

Phase Two Environmental Site Assessment

116 Albert Street
Ottawa, Ontario

Prepared for:
Metcalf Realty
Company Limited



July 31, 2026

LOP26-044B

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1. Executive Summary

Lopers & Associates ("Lopers") was retained by Metcalfe Realty Company Limited ("METCALFE") to complete a Phase Two Environmental Site Assessment (Phase Two ESA) of the commercial property with Civic address No. 116 Albert Street, Ottawa, Ontario ("Phase Two Property", "Property" or "Site").

This Phase Two ESA is being completed as part of due diligence requirements to support the submission of a Development Application to the City of Ottawa Municipal Planning Department.

Lopers has previously completed a Phase One Environmental Site Assessment (Phase One ESA) (Reference No. LOP26-044A, dated July 29, 2026) for METCALFE at the Property. One Potentially Contaminating Activity ("PCA") was identified at the Phase One Property and two PCAs were identified at neighbouring properties, which were interpreted to represent Areas of Potential Environmental Concern ("APECs") on the Property. The PCAs interpreted to represent APECs are summarized in Table 1 below.

Table 1: Potentially Contaminating Activities and Areas of Potential Environmental Concern

APEC Report Reference No.	Location of APEC on Phase One Property	PCA	Location of PCA (on-site or off-site)	Contaminants of Potential Concern	Media Potentially Impacted (Groundwater, soil and/or Sediment)
APEC #1	Southwest portion of the Phase One Property	O.Reg. 153/04 PCA Item 28: Gasoline and Associated Products Storage in Fixed Tanks	On-site: Historical fuel oil aboveground storage tank	PHCs / BTEXs	Soil Groundwater
APEC #2	South portion of the Phase One Property	O.Reg. 153/04 PCA Item 37: Operation of Dry Cleaning Equipment (where chemicals are used)	Off-Site: Former dry cleaner at 119 Slater Street, adjacent to south-central of Phase One Property	VOCs	Groundwater
APEC #3	Southeast portion of the Phase One Property	O.Reg. 153/04 PCA Item 28: Gasoline and Associated Products Storage in Fixed Tanks	Off-Site: Former UST at 88 Metcalfe Street, adjacent to southeast of Phase One Property	PHCs / BTEXs	Soil Groundwater

Based on the identification of APECs at the Phase One Property and the requirement for documentation associated with the municipal planning submission, it was recommended that a Phase Two Environmental Site Assessment Report be completed to provide documentation that the Property meets the soil and groundwater quality standards applicable to its future use.

The scope of work for the Phase Two ESA included drilling 4 boreholes at the Phase Two Property. All 4 of the boreholes were instrumented with groundwater monitoring wells with screens installed in the bedrock.

Five soil samples, including one duplicate sample, were submitted for laboratory analysis of volatile organic compounds ("VOCs"), petroleum hydrocarbons ("PHCs"), benzene, toluene, ethylbenzene and xylenes ("BTEXs") and polycyclic aromatic hydrocarbons ("PAHs").

Six groundwater samples, including duplicate samples and a trip blank, were submitted for laboratory analysis for a combination of VOCs, PHCs, BTEXs and PAHs.

The applicable site standard was determined to be the full depth generic Site Condition Standard, in a non-potable groundwater condition, with coarse textured soil, for residential property use, as specified in Table 3 of the MECP Soil, Ground Water and Sediment Standards for Use Under Part XV.1 of the Environmental Protection Act, April 15, 2011.

All analyzed soil samples as part of this Phase Two ESA were in compliance with the Site Condition Standards.

All groundwater samples collected as part of this Phase Two ESA were in compliance with the Site Condition Standards as of the certification date of June 10, 2026.

Although chloroform exceedances were noted in each of the groundwater samples collected as part of this Phase Two ESA, these chloroform concentrations were inferred to be associated with municipal water used during bedrock coring and chloroform was therefore exempt from consideration as a CPC.

No further Phase Two ESA investigation is required for the Phase Two Property at this time.

2. Introduction

Lopers & Associates ("Lopers") was retained by Metcalfe Realty Company Limited ("METCALFE") to complete a Phase Two Environmental Site Assessment (Phase Two ESA) of the commercial property with Civic address No. 116 Albert Street, Ottawa, Ontario ("Phase Two Property", "Property" or "Site"). The location of the Phase Two Property within the City of Ottawa is presented on Figure 1: Key Plan.

i. Site Description

The Phase Two Property is legally described as Part of Lots 49, 50 and 51 (South Albert Street) Registered Plan 3922, in the City of Ottawa and has a property identifier number of 04115-0059. The boundaries of the Phase Two Property are presented on Figure 2: Site Plan.

Based on approximate dimensions obtained from the City of Ottawa's GIS mapping tool, the Phase Two Property has an approximate area of 1198 m² (0.12 Hectares). The Phase Two Property is immediately surrounded by four municipal Right-of-Ways, then by commercial properties to the north and east, and by commercial properties to the west and south.

ii. Property Ownership

The Phase Two Property is owned by 1702606 Ontario Limited, a subsidiary company of Fuller Group of Companies ("FULLER"), who is also affiliated with Metcalfe Realty Company Limited. 1702606 Ontario Limited purchased the Phase Two Property in 2007. This Phase Two ESA was commissioned by Mr. Philip Thibert, Director of Real Property for FULLER. Fuller Group of Companies has a business address of 2700 Queensview Drive, Ottawa, Ontario, K2B 8H6 and a business telephone number of 613-820-6000.

iii. Current and Proposed Future Use

The Property is currently used for commercial purposes and is zoned Hub 1 Use Zone which permits residential and non-residential use. It is Lopers' understanding that FULLER has a concept to convert the existing Site building at the Phase One Property from commercial office space to a multi-unit residential building with the ground floor remaining used for commercial space.

A record of site condition ("RSC") is not being sought for the Phase One Property to document the change from commercial to residential land use as it is recognized that recent changes to Ontario Regulation 153/04 (O.Reg. 153/04) include an exemption that does permit commercial office building conversion to residential use without the filing of an RSC with the Ministry of Environment, Conservation and Parks ("MECP").

iv. Applicable Site Condition Standard

Through O.Reg. 153/04, the MECP prescribes the conditions to determine the applicable Site Condition Standards for a property.

The proposed future use of the Phase Two Property is for mixed ground floor commercial and residential use, however residential land use standards have been applied for the purposes of this report as they represent the more environmentally sensitive land use conditions.

The Phase Two Property and all other properties within 250 m of the property boundaries are supplied by the municipal drinking water system. The Phase Two is within the urban boundaries of the City of Ottawa, is supplied with municipally treated drinking water and there are no wells within 250 m of the property boundaries that are intended for use as a source of water for human consumption or agriculture. As such, the designation of non-potable groundwater setting is determined to be applicable [O.Reg. 153/04, section 35].

The soil and groundwater quality over the full depth of overburden was considered for this Phase Two ESA. The full depth generic Site Condition Standards were selected for comparison for the Phase Two Property [O.Reg. 153/04, sections 36, 37, 38, 39 and 40].

The Phase Two Property is not situated within or adjacent to an area of natural significance and does not include any land within 30 m of an area of natural significance. The pH of the soil was analyzed and was found to range from 7.84 to 8.35. As such, the Phase Two Property is not considered to be an environmentally sensitive area [O.Reg. 153/04, section 41].

Based on stratigraphic records, the general stratigraphy of the Phase Two Property and general area consists of sand and gravel fill, underlain by silty clay or clayey silt followed by interbedded shale and limestone bedrock. A layer of silty sand and gravel and/or sand (approximate 0.2 to 0.4 m thick) was present at the Phase Two Property, beneath the concrete floor slabs and the shale bedrock, which also were interpreted to represent coarse grained soils. It is interpreted that greater than 1/3 of the Property has coarse grained soil. For the purposes of this Phase Two ESA, the soil conditions are considered to be coarse grained, which provides a more conservative comparison to the MECP Site Condition Standards than the fine-grained values [O.Reg. 153/04, section 42].

Review of the borehole/monitoring well logs completed as part of previous investigations was completed. It was determined that less than 2/3 of the Phase Two Property has greater than 2 m of overburden soil; however, it is also noted that the boreholes commenced at approximately 2 storeys below the existing surface grade and at least 2 m of natural soil cover would be expected at the Phase Two Property, if not for the presence of a building occupying the entire Site. The Phase Two Property is not considered a shallow soil property [O.Reg. 153/04, section 43.1].

The Phase Two Property does not include and does not have any land located within 30 m of a water body. The MECP Site Condition Standards for use within 30 m of a water body do not apply [O.Reg. 153/04, section 43.1].

The full depth generic Site Condition Standards, with non-potable groundwater, coarse textured soil, for residential/parkland/institutional property use, as specified in Table 3 of the MECP Soil, Ground Water and Sediment Standards for Use Under Part XV.1 of the Environmental Protection Act, April 15, 2011 were determined to be the applicable Site Condition Standards for the Phase Two Property as part of this Phase Two ESA.

3. Background Information

i. Physical Setting

No areas of natural significance are located at the Phase Two Property (which is the same property as the Phase One Property) or in the Phase One Study Area (which was an approximate 250 m radius from the limits of the Phase One Property). No drinking water wells are located at the Phase Two Property and the Phase One Study Area is serviced by municipally treated non-potable water. The Phase Two Property and Study Area are not located in the vicinity of any well-head protection areas or other designation identified by the City of Ottawa in its official plan for the protection of ground water. No private or agricultural water supply wells are located within the Phase One Study Area.

The local topography in the vicinity of the Phase One Study Area generally slopes gently downward to the east. The Phase One Property is generally at grade with the neighbouring properties and Right-of-Ways. The nearest surface water body identified on the mapping is the Ottawa River, located approximately 550 m northwest of the Phase One Property. The Rideau Canal (man made and concrete-lined thus not interacting with groundwater) is present approximately 340 m northeast of the Property.

Surface water drainage at the Phase Two Property is by sheet drainage to catch basins located on the paved surfaces, which drain into the municipal stormwater sewer system or by infiltration in the unimproved ground surfaces.

ii. Past Investigations

METCALFE provided the following previous environmental report for review:

1. "Phase One Environmental Site Assessment, 116 Albert Street, Ottawa, Ontario", dated July 29, 2026, completed by Lopers & Associates for METCALFE. ("2026 Lopers Phase One ESA")

2026 Lopers Phase One ESA

A Phase One ESA report was prepared for the Property in July 2026 by Lopers & Associates. The Phase One ESA identified one PCA at the Phase One Property and two PCAs at neighbouring properties which were interpreted to represent APECs for the Property, including:

A historical heating oil Aboveground Storage Tank (AST) was located at the Phase One Property; this AST, PCA #1 is associated with O.Reg. PCA: Gasoline and Associated Products Storage in Fixed Tanks. This PCA has been interpreted to represent APEC #1 for the Phase One Property. The contaminants of potential concern ("CPCs") associated with fuel storage are Petroleum Hydrocarbons (PHCs) and benzene, toluene, ethylbenzene and xylenes (BTEXs).

A historical dry cleaner was located at 119 Slater Street, adjacent to the south of the Phase One Property; this dry cleaner, PCA #2 is associated with O.Reg. PCA: Operation of Dry Cleaning Equipment (where chemicals are used). This PCA has been interpreted to represent APEC #2 for the Phase One Property. The CPCs associated with dry cleaning operations are volatile organic compounds ("VOCs").

A historical heating oil storage Underground Storage Tank (UST) and retail heating oil distributor was located at 82-88 Metcalfe Street, adjacent to the south of the Phase One Property; this UST, PCA #57 is associated with O.Reg. PCA: Gasoline and Associated Products Storage in Fixed Tanks. This PCA has been interpreted to represent APEC #3 for the Phase One Property. The CPCs associated with fuel storage are PHCs and BTEXs.

Seventy-two additional neighbouring properties with PCAs were identified in the Phase One Study Area; however, these activities were not interpreted to have been associated with PCAs. None of the other identified listed 'activities' at neighbouring properties were considered to represent APECs based primarily on commercial redevelopment of the majority of the Phase One Study Area (which would have generally removed all soil down to bedrock) and also considering the distances and/or orientation of the historical PCAs with respect to the Phase One Property.

A Phase Two Environmental Site Assessment was recommended to assess the soil and groundwater quality at the Phase One Property.

4. Scope of Investigation

i. Overview of Site Investigation

This Phase Two ESA was designed to meet the general requirements of O.Reg. 153/04 as amended, with details of scope presented in Lopers' Letter entitled "Proposal for Phase Two Environmental Site Assessment, Proposed Residential Re-Development, 116 Albert Street, Ottawa, ON", dated June 4, 2026, reference No. PRO-044B-26-METCALFE.

The scope of work for investigation was discussed with METCALFE and a sampling and analysis plan (SAP) was prepared to achieve the objectives of the Phase Two ESA; the SAP is provided in Appendix A.

Underground utility locates were completed through Ontario 1-Call to identify any active public services on the Phase Two Property. Various underground utility services, including natural gas, electricity, water and sewers were identified at the Phase Two Property. The water and sewer services are present in underground trenches which enter the Site building at the southeast corner of the building from Metcalfe Street to the east. The natural gas and electricity connections are on the south and west sides of the building, respectively, with trenches leading to Metcalfe Street to the east. Copies of the underground locates are provided in Appendix B.

Four interior boreholes (BH1-26 through BH4-26) were drilled using a portable tripod drill on June 9 and June 10, 2026. The drilling equipment was operated by OGS Inc. Soil samples were collected using stainless steel split spoons. Soil samples recovered during the sampling program were screened in the field for volatile vapour concentrations, as well as visual and olfactory observations.

A total of 4 groundwater monitoring wells (BH1-26 through BH4-26) were installed at the Property as part of this Phase Two ESA. The boreholes which were instrumented with groundwater monitoring wells were drilled to the localized depths between approximately 3.0 to 3.3 m below the finished floor slab level and were screened to intercept shallow bedrock groundwater table. When possible, these groundwater monitoring wells were developed on the day of drilling by removing at least three well volumes or by purging the wells dry three times.

The locations of the boreholes/monitoring wells drilled/installed as part of this Phase Two ESA as well as existing monitoring wells at the Phase Two Property are presented on Figure 2: Site Plan. The rationale for the placement of the boreholes/monitoring wells is provided below:

- BH1-26 was drilled in the interior of the former heat oil storage tank room in the southwest portion of the sub-basement level Site building. This borehole was placed in a location to assess the historical on-Site heating oil storage (APEC #1). This borehole was also placed in the interpreted down-gradient orientation with respect to the

historical dry cleaner (APEC #2) at 119 Slater Street, to the south of the Phase Two Property. This borehole was instrumented with groundwater monitoring well BH1-26.

- BH2-26 was drilled in the northwest portion of the sub-basement level Site building. This borehole was placed in the interpreted down-gradient orientation of groundwater flow, to assess potential contaminant migration. This borehole was instrumented with groundwater monitoring well BH2-26.
- BH3-26 was drilled in the interior of the backup generator (decommissioned) room in the southeast portion of the sub-basement level Site building. This borehole was placed in a location to assess the historical heating oil distributor and UST at 82 Metcalfe Street, adjacent to the south of the Phase Two Property (APEC #3). This borehole was instrumented with groundwater monitoring well BH3-26.
- BH4-26 was drilled in the interior of the main hallway in the central portion of the sub-basement level Site building. This borehole was placed in a location to assess the historical heating oil distributor and UST at 82 Metcalfe Street, adjacent to the south of the Phase Two Property (APEC #3). This borehole was also placed in the interpreted down-gradient orientation with respect to the historical dry cleaner (APEC #2) at 119 Slater Street, to the south of the Phase Two Property. This borehole was instrumented with groundwater monitoring well BH4-26.

Soil samples were selected for laboratory analysis of the contaminants of potential concern (CPCs) based on APECs and CPCs identified in the Phase One ESA, as described in Section 3.ii. above as well as field screening observations.

Groundwater monitoring well development was completed the day of drilling following installation of the monitoring wells. Static groundwater levels were measured prior to disturbance of the water column. During purging, water quality parameters were measured at regular intervals to monitor groundwater quality stabilization; once groundwater quality parameters stabilized (were within approximately 10% on successive readings), groundwater samples were collected. Groundwater samples were selected for laboratory analysis of select CPCs based on APECs and CPCs identified in the Phase One ESA.

All four boreholes/monitoring wells were drilled at least 2 storeys below the surface grade elevation, as such, a geodetic elevation survey was not practical. The surface grade elevation at Albert Street was approximately 70.68 m above mean sea level ("AMSL") based on the Topographic Survey completed by Fairhall, Moffatt & Woodland, completed March 20, 2026. METCALFE provided a development concept plan which indicated the finished floor elevations, including the sub-basement (2nd underground storey) where 3 of the boreholes were drilled. The borehole BH1-26 was drilled in the former fuel storage tank room, which was approximately 1 m below the boiler room finished floor elevation (63.67 m ASL) and had an interpreted elevation of approximately 62.67 m ASL, while the boreholes BH2-26, BH3-26 and BH4-26, located on the 2nd underground storey had reported floor slab elevations of 64.58 m ASL.

ii. Media Investigation

Based on the finding of the Phase One ESA, the following media were investigated:

Soil quality at the Phase Two Property was investigated through the collection of soil samples at varying depths facilitated by drilling using a portable tripod mounted drill with stainless steel split spoon sampling.

Groundwater quality at the Phase Two Property was investigated through the installation and sampling of monitoring wells. Four monitoring wells installed as part of the Phase Two ESA were drilled to the localized depths between approximately of 3.0 and 3.3 m below the finished floor slab level and were screened to intercept the shallow bedrock groundwater table.

Groundwater monitoring wells were sampled using a peristaltic pump.

There were no natural surface water bodies at the Phase Two Property, and as such no sediment sampling was completed as part of the Phase Two ESA.

iii. Phase One Conceptual Site Model

The Phase One Property, which has the same location orientation and property boundaries as the Phase Two Property, is located at Civic No. 116 Albert Street, Ottawa, Ontario and has an approximate area of 1198 m² (0.12 Hectares).

Based on the information reviewed as part of this Phase One ESA, specifically Fire Insurance Plans ("FIPs") and aerial photographs, the Phase One Property has been developed or occupied for commercial use since at least 1912, including a hotel and a Turkish bathhouse. The Phase One Property was redeveloped with the present day 10-storey commercial office building in 1960. Based on the most recent use of the Phase One Property, the O.Reg. 153/04 property use classification was interpreted to be Commercial Use.

1702606 Ontario Limited purchased the Property in 2007, and it is understood that a concept has been proposed to retrofit the Site building for residential use. The Phase One Property is immediately surrounded by:

- A municipal Right-of-Way (Albert Street), followed by a multi-storey commercial development (World Exchange Plaza) to the north;
- Multi-storey commercial buildings followed by municipal Right-of-Way (O'Connor Street) to the west;
- A municipal Right-of-Way (Metcalf Street), followed by multi-storey commercial buildings to the east; and,
- A multi-storey commercial building (southwest), a low-rise commercial building (south-central) and asphalt parking lot (southeast) followed by a municipal Right-of-Way (Slater Street) followed by multi-storey commercial buildings to the south.

The Phase One Study Area includes the Phase One Property and properties with the boundaries within 250 m of the Phase One Property limits. Based on a review of the Phase One Property and properties in the Phase One Study Area, their associated historical and/or current uses and operations and physical characteristics of the Phase One Study Area, it was determined that an assessment of properties within 250 m of the Phase One property was sufficient to meet the objectives of the scope of this investigation for a Phase One ESA.

There were no water bodies at the Phase One Property or in the Phase One Study Area. The nearest surface water body identified is The Ottawa River, flowing east, located approximately 550 m northwest of the Phase One Property. The Rideau Canal (manmade and concrete-lined thus not interacting with groundwater) flowing north, is present approximately 340 m northeast of the Property. No drinking water wells are located at the Phase One Property, and the Phase One Study Area is serviced by municipally treated potable water. The local topography in the Phase One Area slopes gently downward to the south.

Based on the historical research, the general stratigraphy of the Phase One Property and Phase One Study Area consists of sand and gravel fill, underlain by silty clay, underlain by interbedded shale bedrock. The approximate depth to bedrock is expected to range from 4 to 6 m BGS; bedrock was likely removed at the Site during construction of the building to accommodate construction of the 2 underground parking levels at the Property. Groundwater is naturally expected at a depth of approximately 4 to 8 m BGS and flow in a predominantly northeast direction (towards the Ottawa River), however, groundwater levels are expected to be significantly altered by the presence of deep foundations and active sump pits.

A historical heating oil AST was located at the Phase One Property; this AST, PCA #1 is associated with O.Reg. PCA: Gasoline and Associated Products Storage in Fixed Tanks. This PCA has been interpreted to represent APEC #1 for the Phase One Property.

A historical dry cleaner was located at 119 Slater Street, adjacent to the south of the Phase One Property; this dry cleaner, PCA #2 is associated with O.Reg. PCA: Operation of Dry Cleaning Equipment (where chemicals are used). This PCA has been interpreted to represent APEC #2 for the Phase One Property.

A historical heating oil storage UST and retail heating oil distributor was located at 82-88 Metcalfe Street, adjacent to the south of the Phase One Property; this UST, PCA #57 is associated with O.Reg. PCA: Gasoline and Associated Products Storage in Fixed Tanks. This PCA has been interpreted to represent APEC #3 for the Phase One Property.

Seventy-two additional neighbouring properties with PCAs were identified in the Phase One Study Area; however, these activities were not interpreted to have been associated with PCAs. None of the other identified listed 'activities' at neighbouring properties were considered to represent APECs based primarily on commercial redevelopment of the majority of the Phase One Study Area (which would have generally removed all soil down to bedrock) and also

considering the distances and/or orientation of the historical PCAs with respect to the Phase One Property.

Underground utility corridors for sanitary and storm sewers, potable water, private electricity and natural gas lines lead to the building, generally from Albert Street to the north of the building, or from Metcalfe Street to the east. Underground utility corridors do have the potential to affect contaminant distribution and transport, however, they are likely located above the suppressed groundwater table, given the depth of underground parking structures and associated dewatering sump pits in the Phase One Study Area.

iv. Deviations from Sampling and Analysis Plan

There were no deviations to the Sampling and Analysis Plan (SAP) as part of this Phase Two ESA.

v. Impediments

The Phase Two ESA drilling program was completed within an occupied building, and as such the boreholes were placed to avoid active services and/or foundations. The boreholes/monitoring wells were located in a manner suitable to adequately assess the PCAs and APECs identified at the Phase Two Property. It has been interpreted that the Phase Two ESA drilling locations provide an adequate assessment of the overall environmental soil and groundwater quality at the APECs and overall Phase Two Property.

5. Investigation Method

i. General

The investigation method for this Phase Two ESA involved an assessment of the soil and/or groundwater quality for the associated CPCs in the vicinity of the APECs identified during the Phase One ESA.

Investigation of soil was completed using a tripod mounted portable drill with stainless steel split spoons used to recover soil samples. Soil samples were screened in the field for volatile vapour concentrations, as well as visual and olfactory observations. Select soil samples were submitted for laboratory analysis of the CPCs, based on all the indications mentioned above, as well as to capture representative soil and fill layers, for laboratory analysis for the CPCs.

Groundwater was assessed using the groundwater monitoring wells which were installed as part of this Phase Two ESA drilling program. The wells selected for monitoring/sampling were purged during the drilling program. Static groundwater levels were measured in the monitoring wells prior to disturbance of the water column on the day of sampling. Groundwater samples were collected using a peristaltic pump using low-flow procedures and were submitted for laboratory analysis for the CPCs.

All four boreholes/monitoring wells were drilled at least 2 storeys below the surface grade elevation, as such, a geodetic elevation survey was not practical. The surface grade elevation at Albert Street was approximately 70.68 m above mean sea level ("AMSL") based on the Topographic Survey completed by Fairhall, Moffatt & Woodland, completed March 20, 2026. METCALFE provided a development concept plan which indicated the finished floor elevations, including the sub-basement (2nd underground storey) where 3 of the boreholes were drilled. The borehole BH1-26 was drilled in the former fuel storage tank room, which was approximately 1 m below the boiler room finished floor elevation (63.67 m ASL) and had an interpreted elevation of approximately 62.67 m ASL, while the boreholes BH2-26, BH3-26 and BH4-26, located on the 2nd underground storey had reported floor slab elevations of 64.58 m ASL.

The following sections provide further detailed information regarding the investigation methodology completed to produce this Phase Two ESA.

ii. Drilling

The drilling field program for this Phase Two ESA was completed on June 9 and 10, 2026 under full-time supervision by Lopers & Associates personnel. Four boreholes were drilled for the Phase Two ESA by the drilling subcontractor OGS Inc., located at 5518 Appleton Side Road, Almonte, Ontario, K0A 1A0. Drilling was completed using a tripod mounted portable drill, with steel casings.

Samples were collected using stainless steel split spoons from the near surface to the full depth of drilling. Split spoon samples, collected in 0.6 m segments, were recovered continuously at 0.6 m intervals and/or with 0.15 m spacing between samples.

The split spoons, which were the only media to come into contact with the soil samples, were washed using soap and water and a scrub brush between samples to minimize the potential for cross-contamination among samples. The field technician used sterile nitrile gloves, which were changed prior to the handling of each soil sample to further reduce the potential of cross-contamination. The flights of the hollow stem augers were cleaned manually following each borehole.

iii. Soil Sampling

As described above, soil samples were recovered using stainless steel split spoons.

Soil samples were initially collected in Ziploc bags for initial screening as part of sample selection. Soil samples selected for laboratory analysis were collected in dedicated clear glass jars prepared and provided by the analytical laboratory. Soil samples collected for BTEXs/VOCs and the F1 range of PHCs analysis were collected using a dedicated graduated syringe provided by the laboratory and placed directly into a glass vial with a known quantity of methanol preservative. Analytes and associated preservatives were specified on each jar/vial by the laboratory. Each jar/vial sample set was provided with a unique sample identifier, project number and date of sampling in the field.

Detailed soil descriptions of the stratigraphy for each borehole/monitoring are included on the borehole logs provided in Appendix C.

Based on the observations of soil samples collected during the Phase Two ESA field program there were four stratigraphic units identified at the Phase Two Property, which include:

- Concrete (floor slabs)
- Sand (Fill)
- Silty Sand and Gravel (Fill)
- Bedrock (Shale / Limestone)

The stratigraphy is discussed in greater detail in Section 6.1 of this report.

iv. Field Screening Measurements

Initial field screening of the soil samples consisted of visual and olfactory observations made at the time of sample collection during the drilling program.

Additional field screening of the soil samples was completed using an RKI Instruments Model Eagle-2 combustible gas detector ("RKI Eagle"). The RKI Eagle(s) used for soil sample screening as part of this Phase Two ESA was obtained from EnviroMetrics Instrument Rentals Corp. ("EnviroMetrics") and were calibrated by EnviroMetrics on June 8, 2026. The RKI Eagle is capable of measuring combustible vapours at concentrations ranging from 0 parts per million (PPM) to 50% of the lower explosive limit (LEL). The RKI Eagle is also capable of measuring VOC vapours at concentrations ranging from 0 ppm to 1000 ppm. The readings of the RKI Eagle are shown on the Borehole Logs in Appendix C. Additional equipment and calibration information for the RKI Eagle is provided on the certificate of calibration included in Appendix D.

Where soil samples were selected in a borehole within an APEC and the SAP identified proposed soil analysis in that borehole, the field screening was used as follows to select the appropriate sample for laboratory analysis.

1. Select sample with evidence of visual and/or olfactory indications of suspected contamination, such as staining, PHC odours or deleterious fill material.
2. Select sample with most significant elevated soil vapour concentration.
3. Select sample based on stratigraphy and/or moisture content, as certain CPCs are generally expected to be found in these defined conditions (e.g. fill material at shallow depths or PHC impacts near the groundwater table interface).

v. Groundwater: Monitoring Well Installation

Installation of monitoring wells in BH1-26 through BH4-26 were completed by OGS Inc. The wells were installed using slotted PVC No. 10 monitoring well screens, which were 32 or 51 mm in diameter; these screens were installed at depths intended to straddle the shallow groundwater table in each of the aforementioned boreholes. Well screens were 1.5 m in length in both of the monitoring wells installed as part of this Phase Two ESA. The monitoring wells

were extended to approximately 0.1 m below the concrete floor slabs with a PVC riser, also 32 or 51 mm in diameter. A threaded PVC end cap was installed at the base of the screen to prevent sediment infiltration, while a J-Plug was installed at the top of the riser to present surface influence.

The annular space in each monitoring well was backfilled with clean silica sand up to approximately 0.3 m above the monitoring well screens. A layer of bentonite chips was then used to make a hydraulic seal above the sand pack to near the ground surface. The monitoring wells were completed with aluminum flushmount protective casings, which were backfilled with sand to allow drainage of any surface water which may infiltrate into the casings.

Development of each of the monitoring wells was completed using dedicated Waterra low density polyethylene (LDPE) tubing and a Waterra footvalve. The monitoring wells were developed on June 8 and June 9, 2026 by purging the wells dry at least three times. The wells were left to stabilize for a period of 1 week prior to groundwater sampling.

vi. Groundwater: Field Measurement of Water Quality Parameters

Measurements of the groundwater quality field parameters were completed to determine stabilization of these parameters prior to sampling. These measurements were completed using a Horiba U-52 groundwater quality measurement device ("Horiba"). The Horiba used for groundwater quality parameter stabilization measurements as part of this Phase Two ESA was obtained from EnviroMetrics and was calibrated on June 12, 2026. The Horiba is capable of measuring temperature, pH, conductivity, turbidity, dissolved oxygen and oxidation reduction potential. Additional equipment and calibration information for the Horiba is provided on the certificate of calibration included in Appendix D.

Field measurements of water quality parameters were collected at regular intervals (0 L, 0.5 well volumes, 1 well volume, 2 well volumes, etc.) during purging of the monitoring wells prior to sampling. The Horiba was placed in a flow-through cell and water quality parameters were measured until they were found to stabilize to within approximately 10% of the previous measurements prior to sample collection.

vii. Groundwater: Sampling

Groundwater sampling for this Phase Two ESA was completed on June 16, 2026 (at least 6 days after well installation). Groundwater samples were collected from all 4 monitoring wells, however, only a limited volume of water was available for sampling from BH4-26.

Stabilized groundwater levels were measured in each of the groundwater monitoring wells prior to disturbance of the water column prior to sampling. The dedicated Waterra LDPE tubing and footvalve was removed from each of the monitoring wells and 6 m Waterra LDPE tubing was placed in each of the monitoring wells. The LDPE tubing was connected to a dedicated length of silicon tubing, run through a peristaltic pump set to low flow (approximately 0.2-0.5 L/minute) during purging and sampling while monitoring groundwater level to minimize the drop in head.

The monitoring wells were purged on the day of sampling while water quality parameters were measured as noted above.

Groundwater samples were collected in dedicated amber glass bottles and vials or plastic bottles prepared and provided by the analytical laboratory. Analytes and associated preservatives were specified on each bottle by the laboratory. Each bottle sample set was provided with a unique sample identifier, project number and date of sampling in the field. Samples for PHCs, BTEXs, VOCs, PAHs and general chemistry were unfiltered.

The field technician changed dedicated sterile nitrile gloves prior to initiating work at each monitoring well and changed gloves prior to sample collection to minimize the potential for cross-contamination.

viii. Sediment: Sampling

There were no natural surface water bodies at the Phase Two Property, and as such no sediment sampling was completed as part of the Phase Two ESA.

ix. Analytical Testing

Soil and groundwater analytical testing was conducted by Bureau Veritas Canada (2019) Inc. (BV Labs). BV Labs is accredited by the Canadian Association for Laboratory Accreditation Inc. (CALA) and the National Institute of Standards and Technology (NIST), Standard Services Division, National Voluntary Laboratory Accreditation Program (NVLAP) for specific environmental and IAQ tests listed in the Scopes of Accreditation registered with each association. For the scope of accreditation under CALA Membership Number 1262, BV Labs are accredited for all the analytes included in this Phase Two ESA.

x. Residue Management Procedures

Excess soil cuttings from drilling and monitoring well installations were containerized in 20 L plastic buckets, which were stored in a designated area at the Property. These buckets were marked with a wax crayon indicating the origin location(s) of the cuttings containerized within each.

Groundwater from well development and purging was initially placed in a graduated plastic bucket for volume measurements and then was transferred to dedicated plastic 20 L buckets, which were stored in a designated area of the Property. These buckets were marked with a wax crayon indicating the origin location(s) of the water containerized within.

Fluids from equipment cleaning and decontamination were containerized within the purge water drum.

xi. Elevation Surveying

All four boreholes/monitoring wells were drilled at least 2 storeys below the surface grade elevation, as such, a geodetic elevation survey was not practical. The surface grade elevation at Albert Street was approximately 70.68 m above mean sea level ("AMSL") based on the Topographic Survey completed by Fairhall, Moffatt & Woodland, completed March 20, 2026. METCALFE provided a development concept plan which indicated the finished floor elevations, including the sub-basement (2nd underground storey) where 3 of the boreholes were drilled. The borehole BH1-26 was drilled in the former fuel storage tank room, which was approximately 1 m below the boiler room finished floor elevation (63.67 m ASL) and had an interpreted elevation of approximately 62.67 m ASL, while the boreholes BH2-26, BH3-26 and BH4-26, located on the 2nd underground storey had reported floor slab elevations of 64.58 m ASL. The reference elevations of each borehole/monitoring well are provided on the borehole logs in Appendix C.

xii. Quality Assurance and Quality Control Measures

Soil samples were collected in dedicated clear glass jars prepared and provided by the analytical laboratory. Soil samples collected for BTEXs/VOCs and the F1 range of PHCs analysis were collected using dedicated graduated syringes provided by the laboratory and placed directly into a glass vial with methanol preservative. Analytes and associated preservatives were specified on each jar/vial by the laboratory. Each jar/vial sample set was provided with a unique sample identifier, project number and date of sampling in the field.

Groundwater samples were collected in dedicated amber glass bottles and vials or plastic bottles prepared and provided by the analytical laboratory. Analytes and associated preservatives were specified on each bottle by the laboratory. Each bottle sample set was provided with a unique sample identifier, project number and date of sampling in the field.

Following sample collection, the soil and groundwater samples were stored in an ice pack chilled cooler to minimize volatilization and begin the cooling process on the day of sampling. On each day of sample collection, following completion of the fieldwork, samples were delivered directly to the analytical laboratory. Standard chain of custody procedures were used to maintain a custody record of soil and groundwater samples between the field technician and the analytical laboratory.

The split spoons, which were the only media to come into contact with the soil samples, were washed using soap and water and a scrub brush between samples to minimize the potential for cross contamination among samples. The field technician used sterile nitrile gloves, which were changed prior to the handling of each soil sample to prevent cross-contamination. The field technician changed dedicated sterile nitrile gloves prior to initiating work at each monitoring well and changed gloves prior to groundwater sample collection to minimize the potential for cross-contamination.

A trip blank water sample for VOCs was submitted for laboratory analysis from the groundwater sampling event completed on June 16, 2026. No detectable VOC concentrations were reported in the trip blank water sample.

The soil sample (DUP-06/10) was submitted to the laboratory as a blind field duplicate sample of BH3-26-SS1A) for PHCs, PAHs and VOCs. The laboratory completed and reported duplicate sample analysis for all groundwater CPC parameters analyzed as part of this Phase Two ESA as part of their internal quality assurance procedures.

The groundwater sample (DUP-06/16) was submitted to the laboratory as a blind field duplicate sample of BH1-26-GW1. These samples were analyzed for PHCs, PAHs and VOCs (including BTEXs, which provide a blind quality assurance and quality control QA/QC validation for all groundwater CPC parameters analyzed as part of this Phase Two ESA.

No equipment blank of groundwater was required since the groundwater samples were collected using dedicated tubing.

6. Review and Evaluation

i. Geology

Based on the observations of soil samples collected during the Phase Two ESA field program, there were 4 stratigraphic units identified at the Phase Two Property, which include:

Concrete

A layer of concrete (floor slab), approximately 0.13 to 0.25 m in thickness, was encountered at the sub-basement surface in all 4 boreholes.

Silty Sand and Gravel (Fill)

A layer of sand fill material, generally ranging from approximately 0.05 to 0.25 m in thickness was encountered from immediately below the concrete layer in all boreholes (BH1-26 through BH4-26) drilled as part of the Phase Two ESA. It was noted that the sand layer in BH4-26 was suspected to have experienced washout and/or had been mixed into the gravel layer beneath. This sand material was identified to consist of graded imported backfill sand, was compact and generally brown. This layer was encountered at varying moisture conditions, generally moist to wet.

Silty Sand and Gravel (Till)

A layer of silty sand and gravel, approximately 0.1 to 0.3 m in thickness, was encountered below the sand fill and above the bedrock. This silty sand and gravel fill material was identified to

consist of well graded imported granular backfill, was compact and generally grey. This layer was encountered at wet moisture conditions.

Bedrock

Shale and limestone bedrock was observed in each of the borehole locations below the overburden layers. The depth to bedrock ranged from 0.25 to 0.56 m below the finished concrete floor slab. The bedrock was cored using NQ diamond coring equipment and observations of the bedrock were recorded following recovery. The bedrock was found to consist of a grey shale with limestone interbedding. The quality of this rock was generally moderately weathered and fractured and had fair to poor rock quality within the investigated depth of approximately 2.5 m of the bedrock. The quality was observed to improve, becoming what is considered as fair rock based upon Rock Quality Designation (RQD) in the deeper bedrock core samples.

Aquifer

The shallow (unconfined) aquifer is the aquifer of interest based on the nature of APECs and PCAs identified for the Phase Two Property. Based on observations and measured groundwater monitoring data collected as part of this investigation, the aquifer is present in the shale/limestone bedrock geological unit.

Based on moisture contents observed in the soil samples collected as part of this Phase Two ESA, it is expected that seasonal and annual variability affect the groundwater table elevation in the shallow aquifer. It is also expected that local groundwater flow is influenced by the presence of sump pits in the Site building and other buildings in the vicinity of the Phase Two Property, which create localized depressions of groundwater elevation in the shallow bedrock groundwater table.

ii. Groundwater and Elevations and Flow Direction

Based on the nature of the primary CPCs identified for groundwater at the Phase Two Property the screened intervals for the groundwater monitoring wells installed as part of this Phase Two ESA were selected to intercept the shallow bedrock groundwater table.

All four boreholes/monitoring wells were drilled at least 2 storeys below the surface grade elevation, as such, a geodetic elevation survey was not practical. The surface grade elevation at Albert Street was approximately 70.68 m above mean sea level ("AMSL") based the Topographic Survey completed by Fairhall, Moffatt & Woodland, completed March 20, 2026. METCALFE provided a development concept plan which indicated the finished floor elevations, including the sub-basement (2nd underground storey) where 3 of the boreholes were drilled. The borehole BH1-26 was drilled in the former fuel storage tank room, which was approximately 1 m below the boiler room finished floor elevation (63.67 m ASL) and had an interpreted elevation of approximately 62.67 m ASL, while the boreholes BH2-26, BH3-26 and BH4-26, located on the 2nd underground storey had reported floor slab elevations of 64.58 m ASL.

The shallow groundwater aquifer was present within the bedrock at the Phase Two Property. Given the general consistency in depth of the groundwater table in the shallow bedrock at the Phase Two Property, it was suspected that the same shallow aquifer could be used for a determination of groundwater flow direction and hydraulic gradient, however, some uncertainty of static groundwater flow and flow direction do exist because of the operational sump pits at the Phase Two Property and at other properties in the vicinity of the Site. Monitoring well construction details of the shallow aquifer monitoring wells are presented in Table 2 below.

Table 2: Monitoring Well Construction Details

Monitoring Well	Ground Surface Elevation (m AMSL)	Top of Piezometer Elevation (m AMSL)	Screen Elevation (m AMSL)	Sand Pack Elevation (m AMSL)	Bentonite Seal (m AMSL)
BH1-26	62.67	62.56	59.37 – 60.87	59.37 – 61.17	61.17 – 62.37
BH2-26	64.58	64.50	61.30 – 62.80	61.30 – 63.10	63.10 – 64.28
BH3-26	64.58	64.43	61.53 – 63.03	61.53 – 63.33	63.33 – 64.28
BH4-26	64.58	64.48	61.51 – 63.01	61.51 – 63.31	63.31 – 64.28

m AMSL – metres Above Mean Sea Level

On June 16, 2026, following a period of 6 days for stabilization after drilling and developing the monitoring wells, the groundwater levels were measured and are presented in Table 3 below. The shallow bedrock aquifer groundwater table was measured at depths ranging between 0.42 and 2.98 m below finished floor surface ("m BFFS") on June 16, 2026.

Table 3: Groundwater Table Elevations Measured on June 16, 2026

Monitoring Well	Ground Surface Elevation (m AMSL)	Top of Piezometer Elevation (m AMSL)	Depth to Groundwater (m below TOP)	Groundwater Table Elevation (m AMSL)	Depth to Groundwater (m BFFS)
BH1-26	62.67	62.56	0.42	62.14	0.53
BH2-26	64.58	64.50	1.63	62.87	1.71
BH3-26	64.58	64.43	0.48	63.95	0.63
BH4-26	64.58	64.48	2.88	61.60	2.98

m AMSL – metres Above Mean Sea Level

m BGS – metres below Finished Floor Surface.

Three groundwater monitoring well water table elevations are required to triangulate groundwater elevations and determine an approximate groundwater flow direction.

Local Shallow Bedrock Aquifer Groundwater Flow Direction

The groundwater table elevations in BH1-26, BH2-26, BH3-26 and BH4-26 were used for a determination of shallow aquifer groundwater flow direction. Based on the measured groundwater table elevations in these monitoring wells, the local shallow bedrock aquifer groundwater flow direction is towards the south-central portion of the Phase Two Property. This interpreted local groundwater flow direction is reasonable based on the location of a foundation drainage sump system located in the south-central portion of the Phase Two Property.

Regional Deeper Bedrock Aquifer Groundwater Flow Direction

No deep aquifer monitoring wells were installed or measured as part of this Phase Two ESA. The regional topography and nearest surface water bodies were used for a determination of regional deeper bedrock aquifer groundwater flow direction. Based on overall regional topography which drops down significantly to the north of the Phase Two Property and the location of the Ottawa River to the northwest of the Property, the regional deeper aquifer groundwater flow direction was interpreted to be towards the north.

No observations or indications of free product were observed in any of the monitoring wells accessed as part of this Phase Two ESA, as measured with an interface probe during water level measurements, and through observations of the purge water during development and sampling of the monitoring wells.

The underground utility corridors associated with the storm and sanitary sewers have the potential to affect contaminant distribution and transport, as they would create preferential pathways for lateral migration. Based on the depth to groundwater observed in the monitoring wells as part of this investigation, observed between 0.42 and 2.98 m BFFS, the potential exists for migration of contaminants through underground utility service trenches (generally approximately 1 to 2 m BFFS) during periods of seasonally high groundwater table elevations.

iii. Groundwater: Hydraulic Gradients

The horizontal hydraulic gradient was determined by plotting groundwater contours interpreted from groundwater elevations presented in Table 3 and then by dividing the difference in hydraulic head by the lateral separation distance in the groundwater contours. Based on the measured groundwater elevations in BH1-26, BH2-26, BH3-26 and BH4-26, the horizontal hydraulic gradient of the local shallow bedrock aquifer at the Phase Two Property ranges from approximately 0.02 to 0.11 m/m.

iv. Coarse Grained Soil Texture

A layer of silty sand and gravel and/or sand (approximate 0.2 to 0.4 m thick) was present at the Phase Two Property, beneath the concrete floor slabs and the shale bedrock, which also were interpreted to represent coarse grained soils. It is interpreted that greater than 1/3 of the

Property has coarse grained soil. For the purposes of this Phase Two ESA, the soil conditions are considered to be coarse grained, which provides a more conservative comparison to the MECP Site Condition Standards than the fine grained values.

v. Soil Field Screening

Initial field screening of the soil samples consisted of visual and olfactory observations made at the time of sample collection during the drilling program. There were no olfactory observations of PHC contamination encountered in any of the samples recovered as part of this Phase Two ESA.

Additional field screening of the soil samples was completed using an RKI Eagle gas detector. Combustible soil vapour screening concentrations were found to range from 45 to 140 ppm, which is low and generally not considered indicative of significant VOC or PHC contamination.

vi. Soil Quality

Location and Depth of Soil Samples

The following soil samples, which were collected from the boreholes drilled as part of this Phase Two ESA, were submitted for laboratory analysis.

Table 4: Soil Samples Selected for Laboratory Analysis

Sample Location	Sample ID	Sample Depth (m BFFS)	Analytical Parameters
BH1-26	BH1-26-SS1	0.3 - 0.6	PHCs, VOCs, PAHs
BH2-26	BH2-26-SS1	0.1 – 0.5	PHCs, VOCs, PAHs
BH3-26	BH3-26-SS1A	0.1 – 0.5	PHCs, VOCs, PAHs
	DUP-06/10	Duplicate of BH3-26-SS1A	PHCs, VOCs, PAHs
BH4-26	BH4-26-SS1	0.2 – 0.3	PHCs, VOCs, PAHs

Comparison of Soil Analytical Results to Applicable Site Conditions Standards

The analytical soil results were compared to the full depth generic Site Condition Standards, with non-potable groundwater, coarse textured soil, for residential property use, as specified in Table 3 of the MECP Soil, Ground Water and Sediment Standards for Use Under Part XV.1 of the Environmental Protection Act, April 15, 2011.

The aforementioned soil samples selected for laboratory analysis were submitted to BV Labs under chain of custody on the day of completion of the drilling program. The laboratory certificates of analysis (BV Labs Report # R8762663) is provided in Appendix E.

All analyzed soil samples were in compliance with the Site Condition Standards. A full summary of the soil analytical results and comparison to the applicable Site Condition Standards are presented in Table 6: Soil Analytical Results following the text of this report.

Contaminants of Concern

The CPCs identified for soil at the Phase Two ESA were associated with the various PCAs and APECs at the Property, which included:

- The CPCs associated with fuel storage are PHCs and BTEXs.
- The CPCs associated with dry cleaning operations are VOCs.
- The CPCs associated with fuel storage are PHCs and BTEXs.
- PAHs were also included as a CPC as they are commonly present in historical fill material, which may be present at adjacent properties.

The contaminants of concern for a particular sample were based on the relative location and depth of the sample, visual and/or olfactory observations and combustible vapour screening concentrations.

All soil samples collected as part of this Phase Two ESA were in compliance with the Site Condition Standards.

Contaminants Related to Chemical and Biological Transformations

Contaminants related to chemical and biological transformations were not suspected to be present at the Phase Two Property and were not identified as part of the Phase Two ESA soil analysis.

Soil Serving as a Source of Contaminant Mass Contributing to Groundwater

Based on the analytical results, there is no soil that serves as a source of contaminant mass contributing to groundwater at the Phase Two Property.

Light or Dense Non-Aqueous Phase Liquids

The groundwater analytical results (discussed below) do not indicate the presence of light or dense non-aqueous phase liquids at the Phase Two Property. The analytical soil results do not indicate the suspected presence of light non-aqueous phase liquids at the Phase to Property.

vii. Groundwater Quality

Locations and Sample Depth Interval of Groundwater Samples

The groundwater samples were collected using a peristaltic pump with tubing lowered to between the top and approximate (vertical) center of the water column within each monitoring well and withdrawing the water at low flow rates. The groundwater sample locations, screen depths and parameters analyzed are presented in Table 5 below.

Table 5: Groundwater Samples Selected for Laboratory Analysis

Sample Location	Groundwater Level (m AMSL)	Screen Depth (m AMSL)	Analytical Parameters
BH1-26	62.14	59.37 – 60.87	PHCs, VOCs, PAHs
BH2-26	62.87	61.30 – 62.80	PHCs, VOCs, PAHs
BH3-26	63.95	61.53 – 63.03	PHCs, VOCs, PAHs
BH4-26	61.60	61.51 – 63.01	PHCs, VOCs

m AMSL – metres Above Mean Sea Level

Field Filtering

Samples for PHCs, BTEXs, VOCs, PAHs and general chemistry were unfiltered.

Comparison of Groundwater Analytical Results to Applicable Site Conditions Standards

The analytical groundwater results were compared to the full depth generic Site Condition Standards, with non-potable groundwater, coarse textured soil, as specified in Table 3 of the MECP Soil, Ground Water and Sediment Standards for Use Under Part XV.1 of the Environmental Protection Act, April 15, 2011.

The groundwater samples selected for laboratory analysis as part of this Phase Two ESA were submitted to BV Labs under chain of custody on June 16, 2026. The laboratory certificate of analysis (BV Labs Report # R8765782) is provided in Appendix E.

All groundwater samples collected as part of this Phase Two ESA were in compliance with the Site Condition Standards.

Although chloroform exceedances were noted in each of the groundwater samples collected as part of this Phase Two ESA, these chloroform concentrations were inferred to be associated with municipal water used during bedrock coring and chloroform was therefore exempt from consideration as a CPC.

A full summary of the groundwater analytical results and comparison to the applicable Site Condition Standards are presented in Table 7: Groundwater Analytical Results following the text of this report.

Contaminants of Potential Concern

The CPCs identified for groundwater at the Phase Two ESA were associated with the various PCAs and APECs at the Property, which included:

- The CPCs associated with fuel storage are PHCs and BTEXs.
- The CPCs associated with dry cleaning operations are VOCs.
- The CPCs associated with fuel storage are PHCs and BTEXs.

- PAHs were also included as a CPC as they are commonly present in historical fill material, which may be present at adjacent properties.

The contaminants of potential concern for a particular sample were based on the PCA, relative location and depth of the sample, visual and/or olfactory observations of soil samples collected which could have come into contact with the groundwater table.

Contaminants Related to Chemical and Biological Transformations

Contaminants related to chemical and biological transformations were not suspected to be present at the Phase Two Property and were not identified as part of the Phase Two ESA groundwater analysis.

Soil Serving as a Source of Contaminant Mass Contributing to Groundwater

Based on the analytical results, there is no soil that serves as a source of contaminant mass contributing to groundwater at the Phase Two Property.

Light or Dense Non-Aqueous Phase Liquids

The presence of measurable levels LNAPL and/or DNAPL free product were not observed at the Phase Two Property, as measured with an interface probe and with observations of the purge water recovered from the monitoring wells.

The analytical groundwater results do not indicate the suspected presence of dense non-aqueous phase liquids at the Phase Two Property.

viii. Sediment Quality

There were no natural surface water bodies at the Phase Two Property, and as such no sediment sampling was completed as part of the Phase Two ESA.

ix. Quality Assurance and Quality Control Results

The soil sample (DUP-06/10) was submitted to the laboratory as a blind field duplicate sample of BH3-26-SS1A) for PHCs, VOCs and PAHs; there were no detectable contaminant concentrations in either sample. The laboratory completed and reported duplicate sample analysis for all groundwater CPC parameters analyzed as part of this Phase Two ESA as part of their internal quality assurance procedures.

The groundwater sample DUP-06/16 was submitted to the laboratory as a blind field duplicate sample of BH1-26-GW1. The RPDs of groundwater duplicate results to original sample results for chloroform, which was the only CPC detected in both samples, was 8%, which meets the required ratio. There were no significant deviations in groundwater duplicate ratios of PHC, VOC or PAH parameters. These samples were analyzed for PHCs, VOCs (including BTEXs), PAHs and Metals & Inorganics, which provide a blind quality assurance and quality control QA/QC validation for all groundwater parameters analyzed as part of this Phase Two ESA.

Trip blank water samples for VOCs were submitted for laboratory analysis from the groundwater sampling event completed on June 16, 2026. No detectable VOC concentrations were reported in the trip blank water samples.

All certificates of analysis were received pursuant to clause 47 (2) (b) of O.Reg. 153/04 and comply with subsection 47 (3) of O.Reg. 153/04.

The overall quality of the field data from the investigation with respect to the data quality objectives, demonstrate that decision-making was not affected, and the overall objectives of the investigation and the assessment were met.

x. Phase Two Conceptual Site Model

A historical heating oil Aboveground Storage Tank (AST) was located at the Phase One Property; this AST, PCA #1 is associated with O.Reg. PCA: Gasoline and Associated Products Storage in Fixed Tanks. This PCA has been interpreted to represent APEC #1 for the Phase One Property. The contaminants of potential concern ("CPCs") associated with fuel storage are Petroleum Hydrocarbons (PHCs) and benzene, toluene, ethylbenzene and xylenes (BTEXs).

A historical dry cleaner was located at 119 Slater Street, adjacent to the south of the Phase One Property; this dry cleaner, PCA #2 is associated with O.Reg. PCA: Operation of Dry Cleaning Equipment (where chemicals are used). This PCA has been interpreted to represent APEC #2 for the Phase One Property. The CPCs associated with dry cleaning operations are volatile organic compounds ("VOCs").

A historical heating oil storage Underground Storage Tank (UST) and retail heating oil distributor was located at 82-88 Metcalfe Street, adjacent to the south of the Phase One Property; this UST, PCA #57 is associated with O.Reg. PCA: Gasoline and Associated Products Storage in Fixed Tanks. This PCA has been interpreted to represent APEC #3 for the Phase One Property. The CPCs associated with fuel storage are PHCs and BTEXs.

The underground utility corridors associated with the storm and sanitary sewers have the potential to affect contaminant distribution and transport, as they would create preferential pathways for lateral migration. Based on the depth to groundwater observed in the monitoring wells as part of this investigation, observed between 0.42 and 2.98 m BFFS, the potential exists for migration of contaminants through underground utility service trenches (generally approximately 1 to 2 m BFFS) during periods of seasonally high groundwater table elevations.

The overburden stratigraphy of the Phase Two Property is present in four geological units, including a concrete layer for the finished floor surface on the interior of the building, sand (fill), silty sand and gravel (fill) layer and shale bedrock interbedded with limestone across the Property.

The shallow (unconfined) aquifer is the aquifer of interest based on the nature of APECs and PCAs identified for the Phase Two Property. Based on observations and measured groundwater

monitoring data collected as part of this investigation, the aquifer is present in the shale/limestone bedrock geological unit. The bedrock is present approximately 0.2 to 0.5 m below the finished concrete floor slab, which is located approximately 6 to 7 m below the surface grade of Albert Street.

The shallow bedrock aquifer groundwater table was measured at depths ranging between 0.42 and 2.98 m BFFS on June 16, 2026. Based on the measured groundwater table elevations in these monitoring wells, the local shallow bedrock aquifer groundwater flow direction is towards the south-central portion of the Phase Two Property. This interpreted local groundwater flow direction is reasonable based on the location of a foundation drainage sump system located in the south-central portion of the Phase Two Property. The groundwater has an approximate horizontal hydraulic gradient that ranges from approximately 0.02 to 0.11 m/m.

The proposed redevelopment of the Phase Two Property includes a concept to convert the existing Site building at the Phase One Property from commercial office space to a multi-unit residential building. It is understood that the structure will not be altered as part of the conversion and that the ground floor will remain used for commercial space.

The Phase Two Property and all other properties within 250 m of the property boundaries are supplied by Ottawa's municipal potable water supply system. The Phase Two is within the urban boundaries of the City of Ottawa, is supplied with municipally treated drinking water and there are no wells within 250 m of the property boundaries that are intended for use as a source of water for human consumption or agriculture. As such, the designation of non-potable groundwater setting is determined to be applicable [O.Reg. 153/04, section 35].

The Phase Two Property is not situated within or adjacent to an area of natural significance and does not include any land within 30 m of an area of natural significance. The pH of the soil was analyzed as part of this Phase Two ESA and was found to range from 7.84 to 8.35. As such, the Phase Two Property is not considered to be an environmentally sensitive area [O.Reg. 153/04, section 41].

For the purposes of this Phase Two ESA, the soil conditions are considered to be coarse grained. The Phase Two Property is not considered a shallow soil property [O.Reg. 153/04, section 43.1].

The Phase Two Property does not include and does not have any land located within 30 m of a water body. The MECP Site Condition Standards for use within 30 m of a water body do not apply [O.Reg. 153/04, section 43.1].

The full depth generic Site Condition Standards, with non-potable groundwater, coarse textured soil, for residential property use, as specified in Table 3 of the MECP Soil, Ground Water and Sediment Standards for Use Under Part XV.1 of the Environmental Protection Act, April 15, 2011 were determined to be the applicable Site Condition Standards for the Phase Two Property as part of this Phase Two ESA.

All analyzed soil samples as part of this Phase Two ESA were in compliance with the Site Condition Standards.

All groundwater samples collected as part of this Phase Two ESA were in compliance with the Site Condition Standards as of the certification date of June 10, 2026.

Although chloroform exceedances were noted in each of the groundwater samples collected as part of this Phase Two ESA, these chloroform concentrations were inferred to be associated with municipal water used during bedrock coring and chloroform was therefore exempt from consideration as a CPC.

7. Conclusions

All analyzed soil samples as part of this Phase Two ESA were in compliance with the Site Condition Standards.

All groundwater samples collected as part of this Phase Two ESA were in compliance with the Site Condition Standards as of the certification date of June 10, 2026.

Although chloroform exceedances were noted in each of the groundwater samples collected as part of this Phase Two ESA, these chloroform concentrations were inferred to be associated with municipal water used during bedrock coring and chloroform was therefore exempt from consideration as a CPC.

No further Phase Two ESA investigation is required for the Phase Two Property at this time.

i. Signatures

The Qualified Person for this study is Mr. Luke Lopers, P. Eng. Mr. Lopers has been a Professional Engineer, registered in Ontario since 2012 and has been working on environmental site assessments since 2006. Mr. Lopers has been an author, project manager and/or peer reviewer for hundreds of Phase One ESAs and Phase Two ESAs as well as previously filed RSCs.

The reviewer for this study is Ms. Natasha Corrin, P.Eng. Ms. Corrin is a Professional Engineer registered in Ontario since 2005 and has reviewed many of Phase One and Two ESAs in Ontario and the rest of Canada leading to, or incorporated into Risk Assessments. The qualifications of the assessor/Qualified Person and reviewer are included in Appendix F.

Sincerely,



Luke Lopers, P.Eng., QP_{ESA}



Natasha Corrin, M.A.Sc., P.Eng., QP_{RA}



8. Limitations

The findings and conclusions of this Phase Two ESA are based on the information provided and/or reviewed as part of this study.

This Phase Two ESA has been completed with the standard of care generally expected in the industry for a study of this nature.

This Phase Two ESA has been prepared for the sole use of 1702606 Ontario Limited, Fuller Group of Companies and Metcalfe Realty Company Limited for the purposes of a due diligence assessment of the potential liabilities which may exist at the Phase Two Property. No other party is permitted to rely on the conclusions or findings of this report without the written consent of Lopers & Associates and 1702606 Ontario Limited, Fuller Group of Companies and Metcalfe Realty Company Limited.

Changes to the physical setting of the Phase Two Property, Phase One Study Area and applicable regulations governing Phase One and Two Environmental Site Assessments have the potential to influence the validity of the conclusions and opinions presented in this Phase Two ESA.

9. References

Topographic Survey Plan, Fairhall, Moffatt & Woodland, completed March 20, 2026.

City of Ottawa, geoOttawa mapping website, Visited March 2026 through July 2026.

<http://maps.ottawa.ca/geoottawa/>

Google Earth, Visited March 2026 through July 2026.

"Soil, Ground Water and Sediment Standards for Use Under Part XV.1 of the Environmental Protection Act", produced by the Ontario Ministry of the Environment, dated April 15, 2011.

"Phase One Environmental Site Assessment, 116 Albert Street, Ottawa, Ontario" dated July 29, 2026 prepared for Semper Paratus Management Inc. by Lopers & Associates.

BV Labs Certificate of Analysis – Report # R8762663 – Soil Sample Submission June 11, 2026

BV Labs Analysis – Report # R8765782 - Groundwater Sample Submission June 16, 2026

10. Appendices

Appendix A – Sampling and Analysis Plan

Appendix B – Underground Utility Locates

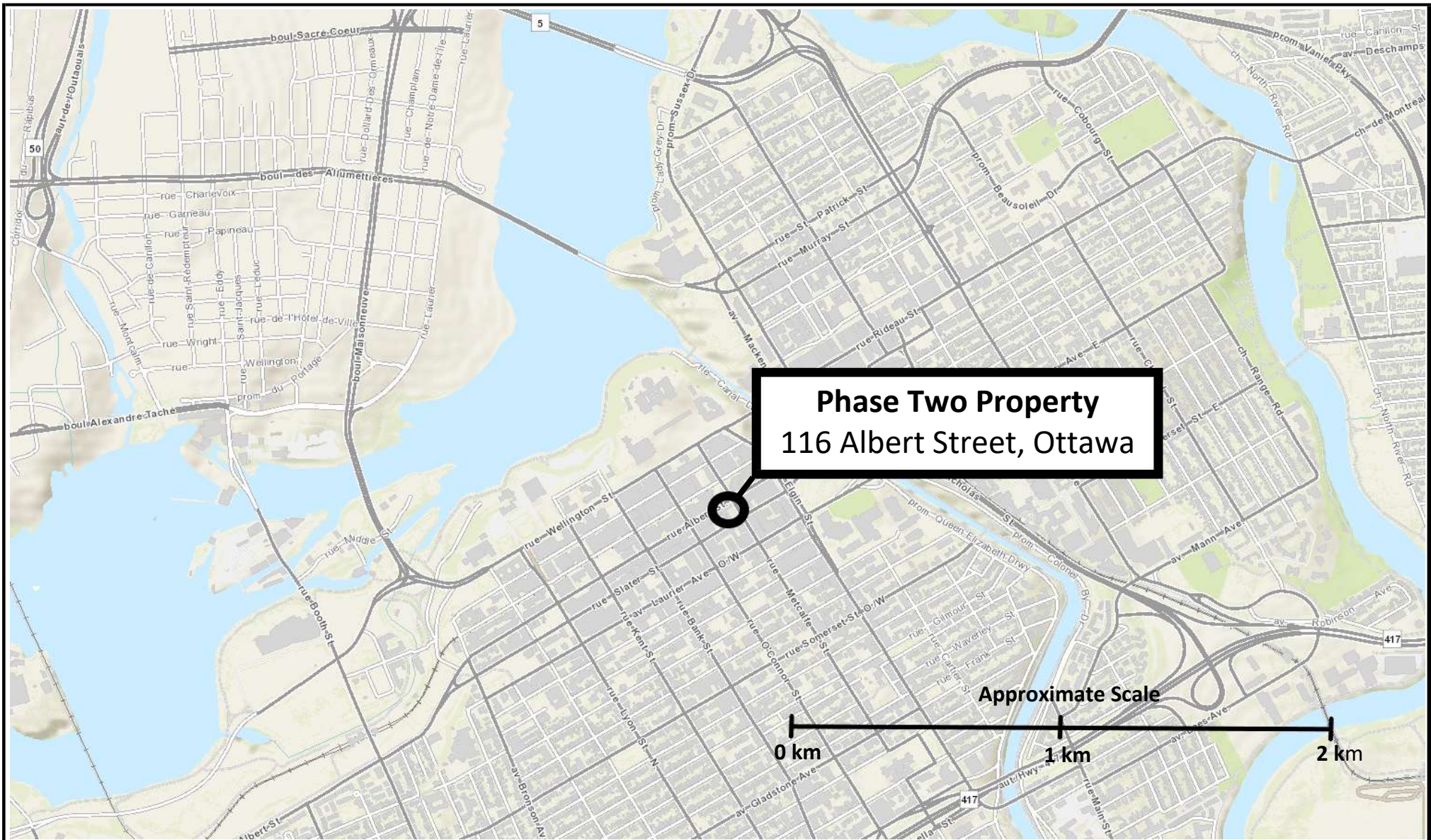
Appendix C – Borehole Logs

Appendix D – Certificates of Equipment Calibration

Appendix E – Laboratory Certificates of Analysis

Appendix F – Qualifications of Assessors

Figures



LOPERS & ASSOCIATES

Figure 1: Key Plan

Phase Two Environmental Site Assessment
116 Albert Street, Ottawa, Ontario
Metcalf Realty Company Limited

Project Reference No: LOP26-044B
Drawing No.: LOP26-044B-1
Date: July 28, 2026
Author: L. Lopers
Source: geoOttawa, Base Mapping



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Figure 2: Site Plan

Phase Two Environmental Site Assessment
116 Albert Street, Ottawa, Ontario
Metcalf Realty Company Limited

Project Reference No:	LOP26-044B
Drawing No.:	LOP26-044B-2
Date:	June 12, 2026
Author:	L. Lopers
Source:	geoOttawa

Tables

Table 6: Soil Analytical Results
116 Albert Street, Ottawa, Ontario

			Sample ID:	BH1-26-SS1	BH2-26-SS1	BH3-26-SS1A	DUP-06/10	BH4-26-SS1
			Sample Depth:	0.3 - 0.6 m BFFS	0.1 - 0.5 m BFFS	0.1 - 0.5 m BFFS	Duplicate of BH3-26-SS1A	0.2 - 0.3 m BFFS
			Sample Date:	June 9, 2026	June 10, 2026	June 10, 2026	June 10, 2026	June 10, 2026
			Laboratory Sample ID:	BDXM06	BDXM07	BDXM08	BDXM10	BDXM09
		Method Detection Limit (MDL)	O.Reg. 153/04 Table 3: Residential Property Use Standards, Coarse Grained Soil					
Parameter	Units							
Petroluem Hydrocarbons (PHCs)								
F1 PHCs (C6-C10)	ug/g	10	55	<10	<10	<10	<10	<10
F2 PHCs (C10-C16)	ug/g	7	98	<7.0	<7.0	<7.0	<7.0	<7.0
F3 PHCs (C16-C34)	ug/g	50	300	<50	<50	<50	<50	<50
F4 PHCs (C34-C50)	ug/g	50	2800	<50	<50	<50	<50	<50
F4G PHCs (gravimetric)	ug/g	-	2800	-	-	-	-	-
Volatile Organic Compounds (VOCs) including Benzene, Toluene, Ethylbenzene and Xylenes (BTEXs)								
Acetone	ug/g	0.49	16	<0.49	<0.49	<0.49	<0.49	<0.49
Benzene	ug/g	0.02	0.21	<0.0060	<0.0060	<0.0060	<0.0060	<0.0060
Bromodichloromethane	ug/g	0.04	13	<0.040	<0.040	<0.040	<0.040	<0.040
Bromoform	ug/g	0.04	0.27	<0.040	<0.040	<0.040	<0.040	<0.040
Bromomethane	ug/g	0.04	0.05	<0.040	<0.040	<0.040	<0.040	<0.040
Carbon Tetrachloride	ug/g	0.04	0.05	<0.040	<0.040	<0.040	<0.040	<0.040
Chlorobenzene	ug/g	0.04	2.4	<0.040	<0.040	<0.040	<0.040	<0.040
Chloroform	ug/g	0.04	0.05	<0.040	<0.040	<0.040	<0.040	<0.040
Dibromochloromethane	ug/g	0.04	9.4	<0.040	<0.040	<0.040	<0.040	<0.040
1,2-Dichlorobenzene	ug/g	0.04	3.4	<0.040	<0.040	<0.040	<0.040	<0.040
1,3-Dichlorobenzene	ug/g	0.04	4.8	<0.040	<0.040	<0.040	<0.040	<0.040
1,4-Dichlorobenzene	ug/g	0.04	0.083	<0.040	<0.040	<0.040	<0.040	0.058
1,1-Dichloroethane	ug/g	0.04	3.5	<0.040	<0.040	<0.040	<0.040	<0.040
1,2-Dichloroethane	ug/g	0.049	0.05	<0.049	<0.049	<0.049	<0.049	<0.049
1,1-Dichloroethylene	ug/g	0.04	0.05	<0.040	<0.040	<0.040	<0.040	<0.040
Cis-1,2-Dichloroethylene	ug/g	0.04	3.4	<0.040	<0.040	<0.040	<0.040	<0.040
Trans-1,2-Dichloroethylene	ug/g	0.04	0.084	<0.040	<0.040	<0.040	<0.040	<0.040
1,2-Dichloropropane	ug/g	0.04	0.05	<0.040	<0.040	<0.040	<0.040	<0.040
Cis-1,3-Dichloropropylene	ug/g	0.03	NV	<0.030	<0.030	<0.030	<0.030	<0.030
Trans-1,3-Dichloropropylene	ug/g	0.04	NV	<0.040	<0.040	<0.040	<0.040	<0.040
Ethylbenzene	ug/g	0.02	2	<0.010	<0.010	<0.010	<0.010	<0.010
Ethylene Dibromide	ug/g	0.04	0.05	<0.040	<0.040	<0.040	<0.040	<0.040
Methyl Ethyl Ketone	ug/g	0.4	16	<0.40	<0.40	<0.40	<0.40	<0.40
Methylene Chloride	ug/g	0.049	0.1	<0.049	<0.049	<0.049	<0.049	<0.049
Methyl Isobutyl Ketone	ug/g	0.4	1.7	<0.40	<0.40	<0.40	<0.40	<0.40
Methyl-t-Butyl Ether	ug/g	0.04	0.75	<0.040	<0.040	<0.040	<0.040	<0.040
Styrene	ug/g	0.04	0.7	<0.040	<0.040	<0.040	<0.040	<0.040
1,1,1,2-Tetrachloroethane	ug/g	0.04	0.058	<0.040	<0.040	<0.040	<0.040	<0.040
1,1,2,2-Tetrachloroethane	ug/g	0.04	0.05	<0.040	<0.040	<0.040	<0.040	<0.040
Toluene	ug/g	0.02	2.3	<0.020	<0.020	<0.020	<0.020	<0.020
Tetrachloroethylene	ug/g	0.04	0.28	<0.040	<0.040	<0.040	<0.040	<0.040
1,1,1-Trichloroethane	ug/g	0.04	0.38	<0.040	<0.040	<0.040	<0.040	<0.040
1,1,2-Trichloroethane	ug/g	0.04	0.05	<0.040	<0.040	<0.040	<0.040	<0.040
Trichloroethylene	ug/g	0.01	0.061	<0.010	<0.010	<0.010	<0.010	<0.010
Vinyl Chloride	ug/g	0.019	0.02	<0.019	<0.019	<0.019	<0.019	<0.019
m-Xylene & p-Xylene	ug/g	0.04	NV	<0.020	0.032	<0.020	<0.020	0.023
o-Xylene	ug/g	0.02	NV	<0.020	<0.020	<0.020	<0.020	0.025
Total Xylenes	ug/g	0.04	3.1	<0.020	0.032	<0.020	<0.020	0.048
Dichlorodifluoromethane	ug/g	0.04	16	<0.040	<0.040	<0.040	<0.040	<0.040
Dioxane, 1,4-	ug/g	-	1.8	-	-	-	-	-
Hexane(n)	ug/g	0.04	2.8	0.057	0.056	<0.040	<0.040	<0.040
Trichlorofluoromethane	ug/g	0.04	4	<0.040	<0.040	<0.040	<0.040	<0.040
1,3-Dichloropropene (cis + trans)	ug/g	0.05	0.05	<0.050	<0.050	<0.050	<0.050	<0.050
Polycyclic Aromatic Hydrocarbons								
Acenaphthene	ug/g	0.050	7.9	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Acenaphthylene	ug/g	0.050	0.15	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Anthracene	ug/g	0.050	0.67	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Benzo[a]anthracene	ug/g	0.050	0.5	<0.0050	0.0061	<0.0050	<0.0050	0.0086
Benzo[a]pyrene	ug/g	0.050	0.3	<0.0050	0.007	<0.0050	<0.0050	0.0085
Benzo[b]fluoranthene	ug/g	0.050	0.78	0.0052	0.011	<0.0050	<0.0050	0.011
Benzo[g,h,i]perylene	ug/g	0.050	6.6	<0.0050	0.005	<0.0050	<0.0050	<0.0050
Benzo[k]fluoranthene	ug/g	0.050	0.78	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Chrysene	ug/g	0.050	7	0.005	0.0071	<0.0050	<0.0050	0.0077
Dibenzo[a,h]anthracene	ug/g	0.050	0.1	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Fluoranthene	ug/g	0.050	0.69	<0.0050	0.015	<0.0050	<0.0050	0.015
Fluorene	ug/g	0.050	62	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Indeno[1,2,3-cd]pyrene	ug/g	0.050	0.38	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
1-Methylnaphthalene	ug/g	0.050	0.99	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
2-Methylnaphthalene	ug/g	0.030	0.99	0.0063	0.0062	<0.0050	<0.0050	<0.0050
Naphthalene	ug/g	0.010	0.6	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Phenanthrene	ug/g	0.050	6.2	0.015	0.015	<0.0050	<0.0050	0.0061
Pyrene	ug/g	0.050	78	0.0091	0.013	<0.0050	<0.0050	0.013
Methylnaphthalene (1&2)	ug/g	0.030	0.99	<0.0071	<0.0071	<0.0071	<0.0071	<0.0071
General Inorganics								
pH	pH Units	0.05	5-11	-	7.84	8.35	-	-

NV - No value listed in MECP site condition standards
- - Not Analyzed
ND - Not detected above laboratory method detection limits
Exceeds MECP Table 3 Residential site condition stand

Table 7: Groundwater Analytical Results
116 Albert Street, Ottawa, Ontario

			Sample ID:	BH1-26-GW1	DUP-06/16	BH2-26-GW1	BH3-26-GW1	BH4-26-GW1	TRIP BLANK
			Well Screen Depth:	1.8 - 3.3 m BFFS	Duplicate of BH1-26-GW1	1.8 - 3.3 m BFFS	1.5 - 3.1 m BFFS	1.6 - 3.1 m BFFS	Laboratory Supplied Blank Sample
			Sample Date:	June 16, 2026	June 16, 2026	June 16, 2026	June 16, 2026	June 16, 2026	June 16, 2026
			Laboratory Sample ID:	BE8B82	BE8B86	BE8B83	BE8B84	BE8B85	BE8B87
Parameter	Units	Method Detection Limit (MDL)	O.Reg. 153/04 Table 3: Residential Property Use Standards, Coarse Grained Soil						
Petroluem Hydrocarbons (PHCs)									
F1 PHCs (C6-C10)	µg/L	25	750	<25	<25	<25	<25	<25	<25
F2 PHCs (C10-C16)	µg/L	100	150	<90	<90	<90	<90	<90	<90
F3 PHCs (C16-C34)	µg/L	250	500	<200	<200	<200	<200	<200	<200
F4 PHCs (C34-C50)	µg/L	250	500	<200	<200	<200	<200	<200	<200
F4G PHCs (gravimetric)	µg/L	250	500	-	-	-	-	-	-
Volatile Organic Compounds (VOCs) including Benzene, Toluene, Ethylbenzene and Xylenes (BTEXs)									
Acetone	µg/L	10	130000	<10	<10	<10	<10	<10	<10
Benzene	µg/L	0.17	44	<0.17	<0.17	<0.17	<0.17	<0.20	<0.20
Bromodichloromethane	µg/L	0.5	85000	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
Bromoform	µg/L	1	380	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Bromomethane	µg/L	0.5	5.6	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
Carbon Tetrachloride		0.2	0.79	<0.20	<0.20	<0.20	<0.20	<0.19	<0.19
Chlorobenzene	µg/L	0.2	630	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
Chloroform	µg/L	0.2	2.4	3	2.8	0.88	4.6	5	<0.20
Dibromochloromethane	µg/L	0.5	82000	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
1,2-Dichlorobenzene	µg/L	0.5	4600	<0.50	<0.50	<0.50	<0.50	<0.40	<0.40
1,3-Dichlorobenzene	µg/L	0.5	9600	<0.50	<0.50	<0.50	<0.50	<0.40	<0.40
1,4-Dichlorobenzene	µg/L	0.5	8	<0.50	<0.50	<0.50	<0.50	<0.40	<0.40
1,1-Dichloroethane	µg/L	0.2	320	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
1,2-Dichloroethane	µg/L	0.5	1.6	<0.50	<0.50	<0.50	<0.50	<0.49	<0.49
1,1-Dichloroethylene	µg/L	0.2	1.6	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
Cis-1,2-Dichloroethylene	µg/L	0.5	1.6	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
Trans-1,2-Dichloroethylene	µg/L	0.5	1.6	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
1,2-Dichloropropane	µg/L	0.2	16	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
Cis-1,3-Dichloropropylene	µg/L	0.3	NV	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30
Trans-1,3-Dichloropropylene	µg/L	0.4	NV	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40
Ethylbenzene	µg/L	0.2	2300	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
Ethylene Dibromide	µg/L	0.2	0.25	<0.20	<0.20	<0.20	<0.20	<0.19	<0.19
Methyl Ethyl Ketone	µg/L	10	470000	<10	<10	<10	<10	<10	<10
Methylene Chloride	µg/L	2	610	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
Methyl Isobutyl Ketone	µg/L	5	140000	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Methyl-t-Butyl Ether	µg/L	0.5	190	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
Styrene	µg/L	0.5	1300	<0.50	<0.50	<0.50	<0.50	<0.40	<0.40
1,1,1,2-Tetrachloroethane	µg/L	0.5	3.30E+00	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
1,1,2,2-Tetrachloroethane	µg/L	0.5	3.2	<0.50	<0.50	<0.50	<0.50	<0.40	<0.40
Toluene	µg/L	0.2	18000	<0.20	<0.20	<0.20	<0.20	2	<0.20
Tetrachloroethylene	µg/L	0.2	1.6	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
1,1,1-Trichloroethane	µg/L	0.2	640	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
1,1,2-Trichloroethane	µg/L	0.5	4.7	<0.50	<0.50	<0.50	<0.50	<0.40	<0.40
Trichloroethylene	µg/L	0.2	1.6	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
Vinyl Chloride	µg/L	0.2	0.5	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
m-Xylene & p-Xylene	µg/L	0.2	NV	<0.20	<0.20	0.36	0.29	<0.20	<0.20
o-Xylene	µg/L	0.2	NV	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
Total Xylenes	µg/L	0.2	4200	<0.20	<0.20	0.36	0.29	<0.20	<0.20
Dichlorodifluoromethane	µg/L	1	4400	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Dioxane, 1,4-	µg/L	-	1900000	-	-	-	-	-	-
Hexane(n)	µg/L	1	51	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Trichlorofluoromethane	µg/L	0.5	2500	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
1,3-Dichloropropene (cis + trans)	µg/L	0.5	5.2	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
Polycyclic Aromatic Hydrocarbons									
Acenaphthene	µg/L	0.05	600	<0.050	<0.050	<0.050	<0.050	-	-
Acenaphthylene	µg/L	0.05	1.8	<0.050	<0.050	<0.050	<0.050	-	-
Anthracene	µg/L	0.05	2.4	<0.050	<0.050	<0.050	<0.050	-	-
Benz(a)anthracene	µg/L	0.05	4.7	<0.050	<0.050	<0.050	<0.050	-	-
Benzo(a)pyrene	µg/L	0.009	0.81	<0.0090	<0.0090	<0.0090	<0.0090	-	-
Benzo(b+j)fluoranthene	µg/L	0.05	0.75	<0.050	<0.050	<0.050	<0.050	-	-
Benzo(g,h,i)perylene	µg/L	0.05	0.2	<0.050	<0.050	<0.050	<0.050	-	-
Benzo(k)fluoranthene	µg/L	0.05	0.4	<0.050	<0.050	<0.050	<0.050	-	-
Chrysene	µg/L	0.05	1	<0.050	<0.050	<0.050	<0.050	-	-
Dibenz(a,h)anthracene	µg/L	0.05	0.52	<0.050	<0.050	<0.050	<0.050	-	-
Fluoranthene	µg/L	0.05	130	<0.050	<0.050	<0.050	<0.050	-	-
Fluorene	µg/L	0.05	400	<0.050	<0.050	<0.050	<0.050	-	-
Indeno(1,2,3-c,d)pyrene	µg/L	0.05	0.2	<0.050	<0.050	<0.050	<0.050	-	-
Methylnaphthalene, 1+2-	µg/L	0.071	1800	<0.050	<0.071	<0.050	<0.050	-	-
Methylnaphthalene, 1-	µg/L	0.05	1800	<0.050	<0.050	<0.050	<0.050	-	-
Methylnaphthalene, 2-	µg/L	0.05	1800	<0.050	<0.050	<0.050	<0.050	-	-
Naphthalene	µg/L	0.05	1400	<0.030	<0.050	<0.030	<0.030	-	-
Phenanthrene	µg/L	0.03	580	<0.050	<0.030	<0.050	<0.050	-	-
Pyrene	µg/L	0.05	68	<0.050	<0.050	<0.050	-	-	-

m BFFS - metres below finished floor slab
NV - No value listed in MECP site condition standards
- - Not Analyzed
ND - Not detected above laboratory method detection limits
Exceeds MECP site condition standards

Appendix A

Sampling and Analysis Plan

Sampling and Analysis Plan

116 Albert Street
Ottawa, Ontario

Prepared for:
Metcalf Realty
Company Limited



6/1/2026

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1. Background

Lopers & Associates ("Lopers") was retained by Metcalfe Realty Company Limited ("Metcalfe") to complete a Phase Two Environmental Site Assessment ("Phase Two ESA") of the commercial property with Civic address No. 116 Albert Street, Ottawa, Ontario ("Site" or "Phase Two Property"). The Phase Two Property consists of a 10-storey commercial office building with 2 sub-grade levels.

Lopers is concurrently completed a Phase One Environmental Site Assessment ("Phase One ESA") (Reference No. LOP26-044A, not issued at the time of this SAP) for Metcalfe at the Property. The Phase One ESA identified the presence of 1 potentially contaminating activity ("PCA") at the Property and 2 additional PCAs at immediately adjacent properties which were interpreted to represent areas of potential environmental concern (APECs).

Table 1: Potentially Contaminating Activities Interpreted as Areas of Potential Environmental Concern

APEC Report Reference No.	Location of APEC on Phase One Property	PCA	Location of PCA (on-site or off-site)	Contaminants of Potential Concern	Media Potentially Impacted (Groundwater, soil and/or Sediment)
APEC #1	Southwest portion of the Phase One Property	O.Reg. 153/04 PCA Item 28: Gasoline and Associated Products Storage in Fixed Tanks	On-site: Historical fuel oil aboveground storage tank	PHCs / BTEXs	Soil Groundwater
APEC #2	South portion of the Phase One Property	O.Reg. 153/04 PCA Item 37: Operation of Dry Cleaning Equipment (where chemicals are used)	Off-Site: Former dry cleaner at 119 Slater Street, adjacent to south-central of Phase One Property	VOCs	Groundwater
APEC #3	Southeast portion of the Phase One Property	O.Reg. 153/04 PCA Item 28: Gasoline and Associated Products Storage in Fixed Tanks	Off-Site: Former UST at 88 Metcalfe Street, adjacent to southeast of Phase One Property	PHCs / BTEXs	Soil Groundwater

Based on the identification of APECs at the Phase One Property, it was recommended that a Phase Two Environmental Site Assessment Report be completed to provide documentation that the Property meets the soil and groundwater quality standards applicable to its future use.

The Phase Two ESA was to be completed in conjunction with a geotechnical investigation. The scope of work for the Phase Two ESA/geotechnical investigation included drilling 4 boreholes at the Phase Two Property. All 4 of the boreholes will be instrumented with groundwater monitoring wells with screens installed in the shallow bedrock.

In the event that additional contaminants of APECs are identified during the drilling or sampling fieldwork, additional scope of work will be discussed with BRIGIL to complete the Phase Two ESA.

2. Planning Site Investigation - Specific Objectives

The following are the specific objectives for planning a site investigation of the Phase Two Environmental Site Assessment, as defined in O.Reg. 153/04.

1. To plan an investigation that will achieve the general objectives of a Phase Two Environmental Site Assessment,
 - i. through the use of an appropriate and complete information base concerning the Phase Two Property, and
 - ii. through the conduct of an investigation based both on information obtained before the Phase Two Environmental Site Assessment begins and on the incorporation of information obtained during the Phase Two Environmental Site Assessment.
2. To develop a sampling and analysis plan that will adequately assess all areas of the Phase Two Property where contaminants may be present in land or water on, in or under the Property.
3. To develop a quality assurance program that is designed to effectively limit errors and bias in sampling and analysis through implementation of assessment and control measures that will ensure data are useful, appropriate and accurate in the determination of whether the Phase Two Property, or any record of site condition (RSC) property within it, meets applicable site condition standards and any standards specified in a risk assessment.

3. Underground Utility Service Locates

Prior to completing the Phase Two ESA field investigation activities, public underground locates will be coordinated through Ontario One Call. As it is understood that the Site is developed with a commercial office building and based on available construction drawings, that no privately owned underground services or infrastructure are present, with the exception of storm

and sanitary drainage pipes, therefore private locates will also be completed in the proposed drilling locations.

The locations of the proposed boreholes will be reviewed in relation to the public underground locates and locations will be modified accordingly if conflicts exist between any location or if the location is in close proximity to an active underground service.

A copy of the public underground locates will be retained by Lopers' field personnel during all excavation components of the fieldwork.

4. Planning Site Investigation - Specific Requirements

The qualified person has ensured the following requirements were met in planning a site investigation. The Phase One conceptual site model for the Phase One Environmental Site Assessment report was used in conjunction with other information in determining:

i. Media for Investigation

Soil and groundwater sampling and analysis for the purpose of assessing environmental quality will be completed as part of the Phase Two ESA.

There are no surface water bodies at the Phase Two Property, as such, sediment and surface water quality sampling and analysis will not be completed as part of this Phase Two ESA.

ii. Locations and Depths for Sampling

A total of 4 borehole locations have been proposed to provide coverage of the APECs identified at the Phase Two Property. Boreholes will be distributed across the entire Site to provide lateral coverage of the identified APECs.

Sampling depths will include as a minimum, collection of samples in 0.6 m intervals from the ground surface to native soil conditions within the groundwater table. Borehole/monitoring wells depths are proposed to be drilled to approximately 3 m to intercept the shallow bedrock groundwater table in APECs where groundwater quality assessment is required.

iii. Parameters for Laboratory Analysis.

The parameters for laboratory analysis will be selected based on the contaminants of potential concern for each APEC as well as the field screening observations.

A historical heating oil Aboveground Storage Tank (AST) was located at the Phase One Property; this AST, PCA #1 is associated with O.Reg. PCA: Gasoline and Associated Products Storage in Fixed Tanks. This PCA has been interpreted to represent APEC #1 for the Phase One Property.

The contaminants of potential concern ("CPCs") associated with fuel storage are Petroleum Hydrocarbons (PHCs) and benzene, toluene, ethylbenzene and xylenes (BTEXs).

A historical dry cleaner was located at 119 Slater Street, adjacent to the south of the Phase One Property; this dry cleaner, PCA #2 is associated with O.Reg. PCA: Operation of Dry Cleaning Equipment (where chemicals are used). This PCA has been interpreted to represent APEC #2 for the Phase One Property. The CPCs associated with dry cleaning operations are volatile organic compounds ("VOCs").

A historical heating oil storage Underground Storage Tank (UST) and retail heating oil distributor was located at 82-88 Metcalfe Street, adjacent to the south of the Phase One Property; this UST, PCA #57 is associated with O.Reg. PCA: Gasoline and Associated Products Storage in Fixed Tanks. This PCA has been interpreted to represent APEC #3 for the Phase One Property. The CPCs associated with fuel storage are PHCs and BTEXs.

PAHs were also included as a CPC as they are commonly present in historical fill material, which may be present at adjacent properties.

The contaminants of concern for a particular sample will be based on the relative location and depth of the sample, visual and/or olfactory observations and combustible vapour screening concentrations.

Information obtained after the completion of the phase one environmental site assessment shall be used to modify the investigation, as appropriate.

5. Quality Assurance and Quality Control

The qualified person has ensured that there is a quality assurance and quality control program, data quality objectives, standard operating procedures and a description of any physical impediments that interfere with or limit the ability to conduct sampling and analysis.

The quality assurance and quality control program includes the following requirements:

5.1 Field Equipment Decontamination

All non-dedicated sampling and monitoring equipment must be cleaned following each use.

The split spoons, which are the only media to come into contact with the soil samples, will be washed using soap and water and a scrub brush between samples to minimize the potential for cross-contamination among samples. The field technician will use sterile nitrile gloves, which are to be changed prior to the handling of each soil sample to further reduce the potential of

cross-contamination. The flights of the hollow stem augers are to be cleaned manually following each borehole.

Water level monitoring equipment, including water level meters and interface probes will be decontaminated with an environmentally safe cleaning solution and rinsed with deionized water between water level readings to prevent cross contamination.

The field technician will change dedicated sterile nitrile gloves prior to initiating work at each monitoring well and change gloves prior to sample collection to minimize the potential for cross-contamination.

5.2 Trip Blanks

Since groundwater samples are to be analyzed for volatile organic compounds (VOCs), one trip blank sample shall be submitted for laboratory analysis with each laboratory submission of groundwater samples.

5.3 Field Duplicates

Sufficient field duplicate samples shall be collected in each medium (soil and groundwater) being sampled, so that at least one field duplicate sample can be submitted for laboratory analysis for every ten samples submitted for laboratory analysis.

At least one field duplicate sample shall be submitted for laboratory analysis for every ten samples submitted for laboratory analysis.

One field duplicate will be submitted from each medium sampled for PHCs, VOCs and PAHs which are the parameter suites identified as a contaminants of concern in APECs #1 through #3 as part of the previously prepared Phase One ESA.

5.4 Equipment Calibration

Field screening of the soil samples will be completed using an RKI Instruments Model Eagle-2 combustible gas detector ("RKI Eagle"). The RKI Eagle used for soil sample screening as part of this Phase Two ESA will be obtained from Maxim Environmental and Safety Inc. and will be calibrated prior to use.

Measurements of the groundwater quality field parameters will be completed to determine stabilization of these parameters prior to sampling. These measurements will be completed using Horiba U-52 groundwater quality measurement device ("Horiba"). The Horiba used for groundwater quality parameter stabilization measurements as part of this Phase Two ESA will be obtained from Maxim Environmental and Safety Inc. and will be calibrated prior to use.

5.5 Data Quality Objectives

The data quality objectives for all types of field data collected during the Phase Two Environmental Site Assessment field investigation that set the level of uncertainty in environmental data shall be such that,

- (a) the decision-making is not affected; and
- (b) the overall objectives of the investigation are met.

6. Standard Operating Procedures

Standard operating procedures were developed for all of the following field investigation methods used in the field investigation.

6.1 Borehole Drilling

The drilling field program will be completed under full time supervision of Lopers & Associates personnel. The drilling subcontractor retained for the Phase Two ESA is OGS Inc., located at 5518 Appleton Side Road, Almonte, Ontario, K0A 1A0. The drill rig used for the Phase Two ESA will be a tripod mounted portable Hilti drill, equipped with stainless steel split spoons. Operation of the drilling equipment is the responsibility of the drilling subcontractor, who is trained and competent in the operation of this equipment.

The field technician logs the drilling and recovery of soil samples from each borehole, noting the soil type, physical and environmental characteristics at each borehole location on the field borehole logs.

6.2 Soil Sampling

Samples are to be collected from auger cuttings or split spoons at the ground surface for surficial samples (0-0.6 m below ground surface (m BGS)) and then using split spoons for subsequent samples. Split spoon samples are generally not collected from surficial depths, as poor recovery of loose packed fill material does not yield sufficient volume of samples required for field screening or laboratory analysis. Split spoon samples, collected in 0.6 m segments, are to be recovered at continuous 0.76 m intervals; the additional 0.16 m between split spoon samples will be over-drilled to provide undisturbed field measurement of geotechnical parameters (blow counts) and to prevent cave in materials from stratigraphic units above the intended sampling intervals from being collected at unrepresentative depths during sampling.

Soil samples are initially collected in Ziploc bags for initial screening as part of sample selection. Soil samples selected for laboratory analysis are collected in dedicated clear glass jars prepared and provided by the analytical laboratory. Soil samples collected for BTEXs/VOCs and the F1

range of PHCs analysis are collected using a dedicated graduated syringe provided by the laboratory and placed directly into a glass vial with methanol preservative. Analytes and associated preservatives are specified on each jar/vial by the laboratory. Each jar/vial sample set is provided with a unique sample identifier, project number and date of sampling in the field.

6.3 Field Soil Screening Measurements

Initial field screening of the soil samples will consist of visual and olfactory observations made at the time of sample collection during the drilling program.

Additional field screening of the soil samples will be completed using an RKI Instruments Model Eagle-2 combustible gas detector ("RKI Eagle"). The RKI Eagle is capable of measuring combustible vapours at concentrations ranging from 0 parts per million (PPM) to 50% of the lower explosive limit (LEL). The RKI Eagle is also capable of measuring VOC vapours at concentrations ranging from 0 ppm to 1000 ppm.

6.4 Monitoring Well Installation

Installation of monitoring wells in selected boreholes is to be completed by Downing, who is a licensed well driller in accordance with O.Reg. 903. The wells will be installed using slotted PVC No. 10 monitoring well screens, which are 51 mm in diameter; these screens are to be installed at the base of each of the aforementioned boreholes, directly above the bedrock surface. Well screens can range from 1.5 m to 4.5 m in length. The monitoring wells are extended to approximately 0.15 m below the surface grade with PVC riser, also 51 mm in diameter. A threaded PVC end cap should be installed at the base of the screen to prevent sediment infiltration, while a J-Plug is installed at the top of the riser to present surface influence.

The annular space in each monitoring well is to be backfill with clean silica sand to approximately 0.3 m above the monitoring well screens. A layer of bentonite chips is then used to make a hydraulic seal above the sand pack to near the ground surface. The monitoring wells are to be completed with flushmount aluminum protective casings, which were backfilled with sand to provide drainage from the protective casing.

6.5 Elevation Survey

All four boreholes/monitoring wells are to be drilled at least 2 storeys below the surface grade elevation, as such, a geodetic elevation survey is not practical. The surface grade elevation at Albert Street is approximately 70.68 m above mean sea level ("AMSL") based on the Topographic Survey completed by Fairhall, Moffatt & Woodland, completed March 20, 2026. Metcalfe provided a development concept plan which indicated the finished floor elevations, including the sub-basement (2nd underground storey) where 3 of the boreholes are to be drilled. The borehole BH1-26 will be drilled in the former fuel storage tank room, which is approximately 1 m below the boiler room finished floor elevation (63.67 m ASL) and had an interpreted

elevation of approximately 62.67 m ASL, while the boreholes BH2-26, BH3-26 and BH4-26, located on the 2nd underground storey have reported floor slab elevations of 64.58 m ASL.

6.6 Monitoring Well Development;

Groundwater monitoring wells will be developed on the day of drilling using LDPE tubing and a footvalve. At least three and up to ten well volumes will be removed from the monitoring wells in order to remove as much sediment as possible from the wells. In cases where the monitoring well goes dry prior to purging three well volumes, the well should be purged dry a minimum of three times, waiting at least one hour between purging events. The LDPE tubing should be removed from the monitoring wells following well development.

6.7 Field Measurement of Water Quality Indicators

Field measurement of water quality parameters were collected at regular intervals (0 L, 0.5 well volumes, 1 well volume, 2 well volumes, etc.) during purging of the monitoring wells prior to sampling. The Horiba was placed in a flow-through cell and water quality parameters were measured until they were found to stabilize to within approximately 10% of the previous measurements prior to sample collection.

6.8 Groundwater Sampling

Follow a period of stabilization after drilling and monitoring well development (1 week recommended), static groundwater elevations are measured relative to the top of piezometer at each groundwater monitoring well on the day of sampling, prior to disturbance of the water column.

Following static groundwater elevation measurements, 6 mm LDPE tubing is placed in each of the monitoring wells. The LDPE tubing is connected to silicon tubing, run through a peristaltic pump set to low flow (approximately 0.2-0.5 L/minute) during purging and sampling. The peristaltic pump is used to avoid mixture of sediment into the groundwater column and prevent volatilization during sample collection. The monitoring wells are purged on the day of sampling while water quality parameters were measured and stabilize as noted above.

Groundwater samples are collected in dedicated amber glass bottles and vials or plastic bottles prepared and provided by the analytical laboratory. Analytes and associated preservatives are specified on each bottle by the laboratory. Each bottle sample set will be provided with a unique sample identifier, project number and date of sampling in the field. Samples for PHCs, BTEXs, VOCs, PAHs and general chemistry are unfiltered.

Appendix B

Underground Utility Locates

From: solutions@on1call.com
To: [Luke Lopers](#)
Subject: Request 2026236536
Date: June 1, 2026 3:41:10 PM



LOCATE REQUEST CONFIRMATION

REQUEST #: 2026236536	REQUEST PRIORITY: STANDARD	REQUEST TYPE: REGULAR	WORK TO BEGIN DATE: 06/08/2026
Update of Request #	Project #:	Call Date: 06/01/2026 04:31:07 PM	Transmit Date: 06/01/2026 04:40:05 PM

REQUESTOR'S CONTACT INFORMATION

Contractor ID: 343253

Contact Name: LUKE LOPERS

Company Name: LOPERS & ASSOCIATES

Address: 30 LANSFIELD WAY, OTTAWA, ON, K2G3V8

Email: Luke@Lopers.ca

Primary Phone #: (613) 327-9073

Cell Phone #: (613) 327-9073

Contact Name: LUKE LOPERS

Contact #: (613) 327-9073

DIG INFORMATION

Region/County: OTTAWA

Community:

City: OTTAWA

Address: 116, ALBERT ST

Intersecting Street 1: OCONNOR ST

Intersecting Street 2: METCALFE ST

Work Done for: PROPERTY OWNER

Reason for Work: ENVIRONMENTAL

Dig Method: Machine Dig

Depth: More than 15 Feet

Pre-Marked: Area Not Pre-Marked

Property Type: Private Property

Site Meeting: No

Work End Date:

ADDITIONAL INFORMATION

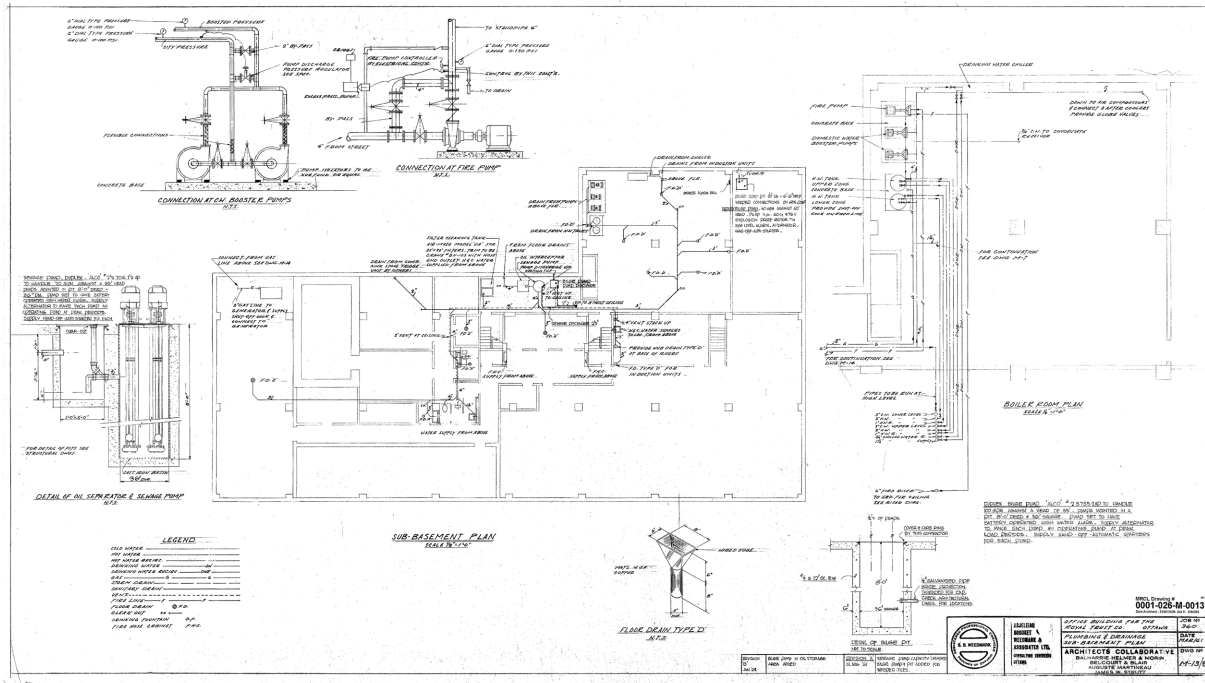
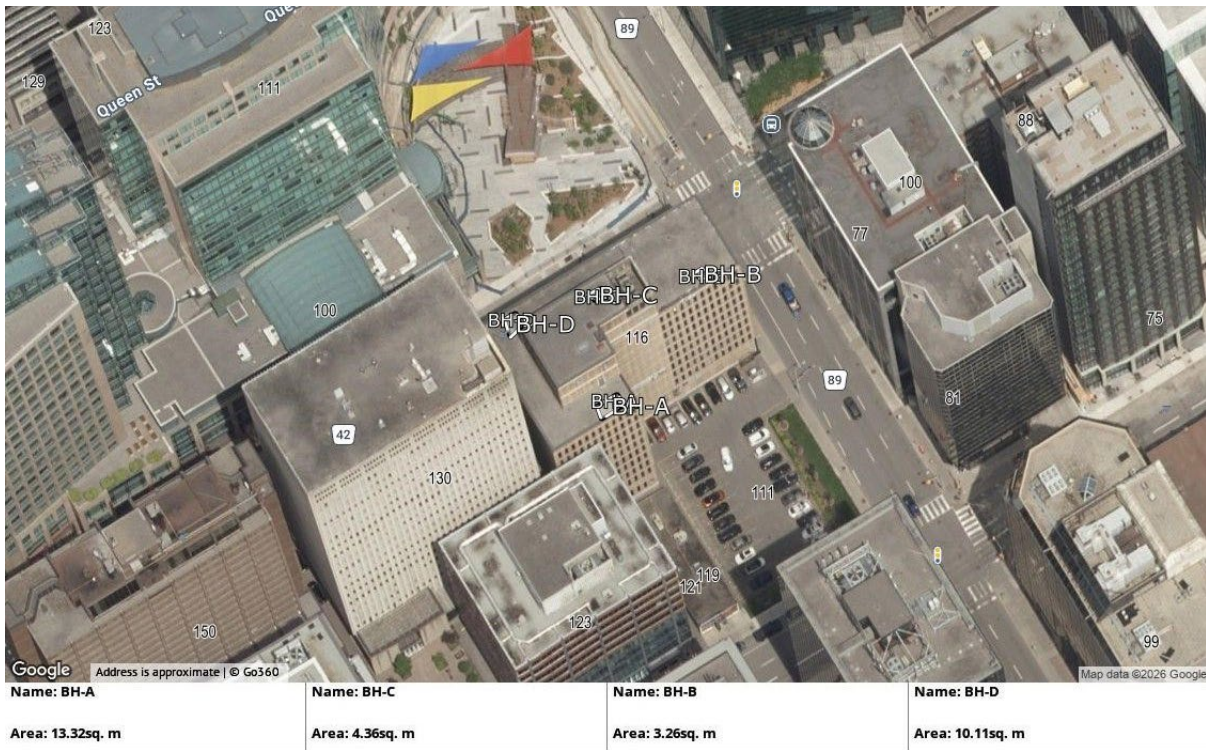
QUALIFYING INFORMATION

DRILLING BOREHOLES FOR ENVIRONMENTAL & GEOTECHNICAL ASSESSMENTS. BOREHOLES TO BE DRILLED IN SUB-BASEMENT (B2) LEVEL OF EXISTING BUILDING WITH PORTABLE DRILLING EQUIPMENT.

MEMBERS NOTIFIED: The following owners of underground infrastructure in the area of your excavation site have been notified.

Member Name	Station Code	Initial Status
ZAYO CANADA INC (ZAYOON10)	ZAYOON10	Notification sent
HYDRO OTTAWA (HOT1)	HOT1	Notification sent
VIDEOTRON SENC (VDT1)	VDT1	Notification sent
TELECON FOR GROUP TELECOM (360OTT)	360OTT	Notification sent
PROMARK FOR ENBRIDGE GAS (ENOE01)	ENOE01	Notification sent
BELL CANADA (BCOE01)	BCOE01	Notification sent
PRIMUS MANAGEMENT ULC (PMT01)	PMT01	Notification sent
CLI FOR ROGERS (ROGOTT01)	ROGOTT01	Notification sent
CITY OF OTTAWA WATER/SEWER (OTWAWS01)	OTWAWS01	Notification sent
CITY OF OTTAWA TRAFFIC SIGNALS (OTWATS01)	OTWATS01	Notification sent
PROMARK FOR TELUS (TELOE01)	TELOE01	Notification sent
PROMARK FOR HIBOO NETWORKS (HIBOO01)	HIBOO01	Notification sent
PROMARK FOR BIRCH HILL TELECOM (BHTI01)	BHTI01	Notification sent
BLACK AND MC DONALD FOR CITY OF OTTAWA STREET LIGHTS (OTWASL01)	OTWASL01	Notification sent

MAP SELECTION: Map Selection provided by the Excavator through Ontario One Call's Map tool or through agent interpretation by phone



their locates or request a status. ON1Call will not be provided with a locate status from the member regarding this request and therefore, cannot provide further information at this time. For locate status contact information please refer to our website.

You have a valid locate when...

- You have reviewed your locate request information for accuracy. UPDATE your request IMMEDIATELY if changes are needed and obtain a corrected locate request confirmation.

NOTE: Intersecting streets are often suggested by Ontario One Call's system, in some circumstances they may not reflect the closest intersecting streets to your excavation. You can change the intersecting streets before submitting the request by going through the "Review" page of your locate request, and editing any inaccurate information. Intersecting streets are for reference only, and unless you change the streets manually, you will not be asked to correct them if they are chosen by the system. If you don't agree with a street name, make sure to edit the request before you submit it, if you found a mistake after submitting the request, update your requests immediately on the web portal.

- You have obtained locates or clearances from all ON1Call members listed in this request before beginning your dig.

You've met your obligations when...

- You respect the marks and instructions provided by the locators and dig with care; the marks and locator instructions MUST MATCH. You must wait for responses from all members notified on your locate request before beginning to dig..
- You have obtained any necessary permits from the municipality in which you are digging.
- You have made Ontario One Call aware if you have come across any new or unlisted infrastructure in the public right of way AND stopped digging to prevent damages while we review.
- You have arranged for locates for your private lines on your private property - where applicable.

What does "Cleared" mean in the "Initial Status" section?

1. The information that you have provided about your dig will not affect that member's underground infrastructure and they have provided you with a clearance, if anything about your excavation changes, please ensure that you update your request immediately.

What are the images under "Map Selection"?

1. A drawing created by an excavator directly within Ontario One Call's Web request tool, this is expected to be an accurate rendition of the dig site, and it is the excavator's responsibility to ensure the location matches the information they provide under the 'Dig Location'; section OR;

2. A drawing created by an Ontario One Call agent, this drawing is based on a verbal description by phone of the area by the excavator. Agents may create drawings that are larger than the proposed dig to minimize risk of interpretation. It is the excavator's responsibility to review these map selections for accuracy. Changes can be made by the excavator through the Web request tool, to learn how visit www.ontarioonecall.ca.

3. All drawings dictate which members are notified.

Primary Locate Sheet



OTTLocateFollowup@Promark-Telecon.ca

Request #2026236536

Phone 613-723-9888 Toll Free: 1-800-371-8866

NORMAL

Location of underground infrastructures

Utilities Located :

☐ Bell	☐ Telus	☐ Hydro One	☐ 360
☐ Gas	☐ Elexicon	☐ Hydro Ottawa	☐ Zayo
☐ BHT	☐ Rogers	☐ Videotron	

Revised Excavation Date

Excavation Date

2026-06-08 5:00:00 PM

Status

STANDARD

Homeowner ☐

Requested by:

LUKE LOPERS

Company:

LOPERS & ASSOCIATES

Phone:

(613)-327-9073 ext.

Fax/email:

LUKE@LOPERS.CA

Contractor ☐Project ☐

Appt Date:

Received Date:

2026-06-01 4:40:22 PM

Locate Address:

116, ALBERT ST

mm/dd/yyyy

mm/dd/yyyy

OCONNOR ST

METCALFE ST

Type of work:

ENVIRONMENTAL

City:

OTTAWA

Caller's Remarks:

DRILLING BOREHOLES FOR ENVIRONMENTAL & GEOTECHNICAL ASSESSMENTS. BOREHOLES TO BE DRILLED IN SUB-BASEMENT (B2) LEVEL OF EXISTING BUILDING WITH PORTABLE DRILLING EQUIPMENT.

-75.696668, 45.421407, NB_SEGMENTS::1, NO_PLAN::613 567, OTWASL01 BLACK AND MC DONALD ,BHT01 PROMARK FO, BHT01 PROMARK FOR BIRCH HI,HIB0001PROMARK FOR, HIB0001PROMARK FOR HIBOO NE,TELOE01PROMARK FOR, TELOE01PROMARK FOR TELUS (T,OTWATS01 CITY OF OT,

Bell Mark Clear	Gas Mark Clear	Hydro Ottawa Mark Clear	Street Lighting Mark Clear	Elexicon Mark Clear	Hydro One Mark Clear	Rogers Mark Clear	360 Mark Clear	Videotron Mark Clear
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LOCATED AREA: EXCAVATOR SHALL NOT WORK OUTSIDE LOCATED AREA WITHOUT OBTAINING ANOTHER LOCATE.Records Reference: ☐ GMobile ☐ LAC Multiviewer☐ Third Party Notification☐ FRA #☐ GO360Field Notes, As-Laid,
Service Sketches:Locator
Remarks:

Apply Sticker Here if Required

Excavator shall notify & receive a clearance from utility prior to excavation for the following:

Telecon

☐ High Priority Cable☐ Central Office VicinityGAS MATERIAL TYPE: ☐ Steel (ST)☐ Plastic (PE)☐ Copper (CP)Method of Field Marking: ☐ Paint ☐ Stakes ☐ Flags ☐ Offset Flags ☐ Other

Colour Indicator: Telecom = Orange Gas = Yellow Traffic / Hydro = Red Sewer = Green Water = Blue

Caution: Bell and 360 locates are valid for the life of the excavation. Telus is valid for **120** days. Rogers locates are valid for **90** days unless an extension approval is provided by Rogers. Unless otherwise indicated, all other utility locates are VOID after **60** days. For utility specific details, see attached document(s).

Caution: Any changes to location or nature of work will require a new locate. The excavator must not work outside the located area without obtaining a new locate. Privately owned services within the located area have not been marked - check with service / property owner. For all locate requests contact Ontario One Call at **1-800-400-2255** or online at **ontarioonecall.ca**

Locator Name: LACHAPELLE BRANDEN

Start Time: _____

☐ Mark & Fax☐ Left on Site☐ Emailed

ID #: EMP002100

End Time: _____

Print: _____

Date _____

Total Hours: _____

Signature: _____

A copy of this Primary Locate Sheet and Auxiliary Locate Sheet(s) must be on site and in the hands of the machine operator during work operations. If sketch and markings do not coincide, the Excavator must obtain a new locate.

Primary Locate Sheet



Location of underground infrastructures

OTTLocateFollowup@Promark-Telecon.ca

Phone 613-723-9888 Toll Free: 1-800-371-8866

Request #2026238538

NORMAL

Utilities Located :

☐ Bell	☐ Telus	☐ Hydro One	☐ 360
☐ Gas	☐ Elexicon	☐ Hydro Ottawa	☐ Zayo
☐ BHT	☐ Rogers	☐ Videotron	

Revised Excavation Date

Excavation Date

6/8/2026 5:00:00 PM

Status

STANDARD

Homeowner ☐Contractor ☒Project ☐Requested by:
LUKE LOPERSCompany:
LOPERS & ASSOCIATESPhone:
(813)-327-9073 ext.Fax/email:
LUKE@LOPERS.CA

Appt Date:

N/A

Received Date:
6/1/2026 4:40:22 PMLocate Address: 116, ALBERT ST
OCONNOR ST METCALFE ST

Type of work:

ENVIRONMENTAL

City:

OTTAWA

Caller's Remarks:

DRILLING BOREHOLES FOR ENVIRONMENTAL & GEOTECHNICAL ASSESSMENTS. BOREHOLES TO BE DRILLED IN SUB-BASEMENT (B2) LEVEL OF EXISTING BUILDING WITH PORTABLE DRILLING EQUIPMENT.

-75.898888, 45.421407, NB_SEGMENTS::1, NO_PLAN::813 587, OTWASL01 BLACK AND MC DONALD ,BHT01 PROMARK FO, BHT01 PROMARK FOR BIRCH HI,HIBOO01PROMARK FOR, HIBOO01PROMARK FOR HIBOO NE,TELOE01PROMARK FOR, TELOE01PROMARK FOR TELUS (T,OTWATS01 CITY OF OT, OTWATS01 CITY OF OTTAWA TRAF,OTWAS01 CITY OF OTTAWA WATER,ROGOTT01 CL FOR, ROGOTT01 CL FOR ROGERS (ROGO,BMT01 PRIMIS

Bell Mark Clear	Gas Mark Clear	Hydro Ottawa Mark Clear	Street Lighting Mark Clear	Elexicon Mark Clear	Hydro One Mark Clear	Rogers Mark Clear	360 Mark Clear	Videotron Mark Clear
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LOCATED AREA: EXCAVATOR SHALL NOT WORK OUTSIDE LOCATED AREA WITHOUT OBTAINING ANOTHER LOCATE.Records Reference: ☐ GMobile ☐ LAG Multiviewer☐ Third Party Notification☐ FRA #☐ GO360Field Notes, As-Laid,
Service Sketches:Locator
Remarks:**WE DO NOT PROVIDE LOCATE INSIDE BUILDINGS****PLEASE ACQUIRE A PRIVATE LOCATE (DIG AT YOUR OWN RISK)**

Apply Sticker Here if Required

Excavator shall notify & receive a clearance from utility prior to excavation for the following: ☐ Telecom ☐ High Priority Cable ☐ Central Office Vicinity ☐ GAS MATERIAL: ☐ Steel (ST) ☐ Plastic (P) ☐ Copper (CP)

Method of Field Marking: ☐ Paint ☐ Stakes ☐ Flags ☐ Offset Flags ☐ Other

Colour Indicator: Telecom = Orange Gas = Yellow Traffic / Hydro = Red Sewer = Green Water = Blue

Caution: Bell and 360 locates are valid for the life of the excavation. Telus is valid for 120 days, Rogers locates are valid for 90 days unless an extension approval is provided by Rogers. Unless otherwise indicated, all other utility locates are VOID after 60 days. For utility specific details, see attached document(s).

Caution: Any changes to location or nature of work will require a new locate. The excavator must not work outside the located area without obtaining a new locate. Privately owned services within the located area have not been marked - check with service / property owner. For all locate requests contact Ontario One Call at 1-800-400-2255 or online at ontarioonecall.ca

Locator Name: LACHAPELLE BRANDEN

Start Time: 14:00

☐ Mark & Fax ☐ Left on Site ☒ Emailed

ID #: EMP002100

End Time: 14:15

Print: N/A

Date: 6/2/2026

Total Hours: 15min

Signature: N/A

A copy of this Primary Locate Sheet and Auxiliary Locate Sheet(s) must be on site and in the hands of the machine operator during work operations. If sketch and markings do not coincide, the Excavator must obtain a new locate.

Supplemental Locate Sheet

Date Located:

*

TELUS Policy:
Any DAMAGE to TELUS facilities MUST be reported to your Provincial One Call Centre. **Please Note:** In Quebec, Ontario and Atlantic Canada, contact the **Cable Locate Support Center at 1-800-980-0030**

*

Crossing Agreements **MUST** be in place prior to working within 5.0 meters of **FOTS (Fibre Optic Transmission System)**. In SK, MB & ON contact, anthony.segreto@telus.com In QC contact TQ@telus.com

*

A copy of the Primary, Auxiliary and Supplemental Locate Sheet(s) **must** be on site and in the machine operator possession during all work operations. Should sketch and markings not coincide, a new locate **MUST** be obtained.

LOCATE LIFESPAN VALIDITY PERIOD - up to 90 Days

Locates are valid for Life of the Project (Maximum 90 days) and must be renewed before the locate expires. This applies to upcoming work as well as current activities

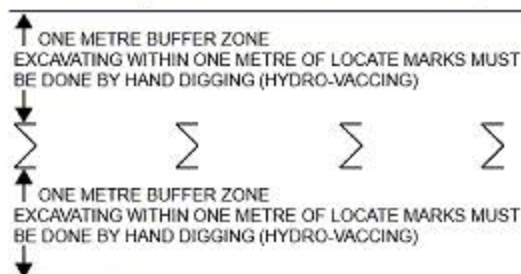
Requesting relocates with field marks within locate validity period, 85 days.

- ❖ Contractor/excavators are responsible to **protect and maintain the locate marks for the life of the project**. If the locate marks could be disturbed or destroyed, the contractor/excavators must provide more permanent or offset marks or references that will **not be disturbed or destroyed** (Refer to CCGA Excavator Caution below)
- ❖ Contractor/excavators are responsible to **create/maintain a "Locate Marks Maintenance Records"** that records when damaged or destroyed locate marks were replaced and/or existing locate marks were verified or refreshed. Utility provided (original) locate marks are to be verified and refreshed every 7 days to ensure visibility. In the event of damage to underground utility(s), contractor/excavators are responsible to provide a copy of these records to the utility owners upon request.
- ❖ Contractor/excavators will be held responsible for any damages resulting from failure in maintaining visible locate marks at their job sites and the supporting "Locate Marks Maintenance Records".
- ❖ Relocates of TELUS facilities with marks, within the validity period of an original locate, will be the responsibility of the contractors/excavators. TELUS will not dispatch a relocate ticket to its Locate Service Provider. In order to refresh your field marks,
 - The contractor/excavators must refer to the original Primary Locate Sheet and use the provided measurements as a guide to refresh or replace missing locate markings or,
 - If relocates are required, it is the contractor/excavators responsibility to hire TELUS's approved Locate Service Provider at their own expense. The Locate Service Provider will contact the contractor/excavator when required to meet on site or will provide a locate sheet by email
 - Saskatchewan & Manitoba: Wrangler Locating Ltd. at 1-877-714-3356
 - Ontario: Canadian Locators at 1-905-479-5674
 - Québec: Promark-Télécon at 1-888-347-3637
- ❖ If contractor/excavator is aware of or suspects there's been any changes to underground utilities within their work area during a valid request period, they're to place a new locate request at the One Call Centre.

***** CANADIAN COMMON GROUND ALLIANCE (CCGA) - EXCAVATOR CAUTION *****

THE LOCATE MARKS PROVIDED BY THE OPERATORS OF BURIED FACILITIES ARE TEMPORARY AND IF THEY WILL BE DISTURBED OR DESTROYED BY THE GROUND DISTURBER'S ACTIVITIES, THE GROUND DISTURBER MUST PROVIDE MORE PERMANENT OR OFFSET MARKS OR REFERENCES THAT WILL NOT BE DISTURBED. GROUND DISTURBER ARE TO REFRESH THE LOCATE MARKS USING THE MEASUREMENTS PROVIDED ON THE PRIMARY LOCATE SHEET (SKETCH). IF ANY DELAYS SHOULD OCCUR IN ACTING ON THE LOCATE INFORMATION AS GIVEN, OR SHOULD LOCATE SKETCH NOT COINCIDE WITH MARKS ON THE GROUND, A NEW LOCATE REQUEST MUST BE OBTAINED. ANY CHANGES TO LOCATE OR NATURE OF WORK REQUIRES A NEW LOCATE REQUEST. THE EXCAVATOR IS RESPONSIBLE FOR THE REMOVAL OF ALL THE FLAGS OR OTHER MARKS UPON COMPLETION OF EXCAVATION ACTIVITIES.

BUFFER ZONE - LOCATOR'S PAINT MARKS The hand expose zone is defined as the horizontal alignment including 1 meter on either side of the outside edges of the chevron marks. If there are flags/pins only, the hand expose zone extends 1.25 meters on either side of the flag/ pin. In both cases the hand expose zone extends to a vertical depth equal to the excavation depth plus 0.3m.



You are RESPONSIBLE for DAMAGE caused to any facilities by your operations within the horizontal alignment of the locate marks independent of depth. By accepting this locate, you acknowledge and agree to ALL terms & conditions outlined!

From: [Sarvesh Gupta](#) on behalf of [NOCC-L](#)
To: [Luke Lopers](#)
Cc: [PRI Locates](#); [NOCC-L](#)
Subject: RE: Request 2026236536
Date: June 1, 2026 4:39:02 PM

Hello,

The work being done in Request 2026236536 is all clear.

Thanks,
NOCC

From: solutions@on1call.com <solutions@on1call.com>
Sent: Monday, June 1, 2026 4:40 PM
To: PRI_Locates <locates@primustel.ca>
Subject: Request 2026236536

CAUTION : External Mail. Do not click on links or open attachments you do not trust.
ATTENTION : Courriel externe. Ne cliquez pas sur des liens et n'ouvrez pas de pièces jointes auxquels vous ne faites pas confiance.

LOCATE REQUEST NOTIFICATION

REQUEST #:
2026236536

REQUEST PRIORITY:
STANDARD

REQUEST TYPE:
REGULAR

WORK TO BEGIN DATE:
06/08/2026

Update of Request # **Project #:**

Call Date: 06/01/2026
04:31:07 PM

Transmit Date: 06/01/2026
04:40:05 PM

TRANSMISSION INFORMATION

Send To: PMT01

Sequence #: 0002

Map Ref.: 613 567

REQUESTOR'S CONTACT INFORMATION

Contractor ID: 343253



Ph: (905) 479-5674 Email: ontario@canadianlocators.com

Contractor / Excavator : LOPERS & ASSOCIATES			Contact Name : LUKE LOPERS		
Tel : 613-327-9073	Alt. Phone : 613-327-9073	Email : luke@lopers.ca			
Received Date : Jun 2 2026	Excavation Date : Jun 8 2026	Revised Excavation Date:	Type of Work : ENVIRONMENTAL		
Locate Address : 116 ALBERT ST			City / Municipality : OTTAWA, ONTARIO		
Nearest Intersection : OCONNOR ST & METCALFE ST					
Method of Field Marking : ☐ Paint ☐ Stakes ☐ Flags					
Caller's Remarks (Additional Info) : DRILLING BOREHOLES FOR ENVIRONMENTAL & GEOTECHNICAL ASSESSMENTS. BOREHOLES TO BE DRILLED IN SUB-BASEMENT (B2) LEVEL OF EXISTING BUILDING WITH PORTABLE DRILLING EQUIPMENT., TOOLS USED:[Machine Dig], PREMARKED VALUES:[Area Not Pre-Marked], PROPERTY TYPES:[Private Property], SITE MEETING:No, DEPTH:More than 15 Feet					
Utilities Marked :				Does this locate have multiple work areas which are greater than 100 m apart?	
☐ Coaxial Plant	☐ Fibre Optics Plant			☐ Yes How many? ☒ No	
Total Length : m	Total Length : m				

Field sketch and Located Area shown on auxiliary locate sheet(s)

This locate is for ROGERS plant / infrastructure ONLY!

Apply sticker here if required

CAUTION : Locate is VOID after 90 days !

CAUTION : Hand dig within one (1) meter or 3.28 feet of markings. The Located Area defined on the Auxiliary Locate Sheet(s) contains all known ROGERS infrastructure. Any changes to excavation area or nature of work requires a new locate.

For all cut cable, please call :

1-800-265-9501

Locator's Comments :
ROGERS CABLES CLEAR IN LOCATED AREA

Locator's Name : (Please Print)
Jason Bisier

Date : Jun 4 2026	Start Time : 4:30 PM	End Time : 4:40 PM
-----------------------------	--------------------------------	------------------------------

A copy of this Primary Locate Sheet and Auxiliary Locate Sheet(s) must be on site and in the hands of the machine operator during work operations. Should sketch and markings not coincide, a new locate MUST be obtained.

Ph: (905) 479-5674 Email: ontario@canadianlocators.com

Utilities Marked :

☐ Coaxial Plant m ☐ Fibre Optics Plant m

Number of Services Marked : (specify building/house numbers)

NA

LOCATED AREA CONTAINS ALL KNOWN ROGERS INFRASTRUCTURE

FROM :
 N BL OF 116 ALBERT ST

TO :
 S BL OF 116 ALBERT ST

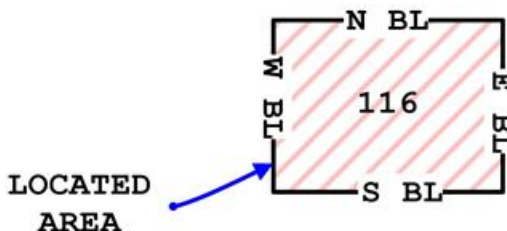
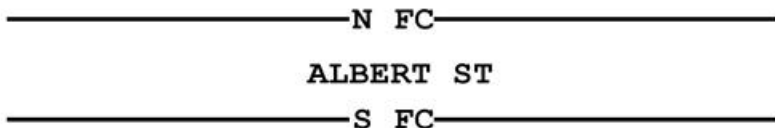
FROM :
 W BL OF 116 ALBERT ST

TO :
 E BL OF 116 ALBERT ST

Hand dig within 1 meter or 3.28 feet as measured horizontally from the field markings to avoid damaging the underground utilities.
 If you damage the utilities, you may be held liable. **For all cut cable, please call: 1-800-265-9501 immediately!**
 Depth of cable plant varies and **MUST** be determined by hand digging or vacuum excavation.
 LOCATED AREA ALTERED AS PER :



ROGERS CABLES CLEAR IN LOCATED AREA



LEGEND :

Fibre Optic — FO —
 Cable / T.V. — CATV —
 Conduit — C —
 Railway — 
 Work Area — 

Road Edge — RE —
 Bldg Line — BL —
 North Direction — 
 Sidewalk — SW —
 Measurement — 

Property Line — PL —
 Lot Line — LL —
 Face of Curb — FC —
 Driveway — DW —
 Fence Line — FL —

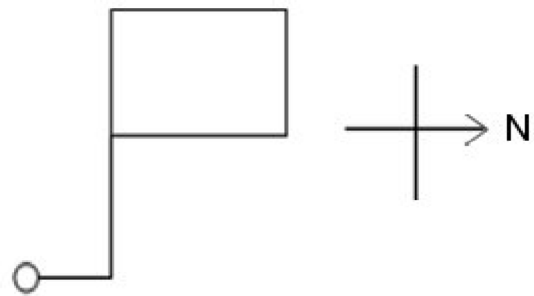
Tree — 
 Pedestal — 
 Pole — 
 Valve — 
 Vault — 

Transformer — 
 Manhole — 
 Catch Basin — 
 North — N
 South — S

Streetlight — 
 Hand Hole — 
 Hydrant — 
 East — E
 West — W

A copy of this Auxiliary Locate Sheet(s) and the Primary Locate Sheet must be on site and in the hands of the machine operator during work operations. Should sketch and markings not coincide, a new locate **MUST** be obtained.

116 ALBERT ST



From the front of the 84 Metcalfe St left corner:
out m, then left m

DISCLAIMER

The excavator must have a copy of this locate on the job site during excavation.

Locate area: The excavator must not work outside the area indicated in the location of work or located area in the diagram without an updated locate. Stakes or markings may disappear or be displaced. If any delays occur in acting on the stakeout information, or if markings become unclear, a new locate must be obtained.

Locating the plant: The plant location information provided is only an estimate. Depth of underground plant varies and the exact location must be determined by hand digging prior to excavation with mechanical equipment.

Warning: Do not use mechanical equipment within one (1) metre of the estimated location of the water or sewer plant. If the plant is greater than or equal to 600mm, mechanical equipment must not be used within three (3) meters.

Digging around exposed plants: Must do any further excavation within 0.3 metres of an exposed water or sewer plant by hand.

Sewer Lateral Plant: the sanitary lateral is typically installed in a common trench with the water service. The applicable disclaimer warning to not use mechanical equipment within one (1) meter of the estimated location of the water or sewer plant smaller than 406mm, or within three (3) meters where the water or sewer plant is greater than 600mm, applies.

The location of the sewer lateral can vary based on slope of property, flow of mains, age of installation, and other variables. Please dig with caution and contact the number in the disclaimer if damage occurs or is suspected.

Contractors are to perform all work in accordance with applicable City of Ottawa By-laws and any applicable federal and provincial legislation or regulations, including but not limited to the *Public Utilities Act, R.S.O. 1990, c. P.52, s. 56(1)*; *Ontario Regulation 210/01 under the Technical Safety Standards Act, 2000, S.O. 2000 c. 16*; *Ontario Regulation 213/91 under the Occupational Health and Safety Act, R. S. O. 1990, c. O. 1*.

AVIS DE NON-RESPONSABILITE

L'opérateur de l'excavatrice doit avoir en sa possession ce rapport de localisation pendant l'excavation.

Zone de localisation : l'opérateur de l'excavatrice ne doit pas creuser en dehors de la zone indiquée sur

l'ordre de travail ni à l'extérieur de la zone indiquée sur le diagramme, à moins d'avoir en sa possession un rapport de localisation actualisé. Les piquets ou les marques peuvent disparaître ou être déplacés. S'il y a un retard à intervenir sur la base des données de surveillance ou si le marquage devient imprécis, il faut obtenir un nouveau rapport de localisation.

Déterminer l'emplacement des conduites : les renseignements sur l'emplacement des conduites sont approximatifs. Pour déterminer l'emplacement et la profondeur, on doit creuser manuellement avant d'utiliser une excavatrice.

Avertissement: n'utilisez pas d'équipement mécanique [excavatrice] à moins d'un [1] mètre de l'emplacement supposé de la conduite d'eau ou d'égout. Si la conduite compte plus de 406 mm de diamètre, aucun équipement mécanique ne doit être utilisé à moins [3] de trois mètres de celle-ci.

Creuser autour des conduites exposées : toute excavation à moins de 0,3 m d'une conduite d'eau ou d'égout doit se faire manuellement.

Conduites de raccordement à l'égout : Les conduites de raccordement à l'égout sont généralement installées dans une tranchée avec les conduites de raccordement à l'aqueduc. Il faut appliquer la consigne selon laquelle on ne doit pas utiliser d'équipement mécanique à moins d'un mètre de l'emplacement estimé d'une conduite d'eau ou d'égout de moins de 406 mm de diamètre, ou à moins de trois mètres d'une conduite d'eau ou d'égout de plus de 600 mm de diamètre.

L'emplacement de la conduite de raccordement à l'égout peut varier en fonction de la pente du terrain, du débit de la conduite principale, de l'âge de l'installation et d'autres variables. Il convient de creuser avec prudence et de composer le numéro indiqué sur la mise en garde en cas de dommage réel ou présumé.

Les entrepreneurs doivent exécuter tous les travaux conformément aux règlements de la Ville d'Ottawa et aux lois et règlements fédéraux ou provinciaux applicables, y compris, mais sans s'y limiter, la *Loi sur les services publics*, L.R.O. 1990, chap. P.52, art. 56[1]; le *Règlement 210/01 de l'Ontario* en vertu de la *Loi de 2000 sur les normes techniques et la sécurité*, L.O. 2000, chap. 16; et le *Règlement 213/91 de l'Ontario* en vertu de la *Loi sur la santé et la sécurité au travail* L.R.O. 1990, chap. 0.1.

Re: Marking Preservation

Your City of Ottawa Water & Sewer locate request has been completed based on the information you provided Ontario One Call. The locate is valid for 120 days from the date indicated on the City of Ottawa Locate Report – Water and Sewer Utilities. Please be aware it's the requestors responsibility to contact Ontario One Call for a new locate if any changes are known, suspected or for a relocate if excavation continues beyond 120 days.

The City of Ottawa expects excavators to protect and preserve the paint marks and flags placed at the time of the original locate ticket. If markings are removed due to weather or excavation work, the excavator is expected to recreate the markings based on the tie-in measurements provided on the original locate ticket report. Valid locate documentation is always required to be on site.

This is in accordance with the below section from the Canadian Common Ground Alliance Best Practices handbook version 3.0 – October 2018 (p. 55)

4-16: Marking Preservation Practice Statement: *The excavator, where practical, protects and preserves the staking, marking, or other designations for underground facilities until no longer required for proper and safe excavation. The excavator stops excavating and notifies the notification service for re-marks if any facility mark is removed or no longer visible.*

If an excavator would like the City of Ottawa to refresh the markings, please contact Ontario One Call to request a Remark and reference the original locate ticket number.

IMPORTANT

IN CASE OF DAMAGE TO CITY OF OTTAWA WATER OR SEWER INFRASTRUCTURE

the excavator must immediately contact ESD-Locates at 613 580-2424 ext. 22336 or email [ESD-Locate@ Ottawa.ca](mailto:ESD-Locate@Ottawa.ca) between 7:00am and 3:30pm. After hours, please contact 311.



813

MHST61628

IN37812

IN37810

IN37711

rue Albert St.

116

82

NOTICE OF INTENT TO EXCAVATE

Header Code: STANDARD

Request Type: NORMAL

Ticket No: 2026236536

Original Call Date: 6/1/2026 4:43:30 PM

Work To Begin Date: 06/08/2026

Company: LOPERS & ASSOCIATES

Contact Name: LUKE LOPERS

Pager:

Contact Phone: (613)-327-9073 ext.

Cell: (613)-327-9073 ext.

Fax:

Alternate Contact: LUKE LOPERS

Alt. Phone: (613)-327-9073 ext.

Place: OTTAWA

Street: 116, ALBERT ST

Nearest Intersecting Street: OCONNOR ST

Second Intersecting Street: METCALFE ST

Subdivision:

Additional Dig Information: Depth in M. 0

MAP REF.: 613 567 PRIVATE PROPERTY SITE MEETING: NO DRILLING BOREHOLES FOR ENVIRONMENTAL & GEOTECHNICAL ASSESSMENTS. BOREHOLES TO BE DRILLED IN SUB-BASEMENT (B2) LEVEL OF EXISTING BUILDING WITH PORTABLE DRILLING EQUIPMENT.

W/O/ JOB #:

Type Of Work: ENVIRONMENTAL

Remarks:

ZAYO CANADA INC (ZAYOON10), ZAYOON10, NOTIFICATION SENT, HYDRO OTTAWA (HOT1), HOT1, NOTIFICATION SENT, VIDEOTRON SENC (VDT1), VDT1, NOTIFICATION SENT, TELECON FOR GROUP TELECOM (360OTT), 360OTT, NOTIFICATION SENT, PROMARK FOR ENBRIDGE GAS (ENOE01), ENOE01, NOTIFICATION SENT, BELL CANADA (BCOE01), BCOE01, NOTIFICATION SENT, PRIMUS MANAGEMENT ULC (PMT01), PMT01, NOTIFICATION SENT, CLI FOR ROGERS (ROGOTT01), ROGOTT01, NOTIFICATION SENT, CITY OF OTTAWA (CITYOTTER/SEWER/CDA/XXXXXXX), CDA/XXXXXXX, NOTIFICATION SENT, CITY OF OTTAWA (CITYOTTER/SEWER/CDA/XXXXXXX), CDA/XXXXXXX, NOTIFICATION SENT.

MIKE LESPERANCE

Black&McDonald	Ontario One Call Request Number:	City of Ottawa	
	2026236536	Streetlight Locate	
SL - Streetlight	Clear Private Property No City of Ottawa street light assets in dig area		
OH - Overhead Fed			
BL - Building Line			
FL - Fence Line			
PL - Property Line			
CL - Face of Curb Line			
AE - Asphalt Edge			
SW - Sidewalk			
DW - Driveway			
⊗ Hydro Pole			
EB99 EB99			
Ⓜ Manhole			
Ⓜ Handhole			
CB Catch Basin			
Ⓜ Fire Hydrant			
● Sign Posts			
▼ Power Source			
■ Disconnect			
⊗ Pedestal			
⚙ Decorative Light			
⚡ Streetlight			
↔ Measurements			
Ⓜ Joint Use Pole			
ANY MEASUREMENTS FROM A CURB EDGE ARE FROM OUTSIDE CURB EDGE UNLESS STATED OTHERWISE			
Notes/Comments:			
Locate is valid for 60 days. If the sketch is different from the markings, location or nature of the work changes, a new Locate must be requested. Hand dig within 1m (3.28 ft) on either side of the markings. Depth of buried plant varies. La repérage est valide pendant 60 jours. Si le croquis diffère des marques au sol, ou si l'emplacement ou la nature des travaux change, un nouveau repérage doit être demandé. Il faut creuser manuellement dans un rayon de 1 m (3.28 pieds) de chaque côté des marques. La profondeur des installations souterraines peut varier.		Date Located	06/03/2026
		Locator	Mike L.
		Page	2 of 2

Disclaimer

Black & McDonald

Warning!

The Excavator must have a copy of this locate on the job site during excavation.

Located Area: The Excavator must not work outside the area indicated, by the located area in the diagram, without a further locate completed by **Black & McDonald Limited**.

Locate the Plant: The plant location information provided is the best we have available, but constitutes only an estimate. Depth of underground plant varies and the exact location must be determined by hand digging prior to excavation with mechanical equipment.

Mechanical equipment must not be used within 1.0 meter of the estimated location of the plant.

Valid Documentation: This locate is valid only for the Agency accepting it. Other parties must obtain and accept their respective underground locate from **Ontario 1 Call**.

Excavator Alterations: Under no circumstance shall an Excavator touch or move an underground power cable. Arrangements must be made to have qualified personnel relocate any such cable.

Expose the plant: Once the plant has been located by hand digging, it must be exposed along its length adjacent to or in the immediate vicinity of the proposed excavation. For this purpose, mechanical equipment must not be used within 0.5 meters of the plant.

Digging around the Exposed Plant: When the plant has been exposed, any further excavation within 0.3 meters, must only be done by hand digging and not with mechanical equipment.

Support Requirements: If the underground plant is exposed over a distance of more than 1.25 meters, the Facility Owner must be notified. Underground plant must be supported at all times.

Private Cables: Please be advised that **Black & McDonald Limited** is not responsible for and does not locate private cables (e.g. parking lot lights and cables to O.C. Transpo signs/bus stops).

New Cables: Be aware that new cables could be installed at any time after the locate has been completed. It is the Excavator's responsibility to call for new locates if any changes are known or suspected.

Caution: The markings may disappear or be misplaced. Should sketch and markings not coincide, the Excavator must obtain a new locate. This is based on the information given at the time. Any changes to location or nature of work require a new locate. The Excavator must not work outside the indicated located area without a further locate. Privately owned services within the located area have not been marked- check with service/property owner.

Liability: Any person or Excavator who interferes with or damages any underground electrical cable without having obtained a valid locate/clearance from **Black & McDonald Limited**, shall be liable for all cost incurred during the repair of the cable as well as any resulting legal actions.

This locate has been given as accurately as possible, but no locate is guaranteed. Excavators must always dig with extreme caution to prevent the possibility of damaging electrical cables and endangering safety.

Locate is void after 60 days

For remarks contact **Ontario One Call** 1-800-400-2255 or www.on1call.com



PLEASE NOTE:

Locates Validity Change

As of the week ending September 19th, 2025 all locate requests for the City of Ottawa Streetlights issued by Black and McDonald will **now be Valid for 60 Days**.

Please refer to the attached disclaimer for any questions or issues.

From: [Barabas, Karoly](#)
To: [Luke Lopers](#)
Subject: 2026236536
Date: June 1, 2026 5:52:01 PM
Attachments: [image001.png](#)

2026236536

This Ontario One Ticket is **Clear of Underground City of Ottawa / Ville d'Ottawa Traffic Lights Infrastructure in Proposed Work Area **

“Locates are Valide for 120 Days”

Ce billet Ontario One est ** libre de toute infrastructure souterraine de la ville d'Ottawa pour les feux de signalisation dans la zone de travail proposée **

“Les habitants sont valides pendant 120 jours”



Charly(Karoly)Barabas
City of Ottawa
Traffic U/G Utilities Investigator
Cell: (613)868-3850
Email: Karoly.barabas@ottawa.ca
Mon-Fri 7h00 to 15h30

This e-mail originates from the City of Ottawa e-mail system. Any distribution, use or copying of this e-mail or the information it contains by other than the intended recipient(s) is unauthorized. Thank you.

Le présent courriel a été expédié par le système de courriels de la Ville d'Ottawa. Toute distribution, utilisation ou reproduction du courriel ou des renseignements qui s'y trouvent par une personne autre que son destinataire prévu est interdite. Je vous remercie de votre collaboration.

NO CONFLICT

Cable Locate Request

ZAYO-000001

1-800-837-6448

EXCAVATION SITE 116, ALBERT ST	OTTAWA, OTTAWA	Xstreet: OCONNOR ST	Xstreet2: METCALFE ST
APPLICANT'S NAME LUKE LOPERS		COMPANY NAME (if applicable) LOPERS & ASSOCIATES	
APPLICANT'S ADDRESS _____	OTTAWA	K2G3V8	PHONE NO. (613)-327-9073 ext.
STREET	CITY	POSTAL CODE	
ALTERNATE CONTACT: LUKE LOPERS		ALTERNATE PHONE NO: (613)-327-9073 ext.	
EMAIL ADDRESS: luke@lopers.ca		FAX NO.: _____	
ORIGINAL CALL DATE: 6/1/2026 4:31:00 PM		WORK TO BEGIN DATE: 6/8/2026 5:00:00 PM	ZAYO TICKET NO. 2026236536

Plant Type: No ZAYO Cable Plant / Facilities Here.	
Ticket Priority:	STANDARD
Clearance Number:	A902098

BURIED CABLE LOCATION DETAILS (To be completed by ZAYO Locator)	
1. Were facilities located at excavation site? YES Reasons:	
2. How was the location of the facilities marked? ☐ PAINT ☐ STAKED ☐ OTHER (Specify Below)	
3. What type of facilities marked? ☐ BURIED CABLE ☐ ENCASED CONDUIT ☐ UNENCASED CONDUIT	
4. Was the applicant present at time of locate? YES Reasons:	☐ FIBRE WATCH REQUIRED-CALL FOR APPOINTMENT
Remarks: NB_SEGMENTS::1 TICKET SENT TO :OTWASL01 BLACK AND MC DONALD ,BHTI01 PROMARK FOR BIRCH HI,HIBOO01 PROMARK FOR HIBOO NE,TELOE01 PROMARK FOR TELUS (T,OTWATS01 CITY OF OTTAWA TRAFF,OTWAWVS01 CITY OF OTTAWA WATER,ROGOTT01 CLI FOR ROGERS (ROGO,PMT01 PRIMUS MANAGEMENT UL,BCOE01 BELL CANADA (BCOE01),ENOE01 PROMARK FOR ENBRIDGE,360OTT TELECON FOR GROUP TE,VDT1 VIDEOTRON SENC (VDT1,HOT1 HYDRO OTTAWA (HOT1),ZAYOON10 ZAYO CANADA INC (ZAYO),CSC01US01,0000000000,1,BUSI,CSC01US01,0000000000,BUSI	
Dig Info - Additional Dig Info: DRILLING BOREHOLES FOR ENVIRONMENTAL & GEOTECHNICAL ASSESSMENTS. BOREHOLES TO BE DRILLED IN SUB-BASEMENT (B2) LEVEL OF EXISTING BUILDING WITH PORTABLE DRILLING EQUIPMENT.	
Dig Info: Utility Remarks:	
Locator Remark:	

ZAYO - INSTRUCTIONS TO APPLICANT- PLEASE READ CAREFULLY

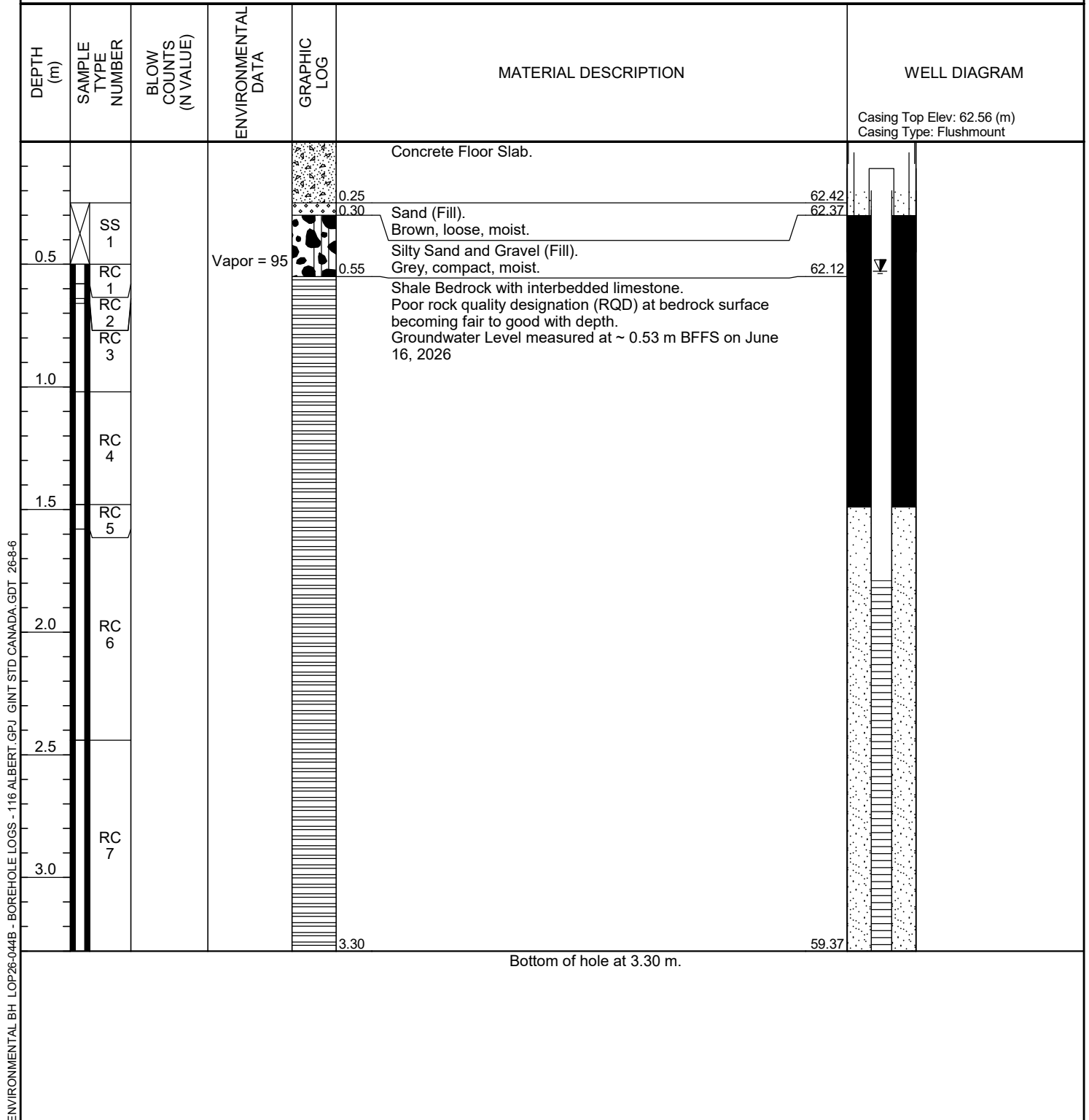
- Requests for a locate should be made at least **2** working days prior to digging. Call ZAYO anytime at **800-837-6448**.
- ZAYO cannot guarantee precise location or depth of facilities. You must **HAND DIG** within one meter (3.28 feet) of markings for paired voice frequency and power cable and within 2.5 meters (8.2 feet) of markings for fiber optic cable.
- Because markings made by ZAYO when locating cable may disappear, or be displaced, any delays in digging after locate require a new locate.
- This locate was completed based on information given to ZAYO's locator at the time of the request or locate. **ANY CHANGES TO LOCATION OR NATURE OF WORK REQUIRE NEW LOCATE**
- You will be liable for damages caused to ZAYO's facilities if you do not follow these instructions, or abide by the locate.
- NOTE FIBRE WATCH REQUIREMENTS- PLEASE CALL THE NUMBER NOTED ABOVE AT LEAST ONE WEEK IN ADVANCE OF EXCAVATION.**
- Under no circumstances shall ZAYO or any of its affiliated or associated companies, or any of their employees be held liable for any losses (including down time) suffered by anyone as a result of a location error made by ZAYO
- Applicant is responsible to remove any ZAYO flags or stakes at locate site once construction is complete.

ZAYO locates are valid for a period of 60 days

Appendix C

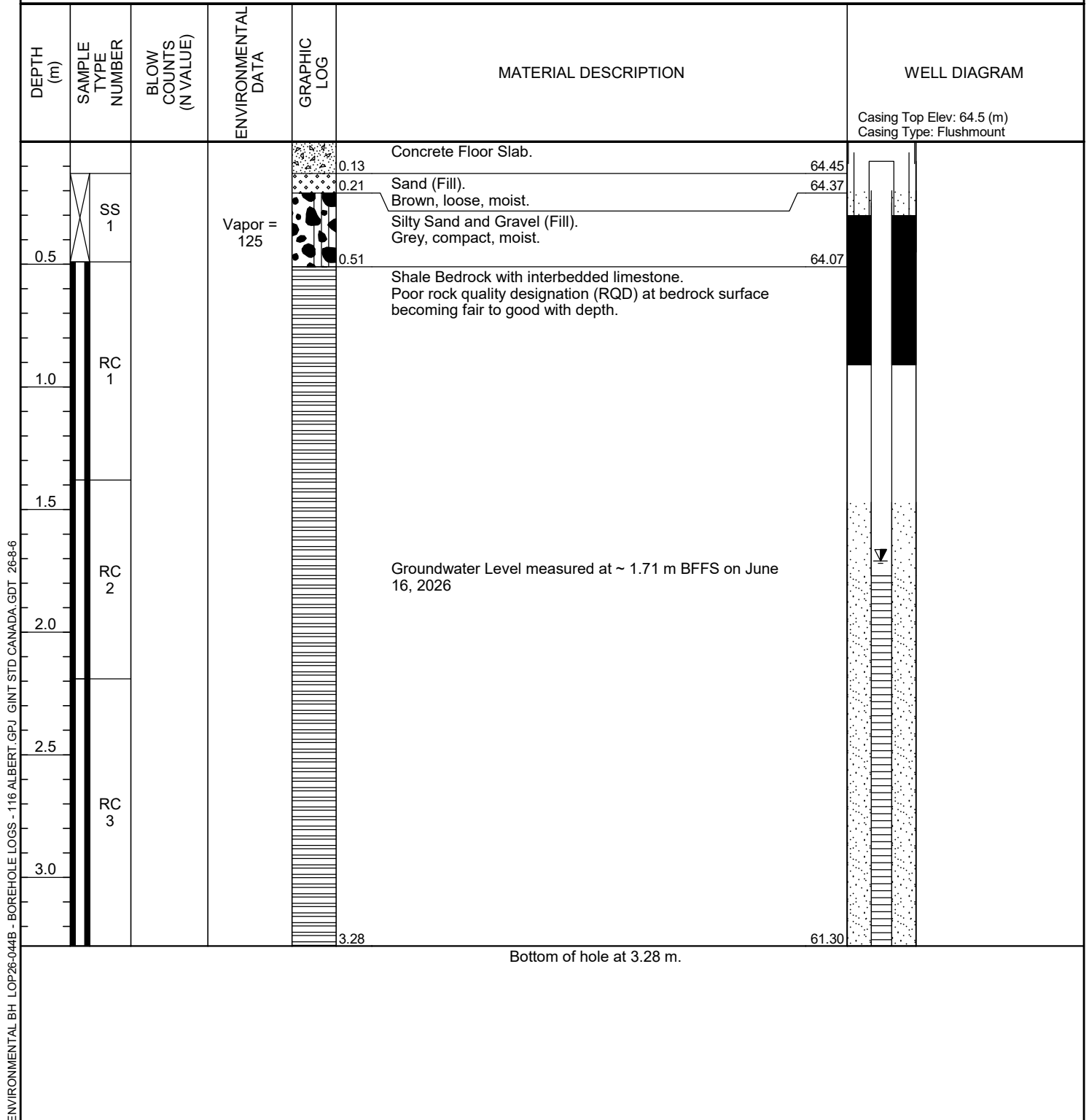
Borehole Logs

CLIENT Metcalfe Realty Company Limited	PROJECT NAME Phase Two Environmental Site Assessment
PROJECT NUMBER LOP26-044B	PROJECT LOCATION 116 Albert Street, Ottawa, Ontario
DATE STARTED 26-6-9 COMPLETED 26-6-9	GROUND ELEVATION 62.67 m HOLE SIZE 20 cm
DRILLING CONTRACTOR OGS Inc.	GROUND WATER LEVELS:
DRILLING METHOD Manual Installation with Tripod	▼ AFTER DRILLING 0.53 m / Elev 62.14 m
LOGGED BY L. Lopers CHECKED BY N. Corrin	
NOTES Geodetic Elevations Provided by Metcalfe Realty	

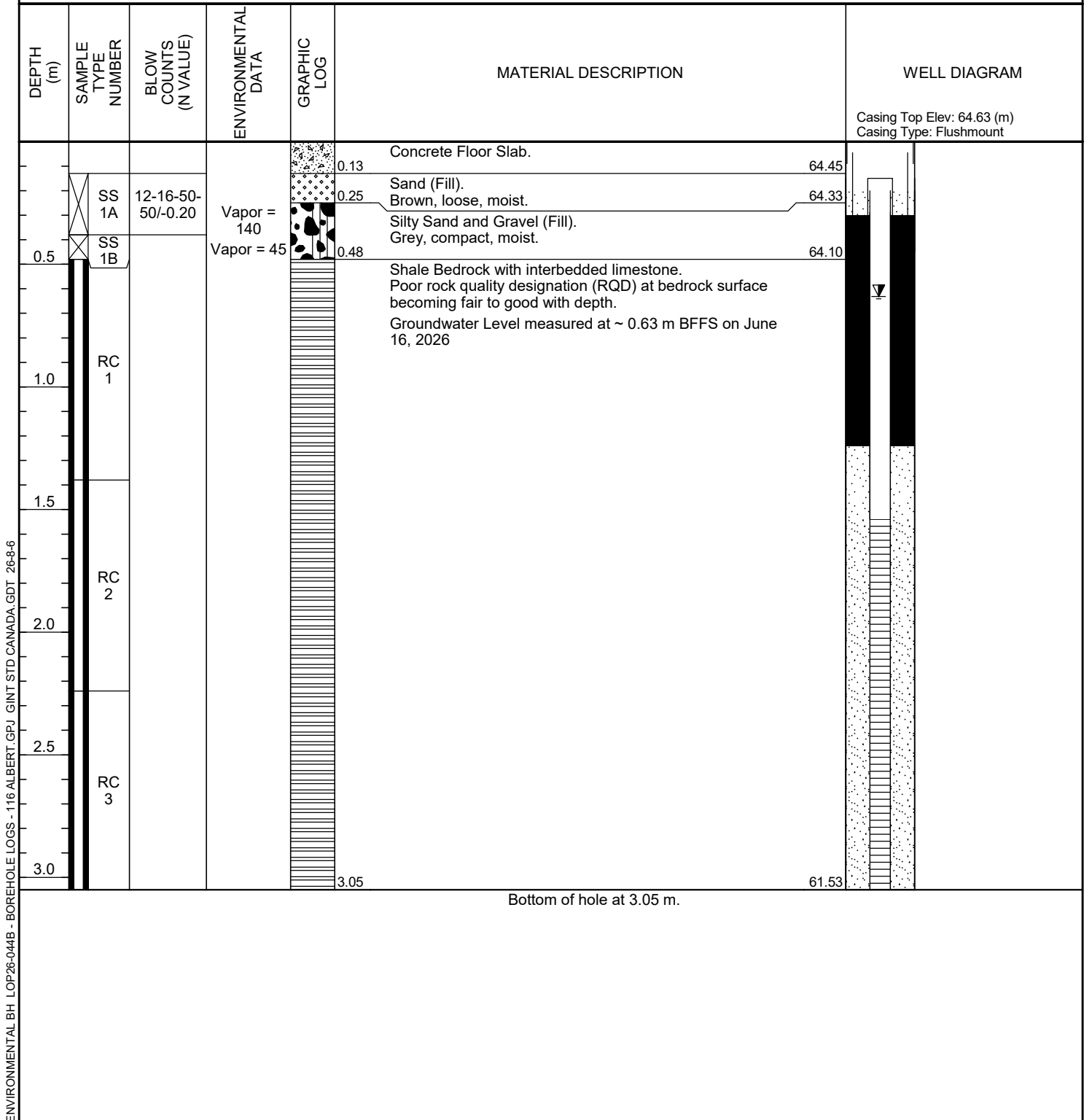


ENVIRONMENTAL BH LOP26-044B - BOREHOLE LOGS - 116 ALBERT GPJ GINT STD CANADA.GDT 26-6-6

CLIENT Metcalfe Realty Company Limited	PROJECT NAME Phase Two Environmental Site Assessment
PROJECT NUMBER LOP26-044B	PROJECT LOCATION 116 Albert Street, Ottawa, Ontario
DATE STARTED 26-6-9 COMPLETED 26-6-9	GROUND ELEVATION 64.58 m HOLE SIZE 20 cm
DRILLING CONTRACTOR OGS Inc.	GROUND WATER LEVELS:
DRILLING METHOD Manual Installation with Tripod	▼ AFTER DRILLING 1.71 m / Elev 62.87 m
LOGGED BY L. Lopers CHECKED BY N. Corrin	
NOTES Geodetic Elevations Provided by Metcalfe Realty	

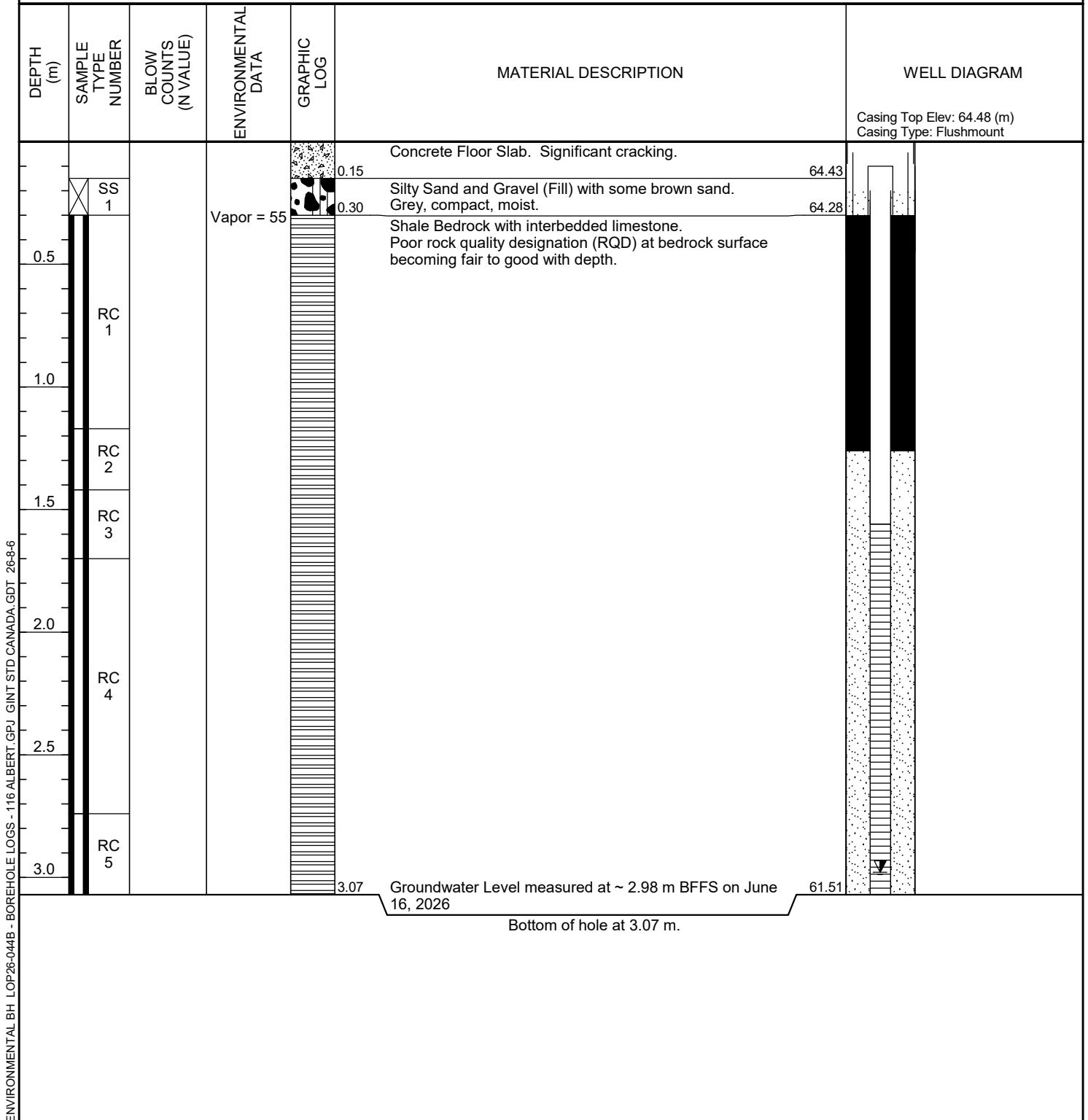


CLIENT Metcalfe Realty Company Limited	PROJECT NAME Phase Two Environmental Site Assessment
PROJECT NUMBER LOP26-044B	PROJECT LOCATION 116 Albert Street, Ottawa, Ontario
DATE STARTED 26-6-10 COMPLETED 26-6-10	GROUND ELEVATION 64.58 m HOLE SIZE 20 cm
DRILLING CONTRACTOR OGS Inc.	GROUND WATER LEVELS:
DRILLING METHOD Manual Installation with Tripod	▼ AFTER DRILLING 0.63 m / Elev 63.95 m
LOGGED BY L. Lopers CHECKED BY N. Corrin	
NOTES Geodetic Elevations Provided by Metcalfe Realty	



ENVIRONMENTAL BH LOP26-044B - BOREHOLE LOGS - 116 ALBERT GPJ GINT STD CANADA.GDT 26-6-6

CLIENT Metcalfe Realty Company Limited	PROJECT NAME Phase Two Environmental Site Assessment
PROJECT NUMBER LOP26-044B	PROJECT LOCATION 116 Albert Street, Ottawa, Ontario
DATE STARTED 26-6-10 COMPLETED 26-6-10	GROUND ELEVATION 64.58 m HOLE SIZE 20 cm
DRILLING CONTRACTOR OGS Inc.	GROUND WATER LEVELS:
DRILLING METHOD Manual Installation with Tripod	▼ AFTER DRILLING 2.98 m / Elev 61.60 m
LOGGED BY L. Lopers CHECKED BY N. Corrin	
NOTES Geodetic Elevations Provided by Metcalfe Realty	



ENVIRONMENTAL BH LOP26-044B - BOREHOLE LOGS - 116 ALBERT GPJ GINT STD CANADA.GDT 26-8-6

Appendix D

Certificates of Equipment Calibration



Certificate of Calibration and Testing

Enviro Metrics Instrument Rentals
16 Concourse Gate, Unit 600, Ottawa, ON K2E 7S6
www.enviro-metrics.ca



Environmental Conditions	
Temperature	22.5 °C
Relative Humidity	60.10%
TSI Q-TRAK XP 75802607006	

Model	RKI Eagle 2
Serial Number	E2B708

– CALIBRATION VERIFICATION RESULTS –

Sensors	Calibration Gas	Lot#	Found Value	Calibration Value
1. PID	100 ppm Isobutylene	302-40284018-114	99 ppm	100 ppm
2. LEL	1650 ppm Hexane	25-4291	1550 ppm	1650 ppm

EnviroMetrics Instrument Rentals certifies that this instrument confirms to the original manufacturer's specifications and has been calibrated using standards traceable set forth by the National Institute of Standards and Technology (NIST). Calibration procedures are performed using certified reference materials and equipment traceable to NIST, ensuring the accuracy, reliability, and consistency of all measurement data collected during our services.

Calibration certificates and documentation for all instruments are securely maintained and made available to clients through our dedicated client portal for easy access and reference.



Jason Nagasawa

June 8, 2026

Calibrated

Date



Certificate of Calibration and Testing

Enviro Metrics Instrument Rentals
16 Concourse Gate, Unit 600, Ottawa ON K2E 7S6
www.enviro-metrics.ca



Environmental Conditions	
Temperature	23.3 °C
Relative Humidity	35.90%
TSI Q-TRAK XP 75802606001	

Model	Horiba U-52
Serial Number	3VKK5C06

– CALIBRATION VERIFICATION RESULTS –

Sensors	Calibration Point	Calibration Standard	Lot#	Found Value	Calibration Value
1. Temperature	Aerated Water Bath	Fisher Scientific Precision Thermometer	250537882	22.58	21.75
2. Conductivity	0 mS/cm	DI Water	N/A	0	0
	4.49 mS/cm	AquaPhoenix	6GC0442	4.72	4.49
3. pH	pH 4	Hanna	2464	3.92	4.01
	pH 7	Hanna	2660	7.10	7.01
4. ORP	240 mv	Hanna	1850	235	240
5. Dissolved Oxygen	0%	Hanna	2591	3.42 mg/L	0 mg/L
	100%	Aerated Water at 21.10 °C			8.88 mg/L
6. Turbidity	0 NTU	DI Water	N/A	1.8	0
	100 NTU	StablCal	A5258	104	100

EnviroMetrics certifies that this instrument confirms to the original manufacturer's specifications and has been calibrated using standards traceable set forth by the National Institute of Standards and Technology (NIST). Calibration procedures are performed using certified reference materials and equipment traceable to NIST, ensuring the accuracy, reliability, and consistency of all measurement data collected during our services.

Calibration certificates and documentation for all instruments are securely maintained and made available to clients through our dedicated client portal for easy access and reference.

Jason Nagasawa

Calibrated

June 12, 2026

Date



Appendix E

Laboratory Certificates of Analysis



Your Project #: LOP26-044B
Your C.O.C. #: C#1121691-01-01

Attention: Luke Lopers

Lopers & Associates
30 Lansfield Way
Ottawa, ON
CANADA K2G 3V8

Report Date: 2026/06/18

Report #: R8762663

Version: 1 - Final

CERTIFICATE OF ANALYSIS

BUREAU VERITAS JOB #: C668233

Received: 2026/06/11, 12:00

Sample Matrix: Soil
Samples Received: 5

Analyses	Date		Date Analyzed	Laboratory Method	Analytical Method
	Quantity	Extracted			
Methylnaphthalene Sum (1)	5	N/A	2026/06/18	CAM SOP-00301	EPA 8270D m
1,3-Dichloropropene Sum (1)	5	N/A	2026/06/17		EPA 8260C m
Petroleum Hydrocarbons F2-F4 in Soil (1, 2)	4	2026/06/16	2026/06/16	CAM SOP-00316	CCME CWS m
Petroleum Hydrocarbons F2-F4 in Soil (1, 2)	1	2026/06/16	2026/06/17	CAM SOP-00316	CCME CWS m
Moisture (1)	5	N/A	2026/06/15	CAM SOP-00445	Carter 2nd ed 70.2 m
PAH Compounds in Soil by GC/MS (SIM) (1)	5	2026/06/17	2026/06/17	CAM SOP-00318	EPA 8270E
pH CaCl2 EXTRACT (1)	2	2026/06/16	2026/06/16	CAM SOP-00413	EPA 9045 D m
Volatile Organic Compounds and F1 PHCs (1)	5	N/A	2026/06/16	CAM SOP-00230	EPA 8260D 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.

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) 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".



Your Project #: LOP26-044B
Your C.O.C. #: C#1121691-01-01

Attention: Luke Lopers

Lopers & Associates
30 Lansfield Way
Ottawa, ON
CANADA K2G 3V8

Report Date: 2026/06/18
Report #: R8762663
Version: 1 - Final

CERTIFICATE OF ANALYSIS

BUREAU VERITAS JOB #: C668233

Received: 2026/06/11, 12:00

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

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

Bureau Veritas Job #: C668233

Report Date: 2026/06/18

Lopers & Associates

Client Project #: LOP26-044B

Sampler Initials: LL

RESULTS OF ANALYSES OF SOIL

Bureau Veritas ID		BDXM06		BDXM07	BDXM08		BDXM09		
Sampling Date		2026/06/09 21:45		2026/06/10 02:15	2026/06/10 19:20		2026/06/10 23:10		
COC Number		C#1121691-01-01		C#1121691-01-01	C#1121691-01-01		C#1121691-01-01		
	UNITS	BH1-26-SS1	QC Batch	BH2-26-SS1	BH3-26-SS1A	QC Batch	BH4-26-SS1	RDL	QC Batch

Inorganics

Moisture	%	11	A173894	15	9.5	A173894	8.6	1.0	A173894
Available (CaCl2) pH	pH			7.84	8.35	A175014			

RDL = Reportable Detection Limit

QC Batch = Quality Control Batch

Bureau Veritas ID		BDXM10		
Sampling Date		2026/06/10		
COC Number		C#1121691-01-01		
	UNITS	DUP-06/10	RDL	QC Batch

Inorganics

Moisture	%	8.1	1.0	A173894
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RDL = Reportable Detection Limit

QC Batch = Quality Control Batch



BUREAU
VERITAS

Bureau Veritas Job #: C668233
Report Date: 2026/06/18

Lopers & Associates
Client Project #: LOP26-044B
Sampler Initials: LL

SEMI-VOLATILE ORGANICS BY GC-MS (SOIL)

Bureau Veritas ID		BDXM06	BDXM07	BDXM08	BDXM09	BDXM10		
Sampling Date		2026/06/09 21:45	2026/06/10 02:15	2026/06/10 19:20	2026/06/10 23:10	2026/06/10		
COC Number		C#1121691-01-01	C#1121691-01-01	C#1121691-01-01	C#1121691-01-01	C#1121691-01-01		
	UNITS	BH1-26-SS1	BH2-26-SS1	BH3-26-SS1A	BH4-26-SS1	DUP-06/10	RDL	QC Batch

Calculated Parameters

Methylnaphthalene, 2-(1-)	ug/g	ND	ND	ND	ND	ND	0.0071	A172360
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Polyaromatic Hydrocarbons

Acenaphthene	ug/g	ND	ND	ND	ND	ND	0.0050	A175766
Acenaphthylene	ug/g	ND	ND	ND	ND	ND	0.0050	A175766
Anthracene	ug/g	ND	ND	ND	ND	ND	0.0050	A175766
Benzo(a)anthracene	ug/g	ND	0.0061	ND	0.0086	ND	0.0050	A175766
Benzo(a)pyrene	ug/g	ND	0.0070	ND	0.0085	ND	0.0050	A175766
Benzo(b,j)fluoranthene	ug/g	0.0052	0.011	ND	0.011	ND	0.0050	A175766
Benzo(g,h,i)perylene	ug/g	ND	0.0050	ND	ND	ND	0.0050	A175766
Benzo(k)fluoranthene	ug/g	ND	ND	ND	ND	ND	0.0050	A175766
Chrysene	ug/g	0.0050	0.0071	ND	0.0077	ND	0.0050	A175766
Dibenzo(a,h)anthracene	ug/g	ND	ND	ND	ND	ND	0.0050	A175766
Fluoranthene	ug/g	ND	0.015	ND	0.015	ND	0.0050	A175766
Fluorene	ug/g	ND	ND	ND	ND	ND	0.0050	A175766
Indeno(1,2,3-cd)pyrene	ug/g	ND	ND	ND	ND	ND	0.0050	A175766
1-Methylnaphthalene	ug/g	ND	ND	ND	ND	ND	0.0050	A175766
2-Methylnaphthalene	ug/g	0.0063	0.0062	ND	ND	ND	0.0050	A175766
Naphthalene	ug/g	ND	ND	ND	ND	ND	0.0050	A175766
Phenanthrene	ug/g	0.015	0.015	ND	0.0061	ND	0.0050	A175766
Pyrene	ug/g	0.0091	0.013	ND	0.013	ND	0.0050	A175766

Surrogate Recovery (%)

D10-Anthracene	%	106	100	104	101	103		A175766
D14-Terphenyl (FS)	%	112	103	100	99	100		A175766
D8-Acenaphthylene	%	93	90	87	87	90		A175766

RDL = Reportable Detection Limit

QC Batch = Quality Control Batch

ND = Not Detected at a concentration equal or greater than the indicated Detection Limit.



BUREAU
VERITAS

Bureau Veritas Job #: C668233
Report Date: 2026/06/18

Lopers & Associates
Client Project #: LOP26-044B
Sampler Initials: LL

VOLATILE ORGANICS BY GC/MS (SOIL)

Bureau Veritas ID		BDXM06	BDXM07	BDXM08	BDXM09		
Sampling Date		2026/06/09 21:45	2026/06/10 02:15	2026/06/10 19:20	2026/06/10 23:10		
COC Number		C#1121691-01-01	C#1121691-01-01	C#1121691-01-01	C#1121691-01-01		
	UNITS	BH1-26-SS1	BH2-26-SS1	BH3-26-SS1A	BH4-26-SS1	RDL	QC Batch
Calculated Parameters							
1,3-Dichloropropene (cis+trans)	ug/g	ND	ND	ND	ND	0.050	A172363
Volatile Organics							
Acetone (2-Propanone)	ug/g	ND	ND	ND	ND	0.49	A174136
Benzene	ug/g	ND	ND	ND	ND	0.0060	A174136
Bromodichloromethane	ug/g	ND	ND	ND	ND	0.040	A174136
Bromoform	ug/g	ND	ND	ND	ND	0.040	A174136
Bromomethane	ug/g	ND	ND	ND	ND	0.040	A174136
Carbon Tetrachloride	ug/g	ND	ND	ND	ND	0.040	A174136
Chlorobenzene	ug/g	ND	ND	ND	ND	0.040	A174136
Chloroform	ug/g	ND	ND	ND	ND	0.040	A174136
Dibromochloromethane	ug/g	ND	ND	ND	ND	0.040	A174136
1,2-Dichlorobenzene	ug/g	ND	ND	ND	ND	0.040	A174136
1,3-Dichlorobenzene	ug/g	ND	ND	ND	ND	0.040	A174136
1,4-Dichlorobenzene	ug/g	ND	ND	ND	0.058	0.040	A174136
Dichlorodifluoromethane (FREON 12)	ug/g	ND	ND	ND	ND	0.040	A174136
1,1-Dichloroethane	ug/g	ND	ND	ND	ND	0.040	A174136
1,2-Dichloroethane	ug/g	ND	ND	ND	ND	0.049	A174136
1,1-Dichloroethylene	ug/g	ND	ND	ND	ND	0.040	A174136
cis-1,2-Dichloroethylene	ug/g	ND	ND	ND	ND	0.040	A174136
trans-1,2-Dichloroethylene	ug/g	ND	ND	ND	ND	0.040	A174136
1,2-Dichloropropane	ug/g	ND	ND	ND	ND	0.040	A174136
cis-1,3-Dichloropropene	ug/g	ND	ND	ND	ND	0.030	A174136
trans-1,3-Dichloropropene	ug/g	ND	ND	ND	ND	0.040	A174136
Ethylbenzene	ug/g	ND	ND	ND	ND	0.010	A174136
Ethylene Dibromide	ug/g	ND	ND	ND	ND	0.040	A174136
Hexane	ug/g	0.057	0.056	ND	ND	0.040	A174136
Methylene Chloride(Dichloromethane)	ug/g	ND	ND	ND	ND	0.049	A174136
Methyl Ethyl Ketone (2-Butanone)	ug/g	ND	ND	ND	ND	0.40	A174136
Methyl Isobutyl Ketone	ug/g	ND	ND	ND	ND	0.40	A174136
Methyl t-butyl ether (MTBE)	ug/g	ND	ND	ND	ND	0.040	A174136
Styrene	ug/g	ND	ND	ND	ND	0.040	A174136
RDL = Reportable Detection Limit							
QC Batch = Quality Control Batch							
ND = Not Detected at a concentration equal or greater than the indicated Detection Limit.							



VOLATILE ORGANICS BY GC/MS (SOIL)

Bureau Veritas ID		BDXM06	BDXM07	BDXM08	BDXM09		
Sampling Date		2026/06/09 21:45	2026/06/10 02:15	2026/06/10 19:20	2026/06/10 23:10		
COC Number		C#1121691-01-01	C#1121691-01-01	C#1121691-01-01	C#1121691-01-01		
	UNITS	BH1-26-SS1	BH2-26-SS1	BH3-26-SS1A	BH4-26-SS1	RDL	QC Batch
1,1,1,2-Tetrachloroethane	ug/g	ND	ND	ND	ND	0.040	A174136
1,1,2,2-Tetrachloroethane	ug/g	ND	ND	ND	ND	0.040	A174136
Tetrachloroethylene	ug/g	ND	ND	ND	ND	0.040	A174136
Toluene	ug/g	ND	ND	ND	ND	0.020	A174136
1,1,1-Trichloroethane	ug/g	ND	ND	ND	ND	0.040	A174136
1,1,2-Trichloroethane	ug/g	ND	ND	ND	ND	0.040	A174136
Trichloroethylene	ug/g	ND	ND	ND	ND	0.010	A174136
Trichlorofluoromethane (FREON 11)	ug/g	ND	ND	ND	ND	0.040	A174136
Vinyl Chloride	ug/g	ND	ND	ND	ND	0.019	A174136
p+m-Xylene	ug/g	ND	0.032	ND	0.023	0.020	A174136
o-Xylene	ug/g	ND	ND	ND	0.025	0.020	A174136
Total Xylenes	ug/g	ND	0.032	ND	0.048	0.020	A174136
F1 (C6-C10)	ug/g	ND	ND	ND	ND	10	A174136
F1 (C6-C10) - BTEX	ug/g	ND	ND	ND	ND	10	A174136
Surrogate Recovery (%)							
4-Bromofluorobenzene	%	116	86	125	105		A174136
D10-o-Xylene	%	122	112	120	114		A174136
D4-1,2-Dichloroethane	%	92	102	98	97		A174136
D8-Toluene	%	112	105	126	116		A174136
RDL = Reportable Detection Limit							
QC Batch = Quality Control Batch							
ND = Not Detected at a concentration equal or greater than the indicated Detection Limit.							

**VOLATILE ORGANICS BY GC/MS (SOIL)**

Bureau Veritas ID		BDXM10		
Sampling Date		2026/06/10		
COC Number		C#1121691-01-01		
	UNITS	DUP-06/10	RDL	QC Batch

Calculated Parameters				
1,3-Dichloropropene (cis+trans)	ug/g	ND	0.050	A172363
Volatile Organics				
Acetone (2-Propanone)	ug/g	ND	0.49	A174136
Benzene	ug/g	ND	0.0060	A174136
Bromodichloromethane	ug/g	ND	0.040	A174136
Bromoform	ug/g	ND	0.040	A174136
Bromomethane	ug/g	ND	0.040	A174136
Carbon Tetrachloride	ug/g	ND	0.040	A174136
Chlorobenzene	ug/g	ND	0.040	A174136
Chloroform	ug/g	ND	0.040	A174136
Dibromochloromethane	ug/g	ND	0.040	A174136
1,2-Dichlorobenzene	ug/g	ND	0.040	A174136
1,3-Dichlorobenzene	ug/g	ND	0.040	A174136
1,4-Dichlorobenzene	ug/g	ND	0.040	A174136
Dichlorodifluoromethane (FREON 12)	ug/g	ND	0.040	A174136
1,1-Dichloroethane	ug/g	ND	0.040	A174136
1,2-Dichloroethane	ug/g	ND	0.049	A174136
1,1-Dichloroethylene	ug/g	ND	0.040	A174136
cis-1,2-Dichloroethylene	ug/g	ND	0.040	A174136
trans-1,2-Dichloroethylene	ug/g	ND	0.040	A174136
1,2-Dichloropropane	ug/g	ND	0.040	A174136
cis-1,3-Dichloropropene	ug/g	ND	0.030	A174136
trans-1,3-Dichloropropene	ug/g	ND	0.040	A174136
Ethylbenzene	ug/g	ND	0.010	A174136
Ethylene Dibromide	ug/g	ND	0.040	A174136
Hexane	ug/g	ND	0.040	A174136
Methylene Chloride(Dichloromethane)	ug/g	ND	0.049	A174136
Methyl Ethyl Ketone (2-Butanone)	ug/g	ND	0.40	A174136
Methyl Isobutyl Ketone	ug/g	ND	0.40	A174136
Methyl t-butyl ether (MTBE)	ug/g	ND	0.040	A174136

RDL = Reportable Detection Limit

QC Batch = Quality Control Batch

ND = Not Detected at a concentration equal or greater than the indicated Detection Limit.



BUREAU
VERITAS

Bureau Veritas Job #: C668233

Report Date: 2026/06/18

Lopers & Associates

Client Project #: LOP26-044B

Sampler Initials: LL

VOLATILE ORGANICS BY GC/MS (SOIL)

Bureau Veritas ID		BDXM10		
Sampling Date		2026/06/10		
COC Number		C#1121691-01-01		
	UNITS	DUP-06/10	RDL	QC Batch
Styrene	ug/g	ND	0.040	A174136
1,1,1,2-Tetrachloroethane	ug/g	ND	0.040	A174136
1,1,2,2-Tetrachloroethane	ug/g	ND	0.040	A174136
Tetrachloroethylene	ug/g	ND	0.040	A174136
Toluene	ug/g	ND	0.020	A174136
1,1,1-Trichloroethane	ug/g	ND	0.040	A174136
1,1,2-Trichloroethane	ug/g	ND	0.040	A174136
Trichloroethylene	ug/g	ND	0.010	A174136
Trichlorofluoromethane (FREON 11)	ug/g	ND	0.040	A174136
Vinyl Chloride	ug/g	ND	0.019	A174136
p+m-Xylene	ug/g	ND	0.020	A174136
o-Xylene	ug/g	ND	0.020	A174136
Total Xylenes	ug/g	ND	0.020	A174136
F1 (C6-C10)	ug/g	ND	10	A174136
F1 (C6-C10) - BTEX	ug/g	ND	10	A174136
Surrogate Recovery (%)				
4-Bromofluorobenzene	%	116		A174136
D10-o-Xylene	%	126		A174136
D4-1,2-Dichloroethane	%	98		A174136
D8-Toluene	%	118		A174136
RDL = Reportable Detection Limit QC Batch = Quality Control Batch ND = Not Detected at a concentration equal or greater than the indicated Detection Limit.				



PETROLEUM HYDROCARBONS (CCME)

Bureau Veritas ID		BDXM06	BDXM07	BDXM08	BDXM09	BDXM10		
Sampling Date		2026/06/09 21:45	2026/06/10 02:15	2026/06/10 19:20	2026/06/10 23:10	2026/06/10		
COC Number		C#1121691-01-01	C#1121691-01-01	C#1121691-01-01	C#1121691-01-01	C#1121691-01-01		
	UNITS	BH1-26-SS1	BH2-26-SS1	BH3-26-SS1A	BH4-26-SS1	DUP-06/10	RDL	QC Batch

F2-F4 Hydrocarbons								
F2 (C10-C16 Hydrocarbons)	ug/g	ND	ND	ND	ND	ND	7.0	A175250
F3 (C16-C34 Hydrocarbons)	ug/g	ND	ND	ND	ND	ND	50	A175250
F4 (C34-C50 Hydrocarbons)	ug/g	ND	ND	ND	ND	ND	50	A175250
Reached Baseline at C50	ug/g	Yes	Yes	Yes	Yes	Yes		A175250

Surrogate Recovery (%)								
o-Terphenyl	%	93	97	96	98	98		A175250

RDL = Reportable Detection Limit

QC Batch = Quality Control Batch

ND = Not Detected at a concentration equal or greater than the indicated Detection Limit.



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GENERAL COMMENTS

Sample BDXM09 [BH4-26-SS1] : VOC/F1 Analysis: Soil weight exceeds the protocol specification of approximately 5g in the field preserved vial. Additional methanol was added to the vial to ensure extraction efficiency.

Results relate only to the items tested.



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QUALITY ASSURANCE REPORT

QA/QC	Batch	Init	QC Type	Parameter	Date Analyzed	Value	Recovery	UNITS	QC Limits
	A173894	KDK	RPD	Moisture	2026/06/15	2.9		%	20
	A174136	BG1	Matrix Spike	4-Bromofluorobenzene	2026/06/16		106	%	60 - 140
				D10-o-Xylene	2026/06/16		122	%	60 - 130
				D4-1,2-Dichloroethane	2026/06/16		95	%	60 - 140
				D8-Toluene	2026/06/16		105	%	60 - 140
				Acetone (2-Propanone)	2026/06/16		82	%	60 - 140
				Benzene	2026/06/16		101	%	60 - 140
				Bromodichloromethane	2026/06/16		98	%	60 - 140
				Bromoform	2026/06/16		102	%	60 - 140
				Bromomethane	2026/06/16		81	%	60 - 140
				Carbon Tetrachloride	2026/06/16		106	%	60 - 140
				Chlorobenzene	2026/06/16		93	%	60 - 140
				Chloroform	2026/06/16		97	%	60 - 140
				Dibromochloromethane	2026/06/16		102	%	60 - 140
				1,2-Dichlorobenzene	2026/06/16		101	%	60 - 140
				1,3-Dichlorobenzene	2026/06/16		101	%	60 - 140
				1,4-Dichlorobenzene	2026/06/16		104	%	60 - 140
				Dichlorodifluoromethane (FREON 12)	2026/06/16		85	%	60 - 140
				1,1-Dichloroethane	2026/06/16		87	%	60 - 140
				1,2-Dichloroethane	2026/06/16		99	%	60 - 140
				1,1-Dichloroethylene	2026/06/16		90	%	60 - 140
				cis-1,2-Dichloroethylene	2026/06/16		96	%	60 - 140
				trans-1,2-Dichloroethylene	2026/06/16		93	%	60 - 140
				1,2-Dichloropropane	2026/06/16		102	%	60 - 140
				cis-1,3-Dichloropropene	2026/06/16		94	%	60 - 140
				trans-1,3-Dichloropropene	2026/06/16		103	%	60 - 140
				Ethylbenzene	2026/06/16		96	%	60 - 140
				Ethylene Dibromide	2026/06/16		96	%	60 - 140
				Hexane	2026/06/16		93	%	60 - 140
				Methylene Chloride(Dichloromethane)	2026/06/16		100	%	60 - 140
				Methyl Ethyl Ketone (2-Butanone)	2026/06/16		85	%	60 - 140
				Methyl Isobutyl Ketone	2026/06/16		94	%	60 - 140
				Methyl t-butyl ether (MTBE)	2026/06/16		91	%	60 - 140
				Styrene	2026/06/16		102	%	60 - 140
				1,1,1,2-Tetrachloroethane	2026/06/16		107	%	60 - 140
				1,1,2,2-Tetrachloroethane	2026/06/16		97	%	60 - 140
				Tetrachloroethylene	2026/06/16		95	%	60 - 140
				Toluene	2026/06/16		96	%	60 - 140
				1,1,1-Trichloroethane	2026/06/16		95	%	60 - 140
				1,1,2-Trichloroethane	2026/06/16		100	%	60 - 140
				Trichloroethylene	2026/06/16		101	%	60 - 140
				Trichlorofluoromethane (FREON 11)	2026/06/16		91	%	60 - 140
				Vinyl Chloride	2026/06/16		86	%	60 - 140
				p+m-Xylene	2026/06/16		95	%	60 - 140
				o-Xylene	2026/06/16		107	%	60 - 140
				F1 (C6-C10)	2026/06/16		93	%	60 - 140
	A174136	BG1	Spiked Blank	4-Bromofluorobenzene	2026/06/16		117	%	60 - 140
				D10-o-Xylene	2026/06/16		121	%	60 - 130
				D4-1,2-Dichloroethane	2026/06/16		94	%	60 - 140
				D8-Toluene	2026/06/16		104	%	60 - 140
				Acetone (2-Propanone)	2026/06/16		85	%	60 - 140
				Benzene	2026/06/16		100	%	60 - 130
				Bromodichloromethane	2026/06/16		97	%	60 - 130
				Bromoform	2026/06/16		114	%	60 - 130



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QA/QC Batch	Init	QC Type	Parameter	Date Analyzed	Value	Recovery	UNITS	QC Limits
A174136	BG1	Method Blank	Bromomethane	2026/06/16		85	%	60 - 140
			Carbon Tetrachloride	2026/06/16		102	%	60 - 130
			Chlorobenzene	2026/06/16		94	%	60 - 130
			Chloroform	2026/06/16		94	%	60 - 130
			Dibromochloromethane	2026/06/16		106	%	60 - 130
			1,2-Dichlorobenzene	2026/06/16		104	%	60 - 130
			1,3-Dichlorobenzene	2026/06/16		95	%	60 - 130
			1,4-Dichlorobenzene	2026/06/16		101	%	60 - 130
			Dichlorodifluoromethane (FREON 12)	2026/06/16		83	%	60 - 140
			1,1-Dichloroethane	2026/06/16		84	%	60 - 130
			1,2-Dichloroethane	2026/06/16		99	%	60 - 130
			1,1-Dichloroethylene	2026/06/16		90	%	60 - 130
			cis-1,2-Dichloroethylene	2026/06/16		89	%	60 - 130
			trans-1,2-Dichloroethylene	2026/06/16		92	%	60 - 130
			1,2-Dichloropropane	2026/06/16		96	%	60 - 130
			cis-1,3-Dichloropropene	2026/06/16		92	%	60 - 130
			trans-1,3-Dichloropropene	2026/06/16		117	%	60 - 130
			Ethylbenzene	2026/06/16		99	%	60 - 130
			Ethylene Dibromide	2026/06/16		99	%	60 - 130
			Hexane	2026/06/16		89	%	60 - 130
			Methylene Chloride(Dichloromethane)	2026/06/16		101	%	60 - 130
			Methyl Ethyl Ketone (2-Butanone)	2026/06/16		85	%	60 - 140
			Methyl Isobutyl Ketone	2026/06/16		95	%	60 - 130
			Methyl t-butyl ether (MTBE)	2026/06/16		92	%	60 - 130
			Styrene	2026/06/16		110	%	60 - 130
			1,1,1,2-Tetrachloroethane	2026/06/16		110	%	60 - 130
			1,1,2,2-Tetrachloroethane	2026/06/16		107	%	60 - 130
			Tetrachloroethylene	2026/06/16		107	%	60 - 130
			Toluene	2026/06/16		100	%	60 - 130
			1,1,1-Trichloroethane	2026/06/16		92	%	60 - 130
			1,1,2-Trichloroethane	2026/06/16		110	%	60 - 130
			Trichloroethylene	2026/06/16		101	%	60 - 130
			Trichlorofluoromethane (FREON 11)	2026/06/16		90	%	60 - 130
			Vinyl Chloride	2026/06/16		87	%	60 - 130
			p+m-Xylene	2026/06/16		101	%	60 - 130
			o-Xylene	2026/06/16		117	%	60 - 130
			F1 (C6-C10)	2026/06/16		98	%	80 - 120
			4-Bromofluorobenzene	2026/06/16		101	%	60 - 140
			D10-o-Xylene	2026/06/16		110	%	60 - 130
			D4-1,2-Dichloroethane	2026/06/16		109	%	60 - 140
			D8-Toluene	2026/06/16		106	%	60 - 140
			Acetone (2-Propanone)	2026/06/16	ND, RDL=0.49		ug/g	
			Benzene	2026/06/16	ND, RDL=0.0060		ug/g	
			Bromodichloromethane	2026/06/16	ND, RDL=0.040		ug/g	
			Bromoform	2026/06/16	ND, RDL=0.040		ug/g	
			Bromomethane	2026/06/16	ND, RDL=0.040		ug/g	
			Carbon Tetrachloride	2026/06/16	ND, RDL=0.040		ug/g	



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QA/QC Batch	Init	QC Type	Parameter	Date Analyzed	Value	Recovery	UNITS	QC Limits
			Chlorobenzene	2026/06/16	ND, RDL=0.040		ug/g	
			Chloroform	2026/06/16	ND, RDL=0.040		ug/g	
			Dibromochloromethane	2026/06/16	ND, RDL=0.040		ug/g	
			1,2-Dichlorobenzene	2026/06/16	ND, RDL=0.040		ug/g	
			1,3-Dichlorobenzene	2026/06/16	ND, RDL=0.040		ug/g	
			1,4-Dichlorobenzene	2026/06/16	ND, RDL=0.040		ug/g	
			Dichlorodifluoromethane (FREON 12)	2026/06/16	ND, RDL=0.040		ug/g	
			1,1-Dichloroethane	2026/06/16	ND, RDL=0.040		ug/g	
			1,2-Dichloroethane	2026/06/16	ND, RDL=0.049		ug/g	
			1,1-Dichloroethylene	2026/06/16	ND, RDL=0.040		ug/g	
			cis-1,2-Dichloroethylene	2026/06/16	ND, RDL=0.040		ug/g	
			trans-1,2-Dichloroethylene	2026/06/16	ND, RDL=0.040		ug/g	
			1,2-Dichloropropane	2026/06/16	ND, RDL=0.040		ug/g	
			cis-1,3-Dichloropropene	2026/06/16	ND, RDL=0.030		ug/g	
			trans-1,3-Dichloropropene	2026/06/16	ND, RDL=0.040		ug/g	
			Ethylbenzene	2026/06/16	ND, RDL=0.010		ug/g	
			Ethylene Dibromide	2026/06/16	ND, RDL=0.040		ug/g	
			Hexane	2026/06/16	ND, RDL=0.040		ug/g	
			Methylene Chloride(Dichloromethane)	2026/06/16	ND, RDL=0.049		ug/g	
			Methyl Ethyl Ketone (2-Butanone)	2026/06/16	ND, RDL=0.40		ug/g	
			Methyl Isobutyl Ketone	2026/06/16	ND, RDL=0.40		ug/g	
			Methyl t-butyl ether (MTBE)	2026/06/16	ND, RDL=0.040		ug/g	
			Styrene	2026/06/16	ND, RDL=0.040		ug/g	
			1,1,1,2-Tetrachloroethane	2026/06/16	ND, RDL=0.040		ug/g	
			1,1,1,2,2-Tetrachloroethane	2026/06/16	ND, RDL=0.040		ug/g	
			Tetrachloroethylene	2026/06/16	ND, RDL=0.040		ug/g	
			Toluene	2026/06/16	ND, RDL=0.020		ug/g	



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QUALITY ASSURANCE REPORT(CONT'D)

QA/QC Batch	Init	QC Type	Parameter	Date Analyzed	Value	Recovery	UNITS	QC Limits
A174136	BG1	RPD	1,1,1-Trichloroethane	2026/06/16	ND, RDL=0.040		ug/g	
			1,1,2-Trichloroethane	2026/06/16	ND, RDL=0.040		ug/g	
			Trichloroethylene	2026/06/16	ND, RDL=0.010		ug/g	
			Trichlorofluoromethane (FREON 11)	2026/06/16	ND, RDL=0.040		ug/g	
			Vinyl Chloride	2026/06/16	ND, RDL=0.019		ug/g	
			p+m-Xylene	2026/06/16	ND, RDL=0.020		ug/g	
			o-Xylene	2026/06/16	ND, RDL=0.020		ug/g	
			Total Xylenes	2026/06/16	ND, RDL=0.020		ug/g	
			F1 (C6-C10)	2026/06/16	ND, RDL=10		ug/g	
			F1 (C6-C10) - BTEX	2026/06/16	ND, RDL=10		ug/g	
			Acetone (2-Propanone)	2026/06/16	NC		%	50
			Benzene	2026/06/16	NC		%	50
			Bromodichloromethane	2026/06/16	NC		%	50
			Bromoform	2026/06/16	NC		%	50
			Bromomethane	2026/06/16	NC		%	50
			Carbon Tetrachloride	2026/06/16	NC		%	50
			Chlorobenzene	2026/06/16	NC		%	50
			Chloroform	2026/06/16	NC		%	50
			Dibromochloromethane	2026/06/16	NC		%	50
			1,2-Dichlorobenzene	2026/06/16	NC		%	50
			1,3-Dichlorobenzene	2026/06/16	NC		%	50
			1,4-Dichlorobenzene	2026/06/16	NC		%	50
			Dichlorodifluoromethane (FREON 12)	2026/06/16	NC		%	50
			1,1-Dichloroethane	2026/06/16	NC		%	50
			1,2-Dichloroethane	2026/06/16	NC		%	50
			1,1-Dichloroethylene	2026/06/16	NC		%	50
			cis-1,2-Dichloroethylene	2026/06/16	NC		%	50
			trans-1,2-Dichloroethylene	2026/06/16	NC		%	50
			1,2-Dichloropropane	2026/06/16	NC		%	50
			cis-1,3-Dichloropropene	2026/06/16	NC		%	50
			trans-1,3-Dichloropropene	2026/06/16	NC		%	50
			Ethylbenzene	2026/06/16	NC		%	50
			Ethylene Dibromide	2026/06/16	NC		%	50
			Hexane	2026/06/16	NC		%	50
			Methylene Chloride(Dichloromethane)	2026/06/16	NC		%	50
			Methyl Ethyl Ketone (2-Butanone)	2026/06/16	NC		%	50
			Methyl Isobutyl Ketone	2026/06/16	NC		%	50
			Methyl t-butyl ether (MTBE)	2026/06/16	NC		%	50
			Styrene	2026/06/16	NC		%	50
			1,1,1,2-Tetrachloroethane	2026/06/16	NC		%	50
			1,1,2,2-Tetrachloroethane	2026/06/16	NC		%	50
			Tetrachloroethylene	2026/06/16	NC		%	50
			Toluene	2026/06/16	NC		%	50
			1,1,1-Trichloroethane	2026/06/16	NC		%	50



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QA/QC Batch	Init	QC Type	Parameter	Date Analyzed	Value	Recovery	UNITS	QC Limits
			1,1,2-Trichloroethane	2026/06/16	NC		%	50
			Trichloroethylene	2026/06/16	NC		%	50
			Trichlorofluoromethane (FREON 11)	2026/06/16	NC		%	50
			Vinyl Chloride	2026/06/16	NC		%	50
			p+m-Xylene	2026/06/16	NC		%	50
			o-Xylene	2026/06/16	NC		%	50
			Total Xylenes	2026/06/16	NC		%	50
			F1 (C6-C10)	2026/06/16	NC		%	30
			F1 (C6-C10) - BTEX	2026/06/16	NC		%	30
A175014	GK6	Spiked Blank	Available (CaCl2) pH	2026/06/16		100	%	97 - 103
A175014	GK6	RPD	Available (CaCl2) pH	2026/06/16	0.80		%	N/A
A175250	DNO	Matrix Spike	o-Terphenyl	2026/06/16		90	%	60 - 140
			F2 (C10-C16 Hydrocarbons)	2026/06/16		91	%	60 - 140
			F3 (C16-C34 Hydrocarbons)	2026/06/16		95	%	60 - 140
			F4 (C34-C50 Hydrocarbons)	2026/06/16		93	%	60 - 140
A175250	DNO	Spiked Blank	o-Terphenyl	2026/06/16		84	%	60 - 140
			F2 (C10-C16 Hydrocarbons)	2026/06/16		84	%	80 - 120
			F3 (C16-C34 Hydrocarbons)	2026/06/16		88	%	80 - 120
			F4 (C34-C50 Hydrocarbons)	2026/06/16		86	%	80 - 120
A175250	DNO	Method Blank	o-Terphenyl	2026/06/16		91	%	60 - 140
			F2 (C10-C16 Hydrocarbons)	2026/06/16	ND, RDL=7.0		ug/g	
			F3 (C16-C34 Hydrocarbons)	2026/06/16	ND, RDL=50		ug/g	
			F4 (C34-C50 Hydrocarbons)	2026/06/16	ND, RDL=50		ug/g	
A175250	DNO	RPD	F2 (C10-C16 Hydrocarbons)	2026/06/16	NC		%	30
			F3 (C16-C34 Hydrocarbons)	2026/06/16	NC		%	30
			F4 (C34-C50 Hydrocarbons)	2026/06/16	NC		%	30
A175766	JYO	Matrix Spike	D10-Anthracene	2026/06/17		76	%	50 - 130
			D14-Terphenyl (FS)	2026/06/17		88	%	50 - 130
			D8-Acenaphthylene	2026/06/17		86	%	50 - 130
			Acenaphthene	2026/06/17		88	%	50 - 130
			Acenaphthylene	2026/06/17		88	%	50 - 130
			Anthracene	2026/06/17		81	%	50 - 130
			Benzo(a)anthracene	2026/06/17		60	%	50 - 130
			Benzo(a)pyrene	2026/06/17		30 (1)	%	50 - 130
			Benzo(b/j)fluoranthene	2026/06/17		49 (1)	%	50 - 130
			Benzo(g,h,i)perylene	2026/06/17		25 (1)	%	50 - 130
			Benzo(k)fluoranthene	2026/06/17		36 (1)	%	50 - 130
			Chrysene	2026/06/17		62	%	50 - 130
			Dibenzo(a,h)anthracene	2026/06/17		29 (1)	%	50 - 130
			Fluoranthene	2026/06/17		86	%	50 - 130
			Fluorene	2026/06/17		92	%	50 - 130
			Indeno(1,2,3-cd)pyrene	2026/06/17		30 (1)	%	50 - 130
			1-Methylnaphthalene	2026/06/17		92	%	50 - 130
			2-Methylnaphthalene	2026/06/17		97	%	50 - 130
			Naphthalene	2026/06/17		99	%	50 - 130
			Phenanthrene	2026/06/17		95	%	50 - 130
			Pyrene	2026/06/17		82	%	50 - 130
A175766	JYO	Spiked Blank	D10-Anthracene	2026/06/17		101	%	50 - 130
			D14-Terphenyl (FS)	2026/06/17		95	%	50 - 130
			D8-Acenaphthylene	2026/06/17		96	%	50 - 130
			Acenaphthene	2026/06/17		91	%	50 - 130



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QA/QC Batch	Init	QC Type	Parameter	Date Analyzed	Value	Recovery	UNITS	QC Limits
A175766	JYO	Method Blank	Acenaphthylene	2026/06/17		92	%	50 - 130
			Anthracene	2026/06/17		96	%	50 - 130
			Benzo(a)anthracene	2026/06/17		83	%	50 - 130
			Benzo(a)pyrene	2026/06/17		91	%	50 - 130
			Benzo(b/j)fluoranthene	2026/06/17		90	%	50 - 130
			Benzo(g,h,i)perylene	2026/06/17		90	%	50 - 130
			Benzo(k)fluoranthene	2026/06/17		100	%	50 - 130
			Chrysene	2026/06/17		90	%	50 - 130
			Dibenzo(a,h)anthracene	2026/06/17		97	%	50 - 130
			Fluoranthene	2026/06/17		89	%	50 - 130
			Fluorene	2026/06/17		90	%	50 - 130
			Indeno(1,2,3-cd)pyrene	2026/06/17		98	%	50 - 130
			1-Methylnaphthalene	2026/06/17		88	%	50 - 130
			2-Methylnaphthalene	2026/06/17		92	%	50 - 130
			Naphthalene	2026/06/17		81	%	50 - 130
			Phenanthrene	2026/06/17		96	%	50 - 130
			Pyrene	2026/06/17		89	%	50 - 130
			D10-Anthracene	2026/06/17		97	%	50 - 130
			D14-Terphenyl (FS)	2026/06/17		94	%	50 - 130
			D8-Acenaphthylene	2026/06/17		90	%	50 - 130
			Acenaphthene	2026/06/17	ND, RDL=0.0050		ug/g	
			Acenaphthylene	2026/06/17	ND, RDL=0.0050		ug/g	
			Anthracene	2026/06/17	ND, RDL=0.0050		ug/g	
			Benzo(a)anthracene	2026/06/17	ND, RDL=0.0050		ug/g	
			Benzo(a)pyrene	2026/06/17	ND, RDL=0.0050		ug/g	
			Benzo(b/j)fluoranthene	2026/06/17	ND, RDL=0.0050		ug/g	
			Benzo(g,h,i)perylene	2026/06/17	ND, RDL=0.0050		ug/g	
			Benzo(k)fluoranthene	2026/06/17	ND, RDL=0.0050		ug/g	
			Chrysene	2026/06/17	ND, RDL=0.0050		ug/g	
			Dibenzo(a,h)anthracene	2026/06/17	ND, RDL=0.0050		ug/g	
			Fluoranthene	2026/06/17	ND, RDL=0.0050		ug/g	
			Fluorene	2026/06/17	ND, RDL=0.0050		ug/g	
			Indeno(1,2,3-cd)pyrene	2026/06/17	ND, RDL=0.0050		ug/g	
			1-Methylnaphthalene	2026/06/17	ND, RDL=0.0050		ug/g	
			2-Methylnaphthalene	2026/06/17	ND, RDL=0.0050		ug/g	
			Naphthalene	2026/06/17	ND, RDL=0.0050		ug/g	
			Phenanthrene	2026/06/17	ND, RDL=0.0050		ug/g	



QUALITY ASSURANCE REPORT(CONT'D)

QA/QC Batch	Init	QC Type	Parameter	Date Analyzed	Value	Recovery	UNITS	QC Limits
A175766	JYO	RPD	Pyrene	2026/06/17	ND, RDL=0.0050		ug/g	
			Acenaphthene	2026/06/17	NC		%	40
			Acenaphthylene	2026/06/17	NC		%	40
			Anthracene	2026/06/17	NC		%	40
			Benzo(a)anthracene	2026/06/17	NC		%	40
			Benzo(a)pyrene	2026/06/17	NC		%	40
			Benzo(b/j)fluoranthene	2026/06/17	10		%	40
			Benzo(g,h,i)perylene	2026/06/17	15		%	40
			Benzo(k)fluoranthene	2026/06/17	NC		%	40
			Chrysene	2026/06/17	NC		%	40
			Dibenzo(a,h)anthracene	2026/06/17	NC		%	40
			Fluoranthene	2026/06/17	17		%	40
			Fluorene	2026/06/17	NC		%	40
			Indeno(1,2,3-cd)pyrene	2026/06/17	NC		%	40
			1-Methylnaphthalene	2026/06/17	NC		%	40
			2-Methylnaphthalene	2026/06/17	NC		%	40
			Naphthalene	2026/06/17	NC		%	40
			Phenanthrene	2026/06/17	NC		%	40
			Pyrene	2026/06/17	16		%	40

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.

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 (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 $\leq 2 \times$ RDL).

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



BUREAU
VERITAS

Bureau Veritas Job #: C668233

Report Date: 2026/06/18

Lopers & Associates

Client Project #: LOP26-044B

Sampler Initials: LL

VALIDATION SIGNATURE PAGE

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

A handwritten signature in black ink, appearing to read 'Arabee Pereira', written over a horizontal line.

Arabee Pereira, Consulting Scientist

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.



SERVICE CENTER COOLER TEMPERATURE RECORD

COOLER OBSERVATIONS:

BV Receipt #	
1	OTT-2026-05-133
2	136
3	138 FO 140
4	129
5	118
6	124
7	137
8	135
9	131
10	119 FO 122

CUSTODY SEAL	YES	NO	Drinking Water
PRESENT	☒	☐	TEMP 2 1 1
INTACT	☒	☐	
ICE PRESENT	☒	☐	
CUSTODY SEAL	YES	NO	Drinking Water
PRESENT	☒	☐	TEMP 2 2 2
INTACT	☒	☐	
ICE PRESENT	☒	☐	
CUSTODY SEAL	YES	NO	Drinking Water
PRESENT	☒	☐	TEMP 3 3 3
INTACT	☒	☐	
ICE PRESENT	☒	☐	
CUSTODY SEAL	YES	NO	Drinking Water
PRESENT	☒	☐	TEMP 4 2 1
INTACT	☒	☐	
ICE PRESENT	☒	☐	
CUSTODY SEAL	YES	NO	Drinking Water
PRESENT	☒	☐	TEMP 2 4 3
INTACT	☒	☐	
ICE PRESENT	☒	☐	
CUSTODY SEAL	YES	NO	Drinking Water
PRESENT	☒	☐	TEMP 3 2 1
INTACT	☒	☐	
ICE PRESENT	☒	☐	
CUSTODY SEAL	YES	NO	Drinking Water
PRESENT	☒	☐	TEMP 2 2 2
INTACT	☒	☐	
ICE PRESENT	☒	☐	
CUSTODY SEAL	YES	NO	Drinking Water
PRESENT	☒	☐	TEMP 1 1 0
INTACT	☒	☐	
ICE PRESENT	☒	☐	
CUSTODY SEAL	YES	NO	Drinking Water
PRESENT	☒	☐	TEMP 4 2 1
INTACT	☒	☐	
ICE PRESENT	☒	☐	
CUSTODY SEAL	YES	NO	Drinking Water
PRESENT	☒	☐	TEMP 4 2 2
INTACT	☒	☐	
ICE PRESENT	☒	☐	

RECEIVED BY (PRINT & SIGN)	DATE (YYYY/MM/DD)	TIME (HH:MM)
ANMOLEPREF SINUM CH	2026/06/12	06:55

CHAIN-OF-CUSTODY RECORD

SHIPPED FROM BV SERVICE CENTER:

OTTAWA

RECEIVED AT:

MISSISSAUGA

BV Receipt #	
11	OTT-2026-06-130
12	141
13	125
14	126
15	117
16	117
17	117
18	117
19	117
20	128

CUSTODY SEAL	YES	NO	Drinking Water
PRESENT	☒	☐	TEMP 4 2 2
INTACT	☒	☐	
ICE PRESENT	☒	☐	
CUSTODY SEAL	YES	NO	Drinking Water
PRESENT	☒	☐	TEMP 2 1 1
INTACT	☒	☐	
ICE PRESENT	☒	☐	
CUSTODY SEAL	YES	NO	Drinking Water
PRESENT	☒	☐	TEMP 2 2 2
INTACT	☒	☐	
ICE PRESENT	☒	☐	
CUSTODY SEAL	YES	NO	Drinking Water
PRESENT	☒	☐	TEMP 3 2 1
INTACT	☒	☐	
ICE PRESENT	☒	☐	
CUSTODY SEAL	YES	NO	Drinking Water
PRESENT	☒	☐	TEMP 4 2 4
INTACT	☒	☐	
ICE PRESENT	☒	☐	
CUSTODY SEAL	YES	NO	Drinking Water
PRESENT	☒	☐	TEMP 4 6 4
INTACT	☒	☐	
ICE PRESENT	☒	☐	
CUSTODY SEAL	YES	NO	Drinking Water
PRESENT	☒	☐	TEMP 2 2 1
INTACT	☒	☐	
ICE PRESENT	☒	☐	
CUSTODY SEAL	YES	NO	Drinking Water
PRESENT	☒	☐	TEMP 2 2 6
INTACT	☒	☐	
ICE PRESENT	☒	☐	
CUSTODY SEAL	YES	NO	Drinking Water
PRESENT	☒	☐	TEMP 3 2 2
INTACT	☒	☐	
ICE PRESENT	☒	☐	
CUSTODY SEAL	YES	NO	Drinking Water
PRESENT	☒	☐	TEMP 4 2 2
INTACT	☒	☐	
ICE PRESENT	☒	☐	

If Custody seal condition and presence of ice is the same for all, use these boxes:

CUSTODY SEAL	YES	NO
PRESENT	☒	☐
INTACT	☒	☐
ICE PRESENT	☒	☐

C668233
2026/06/11 12:00

Bureau Veritas
36 Antares Dr Unit 100, Nepean, Ontario Canada K2E 7W5 Tel: (613) 274-0573 Toll-free: 800-563-6266 Fax: (613) 274-0574 www.bvna.com

Received in Ottawa

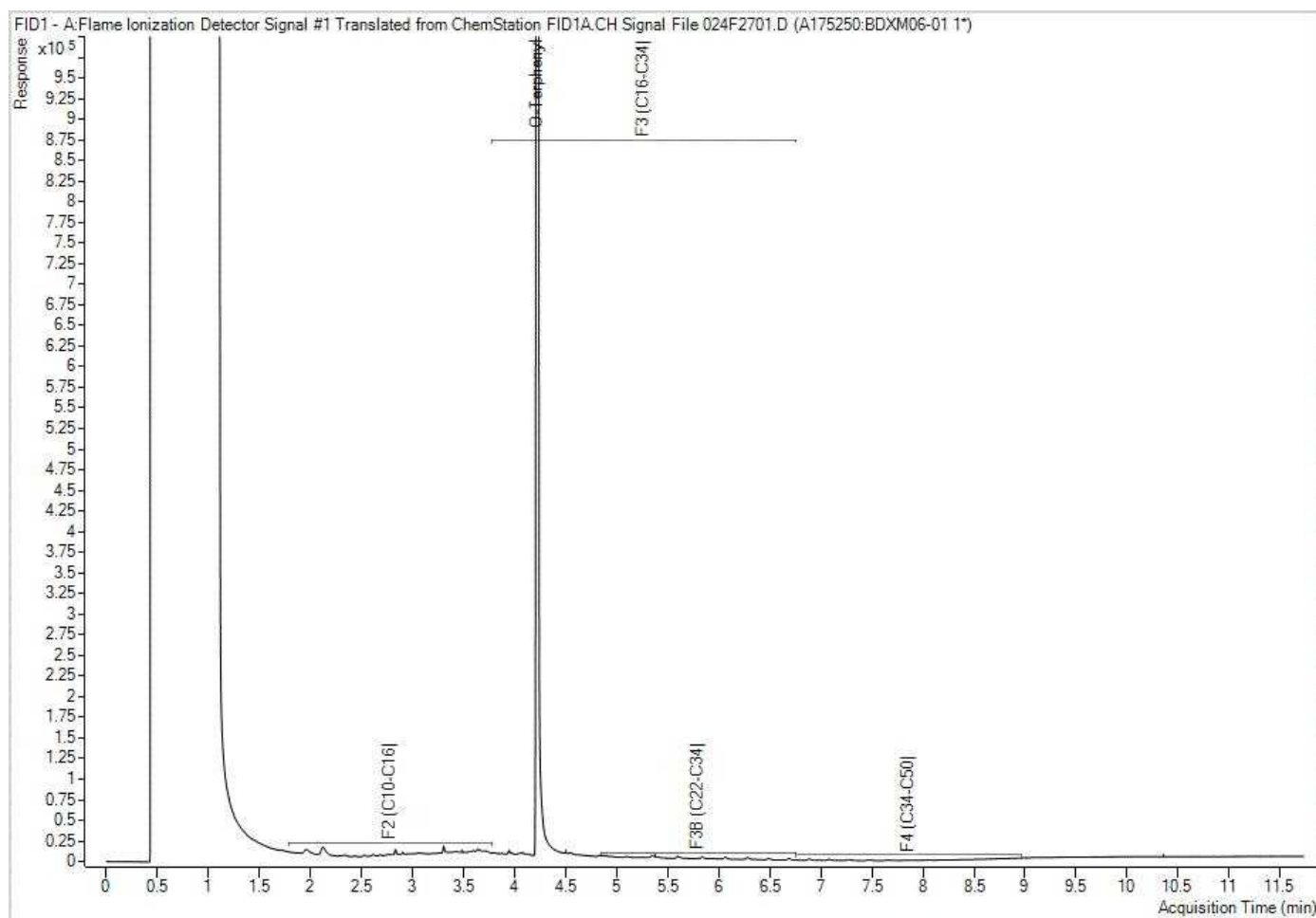
CHAIN OF CUSTODY RECORD

Page of

Invoice To:		Report To:		PROJECT INFORMATION:		Laboratory Use Only:	
Company:	#39509 Lopers & Associates	Company:	Luke Lopers	Quotation #:	C43362	Bureau Veritas Job #:	Bottle Order #:
Attention:	Luke Lopers	Attention:	Luke Lopers	P.O. #:			1121691
Address:	30 Lansfield Way Ottawa ON K2G 3V8	Address:		Project:	LOP26-044B		
Tel:	(613) 327-9073	Tel:		Project Name:		COC #:	Project Manager:
Email:	Luke@lopers.ca	Email:	Luke@lopers.ca	Site #:	L. Lopers		Katherine Szozda
MOBILIZED DRINKING WATER OR WATER INTENDED FOR HUMAN CONSUMPTION MUST BE SUBMITTED ON THE BUREAU VERITAS DRINKING WATER CHAIN OF CUSTODY				ANALYSIS REQUESTED (PLEASE BE SPECIFIC)		Turnaround Time (TAT) Required: Please provide advance notice for rush projects	
Regulation 153 (2011) ☐ Table 1 ☒ Residential ☐ Medium/Fine ☐ Table 2 ☐ IndComm ☒ Coarse ☒ Table 3 ☐ Agri/Other ☐ For RSC		Other Regulations ☐ CCME ☐ Sanitary Sewer Bylaw ☐ Reg 558 ☐ Storm Sewer Bylaw ☐ MISA ☐ Municipality ☐ PWQO ☐ Reg 406 Table ☐ Other		Special Instructions		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 applicable to entire submission) Date Required: Time Required: Rush Confirmation Number: (call lab for #)	
Include Criteria on Certificate of Analysis (Y/N)?				Fold Filtered (please circle): Metals / Hg / Cr VI			
Sample Barcode Label	Sample (Location) Identification	Date Sampled	Time Sampled	Matrix	0 Reg 153 VOCs by HS & F1-F4 (Soil)	1 Reg 153 PAHs (Soil)	2 Reg 153 PAHs (Soil)
1	BH1-26-SS1	June 9, 2026	9:45 PM	S	X	X	
2	BH2-26-SS1	June 10, 2026	2:15 AM	S	X	X	X
3	BH3-26-SS1A	June 10, 2026	7:20 PM	S	X	X	X
4	BH4-26-SS1	June 10, 2026	11:10 PM	S	X	X	
5	DUP-06/10	June 10, 2026		S	X	X	
6							
7							
8							
9							
10							
* Relinquished By (Print): Luke Lopers				RECEIVED BY: (Signature/Print) Leen Asad		# jars used and not submitted	
Date: (YY/MM/DD) 26/06/11				Time: 3:05 AM		Date: (YY/MM/DD) 2026/06/11	
Time: 12:00				Time: 12:00		Laboratory Use Only Time Sensitive Temperature (°C) on Receipt 8/9/7	
Custody Seal Present Intact				Yes No		White: Bureau Veritas Yellow: Client	
* 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.							
SAMPLES MUST BE KEPT COOL (< 10° C) FROM TIME OF SAMPLING UNTIL DELIVERY TO BUREAU VERITAS							

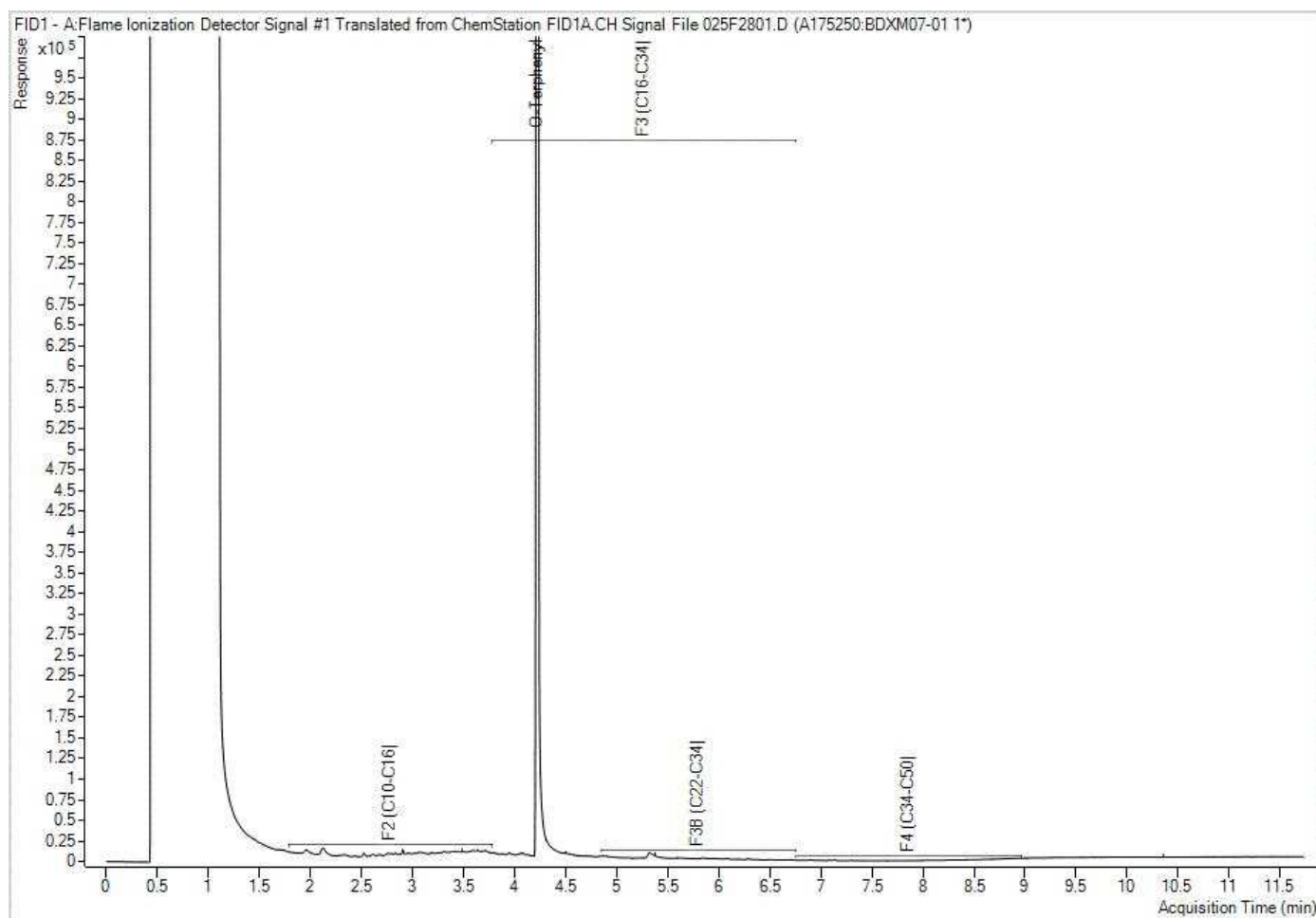
Bureau Veritas Canada (2018) Inc.

Petroleum Hydrocarbons F2-F4 in Soil Chromatogram



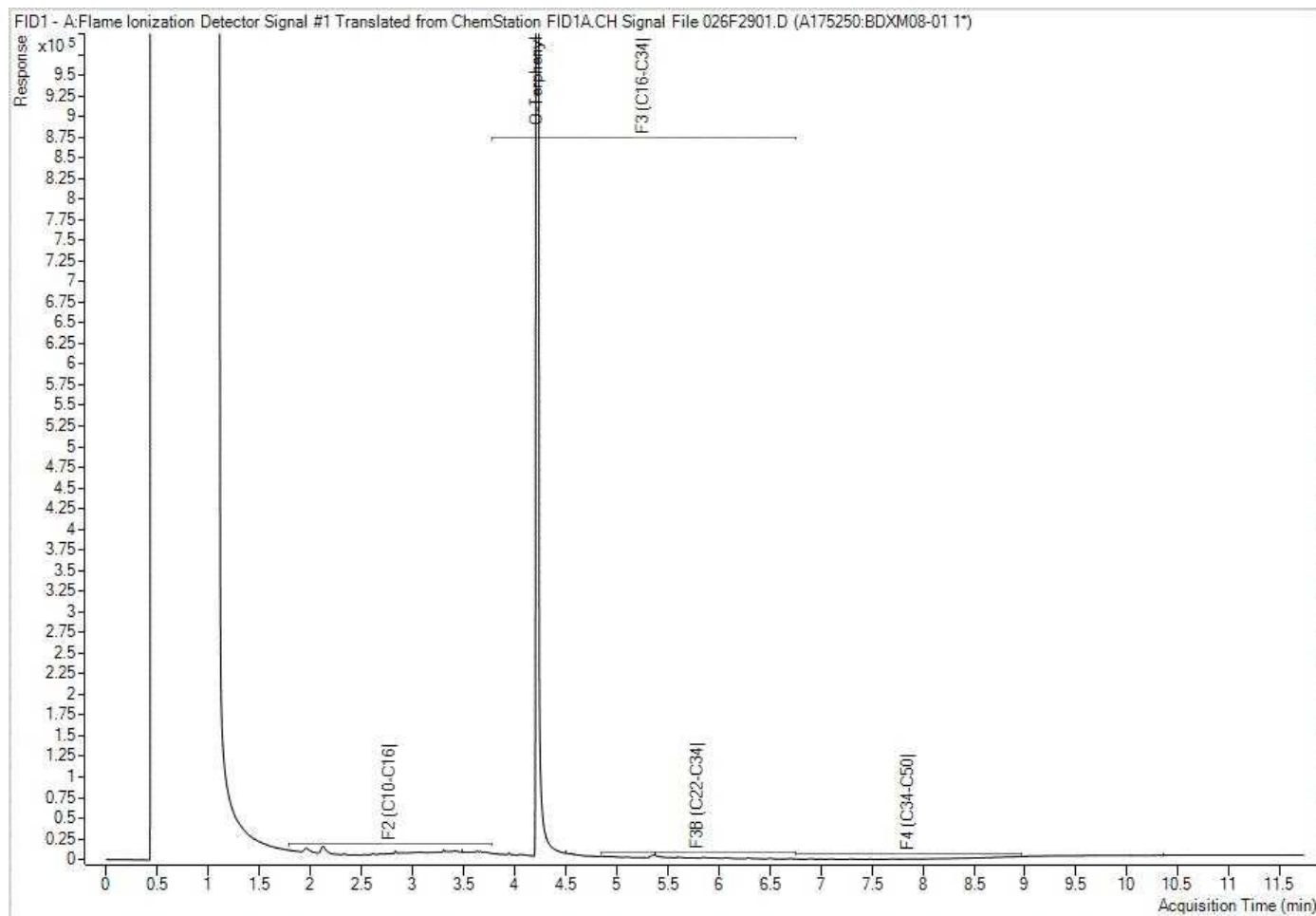
Note: This information is provided for reference purposes only. Should detailed chemist interpretation or fingerprinting be required, please contact the laboratory.

Petroleum Hydrocarbons F2-F4 in Soil Chromatogram



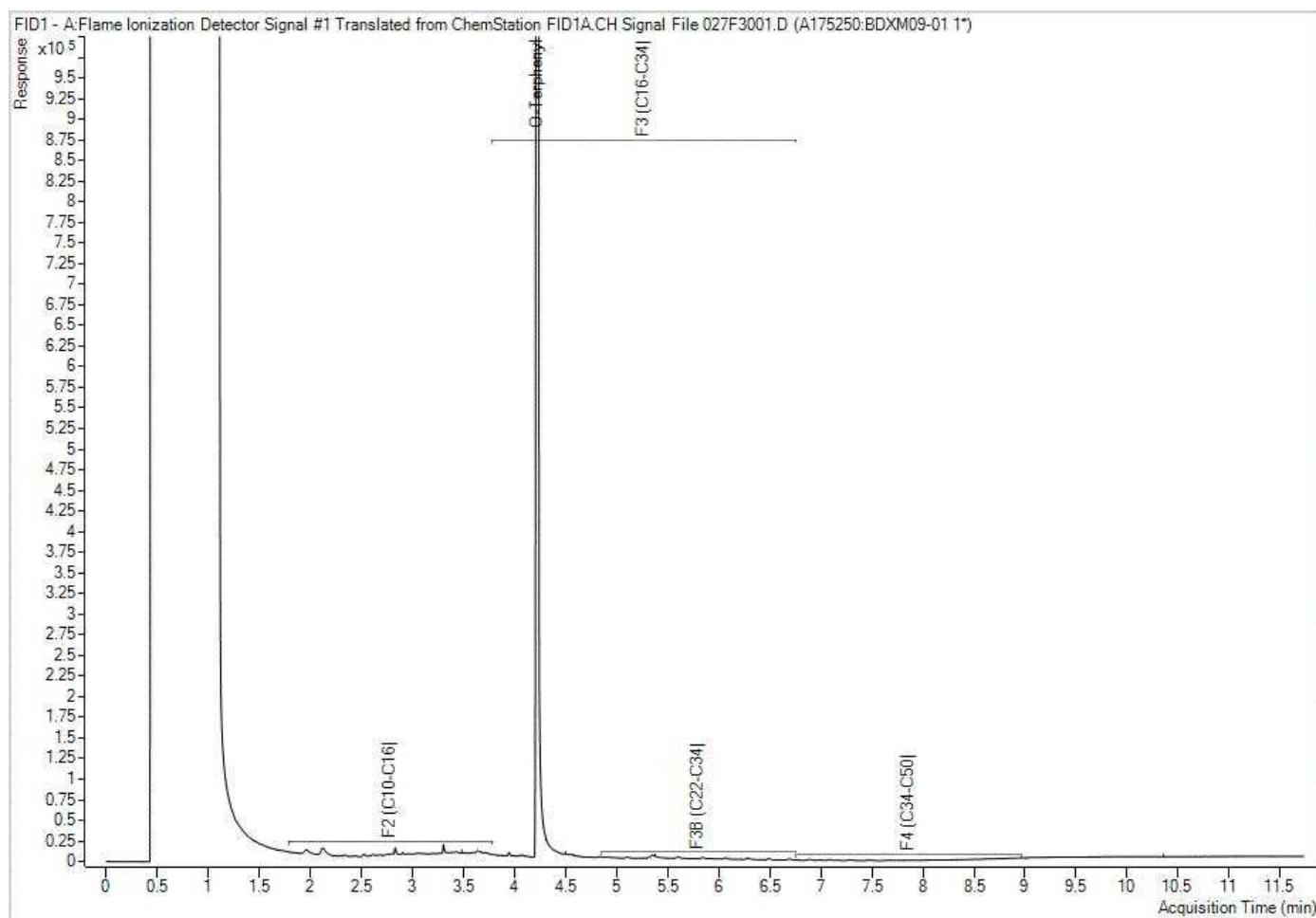
Note: This information is provided for reference purposes only. Should detailed chemist interpretation or fingerprinting be required, please contact the laboratory.

Petroleum Hydrocarbons F2-F4 in Soil Chromatogram



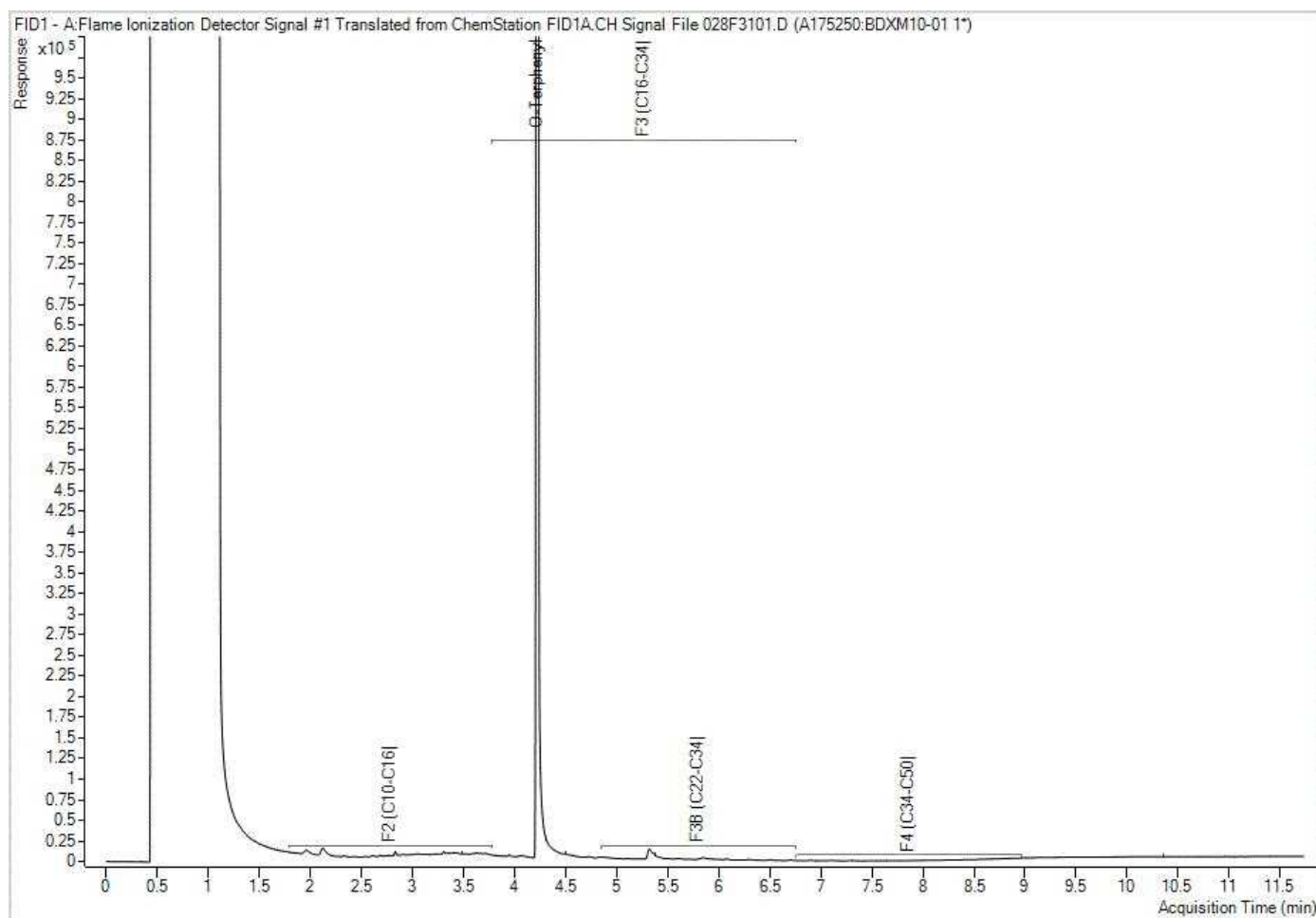
Note: This information is provided for reference purposes only. Should detailed chemist interpretation or fingerprinting be required, please contact the laboratory.

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.

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 Project #: LOP26-044B
Your C.O.C. #: C#1122857-01-01

Attention: Luke Lopers

Lopers & Associates
30 Lansfield Way
Ottawa, ON
CANADA K2G 3V8

Report Date: 2026/06/23
Report #: R8765782
Version: 1 - Final

CERTIFICATE OF ANALYSIS

BUREAU VERITAS JOB #: C670251

Received: 2026/06/16, 13:30

Sample Matrix: Water
Samples Received: 6

Analyses	Date		Date Analyzed	Laboratory Method	Analytical Method
	Quantity	Extracted			
Methylnaphthalene Sum (1)	4	N/A	2026/06/23	CAM SOP-00301	EPA 8270D m
1,3-Dichloropropene Sum (1)	6	N/A	2026/06/22		EPA 8260C m
Petroleum Hydrocarbons F2-F4 in Water (1, 2)	4	2026/06/20	2026/06/21	CAM SOP-00316	CCME PHC-CWS m
PAH Compounds in Water by GC/MS (SIM) (1)	1	2026/06/22	2026/06/23	CAM SOP-00318	EPA 8270E
PAH Compounds in Water by GC/MS (SIM) (1)	3	2026/06/23	2026/06/23	CAM SOP-00318	EPA 8270E
Volatile Organic Compounds and F1 PHCs (1)	4	N/A	2026/06/21	CAM SOP-00230	EPA 8260D m
Volatile Organic Compounds in Water (1)	2	N/A	2026/06/19	CAM SOP-00228	EPA 8260D

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.

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) 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.



Your Project #: LOP26-044B
Your C.O.C. #: C#1122857-01-01

Attention: Luke Lopers

Lopers & Associates
30 Lansfield Way
Ottawa, ON
CANADA K2G 3V8

Report Date: 2026/06/23
Report #: R8765782
Version: 1 - Final

CERTIFICATE OF ANALYSIS

BUREAU VERITAS JOB #: C670251

Received: 2026/06/16, 13:30

Encryption Key

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

Bureau Veritas Job #: C670251
Report Date: 2026/06/23

Lopers & Associates
Client Project #: LOP26-044B
Sampler Initials: LL

SEMI-VOLATILE ORGANICS BY GC-MS (WATER)

Bureau Veritas ID		BEBB82	BEBB83	BEBB84		BEBB86		
Sampling Date		2026/06/16	2026/06/16	2026/06/16		2026/06/16		
COC Number		C#1122857-01-01	C#1122857-01-01	C#1122857-01-01		C#1122857-01-01		
	UNITS	BH1-26-GW1	BH2-26-GW1	BH3-26-GW1	QC Batch	DUP-06/16	RDL	QC Batch
Calculated Parameters								
Methylnaphthalene, 2-(1-)	ug/L	ND	ND	ND	A175784	ND	0.071	A175784
Polyaromatic Hydrocarbons								
Acenaphthene	ug/L	ND	ND	ND	A179882	ND	0.050	A179330
Acenaphthylene	ug/L	ND	ND	ND	A179882	ND	0.050	A179330
Anthracene	ug/L	ND	ND	ND	A179882	ND	0.050	A179330
Benzo(a)anthracene	ug/L	ND	ND	ND	A179882	ND	0.050	A179330
Benzo(a)pyrene	ug/L	ND	ND	ND	A179882	ND	0.0090	A179330
Benzo(b,j)fluoranthene	ug/L	ND	ND	ND	A179882	ND	0.050	A179330
Benzo(g,h,i)perylene	ug/L	ND	ND	ND	A179882	ND	0.050	A179330
Benzo(k)fluoranthene	ug/L	ND	ND	ND	A179882	ND	0.050	A179330
Chrysene	ug/L	ND	ND	ND	A179882	ND	0.050	A179330
Dibenzo(a,h)anthracene	ug/L	ND	ND	ND	A179882	ND	0.050	A179330
Fluoranthene	ug/L	ND	ND	ND	A179882	ND	0.050	A179330
Fluorene	ug/L	ND	ND	ND	A179882	ND	0.050	A179330
Indeno(1,2,3-cd)pyrene	ug/L	ND	ND	ND	A179882	ND	0.050	A179330
1-Methylnaphthalene	ug/L	ND	ND	ND	A179882	ND	0.050	A179330
2-Methylnaphthalene	ug/L	ND	ND	ND	A179882	ND	0.050	A179330
Naphthalene	ug/L	ND	ND	ND	A179882	ND	0.050	A179330
Phenanthrene	ug/L	ND	ND	ND	A179882	ND	0.030	A179330
Pyrene	ug/L	ND	ND	ND	A179882	ND	0.050	A179330
Surrogate Recovery (%)								
D10-Anthracene	%	101	110	107	A179882	127		A179330
D14-Terphenyl (FS)	%	66	82	71	A179882	103		A179330
D8-Acenaphthylene	%	90	97	100	A179882	111		A179330
RDL = Reportable Detection Limit								
QC Batch = Quality Control Batch								
ND = Not Detected at a concentration equal or greater than the indicated Detection Limit.								

BUREAU
VERITAS

Bureau Veritas Job #: C670251

Report Date: 2026/06/23

Lopers & Associates

Client Project #: LOP26-044B

Sampler Initials: LL

VOLATILE ORGANICS BY GC/MS (WATER)

Bureau Veritas ID		BEBB82	BEBB83	BEBB84		
Sampling Date		2026/06/16	2026/06/16	2026/06/16		
COC Number		C#1122857-01-01	C#1122857-01-01	C#1122857-01-01		
	UNITS	BH1-26-GW1	BH2-26-GW1	BH3-26-GW1	RDL	QC Batch
Calculated Parameters						
1,3-Dichloropropene (cis+trans)	ug/L	ND	ND	ND	0.50	A175542
Volatile Organics						
Acetone (2-Propanone)	ug/L	ND	ND	ND	10	A176797
Benzene	ug/L	ND	ND	ND	0.17	A176797
Bromodichloromethane	ug/L	ND	ND	ND	0.50	A176797
Bromoform	ug/L	ND	ND	ND	1.0	A176797
Bromomethane	ug/L	ND	ND	ND	0.50	A176797
Carbon Tetrachloride	ug/L	ND	ND	ND	0.20	A176797
Chlorobenzene	ug/L	ND	ND	ND	0.20	A176797
Chloroform	ug/L	3.0	0.88	4.6	0.20	A176797
Dibromochloromethane	ug/L	ND	ND	ND	0.50	A176797
1,2-Dichlorobenzene	ug/L	ND	ND	ND	0.50	A176797
1,3-Dichlorobenzene	ug/L	ND	ND	ND	0.50	A176797
1,4-Dichlorobenzene	ug/L	ND	ND	ND	0.50	A176797
Dichlorodifluoromethane (FREON 12)	ug/L	ND	ND	ND	1.0	A176797
1,1-Dichloroethane	ug/L	ND	ND	ND	0.20	A176797
1,2-Dichloroethane	ug/L	ND	ND	ND	0.50	A176797
1,1-Dichloroethylene	ug/L	ND	ND	ND	0.20	A176797
cis-1,2-Dichloroethylene	ug/L	ND	ND	ND	0.50	A176797
trans-1,2-Dichloroethylene	ug/L	ND	ND	ND	0.50	A176797
1,2-Dichloropropane	ug/L	ND	ND	ND	0.20	A176797
cis-1,3-Dichloropropene	ug/L	ND	ND	ND	0.30	A176797
trans-1,3-Dichloropropene	ug/L	ND	ND	ND	0.40	A176797
Ethylbenzene	ug/L	ND	ND	ND	0.20	A176797
Ethylene Dibromide	ug/L	ND	ND	ND	0.20	A176797
Hexane	ug/L	ND	ND	ND	1.0	A176797
Methylene Chloride(Dichloromethane)	ug/L	ND	ND	ND	2.0	A176797
Methyl Ethyl Ketone (2-Butanone)	ug/L	ND	ND	ND	10	A176797
Methyl Isobutyl Ketone	ug/L	ND	ND	ND	5.0	A176797
Methyl t-butyl ether (MTBE)	ug/L	ND	ND	ND	0.50	A176797
Styrene	ug/L	ND	ND	ND	0.50	A176797
1,1,1,2-Tetrachloroethane	ug/L	ND	ND	ND	0.50	A176797
RDL = Reportable Detection Limit						
QC Batch = Quality Control Batch						
ND = Not Detected at a concentration equal or greater than the indicated Detection Limit.						



BUREAU
VERITAS

Bureau Veritas Job #: C670251
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Lopers & Associates
Client Project #: LOP26-044B
Sampler Initials: LL

VOLATILE ORGANICS BY GC/MS (WATER)

Bureau Veritas ID		BEBB82	BEBB83	BEBB84		
Sampling Date		2026/06/16	2026/06/16	2026/06/16		
COC Number		C#1122857-01-01	C#1122857-01-01	C#1122857-01-01		
	UNITS	BH1-26-GW1	BH2-26-GW1	BH3-26-GW1	RDL	QC Batch
1,1,2,2-Tetrachloroethane	ug/L	ND	ND	ND	0.50	A176797
Tetrachloroethylene	ug/L	ND	ND	ND	0.20	A176797
Toluene	ug/L	ND	ND	ND	0.20	A176797
1,1,1-Trichloroethane	ug/L	ND	ND	ND	0.20	A176797
1,1,2-Trichloroethane	ug/L	ND	ND	ND	0.50	A176797
Trichloroethylene	ug/L	ND	ND	ND	0.20	A176797
Trichlorofluoromethane (FREON 11)	ug/L	ND	ND	ND	0.50	A176797
Vinyl Chloride	ug/L	ND	ND	ND	0.20	A176797
p+m-Xylene	ug/L	ND	0.36	0.29	0.20	A176797
o-Xylene	ug/L	ND	ND	ND	0.20	A176797
Total Xylenes	ug/L	ND	0.36	0.29	0.20	A176797
F1 (C6-C10)	ug/L	ND	ND	ND	25	A176797
F1 (C6-C10) - BTEX	ug/L	ND	ND	ND	25	A176797
Surrogate Recovery (%)						
4-Bromofluorobenzene	%	101	100	99		A176797
D4-1,2-Dichloroethane	%	116	110	104		A176797
D8-Toluene	%	89	91	93		A176797
RDL = Reportable Detection Limit QC Batch = Quality Control Batch ND = Not Detected at a concentration equal or greater than the indicated Detection Limit.						



BUREAU
VERITAS

Bureau Veritas Job #: C670251

Report Date: 2026/06/23

Lopers & Associates

Client Project #: LOP26-044B

Sampler Initials: LL

VOLATILE ORGANICS BY GC/MS (WATER)

Bureau Veritas ID		BEBB85			BEBB86		
Sampling Date		2026/06/16			2026/06/16		
COC Number		C#1122857-01-01			C#1122857-01-01		
	UNITS	BH4-26-GW1	RDL	QC Batch	DUP-06/16	RDL	QC Batch
Calculated Parameters							
1,3-Dichloropropene (cis+trans)	ug/L	ND	0.50	A175542	ND	0.50	A175542
Volatile Organics							
Acetone (2-Propanone)	ug/L	ND	10	A177000	ND	10	A176797
Benzene	ug/L	ND	0.20	A177000	ND	0.17	A176797
Bromodichloromethane	ug/L	ND	0.50	A177000	ND	0.50	A176797
Bromoform	ug/L	ND	1.0	A177000	ND	1.0	A176797
Bromomethane	ug/L	ND	0.50	A177000	ND	0.50	A176797
Carbon Tetrachloride	ug/L	ND	0.19	A177000	ND	0.20	A176797
Chlorobenzene	ug/L	ND	0.20	A177000	ND	0.20	A176797
Chloroform	ug/L	5.0	0.20	A177000	2.8	0.20	A176797
Dibromochloromethane	ug/L	ND	0.50	A177000	ND	0.50	A176797
1,2-Dichlorobenzene	ug/L	ND	0.40	A177000	ND	0.50	A176797
1,3-Dichlorobenzene	ug/L	ND	0.40	A177000	ND	0.50	A176797
1,4-Dichlorobenzene	ug/L	ND	0.40	A177000	ND	0.50	A176797
Dichlorodifluoromethane (FREON 12)	ug/L	ND	1.0	A177000	ND	1.0	A176797
1,1-Dichloroethane	ug/L	ND	0.20	A177000	ND	0.20	A176797
1,2-Dichloroethane	ug/L	ND	0.49	A177000	ND	0.50	A176797
1,1-Dichloroethylene	ug/L	ND	0.20	A177000	ND	0.20	A176797
cis-1,2-Dichloroethylene	ug/L	ND	0.50	A177000	ND	0.50	A176797
trans-1,2-Dichloroethylene	ug/L	ND	0.50	A177000	ND	0.50	A176797
1,2-Dichloropropane	ug/L	ND	0.20	A177000	ND	0.20	A176797
cis-1,3-Dichloropropene	ug/L	ND	0.30	A177000	ND	0.30	A176797
trans-1,3-Dichloropropene	ug/L	ND	0.40	A177000	ND	0.40	A176797
Ethylbenzene	ug/L	ND	0.20	A177000	ND	0.20	A176797
Ethylene Dibromide	ug/L	ND	0.19	A177000	ND	0.20	A176797
Hexane	ug/L	ND	1.0	A177000	ND	1.0	A176797
Methylene Chloride(Dichloromethane)	ug/L	ND	2.0	A177000	ND	2.0	A176797
Methyl Ethyl Ketone (2-Butanone)	ug/L	ND	10	A177000	ND	10	A176797
Methyl Isobutyl Ketone	ug/L	ND	5.0	A177000	ND	5.0	A176797
Methyl t-butyl ether (MTBE)	ug/L	ND	0.50	A177000	ND	0.50	A176797
Styrene	ug/L	ND	0.40	A177000	ND	0.50	A176797
1,1,1,2-Tetrachloroethane	ug/L	ND	0.50	A177000	ND	0.50	A176797
RDL = Reportable Detection Limit							
QC Batch = Quality Control Batch							
ND = Not Detected at a concentration equal or greater than the indicated Detection Limit.							



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Lopers & Associates
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VOLATILE ORGANICS BY GC/MS (WATER)

Bureau Veritas ID		BEBB85			BEBB86		
Sampling Date		2026/06/16			2026/06/16		
COC Number		C#1122857-01-01			C#1122857-01-01		
	UNITS	BH4-26-GW1	RDL	QC Batch	DUP-06/16	RDL	QC Batch
1,1,2,2-Tetrachloroethane	ug/L	ND	0.40	A177000	ND	0.50	A176797
Tetrachloroethylene	ug/L	ND	0.20	A177000	ND	0.20	A176797
Toluene	ug/L	2.0	0.20	A177000	ND	0.20	A176797
1,1,1-Trichloroethane	ug/L	ND	0.20	A177000	ND	0.20	A176797
1,1,2-Trichloroethane	ug/L	ND	0.40	A177000	ND	0.50	A176797
Trichloroethylene	ug/L	ND	0.20	A177000	ND	0.20	A176797
Trichlorofluoromethane (FREON 11)	ug/L	ND	0.50	A177000	ND	0.50	A176797
Vinyl Chloride	ug/L	ND	0.20	A177000	ND	0.20	A176797
p+m-Xylene	ug/L	ND	0.20	A177000	ND	0.20	A176797
o-Xylene	ug/L	ND	0.20	A177000	ND	0.20	A176797
Total Xylenes	ug/L	ND	0.20	A177000	ND	0.20	A176797
F1 (C6-C10)	ug/L				ND	25	A176797
F1 (C6-C10) - BTEX	ug/L				ND	25	A176797
Surrogate Recovery (%)							
4-Bromofluorobenzene	%				101		A176797
D4-1,2-Dichloroethane	%				114		A176797
D8-Toluene	%				91		A176797
4-Bromofluorobenzene	%	98		A177000			
D4-1,2-Dichloroethane	%	108		A177000			
D8-Toluene	%	98		A177000			
RDL = Reportable Detection Limit							
QC Batch = Quality Control Batch							
ND = Not Detected at a concentration equal or greater than the indicated Detection Limit.							

**VOLATILE ORGANICS BY GC/MS (WATER)**

Bureau Veritas ID		BEBB87		
Sampling Date		2026/06/16		
COC Number		C#1122857-01-01		
	UNITS	TRIP BLANK	RDL	QC Batch
Calculated Parameters				
1,3-Dichloropropene (cis+trans)	ug/L	ND	0.50	A175542
Volatile Organics				
Acetone (2-Propanone)	ug/L	ND	10	A177000
Benzene	ug/L	ND	0.20	A177000
Bromodichloromethane	ug/L	ND	0.50	A177000
Bromoform	ug/L	ND	1.0	A177000
Bromomethane	ug/L	ND	0.50	A177000
Carbon Tetrachloride	ug/L	ND	0.19	A177000
Chlorobenzene	ug/L	ND	0.20	A177000
Chloroform	ug/L	ND	0.20	A177000
Dibromochloromethane	ug/L	ND	0.50	A177000
1,2-Dichlorobenzene	ug/L	ND	0.40	A177000
1,3-Dichlorobenzene	ug/L	ND	0.40	A177000
1,4-Dichlorobenzene	ug/L	ND	0.40	A177000
Dichlorodifluoromethane (FREON 12)	ug/L	ND	1.0	A177000
1,1-Dichloroethane	ug/L	ND	0.20	A177000
1,2-Dichloroethane	ug/L	ND	0.49	A177000
1,1-Dichloroethylene	ug/L	ND	0.20	A177000
cis-1,2-Dichloroethylene	ug/L	ND	0.50	A177000
trans-1,2-Dichloroethylene	ug/L	ND	0.50	A177000
1,2-Dichloropropane	ug/L	ND	0.20	A177000
cis-1,3-Dichloropropene	ug/L	ND	0.30	A177000
trans-1,3-Dichloropropene	ug/L	ND	0.40	A177000
Ethylbenzene	ug/L	ND	0.20	A177000
Ethylene Dibromide	ug/L	ND	0.19	A177000
Hexane	ug/L	ND	1.0	A177000
Methylene Chloride(Dichloromethane)	ug/L	ND	2.0	A177000
Methyl Ethyl Ketone (2-Butanone)	ug/L	ND	10	A177000
Methyl Isobutyl Ketone	ug/L	ND	5.0	A177000
Methyl t-butyl ether (MTBE)	ug/L	ND	0.50	A177000
Styrene	ug/L	ND	0.40	A177000
RDL = Reportable Detection Limit				
QC Batch = Quality Control Batch				
ND = Not Detected at a concentration equal or greater than the indicated Detection Limit.				



VOLATILE ORGANICS BY GC/MS (WATER)

Bureau Veritas ID		BEBB87		
Sampling Date		2026/06/16		
COC Number		C#1122857-01-01		
	UNITS	TRIP BLANK	RDL	QC Batch
1,1,1,2-Tetrachloroethane	ug/L	ND	0.50	A177000
1,1,2,2-Tetrachloroethane	ug/L	ND	0.40	A177000
Tetrachloroethylene	ug/L	ND	0.20	A177000
Toluene	ug/L	ND	0.20	A177000
1,1,1-Trichloroethane	ug/L	ND	0.20	A177000
1,1,2-Trichloroethane	ug/L	ND	0.40	A177000
Trichloroethylene	ug/L	ND	0.20	A177000
Trichlorofluoromethane (FREON 11)	ug/L	ND	0.50	A177000
Vinyl Chloride	ug/L	ND	0.20	A177000
p+m-Xylene	ug/L	ND	0.20	A177000
o-Xylene	ug/L	ND	0.20	A177000
Total Xylenes	ug/L	ND	0.20	A177000
Surrogate Recovery (%)				
4-Bromofluorobenzene	%	98		A177000
D4-1,2-Dichloroethane	%	108		A177000
D8-Toluene	%	99		A177000
RDL = Reportable Detection Limit QC Batch = Quality Control Batch ND = Not Detected at a concentration equal or greater than the indicated Detection Limit.				



PETROLEUM HYDROCARBONS (CCME)

Bureau Veritas ID		BEBB82	BEBB83	BEBB84	BEBB86		
Sampling Date		2026/06/16	2026/06/16	2026/06/16	2026/06/16		
COC Number		C#1122857-01-01	C#1122857-01-01	C#1122857-01-01	C#1122857-01-01		
	UNITS	BH1-26-GW1	BH2-26-GW1	BH3-26-GW1	DUP-06/16	RDL	QC Batch
F2-F4 Hydrocarbons							
F2 (C10-C16 Hydrocarbons)	ug/L	ND	ND	ND	ND	90	A178318
F3 (C16-C34 Hydrocarbons)	ug/L	ND	ND	ND	ND	200	A178318
F4 (C34-C50 Hydrocarbons)	ug/L	ND	ND	ND	ND	200	A178318
Reached Baseline at C50	ug/L	Yes	Yes	Yes	Yes		A178318
Surrogate Recovery (%)							
o-Terphenyl	%	98	99	94	99		A178318
RDL = Reportable Detection Limit							
QC Batch = Quality Control Batch							
ND = Not Detected at a concentration equal or greater than the indicated Detection Limit.							



**BUREAU
VERITAS**

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GENERAL COMMENTS

Results relate only to the items tested.



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Bureau Veritas Job #: C670251

Report Date: 2026/06/23

Lopers & Associates

Client Project #: LOP26-044B

Sampler Initials: LL

QUALITY ASSURANCE REPORT

QA/QC	Batch	Init	QC Type	Parameter	Date Analyzed	Value	Recovery	UNITS	QC Limits
A176797	GGU	Matrix Spike	4-Bromofluorobenzene	2026/06/21		100	%	70 - 130	
			D4-1,2-Dichloroethane	2026/06/21		100	%	70 - 130	
			D8-Toluene	2026/06/21		101	%	70 - 130	
			Acetone (2-Propanone)	2026/06/21		98	%	60 - 140	
			Benzene	2026/06/21		99	%	70 - 130	
			Bromodichloromethane	2026/06/21		97	%	70 - 130	
			Bromoform	2026/06/21		97	%	70 - 130	
			Bromomethane	2026/06/21		101	%	60 - 140	
			Carbon Tetrachloride	2026/06/21		102	%	70 - 130	
			Chlorobenzene	2026/06/21		90	%	70 - 130	
			Chloroform	2026/06/21		96	%	70 - 130	
			Dibromochloromethane	2026/06/21		100	%	70 - 130	
			1,2-Dichlorobenzene	2026/06/21		101	%	70 - 130	
			1,3-Dichlorobenzene	2026/06/21		98	%	70 - 130	
			1,4-Dichlorobenzene	2026/06/21		102	%	70 - 130	
			Dichlorodifluoromethane (FREON 12)	2026/06/21		85	%	60 - 140	
			1,1-Dichloroethane	2026/06/21		96	%	70 - 130	
			1,2-Dichloroethane	2026/06/21		101	%	70 - 130	
			1,1-Dichloroethylene	2026/06/21		99	%	70 - 130	
			cis-1,2-Dichloroethylene	2026/06/21		104	%	70 - 130	
			trans-1,2-Dichloroethylene	2026/06/21		104	%	70 - 130	
			1,2-Dichloropropane	2026/06/21		101	%	70 - 130	
			cis-1,3-Dichloropropene	2026/06/21		103	%	70 - 130	
			trans-1,3-Dichloropropene	2026/06/21		111	%	70 - 130	
			Ethylbenzene	2026/06/21		97	%	70 - 130	
			Ethylene Dibromide	2026/06/21		96	%	70 - 130	
			Hexane	2026/06/21		109	%	70 - 130	
			Methylene Chloride(Dichloromethane)	2026/06/21		93	%	70 - 130	
			Methyl Ethyl Ketone (2-Butanone)	2026/06/21		104	%	60 - 140	
			Methyl Isobutyl Ketone	2026/06/21		100	%	70 - 130	
			Methyl t-butyl ether (MTBE)	2026/06/21		99	%	70 - 130	
			Styrene	2026/06/21		98	%	70 - 130	
			1,1,1,2-Tetrachloroethane	2026/06/21		105	%	70 - 130	
			1,1,2,2-Tetrachloroethane	2026/06/21		94	%	70 - 130	
			Tetrachloroethylene	2026/06/21		94	%	70 - 130	
			Toluene	2026/06/21		97	%	70 - 130	
			1,1,1-Trichloroethane	2026/06/21		96	%	70 - 130	
			1,1,2-Trichloroethane	2026/06/21		97	%	70 - 130	
			Trichloroethylene	2026/06/21		100	%	70 - 130	
			Trichlorofluoromethane (FREON 11)	2026/06/21		97	%	70 - 130	
			Vinyl Chloride	2026/06/21		102	%	70 - 130	
			p+m-Xylene	2026/06/21		96	%	70 - 130	
			o-Xylene	2026/06/21		103	%	70 - 130	
			F1 (C6-C10)	2026/06/21		94	%	60 - 140	
A176797	GGU	Spiked Blank	4-Bromofluorobenzene	2026/06/21		102	%	70 - 130	
			D4-1,2-Dichloroethane	2026/06/21		97	%	70 - 130	
			D8-Toluene	2026/06/21		102	%	70 - 130	
			Acetone (2-Propanone)	2026/06/21		92	%	60 - 140	
			Benzene	2026/06/21		90	%	70 - 130	
			Bromodichloromethane	2026/06/21		91	%	70 - 130	
			Bromoform	2026/06/21		95	%	70 - 130	
			Bromomethane	2026/06/21		91	%	60 - 140	
			Carbon Tetrachloride	2026/06/21		93	%	70 - 130	
Chlorobenzene	2026/06/21		85	%	70 - 130				



BUREAU
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QUALITY ASSURANCE REPORT(CONT'D)

QA/QC Batch	Init	QC Type	Parameter	Date Analyzed	Value	Recovery	UNITS	QC Limits
A176797	GGU	Method Blank	Chloroform	2026/06/21		88	%	70 - 130
			Dibromochloromethane	2026/06/21		96	%	70 - 130
			1,2-Dichlorobenzene	2026/06/21		95	%	70 - 130
			1,3-Dichlorobenzene	2026/06/21		93	%	70 - 130
			1,4-Dichlorobenzene	2026/06/21		96	%	70 - 130
			Dichlorodifluoromethane (FREON 12)	2026/06/21		84	%	60 - 140
			1,1-Dichloroethane	2026/06/21		86	%	70 - 130
			1,2-Dichloroethane	2026/06/21		93	%	70 - 130
			1,1-Dichloroethylene	2026/06/21		89	%	70 - 130
			cis-1,2-Dichloroethylene	2026/06/21		94	%	70 - 130
			trans-1,2-Dichloroethylene	2026/06/21		94	%	70 - 130
			1,2-Dichloropropane	2026/06/21		94	%	70 - 130
			cis-1,3-Dichloropropene	2026/06/21		99	%	70 - 130
			trans-1,3-Dichloropropene	2026/06/21		110	%	70 - 130
			Ethylbenzene	2026/06/21		91	%	70 - 130
			Ethylene Dibromide	2026/06/21		93	%	70 - 130
			Hexane	2026/06/21		100	%	70 - 130
			Methylene Chloride(Dichloromethane)	2026/06/21		84	%	70 - 130
			Methyl Ethyl Ketone (2-Butanone)	2026/06/21		100	%	60 - 140
			Methyl Isobutyl Ketone	2026/06/21		100	%	70 - 130
			Methyl t-butyl ether (MTBE)	2026/06/21		95	%	70 - 130
			Styrene	2026/06/21		93	%	70 - 130
			1,1,1,2-Tetrachloroethane	2026/06/21		99	%	70 - 130
			1,1,2,2-Tetrachloroethane	2026/06/21		94	%	70 - 130
			Tetrachloroethylene	2026/06/21		88	%	70 - 130
			Toluene	2026/06/21		91	%	70 - 130
			1,1,1-Trichloroethane	2026/06/21		87	%	70 - 130
			1,1,2-Trichloroethane	2026/06/21		92	%	70 - 130
			Trichloroethylene	2026/06/21		91	%	70 - 130
			Trichlorofluoromethane (FREON 11)	2026/06/21		88	%	70 - 130
			Vinyl Chloride	2026/06/21		93	%	70 - 130
			p+m-Xylene	2026/06/21		91	%	70 - 130
			o-Xylene	2026/06/21		98	%	70 - 130
			F1 (C6-C10)	2026/06/21		81	%	60 - 140
			4-Bromofluorobenzene	2026/06/21		98	%	70 - 130
			D4-1,2-Dichloroethane	2026/06/21		100	%	70 - 130
			D8-Toluene	2026/06/21		95	%	70 - 130
			Acetone (2-Propanone)	2026/06/21	ND, RDL=10		ug/L	
			Benzene	2026/06/21	ND, RDL=0.17		ug/L	
			Bromodichloromethane	2026/06/21	ND, RDL=0.50		ug/L	
			Bromoform	2026/06/21	ND, RDL=1.0		ug/L	
			Bromomethane	2026/06/21	ND, RDL=0.50		ug/L	
			Carbon Tetrachloride	2026/06/21	ND, RDL=0.20		ug/L	
			Chlorobenzene	2026/06/21	ND, RDL=0.20		ug/L	
			Chloroform	2026/06/21	ND, RDL=0.20		ug/L	



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QUALITY ASSURANCE REPORT(CONT'D)

QA/QC Batch	Init	QC Type	Parameter	Date Analyzed	Value	Recovery	UNITS	QC Limits
			Dibromochloromethane	2026/06/21	ND, RDL=0.50		ug/L	
			1,2-Dichlorobenzene	2026/06/21	ND, RDL=0.50		ug/L	
			1,3-Dichlorobenzene	2026/06/21	ND, RDL=0.50		ug/L	
			1,4-Dichlorobenzene	2026/06/21	ND, RDL=0.50		ug/L	
			Dichlorodifluoromethane (FREON 12)	2026/06/21	ND, RDL=1.0		ug/L	
			1,1-Dichloroethane	2026/06/21	ND, RDL=0.20		ug/L	
			1,2-Dichloroethane	2026/06/21	ND, RDL=0.50		ug/L	
			1,1-Dichloroethylene	2026/06/21	ND, RDL=0.20		ug/L	
			cis-1,2-Dichloroethylene	2026/06/21	ND, RDL=0.50		ug/L	
			trans-1,2-Dichloroethylene	2026/06/21	ND, RDL=0.50		ug/L	
			1,2-Dichloropropane	2026/06/21	ND, RDL=0.20		ug/L	
			cis-1,3-Dichloropropene	2026/06/21	ND, RDL=0.30		ug/L	
			trans-1,3-Dichloropropene	2026/06/21	ND, RDL=0.40		ug/L	
			Ethylbenzene	2026/06/21	ND, RDL=0.20		ug/L	
			Ethylene Dibromide	2026/06/21	ND, RDL=0.20		ug/L	
			Hexane	2026/06/21	ND, RDL=1.0		ug/L	
			Methylene Chloride(Dichloromethane)	2026/06/21	ND, RDL=2.0		ug/L	
			Methyl Ethyl Ketone (2-Butanone)	2026/06/21	ND, RDL=10		ug/L	
			Methyl Isobutyl Ketone	2026/06/21	ND, RDL=5.0		ug/L	
			Methyl t-butyl ether (MTBE)	2026/06/21	ND, RDL=0.50		ug/L	
			Styrene	2026/06/21	ND, RDL=0.50		ug/L	
			1,1,1,2-Tetrachloroethane	2026/06/21	ND, RDL=0.50		ug/L	
			1,1,2,2-Tetrachloroethane	2026/06/21	ND, RDL=0.50		ug/L	
			Tetrachloroethylene	2026/06/21	ND, RDL=0.20		ug/L	
			Toluene	2026/06/21	ND, RDL=0.20		ug/L	
			1,1,1-Trichloroethane	2026/06/21	ND, RDL=0.20		ug/L	
			1,1,2-Trichloroethane	2026/06/21	ND, RDL=0.50		ug/L	



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QA/QC Batch	Init	QC Type	Parameter	Date Analyzed	Value	Recovery	UNITS	QC Limits
A176797	GGU	RPD	Trichloroethylene	2026/06/21	ND, RDL=0.20		ug/L	
			Trichlorofluoromethane (FREON 11)	2026/06/21	ND, RDL=0.50		ug/L	
			Vinyl Chloride	2026/06/21	ND, RDL=0.20		ug/L	
			p+m-Xylene	2026/06/21	ND, RDL=0.20		ug/L	
			o-Xylene	2026/06/21	ND, RDL=0.20		ug/L	
			Total Xylenes	2026/06/21	ND, RDL=0.20		ug/L	
			F1 (C6-C10)	2026/06/21	ND, RDL=25		ug/L	
			F1 (C6-C10) - BTEX	2026/06/21	ND, RDL=25		ug/L	
			Acetone (2-Propanone)	2026/06/21	NC		%	30
			Benzene	2026/06/21	NC		%	30
			Bromodichloromethane	2026/06/21	NC		%	30
			Bromoform	2026/06/21	NC		%	30
			Bromomethane	2026/06/21	NC		%	30
			Carbon Tetrachloride	2026/06/21	NC		%	30
			Chlorobenzene	2026/06/21	NC		%	30
			Chloroform	2026/06/21	NC		%	30
			Dibromochloromethane	2026/06/21	NC		%	30
			1,2-Dichlorobenzene	2026/06/21	NC		%	30
			1,3-Dichlorobenzene	2026/06/21	NC		%	30
			1,4-Dichlorobenzene	2026/06/21	NC		%	30
			Dichlorodifluoromethane (FREON 12)	2026/06/21	NC		%	30
			1,1-Dichloroethane	2026/06/21	NC		%	30
			1,2-Dichloroethane	2026/06/21	NC		%	30
			1,1-Dichloroethylene	2026/06/21	NC		%	30
			cis-1,2-Dichloroethylene	2026/06/21	NC		%	30
			trans-1,2-Dichloroethylene	2026/06/21	NC		%	30
			1,2-Dichloropropane	2026/06/21	NC		%	30
			cis-1,3-Dichloropropene	2026/06/21	NC		%	30
			trans-1,3-Dichloropropene	2026/06/21	NC		%	30
			Ethylbenzene	2026/06/21	NC		%	30
			Ethylene Dibromide	2026/06/21	NC		%	30
			Hexane	2026/06/21	NC		%	30
			Methylene Chloride(Dichloromethane)	2026/06/21	NC		%	30
			Methyl Ethyl Ketone (2-Butanone)	2026/06/21	NC		%	30
			Methyl Isobutyl Ketone	2026/06/21	NC		%	30
			Methyl t-butyl ether (MTBE)	2026/06/21	NC		%	30
			Styrene	2026/06/21	NC		%	30
			1,1,1,2-Tetrachloroethane	2026/06/21	NC		%	30
			1,1,2,2-Tetrachloroethane	2026/06/21	NC		%	30
			Tetrachloroethylene	2026/06/21	NC		%	30
			Toluene	2026/06/21	NC		%	30
			1,1,1-Trichloroethane	2026/06/21	NC		%	30
			1,1,2-Trichloroethane	2026/06/21	NC		%	30
			Trichloroethylene	2026/06/21	NC		%	30
			Trichlorofluoromethane (FREON 11)	2026/06/21	NC		%	30
			Vinyl Chloride	2026/06/21	NC		%	30



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A177000	MS4	Matrix Spike	p+m-Xylene	2026/06/21	NC		%	30
			o-Xylene	2026/06/21	NC		%	30
			Total Xylenes	2026/06/21	NC		%	30
			F1 (C6-C10)	2026/06/21	NC		%	30
			F1 (C6-C10) - BTEX	2026/06/21	NC		%	30
			4-Bromofluorobenzene	2026/06/19		99	%	70 - 130
			D4-1,2-Dichloroethane	2026/06/19		107	%	70 - 130
			D8-Toluene	2026/06/19		100	%	70 - 130
			Acetone (2-Propanone)	2026/06/19		107	%	60 - 140
			Benzene	2026/06/19		101	%	70 - 130
			Bromodichloromethane	2026/06/19		102	%	70 - 130
			Bromoform	2026/06/19		96	%	70 - 130
			Bromomethane	2026/06/19		100	%	60 - 140
			Carbon Tetrachloride	2026/06/19		104	%	70 - 130
			Chlorobenzene	2026/06/19		93	%	70 - 130
			Chloroform	2026/06/19		102	%	70 - 130
			Dibromochloromethane	2026/06/19		102	%	70 - 130
			1,2-Dichlorobenzene	2026/06/19		103	%	70 - 130
			1,3-Dichlorobenzene	2026/06/19		105	%	70 - 130
			1,4-Dichlorobenzene	2026/06/19		105	%	70 - 130
			Dichlorodifluoromethane (FREON 12)	2026/06/19		88	%	60 - 140
			1,1-Dichloroethane	2026/06/19		100	%	70 - 130
			1,2-Dichloroethane	2026/06/19		109	%	70 - 130
			1,1-Dichloroethylene	2026/06/19		105	%	70 - 130
			cis-1,2-Dichloroethylene	2026/06/19		102	%	70 - 130
			trans-1,2-Dichloroethylene	2026/06/19		106	%	70 - 130
			1,2-Dichloropropane	2026/06/19		104	%	70 - 130
			cis-1,3-Dichloropropene	2026/06/19		96	%	70 - 130
			trans-1,3-Dichloropropene	2026/06/19		108	%	70 - 130
			Ethylbenzene	2026/06/19		102	%	70 - 130
			Ethylene Dibromide	2026/06/19		98	%	70 - 130
			Hexane	2026/06/19		113	%	70 - 130
			Methylene Chloride(Dichloromethane)	2026/06/19		104	%	70 - 130
			Methyl Ethyl Ketone (2-Butanone)	2026/06/19		108	%	60 - 140
			Methyl Isobutyl Ketone	2026/06/19		112	%	70 - 130
			Methyl t-butyl ether (MTBE)	2026/06/19		99	%	70 - 130
			Styrene	2026/06/19		97	%	70 - 130
			1,1,1,2-Tetrachloroethane	2026/06/19		107	%	70 - 130
			1,1,2,2-Tetrachloroethane	2026/06/19		100	%	70 - 130
			Tetrachloroethylene	2026/06/19		98	%	70 - 130
			Toluene	2026/06/19		102	%	70 - 130
			1,1,1-Trichloroethane	2026/06/19		100	%	70 - 130
			1,1,2-Trichloroethane	2026/06/19		110	%	70 - 130
			Trichloroethylene	2026/06/19		100	%	70 - 130
			Trichlorofluoromethane (FREON 11)	2026/06/19		101	%	70 - 130
			Vinyl Chloride	2026/06/19		101	%	70 - 130
A177000	MS4	Spiked Blank	p+m-Xylene	2026/06/19		99	%	70 - 130
			o-Xylene	2026/06/19		108	%	70 - 130
			4-Bromofluorobenzene	2026/06/19		98	%	70 - 130
			D4-1,2-Dichloroethane	2026/06/19		107	%	70 - 130
			D8-Toluene	2026/06/19		99	%	70 - 130
			Acetone (2-Propanone)	2026/06/19		109	%	60 - 140
			Benzene	2026/06/19		102	%	70 - 130
			Bromodichloromethane	2026/06/19		104	%	70 - 130



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A177000	MS4	Method Blank	Bromoform	2026/06/19		99	%	70 - 130
			Bromomethane	2026/06/19		102	%	60 - 140
			Carbon Tetrachloride	2026/06/19		105	%	70 - 130
			Chlorobenzene	2026/06/19		94	%	70 - 130
			Chloroform	2026/06/19		103	%	70 - 130
			Dibromochloromethane	2026/06/19		103	%	70 - 130
			1,2-Dichlorobenzene	2026/06/19		105	%	70 - 130
			1,3-Dichlorobenzene	2026/06/19		106	%	70 - 130
			1,4-Dichlorobenzene	2026/06/19		106	%	70 - 130
			Dichlorodifluoromethane (FREON 12)	2026/06/19		90	%	60 - 140
			1,1-Dichloroethane	2026/06/19		101	%	70 - 130
			1,2-Dichloroethane	2026/06/19		110	%	70 - 130
			1,1-Dichloroethylene	2026/06/19		107	%	70 - 130
			cis-1,2-Dichloroethylene	2026/06/19		103	%	70 - 130
			trans-1,2-Dichloroethylene	2026/06/19		108	%	70 - 130
			1,2-Dichloropropane	2026/06/19		106	%	70 - 130
			cis-1,3-Dichloropropene	2026/06/19		98	%	70 - 130
			trans-1,3-Dichloropropene	2026/06/19		109	%	70 - 130
			Ethylbenzene	2026/06/19		104	%	70 - 130
			Ethylene Dibromide	2026/06/19		99	%	70 - 130
			Hexane	2026/06/19		115	%	70 - 130
			Methylene Chloride(Dichloromethane)	2026/06/19		105	%	70 - 130
			Methyl Ethyl Ketone (2-Butanone)	2026/06/19		111	%	60 - 140
			Methyl Isobutyl Ketone	2026/06/19		117	%	70 - 130
			Methyl t-butyl ether (MTBE)	2026/06/19		101	%	70 - 130
			Styrene	2026/06/19		99	%	70 - 130
			1,1,1,2-Tetrachloroethane	2026/06/19		109	%	70 - 130
			1,1,2,2-Tetrachloroethane	2026/06/19		102	%	70 - 130
			Tetrachloroethylene	2026/06/19		98	%	70 - 130
			Toluene	2026/06/19		103	%	70 - 130
			1,1,1-Trichloroethane	2026/06/19		101	%	70 - 130
			1,1,2-Trichloroethane	2026/06/19		111	%	70 - 130
			Trichloroethylene	2026/06/19		101	%	70 - 130
			Trichlorofluoromethane (FREON 11)	2026/06/19		102	%	70 - 130
			Vinyl Chloride	2026/06/19		103	%	70 - 130
			p+m-Xylene	2026/06/19		100	%	70 - 130
			o-Xylene	2026/06/19		110	%	70 - 130
			4-Bromofluorobenzene	2026/06/19		98	%	70 - 130
			D4-1,2-Dichloroethane	2026/06/19		106	%	70 - 130
			D8-Toluene	2026/06/19		99	%	70 - 130
			Acetone (2-Propanone)	2026/06/19	ND, RDL=10		ug/L	
			Benzene	2026/06/19	ND, RDL=0.20		ug/L	
			Bromodichloromethane	2026/06/19	ND, RDL=0.50		ug/L	
			Bromoform	2026/06/19	ND, RDL=1.0		ug/L	
			Bromomethane	2026/06/19	ND, RDL=0.50		ug/L	
			Carbon Tetrachloride	2026/06/19	ND, RDL=0.19		ug/L	
			Chlorobenzene	2026/06/19	ND, RDL=0.20		ug/L	



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			Chloroform	2026/06/19	ND, RDL=0.20		ug/L	
			Dibromochloromethane	2026/06/19	ND, RDL=0.50		ug/L	
			1,2-Dichlorobenzene	2026/06/19	ND, RDL=0.40		ug/L	
			1,3-Dichlorobenzene	2026/06/19	ND, RDL=0.40		ug/L	
			1,4-Dichlorobenzene	2026/06/19	ND, RDL=0.40		ug/L	
			Dichlorodifluoromethane (FREON 12)	2026/06/19	ND, RDL=1.0		ug/L	
			1,1-Dichloroethane	2026/06/19	ND, RDL=0.20		ug/L	
			1,2-Dichloroethane	2026/06/19	ND, RDL=0.49		ug/L	
			1,1-Dichloroethylene	2026/06/19	ND, RDL=0.20		ug/L	
			cis-1,2-Dichloroethylene	2026/06/19	ND, RDL=0.50		ug/L	
			trans-1,2-Dichloroethylene	2026/06/19	ND, RDL=0.50		ug/L	
			1,2-Dichloropropane	2026/06/19	ND, RDL=0.20		ug/L	
			cis-1,3-Dichloropropene	2026/06/19	ND, RDL=0.30		ug/L	
			trans-1,3-Dichloropropene	2026/06/19	ND, RDL=0.40		ug/L	
			Ethylbenzene	2026/06/19	ND, RDL=0.20		ug/L	
			Ethylene Dibromide	2026/06/19	ND, RDL=0.19		ug/L	
			Hexane	2026/06/19	ND, RDL=1.0		ug/L	
			Methylene Chloride(Dichloromethane)	2026/06/19	ND, RDL=2.0		ug/L	
			Methyl Ethyl Ketone (2-Butanone)	2026/06/19	ND, RDL=10		ug/L	
			Methyl Isobutyl Ketone	2026/06/19	ND, RDL=5.0		ug/L	
			Methyl t-butyl ether (MTBE)	2026/06/19	ND, RDL=0.50		ug/L	
			Styrene	2026/06/19	ND, RDL=0.40		ug/L	
			1,1,1,2-Tetrachloroethane	2026/06/19	ND, RDL=0.50		ug/L	
			1,1,2,2-Tetrachloroethane	2026/06/19	ND, RDL=0.40		ug/L	
			Tetrachloroethylene	2026/06/19	ND, RDL=0.20		ug/L	
			Toluene	2026/06/19	ND, RDL=0.20		ug/L	
			1,1,1-Trichloroethane	2026/06/19	ND, RDL=0.20		ug/L	



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A177000	MS4	RPD	1,1,2-Trichloroethane	2026/06/19	ND, RDL=0.40		ug/L	
			Trichloroethylene	2026/06/19	ND, RDL=0.20		ug/L	
			Trichlorofluoromethane (FREON 11)	2026/06/19	ND, RDL=0.50		ug/L	
			Vinyl Chloride	2026/06/19	ND, RDL=0.20		ug/L	
			p+m-Xylene	2026/06/19	ND, RDL=0.20		ug/L	
			o-Xylene	2026/06/19	ND, RDL=0.20		ug/L	
			Total Xylenes	2026/06/19	ND, RDL=0.20		ug/L	
			Acetone (2-Propanone)	2026/06/19	NC		%	30
			Benzene	2026/06/19	NC		%	30
			Bromodichloromethane	2026/06/19	NC		%	30
			Bromoform	2026/06/19	NC		%	30
			Bromomethane	2026/06/19	NC		%	30
			Carbon Tetrachloride	2026/06/19	NC		%	30
			Chlorobenzene	2026/06/19	NC		%	30
			Chloroform	2026/06/19	NC		%	30
			Dibromochloromethane	2026/06/19	NC		%	30
			1,2-Dichlorobenzene	2026/06/19	NC		%	30
			1,3-Dichlorobenzene	2026/06/19	NC		%	30
			1,4-Dichlorobenzene	2026/06/19	NC		%	30
			Dichlorodifluoromethane (FREON 12)	2026/06/19	NC		%	30
			1,1-Dichloroethane	2026/06/19	NC		%	30
			1,2-Dichloroethane	2026/06/19	NC		%	30
			1,1-Dichloroethylene	2026/06/19	NC		%	30
			cis-1,2-Dichloroethylene	2026/06/19	NC		%	30
			trans-1,2-Dichloroethylene	2026/06/19	NC		%	30
			1,2-Dichloropropane	2026/06/19	NC		%	30
			cis-1,3-Dichloropropene	2026/06/19	NC		%	30
			trans-1,3-Dichloropropene	2026/06/19	NC		%	30
			Ethylbenzene	2026/06/19	NC		%	30
			Ethylene Dibromide	2026/06/19	NC		%	30
			Hexane	2026/06/19	NC		%	30
			Methylene Chloride(Dichloromethane)	2026/06/19	NC		%	30
			Methyl Ethyl Ketone (2-Butanone)	2026/06/19	NC		%	30
			Methyl Isobutyl Ketone	2026/06/19	NC		%	30
			Methyl t-butyl ether (MTBE)	2026/06/19	NC		%	30
			Styrene	2026/06/19	NC		%	30
			1,1,1,2-Tetrachloroethane	2026/06/19	NC		%	30
			1,1,2,2-Tetrachloroethane	2026/06/19	NC		%	30
			Tetrachloroethylene	2026/06/19	NC		%	30
			Toluene	2026/06/19	NC		%	30
			1,1,1-Trichloroethane	2026/06/19	NC		%	30
			1,1,2-Trichloroethane	2026/06/19	NC		%	30
			Trichloroethylene	2026/06/19	NC		%	30
			Trichlorofluoromethane (FREON 11)	2026/06/19	NC		%	30
			Vinyl Chloride	2026/06/19	NC		%	30
			p+m-Xylene	2026/06/19	NC		%	30
			o-Xylene	2026/06/19	NC		%	30



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QA/QC Batch	Init	QC Type	Parameter	Date Analyzed	Value	Recovery	UNITS	QC Limits
A178318	ABS	Matrix Spike [BEBB84-01]	Total Xylenes	2026/06/19	NC		%	30
			o-Terphenyl	2026/06/21		100	%	60 - 140
			F2 (C10-C16 Hydrocarbons)	2026/06/21		88	%	60 - 140
			F3 (C16-C34 Hydrocarbons)	2026/06/21		94	%	60 - 140
A178318	ABS	Spiked Blank	F4 (C34-C50 Hydrocarbons)	2026/06/21		89	%	60 - 140
			o-Terphenyl	2026/06/21		102	%	60 - 140
			F2 (C10-C16 Hydrocarbons)	2026/06/21		94	%	60 - 140
			F3 (C16-C34 Hydrocarbons)	2026/06/21		101	%	60 - 140
A178318	ABS	Method Blank	F4 (C34-C50 Hydrocarbons)	2026/06/21		94	%	60 - 140
			o-Terphenyl	2026/06/21		98	%	60 - 140
			F2 (C10-C16 Hydrocarbons)	2026/06/21	ND, RDL=90		ug/L	
			F3 (C16-C34 Hydrocarbons)	2026/06/21	ND, RDL=200		ug/L	
A178318	ABS	RPD [BEBB83-01]	F4 (C34-C50 Hydrocarbons)	2026/06/21	ND, RDL=200		ug/L	
			F2 (C10-C16 Hydrocarbons)	2026/06/21	NC		%	30
			F3 (C16-C34 Hydrocarbons)	2026/06/21	NC		%	30
			F4 (C34-C50 Hydrocarbons)	2026/06/21	NC		%	30
A179330	RAJ	Spiked Blank	D10-Anthracene	2026/06/22		129	%	50 - 130
			D14-Terphenyl (F5)	2026/06/22		111	%	50 - 130
			D8-Acenaphthylene	2026/06/22		112	%	50 - 130
			Acenaphthene	2026/06/22		83	%	50 - 130
			Acenaphthylene	2026/06/22		81	%	50 - 130
			Anthracene	2026/06/22		86	%	50 - 130
			Benzo(a)anthracene	2026/06/22		87	%	50 - 130
			Benzo(a)pyrene	2026/06/22		88	%	50 - 130
			Benzo(b/j)fluoranthene	2026/06/22		86	%	50 - 130
			Benzo(g,h,i)perylene	2026/06/22		81	%	50 - 130
			Benzo(k)fluoranthene	2026/06/22		91	%	50 - 130
			Chrysene	2026/06/22		92	%	50 - 130
			Dibenzo(a,h)anthracene	2026/06/22		90	%	50 - 130
			Fluoranthene	2026/06/22		80	%	50 - 130
			Fluorene	2026/06/22		83	%	50 - 130
			Indeno(1,2,3-cd)pyrene	2026/06/22		85	%	50 - 130
			1-Methylnaphthalene	2026/06/22		73	%	50 - 130
			2-Methylnaphthalene	2026/06/22		75	%	50 - 130
			Naphthalene	2026/06/22		74	%	50 - 130
			Phenanthrene	2026/06/22		92	%	50 - 130
			Pyrene	2026/06/22		79	%	50 - 130
A179330	RAJ	RPD	Acenaphthene	2026/06/22	4.6		%	30
			Acenaphthylene	2026/06/22	4.9		%	30
			Anthracene	2026/06/22	0.60		%	30
			Benzo(a)anthracene	2026/06/22	0.91		%	30
			Benzo(a)pyrene	2026/06/22	0.83		%	30
			Benzo(b/j)fluoranthene	2026/06/22	1.7		%	30
			Benzo(g,h,i)perylene	2026/06/22	0.70		%	30
			Benzo(k)fluoranthene	2026/06/22	0.30		%	30
			Chrysene	2026/06/22	1.5		%	30
			Dibenzo(a,h)anthracene	2026/06/22	0.68		%	30
			Fluoranthene	2026/06/22	3.2		%	30
			Fluorene	2026/06/22	2.3		%	30
			Indeno(1,2,3-cd)pyrene	2026/06/22	0.87		%	30
			1-Methylnaphthalene	2026/06/22	8.0		%	30



BUREAU
VERITAS

Bureau Veritas Job #: C670251

Report Date: 2026/06/23

Lopers & Associates

Client Project #: LOP26-044B

Sampler Initials: LL

QUALITY ASSURANCE REPORT(CONT'D)

QA/QC Batch	Init	QC Type	Parameter	Date Analyzed	Value	Recovery	UNITS	QC Limits
A179330	RAJ	Method Blank	2-Methylnaphthalene	2026/06/22	11		%	30
			Naphthalene	2026/06/22	8.4		%	30
			Phenanthrene	2026/06/22	0.022		%	30
			Pyrene	2026/06/22	3.3		%	30
			D10-Anthracene	2026/06/22		125	%	50 - 130
			D14-Terphenyl (FS)	2026/06/22		105	%	50 - 130
			D8-Acenaphthylene	2026/06/22		108	%	50 - 130
			Acenaphthene	2026/06/22	ND, RDL=0.050		ug/L	
			Acenaphthylene	2026/06/22	ND, RDL=0.050		ug/L	
			Anthracene	2026/06/22	ND, RDL=0.050		ug/L	
			Benzo(a)anthracene	2026/06/22	ND, RDL=0.050		ug/L	
			Benzo(a)pyrene	2026/06/22	ND, RDL=0.0090		ug/L	
			Benzo(b/j)fluoranthene	2026/06/22	ND, RDL=0.050		ug/L	
			Benzo(g,h,i)perylene	2026/06/22	ND, RDL=0.050		ug/L	
			Benzo(k)fluoranthene	2026/06/22	ND, RDL=0.050		ug/L	
			Chrysene	2026/06/22	ND, RDL=0.050		ug/L	
			Dibenzo(a,h)anthracene	2026/06/22	ND, RDL=0.050		ug/L	
			Fluoranthene	2026/06/22	ND, RDL=0.050		ug/L	
			Fluorene	2026/06/22	ND, RDL=0.050		ug/L	
			Indeno(1,2,3-cd)pyrene	2026/06/22	ND, RDL=0.050		ug/L	
			1-Methylnaphthalene	2026/06/22	ND, RDL=0.050		ug/L	
			2-Methylnaphthalene	2026/06/22	ND, RDL=0.050		ug/L	
			Naphthalene	2026/06/22	ND, RDL=0.050		ug/L	
			Phenanthrene	2026/06/22	ND, RDL=0.030		ug/L	
			Pyrene	2026/06/22	ND, RDL=0.050		ug/L	
A179882	LFE	Matrix Spike	D10-Anthracene	2026/06/23		104	%	50 - 130
			D14-Terphenyl (FS)	2026/06/23		90	%	50 - 130
			D8-Acenaphthylene	2026/06/23		112	%	50 - 130
			Acenaphthene	2026/06/23		85	%	50 - 130
			Acenaphthylene	2026/06/23		90	%	50 - 130
			Anthracene	2026/06/23		84	%	50 - 130
			Benzo(a)anthracene	2026/06/23		89	%	50 - 130
			Benzo(a)pyrene	2026/06/23		89	%	50 - 130
			Benzo(b/j)fluoranthene	2026/06/23		96	%	50 - 130
			Benzo(g,h,i)perylene	2026/06/23		86	%	50 - 130
			Benzo(k)fluoranthene	2026/06/23		92	%	50 - 130
			Chrysene	2026/06/23		92	%	50 - 130



**BUREAU
VERITAS**

Bureau Veritas Job #: C670251
Report Date: 2026/06/23

Lopers & Associates
Client Project #: LOP26-044B
Sampler Initials: LL

QUALITY ASSURANCE REPORT(CONT'D)

QA/QC Batch	Init	QC Type	Parameter	Date Analyzed	Value	Recovery	UNITS	QC Limits
A179882	LFE	Spiked Blank	Dibenzo(a,h)anthracene	2026/06/23		75	%	50 - 130
			Fluoranthene	2026/06/23		113	%	50 - 130
			Fluorene	2026/06/23		89	%	50 - 130
			Indeno(1,2,3-cd)pyrene	2026/06/23		87	%	50 - 130
			1-Methylnaphthalene	2026/06/23		79	%	50 - 130
			2-Methylnaphthalene	2026/06/23		80	%	50 - 130
			Naphthalene	2026/06/23		81	%	50 - 130
			Phenanthrene	2026/06/23		96	%	50 - 130
			Pyrene	2026/06/23		110	%	50 - 130
			D10-Anthracene	2026/06/23		99	%	50 - 130
			D14-Terphenyl (FS)	2026/06/23		108	%	50 - 130
			D8-Acenaphthylene	2026/06/23		100	%	50 - 130
			Acenaphthene	2026/06/23		80	%	50 - 130
			Acenaphthylene	2026/06/23		80	%	50 - 130
			Anthracene	2026/06/23		79	%	50 - 130
			Benzo(a)anthracene	2026/06/23		82	%	50 - 130
			Benzo(a)pyrene	2026/06/23		83	%	50 - 130
			Benzo(b/j)fluoranthene	2026/06/23		95	%	50 - 130
			Benzo(g,h,i)perylene	2026/06/23		85	%	50 - 130
			Benzo(k)fluoranthene	2026/06/23		89	%	50 - 130
			Chrysene	2026/06/23		91	%	50 - 130
			Dibenzo(a,h)anthracene	2026/06/23		71	%	50 - 130
			Fluoranthene	2026/06/23		111	%	50 - 130
			Fluorene	2026/06/23		82	%	50 - 130
			Indeno(1,2,3-cd)pyrene	2026/06/23		86	%	50 - 130
			1-Methylnaphthalene	2026/06/23		74	%	50 - 130
			2-Methylnaphthalene	2026/06/23		74	%	50 - 130
			Naphthalene	2026/06/23		76	%	50 - 130
			Phenanthrene	2026/06/23		92	%	50 - 130
			Pyrene	2026/06/23		107	%	50 - 130
A179882	LFE	Method Blank	D10-Anthracene	2026/06/23		100	%	50 - 130
			D14-Terphenyl (FS)	2026/06/23		102	%	50 - 130
			D8-Acenaphthylene	2026/06/23		99	%	50 - 130
			Acenaphthene	2026/06/23	ND, RDL=0.050		ug/L	
			Acenaphthylene	2026/06/23	ND, RDL=0.050		ug/L	
			Anthracene	2026/06/23	ND, RDL=0.050		ug/L	
			Benzo(a)anthracene	2026/06/23	ND, RDL=0.050		ug/L	
			Benzo(a)pyrene	2026/06/23	ND, RDL=0.0090		ug/L	
			Benzo(b/j)fluoranthene	2026/06/23	ND, RDL=0.050		ug/L	
			Benzo(g,h,i)perylene	2026/06/23	ND, RDL=0.050		ug/L	
			Benzo(k)fluoranthene	2026/06/23	ND, RDL=0.050		ug/L	
			Chrysene	2026/06/23	ND, RDL=0.050		ug/L	
			Dibenzo(a,h)anthracene	2026/06/23	ND, RDL=0.050		ug/L	



QUALITY ASSURANCE REPORT(CONT'D)

QA/QC Batch	Init	QC Type	Parameter	Date Analyzed	Value	Recovery	UNITS	QC Limits
A179882	LFE	RPD	Fluoranthene	2026/06/23	ND, RDL=0.050		ug/L	
			Fluorene	2026/06/23	ND, RDL=0.050		ug/L	
			Indeno(1,2,3-cd)pyrene	2026/06/23	ND, RDL=0.050		ug/L	
			1-Methylnaphthalene	2026/06/23	ND, RDL=0.050		ug/L	
			2-Methylnaphthalene	2026/06/23	ND, RDL=0.050		ug/L	
			Naphthalene	2026/06/23	ND, RDL=0.050		ug/L	
			Phenanthrene	2026/06/23	ND, RDL=0.030		ug/L	
			Pyrene	2026/06/23	ND, RDL=0.050		ug/L	
			Acenaphthene	2026/06/23	NC		%	30
			Acenaphthylene	2026/06/23	NC		%	30
			Anthracene	2026/06/23	NC		%	30
			Benzo(a)anthracene	2026/06/23	NC		%	30
			Benzo(a)pyrene	2026/06/23	NC		%	30
			Benzo(b/j)fluoranthene	2026/06/23	NC		%	30
			Benzo(g,h,i)perylene	2026/06/23	NC		%	30
			Benzo(k)fluoranthene	2026/06/23	NC		%	30
			Chrysene	2026/06/23	NC		%	30
			Dibenzo(a,h)anthracene	2026/06/23	NC		%	30
			Fluoranthene	2026/06/23	NC		%	30
			Fluorene	2026/06/23	NC		%	30
			Indeno(1,2,3-cd)pyrene	2026/06/23	NC		%	30
			1-Methylnaphthalene	2026/06/23	NC		%	30
			2-Methylnaphthalene	2026/06/23	NC		%	30
			Naphthalene	2026/06/23	NC		%	30
			Phenanthrene	2026/06/23	NC		%	30
			Pyrene	2026/06/23	NC		%	30

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 (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).



BUREAU
VERITAS

Bureau Veritas Job #: C670251

Report Date: 2026/06/23

Lopers & Associates

Client Project #: LOP26-044B

Sampler Initials: LL

VALIDATION SIGNATURE PAGE

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

A handwritten signature in cursive script, reading "Louise A. Harding".

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.



SERVICE CENTER COOLER TEMPERATURE RECORD

CHAIN-OF-CUSTODY RECORD

BV Receipt #		COOLER OBSERVATIONS:			
1	194 to OTT-2026-06 196	CUSTODY SEAL	YES	NO	☐ Drinking Water
		PRESENT	☒		TEMP NA NA NA
		INTACT	☒		
		ICE PRESENT	☒		
2	181	CUSTODY SEAL	YES	NO	☐ Drinking Water
		PRESENT	☒		TEMP 4 2 1
		INTACT	☒		
		ICE PRESENT	☒		
3	176	CUSTODY SEAL	YES	NO	☐ Drinking Water
		PRESENT	☒		TEMP 2 2 2
		INTACT	☒		
		ICE PRESENT	☒		
4	184	CUSTODY SEAL	YES	NO	☐ Drinking Water
		PRESENT	☒		TEMP 2 1 1
		INTACT	☒		
		ICE PRESENT	☒		
5	185	CUSTODY SEAL	YES	NO	☐ Drinking Water
		PRESENT	☒		TEMP 4 3 3
		INTACT	☒		
		ICE PRESENT	☒		
6	178	CUSTODY SEAL	YES	NO	☐ Drinking Water
		PRESENT	☒		TEMP 4 3 4
		INTACT	☒		
		ICE PRESENT	☒		
7	180	CUSTODY SEAL	YES	NO	☐ Drinking Water
		PRESENT	☒		TEMP 3 2 2
		INTACT	☒		
		ICE PRESENT	☒		
8	182	CUSTODY SEAL	YES	NO	☐ Drinking Water
		PRESENT	☒		TEMP 2 2 1
		INTACT	☒		
		ICE PRESENT	☒		
9	186 to 193	CUSTODY SEAL	YES	NO	☐ Drinking Water
		PRESENT	☒		TEMP 4 3 3
		INTACT	☒		
		ICE PRESENT	☒		
10	183	CUSTODY SEAL	YES	NO	☐ Drinking Water
		PRESENT	☒		TEMP 2 1 2
		INTACT	☒		
		ICE PRESENT	☒		

BV Receipt #		SHIPPED FROM BV SERVICE CENTER:			
		OTTAWA			
		RECEIVED AT: MISSISSAUGA			
11	OTT-2026-06-179	CUSTODY SEAL	YES	NO	☐ Drinking Water
		PRESENT	☒		TEMP 4 2 3
		INTACT	☒		
		ICE PRESENT	☒		
12		CUSTODY SEAL	YES	NO	☐ Drinking Water
		PRESENT	☒		TEMP 3 3 3
		INTACT	☒		
		ICE PRESENT	☒		
13	177	CUSTODY SEAL	YES	NO	☐ Drinking Water
		PRESENT	☒		TEMP 6 4 4
		INTACT	☒		
		ICE PRESENT	☒		
14		CUSTODY SEAL	YES	NO	☐ Drinking Water
		PRESENT	☒		TEMP 2 4 3
		INTACT	☒		
		ICE PRESENT	☒		
15		CUSTODY SEAL	YES	NO	☐ Drinking Water
		PRESENT	☒		TEMP 1 2 3
		INTACT	☒		
		ICE PRESENT	☒		
16		CUSTODY SEAL	YES	NO	☐ Drinking Water
		PRESENT	☒		TEMP 1 2 3
		INTACT	☒		
		ICE PRESENT	☒		
17		CUSTODY SEAL	YES	NO	☐ Drinking Water
		PRESENT	☒		TEMP 1 2 3
		INTACT	☒		
		ICE PRESENT	☒		
18		CUSTODY SEAL	YES	NO	☐ Drinking Water
		PRESENT	☒		TEMP 1 2 3
		INTACT	☒		
		ICE PRESENT	☒		
19		CUSTODY SEAL	YES	NO	☐ Drinking Water
		PRESENT	☒		TEMP 1 2 3
		INTACT	☒		
		ICE PRESENT	☒		
20		CUSTODY SEAL	YES	NO	☐ Drinking Water
		PRESENT	☒		TEMP 1 2 3
		INTACT	☒		
		ICE PRESENT	☒		

RECEIVED BY (PRINT & SIGN)	DATE (YYYY/MM/DD)	TIME (HH:MM)
ANMOLPREET SINGH <i>AS</i> Sign	2026/06/17	06:50

If Custody seal condition and presence of ice is the same for all, use these boxes:

CUSTODY SEAL	YES	NO
PRESENT	☒	☒
INTACT	☒	☒
ICE PRESENT	☒	☒

C670251
2026/06/16 13:30

Bureau Veritas
36 Antares Dr Unit 100, Nepean, Ontario Canada K2E 7W5 Tel: (613) 274-0573 Toll-free: 800-563-6266 Fax: (613) 274-0574 www.bvna.com

Received in Ottawa

CHAIN OF CUSTODY RECORD

Page of

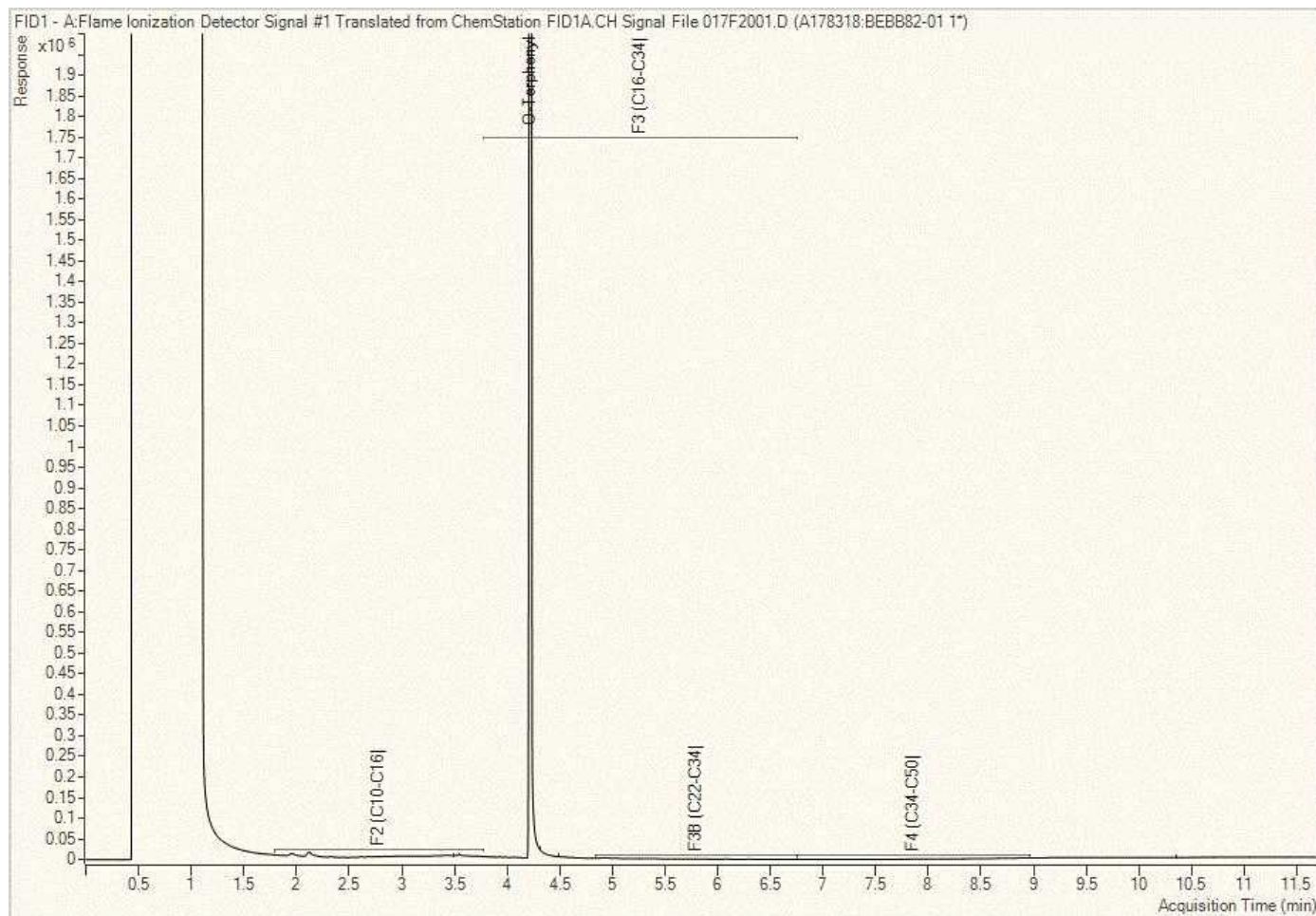
Invoice To:		Report To:		PROJECT INFORMATION:		Laboratory Use Only:	
Company:	#39509 Lopers & Associates	Company:	Luke Lopers	Quotation #:	C43362	Bureau Veritas Job #:	Bottle Order #:
Attention:	Luke Lopers	Attention:	Luke Lopers	P.O. #:			1122857
Address:	30 Lansfield Way Ottawa ON K2G 3V8	Address:		Project:	LOP26-044B	COC #:	Project Manager:
Tel:	(613) 327-9073	Tel:		Project Name:			Katherine Szozda
Email:	Luke@lopers.ca	Email:	Luke@lopers.ca	Site #:			
				Sampled By:	L. Lopers		
MOER REGULATED DRINKING WATER OR WATER INTENDED FOR HUMAN CONSUMPTION MUST BE SUBMITTED ON THE BUREAU VERITAS DRINKING WATER CHAIN OF CUSTODY				ANALYSIS REQUESTED (PLEASE BE SPECIFIC)		Turnaround Time (TAT) Required: Please provide advance notice for rush projects.	
Regulation 157 (2011): ☐ Table 1 ☒ Res/Work ☐ Medium/Fine ☐ Table 2 ☐ Ind/Comm ☒ Coarse ☒ Table 3 ☐ Agri/Other ☐ For RSC ☒ Table 7		Other Regulations: ☐ CCME ☐ Sanitary Sewer Bylaw ☐ Reg 558 ☐ Storm Sewer Bylaw ☐ MISA ☐ Municipality ☐ PWQO ☐ Reg 406 Table ☐ Other		Special Instructions:		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 #)	
Include Criteria on Certificate of Analysis (Y/N)?				Field Filtered (please circle): Metals / Hg / Cr VI O.Reg 153 VOCs by HS & F1-F4 O.Reg 153 PAHs VOCs		# of Bottles Con: ents	
Sample Barcode Label	Sample (Location) Identification	Date Sampled	Time Sampled	Matrix			
1	BH1-26-GW1				X	X	4
2	BH2-26-GW1				X	X	4
3	BH3-26-GW1				X	X	4
4	BH4-26-GW1				X	X	1.5
5	Rep-06/16				X	X	4
6	Trip Blank					X	2
7							
8							
9							
10							
* Relinquished By (Print): Luke Lopers		Date: (YY/MM/DD) 26/06/16	Time 1:20 PM	RECEIVED BY: (Signature/Print) Leen Asad	Date: (YY/MM/DD) 2026/06/16	Time 13:30	# jars used and not submitted
Laboratory Use Only (See Pgs. 1-5)		Time Sensitive		Temperature (°C) on Reel		Custody Seal Present	Yes No
				17/17/20		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/COG-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.							

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

White: Bureau Veritas Yellow: Client

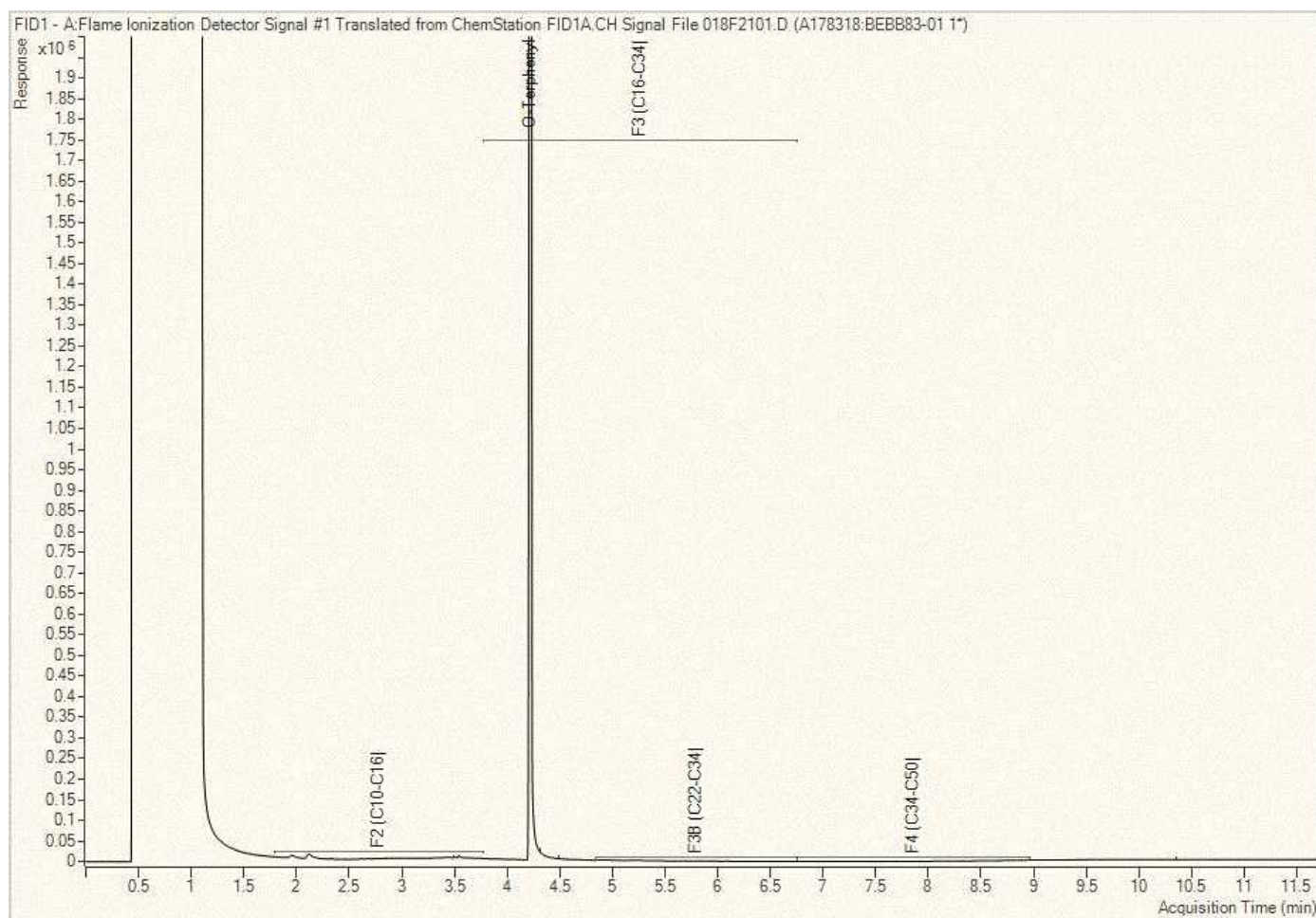
Bureau Veritas Canada (2019) Inc.

Petroleum Hydrocarbons F2-F4 in Water Chromatogram



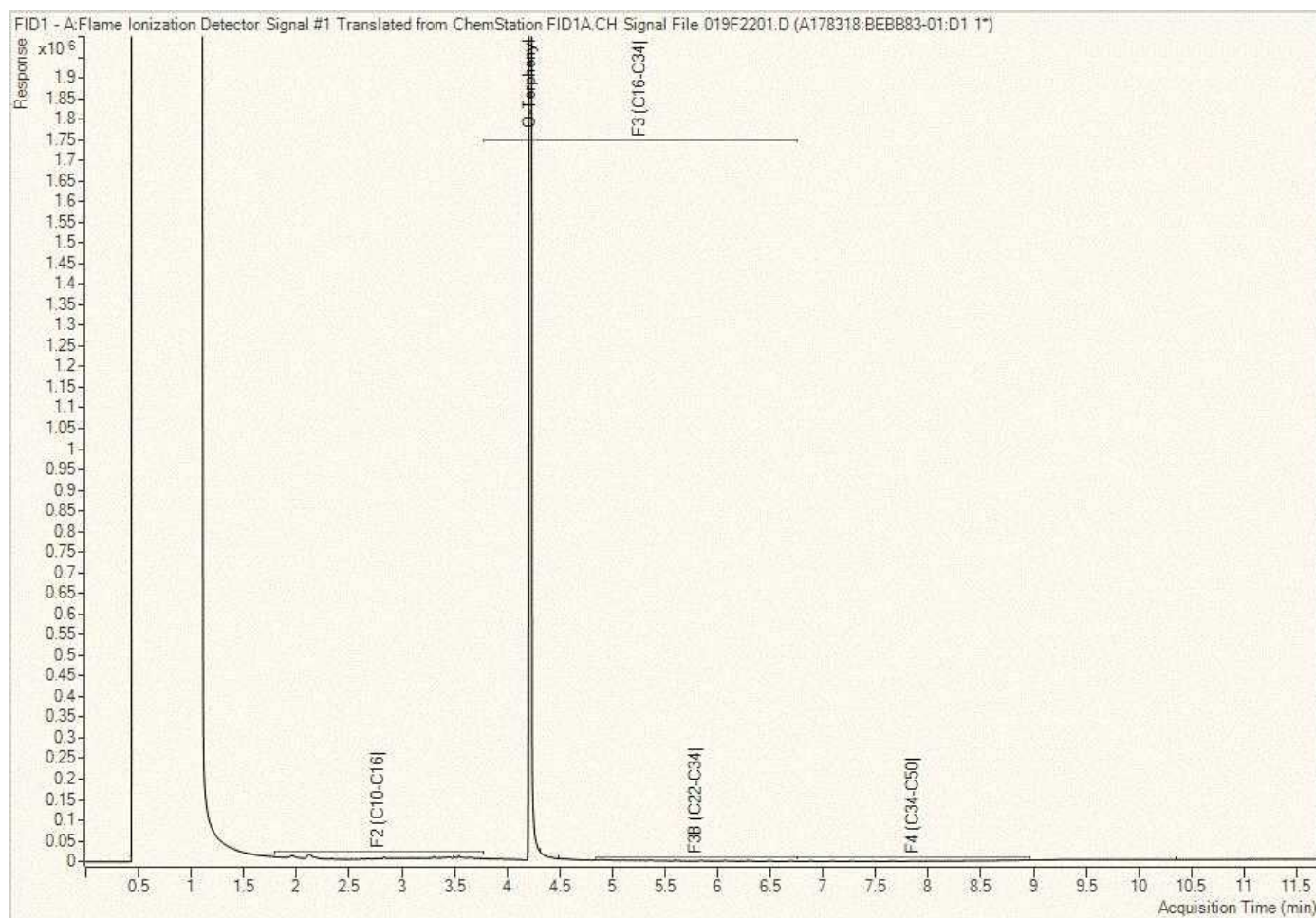
Note: This information is provided for reference purposes only. Should detailed chemist interpretation or fingerprinting be required, please contact the laboratory.

Petroleum Hydrocarbons F2-F4 in Water Chromatogram



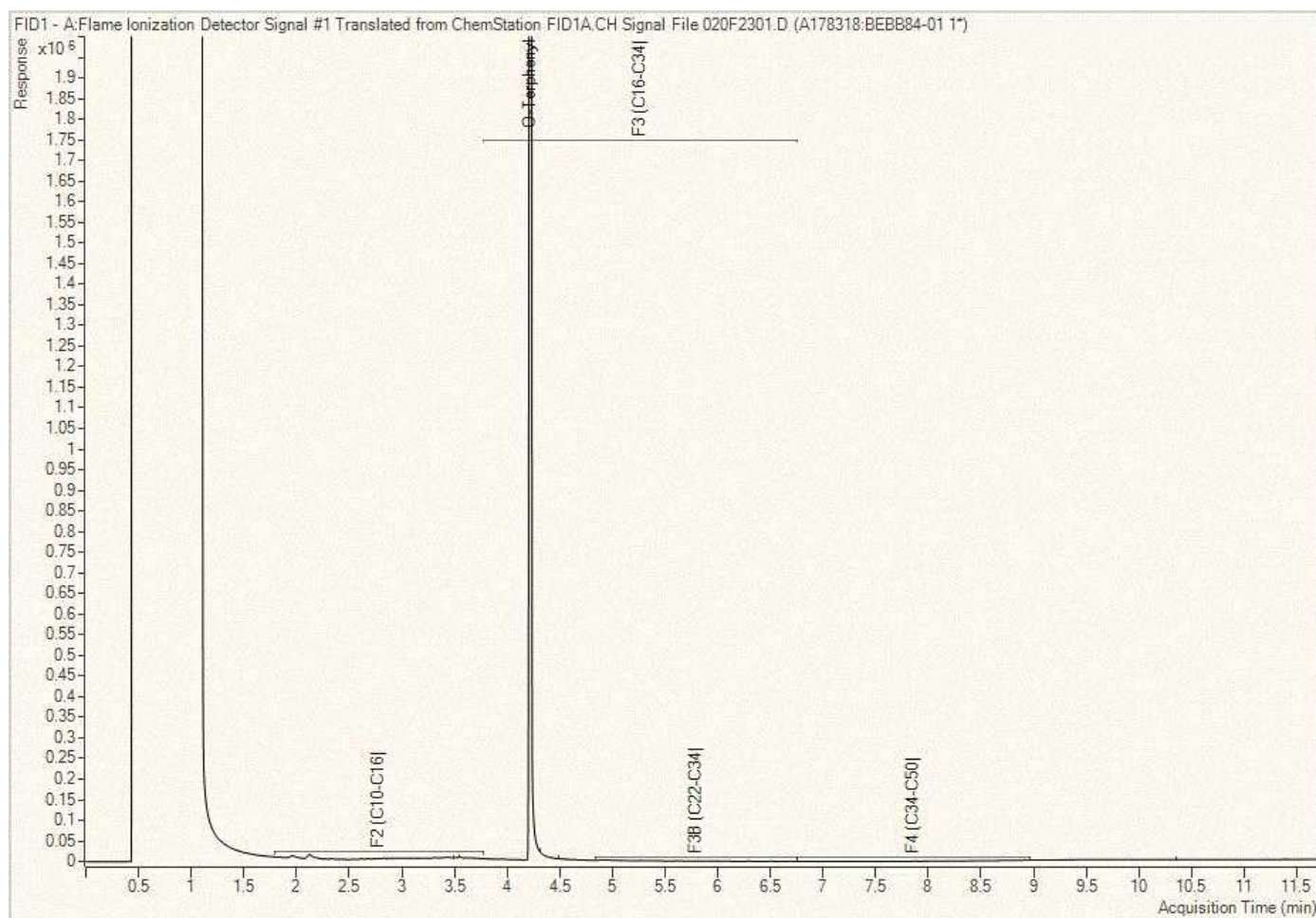
Note: This information is provided for reference purposes only. Should detailed chemist interpretation or fingerprinting be required, please contact the laboratory.

Petroleum Hydrocarbons F2-F4 in Water Chromatogram



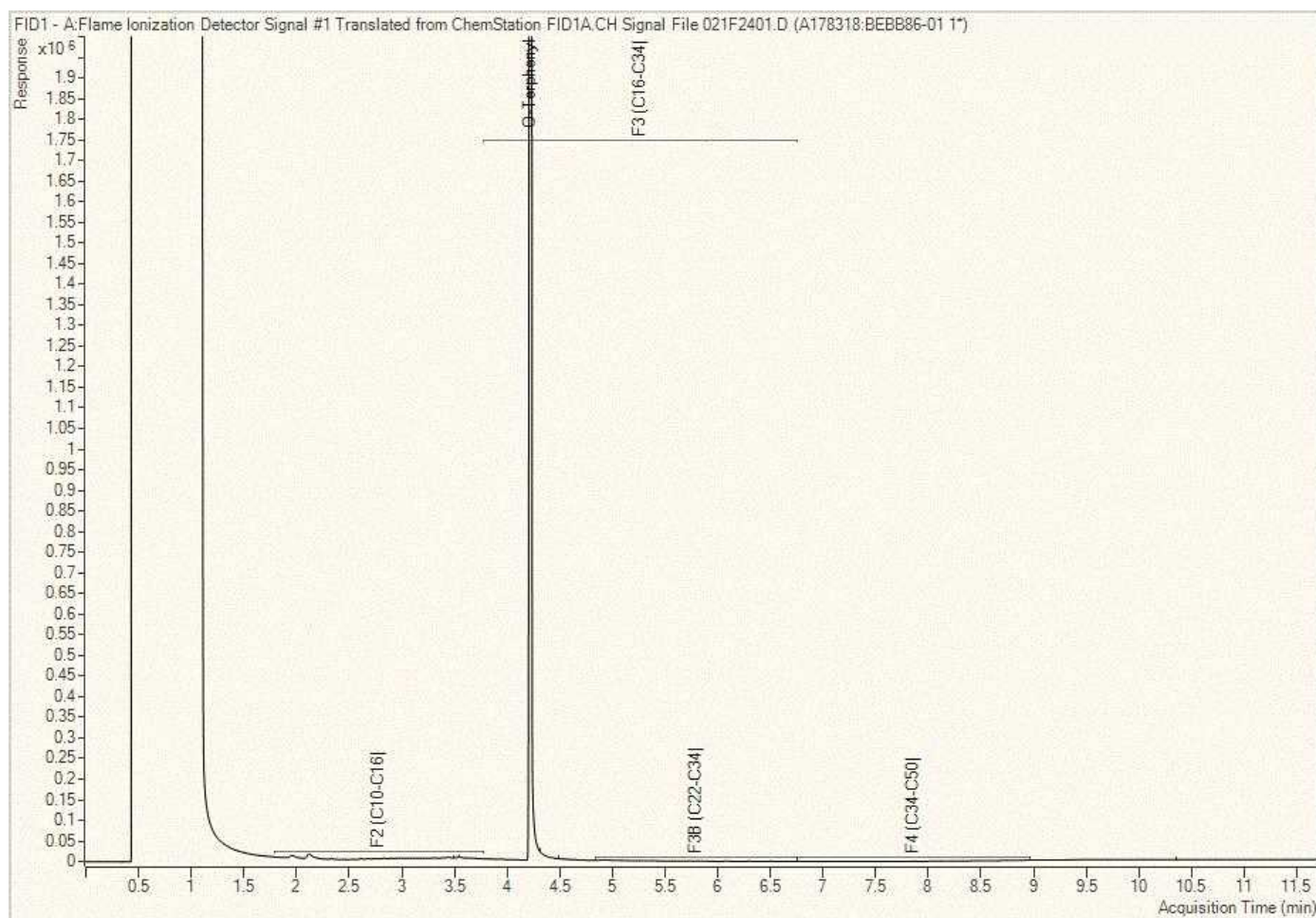
Note: This information is provided for reference purposes only. Should detailed chemist interpretation or fingerprinting be required, please contact the laboratory.

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.

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.

Appendix F

Qualifications of Assessors



PROFILE

Mr. Lopers is an environmental engineer with over 17 years of experience in environmental consulting, specializing in due diligence investigations. Mr. Lopers has extensive experience in Phase I and II Environmental Site Assessments; environmental remediation direction and supervision; record of site condition submissions; asset inventory; designated substance surveys and abatement projects; environmental expertise on legal issues; and coordination of various monitoring programs (groundwater, surface water, air).

Mr. Lopers has a strong commitment to health and safety, having experience leading a regional health and safety committee as a certified employee representative and Ottawa office safety captain. Mr. Lopers has extensive training including OSHA 40-hour HAZWOPER, ASP Health and Safety on Construction Sites in Quebec, Ontario Working at Heights, Emergency First Aid/CPR and WHMIS.

CONTACT

EMAIL:

Luke@Lopers.ca

LUKE LOPERS

Principal

LOPERS & ASSOCIATES

EDUCATION

University of Waterloo,

B.A.Sc., Honours Environmental Engineering

Management Science Option Designation - 2002 - 2008

PROFESSIONAL EXPERIENCE

Lopers & Associates, Principal, Project Manager, Senior Environmental Engineer

Ottawa, Ontario - 2020–Present

Responsible for the management, coordination, supervision, completion and delivery of Phase I/1 and II/2 Environmental Site Assessments, Environmental Remediation Programs, Environmental litigation support, Designated Substance Surveys, scope of work development, cost estimates and proposals

GHD Limited, Project Manager, Senior Environmental Engineer

Ottawa, Ontario - 2013–2020

Responsible for the management, senior technical review, coordination, supervision, completion and delivery of Phase I/1 and II/2 Environmental Site Assessments, Environmental Remediation Programs, Environmental litigation support, Designated Substance Surveys, scope of work development, cost estimates and proposals
Office Safety Captain and Joint Health and Safety Committee team leader

Paterson Group Inc., Project Manager, Environmental Engineer

Ottawa, Ontario - 2009–2013

Responsible for supervision, completion and review for Phase I/1 and II/2 Environmental Site Assessments, Environmental Remediation Programs, Designated Substance Surveys

NEXT Environmental Inc., Site Investigation Staff

Burnaby, British Columbia - 2008–2009

Responsible for fieldwork and reporting for Stage/Phase I and II Environmental Site Assessments, Environmental Remediation Programs

PROFESSIONAL DESIGNATIONS

Licensed Professional Engineer (P.Eng.) with Professional Engineers Ontario (PEO) since 2012

Qualified Person (QP), Environmental Site Assessments with Ontario Ministry of the Environment, Conservation and Parks

SELECT LIST OF CLIENTS

Ottawa Community Housing Corporation

Brigil Construction

Willms & Shier Environmental Lawyers LLP

RECENT & RELEVANT PROJECT EXPERIENCE

Phase One Environmental Site Assessments

Project Engineer/ Project Manager & Site Assessor | Various Clients | Ottawa, Ontario | 2020-2024

Mr. Lopers has completed 18 Phase One Environmental Site Assessments since starting Lopers & Associates 2020. Several of these Phase One ESA Sites progressed to subsequent stages of investigation and remediation, which is discussed in further detail in the sections below.

Project Engineer / Manager & Site Assessor | Various Clients | Ottawa & GTA, ON, Vancouver, BC | 2006-2020

Prior to starting Lopers & Associates in 2020, Mr. Lopers completed over 250 Phase One/I Environmental Site Assessments in 3 large urban centers in Canada including Ottawa, Toronto and Vancouver. Mr. Lopers developed Phase One Environmental Site Assessment Report templates for 3 unaffiliated Engineering companies.

Phase Two Environmental Site Assessments

Project Engineer/ Environmental Project Manager & Site Supervisor | Various Clients | Ottawa, Ontario | 2020-2024

Coordination & Field Supervision consisting of meeting with underground service locators, determining investigation locations, supervising and directing drilling subcontractors, logging soil profiles for borehole logs, daily field notes and subcontractor timesheets. Also completed independent field elevation surveys and groundwater sampling in active pedestrian traffic areas.

Project Engineer/Manager for the following Phase Two ESA field investigation and/or environmental delineation and environmental remediation programs and other Site Investigations:

- Former Canex Fuel Outlet and Residential Lands, Former CFB Rockliffe, Ottawa Community Housing Corporation.
- Former Petro Canada Retail Fuel Outlet, Automotive Service Garage and Commercial Lands, Ridgewood Avenue, Brigil Construction.
- Former Urban Waste Disposal Site and Operational Commercial Lands, DuMaurier Avenue, Brigil Construction.
- Residential Properties (regional dNAPL groundwater concerns), Parkdale Avenue, Homestead Developments Corporation.
- Former Private Fuel Outlet and Construction & Equipment Rental Yard and Service Garage, 2940 Baseline Road, Brigil Construction.
- Former historic lumberyard, Central Bus Terminal and Fuel Outlet, 265 Catherine Street, Brigil Construction.
- Residential Property (adjacent up-gradient dry-cleaner APEC), Penfield Avenue, Ottawa Community Housing Corporation.
- Former Private Fuel Outlet and Contractor's Yard, Ogilvie & Cummings Avenue, Lux Place LP.
- Former Residential Developments with historic USTs, poor environmental quality fill materials and/or in vicinity to off-Site VOC groundwater plume, Gladstone Avenue & Rochester Street, Ottawa Community Housing Corporation.

Environmental Remediation Programs (Lopers & Associates)

Project Engineer/ Environmental Project Manager & Site Supervisor / Client/Owner Advisor | Various Clients | Ottawa, Ontario | 2021-2024

Coordination & Field Supervision consisting of supervising and directing excavation/remediation subcontractors, logging trucking information for off-Site disposal, daily field notes and subcontractor invoice review and approval. Independent determination of remediation extents based on field soil and groundwater sampling in active remediation/excavation under timeline constricted conditions. Filing of Record of Site Conditions with Ontario Ministry of Environment, Conservation and Parks.

- Former Private Fuel Outlet and Construction & Equipment Rental Yard and Service Garage, Baseline Road, Brigil Construction.
 - Site Environmental Project Experience dating back to 2009, with 2 unaffiliated property owners and Mr. Lopers practicing Professional Engineering for 3 unaffiliated Engineering companies.
- Former Private Fuel Outlet and Contractor's Yard, Ogilvie & Cummings Avenue, Lux Place LP.
 - Project Experience dating back to 2011, with several changes in ownership structure and with Mr. Lopers practicing Professional Engineering for 3 unaffiliated Engineering companies.
 - Site Remediation Complete, RSC #: B-403-1823439436

- Lopers assisted the Client with regulatory approvals and in obtaining municipal brownfields redevelopment grant funding as part of Site remediation/redevelopment.
- Former lumberyard, Central Bus Terminal and Fuel Outlet, Catherine Street, Brigil Construction.
 - Project Experience dating back to 2010, with 2 unaffiliated property owners and with Mr. Lopers practicing Professional Engineering for 2 unaffiliated Engineering companies.
 - Environmental Remediation Plan prepared by Mr. Lopers Fuel terminal remediation February-April 2024. UST removal, bulk soil excavation, groundwater pump & treat & discharge to municipal storm sewer under SSA. Post-remediation groundwater monitoring in progress to support RSC application (2025)
 - Lopers is also assisting the Client with regulatory approvals and in obtaining municipal brownfields redevelopment grant funding as part of Site remediation/redevelopment.
- Former Retail Fuel Outlet and Automotive Service Garage, Ridgewood, Brigil Construction.
 - Environmental Remediation Plan prepared by Mr. Lopers Fuel remediation June-October 2024. Bulk soil excavation and off-Site disposal. Post-remediation groundwater monitoring in progress to support RSC application (2025)
 - Lopers is also assisting the Client with obtaining municipal brownfields redevelopment grant funding as part of Site remediation/redevelopment.
- Former Residential Developments with historic USTs, poor environmental quality fill materials and/or in vicinity to off-Site VOC groundwater plume, Gladstone Avenue & Rochester Street, Ottawa Community Housing Corporation.
 - Environmental Remediation Plan prepared by Mr. Lopers poor environmental quality fill remediation September-October 2024 (periodically on-going). Bulk soil excavation and off-Site disposal.
 - Lopers is also assisting the Client with verification of contractor quantities and rates for disposal of contaminated soil.

Designated Substance Surveys

Project Manager for portfolio Designated Substance Surveys and Hazardous Building Materials Assessment | Ottawa, Pembroke, Southeastern Ontario | 2010- 2024

- DSSs at various municipal facilities for the City of Pembroke, Pembroke, Ontario. Preparation of Asbestos Management Plan. Supervised 3 staff (remotely from Ottawa) completing DSS on 10 municipal facilities.
- HBMA at various institutional buildings for the Catholic District School Board of Eastern Ontario, Southeastern Ontario. Supervised 2-3 staff (remotely from Ottawa) complete 10-20 DSS on schools and maintenance buildings, generally after hours or on weekends.

Project Manager for asbestos containing material (ACM) surveys, designated substance surveys (DSSs), Hazardous Building Materials Assessments (HBMA) or mould assessments at the following sites:

- DSSs and ACM surveys at various residential, buildings (dwellings and apartment buildings) for private residential clients, Ottawa, Ontario.
- DSS and abatement oversight and contractor approvals during demolition, residential buildings (townhouses) for Ottawa Community Housing Corporation, 818 Gladstone Avenue, Ottawa, Ontario.
 - Completed contractor compliance oversight and daily field inspection reports. Provided additional recommendations when warranted.
- DSS for residential buildings (townhouses) for Ottawa Community Housing Corporation, 66-82 Finch Private, Ottawa, Ontario.
- DSS for residential buildings (adjoining rooming houses) for Ottawa Community Housing Corporation, 214-224 Somerset Street East, Ottawa, Ontario.
- DSS commercial building (Central Bus Terminal) for Brigil Construction, 265 Catherine Street, Ottawa, Ontario.
- DSS commercial buildings (2 Commercial Plaza buildings) for Brigil Construction, 729 Ridgewood Avenue, Ottawa, Ontario.

Environmental Litigation Support

Project Manager, Field Engineer, Expert Witness | Ottawa, Ontario | 2014-2020

Project Manager, Field Engineer and Expert Witness for a fuel spill, remediation program, groundwater monitoring program and litigation review for redevelopment of a residential property adjacent to a central heating plant at an institutional facility.

- Coordination & Field Supervision consisting of meeting with underground service locators, determining investigation locations, supervising and directing drilling and remediation subcontractors, logging soil profiles for borehole logs, daily field notes and subcontractor timesheets. Also completed independent field elevation surveys and groundwater sampling.

Project Manager, Field Engineer, Expert Witness | Gladstone Avenue, Ottawa, Ontario | 2021-2023

Project Manager, Field Engineer and Expert Witness for assessment of damages resulting from temporary expropriation of residential lands for industrial use (Bridge Construction).

- Coordination & Field Supervision consisting of determining investigation locations, supervising and directing drilling subcontractors, logging soil profiles for borehole logs. Also completed independent field elevation surveys and groundwater sampling. Completed environmental investigation, remediation and management cost estimates for different scenarios to determine incremental costs resulting from Site occupancy.

Select Federal and Provincial Experience

- Field Engineer, PWGSC representative for monitoring access road reconstruction, asset inventory, camp drainage assessment, reservoir construction progress monitoring | Outcome Consultants (PWGSC) | Governmental Facilities, Eureka, Nunavut | June 2022
- Environmental Project Manager, Field Assessor for UST removal, DSS, Abatement Review & Compliance Monitoring | BGIS (PWGSC) | CRA Taxation & Data Centre, 875 Heron Road, Ottawa, Ontario | 2017-2019
- Environmental Project Manager, Field Assessor for Project Specific DSSs | BGIS (PWGSC) | 20 to 30 buildings in Ottawa & Gatineau | 2016-2019
- Environmental Project Manager, Field Assessor for Environmental Compliance Audit | BGIS (PWGSC) | Tunney's Pasture (select facilities), Ottawa, Ontario | 2016
- Planning Coop Student for Executive Assistant to Director of Ministry of Transportation | St. Catharines, Ontario | 2003

Natasha Corrin

M.A.Sc., P.ENG., QP_{RA}

SENIOR RISK ASSESSOR



AREAS OF SPECIALTY

Areas of expertise include Human Health Risk Assessment, Ecological Risk Assessment and Risk Management for contaminated sites and environmental impact assessments.

PROFESSIONAL MEMBERSHIPS AND AFFILIATIONS

Professional Engineer #100079432, Professional Engineers Ontario, 2005-present

Qualified Person for Risk Assessment, Ontario, 2011 - present

EDUCATION

M.A.Sc. Chemical Engineering, University of Waterloo, 1999

B.Eng. Chemical Engineering, McGill University, 1997

Graduate Course Engineering Risk Assessment, University of Idaho, 2010

EXPERIENCE

Ms. Corrin is a professional engineer and senior risk assessor with over 20 years of experience in environmental consulting. She reviews and carries out projects related to human health and ecological risk assessment and risk management for contaminated sites. In this role, her responsibilities include planning and designing site specific human health and ecological risk assessments, particularly complex risk assessments that involve consumption of country foods and/or emerging contaminants. She provides senior technical advice and oversight to project teams and acts as the senior technical lead for risk assessment on complex multi-disciplinary projects. She has been responsible for developing standard operating procedures including those for the collection and brewing of Labrador tea according to traditional methods as well as the collection of various types of vegetation for human and animal consumption. Additionally, she has conducted peer reviews on behalf of Public Works and Government Services Canada and the Department of National Defence. Ms. Corrin is designated as a Qualified Person for Risk Assessment (QP_{RA}) in Ontario and has worked on numerous risk assessments under Ontario Regulation 153/04, successfully receiving approval under the regulatory process. Ms. Corrin believes in a holistic approach to managing contaminated sites and collaborates closely with clients and other stakeholders on projects so that objectives are achieved efficiently.

RISK ASSESSMENTS

Soil Vapour and Indoor Air Quality Assessment, Residential Development, Etobicoke Ontario. Senior Risk Assessor, 2022

Corrin Environmental Consulting evaluated sub-slab vapour data and indoor air quality data related to a historical fuel spill below a residential building. Work included providing technical input into the sampling programs, comparing data to Ontario Health Based Indoor Air Criteria and providing recommendations for additional work.

Modified Generic Risk Assessment, Site in Brantford, Ontario. Qualified Person for Risk Assessment, 2021-2022

Completed a Tier 2 Risk Assessment for a client where land use was changing from commercial to residential. Liaised with MECP District Engineer and Standards Development Branch. The main source of contamination was material used to infill the Grand River in the 1880s. MGRA received approval from the MECP and the client was able to obtain their RSC for the site.

Tier 3 Risk Assessment under O.Reg. 153/04, Site in Ottawa, Ontario. Qualified Person for Risk Assessment, 2022

Completed a Pre-Submission Form and Tier 3 Risk Assessment for a client where land use was changing from commercial to residential. Liaised with MECP District Engineer and Standards Development Branch. The main contaminants were chlorinated solvents in groundwater in a complex hydrogeological

Natasha Corrin – Senior Risk Assessor

environment. The contamination was from an upgradient, off-site source, and the site is part of a larger area designated by the City of Ottawa as an Environmental Risk Management Area due to the contaminated groundwater. Groundwater migration is complicated by dewatering associated with the presence of the Light Rail Train adjacent to the site. Non-standard delineation was applied at the site.

Human Health Risk Assessment for the Iqaluit Main Power Plant, Iqaluit, Nunavut. Qulliq Energy Corporation. Senior Risk Assessor, 2022.

Evaluated if human health risks could be present at the site due to historical fuel spills. Quantitatively evaluated risks associated with the inhalation pathway inside the plant and provided recommendations for additional work to reduce uncertainties.

Due Diligence Risk Assessment, Development Site in Ottawa, Ontario. Senior Risk Assessor, 2021

Completed a due diligence risk assessment for a development in Ottawa where a residence was being demolished and the site was being developed into a multi-unit property. Evaluated potential risks at the site and recommended risk management measures. Assessment was used to satisfy lender requirements related to financing the project.

Human Health and Ecological Risk Assessment, Ottawa, Ontario. Senior Risk Assessor, QP_{RA}, 2011-2018

Conducted human health and ecological risk assessment for numerous sites under O.Reg. 153/04. Tasks included preparation and submission of Pre-Submission Form and completion of Risk Assessment including hazard assessment, problem formulation, toxicity assessment and risk characterization. Developed Risk Management Plans. Contaminants of concern at the sites have included VOCs, PAHs, PHCs, metals, and methane. Some of the sites have been considered sensitive due to high or low pH and presence of species at risk.

Various Due Diligence Risk Assessments for Real Estate Clients, Ontario – GWLRA. Risk Assessor, 2011-2015

Ms. Corrin has conducted numerous due diligence risk assessments for real estate clients for the purpose of financing or re-financing their sites as well as for satisfying requirements of the insurers.

Residential Development, Ottawa, Ontario – Claridge. Senior Risk Assessor, 2015

QP_{RA} for a risk assessment at a residential high-rise development in downtown Ottawa. The site had been impacted by upgradient chlorinated solvents. Ms. Corrin is the technical director and reviewer for the risk assessment. Ms. Corrin used a pro-active approach engaging local district engineers resolving issues related to risk management and off-site migration of contaminants early in the RSC process.

National Research Council's National Fire Laboratory (NFL), Mississippi Mills, Ontario. Senior Risk Assessor, 2015-2018

NRC's NFL property is approximately 78 hectares in size and includes one large main structure (Building U-96) located approximately in the centre of the property. The NFL facility has historically been used to conduct a wide range of full-scale scenarios to test fire detection, fire suppression and smoke movement and to test the performance of building materials and systems. Fire testing associated with aqueous film forming foam (AFFF) was conducted at the site, with process waters containing PFAS reportedly discharged to ground surface. Since PFAS was discovered in soil, groundwater, and surface water at the site, work has involved in a multi-disciplinary PFAS investigation program that has included on-site groundwater, soil, surface water, and sediment sampling, off-site residential drinking water sampling, targeted soil removal, ecological assessment programs, and air deposition studies. Ms. Corrin was the Senior Lead for the Human Health Risk Assessment for risks associated with exposure to soil, water, vegetation, big game and small game at the Site.

Tundra Mine Detailed HHERA for INAC, Tundra Mine, NWT. Project Manager and Senior Risk Assessor, 2016-2017

INAC requested that the HHERA be completed to assess residual risks associated with the remediated mine site in order to facilitate project closure. Ms. Corrin was the project manager and senior risk assessor involved in designing and managing a DQRA for the Tundra Mine, 240 km northeast of Yellowknife. For the human health risk assessment, the critical receptor was a First Nation Hunter. Exposure pathways evaluated included direct contact with soil, ingestion of surface water and consumption of: berries, small game, large game, fish and Labrador tea. Terrestrial ecological receptors were evaluated as well as aquatic receptors in lakes downstream of the Tailings Containment Area. Lines of evidence used to assess risks to

Natasha Corrin – Senior Risk Assessor

aquatic receptors included: surface water and sediment chemistry, benthic community survey, Hyalella critical body residue analysis, fish internal and external health examinations and biological habitat assessment. A comprehensive sampling program was planned and executed and included collection of soil, surface water, fish tissue, benthic invertebrates, Hyalella, berries and Labrador tea from both impacted and reference areas. A risk management plan was developed. Ms. Corrin managed a multi-disciplinary team, worked with multiple stakeholders including INAC, Expert Support, and First Nations Communities. As the senior risk assessor, Ms. Corrin planned the technical direction of the risk assessment, developed the risk management plan and reviewed all deliverables.

PEER REVIEW PROJECTS

Peer Reviews of Numerous Small Craft Harbour Waterlot Assessments, Maritime and Gulf Region – PSPC/DFO. Senior Risk Assessor 2021, 2022

Responsible for the review and provision of construction comments related to the review of reports for 8 sites in the 2021/22 Fiscal Year and 6 sites in the 2022/23 Fiscal Year. Work conducted included sediment sampling, benthic community assessment and tissue analysis. Reports included descriptions of field work, dive work, historical reviews and human health and ecological risk assessments.

Vendor of Record (VOR) Risk Assessment Peer Reviews on behalf of the Ontario Ministry of Environment, Conservation and Parks. Senior Reviewer, 2014 – 2018

Natasha has been part of MECP teams that were Vendors of Record (VORs) reviewing risk assessments conducted under Ontario Regulation 153/04 on behalf of the Ministry. As part of the VOR team, Natasha has an in depth understanding of the regulation and the required steps to get a risk assessment through the review and approvals process.

3rd Party Peer Review, Risk Assessment Camp Ipperwash, Lambton Shores, Ontario – DND. Project Manager/Senior Risk Assessor, 2016

A 3rd party peer review was performed for an aquatic site assessment and risk assessment conducted in surface water bodies at the Former Camp Ipperwash in Lambton Shores, Ontario. The Site was appropriated from the Stony Point Indian Reserve in 1942 and used for infantry training. The site assessment work investigated impacts associated with sediment and surface water including metals, polycyclic aromatic hydrocarbons (PAHs) and DDT. The risk assessment considered potential risks to aquatic life including benthic invertebrates, fish and turtles, particularly associated with biomagnifying contaminants. Risks to human health were also considered associated with the consumption of fish.

AQUATIC TOXICOLOGY / DEVELOPMENT OF DISCHARGE CRITERIA

Development of Discharge Limits for the Abercrombie Ash Management Site - Nova Scotia Power Incorporated. Senior Risk Assessor, 2019-2020

Natasha worked on a multi-disciplinary team to develop effluent discharge criteria for aluminum, chromium (VI) and molybdenum at the site. The work involved process engineers, biologists, site assessors and risk assessors. The process engineers worked on reducing concentrations of chromium (VI) and molybdenum in the discharge by evaluating numerous treatment options. The preferred option was piloted and implemented and included the use of a combined granular activated carbon and resin recirculation system. Acute discharge criteria were developed based on multiple lines of evidence including a literature review of available information combined with surface water and sediment chemistry as well as an aquatic habitat assessment and benthic community analysis. The numeric limits were selected based on the 5th percentile of the species sensitivity distributions of acute effects data.

CLIMATE CHANGE

Climate Change Impacts and Indices for the National Capital Region - NCC and City of Ottawa. Facilitator, Senior Reviewer, 2019

Conducted stakeholder engagement sessions and facilitated workshops to get feedback from multiple stakeholder groups from the NCC and City of Ottawa regarding how climate change impacts their sector (e.g., contaminated sites, recreation, transportation, public health, water/wastewater) and what climate change parameters and indices would be most valuable to them for future vulnerability assessments and resilience planning. Natasha provided senior technical advice, reviewed deliverables and was a facilitator at the workshop and stakeholder engagement sessions.

Natasha Corrin – Senior Risk Assessor

STAKEHOLDER ENGAGEMENT

Completion of Two Stakeholder Engagement Sessions to support the Clyde River Small Craft Harbour Development, Nunavut - PSPC/DFO. Senior Risk Assessor and Assistant Project Manager, July 2020 – March 2021

Planned and led biological studies and stakeholder engagement sessions to support the design of the Clyde River Small Craft Harbour. Coordinated meetings with the Hamlet Council and the Hunters and Trappers Organization. Held IQ sessions with elders and used participatory maps to gather insights into historical and current use of the area. Also engaged with ECCC, DFO, NIRB, NPC, Arctic Fisheries Alliance, sealift operators, CIRNAC, GN Petroleum Products Division and fuel provider.

SOIL REUSE

Screening Level Risk Assessments for Soil Reuse at City of Ottawa Infrastructure Projects – Various locations, City of Ottawa, Ontario. Senior Risk Assessor, 2022 -2023.

Evaluated available data including soil, groundwater and leachate data (if available) to determine if there were potential risks to human and ecological receptors associated with reusing material at integrated roadway and sewer projects in consideration of O.Reg. 406/19 and O.Reg. 153/04. Made recommendations for soil reuse on and off-site.

Soil Reuse Program at a Development Site in Hawkesbury, Ontario - United Counties of Prescott-Russell. Project Manager/Senior Risk Assessor, 2020 and 2022 for Project Close-out. Selenium exceedances in soil were identified at a redevelopment site in Hawkesbury, Ontario. Completed a risk assessment that identified that the exceedances would not pose a risk to human health or the environment if the soil were to be reused at the site and avoided costly site assessment and soil removal fees. Provided advice in the context of Ontario Regulation 406/19 (the excess soil management regulation), provided specification for a tender document related to excess soil management, advice for excess soil management and cost saving strategies, tender support and construction support. Provided follow-up work post-construction to close out the project. Hired MP as a subconsultant for both phases of the project to collaborate on creative solutions for soil management and money-saving options for the client.

Soil Reuse Program at the Cliff Central Heating and Cooling Plant, Ottawa, Ontario - PCL Constructors Canada Inc. Senior Environmental Engineer, November 2020

Reviewed historical reports and evaluated options for soil reuse at the site in consideration of potential risks to human health, the environment and planned risk management measures. Determined that soil could be reused at the site, saving disposal fees for contaminated soil.

COURSES AND PRESENTATIONS GIVEN

- Science, Approaches and Challenges in Human Health Risk Assessment When Considering PFAS. RPIC Federal Contaminated Sites Regional Workshop. Halifax, NS. June 2019.
- Lessons learned in the FCSAP Program: Custodian and ESD Perspective. Natasha Corrin. Oral Presentation. RPIC, 2018.
- Understanding the Impacts of Confounding Uncertainties with PFAS – from Assessment to Communication with Stakeholders. Half-Day Professional Development Session. Natasha Corrin – presented HHRA and ERA. RPIC, 2018.
- FCSAP Project Managers Toolkit. Half-Day Professional Development Session. Natasha Corrin – presented Site Closure Tool and TRAV. RPIC, 2016.
- Site Closure Tool/Tool for Risk Assessment Validation. Half-Day Professional Development Session. Natasha Corrin, Golder; Andrew Henderson, Franz. RPIC, 2014.

SELECTED RECENT PROFESSIONAL DEVELOPMENT

- The Path: Your Journey Through Indigenous Canada. nVision. March 2021
- The Health Effects of Climate Change. HarvardX (edX online course). May 2019.
- Introduction to Climate Change and Health. Yale University (Coursera online course). April 2020.
- Cultural awareness and sensitivity training – Kettle and Stony Point First Nation. March 2018.