	70 - 130
			Bromoform	2025/01/15		101	%	70 - 130
			Bromomethane	2025/01/15		105	%	60 - 140
			Carbon Tetrachloride	2025/01/15		109	%	70 - 130
			Chlorobenzene	2025/01/15		86	%	70 - 130
			Chloroform	2025/01/15		95	%	70 - 130
			Dibromochloromethane	2025/01/15		104	%	70 - 130
			1,2-Dichlorobenzene	2025/01/15		98	%	70 - 130
			1,3-Dichlorobenzene	2025/01/15		99	%	70 - 130
			1,4-Dichlorobenzene	2025/01/15		98	%	70 - 130
			Dichlorodifluoromethane (FREON 12)	2025/01/15		107	%	60 - 140
			1,1-Dichloroethane	2025/01/15		95	%	70 - 130
			1,2-Dichloroethane	2025/01/15		98	%	70 - 130

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

QUALITY ASSURANCE REPORT(CONT'D)

QA/QC Batch	Init	QC Type	Parameter	Date Analyzed	Value	Recovery	UNITS	QC Limits
			1,1-Dichloroethylene	2025/01/15		95	%	70 - 130
			cis-1,2-Dichloroethylene	2025/01/15		101	%	70 - 130
			trans-1,2-Dichloroethylene	2025/01/15		106	%	70 - 130
			1,2-Dichloropropane	2025/01/15		96	%	70 - 130
			cis-1,3-Dichloropropene	2025/01/15		84	%	70 - 130
			trans-1,3-Dichloropropene	2025/01/15		98	%	70 - 130
			Ethylbenzene	2025/01/15		82	%	70 - 130
			Ethylene Dibromide	2025/01/15		96	%	70 - 130
			Hexane	2025/01/15		100	%	70 - 130
			Methylene Chloride(Dichloromethane)	2025/01/15		101	%	70 - 130
			Methyl Ethyl Ketone (2-Butanone)	2025/01/15		90	%	60 - 140
			Methyl Isobutyl Ketone	2025/01/15		77	%	70 - 130
			Methyl t-butyl ether (MTBE)	2025/01/15		79	%	70 - 130
			Styrene	2025/01/15		82	%	70 - 130
			1,1,1,2-Tetrachloroethane	2025/01/15		110	%	70 - 130
			1,1,2,2-Tetrachloroethane	2025/01/15		96	%	70 - 130
			Tetrachloroethylene	2025/01/15		96	%	70 - 130
			Toluene	2025/01/15		97	%	70 - 130
			1,1,1-Trichloroethane	2025/01/15		99	%	70 - 130
			1,1,2-Trichloroethane	2025/01/15		102	%	70 - 130
			Trichloroethylene	2025/01/15		101	%	70 - 130
			Trichlorofluoromethane (FREON 11)	2025/01/15		102	%	70 - 130
			Vinyl Chloride	2025/01/15		100	%	70 - 130
			p+m-Xylene	2025/01/15		81	%	70 - 130
			o-Xylene	2025/01/15		87	%	70 - 130
			F1 (C6-C10)	2025/01/15		95	%	60 - 140
9858823	XJI	Method Blank	4-Bromofluorobenzene	2025/01/15		98	%	70 - 130
			D4-1,2-Dichloroethane	2025/01/15		107	%	70 - 130
			D8-Toluene	2025/01/15		95	%	70 - 130
			Acetone (2-Propanone)	2025/01/15	<10		ug/L	
			Benzene	2025/01/15	<0.17		ug/L	
			Bromodichloromethane	2025/01/15	<0.50		ug/L	
			Bromoform	2025/01/15	<1.0		ug/L	
			Bromomethane	2025/01/15	<0.50		ug/L	
			Carbon Tetrachloride	2025/01/15	<0.20		ug/L	
			Chlorobenzene	2025/01/15	<0.20		ug/L	
			Chloroform	2025/01/15	<0.20		ug/L	
			Dibromochloromethane	2025/01/15	<0.50		ug/L	
			1,2-Dichlorobenzene	2025/01/15	<0.50		ug/L	
			1,3-Dichlorobenzene	2025/01/15	<0.50		ug/L	
			1,4-Dichlorobenzene	2025/01/15	<0.50		ug/L	
			Dichlorodifluoromethane (FREON 12)	2025/01/15	<1.0		ug/L	
			1,1-Dichloroethane	2025/01/15	<0.20		ug/L	
			1,2-Dichloroethane	2025/01/15	<0.50		ug/L	
			1,1-Dichloroethylene	2025/01/15	<0.20		ug/L	
			cis-1,2-Dichloroethylene	2025/01/15	<0.50		ug/L	
			trans-1,2-Dichloroethylene	2025/01/15	<0.50		ug/L	
			1,2-Dichloropropane	2025/01/15	<0.20		ug/L	
			cis-1,3-Dichloropropene	2025/01/15	<0.30		ug/L	
			trans-1,3-Dichloropropene	2025/01/15	<0.40		ug/L	
			Ethylbenzene	2025/01/15	<0.20		ug/L	
			Ethylene Dibromide	2025/01/15	<0.20		ug/L	

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

QUALITY ASSURANCE REPORT(CONT'D)

QA/QC Batch	Init	QC Type	Parameter	Date Analyzed	Value	Recovery	UNITS	QC Limits
			Hexane	2025/01/15	<1.0		ug/L	
			Methylene Chloride(Dichloromethane)	2025/01/15	<2.0		ug/L	
			Methyl Ethyl Ketone (2-Butanone)	2025/01/15	<10		ug/L	
			Methyl Isobutyl Ketone	2025/01/15	<5.0		ug/L	
			Methyl t-butyl ether (MTBE)	2025/01/15	<0.50		ug/L	
			Styrene	2025/01/15	<0.50		ug/L	
			1,1,1,2-Tetrachloroethane	2025/01/15	<0.50		ug/L	
			1,1,2,2-Tetrachloroethane	2025/01/15	<0.50		ug/L	
			Tetrachloroethylene	2025/01/15	<0.20		ug/L	
			Toluene	2025/01/15	<0.20		ug/L	
			1,1,1-Trichloroethane	2025/01/15	<0.20		ug/L	
			1,1,2-Trichloroethane	2025/01/15	<0.50		ug/L	
			Trichloroethylene	2025/01/15	<0.20		ug/L	
			Trichlorofluoromethane (FREON 11)	2025/01/15	<0.50		ug/L	
			Vinyl Chloride	2025/01/15	<0.20		ug/L	
			p+m-Xylene	2025/01/15	<0.20		ug/L	
			o-Xylene	2025/01/15	<0.20		ug/L	
			Total Xylenes	2025/01/15	<0.20		ug/L	
			F1 (C6-C10)	2025/01/15	<25		ug/L	
			F1 (C6-C10) - BTEX	2025/01/15	<25		ug/L	
9858823	XJI	RPD	Acetone (2-Propanone)	2025/01/15	NC		%	30
			Benzene	2025/01/15	NC		%	30
			Bromodichloromethane	2025/01/15	NC		%	30
			Bromoform	2025/01/15	NC		%	30
			Bromomethane	2025/01/15	NC		%	30
			Carbon Tetrachloride	2025/01/15	NC		%	30
			Chlorobenzene	2025/01/15	NC		%	30
			Chloroform	2025/01/15	14		%	30
			Dibromochloromethane	2025/01/15	NC		%	30
			1,2-Dichlorobenzene	2025/01/15	NC		%	30
			1,3-Dichlorobenzene	2025/01/15	NC		%	30
			1,4-Dichlorobenzene	2025/01/15	NC		%	30
			Dichlorodifluoromethane (FREON 12)	2025/01/15	NC		%	30
			1,1-Dichloroethane	2025/01/15	NC		%	30
			1,2-Dichloroethane	2025/01/15	NC		%	30
			1,1-Dichloroethylene	2025/01/15	NC		%	30
			cis-1,2-Dichloroethylene	2025/01/15	NC		%	30
			trans-1,2-Dichloroethylene	2025/01/15	NC		%	30
			1,2-Dichloropropane	2025/01/15	NC		%	30
			cis-1,3-Dichloropropene	2025/01/15	NC		%	30
			trans-1,3-Dichloropropene	2025/01/15	NC		%	30
			Ethylbenzene	2025/01/15	NC		%	30
			Ethylene Dibromide	2025/01/15	NC		%	30
			Hexane	2025/01/15	NC		%	30
			Methylene Chloride(Dichloromethane)	2025/01/15	NC		%	30
			Methyl Ethyl Ketone (2-Butanone)	2025/01/15	NC		%	30
			Methyl Isobutyl Ketone	2025/01/15	NC		%	30
			Methyl t-butyl ether (MTBE)	2025/01/15	NC		%	30
			Styrene	2025/01/15	NC		%	30
			1,1,1,2-Tetrachloroethane	2025/01/15	NC		%	30
			1,1,2,2-Tetrachloroethane	2025/01/15	NC		%	30
			Tetrachloroethylene	2025/01/15	NC		%	30

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

QUALITY ASSURANCE REPORT(CONT'D)

QA/QC Batch	Init	QC Type	Parameter	Date Analyzed	Value	Recovery	UNITS	QC Limits
			Toluene	2025/01/15	7.9		%	30
			1,1,1-Trichloroethane	2025/01/15	NC		%	30
			1,1,2-Trichloroethane	2025/01/15	NC		%	30
			Trichloroethylene	2025/01/15	NC		%	30
			Trichlorofluoromethane (FREON 11)	2025/01/15	NC		%	30
			Vinyl Chloride	2025/01/15	NC		%	30
			p+m-Xylene	2025/01/15	NC		%	30
			o-Xylene	2025/01/15	NC		%	30
			Total Xylenes	2025/01/15	NC		%	30
			F1 (C6-C10)	2025/01/15	NC		%	30
			F1 (C6-C10) - BTEX	2025/01/15	NC		%	30
9858996	MJ1	Matrix Spike	Dissolved Chloride (Cl-)	2025/01/16		NC	%	80 - 120
9858996	MJ1	Spiked Blank	Dissolved Chloride (Cl-)	2025/01/16		100	%	80 - 120
9858996	MJ1	Method Blank	Dissolved Chloride (Cl-)	2025/01/16	<1.0		mg/L	
9858996	MJ1	RPD	Dissolved Chloride (Cl-)	2025/01/16	0.070		%	20
9859033	GRU	Matrix Spike [ANCD19-06]	1,4-Difluorobenzene	2025/01/14		102	%	70 - 130
			4-Bromofluorobenzene	2025/01/14		102	%	70 - 130
			D10-o-Xylene	2025/01/14		86	%	70 - 130
			D4-1,2-Dichloroethane	2025/01/14		103	%	70 - 130
			Benzene	2025/01/14		80	%	50 - 140
			Toluene	2025/01/14		73	%	50 - 140
			Ethylbenzene	2025/01/14		82	%	50 - 140
			o-Xylene	2025/01/14		80	%	50 - 140
			p+m-Xylene	2025/01/14		77	%	50 - 140
			F1 (C6-C10)	2025/01/14		84	%	60 - 140
9859033	GRU	Spiked Blank	1,4-Difluorobenzene	2025/01/14		103	%	70 - 130
			4-Bromofluorobenzene	2025/01/14		103	%	70 - 130
			D10-o-Xylene	2025/01/14		89	%	70 - 130
			D4-1,2-Dichloroethane	2025/01/14		102	%	70 - 130
			Benzene	2025/01/14		84	%	50 - 140
			Toluene	2025/01/14		78	%	50 - 140
			Ethylbenzene	2025/01/14		87	%	50 - 140
			o-Xylene	2025/01/14		84	%	50 - 140
			p+m-Xylene	2025/01/14		82	%	50 - 140
			F1 (C6-C10)	2025/01/14		89	%	60 - 140
9859033	GRU	Method Blank	1,4-Difluorobenzene	2025/01/14		107	%	70 - 130
			4-Bromofluorobenzene	2025/01/14		103	%	70 - 130
			D10-o-Xylene	2025/01/14		92	%	70 - 130
			D4-1,2-Dichloroethane	2025/01/14		110	%	70 - 130
			Benzene	2025/01/14	<0.20		ug/L	
			Toluene	2025/01/14	<0.20		ug/L	
			Ethylbenzene	2025/01/14	<0.20		ug/L	
			o-Xylene	2025/01/14	<0.20		ug/L	
			p+m-Xylene	2025/01/14	<0.40		ug/L	
			Total Xylenes	2025/01/14	<0.40		ug/L	
			F1 (C6-C10)	2025/01/14	<25		ug/L	
			F1 (C6-C10) - BTEX	2025/01/14	<25		ug/L	
9859033	GRU	RPD [ANCD19-06]	Benzene	2025/01/14	NC		%	30
			Toluene	2025/01/14	NC		%	30
			Ethylbenzene	2025/01/14	NC		%	30
			o-Xylene	2025/01/14	NC		%	30

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

QUALITY ASSURANCE REPORT(CONT'D)

QA/QC Batch	Init	QC Type	Parameter	Date Analyzed	Value	Recovery	UNITS	QC Limits
			p+m-Xylene	2025/01/14	NC		%	30
			Total Xylenes	2025/01/14	NC		%	30
			F1 (C6-C10)	2025/01/14	NC		%	30
			F1 (C6-C10) - BTEX	2025/01/14	NC		%	30
9859581	IHP	Matrix Spike	Dissolved Aluminum (Al)	2025/01/16		98	%	80 - 120
			Dissolved Antimony (Sb)	2025/01/16		93	%	80 - 120
			Dissolved Arsenic (As)	2025/01/16		95	%	80 - 120
			Dissolved Barium (Ba)	2025/01/16		96	%	80 - 120
			Dissolved Beryllium (Be)	2025/01/16		91	%	80 - 120
			Dissolved Bismuth (Bi)	2025/01/16		93	%	80 - 120
			Dissolved Boron (B)	2025/01/16		86	%	80 - 120
			Dissolved Cadmium (Cd)	2025/01/16		95	%	80 - 120
			Dissolved Calcium (Ca)	2025/01/16		NC	%	80 - 120
			Dissolved Chromium (Cr)	2025/01/16		91	%	80 - 120
			Dissolved Cobalt (Co)	2025/01/16		92	%	80 - 120
			Dissolved Copper (Cu)	2025/01/16		93	%	80 - 120
			Dissolved Iron (Fe)	2025/01/16		94	%	80 - 120
			Dissolved Lead (Pb)	2025/01/16		91	%	80 - 120
			Dissolved Lithium (Li)	2025/01/16		97	%	80 - 120
			Dissolved Magnesium (Mg)	2025/01/16		87	%	80 - 120
			Dissolved Manganese (Mn)	2025/01/16		93	%	80 - 120
			Dissolved Molybdenum (Mo)	2025/01/16		93	%	80 - 120
			Dissolved Nickel (Ni)	2025/01/16		90	%	80 - 120
			Dissolved Phosphorus (P)	2025/01/16		102	%	80 - 120
			Dissolved Potassium (K)	2025/01/16		61 (1)	%	80 - 120
			Dissolved Selenium (Se)	2025/01/16		94	%	80 - 120
			Dissolved Silicon (Si)	2025/01/16		36 (1)	%	80 - 120
			Dissolved Silver (Ag)	2025/01/16		15 (1)	%	80 - 120
			Dissolved Sodium (Na)	2025/01/16		58 (1)	%	80 - 120
			Dissolved Strontium (Sr)	2025/01/16		93	%	80 - 120
			Dissolved Tellurium (Te)	2025/01/16		93	%	80 - 120
			Dissolved Thallium (Tl)	2025/01/16		93	%	80 - 120
			Dissolved Tin (Sn)	2025/01/16		94	%	80 - 120
			Dissolved Titanium (Ti)	2025/01/16		96	%	80 - 120
			Dissolved Tungsten (W)	2025/01/16		72 (1)	%	80 - 120
			Dissolved Uranium (U)	2025/01/16		97	%	80 - 120
			Dissolved Vanadium (V)	2025/01/16		94	%	80 - 120
			Dissolved Zinc (Zn)	2025/01/16		91	%	80 - 120
			Dissolved Zirconium (Zr)	2025/01/16		100	%	80 - 120
9859581	IHP	Spiked Blank	Dissolved Aluminum (Al)	2025/01/16		97	%	80 - 120
			Dissolved Antimony (Sb)	2025/01/16		98	%	80 - 120
			Dissolved Arsenic (As)	2025/01/16		95	%	80 - 120
			Dissolved Barium (Ba)	2025/01/16		97	%	80 - 120
			Dissolved Beryllium (Be)	2025/01/16		91	%	80 - 120
			Dissolved Bismuth (Bi)	2025/01/16		94	%	80 - 120
			Dissolved Boron (B)	2025/01/16		91	%	80 - 120
			Dissolved Cadmium (Cd)	2025/01/16		95	%	80 - 120
			Dissolved Calcium (Ca)	2025/01/16		98	%	80 - 120
			Dissolved Chromium (Cr)	2025/01/16		91	%	80 - 120
			Dissolved Cobalt (Co)	2025/01/16		93	%	80 - 120
			Dissolved Copper (Cu)	2025/01/16		93	%	80 - 120
			Dissolved Iron (Fe)	2025/01/16		93	%	80 - 120

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

QUALITY ASSURANCE REPORT(CONT'D)

QA/QC Batch	Init	QC Type	Parameter	Date Analyzed	Value	Recovery	UNITS	QC Limits
			Dissolved Lead (Pb)	2025/01/16		93	%	80 - 120
			Dissolved Lithium (Li)	2025/01/16		101	%	80 - 120
			Dissolved Magnesium (Mg)	2025/01/16		94	%	80 - 120
			Dissolved Manganese (Mn)	2025/01/16		94	%	80 - 120
			Dissolved Molybdenum (Mo)	2025/01/16		93	%	80 - 120
			Dissolved Nickel (Ni)	2025/01/16		90	%	80 - 120
			Dissolved Phosphorus (P)	2025/01/16		98	%	80 - 120
			Dissolved Potassium (K)	2025/01/16		98	%	80 - 120
			Dissolved Selenium (Se)	2025/01/16		95	%	80 - 120
			Dissolved Silicon (Si)	2025/01/16		95	%	80 - 120
			Dissolved Silver (Ag)	2025/01/16		91	%	80 - 120
			Dissolved Sodium (Na)	2025/01/16		93	%	80 - 120
			Dissolved Strontium (Sr)	2025/01/16		96	%	80 - 120
			Dissolved Tellurium (Te)	2025/01/16		96	%	80 - 120
			Dissolved Thallium (Tl)	2025/01/16		99	%	80 - 120
			Dissolved Tin (Sn)	2025/01/16		97	%	80 - 120
			Dissolved Titanium (Ti)	2025/01/16		96	%	80 - 120
			Dissolved Tungsten (W)	2025/01/16		92	%	80 - 120
			Dissolved Uranium (U)	2025/01/16		96	%	80 - 120
			Dissolved Vanadium (V)	2025/01/16		94	%	80 - 120
			Dissolved Zinc (Zn)	2025/01/16		93	%	80 - 120
			Dissolved Zirconium (Zr)	2025/01/16		99	%	80 - 120
9859581	IHP	Method Blank	Dissolved Aluminum (Al)	2025/01/16	<4.9		ug/L	
			Dissolved Antimony (Sb)	2025/01/16	<0.50		ug/L	
			Dissolved Arsenic (As)	2025/01/16	<1.0		ug/L	
			Dissolved Barium (Ba)	2025/01/16	<2.0		ug/L	
			Dissolved Beryllium (Be)	2025/01/16	<0.40		ug/L	
			Dissolved Bismuth (Bi)	2025/01/16	<1.0		ug/L	
			Dissolved Boron (B)	2025/01/16	<10		ug/L	
			Dissolved Cadmium (Cd)	2025/01/16	<0.090		ug/L	
			Dissolved Calcium (Ca)	2025/01/16	<200		ug/L	
			Dissolved Chromium (Cr)	2025/01/16	<5.0		ug/L	
			Dissolved Cobalt (Co)	2025/01/16	<0.50		ug/L	
			Dissolved Copper (Cu)	2025/01/16	<0.90		ug/L	
			Dissolved Iron (Fe)	2025/01/16	<100		ug/L	
			Dissolved Lead (Pb)	2025/01/16	<0.50		ug/L	
			Dissolved Lithium (Li)	2025/01/16	<5.0		ug/L	
			Dissolved Magnesium (Mg)	2025/01/16	<50		ug/L	
			Dissolved Manganese (Mn)	2025/01/16	<2.0		ug/L	
			Dissolved Molybdenum (Mo)	2025/01/16	<0.50		ug/L	
			Dissolved Nickel (Ni)	2025/01/16	<1.0		ug/L	
			Dissolved Phosphorus (P)	2025/01/16	<100		ug/L	
			Dissolved Potassium (K)	2025/01/16	<200		ug/L	
			Dissolved Selenium (Se)	2025/01/16	<2.0		ug/L	
			Dissolved Silicon (Si)	2025/01/16	<50		ug/L	
			Dissolved Silver (Ag)	2025/01/16	<0.090		ug/L	
			Dissolved Sodium (Na)	2025/01/16	<100		ug/L	
			Dissolved Strontium (Sr)	2025/01/16	<1.0		ug/L	
			Dissolved Tellurium (Te)	2025/01/16	<1.0		ug/L	
			Dissolved Thallium (Tl)	2025/01/16	<0.050		ug/L	
			Dissolved Tin (Sn)	2025/01/16	<1.0		ug/L	
			Dissolved Titanium (Ti)	2025/01/16	<5.0		ug/L	

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

QUALITY ASSURANCE REPORT(CONT'D)

QA/QC Batch	Init	QC Type	Parameter	Date Analyzed	Value	Recovery	UNITS	QC Limits
			Dissolved Tungsten (W)	2025/01/16	<1.0		ug/L	
			Dissolved Uranium (U)	2025/01/16	<0.10		ug/L	
			Dissolved Vanadium (V)	2025/01/16	<0.50		ug/L	
			Dissolved Zinc (Zn)	2025/01/16	<5.0		ug/L	
			Dissolved Zirconium (Zr)	2025/01/16	<1.0		ug/L	
9859581	IHP	RPD	Dissolved Aluminum (Al)	2025/01/16	NC		%	20
			Dissolved Antimony (Sb)	2025/01/16	NC		%	20
			Dissolved Arsenic (As)	2025/01/16	NC		%	20
			Dissolved Barium (Ba)	2025/01/16	5.6		%	20
			Dissolved Beryllium (Be)	2025/01/16	NC		%	20
			Dissolved Boron (B)	2025/01/16	0.075		%	20
			Dissolved Cadmium (Cd)	2025/01/16	NC		%	20
			Dissolved Calcium (Ca)	2025/01/16	0.29		%	20
			Dissolved Chromium (Cr)	2025/01/16	NC		%	20
			Dissolved Cobalt (Co)	2025/01/16	NC		%	20
			Dissolved Copper (Cu)	2025/01/16	0.72		%	20
			Dissolved Iron (Fe)	2025/01/16	NC		%	20
			Dissolved Lead (Pb)	2025/01/16	NC		%	20
			Dissolved Magnesium (Mg)	2025/01/16	1.8		%	20
			Dissolved Manganese (Mn)	2025/01/16	0.18		%	20
			Dissolved Molybdenum (Mo)	2025/01/16	NC		%	20
			Dissolved Nickel (Ni)	2025/01/16	NC		%	20
			Dissolved Phosphorus (P)	2025/01/16	NC		%	20
			Dissolved Potassium (K)	2025/01/16	1.6		%	20
			Dissolved Selenium (Se)	2025/01/16	NC		%	20
			Dissolved Silicon (Si)	2025/01/16	0.068		%	20
			Dissolved Silver (Ag)	2025/01/16	NC		%	20
			Dissolved Sodium (Na)	2025/01/16	3.1		%	20
			Dissolved Strontium (Sr)	2025/01/16	2.4		%	20
			Dissolved Thallium (Tl)	2025/01/16	NC		%	20
			Dissolved Titanium (Ti)	2025/01/16	NC		%	20
			Dissolved Uranium (U)	2025/01/16	0.35		%	20
			Dissolved Vanadium (V)	2025/01/16	2.6		%	20
			Dissolved Zinc (Zn)	2025/01/16	5.7		%	20

Duplicate: Paired analysis of a separate portion of the same sample. Used to evaluate the variance in the measurement.

Matrix Spike: A sample to which a known amount of the analyte of interest has been added. Used to evaluate sample matrix interference.

Spiked Blank: A blank matrix sample to which a known amount of the analyte, usually from a second source, has been added. Used to evaluate method accuracy.

Method Blank: A blank matrix containing all reagents used in the analytical procedure. Used to identify laboratory contamination.

Surrogate: A pure or isotopically labeled compound whose behavior mirrors the analytes of interest. Used to evaluate extraction efficiency.

NC (Matrix Spike): The recovery in the matrix spike was not calculated. The relative difference between the concentration in the parent sample and the spike amount was too small to permit a reliable recovery calculation (matrix spike concentration was less than the native sample concentration)

NC (Duplicate RPD): The duplicate RPD was not calculated. The concentration in the sample and/or duplicate was too low to permit a reliable RPD calculation (absolute difference <= 2x RDL).

(1) Matrix Spike exceeds acceptance limits, probable matrix interference

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

VALIDATION SIGNATURE PAGE

The analytical data and all QC contained in this report were reviewed and validated by:

Cristina Carriere, Senior Scientific Specialist

Louise Harding, Scientific Specialist

Bureau Veritas has procedures in place to guard against improper use of the electronic signature and have the required "signatories", as per ISO/IEC 17025, signing the reports. For Service Group specific validation, please refer to the Validation Signatures page if included, otherwise available by request. For Department specific Analyst/Supervisor validation names, please refer to the Test Summary section if included, otherwise available by request. This report is authorized by Rodney Major, General Manager responsible for Ontario Environmental laboratory operations.

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

QAQC-1

RELATIVE PERCENT DIFFERENCE CALCULATIONS - SOIL FIELD DUPLICATE SAMPLES
PETROLEUM HYDROCARBON PARAMETERS

SAMPLE LOCATIONS	BH-105(4.9-5.5)	RDL	DUP-01 DUPLICATE BH-105(4.9-5.5)	RDL	RPD	RPD ALERT LIMITS (%)[a]
Certificate of Analysis No.	C4BP637		C4BP637			
Sample ID	AMLF43		AMLF44			
Depth (mbgs)	4.9-5.5		4.9-5.5			
Date Sampled (yyyy/mm/dd)	2024/12/20		2024/12/20			
PARAMETERS						
Benzene	< 0.0060	0.0060	< 0.0060	0.0060	NC	100
Toluene	< 0.020	0.020	< 0.020	0.020	NC	100
Ethylbenzene	< 0.010	0.010	< 0.010	0.010	NC	100
Xylenes	< 0.020	0.020	< 0.020	0.020	NC	100
PHC F1 (C6 - C10)[b]	< *10*	10	< 10	10	NC	100
PHC F2 (>C10 - C16)[c]	< 14	14	14	7.0	NC	100
PHC F3 (>C16 - C34)[d]	140	100	160	50	NC	100
PHC F4 (>C34 - C50)	170	100	280	50	NC	100

a - Alert limits used for field duplicate samples

b - BTEX have been subtracted from the fraction

c - Naphthalene has not been subtracted from the fraction

d - PAHs have not been subtracted from the fraction

NA - Not applicable

NC - Not calculated

RDL - Reportable Detection Limit

RPD - Relative Percent Difference (not calculated when one or both results are less than 5X RDL)

mbgs - metres below ground surface

The specific date each sample was analyzed is presented in the laboratory Certificates of Analysis.

Results for all parameters are reported in micrograms per gram (µg/g) on a dry weight basis

QAQC-2

RELATIVE PERCENT DIFFERENCE CALCULATIONS - SOIL FIELD DUPLICATE SAMPLES
VOLATILE ORGANIC COMPOUNDS EXCLUDING BTEX

SAMPLE LOCATIONS	BH-105(4.9-5.5)	RDL	DUP-01 DUPLICATE BH-105(4.9-5.5)	RDL	RPD	RPD ALERT LIMITS (%)[a]
Certificate of Analysis No.	C4BP637		C4BP637			
Sample ID	AMLF43		AMLF44			
Depth (mbgs)	4.9-5.5		4.9-5.5			
Date Sampled (yyyy/mm/dd)	2024/12/20		2024/12/20			
PARAMETERS						
Acetone	< 0.49	0.49	< 0.49	0.49	NC	100
Bromodichloromethane	< 0.040	0.040	< 0.040	0.040	NC	100
Bromoform	< 0.040	0.040	< 0.040	0.040	NC	100
Bromomethane	< 0.040	0.040	< 0.040	0.040	NC	100
Carbon Tetrachloride	< 0.040	0.040	< 0.040	0.040	NC	100
Chlorobenzene	< 0.040	0.040	< 0.040	0.040	NC	100
Chloroform	< 0.040	0.040	< 0.040	0.040	NC	100
Dibromochloromethane	< 0.040	0.040	< 0.040	0.040	NC	100
Ethylene Dibromide	< 0.040	0.040	< 0.040	0.040	NC	100
1,2-Dichlorobenzene	< 0.040	0.040	< 0.040	0.040	NC	100
1,3-Dichlorobenzene	< 0.040	0.040	< 0.040	0.040	NC	100
1,4-Dichlorobenzene	< 0.040	0.040	< 0.040	0.040	NC	100
Dichlorodifluoromethane	< 0.040	0.040	< 0.040	0.040	NC	100
1,1-Dichloroethane	< 0.040	0.040	< 0.040	0.040	NC	100
1,2-Dichloroethane	< 0.049	0.049	< 0.049	0.049	NC	100
1,1-Dichloroethylene	< 0.040	0.040	< 0.040	0.040	NC	100
cis-1,2-Dichloroethylene	< 0.040	0.040	< 0.040	0.040	NC	100
trans-1,2-Dichloroethylene	< 0.040	0.040	< 0.040	0.040	NC	100
1,2-Dichloropropane	< 0.040	0.040	< 0.040	0.040	NC	100
cis-1,3-Dichloropropene	< 0.030	0.030	< 0.030	0.030	NC	100
trans-1,3-Dichloropropene	< 0.040	0.040	< 0.040	0.040	NC	100
1,3-Dichloropropene	< 0.050	0.050	< 0.050	0.050	NC	100
Hexane	< 0.040	0.049	< 0.040	0.049	NC	100
Methyl ethyl ketone	< 0.40	0.40	< 0.40	0.40	NC	100
Methyl isobutyl ketone	< 0.40	0.40	< 0.40	0.40	NC	100
Methyl t-butyl ether	< 0.040	0.040	< 0.040	0.040	NC	100
Methylene Chloride	< 0.049	0.049	< 0.049	0.049	NC	100
Styrene	< 0.040	0.040	< 0.040	0.040	NC	100
1,1,1,2-Tetrachloroethane	< 0.040	0.040	< 0.040	0.040	NC	100
1,1,2,2-Tetrachloroethane	< 0.040	0.040	< 0.040	0.040	NC	100
Tetrachloroethylene	< 0.040	0.040	< 0.040	0.040	NC	100
1,1,1-Trichloroethane	< 0.040	0.040	< 0.040	0.040	NC	100
1,1,2-Trichloroethane	< 0.040	0.040	< 0.040	0.040	NC	100
Trichloroethylene	< 0.010	0.010	< 0.010	0.010	NC	100
Trichlorofluoromethane	< 0.040	0.040	< 0.040	0.040	NC	100
Vinyl Chloride	< 0.019	0.019	< 0.019	0.019	NC	100

a - Alert limits used for field duplicate samples

NA - Not applicable

NC - Not calculated

RDL - Reportable Detection Limit

RPD - Relative Percent Difference (not calculated when one or both results are less than 5X RDL)

"-" - Not analyzed

mbgs - metres below ground surface

The specific date each sample was analyzed is presented in the laboratory Certificates of Analysis.

BOLD - Exceeds RPD alert limit

Results for all parameters are reported in micrograms per gram (µg/g) on a dry weight basis

QAQC-3

RELATIVE PERCENT DIFFERENCE CALCULATIONS - SOIL FIELD DUPLICATE SAMPLES
POLYCYCLIC AROMATIC HYDROCARBONS

SAMPLE LOCATIONS	BH-105(4.9-5.5)	RDL	DUP-01 DUPLICATE BH-105(4.9-5.5)	RDL	RPD	RPD ALERT LIMITS (%)[a]
Certificate of Analysis No.	C4BP637		C4BP637			
Sample ID	AMLF43		AMLF44			
Depth (mbgs)	4.9-5.5		4.9-5.5			
Date Sampled (yyyy/mm/dd)	2024/12/20		2024/12/20			
PARAMETERS						
Acenaphthene	0.019	0.010	0.0090	0.0050	NC	100
Acenaphthylene	< 0.010	0.010	< 0.0050	0.0050	NC	100
Anthracene	0.038	0.010	0.016	0.0050	NC	100
Benzo(a)anthracene	0.074	0.010	0.030	0.0050	85%	100
Benzo(a)pyrene	0.042	0.010	0.024	0.0050	NC	100
Benzo(b/j)fluoranthene	0.074	0.010	0.039	0.0050	62%	100
Benzo(g,h,i)perylene	0.024	0.010	0.013	0.0050	NC	100
Benzo(k)fluoranthene	0.022	0.010	0.014	0.0050	NC	100
Chrysene	0.067	0.010	0.026	0.0050	88%	100
Dibenz(a,h)anthracene	< 0.010	0.010	< 0.0050	0.0050	NC	100
Fluoranthene	0.35	0.010	0.10	0.0050	NC	100
Fluorene	0.029	0.010	0.014	0.0050	NC	100
Indeno(1,2,3-cd)pyrene	0.022	0.010	0.013	0.0050	NC	100
1-Methylnaphthalene	< 0.010	0.010	< 0.0050	0.0050	NC	100
2-Methylnaphthalene	< 0.010	0.010	< 0.0050	0.0050	NC	100
Total Methylnaphthalenes	< 0.014	0.010	< 0.0071	0.0050	NC	100
Naphthalene	0.011	0.010	0.0080	0.0050	NC	100
Phenanthrene	0.13	0.010	0.048	0.0050	NC	100
Pyrene	0.31	0.010	0.088	0.0050	NC	100

a - Alert limits used for field duplicate samples

NA - Not applicable

NC - Not calculated

RDL - Reportable Detection Limit

RPD - Relative Percent Difference (not calculated when one or both results are less than 5X RDL)

mbgs - metres below ground surface

BOLD - Exceeds RPD alert limit

Results for all parameters are reported in micrograms per gram (µg/g) on a dry weight basis

The specific date each sample was analyzed is presented in the laboratory Certificates of Analysis.

QAQC-4

RELATIVE PERCENT DIFFERENCE CALCULATIONS - GROUNDWATER FIELD DUPLICATE SAMPLES
PETROLEUM HYDROCARBON PARAMETERS

SAMPLE LOCATIONS	BH-102	RDL	DUP-01 DUPLICATE BH-102	RDL	RPD	RPD ALERT LIMITS (%)[a]
Certificate of Analysis No.	C502765		C502765			
Sample ID	ANCD22		ANCD23			
Date Sampled (yyyy/mm/dd)	2025/01/08		2025/01/08			
PARAMETERS						
Benzene	1.4	0.17	1.3	0.17	7%	100
Toluene	0.88	0.20	0.63	0.20	NC	100
Ethylbenzene	2.7	0.20	2.1	0.20	25%	100
Xylenes	20	0.20	14	0.20	35%	100
PHC F1 (C6 - C10)[b]	*130*	25	120	25	8%	100
PHC F2 (>C10 - C16)[c]	2800	90	6400	90	78%	100
PHC F3 (>C16 - C34)[d]	1800	200	4700	200	89%	100
PHC F4 (>C34 - C50)	< 200	200	< 200	200	NC	100

a - Alert limits used for field duplicate samples

b - BTEX have been subtracted from the fraction

c - Naphthalene has not been subtracted from the fraction

d - PAHs have not been subtracted from the fraction

NA - Not applicable

NC - Not calculated

RDL - Reportable Detection Limit

RPD - Relative Percent Difference (not calculated when one or both results are less than 5X RDL)

The specific date each sample was analyzed is presented in the laboratory Certificates of Analysis.

Results for all parameters are reported in micrograms per litre (µg/L)

QAQC-5

RELATIVE PERCENT DIFFERENCE CALCULATIONS - GROUNDWATER FIELD DUPLICATE SAMPLES
VOLATILE ORGANIC COMPOUNDS EXCLUDING BTEX

SAMPLE LOCATIONS	BH-102	RDL	DUP-01 DUPLICATE BH-102	RDL	RPD	RPD ALERT LIMITS (%)[a]
Certificate of Analysis No.	C502765		C502765			
Sample ID	ANCD22		ANCD23			
Date Sampled (yyyy/mm/dd)	2025/01/08		2025/01/08			
PARAMETERS						
Acetone	< 10	10	< 10	10	NC	100
Bromodichloromethane	< 0.50	0.50	< 0.50	0.50	NC	100
Bromoform	< 1.0	1.0	< 1.0	1.0	NC	100
Bromomethane	< 0.50	0.50	< 0.50	0.50	NC	100
Carbon Tetrachloride	< 0.20	0.20	< 0.20	0.20	NC	100
Chlorobenzene	0.82	0.20	1.1	0.20	NC	100
Chloroform	< 0.50	0.20	< 0.50	0.20	NC	100
Dibromochloromethane	< 0.20	0.50	< 0.20	0.50	NC	100
Ethylene Dibromide	< 0.20	0.20	< 0.20	0.20	NC	100
1,2-Dichlorobenzene	< 0.50	0.50	< 0.50	0.50	NC	100
1,3-Dichlorobenzene	< 0.50	0.50	< 0.50	0.50	NC	100
1,4-Dichlorobenzene	< 0.50	0.50	0.53	0.50	NC	100
Dichlorodifluoromethane	< 1.0	1.0	< 1.0	1.0	NC	100
1,1-Dichloroethane	< 0.20	0.20	< 0.20	0.20	NC	100
1,2-Dichloroethane	< 0.50	0.50	< 0.50	0.50	NC	100
1,1-Dichloroethylene	< 0.20	0.20	< 0.20	0.20	NC	100
cis-1,2-Dichloroethylene	1.2	0.50	1.3	0.50	NC	100
trans-1,2-Dichloroethylene	< 0.50	0.50	< 0.50	0.50	NC	100
1,2-Dichloropropane	< 0.20	0.20	< 0.20	0.20	NC	100
cis-1,3-Dichloropropene	< 0.30	0.30	< 0.30	0.30	NC	100
trans-1,3-Dichloropropene	< 0.40	0.40	< 0.40	0.40	NC	100
1,3-Dichloropropene	< 0.50	0.50	< 0.50	0.50	NC	100
Hexane	< 1.0	1.0	< 1.0	1.0	NC	100
Methyl ethyl ketone	< 10	10	< 10	10	NC	100
Methyl isobutyl ketone	< 5.0	5.0	< 5.0	5.0	NC	100
Methyl t-butyl ether	< 0.50	0.50	< 0.50	0.50	NC	100
Methylene Chloride	< 2.0	2.0	< 2.0	2.0	NC	100
Styrene	< 0.50	0.50	< 0.50	0.50	NC	100
1,1,1,2-Tetrachloroethane	< 0.50	0.50	< 0.50	0.50	NC	100
1,1,2,2-Tetrachloroethane	< 0.50	0.50	< 0.50	0.50	NC	100
Tetrachloroethylene	< 0.20	0.20	< 0.20	0.20	NC	100
1,1,1-Trichloroethane	< 0.20	0.20	< 0.20	0.20	NC	100
1,1,2-Trichloroethane	< 0.50	0.50	< 0.50	0.50	NC	100
Trichloroethylene	< 0.20	0.20	< 0.20	0.20	NC	100
Trichlorofluoromethane	< 0.50	0.50	< 0.50	0.50	NC	100
Vinyl Chloride	0.53	0.20	0.60	0.20	NC	100

a - Alert limits used for field duplicate samples

NA - Not applicable

NC - Not calculated

RDL - Reportable Detection Limit

RPD - Relative Percent Difference (not calculated when one or both results are less than 5X RDL)

"-" - Not analyzed

The specific date each sample was analyzed is presented in the laboratory Certificates of Analysis.

BOLD - Exceeds RPD alert limit

Results for all parameters are reported in micrograms per litre (µg/L)

QAQC-6

RELATIVE PERCENT DIFFERENCE CALCULATIONS - GROUNDWATER FIELD DUPLICATE SAMPLES
POLYCYCLIC AROMATIC HYDROCARBONS

SAMPLE LOCATIONS	BH-102	RDL	DUP-01 DUPLICATE BH-102	RDL	RPD	RPD ALERT LIMITS (%)[a]
Certificate of Analysis No.	C502765		C502765			
Sample ID	ANCD22		ANCD23			
Date Sampled (yyyy/mm/dd)	2025/01/08		2025/01/08			
PARAMETERS						
Acenaphthene	1.0	0.050	1.0	0.050	NC	100
Acenaphthylene	0.15	0.050	< 0.20	0.20	NC	100
Anthracene	0.43	0.050	0.57	0.050	NC	100
Benzo(a)anthracene	0.14	0.050	0.098	0.050	NC	100
Benzo(a)pyrene	0.091	0.0090	0.068	0.0090	29%	100
Benzo(b/j)fluoranthene	0.12	0.050	0.096	0.050	NC	100
Benzo(g,h,i)perylene	0.059	0.050	0.077	0.050	NC	100
Benzo(k)fluoranthene	< 0.050	0.050	< 0.050	0.050	NC	100
Chrysene	0.12	0.050	0.10	0.050	NC	100
Dibenz(a,h)anthracene	< 0.050	0.050	< 0.050	0.050	NC	100
Fluoranthene	0.68	0.050	0.56	0.050	19%	100
Fluorene	< 1.5	1.5	1.1	0.050	NC	100
Indeno(1,2,3-cd)pyrene	< 0.050	0.050	< 0.050	0.050	NC	100
1-Methylnaphthalene	6.9	0.050	5.1	0.050	30%	100
2-Methylnaphthalene	10	0.050	8.0	0.050	22%	100
Total Methylnaphthalenes	17	0.050	13	0.050	27%	100
Naphthalene	6.1	0.050	3.7	0.050	49%	100
Phenanthrene	1.8	0.030	2.2	0.030	20%	100
Pyrene	1.7	0.050	2.4	0.050	34%	100

a - Alert limits used for field duplicate samples

NA - Not applicable

NC - Not calculated

RDL - Reportable Detection Limit

RPD - Relative Percent Difference (not calculated when one or both results are less than 5X RDL)

BOLD - Exceeds RPD alert limit

Results for all parameters are reported in micrograms per litre (µg/L)

The specific date each sample was analyzed is presented in the laboratory Certificates of Analysis.

QAQC-7

RELATIVE PERCENT DIFFERENCE CALCULATIONS - GROUNDWATER FIELD DUPLICATE SAMPLES
METALS INCLUDING HYDRIDE-FORMING

SAMPLE LOCATIONS	BH-102	RDL	DUP-01 DUPLICATE BH-102	RDL	RPD	RPD ALERT LIMITS (%)[a]
Certificate of Analysis No.	C502765		C502765			
Sample ID	ANCD22		ANCD23			
Date Sampled (yyyy/mm/dd)	2025/01/08		2025/01/08			
PARAMETERS						
Antimony	0.74	0.50	0.58	0.50	NC	100
Arsenic	< 1.0	1.0	< 1.0	1.0	NC	100
Barium	510	2.0	580	2.0	13%	100
Beryllium	< 0.40	0.40	< 0.40	0.40	NC	100
Boron	90	10	62	10	37%	100
Cadmium	< 0.090	0.090	< 0.090	0.090	NC	100
Chromium	< 5.0	5.0	< 5.0	5.0	NC	100
Cobalt	2.2	0.50	2.1	0.50	NC	100
Copper	1.1	0.90	1.7	0.90	NC	100
Lead	< 0.50	0.50	< 0.50	0.50	NC	100
Molybdenum	2.7	0.50	2.0	0.50	NC	100
Nickel	3.9	1.0	4.7	1.0	NC	100
Selenium	< 2.0	2.0	< 2.0	2.0	NC	100
Silver	< 0.090	0.090	< 0.090	0.090	NC	100
Sodium	690 000	500	730 000	500	6%	100
Thallium	< 0.050	0.050	< 0.050	0.050	NC	100
Uranium	0.94	0.10	1.0	0.10	NC	100
Vanadium	< 0.50	0.50	< 0.50	0.50	NC	100
Zinc	5.2	5.0	14	5.0	NC	100

a - Alert limits used for field duplicate samples

NA - Not applicable

NC - Not calculated

RDL - Reportable Detection Limit

RPD - Relative Percent Difference (not calculated when one or both results are less than 5X RDL)

The specific date each sample was analyzed is presented in the laboratory Certificates of Analysis.

BOLD - Exceeds RPD alert limit

Results for all parameters are reported in micrograms per litre (µg/L)

QAQC-8

RELATIVE PERCENT DIFFERENCE CALCULATIONS - GROUNDWATER FIELD DUPLICATE SAMPLES
POLYCHLORINATED BIPHENYLS

SAMPLE LOCATIONS	BH-102	RDL	DUP-01 DUPLICATE BH-102	RDL	RPD	RPD ALERT LIMITS (%)[a]
Certificate of Analysis No.	C502765		C502765			
Sample ID	ANCD22		ANCD23			
Date Sampled (yyyy/mm/dd)	2025/01/08		2025/01/08			
PARAMETERS						
Total Polychlorinated Biphenyls	< 0.05	0.05	< 0.5	0.50	NC	100

a - Alert limits used for field duplicate samples

NA - Not applicable

NC - Not calculated

RDL - Reportable Detection Limit

RPD - Relative Percent Difference (not calculated when one or both results are less than 5X RDL)

The specific date each sample was analyzed is presented in the laboratory Certificates of Analysis.

BOLD - Exceeds RPD alert limit

Results for all parameters are reported in micrograms per litre (µg/L)

QAQC-9

RELATIVE PERCENT DIFFERENCE CALCULATIONS - GROUNDWATER FIELD DUPLICATE SAMPLES

OTHER REGULATED PARAMETERS - Cl, Cr (VI), CN, Hg

SAMPLE LOCATIONS	BH-102	RDL	DUP-01 DUPLICATE BH-102	RDL	RPD	RPD ALERT LIMITS (%)[a]
Certificate of Analysis No.	C502765		C502765			
Sample ID	ANCD22		ANCD23			
Date Sampled (yyyy/mm/dd)	2025/01/08		2025/01/08			
PARAMETERS						
Chloride	1500	20	1500	20	0%	100
Chromium (VI)	< 1.0	1.0	< 1.0	1.0	NC	
Cyanide	< 1	1	< 1	1	NC	
Mercury	0.33	0.10	0.38	0.10	NC	

a - Alert limits used for field duplicate samples

NA - Not applicable

NC - Not calculated

RDL - Reportable Detection Limit

RPD - Relative Percent Difference (not calculated when one or both results are less than 5X RDL)

The specific date each sample was analyzed is presented in the laboratory Certificates of Analysis.

BOLD - Exceeds RPD alert limit

Results for all parameters are reported in micrograms per litre (µg/L)

QAQC-10

SOIL TRIP BLANK DATA
PETROLEUM HYDROCARBON PARAMETERS

SAMPLE LOCATIONS	RDL	TRIP BLANK-01	EXCEEDS ALERT LIMIT (yes/no)
Certificate of Analysis No.		C4BP637	
Sample ID		AMLF46	
Date Sampled (yyyy/mm/dd)		2024/12/20	
PARAMETERS			
Benzene	0.0060	< 0.0060	No
Toluene	0.020	< 0.020	No
Ethylbenzene	0.010	< 0.010	No
Xylenes	0.020	< 0.020	No
PHC F1 (C6 - C10)[a]	10	< 10	No

a - BTEX have been subtracted from the fraction

RDL - Reportable detection limit

The specific date each sample was analyzed is presented in the laboratory Certificates of Analysis.

BOLD - Exceeds alert limit

Note - Alert limits for field blanks and trip blanks are 5x RDL for BTEX; 2x RDL for petroleum hydrocarbons fractions F1 to F4.

Results for all parameters are reported in micrograms per gram (µg/g) on a dry weight basis

QAQC-11

SOIL TRIP BLANK DATA
VOLATILE ORGANIC COMPOUNDS EXCLUDING BTEX

SAMPLE LOCATIONS	RDL	TRIP BLANK-01	EXCEEDS ALERT LIMIT (yes/no)
Certificate of Analysis No.		C4BP637	
Sample ID		AMLF46	
Date Sampled (yyyy/mm/dd)		2024/12/20	
PARAMETERS			
Acetone	0.49	< 0.49	No
Bromodichloromethane	0.040	< 0.040	No
Bromoform	0.040	< 0.040	No
Bromomethane	0.040	< 0.040	No
Carbon Tetrachloride	0.040	< 0.040	No
Chlorobenzene	0.040	< 0.040	No
Chloroform	0.040	< 0.040	No
Dibromochloromethane	0.040	< 0.040	No
Ethylene Dibromide	0.040	< 0.040	No
1,2-Dichlorobenzene	0.040	< 0.040	No
1,3-Dichlorobenzene	0.040	< 0.040	No
1,4-Dichlorobenzene	0.040	< 0.040	No
Dichlorodifluoromethane	0.040	< 0.040	No
1,1-Dichloroethane	0.040	< 0.040	No
1,2-Dichloroethane	0.049	< 0.049	No
1,1-Dichloroethylene	0.040	< 0.040	No
cis-1,2-Dichloroethylene	0.040	< 0.040	No
trans-1,2-Dichloroethylene	0.040	< 0.040	No
1,2-Dichloropropane	0.040	< 0.040	No
cis-1,3-Dichloropropene	0.030	< 0.030	No
trans-1,3-Dichloropropene	0.040	< 0.040	No
1,3-Dichloropropene	0.050	< 0.050	No
Hexane	0.049	< 0.040	No
Methyl ethyl ketone	0.40	< 0.40	No
Methyl isobutyl ketone	0.40	< 0.40	No
Methyl t-butyl ether	0.040	< 0.040	No
Methylene Chloride	0.049	< 0.049	No
Styrene	0.040	< 0.040	No
1,1,1,2-Tetrachloroethane	0.040	< 0.040	No
1,1,2,2-Tetrachloroethane	0.040	< 0.040	No
Tetrachloroethylene	0.040	< 0.040	No
1,1,1-Trichloroethane	0.040	< 0.040	No
1,1,2-Trichloroethane	0.040	< 0.040	No
Trichloroethylene	0.010	< 0.010	No
Trichlorofluoromethane	0.040	< 0.040	No
Vinyl Chloride	0.019	< 0.019	No

RDL - Reportable detection limit

The specific date each sample was analyzed is presented in the laboratory Certificates of Analysis.

BOLD - Exceeds alert limit

Note - Alert limits for field blanks are 1x RDL for VOCs.

Results for all parameters are reported in micrograms per gram (µg/g) on a dry weight basis

QAQC-12

GROUNDWATER FIELD BLANK AND TRIP BLANK DATA
PETROLEUM HYDROCARBON PARAMETERS

SAMPLE LOCATIONS	RDL	FIELD BLANK-01	EXCEEDS ALERT LIMIT (yes/no)
Bureau Veritas Certificate of Analysis No.		**C502765**	
Bureau Veritas Sample ID		**ANCD24**	
Date Sampled (yyyy/mm/dd)		**2025/01/08**	
PARAMETERS			
Benzene	0.17	< 0.17	No
Toluene	0.20	< 0.20	No
Ethylbenzene	0.20	< 0.20	No
Xylenes	0.20	< 0.20	No
PHC F1 (C6 - C10)[a]	25	< 25	No
PHC F2 (>C10 - C16)[b]	90	< 90	No
PHC F3 (>C16 - C34)[c]	200	< 200	No
PHC F4 (>C34 - C50)	200	< 200	No

a -BTEX have been subtracted from the fraction

b -Naphthalene has not been subtracted from the fraction

c -PAHs have not been subtracted from the fraction

RDL -Reportable detection limit

BOLD -Exceeds alert limit

Note -Alert limits for field blanks and trip blanks are 5x RDL for BTEX; 2x RDL for petroleum hydrocarbons fractions F1 to F4.

Results for all parameters are reported in micrograms per litre (µg/L)

The specific date each sample was analyzed is presented in the laboratory Certificates of Analysis.

QAQC-13

GROUNDWATER FIELD BLANK AND TRIP BLANK DATA
VOLATILE ORGANIC COMPOUNDS EXCLUDING BTEX

SAMPLE LOCATIONS	RDL	FIELD BLANK-01	EXCEEDS ALERT LIMIT (yes/no)
Bureau Veritas Certificate of Analysis No.		C502765	
Bureau Veritas Sample ID		ANCD24	
Date Sampled (yyyy/mm/dd)		2025/01/08	
PARAMETERS			
Acetone	10	< 10	No
Bromodichloromethane	0.50	< 0.50	No
Bromoform	1.0	< 1.0	No
Bromomethane	0.50	< 0.50	No
Carbon Tetrachloride	0.20	< 0.20	No
Chlorobenzene	0.20	< 0.20	No
Chloroform	0.20	< 0.50	No
Dibromochloromethane	0.50	3.5	No
Ethylene Dibromide	0.20	< 0.20	No
1,2-Dichlorobenzene	0.50	< 0.50	No
1,3-Dichlorobenzene	0.50	< 0.50	No
1,4-Dichlorobenzene	0.50	< 0.50	No
Dichlorodifluoromethane	1.0	< 1.0	No
1,1-Dichloroethane	0.20	< 0.20	No
1,2-Dichloroethane	0.50	< 0.50	No
1,1-Dichloroethylene	0.20	< 0.20	No
cis-1,2-Dichloroethylene	0.50	< 0.50	No
trans-1,2-Dichloroethylene	0.50	< 0.50	No
1,2-Dichloropropane	0.20	< 0.20	No
cis-1,3-Dichloropropene	0.30	< 0.30	No
trans-1,3-Dichloropropene	0.40	< 0.40	No
1,3-Dichloropropene	0.50	< 0.50	No
Hexane	1.0	< 1.0	No
Methyl ethyl ketone	10	< 10	No
Methyl isobutyl ketone	5.0	< 5.0	No
Methyl t-butyl ether	0.50	< 0.50	No
Methylene Chloride	2.0	< 2.0	No
Styrene	0.50	< 0.50	No
1,1,1,2-Tetrachloroethane	0.50	< 0.50	No
1,1,2,2-Tetrachloroethane	0.50	< 0.50	No
Tetrachloroethylene	0.20	< 0.20	No
1,1,1-Trichloroethane	0.20	< 0.20	No
1,1,2-Trichloroethane	0.50	< 0.50	No
Trichloroethylene	0.20	< 0.20	No
Trichlorofluoromethane	0.50	< 0.50	No
Vinyl Chloride	0.20	< 0.20	No

RDL -Reportable detection limit

BOLD -Exceeds alert limit

Note -Alert limits for field blanks and trip blanks are 5x RDL for VOCs.

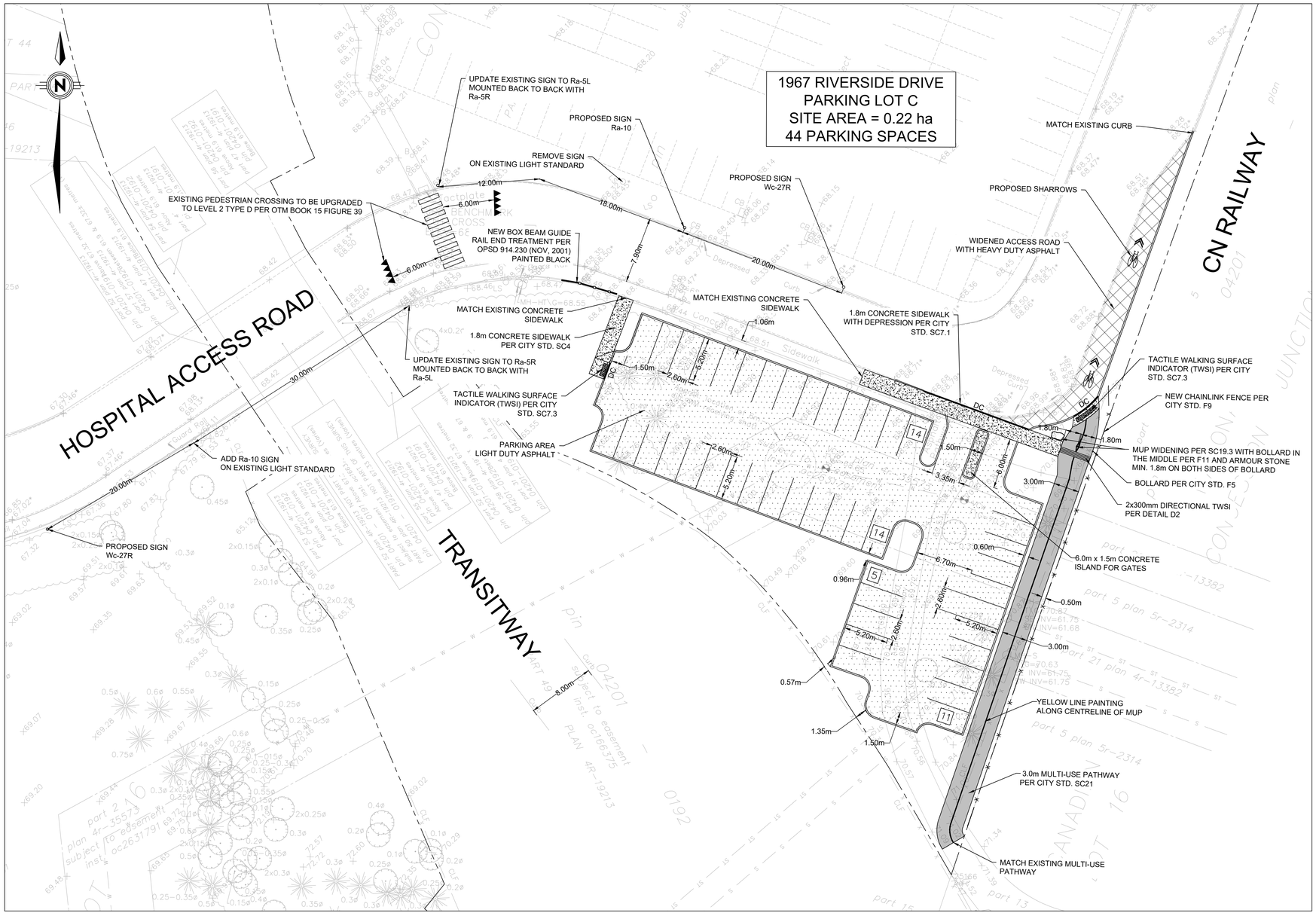
Results for all parameters are reported in micrograms per litre (µg/L)

The specific date each sample was analyzed is presented in the laboratory Certificates of Analysis.

APPENDIX G

Conceptual Development Plan (Lot C and Lot D)

PARSONS



LEGEND:

- EXISTING PROPERTY LINE
- EXISTING GRADE
- PROPOSED LIGHT DUTY PAVEMENT
- PROPOSED HEAVY DUTY PAVEMENT
- PROPOSED CONCRETE
- PROPOSED MULTI-USE PATHWAY
- PROPOSED CONCRETE CURB PER CITY STD. SC1.1
- PROPOSED DEPRESSED CONCRETE CURB WITH TWSI PER CITY STD. SC7.3 (DC)
- EXISTING CHAINLINK FENCE
- PROPOSED CHAINLINK FENCE PER CITY STD. F9

KEY PLAN

NOT TO SCALE

Surveyor

ANNIS, O'SULLIVAN, VOLLEBEKK LTD.
14 CONCOURSE GATE, SUITE 500
NEPEAN, ONTARIO, K2E 7S6

TOPOGRAPHIC INFORMATION & BENCHMARK

SURVEY COMPLETED BY ANNIS, O'SULLIVAN, VOLLEBEKK LTD. ON MARCH 21, 2024. ELEVATIONS SHOWN ARE GEODETIC AND ARE REFERRED TO THE CGVD28 GEODETIC DATUM, DERIVED FROM CONTROL MONUMENT NO. 019680274 HAVING AN ELEVATION OF 86.322m.

BOUNDARY INFORMATION WAS COMPILED FROM PLANS 4R-19213, 4R-35573 AND 4R-36051

JOB BENCHMARK

CUT CROSS ON SIDEWALK NEAR OVERPASS
ELEVATION = 68.53m

PROPERTY LEGAL DESCRIPTION

THE SOUTHERLY PART OF PIN 04201-0191
BEING PART OF LOT 16
CONCESSION JUNCTION GORE
GEOGRAPHIC TOWNSHIP OF GLOUCESTER
CITY OF OTTAWA

Client

The Ottawa Hospital | L'Hôpital d'Ottawa

RIVERSIDE CAMPUS
1967 RIVERSIDE DRIVE,
OTTAWA, ONTARIO, K1H 7W9

PARSONS

1223 MICHAEL STREET, SUITE 100
GLOUCESTER, ONTARIO, K1J 7T2

No.	Revision	By	Date (yy/mm/dd)
2	RE-ISSUED FOR SPA	BV	2025/01/17
1	ISSUED FOR SPA	BV	2024/11/08

Scale

5m 0 5 10m

SCALE: 1:250

Project Title

THE OTTAWA HOSPITAL
RIVERSIDE CAMPUS
PARKING LOT

Drawing Title

PARKING LOT C - SITE PLAN

Designed by:	BV	Datum	
Drawn by:	BV		
Approved by:	MT		
Project No.	479008	Drawing No.	SP

1967 RIVERSIDE DRIVE
PARKING LOT D
SITE AREA = 0.63 ha
126 TOTAL PARKING SPACES
(60 SMALL CAR PARKINGS)

RIVERSIDE DRIVE

SMYTH ROAD ON-RAMP

TRANSITWAY OFF-RAMP

TRANSITWAY

1.5m CONCRETE SIDEWALK WITH DEPRESSION PER CITY STD. SC7.1
MATCH EXISTING SIDEWALK AT BOTH ENDS

MATCH EXISTING CURB

MATCH EXISTING SIDEWALK

2.0m CONCRETE SIDEWALK

600mm HIGH MODULAR BLOCK RETAINING WALL

SMALL CAR PARKING AREA

VEGETATED AREA

PAINTED CROSSWALK

6.0m x 1.5m CONCRETE ISLAND FOR GATES

TACTILE WALKING SURFACE INDICATOR (TWSI) PER CITY STD. SC7.3

DC

LEGEND:

	EXISTING PROPERTY LINE
99.99	EXISTING GRADE
	PROPOSED LIGHT DUTY PAVEMENT
	PROPOSED CONCRETE
	PROPOSED CONCRETE CURB PER CITY STD. SC1.1
DC	PROPOSED DEPRESSED CONCRETE CURB WITH TWSI PER CITY STD. SC7.3

KEY PLAN

NOT TO SCALE

Surveyor

ANNIS, O'SULLIVAN, VOLLEBEKK LTD.
14 CONCOURSE GATE, SUITE 500
NEPEAN, ONTARIO, K2E 7S6

TOPOGRAPHIC INFORMATION & BENCHMARK

SURVEY COMPLETED BY ANNIS, O'SULLIVAN, VOLLEBEKK LTD. ON MAY 28, 2024. ELEVATIONS SHOWN ARE GEODETIC AND ARE REFERRED TO THE CGVD28 GEODETIC DATUM, DERIVED FROM CONTROL MONUMENT NO. 019680274 HAVING AN ELEVATION OF 86.322m.

BOUNDARY INFORMATION WAS COMPILED FROM PLANS 4R-19213, 4R-35573 AND 4R-36051

JOB BENCHMARK

FIRE HYDRANT TOP OF SPINDLE ALONG TRANSITWAY
ELEVATION = 63.52m

PROPERTY LEGAL DESCRIPTION

THE NORTHERLY PART OF PIN 04201-0191
BEING PART OF LOT 16
CONCESSION JUNCTION GORE
GEOGRAPHIC TOWNSHIP OF GLOUCESTER
CITY OF OTTAWA

Client

The Ottawa Hospital | L'Hôpital d'Ottawa

RIVERSIDE CAMPUS
1967 RIVERSIDE DRIVE,
OTTAWA, ONTARIO, K1H 7W9

PARSONS

1223 MICHAEL STREET, SUITE 100
GLOUCESTER, ONTARIO, K1J 7T2

No.	Revision	By	Date (yy/mm/dd)
2	RE-ISSUED FOR SPA	BV	2025/01/17
1	ISSUED FOR SPA	BV	2024/11/08

Scale

5m 0 5 10m

SCALE: 1:250

Project Title

THE OTTAWA HOSPITAL
RIVERSIDE CAMPUS
PARKING LOT

Drawing Title

PARKING LOT D
SITE PLAN

Designed by:	BV	Datum	NAD83 (ORIGINAL) CGVD28
Drawn by:	BV		
Approved by:	MT		
Project No.	479008	Drawing No.	SP

APPENDIX H

Maximum Concentrations

PARSONS

MAXIMUM SOIL CONCENTRATIONS

Contaminant Name	Maximum Concentration (µg/g)	MECP Table 3 RPI SCS (µg/g)	Meets Table 3 ICC SCS (Y/N)
Metals including Hydride-Forming			
Antimony	11	7.5	***N***
Arsenic	7.11	42	***N***
Barium	610	390	***N***
Beryllium	0.64	4	Y
Cadmium	3.000	1.2	***N***
Chromium	53	160	Y
Cobalt	22	22	Y
Copper	330	140	***N***
Lead	640	120	***N***
Molybdenum	15	6.9	***N***
Nickel	130	100	***N***
Selenium	11.00	2.4	***N***
Silver	2.9	20	Y
Thallium	0.460	1	Y
Uranium	6.2	23	Y
Vanadium	38	86	Y
Zinc	1200	340	***N***
VOCs			
Acetone	1.1	16	Y
Benzene	0.20	0.21	Y
Bromodichloromethane	<0.12	13	Y
Bromoform	<0.12	0.27	Y
Bromomethane	*<0.12*	0.05	***N***
Carbon Tetrachloride	*<0.12*	0.05	***N***
Chlorobenzene	<0.12	2.4	Y
Chloroform	<0.12	0.05	Y
Dibromochloromethane	<0.12	9.4	Y
Ethylene Dibromide	<0.12	0.05	***N***
1,2-Dichlorobenzene	<0.12	3.4	Y
1,3-Dichlorobenzene	<0.12	4.8	Y
1,4-Dichlorobenzene	*0.66*	0.083	***N***
1,1-Dichloroethane	*<0.15*	3.5	Y
1,2-Dichloroethane	0.54	0.05	***N***
1,1-Dichloroethylene	<0.12	0.05	***N***
cis-1,2-Dichloroethylene	0.74	3.4	Y
trans-1,2-Dichloroethylene	<0.050	0.084	Y
1,2-Dichloropropane	<0.12	0.05	***N***
Ethylbenzene	0.17	2	Y
Hexane	0.29	2.8	Y
Methyl Ethyl Ketone	<1.2	16	Y
Methyl Isobutyl Ketone	<1.2	1.7	Y
Methyl t-butyl ether	<0.12	0.75	Y
Methylene Chloride (dichloromethane)	0.056	0.1	Y
Styrene	<0.12	0.7	Y
1,1,1,2-Tetrachloroethane	<0.12	0.058	***N***
1,1,2,2-Tetrachloroethane	<0.12	0.05	***N***
Tetrachloroethylene	0.47	0.28	***N***
Toluene	0.3	2.3	Y
1,1,1-Trichloroethane	<0.12	0.38	Y
1,1,2-Trichloroethane	<0.12	0.05	***N***
Trichloroethylene	0.33	0.061	***N***
Trichlorofluoromethane	<0.12	4	Y
Vinyl Chloride	0.13	0.02	***N***
Xylenes	1.1	3.1	Y
BTEX & PHCs			
F1 (C6-C10)	100	55	***N***
F2 (C10-C16 Hydrocarbons)	1500	98	***N***

MAXIMUM SOIL CONCENTRATIONS

Contaminant Name	Maximum Concentration (µg/g)	MECP Table 3 RPI SCS (µg/g)	Meets Table 3 ICC SCS (Y/N)
F3 (C16-C34 Hydrocarbons)	4200	300	***N***
F4 (C34-C50 Hydrocarbons)	1800	2800	Y
PAHs			
Acenaphthene	0.73	7.9	Y
Acenaphthylene	1	0.15	***N***
Anthracene	1.9	0.67	***N***
Benzo[a]anthracene	6.3	0.5	***N***
Benzo[a]pyrene	6	0.3	***N***
Benzo[b/j]fluoranthene	7.3	0.78	***N***
Benzo[g,h,i]perylene	2.8	6.6	Y
Benzo[k]fluoranthene	2.8	0.78	***N***
Chrysene	5.3	7	Y
Dibenzo[a,h]anthracene	0.97	0.1	***N***
Fluoranthene	11	0.69	***N***
Fluorene	1.2	62	Y
Indeno[1,2,3-cd]pyrene	3.5	0.38	***N***
Naphthalene	2.5	0.6	***N***
Phenanthrene	7	6.2	***N***
Pyrene	8.6	78	Y
1-Methylnaphthalene	1.3	0.99	***N***
2-Methylnaphthalene	2.3	0.99	***N***
2-(1-)Methylnaphthalene	3.6	0.99	***N***
OCPs			
Aldrin	<0.010	0.05	Y
Chlordane	<0.020	0.05	Y
DDD	0.59	3.3	Y

MAXIMUM GROUNDWATER CONCENTRATIONS

Contaminant Name	Maximum Concentration (µg/L)	MECP Table 3 All Types of Property Use (µg/L)	Meets MECP Table 3 SCS (Y/N)
Metals including Hydride-Forming and Sodium			
Antimony	0.84	20000	Y
Arsenic	1	1900	Y
Barium	580	29000	Y
Beryllium	<0.40	67	Y
Boron	320	45000	Y
Cadmium	<0.090	2.7	Y
Chromium (total)	<5.0	810	Y
Cobalt	7.7	66	Y
Copper	3	87	Y
Lead	<0.50	25	Y
Molybdenum	3	9200	Y
Nickel	9.2	490	Y
Selenium	<2.0	63	Y
Silver	<0.090	1.5	Y
Thallium	0.066	510	Y
Uranium	1.9	420	Y
Vanadium	<0.50	250	Y
Zinc	25	1100	Y
Sodium	4,400,000	2,300,000.00	***N***
VOCs			
Acetone	<10	130000	Y
Benzene	2.9	44	Y
Bromodichloromethane	<0.50	85000	Y
Bromoform	<1.0	380	Y
Bromomethane	<0.50	5.6	Y
Carbon Tetrachloride	<0.20	0.79	Y
Chlorobenzene	1.1	630	Y
Chloroform	3.5	2.4	***N***
Dibromochloromethane	<0.50	82000	Y
1,2-Dichlorobenzene	<0.50	4600	Y
1,3-Dichlorobenzene	<0.50	9600	Y
1,4-Dichlorobenzene	1.1	8	Y
1,1-Dichloroethane	<0.20	320	Y
1,2-Dichloroethane	<0.50	1.6	Y
1,1-Dichloroethylene	<0.20	1.6	Y
Cis-1,2-Dichloroethylene	1.3	1.6	Y
Trans-1,2-Dichloroethylene	<0.50	1.6	Y
1,2-Dichloropropane	<0.20	16	Y
Cis-1,3-Dichloropropylene	<0.30	NV	Y
Trans-1,3-Dichloropropylene	<0.40	NV	Y
Ethylbenzene	2.7	2300	Y
Ethylene Dibromide	<0.20	0.25	Y
Methyl Ethyl Ketone	<10	470000	Y
Methylene Chloride	<2.0	610	Y
Methyl Isobutyl Ketone	<5.0	140000	Y
Methyl-t-Butyl Ether	<0.50	190	Y
Styrene	<0.50	1300	Y
1,1,1,2-Tetrachloroethane	<0.50	3.3	Y
1,1,2,2-Tetrachloroethane	<0.50	3.2	Y
Toluene	0.88	18000	Y
Tetrachloroethylene	<0.20	1.6	Y
1,1,1-Trichloroethane	<0.20	640	***N***
1,1,2-Trichloroethane	<0.50	4.7	Y
Trichloroethylene	<0.20	1.6	Y
Vinyl Chloride	0.6	0.5	***N***
Xylenes	20	4200	Y
Dichlorodifluoromethane	<1.0	4400	Y
Hexane(n)	<1.0	51	Y
Trichlorofluoromethane	<0.50	2500	Y
1,3-Dichloropropene (cis + trans)	<0.50	5.2	Y

MAXIMUM GROUNDWATER CONCENTRATIONS

Contaminant Name	Maximum Concentration (µg/L)	MECP Table 3 All Types of Property Use (µg/L)	Meets MECP Table 3 SCS (Y/N)
PHCs			
F1 (C6-C10)	160	750	Y
F2 (C10-C16)	6400	150	***N***
F3 (C16-C34)	4700	500	***N***
F4 (C34-C50)	<200	500	Y
PAHs			
Acenaphthene	1	600	Y
Acenaphthylene	0.15	1.8	Y
Anthracene	0.57	2.4	Y
Benzo(a)anthracene	0.18	4.7	Y
Benzo(a)pyrene	0.16	0.81	Y
Benzo(b/j)fluoranthene	0.20	0.75	Y
Benzo(ghi)perylene	0.089	0.2	Y
Benzo(k)fluoranthene	0.08	0.4	Y
Chrysene	0.17	1	Y
Dibenzo(a,h)anthracene	<0.050	0.52	Y
Fluoranthene	0.68	130	Y
Fluorene	1.1	400	Y
Indeno(1,2,3-cd)pyrene	0.092	0.2	Y
1-(2-)Methylnaphthalene	17	1800	Y
Naphthalene	9.5	1400	Y
Phenanthrene	2.2	580	Y
Pyrene	2.4	68	Y
PCBs			
PCBs	<0.3	7.8	Y