

# Phase Two Environmental Site Assessment

Parkdale 3 Lands  
131 & 139 Parkdale Avenue  
and 122 Forward Avenue  
Ottawa, Ontario

Prepared for:  
11034936 Canada Inc.



February 12, 2026

LOP26-035B

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# 1. Executive Summary

Lopers & Associates (Lopers) was retained by 11034936 Canada Inc., a subsidiary company of Brigil Construction (“BRIGIL”) to complete a Phase Two Environmental Site Assessment (Phase Two ESA) of the residential properties civic address Nos. 131 Parkdale Avenue, 139 Parkdale Avenue and 122-124 Forward Avenue, Ottawa, Ontario (“Phase Two Property”, “Property” or “Site”).

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

Lopers completed a Phase One Environmental Site Assessment (Phase One ESA, Reference No. LOP26-35A, dated February 9, 2026) for BRIGIL at the Property. The Phase One ESA identified the presence of one potentially contaminating activity (PCA) at the Property which was interpreted to represent an area of potential environmental concern (APEC). The on-Site PCA which was interpreted to represent an APEC for the Phase Two Property, and its associated contaminants of potential concern (CPCs), are summarized below.

**Table 1: Areas of Potential Environmental Concern**

Area of Potential Environmental Concern (APEC)	Location of Area of Potential Environmental Concern on Phase One Property	Potentially Contaminating Activity (PCA)	Location of PCA (on-Site or off-Site)	Contaminants of Potential Concern (CPC)	Media potentially impacted (Soil, Sediment and/or Groundwater)
APEC 1 PCA-1- Fill material of suspect environmental quality – 131 & 139 Parkdale Avenue and 122 Forward Avenue	Entirety of the Phase Two Property not developed with structures	PCA 30: Importation of Fill Material of Unknown Quality	On-Site	BTEX PHCs (F <sub>1</sub> -F <sub>4</sub> ) Metals, Hg, Cr VI PAHs	Soil

Twenty additional PCAs at neighbouring properties in the Phase One Study Area were identified as part of the 2026 Lopers Phase One ESA. Neighbouring property PCAs consist of active and historical automotive garages, autobody shops and fuel storage tanks. Two PCAs were identified in close proximity to the Phase Two Property during the historical research and were reviewed at the time of the Site Investigation. Based on historical research, visual observations during the Site Investigation and waste registration experience, the waste generator listing at 151 Parkdale Avenue is suspected to be associated with clean out of a hydraulic elevator pit or underground parking catch basin, which is not considered to represent an APEC for the Phase Two Property. The Tunney’s Pasture (120 & 150 Parkdale) property limits are 20 m west of the Phase Two Property, however, the operations at the various Government of Canada facilities

identified in the Waste Generators summary and Underground Storage Tank (UST) registry are located at least 110 m southwest of the Property and are not considered to represent an APEC for the Phase Two Property. The other PCAs at neighbouring properties in the Phase One Study Area are located significant distances and at down- or cross-gradient orientations with respect to the Phase Two Property and are not considered to represent APECs for the Phase Two Property.

The scope of work for the Phase Two ESA included drilling 11 boreholes (BH1-25 through BH11-25) at the Phase Two Property. Four groundwater monitoring wells (BH1-25 through BH4-25) with their screens situated in the limestone bedrock, were installed as part of this Phase Two ESA.

A total of 14 soil samples, including 2 duplicate samples, were submitted for laboratory analysis as part of this Phase Two ESA. The samples were analyzed for a combination of PHCs, BTEXs, PAHs and Metals & Inorganics.

Although it was not considered a PCA or to represent an APEC for the Phase Two Property in the 2026 Lopers Phase One ESA, the limits of the City of Ottawa Environmental Risk Management Area (ERMA) for 3 Hamilton Avenue N were identified 300 m south of the Phase Two Property and 50 m south of the Phase One Study Area. The ERMA relates to a VOC groundwater plume; the monitoring wells installed as part of this Phase Two ESA are expected to be suitable for assessment of groundwater quality relating to the ERMA. Out of caution and consideration of the identified ERMA, the Phase Two Property groundwater quality was assessed for VOCs. Additionally, the soil CPCs were assessed in groundwater from select monitoring wells at the Phase Two Property for future construction dewatering discharge considerations into the municipal sewer system. The monitoring wells water samples were considered representative water quality for future discharge considerations during construction excavation dewatering.

Groundwater sampling was completed of 3 of the 4 groundwater monitoring wells at the Phase Two Property. A total of 5 groundwater samples, including 3 original samples, 1 duplicate sample and 1 trip blanks, were submitted for laboratory analysis as part of this Phase Two ESA. The samples were analyzed for a combination of PHCs, BTEXs, VOCs, PAHs and Metals & Inorganics.

The applicable site standard was determined to be the shallow depth generic site condition standard, in a non-potable groundwater condition, with coarse textured soil, for residential property use, as specified in Table 7 of the Ministry of Environment Conservation and Parks (MECP) Soil, Ground Water and Sediment Standards for Use Under Part XV.1 of the Environmental Protection Act, April 15, 2011.

The following soil samples had exceedance concentrations reported compared to their respective Site Condition Standards at the time of the Phase Two ESA, as noted in Table 2a through Table 2c below:

**Table 2a: Soil Exceedances – Petroleum Hydrocarbons (PHCs)**

Exceeding Parameter:			F3 PHCs (C16-C34)	F4G PHCs (gravimetric)
Sample Location	MECP Table 7 Site Condition Standards		300 ug/g	2800 ug/g
	Sample ID	Sample Depth	Reported Concentration (ug/g)	
BH3-25	BH3-25-SS1	0.0 – 0.4 m BGS	310	4,400
BH5-25	BH5-25-AU1	0.0 – 0.6 m BGS	570	-
BH7-25	BH7-25-AU1	0.0 – 0.6 m BGS	450	-
	DUP-12/03	Duplicate of BH7-25-AU1	390	-
BH11-25	BH11-25-AU1	0.0 – 0.3 m BGS	1,300	3,000

**Table 2b: Soil Exceedances – PAHs**

Exceeding Parameter:			Acenaphthylene	Anthracene	Benzo[a]anthracene	Benzo[a]pyrene	Benzo[b]fluoranthene	Benzo[k]fluoranthene	Dibenzo[a,h]anthracene	Fluoranthene	Indeno[1,2,3-cd]pyrene	Naphthalene	Phenanthrene
Sample Location	MECP Table 7 Site Condition Standards		0.15 ug/g	0.67 ug/g	0.5 ug/g	0.3 ug/g	0.78 ug/g	0.78 ug/g	0.1 ug/g	0.69 ug/g	0.38 ug/g	0.6 ug/g	6.2 ug/g
	Sample ID	Sample Depth	Reported Concentration (ug/g)										
BH1-25	BH1-25-AU1	0.0 – 0.6 m BGS	-	0.9	1.8	1.8	2.3	0.84	0.27	5.1	1.2	-	-
	BH1-25-SS2	0.8 – 1.4 m BGS	0.35	-	1.2	1.6	1.9	-	0.24	2.2	1	-	-
BH2-25	BH2-25-SS1	0.0 – 0.6 m BGS	-	0.87	1.4	1.3	1.8	-	0.21	3.6	0.93	-	-
	DUP-12/01	Duplicate of BH2-25-SS1	0.24	2.4	5	5.1	6.4	2.3	0.84	13	3.4	0.84	9.5
BH3-25	BH3-25-SS1	0.0 – 0.4 m BGS	-	-	0.66	0.64	0.82	-	-	2	0.45	-	-
BH4-25	BH4-25-SS1	0.0 – 0.6 m BGS	-	0.86	1.1	1.1	1.3	-	0.15	2.9	0.73	-	-
BH5-25	BH5-25-AU1	0.0 – 0.6 m BGS	-	1.7	2.9	3	4	1.2	0.47	8	2.2	-	-
BH6-25	BH6-25-AU1	0.0 – 0.3 m BGS	-	-	0.7	0.81	0.91	-	0.13	1.7	0.56	-	-

BH7-25	BH7-25-AU1	0.0 – 0.6 m BGS	0.16	-	1.4	1.5	1.9	-	0.24	3.5	1.1	-	-
	DUP-12/03	Duplicate of BH7-25-AU1	0.2	-	8	8.3	8.8	2.8	1.1	20	5.3	-	11
BH8-25	BH8-25-AU1	0.0 – 0.4 m BGS	-	-	0.39	0.42	-	0.18	-	-	-	-	-
BH9-25	BH9-25-AU1	0.0 – 0.4 m BGS	0.34	-	1.6	1.7	2	0.74	0.22	3.3	1.2	-	-
BH10-25	BH10-25-AU1	0.0 – 0.5 m BGS	-	-	0.74	0.77	0.94	0.29	0.11	1.8	0.55	-	-
BH11-25	BH11-25-AU1	0.0 – 0.3 m BGS	0.75	12	25	23	28	11	2.7	65	14	8.2	59

BH11-25-AU1 also exceeded the Site Condition Standards for Benzo[g,h,i]perylene (11 ug/g vs. 6.6 ug/g), Chrysene (21 ug/g vs. 7 ug/g) and Methylnaphthalene (1&2) (3.5 ug/g vs. 0.99 ug/g).

**Table 2c: Soil Exceedances – Metals & Inorganics**

Exceeding Parameter:			Antimony	Barium	Cadmium	Lead	Nickel	Zinc	Sodium Absorption Ratio	Conductivity
Sample Location	MECP Table 7 Site Condition Standards		7.5 ug/g	390 ug/g	1.2 ug/g	120 ug/g	340 ug/g	6.9 ug/g	-	0.7 mS/cm
	Sample ID	Sample Depth	Reported Concentration (ug/g)							
BH1-25	BH1-25-AU1	0.0 – 0.6 m BGS	-	-	-	300	-	-	55	4.3
	BH1-25-SS2	0.8 – 1.4 m BGS	-	-	-	780	-	-	-	2.7
BH2-25	BH2-25-SS1	0.0 – 0.6 m BGS	-	-	-	220	-	-	29	1.4
	DUP-12/01	Duplicate of BH2-25-SS1	-	-	-	240	-	-	57	3.7
BH3-25	BH3-25-SS1	0.0 – 0.4 m BGS	-	-	-	-	-	-	6.5	-
BH4-25	BH4-25-SS1	0.0 – 0.6 m BGS	38	480	1.5	640	300	470	-	-
BH5-25	BH5-25-AU1	0.0 – 0.6 m BGS	-	-	-	-	-	-	-	1.1
BH6-25	BH6-25-AU1	0.0 – 0.3 m BGS	-	-	-	530	-	-	19	2.6
BH7-25	BH7-25-AU1	0.0 – 0.6 m BGS	-	-	-	340	-	-	23	1.5
	DUP-12/03	Duplicate of BH7-25-AU1	-	-	-	360	-	-	25	1.7
BH8-25	BH8-25-AU1	0.0 – 0.4 m BGS	-	-	-	210	-	-	-	-
BH9-25	BH9-25-AU1	0.0 – 0.4 m BGS	-	-	-	620	-	520	8.9	-
BH10-25	BH10-25-AU1	0.0 – 0.5 m BGS	-	-	-	270	-	-	13	0.94
BH11-25	BH11-25-AU1	0.0 – 0.3 m BGS	-	-	1.3	760	-	580	-	-

All other soil results for the Phase Two Property are in compliance with the applicable Site Condition Standards.

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

An environmental remediation program, including the bulk removal and off-site disposal of soil in excess of the Site Condition Standards, is recommended for the Phase Two Property. Given the scope and timeline for the proposed redevelopment and the requirements for specialized construction techniques to complete remediation of the Phase Two Property to meet the Site Condition Standards, it is recommended that remediation be completed in conjunction with redevelopment of the Property. It should be noted that the proposed redevelopment includes excavation for at least 3 to 4 levels of underground parking, which is expected to remove the source zone of the impacted soil at the Phase Two Property.

The Phase Two ESA could then be updated with confirmatory sample results at that time to show compliance with Site Condition Standards.

Preparation of a soil management plan in accordance with O.Reg. 406/19 will be required as part of the management of excess soil generated as part of construction activities. It is recommended that a remedial action plan be prepared to develop a strategy for remediation, including soil and groundwater management, during redevelopment.

## 2. Introduction

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Lopers & Associates (Lopers) was retained by 11034936 Canada Inc., a subsidiary company of Brigil Construction (“BRIGIL”) to complete a Phase Two Environmental Site Assessment (Phase Two ESA) of the residential properties civic address Nos. 131 Parkdale Avenue, 139 Parkdale Avenue and 122-124 Forward Avenue, Ottawa, Ontario (“Phase One Property”, “Property” or “Site”). The location of the Phase Two Property within the City of Ottawa is presented on Figure 1: Site Location. The orientation of the Phase Two Property is shown on Figure 2: Site Plan.

### i. Site Description

The Phase Two Property is legally described as Lots 1, 2, 3 & 4 East Parkdale Avenue, Lots 1 & 2 West Forward Avenue and Part of Lane (closed by Judge’s Order) Inst. N719490. Amended by Judge’s Orders Inst. N722887 & N723202, Registered Plan 35, in the City of Ottawa as obtained from a Topographical Survey completed by Annis, O’Sullivan, Vollebekk Ltd., on July 21, 2025, provided by BRIGIL. The Phase Two Property has an approximate area of 3,137 m<sup>2</sup> (0.31 Hectares) and is associated with property identification numbers (P.I.N.s) of 04096-0001 (131 Parkdale), 04096-0002 (139 Parkdale), 04096-0012 (122 Forward) and 0496-0054 (Laneway). The boundaries of the Phase Two Property are presented on Figure 2: Site Plan.

The Phase Two Property has 2 zoning definitions:

- The west portion of the Property is zoned R5B (H37), which signifies Residential zoning with a height restriction of 37 m.
- The east portion of the Property is zoned R5L (H19), which signifies Residential zoning with a height restriction of 19 m.

The Phase Two Property is immediately surrounded by municipal Right-of-Ways and residential buildings to the north and east, by residential buildings to the south and by Parkdale Avenue followed by the Tunney’s Pasture Government of Canada office and research complex to the east.

### ii. Property Ownership

The Phase Two Property is currently owned by 11414801 Canada Inc., a subsidiary company of BRIGIL. This Phase Two ESA was commissioned by Mr. Jean-Luc Rivard, Vice-President - Land Acquisition and Development for BRIGIL. BRIGIL has a business address of 200-425 St. Joseph Boulevard, Gatineau, Quebec, J8Y 3Z8 and a business telephone number of 819-243-7392.

iii. Current and Proposed Future Use

The Phase Two Property has been developed or occupied for residential use since at least 1912 and the northwest portion of the Property was redeveloped in 1962 for the present day residential apartment use. Various portions of the Property became vacant in the 1980's and 2020's and have not been developed for any other use.

It is Lopers' understanding that BRIGIL intends to redevelop the Phase Two Property for residential use, including the current concept for construction of two buildings and 3 to 4 levels of subgrade parking.

The proposed residential re-development will not involve a change of land use to a more sensitive use since it is currently developed for residential use and is zoned as "Residential", as such, a record of site condition (RSC) is not required for the Phase Two Property.

iv. Applicable Site Condition Standard

Through Ontario Regulation 153/04 (O.Reg. 153/04), the Ministry of Environment, Conservation and Parks (MECP) prescribes the conditions to determine the applicable site condition standard for a property.

The proposed future use of the Phase Two Property is for residential use.

The Phase Two Property and all other properties within 250 m of the property boundaries are supplied by the municipal potable water system. There is no known agricultural use 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 in overburden was considered for this Phase Two ESA. The shallow depth generic Site Condition Standards were selected for comparison for the Phase Two Property, based on the depth to bedrock between 0.3 and 1.4 m BGS [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 as part of this Phase Two ESA and was generally found to range from 7.54 to 10.9; it should be noted that 12 of the 14 analyzed soil samples for pH ranged from 7.54 to 8.02. As such, the Phase Two Property is not considered to be an environmentally sensitive area [O.Reg. 153/04, section 41]. Additionally, the elevated pH soil will be removed from the Phase Two Property as part of the redevelopment.

A layer of fill material consisting of silty sand and gravel with occasional debris was observed from ground surface to bedrock; these stratigraphic layers are considered to represent coarse grained soil conditions. No presence of the original native soils was encountered. 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 drilling program and borehole/monitoring well logs completed as part of this Phase Two ESA was completed. It was determined that less than 2/3 of the Phase Two Property has greater than 2 m of overburden soil. The Phase Two Property is hence 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 shallow depth generic Site Condition Standards, with non-potable groundwater, coarse textured soil, for residential/parkland/institutional property use, as specified in Table 7 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

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### i. Physical Setting

No water bodies or areas of natural significance are located at the Phase Two Property or in the Phase One Study Area (Note: The Phase One Study Area represents a 250 m radius from the Property, as reviewed in the Phase One ESA). There were no areas of natural and scientific interest (ANSIs) or areas of natural significance identified in the Phase One Study Area.

The regional topography in the Phase Two Study Area generally slopes gently downward to the north and northeast, towards the Ottawa River and Lazy Bay. The observed geodetic elevations were observed to range from approximately 60.6 m and 61.8 m above sea level (m ASL). The Phase Two Property is generally at grade with the neighbouring properties. The nearest surface water body identified on the mapping is Lazy Bay, an inlet off the Ottawa River to the north; the southern limits of Lazy Bay are shown approximately 270 m northeast of the Phase One Property. The Ottawa River, flowing towards the east, is located approximately 500 m north of the Phase One Property.

Surface water flow is dominated by infiltration with some localized drainage directed towards Right-of-Ways to the north, east and west of the Property, which drain into the municipal stormwater sewer system and by catch basins in the apartment building parking area.

No drinking water wells are located at the Phase Two Property. Since the Phase Two Study Area is serviced by municipally treated drinking water, it is not expected that any operational potable water supply wells remain in the Study Area. 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 Study Area.

ii. Past Investigations

BRIGIL provided the following reports for review as part of previous the Phase One ESA and this Phase Two ESA:

- i. "Phase I Environmental Site Assessment, 131 Parkdale Avenue, Ottawa, Ontario", dated March 12, 2015, completed by Pinchin Ltd., for Timbercreek Asset Management Inc.
- ii. "Phase I Environmental Site Assessment, 131 Parkdale Avenue, Ottawa, Ontario", dated June 18, 2024, completed by Pinchin Ltd., for Portage Capital Corporation.
- iii. "Phase I - Environmental Site Assessment, 139 Parkdale Avenue, Ottawa, Ontario", dated April 5, 2021, completed by Paterson Group Inc., for Vika Land & Development Group.
- iv. "Phase I - Environmental Site Assessment, 122-124 Forward Avenue, Ottawa, Ontario", dated April 3, 2020, completed by Paterson Group Inc., for 2634410 Ontario Inc.
- v. "Phase One Environmental Site Assessment, Parkdale 3 Lands, 131 & 139 Parkdale Avenue and 122 Forward Avenue, Ottawa, Ontario", dated February 9, 2026, completed by Lopers & Associates, for 11034936 Canada Inc.

**2015 Phase I Environmental Site Assessment by Pinchin (2015 Pinchin Phase I ESA)**

*Report was prepared for 131 Parkdale Avenue*

The 2015 Pinchin Phase I ESA identified that the 131 Parkdale Avenue portion of the Phase One Property was originally developed for residential purposes since at least the mid-1940's. Pinchin identified the historical presence of two residential dwellings at the Site from at least the mid-1940's until the late 1950's. The Site was redeveloped with the present day apartment building circa 1962. The Property was occupied with the 6-storey residential apartment building at the time of the 2015 Pinchin Phase I ESA.

Pinchin did not identify the current or historic presence of any underground storage tanks (USTs) or aboveground storage tanks (ASTs) at the Site. No PCAs were identified at the Site and no off-Site PCAs were interpreted to represent APECs for the Site. A Phase II ESA was not recommended for the Site. The report did identify waste generators at the neighbouring property to the west (Government of Canada Tunney's Pasture), which are associated with PCA(s); these adjacent properties will be discussed in greater detail in subsequent sections of this report.

**2024 Phase I Environmental Site Assessment by Pinchin (2024 Pinchin Phase I ESA)**

*Report was prepared for 131 Parkdale Avenue*

The 2024 Pinchin Phase I ESA updated the information summarized in the above noted 2015 Pinchin Phase I ESA. The Property was occupied with the 6-storey residential apartment building at the time of the 2024 Pinchin Phase I ESA.

Pinchin did not identify the current or historical presence of any USTs or ASTs at the Site. No PCAs were identified at the Site and no off-Site PCAs were interpreted to represent APECs for the Site. A Phase II ESA was not recommended for the Site. The report did identify waste generators and an oil/gas spill at the neighbouring property to the west (Government of Canada Tunney's Pasture), which are associated with PCA(s); these adjacent properties will be discussed in greater detail in subsequent sections of this report.

**2021 Phase I Environmental Site Assessment by Paterson (2021 Paterson Phase I ESA)**

*Report was prepared for 139 Parkdale Avenue*

The 2021 Paterson Phase I ESA identified that the 139 Parkdale Avenue portion of the Phase One Property was originally developed for residential purposes since at least 1912. The Property was occupied with the 2-storey residential dwelling at the time of the 2021 Paterson Phase I ESA.

Paterson did not identify the current or historical presence of any USTs or ASTs at the Site. No PCAs were identified at the Site and no off-Site PCAs were interpreted to represent APECs for the Site. A Phase II ESA was not recommended for the Site. The report did identify waste generators at the neighbouring property to the west (Government of Canada Tunney's Pasture), which are associated with PCA(s); these adjacent properties will be discussed in greater detail in subsequent sections of this report.

**2020 Phase I Environmental Site Assessment by Paterson (2020 Paterson Phase I ESA)**

*Report was prepared for 122-124 Forward Avenue*

The 2020 Paterson Phase I ESA identified that the 122-124 Forward Avenue portion of the Phase One Property was originally developed for residential purposes since at least 1912. The former building on the south portion of 122 Forward Avenue was identified to have been demolished prior to 1986. The Property was occupied with the 2-storey residential dwelling at the time of the 2020 Paterson Phase I ESA.

Paterson did not identify the current or historical presence of any USTs or ASTs at the Site. No PCAs were identified at the Site and no off-Site PCAs were interpreted to represent APECs for the Site. A Phase II ESA was not recommended for the Site.

## **2026 Phase One Environmental Site Assessment by Lopers (2026 Lopers Phase One ESA)**

The presence of historical residential buildings present at the Phase One Property was observed in aerial photos from at least 1912 to 1958. These historical structures were demolished prior to redevelopment of the northeast portion Property in the 1960's and clearing of the southeast portion of Property in the 1980's; historical demolition and backfilling practices have included backfilling foundations and grading with demolition debris and other fill materials of unknown environmental quality. These original structures were located outside of the existing and redeveloped building footprints. The fill material represents PCA #1 and is associated with the O.Reg. 153/04 PCA: Importation of Fill Material of Unknown Quality. This represents APEC #1 for the Phase One Property.

Twenty additional PCAs at neighbouring properties in the Phase One Study Area were identified as part of the 2026 Lopers Phase One ESA. Neighbouring property PCAs consist of active and historical automotive garages, autobody shops and fuel storage tanks.

Two PCAs were identified in close proximity to the Phase One Property during the historical research and were reviewed at the time of the Site Investigation. Based on historical research, visual observations during the Site Investigation and waste registration experience, the waste generator listing at 151 Parkdale Avenue is suspected to be associated with clean out of a hydraulic elevator pit or underground parking catch basin, which is not considered to represent an APEC for the Phase One Property. The Tunney's Pasture (120 & 150 Parkdale) property limits are 20 m west of the Phase One Property; however, the operations at the various Government of Canada facilities identified in the Waste Generators summary and UST registry are located at least 110 m southwest of the Property and are not considered to represent an APEC for the Phase One Property.

The other PCAs at neighbouring properties in the Phase One Study Area are located significant distances and at down- or cross-gradient orientations with respect to the Phase One Property and are not considered to represent APECs for the Phase One Property.

Based on the identification of one APEC at the Phase One Property, it was recommended that a Phase Two Environmental Site Assessment be completed to assess the soil and/or groundwater quality in the vicinity of the APEC.

## **4. Scope of Investigation**

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### **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 One Environmental Site Assessment, Phase Two Environmental Site Assessment and Supplemental

Excess Soil Management Sampling, Proposed Residential Re-development, 131 Parkdale Avenue, Ottawa, ON", dated September 25, 2025, reference No. PRO-035C-25-BRIGIL.

The scope of work for investigation was discussed with BRIGIL 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. The active underground utility services identified at the Property included water and sewer services present in underground trenches to the south of the residential apartment on the west-central portion of the Phase One Property. An underground hydro conduit was identified from a pole on Burnside Avenue traveling below grade to the ground floor apartment electrical room. A natural gas conduit was shown on the northeast portion of the residential apartment leading towards Burnside Avenue to the north. Services at 139 Parkdale Avenue and 122 Forward Avenue were capped and not operational at the time of the Phase Two ESA. Copies of the underground locates are provided in Appendix B.

A total of 11 boreholes (BH1-25 through BH11-25) were drilled at the Phase Two Property between December 1 and December 3, 2025. The boreholes were drilled using a truck mounted CME 55 drill rig operated by George Downing Estate Drilling. 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. Representative and 'worst case' samples were selected and containerized for laboratory analysis.

A total of four groundwater monitoring wells (BH1-25, BH2-25, BH3-25 and BH4-25) were installed on the west-central, north-central, east-central and south-central portions of the Phase Two Property. The boreholes which were instrumented with groundwater monitoring wells were drilled to the localized depths of 11.7 m BGS and were screened with the intent to install well screens at the base of the groundwater table proposed for water taking as part of construction dewatering. 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 are presented on Figure 2: Site Plan. The rationale for the placement of the boreholes/monitoring wells is provided below:

BH1-25, BH2-25, BH3-25 and BH4-25 were drilled on the west-central, north-central, east-central and south-central portions of the Phase Two Property. These boreholes were placed in locations to assess fill quality at the Site (APEC #1) in the location of 3 historical residential buildings. These boreholes were also placed in locations coordinated for geotechnical and hydrogeological assessment purposes for the primary purpose of assessment for construction dewatering assessment. All four of these boreholes were instrumented with groundwater monitoring wells, with their screens installed within bedrock at the approximate maximum depth proposed for re-developed excavation.

BH5-25 through BH11-25 were drilled to provide general coverage of the Phase Two Property. These boreholes were placed in locations to assess fill quality and thickness at the Site (APEC #1) in the locations to the west of the historic residential building and in historically graded areas.

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.

A groundwater monitoring and sampling event of the newly installed groundwater monitoring wells (BH1-25, BH2-25, BH3-25 and BH4-25) was completed at the Phase Two Property on December 17, 2025.

Static groundwater levels were measured 15 days after installation, 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 (to within approximately 10% variation on successive readings), groundwater samples were collected.

Although it was not considered a PCA or to represent an APEC for the Phase Two Property in the 2026 Lopers Phase One ESA, the limits of the City of Ottawa ERMA for 3 Hamilton Avenue N were identified 300 m south of the Phase Two Property and 50 m south of the Phase One Study Area. The ERMA relates to a VOC groundwater plume; the monitoring wells installed as part of this Phase Two ESA are expected to be suitable for assessment of groundwater quality relating to the ERMA. Out of caution and consideration of the identified ERMA, the Phase Two Property groundwater quality was assessed for VOCs. Additionally, the soil CPCs were assessed in groundwater from select monitoring wells at the Phase Two Property for future construction dewatering discharge considerations into the municipal sewer system. The monitoring wells water samples were considered representative water quality for future discharge considerations during construction excavation dewatering.

An elevation survey was completed of the boreholes/monitoring wells drilled at the Phase Two Property by Paterson Group Inc. on December 2, 2025. The boreholes drilled on December 3, 2025 for general Site coverage were referenced to the nearest approximate surveyed location of the July 21, 2025 Annis, O'Sullivan, Vollebakk Ltd. survey. The geodetic elevation of the ground surface elevations were surveyed between 60.6 m ASL to 61.8 m ASL across the entire Phase Two Property (i.e., generally flat Site topography).

## ii. Media Investigation

Based on the findings 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 truck mounted CME drill rig with stainless-steel split spoon and auger sampling.

Groundwater quality at the Phase Two Property was investigated through the installation of 4 new monitoring wells. The monitoring wells were installed as part of this Phase Two ESA were drilled to the localized depths of approximately 11.7 m BGS for the proposed redevelopment project. Groundwater monitoring wells were sampled via low-flow procedures using a peristaltic pump.

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

### iii. Phase One Conceptual Site Model

The Phase One Property is located at Civic address Nos. 131 & 139 Parkdale Avenue and 122-124 Forward Avenue, Ottawa, Ontario, commonly referred to as 131 Parkdale and has an approximate area of 3,137 m<sup>2</sup> (0.31 Hectares).

Based on the information reviewed as part of the 2026 Lopers Phase One ESA, specifically Fire Insurance Plans (FIPs) and aerial photographs, the Phase One Property has been developed or occupied for residential use since at least 1912 and the northwest portion of the Property redeveloped in 1962 for the present day apartment residential use. Various portions of the Property became vacant in the 1980's and 2020's and have not been developed for any other use. The O.Reg. 153/04 property use classification is considered to be Residential Use.

The Phase One Property has 2 zoning definitions:

- The west portion of the Property is zoned R5B (H37), which signifies Residential zoning with a height restriction of 37 m.
- The east portion of the Property is zoned R5L (H19), which signifies Residential zoning with a height restriction of 19 m.

The Phase One Property is currently owned by 11414801 Canada Inc., a subsidiary company of BRIGIL. It is Lopers' understanding that BRIGIL intends to re-develop the Phase One Property for residential purposes. The Phase One Property is immediately surrounded by a municipal Right-of-Ways and residential buildings to the north and east, by residential buildings to the south and by Parkdale Avenue followed by the Tunney's Pasture Government of Canada office and research complex to the east.

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 is Lazy Bay, an inlet off the Ottawa River to the north; the southern

limits of Lazy Bay present approximately 270 m northeast of the Phase One Property. The Ottawa River, flowing towards the east, is located approximately 500 m north of the Phase One Property. The regional topography in the Phase One Study Area slopes downward to the north and northeast, towards the Ottawa River.

Based on the historical research, the general stratigraphy of the Phase One Property and Phase One Study Area consists of silty sand and gravel type soils underlain by limestone bedrock. Overburden soils are expected to be 1 and 2 m thick. The shallow groundwater table is expected at a depth of approximately 3 to 6 m BGS and has regional flow in a predominantly northeast direction with local variations influenced by deep building foundations and buried utilities.

The presence of historical residential buildings at the Phase One Property was observed from at least 1912 to 1958. These historical structures were demolished prior to redevelopment of the northeast portion Property in the 1960's and clearing of the southeast portion of Property in the 1980's; historical demolition and backfilling practices have included backfilling foundations and grading with demolition debris and other fill materials of unknown environmental quality. These original structures were located outside of the existing and redeveloped building footprints. The fill material represents PCA #1 and is associated with the O.Reg. 153/04 PCA: Importation of Fill Material of Unknown Quality. This represents APEC #1 for the Phase One Property.

Twenty additional PCAs at neighbouring properties in the Phase One Study Area were identified as part of the 2026 Lopers Phase One ESA. Neighbouring property PCAs consist of active and historical automotive garages, autobody shops and fuel storage tanks. Two PCAs were identified in close proximity to the Phase One Property during the historical research and were reviewed at the time of the Site Investigation. Based on historical research, visual observations during the Site Investigation and waste registration experience, the waste generator listing at 151 Parkdale Avenue is suspected to be associated with clean out of a hydraulic elevator pit or underground parking catch basin, which is not considered to represent an APEC for the Phase One Property. The Tunney's Pasture (120 & 150 Parkdale) property limits are 20 m west of the Phase One Property, however, the operations at the various Government of Canada facilities identified in the Waste Generators summary and UST registry are located at least 110 m southwest of the Property and are not considered to represent an APEC for the Phase One Property. The other PCAs at neighbouring properties in the Phase One Study Area are located significant distances and at down- or cross-gradient orientations with respect to the Phase One Property and are not considered to represent APECs for the Phase One Property.

Underground utility corridors for sanitary and storm sewers, potable water, private electricity and natural gas lines lead to the residential buildings, generally from Parkdale Avenue to the west, Burnside Drive to the north or Forward Avenue to the east of the Property. Electrical services are supplied to the residential buildings through overhead connections to pole mounted transformers (located on public property).

Given that APECs have been corroborated from several sources of information for the Phase One Property, any uncertainty or absence of information obtained in the components of the 2026 Lopers Phase One ESA are not expected to affect the validity of the conclusions or conceptual site model.

iv. Deviations from Sampling and Analysis Plan

Overhead cables restricted drilling locations on the central portion of the Phase Two Property. The proposed locations were moved to provide necessary assessment of the APEC and provide sufficient Site coverage. There were no other deviations to the SAP as part of this Phase Two ESA.

v. Impediments

As noted above, overhead cables that restricted drilling locations were present on the central portion of the Phase Two Property. The proposed locations were moved to provide necessary assessment of the APEC and provide sufficient Site coverage. There were no other impediments encountered as part of this Phase Two ESA.

## 5. Investigation Method

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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.

Soil was investigated at the Phase Two Property by drilling 11 boreholes distributed across the Site. The boreholes were drilled using a truck mounted CME 55 drill rig operated by George Downing Estate Drilling. Soil samples were collected from auger cuttings or using 60 cm long stainless-steel split spoons at the frequency of two per 1.52 m long auger. Soil samples recovered during the sampling program were screened in the field for volatile vapour concentrations, as well as visual and olfactory observations. Representative and 'worst case' samples were selected and containerized for laboratory analysis for the CPCs.

Groundwater was assessed using the four groundwater monitoring wells which were installed as part of this Phase Two ESA. The wells were developed following installation. 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 with a peristaltic pump using low-flow procedures and were submitted for laboratory analysis for the CPCs.

An elevation survey was completed of the boreholes/monitoring wells drilled at the Phase Two Property by Paterson Group Inc. on December 2, 2025. The boreholes drilled on December 3,

2025 for general Site coverage were referenced to the nearest approximate surveyed location of the July 21, 2025 Annis, O'Sullivan, Vollebakk Ltd. survey.

The following sections provide further detailed information regarding the investigation methodology completed as part of the Phase Two ESA.

i. Drilling

The Phase Two ESA drilling field program was completed between December 1 and December 3, 2025 under the direction of Mr. Luke Lopers, P.Eng. Eleven boreholes were drilled for the Phase Two ESA by the drilling subcontractor George Downing Estate Drilling, located at 410 Principale Rue, Grenville-Sur-la-Rouge, Quebec, J0V 1B0. The drill rig used for the Phase Two ESA was a truck mounted CME 55 drill, equipped with hollow stem augers and stainless-steel split spoons.

Samples were collected using stainless-steel split spoons or from auger cuttings from the near surface to the full depth of drilling. Split spoon samples, collected in 0.6 m segments, were recovered at continuous 0.76 m intervals; the additional 0.16 m between split spoon samples was 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.

The split spoons, which were the only media to come into contact with the soil samples below surface grade, 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.

ii. 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 and vials prepared and provided by the analytical laboratory. Soil samples collected for Benzene, Toluene, Ethylbenzene and Xylenes (BTEXs/) volatile organic compounds (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 well 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:

- Asphalt
- Silty Sand & Gravel (Historical Grading Fill)
- Sand (Imported Sand Backfill)
- Limestone Bedrock

The stratigraphic units encountered as part of this Phase Two ESA are discussed in further detail in Section 6.1 of this report.

### iii. 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 used for soil sample screening as part of this Phase Two ESA was obtained from Maxim Environmental and Safety Inc. and was calibrated by Maxim on November 27, 2025. 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 Test Pit and 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).

### iv. Groundwater: Monitoring Well Installation

Installation of monitoring wells in 4 boreholes BH1-25 through BH4-25 was completed by George Downing Estate Drilling under Lopers' supervision on December 1 & 2, 2025. The wells were installed using slotted PVC No. 10 monitoring well screens, which were 32 mm in inside diameter; these screens were installed at depths intended to investigate the maximum anticipated depth of excavation for the proposed re-development project. Well screens were 3.0 m in length in the monitoring wells installed as part of this Phase Two ESA. The monitoring

wells were extended to approximately 0.15 m below the surface grade with a PVC riser, also 32 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.

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 flushmount aluminum protective casings, which were backfilled internally with sand to natural ground level to stabilize 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 December 1 & 2, 2025 (on the days of drilling) by purging the wells dry at least three times or removing at least three well volumes.

v. 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 Maxim Environmental and Safety Inc. and was calibrated on December 16, 2025. 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.

vi. Groundwater: Sampling

Lopers completed a groundwater sampling event of the 4 newly installed groundwater monitoring wells (BH1-25, BH2-25, BH3-25 and BH4-25) on December 17, 2025. All of these monitoring wells have their screens set in the bedrock with the intent of investigating the deepest portion of the Property proposed to be excavated for re-development.

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 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, VOCs, Polycyclic Aromatic Hydrocarbons (PAHs) and general chemistry were unfiltered, while metals samples were field filtered using a dedicated 0.45 µm Waterra filter for each sample.

The field technician changed dedicated sterile nitrile gloves prior to initiating the sampling operation at each monitoring well to minimize the potential for cross-contamination.

vii. 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.

viii. 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 is accredited for all the analytes included in this Phase Two ESA.

ix. Residue Management Procedures

No excess soil cuttings were generated as part of the drilling program. Auger cuttings were used to backfill their respective borehole locations.

Groundwater from well development and purging was initially placed in a graduated plastic bucket for observations and volume measurements and then was transferred to a dedicated 205 L drum, which was stored in the southwest portion of the Property. This drum was 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.

x. Elevation Surveying

An elevation survey was completed of the boreholes/monitoring wells drilled at the Phase Two Property by Paterson Group Inc. on December 2, 2025. The boreholes drilled on December 3, 2025 for general Site coverage were referenced to the nearest approximate surveyed location of the July 21, 2025 Annis, O'Sullivan, Vollebekk Ltd. survey.

## xi. 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 or clear 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 so that no maximum hold times were exceeded. 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 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 December 17, 2024.

Two soil samples: DUP-12/01 (BH2-25-AU1) and DUP-12/03 (BH7-25-AU1) were submitted to the laboratory as blind field duplicate samples (of their respective samples).

The groundwater sample DUP-12/17 was submitted to the laboratory as a blind field duplicate sample of BH4-25-GW1.

No equipment blank of groundwater was required since the groundwater samples only came in contact with dedicated tubing.

## 6. Review and Evaluation

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### i. Geology

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:

#### ***Asphalt***

A thin layer of asphalt, approximately 0.05 m in thickness, was encountered at the ground surface in borehole location BH1-25, BH2-25, BH3-25 and BH7-25.

#### ***Silty Sand & Gravel (Fill)***

A layer of silty sand and gravel and with some clay fill material, ranging from approximately 0.3 to 0.8 m in thickness, was encountered immediately below the asphalt layer or at ground surface in all of the boreholes. This material was generally compact and was found to be moist. No odours or staining were observed in this layer. Possible asphalt pieces, brick pieces, glass, wood and slag (spent coal and metal) were observed in the fill samples from BH1-25, BH2-25, BH4-25, BH6-25, BH7-25, BH10-25 and BH11-25. Thirteen samples were submitted for laboratory analysis from this layer.

#### ***Sand (Backfill)***

A layer of backfill sand was encountered beneath the silty sand & gravel fill in BH1-25. This material was identified to consist of coarse grained sand, was loose and was grey. Lopers interprets that the backfill sand may have been previously placed as bedding for historical underground utility services. This material was generally moist. No odours or staining were observed in this layer. Trace amounts of possible slag (spent coal and metal) were observed in the sand backfill samples from BH1-25.

#### ***Bedrock***

Limestone bedrock was observed in each of the borehole locations below the fill layers. The depth to bedrock ranged from 0.3 to 1.4 m BGS, and it was interpreted that less than 2/3 of the Phase Two Property has greater than 2.0 m of soil cover. 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 limestone with shale interbedding. The quality of this rock was generally moderately weathered and fractured, and very poor rock quality within the upper approximately 0.5 to 1.5 m of the bedrock. The quality was observed to improve, becoming what is considered as fair to excellent rock based upon Rock Quality Designation (RQD) with RQD values of 97 to 100 in the deeper bedrock core samples.

#### ***Aquifer***

The bedrock (unconfined) aquifer at approximately 9 to 12 m BGS is the aquifer of interest based on the proposed construction excavation dewatering. Based on observations and measured groundwater monitoring data collected as part of this investigation, the aquifer is present in the limestone bedrock geological unit.

Although it was not considered a PCA or to represent an APEC for the Phase Two Property in the 2026 Lopers Phase One ESA, the limits of the City of Ottawa ERMA for 3 Hamilton Avenue were identified 300 m south of the Phase Two Property and 50 m south of the Phase One Study Area. The ERMA relates to a VOC groundwater plume; the monitoring wells installed as part of this Phase Two ESA are expected to be suitable for assessment of groundwater quality relating to the ERMA. Out of caution and consideration of the identified ERMA, the groundwater quality was assessed for VOCs. Additionally, the soil CPCs were assessed in groundwater from the monitoring wells for future construction dewatering discharge considerations into the municipal sewer system. The monitoring wells water samples were considered representative water quality for future discharge considerations during construction excavation dewatering.

#### ii. Groundwater and Elevations and Flow Direction

Based on the nature of the primary CPCs identified in the soil at the Site (APEC #1) and the depth to bedrock, the potential for groundwater contamination from on-Site fill material was considered to be low. As previously noted, the ERMA in the vicinity of the Phase Two Property was not considered an APEC for the Phase Two Property, however, the monitoring wells installed as part of this Phase Two ESA are expected to be suitable for assessment of groundwater quality relating to the ERMA. The monitoring wells were also proposed to sample representative water quality for discharge considerations during excavation dewatering.

An elevation survey was completed of the boreholes/monitoring wells drilled at the Phase Two Property by Paterson Group Inc. on December 2, 2025. The boreholes drilled on December 3, 2025 for general Site coverage were referenced to the nearest approximate surveyed location of the July 21, 2025 Annis, O'Sullivan, Vollebakk Ltd. survey. The geodetic elevation of the ground surface elevations were surveyed between 60.6 m ASL to 61.8 m ASL across the entire Phase Two Property.

A bedrock groundwater aquifer was present within the investigated bedrock at the Phase Two Property. Given that the groundwater table was found in the limestone bedrock geological unit in at the Phase Two Property, it is inferred that the same unconfined aquifer exists across this unit and monitoring wells screened at similar depths can be used for a determination of localized groundwater flow direction and hydraulic gradient. Monitoring well construction details are presented in Table 3 below.

**Table 3: Monitoring Well Construction Details**

Monitoring Well	Ground Surface Elevation (m ASL)	Top of Piezometer Elevation (m ASL)	Screen Elevation (m ASL)	Sand Pack Elevation (m ASL)	Bentonite Seal (m ASL)
BH1-25	60.84	60.63	49.18 – 52.23	49.18 – 52.53	52.53 – 59.49
BH2-25	60.64	60.51	48.91 – 51.96	48.91 – 52.26	52.26 – 59.85
BH3-25	61.60	61.47	49.94 – 52.99	49.94 – 53.29	53.29 – 58.50
BH4-25	61.59	61.42	49.86 – 52.91	49.86 – 53.21	53.21 – 61.20

m ASL – metres Above Sea Level

On December 17, 2025, following a period of approximately 2 weeks for stabilization after drilling and developing the monitoring wells, the groundwater levels were measured and are presented in Table 4 below. The groundwater table was measured at depths ranging between 3.50 and 5.15 m BGS.

**Table 4: Groundwater Table Elevations Measured on December 17, 2025**

Monitoring Well	Ground Surface Elevation (m ASL)	Top of Piezometer Elevation (m ASL)	Depth to Groundwater (m below TOP)	Groundwater Table Elevation (m ASL)	Depth to Groundwater (m BGS)
BH1-25	60.84	60.63	4.81	55.82	5.10
BH2-25	60.64	60.51	3.37	57.14	3.50
BH3-25	61.60	61.47	5.02	56.45	5.15
BH4-25	61.59	61.42	3.37	58.05	3.54

m ASL – metres Above Sea Level

m BGS – metres below Ground Surface

Three groundwater monitoring well water table elevations are required to triangulate groundwater elevations and determine an approximate groundwater flow direction. The groundwater table elevations in BH2-25, BH3-25 and BH4-25 were used for a determination of groundwater flow direction. The groundwater table elevation recorded from BH1-25 was treated as an outlier. Based on the measured groundwater table elevations in these monitoring wells, the local groundwater flow direction at the Phase Two Property is towards the northeast. The interpreted groundwater elevation contours and groundwater flow direction are shown in Figure 3: Groundwater Flow Interpretation. This interpreted local groundwater flow direction is reasonable based on the local topography and hydrology setting, with an elevation drop towards the northeast in the direction of the Ottawa River.

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 historical underground utility corridors 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 Phase Two ESA, observed between 3.50 to 5.15 m BGS, it is unlikely that migration of contaminants (if present) through underground utility service trenches (generally approximately 2 to 3 m BGS) would have been significant.

i. Groundwater: Hydraulic Gradients

The horizontal hydraulic gradient was determined by plotting groundwater contours interpreted from groundwater elevations presented in Table 4 and then by dividing the difference in hydraulic head by the lateral separation distance in the groundwater contours. Based on the measured groundwater elevations on December 17, 2025, from BH2-25, BH3-25 and BH4-25, the horizontal hydraulic gradient at the Phase Two Property is approximately 0.04 m/m.

ii. Coarse Grained Soil Texture

A layer of fill material consisting of silty sand and gravel with occasional debris was observed from ground surface to bedrock; this stratigraphic layer is considered to represent coarse grained soil conditions. Silty sand and gravel fill, granular backfill and imported sand backfill were also encountered at various locations at the Phase Two Property, 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.

iii. Soil Field Screening

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

There was evidence of deleterious fill observed in BH1-25, BH2-25, BH4-25, BH6-25, BH7-25, BH10-25 and BH11-25; observations of trace (less than 5% by volume) debris, brick, asphalt, concrete, slag (coal & metal), wood and other refuse were observed in these boreholes.

Additional field screening of the soil samples was completed using an RKI Eagle gas detector. Combustible soil vapour screening concentrations were all measured at 0 or 5 ppm, which generally are not considered indicative of significant PHC contamination.

iv. Soil Quality

**Location and Depth of Soil Samples**

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

**Table 5: Soil Samples Selected for Laboratory Analysis**

Sample Location	Sample ID	Sample Depth (m BGS)	Analytical Parameters
BH1-25	BH1-25-AU1	0.0 – 0.6	PHCs, BTEXs, PAHs, Metals & Inorganics
	BH1-25-SS2	0.8 – 1.4	PHCs, BTEXs, PAHs, Metals & Inorganics
BH2-25	BH2-25-AU1	0.0 – 0.6	PHCs, BTEXs, PAHs, Metals & Inorganics
	DUP-12/01		PHCs, BTEXs, PAHs, Metals & Inorganics
BH3-25	BH3-25-AU1	0.0 – 0.4	PHCs, BTEXs, PAHs, Metals & Inorganics
BH4-25	BH4-25-SS1	0.0 – 0.6	PHCs, BTEXs, PAHs, Metals & Inorganics
BH5-25	BH5-25-AU1	0.0 – 0.6	PHCs, BTEXs, PAHs, Metals & Inorganics
BH6-25	BH6-25-AU1	0.0 – 0.3	PHCs, BTEXs, PAHs, Metals & Inorganics
BH7-25	BH7-25-AU1	0.0 – 0.6	PHCs, BTEXs, PAHs, Metals & Inorganics
	DUP-12/03		PHCs, BTEXs, PAHs, Metals & Inorganics
BH8-25	BH8-25-AU1	0.0 – 0.4	PHCs, BTEXs, PAHs, Metals & Inorganics
BH9-25	BH9-25-AU1	0.0 – 0.4	PHCs, BTEXs, PAHs, Metals & Inorganics
BH10-25	BH10-25-AU1	0.0 – 0.5	PHCs, BTEXs, PAHs, Metals & Inorganics
BH11-25	BH11-25-AU1	0.0 – 0.3	PHCs, BTEXs, PAHs, Metals & Inorganics

**Comparison of Soil Analytical Results to Applicable Site Conditions Standards**

The analytical soil results were compared to the shallow soil generic Site Condition Standards, with non-potable groundwater, coarse textured soil, for residential property use, as specified in Table 7 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(s). The laboratory certificates of analysis (BV Labs Report #s R8666533, R8668108 and R8666670) are provided in Appendix E.

The following soil samples had exceedance concentrations reported compared to their respective Site Condition Standards, as noted in Table 6a through Table 6c: It is noted that these results represent the condition of the Site prior to completing the anticipated environmental remediation program.

**Table 6a : Soil Exceedances – Petroleum Hydrocarbons (PHCs)**

Exceeding Parameter:			F3 PHCs (C16-C34)	F4G PHCs (gravimetric)
Sample Location	MECP Table 7 Site Condition Standards		300 ug/g	2800 ug/g
	Sample ID	Sample Depth	Reported Concentration (ug/g)	
BH3-25	BH3-25-SS1	0.0 – 0.4 m BGS	310	4,400
BH5-25	BH5-25-AU1	0.0 – 0.6 m BGS	570	-
BH7-25	BH7-25-AU1	0.0 – 0.6 m BGS	450	-
	DUP-12/03	Duplicate of BH7-25-AU1	390	-
BH11-25	BH11-25-AU1	0.0 – 0.3 m BGS	1,300	3,000

**Table 6b: Soil Exceedances – PAHs**

Exceeding Parameter:			Acenaphthylene	Anthracene	Benzo[a]anthracene	Benzo[a]pyrene	Benzo[b]fluoranthene	Benzo[k]fluoranthene	Dibenzo[a,h]anthracene	Fluoranthene	Indeno[1,2,3-cd]pyrene	Naphthalene	Phenanthrene
Sample Location	MECP Table 7 Site Condition Standards		0.15 ug/g	0.67 ug/g	0.5 ug/g	0.3 ug/g	0.78 ug/g	0.78 ug/g	0.1 ug/g	0.69 ug/g	0.38 ug/g	0.6 ug/g	6.2 ug/g
	Sample ID	Sample Depth	Reported Concentration (ug/g)										
BH1-25	BH1-25-AU1	0.0 – 0.6 m BGS	-	0.9	1.8	1.8	2.3	0.84	0.27	5.1	1.2	-	-
	BH1-25-SS2	0.8 – 1.4 m BGS	0.35	-	1.2	1.6	1.9	-	0.24	2.2	1	-	-
BH2-25	BH2-25-SS1	0.0 – 0.6 m BGS	-	0.87	1.4	1.3	1.8	-	0.21	3.6	0.93	-	-
	DUP-12/01	Duplicate of BH2-25-SS1	0.24	2.4	5	5.1	6.4	2.3	0.84	13	3.4	0.84	9.5
BH3-25	BH3-25-SS1	0.0 – 0.4 m BGS	-	-	0.66	0.64	0.82	-	-	2	0.45	-	-
BH4-25	BH4-25-SS1	0.0 – 0.6 m BGS	-	0.86	1.1	1.1	1.3	-	0.15	2.9	0.73	-	-
BH5-25	BH5-25-AU1	0.0 – 0.6 m BGS	-	1.7	2.9	3	4	1.2	0.47	8	2.2	-	-
BH6-25	BH6-25-AU1	0.0 – 0.3 m BGS	-	-	0.7	0.81	0.91	-	0.13	1.7	0.56	-	-
BH7-25	BH7-25-AU1	0.0 – 0.6 m BGS	0.16	-	1.4	1.5	1.9	-	0.24	3.5	1.1	-	-
	DUP-12/03	Duplicate of BH7-25-AU1	0.2	-	8	8.3	8.8	2.8	1.1	20	5.3	-	11
BH8-25	BH8-25-AU1	0.0 – 0.4 m BGS	-	-	0.39	0.42	-	0.18	-	-	-	-	-
BH9-25	BH9-25-AU1	0.0 – 0.4 m BGS	0.34	-	1.6	1.7	2	0.74	0.22	3.3	1.2	-	-
BH10-25	BH10-25-AU1	0.0 – 0.5 m BGS	-	-	0.74	0.77	0.94	0.29	0.11	1.8	0.55	-	-
BH11-25	BH11-25-AU1	0.0 – 0.3 m BGS	0.75	12	25	23	28	11	2.7	65	14	8.2	59

BH11-25-AU1 also exceeded the Site Condition Standards for Benzo[g,h,i]perylene (11 ug/g vs. 6.6 ug/g), Chrysene (21 ug/g vs. 7 ug/g) and Methylnaphthalene (1&2) (3.5 ug/g vs. 0.99 ug/g).

**Table 6c: Soil Exceedances – Metals & Inorganics**

Exceeding Parameter:			Antimony	Barium	Cadmium	Lead	Nickel	Zinc	Sodium Absorption Ratio	Conductivity
Sample Location	MECP Table 7 Site Condition Standards		7.5 ug/g	390 ug/g	1.2 (ug/g)	120 ug/g	340 ug/g	6.9 ug/g	-	0.7 mS/cm
	Sample ID	Sample Depth	Reported Concentration (ug/g)							
BH1-25	BH1-25-AU1	0.0 – 0.6 m BGS	-	-	-	300	-	-	55	4.3
	BH1-25-SS2	0.8 – 1.4 m BGS	-	-	-	780	-	-	-	2.7
BH2-25	BH2-25-SS1	0.0 – 0.6 m BGS	-	-	-	220	-	-	29	1.4
	DUP-12/01	Duplicate of BH2-25-SS1	-	-	-	240	-	-	57	3.7
BH3-25	BH3-25-SS1	0.0 – 0.4 m BGS	-	-	-	-	-	-	6.5	-
BH4-25	BH4-25-SS1	0.0 – 0.6 m BGS	38	480	1.5	640	300	470	-	-
BH5-25	BH5-25-AU1	0.0 – 0.6 m BGS	-	-	-	-	-	-	-	1.1
BH6-25	BH6-25-AU1	0.0 – 0.3 m BGS	-	-	-	530	-	-	19	2.6
BH7-25	BH7-25-AU1	0.0 – 0.6 m BGS	-	-	-	340	-	-	23	1.5
	DUP-12/03	Duplicate of BH7-25-AU1	-	-	-	360	-	-	25	1.7
BH8-25	BH8-25-AU1	0.0 – 0.4 m BGS	-	-	-	210	-	-	-	-
BH9-25	BH9-25-AU1	0.0 – 0.4 m BGS	-	-	-	620	-	520	8.9	-
BH10-25	BH10-25-AU1	0.0 – 0.5 m BGS	-	-	-	270	-	-	13	0.94
BH11-25	BH11-25-AU1	0.0 – 0.3 m BGS	-	-	1.3	760	-	580	-	-

All the other soil results for the Phase Two Property are in compliance with the applicable Site Condition Standards. A full summary of the soil analytical results and comparison to the applicable Site Condition Standards are presented in Table 11: Soil Analytical Results following the text of this report. Contaminant exceedance plans are provided as:

- Figure 4: PHC Soil Exceedances.
- Figure 5: Metals & Inorganics Soil Exceedances.
- Figure 6: PAHs Soil Exceedances.

**Comparison of mSPLP Analytical Results to O.Reg. 406/19**

Two leachate characterization samples were selected for laboratory analysis of modified Synthetic Precipitate Leaching Procedure (mSPLP) analysis for leachate Metals & Inorganics, leachate VOCs and leachate acid-base neutrals. This sample was comprised of what was considered the most likely fill material to have some reuse possibility, as determined by review of the bulk soil laboratory analytical results. The sample from BH3-25-SS1 and BH8-25-AU1 was selected for mSPLP analysis.

The aforementioned soil sample selected for mSPLP laboratory analysis was submitted to BV Labs under chain of custody on December 16, 2025. The laboratory certificate of analysis (BV Labs Report # R8674112) is provided in Appendix E.

The analytical leachate results were compared to the O.Reg. 406/19 Table 2.1 and Table 3.1 Leachate Standards for residential/parkland/institutional property use, volume independent. The analyzed leachate sample was in compliance with these criteria. A full summary of the leachate analytical results and comparison to the applicable Site Condition Standards are presented in Table 12: mSPLP Leachate Analytical Results following the text of this report.

### ***Comparison of TCLP Analytical Results to O.Reg. 558/00***

A waste characterization sample was selected for laboratory analysis of toxicity characteristic leaching procedure (TCLP) analysis for ignitability, leachate Metals & Inorganics, leachate VOCs and leachate organics (PAHs and polychlorinated biphenyls). This sample was comprised of what was considered a worst-case sample (BH11-AU1), as determined by review of the bulk soil laboratory analytical results.

The aforementioned soil sample selected for TCLP laboratory analysis was submitted to BV Labs under chain of custody on December 16, 2025. The laboratory certificate of analysis (BV Labs Report # R8674112) is provided in Appendix E.

This sample was compared to the criteria specified in schedule IV of O.Reg. 558/00 and no measured parameter exceeded the toxicity criteria. Based on the analytical results and field screening, if excess soil generated from redevelopment of the Site cannot be reused as clean fill at an appropriate receiving site, it can be treated as solid non-hazardous waste. A full summary of the leachate analytical results and comparison to the applicable Site Condition Standards are presented in Table 13: TCLP Leachate Analytical Results following the text of this report.

### ***Contaminants of Concern***

There was evidence of non-native fill material observed down to a depth of 1.4 m BGS, during the subsurface drilling and sampling, completed as part of this Phase Two ESA. The presence of deleterious fill material was suspected at the Phase Two Property and is associated with O.Reg. 153/04 PCA: Importation of fill material of unknown quality, which represents PCA #1 and has been interpreted as APEC #1 for the Phase Two Property.

The CPCs associated with the historical fill materials are PHCs, BTEXs, polycyclic aromatic hydrocarbons (PAHs), Metals & Inorganics.

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.

**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.

- v. 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 monitoring well screen 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 7 below.

**Table 7: Groundwater Samples Selected for Laboratory Analysis**

Sample Location	Groundwater Table Elevation (m ASL) December 17, 2025	Screen Elevation (m ASL)	Analytical Parameters
BH2-25	57.14	48.91 – 51.96	PHCs, VOCs, PAHs, Metals & Inorganics
BH3-25	56.45	49.94 – 52.99	PHCs, VOCs, PAHs, Metals & Inorganics
BH4-25	58.05	49.86 – 52.91	PHCs, VOCs, PAHs, Metals & Inorganics
DUP-12/17	Duplicate Sample of BH4-25		PHCs, VOCs, PAHs, Metals & Inorganics

m ASL – metres Referenced to Site Datum

**Field Filtering**

Samples for PHCs, BTEXs, VOCs, PAHs and general chemistry were unfiltered, while samples for metals were collected in unpreserved bottles and were field filtered by the laboratory.

**Comparison of Groundwater Analytical Results to Applicable Site Conditions Standards**

The analytical groundwater results were compared to the shallow soil generic Site Condition Standards, with non-potable groundwater, coarse textured soil, as specified in Table 7 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 December 17, 2025. The laboratory certificate of analysis (BV Labs Report # R8675838) 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 14: Groundwater Analytical Results following the text of this report.

### ***Contaminants of Concern***

The suspected presence of poor-quality fill material at the Property represents PCA #1 and is associated with the O.Reg. 153/04 PCA: Importation of Fill Material of Unknown Quality. This represents APEC #1 for the Phase Two Property. The CPCs associated with the historical fill materials (soil) are PHCs, BTEXs, PAHs and Metals & Inorganics.

Based on the nature of the primary CPCs identified in the soil at the Site (APEC #1) and the depth to bedrock, the potential for groundwater contamination from on-Site fill material was considered to be low.

Although it was not considered a PCA or to represent an APEC for the Phase Two Property in the 2026 Lopers Phase One ESA, the limits of the City of Ottawa Environmental Risk Management Area (ERMA) for 3 Hamilton Avenue N were identified 300 m south of the Phase Two Property and 50 m south of the Phase One Study Area. The ERMA relates to a VOC groundwater plume; the monitoring wells installed as part of this Phase Two ESA are expected to be suitable for assessment of groundwater quality relating to the ERMA. Out of caution and consideration of the identified ERMA, the Phase Two Property groundwater quality was assessed for VOCs. Additionally, the soil CPCs were assessed in groundwater from select monitoring wells at the Phase Two Property for future construction dewatering discharge considerations into the municipal sewer system. The monitoring wells water samples were considered representative water quality for future discharge considerations during construction excavation dewatering.

Although chloroform exceedances were noted, these were inferred to be associated with municipal water used during bedrock coring and chloroform was therefore exempt from consideration as a CPC.

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. There were no CPCs identified for the Phase Two Property groundwater based on the analytical results, which indicated that all soil CPCs, which were analyzed in groundwater, 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 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.

#### vi. 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.

#### vii. Quality Assurance and Quality Control Results

### ***Duplicate Samples***

Trip blank water samples for VOCs were submitted for laboratory analysis from the groundwater sampling event completed on December 17, 2025. No detectable VOC concentrations were reported in the trip blank water samples.

Two soil samples: DUP-12/01 (BH2-25-AU1) and DUP-12/03 (BH7-25-AU1) were submitted to the laboratory as blind field duplicate samples (of their respective samples). The relative percent differences (RPDs) for individual parameters soil duplicate results to original sample results were 0 to 140%, which demonstrates a low to high degree of variability in the analytical results. While some of the soil duplicate ratios observed had higher degrees of variability, it should be noted that where exceedances of the Site Condition Standards were observed for PAHs, metals and/or PHCs in a particular sample and its duplicate, they were present in both samples and the sample results for these parameters are comparable. Additionally, the high degree of heterogeneity in soil samples, particularly in fill, can be attributed to higher levels of variability in analytical ratios. 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 soil parameters analyzed as part of this Phase Two ESA.

The groundwater sample DUP-12/17 was submitted to the laboratory as a blind field duplicate sample of BH4-25-GW1. The RPDs of groundwater duplicate results to original sample results for metals was 0 to 48%, 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.

### ***Blanks***

A trip blank water sample for VOCs was submitted for laboratory analysis from the groundwater sampling event completed on December 17, 2025. No detectable VOC concentrations were reported in the trip blank water samples.

### ***Laboratory Qualifying Statements***

The laboratory made no qualifying statements regarding the sample handling or submission as part of this Phase Two ESA. Any laboratory remarks in certificates of analysis are related to internal QA and are not expected to impact the validity of any of the data.

### ***Data Quality***

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.

#### viii. Phase Two Conceptual Site Model

There was 1 potentially contaminating activity (PCA) at the Phase Two Property identified during the Phase One ESA; this on-Site PCAs was interpreted to have contributed to an area of potential environmental concern (APEC) for the Site. The APEC for the Phase Two Property and its associated PCA is presented in the table below.

**Table 8: Areas of Potential Environmental Concern**

Area of Potential Environmental Concern (APEC)	Location of Area of Potential Environmental Concern on Phase One Property	Potentially Contaminating Activity (PCA)	Location of PCA (on-Site or off-Site)	Contaminants of Potential Concern (CPC)	Media potentially impacted (Soil, Sediment and/or Groundwater)
APEC 1 PCA-1- Fill material of suspect environmental quality – 131 & 139 Parkdale Avenue and 122 Forward Avenue	Entirety of the Phase Two Property not developed with structures	PCA 30: Importation of Fill Material of Unknown Quality	On-Site	BTEX PHCs (F <sub>1</sub> -F <sub>4</sub> ) Metals, Hg, Cr VI PAHs	Soil

Twenty additional PCAs at neighbouring properties in the Phase One Study Area were identified as part of the 2026 Lopers Phase One ESA. Neighbouring property PCAs consist of active and historical automotive garages, autobody shops and fuel storage tanks. Two PCAs were identified in close proximity to the Phase Two Property during the historical research and were reviewed at the time of the Site Investigation. Based on historical research, visual observations during the Site Investigation and waste registration experience, the waste generator listing at 151 Parkdale Avenue is suspected to be associated with clean out of a hydraulic elevator pit or underground parking catch basin, which is not considered to represent an APEC for the Phase Two Property. The Tunney’s Pasture (120 & 150 Parkdale) property limits are 20 m west of the Phase Two Property, however, the operations at the various Government of Canada facilities identified in the Waste Generators summary and UST registry are located at least 110 m southwest of the Property and are not considered to represent an APEC for the Phase Two Property. The other PCAs at neighbouring properties in the Phase One Study Area are located significant distances and at down- or cross-gradient orientations with respect to the Phase Two Property and are not considered to represent APECs for the Phase Two Property.

The soil CPCs with respect to the historical fill materials are PHCs, BTEXs, PAHs and Metals & Inorganics.

Although it was not considered a PCA or to represent an APEC for the Phase Two Property in the 2026 Lopers Phase One ESA, the limits of the City of Ottawa Environmental Risk Management Area (ERMA) for 3 Hamilton Avenue N were identified 300 m south of the Phase Two Property and 50 m south of the Phase One Study Area. The ERMA relates to a VOC groundwater plume; the monitoring wells installed as part of this Phase Two ESA are expected to be suitable for assessment of groundwater quality relating to the ERMA. Out of caution and consideration of the identified ERMA, the Phase Two Property groundwater quality was assessed for VOCs. Additionally, the soil CPCs were assessed in groundwater from select monitoring wells at the Phase Two Property for future construction dewatering discharge considerations into the municipal sewer system. The monitoring wells water samples were considered representative water quality for future discharge considerations during construction excavation dewatering.

Underground utility corridors for sanitary and storm sewers, potable water, private electricity and natural gas lines lead to the residential buildings, generally from Parkdale Avenue to the west, Burnside Drive to the north or Forward Avenue to the east of the Property. Electrical services are supplied to the residential buildings through overhead connections to pole mounted transformers (located on public property). The historical underground utility corridors 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 Phase Two ESA, observed between 3.50 to 5.15 m BGS, it is unlikely that migration of contaminants (if present) through underground utility service trenches (generally approximately 2 to 3 m BGS) would have been significant.

Based on the observations of soil samples collected during the Phase Two ESA field programs and previous investigations by others, there were four stratigraphic units identified at the Phase Two Property, which include:

### ***Asphalt***

A thin layer of asphalt, approximately 0.05 m in thickness, was encountered at the ground surface in 4 borehole locations.

### ***Silty Sand & Gravel (Fill)***

A layer of silty sand and gravel and with some clay fill material, ranging from approximately 0.3 to 0.8 m in thickness, was encountered immediately below the asphalt layer or at ground surface in all of the boreholes. This material was generally compact and was found to be moist and loose. No odours or staining were observed in this layer. Possible asphalt pieces, brick pieces, glass, wood and slag (spent coal and metal) were observed in the fill samples from 7 boreholes. Thirteen samples were submitted for laboratory analysis from this layer.

### ***Sand (Backfill)***

A layer of backfill sand was encountered beneath the silty sand & gravel fill in BH1-25. This material was identified to consist of coarse grained sand, was loose and was grey. Lopers interprets that the backfill sand may have been previously placed as bedding for historic underground utility services. This material was generally moist. No odours or staining were observed in this layer. Trace amounts of possible slag (spent coal and metal) were observed in the sand backfill samples from BH1-25.

### ***Bedrock***

Limestone bedrock was observed in each of the borehole locations below the fill layers. The depth to bedrock ranged from 0.3 to 1.4 m BGS. The bedrock was cored and found to consist of a grey limestone with shale interbedding. The quality of this rock was generally moderately weathered and fractured, and very poor rock quality at surface and was observed to improve becoming what is considered as fair to excellent rock based upon Rock Quality Designation.

There were no natural surface water bodies at the Phase Two Property, and as such no surface water or sediment sampling was completed as part of the Phase Two ESA. The nearest surface water body is Lazy Bay, an inlet off the Ottawa River to the north; the southern limits of Lazy Bay are shown approximately 270 m northeast of the Phase One Property. The Ottawa River, flowing towards the east, is located approximately 500 m north of the Phase One Property. Based on regional topography and the locations of the nearest significant water bodies, the regional groundwater flow was expected to be towards the northeast. The locations of Lazy Bay and the Ottawa River relative to the Phase Two Property are shown on Figure 1.

A groundwater aquifer was present within the limestone bedrock at the Phase Two Property. Given that the groundwater table was found in the high RQD limestone bedrock geological unit in at the Phase Two Property, it is inferred that the same bedrock aquifer exists across this unit and monitoring wells screened at similar depths can be used for a determination of localized groundwater flow direction and hydraulic gradient. Based on the measured groundwater table elevations in these monitoring wells, the local groundwater flow direction at the Phase Two Property is towards the northeast. This interpreted local groundwater flow direction is reasonable based on the regional topography and locations of nearby surface water bodies. The horizontal hydraulic gradient was calculated to be approximately 0.04 m/m. The groundwater flow interpretation is presented on Figure 3: Groundwater Flow Interpretation.

The groundwater table elevation was measured at depths ranging between 3.50 and 5.15 m BGS on December 17, 2025.

The proposed redevelopment concept is for construction of 2 multi-unit, multi-storey buildings: Building A (6 to 40 Storeys) on the west portion of the Property and Building B (6-Storeys) on the east portion of the Property. The proposed development concept includes excavation for 3 to 4 levels of underground parking.

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. There were no identified agricultural uses 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 generally found to range from 7.54 to 10.9; it should be noted that 12 of the 14 analyzed soil samples for pH ranged from 7.54 to 8.02. As such, the Phase Two Property is not considered to be an environmentally sensitive area [O.Reg. 153/04, section 41]. Additionally, the elevated pH soil will be removed from the Phase Two Property as part of the redevelopment.

Review of the drilling program and borehole/monitoring well logs completed as part of this Phase Two ESA and previous investigations were completed. It was determined that less than 2/3 of the Phase Two Property has greater than 2 m of overburden soil. The Phase Two Property is hence 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 shallow soil generic Site Condition Standards, with non-potable groundwater, coarse textured soil, for residential property use, as specified in Table 7 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.

The following soil samples had exceedance concentrations reported compared to their respective Site Condition Standards at the time of the Phase Two ESA, as noted in Tables 9a through 9c below:

**Table 9a: Soil Exceedances – Petroleum Hydrocarbons (PHCs)**

Exceeding Parameter:			F3 PHCs (C16-C34)	F4G PHCs (gravimetric)
Sample Location	MECP Table 7 Site Condition Standards		300 ug/g	2800 ug/g
	Sample ID	Sample Depth	Reported Concentration (ug/g)	
BH3-25	BH3-25-SS1	0.0 – 0.4 m BGS	310	4,400
BH5-25	BH5-25-AU1	0.0 – 0.6 m BGS	570	-
BH7-25	BH7-25-AU1	0.0 – 0.6 m BGS	450	-
	DUP-12/03	Duplicate of BH7-25-AU1	390	-
BH11-25	BH11-25-AU1	0.0 – 0.3 m BGS	1,300	3,000

**Table 9b: Soil Exceedances – PAHs**

Exceeding Parameter:			Acenaphthylene	Anthracene	Benzo[a]anthracene	Benzo[a]pyrene	Benzo[b]fluoranthene	Benzo[k]fluoranthene	Dibenzo[a,h]anthracene	Fluoranthene	Indeno[1,2,3-cd]pyrene	Naphthalene	Phenanthrene
Sample Location	MECP Table 7 Site Condition Standards		0.15 ug/g	0.67 ug/g	0.5 ug/g	0.3 ug/g	0.78 ug/g	0.78 ug/g	0.1 ug/g	0.69 ug/g	0.38 ug/g	0.6 ug/g	6.2 ug/g
	Sample ID	Sample Depth	Reported Concentration (ug/g)										
BH1-25	BH1-25-AU1	0.0 – 0.6 m BGS	-	0.9	1.8	1.8	2.3	0.84	0.27	5.1	1.2	-	-
	BH1-25-SS2	0.8 – 1.4 m BGS	0.35	-	1.2	1.6	1.9	-	0.24	2.2	1	-	-
BH2-25	BH2-25-SS1	0.0 – 0.6 m BGS	-	0.87	1.4	1.3	1.8	-	0.21	3.6	0.93	-	-
	DUP-12/01	Duplicate of BH2-25-SS1	0.24	2.4	5	5.1	6.4	2.3	0.84	13	3.4	0.84	9.5
BH3-25	BH3-25-SS1	0.0 – 0.4 m BGS	-	-	0.66	0.64	0.82	-	-	2	0.45	-	-
BH4-25	BH4-25-SS1	0.0 – 0.6 m BGS	-	0.86	1.1	1.1	1.3	-	0.15	2.9	0.73	-	-
BH5-25	BH5-25-AU1	0.0 – 0.6 m BGS	-	1.7	2.9	3	4	1.2	0.47	8	2.2	-	-
BH6-25	BH6-25-AU1	0.0 – 0.3 m BGS	-	-	0.7	0.81	0.91	-	0.13	1.7	0.56	-	-
BH7-25	BH7-25-AU1	0.0 – 0.6 m BGS	0.16	-	1.4	1.5	1.9	-	0.24	3.5	1.1	-	-
	DUP-12/03	Duplicate of BH7-25-AU1	0.2	-	8	8.3	8.8	2.8	1.1	20	5.3	-	11
BH8-25	BH8-25-AU1	0.0 – 0.4 m BGS	-	-	0.39	0.42	-	0.18	-	-	-	-	-
BH9-25	BH9-25-AU1	0.0 – 0.4 m BGS	0.34	-	1.6	1.7	2	0.74	0.22	3.3	1.2	-	-
BH10-25	BH10-25-AU1	0.0 – 0.5 m BGS	-	-	0.74	0.77	0.94	0.29	0.11	1.8	0.55	-	-
BH11-25	BH11-25-AU1	0.0 – 0.3 m BGS	0.75	12	25	23	28	11	2.7	65	14	8.2	59

BH11-25-AU1 also exceeded the Site Condition Standards for Benzo[g,h,i]perylene (11 ug/g vs. 6.6 ug/g), Chrysene (21 ug/g vs. 7 ug/g) and Methylnaphthalene (1&2) (3.5 ug/g vs. 0.99 ug/g).

**Table 9c: Soil Exceedances – Metals & Inorganics**

Exceeding Parameter:			Antimony	Barium	Cadmium	Lead	Nickel	Zinc	Sodium Absorption Ratio	Conductivity
Sample Location	MECP Table 7 Site Condition Standards		7.5 ug/g	390 ug/g	1.2 (ug/g)	120 ug/g	340 ug/g	6.9 ug/g	-	0.7 mS/cm
	Sample ID	Sample Depth	Reported Concentration (ug/g)							
BH1-25	BH1-25-AU1	0.0 – 0.6 m BGS	-	-	-	300	-	-	55	4.3
	BH1-25-SS2	0.8 – 1.4 m BGS	-	-	-	780	-	-	-	2.7
BH2-25	BH2-25-SS1	0.0 – 0.6 m BGS	-	-	-	220	-	-	29	1.4
	DUP-12/01	Duplicate of BH2-25-SS1	-	-	-	240	-	-	57	3.7
BH3-25	BH3-25-SS1	0.0 – 0.4 m BGS	-	-	-	-	-	-	6.5	-
BH4-25	BH4-25-SS1	0.0 – 0.6 m BGS	38	480	1.5	640	300	470	-	-
BH5-25	BH5-25-AU1	0.0 – 0.6 m BGS	-	-	-	-	-	-	-	1.1
BH6-25	BH6-25-AU1	0.0 – 0.3 m BGS	-	-	-	530	-	-	19	2.6
BH7-25	BH7-25-AU1	0.0 – 0.6 m BGS	-	-	-	340	-	-	23	1.5
	DUP-12/03	Duplicate of BH7-25-AU1	-	-	-	360	-	-	25	1.7
BH8-25	BH8-25-AU1	0.0 – 0.4 m BGS	-	-	-	210	-	-	-	-
BH9-25	BH9-25-AU1	0.0 – 0.4 m BGS	-	-	-	620	-	520	8.9	-
BH10-25	BH10-25-AU1	0.0 – 0.5 m BGS	-	-	-	270	-	-	13	0.94
BH11-25	BH11-25-AU1	0.0 – 0.3 m BGS	-	-	1.3	760	-	580	-	-

All other soil results for the Phase Two Property are in compliance with the applicable Site Condition Standards.

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

# 7. Conclusions

The following soil samples had exceedance concentrations reported compared to their respective Site Condition Standards at the time of the Phase Two ESA, as noted in Table 10a through 10c below:

**Table 10a: Soil Exceedances – Petroleum Hydrocarbons (PHCs)**

Exceeding Parameter:			F3 PHCs (C16-C34)	F4G PHCs (gravimetric)
Sample Location	MECP Table 7 Site Condition Standards		300 ug/g	2800 ug/g
	Sample ID	Sample Depth	Reported Concentration (ug/g)	
BH3-25	BH3-25-SS1	0.0 – 0.4 m BGS	310	4,400
BH5-25	BH5-25-AU1	0.0 – 0.6 m BGS	570	-
BH7-25	BH7-25-AU1	0.0 – 0.6 m BGS	450	-
	DUP-12/03	Duplicate of BH7-25-AU1	390	-
BH11-25	BH11-25-AU1	0.0 – 0.3 m BGS	1,300	3,000

**Table 10b: Soil Exceedances – PAHs**

Exceeding Parameter:			Acenaphthylene	Anthracene	Benzo[a]anthracene	Benzo[a]pyrene	Benzo[b]fluoranthene	Benzo[k]fluoranthene	Dibenzo[a,h]anthracene	Fluoranthene	Indeno[1,2,3-cd]pyrene	Naphthalene	Phenanthrene
Sample Location	MECP Table 7 Site Condition Standards		0.15 ug/g	0.67 ug/g	0.5 ug/g	0.3 ug/g	0.78 ug/g	0.78 ug/g	0.1 ug/g	0.69 ug/g	0.38 ug/g	0.6 ug/g	6.2 ug/g
	Sample ID	Sample Depth	Reported Concentration (ug/g)										
BH1-25	BH1-25-AU1	0.0 – 0.6 m BGS	-	0.9	1.8	1.8	2.3	0.84	0.27	5.1	1.2	-	-
	BH1-25-SS2	0.8 – 1.4 m BGS	0.35	-	1.2	1.6	1.9	-	0.24	2.2	1	-	-
BH2-25	BH2-25-SS1	0.0 – 0.6 m BGS	-	0.87	1.4	1.3	1.8	-	0.21	3.6	0.93	-	-
	DUP-12/01	Duplicate of BH2-25-SS1	0.24	2.4	5	5.1	6.4	2.3	0.84	13	3.4	0.84	9.5
BH3-25	BH3-25-SS1	0.0 – 0.4 m BGS	-	-	0.66	0.64	0.82	-	-	2	0.45	-	-
BH4-25	BH4-25-SS1	0.0 – 0.6 m BGS	-	0.86	1.1	1.1	1.3	-	0.15	2.9	0.73	-	-
BH5-25	BH5-25-AU1	0.0 – 0.6 m BGS	-	1.7	2.9	3	4	1.2	0.47	8	2.2	-	-
BH6-25	BH6-25-AU1	0.0 – 0.3 m BGS	-	-	0.7	0.81	0.91	-	0.13	1.7	0.56	-	-
BH7-25	BH7-25-AU1	0.0 – 0.6 m BGS	0.16	-	1.4	1.5	1.9	-	0.24	3.5	1.1	-	-
	DUP-12/03	Duplicate of BH7-25-AU1	0.2	-	8	8.3	8.8	2.8	1.1	20	5.3	-	11
BH8-25	BH8-25-AU1	0.0 – 0.4 m BGS	-	-	0.39	0.42	-	0.18	-	-	-	-	-
BH9-25	BH9-25-AU1	0.0 – 0.4 m BGS	0.34	-	1.6	1.7	2	0.74	0.22	3.3	1.2	-	-
BH10-25	BH10-25-AU1	0.0 – 0.5 m BGS	-	-	0.74	0.77	0.94	0.29	0.11	1.8	0.55	-	-
BH11-25	BH11-25-AU1	0.0 – 0.3 m BGS	0.75	12	25	23	28	11	2.7	65	14	8.2	59

BH11-25-AU1 also exceeded the Site Condition Standards for Benzo[g,h,i]perylene (11 ug/g vs. 6.6 ug/g), Chrysene (21 ug/g vs. 7 ug/g) and Methylnaphthalene (1&2) (3.5 ug/g vs. 0.99 ug/g).

**Table 10c: Soil Exceedances – Metals & Inorganics**

Exceeding Parameter:			Antimony	Barium	Cadmium	Lead	Nickel	Zinc	Sodium Absorption Ratio	Conductivity
Sample Location	MECP Table 7 Site Condition Standards		7.5 ug/g	390 ug/g	1.2 (ug/g)	120 ug/g	340 ug/g	6.9 ug/g	-	0.7 mS/cm
	Sample ID	Sample Depth	Reported Concentration (ug/g)							
BH1-25	BH1-25-AU1	0.0 – 0.6 m BGS	-	-	-	300	-	-	55	4.3
	BH1-25-SS2	0.8 – 1.4 m BGS	-	-	-	780	-	-	-	2.7
BH2-25	BH2-25-SS1	0.0 – 0.6 m BGS	-	-	-	220	-	-	29	1.4
	DUP-12/01	Duplicate of BH2-25-SS1	-	-	-	240	-	-	57	3.7
BH3-25	BH3-25-SS1	0.0 – 0.4 m BGS	-	-	-	-	-	-	6.5	-
BH4-25	BH4-25-SS1	0.0 – 0.6 m BGS	38	480	1.5	640	300	470	-	-
BH5-25	BH5-25-AU1	0.0 – 0.6 m BGS	-	-	-	-	-	-	-	1.1
BH6-25	BH6-25-AU1	0.0 – 0.3 m BGS	-	-	-	530	-	-	19	2.6
BH7-25	BH7-25-AU1	0.0 – 0.6 m BGS	-	-	-	340	-	-	23	1.5
	DUP-12/03	Duplicate of BH7-25-AU1	-	-	-	360	-	-	25	1.7
BH8-25	BH8-25-AU1	0.0 – 0.4 m BGS	-	-	-	210	-	-	-	-
BH9-25	BH9-25-AU1	0.0 – 0.4 m BGS	-	-	-	620	-	520	8.9	-
BH10-25	BH10-25-AU1	0.0 – 0.5 m BGS	-	-	-	270	-	-	13	0.94
BH11-25	BH11-25-AU1	0.0 – 0.3 m BGS	-	-	1.3	760	-	580	-	-

All other soil results for the Phase Two Property are in compliance with the applicable Site Condition Standards.

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

An environmental remediation program, including the bulk removal and off-site disposal of soil in excess of the Site Condition Standards, is recommended for the Phase Two Property. This can be completed at the time of excavation for building foundation construction at the Phase Two Property. The Phase Two ESA could then be updated with confirmatory sample results at that time to show compliance with Site Condition Standards.

Preparation of a soil management plan in accordance with O.Reg. 406/19 will be required as part of the management of excess soil generated as part of construction activities. It is recommended that a remedial action plan be prepared to develop a strategy for remediation, including soil and groundwater management, during redevelopment.

LOPERS & ASSOCIATES

i. Signatures

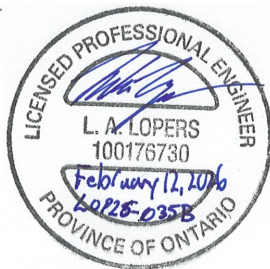
The Qualified Person for this study is Mr. Luke Lopers, P. Eng. Mr. Lopers has been a Professional Engineer, registered in Ontario since 2012 and has been working on environmental site assessments since 2006. Mr. Lopers has been an author, project manager and/or peer reviewer for hundreds of Phase One 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 authored and/or reviewed many of Phase One and Two ESAs in Ontario and the rest of Canada leading to, or incorporated in Risk Assessments. The qualifications of the assessor/Qualified Person and reviewer are included in Appendix F.

Sincerely,



Luke Lopers, P.Eng., QP<sub>ESA</sub>



Natasha Corrin, M.A.Sc., P.Eng., QP<sub>RA</sub>

## 8. Limitations

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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 11034936 Canada Inc. 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 11034936 Canada Inc.

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

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Topographical Survey Plan, Annis, O'Sullivan, Vollebakk Ltd., dated July 21, 2025.

City of Ottawa, geoOttawa mapping website, Visited November 2025 through February 2026.

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

Google Earth, Visited November 2025 through February 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 I Environmental Site Assessment, 131 Parkdale Avenue, Ottawa, Ontario", dated March 12, 2015, completed by Pinchin Ltd., for Timbercreek Asset Management Inc.

"Phase I Environmental Site Assessment, 131 Parkdale Avenue, Ottawa, Ontario", dated June 18, 2024, completed by Pinchin Ltd., for Portage Capital Corporation.

"Phase I - Environmental Site Assessment, 139 Parkdale Avenue, Ottawa, Ontario", dated April 5, 2021, completed by Paterson Group Inc., for Vika Land & Development Group.

"Phase I - Environmental Site Assessment, 122-124 Forward Avenue, Ottawa, Ontario", dated April 3, 2020, completed by Paterson Group Inc., for 2634410 Ontario Inc.

"Phase One Environmental Site Assessment, 131 & 139 Parkdale Avenue and 122 Forward Avenue, Ottawa, Ontario", dated February 9, 2024, completed by Lopers & Associates, for 11034936 Canada Inc..

BV Labs Certificate of Analysis – Report # R8666533 - Soil Sample Submission December 1, 2025

BV Labs Certificate of Analysis – Report # R8668108 – Soil Sample Submission December 2, 2025

BV Labs Certificate of Analysis – Report # R8666670 – Soil Sample Submission December 3, 2025

BV Labs Certificate of Analysis – # R8674112 – mSPLP and TCLP Sample Submission December 16, 2025

BV Labs Analysis – Report # R8675838 - Groundwater Sample Submission December 17, 2025

## 10. Appendices

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Appendix A – Sampling and Analysis Plan

Appendix B – Underground Utility Locates

Appendix C – Borehole Logs

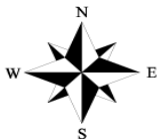
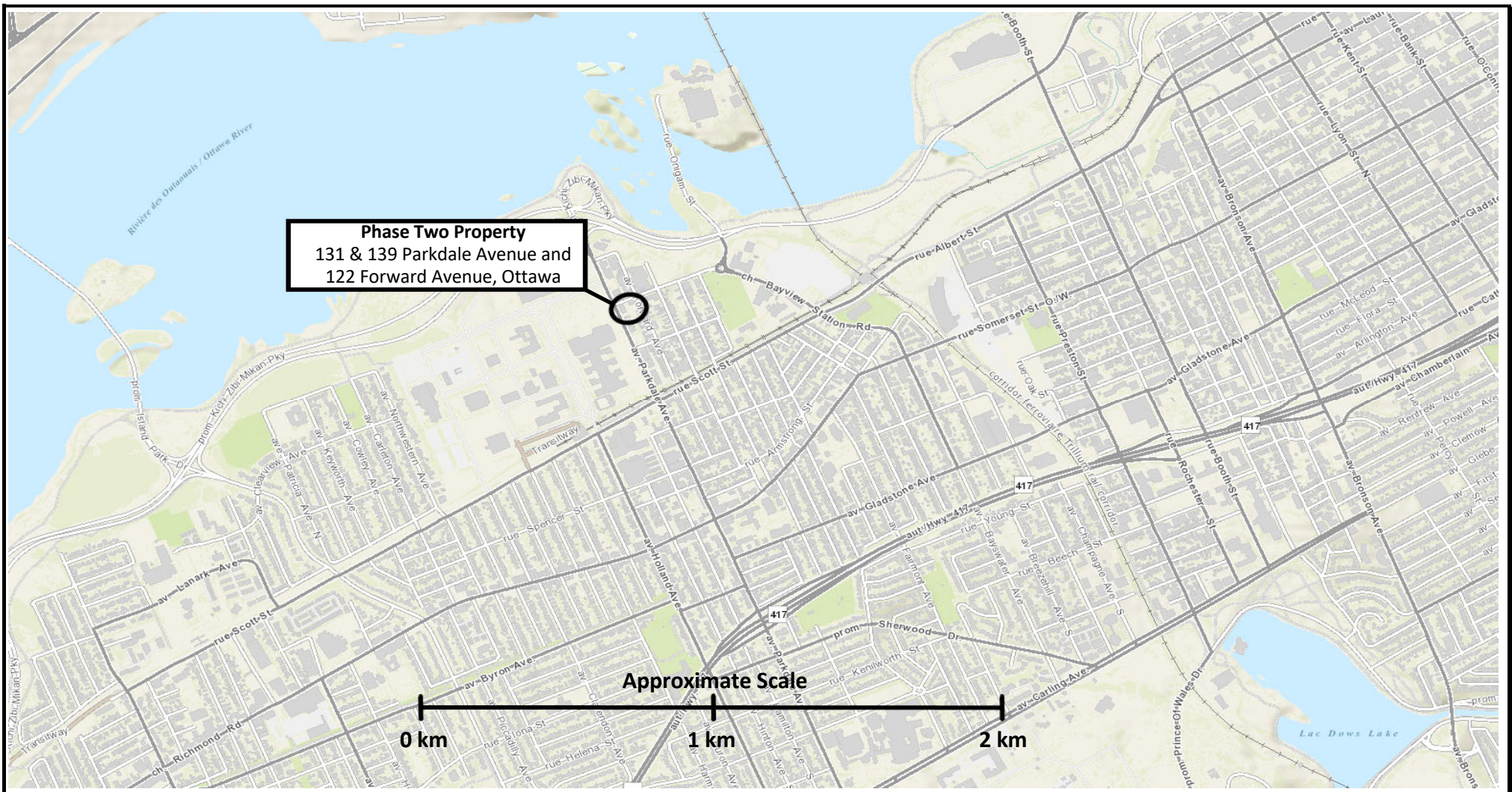
Appendix D – Certificates of Equipment Calibration

Appendix E – Laboratory Certificates of Analysis

Appendix F – Qualifications of Assessors

# Figures

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**LOPERS & ASSOCIATES**

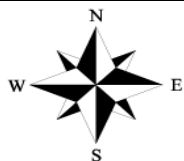
**Figure 1: Key Plan**  
 Phase Two Environmental Site Assessment  
 131 & 139 Parkdale and 122 Forward Avenue, Ottawa, Ontario  
 11034936 Canada Inc.

Project Reference No: LOP26-035B  
 Drawing No.: LOP26-035B-1  
 Date: February 8, 2026  
 Author: L. Lopers  
 Source: geoOttawa, Base Mapping



**LEGEND**

- ◆ Approximate Location of Borehole with Monitoring Well
- ◆ Approximate Location of Soil Borehole to bedrock

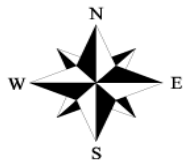
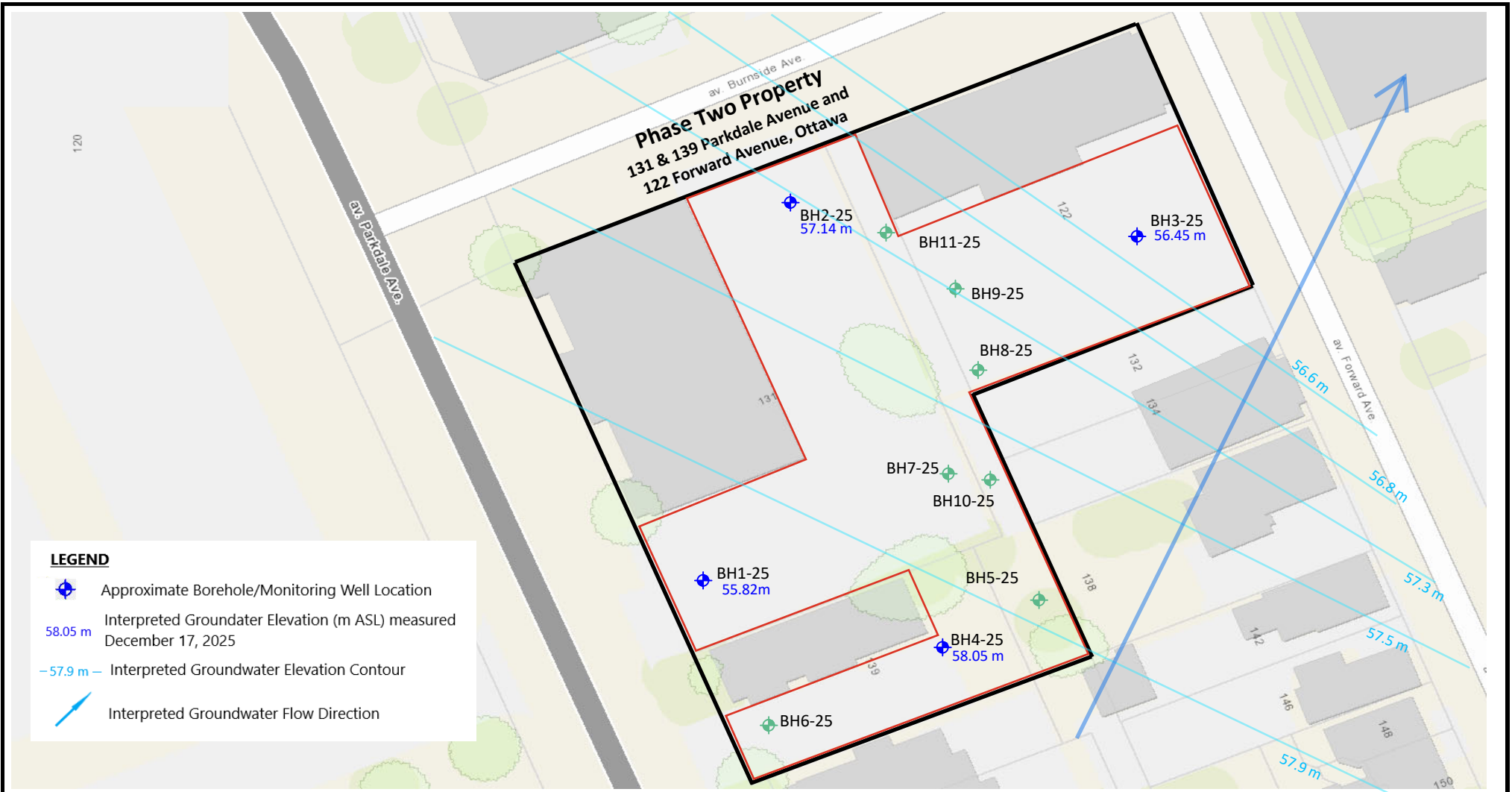


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**Figure 2: Site Plan**

Phase Two Environmental Site Assessment  
 131 Parkdale Avenue, Ottawa, Ontario  
 11034936 Canada Inc.

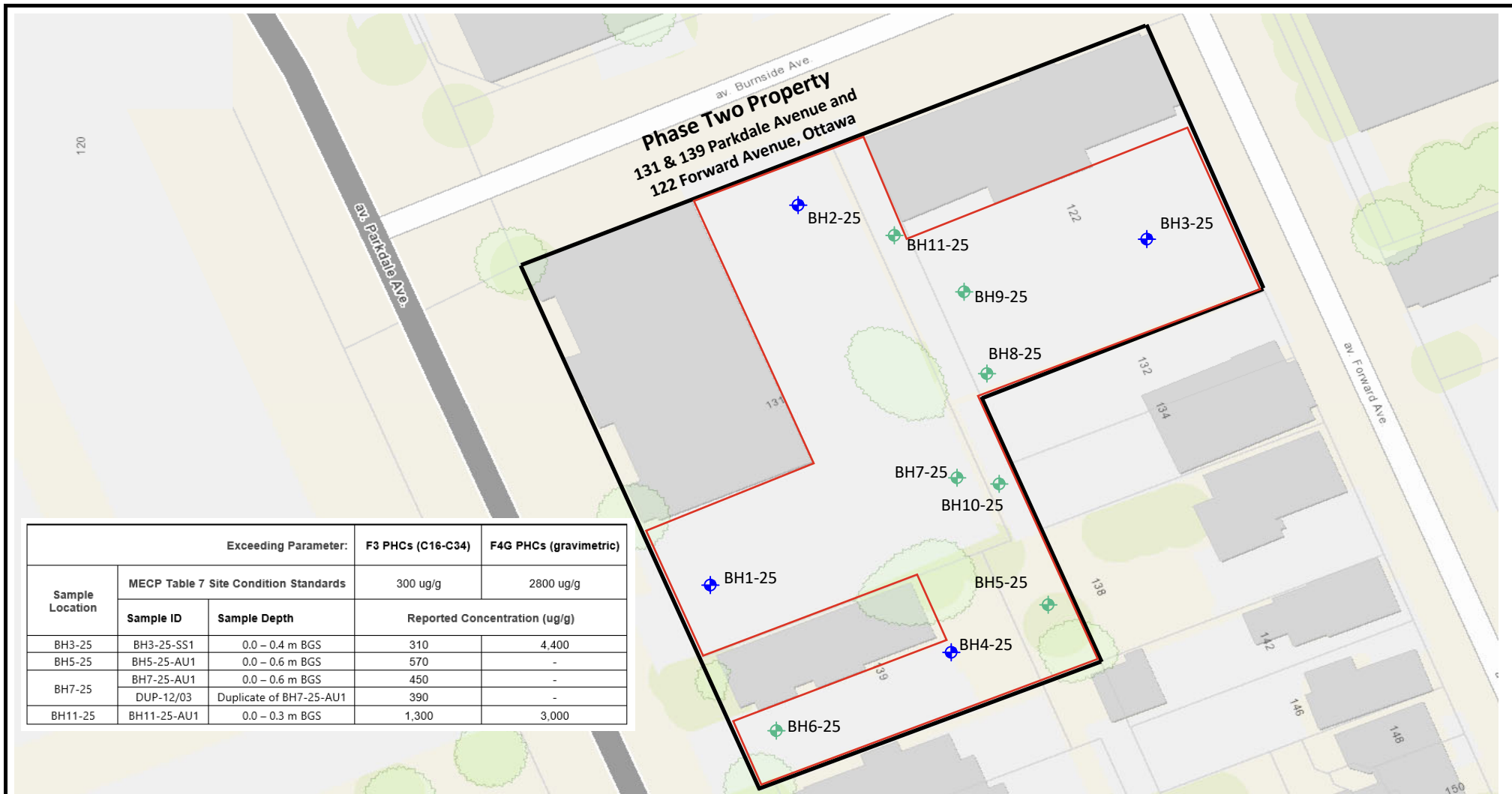
Project Reference No:	LOP25-035B
Drawing No.:	LOP25-035B-2
Date:	January 22, 2025
Author:	L. Lopers
Source:	geoOttawa



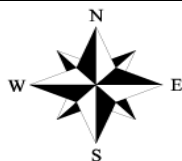
LOPERS & ASSOCIATES

**Figure 3: Groundwater Flow Interpretation**  
Phase Two Environmental Site Assessment  
131 Parkdale Avenue, Ottawa, Ontario  
11034936 Canada Inc.

Project Reference No.: LOP25-035B  
Drawing No.: LOP25-035B-3  
Date: February 12, 2025  
Author: L. Lopers  
Source: geoOttawa



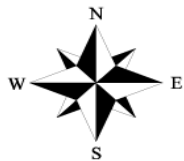
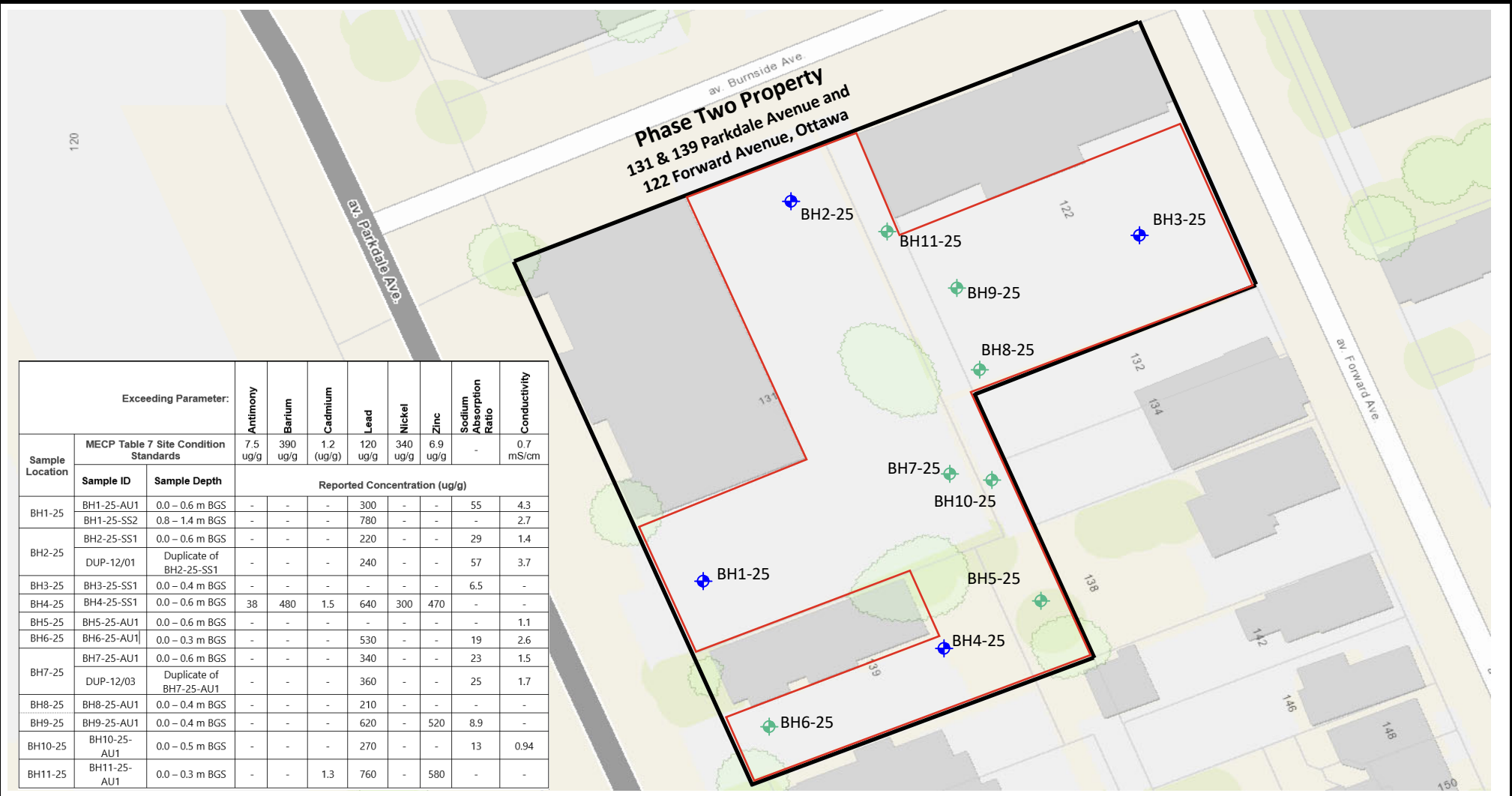
Exceeding Parameter:		F3 PHCs (C16-C34)	F4G PHCs (gravimetric)
Sample Location	MECP Table 7 Site Condition Standards	300 ug/g	2800 ug/g
	Sample ID	Reported Concentration (ug/g)	
	Sample Depth		



LOPERS & ASSOCIATES

**Figure 4: PHC Soil Exceedances**  
Phase Two Environmental Site Assessment  
131 Parkdale Avenue, Ottawa, Ontario  
11034936 Canada Inc.

Project Reference No: LOP25-035B  
Drawing No.: LOP25-035B-4  
Date: January 22, 2025  
Author: L. Lopers  
Source: geoOttawa



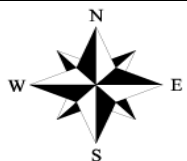
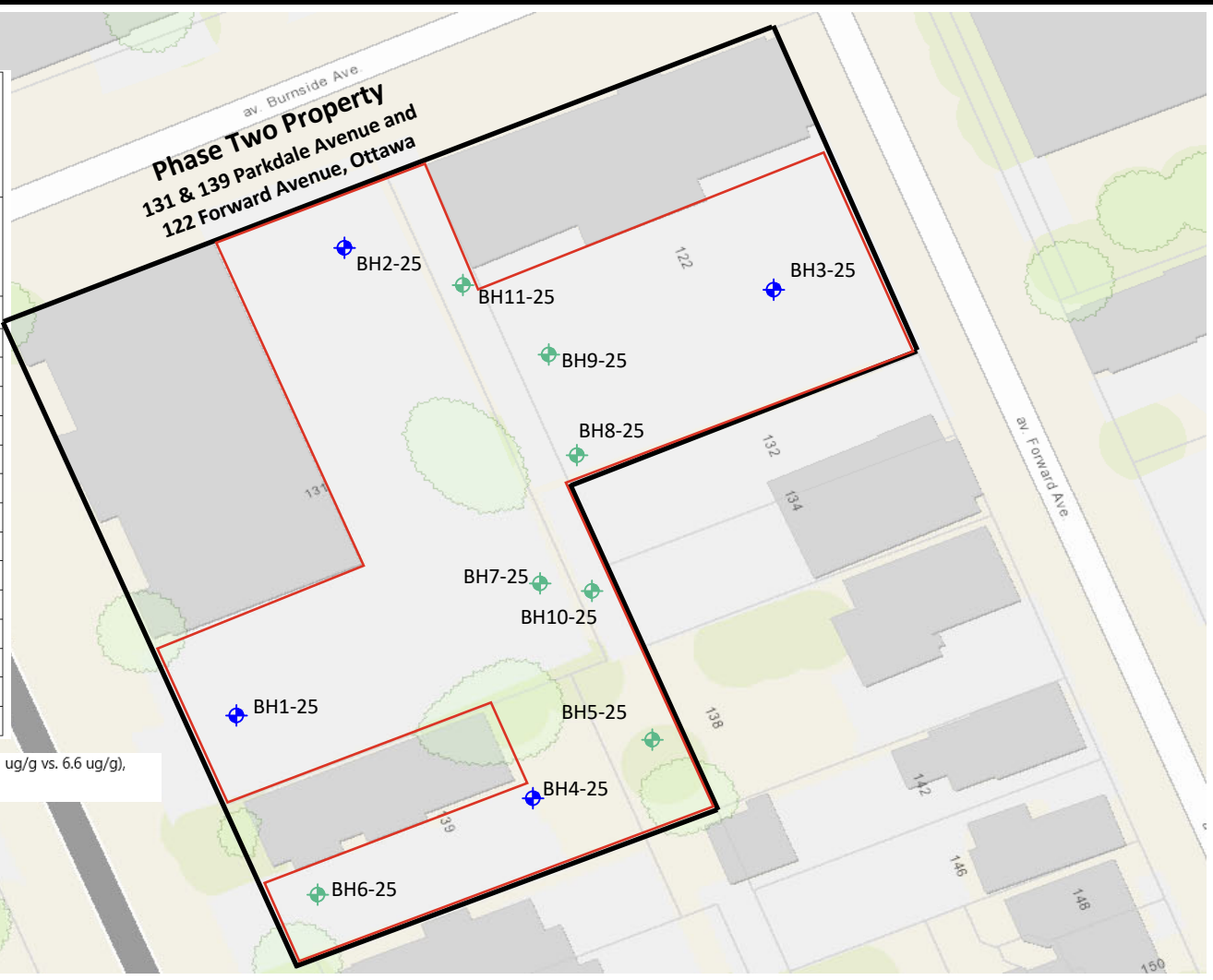
LOPERS & ASSOCIATES

**Figure 5: Metals & Inorganics Soil Exceedances**  
Phase Two Environmental Site Assessment  
131 Parkdale Avenue, Ottawa, Ontario  
11034936 Canada Inc.

Project Reference No: LOP25-035B  
Drawing No.: LOP25-035B-5  
Date: January 22, 2025  
Author: L. Lopers  
Source: geoOttawa

Sample Location		MECP Table 7 Site Condition Standards	Exceeding Parameter:										
Sample ID	Sample Depth	Reported Concentration (ug/g)											
		Acenaphthylene	Anthracene	Benzofluoranthene	Benzopyrene	Benzofluoranthene	Benzofluoranthene	Dibenzofluoranthene	Fluoranthene	Indeno(1,2,3-cd)pyrene	Naphthalene	Phenanthrene	
		0.15 ug/g	0.67 ug/g	0.5 ug/g	0.3 ug/g	0.78 ug/g	0.78 ug/g	0.1 ug/g	0.69 ug/g	0.38 ug/g	0.6 ug/g	6.2 ug/g	
BH1-25	BH1-25-AU1	0.0 – 0.6 m BGS	-	0.9	1.8	1.8	2.3	0.84	0.27	5.1	1.2	-	-
	BH1-25-SS2	0.8 – 1.4 m BGS	0.35	-	1.2	1.6	1.9	-	0.24	2.2	1	-	-
BH2-25	BH2-25-SS1	0.0 – 0.6 m BGS	-	0.87	1.4	1.3	1.8	-	0.21	3.6	0.93	-	-
	DUP-12/01	Duplicate of BH2-25-SS1	0.24	2.4	5	5.1	6.4	2.3	0.84	13	3.4	0.84	9.5
BH3-25	BH3-25-SS1	0.0 – 0.4 m BGS	-	-	0.66	0.64	0.82	-	-	2	0.45	-	-
BH4-25	BH4-25-SS1	0.0 – 0.6 m BGS	-	0.86	1.1	1.1	1.3	-	0.15	2.9	0.73	-	-
BH5-25	BH5-25-AU1	0.0 – 0.6 m BGS	-	1.7	2.9	3	4	1.2	0.47	8	2.2	-	-
BH6-25	BH6-25-AU1	0.0 – 0.3 m BGS	-	-	0.7	0.81	0.91	-	0.13	1.7	0.56	-	-
BH7-25	BH7-25-AU1	0.0 – 0.6 m BGS	0.16	-	1.4	1.5	1.9	-	0.24	3.5	1.1	-	-
	DUP-12/03	Duplicate of BH7-25-AU1	0.2	-	8	8.3	8.8	2.8	1.1	20	5.3	-	11
BH8-25	BH8-25-AU1	0.0 – 0.4 m BGS	-	-	0.39	0.42	-	0.18	-	-	-	-	-
BH9-25	BH9-25-AU1	0.0 – 0.4 m BGS	0.34	-	1.6	1.7	2	0.74	0.22	3.3	1.2	-	-
BH10-25	BH10-25-AU1	0.0 – 0.5 m BGS	-	-	0.74	0.77	0.94	0.29	0.11	1.8	0.55	-	-
BH11-25	BH11-25-AU1	0.0 – 0.3 m BGS	0.75	12	25	23	28	11	2.7	65	14	8.2	59

BH11-25-AU1 also exceeded the Site Condition Standards for Benzo(a,h)perylene (11 ug/g vs. 6.6 ug/g), Chrysene (21 ug/g vs. 7 ug/g) and Methylanthalene (1&2) (3.5 ug/g vs. 0.99 ug/g).



LOPERS & ASSOCIATES

**Figure 6: PAH Soil Exceedances Phase Two Environmental Site Assessment 131 Parkdale Avenue, Ottawa, Ontario 11034936 Canada Inc.**

Project Reference No: LOP25-035B  
 Drawing No.: LOP25-035B-5  
 Date: January 22, 2025  
 Author: L. Lopers  
 Source: geoOttawa

# Tables

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**Table 9: Soil Analytical Results**  
1145 Carling Avenue, Ottawa, Ontario

Parameter	Units	Method Detection Limit (MDL)	O.Reg. 153/04 Table 7: Residential Property Use Standards, Coarse Grained Soil	Sample ID:	BH1-25-AU1	BH1-25-SS2	BH2-25-AU1	DUP-12/01	BH3-25-SS1	BH4-25-SS1	BH5-25-AU1
				Sample Depth:	0.0 - 0.6 m BGS	0.8 - 1.4 m BGS	0.0 - 0.6 m BGS	Duplicate of BH2-25-AU1	0.0 - 0.4 m BGS	0.0 - 0.6 m BGS	0.0 - 0.6 m BGS
				Sample Date:	December 1, 2025	December 1, 2025	December 1, 2025	December 1, 2025	December 2, 2025	December 2, 2025	December 3, 2025
				Laboratory Sample ID:	AXXG67	AXXG68	AXXG69	AXXG70	AYAL42	AYAL43	AXZW40
<b>Petroleum Hydrocarbons (PHCs)</b>											
F1 PHCs (C6-C10)	ug/g	10	55	<10	<10	<10	<10	<10	<10	<10	<10
F2 PHCs (C10-C16)	ug/g	7	98	11	16	8	11	8.6	15	36	36
F3 PHCs (C16-C34)	ug/g	50	300	290	290	270	290	310	260	570	570
F4 PHCs (C34-C50)	ug/g	50	2800	310	620	640	200	940	670	370	370
F4G PHCs (gravimetric)	ug/g	-	2800	1600	2700	1600	850	4400	2800	1200	1200
<b>Volatile Organic Compounds (VOCs) including Benzene, Toluene, Ethylbenzene and Xylenes (BTEXs)</b>											
Acetone	ug/g	0.49	16	-	-	-	-	-	-	-	-
Benzene	ug/g	0.02	0.21	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020
Bromodichloromethane	ug/g	0.04	13	-	-	-	-	-	-	-	-
Bromoform	ug/g	0.04	0.27	-	-	-	-	-	-	-	-
Bromomethane	ug/g	0.04	0.05	-	-	-	-	-	-	-	-
Carbon Tetrachloride	ug/g	0.04	0.05	-	-	-	-	-	-	-	-
Chlorobenzene	ug/g	0.04	2.4	-	-	-	-	-	-	-	-
Chloroform	ug/g	0.04	0.05	-	-	-	-	-	-	-	-
Dibromochloromethane	ug/g	0.04	9.4	-	-	-	-	-	-	-	-
1,2-Dichlorobenzene	ug/g	0.04	3.4	-	-	-	-	-	-	-	-
1,3-Dichlorobenzene	ug/g	0.04	4.8	-	-	-	-	-	-	-	-
1,4-Dichlorobenzene	ug/g	0.04	0.083	-	-	-	-	-	-	-	-
1,1-Dichloroethane	ug/g	0.04	3.5	-	-	-	-	-	-	-	-
1,2-Dichloroethane	ug/g	0.049	0.05	-	-	-	-	-	-	-	-
1,1-Dichloroethylene	ug/g	0.04	0.05	-	-	-	-	-	-	-	-
Cis-1,2-Dichloroethylene	ug/g	0.04	3.4	-	-	-	-	-	-	-	-
Trans-1,2-Dichloroethylene	ug/g	0.04	0.084	-	-	-	-	-	-	-	-
1,2-Dichloropropane	ug/g	0.04	0.05	-	-	-	-	-	-	-	-
Cis-1,3-Dichloropropylene	ug/g	0.03	NV	-	-	-	-	-	-	-	-
Trans-1,3-Dichloropropylene	ug/g	0.04	NV	-	-	-	-	-	-	-	-
Ethylbenzene	ug/g	0.02	2	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020
Ethylene Dibromide	ug/g	0.04	0.05	-	-	-	-	-	-	-	-
Methyl Ethyl Ketone	ug/g	0.4	16	-	-	-	-	-	-	-	-
Methylene Chloride	ug/g	0.049	0.1	-	-	-	-	-	-	-	-
Methyl Isobutyl Ketone	ug/g	0.4	1.7	-	-	-	-	-	-	-	-
Methyl-t-Butyl Ether	ug/g	0.04	0.75	-	-	-	-	-	-	-	-
Styrene	ug/g	0.04	0.7	-	-	-	-	-	-	-	-
1,1,1,2-Tetrachloroethane	ug/g	0.04	0.058	-	-	-	-	-	-	-	-
1,1,2,2-Tetrachloroethane	ug/g	0.04	0.05	-	-	-	-	-	-	-	-
Toluene	ug/g	0.02	2.3	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020
Tetrachloroethylene	ug/g	0.04	0.28	-	-	-	-	-	-	-	-
1,1,1-Trichloroethane	ug/g	0.04	0.38	-	-	-	-	-	-	-	-
1,1,2-Trichloroethane	ug/g	0.04	0.05	-	-	-	-	-	-	-	-
Trichloroethylene	ug/g	0.01	0.061	-	-	-	-	-	-	-	-
Vinyl Chloride	ug/g	0.019	0.02	-	-	-	-	-	-	-	-
m-Xylene & p-Xylene	ug/g	0.04	NV	<0.040	<0.040	<0.040	<0.040	<0.040	<0.040	<0.040	<0.040
o-Xylene	ug/g	0.02	NV	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020
Total Xylenes	ug/g	0.04	3.1	<0.040	<0.040	<0.040	<0.040	<0.040	<0.040	<0.040	<0.040
Dichlorodifluoromethane	ug/g	0.04	16	-	-	-	-	-	-	-	-
Dioxane, 1,4-	ug/g	-	1.8	-	-	-	-	-	-	-	-
Hexane(n)	ug/g	0.04	2.8	-	-	-	-	-	-	-	-
Trichlorofluoromethane	ug/g	0.04	4	-	-	-	-	-	-	-	-
1,3-Dichloropropene (cis + trans)	ug/g	0.05	0.05	-	-	-	-	-	-	-	-
<b>Polycyclic Aromatic Hydrocarbons</b>											
Acenaphthene	ug/g	0.050	7.9	0.18	<0.050	0.43	0.76	0.13	0.28	0.52	0.52
Acenaphthylene	ug/g	0.050	0.15	0.086	0.35	0.067	0.24	<0.050	<0.050	0.063	0.063
Anthracene	ug/g	0.050	0.67	0.9	0.18	0.87	2.4	0.28	0.86	1.7	1.7
Benzo[a]anthracene	ug/g	0.050	0.5	1.8	1.2	1.4	5	0.66	1.1	2.9	2.9
Benzo[a]pyrene	ug/g	0.050	0.3	1.8	1.6	1.3	5.1	0.64	1.1	3	3
Benzo[b]fluoranthene	ug/g	0.050	0.78	2.3	1.9	1.8	6.4	0.82	1.3	4	4
Benzo[g,h,i]perylene	ug/g	0.050	6.6	0.98	0.89	0.78	2.8	0.41	0.62	1.8	1.8
Benzo[k]fluoranthene	ug/g	0.050	0.78	0.84	0.69	0.61	2.3	0.3	0.43	1.2	1.2
Chrysene	ug/g	0.050	7	1.5	0.85	1.2	4.2	0.59	0.92	2.7	2.7
Dibenzo[a,h]anthracene	ug/g	0.050	0.1	0.27	0.24	0.21	0.84	0.091	0.15	0.47	0.47
Fluoranthene	ug/g	0.050	0.69	5.1	2.2	3.6	13	2	2.9	8	8
Fluorene	ug/g	0.050	62	0.31	<0.050	0.29	1.1	0.079	0.32	0.5	0.5
Indeno[1,2,3-cd]pyrene	ug/g	0.050	0.38	1.2	1	0.93	3.4	0.45	0.73	2.2	2.2
1-Methylnaphthalene	ug/g	0.050	0.99	<0.050	<0.050	<0.080	<0.20	<0.050	0.058	0.075	0.075
2-Methylnaphthalene	ug/g	0.030	0.99	<0.050	<0.050	<0.090	<0.21	<0.050	0.072	0.087	0.087
Naphthalene	ug/g	0.010	0.6	0.13	<0.050	0.092	0.84	<0.050	0.11	0.16	0.16
Phenanthrene	ug/g	0.050	6.2	3.3	0.26	3	9.5	1.4	2.7	6.2	6.2
Pyrene	ug/g	0.050	78	4.1	2.2	2.9	11	1.6	2.3	6.7	6.7
Methylnaphthalene (1&2)	ug/g	0.030	0.99	<0.071	<0.071	<0.12	<0.29	<0.071	0.13	0.16	0.16
<b>Metals</b>											
Antimony	ug/g	0.2	7.5	1.7	1.3	2.7	2.1	0.27	38	1.8	1.8
Arsenic	ug/g	1.0	18	3.2	3.9	4.2	2.5	2.6	5.1	3.7	3.7
Barium	ug/g	0.5	390	270	150	230	210	170	480	230	230
Beryllium	ug/g	0.2	4	0.43	0.46	0.31	0.33	0.23	0.36	0.28	0.28
Boron, available	ug/g	0.05	1.5	0.46	0.13	0.35	0.4	0.43	0.18	1.1	1.1
Boron	ug/g	5.0	120	8.5	6	8.3	7.3	11	9.4	7	7
Cadmium	ug/g	0.1	1.2	0.54	0.22	0.51	0.43	0.3	1.5	0.6	0.6
Chromium	ug/g	1.0	160	18	16	15	15	12	67	18	18
Chromium (VI)	ug/g	0.18	8	<0.18	0.19	<0.18	<0.18	<0.18	<0.18	<0.18	<0.18
Cobalt	ug/g	0.1	22	5.1	6.6	4.8	4.6	5.5	6.4	5.1	5.1
Copper	ug/g	0.5	140	48	24	26	51	17	86	25	25
Lead	ug/g	1.0	120	300	780	220	240	57	640	120	120
Mercury	ug/g	0.05	0.27	0.17	<0.050	0.1	0.14	<0.050	0.26	0.085	0.085
Molybdenum	ug/g	0.5	6.9	<0.50	0.92	1.7	<0.50	0.84	1.4	0.73	0.73
Nickel	ug/g	0.5	100	13	14	13	12	13	300	13	13
Selenium	ug/g	0.5	2.4	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
Silver	ug/g	0.2	20	<0.20	<0.20	<0.20	<0.20	<0.20	0.4	<0.20	<0.20
Thallium	ug/g	0.05	1	0.11	0.099	0.16	0.13	0.19	0.13	0.13	0.13
Uranium	ug/g	0.1	23	0.31	0.8	0.41	0.32	0.39	0.46	0.53	0.53
Vanadium	ug/g	5.0	86	19	21	15	19	18	23	23	23
Zinc	ug/g	5.0	340	150	110	130	130	63	470	150	150
<b>General Inorganics</b>											
SAR	N/A	0.01	5	55	3.5	29	57	6.5	0.59	1.8	1.8
Conductivity	mS/cm	0.02	0.7	4.3	2.7	1.4	3.7	0.54	0.36	1.1	1.1
Cyanide, free	ug/g	0.03	0.051	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
pH	pH Units	0.05	5-11	8.02	10.90	8.01	7.96	8.00	10.30	7.66	7.66

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

**Table 9: Soil Analytical Results**  
1145 Carling Avenue, Ottawa, Ontario

Parameter	Units	Method Detection Limit (MDL)	O.Reg. 153/04 Table 7: Residential Property Use Standards, Coarse Grained Soil	Sample ID:	BH6-25-AU1	BH7-25-AU1	DUP-12/03 Duplicate of BH7-25-AU1	BH8-25-AU1	BH9-25-AU1	BH10-25-AU1	BH11-25-AU1
				Sample Depth:	0.0 - 0.3 m BGS	0.0 - 0.6 m BGS	0.0 - 0.3 m BGS	0.0 - 0.4 m BGS	0.0 - 0.4 m BGS	0.0 - 0.5 m BGS	0.0 - 0.3 m BGS
				Sample Date:	December 3, 2025	December 3, 2025	December 3, 2025	December 3, 2025	December 3, 2025	December 3, 2025	December 3, 2025
				Laboratory Sample ID:	AXZW41	AXZW42	AXZW47	AXZW43	AXZW44	AXZW45	AXZW46
<b>Petroleum Hydrocarbons (PHCs)</b>											
F1 PHCs (C6-C10)	ug/g	10	55	<10	<10	<10	<10	<10	<10	<10	<10
F2 PHCs (C10-C16)	ug/g	7	98	<7.0	12	98	10	<7.0	7.4	13	44
F3 PHCs (C16-C34)	ug/g	50	300	110	450	390	56	170	210	1300	970
F4 PHCs (C34-C50)	ug/g	50	2800	90	580	600	53	110	410	1200	3000
F4G PHCs (gravimetric)	ug/g	-	2800	-	1700	2200	-	-	-	-	-
<b>Volatile Organic Compounds (VOCs) including Benzene, Toluene, Ethylbenzene and Xylenes (BTE)</b>											
Acetone	ug/g	0.49	16	-	-	-	-	-	-	-	-
Benzene	ug/g	0.02	0.21	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020
Bromodichloromethane	ug/g	0.04	13	-	-	-	-	-	-	-	-
Bromoform	ug/g	0.04	0.27	-	-	-	-	-	-	-	-
Bromomethane	ug/g	0.04	0.05	-	-	-	-	-	-	-	-
Carbon Tetrachloride	ug/g	0.04	0.05	-	-	-	-	-	-	-	-
Chlorobenzene	ug/g	0.04	2.4	-	-	-	-	-	-	-	-
Chloroform	ug/g	0.04	0.05	-	-	-	-	-	-	-	-
Dibromochloromethane	ug/g	0.04	9.4	-	-	-	-	-	-	-	-
1,2-Dichlorobenzene	ug/g	0.04	3.4	-	-	-	-	-	-	-	-
1,3-Dichlorobenzene	ug/g	0.04	4.8	-	-	-	-	-	-	-	-
1,4-Dichlorobenzene	ug/g	0.04	0.083	-	-	-	-	-	-	-	-
1,1-Dichloroethane	ug/g	0.04	3.5	-	-	-	-	-	-	-	-
1,2-Dichloroethane	ug/g	0.049	0.05	-	-	-	-	-	-	-	-
1,1-Dichloroethylene	ug/g	0.04	0.05	-	-	-	-	-	-	-	-
Cis-1,2-Dichloroethylene	ug/g	0.04	3.4	-	-	-	-	-	-	-	-
Trans-1,2-Dichloroethylene	ug/g	0.04	0.084	-	-	-	-	-	-	-	-
1,2-Dichloropropane	ug/g	0.04	0.05	-	-	-	-	-	-	-	-
Cis-1,3-Dichloropropylene	ug/g	0.03	NV	-	-	-	-	-	-	-	-
Trans-1,3-Dichloropropylene	ug/g	0.04	NV	-	-	-	-	-	-	-	-
Ethylbenzene	ug/g	0.02	2	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020
Ethylene Dibromide	ug/g	0.04	0.05	-	-	-	-	-	-	-	-
Methyl Ethyl Ketone	ug/g	0.4	16	-	-	-	-	-	-	-	-
Methylene Chloride	ug/g	0.049	0.1	-	-	-	-	-	-	-	-
Methyl Isobutyl Ketone	ug/g	0.4	1.7	-	-	-	-	-	-	-	-
Methyl-t-Butyl Ether	ug/g	0.04	0.75	-	-	-	-	-	-	-	-
Styrene	ug/g	0.04	0.7	-	-	-	-	-	-	-	-
1,1,1,2-Tetrachloroethane	ug/g	0.04	0.058	-	-	-	-	-	-	-	-
1,1,2,2-Tetrachloroethane	ug/g	0.04	0.05	-	-	-	-	-	-	-	-
Toluene	ug/g	0.02	2.3	<0.020	0.038	0.034	<0.020	0.022	<0.020	<0.020	<0.020
Tetrachloroethylene	ug/g	0.04	0.28	-	-	-	-	-	-	-	-
1,1,1-Trichloroethane	ug/g	0.04	0.38	-	-	-	-	-	-	-	-
1,1,2-Trichloroethane	ug/g	0.04	0.05	-	-	-	-	-	-	-	-
Trichloroethylene	ug/g	0.01	0.061	-	-	-	-	-	-	-	-
Vinyl Chloride	ug/g	0.019	0.02	-	-	-	-	-	-	-	-
m-Xylene & p-Xylene	ug/g	0.04	NV	<0.040	0.048	0.057	<0.040	<0.040	<0.040	<0.040	<0.040
o-Xylene	ug/g	0.02	NV	<0.020	0.02	0.023	<0.020	<0.020	<0.020	<0.020	<0.020
Total Xylenes	ug/g	0.04	3.1	<0.040	0.069	0.08	<0.040	<0.040	<0.040	<0.040	<0.040
Dichlorodifluoromethane	ug/g	0.04	16	-	-	-	-	-	-	-	-
Dioxane, 1,4-	ug/g	-	1.8	-	-	-	-	-	-	-	-
Hexane(n)	ug/g	0.04	2.8	-	-	-	-	-	-	-	-
Trichlorofluoromethane	ug/g	0.04	4	-	-	-	-	-	-	-	-
1,3-Dichloropropene (cis + trans)	ug/g	0.05	0.05	-	-	-	-	-	-	-	-
<b>Polycyclic Aromatic Hydrocarbons</b>											
Acenaphthene	ug/g	0.050	7.9	0.097	0.24	0.63	0.021	0.15	0.13	5.5	
Acenaphthylene	ug/g	0.050	0.15	0.097	0.16	0.2	0.043	0.34	0.06	0.75	
Anthracene	ug/g	0.050	0.67	0.32	0.66	3.4	0.11	0.61	0.33	12	
Benzo[a]anthracene	ug/g	0.050	0.5	0.7	1.4	8	0.39	1.6	0.74	25	
Benzo[a]pyrene	ug/g	0.050	0.3	0.81	1.5	8.3	0.42	1.7	0.77	23	
Benzo[b]fluoranthene	ug/g	0.050	0.78	0.91	1.9	8.8	0.49	2	0.94	28	
Benzo[g,h,i]perylene	ug/g	0.050	6.6	0.47	0.95	4.4	0.25	1.1	0.55	11	
Benzo[k]fluoranthene	ug/g	0.050	0.78	0.34	0.57	2.8	0.18	0.74	0.29	11	
Chrysene	ug/g	0.050	7	0.64	1.2	6.5	0.34	1.3	0.58	21	
Dibenzo[a,h]anthracene	ug/g	0.050	0.1	0.13	0.24	1.1	0.07	0.22	0.11	2.7	
Fluoranthene	ug/g	0.050	0.69	1.7	3.5	20	0.69	3.3	1.8	65	
Fluorene	ug/g	0.050	62	0.11	0.25	0.5	0.018	0.12	0.12	4.3	
Indeno[1,2,3-cd]pyrene	ug/g	0.050	0.38	0.56	1.1	5.3	0.3	1.2	0.55	14	
1-Methylnaphthalene	ug/g	0.050	0.99	0.032	<0.050	0.063	0.0053	<0.050	<0.050	1.5	
2-Methylnaphthalene	ug/g	0.030	0.99	0.034	<0.050	0.065	0.0069	<0.050	<0.050	2	
Naphthalene	ug/g	0.010	0.6	0.047	0.074	0.1	0.0078	<0.050	0.09	8.2	
Phenanthrene	ug/g	0.050	6.2	1.2	2.4	11	0.32	1.8	1.3	59	
Pyrene	ug/g	0.050	78	1.4	3	17	0.63	3.3	1.6	56	
Methylnaphthalene (1&2)	ug/g	0.030	0.99	0.066	<0.071	0.13	0.012	<0.071	<0.071	3.5	
<b>Metals</b>											
Antimony	ug/g	0.2	7.5	3.1	2.1	2.5	1.2	3.4	1.4	2.8	
Arsenic	ug/g	1.0	18	4.8	6.4	6.2	4.2	7.6	4.9	7	
Barium	ug/g	0.5	390	300	240	250	150	350	280	380	
Beryllium	ug/g	0.2	4	0.41	0.4	0.45	0.25	0.42	0.27	0.51	
Boron, available	ug/g	0.05	1.5	1.2	0.72	0.87	0.41	1.2	0.47	0.31	
Boron	ug/g	5.0	120	11	10	9.1	10	10	9.2	11	
Cadmium	ug/g	0.1	1.2	0.82	0.92	0.96	0.32	0.89	0.66	1.3	
Chromium	ug/g	1.0	160	32	23	23	16	28	18	26	
Chromium (VI)	ug/g	0.18	8	<0.18	<0.18	<0.18	<0.18	<0.18	<0.18	<0.18	
Cobalt	ug/g	0.1	22	6.5	5.6	5.8	5.2	7.2	4.7	7.9	
Copper	ug/g	0.5	140	62	50	71	32	78	32	110	
Lead	ug/g	1.0	120	530	340	360	210	620	270	760	
Mercury	ug/g	0.05	0.27	0.26	0.16	0.19	0.062	0.22	0.21	0.18	
Molybdenum	ug/g	0.5	6.9	0.61	0.82	0.83	0.79	1.9	1	1.4	
Nickel	ug/g	0.5	100	17	16	18	14	19	16	23	
Selenium	ug/g	0.5	2.4	<0.50	0.61	0.63	<0.50	0.65	<0.50	0.82	
Silver	ug/g	0.2	20	1.1	0.25	0.26	<0.20	0.39	0.23	0.64	
Thallium	ug/g	0.05	1	0.2	0.17	0.2	0.14	0.19	0.19	0.18	
Uranium	ug/g	0.1	23	0.42	0.39	0.36	0.34	0.41	0.37	0.42	
Vanadium	ug/g	5.0	86	24	20	20	12	25	16	28	
Zinc	ug/g	5.0	340	330	310	340	140	520	250	580	
<b>General Inorganics</b>											
SAR	N/A	0.01	5	19	23	25	0.95	8.9	13	1.5	
Conductivity	mS/cm	0.02	0.7	2.6	1.5	1.7	0.27	0.64	0.94	0.35	
Cyanide, free	ug/g	0.03	0.051	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	
pH	pH Units	0.05	5-11	7.69	7.85	7.82	7.85	7.54	7.85	7.56	

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

**Table 12: mSPLP Leachate Analytical Results**  
 131 139 Parkdale Avenue and 122 Forward Avenue, Ottawa, Ontario

				Sample ID:	BH3-25-SS1	BH8-25-AU1
				Sample Depth:	0.0 - 0.6 m BGS	0.0 - 0.6 m BGS
				Soil Type:	Silty Sand & Gravel	Silty Sand & Gravel
				Sample Date:	December 2, 2025	December 12, 2025
				Laboratory Sample ID:	AYAL42	ALYN32
				O.Reg. 406/19 Table 2.1: Leachate Screening Levels for Full Depth Excess Soil in a Potable Ground Water Condition - Industrial, Commercial, Community Property Re-Use, Volume Independent Standards	O.Reg. 406/19 Table 4.1: Leachate Screening Levels for Stratified Excess Soil in a Potable Ground Water Condition Industrial, Commercial, Community Property Re- Use, Volume Independent Standards	
Parameter	Units	Method Detection Limit (MDL)				
<b>ON mSPLP Extractables (target pH= 5) (Matrix: Soil/Solid)</b>						
Bis(2-chloroethyl)ether	µg/L	2	10	10	<2	<2
Bis(2-chloroisopropyl)ether	µg/L	2	nv	0.5	<2	<2
p-Chloroaniline	µg/L	5	2	2	<5	<5
3,3'-Dichlorobenzidine	µg/L	0.4	2	2	<0.4	<0.4
Diethyl phthalate	µg/L	1	nv	10	<1	<1
Dimethyl phthalate	µg/L	1	5	5	<1	<1
2,4-Dinitrophenol	µg/L	5	5	5	<5	<5
2,4-Dinitrotoluene	µg/L	3	5	5	<3	<3
2,6-Dinitrotoluene	µg/L	3	0.75	0.75	<3	<3
2,4,6-Trichlorophenol	µg/L	0.7	4	4	<0.7	<0.7
<b>ON mSPLP Metal (target pH= 5) (Matrix: Soil/Solid)</b>						
Antimony, mSPLP	µg/L	0.50	6	6	<2	<2
Arsenic, mSPLP	µg/L	1.0	nv	13	<2	<2
Barium, mSPLP	µg/L	2	1000	1000	<5	13
Beryllium, mSPLP	µg/L	0.50	4	4	<0.4	<0.4
Boron, mSPLP	µg/L	10	5000	5000	<1	23
Cadmium, mSPLP	µg/L	0.10	0.5	0.5	<1	<1
Chromium, mSPLP	µg/L	5.0	50	50	<5	<5
Cobalt, mSPLP	µg/L	1.0	3.8	3.8	<3	<3
Copper, mSPLP	µg/L	5.0	14	14	<3	<3
Lead, mSPLP	µg/L	1.0	nv	4	<0.7	<0.7
Molybdenum, mSPLP	µg/L	0.50	23	23	<1	1
Nickel, mSPLP	µg/L	1.0	78	78	<1	<1
Selenium, mSPLP	µg/L	1.0	10	10	<2	<2
Silver, mSPLP	µg/L	0.25	0.3	0.3	<0.1	<0.1
Thallium, mSPLP	µg/L	0.50	2	2	<0.05	<0.05
Uranium, mSPLP	µg/L	2.0	20	20	<0.1	<0.1
Vanadium, mSPLP	µg/L	0.50	nv	6.2	2	1
Zinc, mSPLP	µg/L	5.0	180	180	<5	<5
<b>ON mSPLP VOC (reagent water) (Matrix: Soil/Solid)</b>						
Bromomethane, mSPLP	µg/L	0.4	0.5	0.5	<0.4	<0.4
Carbon tetrachloride, mSPLP	µg/L	0.19	0.2	0.2	<0.19	<0.19
Chloroform, mSPLP	µg/L	0.9	nv	nv	<0.9	<0.9
Dibromoethane, 1,2-, mSPLP	µg/L	0.4	0.2	0.2	<0.4	<0.4
Dichlorobenzene, 1,2-, mSPLP	µg/L	0.4	0.55	0.55	<0.4	<0.4
Dichlorobenzene, 1,4-, mSPLP	µg/L	0.4	0.5	0.5	<0.4	<0.4
Dichloroethane, 1,1-, mSPLP	µg/L	0.4	0.5	nv	<0.4	<0.4
Dichloroethane, 1,2-, mSPLP	µg/L	0.4	0.5	0.5	<0.4	<0.4
Dichloroethylene, 1,1-, mSPLP	µg/L	0.4	0.5	0.5	<0.4	<0.4
Dichloroethylene, cis-1,2-, mSPLP	µg/L	0.4	0.5	0.5	<0.4	<0.4
Dichloroethylene, trans-1,2-, mSPLP	µg/L	0.4	0.5	0.5	<0.4	<0.4
Dichloropropane, 1,2-, mSPLP	µg/L	0.4	0.5	0.5	<0.4	<0.4
Dichloropropylene, cis+trans-1,3-, mSPLP	µg/L	0.4	nv	nv	<0.4	<0.4
Dichloropropylene, cis-1,3-, mSPLP	µg/L	0.3	nv	nv	<0.3	<0.3
Dichloropropylene, trans-1,3-, mSPLP	µg/L	0.3	nv	nv	<0.3	<0.3
Dioxane, 1,4-, mSPLP	µg/L	-	2	2	-	-
Tetrachloroethane, 1,1,1,2-, mSPLP	µg/L	0.4	nv	nv	<0.4	<0.4
Tetrachloroethane, 1,1,2,2-, mSPLP	µg/L	0.4	0.5	0.5	<0.4	<0.4
Tetrachloroethylene, mSPLP	µg/L	0.4	0.5	0.5	<0.4	<0.4
Trichloroethane, 1,1,2-, mSPLP	µg/L	0.4	nv	nv	<0.4	<0.4
Trichloroethylene, mSPLP	µg/L	0.4	0.5	0.5	<0.4	<0.4

nv - No value listed in MECP Re-Use Standards

- - Not Analyzed

ND - Not detected above laboratory method detection limits

8.9\*\* - Leachate Standards not applicable as bulk soil concentrations are below background.

Exceeds O.Reg. 406/19 Table 2.1: Industrial, Commer

Exceeds O.Reg. 406/19 Table 4.1: Industrial, Commer

Table 13: TCLP Analytical Results  
131 Parkdale Avenue, Ottawa, Ontario

Parameter	Units	Method Detection Limit (MDL)	Sample ID:	BH11-25-AU1
			Laboratory Sample ID:	AYLN33
			Sample Date:	December 12, 2025
			Reg 558 Schedule IV	
<b>Physical Characteristics</b>				
Flashpoint	°C			>70
<b>TCLP Leachate Inorganics</b>				
Fluoride	mg/L	0.1	150	0.32
Nitrate as N	mg/L	1	1000	ND
Cyanide, free	mg/L	0.02	20	ND
Initial pH	pH Units	-	-	9.22
Final pH	pH Units	-	-	6.52
Cyanide, free	mg/L	0.02	20	ND
<b>TCLP Leachate Metals</b>				
Mercury	mg/L	0.1	0.1	ND
Arsenic	mg/L	2.5	2.5	ND
Barium	mg/L	100	100	1.2
Boron	mg/L	500	500	ND
Cadmium	mg/L	0.5	0.5	ND
Chromium	mg/L	0.1	5	ND
Lead	mg/L	0.1	5	ND
Selenium	mg/L	0.1	1	ND
Silver	mg/L	0.01	5	ND
Uranium	mg/L	0.01	10	ND
<b>TCLP Leachate Volatiles</b>				
Benzene	mg/L	0.02	0.5	ND
Carbon Tetrachloride	mg/L	0.02	0.5	ND
Chlorobenzene	mg/L	0.02	8	ND
Chloroform	mg/L	0.02	10	ND
1,2-Dichlorobenzene	mg/L	0.05	20	ND
1,4-Dichlorobenzene	mg/L	0.05	0.5	ND
1,2-Dichloroethane	mg/L	0.05	0.5	ND
1,1-Dichloroethylene	mg/L	0.02	1.4	ND
Methyl Ethyl Ketone (2-Butanone)	mg/L	0.02	200	ND
Methylene Chloride	mg/L	0.02	5	ND
Tetrachloroethylene	mg/L	0.02	3	ND
Trichloroethylene	mg/L	0.02	5	ND
Vinyl Chloride	mg/L	0.02	0.2	ND
<b>TCLP Leachate Organics</b>				
Benzo[a]pyrene	mg/L	0.0001	0.13	ND
Benzo[a]pyrene	mg/L	0.0001	0.001	ND
Nitrobenzene	mg/L	0.001	2	ND
Hexachloroethane	mg/L	0.001	3	ND
Hexachlorobenzene	mg/L	0.050	0.13	ND
Hexachlorobutadiene	mg/L	0.001	-	ND
2,3,4,6-Tetrachlorophenol	mg/L	0.002	10	ND
2,4,5-Trichlorophenol	mg/L	0.001	400	ND
2,4,6-Trichlorophenol	mg/L	0.001	0.5	ND
2,4-Dichlorophenol	mg/L	0.001	90	ND
2-Methylphenol	mg/L	0.001	200	ND
3/4-Methylphenol	mg/L	0.001	200	ND
Pentachlorophenol	mg/L	0.005	6	ND
PCBs, total	mg/L	0.003	0.3	ND

ND - Not detected above laboratory method detection limits

**Table 14: Groundwater Analytical Results**  
131-139 Parkdale Avenue 122-124 Forward Avenue, Ottawa, Ontario

Parameter	Units	Method Detection Limit (MDL)	O.Reg. 153/04 Table 7: Residential Property Use Standards, Coarse Grained Soil	Sample ID:	BH2 - 25 - GW1	BH3 - 25 - GW1	BH4 - 25 - GW1	DUP - 12/17	Trip Blank
				Well Screen Depth:	8.7 - 11.7 m BGS	8.6 - 11.7 m BGS	8.7 - 11.7 m BGS	Duplicate of BH4-25-GW1	Laboratory Supplied Blank Sample
				Sample Date:	December 17, 2025	December 17, 2025	December 17, 2025	December 17, 2025	December 17, 2025
				Laboratory Sample ID:	AYNG96	AYNG97	AYNG98	AYNG99	AYNG100
<b>Petroleum Hydrocarbons (PHCs)</b>									
F1 PHCs (C6-C10)	µg/L	25	420	<25	<25	<25	<25	<25	-
F2 PHCs (C10-C16)	µg/L	90	150	<90	<90	<90	<90	<90	-
F3 PHCs (C16-C34)	µg/L	200	500	220	330	260	240	240	-
F4 PHCs (C34-C50)	µg/L	200	500	<200	<200	<200	<200	<200	-
F4G PHCs (gravimetric)	µg/L	200	500	-	-	-	-	-	-
<b>Volatile Organic Compounds (VOCs) including Benzene, Toluene, Ethylbenzene and Xylenes (BTEXs)</b>									
Acetone	µg/L	10	100000	<16	<12	<10	<10	<10	<10
Benzene	µg/L	0.2	0.5	0.4	0.22	<0.17	<0.17	<0.17	<0.17
Bromodichloromethane	µg/L	0.5	67000	1.3	0.56	<0.50	<0.50	<0.50	<0.50
Bromoform	µg/L	1	5	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Bromomethane	µg/L	0.5	0.89	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
Carbon Tetrachloride	µg/L	0.19	0.2	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
Chlorobenzene	µg/L	0.2	140	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
Chloroform	µg/L	0.2	2	9.5	4.3	2.5	2.6	2.6	<0.20
Dibromochloromethane	µg/L	0.5	65000	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
1,2-Dichlorobenzene	µg/L	0.4	150	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
1,3-Dichlorobenzene	µg/L	0.4	7600	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
1,4-Dichlorobenzene	µg/L	0.4	0.5	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
1,1-Dichloroethane	µg/L	0.2	11	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
1,2-Dichloroethane	µg/L	0.49	0.5	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
1,1-Dichloroethylene	µg/L	0.2	0.5	<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	0.58	<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	54	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
Ethylene Dibromide	µg/L	0.19	0.2	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
Methyl Ethyl Ketone	µg/L	10	21000	<10	<10	<10	<10	<10	<10
Methylene Chloride	µg/L	2	26	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
Methyl Isobutyl Ketone	µg/L	5	5200	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Methyl-t-Butyl Ether	µg/L	0.5	15	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
Styrene	µg/L	0.4	43	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
1,1,1,2-Tetrachloroethane	µg/L	0.5	1.10E+00	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
1,1,2,2-Tetrachloroethane	µg/L	0.4	0.5	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
Toluene	µg/L	0.2	320	0.33	0.28	<0.20	<0.20	<0.20	<0.20
Tetrachloroethylene	µg/L	0.2	0.5	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
1,1,1-Trichloroethane	µg/L	0.2	23	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
1,1,2-Trichloroethane	µg/L	0.4	0.5	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
Trichloroethylene	µg/L	0.2	0.5	<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	0.29	<0.20	<0.20	<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	72	<0.20	0.29	<0.20	<0.20	<0.20	<0.20
Dichlorodifluoromethane	µg/L	1	3500	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Dioxane, 1,4-	µg/L	-	190000	-	-	-	-	-	-
Hexane(n)	µg/L	1	5	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Trichlorofluoromethane	µg/L	0.5	2000	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
1,3-Dichloropropene (cis + trans)	µg/L	0.5	0.5	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
<b>Polycyclic Aromatic Hydrocarbons</b>									
Acenaphthene	µg/L	0.05	17	<0.050	<0.050	<0.050	<0.050	<0.050	-
Acenaphthylene	µg/L	0.05	1	<0.050	<0.050	<0.050	<0.050	<0.050	-
Anthracene	µg/L	0.05	1	<0.050	<0.050	<0.050	<0.050	<0.050	-
Benz(a)anthracene	µg/L	0.05	1.8	<0.050	<0.050	<0.050	<0.050	<0.050	-
Benzo(a)pyrene	µg/L	0.009	0.81	<0.0090	<0.0090	0.022	<0.0090	<0.0090	-
Benzo(b+j)fluoranthene	µg/L	0.05	0.75	<0.050	<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	<0.050	-
Benzo(k)fluoranthene	µg/L	0.05	0.4	<0.050	<0.050	<0.050	<0.050	<0.050	-
Chrysene	µg/L	0.05	0.7	<0.050	<0.050	<0.050	<0.050	<0.050	-
Dibenz(a,h)anthracene	µg/L	0.05	0.4	<0.050	<0.050	<0.050	<0.050	<0.050	-
Fluoranthene	µg/L	0.05	44	<0.050	<0.050	<0.050	<0.050	<0.050	-
Fluorene	µg/L	0.05	290	<0.050	<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	<0.050	-
Methylnaphthalene, 1+2-	µg/L	0.071	1500	<0.071	<0.071	<0.071	<0.071	<0.071	-
Methylnaphthalene, 1-	µg/L	0.05	1500	<0.050	<0.050	<0.050	<0.050	<0.050	-
Methylnaphthalene, 2-	µg/L	0.05	1500	<0.050	<0.050	<0.050	<0.050	<0.050	-
Naphthalene	µg/L	0.05	7	<0.050	<0.050	<0.050	<0.050	<0.050	-
Phenanthrene	µg/L	0.03	380	0.033	0.037	0.035	<0.030	<0.030	-
Pyrene	µg/L	0.05	5.7	<0.050	<0.050	<0.050	<0.050	<0.050	-
<b>Metals</b>									
Antimony	µg/L	0.5	1.5	3.2	2.7	3.6	3.6	3.6	-
Arsenic	µg/L	1.0	13	2	1.9	4.8	4.7	4.7	-
Barium	µg/L	2.0	610	33	47	120	130	130	-
Beryllium	µg/L	0.4	0.5	<0.40	<0.40	<0.40	<0.40	<0.40	-
Boron	µg/L	10	1700	340	2900	230	230	230	-
Cadmium	µg/L	0.1	0.5	<0.090	<0.090	<0.090	<0.090	<0.090	-
Chromium	µg/L	5	11	<5.0	<5.0	<5.0	<5.0	<5.0	-
Chromium, hexavalent [Cr VI]	µg/L	0.5	25	<0.50	<0.50	<0.50	<0.50	<0.50	-
Cobalt	µg/L	0.5	3.8	0.7	<0.50	0.58	0.65	0.65	-
Copper	µg/L	0.9	5	3.5	2.7	3	4.9	4.9	-
Lead	µg/L	0.5	1.9	5	0.62	<0.50	2.1	2.1	-
Mercury	µg/L	0.1	0.1	<0.10	<0.10	<0.10	<0.10	<0.10	-
Molybdenum	µg/L	0.5	23	48	55	81	79	79	-
Nickel	µg/L	1	14	1.3	2	2.2	2.6	2.6	-
Selenium	µg/L	2.0	5	<2.0	2.9	<2.0	<2.0	<2.0	-
Silver	µg/L	0.1	0.3	<0.090	<0.090	<0.090	<0.090	<0.090	-
Sodium	µg/L	500.0	4.90E+05	330000	240000	870000	900000	900000	-
Thallium	µg/L	0.05	0.5	<0.050	<0.050	0.066	0.064	0.064	-
Uranium	µg/L	0.5	3.9	0.79	0.66	0.93	1	1	-
Vanadium	µg/L	0.1	8.9	2.3	1.7	13	13	13	-
Zinc	µg/L	5.0	160	28	<5.0	<5.0	11	11	-
<b>General Inorganics</b>									
Chloride	µg/L	5	2300	370	170	1100	1100	1100	-
Cyanide, free	µg/L	1	66	<1	<1	<1	<1	<1	-

NV - No value listed in MECP site condition standards

- - Not Analyzed

ND - Not detected above laboratory method detection limits

Exceeds MECP site condition standards

LOP25-035B

## Appendix A

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# Sampling and Analysis Plan

# Sampling and Analysis Plan

Parkdale 3 Lands  
131 & 139 Parkdale Avenue  
and 122 Forward Avenue  
Ottawa, Ontario

Prepared for:  
11034936 Canada Inc.



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# 1. Background

Lopers & Associates (Lopers) was retained by 11034936 Canada Inc. (Brigil) to complete a Phase Two Environmental Site Assessment (Phase Two ESA) of the residential properties with Civic address Nos. 131 & 139 Parkdale Avenue and 122 Forward Avenue Street, Ottawa, Ontario (“Phase Two Property”, “Property” or “Site”).

Lopers has previously completed a Phase One Environmental Site Assessment (Phase One ESA) (Reference No. LOP26-035A, dated February 9, 2025) for Brigil at the Property. The Phase One ESA identified the presence of one potentially contaminating activity (PCA) at the Property which was interpreted to represent an area of potential environmental concern (APEC).

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

PCA / APEC Report Reference No.	Potentially Contaminating Activity	Location	Potential Contaminants of Concern
PCA #1 APEC #1	Presence of Poor Environmental Quality Fill Material, suspected to have been used for historical grading of the Site  (O.Reg. 153/04 PCA Item 30: Importation of Fill Material of Unknown Quality)	Entirety of the Phase Two Property not developed with structures	PHCs/BTEXs, PAHs, Metals & Inorganics

Based on the identification of APECs at the Phase One Property and the requirement for documentation, 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 11 boreholes at the Phase Two Property. Four of the boreholes were instrumented with groundwater monitoring wells with screens installed in the limestone bedrock. Additional excess soil characterization sampling and analysis was completed concurrently with this Phase Two ESA, for future planning purposes.

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.

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 five 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 fill material (APEC #1).

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 5-6 m to intercept the groundwater table in APECs where groundwater quality assessment is required. Boreholes are proposed to be drilled to a depth of approximately 3 m where an assessment of the fill quality 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.

The presence of an historic backfill of suspected poor environmental quality at the Phase One Property is interpreted as PCA #1 associated with the O.Reg. 153/04 PCA: Importation of Fill Material of Unknown Quality and represents APEC #1 for the Property. The contaminants of potential concern (CPCs) associated with the historical fill are petroleum hydrocarbons (PHCs), benzene, toluene, ethylbenzene and xylenes (BTEXs), polycyclic aromatic hydrocarbons (PAHs) and metals & inorganics.

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, PAHs and metals & inorganics which are the parameter suites identified as a contaminants of concern in APECs #1 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 George Downing Estate Drilling Ltd., located at 410 Principale Rue, Grenville-Sur-la-Rouge, Quebec, J0V 1B0. The drill rig used for the Phase Two ESA will be a track mounted CME drill, equipped with hollow stem augers and stainless steel split spoons. The boreholes / monitoring wells located on the interior of the Site building will be drilled using a potable drill and tripod set-up, with sample collection

using 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 prevent 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

An elevation survey was completed of the boreholes/monitoring wells drilled at the Phase Two Property by Paterson Group Inc. on December 2, 2025. The boreholes drilled on December 3, 2025 for general Site coverage were referenced to the nearest approximate surveyed location of the July 21, 2025 Annis, O'Sullivan, Vollebakk Ltd. survey. The top of piezometer of each monitoring well should also be surveyed; this allows for higher accuracy in the interpretation of groundwater elevations.

#### 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, while metals samples are to be field filtered using a dedicated 0.45 µm filter for each sample.

## Appendix B

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# Underground Utility Locates

**From:** [solutions@on1call.com](mailto:solutions@on1call.com)  
**To:** [Luke Lopers](#)  
**Subject:** Request 20254314690  
**Date:** October 23, 2025 4:32:54 AM



# LOCATE REQUEST CONFIRMATION

<b>REQUEST #:</b> 20254314690	<b>REQUEST PRIORITY:</b> PROJECT WORK	<b>REQUEST TYPE:</b> REGULAR	<b>WORK TO BEGIN DATE:</b> 11/06/2025
<b>Update of Request #</b>	<b>Project #:LOP25-035B</b>	<b>Call Date: 10/23/2025 04:22:30 AM</b>	<b>Transmit Date: 10/23/2025 04:32:06 AM</b>

REQUESTOR'S CONTACT INFORMATION	
<b>Contractor ID:</b> 343253 <b>Contact Name:</b> LUKE LOPERS <b>Company Name:</b> LOPERS & ASSOCIATES <b>Address:</b> 30 LANSFIELD WAY, OTTAWA, ON, K2G3V8 <b>Email:</b> Luke@Lopers.ca <b>Primary Phone #:</b> (613) 327-9073 <b>Cell Phone #:</b> (613) 327-9073	<b>Contact Name:</b> LUKE LOPERS <b>Contact #:</b> (613) 327-9073

DIG INFORMATION		
<b>Region/County:</b> OTTAWA  <b>Community:</b>  <b>City:</b> OTTAWA <b>Address:</b> 131, PARKDALE AVE <b>Intersecting Street 1:</b> BURNSIDE AVE <b>Intersecting Street 2:</b> TUNNEYS PASTURE	<b>Work Done for:</b> PROPERTY OWNER <b>Reason for Work:</b> ENVIRONMENTAL <b>Dig Method:</b> Machine Dig <b>Depth:</b> More than 15 Feet	<b>Pre-Marked:</b> Other - Details in Additional Information <b>Property Type:</b> Private Property, Public Property <b>Site Meeting:</b> No <b>Permit #:</b> No <b>Work End Date:</b> 12/20/2025

ADDITIONAL INFORMATION	QUALIFYING INFORMATION

DRILLING 12 BOREHOLES FOR ENVIRONMENTAL DELINEATION. EXPECTED SHALLOW BEDROCK. EASEMENT/LANEWAY BETWEEN 122 FORWARD AVENUE AND PARKDALE PROPERTIES IS CITY OWNED, BUT INCLUDED IN THE SITE DEVELOPMENT - IF SERVICE TRENCHES EXIST, PLEASE INDICATE SERVICE LOCATIONS AND SUGGESTED MOVEMENT OF PROPOSED BOREHOLE LOCATIONS. ATTEMPTED TO MARK DRILLING AREAS WITH ORANGE PAINT...IN THE RAIN, THE PAINT MAY HAVE FADED.

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

Member Name	Station Code	Initial Status
HYDRO OTTAWA (HOT1)	HOT1	Notification sent
PROMARK FOR ENBRIDGE GAS (ENOE01)	ENOE01	Notification sent
BELL CANADA (BCOE01)	BCOE01	Notification sent
CITY OF OTTAWA WATER/SEWER (OTWAWS01)	OTWAWS01	Notification sent
PROMARK FOR TELUS (TELOE01)	TELOE01	Notification sent
CLI FOR ROGERS (ROGOTT01)	ROGOTT01	Notification sent
CITY OF OTTAWA TRAFFIC SIGNALS (OTWATS01)	OTWATS01	Notification sent

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



Google  
 Name: 3 Property Site  
 Start Date: 2025/11/07  
 Area: 2396.27sq. m

Map data ©2025 Google



**LEGEND**  
 ◆ Borehole with Monitoring Well  
 ◆ Borehole to bedrock



**Figure 1: Proposed Borehole Location Plan**  
 Phase Two Environmental Site Assessment  
 131 Parkdale Avenue, Ottawa, Ontario  
 11034936 Canada Inc.

Project Reference No: LOP25-035B  
 Drawing No.: LOP25-035B-1  
 Date: October 7, 2025  
 Author: L. Lopers  
 Source: geoOttawa

## IMPORTANT INFORMATION: Please read.

### Defining "NC" - Non-Compliant

- Non-compliant members have not met their obligations under section 5 of the Ontario Underground Infrastructure Notification Act. ON1Call has notified these members to ensure they are aware of your excavation. In this circumstance, should the member not respond, the excavator should contact the member directly to obtain 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](http://www.ontarioonecall.ca).

3. All drawings dictate which members are notified.





Auxiliary Locate Sheet

OTTLocateFollowup@Promark-Telecon.ca

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

Location of underground infrastructures

Utilities Located :	Date Located:	Request #
<input type="checkbox"/> Bell <input checked="" type="checkbox"/> Gas <input type="checkbox"/> BHT 360 <input type="checkbox"/> Telus Rogers <input type="checkbox"/> Hydro One Elexicon <input type="checkbox"/> Videotron <input type="checkbox"/> Hydro Ottawa <input type="checkbox"/> Zayo	NOV-03-25 <small>mm/dd/yyyy</small>	20254314690

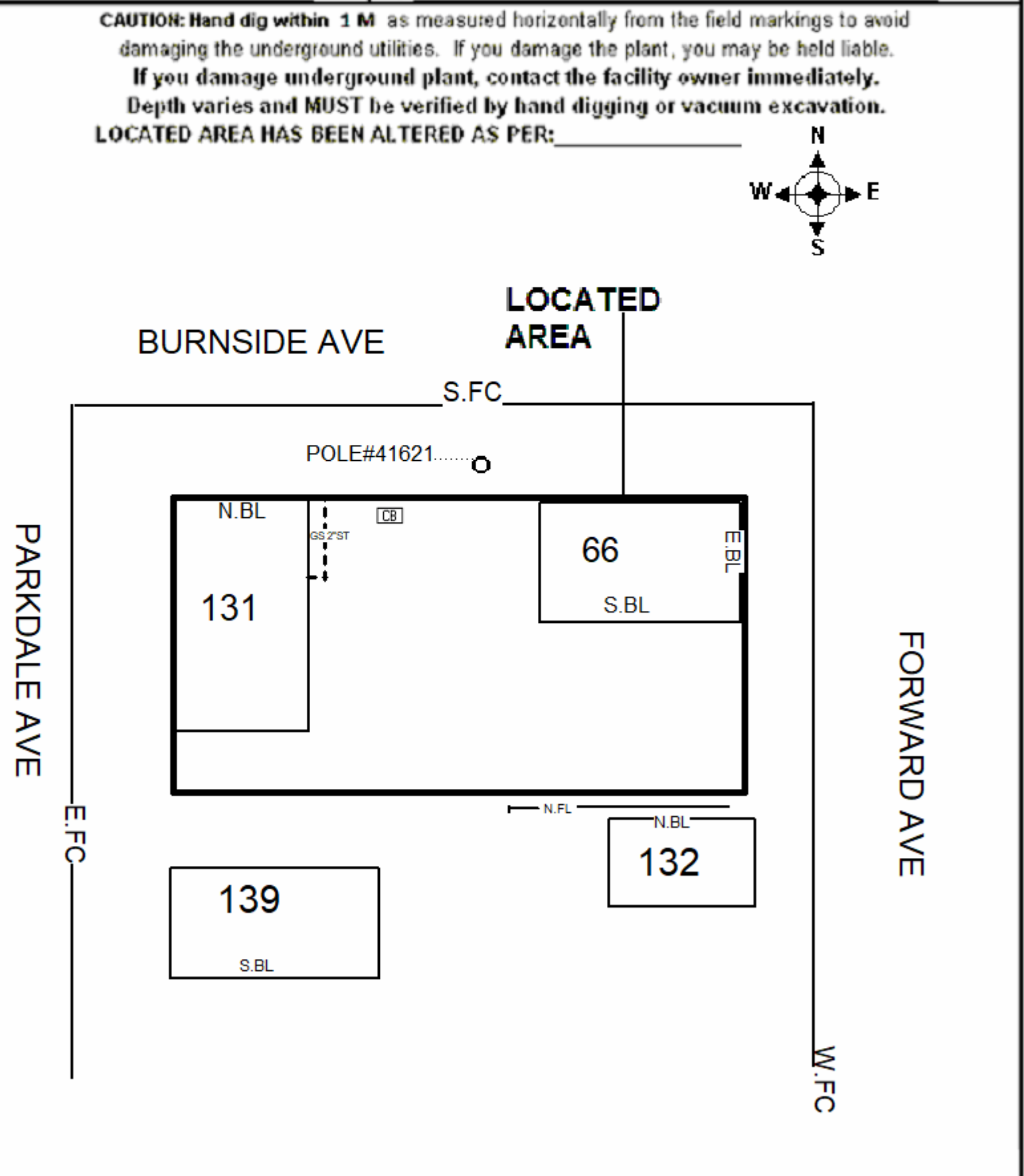
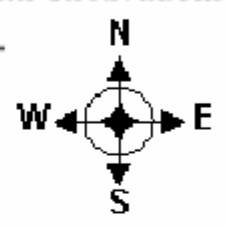
Number of Services marked: (Specify building/house numbers) 1@ 131 PARKDALE AVE

LOCATED AREA: EXCAVATOR SHALL NOT WORK OUTSIDE THE LOCATED AREA WITHOUT OBTAINING ANOTHER LOCATE

FROM: N.BL 131 PARKDALE AVE	TO: 1.0M N.OF N.FL 132 FORWARD AVE
FROM: E.BL 66 FORWARD AVE	TO: W.BL 131 PARKDALE AVE

- Legend
- Building Line -- BL --
  - Fence Line -- FL --
  - Face of Curb -- FC --
  - Asphalt Edge -- AE --
  - Sidewalk -- SW --
  - Driveway -- DW --
  - Manhole
  - Pedestal
  - Buried Cable TV -- TV --
  - Flush to Grade Pedestal
  - Buried Service Wire -- BSW --
  - Buried Cable -- B --
  - Conduit -- C --
  - Fiber Optic Cable -- FO --
  - Bell Hydro Service -- BH --
  - Gas Valve
  - Gas Service -- GS --
  - Gas Main -- GM --
  - Transformer
  - Demarcation
  - Hydro -- H --
  - Hydro Primary -- HP --
  - Hydro Secondary -- HS --
  - Catch Basin
  - Sewer Manhole
  - Water Valve
  - Hydrant
  - Water Valve Chamber
  - Hydro / Bell Pole
  - Hand Well
  - End Cap
  - Traffic Manhole
  - Street Light Cable -- SL --
  - Street Light
  - North N.
  - East E.
  - West W.
  - South S.
  - Gas Material - Steel ST
  - Plastic PE
  - Copper CP

**CAUTION: Hand dig within 1 M** as measured horizontally from the field markings to avoid damaging the underground utilities. If you damage the plant, you may be held liable. If you damage underground plant, contact the facility owner immediately. Depth varies and **MUST** be verified by hand digging or vacuum excavation. LOCATED AREA HAS BEEN ALTERED AS PER: \_\_\_\_\_



Refer to CCGA Excavator Caution on Supplemental Locate Sheet  
**THIS FORM VALID ONLY WITH Primary Locate Form. This sketch is not to scale**  
 Any privately owned services within the located area have not been marked- check with service/property owner.

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. If sketch and markings do not coincide, the Excavator must obtain a new locate.



Auxiliary Locate Sheet

OTTLocateFollowup@Promark-Telecon.ca

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

Location of underground infrastructures

Utilities Located : <input checked="" type="checkbox"/> Bell <input type="checkbox"/> Gas <input type="checkbox"/> BHT 360 <input type="checkbox"/> Telus Rogers <input type="checkbox"/> Hydro One Elexicon <input type="checkbox"/> Videotron <input type="checkbox"/> Hydro Ottawa <input type="checkbox"/> Zayo	Date Located: NOV-03-25 <small>mm/dd/yyyy</small>	Request # 20254314690
---	---	--------------------------

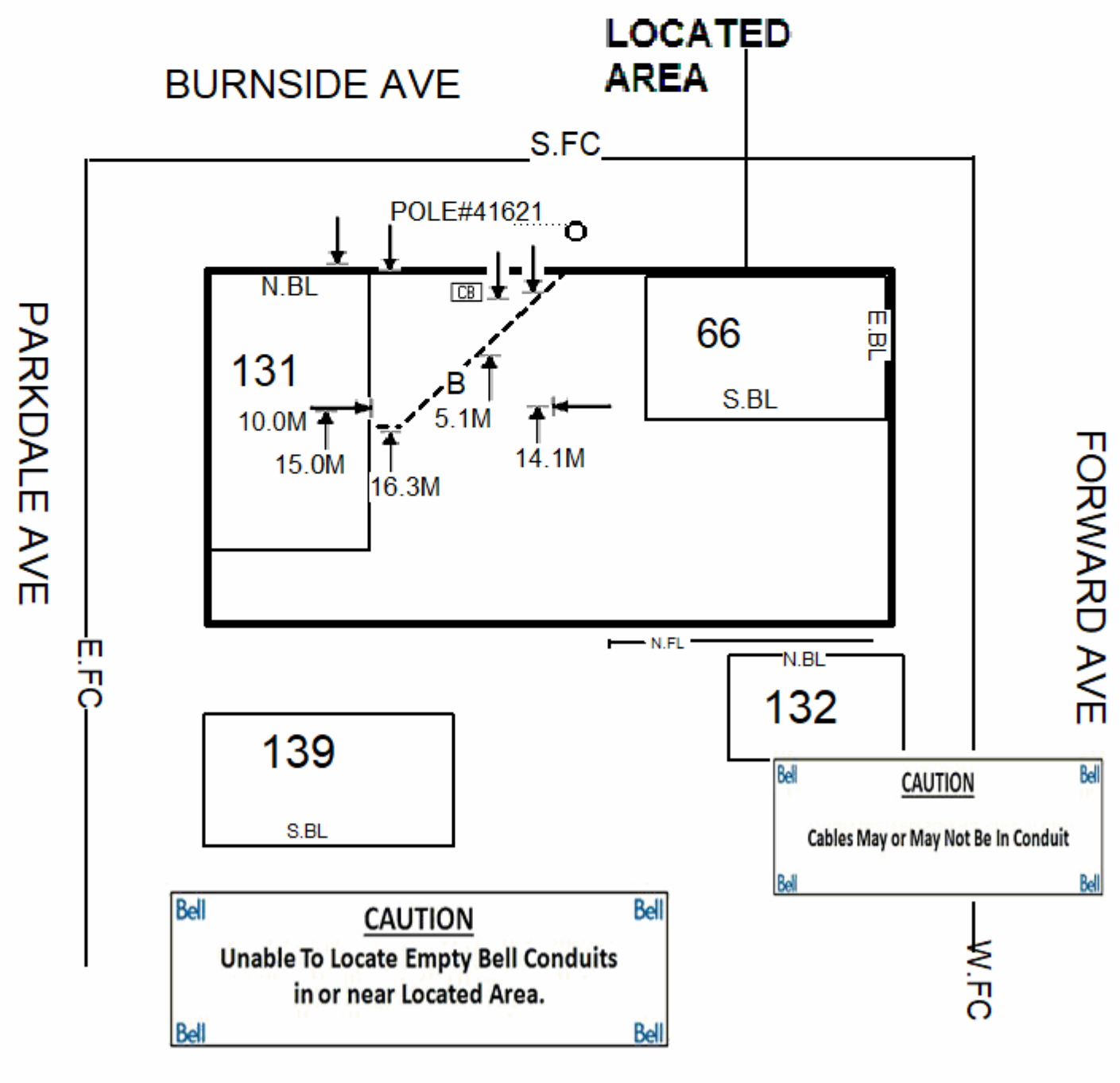
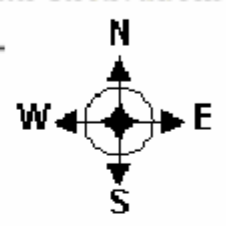
Number of Services marked: (Specify building/house numbers) 0

**LOCATED AREA: EXCAVATOR SHALL NOT WORK OUTSIDE THE LOCATED AREA WITHOUT OBTAINING ANOTHER LOCATE**

FROM: N.BL 131 PARKDALE AVE	TO: 1.0M N.OF N.FL 132 FORWARD AVE
FROM: E.BL 66 FORWARD AVE	TO: W.BL 131 PARKDALE AVE

- Legend
- Building Line -- BL --
  - Fence Line -- FL --
  - Face of Curb -- FC --
  - Asphalt Edge -- AE --
  - Sidewalk -- SW --
  - Driveway -- DW --
  - Manhole
  - Pedestal
  - Buried Cable TV -- TV --
  - Flush to Grade Pedestal
  - Buried Service Wire -- BSW --
  - Buried Cable -- B --
  - Conduit -- C --
  - Fiber Optic Cable -- FO --
  - Bell Hydro Service -- BH --
  - Gas Valve
  - Gas Service -- GS --
  - Gas Main -- GM --
  - Transformer
  - Demarcation
  - Hydro -- H --
  - Hydro Primary -- HP --
  - Hydro Secondary -- HS --
  - Catch Basin
  - Sewer Manhole
  - Water Valve
  - Hydrant
  - Water Valve Chamber
  - Hydro / Bell Pole
  - Hand Well
  - End Cap
  - Traffic Manhole
  - Street Light Cable -- SL --
  - Street Light
  - North N.
  - East E.
  - West W.
  - South S.
  - Gas Material - Steel ST
  - Plastic PE
  - Copper CP

**CAUTION: Hand dig within 1 M** as measured horizontally from the field markings to avoid damaging the underground utilities. If you damage the plant, you may be held liable. If you damage underground plant, contact the facility owner immediately. Depth varies and **MUST** be verified by hand digging or vacuum excavation. LOCATED AREA HAS BEEN ALTERED AS PER: \_\_\_\_\_



Refer to CCGA Excavator Caution on Supplemental Locate Sheet  
**THIS FORM VALID ONLY WITH Primary Locate Form. This sketch is not to scale**  
 Any privately owned services within the located area have not been marked- check with service/property owner.

**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. If sketch and markings do not coincide, the Excavator must obtain a new locate.**



Auxiliary Locate Sheet

OTTLocateFollowup@Promark-Telecon.ca

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

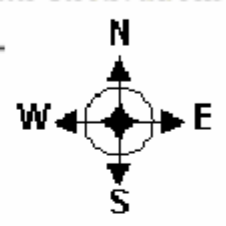
Utilities Located: <input checked="" type="checkbox"/> Hydro Ottawa	Date Located: mm/dd/yyyy NOV-03-25	Request # 20254314890
---	---------------------------------------	--------------------------

Number of Services marked: (Specify building/house numbers) N/A

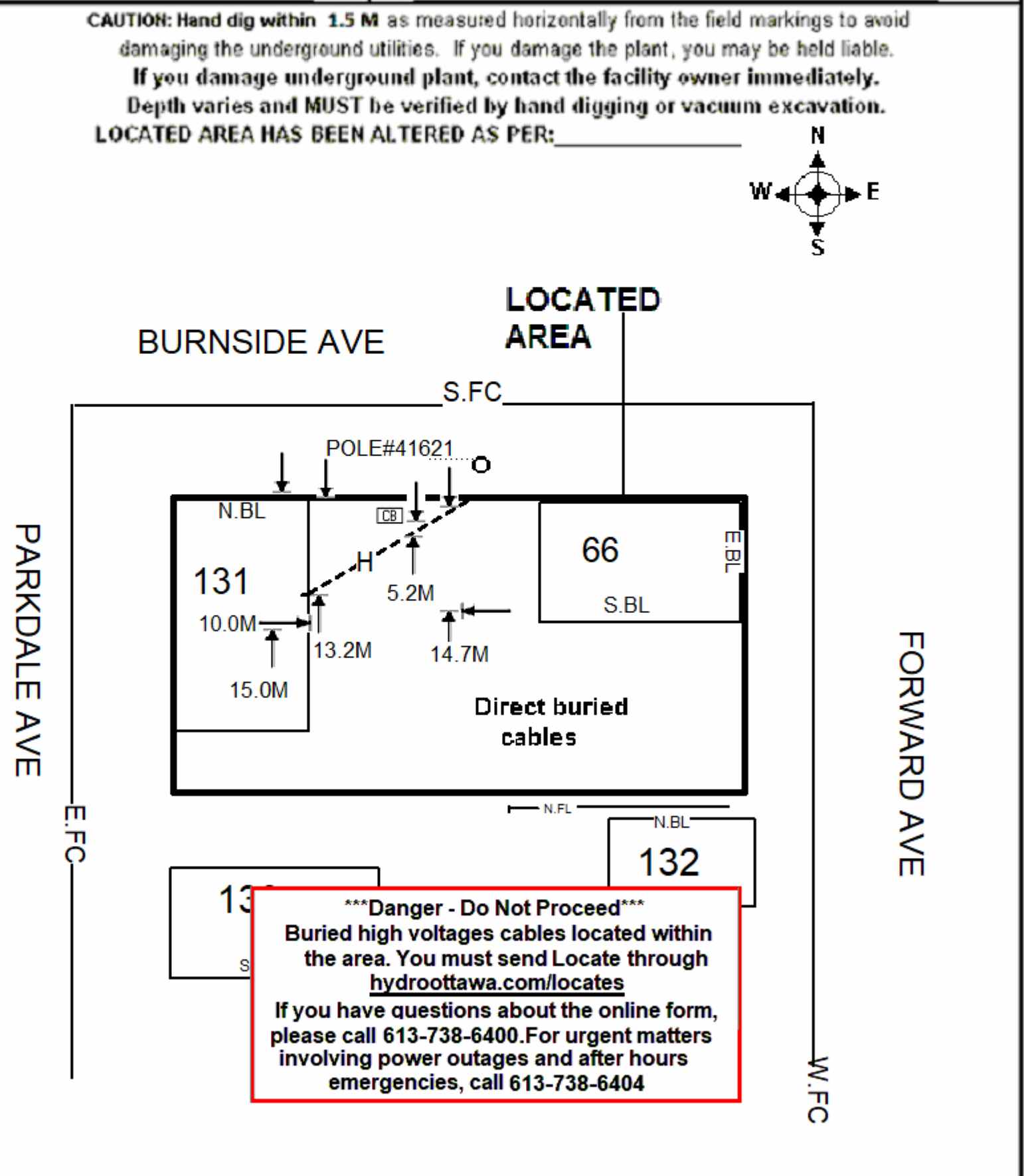
LOCATED AREA: EXCAVATOR SHALL NOT WORK OUTSIDE THE LOCATED AREA WITHOUT OBTAINING ANOTHER LOCATE

FROM: N.BL 131 PARKDALE AVE	TO: 1.0M N.OF N.FL 132 FORWARD AVE
FROM: E.BL 66 FORWARD AVE	TO: W.BL 131 PARKDALE AVE

**CAUTION: Hand dig within 1.5 M** as measured horizontally from the field markings to avoid damaging the underground utilities. If you damage the plant, you may be held liable. **If you damage underground plant, contact the facility owner immediately. Depth varies and MUST be verified by hand digging or vacuum excavation.**  
 LOCATED AREA HAS BEEN ALTERED AS PER: \_\_\_\_\_



- Legend**
- Building Line -- BL --
  - Fence Line -- FL --
  - Face of Curb -- FC --
  - Asphalt Edge -- AE --
  - Sidewalk -- SW --
  - Driveway -- DW --
  - Manhole
  - Pedestal
  - Buried Cable TV -- TV --
  - Flush to Grade Pedestal
  - Buried Service Wire -- BSW --
  - Buried Cable -- B --
  - Conduit -- C --
  - Fiber Optic Cable -- FO --
  - Bell Hydro Service -- BH --
  - Gas Valve
  - Gas Service -- GS --
  - Gas Main -- GM --
  - Transformer
  - Demarcation
  - Hydro -- H --
  - Hydro Primary -- HP --
  - Hydro Secondary -- HS --
  - Catch Basin
  - Sewer Manhole
  - Water Valve
  - Hydrant
  - Water Valve Chamber
  - Hydro / Bell Pole
  - Railway
  - End Cap
  - Traffic Manhole
  - Street Light Cable -- SL --
  - Street Light
  - North N.
  - East E.
  - West W.
  - South S.



**\*\*\*Danger - Do Not Proceed\*\*\***  
 Buried high voltages cables located within the area. You must send Locate through [hydroottawa.com/locates](http://hydroottawa.com/locates)  
 If you have questions about the online form, please call 613-738-6400. For urgent matters involving power outages and after hours emergencies, call 613-738-6404

THIS FORM VALID ONLY WITH Primary Locate Form. This sketch is not to scale.  
 Any privately owned services within the located area have not been marked- check with service/property owner.

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. If sketch and markings do not coincide, the Excavator must obtain a new locate.  
 This form revised January 2023

**TELUS**  
Auxiliary Locate Sheet

Request #: 20254314690

Utilities Located :

Telecom (TELUS)

RURAL  URBAN

Date Located : NOV-03-25

Number of Services marked : (Specify building/house numbers)

**LOCATED AREA: EXCAVATOR SHALL NOT WORK OUTSIDE THE LOCATED AREA WITHOUT OBTAINING ANOTHER LOCATE**

**From:** N.BL 131 PARKDALE AVE

**To:** 1.0M N.OF N.FL 132 FORWARD AVE

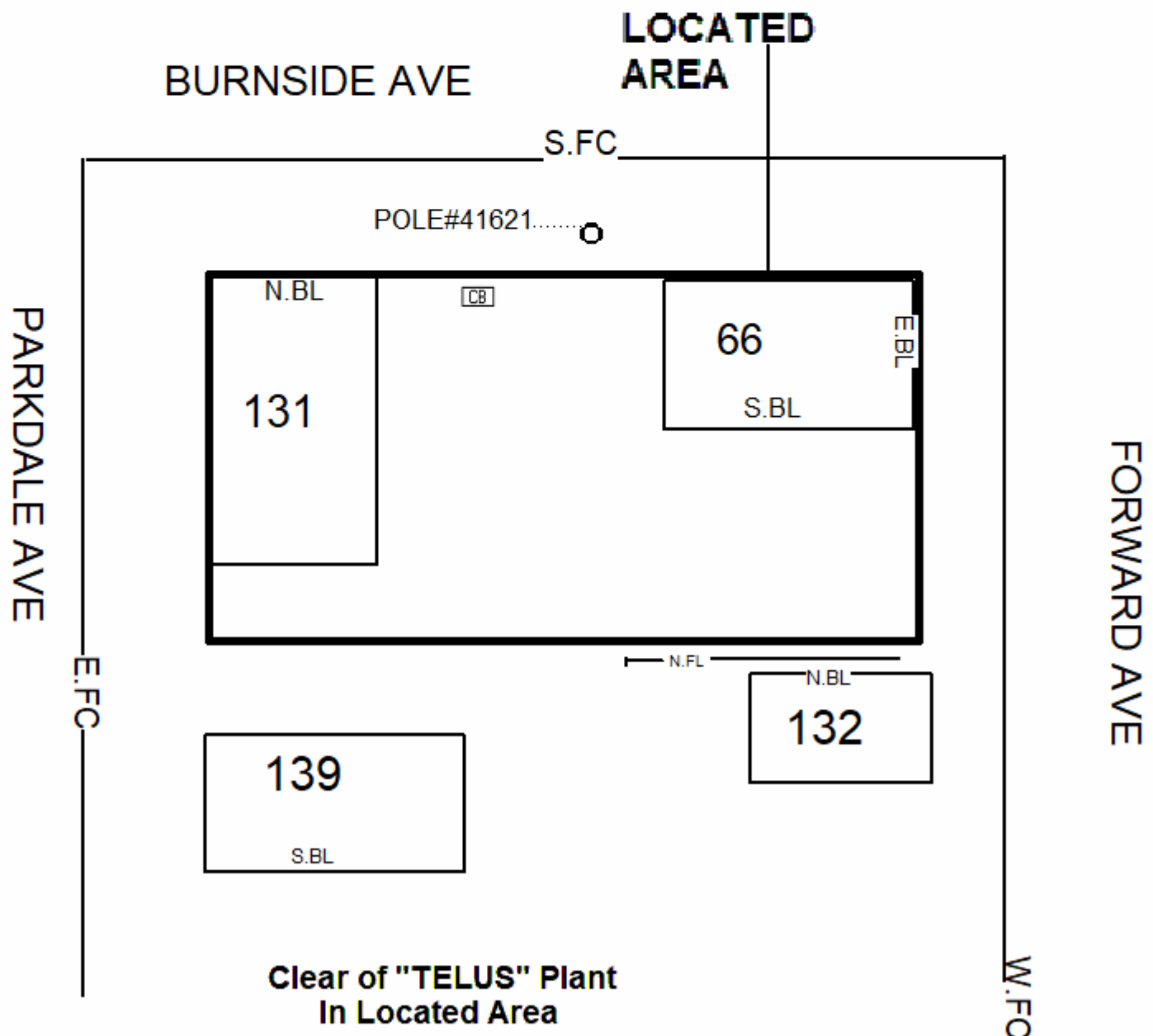
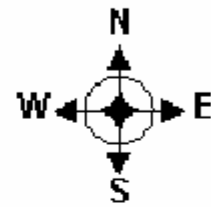
**From:** E.BL 66 FORWARD AVE

**To:** W.BL 131 PARKDALE AVE

- Legend**
- Building Line -- BL --
  - Fence Line -- FL --
  - Face of Curb -- FC --
  - Asphalt Edge -- AE --
  - Sidewalk SW
  - Driveway -- DW --
  - Manhole M/H
  - Pedestal
  - Buried Cable TV -- TV --
  - Flush to Grade Pedestal FTG
  - Buried Service Wire -- BSW --
  - Buried Cable -- B --
  - Conduit -- C --
  - Fiber Optic Cable -- FO --
  - Bell Hydro Service -- BH --
  - Gas Valve
  - Gas Service -- GS --
  - Gas Main -- GM --
  - Transformer
  - Demarcation DM
  - Hydro -- H --
  - Hydro Primary -- HP --
  - Hydro Secondary -- HS --
  - Catch Basin CB
  - Sewer Manhole
  - Water Valve
  - Hydrant
  - Water Valve Chamber W
  - Hydro / Bell Pole
  - Hand Well HW
  - End Cap
  - Traffic Manhole
  - Street Light Cable -- SL --
  - Street Light
  - North N.
  - East E.
  - West W.
  - South S.
  - Gas Material - Steel ST
  - Plastic PE
  - Copper CP

LOCATED AREA HAS BEEN ALTERED AS PER:

All underground (buried) facilities must be exposed by HAND DIGGING or approved HYDROVAC method before excavating with MACHINERY. Any damage **MUST** be reported to your provincial One Call Center immediately (In Quebec, Ontario and Atlantic Canada contact TELUS at, 1-800-980-0030)



Sketch is not to scale and locate marks are only temporary, refer to CCGA Excavator Caution on Supplemental Locate Sheet. Any privately owned services, including sewer service lines, within the located area have not been marked - check with the service/property owner.

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.



Auxiliary Locate Sheet

OTTLocateFollowup@Promark-Telecon.ca

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

Location of underground infrastructures

Utilities Located:	Date Located:	Request #
<input type="checkbox"/> Bell <input checked="" type="checkbox"/> Gas <input type="checkbox"/> BHT 360 <input type="checkbox"/> Telus Rogers <input type="checkbox"/> Hydro One Elexicon <input type="checkbox"/> Videotron <input type="checkbox"/> Hydro Ottawa <input type="checkbox"/> Zayo	NOV-03-25 <small>mm/dd/yyyy</small>	20254314690

Number of Services marked: (Specify building/house numbers) 0

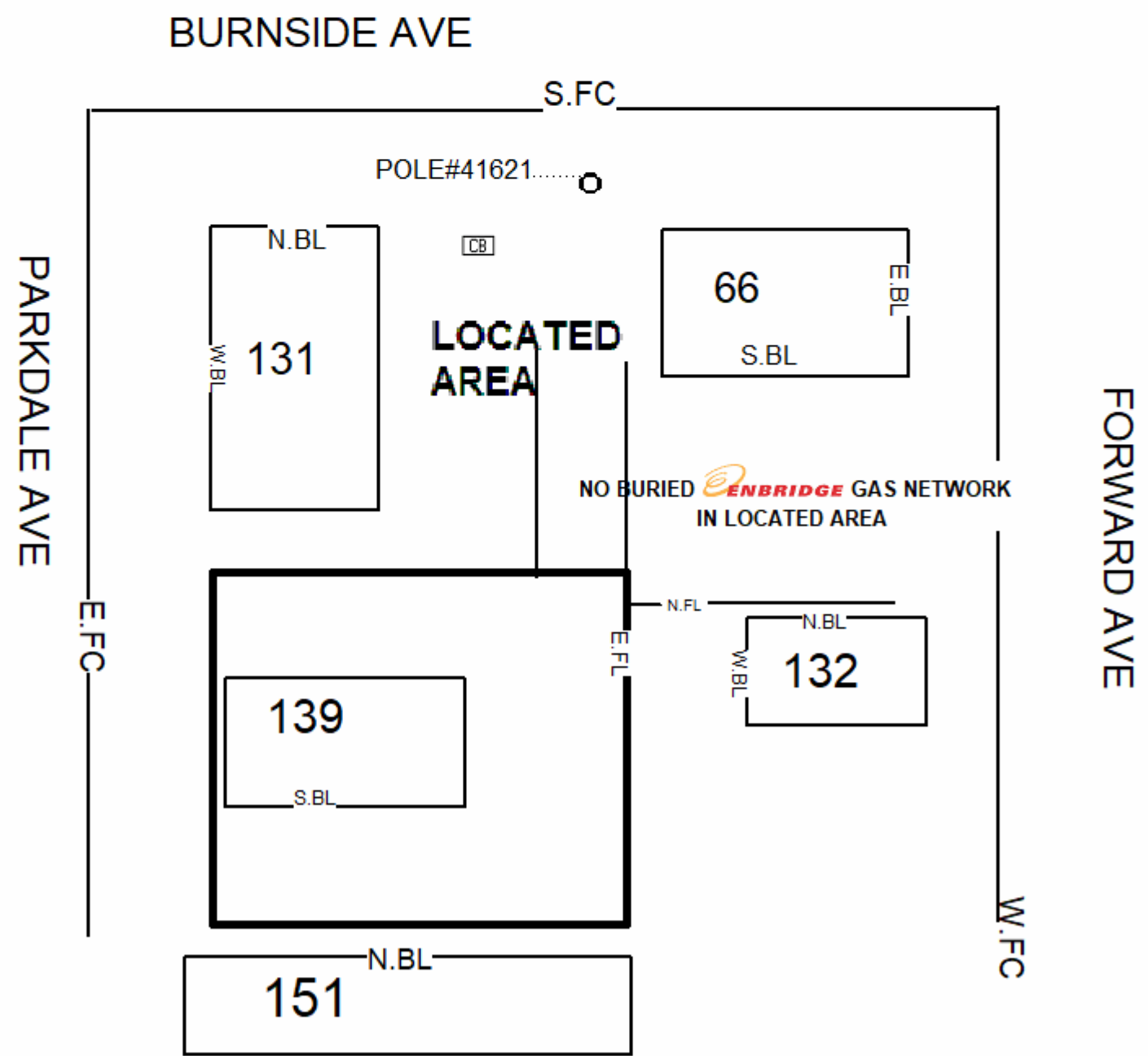
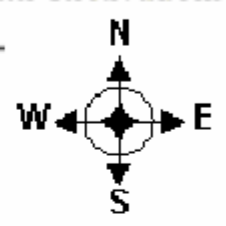
**LOCATED AREA: EXCAVATOR SHALL NOT WORK OUTSIDE THE LOCATED AREA WITHOUT OBTAINING ANOTHER LOCATE**

FROM: N.BL 151 PARKDALE AVE	TO: 1.0M N.OF N.FL 132 FORWARD AVE
FROM: W.BL 131 PARKDALE AVE	TO: E.FL 131 PARKDALE AVE

- Legend**
- Building Line -- BL --
  - Fence Line -- FL --
  - Face of Curb -- FC --
  - Asphalt Edge -- AE --
  - Sidewalk -- SW --
  - Driveway -- DW --
  - Manhole
  - Pedestal
  - Buried Cable TV -- TV --
  - Flush to Grade Pedestal
  - Buried Service Wire -- BSW --
  - Buried Cable -- B --
  - Conduit -- C --
  - Fiber Optic Cable -- FO --
  - Bell Hydro Service -- BH --
  - Gas Valve
  - Gas Service -- GS --
  - Gas Main -- GM --
  - Transformer
  - Demarcation
  - Hydro -- H --
  - Hydro Primary -- HP --
  - Hydro Secondary -- HS --
  - Catch Basin
  - Sewer Manhole
  - Water Valve
  - Hydrant
  - Water Valve Chamber
  - Hydro / Bell Pole
  - Hand Well
  - End Cap
  - Traffic Manhole
  - Street Light Cable -- SL --
  - Street Light
  - North N.
  - East E.
  - West W.
  - South S.
  - Gas Material - Steel ST
  - Plastic PE
  - Copper CP

**CAUTION: Hand dig within 1 M** as measured horizontally from the field markings to avoid damaging the underground utilities. If you damage the plant, you may be held liable. **If you damage underground plant, contact the facility owner immediately. Depth varies and MUST be verified by hand digging or vacuum excavation.**

**LOCATED AREA HAS BEEN ALTERED AS PER:** \_\_\_\_\_



Refer to CCGA Excavator Caution on Supplemental Locate Sheet  
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Auxiliary Locate Sheet

OTTLocateFollowup@Promark-Telecon.ca

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

Location of underground infrastructures

Utilities Located : <input checked="" type="checkbox"/> Bell <input type="checkbox"/> Gas <input type="checkbox"/> BHT 360 <input type="checkbox"/> Telus Rogers <input type="checkbox"/> Hydro One Elexicon <input type="checkbox"/> Videotron <input type="checkbox"/> Hydro Ottawa <input type="checkbox"/> Zayo	Date Located: NOV-03-25 <small>mm/dd/yyyy</small>	Request # 20254314690
---	---	--------------------------

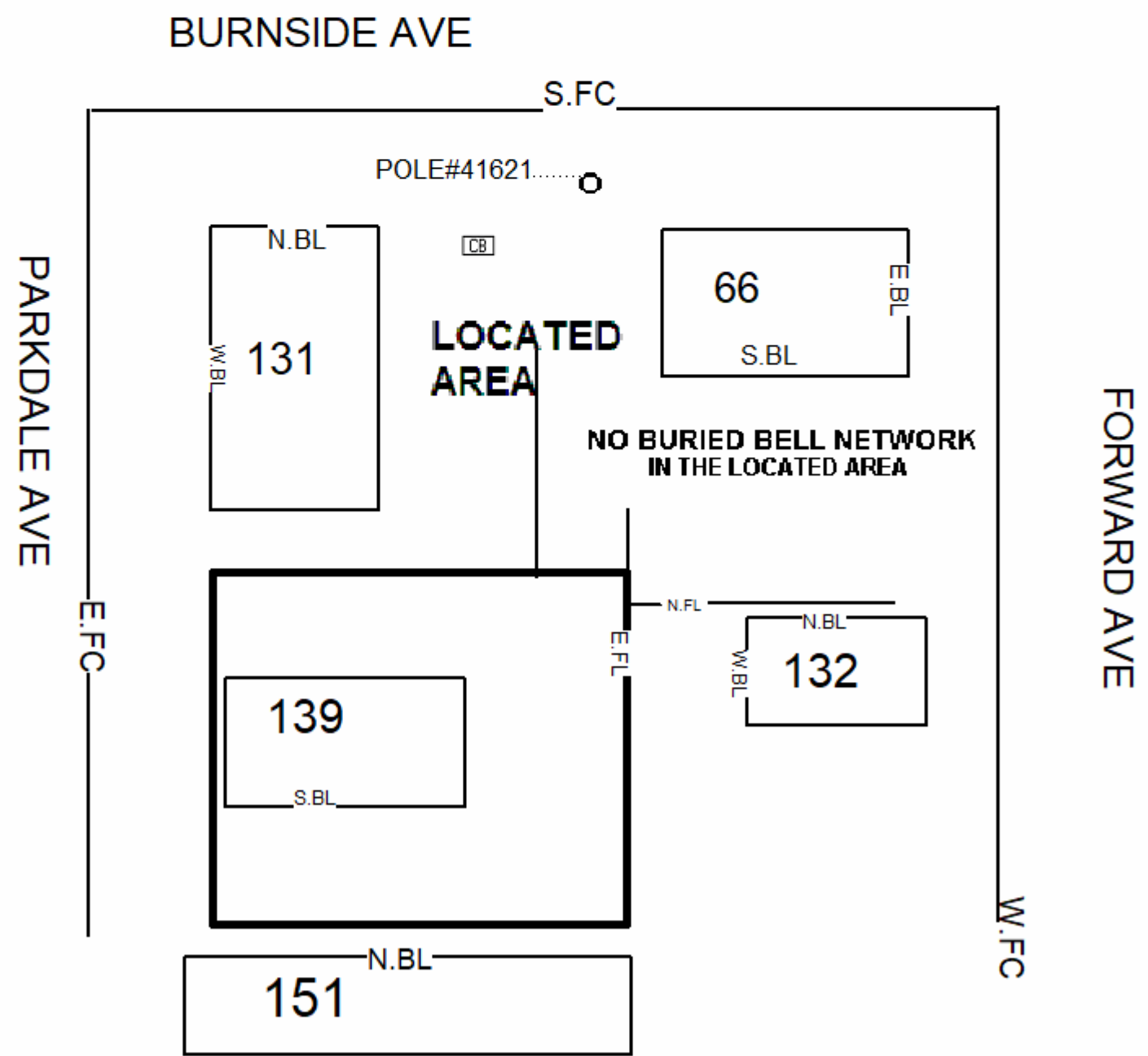
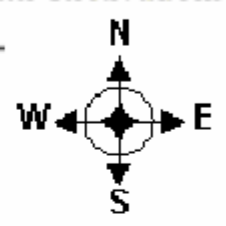
Number of Services marked: (Specify building/house numbers) 0

**LOCATED AREA: EXCAVATOR SHALL NOT WORK OUTSIDE THE LOCATED AREA WITHOUT OBTAINING ANOTHER LOCATE**

FROM: N.BL 151 PARKDALE AVE	TO: 1.0M N.OF N.FL 132 FORWARD AVE
FROM: W.BL 131 PARKDALE AVE	TO: E.FL 131 PARKDALE AVE

- Legend**
- Building Line -- BL --
  - Fence Line -- FL --
  - Face of Curb -- FC --
  - Asphalt Edge -- AE --
  - Sidewalk -- SW --
  - Driveway -- DW --
  - Manhole
  - Pedestal
  - Buried Cable TV -- TV --
  - Flush to Grade Pedestal
  - Buried Service Wire -- BSW --
  - Buried Cable -- B --
  - Conduit -- C --
  - Fiber Optic Cable -- FO --
  - Bell Hydro Service -- BH --
  - Gas Valve
  - Gas Service -- GS --
  - Gas Main -- GM --
  - Transformer
  - Demarcation
  - Hydro -- H --
  - Hydro Primary -- HP --
  - Hydro Secondary -- HS --
  - Catch Basin
  - Sewer Manhole
  - Water Valve
  - Hydrant
  - Water Valve Chamber
  - Hydro / Bell Pole
  - Hand Well
  - End Cap
  - Traffic Manhole
  - Street Light Cable -- SL --
  - Street Light
  - North N.
  - East E.
  - West W.
  - South S.
  - Gas Material - Steel ST
  - Plastic PE
  - Copper CP

**CAUTION: Hand dig within 1 M** as measured horizontally from the field markings to avoid damaging the underground utilities. If you damage the plant, you may be held liable. If you damage underground plant, contact the facility owner immediately. Depth varies and **MUST** be verified by hand digging or vacuum excavation. **LOCATED AREA HAS BEEN ALTERED AS PER:** \_\_\_\_\_



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Auxiliary Locate Sheet

OTTLocateFollowup@Promark-Telecon.ca

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

Utilities Located: <input checked="" type="checkbox"/> Hydro Ottawa	Date Located: mm/dd/yyyy NOV-03-25	Request # 20254314890
---	------------------------------------	-----------------------

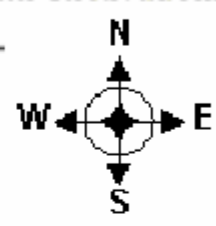
Number of Services marked: (Specify building/house numbers) N/A

**LOCATED AREA: EXCAVATOR SHALL NOT WORK OUTSIDE THE LOCATED AREA WITHOUT OBTAINING ANOTHER LOCATE**

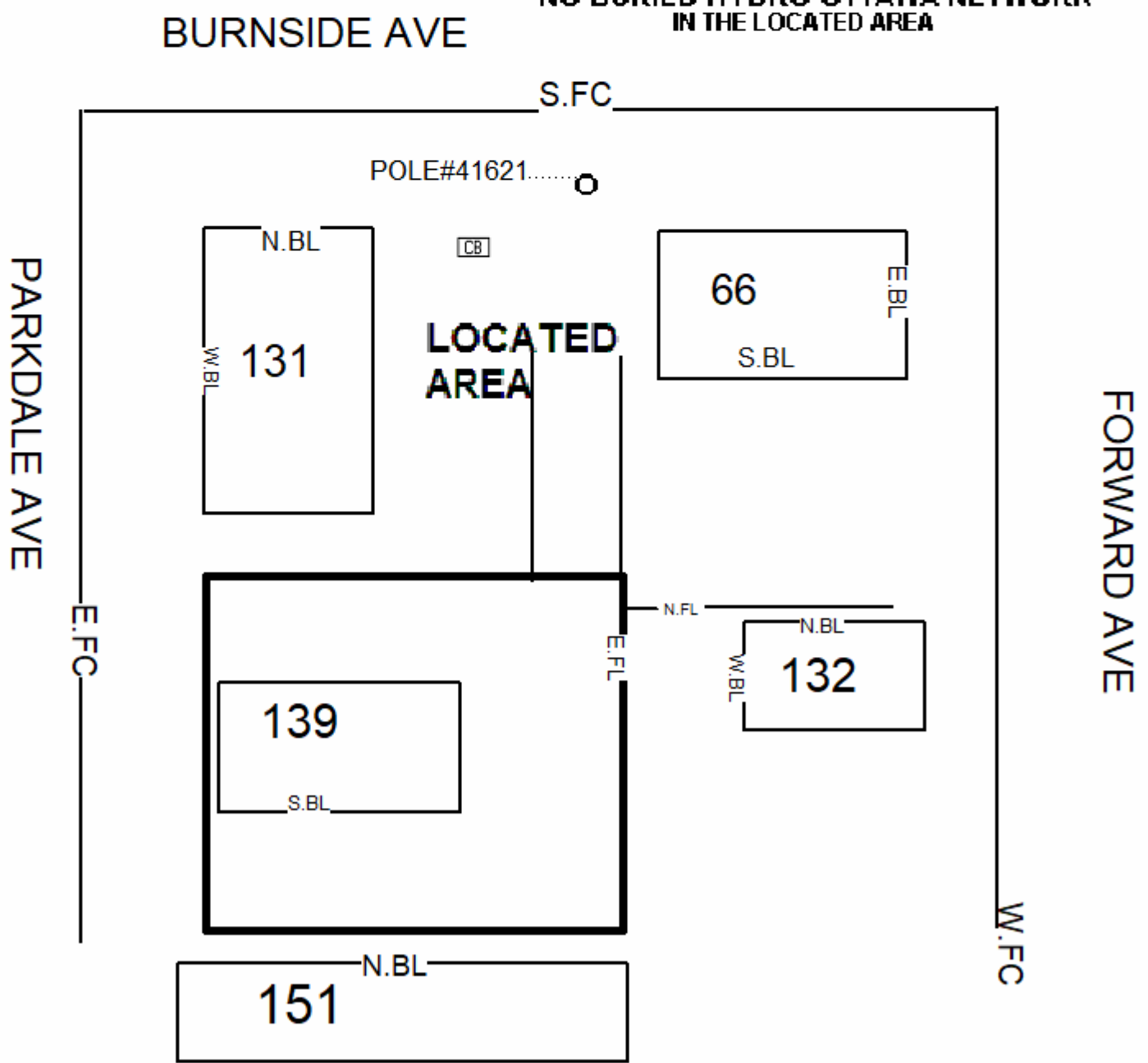
FROM: N.BL 151 PARKDALE AVE	TO: 1.0M N.OF N.FL 132 FORWARD AVE
FROM: W.BL 131 PARKDALE AVE	TO: E.FL 131 PARKDALE AVE

- Legend**
- Building Line -- BL --
  - Fence Line -- FL --
  - Face of Curb -- FC --
  - Asphalt Edge -- AE --
  - Sidewalk -- SW --
  - Driveway -- DW --
  - Manhole
  - Pedestal
  - Buried Cable TV -- TV --
  - Flush to Grade Pedestal
  - Buried Service Wire -- BSW --
  - Buried Cable -- B --
  - Conduit -- C --
  - Fiber Optic Cable -- FO --
  - Bell Hydro Service -- BH --
  - Gas Valve
  - Gas Service -- GS --
  - Gas Main -- GM --
  - Transformer
  - Demarcation
  - Hydro -- H --
  - Hydro Primary -- HP --
  - Hydro Secondary -- HS --
  - Catch Basin
  - Sewer Manhole
  - Water Valve
  - Hydrant
  - Water Valve Chamber
  - Hydro / Bell Pole
  - Railway
  - End Cap
  - Traffic Manhole
  - Street Light Cable -- SL --
  - Street Light
  - North N.
  - East E.
  - West W.
  - South S.

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**NO BURIED HYDRO OTTAWA NETWORK IN THE LOCATED AREA**



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**TELUS**  
Auxiliary Locate Sheet

Request #: 20254314690

Utilities Located :

Telecom (TELUS)

RURAL

URBAN

Date Located :

NOV-03-25

Number of Services marked : (Specify building/house numbers)

**LOCATED AREA: EXCAVATOR SHALL NOT WORK OUTSIDE THE LOCATED AREA WITHOUT OBTAINING ANOTHER LOCATE**

**From:** N.BL 151 PARKDALE AVE

**To:** 1.0M N.OF N.FL 132 FORWARD AVE

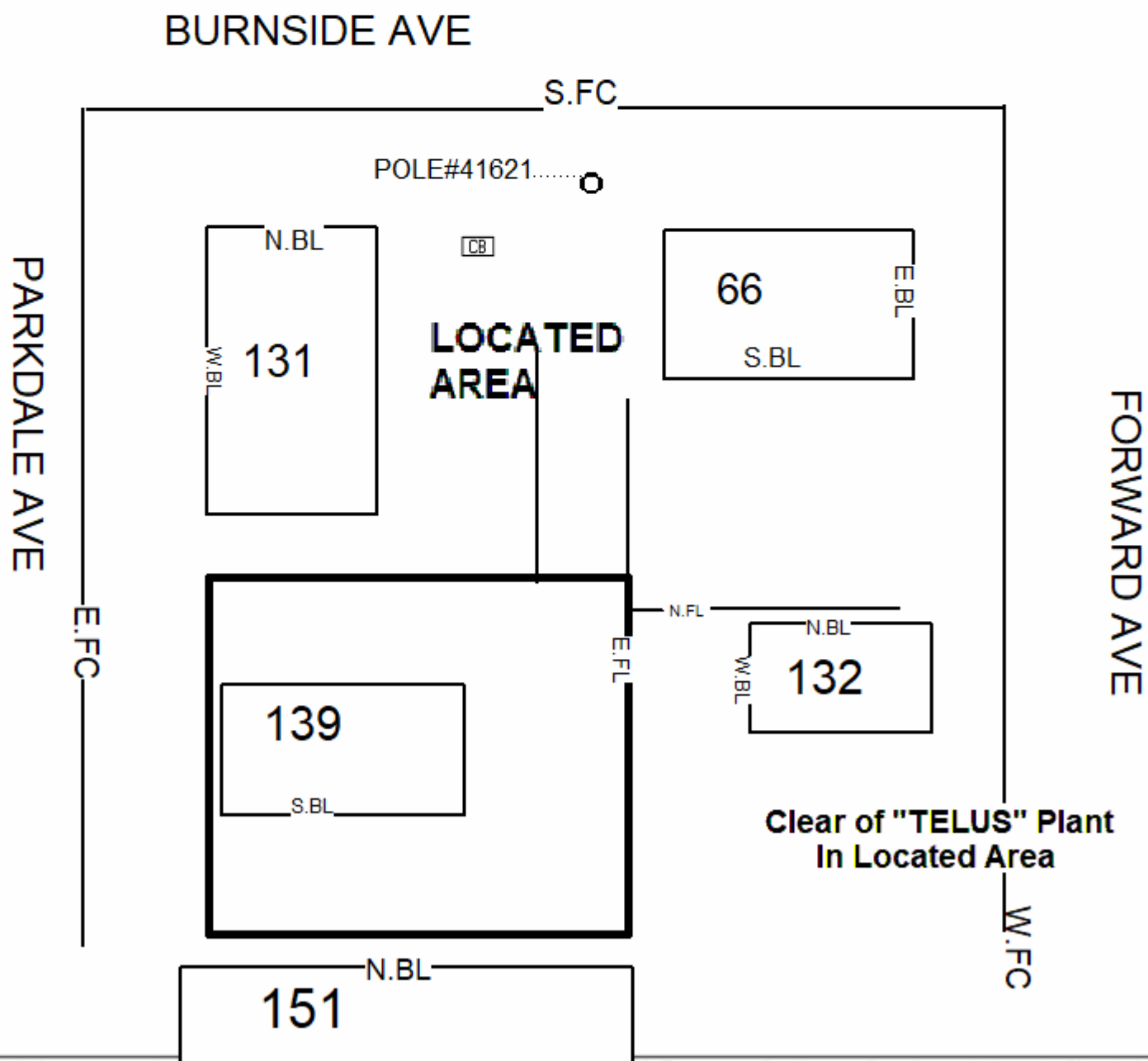
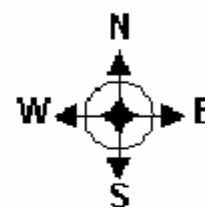
**From:** W.BL 131 PARKDALE AVE

**To:** E.FL 131 PARKDALE AVE

- Legend**
- Building Line -- BL --
  - Fence Line -- FL --
  - Face of Curb -- FC --
  - Asphalt Edge -- AE --
  - Sidewalk SW
  - Driveway -- DW --
  - Manhole M/H
  - Pedestal
  - Buried Cable TV -- TV --
  - Flush to Grade Pedestal FTG
  - Buried Service Wire -- BSW --
  - Buried Cable -- B --
  - Conduit -- C --
  - Fiber Optic Cable -- FO --
  - Bell Hydro Service -- BH --
  - Gas Valve
  - Gas Service -- GS --
  - Gas Main -- GM --
  - Transformer
  - Demarcation DM
  - Hydro -- H --
  - Hydro Primary -- HP --
  - Hydro Secondary -- HS --
  - Catch Basin CB
  - Sewer Manhole
  - Water Valve
  - Hydrant
  - Water Valve Chamber W
  - Hydro / Bell Pole
  - Hand Well HW
  - End Cap
  - Traffic Manhole
  - Street Light Cable -- SL --
  - Street Light
  - North N.
  - East E.
  - West W.
  - South S.
  - Gas Material - Steel ST
  - Plastic PE
  - Copper CP

LOCATED AREA HAS BEEN ALTERED AS PER:

All underground (buried) facilities must be exposed by HAND DIGGING or approved HYDROVAC method before excavating with MACHINERY. Any damage MUST be reported to your provincial One Call Center immediately (In Quebec, Ontario and Atlantic Canada contact TELUS at, 1-800-980-0030)



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

<b>Contractor / Excavator :</b> LOPERS & ASSOCIATES			<b>Contact Name :</b> LUKE LOPERS		
<b>Tel :</b> 613-327-9073	<b>Alt. Phone :</b> 613-327-9073	<b>Email :</b> luke@lopers.ca			
<b>Received Date :</b> Oct 23 2025	<b>Excavation Date :</b> Nov 6 2025	<b>Revised Excavation Date:</b>	<b>Type of Work :</b> ENVIRONMENTAL		
<b>Locate Address :</b> 131 PARKDALE AVE			<b>City / Municipality :</b> OTTAWA, ONTARIO		

**Nearest Intersection :**  
 BURNSIDE AVE & TUNNEYS PASTURE

**Method of Field Marking :**     Paint     Stakes     Flags

**Caller's Remarks (Additional Info) :**  
 DRILLING 12 BOREHOLES FOR ENVIRONMENTAL DELINEATION. EXPECTED SHALLOW BEDROCK. EASEMENT/LANEWAY BETWEEN 122 FORWARD AVENUE AND PARKDALE PROPERTIES IS CITY OWNED, BUT INCLUDED IN THE SITE DEVELOPMENT - IF SERVICE TRENCHES EXIST, PLEASE INDICATE SERVICE LOCATIONS AND SUGGESTED MOVEMENT OF PROPOSED BOREHOLE LOCATIONS. ATTEMPTED TO MARK DRILLING AREAS WITH ORANGE PAINT...IN THE RAIN, THE PAINT MAY HAVE FADED., TOOLS USED:[Machine Dig], PREMARKED VALUES:[Other - Details in Additional Information], PR

<b>Utilities Marked :</b> <input type="checkbox"/> Coaxial Plant	<input type="checkbox"/> Fibre Optics Plant				<b>Does this locate have multiple work areas which are greater than 100 m apart?</b> <input type="checkbox"/> Yes    How many? <input checked="" type="checkbox"/> No
<b>Total Length :</b> m	<b>Total Length :</b> 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

<b>Date :</b> Nov 4 2025	<b>Start Time :</b> 3:30 PM	<b>End Time :</b> 4:00 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 64 BURNSIDE AVE

**TO :**  
 N BL OF 142 FORWARD AVE

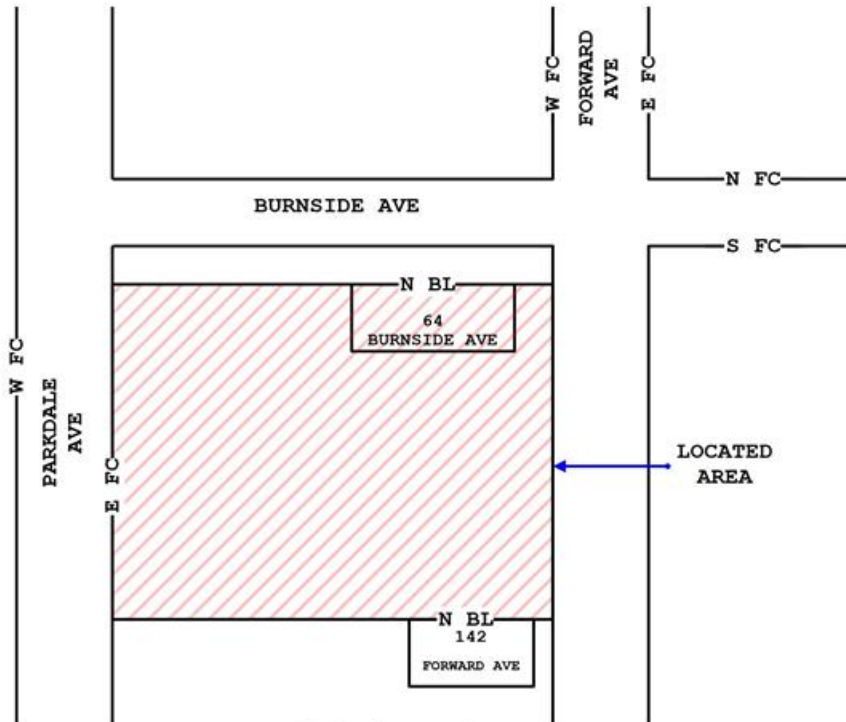
**FROM :**  
 E FC OF PARKDALE AVE

**TO :**  
 W FC OF FORWARD AVE

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**



*Sketch not drawn to scale*

**LEGEND :**

- |                       |                  |                      |          |             |             |
|-----------------------|------------------|----------------------|----------|-------------|-------------|
| Fibre Optic — FO —    | Road Edge — RE — | Property Line — PL — | Tree     | Transformer | Streetlight |
| Cable / T.V. — CATV — | Bldg Line — BL — | Lot Line — LL —      | Pedestal | Manhole     | Hand Hole   |
| Conduit — C —         | North Direction  | Face of Curb — FC —  | Pole     | Catch Basin | Hydrant     |
| Railway               | Sidewalk — SW —  | Driveway — DW —      | Valve    | North N     | East E      |
| Work Area             | Measurement      | Fence Line — FL —    | Vault    | South S     | 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.

**From:** [Barabas, Karoly](#)  
**To:** [Luke Lopers](#)  
**Subject:** 20254314690  
**Date:** October 23, 2025 5:51:28 AM  
**Attachments:** [image001.png](#)

---

20254314690

**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 90 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 90 jours”



Charly(Karoly)Barabas  
City of Ottawa  
Traffic U/G Utilities Investigator  
Cell: (613)868-3850  
Email: [Karoly.barabas@ottawa.ca](mailto: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.

'  
Classified as City of Ottawa - Internal / Ville d'Ottawa - classé interne

131 PARKDALE AVE



From the front of the BACK OF HOUSE left corr  
out 3.50m, then right 0.60m

**From:** [esd-locate@ottawa.ca](mailto:esd-locate@ottawa.ca)  
**To:** [Luke Lopers](#)  
**Cc:** [esd-locate@ottawa.ca](mailto:esd-locate@ottawa.ca)  
**Subject:** Re: Ontario1Call 20254314690 - 131 PARKDALE AVE  
**Date:** October 23, 2025 9:12:59 AM  
**Attachments:** [2025LocatesDisclaimer.pdf](#)

---

The work area is clear of underground water and sewer pipes owned by The City of Ottawa if the excavation is not in the road.

Please note there is a water service post close to the property line which may or may not be visible, dig with caution

Please note: City of Ottawa locates are valid for one hundred twenty (120) days.

La zone de travail est exempte de conduites d'eau et d'égout souterraines appartenant à la Ville d'Ottawa si les travaux d'excavation ne se trouvent pas sur la voie publique.

Veillez noter qu'il y a un poste de service d'eau à proximité de la limite de propriété qui peut être visible ou non, creusez avec prudence.

Remarque importante : Les coordonnées de localisation de la Ville d'Ottawa sont valables pour une durée de cent-vingt (120) jours.

**Customer & Operational Support Services**  
Infrastructure & Water Services Department  
Technical, Innovation & Engineering Support Services

City of Ottawa | (613) 580-2424 ext. 22336

*Please note: City of Ottawa locates are valid for one hundred twenty (120) days. | S'il-vous-plaît notez: les localisations de la ville d'Ottawa sont valables pendant cent-vingt (120) jours.*

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.

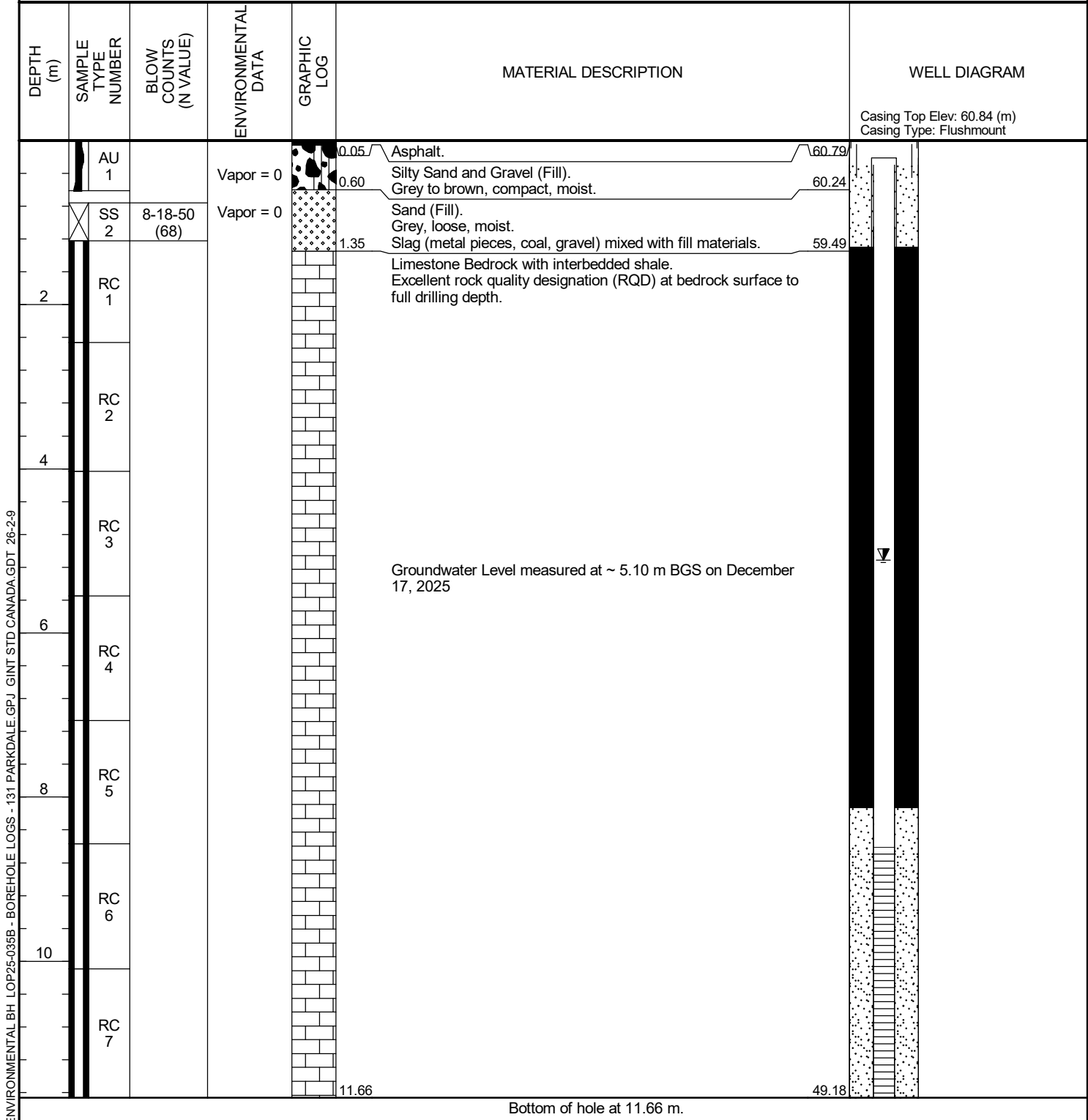
,

# Appendix C

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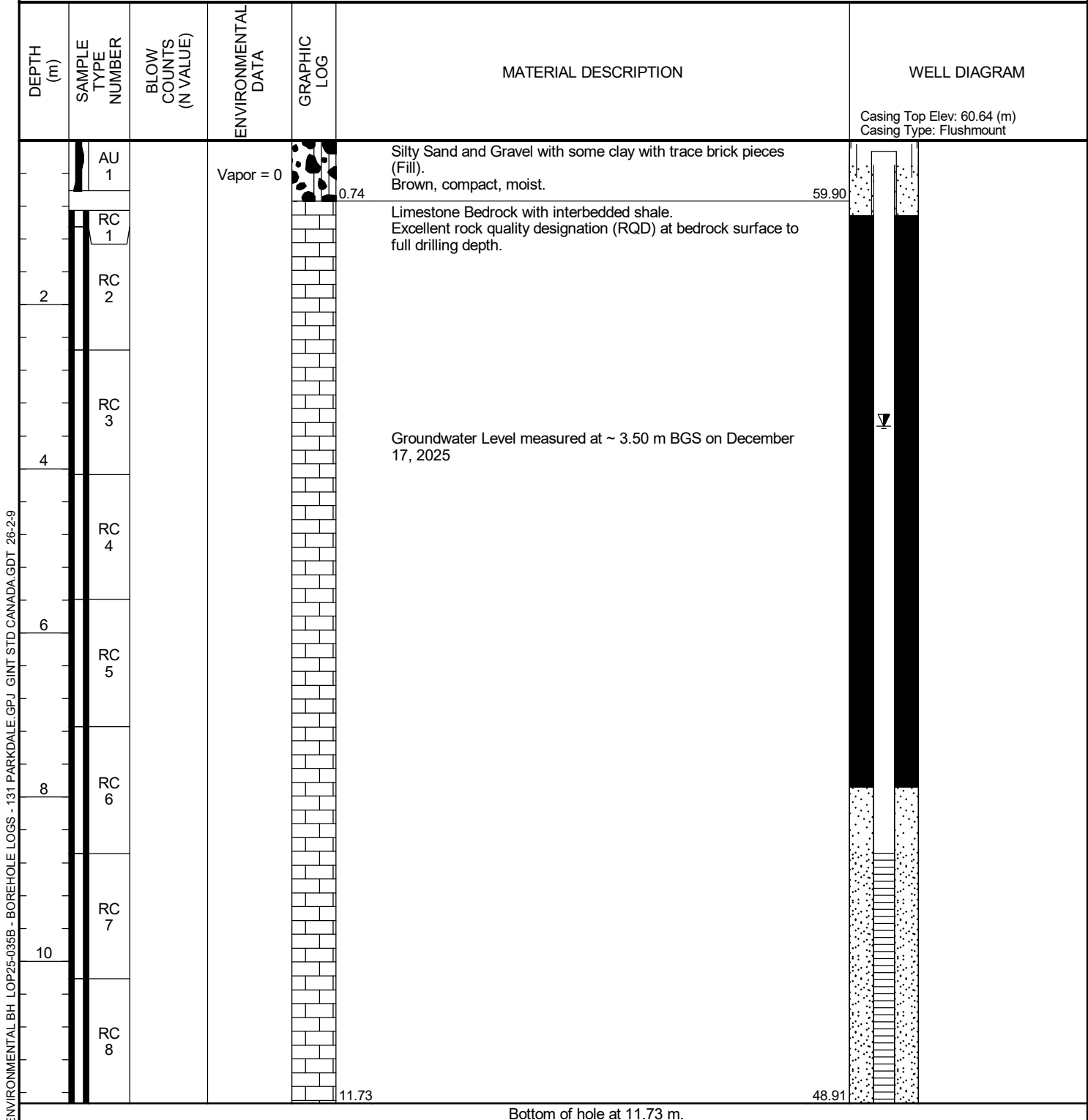
## Borehole Logs

**CLIENT** 11034936 Canada Inc. **PROJECT NAME** Phase Two Environmental Site Assessment  
**PROJECT NUMBER** LOP26-035B **PROJECT LOCATION** 131 Parkdale Avenue, Ottawa, Ontario  
**DATE STARTED** 25-12-1 **COMPLETED** 25-12-1 **GROUND ELEVATION** 60.838 m **HOLE SIZE** 20 cm  
**DRILLING CONTRACTOR** George Downing Estate Drilling **GROUND WATER LEVELS:**  
**DRILLING METHOD** Truck Mounted CME 55 **AFTER DRILLING** 5.10 m / Elev 55.74 m  
**LOGGED BY** L. Lopers **CHECKED BY** N. Corrin  
**NOTES** Geodetic Survey completed by Paterson Group Inc. on December 2, 2025



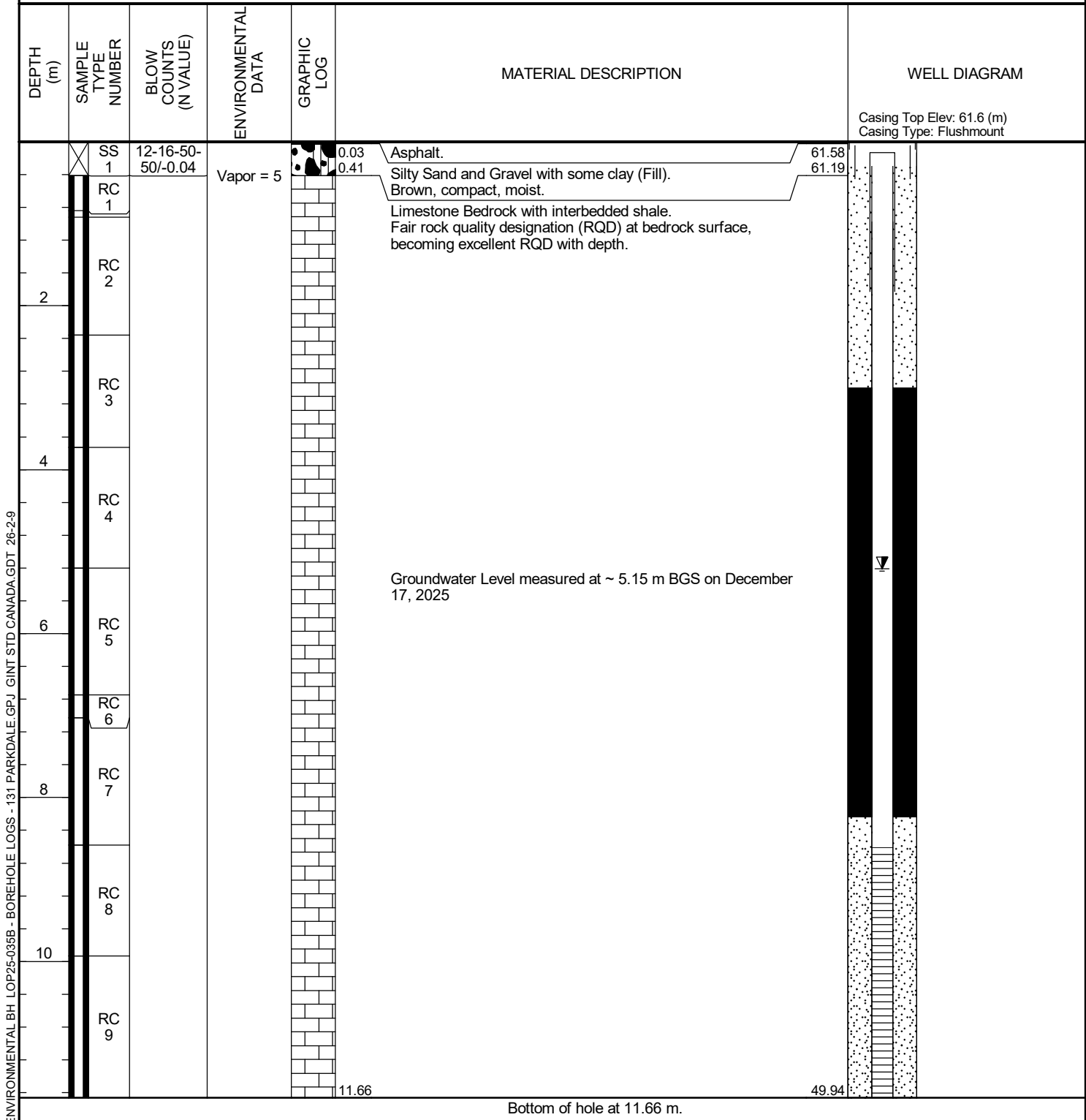
ENVIRONMENTAL.BH LOP25-035B - BOREHOLE LOGS - 131 PARKDALE.GPJ GINT STD CANADA.GDT 26-2-9

**CLIENT** 11034936 Canada Inc. **PROJECT NAME** Phase Two Environmental Site Assessment  
**PROJECT NUMBER** LOP26-035B **PROJECT LOCATION** 131 Parkdale Avenue, Ottawa, Ontario  
**DATE STARTED** 25-12-1 **COMPLETED** 25-12-1 **GROUND ELEVATION** 60.637 m **HOLE SIZE** 20 cm  
**DRILLING CONTRACTOR** George Downing Estate Drilling **GROUND WATER LEVELS:**  
**DRILLING METHOD** Truck Mounted CME 55 **AFTER DRILLING** 3.50 m / Elev 57.14 m  
**LOGGED BY** L. Lopers **CHECKED BY** N. Corrin  
**NOTES** Geodetic Survey completed by Paterson Group Inc. on December 2, 2025



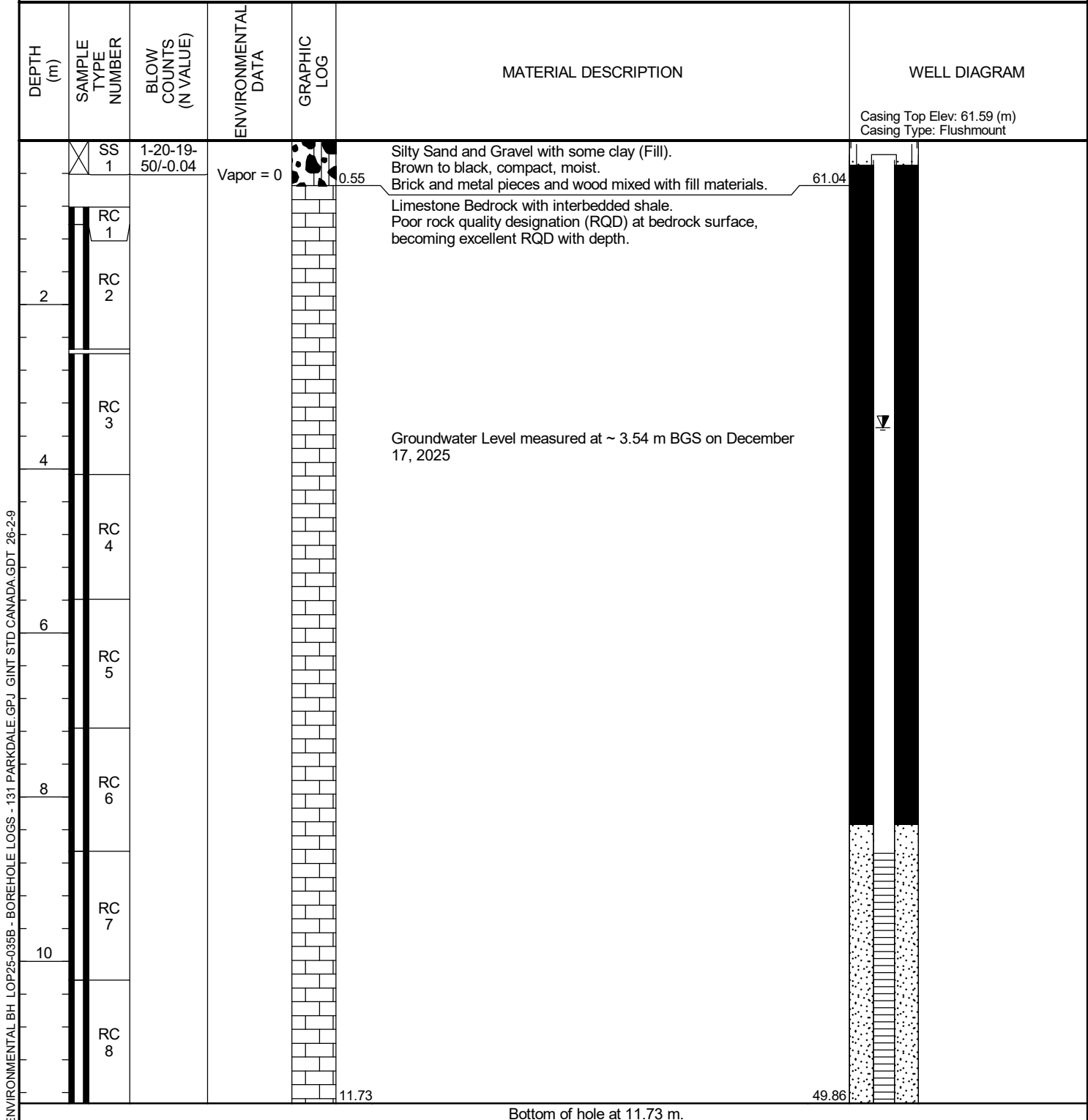
ENVIRONMENTAL.BH LOP25-035B - BOREHOLE LOGS - 131 PARKDALE.GPJ GINT STD CANADA.GDT 26-2-9

**CLIENT** 11034936 Canada Inc. **PROJECT NAME** Phase Two Environmental Site Assessment  
**PROJECT NUMBER** LOP26-035B **PROJECT LOCATION** 131 Parkdale Avenue, Ottawa, Ontario  
**DATE STARTED** 25-12-2 **COMPLETED** 25-12-2 **GROUND ELEVATION** 61.6 m **HOLE SIZE** 20 cm  
**DRILLING CONTRACTOR** George Downing Estate Drilling **GROUND WATER LEVELS:**  
**DRILLING METHOD** Truck Mounted CME 55 **AFTER DRILLING** 5.15 m / Elev 56.45 m  
**LOGGED BY** L. Lopers **CHECKED BY** N. Corrin  
**NOTES** Geodetic Survey completed by Paterson Group Inc. on December 2, 2025




ENVIRONMENTAL.BH LOP25-035B - BOREHOLE LOGS - 131 PARKDALE.GPJ GINT STD CANADA.GDT 26-2-9

**CLIENT** 11034936 Canada Inc. **PROJECT NAME** Phase Two Environmental Site Assessment  
**PROJECT NUMBER** LOP26-035B **PROJECT LOCATION** 131 Parkdale Avenue, Ottawa, Ontario  
**DATE STARTED** 25-12-2 **COMPLETED** 25-12-2 **GROUND ELEVATION** 61.592 m **HOLE SIZE** 20 cm  
**DRILLING CONTRACTOR** George Downing Estate Drilling **GROUND WATER LEVELS:**  
**DRILLING METHOD** Truck Mounted CME 55 **AFTER DRILLING** 3.54 m / Elev 58.05 m  
**LOGGED BY** L. Lopers **CHECKED BY** N. Corrin  
**NOTES** Geodetic Survey completed by Paterson Group Inc. on December 2, 2025



ENVIRONMENTAL.BH LOP25-035B - BOREHOLE LOGS - 131 PARKDALE.GPJ GINT STD CANADA.GDT 26-2-9


**CLIENT** 11034936 Canada Inc. **PROJECT NAME** Phase Two Environmental Site Assessment  
**PROJECT NUMBER** LOP26-035B **PROJECT LOCATION** 131 Parkdale Avenue, Ottawa, Ontario  
**DATE STARTED** 25-12-3 **COMPLETED** 25-12-3 **GROUND ELEVATION** 61.65 m **HOLE SIZE** 20 cm  
**DRILLING CONTRACTOR** George Downing Estate Drilling **GROUND WATER LEVELS:**  
**DRILLING METHOD** Truck Mounted CME 55 **AFTER DRILLING** ---  
**LOGGED BY** L. Lopers **CHECKED BY** N. Corrin  
**NOTES** Approximate Elevations based on Topographic Survey completed by Annis, O'Sullivan, Vollebekk Ltd. on July 22, 2025

DEPTH (m)	SAMPLE TYPE NUMBER	BLOW COUNTS (N VALUE)	ENVIRONMENTAL DATA	GRAPHIC LOG	MATERIAL DESCRIPTION	WELL DIAGRAM
	AU 1		Vapor = 0		Silty Sand and Gravel with some silt (Fill). Grey, compact, dry.	
				0.76		60.89


Auger Refusal on inferred Limestone Bedrock @ 0.76 m BGS.  
 Bottom of hole at 0.76 m.

**CLIENT** 11034936 Canada Inc. **PROJECT NAME** Phase Two Environmental Site Assessment  
**PROJECT NUMBER** LOP26-035B **PROJECT LOCATION** 131 Parkdale Avenue, Ottawa, Ontario  
**DATE STARTED** 25-12-3 **COMPLETED** 25-12-3 **GROUND ELEVATION** 60.86 m **HOLE SIZE** 20 cm  
**DRILLING CONTRACTOR** George Downing Estate Drilling **GROUND WATER LEVELS:**  
**DRILLING METHOD** Truck Mounted CME 55 **AFTER DRILLING** ---  
**LOGGED BY** L. Lopers **CHECKED BY** N. Corrin  
**NOTES** Approximate Elevations based on Topographic Survey completed by Annis, O'Sullivan, Vollebek Ltd. on July 22, 2025

DEPTH (m)	SAMPLE TYPE NUMBER	BLOW COUNTS (N VALUE)	ENVIRONMENTAL DATA	GRAPHIC LOG	MATERIAL DESCRIPTION	WELL DIAGRAM
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	AU 1		Vapor = 0		0.25 Silty Sand and Gravel with some metal pieces (Fill). Grey, loose, dry. Auger Refusal on inferred Limestone Bedrock @ 0.25 m BGS. Bottom of hole at 0.25 m.	60.61
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**CLIENT** 11034936 Canada Inc. **PROJECT NAME** Phase Two Environmental Site Assessment  
**PROJECT NUMBER** LOP26-035B **PROJECT LOCATION** 131 Parkdale Avenue, Ottawa, Ontario  
**DATE STARTED** 25-12-3 **COMPLETED** 25-12-3 **GROUND ELEVATION** 61.28 m **HOLE SIZE** 20 cm  
**DRILLING CONTRACTOR** George Downing Estate Drilling **GROUND WATER LEVELS:**  
**DRILLING METHOD** Truck Mounted CME 55 **AFTER DRILLING** ---  
**LOGGED BY** L. Lopers **CHECKED BY** N. Corrin  
**NOTES** Approximate Elevations based on Topographic Survey completed by Annis, O'Sullivan, Vollebek Ltd. on July 22, 2025

DEPTH (m)	SAMPLE TYPE NUMBER	BLOW COUNTS (N VALUE)	ENVIRONMENTAL DATA	GRAPHIC LOG	MATERIAL DESCRIPTION	WELL DIAGRAM
	AU 1		Vapor = 0		Silty Sand and Gravel with some metal pieces (Fill). Grey, loose, dry.	
				0.61		60.67


Auger Refusal on inferred Limestone Bedrock @ 0.61 m BGS.  
 Bottom of hole at 0.61 m.

**CLIENT** 11034936 Canada Inc. **PROJECT NAME** Phase Two Environmental Site Assessment  
**PROJECT NUMBER** LOP26-035B **PROJECT LOCATION** 131 Parkdale Avenue, Ottawa, Ontario  
**DATE STARTED** 25-12-3 **COMPLETED** 25-12-3 **GROUND ELEVATION** 61.8 m **HOLE SIZE** 20 cm  
**DRILLING CONTRACTOR** George Downing Estate Drilling **GROUND WATER LEVELS:**  
**DRILLING METHOD** Truck Mounted CME 55 **AFTER DRILLING** ---  
**LOGGED BY** L. Lopers **CHECKED BY** N. Corrin  
**NOTES** Approximate Elevations based on Topographic Survey completed by Annis, O'Sullivan, Vollebakk Ltd. on July 22, 2025

DEPTH (m)	SAMPLE TYPE NUMBER	BLOW COUNTS (N VALUE)	ENVIRONMENTAL DATA	GRAPHIC LOG	MATERIAL DESCRIPTION	WELL DIAGRAM
	AU 1		Vapor = 0		Silty Sand and Gravel (Fill). Grey, compact, dry.	


Auger Refusal on inferred Limestone Bedrock @ 0.35 m BGS.  
 Bottom of hole at 0.35 m.

**CLIENT** 11034936 Canada Inc. **PROJECT NAME** Phase Two Environmental Site Assessment  
**PROJECT NUMBER** LOP26-035B **PROJECT LOCATION** 131 Parkdale Avenue, Ottawa, Ontario  
**DATE STARTED** 25-12-3 **COMPLETED** 25-12-3 **GROUND ELEVATION** 61.66 m **HOLE SIZE** 20 cm  
**DRILLING CONTRACTOR** George Downing Estate Drilling **GROUND WATER LEVELS:**  
**DRILLING METHOD** Truck Mounted CME 55 **AFTER DRILLING** ---  
**LOGGED BY** L. Lopers **CHECKED BY** N. Corrin  
**NOTES** Approximate Elevations based on Topographic Survey completed by Annis, O'Sullivan, Vollebekk Ltd. on July 22, 2025

DEPTH (m)	SAMPLE TYPE NUMBER	BLOW COUNTS (N VALUE)	ENVIRONMENTAL DATA	GRAPHIC LOG	MATERIAL DESCRIPTION	WELL DIAGRAM
	AU 1		Vapor = 0		Silty Sand and Gravel (Fill). Grey, compact, dry.	

Auger Refusal on inferred Limestone Bedrock @ 0.35 m BGS.  
 Bottom of hole at 0.35 m.

**CLIENT** 11034936 Canada Inc. **PROJECT NAME** Phase Two Environmental Site Assessment  
**PROJECT NUMBER** LOP26-035B **PROJECT LOCATION** 131 Parkdale Avenue, Ottawa, Ontario  
**DATE STARTED** 25-12-3 **COMPLETED** 25-12-3 **GROUND ELEVATION** 61.72 m **HOLE SIZE** 20 cm  
**DRILLING CONTRACTOR** George Downing Estate Drilling **GROUND WATER LEVELS:**  
**DRILLING METHOD** Truck Mounted CME 55 **AFTER DRILLING** ---  
**LOGGED BY** L. Lopers **CHECKED BY** N. Corrin  
**NOTES** Approximate Elevations based on Topographic Survey completed by Annis, O'Sullivan, Vollebakk Ltd. on July 22, 2025

DEPTH (m)	SAMPLE TYPE NUMBER	BLOW COUNTS (N VALUE)	ENVIRONMENTAL DATA	GRAPHIC LOG	MATERIAL DESCRIPTION	WELL DIAGRAM
	AU 1		Vapor = 1		Silty Sand and Gravel with Brick and Glass pieces (Fill). Brown to black, compact, dry.	
				0.51		61.21

Auger Refusal on inferred Limestone Bedrock @ 0.51m BGS.  
 Bottom of hole at 0.51 m.

**CLIENT** 11034936 Canada Inc. **PROJECT NAME** Phase Two Environmental Site Assessment  
**PROJECT NUMBER** LOP26-035B **PROJECT LOCATION** 131 Parkdale Avenue, Ottawa, Ontario  
**DATE STARTED** 25-12-3 **COMPLETED** 25-12-3 **GROUND ELEVATION** 61.4 m **HOLE SIZE** 20 cm  
**DRILLING CONTRACTOR** George Downing Estate Drilling **GROUND WATER LEVELS:**  
**DRILLING METHOD** Truck Mounted CME 55 **AFTER DRILLING** ---  
**LOGGED BY** L. Lopers **CHECKED BY** N. Corrin  
**NOTES** Approximate Elevations based on Topographic Survey completed by Annis, O'Sullivan, Vollebakk Ltd. on July 22, 2025

DEPTH (m)	SAMPLE TYPE NUMBER	BLOW COUNTS (N VALUE)	ENVIRONMENTAL DATA	GRAPHIC LOG	MATERIAL DESCRIPTION	WELL DIAGRAM
--------------	--------------------------	-----------------------------	-----------------------	----------------	----------------------	--------------

	AU 1		Vapor = 0		Silty Sand and Gravel with some silt (Fill). Brown to black, loose, dry. Brick and glass pieces mixed with fill materials. Auger Refusal on inferred Limestone Bedrock @ 0.3m BGS. Bottom of hole at 0.31 m.	61.10
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## Appendix D

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# Certificates of Equipment Calibration



# CERTIFICATE OF CALIBRATION

The RKI Instrument listed below has been inspected and calibrated following the Manufacturer's specifications and methods.

*Instrument Model:* **RKI Eagle 2**      *Serial Number:* **E2F801**      *Calibration Date:* **November 27, 2025**

<u>SENSOR</u>	<u>CALIBRATION GAS STANDARD</u>	<u>CALIBRATION GAS CONCENTRATION</u>	<u>READING PRIOR TO ADJUSTMENT</u>	<u>INSTRUMENT SPAN SETTINGS</u>	<u>ALARM LEVEL SETTING</u>
VOC	Isobutylene LOT# 25-3127 EXP: 05/29	100 PPM	96 PPM	100 PPM	400 & 1000 PPM
Combustible	Methane LOT# 24-1634 EXP: 03/26	50% LEL	<500 PPM	"ME" MODE	
Combustible	Hexane LOT# 25-3261 EXP: 12/29	1650 PPM	1750 PPM	15% LEL FULL GAS RESPONSE MODE	10 & 50% LEL
Combustible	Hexane LOT# 24-2409 EXP: 09/28	15% LEL	15% LEL	15% LEL "METHANE ELIMINATION" MODE	10 & 50% LEL

The calibration gas standard used is considered to be a certified standard and is traceable to the National Institute of Standards and Technology (NIST). Certificate of Analysis is available upon request.

The instrument indicated above is now certified to be operating within the Manufacturer's specifications. This does not eliminate the requirement for regular maintenance and pre-use sensor response checks in order to ensure continued complete and accurate operating condition.

*Certified By:* Jason Ashe

## MAXIM Environmental and Safety Inc.

[sales@maximenvironmental.com](mailto:sales@maximenvironmental.com)  
[www.maximenvironmental.com](http://www.maximenvironmental.com)



9 - 170 Ambassador Dr., Mississauga, ON L5T 2H9  
(905)670-1304 | Toll Free (888)285-2324

9 - 148 Colonnade Rd., Ottawa, ON K2E 7R4  
(613)224-4747 | Toll Free (888)285-2324



# CERTIFICATE OF CALIBRATION

The HORIBA Instrument listed below has been inspected and calibrated following the Manufacturer's specifications and methods.

*Instrument Model:* **HORIBA U-52**      *Serial Number:* **KFS6BUM3/6KD05U6A**      *Calibration Date:* **December 16, 2025**

<u>2-POINT pH</u>	<u>CONDUCTIVITY</u>	<u>TURBIDITY</u>	<u>DISSOLVED OXYGEN</u>	<u>OXIDIZATION-REDUCTION POTENTIAL</u>	<u>TEMPERATURE</u>
4.00 pH, 7.00 pH	4.49mS/cm ZERO CHECKED	0 & 100 NTU	8.69 mg/L @ 22.3 DegC	240mV	Traceable Thermometer s/n 250032696
AutoCal 4.00 pH Solution LOT # 5GI0487	AutoCal Solution LOT # 5GI0487	AutoCal Solution LOT# 5GI0487	Oakton Zero Solution LOT# 818216	Hanna ORP LOT # 1609	
Expiry Date: September 1, 2026	Expiry Date: September 1, 2026	Expiry Date: September 1, 2026	Expiry Date: February 1, 2026	Expiry Date: May 1, 2030	
pH 7.00 LOT # 4GH0553	@25 DegC	Turb. 100 NTU LOT # A5154			
Expiry Date: August 1, 2026		Expiry Date: June 1, 2027			

The calibration standard used is considered to be a certified standard and is traceable to the National Institute of Standards and Technology (NIST). Certificate of Analysis is available upon request.

The instrument indicated above is now certified to be operating within the Manufacturer's specifications. This does not eliminate the requirement for regular maintenance and pre-use sensor response checks in order to ensure continued complete and accurate operating condition.

**Certified By:** Vincent Marin

## MAXIM Environmental and Safety Inc.

[sales@maximenvironmental.com](mailto:sales@maximenvironmental.com)  
[www.maximenvironmental.com](http://www.maximenvironmental.com)



9 - 170 Ambassador Dr., Mississauga, ON L5T 2H9  
(905)670-1304 | Toll Free (888)285-2324

9 - 148 Colonnade Rd., Ottawa, ON K2E 7R4  
(613)224-4747 | Toll Free (888)285-2324

## Appendix E

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# Laboratory Certificates of Analysis



Your Project #: LOP25-035B  
 Site Location: 131 PARKDALE  
 Your C.O.C. #: C#1072068-01-01

**Attention: Luke Lopers**

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

**Report Date: 2025/12/10**  
 Report #: R8666533  
 Version: 1 - Final

**CERTIFICATE OF ANALYSIS**

**BUREAU VERITAS JOB #: C5F1990**

**Received: 2025/12/01, 16:25**

Sample Matrix: Soil  
 # Samples Received: 4

Analyses	Quantity	Date	Date	Laboratory Method	Analytical Method
		Extracted	Analyzed		
Methylnaphthalene Sum (1)	4	N/A	2025/12/08	CAM SOP-00301	EPA 8270D m
Hot Water Extractable Boron (1)	4	2025/12/05	2025/12/08	CAM SOP-00408	R153 Ana. Prot. 2011
Free (WAD) Cyanide (1)	1	2025/12/05	2025/12/06	CAM SOP-00457	OMOE E3015 m
Free (WAD) Cyanide (1)	3	2025/12/08	2025/12/08	CAM SOP-00457	OMOE E3015 m
Conductivity (1)	4	2025/12/08	2025/12/08	CAM SOP-00414	OMOE E3530 v1 m
Hexavalent Chromium in Soil by IC (1, 2)	4	2025/12/05	2025/12/05	CAM SOP-00436	EPA 3060A/7199 m
Petroleum Hydro. CCME F1 & BTEX in Soil (1, 3)	4	N/A	2025/12/08	CAM SOP-00315	CCME PHC-CWS m
Petroleum Hydrocarbons F2-F4 in Soil (1, 4)	4	2025/12/05	2025/12/08	CAM SOP-00316	CCME CWS m
F4G (CCME Hydrocarbons Gravimetric) (1)	4	2025/12/10	2025/12/10	CAM SOP-00316	CCME PHC-CWS m
Acid Extractable Metals by ICPMS (1)	4	2025/12/05	2025/12/08	CAM SOP-00447	EPA 6020B m
Moisture (1)	4	N/A	2025/12/04	CAM SOP-00445	Carter 2nd ed 70.2 m
PAH Compounds in Soil by GC/MS (SIM) (1)	4	2025/12/06	2025/12/06	CAM SOP-00318	EPA 8270E
pH CaCl2 EXTRACT (1)	4	2025/12/05	2025/12/05	CAM SOP-00413	EPA 9045 D m
Sodium Adsorption Ratio (SAR) (1)	4	N/A	2025/12/09	CAM SOP-00102	EPA 6010C

**Remarks:**

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

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

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

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

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



Your Project #: LOP25-035B  
Site Location: 131 PARKDALE  
Your C.O.C. #: C#1072068-01-01

**Attention: Luke Lopers**

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

**Report Date: 2025/12/10**  
Report #: R8666533  
Version: 1 - Final

**CERTIFICATE OF ANALYSIS**

**BUREAU VERITAS JOB #: C5F1990**

**Received: 2025/12/01, 16:25**

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) Soils are reported on a dry weight basis unless otherwise specified.

(3) No lab extraction date is given for F1BTX & VOC samples that are field preserved with methanol. Extraction date is the date sampled unless otherwise stated.

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

**Encryption Key**

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 #: C5F1990  
Report Date: 2025/12/10

Lopers & Associates  
Client Project #: LOP25-035B  
Site Location: 131 PARKDALE  
Sampler Initials: LL

**RESULTS OF ANALYSES OF SOIL**

<b>Bureau Veritas ID</b>		AXXG67		AXXG68		AXXG69		
<b>Sampling Date</b>		2025/12/01 09:15		2025/12/01 09:20		2025/12/01 13:05		
<b>COC Number</b>		C#1072068-01-01		C#1072068-01-01		C#1072068-01-01		
	<b>UNITS</b>	<b>BH1-25-AU1</b>	<b>QC Batch</b>	<b>BH1-25-SS2</b>	<b>QC Batch</b>	<b>BH2-25-AU1</b>	<b>RDL</b>	<b>QC Batch</b>
<b>Calculated Parameters</b>								
Sodium Adsorption Ratio	N/A	55	A065363	3.5	A065363	29		A065363
<b>Inorganics</b>								
Conductivity	mS/cm	4.3	A069241	2.7	A069241	1.4	0.002	A069241
Moisture	%	10	A067314	13	A067314	6.5	1.0	A067314
Available (CaCl2) pH	pH	8.02	A068318	10.9	A068318	8.01		A068318
WAD Cyanide (Free)	ug/g	ND	A069062	ND	A067953	ND	0.01	A069062
RDL = Reportable Detection Limit QC Batch = Quality Control Batch ND = Not Detected at a concentration equal or greater than the indicated Detection Limit.								

<b>Bureau Veritas ID</b>		AXXG70		
<b>Sampling Date</b>		2025/12/01		
<b>COC Number</b>		C#1072068-01-01		
	<b>UNITS</b>	<b>DUP-12/01</b>	<b>RDL</b>	<b>QC Batch</b>
<b>Calculated Parameters</b>				
Sodium Adsorption Ratio	N/A	57		A065363
<b>Inorganics</b>				
Conductivity	mS/cm	3.7	0.002	A069241
Moisture	%	13	1.0	A067314
Available (CaCl2) pH	pH	7.96		A068318
WAD Cyanide (Free)	ug/g	ND	0.01	A069062
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 #: C5F1990  
Report Date: 2025/12/10

Lopers & Associates  
Client Project #: LOP25-035B  
Site Location: 131 PARKDALE  
Sampler Initials: LL

### ELEMENTS BY ATOMIC SPECTROSCOPY (SOIL)

Bureau Veritas ID		AXXG67	AXXG68	AXXG69	AXXG70		
Sampling Date		2025/12/01 09:15	2025/12/01 09:20	2025/12/01 13:05	2025/12/01		
COC Number		C#1072068-01-01	C#1072068-01-01	C#1072068-01-01	C#1072068-01-01		
	UNITS	BH1-25-AU1	BH1-25-SS2	BH2-25-AU1	DUP-12/01	RDL	QC Batch

Inorganics							
Chromium (VI)	ug/g	ND	0.19	ND	ND	0.18	A067865
Metals							
Hot Water Ext. Boron (B)	ug/g	0.46	0.13	0.35	0.40	0.050	A068592
Acid Extractable Antimony (Sb)	ug/g	1.7	1.3	2.7	2.1	0.20	A068520
Acid Extractable Arsenic (As)	ug/g	3.2	3.9	4.2	2.5	1.0	A068520
Acid Extractable Barium (Ba)	ug/g	270	150	230	210	0.50	A068520
Acid Extractable Beryllium (Be)	ug/g	0.43	0.46	0.31	0.33	0.20	A068520
Acid Extractable Boron (B)	ug/g	8.5	6.0	8.3	7.3	5.0	A068520
Acid Extractable Cadmium (Cd)	ug/g	0.54	0.22	0.51	0.43	0.10	A068520
Acid Extractable Chromium (Cr)	ug/g	18	16	15	15	1.0	A068520
Acid Extractable Cobalt (Co)	ug/g	5.1	6.6	4.8	4.6	0.10	A068520
Acid Extractable Copper (Cu)	ug/g	48	24	26	51	0.50	A068520
Acid Extractable Lead (Pb)	ug/g	300	780	220	240	1.0	A068520
Acid Extractable Molybdenum (Mo)	ug/g	ND	0.92	1.7	ND	0.50	A068520
Acid Extractable Nickel (Ni)	ug/g	13	14	13	12	0.50	A068520
Acid Extractable Selenium (Se)	ug/g	ND	ND	ND	ND	0.50	A068520
Acid Extractable Silver (Ag)	ug/g	ND	ND	ND	ND	0.20	A068520
Acid Extractable Thallium (Tl)	ug/g	0.11	0.099	0.16	0.13	0.050	A068520
Acid Extractable Uranium (U)	ug/g	0.31	0.80	0.41	0.32	0.050	A068520
Acid Extractable Vanadium (V)	ug/g	19	21	15	19	5.0	A068520
Acid Extractable Zinc (Zn)	ug/g	150	110	130	130	5.0	A068520
Acid Extractable Mercury (Hg)	ug/g	0.17	ND	0.10	0.14	0.050	A068520

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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Bureau Veritas Job #: C5F1990  
Report Date: 2025/12/10

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Sampler Initials: LL

**SEMI-VOLATILE ORGANICS BY GC-MS (SOIL)**

<b>Bureau Veritas ID</b>		AXXG67	AXXG68		AXXG69		AXXG70		
<b>Sampling Date</b>		2025/12/01 09:15	2025/12/01 09:20		2025/12/01 13:05		2025/12/01		
<b>COC Number</b>		C#1072068-01-01	C#1072068-01-01		C#1072068-01-01		C#1072068-01-01		
	<b>UNITS</b>	<b>BH1-25-AU1</b>	<b>BH1-25-SS2</b>	<b>RDL</b>	<b>BH2-25-AU1</b>	<b>RDL</b>	<b>DUP-12/01</b>	<b>RDL</b>	<b>QC Batch</b>

<b>Calculated Parameters</b>									
Methylnaphthalene, 2-(1-)	ug/g	ND	ND	0.071	ND	0.12	ND	0.29	A065224
<b>Polyaromatic Hydrocarbons</b>									
Acenaphthene	ug/g	0.18	ND	0.050	0.43	0.050	0.76	0.050	A068758
Acenaphthylene	ug/g	0.086	0.35	0.050	0.067	0.050	0.24	0.050	A068758
Anthracene	ug/g	0.90	0.18	0.050	0.87	0.050	2.4	0.050	A068758
Benzo(a)anthracene	ug/g	1.8	1.2	0.050	1.4	0.050	5.0	0.050	A068758
Benzo(a)pyrene	ug/g	1.8	1.6	0.050	1.3	0.050	5.1	0.050	A068758
Benzo(b,j)fluoranthene	ug/g	2.3	1.9	0.050	1.8	0.050	6.4	0.050	A068758
Benzo(g,h,i)perylene	ug/g	0.98	0.89	0.050	0.78	0.050	2.8	0.050	A068758
Benzo(k)fluoranthene	ug/g	0.84	0.69	0.050	0.61	0.050	2.3	0.050	A068758
Chrysene	ug/g	1.5	0.85	0.050	1.2	0.050	4.2	0.050	A068758
Dibenzo(a,h)anthracene	ug/g	0.27	0.24	0.050	0.21	0.050	0.84	0.050	A068758
Fluoranthene	ug/g	5.1	2.2	0.050	3.6	0.050	13	0.050	A068758
Fluorene	ug/g	0.31	ND	0.050	0.29	0.050	1.1	0.050	A068758
Indeno(1,2,3-cd)pyrene	ug/g	1.2	1.0	0.050	0.93	0.050	3.4	0.050	A068758
1-Methylnaphthalene	ug/g	ND	ND	0.050	ND (1)	0.080	ND (1)	0.20	A068758
2-Methylnaphthalene	ug/g	ND	ND	0.050	ND (1)	0.090	ND (1)	0.21	A068758
Naphthalene	ug/g	0.13	ND	0.050	0.092	0.050	0.84	0.050	A068758
Phenanthrene	ug/g	3.3	0.26	0.050	3.0	0.050	9.5	0.050	A068758
Pyrene	ug/g	4.1	2.2	0.050	2.9	0.050	11	0.050	A068758
<b>Surrogate Recovery (%)</b>									
D10-Anthracene	%	120	123		103		103		A068758
D14-Terphenyl (FS)	%	113	116		110		124		A068758
D8-Acenaphthylene	%	80	81		91		83		A068758

RDL = Reportable Detection Limit  
 QC Batch = Quality Control Batch  
 ND = Not Detected at a concentration equal or greater than the indicated Detection Limit.  
 (1) Detection Limit was raised due to matrix interferences.



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Bureau Veritas Job #: C5F1990  
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Sampler Initials: LL

### PETROLEUM HYDROCARBONS (CCME)

Bureau Veritas ID		AXXG67	AXXG68	AXXG69	AXXG70		
Sampling Date		2025/12/01 09:15	2025/12/01 09:20	2025/12/01 13:05	2025/12/01		
COC Number		C#1072068-01-01	C#1072068-01-01	C#1072068-01-01	C#1072068-01-01		
	UNITS	BH1-25-AU1	BH1-25-SS2	BH2-25-AU1	DUP-12/01	RDL	QC Batch

BTEX & F1 Hydrocarbons							
Benzene	ug/g	ND	ND	ND	ND	0.020	A068919
Toluene	ug/g	ND	ND	ND	ND	0.020	A068919
Ethylbenzene	ug/g	ND	ND	ND	ND	0.020	A068919
o-Xylene	ug/g	ND	ND	ND	ND	0.020	A068919
p+m-Xylene	ug/g	ND	ND	ND	ND	0.040	A068919
Total Xylenes	ug/g	ND	ND	ND	ND	0.040	A068919
F1 (C6-C10)	ug/g	ND	ND	ND	ND	10	A068919
F1 (C6-C10) - BTEX	ug/g	ND	ND	ND	ND	10	A068919
F2-F4 Hydrocarbons							
F4G-sg (Grav. Heavy Hydrocarbons)	ug/g	1600	2700	1600	850	100	A070819
F2 (C10-C16 Hydrocarbons)	ug/g	11	16	8.0	11	7.0	A069028
F3 (C16-C34 Hydrocarbons)	ug/g	290	290	270	290	50	A069028
F4 (C34-C50 Hydrocarbons)	ug/g	310	620	640	200	50	A069028
Reached Baseline at C50	ug/g	No	No	No	No		A069028
Surrogate Recovery (%)							
1,4-Difluorobenzene	%	105	107	106	105		A068919
4-Bromofluorobenzene	%	95	92	91	89		A068919
D10-o-Xylene	%	94	95	96	88		A068919
D4-1,2-Dichloroethane	%	93	95	97	93		A068919
o-Terphenyl	%	92	99	120	95		A069028

RDL = Reportable Detection Limit  
 QC Batch = Quality Control Batch  
 ND = Not Detected at a concentration equal or greater than the indicated Detection Limit.



### GENERAL COMMENTS

Sample AXXG67 [BH1-25-AU1] : F1/BTEX 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.

PAH Analysis: Due to the sample matrix, sample required dilution. Detection limits were adjusted accordingly.

Sample AXXG68 [BH1-25-SS2] : PAH Analysis: Due to the sample matrix, sample required dilution. Detection limits were adjusted accordingly.

Sample AXXG69 [BH2-25-AU1] : F1/BTEX 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.

PAH Analysis: Due to the sample matrix, sample required dilution. Detection limits were adjusted accordingly.

Sample AXXG70 [DUP-12/01] : PAH Analysis: Due to the sample matrix, sample required dilution. Detection limits were adjusted accordingly.

**Results relate only to the items tested.**



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Sampler Initials: LL

### QUALITY ASSURANCE REPORT

QA/QC	Batch	Init	QC Type	Parameter	Date Analyzed	Value	Recovery	UNITS	QC Limits
	A067314	KAT	RPD	Moisture	2025/12/04	0.45		%	20
	A067865	HK1	Matrix Spike	Chromium (VI)	2025/12/05		70	%	70 - 130
	A067865	HK1	Spiked Blank	Chromium (VI)	2025/12/05		92	%	80 - 120
	A067865	HK1	Method Blank	Chromium (VI)	2025/12/05	ND, RDL=0.18		ug/g	
	A067865	HK1	RPD	Chromium (VI)	2025/12/05	NC		%	35
	A067953	GYA	Matrix Spike	WAD Cyanide (Free)	2025/12/05		101	%	75 - 125
	A067953	GYA	Spiked Blank	WAD Cyanide (Free)	2025/12/05		116	%	80 - 120
	A067953	GYA	Method Blank	WAD Cyanide (Free)	2025/12/05	ND, RDL=0.01		ug/g	
	A067953	GYA	RPD	WAD Cyanide (Free)	2025/12/05	NC		%	35
	A068318	HH	Spiked Blank	Available (CaCl2) pH	2025/12/05		100	%	97 - 103
	A068318	HH	RPD	Available (CaCl2) pH	2025/12/05	0.87		%	N/A
	A068520	DT1	Matrix Spike	Acid Extractable Antimony (Sb)	2025/12/08		95	%	75 - 125
				Acid Extractable Arsenic (As)	2025/12/08		112	%	75 - 125
				Acid Extractable Barium (Ba)	2025/12/08		NC	%	75 - 125
				Acid Extractable Beryllium (Be)	2025/12/08		96	%	75 - 125
				Acid Extractable Boron (B)	2025/12/08		94	%	75 - 125
				Acid Extractable Cadmium (Cd)	2025/12/08		95	%	75 - 125
				Acid Extractable Chromium (Cr)	2025/12/08		96	%	75 - 125
				Acid Extractable Cobalt (Co)	2025/12/08		93	%	75 - 125
				Acid Extractable Copper (Cu)	2025/12/08		85	%	75 - 125
				Acid Extractable Lead (Pb)	2025/12/08		86	%	75 - 125
				Acid Extractable Molybdenum (Mo)	2025/12/08		95	%	75 - 125
				Acid Extractable Nickel (Ni)	2025/12/08		90	%	75 - 125
				Acid Extractable Selenium (Se)	2025/12/08		94	%	75 - 125
				Acid Extractable Silver (Ag)	2025/12/08		97	%	75 - 125
				Acid Extractable Thallium (Tl)	2025/12/08		87	%	75 - 125
				Acid Extractable Uranium (U)	2025/12/08		92	%	75 - 125
				Acid Extractable Vanadium (V)	2025/12/08		97	%	75 - 125
				Acid Extractable Zinc (Zn)	2025/12/08		84	%	75 - 125
				Acid Extractable Mercury (Hg)	2025/12/08		89	%	75 - 125
	A068520	DT1	Spiked Blank	Acid Extractable Antimony (Sb)	2025/12/08		104	%	80 - 120
				Acid Extractable Arsenic (As)	2025/12/08		96	%	80 - 120
				Acid Extractable Barium (Ba)	2025/12/08		95	%	80 - 120
				Acid Extractable Beryllium (Be)	2025/12/08		97	%	80 - 120
				Acid Extractable Boron (B)	2025/12/08		98	%	80 - 120
				Acid Extractable Cadmium (Cd)	2025/12/08		99	%	80 - 120
				Acid Extractable Chromium (Cr)	2025/12/08		98	%	80 - 120
				Acid Extractable Cobalt (Co)	2025/12/08		96	%	80 - 120
				Acid Extractable Copper (Cu)	2025/12/08		99	%	80 - 120
				Acid Extractable Lead (Pb)	2025/12/08		93	%	80 - 120
				Acid Extractable Molybdenum (Mo)	2025/12/08		94	%	80 - 120
				Acid Extractable Nickel (Ni)	2025/12/08		97	%	80 - 120
				Acid Extractable Selenium (Se)	2025/12/08		99	%	80 - 120
				Acid Extractable Silver (Ag)	2025/12/08		99	%	80 - 120
				Acid Extractable Thallium (Tl)	2025/12/08		94	%	80 - 120
				Acid Extractable Uranium (U)	2025/12/08		95	%	80 - 120
				Acid Extractable Vanadium (V)	2025/12/08		95	%	80 - 120
				Acid Extractable Zinc (Zn)	2025/12/08		99	%	80 - 120
				Acid Extractable Mercury (Hg)	2025/12/08		95	%	80 - 120
	A068520	DT1	Method Blank	Acid Extractable Antimony (Sb)	2025/12/08	ND, RDL=0.20		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
			Acid Extractable Arsenic (As)	2025/12/08	ND, RDL=1.0		ug/g	
			Acid Extractable Barium (Ba)	2025/12/08	ND, RDL=0.50		ug/g	
			Acid Extractable Beryllium (Be)	2025/12/08	ND, RDL=0.20		ug/g	
			Acid Extractable Boron (B)	2025/12/08	ND, RDL=5.0		ug/g	
			Acid Extractable Cadmium (Cd)	2025/12/08	ND, RDL=0.10		ug/g	
			Acid Extractable Chromium (Cr)	2025/12/08	ND, RDL=1.0		ug/g	
			Acid Extractable Cobalt (Co)	2025/12/08	ND, RDL=0.10		ug/g	
			Acid Extractable Copper (Cu)	2025/12/08	ND, RDL=0.50		ug/g	
			Acid Extractable Lead (Pb)	2025/12/08	ND, RDL=1.0		ug/g	
			Acid Extractable Molybdenum (Mo)	2025/12/08	ND, RDL=0.50		ug/g	
			Acid Extractable Nickel (Ni)	2025/12/08	ND, RDL=0.50		ug/g	
			Acid Extractable Selenium (Se)	2025/12/08	ND, RDL=0.50		ug/g	
			Acid Extractable Silver (Ag)	2025/12/08	ND, RDL=0.20		ug/g	
			Acid Extractable Thallium (Tl)	2025/12/08	ND, RDL=0.050		ug/g	
			Acid Extractable Uranium (U)	2025/12/08	ND, RDL=0.050		ug/g	
			Acid Extractable Vanadium (V)	2025/12/08	ND, RDL=5.0		ug/g	
			Acid Extractable Zinc (Zn)	2025/12/08	ND, RDL=5.0		ug/g	
			Acid Extractable Mercury (Hg)	2025/12/08	ND, RDL=0.050		ug/g	
A068592	IHP	Matrix Spike	Hot Water Ext. Boron (B)	2025/12/08		52 (1)	%	75 - 125
A068592	IHP	Spiked Blank	Hot Water Ext. Boron (B)	2025/12/08		105	%	75 - 125
A068592	IHP	Method Blank	Hot Water Ext. Boron (B)	2025/12/08	ND, RDL=0.050		ug/g	
A068592	IHP	RPD	Hot Water Ext. Boron (B)	2025/12/08	2.9		%	40
A068758	JYO	Matrix Spike	D10-Anthracene	2025/12/06		121	%	50 - 130
			D14-Terphenyl (FS)	2025/12/06		110	%	50 - 130
			D8-Acenaphthylene	2025/12/06		93	%	50 - 130
			Acenaphthene	2025/12/06		90	%	50 - 130
			Acenaphthylene	2025/12/06		87	%	50 - 130
			Anthracene	2025/12/06		122	%	50 - 130
			Benzo(a)anthracene	2025/12/06		90	%	50 - 130
			Benzo(a)pyrene	2025/12/06		98	%	50 - 130
			Benzo(b,j)fluoranthene	2025/12/06		107	%	50 - 130
			Benzo(g,h,i)perylene	2025/12/06		107	%	50 - 130
			Benzo(k)fluoranthene	2025/12/06		92	%	50 - 130
			Chrysene	2025/12/06		94	%	50 - 130
			Dibenzo(a,h)anthracene	2025/12/06		97	%	50 - 130



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Sampler Initials: LL

### QUALITY ASSURANCE REPORT(CONT'D)

QA/QC	Batch	Init	QC Type	Parameter	Date Analyzed	Value	Recovery	UNITS	QC Limits
				Fluoranthene	2025/12/06		109	%	50 - 130
				Fluorene	2025/12/06		97	%	50 - 130
				Indeno(1,2,3-cd)pyrene	2025/12/06		115	%	50 - 130
				1-Methylnaphthalene	2025/12/06		95	%	50 - 130
				2-Methylnaphthalene	2025/12/06		92	%	50 - 130
				Naphthalene	2025/12/06		89	%	50 - 130
				Phenanthrene	2025/12/06		108	%	50 - 130
				Pyrene	2025/12/06		110	%	50 - 130
A068758	JYO		Spiked Blank	D10-Anthracene	2025/12/06		122	%	50 - 130
				D14-Terphenyl (FS)	2025/12/06		110	%	50 - 130
				D8-Acenaphthylene	2025/12/06		91	%	50 - 130
				Acenaphthene	2025/12/06		89	%	50 - 130
				Acenaphthylene	2025/12/06		86	%	50 - 130
				Anthracene	2025/12/06		124	%	50 - 130
				Benzo(a)anthracene	2025/12/06		89	%	50 - 130
				Benzo(a)pyrene	2025/12/06		98	%	50 - 130
				Benzo(b/j)fluoranthene	2025/12/06		104	%	50 - 130
				Benzo(g,h,i)perylene	2025/12/06		108	%	50 - 130
				Benzo(k)fluoranthene	2025/12/06		100	%	50 - 130
				Chrysene	2025/12/06		97	%	50 - 130
				Dibenzo(a,h)anthracene	2025/12/06		93	%	50 - 130
				Fluoranthene	2025/12/06		112	%	50 - 130
				Fluorene	2025/12/06		97	%	50 - 130
				Indeno(1,2,3-cd)pyrene	2025/12/06		118	%	50 - 130
				1-Methylnaphthalene	2025/12/06		95	%	50 - 130
				2-Methylnaphthalene	2025/12/06		91	%	50 - 130
				Naphthalene	2025/12/06		89	%	50 - 130
				Phenanthrene	2025/12/06		109	%	50 - 130
				Pyrene	2025/12/06		113	%	50 - 130
A068758	JYO		Method Blank	D10-Anthracene	2025/12/06		130	%	50 - 130
				D14-Terphenyl (FS)	2025/12/06		112	%	50 - 130
				D8-Acenaphthylene	2025/12/06		90	%	50 - 130
				Acenaphthene	2025/12/06	ND, RDL=0.0050		ug/g	
				Acenaphthylene	2025/12/06	ND, RDL=0.0050		ug/g	
				Anthracene	2025/12/06	ND, RDL=0.0050		ug/g	
				Benzo(a)anthracene	2025/12/06	ND, RDL=0.0050		ug/g	
				Benzo(a)pyrene	2025/12/06	ND, RDL=0.0050		ug/g	
				Benzo(b/j)fluoranthene	2025/12/06	ND, RDL=0.0050		ug/g	
				Benzo(g,h,i)perylene	2025/12/06	ND, RDL=0.0050		ug/g	
				Benzo(k)fluoranthene	2025/12/06	ND, RDL=0.0050		ug/g	
				Chrysene	2025/12/06	ND, RDL=0.0050		ug/g	
				Dibenzo(a,h)anthracene	2025/12/06	ND, RDL=0.0050		ug/g	



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Sampler Initials: LL

### QUALITY ASSURANCE REPORT(CONT'D)

QA/QC Batch	Init	QC Type	Parameter	Date Analyzed	Value	Recovery	UNITS	QC Limits
			Fluoranthene	2025/12/06	ND, RDL=0.0050		ug/g	
			Fluorene	2025/12/06	ND, RDL=0.0050		ug/g	
			Indeno(1,2,3-cd)pyrene	2025/12/06	ND, RDL=0.0050		ug/g	
			1-Methylnaphthalene	2025/12/06	ND, RDL=0.0050		ug/g	
			2-Methylnaphthalene	2025/12/06	ND, RDL=0.0050		ug/g	
			Naphthalene	2025/12/06	ND, RDL=0.0050		ug/g	
			Phenanthrene	2025/12/06	ND, RDL=0.0050		ug/g	
			Pyrene	2025/12/06	ND, RDL=0.0050		ug/g	
A068758	JYO	RPD	Acenaphthene	2025/12/06	NC		%	40
			Acenaphthylene	2025/12/06	NC		%	40
			Anthracene	2025/12/06	NC		%	40
			Benzo(a)anthracene	2025/12/06	NC		%	40
			Benzo(a)pyrene	2025/12/06	NC		%	40
			Benzo(b/j)fluoranthene	2025/12/06	NC		%	40
			Benzo(g,h,i)perylene	2025/12/06	NC		%	40
			Benzo(k)fluoranthene	2025/12/06	NC		%	40
			Chrysene	2025/12/06	NC		%	40
			Dibenzo(a,h)anthracene	2025/12/06	NC		%	40
			Fluoranthene	2025/12/06	NC		%	40
			Fluorene	2025/12/06	NC		%	40
			Indeno(1,2,3-cd)pyrene	2025/12/06	NC		%	40
			1-Methylnaphthalene	2025/12/06	NC		%	40
			2-Methylnaphthalene	2025/12/06	NC		%	40
			Naphthalene	2025/12/06	NC		%	40
			Phenanthrene	2025/12/06	NC		%	40
			Pyrene	2025/12/06	NC		%	40
A068919	H_W	Matrix Spike	1,4-Difluorobenzene	2025/12/07		101	%	60 - 140
			4-Bromofluorobenzene	2025/12/07		90	%	60 - 140
			D10-o-Xylene	2025/12/07		85	%	60 - 140
			D4-1,2-Dichloroethane	2025/12/07		99	%	60 - 140
			Benzene	2025/12/07		84	%	50 - 140
			Toluene	2025/12/07		84	%	50 - 140
			Ethylbenzene	2025/12/07		95	%	50 - 140
			o-Xylene	2025/12/07		89	%	50 - 140
			p+m-Xylene	2025/12/07		88	%	50 - 140
			F1 (C6-C10)	2025/12/07		96	%	60 - 140
A068919	H_W	Spiked Blank	1,4-Difluorobenzene	2025/12/07		102	%	60 - 140
			4-Bromofluorobenzene	2025/12/07		97	%	60 - 140
			D10-o-Xylene	2025/12/07		100	%	60 - 140
			D4-1,2-Dichloroethane	2025/12/07		98	%	60 - 140
			Benzene	2025/12/07		90	%	50 - 140
			Toluene	2025/12/07		83	%	50 - 140
			Ethylbenzene	2025/12/07		93	%	50 - 140
			o-Xylene	2025/12/07		93	%	50 - 140
			p+m-Xylene	2025/12/07		87	%	50 - 140



BUREAU  
VERITAS

Bureau Veritas Job #: C5F1990  
Report Date: 2025/12/10

Lopers & Associates  
Client Project #: LOP25-035B  
Site Location: 131 PARKDALE  
Sampler Initials: LL

### QUALITY ASSURANCE REPORT(CONT'D)

QA/QC Batch	Init	QC Type	Parameter	Date Analyzed	Value	Recovery	UNITS	QC Limits			
A068919	H_W	Method Blank	F1 (C6-C10)	2025/12/07		107	%	80 - 120			
			1,4-Difluorobenzene	2025/12/07		104	%	60 - 140			
			4-Bromofluorobenzene	2025/12/07		94	%	60 - 140			
			D10-o-Xylene	2025/12/07		98	%	60 - 140			
			D4-1,2-Dichloroethane	2025/12/07		98	%	60 - 140			
			Benzene	2025/12/07	ND, RDL=0.020		ug/g				
			Toluene	2025/12/07	ND, RDL=0.020		ug/g				
			Ethylbenzene	2025/12/07	ND, RDL=0.020		ug/g				
			o-Xylene	2025/12/07	ND, RDL=0.020		ug/g				
			p+m-Xylene	2025/12/07	ND, RDL=0.040		ug/g				
			Total Xylenes	2025/12/07	ND, RDL=0.040		ug/g				
			F1 (C6-C10)	2025/12/07	ND, RDL=10		ug/g				
			F1 (C6-C10) - BTEX	2025/12/07	ND, RDL=10		ug/g				
			A068919	H_W	RPD	Benzene	2025/12/07	NC		%	50
						Toluene	2025/12/07	NC		%	50
Ethylbenzene	2025/12/07	NC					%	50			
o-Xylene	2025/12/07	NC					%	50			
p+m-Xylene	2025/12/07	NC					%	50			
Total Xylenes	2025/12/07	NC					%	50			
F1 (C6-C10)	2025/12/07	NC					%	30			
F1 (C6-C10) - BTEX	2025/12/07	NC					%	30			
A069028	ABS	Matrix Spike	o-Terphenyl	2025/12/08		97	%	60 - 140			
			F2 (C10-C16 Hydrocarbons)	2025/12/08		98	%	60 - 140			
			F3 (C16-C34 Hydrocarbons)	2025/12/08		100	%	60 - 140			
			F4 (C34-C50 Hydrocarbons)	2025/12/08		96	%	60 - 140			
A069028	ABS	Spiked Blank	o-Terphenyl	2025/12/08		96	%	60 - 140			
			F2 (C10-C16 Hydrocarbons)	2025/12/08		97	%	80 - 120			
			F3 (C16-C34 Hydrocarbons)	2025/12/08		99	%	80 - 120			
			F4 (C34-C50 Hydrocarbons)	2025/12/08		94	%	80 - 120			
A069028	ABS	Method Blank	o-Terphenyl	2025/12/08		91	%	60 - 140			
			F2 (C10-C16 Hydrocarbons)	2025/12/08	ND, RDL=7.0		ug/g				
			F3 (C16-C34 Hydrocarbons)	2025/12/08	ND, RDL=50		ug/g				
			F4 (C34-C50 Hydrocarbons)	2025/12/08	ND, RDL=50		ug/g				
A069028	ABS	RPD	F2 (C10-C16 Hydrocarbons)	2025/12/08	NC		%	30			
			F3 (C16-C34 Hydrocarbons)	2025/12/08	NC		%	30			
			F4 (C34-C50 Hydrocarbons)	2025/12/08	NC		%	30			
A069062	GYA	Matrix Spike	WAD Cyanide (Free)	2025/12/08		95	%	75 - 125			
A069062	GYA	Spiked Blank	WAD Cyanide (Free)	2025/12/08		108	%	80 - 120			
A069062	GYA	Method Blank	WAD Cyanide (Free)	2025/12/08	ND, RDL=0.01		ug/g				
A069062	GYA	RPD	WAD Cyanide (Free)	2025/12/08	NC		%	35			
A069241	SAU	Spiked Blank	Conductivity	2025/12/08		105	%	90 - 110			



BUREAU  
VERITAS

Bureau Veritas Job #: C5F1990  
Report Date: 2025/12/10

Lopers & Associates  
Client Project #: LOP25-035B  
Site Location: 131 PARKDALE  
Sampler Initials: LL

### QUALITY ASSURANCE REPORT(CONT'D)

QA/QC Batch	Init	QC Type	Parameter	Date Analyzed	Value	Recovery	UNITS	QC Limits
A069241	SAU	Method Blank	Conductivity	2025/12/08	ND, RDL=0.002		mS/cm	
A069241	SAU	RPD	Conductivity	2025/12/08	0.54		%	10
A070819	RDU	Matrix Spike [AXXG70-02]	F4G-sg (Grav. Heavy Hydrocarbons)	2025/12/10		99	%	65 - 135
A070819	RDU	Spiked Blank	F4G-sg (Grav. Heavy Hydrocarbons)	2025/12/10		102	%	65 - 135
A070819	RDU	Method Blank	F4G-sg (Grav. Heavy Hydrocarbons)	2025/12/10	ND, RDL=100		ug/g	
A070819	RDU	RPD	F4G-sg (Grav. Heavy Hydrocarbons)	2025/12/10	5.4		%	50

N/A = Not Applicable

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

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

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

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

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

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

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

(1) Matrix Spike exceeds acceptance limits, probable matrix interference



BUREAU  
VERITAS

Bureau Veritas Job #: C5F1990  
Report Date: 2025/12/10

Lopers & Associates  
Client Project #: LOP25-035B  
Site Location: 131 PARKDALE  
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 that reads "Louise A. Harding".

Louise Harding, Scientific Specialist

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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	OTT-2025-11-335	CUSTODY SEAL	YES	NO	<input type="checkbox"/> Drinking Water			
		PRESENT	<input checked="" type="checkbox"/>		TEMP	2	1	2
		INTACT	<input checked="" type="checkbox"/>			1	2	3
		ICE PRESENT	<input checked="" type="checkbox"/>					
2	337	CUSTODY SEAL	YES	NO	<input type="checkbox"/> Drinking Water			
		PRESENT	<input checked="" type="checkbox"/>		TEMP	2	3	2
		INTACT	<input checked="" type="checkbox"/>					
		ICE PRESENT	<input checked="" type="checkbox"/>					
3	333	CUSTODY SEAL	YES	NO	<input type="checkbox"/> Drinking Water			
		PRESENT	<input checked="" type="checkbox"/>		TEMP	1	1	1
		INTACT	<input checked="" type="checkbox"/>					
		ICE PRESENT	<input checked="" type="checkbox"/>					
4	330	CUSTODY SEAL	YES	NO	<input type="checkbox"/> Drinking Water			
		PRESENT	<input checked="" type="checkbox"/>		TEMP	2	2	1
		INTACT	<input checked="" type="checkbox"/>					
		ICE PRESENT	<input checked="" type="checkbox"/>					
5	332	CUSTODY SEAL	YES	NO	<input type="checkbox"/> Drinking Water			
		PRESENT	<input checked="" type="checkbox"/>		TEMP	4	4	2
		INTACT	<input checked="" type="checkbox"/>					
		ICE PRESENT	<input checked="" type="checkbox"/>					
6	336	CUSTODY SEAL	YES	NO	<input type="checkbox"/> Drinking Water			
		PRESENT	<input checked="" type="checkbox"/>		TEMP	1	1	1
		INTACT	<input checked="" type="checkbox"/>					
		ICE PRESENT	<input checked="" type="checkbox"/>					
7	345	CUSTODY SEAL	YES	NO	<input type="checkbox"/> Drinking Water			
		PRESENT	<input checked="" type="checkbox"/>		TEMP	3	1	1
		INTACT	<input checked="" type="checkbox"/>					
		ICE PRESENT	<input checked="" type="checkbox"/>					
8	331	CUSTODY SEAL	YES	NO	<input type="checkbox"/> Drinking Water			
		PRESENT	<input checked="" type="checkbox"/>		TEMP	-1	-2	-2
		INTACT	<input checked="" type="checkbox"/>					
		ICE PRESENT	<input checked="" type="checkbox"/>					
9	334	CUSTODY SEAL	YES	NO	<input type="checkbox"/> Drinking Water			
		PRESENT	<input checked="" type="checkbox"/>		TEMP	2	2	4
		INTACT	<input checked="" type="checkbox"/>					
		ICE PRESENT	<input checked="" type="checkbox"/>					
10	342 343 344	CUSTODY SEAL	YES	NO	<input type="checkbox"/> Drinking Water			
		PRESENT	<input checked="" type="checkbox"/>		TEMP	-2	1	1
		INTACT	<input checked="" type="checkbox"/>					
		ICE PRESENT	<input checked="" type="checkbox"/>					

BV Receipt #		SHIPPED FROM BV SERVICE CENTER: OTTAWA						
RECEIVED AT: MISSISSAUGA								
11	OTT-2025-11-326	CUSTODY SEAL	YES	NO	<input type="checkbox"/> Drinking Water			
		PRESENT	<input checked="" type="checkbox"/>		TEMP	-2	-1	2
		INTACT	<input checked="" type="checkbox"/>					
		ICE PRESENT	<input checked="" type="checkbox"/>					
12		CUSTODY SEAL	YES	NO	<input type="checkbox"/> Drinking Water			
		PRESENT	<input checked="" type="checkbox"/>		TEMP	3	-2	-1
		INTACT	<input checked="" type="checkbox"/>					
		ICE PRESENT	<input checked="" type="checkbox"/>					
13	339	CUSTODY SEAL	YES	NO	<input type="checkbox"/> Drinking Water			
		PRESENT	<input checked="" type="checkbox"/>		TEMP	-2	-1	-1
		INTACT	<input checked="" type="checkbox"/>					
		ICE PRESENT	<input checked="" type="checkbox"/>					
14	328 329	CUSTODY SEAL	YES	NO	<input type="checkbox"/> Drinking Water			
		PRESENT	<input checked="" type="checkbox"/>		TEMP	4	6	4
		INTACT	<input checked="" type="checkbox"/>					
		ICE PRESENT	<input checked="" type="checkbox"/>					
15	338	CUSTODY SEAL	YES	NO	<input type="checkbox"/> Drinking Water			
		PRESENT	<input checked="" type="checkbox"/>		TEMP	2	3	3
		INTACT	<input checked="" type="checkbox"/>					
		ICE PRESENT	<input checked="" type="checkbox"/>					
16	340	CUSTODY SEAL	YES	NO	<input type="checkbox"/> Drinking Water			
		PRESENT	<input checked="" type="checkbox"/>		TEMP	4	2	2
		INTACT	<input checked="" type="checkbox"/>					
		ICE PRESENT	<input checked="" type="checkbox"/>					
17	327	CUSTODY SEAL	YES	NO	<input type="checkbox"/> Drinking Water			
		PRESENT	<input checked="" type="checkbox"/>		TEMP	2	4	2
		INTACT	<input checked="" type="checkbox"/>					
		ICE PRESENT	<input checked="" type="checkbox"/>					
18		CUSTODY SEAL	YES	NO	<input type="checkbox"/> Drinking Water			
		PRESENT	<input checked="" type="checkbox"/>		TEMP	-3	-2	-2
		INTACT	<input checked="" type="checkbox"/>					
		ICE PRESENT	<input checked="" type="checkbox"/>					
19		CUSTODY SEAL	YES	NO	<input type="checkbox"/> Drinking Water			
		PRESENT	<input checked="" type="checkbox"/>		TEMP	-3	-2	-2
		INTACT	<input checked="" type="checkbox"/>					
		ICE PRESENT	<input checked="" type="checkbox"/>					
20		CUSTODY SEAL	YES	NO	<input type="checkbox"/> Drinking Water			
		PRESENT	<input checked="" type="checkbox"/>		TEMP	-2	-2	-2
		INTACT	<input checked="" type="checkbox"/>					
		ICE PRESENT	<input checked="" type="checkbox"/>					

RECEIVED BY (PRINT & SIGN)	DATE (YYYY/MM/DD)	TIME (HH:MM)
ANMOUPREET SINGH	2025/12/10	06:22



If Custody seal condition and presence of ice is the same for all, use these boxes:	CUSTODY SEAL	YES	NO
	PRESENT		
	INTACT		
	ICE PRESENT		

C5F1990  
2025/12/01 16:25

Bureau Veritas  
35 Antares Dr Unit 100, Nepean, Ontario Canada K2E 7W5 Tel:(613) 274-0573 Toll-free 900-563-6266 Fax:(613) 274-0574 www.bvna.com

CHAIN OF CUSTODY RECORD

Received in Ottawa

<b>Invoice To:</b> Company: #39509 Lopers & Associates Attention: Alisha Sullivan Address: 30 Lansfield Way Ottawa ON K2G 3V8 Tel: (613) 327-9073 Fax: Email: Alisha.Sullivan@bureauveritas.com		<b>Report To:</b> Company: Attention: Luke Lopers Address: Tel: Email: luke@lopers.ca		<b>PROJECT INFORMATION:</b> Quotation #: C43362 P.O. #: Project: LOP25-035B Project Name: 131 Parkdale Site #: Lopers Sampled By:		<b>Laboratory Use Only:</b> Bureau Veritas Job #: 1072058 Bottle Order #:  COC #:  Project Manager: Katherine Szozda C#1072058-01-01	
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MOE REGULATED DRINKING WATER OR WATER INTENDED FOR HUMAN CONSUMPTION MUST BE SUBMITTED ON THE BUREAU VERITAS DRINKING WATER CHAIN OF CUSTODY

<b>Regulation 153 (2011)</b> <input type="checkbox"/> Table 1 <input checked="" type="checkbox"/> Res/Park <input checked="" type="checkbox"/> Medium/Fine <input type="checkbox"/> Table 2 <input type="checkbox"/> Ind/Comm <input type="checkbox"/> Coarse <input type="checkbox"/> Table 3 <input type="checkbox"/> Agri/Other <input type="checkbox"/> For RSC <input checked="" type="checkbox"/> Table 7	<b>Other Regulations</b> <input type="checkbox"/> CCME <input type="checkbox"/> Sanitary Sewer Bylaw <input type="checkbox"/> Reg 558 <input type="checkbox"/> Storm Sewer Bylaw <input type="checkbox"/> MISA Municipality <input type="checkbox"/> PWQO <input type="checkbox"/> Reg 406 Table <input type="checkbox"/> Other	<b>Special Instructions:</b>
---	--	------------------------------

Sample Barcode Label	Sample (Location) Identification	Date Sampled	Time Sampled	Matrix	Field Filtered (please circle): Metals / Hg / Cr / V	ANALYSIS REQUESTED (PLEASE BE SPECIFIC)				# of Bottles	Comment
						10 Reg 153 PHC, BTEX, H4	10 Reg 153 PAHs	10 Reg 153 Metals & Inorganics Pq	pH, CaCl <sub>2</sub> EXTRACT		
1	BH1-25-Au1	Dec 1/25	9:15AM	S		X	X	X	X		
2	BH1-25-SS2		9:20AM	S		X	X	X	X		
3	BH2-25-Au1		1:05PM	S		X	X	X			
4	DAP-12/01			S		X	X	X			
5											
6											
7											
8											
9											
10											

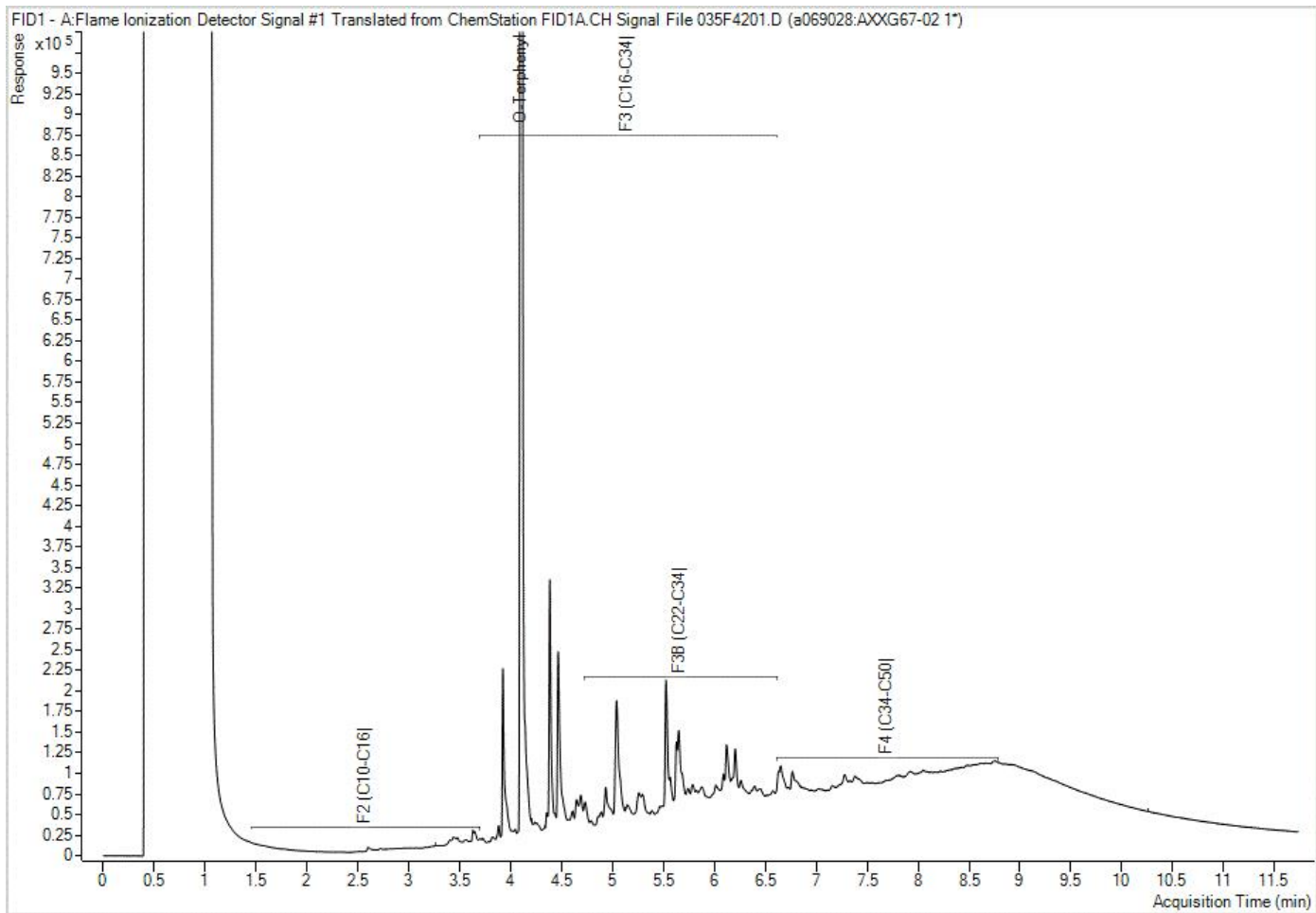


OTT-2025-11-345

<b>Relinquished By (Print):</b> Luke Lopers	<b>Date: (YY/MM/DD)</b> 25/12/01	<b>Time</b> 9:20AM	<b>RECEIVED BY: (Signature/Print)</b> Redra da Silva / MRO	<b>Date: (YY/MM/DD)</b> 2025/12/01	<b>Time</b> 16:25	<b># jars used and not submitted:</b>	<b>Laboratory Use Only</b> Time Sensitive: <input type="checkbox"/> Temperature (°C) on Receipt: -110/1	<b>Custody Seal Present:</b> Intact: <input checked="" type="checkbox"/>	<b>Yes</b> <input type="checkbox"/> <b>No</b> <input checked="" type="checkbox"/>
--	-------------------------------------	-----------------------	---	---------------------------------------	----------------------	---------------------------------------	---	---	---

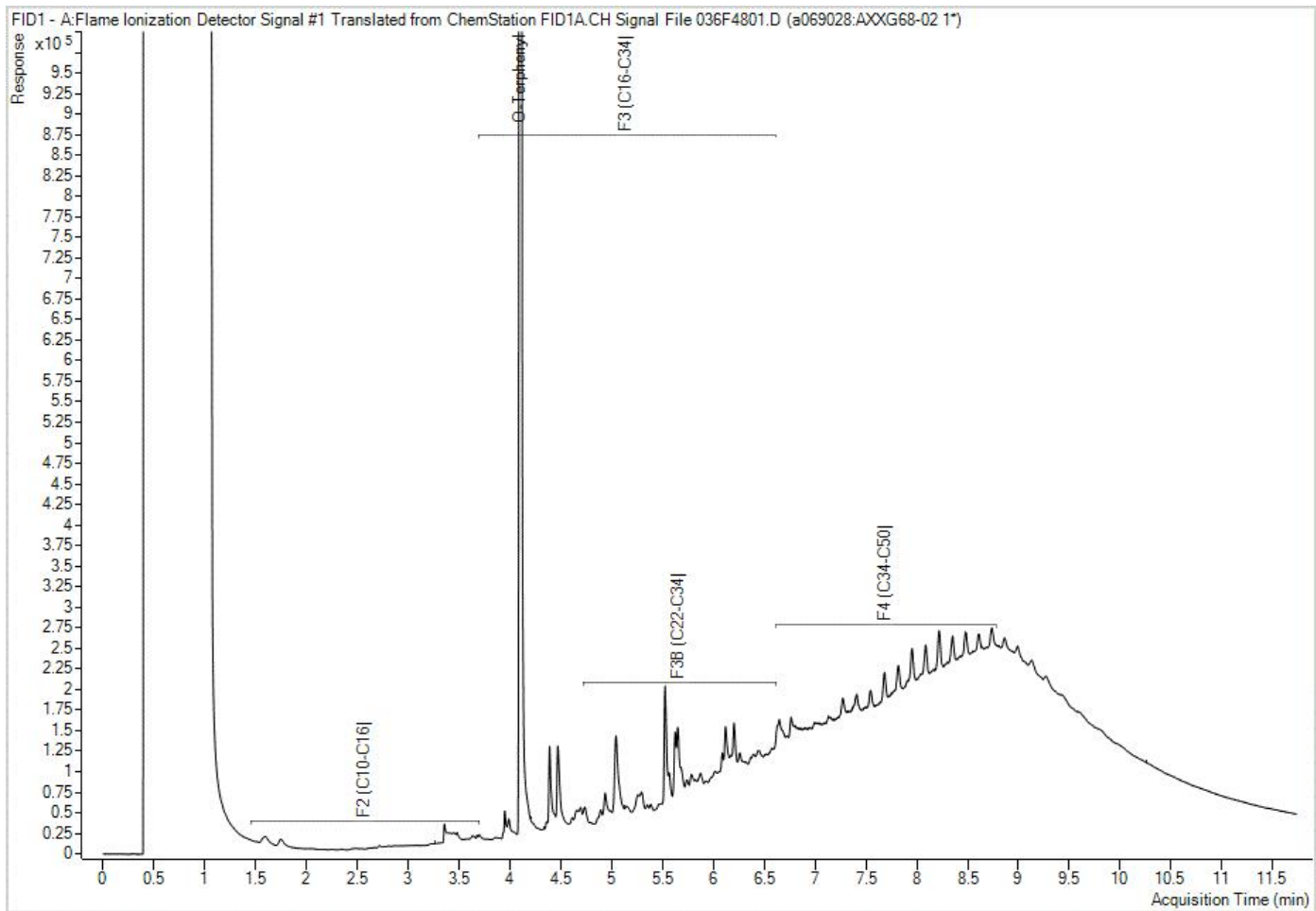
\* UNLESS OTHERWISE AGREED TO IN WRITING, WORK SUBMITTED ON THIS CHAIN OF CUSTODY IS SUBJECT TO BUREAU VERITAS'S STANDARD TERMS AND CONDITIONS. SIGNING OF THIS CHAIN OF CUSTODY DOCUMENT IS ACKNOWLEDGMENT AND ACCEPTANCE OF OUR TERMS WHICH ARE AVAILABLE FOR VIEWING AT WWW.BVNA.COM/ENVIRONMENTAL-LABORATORIES/RESOURCES/COCS-TERMS-AND-CONDITIONS.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

Petroleum Hydrocarbons F2-F4 in Soil Chromatogram



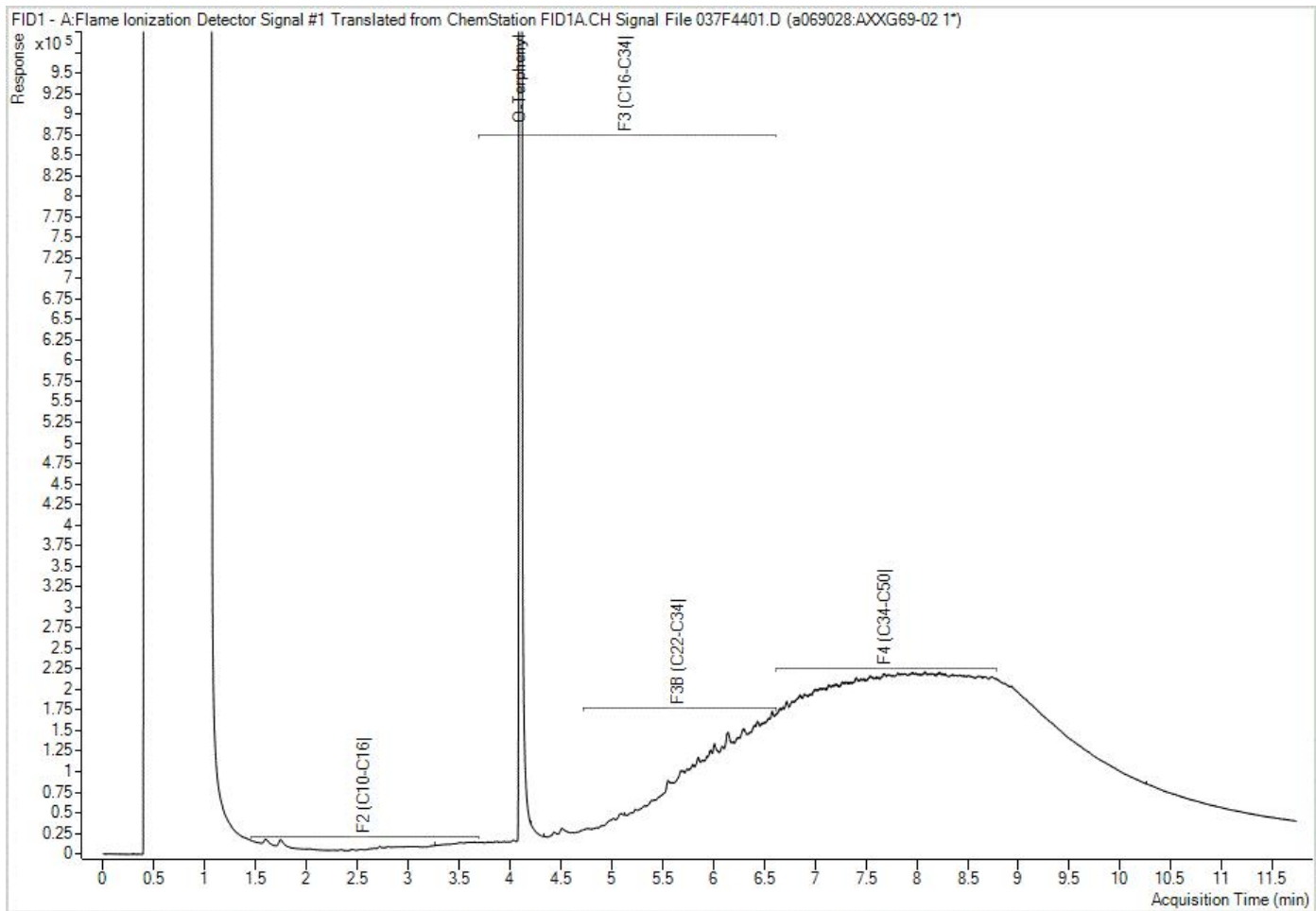
**Note: This information is provided for reference purposes only. Should detailed chemist interpretation or fingerprinting be required, please contact the laboratory.**

Petroleum Hydrocarbons F2-F4 in Soil Chromatogram



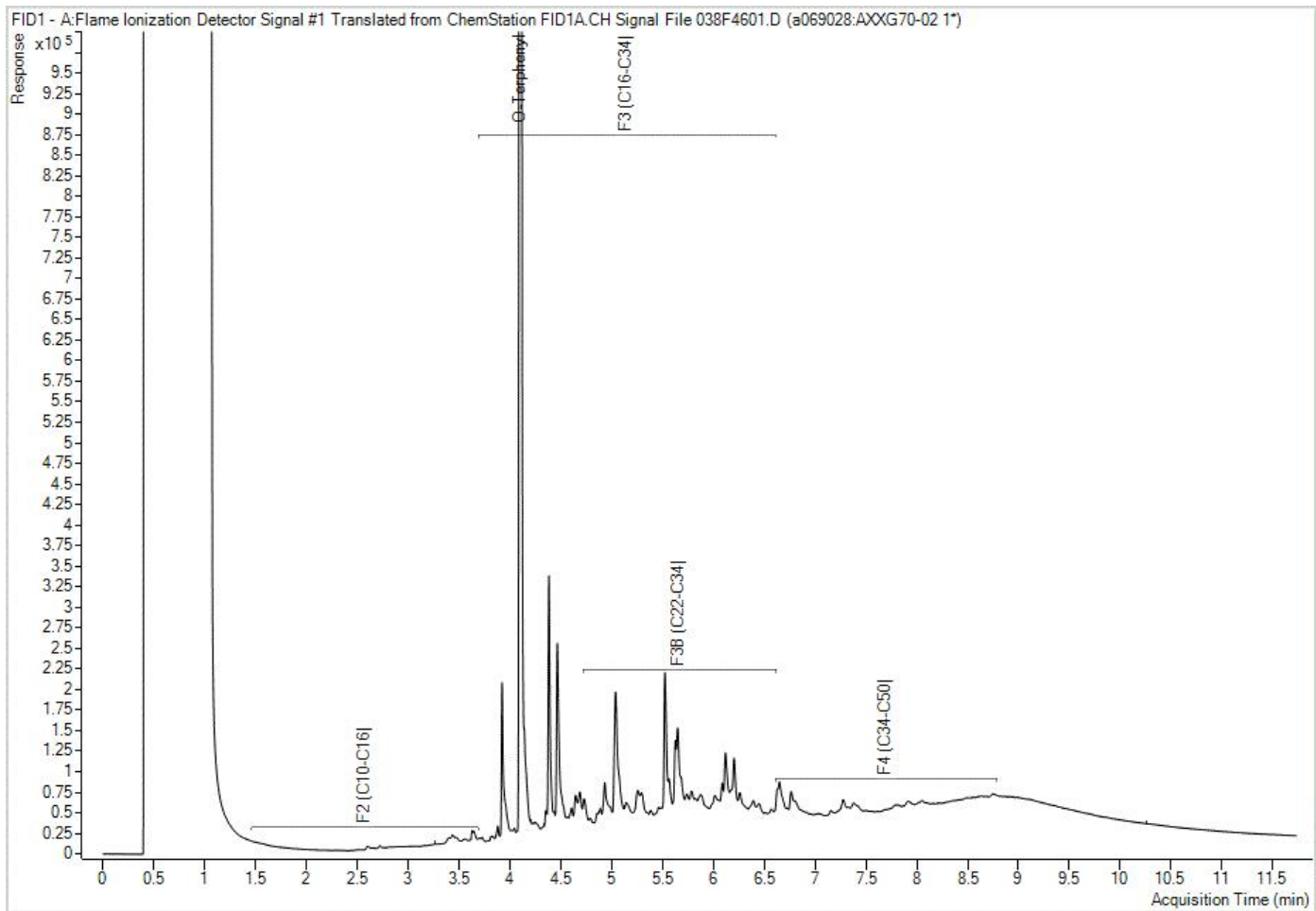
**Note: This information is provided for reference purposes only. Should detailed chemist interpretation or fingerprinting be required, please contact the laboratory.**

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 #: LOP25-035B  
 Site Location: 131 PARKDALE  
 Your C.O.C. #: 1072068-02-01

**Attention: Luke Lopers**

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

**Report Date: 2025/12/12**  
 Report #: R8668108  
 Version: 1 - Final

**CERTIFICATE OF ANALYSIS**

**BUREAU VERITAS JOB #: C5F3627**

**Received: 2025/12/03, 10:45**

Sample Matrix: Soil  
 # Samples Received: 2

Analyses	Quantity	Date	Date	Laboratory Method	Analytical Method
		Extracted	Analyzed		
Methylnaphthalene Sum (1)	2	N/A	2025/12/09	CAM SOP-00301	EPA 8270D m
ABN Compounds in SPLP Leachates (1)	1	2025/12/11	2025/12/12	CAM SOP-00301	EPA 8270E m
Hot Water Extractable Boron (1)	2	2025/12/09	2025/12/10	CAM SOP-00408	R153 Ana. Prot. 2011
1,3-Dichloropropene Sum (1)	1	N/A	2025/12/07		EPA 8260D m
Free (WAD) Cyanide (1)	2	2025/12/08	2025/12/08	CAM SOP-00457	OMOE E3015 m
Conductivity (1)	1	2025/12/10	2025/12/10	CAM SOP-00414	OMOE E3530 v1 m
Conductivity (1)	1	2025/12/09	2025/12/09	CAM SOP-00414	OMOE E3530 v1 m
Hexavalent Chromium in Soil by IC (1, 2)	2	2025/12/09	2025/12/09	CAM SOP-00436	EPA 3060A/7199 m
Dinitrotoluene Sum (1)	1	N/A	2025/12/12	CAM SOP - 00301	EPA 8270
Petroleum Hydro. CCME F1 & BTEX in Soil (1, 3)	2	N/A	2025/12/09	CAM SOP-00315	CCME PHC-CWS m
Petroleum Hydrocarbons F2-F4 in Soil (1, 4)	2	2025/12/08	2025/12/09	CAM SOP-00316	CCME CWS m
F4G (CCME Hydrocarbons Gravimetric) (1)	2	2025/12/10	2025/12/10	CAM SOP-00316	CCME PHC-CWS m
Acid Extractable Metals by ICPMS (1)	2	2025/12/09	2025/12/09	CAM SOP-00447	EPA 6020B m
Total Metals in SPLP Leachate by ICPMS (1)	1	2025/12/10	2025/12/10	CAM SOP-00447	EPA 6020B m
Moisture (1)	2	N/A	2025/12/05	CAM SOP-00445	Carter 2nd ed 70.2 m
Modified SPLP extraction - Weight (1)	1	N/A	2025/12/10	CAM SOP-00941	OMOECPLaSB E9003 R3
PAH Compounds in Soil by GC/MS (SIM) (1)	2	2025/12/07	2025/12/07	CAM SOP-00318	EPA 8270E
pH CaCl2 EXTRACT (1)	2	2025/12/09	2025/12/09	CAM SOP-00413	EPA 9045 D m
Sodium Adsorption Ratio (SAR) (1)	2	N/A	2025/12/10	CAM SOP-00102	EPA 6010C
SPLP Zero Headspace Extraction (1)	1	2025/12/05	2025/12/06	CAM SOP-00430	EPA 1312 m
Volatile organics in SPLP leachates (1)	1	N/A	2025/12/06	CAM SOP-00228	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



Your Project #: LOP25-035B  
Site Location: 131 PARKDALE  
Your C.O.C. #: 1072068-02-01

**Attention: Luke Lopers**

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

**Report Date: 2025/12/12**  
Report #: R8668108  
Version: 1 - Final

**CERTIFICATE OF ANALYSIS**

**BUREAU VERITAS JOB #: C5F3627**

**Received: 2025/12/03, 10:45**

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) Soils are reported on a dry weight basis unless otherwise specified.

(3) No lab extraction date is given for F1BTEX & VOC samples that are field preserved with methanol. Extraction date is the date sampled unless otherwise stated.

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

**Encryption Key**

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  
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Bureau Veritas Job #: C5F3627  
Report Date: 2025/12/12

Lopers & Associates  
Client Project #: LOP25-035B  
Site Location: 131 PARKDALE  
Sampler Initials: LL

### RESULTS OF ANALYSES OF SOIL

Bureau Veritas ID		AYAL42			AYAL43		
Sampling Date		2025/12/02 09:05			2025/12/02 12:55		
COC Number		1072068-02-01			1072068-02-01		
	UNITS	BH3-25-SS1	RDL	QC Batch	BH4-25-SS1	RDL	QC Batch
<b>Calculated Parameters</b>							
Sodium Adsorption Ratio	N/A	6.5		A067311	0.59		A067311
<b>Charge/Prep Analysis</b>							
Amount Extracted (Wet Weight) (g)	N/A	25	N/A	A068406			
<b>Inorganics</b>							
Conductivity	mS/cm	0.54	0.002	A071024	0.36	0.002	A070154
Dry Weight	g	100		A070191			
Moisture	%	6.8	1.0	A068668	11	1.0	A068668
Available (CaCl2) pH	pH	8.00		A070276	10.3		A070276
WAD Cyanide (Free)	ug/g	ND	0.01	A069085	ND	0.01	A069085
RDL = Reportable Detection Limit QC Batch = Quality Control Batch N/A = Not Applicable ND = Not Detected at a concentration equal or greater than the indicated Detection Limit.							



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Bureau Veritas Job #: C5F3627

Report Date: 2025/12/12

Lopers & Associates

Client Project #: LOP25-035B

Site Location: 131 PARKDALE

Sampler Initials: LL

### ELEMENTS BY ATOMIC SPECTROSCOPY (SOIL)

Bureau Veritas ID		AYAL42			AYAL43		
Sampling Date		2025/12/02 09:05			2025/12/02 12:55		
COC Number		1072068-02-01			1072068-02-01		
	UNITS	BH3-25-SS1	RDL	QC Batch	BH4-25-SS1	RDL	QC Batch
<b>Inorganics</b>							
Chromium (VI)	ug/g	ND	0.18	A069917	ND	0.18	A069917
<b>Metals</b>							
Leachable (SPLP) Antimony (Sb)	ug/L	ND	0.5	A071233			
Leachable (SPLP) Arsenic (As)	ug/L	4	1	A071233			
Leachable (SPLP) Barium (Ba)	ug/L	47	5	A071233			
Leachable (SPLP) Beryllium (Be)	ug/L	ND	0.5	A071233			
Hot Water Ext. Boron (B)	ug/g	0.43	0.050	A070437	0.18	0.050	A070437
Leachable (SPLP) Boron (B)	ug/L	ND	10	A071233			
Leachable (SPLP) Cadmium (Cd)	ug/L	ND	0.1	A071233			
Leachable (SPLP) Chromium (Cr)	ug/L	ND	5	A071233			
Leachable (SPLP) Cobalt (Co)	ug/L	ND	0.5	A071233			
Leachable (SPLP) Copper (Cu)	ug/L	ND	1	A071233			
Leachable (SPLP) Lead (Pb)	ug/L	ND	0.5	A071233			
Leachable (SPLP) Molybdenum (Mo)	ug/L	1	1	A071233			
Leachable (SPLP) Nickel (Ni)	ug/L	ND	1	A071233			
Leachable (SPLP) Selenium (Se)	ug/L	ND	2	A071233			
Leachable (SPLP) Silver (Ag)	ug/L	ND	0.1	A071233			
Leachable (SPLP) Thallium (Tl)	ug/L	ND	0.05	A071233			
Leachable (SPLP) Uranium (U)	ug/L	ND	0.1	A071233			
Leachable (SPLP) Vanadium (V)	ug/L	2	1	A071233			
Leachable (SPLP) Zinc (Zn)	ug/L	ND	5	A071233			
Acid Extractable Antimony (Sb)	ug/g	0.27	0.20	A070374	38	0.20	A070082
Acid Extractable Arsenic (As)	ug/g	2.6	1.0	A070374	5.1	1.0	A070082
Acid Extractable Barium (Ba)	ug/g	170	0.50	A070374	480	0.50	A070082
Acid Extractable Beryllium (Be)	ug/g	0.23	0.20	A070374	0.36	0.20	A070082
Acid Extractable Boron (B)	ug/g	11	5.0	A070374	9.4	5.0	A070082
Acid Extractable Cadmium (Cd)	ug/g	0.30	0.10	A070374	1.5	0.10	A070082
Acid Extractable Chromium (Cr)	ug/g	12	1.0	A070374	67	1.0	A070082
Acid Extractable Cobalt (Co)	ug/g	5.5	0.10	A070374	6.4	0.10	A070082
Acid Extractable Copper (Cu)	ug/g	17	0.50	A070374	86	0.50	A070082
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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Bureau Veritas Job #: C5F3627  
Report Date: 2025/12/12

Lopers & Associates  
Client Project #: LOP25-035B  
Site Location: 131 PARKDALE  
Sampler Initials: LL

### ELEMENTS BY ATOMIC SPECTROSCOPY (SOIL)

Bureau Veritas ID		AYAL42			AYAL43		
Sampling Date		2025/12/02 09:05			2025/12/02 12:55		
COC Number		1072068-02-01			1072068-02-01		
	UNITS	BH3-25-SS1	RDL	QC Batch	BH4-25-SS1	RDL	QC Batch
Acid Extractable Lead (Pb)	ug/g	57	1.0	A070374	640	1.0	A070082
Acid Extractable Molybdenum (Mo)	ug/g	0.84	0.50	A070374	1.4	0.50	A070082
Acid Extractable Nickel (Ni)	ug/g	13	0.50	A070374	300	0.50	A070082
Acid Extractable Selenium (Se)	ug/g	ND	0.50	A070374	ND	0.50	A070082
Acid Extractable Silver (Ag)	ug/g	ND	0.20	A070374	0.40	0.20	A070082
Acid Extractable Thallium (Tl)	ug/g	0.19	0.050	A070374	0.13	0.050	A070082
Acid Extractable Uranium (U)	ug/g	0.39	0.050	A070374	0.46	0.050	A070082
Acid Extractable Vanadium (V)	ug/g	18	5.0	A070374	23	5.0	A070082
Acid Extractable Zinc (Zn)	ug/g	63	5.0	A070374	470	5.0	A070082
Acid Extractable Mercury (Hg)	ug/g	ND	0.050	A070374	0.26	0.050	A070082
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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Bureau Veritas Job #: C5F3627  
Report Date: 2025/12/12

Lopers & Associates  
Client Project #: LOP25-035B  
Site Location: 131 PARKDALE  
Sampler Initials: LL

### SEMI-VOLATILE ORGANICS BY GC-MS (SOIL)

Bureau Veritas ID		AYAL42			AYAL43		
Sampling Date		2025/12/02 09:05			2025/12/02 12:55		
COC Number		1072068-02-01			1072068-02-01		
	UNITS	BH3-25-SS1	RDL	QC Batch	BH4-25-SS1	RDL	QC Batch
<b>Semivolatile Organics</b>							
Leachable (SPLP) Bis(2-chloroethyl)ether	ug/L	ND	2.0	A072333			
Leachable (SPLP) Bis(2-chloroisopropyl)ether	ug/L	ND	2.0	A072333			
Leachable (SPLP) p-Chloroaniline	ug/L	ND	5.0	A072333			
Leachable (SPLP) 3,3'-Dichlorobenzidine	ug/L	ND	0.40	A072333			
Leachable (SPLP) Diethyl phthalate	ug/L	ND	1.0	A072333			
Leachable (SPLP) Dimethyl phthalate	ug/L	ND	1.0	A072333			
Leachable (SPLP) 2,4-Dinitrophenol	ug/L	ND	5.0	A072333			
Leachable (SPLP) 2,4-Dinitrotoluene	ug/L	ND	3.0	A072333			
Leachable (SPLP) 2,6-Dinitrotoluene	ug/L	ND	3.0	A072333			
Leachable (SPLP) 2,4,6-Trichlorophenol	ug/L	ND	0.70	A072333			
<b>Calculated Parameters</b>							
Leachable 2,4- & 2,6-Dinitrotoluene	ug/L	ND	4.2	A067666			
Methylnaphthalene, 2-(1-)	ug/g	ND	0.071	A067312	0.13	0.071	A067312
<b>Polyaromatic Hydrocarbons</b>							
Acenaphthene	ug/g	0.13	0.050	A068978	0.28	0.050	A068978
Acenaphthylene	ug/g	ND	0.050	A068978	ND	0.050	A068978
Anthracene	ug/g	0.28	0.050	A068978	0.86	0.050	A068978
Benzo(a)anthracene	ug/g	0.66	0.050	A068978	1.1	0.050	A068978
Benzo(a)pyrene	ug/g	0.64	0.050	A068978	1.1	0.050	A068978
Benzo(b/j)fluoranthene	ug/g	0.82	0.050	A068978	1.3	0.050	A068978
Benzo(g,h,i)perylene	ug/g	0.41	0.050	A068978	0.62	0.050	A068978
Benzo(k)fluoranthene	ug/g	0.30	0.050	A068978	0.43	0.050	A068978
Chrysene	ug/g	0.59	0.050	A068978	0.92	0.050	A068978
Dibenzo(a,h)anthracene	ug/g	0.091	0.050	A068978	0.15	0.050	A068978
Fluoranthene	ug/g	2.0	0.050	A068978	2.9	0.050	A068978
Fluorene	ug/g	0.079	0.050	A068978	0.32	0.050	A068978
Indeno(1,2,3-cd)pyrene	ug/g	0.45	0.050	A068978	0.73	0.050	A068978
1-Methylnaphthalene	ug/g	ND	0.050	A068978	0.058	0.050	A068978
2-Methylnaphthalene	ug/g	ND	0.050	A068978	0.072	0.050	A068978
Naphthalene	ug/g	ND	0.050	A068978	0.11	0.050	A068978
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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Bureau Veritas Job #: C5F3627  
Report Date: 2025/12/12

Lopers & Associates  
Client Project #: LOP25-035B  
Site Location: 131 PARKDALE  
Sampler Initials: LL

### SEMI-VOLATILE ORGANICS BY GC-MS (SOIL)

Bureau Veritas ID		AYAL42			AYAL43		
Sampling Date		2025/12/02 09:05			2025/12/02 12:55		
COC Number		1072068-02-01			1072068-02-01		
	UNITS	BH3-25-SS1	RDL	QC Batch	BH4-25-SS1	RDL	QC Batch
Phenanthrene	ug/g	1.4	0.050	A068978	2.7	0.050	A068978
Pyrene	ug/g	1.6	0.050	A068978	2.3	0.050	A068978
<b>Surrogate Recovery (%)</b>							
Leachable (SPLP) 2,4,6-Tribromophenol	%	76		A072333			
Leachable (SPLP) 2-Fluorobiphenyl	%	67		A072333			
Leachable (SPLP) D14-Terphenyl (FS)	%	94		A072333			
Leachable (SPLP) D5-Nitrobenzene	%	82		A072333			
D10-Anthracene	%	120		A068978	96		A068978
D14-Terphenyl (FS)	%	99		A068978	94		A068978
D8-Acenaphthylene	%	92		A068978	86		A068978
RDL = Reportable Detection Limit QC Batch = Quality Control Batch							



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

<b>Bureau Veritas ID</b>		AYAL42		
<b>Sampling Date</b>		2025/12/02 09:05		
<b>COC Number</b>		1072068-02-01		
	<b>UNITS</b>	<b>BH3-25-SS1</b>	<b>RDL</b>	<b>QC Batch</b>
<b>Calculated Parameters</b>				
Leachable (ZHE) 1,3-Dichloropropene (cis+trans)	ug/L	ND	0.42	A067654
<b>Volatile Organics</b>				
Leachable (SPLP) Bromomethane	ug/L	ND	0.40	A068904
Leachable (SPLP) Carbon Tetrachloride	ug/L	ND	0.19	A068904
Leachable (SPLP) Chloroform	ug/L	ND	0.90	A068904
Leachable (SPLP) 1,2-Dichlorobenzene	ug/L	ND	0.40	A068904
Leachable (SPLP) 1,4-Dichlorobenzene	ug/L	ND	0.40	A068904
Leachable (SPLP) 1,1-Dichloroethane	ug/L	ND	0.40	A068904
Leachable (SPLP) 1,2-Dichloroethane	ug/L	ND	0.40	A068904
Leachable (SPLP) 1,1-Dichloroethylene	ug/L	ND	0.40	A068904
Leachable (SPLP) cis-1,2-Dichloroethylene	ug/L	ND	0.40	A068904
Leachable (SPLP) trans-1,2-Dichloroethylene	ug/L	ND	0.40	A068904
Leachable (SPLP) 1,2-Dichloropropane	ug/L	ND	0.40	A068904
Leachable (SPLP) cis-1,3-Dichloropropene	ug/L	ND	0.30	A068904
Leachable (SPLP) trans-1,3-Dichloropropene	ug/L	ND	0.30	A068904
Leachable (SPLP) Ethylene Dibromide	ug/L	ND	0.19	A068904
Leachable (SPLP) 1,1,1,2-Tetrachloroethane	ug/L	ND	0.40	A068904
Leachable (SPLP) 1,1,2,2-Tetrachloroethane	ug/L	ND	0.40	A068904
Leachable (SPLP) Tetrachloroethylene	ug/L	ND	0.40	A068904
Leachable (SPLP) 1,1,2-Trichloroethane	ug/L	ND	0.40	A068904
Leachable (SPLP) Trichloroethylene	ug/L	ND	0.40	A068904
<b>Surrogate Recovery (%)</b>				
Leachable (SPLP) 4-Bromofluorobenzene	%	99		A068904
Leachable (SPLP) D4-1,2-Dichloroethane	%	100		A068904
Leachable (SPLP) D8-Toluene	%	89		A068904
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		AYAL42	AYAL43		
Sampling Date		2025/12/02 09:05	2025/12/02 12:55		
COC Number		1072068-02-01	1072068-02-01		
	<b>UNITS</b>	<b>BH3-25-SS1</b>	<b>BH4-25-SS1</b>	<b>RDL</b>	<b>QC Batch</b>
<b>BTEX &amp; F1 Hydrocarbons</b>					
Benzene	ug/g	ND	ND	0.020	A069969
Toluene	ug/g	ND	ND	0.020	A069969
Ethylbenzene	ug/g	ND	ND	0.020	A069969
o-Xylene	ug/g	ND	ND	0.020	A069969
p+m-Xylene	ug/g	ND	ND	0.040	A069969
Total Xylenes	ug/g	ND	ND	0.040	A069969
F1 (C6-C10)	ug/g	ND	ND	10	A069969
F1 (C6-C10) - BTEX	ug/g	ND	ND	10	A069969
<b>F2-F4 Hydrocarbons</b>					
F4G-sg (Grav. Heavy Hydrocarbons)	ug/g	4400	2800	100	A070819
F2 (C10-C16 Hydrocarbons)	ug/g	8.6	15	7.0	A069676
F3 (C16-C34 Hydrocarbons)	ug/g	310	260	50	A069676
F4 (C34-C50 Hydrocarbons)	ug/g	940	670	50	A069676
Reached Baseline at C50	ug/g	No	No		A069676
<b>Surrogate Recovery (%)</b>					
1,4-Difluorobenzene	%	105	103		A069969
4-Bromofluorobenzene	%	99	98		A069969
D10-o-Xylene	%	103	100		A069969
D4-1,2-Dichloroethane	%	95	97		A069969
o-Terphenyl	%	100	102		A069676
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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Bureau Veritas Job #: C5F3627

Report Date: 2025/12/12

Lopers & Associates

Client Project #: LOP25-035B

Site Location: 131 PARKDALE

Sampler Initials: LL

### GENERAL COMMENTS

Sample AYAL42 [BH3-25-SS1] : PAH Analysis: Due to the sample matrix, sample required dilution. Detection limits were adjusted accordingly.

Sample AYAL43 [BH4-25-SS1] : PAH Analysis: Due to the sample matrix, sample required dilution. Detection limits were adjusted accordingly.

#### PETROLEUM HYDROCARBONS (CCME)

Sample AYAL42 [BH3-25-SS1] Petroleum Hydro. CCME F1 & BTEX in Soil: F1/BTEX 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.

Sample AYAL43 [BH4-25-SS1] Petroleum Hydro. CCME F1 & BTEX in Soil: F1/BTEX 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.**



BUREAU  
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Bureau Veritas Job #: C5F3627  
Report Date: 2025/12/12

Lopers & Associates  
Client Project #: LOP25-035B  
Site Location: 131 PARKDALE  
Sampler Initials: LL

### QUALITY ASSURANCE REPORT

QA/QC								
Batch	Init	QC Type	Parameter	Date Analyzed	Value	Recovery	UNITS	QC Limits
A068668	KAT	RPD	Moisture	2025/12/05	0		%	20
A068904	NGH	Matrix Spike	Leachable (SPLP) 4-Bromofluorobenzene	2025/12/06		103	%	70 - 130
			Leachable (SPLP) D4-1,2-Dichloroethane	2025/12/06		100	%	70 - 130
			Leachable (SPLP) D8-Toluene	2025/12/06		101	%	70 - 130
			Leachable (SPLP) Bromomethane	2025/12/06		90	%	60 - 140
			Leachable (SPLP) Carbon Tetrachloride	2025/12/06		102	%	70 - 130
			Leachable (SPLP) Chloroform	2025/12/06		96	%	70 - 130
			Leachable (SPLP) 1,2-Dichlorobenzene	2025/12/06		98	%	70 - 130
			Leachable (SPLP) 1,4-Dichlorobenzene	2025/12/06		101	%	70 - 130
			Leachable (SPLP) 1,1-Dichloroethane	2025/12/06		92	%	70 - 130
			Leachable (SPLP) 1,2-Dichloroethane	2025/12/06		98	%	70 - 130
			Leachable (SPLP) 1,1-Dichloroethylene	2025/12/06		95	%	70 - 130
			Leachable (SPLP) cis-1,2-Dichloroethylene	2025/12/06		101	%	70 - 130
			Leachable (SPLP) trans-1,2-Dichloroethylene	2025/12/06		101	%	70 - 130
			Leachable (SPLP) 1,2-Dichloropropane	2025/12/06		95	%	70 - 130
			Leachable (SPLP) cis-1,3-Dichloropropene	2025/12/06		85	%	70 - 130
			Leachable (SPLP) trans-1,3-Dichloropropene	2025/12/06		92	%	70 - 130
			Leachable (SPLP) Ethylene Dibromide	2025/12/06		94	%	70 - 130
			Leachable (SPLP) 1,1,1,2-Tetrachloroethane	2025/12/06		101	%	70 - 130
			Leachable (SPLP) 1,1,2,2-Tetrachloroethane	2025/12/06		87	%	70 - 130
			Leachable (SPLP) Tetrachloroethylene	2025/12/06		95	%	70 - 130
			Leachable (SPLP) 1,1,2-Trichloroethane	2025/12/06		93	%	70 - 130
			Leachable (SPLP) Trichloroethylene	2025/12/06		99	%	70 - 130
A068904	NGH	Spiked Blank	Leachable (SPLP) 4-Bromofluorobenzene	2025/12/06		102	%	70 - 130
			Leachable (SPLP) D4-1,2-Dichloroethane	2025/12/06		94	%	70 - 130
			Leachable (SPLP) D8-Toluene	2025/12/06		103	%	70 - 130
			Leachable (SPLP) Bromomethane	2025/12/06		92	%	60 - 140
			Leachable (SPLP) Carbon Tetrachloride	2025/12/06		108	%	70 - 130
			Leachable (SPLP) Chloroform	2025/12/06		98	%	70 - 130
			Leachable (SPLP) 1,2-Dichlorobenzene	2025/12/06		102	%	70 - 130
			Leachable (SPLP) 1,4-Dichlorobenzene	2025/12/06		105	%	70 - 130
			Leachable (SPLP) 1,1-Dichloroethane	2025/12/06		94	%	70 - 130
			Leachable (SPLP) 1,2-Dichloroethane	2025/12/06		97	%	70 - 130
			Leachable (SPLP) 1,1-Dichloroethylene	2025/12/06		99	%	70 - 130
			Leachable (SPLP) cis-1,2-Dichloroethylene	2025/12/06		102	%	70 - 130
			Leachable (SPLP) trans-1,2-Dichloroethylene	2025/12/06		102	%	70 - 130
			Leachable (SPLP) 1,2-Dichloropropane	2025/12/06		96	%	70 - 130
			Leachable (SPLP) cis-1,3-Dichloropropene	2025/12/06		85	%	70 - 130
			Leachable (SPLP) trans-1,3-Dichloropropene	2025/12/06		93	%	70 - 130
			Leachable (SPLP) Ethylene Dibromide	2025/12/06		95	%	70 - 130
			Leachable (SPLP) 1,1,1,2-Tetrachloroethane	2025/12/06		106	%	70 - 130
			Leachable (SPLP) 1,1,2,2-Tetrachloroethane	2025/12/06		88	%	70 - 130
			Leachable (SPLP) Tetrachloroethylene	2025/12/06		102	%	70 - 130
			Leachable (SPLP) 1,1,2-Trichloroethane	2025/12/06		96	%	70 - 130
			Leachable (SPLP) Trichloroethylene	2025/12/06		103	%	70 - 130
A068904	NGH	Method Blank	Leachable (SPLP) 4-Bromofluorobenzene	2025/12/06		99	%	70 - 130
			Leachable (SPLP) D4-1,2-Dichloroethane	2025/12/06		97	%	70 - 130
			Leachable (SPLP) D8-Toluene	2025/12/06		92	%	70 - 130
			Leachable (SPLP) Bromomethane	2025/12/06	ND, RDL=0.40		ug/L	
			Leachable (SPLP) Carbon Tetrachloride	2025/12/06	ND, RDL=0.19		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
			Leachable (SPLP) Chloroform	2025/12/06	ND, RDL=0.90		ug/L	
			Leachable (SPLP) 1,2-Dichlorobenzene	2025/12/06	ND, RDL=0.40		ug/L	
			Leachable (SPLP) 1,4-Dichlorobenzene	2025/12/06	ND, RDL=0.40		ug/L	
			Leachable (SPLP) 1,1-Dichloroethane	2025/12/06	ND, RDL=0.40		ug/L	
			Leachable (SPLP) 1,2-Dichloroethane	2025/12/06	ND, RDL=0.40		ug/L	
			Leachable (SPLP) 1,1-Dichloroethylene	2025/12/06	ND, RDL=0.40		ug/L	
			Leachable (SPLP) cis-1,2-Dichloroethylene	2025/12/06	ND, RDL=0.40		ug/L	
			Leachable (SPLP) trans-1,2-Dichloroethylene	2025/12/06	ND, RDL=0.40		ug/L	
			Leachable (SPLP) 1,2-Dichloropropane	2025/12/06	ND, RDL=0.40		ug/L	
			Leachable (SPLP) cis-1,3-Dichloropropene	2025/12/06	ND, RDL=0.30		ug/L	
			Leachable (SPLP) trans-1,3-Dichloropropene	2025/12/06	ND, RDL=0.30		ug/L	
			Leachable (SPLP) Ethylene Dibromide	2025/12/06	ND, RDL=0.19		ug/L	
			Leachable (SPLP) 1,1,1,2-Tetrachloroethane	2025/12/06	ND, RDL=0.40		ug/L	
			Leachable (SPLP) 1,1,2,2-Tetrachloroethane	2025/12/06	ND, RDL=0.40		ug/L	
			Leachable (SPLP) Tetrachloroethylene	2025/12/06	ND, RDL=0.40		ug/L	
			Leachable (SPLP) 1,1,2-Trichloroethane	2025/12/06	ND, RDL=0.40		ug/L	
			Leachable (SPLP) Trichloroethylene	2025/12/06	ND, RDL=0.40		ug/L	
A068904	NGH	RPD	Leachable (SPLP) Bromomethane	2025/12/06	NC		%	30
			Leachable (SPLP) Carbon Tetrachloride	2025/12/06	NC		%	30
			Leachable (SPLP) Chloroform	2025/12/06	NC		%	30
			Leachable (SPLP) 1,2-Dichlorobenzene	2025/12/06	NC		%	30
			Leachable (SPLP) 1,4-Dichlorobenzene	2025/12/06	NC		%	30
			Leachable (SPLP) 1,1-Dichloroethane	2025/12/06	NC		%	30
			Leachable (SPLP) 1,2-Dichloroethane	2025/12/06	NC		%	30
			Leachable (SPLP) 1,1-Dichloroethylene	2025/12/06	NC		%	30
			Leachable (SPLP) cis-1,2-Dichloroethylene	2025/12/06	NC		%	30
			Leachable (SPLP) trans-1,2-Dichloroethylene	2025/12/06	NC		%	30
			Leachable (SPLP) 1,2-Dichloropropane	2025/12/06	NC		%	30
			Leachable (SPLP) cis-1,3-Dichloropropene	2025/12/06	NC		%	30
			Leachable (SPLP) trans-1,3-Dichloropropene	2025/12/06	NC		%	30
			Leachable (SPLP) Ethylene Dibromide	2025/12/06	NC		%	30
			Leachable (SPLP) 1,1,1,2-Tetrachloroethane	2025/12/06	NC		%	30
			Leachable (SPLP) 1,1,2,2-Tetrachloroethane	2025/12/06	NC		%	30
			Leachable (SPLP) Tetrachloroethylene	2025/12/06	NC		%	30
			Leachable (SPLP) 1,1,2-Trichloroethane	2025/12/06	NC		%	30
			Leachable (SPLP) Trichloroethylene	2025/12/06	NC		%	30
A068978	JET	Matrix Spike	D10-Anthracene	2025/12/07		113	%	50 - 130



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### QUALITY ASSURANCE REPORT(CONT'D)

QA/QC	Batch	Init	QC Type	Parameter	Date Analyzed	Value	Recovery	UNITS	QC Limits
				D14-Terphenyl (FS)	2025/12/07		105	%	50 - 130
				D8-Acenaphthylene	2025/12/07		90	%	50 - 130
				Acenaphthene	2025/12/07		92	%	50 - 130
				Acenaphthylene	2025/12/07		94	%	50 - 130
				Anthracene	2025/12/07		124	%	50 - 130
				Benzo(a)anthracene	2025/12/07		91	%	50 - 130
				Benzo(a)pyrene	2025/12/07		97	%	50 - 130
				Benzo(b/j)fluoranthene	2025/12/07		99	%	50 - 130
				Benzo(g,h,i)perylene	2025/12/07		101	%	50 - 130
				Benzo(k)fluoranthene	2025/12/07		90	%	50 - 130
				Chrysene	2025/12/07		97	%	50 - 130
				Dibenzo(a,h)anthracene	2025/12/07		97	%	50 - 130
				Fluoranthene	2025/12/07		105	%	50 - 130
				Fluorene	2025/12/07		92	%	50 - 130
				Indeno(1,2,3-cd)pyrene	2025/12/07		109	%	50 - 130
				1-Methylnaphthalene	2025/12/07		80	%	50 - 130
				2-Methylnaphthalene	2025/12/07		80	%	50 - 130
				Naphthalene	2025/12/07		78	%	50 - 130
				Phenanthrene	2025/12/07		109	%	50 - 130
				Pyrene	2025/12/07		116	%	50 - 130
A068978	JET		Spiked Blank	D10-Anthracene	2025/12/07		117	%	50 - 130
				D14-Terphenyl (FS)	2025/12/07		102	%	50 - 130
				D8-Acenaphthylene	2025/12/07		98	%	50 - 130
				Acenaphthene	2025/12/07		92	%	50 - 130
				Acenaphthylene	2025/12/07		100	%	50 - 130
				Anthracene	2025/12/07		130	%	50 - 130
				Benzo(a)anthracene	2025/12/07		94	%	50 - 130
				Benzo(a)pyrene	2025/12/07		96	%	50 - 130
				Benzo(b/j)fluoranthene	2025/12/07		101	%	50 - 130
				Benzo(g,h,i)perylene	2025/12/07		106	%	50 - 130
				Benzo(k)fluoranthene	2025/12/07		90	%	50 - 130
				Chrysene	2025/12/07		101	%	50 - 130
				Dibenzo(a,h)anthracene	2025/12/07		93	%	50 - 130
				Fluoranthene	2025/12/07		105	%	50 - 130
				Fluorene	2025/12/07		99	%	50 - 130
				Indeno(1,2,3-cd)pyrene	2025/12/07		112	%	50 - 130
				1-Methylnaphthalene	2025/12/07		83	%	50 - 130
				2-Methylnaphthalene	2025/12/07		85	%	50 - 130
				Naphthalene	2025/12/07		86	%	50 - 130
				Phenanthrene	2025/12/07		115	%	50 - 130
				Pyrene	2025/12/07		111	%	50 - 130
A068978	JET		Method Blank	D10-Anthracene	2025/12/07		127	%	50 - 130
				D14-Terphenyl (FS)	2025/12/07		100	%	50 - 130
				D8-Acenaphthylene	2025/12/07		98	%	50 - 130
				Acenaphthene	2025/12/07	ND, RDL=0.0050		ug/g	
				Acenaphthylene	2025/12/07	ND, RDL=0.0050		ug/g	
				Anthracene	2025/12/07	ND, RDL=0.0050		ug/g	
				Benzo(a)anthracene	2025/12/07	ND, RDL=0.0050		ug/g	



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QA/QC Batch	Init	QC Type	Parameter	Date Analyzed	Value	Recovery	UNITS	QC Limits
			Benzo(a)pyrene	2025/12/07	ND, RDL=0.0050		ug/g	
			Benzo(b/j)fluoranthene	2025/12/07	ND, RDL=0.0050		ug/g	
			Benzo(g,h,i)perylene	2025/12/07	ND, RDL=0.0050		ug/g	
			Benzo(k)fluoranthene	2025/12/07	ND, RDL=0.0050		ug/g	
			Chrysene	2025/12/07	ND, RDL=0.0050		ug/g	
			Dibenzo(a,h)anthracene	2025/12/07	ND, RDL=0.0050		ug/g	
			Fluoranthene	2025/12/07	ND, RDL=0.0050		ug/g	
			Fluorene	2025/12/07	ND, RDL=0.0050		ug/g	
			Indeno(1,2,3-cd)pyrene	2025/12/07	ND, RDL=0.0050		ug/g	
			1-Methylnaphthalene	2025/12/07	ND, RDL=0.0050		ug/g	
			2-Methylnaphthalene	2025/12/07	ND, RDL=0.0050		ug/g	
			Naphthalene	2025/12/07	ND, RDL=0.0050		ug/g	
			Phenanthrene	2025/12/07	ND, RDL=0.0050		ug/g	
			Pyrene	2025/12/07	ND, RDL=0.0050		ug/g	
A068978	JET	RPD	Acenaphthene	2025/12/07	NC		%	40
			Acenaphthylene	2025/12/07	NC		%	40
			Anthracene	2025/12/07	NC		%	40
			Benzo(a)anthracene	2025/12/07	NC		%	40
			Benzo(a)pyrene	2025/12/07	NC		%	40
			Benzo(b/j)fluoranthene	2025/12/07	NC		%	40
			Benzo(g,h,i)perylene	2025/12/07	NC		%	40
			Benzo(k)fluoranthene	2025/12/07	NC		%	40
			Chrysene	2025/12/07	NC		%	40
			Dibenzo(a,h)anthracene	2025/12/07	NC		%	40
			Fluoranthene	2025/12/07	NC		%	40
			Fluorene	2025/12/07	NC		%	40
			Indeno(1,2,3-cd)pyrene	2025/12/07	NC		%	40
			1-Methylnaphthalene	2025/12/07	NC		%	40
			2-Methylnaphthalene	2025/12/07	NC		%	40
			Naphthalene	2025/12/07	NC		%	40
			Phenanthrene	2025/12/07	NC		%	40
			Pyrene	2025/12/07	NC		%	40
A069085	GYA	Matrix Spike	WAD Cyanide (Free)	2025/12/08		108	%	75 - 125
A069085	GYA	Spiked Blank	WAD Cyanide (Free)	2025/12/08		106	%	80 - 120
A069085	GYA	Method Blank	WAD Cyanide (Free)	2025/12/08	ND, RDL=0.01		ug/g	
A069085	GYA	RPD	WAD Cyanide (Free)	2025/12/08	NC		%	35
A069676	MSZ	Matrix Spike [AYAL42-01]	o-Terphenyl	2025/12/09		98	%	60 - 140
			F2 (C10-C16 Hydrocarbons)	2025/12/09		99	%	60 - 140
			F3 (C16-C34 Hydrocarbons)	2025/12/09		104	%	60 - 140



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QA/QC Batch	Init	QC Type	Parameter	Date Analyzed	Value	Recovery	UNITS	QC Limits
A069676	MSZ	Spiked Blank	F4 (C34-C50 Hydrocarbons)	2025/12/09		96	%	60 - 140
			o-Terphenyl	2025/12/08		96	%	60 - 140
			F2 (C10-C16 Hydrocarbons)	2025/12/08		97	%	80 - 120
			F3 (C16-C34 Hydrocarbons)	2025/12/08		101	%	80 - 120
A069676	MSZ	Method Blank	F4 (C34-C50 Hydrocarbons)	2025/12/08		98	%	80 - 120
			o-Terphenyl	2025/12/08		101	%	60 - 140
			F2 (C10-C16 Hydrocarbons)	2025/12/08	ND, RDL=7.0		ug/g	
			F3 (C16-C34 Hydrocarbons)	2025/12/08	ND, RDL=50		ug/g	
A069676	MSZ	RPD [AYAL42-01]	F4 (C34-C50 Hydrocarbons)	2025/12/08	ND, RDL=50		ug/g	
			F2 (C10-C16 Hydrocarbons)	2025/12/09	NC	%	30	
			F3 (C16-C34 Hydrocarbons)	2025/12/09	35 (1)	%	30	
A069917	HK1	Matrix Spike	F4 (C34-C50 Hydrocarbons)	2025/12/09	26		%	30
A069917	HK1	Spiked Blank	Chromium (VI)	2025/12/09		85	%	N/A
A069917	HK1	Spiked Blank	Chromium (VI)	2025/12/09		89	%	80 - 120
A069917	HK1	Method Blank	Chromium (VI)	2025/12/09	ND, RDL=0.18		ug/g	
A069917	HK1	RPD	Chromium (VI)	2025/12/09	NC		%	35
A069969	H_W	Matrix Spike	1,4-Difluorobenzene	2025/12/09		104	%	60 - 140
			4-Bromofluorobenzene	2025/12/09		102	%	60 - 140
			D10-o-Xylene	2025/12/09		111	%	60 - 140
			D4-1,2-Dichloroethane	2025/12/09		94	%	60 - 140
			Benzene	2025/12/09		104	%	50 - 140
			Toluene	2025/12/09		104	%	50 - 140
			Ethylbenzene	2025/12/09		126	%	50 - 140
			o-Xylene	2025/12/09		117	%	50 - 140
			p+m-Xylene	2025/12/09		115	%	50 - 140
			F1 (C6-C10)	2025/12/09		110	%	60 - 140
			1,4-Difluorobenzene	2025/12/09		103	%	60 - 140
			4-Bromofluorobenzene	2025/12/09		101	%	60 - 140
			D10-o-Xylene	2025/12/09		101	%	60 - 140
			D4-1,2-Dichloroethane	2025/12/09		93	%	60 - 140
A069969	H_W	Method Blank	Benzene	2025/12/09		94	%	50 - 140
			Toluene	2025/12/09		96	%	50 - 140
			Ethylbenzene	2025/12/09		120	%	50 - 140
			o-Xylene	2025/12/09		108	%	50 - 140
			p+m-Xylene	2025/12/09		106	%	50 - 140
			F1 (C6-C10)	2025/12/09		101	%	80 - 120
			1,4-Difluorobenzene	2025/12/09		105	%	60 - 140
			4-Bromofluorobenzene	2025/12/09		100	%	60 - 140
			D10-o-Xylene	2025/12/09		103	%	60 - 140
			D4-1,2-Dichloroethane	2025/12/09		96	%	60 - 140
			Benzene	2025/12/09	ND, RDL=0.020		ug/g	
			Toluene	2025/12/09	ND, RDL=0.020		ug/g	
			Ethylbenzene	2025/12/09	ND, RDL=0.020		ug/g	
			o-Xylene	2025/12/09	ND, RDL=0.020		ug/g	



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				p+m-Xylene	2025/12/09	ND, RDL=0.040		ug/g	
				Total Xylenes	2025/12/09	ND, RDL=0.040		ug/g	
				F1 (C6-C10)	2025/12/09	ND, RDL=10		ug/g	
				F1 (C6-C10) - BTEX	2025/12/09	ND, RDL=10		ug/g	
A069969	H_W	RPD		Benzene	2025/12/09	NC		%	50
				Toluene	2025/12/09	NC		%	50
				Ethylbenzene	2025/12/09	NC		%	50
				o-Xylene	2025/12/09	NC		%	50
				p+m-Xylene	2025/12/09	NC		%	50
				Total Xylenes	2025/12/09	NC		%	50
				F1 (C6-C10)	2025/12/09	NC		%	30
				F1 (C6-C10) - BTEX	2025/12/09	NC		%	30
A070082	DT1	Matrix Spike		Acid Extractable Antimony (Sb)	2025/12/09		91	%	75 - 125
				Acid Extractable Arsenic (As)	2025/12/09		95	%	75 - 125
				Acid Extractable Barium (Ba)	2025/12/09		NC	%	75 - 125
				Acid Extractable Beryllium (Be)	2025/12/09		91	%	75 - 125
				Acid Extractable Boron (B)	2025/12/09		103	%	75 - 125
				Acid Extractable Cadmium (Cd)	2025/12/09		92	%	75 - 125
				Acid Extractable Chromium (Cr)	2025/12/09		108	%	75 - 125
				Acid Extractable Cobalt (Co)	2025/12/09		94	%	75 - 125
				Acid Extractable Copper (Cu)	2025/12/09		NC	%	75 - 125
				Acid Extractable Lead (Pb)	2025/12/09		NC	%	75 - 125
				Acid Extractable Molybdenum (Mo)	2025/12/09		90	%	75 - 125
				Acid Extractable Nickel (Ni)	2025/12/09		104	%	75 - 125
				Acid Extractable Selenium (Se)	2025/12/09		92	%	75 - 125
				Acid Extractable Silver (Ag)	2025/12/09		93	%	75 - 125
				Acid Extractable Thallium (Tl)	2025/12/09		86	%	75 - 125
				Acid Extractable Uranium (U)	2025/12/09		93	%	75 - 125
				Acid Extractable Vanadium (V)	2025/12/09		99	%	75 - 125
				Acid Extractable Zinc (Zn)	2025/12/09		NC	%	75 - 125
				Acid Extractable Mercury (Hg)	2025/12/09		91	%	75 - 125
A070082	DT1	Spiked Blank		Acid Extractable Antimony (Sb)	2025/12/09		102	%	80 - 120
				Acid Extractable Arsenic (As)	2025/12/09		101	%	80 - 120
				Acid Extractable Barium (Ba)	2025/12/09		97	%	80 - 120
				Acid Extractable Beryllium (Be)	2025/12/09		95	%	80 - 120
				Acid Extractable Boron (B)	2025/12/09		96	%	80 - 120
				Acid Extractable Cadmium (Cd)	2025/12/09		97	%	80 - 120
				Acid Extractable Chromium (Cr)	2025/12/09		100	%	80 - 120
				Acid Extractable Cobalt (Co)	2025/12/09		99	%	80 - 120
				Acid Extractable Copper (Cu)	2025/12/09		96	%	80 - 120
				Acid Extractable Lead (Pb)	2025/12/09		96	%	80 - 120
				Acid Extractable Molybdenum (Mo)	2025/12/09		95	%	80 - 120
				Acid Extractable Nickel (Ni)	2025/12/09		100	%	80 - 120
				Acid Extractable Selenium (Se)	2025/12/09		100	%	80 - 120
				Acid Extractable Silver (Ag)	2025/12/09		100	%	80 - 120
				Acid Extractable Thallium (Tl)	2025/12/09		95	%	80 - 120
				Acid Extractable Uranium (U)	2025/12/09		100	%	80 - 120
				Acid Extractable Vanadium (V)	2025/12/09		99	%	80 - 120
				Acid Extractable Zinc (Zn)	2025/12/09		99	%	80 - 120



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### QUALITY ASSURANCE REPORT(CONT'D)

QA/QC Batch	Init	QC Type	Parameter	Date Analyzed	Value	Recovery	UNITS	QC Limits
A070082	DT1	Method Blank	Acid Extractable Mercury (Hg)	2025/12/09		98	%	80 - 120
			Acid Extractable Antimony (Sb)	2025/12/09	ND, RDL=0.20		ug/g	
			Acid Extractable Arsenic (As)	2025/12/09	ND, RDL=1.0		ug/g	
			Acid Extractable Barium (Ba)	2025/12/09	ND, RDL=0.50		ug/g	
			Acid Extractable Beryllium (Be)	2025/12/09	ND, RDL=0.20		ug/g	
			Acid Extractable Boron (B)	2025/12/09	ND, RDL=5.0		ug/g	
			Acid Extractable Cadmium (Cd)	2025/12/09	ND, RDL=0.10		ug/g	
			Acid Extractable Chromium (Cr)	2025/12/09	ND, RDL=1.0		ug/g	
			Acid Extractable Cobalt (Co)	2025/12/09	ND, RDL=0.10		ug/g	
			Acid Extractable Copper (Cu)	2025/12/09	ND, RDL=0.50		ug/g	
			Acid Extractable Lead (Pb)	2025/12/09	ND, RDL=1.0		ug/g	
			Acid Extractable Molybdenum (Mo)	2025/12/09	ND, RDL=0.50		ug/g	
			Acid Extractable Nickel (Ni)	2025/12/09	ND, RDL=0.50		ug/g	
			Acid Extractable Selenium (Se)	2025/12/09	ND, RDL=0.50		ug/g	
			Acid Extractable Silver (Ag)	2025/12/09	ND, RDL=0.20		ug/g	
			Acid Extractable Thallium (Tl)	2025/12/09	ND, RDL=0.050		ug/g	
			Acid Extractable Uranium (U)	2025/12/09	ND, RDL=0.050		ug/g	
			Acid Extractable Vanadium (V)	2025/12/09	ND, RDL=5.0		ug/g	
			Acid Extractable Zinc (Zn)	2025/12/09	ND, RDL=5.0		ug/g	
						Acid Extractable Mercury (Hg)	2025/12/09	ND, RDL=0.050
A070082	DT1	RPD	Acid Extractable Lead (Pb)	2025/12/09	9.1		%	30
A070154	NGI	Spiked Blank	Conductivity	2025/12/09		104	%	90 - 110
A070154	NGI	Method Blank	Conductivity	2025/12/09	ND, RDL=0.002		mS/cm	
A070154	NGI	RPD	Conductivity	2025/12/09	4.6		%	10
A070276	HH	Spiked Blank	Available (CaCl2) pH	2025/12/09		100	%	97 - 103
A070276	HH	RPD	Available (CaCl2) pH	2025/12/09	1.3		%	N/A
A070374	AFZ	Matrix Spike	Acid Extractable Antimony (Sb)	2025/12/09		104	%	75 - 125
			Acid Extractable Arsenic (As)	2025/12/09		105	%	75 - 125
			Acid Extractable Barium (Ba)	2025/12/09		NC	%	75 - 125
			Acid Extractable Beryllium (Be)	2025/12/09		106	%	75 - 125
			Acid Extractable Boron (B)	2025/12/09		98	%	75 - 125
			Acid Extractable Cadmium (Cd)	2025/12/09		105	%	75 - 125
			Acid Extractable Chromium (Cr)	2025/12/09		102	%	75 - 125
			Acid Extractable Cobalt (Co)	2025/12/09		103	%	75 - 125



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### QUALITY ASSURANCE REPORT(CONT'D)

QA/QC	Batch	Init	QC Type	Parameter	Date Analyzed	Value	Recovery	UNITS	QC Limits
				Acid Extractable Copper (Cu)	2025/12/09		101	%	75 - 125
				Acid Extractable Lead (Pb)	2025/12/09		99	%	75 - 125
				Acid Extractable Molybdenum (Mo)	2025/12/09		103	%	75 - 125
				Acid Extractable Nickel (Ni)	2025/12/09		103	%	75 - 125
				Acid Extractable Selenium (Se)	2025/12/09		106	%	75 - 125
				Acid Extractable Silver (Ag)	2025/12/09		104	%	75 - 125
				Acid Extractable Thallium (Tl)	2025/12/09		99	%	75 - 125
				Acid Extractable Uranium (U)	2025/12/09		105	%	75 - 125
				Acid Extractable Vanadium (V)	2025/12/09		100	%	75 - 125
				Acid Extractable Zinc (Zn)	2025/12/09		NC	%	75 - 125
				Acid Extractable Mercury (Hg)	2025/12/09		102	%	75 - 125
A070374	AFZ		Spiked Blank	Acid Extractable Antimony (Sb)	2025/12/09		100	%	80 - 120
				Acid Extractable Arsenic (As)	2025/12/09		96	%	80 - 120
				Acid Extractable Barium (Ba)	2025/12/09		95	%	80 - 120
				Acid Extractable Beryllium (Be)	2025/12/09		97	%	80 - 120
				Acid Extractable Boron (B)	2025/12/09		95	%	80 - 120
				Acid Extractable Cadmium (Cd)	2025/12/09		97	%	80 - 120
				Acid Extractable Chromium (Cr)	2025/12/09		96	%	80 - 120
				Acid Extractable Cobalt (Co)	2025/12/09		97	%	80 - 120
				Acid Extractable Copper (Cu)	2025/12/09		98	%	80 - 120
				Acid Extractable Lead (Pb)	2025/12/09		96	%	80 - 120
				Acid Extractable Molybdenum (Mo)	2025/12/09		94	%	80 - 120
				Acid Extractable Nickel (Ni)	2025/12/09		99	%	80 - 120
				Acid Extractable Selenium (Se)	2025/12/09		99	%	80 - 120
				Acid Extractable Silver (Ag)	2025/12/09		97	%	80 - 120
				Acid Extractable Thallium (Tl)	2025/12/09		96	%	80 - 120
				Acid Extractable Uranium (U)	2025/12/09		98	%	80 - 120
				Acid Extractable Vanadium (V)	2025/12/09		99	%	80 - 120
				Acid Extractable Zinc (Zn)	2025/12/09		101	%	80 - 120
				Acid Extractable Mercury (Hg)	2025/12/09		95	%	80 - 120
A070374	AFZ		Method Blank	Acid Extractable Antimony (Sb)	2025/12/09	ND, RDL=0.20		ug/g	
				Acid Extractable Arsenic (As)	2025/12/09	ND, RDL=1.0		ug/g	
				Acid Extractable Barium (Ba)	2025/12/09	ND, RDL=0.50		ug/g	
				Acid Extractable Beryllium (Be)	2025/12/09	ND, RDL=0.20		ug/g	
				Acid Extractable Boron (B)	2025/12/09	ND, RDL=5.0		ug/g	
				Acid Extractable Cadmium (Cd)	2025/12/09	ND, RDL=0.10		ug/g	
				Acid Extractable Chromium (Cr)	2025/12/09	ND, RDL=1.0		ug/g	
				Acid Extractable Cobalt (Co)	2025/12/09	ND, RDL=0.10		ug/g	
				Acid Extractable Copper (Cu)	2025/12/09	ND, RDL=0.50		ug/g	
				Acid Extractable Lead (Pb)	2025/12/09	ND, RDL=1.0		ug/g	
				Acid Extractable Molybdenum (Mo)	2025/12/09	ND, RDL=0.50		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
			Acid Extractable Nickel (Ni)	2025/12/09	ND, RDL=0.50		ug/g	
			Acid Extractable Selenium (Se)	2025/12/09	ND, RDL=0.50		ug/g	
			Acid Extractable Silver (Ag)	2025/12/09	ND, RDL=0.20		ug/g	
			Acid Extractable Thallium (Tl)	2025/12/09	ND, RDL=0.050		ug/g	
			Acid Extractable Uranium (U)	2025/12/09	ND, RDL=0.050		ug/g	
			Acid Extractable Vanadium (V)	2025/12/09	ND, RDL=5.0		ug/g	
			Acid Extractable Zinc (Zn)	2025/12/09	ND, RDL=5.0		ug/g	
			Acid Extractable Mercury (Hg)	2025/12/09	ND, RDL=0.050		ug/g	
A070374	AFZ	RPD	Acid Extractable Antimony (Sb)	2025/12/09	NC		%	30
			Acid Extractable Arsenic (As)	2025/12/09	7.2		%	30
			Acid Extractable Barium (Ba)	2025/12/09	3.9		%	30
			Acid Extractable Beryllium (Be)	2025/12/09	2.2		%	30
			Acid Extractable Boron (B)	2025/12/09	NC		%	30
			Acid Extractable Cadmium (Cd)	2025/12/09	NC		%	30
			Acid Extractable Chromium (Cr)	2025/12/09	5.1		%	30
			Acid Extractable Cobalt (Co)	2025/12/09	2.7		%	30
			Acid Extractable Copper (Cu)	2025/12/09	5.3		%	30
			Acid Extractable Lead (Pb)	2025/12/09	4.1		%	30
			Acid Extractable Molybdenum (Mo)	2025/12/09	NC		%	30
			Acid Extractable Nickel (Ni)	2025/12/09	4.7		%	30
			Acid Extractable Selenium (Se)	2025/12/09	NC		%	30
			Acid Extractable Silver (Ag)	2025/12/09	NC		%	30
			Acid Extractable Thallium (Tl)	2025/12/09	2.2		%	30
			Acid Extractable Uranium (U)	2025/12/09	4.1		%	30
			Acid Extractable Vanadium (V)	2025/12/09	1.0		%	30
			Acid Extractable Zinc (Zn)	2025/12/09	4.0		%	30
			Acid Extractable Mercury (Hg)	2025/12/09	NC		%	30
A070437	IHP	Matrix Spike	Hot Water Ext. Boron (B)	2025/12/10		107	%	75 - 125
A070437	IHP	Spiked Blank	Hot Water Ext. Boron (B)	2025/12/10		103	%	75 - 125
A070437	IHP	Method Blank	Hot Water Ext. Boron (B)	2025/12/10	ND, RDL=0.050		ug/g	
A070437	IHP	RPD	Hot Water Ext. Boron (B)	2025/12/10	20		%	40
A070819	RDU	Matrix Spike	F4G-sg (Grav. Heavy Hydrocarbons)	2025/12/10		99	%	65 - 135
A070819	RDU	Spiked Blank	F4G-sg (Grav. Heavy Hydrocarbons)	2025/12/10		102	%	65 - 135
A070819	RDU	Method Blank	F4G-sg (Grav. Heavy Hydrocarbons)	2025/12/10	ND, RDL=100		ug/g	
A070819	RDU	RPD	F4G-sg (Grav. Heavy Hydrocarbons)	2025/12/10	5.4		%	50
A071024	SAU	Spiked Blank	Conductivity	2025/12/10		104	%	90 - 110
A071024	SAU	Method Blank	Conductivity	2025/12/10	ND, RDL=0.002		mS/cm	
A071024	SAU	RPD	Conductivity	2025/12/10	1.0		%	10
A071233	AFZ	Matrix Spike	Leachable (SPLP) Antimony (Sb)	2025/12/10		109	%	80 - 120
			Leachable (SPLP) Arsenic (As)	2025/12/10		100	%	80 - 120
			Leachable (SPLP) Barium (Ba)	2025/12/10		96	%	80 - 120
			Leachable (SPLP) Beryllium (Be)	2025/12/10		105	%	80 - 120



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### QUALITY ASSURANCE REPORT(CONT'D)

QA/QC Batch	Init	QC Type	Parameter	Date Analyzed	Value	Recovery	UNITS	QC Limits
			Leachable (SPLP) Boron (B)	2025/12/10		97	%	80 - 120
			Leachable (SPLP) Cadmium (Cd)	2025/12/10		102	%	80 - 120
			Leachable (SPLP) Chromium (Cr)	2025/12/10		96	%	80 - 120
			Leachable (SPLP) Cobalt (Co)	2025/12/10		96	%	80 - 120
			Leachable (SPLP) Copper (Cu)	2025/12/10		99	%	80 - 120
			Leachable (SPLP) Lead (Pb)	2025/12/10		102	%	80 - 120
			Leachable (SPLP) Molybdenum (Mo)	2025/12/10		100	%	80 - 120
			Leachable (SPLP) Nickel (Ni)	2025/12/10		95	%	80 - 120
			Leachable (SPLP) Selenium (Se)	2025/12/10		104	%	80 - 120
			Leachable (SPLP) Silver (Ag)	2025/12/10		96	%	80 - 120
			Leachable (SPLP) Thallium (Tl)	2025/12/10		100	%	80 - 120
			Leachable (SPLP) Uranium (U)	2025/12/10		105	%	80 - 120
			Leachable (SPLP) Vanadium (V)	2025/12/10		96	%	80 - 120
			Leachable (SPLP) Zinc (Zn)	2025/12/10		103	%	80 - 120
A071233	AFZ	Leachate Blank	Leachable (SPLP) Antimony (Sb)	2025/12/10	ND, RDL=0.5		ug/L	
			Leachable (SPLP) Arsenic (As)	2025/12/10	ND,RDL=1		ug/L	
			Leachable (SPLP) Barium (Ba)	2025/12/10	ND,RDL=5		ug/L	
			Leachable (SPLP) Beryllium (Be)	2025/12/10	ND, RDL=0.5		ug/L	
			Leachable (SPLP) Boron (B)	2025/12/10	ND, RDL=10		ug/L	
			Leachable (SPLP) Cadmium (Cd)	2025/12/10	ND, RDL=0.1		ug/L	
			Leachable (SPLP) Chromium (Cr)	2025/12/10	ND,RDL=5		ug/L	
			Leachable (SPLP) Cobalt (Co)	2025/12/10	ND, RDL=0.5		ug/L	
			Leachable (SPLP) Copper (Cu)	2025/12/10	ND,RDL=1		ug/L	
			Leachable (SPLP) Lead (Pb)	2025/12/10	ND, RDL=0.5		ug/L	
			Leachable (SPLP) Molybdenum (Mo)	2025/12/10	ND,RDL=1		ug/L	
			Leachable (SPLP) Nickel (Ni)	2025/12/10	ND,RDL=1		ug/L	
			Leachable (SPLP) Selenium (Se)	2025/12/10	ND,RDL=2		ug/L	
			Leachable (SPLP) Silver (Ag)	2025/12/10	ND, RDL=0.1		ug/L	
			Leachable (SPLP) Thallium (Tl)	2025/12/10	ND, RDL=0.05		ug/L	
			Leachable (SPLP) Uranium (U)	2025/12/10	ND, RDL=0.1		ug/L	
			Leachable (SPLP) Vanadium (V)	2025/12/10	ND,RDL=1		ug/L	
			Leachable (SPLP) Zinc (Zn)	2025/12/10	ND,RDL=5		ug/L	
A071233	AFZ	RPD	Leachable (SPLP) Antimony (Sb)	2025/12/10	NC		%	35
			Leachable (SPLP) Arsenic (As)	2025/12/10	NC		%	35
			Leachable (SPLP) Barium (Ba)	2025/12/10	NC		%	35
			Leachable (SPLP) Beryllium (Be)	2025/12/10	NC		%	35
			Leachable (SPLP) Boron (B)	2025/12/10	NC		%	35
			Leachable (SPLP) Cadmium (Cd)	2025/12/10	NC		%	35
			Leachable (SPLP) Chromium (Cr)	2025/12/10	NC		%	35
			Leachable (SPLP) Cobalt (Co)	2025/12/10	NC		%	35
			Leachable (SPLP) Copper (Cu)	2025/12/10	NC		%	35
			Leachable (SPLP) Lead (Pb)	2025/12/10	NC		%	35
			Leachable (SPLP) Molybdenum (Mo)	2025/12/10	NC		%	35
			Leachable (SPLP) Nickel (Ni)	2025/12/10	NC		%	35



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### QUALITY ASSURANCE REPORT(CONT'D)

QA/QC Batch	Init	QC Type	Parameter	Date Analyzed	Value	Recovery	UNITS	QC Limits
			Leachable (SPLP) Selenium (Se)	2025/12/10	NC		%	35
			Leachable (SPLP) Silver (Ag)	2025/12/10	NC		%	35
			Leachable (SPLP) Thallium (Tl)	2025/12/10	NC		%	35
			Leachable (SPLP) Uranium (U)	2025/12/10	NC		%	35
			Leachable (SPLP) Vanadium (V)	2025/12/10	NC		%	35
			Leachable (SPLP) Zinc (Zn)	2025/12/10	NC		%	35
			Leachable (SPLP) Antimony (Sb)	2025/12/10	0.91		%	35
			Leachable (SPLP) Arsenic (As)	2025/12/10	NC		%	35
			Leachable (SPLP) Barium (Ba)	2025/12/10	2.6		%	35
			Leachable (SPLP) Beryllium (Be)	2025/12/10	NC		%	35
			Leachable (SPLP) Boron (B)	2025/12/10	2.2		%	35
			Leachable (SPLP) Cadmium (Cd)	2025/12/10	NC		%	35
			Leachable (SPLP) Chromium (Cr)	2025/12/10	8.7		%	35
			Leachable (SPLP) Cobalt (Co)	2025/12/10	NC		%	35
			Leachable (SPLP) Copper (Cu)	2025/12/10	2.7		%	35
			Leachable (SPLP) Lead (Pb)	2025/12/10	NC		%	35
			Leachable (SPLP) Molybdenum (Mo)	2025/12/10	9.0		%	35
			Leachable (SPLP) Nickel (Ni)	2025/12/10	3.3		%	35
			Leachable (SPLP) Selenium (Se)	2025/12/10	NC		%	35
			Leachable (SPLP) Silver (Ag)	2025/12/10	NC		%	35
			Leachable (SPLP) Thallium (Tl)	2025/12/10	NC		%	35
			Leachable (SPLP) Uranium (U)	2025/12/10	NC		%	35
			Leachable (SPLP) Vanadium (V)	2025/12/10	5.2		%	35
			Leachable (SPLP) Zinc (Zn)	2025/12/10	NC		%	35
A071233	AFZ	Spiked Blank	Leachable (SPLP) Antimony (Sb)	2025/12/10		108	%	80 - 120
			Leachable (SPLP) Arsenic (As)	2025/12/10		100	%	80 - 120
			Leachable (SPLP) Barium (Ba)	2025/12/10		95	%	80 - 120
			Leachable (SPLP) Beryllium (Be)	2025/12/10		105	%	80 - 120
			Leachable (SPLP) Boron (B)	2025/12/10		96	%	80 - 120
			Leachable (SPLP) Cadmium (Cd)	2025/12/10		101	%	80 - 120
			Leachable (SPLP) Chromium (Cr)	2025/12/10		96	%	80 - 120
			Leachable (SPLP) Cobalt (Co)	2025/12/10		96	%	80 - 120
			Leachable (SPLP) Copper (Cu)	2025/12/10		99	%	80 - 120
			Leachable (SPLP) Lead (Pb)	2025/12/10		101	%	80 - 120
			Leachable (SPLP) Molybdenum (Mo)	2025/12/10		98	%	80 - 120
			Leachable (SPLP) Nickel (Ni)	2025/12/10		97	%	80 - 120
			Leachable (SPLP) Selenium (Se)	2025/12/10		104	%	80 - 120
			Leachable (SPLP) Silver (Ag)	2025/12/10		95	%	80 - 120
			Leachable (SPLP) Thallium (Tl)	2025/12/10		99	%	80 - 120
			Leachable (SPLP) Uranium (U)	2025/12/10		106	%	80 - 120
			Leachable (SPLP) Vanadium (V)	2025/12/10		96	%	80 - 120
			Leachable (SPLP) Zinc (Zn)	2025/12/10		104	%	80 - 120
A071233	AFZ	Method Blank	Leachable (SPLP) Antimony (Sb)	2025/12/10	ND, RDL=0.5		ug/L	
			Leachable (SPLP) Arsenic (As)	2025/12/10	ND,RDL=1		ug/L	
			Leachable (SPLP) Barium (Ba)	2025/12/10	ND,RDL=5		ug/L	
			Leachable (SPLP) Beryllium (Be)	2025/12/10	ND, RDL=0.5		ug/L	
			Leachable (SPLP) Boron (B)	2025/12/10	ND, RDL=10		ug/L	
			Leachable (SPLP) Cadmium (Cd)	2025/12/10	ND, RDL=0.1		ug/L	
			Leachable (SPLP) Chromium (Cr)	2025/12/10	ND,RDL=5		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
			Leachable (SPLP) Cobalt (Co)	2025/12/10	ND, RDL=0.5		ug/L	
			Leachable (SPLP) Copper (Cu)	2025/12/10	ND,RDL=1		ug/L	
			Leachable (SPLP) Lead (Pb)	2025/12/10	ND, RDL=0.5		ug/L	
			Leachable (SPLP) Molybdenum (Mo)	2025/12/10	ND,RDL=1		ug/L	
			Leachable (SPLP) Nickel (Ni)	2025/12/10	ND,RDL=1		ug/L	
			Leachable (SPLP) Selenium (Se)	2025/12/10	ND,RDL=2		ug/L	
			Leachable (SPLP) Silver (Ag)	2025/12/10	ND, RDL=0.1		ug/L	
			Leachable (SPLP) Thallium (Tl)	2025/12/10	ND, RDL=0.05		ug/L	
			Leachable (SPLP) Uranium (U)	2025/12/10	ND, RDL=0.1		ug/L	
			Leachable (SPLP) Vanadium (V)	2025/12/10	ND,RDL=1		ug/L	
			Leachable (SPLP) Zinc (Zn)	2025/12/10	ND,RDL=5		ug/L	
A072333	MYI	Matrix Spike [AYAL42-04]	Leachable (SPLP) 2,4,6-Tribromophenol	2025/12/12		88	%	30 - 130
			Leachable (SPLP) 2-Fluorobiphenyl	2025/12/12		72	%	30 - 130
			Leachable (SPLP) D14-Terphenyl (FS)	2025/12/12		90	%	30 - 130
			Leachable (SPLP) D5-Nitrobenzene	2025/12/12		77	%	30 - 130
			Leachable (SPLP) Bis(2-chloroethyl)ether	2025/12/12		96	%	30 - 130
			Leachable (SPLP) Bis(2-chloroisopropyl)ether	2025/12/12		87	%	30 - 130
			Leachable (SPLP) p-Chloroaniline	2025/12/12		88	%	30 - 130
			Leachable (SPLP) 3,3'-Dichlorobenzidine	2025/12/12		96	%	30 - 130
			Leachable (SPLP) Diethyl phthalate	2025/12/12		102	%	30 - 130
			Leachable (SPLP) Dimethyl phthalate	2025/12/12		99	%	30 - 130
			Leachable (SPLP) 2,4-Dinitrophenol	2025/12/12		92	%	10 - 130
			Leachable (SPLP) 2,4-Dinitrotoluene	2025/12/12		97	%	30 - 130
			Leachable (SPLP) 2,6-Dinitrotoluene	2025/12/12		89	%	30 - 130
			Leachable (SPLP) 2,4,6-Trichlorophenol	2025/12/12		84	%	10 - 130
A072333	MYI	Spiked Blank	Leachable (SPLP) 2,4,6-Tribromophenol	2025/12/12		90	%	30 - 130
			Leachable (SPLP) 2-Fluorobiphenyl	2025/12/12		76	%	30 - 130
			Leachable (SPLP) D14-Terphenyl (FS)	2025/12/12		90	%	30 - 130
			Leachable (SPLP) D5-Nitrobenzene	2025/12/12		81	%	30 - 130
			Leachable (SPLP) Bis(2-chloroethyl)ether	2025/12/12		100	%	30 - 130
			Leachable (SPLP) Bis(2-chloroisopropyl)ether	2025/12/12		92	%	30 - 130
			Leachable (SPLP) p-Chloroaniline	2025/12/12		103	%	30 - 130
			Leachable (SPLP) 3,3'-Dichlorobenzidine	2025/12/12		114	%	30 - 130
			Leachable (SPLP) Diethyl phthalate	2025/12/12		106	%	30 - 130
			Leachable (SPLP) Dimethyl phthalate	2025/12/12		103	%	30 - 130
			Leachable (SPLP) 2,4-Dinitrophenol	2025/12/12		97	%	10 - 130
			Leachable (SPLP) 2,4-Dinitrotoluene	2025/12/12		99	%	30 - 130
			Leachable (SPLP) 2,6-Dinitrotoluene	2025/12/12		92	%	30 - 130
			Leachable (SPLP) 2,4,6-Trichlorophenol	2025/12/12		89	%	10 - 130
A072333	MYI	Method Blank	Leachable (SPLP) 2,4,6-Tribromophenol	2025/12/12		73	%	30 - 130
			Leachable (SPLP) 2-Fluorobiphenyl	2025/12/12		73	%	30 - 130
			Leachable (SPLP) D14-Terphenyl (FS)	2025/12/12		91	%	30 - 130
			Leachable (SPLP) D5-Nitrobenzene	2025/12/12		83	%	30 - 130
			Leachable (SPLP) Bis(2-chloroethyl)ether	2025/12/12	ND, RDL=2.0		ug/L	
			Leachable (SPLP) Bis(2-chloroisopropyl)ether	2025/12/12	ND, RDL=2.0		ug/L	



BUREAU VERITAS

Bureau Veritas Job #: C5F3627  
Report Date: 2025/12/12

Lopers & Associates  
Client Project #: LOP25-035B  
Site Location: 131 PARKDALE  
Sampler Initials: LL

### QUALITY ASSURANCE REPORT(CONT'D)

QA/QC Batch	Init	QC Type	Parameter	Date Analyzed	Value	Recovery	UNITS	QC Limits
			Leachable (SPLP) p-Chloroaniline	2025/12/12	ND, RDL=5.0		ug/L	
			Leachable (SPLP) 3,3'-Dichlorobenzidine	2025/12/12	ND, RDL=0.40		ug/L	
			Leachable (SPLP) Diethyl phthalate	2025/12/12	ND, RDL=1.0		ug/L	
			Leachable (SPLP) Dimethyl phthalate	2025/12/12	ND, RDL=1.0		ug/L	
			Leachable (SPLP) 2,4-Dinitrophenol	2025/12/12	ND, RDL=5.0		ug/L	
			Leachable (SPLP) 2,4-Dinitrotoluene	2025/12/12	ND, RDL=3.0		ug/L	
			Leachable (SPLP) 2,6-Dinitrotoluene	2025/12/12	ND, RDL=3.0		ug/L	
			Leachable (SPLP) 2,4,6-Trichlorophenol	2025/12/12	ND, RDL=0.70		ug/L	
A072333	MYI	RPD [AYAL42-04]	Leachable (SPLP) Bis(2-chloroethyl)ether	2025/12/12	NC		%	40
			Leachable (SPLP) Bis(2-chloroisopropyl)ether	2025/12/12	NC		%	40
			Leachable (SPLP) p-Chloroaniline	2025/12/12	NC		%	40
			Leachable (SPLP) 3,3'-Dichlorobenzidine	2025/12/12	NC		%	40
			Leachable (SPLP) Diethyl phthalate	2025/12/12	NC		%	40
			Leachable (SPLP) Dimethyl phthalate	2025/12/12	NC		%	40
			Leachable (SPLP) 2,4-Dinitrophenol	2025/12/12	NC		%	40
			Leachable (SPLP) 2,4-Dinitrotoluene	2025/12/12	NC		%	40
			Leachable (SPLP) 2,6-Dinitrotoluene	2025/12/12	NC		%	40
			Leachable (SPLP) 2,4,6-Trichlorophenol	2025/12/12	NC		%	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.

Leachate Blank: A blank matrix containing all reagents used in the leaching procedure. Used to determine any process contamination.

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

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

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

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

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

(1) Duplicate results exceeded RPD acceptance criteria for flagged analytes. Sample extract was reanalyzed with the same results. This is likely due to sample heterogeneity.



BUREAU  
VERITAS

Bureau Veritas Job #: C5F3627  
Report Date: 2025/12/12

Lopers & Associates  
Client Project #: LOP25-035B  
Site Location: 131 PARKDALE  
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 that reads 'Louise A. Harding'.

Louise Harding, Scientific Specialist

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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

COOLER OBSERVATIONS:

SHIPPED FROM BV SERVICE CENTER:

OTTAWA

RECEIVED AT:

MISSISSAUGA

BV Receipt #	CUSTODY SEAL	YES	NO	<input type="checkbox"/> Drinking Water	TEMP
1 OTT-2025-12-386	PRESENT	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	2 3 2
2 001 002	PRESENT	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	NA NA NA
3 003 to 006	PRESENT	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	0 0 1
4 355	PRESENT	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	4 3 2
5 354	PRESENT	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	0 1 1
6 378	PRESENT	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	0 1 1
7 379	PRESENT	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	1 1 1
8 380 to 382	PRESENT	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	2 6 2
9 359 377	PRESENT	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	4 4 6
10 U	PRESENT	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	2 1 2

BV Receipt #	CUSTODY SEAL	YES	NO	<input type="checkbox"/> Drinking Water	TEMP
11 356 OTT-2025-12-357	PRESENT	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	-1 9 0
12 383 384	PRESENT	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	3 6 6
13 1	PRESENT	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	4 5 2
14 385	PRESENT	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	4 2 4
15 1	PRESENT	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	2 1 2
16 388	PRESENT	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	0 8 6
17 U 008	PRESENT	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	0 0 1
18	PRESENT	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
19	PRESENT	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
20	PRESENT	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

RECEIVED BY (PRINT & SIGN)	DATE (YYYY/MM/DD)	TIME (HH:MM)
ANMORHT SINGH	2025/12/04	06:20

If Custody seal condition and presence of ice is the same for all, use these boxes:	CUSTODY SEAL	YES	NO
	PRESENT	<input type="checkbox"/>	<input type="checkbox"/>
	INTACT	<input type="checkbox"/>	<input type="checkbox"/>
	ICE PRESENT	<input type="checkbox"/>	<input type="checkbox"/>

C5F3627  
2025/12/03 10:45

Bureau Veritas  
35 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

<b>Invoice To:</b> Company: #39509 Lopers & Associates Attention: Alisha Sullivan Address: 30 Lansfield Way Ottawa ON K2G 3V8 Tel: (613) 327-9073 Fax: Email: Alisha.Sullivan@bureauveritas.com		<b>Report To:</b> Company: Attention: Luke Lopers Address: Tel: Email: Luke@lopers.ca		<b>PROJECT INFORMATION:</b> Quotation #: C43362 P.O. #: Project Name: LOP25-035B Site #: 131 Parkdale Sampled By: L. Lopers		<b>Laboratory Use Only:</b> Bureau Veritas Job #: Bottle Order #: 1072068 COC #: Project Manager: Katherine Szozda C#1072068-02-01	
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MOE REGULATED DRINKING WATER OR WATER INTENDED FOR HUMAN CONSUMPTION MUST BE SUBMITTED ON THE BUREAU VERITAS DRINKING WATER CHAIN OF CUSTODY

<b>Regulation 153 (2011)</b> <input type="checkbox"/> Table 1 <input type="checkbox"/> Table 2 <input type="checkbox"/> Table 3 <input checked="" type="checkbox"/> Table 4	<input checked="" type="checkbox"/> Res/Park <input checked="" type="checkbox"/> Ind/Comm <input type="checkbox"/> Agri/Other	<input checked="" type="checkbox"/> Medium/Fine <input checked="" type="checkbox"/> Coarse <input type="checkbox"/> For RSC	<b>Other Regulations</b> <input type="checkbox"/> CCME <input type="checkbox"/> Reg 558 <input type="checkbox"/> MISA <input type="checkbox"/> PWQO <input type="checkbox"/> Other	<input type="checkbox"/> Sanitary Sewer Bylaw <input type="checkbox"/> Storm Sewer Bylaw <input type="checkbox"/> Municipality <input type="checkbox"/> Reg 406 Table	<b>Special Instructions</b>
---	---	---	---	--	-----------------------------

Sample Barcode Label	Sample (Location) Identification	Date Sampled	Time Sampled	Matrix	Field Filtered (please circle): Metals / Hg / Cr VI	0 Reg 153 PHCk, BTEX/F, H4	1 Reg 153 PAHs	10 Reg 153 Metals & Inorganics Pkg	pH CACB EXTRACT	Turnaround Time (TAT) Required: (Please provide advance notice for rush projects)
1	BH3-25-SS1	Dec 2/25	9:05AM	S		X	X	X		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 #)
2	BH4-25-SS1	↓	12:55PM	S		X	X	X		
3										
4										
5										
6										
7										
8										
9										
10										

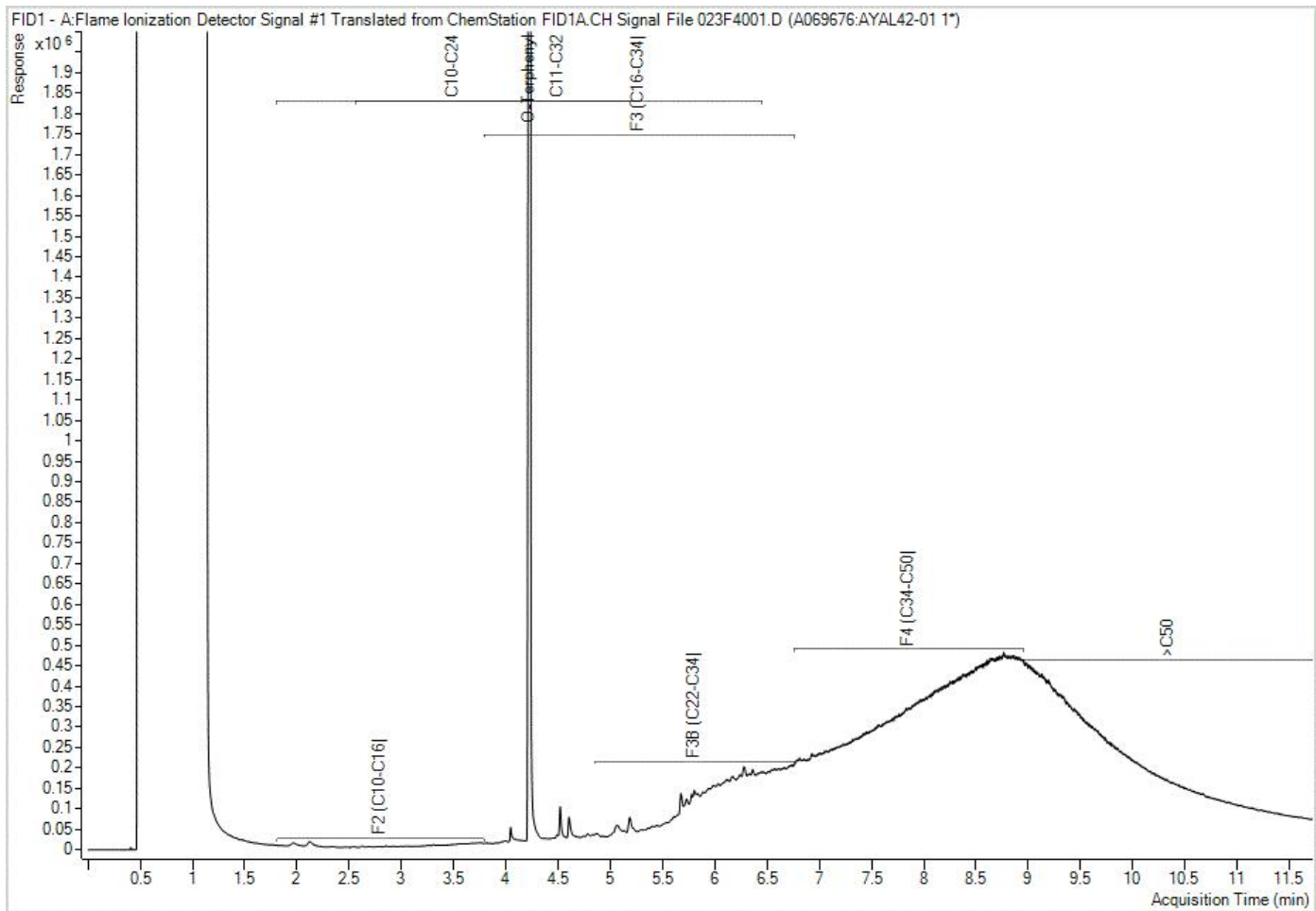


OTT-2025-11-355

Relinquished By (Print): <i>Luke Lopers</i>	Date: (YY/MM/DD) 25/12/0	Time 9:20AM	RECEIVED BY: (Signature/Print) <i>Rodrigo da Silva</i>	Date: (YY/MM/DD) 2025/12/03	Time 10:45	# jars used and not submitted	Laboratory Use Only Time Sensitive Temperature (°C) on Recl: 3/3/5 (icepack) Custody Seal Present: Intact Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
--	-----------------------------	----------------	---	--------------------------------	---------------	-------------------------------	---

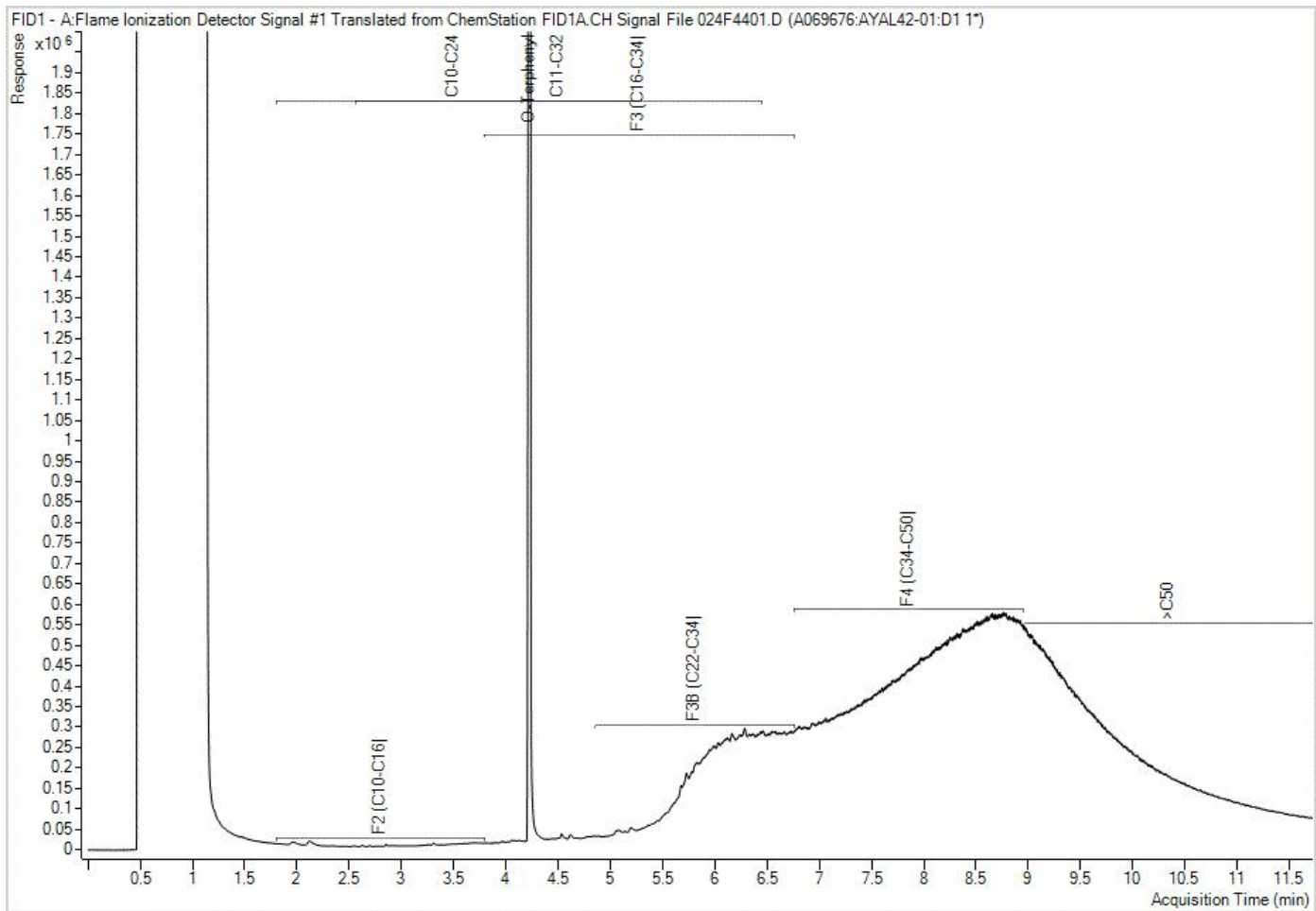
\* UNLESS OTHERWISE AGREED TO IN WRITING, WORK SUBMITTED ON THIS CHAIN OF CUSTODY IS SUBJECT TO BUREAU VERITAS'S STANDARD TERMS AND CONDITIONS. SIGNING OF THIS CHAIN OF CUSTODY DOCUMENT IS ACKNOWLEDGMENT AND ACCEPTANCE OF OUR TERMS WHICH ARE AVAILABLE FOR VIEWING AT WWW.BVNA.COM/ENVIRONMENTAL-LABORATORIES/RESOURCES/COCS-TERMS-AND-CONDITIONS.  
 \* 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.  
 White: Bureau Veritas Yellow: Client  
 SAMPLES MUST BE KEPT COOL (< 10° C) FROM TIME OF SAMPLING UNTIL DELIVERY TO BUREAU VERITAS

Petroleum Hydrocarbons F2-F4 in Soil Chromatogram



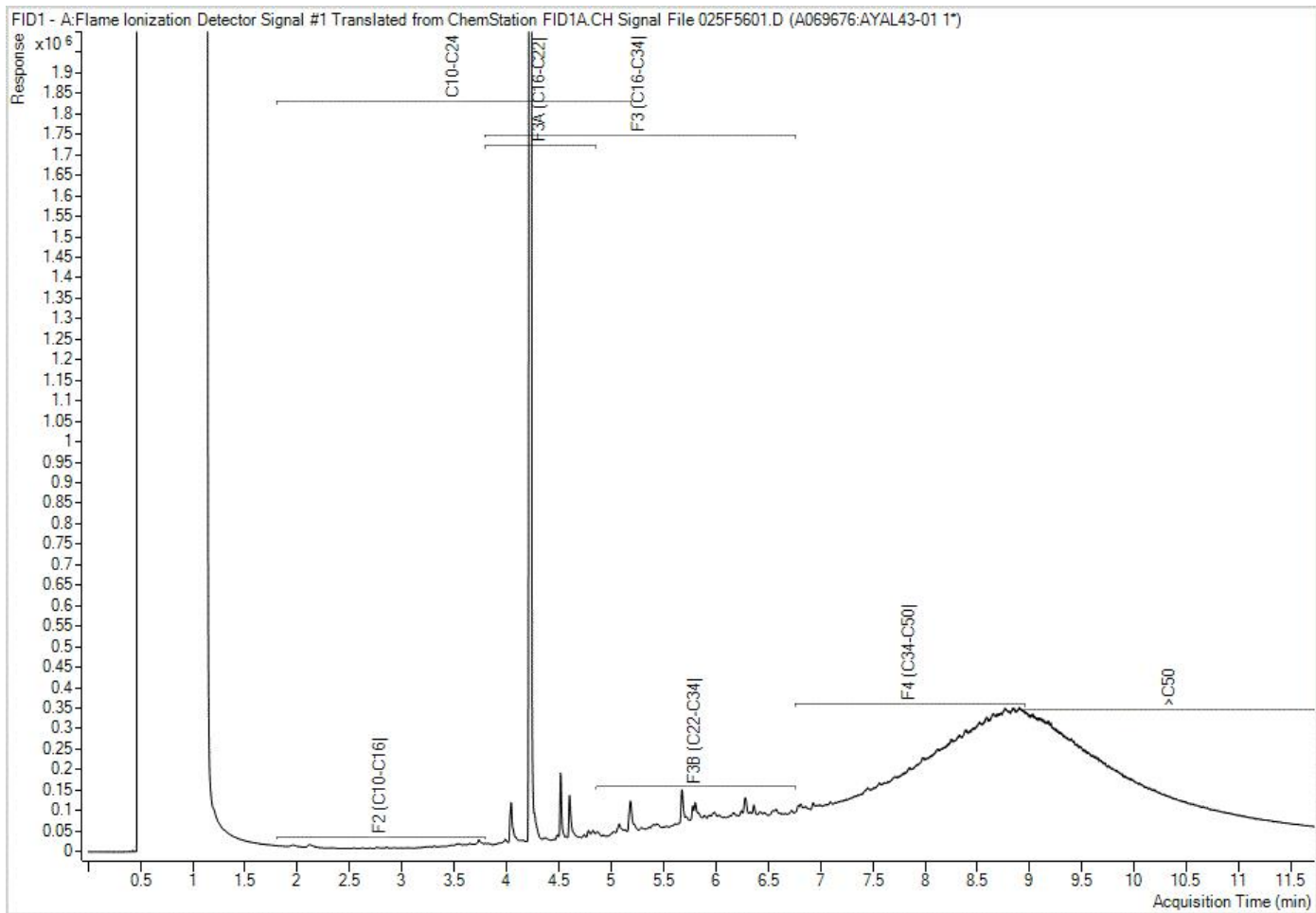
Note: This information is provided for reference purposes only. Should detailed chemist interpretation or fingerprinting be required, please contact the laboratory.

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 #: LOP25-035B  
 Site Location: 131 PARKDALE  
 Your C.O.C. #: C#1072068-03-01

**Attention: Luke Lopers**

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

**Report Date: 2025/12/10**  
 Report #: R866670  
 Version: 1 - Final

**CERTIFICATE OF ANALYSIS**

**BUREAU VERITAS JOB #: C5F3307**

**Received: 2025/12/03, 16:50**

Sample Matrix: Soil  
 # Samples Received: 8

Analyses	Quantity	Date	Date	Laboratory Method	Analytical Method
		Extracted	Analyzed		
Methylnaphthalene Sum	8	N/A	2025/12/09	CAM SOP-00301	EPA 8270D m
Hot Water Extractable Boron	6	2025/12/09	2025/12/10	CAM SOP-00408	R153 Ana. Prot. 2011
Hot Water Extractable Boron	2	2025/12/09	2025/12/09	CAM SOP-00408	R153 Ana. Prot. 2011
Free (WAD) Cyanide	8	2025/12/08	2025/12/08	CAM SOP-00457	OMOE E3015 m
Conductivity	8	2025/12/09	2025/12/09	CAM SOP-00414	OMOE E3530 v1 m
Hexavalent Chromium in Soil by IC (1)	8	2025/12/08	2025/12/08	CAM SOP-00436	EPA 3060A/7199 m
Petroleum Hydro. CCME F1 & BTEX in Soil (2)	1	N/A	2025/12/10	CAM SOP-00315	CCME PHC-CWS m
Petroleum Hydro. CCME F1 & BTEX in Soil (2)	7	N/A	2025/12/09	CAM SOP-00315	CCME PHC-CWS m
Petroleum Hydrocarbons F2-F4 in Soil (3)	8	2025/12/08	2025/12/09	CAM SOP-00316	CCME CWS m
F4G (CCME Hydrocarbons Gravimetric)	5	2025/12/10	2025/12/10	CAM SOP-00316	CCME PHC-CWS m
Acid Extractable Metals by ICPMS	4	2025/12/08	2025/12/09	CAM SOP-00447	EPA 6020B m
Acid Extractable Metals by ICPMS	4	2025/12/09	2025/12/09	CAM SOP-00447	EPA 6020B m
Moisture	8	N/A	2025/12/05	CAM SOP-00445	Carter 2nd ed 70.2 m
PAH Compounds in Soil by GC/MS (SIM)	6	2025/12/07	2025/12/07	CAM SOP-00318	EPA 8270E
PAH Compounds in Soil by GC/MS (SIM)	2	2025/12/07	2025/12/08	CAM SOP-00318	EPA 8270E
pH CaCl2 EXTRACT	8	2025/12/09	2025/12/09	CAM SOP-00413	EPA 9045 D m
Sodium Adsorption Ratio (SAR)	8	N/A	2025/12/10	CAM SOP-00102	EPA 6010C

**Remarks:**

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

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

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



Your Project #: LOP25-035B  
Site Location: 131 PARKDALE  
Your C.O.C. #: C#1072068-03-01

**Attention: Luke Lopers**

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

**Report Date: 2025/12/10**  
Report #: R8666670  
Version: 1 - Final

**CERTIFICATE OF ANALYSIS**

**BUREAU VERITAS JOB #: C5F3307**

**Received: 2025/12/03, 16:50**

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) Soils are reported on a dry weight basis unless otherwise specified.

(2) No lab extraction date is given for F1BTEX & VOC samples that are field preserved with methanol. Extraction date is the date sampled unless otherwise stated.

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

**Encryption Key**

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 #: C5F3307  
Report Date: 2025/12/10

Lopers & Associates  
Client Project #: LOP25-035B  
Site Location: 131 PARKDALE  
Sampler Initials: LL

### RESULTS OF ANALYSES OF SOIL

Bureau Veritas ID		AXZW40	AXZW41		AXZW42		
Sampling Date		2025/12/03 08:15	2025/12/03 08:50		2025/12/03 09:10		
COC Number		C#1072068-03-01	C#1072068-03-01		C#1072068-03-01		
	UNITS	BH5-25-AU1	BH6-25-AU1	QC Batch	BH7-25-AU1	RDL	QC Batch
<b>Calculated Parameters</b>							
Sodium Adsorption Ratio	N/A	1.8	19	A067311	23		A067311
<b>Inorganics</b>							
Conductivity	mS/cm	1.1	2.6	A069941	1.5	0.002	A069941
Moisture	%	11	12	A068668	14	1.0	A068668
Available (CaCl2) pH	pH	7.66	7.69	A070333	7.85		A070333
WAD Cyanide (Free)	ug/g	ND	ND	A069075	ND	0.01	A069085
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 ID		AXZW43	AXZW44		AXZW45	AXZW46		
Sampling Date		2025/12/03 09:45	2025/12/03 10:05		2025/12/03 10:20	2025/12/03 10:50		
COC Number		C#1072068-03-01	C#1072068-03-01		C#1072068-03-01	C#1072068-03-01		
	UNITS	BH8-25-AU1	BH9-25-AU1	QC Batch	BH10-25-AU1	BH11-25-AU1	RDL	QC Batch
<b>Calculated Parameters</b>								
Sodium Adsorption Ratio	N/A	0.95	8.9	A067311	13	1.5		A067311
<b>Inorganics</b>								
Conductivity	mS/cm	0.27	0.64	A069941	0.94	0.35	0.002	A070154
Moisture	%	6.7	15	A068668	8.9	19	1.0	A068668
Available (CaCl2) pH	pH	7.85	7.54	A070333	7.85	7.56		A070333
WAD Cyanide (Free)	ug/g	ND	ND	A069075	ND	ND	0.01	A069075
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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Sampler Initials: LL

### RESULTS OF ANALYSES OF SOIL

<b>Bureau Veritas ID</b>		AXZW47		
<b>Sampling Date</b>		2025/12/03		
<b>COC Number</b>		C#1072068-03-01		
	<b>UNITS</b>	<b>DUP-12/03</b>	<b>RDL</b>	<b>QC Batch</b>
<b>Calculated Parameters</b>				
Sodium Adsorption Ratio	N/A	25		A067311
<b>Inorganics</b>				
Conductivity	mS/cm	1.7	0.002	A069941
Moisture	%	14	1.0	A068660
Available (CaCl2) pH	pH	7.82		A070333
WAD Cyanide (Free)	ug/g	ND	0.01	A069075
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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### ELEMENTS BY ATOMIC SPECTROSCOPY (SOIL)

Bureau Veritas ID		AXZW40	AXZW41	AXZW42	AXZW43		
Sampling Date		2025/12/03 08:15	2025/12/03 08:50	2025/12/03 09:10	2025/12/03 09:45		
COC Number		C#1072068-03-01	C#1072068-03-01	C#1072068-03-01	C#1072068-03-01		
	UNITS	BH5-25-AU1	BH6-25-AU1	BH7-25-AU1	BH8-25-AU1	RDL	QC Batch

Inorganics							
Chromium (VI)	ug/g	ND	ND	ND	ND	0.18	A069103
Metals							
Hot Water Ext. Boron (B)	ug/g	1.1	1.2	0.72	0.41	0.050	A070152
Acid Extractable Antimony (Sb)	ug/g	1.8	3.1	2.1	1.2	0.20	A069534
Acid Extractable Arsenic (As)	ug/g	3.7	4.8	6.4	4.2	1.0	A069534
Acid Extractable Barium (Ba)	ug/g	230	300	240	150	0.50	A069534
Acid Extractable Beryllium (Be)	ug/g	0.28	0.41	0.40	0.25	0.20	A069534
Acid Extractable Boron (B)	ug/g	7.0	11	10	10	5.0	A069534
Acid Extractable Cadmium (Cd)	ug/g	0.60	0.82	0.92	0.32	0.10	A069534
Acid Extractable Chromium (Cr)	ug/g	18	32	23	16	1.0	A069534
Acid Extractable Cobalt (Co)	ug/g	5.1	6.5	5.6	5.2	0.10	A069534
Acid Extractable Copper (Cu)	ug/g	25	62	50	32	0.50	A069534
Acid Extractable Lead (Pb)	ug/g	120	530	340	210	1.0	A069534
Acid Extractable Molybdenum (Mo)	ug/g	0.73	0.61	0.82	0.79	0.50	A069534
Acid Extractable Nickel (Ni)	ug/g	13	17	16	14	0.50	A069534
Acid Extractable Selenium (Se)	ug/g	ND	ND	0.61	ND	0.50	A069534
Acid Extractable Silver (Ag)	ug/g	ND	1.1	0.25	ND	0.20	A069534
Acid Extractable Thallium (Tl)	ug/g	0.13	0.20	0.17	0.14	0.050	A069534
Acid Extractable Uranium (U)	ug/g	0.53	0.42	0.39	0.34	0.050	A069534
Acid Extractable Vanadium (V)	ug/g	23	24	20	12	5.0	A069534
Acid Extractable Zinc (Zn)	ug/g	150	330	310	140	5.0	A069534
Acid Extractable Mercury (Hg)	ug/g	0.085	0.26	0.16	0.062	0.050	A069534

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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### ELEMENTS BY ATOMIC SPECTROSCOPY (SOIL)

Bureau Veritas ID		AXZW44		AXZW45	AXZW46		
Sampling Date		2025/12/03 10:05		2025/12/03 10:20	2025/12/03 10:50		
COC Number		C#1072068-03-01		C#1072068-03-01	C#1072068-03-01		
	UNITS	BH9-25-AU1	QC Batch	BH10-25-AU1	BH11-25-AU1	RDL	QC Batch
<b>Inorganics</b>							
Chromium (VI)	ug/g	ND	A069103	ND	ND	0.18	A069103
<b>Metals</b>							
Hot Water Ext. Boron (B)	ug/g	1.2	A070151	0.47	0.31	0.050	A070437
Acid Extractable Antimony (Sb)	ug/g	3.4	A070369	1.4	2.8	0.20	A070082
Acid Extractable Arsenic (As)	ug/g	7.6	A070369	4.9	7.0	1.0	A070082
Acid Extractable Barium (Ba)	ug/g	350	A070369	280	380	0.50	A070082
Acid Extractable Beryllium (Be)	ug/g	0.42	A070369	0.27	0.51	0.20	A070082
Acid Extractable Boron (B)	ug/g	10	A070369	9.2	11	5.0	A070082
Acid Extractable Cadmium (Cd)	ug/g	0.89	A070369	0.66	1.3	0.10	A070082
Acid Extractable Chromium (Cr)	ug/g	28	A070369	18	26	1.0	A070082
Acid Extractable Cobalt (Co)	ug/g	7.2	A070369	4.7	7.9	0.10	A070082
Acid Extractable Copper (Cu)	ug/g	78	A070369	32	110	0.50	A070082
Acid Extractable Lead (Pb)	ug/g	620	A070369	270	760	1.0	A070082
Acid Extractable Molybdenum (Mo)	ug/g	1.9	A070369	1.0	1.4	0.50	A070082
Acid Extractable Nickel (Ni)	ug/g	19	A070369	16	23	0.50	A070082
Acid Extractable Selenium (Se)	ug/g	0.65	A070369	ND	0.82	0.50	A070082
Acid Extractable Silver (Ag)	ug/g	0.39	A070369	0.23	0.64	0.20	A070082
Acid Extractable Thallium (Tl)	ug/g	0.19	A070369	0.19	0.18	0.050	A070082
Acid Extractable Uranium (U)	ug/g	0.41	A070369	0.37	0.42	0.050	A070082
Acid Extractable Vanadium (V)	ug/g	25	A070369	16	28	5.0	A070082
Acid Extractable Zinc (Zn)	ug/g	520	A070369	250	580	5.0	A070082
Acid Extractable Mercury (Hg)	ug/g	0.22	A070369	0.21	0.18	0.050	A070082
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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### ELEMENTS BY ATOMIC SPECTROSCOPY (SOIL)

Bureau Veritas ID		AXZW47		
Sampling Date		2025/12/03		
COC Number		C#1072068-03-01		
	UNITS	DUP-12/03	RDL	QC Batch
<b>Inorganics</b>				
Chromium (VI)	ug/g	ND	0.18	A069103
<b>Metals</b>				
Hot Water Ext. Boron (B)	ug/g	0.87	0.050	A070151
Acid Extractable Antimony (Sb)	ug/g	2.5	0.20	A069999
Acid Extractable Arsenic (As)	ug/g	6.2	1.0	A069999
Acid Extractable Barium (Ba)	ug/g	250	0.50	A069999
Acid Extractable Beryllium (Be)	ug/g	0.45	0.20	A069999
Acid Extractable Boron (B)	ug/g	9.1	5.0	A069999
Acid Extractable Cadmium (Cd)	ug/g	0.96	0.10	A069999
Acid Extractable Chromium (Cr)	ug/g	23	1.0	A069999
Acid Extractable Cobalt (Co)	ug/g	5.8	0.10	A069999
Acid Extractable Copper (Cu)	ug/g	71	0.50	A069999
Acid Extractable Lead (Pb)	ug/g	360	1.0	A069999
Acid Extractable Molybdenum (Mo)	ug/g	0.83	0.50	A069999
Acid Extractable Nickel (Ni)	ug/g	18	0.50	A069999
Acid Extractable Selenium (Se)	ug/g	0.63	0.50	A069999
Acid Extractable Silver (Ag)	ug/g	0.26	0.20	A069999
Acid Extractable Thallium (Tl)	ug/g	0.20	0.050	A069999
Acid Extractable Uranium (U)	ug/g	0.36	0.050	A069999
Acid Extractable Vanadium (V)	ug/g	20	5.0	A069999
Acid Extractable Zinc (Zn)	ug/g	340	5.0	A069999
Acid Extractable Mercury (Hg)	ug/g	0.19	0.050	A069999
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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Report Date: 2025/12/10

Lopers & Associates

Client Project #: LOP25-035B

Site Location: 131 PARKDALE

Sampler Initials: LL

### SEMI-VOLATILE ORGANICS BY GC-MS (SOIL)

Bureau Veritas ID		AXZW40		AXZW41		AXZW42		
Sampling Date		2025/12/03 08:15		2025/12/03 08:50		2025/12/03 09:10		
COC Number		C#1072068-03-01		C#1072068-03-01		C#1072068-03-01		
	UNITS	BH5-25-AU1	RDL	BH6-25-AU1	RDL	BH7-25-AU1	RDL	QC Batch
<b>Calculated Parameters</b>								
Methylnaphthalene, 2-(1-)	ug/g	0.16	0.071	0.066	0.0071	ND	0.071	A067312
<b>Polyaromatic Hydrocarbons</b>								
Acenaphthene	ug/g	0.52	0.050	0.097	0.0050	0.24	0.050	A068978
Acenaphthylene	ug/g	0.063	0.050	0.097	0.0050	0.16	0.050	A068978
Anthracene	ug/g	1.7	0.050	0.32	0.0050	0.66	0.050	A068978
Benzo(a)anthracene	ug/g	2.9	0.050	0.70	0.0050	1.4	0.050	A068978
Benzo(a)pyrene	ug/g	3.0	0.050	0.81	0.0050	1.5	0.050	A068978
Benzo(b/j)fluoranthene	ug/g	4.0	0.050	0.91	0.0050	1.9	0.050	A068978
Benzo(g,h,i)perylene	ug/g	1.8	0.050	0.47	0.0050	0.95	0.050	A068978
Benzo(k)fluoranthene	ug/g	1.2	0.050	0.34	0.0050	0.57	0.050	A068978
Chrysene	ug/g	2.7	0.050	0.64	0.0050	1.2	0.050	A068978
Dibenzo(a,h)anthracene	ug/g	0.47	0.050	0.13	0.0050	0.24	0.050	A068978
Fluoranthene	ug/g	8.0	0.050	1.7	0.0050	3.5	0.050	A068978
Fluorene	ug/g	0.50	0.050	0.11	0.0050	0.25	0.050	A068978
Indeno(1,2,3-cd)pyrene	ug/g	2.2	0.050	0.56	0.0050	1.1	0.050	A068978
1-Methylnaphthalene	ug/g	0.075	0.050	0.032	0.0050	ND	0.050	A068978
2-Methylnaphthalene	ug/g	0.087	0.050	0.034	0.0050	ND	0.050	A068978
Naphthalene	ug/g	0.16	0.050	0.047	0.0050	0.074	0.050	A068978
Phenanthrene	ug/g	6.2	0.050	1.2	0.0050	2.4	0.050	A068978
Pyrene	ug/g	6.7	0.050	1.4	0.0050	3.0	0.050	A068978
<b>Surrogate Recovery (%)</b>								
D10-Anthracene	%	100		109		115		A068978
D14-Terphenyl (FS)	%	99		97		98		A068978
D8-Acenaphthylene	%	93		93		85		A068978
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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### SEMI-VOLATILE ORGANICS BY GC-MS (SOIL)

Bureau Veritas ID		AXZW43		AXZW44	AXZW45		AXZW46		
Sampling Date		2025/12/03 09:45		2025/12/03 10:05	2025/12/03 10:20		2025/12/03 10:50		
COC Number		C#1072068-03-01		C#1072068-03-01	C#1072068-03-01		C#1072068-03-01		
	UNITS	BH8-25-AU1	RDL	BH9-25-AU1	BH10-25-AU1	RDL	BH11-25-AU1	RDL	QC Batch

#### Calculated Parameters

Methylnaphthalene, 2-(1-)	ug/g	0.012	0.0071	ND	ND	0.071	3.5	0.71	A067312
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#### Polyaromatic Hydrocarbons

Acenaphthene	ug/g	0.021	0.0050	0.15	0.13	0.050	5.5	0.50	A068978
Acenaphthylene	ug/g	0.043	0.0050	0.34	0.060	0.050	0.75	0.50	A068978
Anthracene	ug/g	0.11	0.0050	0.61	0.33	0.050	12	0.50	A068978
Benzo(a)anthracene	ug/g	0.39	0.0050	1.6	0.74	0.050	25	0.50	A068978
Benzo(a)pyrene	ug/g	0.42	0.0050	1.7	0.77	0.050	23	0.50	A068978
Benzo(b,j)fluoranthene	ug/g	0.49	0.0050	2.0	0.94	0.050	28	0.50	A068978
Benzo(g,h,i)perylene	ug/g	0.25	0.0050	1.1	0.55	0.050	11	0.50	A068978
Benzo(k)fluoranthene	ug/g	0.18	0.0050	0.74	0.29	0.050	11	0.50	A068978
Chrysene	ug/g	0.34	0.0050	1.3	0.58	0.050	21	0.50	A068978
Dibenzo(a,h)anthracene	ug/g	0.070	0.0050	0.22	0.11	0.050	2.7	0.50	A068978
Fluoranthene	ug/g	0.69	0.0050	3.3	1.8	0.050	65	0.50	A068978
Fluorene	ug/g	0.018	0.0050	0.12	0.12	0.050	4.3	0.50	A068978
Indeno(1,2,3-cd)pyrene	ug/g	0.30	0.0050	1.2	0.55	0.050	14	0.50	A068978
1-Methylnaphthalene	ug/g	0.0053	0.0050	ND	ND	0.050	1.5	0.50	A068978
2-Methylnaphthalene	ug/g	0.0069	0.0050	ND	ND	0.050	2.0	0.50	A068978
Naphthalene	ug/g	0.0078	0.0050	ND	0.090	0.050	8.2	0.50	A068978
Phenanthrene	ug/g	0.32	0.0050	1.8	1.3	0.050	59	0.50	A068978
Pyrene	ug/g	0.63	0.0050	3.3	1.6	0.050	56	0.50	A068978

#### Surrogate Recovery (%)

D10-Anthracene	%	106		114	120		107		A068978
D14-Terphenyl (FS)	%	92		94	90		102		A068978
D8-Acenaphthylene	%	86		85	84		111		A068978

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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### SEMI-VOLATILE ORGANICS BY GC-MS (SOIL)

<b>Bureau Veritas ID</b>		AXZW47		
<b>Sampling Date</b>		2025/12/03		
<b>COC Number</b>		C#1072068-03-01		
	<b>UNITS</b>	<b>DUP-12/03</b>	<b>RDL</b>	<b>QC Batch</b>
<b>Calculated Parameters</b>				
Methylnaphthalene, 2-(1-)	ug/g	0.13	0.071	A067312
<b>Polyaromatic Hydrocarbons</b>				
Acenaphthene	ug/g	0.63	0.050	A068978
Acenaphthylene	ug/g	0.20	0.050	A068978
Anthracene	ug/g	3.4	0.050	A068978
Benzo(a)anthracene	ug/g	8.0	0.050	A068978
Benzo(a)pyrene	ug/g	8.3	0.050	A068978
Benzo(b/j)fluoranthene	ug/g	8.8	0.050	A068978
Benzo(g,h,i)perylene	ug/g	4.4	0.050	A068978
Benzo(k)fluoranthene	ug/g	2.8	0.050	A068978
Chrysene	ug/g	6.5	0.050	A068978
Dibenzo(a,h)anthracene	ug/g	1.1	0.050	A068978
Fluoranthene	ug/g	20	0.050	A068978
Fluorene	ug/g	0.50	0.050	A068978
Indeno(1,2,3-cd)pyrene	ug/g	5.3	0.050	A068978
1-Methylnaphthalene	ug/g	0.063	0.050	A068978
2-Methylnaphthalene	ug/g	0.065	0.050	A068978
Naphthalene	ug/g	0.10	0.050	A068978
Phenanthrene	ug/g	11	0.050	A068978
Pyrene	ug/g	17	0.050	A068978
<b>Surrogate Recovery (%)</b>				
D10-Anthracene	%	115		A068978
D14-Terphenyl (FS)	%	101		A068978
D8-Acenaphthylene	%	87		A068978
RDL = Reportable Detection Limit				
QC Batch = Quality Control Batch				



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Site Location: 131 PARKDALE

Sampler Initials: LL

### PETROLEUM HYDROCARBONS (CCME)

Bureau Veritas ID		AXZW40			AXZW41		
Sampling Date		2025/12/03 08:15			2025/12/03 08:50		
COC Number		C#1072068-03-01			C#1072068-03-01		
	UNITS	BH5-25-AU1	RDL	QC Batch	BH6-25-AU1	RDL	QC Batch
<b>BTEX &amp; F1 Hydrocarbons</b>							
Benzene	ug/g	ND	0.020	A070453	ND	0.020	A070453
Toluene	ug/g	ND	0.020	A070453	ND	0.020	A070453
Ethylbenzene	ug/g	ND	0.020	A070453	ND	0.020	A070453
o-Xylene	ug/g	ND	0.020	A070453	ND	0.020	A070453
p+m-Xylene	ug/g	ND	0.040	A070453	ND	0.040	A070453
Total Xylenes	ug/g	ND	0.040	A070453	ND	0.040	A070453
F1 (C6-C10)	ug/g	ND	10	A070453	ND	10	A070453
F1 (C6-C10) - BTEX	ug/g	ND	10	A070453	ND	10	A070453
<b>F2-F4 Hydrocarbons</b>							
F4G-sg (Grav. Heavy Hydrocarbons)	ug/g	1200	100	A070819			
F2 (C10-C16 Hydrocarbons)	ug/g	36	7.0	A069676	ND	7.0	A069676
F3 (C16-C34 Hydrocarbons)	ug/g	570	50	A069676	110	50	A069676
F4 (C34-C50 Hydrocarbons)	ug/g	370	50	A069676	90	50	A069676
Reached Baseline at C50	ug/g	No		A069676	Yes		A069676
<b>Surrogate Recovery (%)</b>							
1,4-Difluorobenzene	%	103		A070453	104		A070453
4-Bromofluorobenzene	%	99		A070453	97		A070453
D10-o-Xylene	%	101		A070453	106		A070453
D4-1,2-Dichloroethane	%	97		A070453	96		A070453
o-Terphenyl	%	102		A069676	101		A069676
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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Sampler Initials: LL

### PETROLEUM HYDROCARBONS (CCME)

Bureau Veritas ID		AXZW42			AXZW43	AXZW44		
Sampling Date		2025/12/03 09:10			2025/12/03 09:45	2025/12/03 10:05		
COC Number		C#1072068-03-01			C#1072068-03-01	C#1072068-03-01		
	UNITS	BH7-25-AU1	RDL	QC Batch	BH8-25-AU1	BH9-25-AU1	RDL	QC Batch
<b>BTEX &amp; F1 Hydrocarbons</b>								
Benzene	ug/g	ND	0.020	A070453	ND	ND	0.020	A070453
Toluene	ug/g	0.038	0.020	A070453	ND	0.022	0.020	A070453
Ethylbenzene	ug/g	ND	0.020	A070453	ND	ND	0.020	A070453
o-Xylene	ug/g	0.020	0.020	A070453	ND	ND	0.020	A070453
p+m-Xylene	ug/g	0.048	0.040	A070453	ND	ND	0.040	A070453
Total Xylenes	ug/g	0.069	0.040	A070453	ND	ND	0.040	A070453
F1 (C6-C10)	ug/g	ND	10	A070453	ND	ND	10	A070453
F1 (C6-C10) - BTEX	ug/g	ND	10	A070453	ND	ND	10	A070453
<b>F2-F4 Hydrocarbons</b>								
F4G-sg (Grav. Heavy Hydrocarbons)	ug/g	1700	100	A070819				
F2 (C10-C16 Hydrocarbons)	ug/g	12	7.0	A069676	ND	7.4	7.0	A069676
F3 (C16-C34 Hydrocarbons)	ug/g	450	50	A069676	56	170	50	A069676
F4 (C34-C50 Hydrocarbons)	ug/g	580	50	A069676	53	110	50	A069676
Reached Baseline at C50	ug/g	No		A069676	Yes	Yes		A069676
<b>Surrogate Recovery (%)</b>								
1,4-Difluorobenzene	%	103		A070453	104	103		A070453
4-Bromofluorobenzene	%	100		A070453	98	97		A070453
D10-o-Xylene	%	104		A070453	102	102		A070453
D4-1,2-Dichloroethane	%	99		A070453	96	98		A070453
o-Terphenyl	%	101		A069676	102	103		A069676
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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### PETROLEUM HYDROCARBONS (CCME)

Bureau Veritas ID		AXZW45	AXZW46	AXZW47		
Sampling Date		2025/12/03 10:20	2025/12/03 10:50	2025/12/03		
COC Number		C#1072068-03-01	C#1072068-03-01	C#1072068-03-01		
	UNITS	BH10-25-AU1	BH11-25-AU1	DUP-12/03	RDL	QC Batch
<b>BTEX &amp; F1 Hydrocarbons</b>						
Benzene	ug/g	ND	ND	ND	0.020	A070453
Toluene	ug/g	ND	ND	0.034	0.020	A070453
Ethylbenzene	ug/g	ND	ND	ND	0.020	A070453
o-Xylene	ug/g	ND	ND	0.023	0.020	A070453
p+m-Xylene	ug/g	ND	ND	0.057	0.040	A070453
Total Xylenes	ug/g	ND	ND	0.080	0.040	A070453
F1 (C6-C10)	ug/g	ND	ND	ND	10	A070453
F1 (C6-C10) - BTEX	ug/g	ND	ND	ND	10	A070453
<b>F2-F4 Hydrocarbons</b>						
F4G-sg (Grav. Heavy Hydrocarbons)	ug/g	1200	3000	2200	100	A070819
F2 (C10-C16 Hydrocarbons)	ug/g	13	44	10	7.0	A069676
F3 (C16-C34 Hydrocarbons)	ug/g	210	1300	390	50	A069676
F4 (C34-C50 Hydrocarbons)	ug/g	410	970	600	50	A069676
Reached Baseline at C50	ug/g	No	No	No		A069676
<b>Surrogate Recovery (%)</b>						
1,4-Difluorobenzene	%	102	103	102		A070453
4-Bromofluorobenzene	%	99	99	101		A070453
D10-o-Xylene	%	98	103	107		A070453
D4-1,2-Dichloroethane	%	97	97	99		A070453
o-Terphenyl	%	101	102	101		A069676
RDL = Reportable Detection Limit QC Batch = Quality Control Batch ND = Not Detected at a concentration equal or greater than the indicated Detection Limit.						



### GENERAL COMMENTS

Each temperature is the average of up to three cooler temperatures taken at receipt

Package 1	0.0°C
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PAH Analysis: Due to the sample matrix, some samples required dilution. Detection limits were adjusted accordingly.

Sample AXZW41 [BH6-25-AU1] : F1/BTEX 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.

Sample AXZW45 [BH10-25-AU1] : F1/BTEX 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
A068660	KAT	RPD	Moisture	2025/12/05	1.0		%	20
A068668	KAT	RPD	Moisture	2025/12/05	0		%	20
A068978	JET	Matrix Spike	D10-Anthracene	2025/12/07		113	%	50 - 130
			D14-Terphenyl (FS)	2025/12/07		105	%	50 - 130
			D8-Acenaphthylene	2025/12/07		90	%	50 - 130
			Acenaphthene	2025/12/07		92	%	50 - 130
			Acenaphthylene	2025/12/07		94	%	50 - 130
			Anthracene	2025/12/07		124	%	50 - 130
			Benzo(a)anthracene	2025/12/07		91	%	50 - 130
			Benzo(a)pyrene	2025/12/07		97	%	50 - 130
			Benzo(b/j)fluoranthene	2025/12/07		99	%	50 - 130
			Benzo(g,h,i)perylene	2025/12/07		101	%	50 - 130
			Benzo(k)fluoranthene	2025/12/07		90	%	50 - 130
			Chrysene	2025/12/07		97	%	50 - 130
			Dibenzo(a,h)anthracene	2025/12/07		97	%	50 - 130
			Fluoranthene	2025/12/07		105	%	50 - 130
			Fluorene	2025/12/07		92	%	50 - 130
			Indeno(1,2,3-cd)pyrene	2025/12/07		109	%	50 - 130
			1-Methylnaphthalene	2025/12/07		80	%	50 - 130
			2-Methylnaphthalene	2025/12/07		80	%	50 - 130
			Naphthalene	2025/12/07		78	%	50 - 130
			Phenanthrene	2025/12/07		109	%	50 - 130
			Pyrene	2025/12/07		116	%	50 - 130
A068978	JET	Spiked Blank	D10-Anthracene	2025/12/07		117	%	50 - 130
			D14-Terphenyl (FS)	2025/12/07		102	%	50 - 130
			D8-Acenaphthylene	2025/12/07		98	%	50 - 130
			Acenaphthene	2025/12/07		92	%	50 - 130
			Acenaphthylene	2025/12/07		100	%	50 - 130
			Anthracene	2025/12/07		130	%	50 - 130
			Benzo(a)anthracene	2025/12/07		94	%	50 - 130
			Benzo(a)pyrene	2025/12/07		96	%	50 - 130
			Benzo(b/j)fluoranthene	2025/12/07		101	%	50 - 130
			Benzo(g,h,i)perylene	2025/12/07		106	%	50 - 130
			Benzo(k)fluoranthene	2025/12/07		90	%	50 - 130
			Chrysene	2025/12/07		101	%	50 - 130
			Dibenzo(a,h)anthracene	2025/12/07		93	%	50 - 130
			Fluoranthene	2025/12/07		105	%	50 - 130
			Fluorene	2025/12/07		99	%	50 - 130
			Indeno(1,2,3-cd)pyrene	2025/12/07		112	%	50 - 130
			1-Methylnaphthalene	2025/12/07		83	%	50 - 130
			2-Methylnaphthalene	2025/12/07		85	%	50 - 130
			Naphthalene	2025/12/07		86	%	50 - 130
			Phenanthrene	2025/12/07		115	%	50 - 130
			Pyrene	2025/12/07		111	%	50 - 130
A068978	JET	Method Blank	D10-Anthracene	2025/12/07		127	%	50 - 130
			D14-Terphenyl (FS)	2025/12/07		100	%	50 - 130
			D8-Acenaphthylene	2025/12/07		98	%	50 - 130
			Acenaphthene	2025/12/07	ND, RDL=0.0050		ug/g	
			Acenaphthylene	2025/12/07	ND, RDL=0.0050		ug/g	
			Anthracene	2025/12/07	ND, RDL=0.0050		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
			Benzo(a)anthracene	2025/12/07	ND, RDL=0.0050		ug/g	
			Benzo(a)pyrene	2025/12/07	ND, RDL=0.0050		ug/g	
			Benzo(b/j)fluoranthene	2025/12/07	ND, RDL=0.0050		ug/g	
			Benzo(g,h,i)perylene	2025/12/07	ND, RDL=0.0050		ug/g	
			Benzo(k)fluoranthene	2025/12/07	ND, RDL=0.0050		ug/g	
			Chrysene	2025/12/07	ND, RDL=0.0050		ug/g	
			Dibenzo(a,h)anthracene	2025/12/07	ND, RDL=0.0050		ug/g	
			Fluoranthene	2025/12/07	ND, RDL=0.0050		ug/g	
			Fluorene	2025/12/07	ND, RDL=0.0050		ug/g	
			Indeno(1,2,3-cd)pyrene	2025/12/07	ND, RDL=0.0050		ug/g	
			1-Methylnaphthalene	2025/12/07	ND, RDL=0.0050		ug/g	
			2-Methylnaphthalene	2025/12/07	ND, RDL=0.0050		ug/g	
			Naphthalene	2025/12/07	ND, RDL=0.0050		ug/g	
			Phenanthrene	2025/12/07	ND, RDL=0.0050		ug/g	
			Pyrene	2025/12/07	ND, RDL=0.0050		ug/g	
A068978	JET	RPD	Acenaphthene	2025/12/07	NC		%	40
			Acenaphthylene	2025/12/07	NC		%	40
			Anthracene	2025/12/07	NC		%	40
			Benzo(a)anthracene	2025/12/07	NC		%	40
			Benzo(a)pyrene	2025/12/07	NC		%	40
			Benzo(b/j)fluoranthene	2025/12/07	NC		%	40
			Benzo(g,h,i)perylene	2025/12/07	NC		%	40
			Benzo(k)fluoranthene	2025/12/07	NC		%	40
			Chrysene	2025/12/07	NC		%	40
			Dibenzo(a,h)anthracene	2025/12/07	NC		%	40
			Fluoranthene	2025/12/07	NC		%	40
			Fluorene	2025/12/07	NC		%	40
			Indeno(1,2,3-cd)pyrene	2025/12/07	NC		%	40
			1-Methylnaphthalene	2025/12/07	NC		%	40
			2-Methylnaphthalene	2025/12/07	NC		%	40
			Naphthalene	2025/12/07	NC		%	40
			Phenanthrene	2025/12/07	NC		%	40
			Pyrene	2025/12/07	NC		%	40
A069075	GYA	Matrix Spike [AXZW41-02]	WAD Cyanide (Free)	2025/12/08		110	%	75 - 125
A069075	GYA	Spiked Blank	WAD Cyanide (Free)	2025/12/08		105	%	80 - 120
A069075	GYA	Method Blank	WAD Cyanide (Free)	2025/12/08	ND, RDL=0.01		ug/g	
A069075	GYA	RPD [AXZW41-02]	WAD Cyanide (Free)	2025/12/08	NC		%	35



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### QUALITY ASSURANCE REPORT(CONT'D)

QA/QC	Batch	Init	QC Type	Parameter	Date Analyzed	Value	Recovery	UNITS	QC Limits
	A069085	GYA	Matrix Spike	WAD Cyanide (Free)	2025/12/08		108	%	75 - 125
	A069085	GYA	Spiked Blank	WAD Cyanide (Free)	2025/12/08		106	%	80 - 120
	A069085	GYA	Method Blank	WAD Cyanide (Free)	2025/12/08	ND, RDL=0.01		ug/g	
	A069085	GYA	RPD	WAD Cyanide (Free)	2025/12/08	NC		%	35
	A069103	HK1	Matrix Spike	Chromium (VI)	2025/12/08		74	%	70 - 130
	A069103	HK1	Spiked Blank	Chromium (VI)	2025/12/08		89	%	80 - 120
	A069103	HK1	Method Blank	Chromium (VI)	2025/12/08	ND, RDL=0.18		ug/g	
	A069103	HK1	RPD	Chromium (VI)	2025/12/08	NC		%	35
	A069534	DT1	Matrix Spike	Acid Extractable Antimony (Sb)	2025/12/09		98	%	75 - 125
				Acid Extractable Arsenic (As)	2025/12/09		94	%	75 - 125
				Acid Extractable Barium (Ba)	2025/12/09		91	%	75 - 125
				Acid Extractable Beryllium (Be)	2025/12/09		90	%	75 - 125
				Acid Extractable Boron (B)	2025/12/09		91	%	75 - 125
				Acid Extractable Cadmium (Cd)	2025/12/09		94	%	75 - 125
				Acid Extractable Chromium (Cr)	2025/12/09		95	%	75 - 125
				Acid Extractable Cobalt (Co)	2025/12/09		94	%	75 - 125
				Acid Extractable Copper (Cu)	2025/12/09		73 (1)	%	75 - 125
				Acid Extractable Lead (Pb)	2025/12/09		91	%	75 - 125
				Acid Extractable Molybdenum (Mo)	2025/12/09		94	%	75 - 125
				Acid Extractable Nickel (Ni)	2025/12/09		88	%	75 - 125
				Acid Extractable Selenium (Se)	2025/12/09		97	%	75 - 125
				Acid Extractable Silver (Ag)	2025/12/09		92	%	75 - 125
				Acid Extractable Thallium (Tl)	2025/12/09		92	%	75 - 125
				Acid Extractable Uranium (U)	2025/12/09		98	%	75 - 125
				Acid Extractable Vanadium (V)	2025/12/09		95	%	75 - 125
				Acid Extractable Zinc (Zn)	2025/12/09		92	%	75 - 125
				Acid Extractable Mercury (Hg)	2025/12/09		91	%	75 - 125
	A069534	DT1	Spiked Blank	Acid Extractable Antimony (Sb)	2025/12/09		103	%	80 - 120
				Acid Extractable Arsenic (As)	2025/12/09		97	%	80 - 120
				Acid Extractable Barium (Ba)	2025/12/09		98	%	80 - 120
				Acid Extractable Beryllium (Be)	2025/12/09		95	%	80 - 120
				Acid Extractable Boron (B)	2025/12/09		100	%	80 - 120
				Acid Extractable Cadmium (Cd)	2025/12/09		98	%	80 - 120
				Acid Extractable Chromium (Cr)	2025/12/09		100	%	80 - 120
				Acid Extractable Cobalt (Co)	2025/12/09		97	%	80 - 120
				Acid Extractable Copper (Cu)	2025/12/09		98	%	80 - 120
				Acid Extractable Lead (Pb)	2025/12/09		96	%	80 - 120
				Acid Extractable Molybdenum (Mo)	2025/12/09		97	%	80 - 120
				Acid Extractable Nickel (Ni)	2025/12/09		99	%	80 - 120
				Acid Extractable Selenium (Se)	2025/12/09		100	%	80 - 120
				Acid Extractable Silver (Ag)	2025/12/09		100	%	80 - 120
				Acid Extractable Thallium (Tl)	2025/12/09		95	%	80 - 120
				Acid Extractable Uranium (U)	2025/12/09		100	%	80 - 120
				Acid Extractable Vanadium (V)	2025/12/09		98	%	80 - 120
				Acid Extractable Zinc (Zn)	2025/12/09		100	%	80 - 120
				Acid Extractable Mercury (Hg)	2025/12/09		95	%	80 - 120
	A069534	DT1	Method Blank	Acid Extractable Antimony (Sb)	2025/12/09	ND, RDL=0.20		ug/g	
				Acid Extractable Arsenic (As)	2025/12/09	ND, RDL=1.0		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
			Acid Extractable Barium (Ba)	2025/12/09	ND, RDL=0.50		ug/g	
			Acid Extractable Beryllium (Be)	2025/12/09	ND, RDL=0.20		ug/g	
			Acid Extractable Boron (B)	2025/12/09	ND, RDL=5.0		ug/g	
			Acid Extractable Cadmium (Cd)	2025/12/09	ND, RDL=0.10		ug/g	
			Acid Extractable Chromium (Cr)	2025/12/09	ND, RDL=1.0		ug/g	
			Acid Extractable Cobalt (Co)	2025/12/09	ND, RDL=0.10		ug/g	
			Acid Extractable Copper (Cu)	2025/12/09	ND, RDL=0.50		ug/g	
			Acid Extractable Lead (Pb)	2025/12/09	ND, RDL=1.0		ug/g	
			Acid Extractable Molybdenum (Mo)	2025/12/09	ND, RDL=0.50		ug/g	
			Acid Extractable Nickel (Ni)	2025/12/09	ND, RDL=0.50		ug/g	
			Acid Extractable Selenium (Se)	2025/12/09	ND, RDL=0.50		ug/g	
			Acid Extractable Silver (Ag)	2025/12/09	ND, RDL=0.20		ug/g	
			Acid Extractable Thallium (Tl)	2025/12/09	ND, RDL=0.050		ug/g	
			Acid Extractable Uranium (U)	2025/12/09	ND, RDL=0.050		ug/g	
			Acid Extractable Vanadium (V)	2025/12/09	ND, RDL=5.0		ug/g	
			Acid Extractable Zinc (Zn)	2025/12/09	ND, RDL=5.0		ug/g	
			Acid Extractable Mercury (Hg)	2025/12/09	ND, RDL=0.050		ug/g	
A069676	MSZ	Matrix Spike	o-Terphenyl	2025/12/09		98	%	60 - 140
			F2 (C10-C16 Hydrocarbons)	2025/12/09		99	%	60 - 140
			F3 (C16-C34 Hydrocarbons)	2025/12/09		104	%	60 - 140
			F4 (C34-C50 Hydrocarbons)	2025/12/09		96	%	60 - 140
A069676	MSZ	Spiked Blank	o-Terphenyl	2025/12/08		96	%	60 - 140
			F2 (C10-C16 Hydrocarbons)	2025/12/08		97	%	80 - 120
			F3 (C16-C34 Hydrocarbons)	2025/12/08		101	%	80 - 120
			F4 (C34-C50 Hydrocarbons)	2025/12/08		98	%	80 - 120
A069676	MSZ	Method Blank	o-Terphenyl	2025/12/08		101	%	60 - 140
			F2 (C10-C16 Hydrocarbons)	2025/12/08	ND, RDL=7.0		ug/g	
			F3 (C16-C34 Hydrocarbons)	2025/12/08	ND, RDL=50		ug/g	
			F4 (C34-C50 Hydrocarbons)	2025/12/08	ND, RDL=50		ug/g	
A069676	MSZ	RPD	F2 (C10-C16 Hydrocarbons)	2025/12/09	NC		%	30
			F3 (C16-C34 Hydrocarbons)	2025/12/09	35 (2)		%	30
			F4 (C34-C50 Hydrocarbons)	2025/12/09	26		%	30
A069941	NGI	Spiked Blank	Conductivity	2025/12/09		103	%	90 - 110



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### QUALITY ASSURANCE REPORT(CONT'D)

QA/QC	Batch	Init	QC Type	Parameter	Date Analyzed	Value	Recovery	UNITS	QC Limits
	A069941	NGI	Method Blank	Conductivity	2025/12/09	ND, RDL=0.002		mS/cm	
	A069941	NGI	RPD [AXZW43-02]	Conductivity	2025/12/09	2.6		%	10
	A069999	AFZ	Matrix Spike	Acid Extractable Antimony (Sb)	2025/12/09		85	%	75 - 125
				Acid Extractable Arsenic (As)	2025/12/09		88	%	75 - 125
				Acid Extractable Barium (Ba)	2025/12/09		NC	%	75 - 125
				Acid Extractable Beryllium (Be)	2025/12/09		91	%	75 - 125
				Acid Extractable Boron (B)	2025/12/09		85	%	75 - 125
				Acid Extractable Cadmium (Cd)	2025/12/09		91	%	75 - 125
				Acid Extractable Chromium (Cr)	2025/12/09		85	%	75 - 125
				Acid Extractable Cobalt (Co)	2025/12/09		86	%	75 - 125
				Acid Extractable Copper (Cu)	2025/12/09		NC	%	75 - 125
				Acid Extractable Lead (Pb)	2025/12/09		91	%	75 - 125
				Acid Extractable Molybdenum (Mo)	2025/12/09		90	%	75 - 125
				Acid Extractable Nickel (Ni)	2025/12/09		NC	%	75 - 125
				Acid Extractable Selenium (Se)	2025/12/09		91	%	75 - 125
				Acid Extractable Silver (Ag)	2025/12/09		93	%	75 - 125
				Acid Extractable Thallium (Tl)	2025/12/09		86	%	75 - 125
				Acid Extractable Uranium (U)	2025/12/09		93	%	75 - 125
				Acid Extractable Vanadium (V)	2025/12/09		NC	%	75 - 125
				Acid Extractable Zinc (Zn)	2025/12/09		NC	%	75 - 125
				Acid Extractable Mercury (Hg)	2025/12/09		88	%	75 - 125
	A069999	AFZ	Spiked Blank	Acid Extractable Antimony (Sb)	2025/12/09		99	%	80 - 120
				Acid Extractable Arsenic (As)	2025/12/09		97	%	80 - 120
				Acid Extractable Barium (Ba)	2025/12/09		97	%	80 - 120
				Acid Extractable Beryllium (Be)	2025/12/09		96	%	80 - 120
				Acid Extractable Boron (B)	2025/12/09		97	%	80 - 120
				Acid Extractable Cadmium (Cd)	2025/12/09		95	%	80 - 120
				Acid Extractable Chromium (Cr)	2025/12/09		94	%	80 - 120
				Acid Extractable Cobalt (Co)	2025/12/09		95	%	80 - 120
				Acid Extractable Copper (Cu)	2025/12/09		93	%	80 - 120
				Acid Extractable Lead (Pb)	2025/12/09		94	%	80 - 120
				Acid Extractable Molybdenum (Mo)	2025/12/09		94	%	80 - 120
				Acid Extractable Nickel (Ni)	2025/12/09		96	%	80 - 120
				Acid Extractable Selenium (Se)	2025/12/09		97	%	80 - 120
				Acid Extractable Silver (Ag)	2025/12/09		98	%	80 - 120
				Acid Extractable Thallium (Tl)	2025/12/09		93	%	80 - 120
				Acid Extractable Uranium (U)	2025/12/09		96	%	80 - 120
				Acid Extractable Vanadium (V)	2025/12/09		94	%	80 - 120
				Acid Extractable Zinc (Zn)	2025/12/09		95	%	80 - 120
				Acid Extractable Mercury (Hg)	2025/12/09		93	%	80 - 120
	A069999	AFZ	Method Blank	Acid Extractable Antimony (Sb)	2025/12/09	ND, RDL=0.20		ug/g	
				Acid Extractable Arsenic (As)	2025/12/09	ND, RDL=1.0		ug/g	
				Acid Extractable Barium (Ba)	2025/12/09	ND, RDL=0.50		ug/g	
				Acid Extractable Beryllium (Be)	2025/12/09	ND, RDL=0.20		ug/g	
				Acid Extractable Boron (B)	2025/12/09	ND, RDL=5.0		ug/g	
				Acid Extractable Cadmium (Cd)	2025/12/09	ND, RDL=0.10		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
			Acid Extractable Chromium (Cr)	2025/12/09	ND, RDL=1.0		ug/g	
			Acid Extractable Cobalt (Co)	2025/12/09	ND, RDL=0.10		ug/g	
			Acid Extractable Copper (Cu)	2025/12/09	ND, RDL=0.50		ug/g	
			Acid Extractable Lead (Pb)	2025/12/09	ND, RDL=1.0		ug/g	
			Acid Extractable Molybdenum (Mo)	2025/12/09	ND, RDL=0.50		ug/g	
			Acid Extractable Nickel (Ni)	2025/12/09	ND, RDL=0.50		ug/g	
			Acid Extractable Selenium (Se)	2025/12/09	ND, RDL=0.50		ug/g	
			Acid Extractable Silver (Ag)	2025/12/09	ND, RDL=0.20		ug/g	
			Acid Extractable Thallium (Tl)	2025/12/09	ND, RDL=0.050		ug/g	
			Acid Extractable Uranium (U)	2025/12/09	ND, RDL=0.050		ug/g	
			Acid Extractable Vanadium (V)	2025/12/09	ND, RDL=5.0		ug/g	
			Acid Extractable Zinc (Zn)	2025/12/09	ND, RDL=5.0		ug/g	
			Acid Extractable Mercury (Hg)	2025/12/09	ND, RDL=0.050		ug/g	
A069999	AFZ	RPD	Acid Extractable Antimony (Sb)	2025/12/09	4.8		%	30
			Acid Extractable Arsenic (As)	2025/12/09	1.2		%	30
			Acid Extractable Barium (Ba)	2025/12/09	0.63		%	30
			Acid Extractable Beryllium (Be)	2025/12/09	9.7		%	30
			Acid Extractable Boron (B)	2025/12/09	NC		%	30
			Acid Extractable Cadmium (Cd)	2025/12/09	1.2		%	30
			Acid Extractable Chromium (Cr)	2025/12/09	0.23		%	30
			Acid Extractable Cobalt (Co)	2025/12/09	0.73		%	30
			Acid Extractable Copper (Cu)	2025/12/09	0.35		%	30
			Acid Extractable Lead (Pb)	2025/12/09	6.6		%	30
			Acid Extractable Molybdenum (Mo)	2025/12/09	2.5		%	30
			Acid Extractable Nickel (Ni)	2025/12/09	2.4		%	30
			Acid Extractable Selenium (Se)	2025/12/09	NC		%	30
			Acid Extractable Silver (Ag)	2025/12/09	NC		%	30
			Acid Extractable Thallium (Tl)	2025/12/09	1.7		%	30
			Acid Extractable Uranium (U)	2025/12/09	7.0		%	30
			Acid Extractable Vanadium (V)	2025/12/09	5.9		%	30
			Acid Extractable Zinc (Zn)	2025/12/09	0.23		%	30
			Acid Extractable Mercury (Hg)	2025/12/09	0.034		%	30
A070082	DT1	Matrix Spike	Acid Extractable Antimony (Sb)	2025/12/09		91	%	75 - 125
			Acid Extractable Arsenic (As)	2025/12/09		95	%	75 - 125
			Acid Extractable Barium (Ba)	2025/12/09		NC	%	75 - 125
			Acid Extractable Beryllium (Be)	2025/12/09		91	%	75 - 125
			Acid Extractable Boron (B)	2025/12/09		103	%	75 - 125
			Acid Extractable Cadmium (Cd)	2025/12/09		92	%	75 - 125
			Acid Extractable Chromium (Cr)	2025/12/09		108	%	75 - 125
			Acid Extractable Cobalt (Co)	2025/12/09		94	%	75 - 125



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A070082	DT1	Spiked Blank	Acid Extractable Copper (Cu)	2025/12/09		NC	%	75 - 125
			Acid Extractable Lead (Pb)	2025/12/09		NC	%	75 - 125
			Acid Extractable Molybdenum (Mo)	2025/12/09		90	%	75 - 125
			Acid Extractable Nickel (Ni)	2025/12/09		104	%	75 - 125
			Acid Extractable Selenium (Se)	2025/12/09		92	%	75 - 125
			Acid Extractable Silver (Ag)	2025/12/09		93	%	75 - 125
			Acid Extractable Thallium (Tl)	2025/12/09		86	%	75 - 125
			Acid Extractable Uranium (U)	2025/12/09		93	%	75 - 125
			Acid Extractable Vanadium (V)	2025/12/09		99	%	75 - 125
			Acid Extractable Zinc (Zn)	2025/12/09		NC	%	75 - 125
			Acid Extractable Mercury (Hg)	2025/12/09		91	%	75 - 125
			Acid Extractable Antimony (Sb)	2025/12/09		102	%	80 - 120
			Acid Extractable Arsenic (As)	2025/12/09		101	%	80 - 120
			Acid Extractable Barium (Ba)	2025/12/09		97	%	80 - 120
			Acid Extractable Beryllium (Be)	2025/12/09		95	%	80 - 120
			Acid Extractable Boron (B)	2025/12/09		96	%	80 - 120
			Acid Extractable Cadmium (Cd)	2025/12/09		97	%	80 - 120
			Acid Extractable Chromium (Cr)	2025/12/09		100	%	80 - 120
			Acid Extractable Cobalt (Co)	2025/12/09		99	%	80 - 120
			Acid Extractable Copper (Cu)	2025/12/09		96	%	80 - 120
			Acid Extractable Lead (Pb)	2025/12/09		96	%	80 - 120
			Acid Extractable Molybdenum (Mo)	2025/12/09		95	%	80 - 120
			Acid Extractable Nickel (Ni)	2025/12/09		100	%	80 - 120
			Acid Extractable Selenium (Se)	2025/12/09		100	%	80 - 120
			Acid Extractable Silver (Ag)	2025/12/09		100	%	80 - 120
			Acid Extractable Thallium (Tl)	2025/12/09		95	%	80 - 120
			Acid Extractable Uranium (U)	2025/12/09		100	%	80 - 120
			Acid Extractable Vanadium (V)	2025/12/09		99	%	80 - 120
Acid Extractable Zinc (Zn)	2025/12/09		99	%	80 - 120			
Acid Extractable Mercury (Hg)	2025/12/09		98	%	80 - 120			
A070082	DT1	Method Blank	Acid Extractable Antimony (Sb)	2025/12/09	ND, RDL=0.20		ug/g	
			Acid Extractable Arsenic (As)	2025/12/09	ND, RDL=1.0		ug/g	
			Acid Extractable Barium (Ba)	2025/12/09	ND, RDL=0.50		ug/g	
			Acid Extractable Beryllium (Be)	2025/12/09	ND, RDL=0.20		ug/g	
			Acid Extractable Boron (B)	2025/12/09	ND, RDL=5.0		ug/g	
			Acid Extractable Cadmium (Cd)	2025/12/09	ND, RDL=0.10		ug/g	
			Acid Extractable Chromium (Cr)	2025/12/09	ND, RDL=1.0		ug/g	
			Acid Extractable Cobalt (Co)	2025/12/09	ND, RDL=0.10		ug/g	
			Acid Extractable Copper (Cu)	2025/12/09	ND, RDL=0.50		ug/g	
			Acid Extractable Lead (Pb)	2025/12/09	ND, RDL=1.0		ug/g	
			Acid Extractable Molybdenum (Mo)	2025/12/09	ND, RDL=0.50		ug/g	



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			Acid Extractable Nickel (Ni)	2025/12/09	ND, RDL=0.50		ug/g	
			Acid Extractable Selenium (Se)	2025/12/09	ND, RDL=0.50		ug/g	
			Acid Extractable Silver (Ag)	2025/12/09	ND, RDL=0.20		ug/g	
			Acid Extractable Thallium (Tl)	2025/12/09	ND, RDL=0.050		ug/g	
			Acid Extractable Uranium (U)	2025/12/09	ND, RDL=0.050		ug/g	
			Acid Extractable Vanadium (V)	2025/12/09	ND, RDL=5.0		ug/g	
			Acid Extractable Zinc (Zn)	2025/12/09	ND, RDL=5.0		ug/g	
			Acid Extractable Mercury (Hg)	2025/12/09	ND, RDL=0.050		ug/g	
A070082	DT1	RPD	Acid Extractable Lead (Pb)	2025/12/09	9.1		%	30
A070151	IHP	Matrix Spike	Hot Water Ext. Boron (B)	2025/12/09		NC	%	75 - 125
A070151	IHP	Spiked Blank	Hot Water Ext. Boron (B)	2025/12/09		108	%	75 - 125
A070151	IHP	Method Blank	Hot Water Ext. Boron (B)	2025/12/09	ND, RDL=0.050		ug/g	
A070151	IHP	RPD	Hot Water Ext. Boron (B)	2025/12/09	17		%	40
A070152	IHP	Matrix Spike	Hot Water Ext. Boron (B)	2025/12/10		109	%	75 - 125
A070152	IHP	Spiked Blank	Hot Water Ext. Boron (B)	2025/12/10		102	%	75 - 125
A070152	IHP	Method Blank	Hot Water Ext. Boron (B)	2025/12/10	ND, RDL=0.050		ug/g	
A070152	IHP	RPD	Hot Water Ext. Boron (B)	2025/12/10	11		%	40
A070154	NGI	Spiked Blank	Conductivity	2025/12/09		104	%	90 - 110
A070154	NGI	Method Blank	Conductivity	2025/12/09	ND, RDL=0.002		mS/cm	
A070154	NGI	RPD	Conductivity	2025/12/09	4.6		%	10
A070333	HH	Spiked Blank	Available (CaCl2) pH	2025/12/09		100	%	97 - 103
A070333	HH	RPD	Available (CaCl2) pH	2025/12/09	0.55		%	N/A
A070369	DT1	Matrix Spike	Acid Extractable Antimony (Sb)	2025/12/09		84	%	75 - 125
			Acid Extractable Arsenic (As)	2025/12/09		92	%	75 - 125
			Acid Extractable Barium (Ba)	2025/12/09		NC	%	75 - 125
			Acid Extractable Beryllium (Be)	2025/12/09		89	%	75 - 125
			Acid Extractable Boron (B)	2025/12/09		89	%	75 - 125
			Acid Extractable Cadmium (Cd)	2025/12/09		92	%	75 - 125
			Acid Extractable Chromium (Cr)	2025/12/09		89	%	75 - 125
			Acid Extractable Cobalt (Co)	2025/12/09		90	%	75 - 125
			Acid Extractable Copper (Cu)	2025/12/09		90	%	75 - 125
			Acid Extractable Lead (Pb)	2025/12/09		89	%	75 - 125
			Acid Extractable Molybdenum (Mo)	2025/12/09		90	%	75 - 125
			Acid Extractable Nickel (Ni)	2025/12/09		NC	%	75 - 125
			Acid Extractable Selenium (Se)	2025/12/09		95	%	75 - 125
			Acid Extractable Silver (Ag)	2025/12/09		94	%	75 - 125
			Acid Extractable Thallium (Tl)	2025/12/09		89	%	75 - 125
			Acid Extractable Uranium (U)	2025/12/09		97	%	75 - 125
			Acid Extractable Vanadium (V)	2025/12/09		NC	%	75 - 125
			Acid Extractable Zinc (Zn)	2025/12/09		NC	%	75 - 125
			Acid Extractable Mercury (Hg)	2025/12/09		92	%	75 - 125
A070369	DT1	Spiked Blank	Acid Extractable Antimony (Sb)	2025/12/09		101	%	80 - 120



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			Acid Extractable Arsenic (As)	2025/12/09		100	%	80 - 120
			Acid Extractable Barium (Ba)	2025/12/09		94	%	80 - 120
			Acid Extractable Beryllium (Be)	2025/12/09		94	%	80 - 120
			Acid Extractable Boron (B)	2025/12/09		93	%	80 - 120
			Acid Extractable Cadmium (Cd)	2025/12/09		97	%	80 - 120
			Acid Extractable Chromium (Cr)	2025/12/09		103	%	80 - 120
			Acid Extractable Cobalt (Co)	2025/12/09		101	%	80 - 120
			Acid Extractable Copper (Cu)	2025/12/09		98	%	80 - 120
			Acid Extractable Lead (Pb)	2025/12/09		98	%	80 - 120
			Acid Extractable Molybdenum (Mo)	2025/12/09		96	%	80 - 120
			Acid Extractable Nickel (Ni)	2025/12/09		102	%	80 - 120
			Acid Extractable Selenium (Se)	2025/12/09		102	%	80 - 120
			Acid Extractable Silver (Ag)	2025/12/09		101	%	80 - 120
			Acid Extractable Thallium (Tl)	2025/12/09		98	%	80 - 120
			Acid Extractable Uranium (U)	2025/12/09		103	%	80 - 120
			Acid Extractable Vanadium (V)	2025/12/09		102	%	80 - 120
			Acid Extractable Zinc (Zn)	2025/12/09		102	%	80 - 120
			Acid Extractable Mercury (Hg)	2025/12/09		100	%	80 - 120
A070369	DT1	Method Blank	Acid Extractable Antimony (Sb)	2025/12/09	ND, RDL=0.20		ug/g	
			Acid Extractable Arsenic (As)	2025/12/09	ND, RDL=1.0		ug/g	
			Acid Extractable Barium (Ba)	2025/12/09	ND, RDL=0.50		ug/g	
			Acid Extractable Beryllium (Be)	2025/12/09	ND, RDL=0.20		ug/g	
			Acid Extractable Boron (B)	2025/12/09	ND, RDL=5.0		ug/g	
			Acid Extractable Cadmium (Cd)	2025/12/09	ND, RDL=0.10		ug/g	
			Acid Extractable Chromium (Cr)	2025/12/09	ND, RDL=1.0		ug/g	
			Acid Extractable Cobalt (Co)	2025/12/09	ND, RDL=0.10		ug/g	
			Acid Extractable Copper (Cu)	2025/12/09	ND, RDL=0.50		ug/g	
			Acid Extractable Lead (Pb)	2025/12/09	ND, RDL=1.0		ug/g	
			Acid Extractable Molybdenum (Mo)	2025/12/09	ND, RDL=0.50		ug/g	
			Acid Extractable Nickel (Ni)	2025/12/09	ND, RDL=0.50		ug/g	
			Acid Extractable Selenium (Se)	2025/12/09	ND, RDL=0.50		ug/g	
			Acid Extractable Silver (Ag)	2025/12/09	ND, RDL=0.20		ug/g	
			Acid Extractable Thallium (Tl)	2025/12/09	ND, RDL=0.050		ug/g	
			Acid Extractable Uranium (U)	2025/12/09	ND, RDL=0.050		ug/g	
			Acid Extractable Vanadium (V)	2025/12/09	ND, RDL=5.0		ug/g	
			Acid Extractable Zinc (Zn)	2025/12/09	ND, RDL=5.0		ug/g	



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			Acid Extractable Mercury (Hg)	2025/12/09	ND, RDL=0.050		ug/g	
A070369	DT1	RPD	Acid Extractable Antimony (Sb)	2025/12/09	11		%	30
			Acid Extractable Arsenic (As)	2025/12/09	7.3		%	30
			Acid Extractable Barium (Ba)	2025/12/09	1.9		%	30
			Acid Extractable Beryllium (Be)	2025/12/09	6.5		%	30
			Acid Extractable Boron (B)	2025/12/09	NC		%	30
			Acid Extractable Cadmium (Cd)	2025/12/09	3.3		%	30
			Acid Extractable Chromium (Cr)	2025/12/09	3.1		%	30
			Acid Extractable Cobalt (Co)	2025/12/09	2.4		%	30
			Acid Extractable Copper (Cu)	2025/12/09	7.0		%	30
			Acid Extractable Lead (Pb)	2025/12/09	8.5		%	30
			Acid Extractable Molybdenum (Mo)	2025/12/09	4.9		%	30
			Acid Extractable Nickel (Ni)	2025/12/09	3.7		%	30
			Acid Extractable Selenium (Se)	2025/12/09	NC		%	30
			Acid Extractable Silver (Ag)	2025/12/09	14		%	30
			Acid Extractable Thallium (Tl)	2025/12/09	3.2		%	30
			Acid Extractable Uranium (U)	2025/12/09	8.3		%	30
			Acid Extractable Vanadium (V)	2025/12/09	4.8		%	30
			Acid Extractable Zinc (Zn)	2025/12/09	4.6		%	30
			Acid Extractable Mercury (Hg)	2025/12/09	5.0		%	30
A070437	IHP	Matrix Spike	Hot Water Ext. Boron (B)	2025/12/10		107	%	75 - 125
A070437	IHP	Spiked Blank	Hot Water Ext. Boron (B)	2025/12/10		103	%	75 - 125
A070437	IHP	Method Blank	Hot Water Ext. Boron (B)	2025/12/10	ND, RDL=0.050		ug/g	
A070437	IHP	RPD	Hot Water Ext. Boron (B)	2025/12/10	20		%	40
A070453	H_W	Matrix Spike [AXZW41-03]	1,4-Difluorobenzene	2025/12/09		99	%	60 - 140
			4-Bromofluorobenzene	2025/12/09		102	%	60 - 140
			D10-o-Xylene	2025/12/09		95	%	60 - 140
			D4-1,2-Dichloroethane	2025/12/09		99	%	60 - 140
			Benzene	2025/12/09		94	%	50 - 140
			Toluene	2025/12/09		95	%	50 - 140
			Ethylbenzene	2025/12/09		117	%	50 - 140
			o-Xylene	2025/12/09		107	%	50 - 140
			p+m-Xylene	2025/12/09		102	%	50 - 140
			F1 (C6-C10)	2025/12/09		81	%	60 - 140
A070453	H_W	Spiked Blank	1,4-Difluorobenzene	2025/12/09		102	%	60 - 140
			4-Bromofluorobenzene	2025/12/09		101	%	60 - 140
			D10-o-Xylene	2025/12/09		99	%	60 - 140
			D4-1,2-Dichloroethane	2025/12/09		95	%	60 - 140
			Benzene	2025/12/09		96	%	50 - 140
			Toluene	2025/12/09		96	%	50 - 140
			Ethylbenzene	2025/12/09		105	%	50 - 140
			o-Xylene	2025/12/09		109	%	50 - 140
			p+m-Xylene	2025/12/09		105	%	50 - 140
			F1 (C6-C10)	2025/12/09		99	%	80 - 120
A070453	H_W	Method Blank	1,4-Difluorobenzene	2025/12/09		104	%	60 - 140
			4-Bromofluorobenzene	2025/12/09		97	%	60 - 140
			D10-o-Xylene	2025/12/09		94	%	60 - 140
			D4-1,2-Dichloroethane	2025/12/09		96	%	60 - 140
			Benzene	2025/12/09	ND, RDL=0.020		ug/g	



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QA/QC Batch	Init	QC Type	Parameter	Date Analyzed	Value	Recovery	UNITS	QC Limits
			Toluene	2025/12/09	ND, RDL=0.020		ug/g	
			Ethylbenzene	2025/12/09	ND, RDL=0.020		ug/g	
			o-Xylene	2025/12/09	ND, RDL=0.020		ug/g	
			p+m-Xylene	2025/12/09	ND, RDL=0.040		ug/g	
			Total Xylenes	2025/12/09	ND, RDL=0.040		ug/g	
			F1 (C6-C10)	2025/12/09	ND, RDL=10		ug/g	
			F1 (C6-C10) - BTEX	2025/12/09	ND, RDL=10		ug/g	
A070453	H_W	RPD [AXZW41-03]	Benzene	2025/12/09	NC		%	50
			Toluene	2025/12/09	NC		%	50
			Ethylbenzene	2025/12/09	NC		%	50
			o-Xylene	2025/12/09	NC		%	50
			p+m-Xylene	2025/12/09	NC		%	50
			Total Xylenes	2025/12/09	NC		%	50
			F1 (C6-C10)	2025/12/09	NC		%	30
			F1 (C6-C10) - BTEX	2025/12/09	NC		%	30
A070819	RDU	Matrix Spike	F4G-sg (Grav. Heavy Hydrocarbons)	2025/12/10		99	%	65 - 135
A070819	RDU	Spiked Blank	F4G-sg (Grav. Heavy Hydrocarbons)	2025/12/10		102	%	65 - 135
A070819	RDU	Method Blank	F4G-sg (Grav. Heavy Hydrocarbons)	2025/12/10	ND, RDL=100		ug/g	
A070819	RDU	RPD [AXZW40-01]	F4G-sg (Grav. Heavy Hydrocarbons)	2025/12/10	5.4		%	50

N/A = Not Applicable

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

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

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

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

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

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

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

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

(2) Duplicate results exceeded RPD acceptance criteria for flagged analytes. Sample extract was reanalyzed with the same results. This is likely due to sample heterogeneity.



BUREAU  
VERITAS

Bureau Veritas Job #: C5F3307

Report Date: 2025/12/10

Lopers & Associates

Client Project #: LOP25-035B

Site Location: 131 PARKDALE

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 that reads '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

COOLER OBSERVATIONS:

SHIPPED FROM BV SERVICE CENTER:

OTTAWA

RECEIVED AT:

MISSISSAUGA

BV Receipt #	CUSTODY SEAL	YES	NO	Drinking Water	TEMP
1	PRESENT	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	2 3 2
OTT-2025-12-386	INTACT	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	1 3 3
2	PRESENT	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	NA NA NA
001	INTACT	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	1 2 3
002	ICE PRESENT	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
3	PRESENT	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	0 0 1
003 to 006	INTACT	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	1 2 3
4	PRESENT	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	4 3 2
355	INTACT	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	1 2 3
5	PRESENT	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	0 1 1
354	INTACT	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	1 2 3
6	PRESENT	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	0 1 1
378	INTACT	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	1 2 3
7	PRESENT	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	1 1 1
379	INTACT	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	1 2 3
8	PRESENT	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	2 6 2
380 to 382	INTACT	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	1 2 3
9	PRESENT	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	4 4 6
359	INTACT	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	1 2 3
377	ICE PRESENT	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
10	PRESENT	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	2 1 2
U	INTACT	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	1 2 3
	ICE PRESENT	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

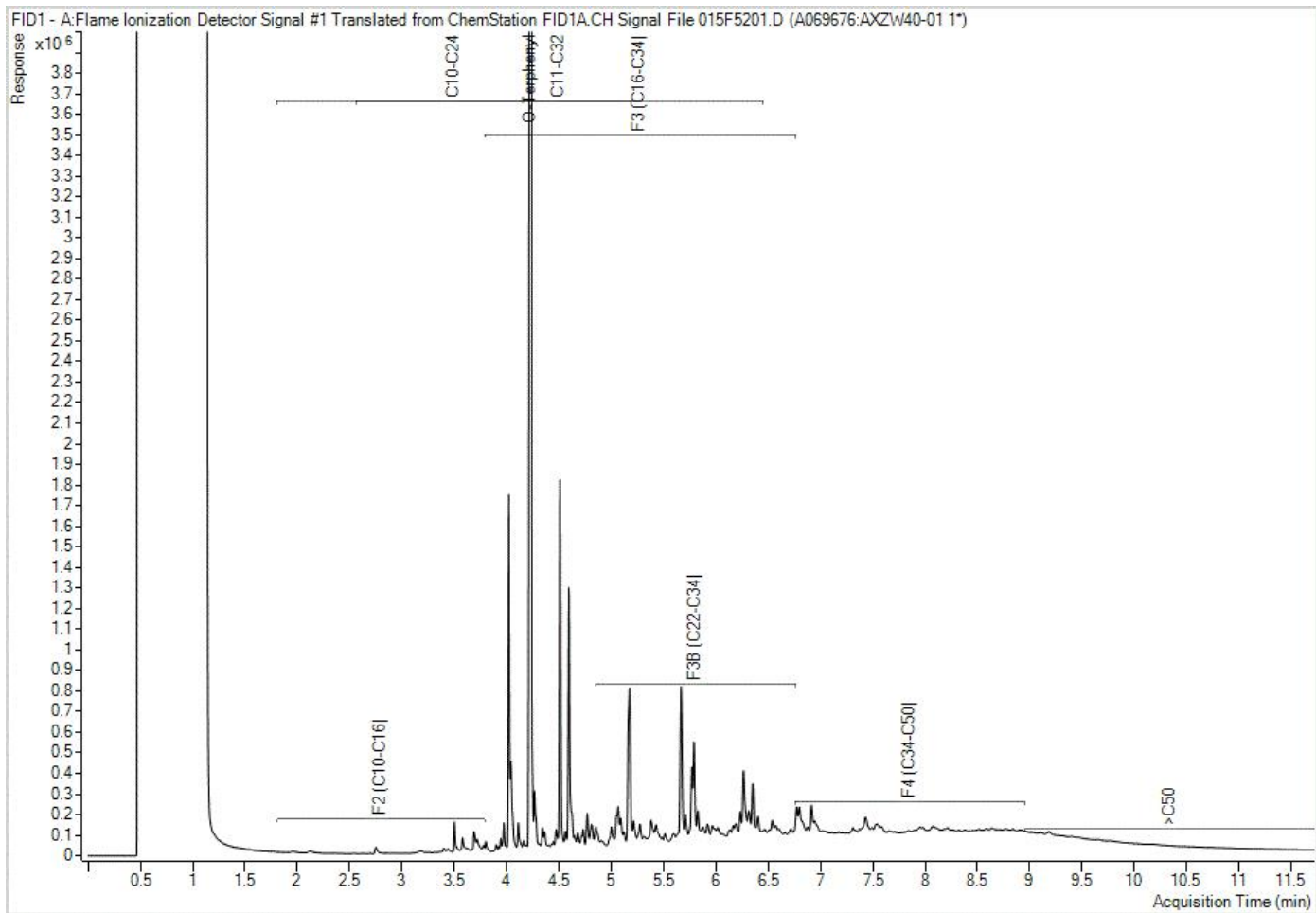
BV Receipt #	CUSTODY SEAL	YES	NO	Drinking Water	TEMP
11	PRESENT	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	-1 0 0
356	INTACT	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	1 2 3
12	PRESENT	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	3 6 6
OTT-2025-12-357	INTACT	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	1 2 3
383	ICE PRESENT	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
384	CUSTODY SEAL	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
13	PRESENT	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	4 5 2
1	INTACT	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	1 2 3
14	PRESENT	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	4 2 4
385	INTACT	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	1 2 3
15	PRESENT	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	2 1 2
1	INTACT	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	1 2 3
16	PRESENT	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	0 8 6
388	INTACT	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	1 2 3
17	PRESENT	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	0 0 1
U	INTACT	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	1 2 3
008	ICE PRESENT	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
18	CUSTODY SEAL	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
19	PRESENT	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
20	INTACT	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
	ICE PRESENT	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

RECEIVED BY (PRINT & SIGN)	DATE (YYYY/MM/DD)	TIME (HH:MM)
ANMOURET SINGH	2025/12/04	06:20

If Custody seal condition and presence of ice is the same for all, use these boxes:	CUSTODY SEAL	YES	NO
	PRESENT	<input type="checkbox"/>	<input type="checkbox"/>
	INTACT	<input type="checkbox"/>	<input type="checkbox"/>
	ICE PRESENT	<input type="checkbox"/>	<input type="checkbox"/>

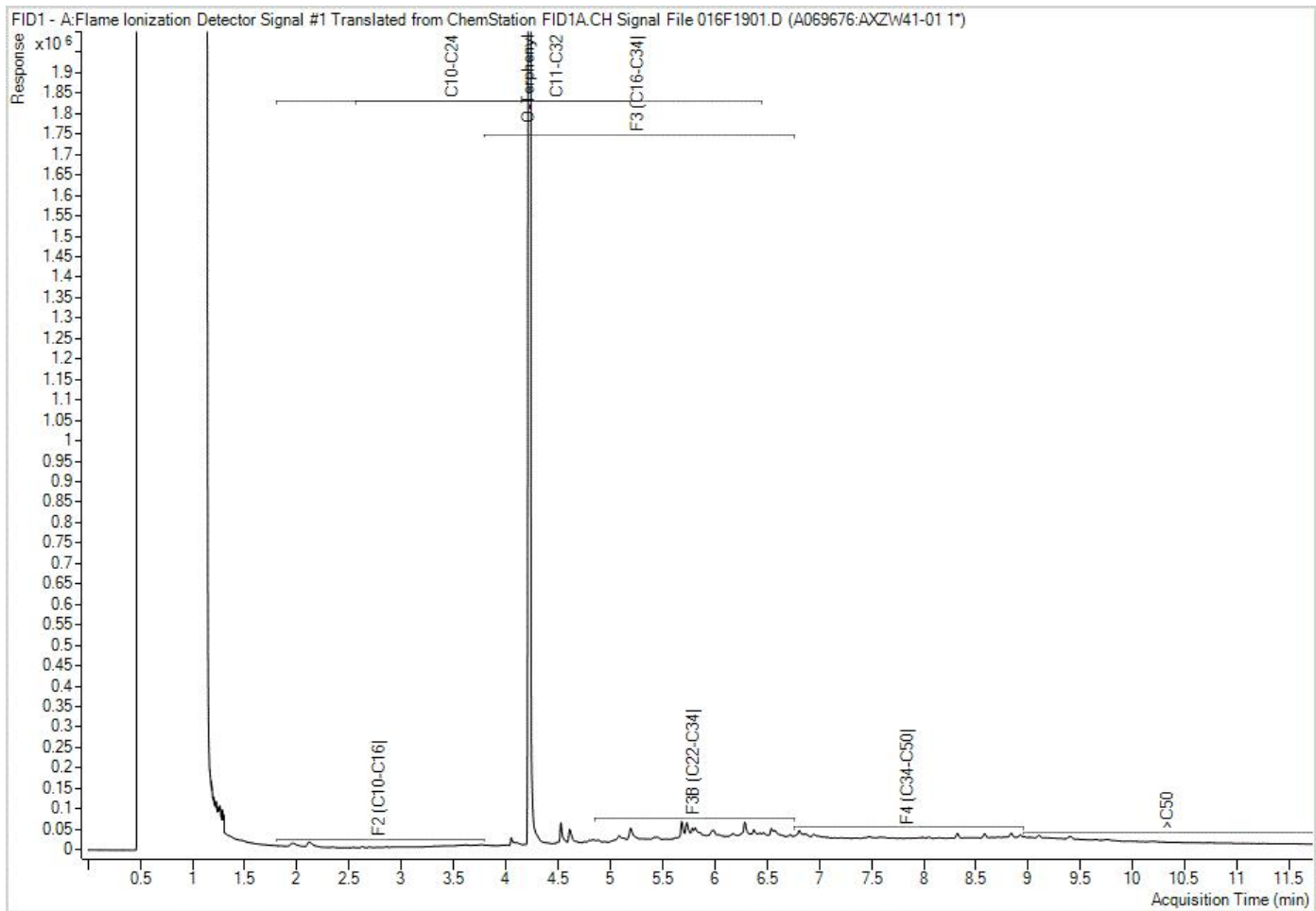


Petroleum Hydrocarbons F2-F4 in Soil Chromatogram



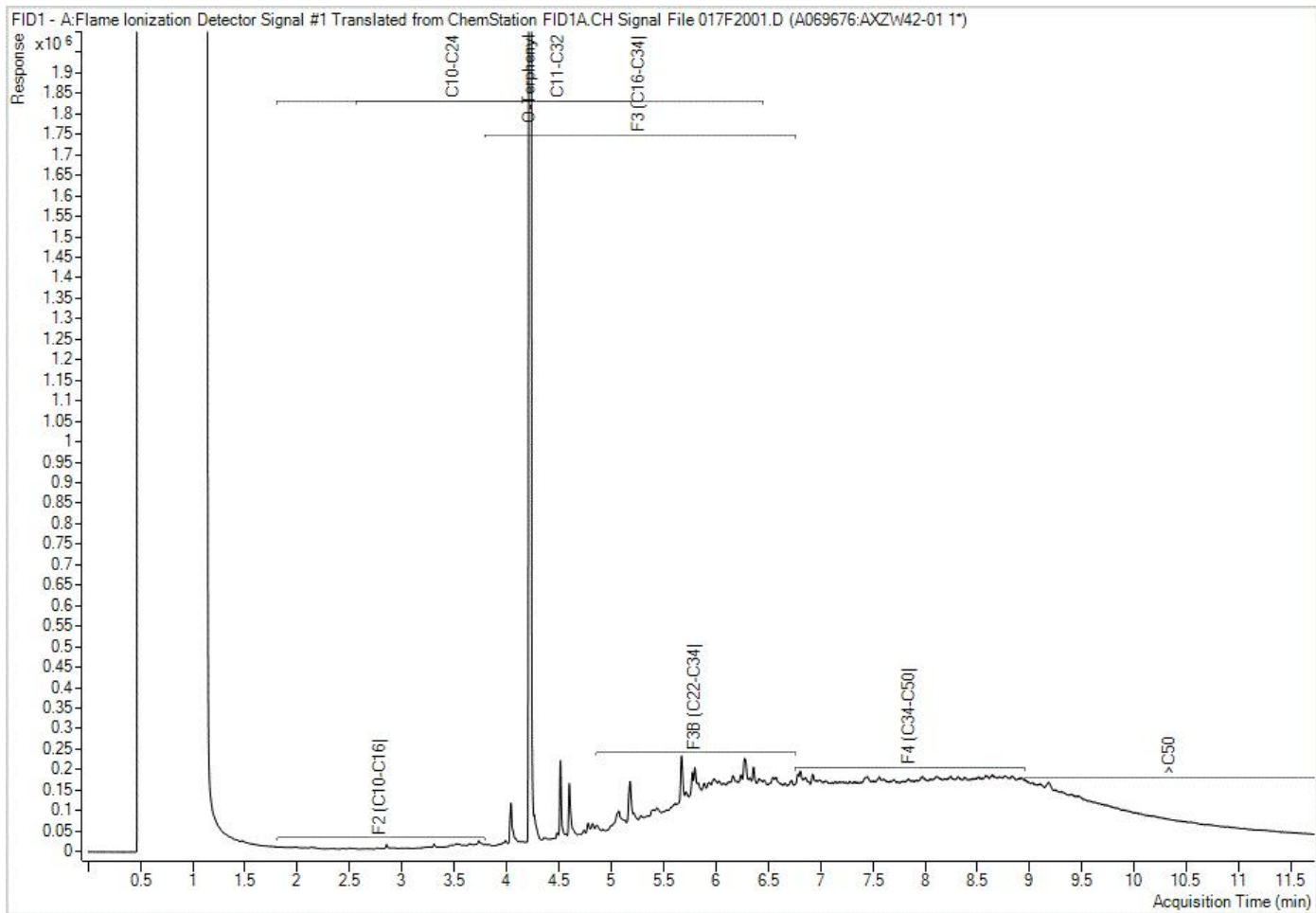
**Note: This information is provided for reference purposes only. Should detailed chemist interpretation or fingerprinting be required, please contact the laboratory.**

Petroleum Hydrocarbons F2-F4 in Soil Chromatogram



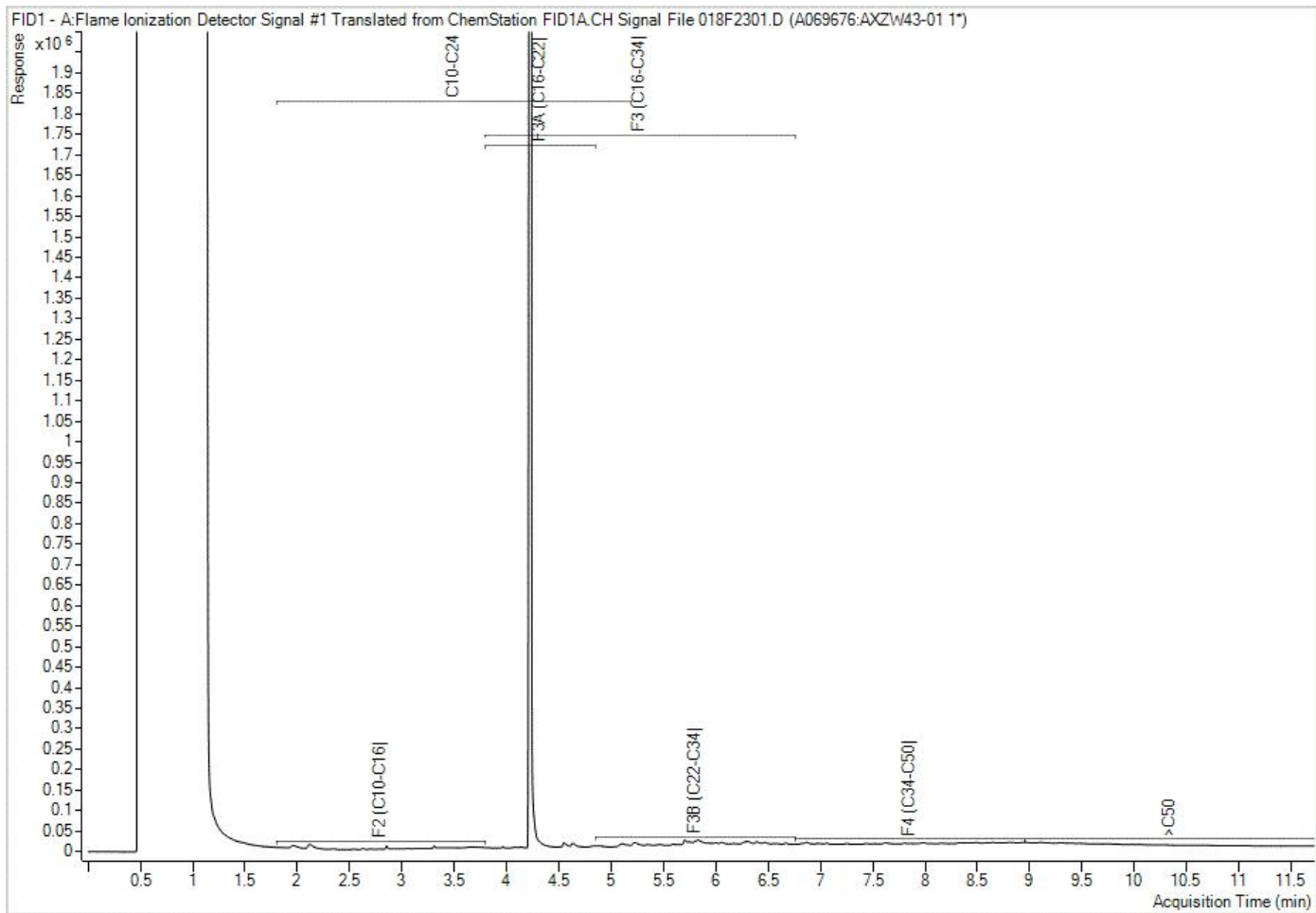
Note: This information is provided for reference purposes only. Should detailed chemist interpretation or fingerprinting be required, please contact the laboratory.

Petroleum Hydrocarbons F2-F4 in Soil Chromatogram



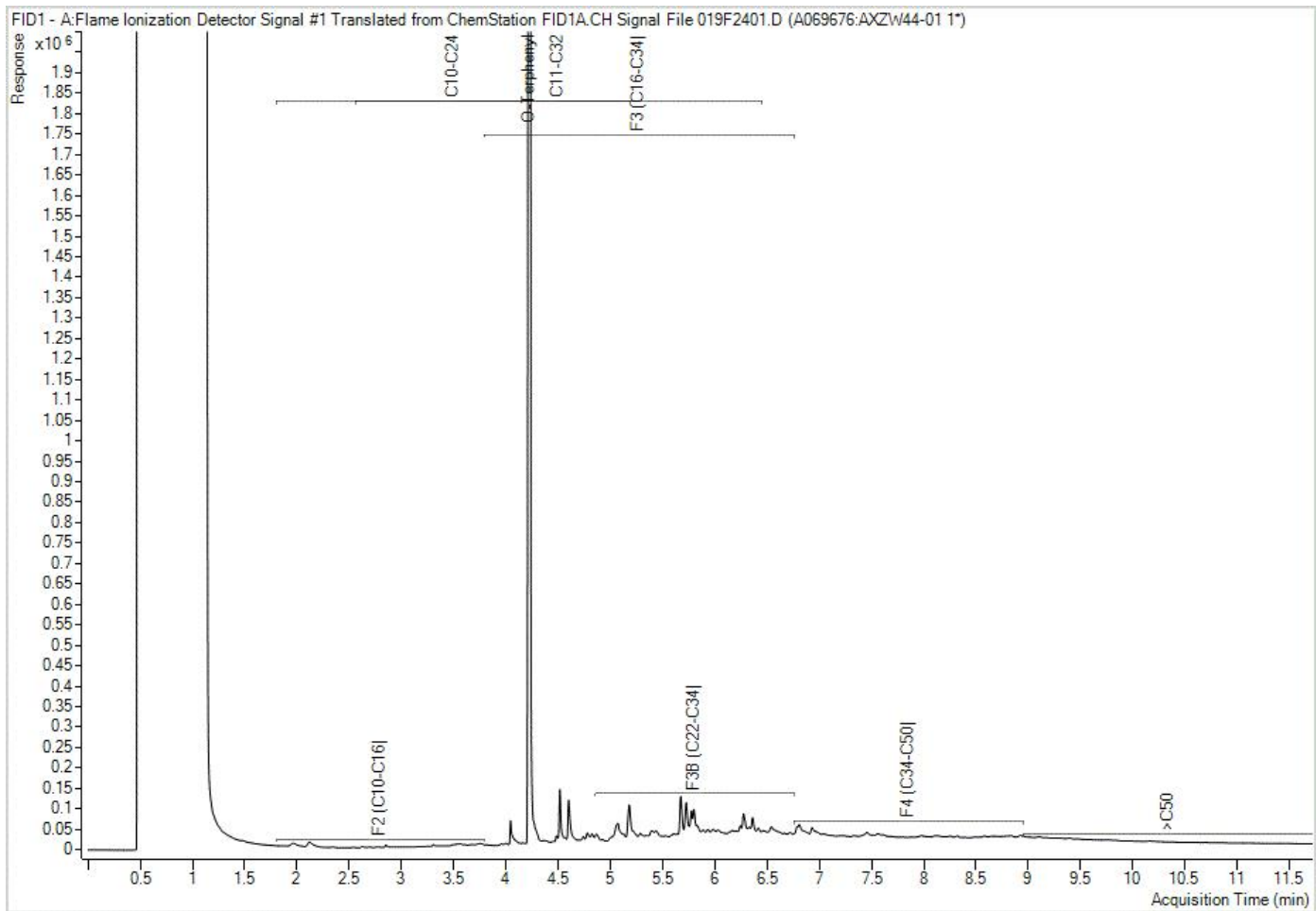
**Note:** This information is provided for reference purposes only. Should detailed chemist interpretation or fingerprinting be required, please contact the laboratory.

Petroleum Hydrocarbons F2-F4 in Soil Chromatogram



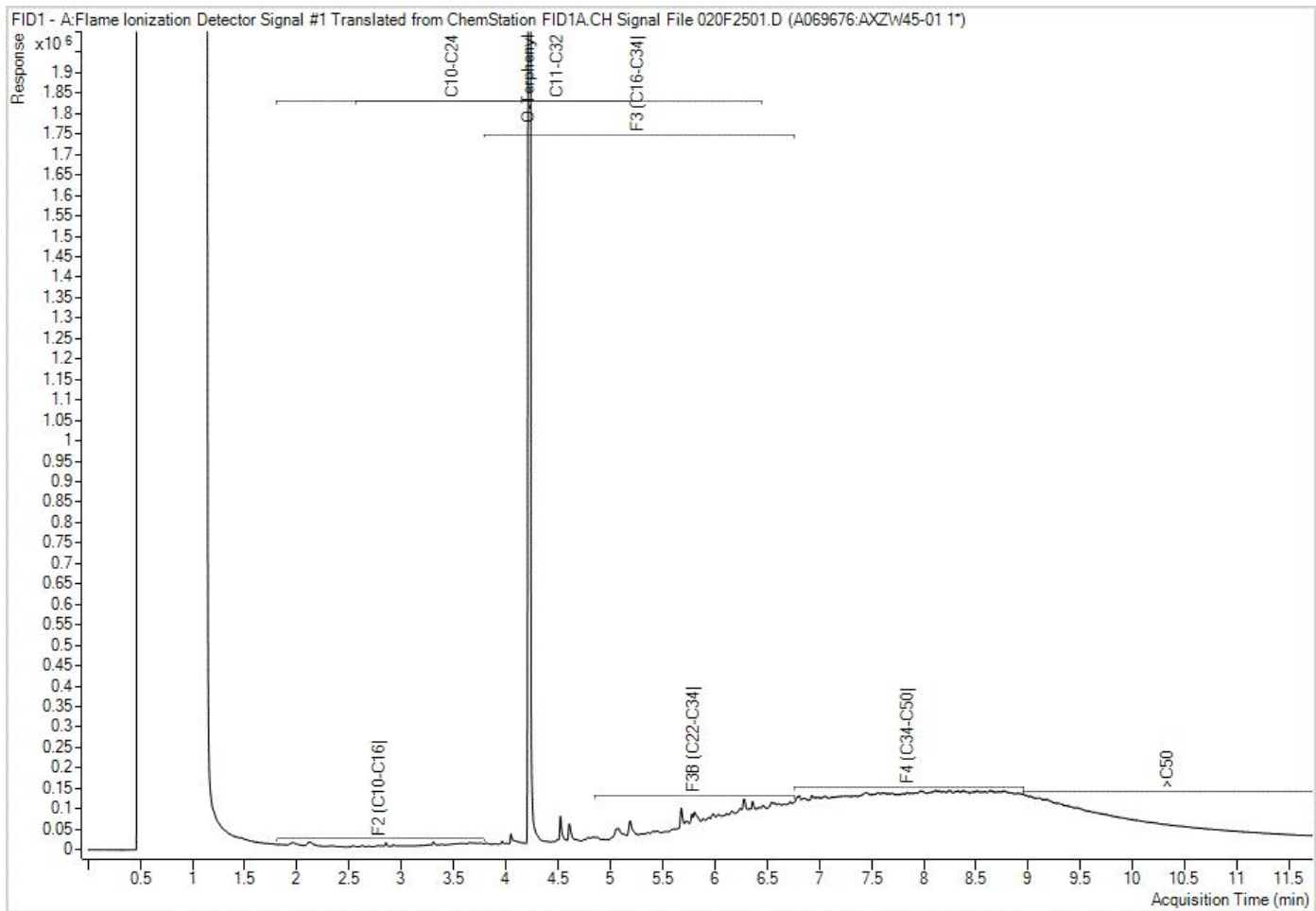
Note: This information is provided for reference purposes only. Should detailed chemist interpretation or fingerprinting be required, please contact the laboratory.

Petroleum Hydrocarbons F2-F4 in Soil Chromatogram



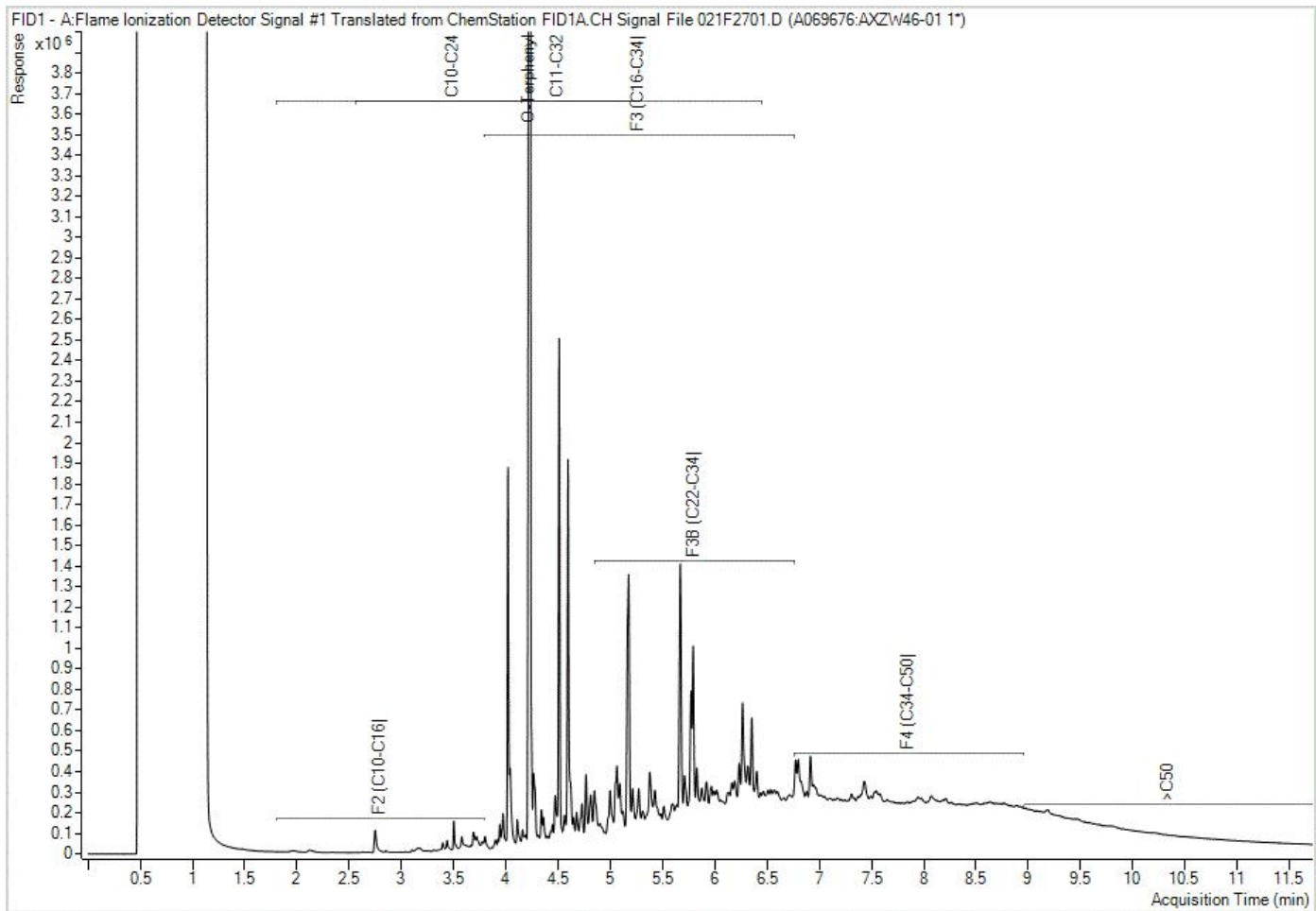
Note: This information is provided for reference purposes only. Should detailed chemist interpretation or fingerprinting be required, please contact the laboratory.

Petroleum Hydrocarbons F2-F4 in Soil Chromatogram



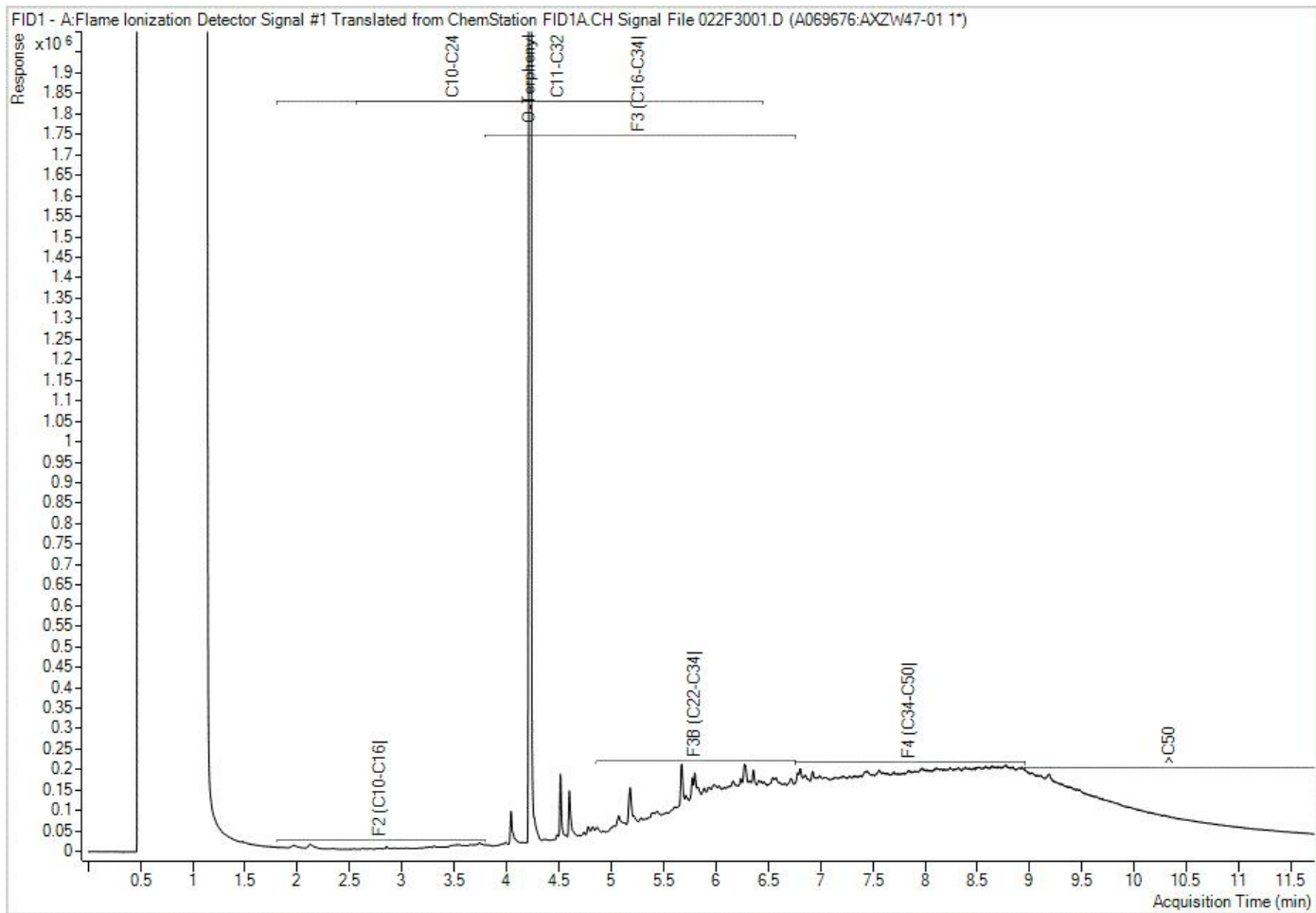
Note: This information is provided for reference purposes only. Should detailed chemist interpretation or fingerprinting be required, please contact the laboratory.

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 #: LOP25-035B  
 Site#: 131 PARKDALE  
 Your C.O.C. #: 1072069-01-01

**Attention: Luke Lopers**

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

**Report Date: 2025/12/24**  
 Report #: R8674112  
 Version: 1 - Final

**CERTIFICATE OF ANALYSIS**

**BUREAU VERITAS JOB #: C5F9047**

**Received: 2025/12/16, 15:45**

Sample Matrix: Soil  
 # Samples Received: 2

Analyses	Quantity	Date	Date	Laboratory Method	Analytical Method
		Extracted	Analyzed		
Semivolatile Organic Compounds (TCLP) (1)	1	2025/12/21	2025/12/22	CAM SOP-00301	EPA 8270E m
ABN Compounds in SPLP Leachates (1)	1	2025/12/21	2025/12/22	CAM SOP-00301	EPA 8270E m
1,3-Dichloropropene Sum (1)	1	N/A	2025/12/24		EPA 8260D m
Cyanide (WAD) in Leachates (1)	1	N/A	2025/12/22	CAM SOP-00457	OMOE 3015 m
Dinitrotoluene Sum (1)	1	N/A	2025/12/23	CAM SOP - 00301	EPA 8270
Fluoride by ISE in Leachates (1)	1	2025/12/20	2025/12/22	CAM SOP-00449	SM 24 4500-F- C m
Total Metals in TCLP Leachate by ICPMS (1)	1	2025/12/22	2025/12/22	CAM SOP-00447	EPA 6020B m
Total Metals in SPLP Leachate by ICPMS (1)	1	2025/12/23	2025/12/23	CAM SOP-00447	EPA 6020B m
Ignitability of a Sample (1)	1	2025/12/19	2025/12/19	CAM SOP-00432	EPA 1030 Rev. 1 m
Modified SPLP extraction - Weight (1)	1	N/A	2025/12/19	CAM SOP-00941	OMOECP LaSB E9003 R3
Nitrate& Nitrite as Nitrogen in Leachate (1)	1	N/A	2025/12/22	CAM SOP-00440	SM 24 4500-NO3I/NO2B
SPLP Zero Headspace Extraction (1)	1	2025/12/22	2025/12/23	CAM SOP-00430	EPA 1312 m
TCLP - % Solids (1)	1	2025/12/18	2025/12/19	CAM SOP-00401	EPA 1311 Update I m
TCLP - Extraction Fluid (1)	1	N/A	2025/12/19	CAM SOP-00401	EPA 1311 Update I m
TCLP - Initial and final pH (1)	1	N/A	2025/12/19	CAM SOP-00401	EPA 1311 Update I m
TCLP Zero Headspace Extraction (1)	1	2025/12/18	2025/12/19	CAM SOP-00430	EPA 1311 m
VOCs in ZHE Leachates (1)	1	2025/12/19	2025/12/19	CAM SOP-00228	EPA 8260D
Volatile organics in SPLP leachates (1)	1	N/A	2025/12/23	CAM SOP-00228	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.



Your Project #: LOP25-035B  
Site#: 131 PARKDALE  
Your C.O.C. #: 1072069-01-01

**Attention: Luke Lopers**

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

**Report Date: 2025/12/24**  
Report #: R8674112  
Version: 1 - Final

**CERTIFICATE OF ANALYSIS**

**BUREAU VERITAS JOB #: C5F9047**

**Received: 2025/12/16, 15:45**

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

**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.

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**RESULTS OF ANALYSES OF SOIL**

<b>Bureau Veritas ID</b>		AYLN32		AYLN33		
<b>Sampling Date</b>		2025/12/12 13:15		2025/12/12 13:25		
<b>COC Number</b>		1072069-01-01		1072069-01-01		
	<b>UNITS</b>	<b>BH8-25-AU1</b>	<b>QC Batch</b>	<b>BH11-25-AU1</b>	<b>RDL</b>	<b>QC Batch</b>
<b>Charge/Prep Analysis</b>						
Amount Extracted (Wet Weight) (g)	N/A	25	A078375	25	N/A	A076763
<b>Inorganics</b>						
Dry Weight	g	100	A076526			
Final pH	pH			6.52		A076525
Leachable Fluoride (F-)	mg/L			0.12	0.10	A077991
Initial pH	pH			9.22		A076525
TCLP - % Solids	%			100	0.2	A076522
TCLP Extraction Fluid	N/A			FLUID 1		A076524
Leachable WAD Cyanide (Free)	mg/L			ND	0.010	A077992
Leachable Nitrite (N)	mg/L			ND	0.10	A077993
Leachable Nitrate (N)	mg/L			ND	1.0	A077993
Leachable Nitrate + Nitrite (N)	mg/L			ND	1.0	A077993
RDL = Reportable Detection Limit QC Batch = Quality Control Batch N/A = Not Applicable ND = Not Detected at a concentration equal or greater than the indicated Detection Limit.						



BUREAU  
VERITAS

Bureau Veritas Job #: C5F9047  
Report Date: 2025/12/24

Lopers & Associates  
Client Project #: LOP25-035B  
Sampler Initials: LL

**ELEMENTS BY ATOMIC SPECTROSCOPY (SOIL)**

Bureau Veritas ID		AYLN32			AYLN33		
Sampling Date		2025/12/12 13:15			2025/12/12 13:25		
COC Number		1072069-01-01			1072069-01-01		
	UNITS	BH8-25-AU1	RDL	QC Batch	BH11-25-AU1	RDL	QC Batch
<b>Metals</b>							
Leachable (SPLP) Antimony (Sb)	ug/L	ND	0.5	A078942			
Leachable (SPLP) Arsenic (As)	ug/L	ND	1	A078942			
Leachable (SPLP) Barium (Ba)	ug/L	13	5	A078942			
Leachable (SPLP) Beryllium (Be)	ug/L	ND	0.5	A078942			
Leachable (SPLP) Boron (B)	ug/L	23	10	A078942			
Leachable (SPLP) Cadmium (Cd)	ug/L	ND	0.1	A078942			
Leachable (SPLP) Chromium (Cr)	ug/L	ND	5	A078942			
Leachable (SPLP) Cobalt (Co)	ug/L	ND	0.5	A078942			
Leachable (SPLP) Copper (Cu)	ug/L	ND	1	A078942			
Leachable (SPLP) Lead (Pb)	ug/L	ND	0.5	A078942			
Leachable (SPLP) Molybdenum (Mo)	ug/L	1	1	A078942			
Leachable (SPLP) Nickel (Ni)	ug/L	ND	1	A078942			
Leachable (SPLP) Selenium (Se)	ug/L	ND	2	A078942			
Leachable (SPLP) Silver (Ag)	ug/L	ND	0.1	A078942			
Leachable (SPLP) Thallium (Tl)	ug/L	ND	0.05	A078942			
Leachable (SPLP) Uranium (U)	ug/L	ND	0.1	A078942			
Leachable (SPLP) Vanadium (V)	ug/L	1	1	A078942			
Leachable (SPLP) Zinc (Zn)	ug/L	ND	5	A078942			
Leachable Arsenic (As)	mg/L				ND	0.2	A078126
Leachable Barium (Ba)	mg/L				1.2	0.2	A078126
Leachable Boron (B)	mg/L				ND	0.1	A078126
Leachable Cadmium (Cd)	mg/L				ND	0.05	A078126
Leachable Chromium (Cr)	mg/L				ND	0.1	A078126
Leachable Lead (Pb)	mg/L				ND	0.1	A078126
Leachable Mercury (Hg)	mg/L				ND	0.001	A078126
Leachable Selenium (Se)	mg/L				ND	0.1	A078126
Leachable Silver (Ag)	mg/L				ND	0.01	A078126
Leachable Uranium (U)	mg/L				ND	0.01	A078126
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 #: C5F9047  
Report Date: 2025/12/24

Lopers & Associates  
Client Project #: LOP25-035B  
Sampler Initials: LL

**SEMI-VOLATILE ORGANICS BY GC-MS (SOIL)**

Bureau Veritas ID		AYLN32			AYLN33		
Sampling Date		2025/12/12 13:15			2025/12/12 13:25		
COC Number		1072069-01-01			1072069-01-01		
	UNITS	BH8-25-AU1	RDL	QC Batch	BH11-25-AU1	RDL	QC Batch
<b>Semivolatiles Organics</b>							
Leachable (SPLP) Bis(2-chloroethyl)ether	ug/L	ND	2.0	A078036			
Leachable (SPLP) Bis(2-chloroisopropyl)ether	ug/L	ND	2.0	A078036			
Leachable (SPLP) p-Chloroaniline	ug/L	ND	5.0	A078036			
Leachable (SPLP) 3,3'-Dichlorobenzidine	ug/L	ND	0.40	A078036			
Leachable Benzo(a)pyrene	ug/L				ND	0.10	A078035
Leachable (SPLP) Diethyl phthalate	ug/L	ND	1.0	A078036			
Leachable (SPLP) Dimethyl phthalate	ug/L	ND	1.0	A078036			
Leachable (SPLP) 2,4-Dinitrophenol	ug/L	ND	5.0	A078036			
Leachable (SPLP) 2,4-Dinitrotoluene	ug/L	ND	3.0	A078036			
Leachable (SPLP) 2,6-Dinitrotoluene	ug/L	ND	3.0	A078036			
Leachable (SPLP) 2,4,6-Trichlorophenol	ug/L	ND	0.70	A078036			
Leachable m/p-Cresol	ug/L				ND	2.5	A078035
Leachable o-Cresol	ug/L				ND	2.5	A078035
Leachable Cresol Total	ug/L				ND	2.5	A078035
Leachable 2,4-Dichlorophenol	ug/L				ND	2.5	A078035
Leachable 2,4-Dinitrotoluene	ug/L				ND	10	A078035
Leachable Hexachlorobenzene	ug/L				ND	10	A078035
Leachable Hexachlorobutadiene	ug/L				ND	10	A078035
Leachable Hexachloroethane	ug/L				ND	10	A078035
Leachable Nitrobenzene	ug/L				ND	10	A078035
Leachable Pentachlorophenol	ug/L				ND	2.5	A078035
Leachable Pyridine	ug/L				ND	10	A078035
Leachable 2,3,4,6-Tetrachlorophenol	ug/L				ND	2.5	A078035
Leachable 2,4,5-Trichlorophenol	ug/L				ND	0.50	A078035
Leachable 2,4,6-Trichlorophenol	ug/L				ND	2.5	A078035
<b>Calculated Parameters</b>							
Leachable 2,4- & 2,6-Dinitrotoluene	ug/L	ND	4.2	A076008			
<b>Surrogate Recovery (%)</b>							
Leachable 2,4,6-Tribromophenol	%				61		A078035
Leachable 2-Fluorobiphenyl	%				46		A078035
Leachable 2-Fluorophenol	%				24		A078035
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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Bureau Veritas Job #: C5F9047  
Report Date: 2025/12/24

Lopers & Associates  
Client Project #: LOP25-035B  
Sampler Initials: LL

### SEMI-VOLATILE ORGANICS BY GC-MS (SOIL)

Bureau Veritas ID		AYLN32			AYLN33		
Sampling Date		2025/12/12 13:15			2025/12/12 13:25		
COC Number		1072069-01-01			1072069-01-01		
	UNITS	BH8-25-AU1	RDL	QC Batch	BH11-25-AU1	RDL	QC Batch
Leachable D14-Terphenyl (FS)	%				67		A078035
Leachable D5-Nitrobenzene	%				59		A078035
Leachable D5-Phenol	%				27		A078035
Leachable (SPLP) 2,4,6-Tribromophenol	%	51		A078036			
Leachable (SPLP) 2-Fluorobiphenyl	%	43		A078036			
Leachable (SPLP) D14-Terphenyl (FS)	%	89		A078036			
Leachable (SPLP) D5-Nitrobenzene	%	55		A078036			
RDL = Reportable Detection Limit QC Batch = Quality Control Batch							



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Bureau Veritas Job #: C5F9047

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Lopers & Associates

Client Project #: LOP25-035B

Sampler Initials: LL

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

Bureau Veritas ID		AYLN32			AYLN33		
Sampling Date		2025/12/12 13:15			2025/12/12 13:25		
COC Number		1072069-01-01			1072069-01-01		
	UNITS	BH8-25-AU1	RDL	QC Batch	BH11-25-AU1	RDL	QC Batch
<b>Calculated Parameters</b>							
Leachable (ZHE) 1,3-Dichloropropene (cis+trans)	ug/L	ND	0.42	A076009			
<b>Volatile Organics</b>							
Leachable Benzene	mg/L				ND	0.020	A077409
Leachable Carbon Tetrachloride	mg/L				ND	0.020	A077409
Leachable Chlorobenzene	mg/L				ND	0.020	A077409
Leachable Chloroform	mg/L				ND	0.020	A077409
Leachable 1,2-Dichlorobenzene	mg/L				ND	0.050	A077409
Leachable (SPLP) Bromomethane	ug/L	ND	0.40	A079179			
Leachable 1,4-Dichlorobenzene	mg/L				ND	0.050	A077409
Leachable (SPLP) Carbon Tetrachloride	ug/L	ND	0.19	A079179			
Leachable 1,2-Dichloroethane	mg/L				ND	0.050	A077409
Leachable 1,1-Dichloroethylene	mg/L				ND	0.020	A077409
Leachable (SPLP) Chloroform	ug/L	ND	0.90	A079179			
Leachable Methylene Chloride(Dichloromethane)	mg/L				ND	0.20	A077409
Leachable Methyl Ethyl Ketone (2-Butanone)	mg/L				ND	1.0	A077409
Leachable Tetrachloroethylene	mg/L				ND	0.020	A077409
Leachable (SPLP) 1,2-Dichlorobenzene	ug/L	ND	0.40	A079179			
Leachable Trichloroethylene	mg/L				ND	0.020	A077409
Leachable Vinyl Chloride	mg/L				ND	0.020	A077409
Leachable (SPLP) 1,4-Dichlorobenzene	ug/L	ND	0.40	A079179			
Leachable (SPLP) 1,1-Dichloroethane	ug/L	ND	0.40	A079179			
Leachable (SPLP) 1,2-Dichloroethane	ug/L	ND	0.40	A079179			
Leachable (SPLP) 1,1-Dichloroethylene	ug/L	ND	0.40	A079179			
Leachable (SPLP) cis-1,2-Dichloroethylene	ug/L	ND	0.40	A079179			
Leachable (SPLP) trans-1,2-Dichloroethylene	ug/L	ND	0.40	A079179			
Leachable (SPLP) 1,2-Dichloropropane	ug/L	ND	0.40	A079179			
Leachable (SPLP) cis-1,3-Dichloropropene	ug/L	ND	0.30	A079179			
Leachable (SPLP) trans-1,3-Dichloropropene	ug/L	ND	0.30	A079179			
Leachable (SPLP) Ethylene Dibromide	ug/L	ND	0.19	A079179			
Leachable (SPLP) 1,1,1,2-Tetrachloroethane	ug/L	ND	0.40	A079179			
Leachable (SPLP) 1,1,2,2-Tetrachloroethane	ug/L	ND	0.40	A079179			
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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Bureau Veritas Job #: C5F9047

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Lopers & Associates

Client Project #: LOP25-035B

Sampler Initials: LL

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

<b>Bureau Veritas ID</b>		AYLN32			AYLN33		
<b>Sampling Date</b>		2025/12/12 13:15			2025/12/12 13:25		
<b>COC Number</b>		1072069-01-01			1072069-01-01		
	<b>UNITS</b>	<b>BH8-25-AU1</b>	<b>RDL</b>	<b>QC Batch</b>	<b>BH11-25-AU1</b>	<b>RDL</b>	<b>QC Batch</b>
Leachable (SPLP) Tetrachloroethylene	ug/L	ND	0.40	A079179			
Leachable (SPLP) 1,1,2-Trichloroethane	ug/L	ND	0.40	A079179			
Leachable (SPLP) Trichloroethylene	ug/L	ND	0.40	A079179			
<b>Surrogate Recovery (%)</b>							
Leachable 4-Bromofluorobenzene	%				102		A077409
Leachable D4-1,2-Dichloroethane	%				96		A077409
Leachable D8-Toluene	%				96		A077409
Leachable (SPLP) 4-Bromofluorobenzene	%	103		A079179			
Leachable (SPLP) D4-1,2-Dichloroethane	%	100		A079179			
Leachable (SPLP) D8-Toluene	%	94		A079179			
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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**MISCELLANEOUS (SOIL)**

<b>Bureau Veritas ID</b>		AYLN33	
<b>Sampling Date</b>		2025/12/12 13:25	
<b>COC Number</b>		1072069-01-01	
	<b>UNITS</b>	<b>BH11-25-AU1</b>	<b>QC Batch</b>
<b>Inorganics</b>			
Ignitability	N/A	NF/NI	A077604
QC Batch = Quality Control Batch			



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Bureau Veritas Job #: C5F9047  
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### GENERAL COMMENTS

Sample AYLN33 [BH11-25-AU1] : NF/NI = Non Flammable and Non Ignitable.

**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
A077409	NRA	Matrix Spike	Leachable 4-Bromofluorobenzene	2025/12/19	101	%	70 - 130		
			Leachable D4-1,2-Dichloroethane	2025/12/19	101	%	70 - 130		
			Leachable D8-Toluene	2025/12/19	101	%	70 - 130		
			Leachable Benzene	2025/12/19	97	%	70 - 130		
			Leachable Carbon Tetrachloride	2025/12/19	107	%	70 - 130		
			Leachable Chlorobenzene	2025/12/19	93	%	70 - 130		
			Leachable Chloroform	2025/12/19	98	%	70 - 130		
			Leachable 1,2-Dichlorobenzene	2025/12/19	94	%	70 - 130		
			Leachable 1,4-Dichlorobenzene	2025/12/19	95	%	70 - 130		
			Leachable 1,2-Dichloroethane	2025/12/19	99	%	70 - 130		
			Leachable 1,1-Dichloroethylene	2025/12/19	100	%	70 - 130		
			Leachable Methylene Chloride(Dichloromethan	2025/12/19	95	%	70 - 130		
			Leachable Methyl Ethyl Ketone (2-Butanone)	2025/12/19	100	%	60 - 140		
			Leachable Tetrachloroethylene	2025/12/19	98	%	70 - 130		
			Leachable Trichloroethylene	2025/12/19	99	%	70 - 130		
			Leachable Vinyl Chloride	2025/12/19	96	%	70 - 130		
			A077409	NRA	Spiked Blank	Leachable 4-Bromofluorobenzene	2025/12/19	100	%
Leachable D4-1,2-Dichloroethane	2025/12/19	101				%	70 - 130		
Leachable D8-Toluene	2025/12/19	101				%	70 - 130		
Leachable Benzene	2025/12/19	104				%	70 - 130		
Leachable Carbon Tetrachloride	2025/12/19	115				%	70 - 130		
Leachable Chlorobenzene	2025/12/19	99				%	70 - 130		
Leachable Chloroform	2025/12/19	105				%	70 - 130		
Leachable 1,2-Dichlorobenzene	2025/12/19	102				%	70 - 130		
Leachable 1,4-Dichlorobenzene	2025/12/19	106				%	70 - 130		
Leachable 1,2-Dichloroethane	2025/12/19	107				%	70 - 130		
Leachable 1,1-Dichloroethylene	2025/12/19	107				%	70 - 130		
Leachable Methylene Chloride(Dichloromethan	2025/12/19	102				%	70 - 130		
Leachable Methyl Ethyl Ketone (2-Butanone)	2025/12/19	111				%	60 - 140		
Leachable Tetrachloroethylene	2025/12/19	104				%	70 - 130		
Leachable Trichloroethylene	2025/12/19	105				%	70 - 130		
Leachable Vinyl Chloride	2025/12/19	101				%	70 - 130		
A077409	NRA	Method Blank				Leachable 4-Bromofluorobenzene	2025/12/19	103	%
			Leachable D4-1,2-Dichloroethane	2025/12/19	97	%	70 - 130		
			Leachable D8-Toluene	2025/12/19	96	%	70 - 130		
			Leachable Benzene	2025/12/19	ND, RDL=0.020	mg/L			
			Leachable Carbon Tetrachloride	2025/12/19	ND, RDL=0.020	mg/L			
			Leachable Chlorobenzene	2025/12/19	ND, RDL=0.020	mg/L			
			Leachable Chloroform	2025/12/19	ND, RDL=0.020	mg/L			
			Leachable 1,2-Dichlorobenzene	2025/12/19	ND, RDL=0.050	mg/L			
			Leachable 1,4-Dichlorobenzene	2025/12/19	ND, RDL=0.050	mg/L			
			Leachable 1,2-Dichloroethane	2025/12/19	ND, RDL=0.050	mg/L			
			Leachable 1,1-Dichloroethylene	2025/12/19	ND, RDL=0.020	mg/L			
			Leachable Methylene Chloride (Dichloromethane)	2025/12/19	ND, RDL=0.20	mg/L			



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### QUALITY ASSURANCE REPORT(CONT'D)

QA/QC Batch	Init	QC Type	Parameter	Date Analyzed	Value	Recovery	UNITS	QC Limits																																				
A077409	NRA	RPD	Leachable Methyl Ethyl Ketone (2-Butanone)	2025/12/19	ND, RDL=1.0		mg/L																																					
			Leachable Tetrachloroethylene	2025/12/19	ND, RDL=0.020		mg/L																																					
			Leachable Trichloroethylene	2025/12/19	ND, RDL=0.020		mg/L																																					
			Leachable Vinyl Chloride	2025/12/19	ND, RDL=0.020		mg/L																																					
			Leachable Benzene	2025/12/19	NC	%	30																																					
			Leachable Carbon Tetrachloride	2025/12/19	NC	%	30																																					
			Leachable Chlorobenzene	2025/12/19	NC	%	30																																					
			Leachable Chloroform	2025/12/19	NC	%	30																																					
			Leachable 1,2-Dichlorobenzene	2025/12/19	NC	%	30																																					
			Leachable 1,4-Dichlorobenzene	2025/12/19	NC	%	30																																					
			Leachable 1,2-Dichloroethane	2025/12/19	NC	%	30																																					
			Leachable 1,1-Dichloroethylene	2025/12/19	NC	%	30																																					
			Leachable Methylene Chloride(Dichloromethan	2025/12/19	NC	%	30																																					
			Leachable Methyl Ethyl Ketone (2-Butanone)	2025/12/19	NC	%	30																																					
A077991	NGI	Matrix Spike	Leachable Fluoride (F-)	2025/12/22		97	%	75 - 125																																				
			A077991	NGI	Leachate Blank	Leachable Fluoride (F-)	2025/12/22	ND, RDL=0.10	mg/L																																			
						A077991	NGI	Spiked Blank	Leachable Fluoride (F-)	2025/12/22		100	%	75 - 125																														
									A077991	NGI	Method Blank	Leachable Fluoride (F-)	2025/12/22	ND, RDL=0.10	mg/L																													
												A077991	NGI	RPD	Leachable Fluoride (F-)	2025/12/22	0.47	%	25																									
															A077992	GYA	Matrix Spike	Leachable WAD Cyanide (Free)	2025/12/22		98	%	80 - 120																					
																		A077992	GYA	Leachate Blank	Leachable WAD Cyanide (Free)	2025/12/22	ND, RDL=0.010	mg/L																				
																					A077992	GYA	Spiked Blank	Leachable WAD Cyanide (Free)	2025/12/22		111	%	80 - 120															
																								A077992	GYA	Method Blank	Leachable WAD Cyanide (Free)	2025/12/22	ND, RDL=0.0020	mg/L														
																											A077992	GYA	RPD	Leachable WAD Cyanide (Free)	2025/12/22	NC	%	20										
																														A077993	C_N	Matrix Spike	Leachable Nitrite (N)	2025/12/22		94	%	80 - 120						
																																	A077993	C_N	Leachate Blank	Leachable Nitrate (N)	2025/12/22		61 (1)	%	80 - 120			
																																				A077993	C_N	Leachate Blank	Leachable Nitrate + Nitrite (N)	2025/12/22		68 (1)	%	80 - 120
																																							A077993	C_N	Leachate Blank	Leachable Nitrite (N)	2025/12/22	ND, RDL=0.10
A077993	C_N	Leachate Blank																																								Leachable Nitrate (N)	2025/12/22	ND, RDL=1.0
			A077993	C_N	Leachate Blank																																					Leachable Nitrate + Nitrite (N)	2025/12/22	ND, RDL=1.0
						A077993	C_N	Spiked Blank																																		Leachable Nitrite (N)	2025/12/22	
									A077993	C_N	Spiked Blank																															Leachable Nitrate (N)	2025/12/22	
												A077993	C_N	Spiked Blank																												Leachable Nitrate + Nitrite (N)	2025/12/22	
															A077993	C_N	Method Blank																									Leachable Nitrite (N)	2025/12/22	ND, RDL=0.10
																		A077993	C_N	Method Blank																						Leachable Nitrate (N)	2025/12/22	ND, RDL=1.0
																					A077993	C_N	Method Blank																			Leachable Nitrate + Nitrite (N)	2025/12/22	ND, RDL=1.0
																								A077993	C_N	RPD																Leachable Nitrite (N)	2025/12/22	NC
																											A077993	C_N	RPD													Leachable Nitrate (N)	2025/12/22	NC



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### QUALITY ASSURANCE REPORT(CONT'D)

QA/QC	Batch	Init	QC Type	Parameter	Date Analyzed	Value	Recovery	UNITS	QC Limits
				Leachable Nitrate + Nitrite (N)	2025/12/22	NC		%	20
A078035	THT		Matrix Spike	Leachable 2,4,6-Tribromophenol	2025/12/22		87	%	10 - 130
				Leachable 2-Fluorobiphenyl	2025/12/22		76	%	30 - 130
				Leachable 2-Fluorophenol	2025/12/22		31	%	10 - 130
				Leachable D14-Terphenyl (FS)	2025/12/22		73	%	30 - 130
				Leachable D5-Nitrobenzene	2025/12/22		80	%	30 - 130
				Leachable D5-Phenol	2025/12/22		36	%	10 - 130
				Leachable Benzo(a)pyrene	2025/12/22		99	%	30 - 130
				Leachable m/p-Cresol	2025/12/22		58	%	10 - 130
				Leachable o-Cresol	2025/12/22		67	%	10 - 130
				Leachable Cresol Total	2025/12/22		63	%	10 - 130
				Leachable 2,4-Dichlorophenol	2025/12/22		51	%	10 - 130
				Leachable 2,4-Dinitrotoluene	2025/12/22		84	%	30 - 130
				Leachable Hexachlorobenzene	2025/12/22		89	%	30 - 130
				Leachable Hexachlorobutadiene	2025/12/22		66	%	30 - 130
				Leachable Hexachloroethane	2025/12/22		62	%	30 - 130
				Leachable Nitrobenzene	2025/12/22		85	%	30 - 130
				Leachable Pentachlorophenol	2025/12/22		84	%	30 - 130
				Leachable Pyridine	2025/12/22		36	%	10 - 130
				Leachable 2,3,4,6-Tetrachlorophenol	2025/12/22		100	%	10 - 130
				Leachable 2,4,5-Trichlorophenol	2025/12/22		56	%	10 - 130
				Leachable 2,4,6-Trichlorophenol	2025/12/22		79	%	10 - 130
A078035	THT		Spiked Blank	Leachable 2,4,6-Tribromophenol	2025/12/22		72	%	10 - 130
				Leachable 2-Fluorobiphenyl	2025/12/22		46	%	30 - 130
				Leachable 2-Fluorophenol	2025/12/22		27	%	10 - 130
				Leachable D14-Terphenyl (FS)	2025/12/22		67	%	30 - 130
				Leachable D5-Nitrobenzene	2025/12/22		51	%	30 - 130
				Leachable D5-Phenol	2025/12/22		24	%	10 - 130
				Leachable Benzo(a)pyrene	2025/12/22		91	%	30 - 130
				Leachable m/p-Cresol	2025/12/22		37	%	10 - 130
				Leachable o-Cresol	2025/12/22		43	%	10 - 130
				Leachable Cresol Total	2025/12/22		40	%	10 - 130
				Leachable 2,4-Dichlorophenol	2025/12/22		40	%	10 - 130
				Leachable 2,4-Dinitrotoluene	2025/12/22		66	%	30 - 130
				Leachable Hexachlorobenzene	2025/12/22		71	%	30 - 130
				Leachable Hexachlorobutadiene	2025/12/22		40	%	30 - 130
				Leachable Hexachloroethane	2025/12/22		39	%	30 - 130
				Leachable Nitrobenzene	2025/12/22		54	%	30 - 130
				Leachable Pentachlorophenol	2025/12/22		79	%	30 - 130
				Leachable Pyridine	2025/12/22		28	%	10 - 130
				Leachable 2,3,4,6-Tetrachlorophenol	2025/12/22		82	%	10 - 130
				Leachable 2,4,5-Trichlorophenol	2025/12/22		53	%	10 - 130
				Leachable 2,4,6-Trichlorophenol	2025/12/22		51	%	10 - 130
A078035	THT		Method Blank	Leachable 2,4,6-Tribromophenol	2025/12/22		76	%	10 - 130
				Leachable 2-Fluorobiphenyl	2025/12/22		74	%	30 - 130
				Leachable 2-Fluorophenol	2025/12/22		30	%	10 - 130
				Leachable D14-Terphenyl (FS)	2025/12/22		71	%	30 - 130
				Leachable D5-Nitrobenzene	2025/12/22		80	%	30 - 130
				Leachable D5-Phenol	2025/12/22		33	%	10 - 130
				Leachable Benzo(a)pyrene	2025/12/22	ND, RDL=0.10		ug/L	
				Leachable m/p-Cresol	2025/12/22	ND, RDL=2.5		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
			Leachable o-Cresol	2025/12/22	ND, RDL=2.5		ug/L	
			Leachable Cresol Total	2025/12/22	ND, RDL=2.5		ug/L	
			Leachable 2,4-Dichlorophenol	2025/12/22	ND, RDL=2.5		ug/L	
			Leachable 2,4-Dinitrotoluene	2025/12/22	ND, RDL=10		ug/L	
			Leachable Hexachlorobenzene	2025/12/22	ND, RDL=10		ug/L	
			Leachable Hexachlorobutadiene	2025/12/22	ND, RDL=10		ug/L	
			Leachable Hexachloroethane	2025/12/22	ND, RDL=10		ug/L	
			Leachable Nitrobenzene	2025/12/22	ND, RDL=10		ug/L	
			Leachable Pentachlorophenol	2025/12/22	ND, RDL=2.5		ug/L	
			Leachable Pyridine	2025/12/22	ND, RDL=10		ug/L	
			Leachable 2,3,4,6-Tetrachlorophenol	2025/12/22	ND, RDL=2.5		ug/L	
			Leachable 2,4,5-Trichlorophenol	2025/12/22	ND, RDL=0.50		ug/L	
			Leachable 2,4,6-Trichlorophenol	2025/12/22	ND, RDL=2.5		ug/L	
A078035	THT	RPD	Leachable Benzo(a)pyrene	2025/12/22	NC		%	40
			Leachable m/p-Cresol	2025/12/22	NC		%	40
			Leachable o-Cresol	2025/12/22	NC		%	40
			Leachable Cresol Total	2025/12/22	NC		%	40
			Leachable 2,4-Dichlorophenol	2025/12/22	NC		%	40
			Leachable 2,4-Dinitrotoluene	2025/12/22	NC		%	40
			Leachable Hexachlorobenzene	2025/12/22	NC		%	40
			Leachable Hexachlorobutadiene	2025/12/22	NC		%	40
			Leachable Hexachloroethane	2025/12/22	NC		%	40
			Leachable Nitrobenzene	2025/12/22	NC		%	40
			Leachable Pentachlorophenol	2025/12/22	NC		%	40
			Leachable Pyridine	2025/12/22	NC		%	40
			Leachable 2,3,4,6-Tetrachlorophenol	2025/12/22	NC		%	40
			Leachable 2,4,5-Trichlorophenol	2025/12/22	NC		%	40
			Leachable 2,4,6-Trichlorophenol	2025/12/22	NC		%	40
A078036	MYI	Matrix Spike [AYLN32-01]	Leachable (SPLP) 2,4,6-Tribromophenol	2025/12/22		87	%	30 - 130
			Leachable (SPLP) 2-Fluorobiphenyl	2025/12/22		74	%	30 - 130
			Leachable (SPLP) D14-Terphenyl (FS)	2025/12/22		94	%	30 - 130
			Leachable (SPLP) D5-Nitrobenzene	2025/12/22		77	%	30 - 130
			Leachable (SPLP) Bis(2-chloroethyl)ether	2025/12/22		94	%	30 - 130
			Leachable (SPLP) Bis(2-chloroisopropyl)ether	2025/12/22		84	%	30 - 130
			Leachable (SPLP) p-Chloroaniline	2025/12/22		88	%	30 - 130
			Leachable (SPLP) 3,3'-Dichlorobenzidine	2025/12/22		93	%	30 - 130
			Leachable (SPLP) Diethyl phthalate	2025/12/22		100	%	30 - 130
			Leachable (SPLP) Dimethyl phthalate	2025/12/22		94	%	30 - 130
			Leachable (SPLP) 2,4-Dinitrophenol	2025/12/22		93	%	10 - 130
			Leachable (SPLP) 2,4-Dinitrotoluene	2025/12/22		96	%	30 - 130
			Leachable (SPLP) 2,6-Dinitrotoluene	2025/12/22		90	%	30 - 130



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QA/QC Batch	Init	QC Type	Parameter	Date Analyzed	Value	Recovery	UNITS	QC Limits			
A078036	MYI	Spiked Blank	Leachable (SPLP) 2,4,6-Trichlorophenol	2025/12/22		80	%	10 - 130			
			Leachable (SPLP) 2,4,6-Tribromophenol	2025/12/22		94	%	30 - 130			
			Leachable (SPLP) 2-Fluorobiphenyl	2025/12/22		84	%	30 - 130			
			Leachable (SPLP) D14-Terphenyl (FS)	2025/12/22		93	%	30 - 130			
			Leachable (SPLP) D5-Nitrobenzene	2025/12/22		87	%	30 - 130			
			Leachable (SPLP) Bis(2-chloroethyl)ether	2025/12/22		108	%	30 - 130			
			Leachable (SPLP) Bis(2-chloroisopropyl)ether	2025/12/22		98	%	30 - 130			
			Leachable (SPLP) p-Chloroaniline	2025/12/22		102	%	30 - 130			
			Leachable (SPLP) 3,3'-Dichlorobenzidine	2025/12/22		107	%	30 - 130			
			Leachable (SPLP) Diethyl phthalate	2025/12/22		104	%	30 - 130			
			Leachable (SPLP) Dimethyl phthalate	2025/12/22		104	%	30 - 130			
			Leachable (SPLP) 2,4-Dinitrophenol	2025/12/22		95	%	10 - 130			
			Leachable (SPLP) 2,4-Dinitrotoluene	2025/12/22		100	%	30 - 130			
			Leachable (SPLP) 2,6-Dinitrotoluene	2025/12/22		100	%	30 - 130			
			Leachable (SPLP) 2,4,6-Trichlorophenol	2025/12/22		93	%	10 - 130			
			A078036	MYI	Method Blank	Leachable (SPLP) 2,4,6-Tribromophenol	2025/12/22		62	%	30 - 130
Leachable (SPLP) 2-Fluorobiphenyl	2025/12/22					77	%	30 - 130			
Leachable (SPLP) D14-Terphenyl (FS)	2025/12/22					83	%	30 - 130			
Leachable (SPLP) D5-Nitrobenzene	2025/12/22					89	%	30 - 130			
Leachable (SPLP) Bis(2-chloroethyl)ether	2025/12/22	ND, RDL=2.0					ug/L				
Leachable (SPLP) Bis(2-chloroisopropyl)ether	2025/12/22	ND, RDL=2.0					ug/L				
Leachable (SPLP) p-Chloroaniline	2025/12/22	ND, RDL=5.0					ug/L				
Leachable (SPLP) 3,3'-Dichlorobenzidine	2025/12/22	ND, RDL=0.40					ug/L				
Leachable (SPLP) Diethyl phthalate	2025/12/22	ND, RDL=1.0					ug/L				
Leachable (SPLP) Dimethyl phthalate	2025/12/22	ND, RDL=1.0					ug/L				
Leachable (SPLP) 2,4-Dinitrophenol	2025/12/22	ND, RDL=5.0					ug/L				
Leachable (SPLP) 2,4-Dinitrotoluene	2025/12/22	ND, RDL=3.0					ug/L				
Leachable (SPLP) 2,6-Dinitrotoluene	2025/12/22	ND, RDL=3.0					ug/L				
Leachable (SPLP) 2,4,6-Trichlorophenol	2025/12/22	ND, RDL=0.70					ug/L				
A078036	MYI	RPD [AYLN32-01]				Leachable (SPLP) Bis(2-chloroethyl)ether	2025/12/22	NC		%	40
						Leachable (SPLP) Bis(2-chloroisopropyl)ether	2025/12/22	NC		%	40
			Leachable (SPLP) p-Chloroaniline	2025/12/22	NC		%	40			
			Leachable (SPLP) 3,3'-Dichlorobenzidine	2025/12/22	NC		%	40			
			Leachable (SPLP) Diethyl phthalate	2025/12/22	NC		%	40			
			Leachable (SPLP) Dimethyl phthalate	2025/12/22	NC		%	40			
			Leachable (SPLP) 2,4-Dinitrophenol	2025/12/22	NC		%	40			
			Leachable (SPLP) 2,4-Dinitrotoluene	2025/12/22	NC		%	40			
			Leachable (SPLP) 2,6-Dinitrotoluene	2025/12/22	NC		%	40			
			Leachable (SPLP) 2,4,6-Trichlorophenol	2025/12/22	NC		%	40			
A078126	PBA	Matrix Spike	Leachable Arsenic (As)	2025/12/22		103	%	80 - 120			
			Leachable Barium (Ba)	2025/12/22		NC	%	80 - 120			
			Leachable Boron (B)	2025/12/22		104	%	80 - 120			
			Leachable Cadmium (Cd)	2025/12/22		101	%	80 - 120			
			Leachable Chromium (Cr)	2025/12/22		99	%	80 - 120			



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QA/QC	Batch	Init	QC Type	Parameter	Date Analyzed	Value	Recovery	UNITS	QC Limits
				Leachable Lead (Pb)	2025/12/22		97	%	80 - 120
				Leachable Mercury (Hg)	2025/12/22		94	%	80 - 120
				Leachable Selenium (Se)	2025/12/22		102	%	80 - 120
				Leachable Silver (Ag)	2025/12/22		95	%	80 - 120
				Leachable Uranium (U)	2025/12/22		97	%	80 - 120
A078126	PBA		Leachate Blank	Leachable Arsenic (As)	2025/12/22	ND, RDL=0.2		mg/L	
				Leachable Barium (Ba)	2025/12/22	ND, RDL=0.2		mg/L	
				Leachable Boron (B)	2025/12/22	ND, RDL=0.1		mg/L	
				Leachable Cadmium (Cd)	2025/12/22	ND, RDL=0.05		mg/L	
				Leachable Chromium (Cr)	2025/12/22	ND, RDL=0.1		mg/L	
				Leachable Lead (Pb)	2025/12/22	ND, RDL=0.1		mg/L	
				Leachable Mercury (Hg)	2025/12/22	ND, RDL=0.001		mg/L	
				Leachable Selenium (Se)	2025/12/22	ND, RDL=0.1		mg/L	
				Leachable Silver (Ag)	2025/12/22	ND, RDL=0.01		mg/L	
				Leachable Uranium (U)	2025/12/22	ND, RDL=0.01		mg/L	
A078126	PBA	RPD		Leachable Arsenic (As)	2025/12/22	NC		%	35
				Leachable Barium (Ba)	2025/12/22	NC		%	35
				Leachable Boron (B)	2025/12/22	NC		%	35
				Leachable Cadmium (Cd)	2025/12/22	NC		%	35
				Leachable Chromium (Cr)	2025/12/22	NC		%	35
				Leachable Lead (Pb)	2025/12/22	NC		%	35
				Leachable Mercury (Hg)	2025/12/22	NC		%	35
				Leachable Selenium (Se)	2025/12/22	NC		%	35
				Leachable Silver (Ag)	2025/12/22	NC		%	35
				Leachable Uranium (U)	2025/12/22	NC		%	35
				Leachable Arsenic (As)	2025/12/22	NC		%	35
				Leachable Barium (Ba)	2025/12/22	1.3		%	35
				Leachable Boron (B)	2025/12/22	NC		%	35
				Leachable Cadmium (Cd)	2025/12/22	NC		%	35
				Leachable Chromium (Cr)	2025/12/22	NC		%	35
				Leachable Lead (Pb)	2025/12/22	NC		%	35
				Leachable Mercury (Hg)	2025/12/22	NC		%	35
				Leachable Selenium (Se)	2025/12/22	NC		%	35
				Leachable Silver (Ag)	2025/12/22	NC		%	35
				Leachable Uranium (U)	2025/12/22	NC		%	35
A078126	PBA		Spiked Blank	Leachable Arsenic (As)	2025/12/22		103	%	80 - 120
				Leachable Barium (Ba)	2025/12/22		103	%	80 - 120
				Leachable Boron (B)	2025/12/22		97	%	80 - 120
				Leachable Cadmium (Cd)	2025/12/22		102	%	80 - 120
				Leachable Chromium (Cr)	2025/12/22		100	%	80 - 120
				Leachable Lead (Pb)	2025/12/22		98	%	80 - 120
				Leachable Mercury (Hg)	2025/12/22		97	%	80 - 120
				Leachable Selenium (Se)	2025/12/22		101	%	80 - 120
				Leachable Silver (Ag)	2025/12/22		97	%	80 - 120



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A078126	PBA	Method Blank	Leachable Uranium (U)	2025/12/22		96	%	80 - 120
			Leachable Arsenic (As)	2025/12/22	ND, RDL=0.2		mg/L	
			Leachable Barium (Ba)	2025/12/22	ND, RDL=0.2		mg/L	
			Leachable Boron (B)	2025/12/22	ND, RDL=0.1		mg/L	
			Leachable Cadmium (Cd)	2025/12/22	ND, RDL=0.05		mg/L	
			Leachable Chromium (Cr)	2025/12/22	ND, RDL=0.1		mg/L	
			Leachable Lead (Pb)	2025/12/22	ND, RDL=0.1		mg/L	
			Leachable Mercury (Hg)	2025/12/22	ND, RDL=0.001		mg/L	
			Leachable Selenium (Se)	2025/12/22	ND, RDL=0.1		mg/L	
			Leachable Silver (Ag)	2025/12/22	ND, RDL=0.01		mg/L	
			Leachable Uranium (U)	2025/12/22	ND, RDL=0.01		mg/L	
A078942	AFZ	Matrix Spike [AYLN32-01]	Leachable (SPLP) Antimony (Sb)	2025/12/23		106	%	80 - 120
			Leachable (SPLP) Arsenic (As)	2025/12/23		99	%	80 - 120
			Leachable (SPLP) Barium (Ba)	2025/12/23		98	%	80 - 120
			Leachable (SPLP) Beryllium (Be)	2025/12/23		91	%	80 - 120
			Leachable (SPLP) Boron (B)	2025/12/23		90	%	80 - 120
			Leachable (SPLP) Cadmium (Cd)	2025/12/23		101	%	80 - 120
			Leachable (SPLP) Chromium (Cr)	2025/12/23		98	%	80 - 120
			Leachable (SPLP) Cobalt (Co)	2025/12/23		100	%	80 - 120
			Leachable (SPLP) Copper (Cu)	2025/12/23		103	%	80 - 120
			Leachable (SPLP) Lead (Pb)	2025/12/23		95	%	80 - 120
			Leachable (SPLP) Molybdenum (Mo)	2025/12/23		100	%	80 - 120
			Leachable (SPLP) Nickel (Ni)	2025/12/23		96	%	80 - 120
			Leachable (SPLP) Selenium (Se)	2025/12/23		102	%	80 - 120
			Leachable (SPLP) Silver (Ag)	2025/12/23		94	%	80 - 120
			Leachable (SPLP) Thallium (Tl)	2025/12/23		95	%	80 - 120
			Leachable (SPLP) Uranium (U)	2025/12/23		96	%	80 - 120
			Leachable (SPLP) Vanadium (V)	2025/12/23		98	%	80 - 120
Leachable (SPLP) Zinc (Zn)	2025/12/23		101	%	80 - 120			
A078942	AFZ	Leachate Blank	Leachable (SPLP) Antimony (Sb)	2025/12/23	ND, RDL=0.5		ug/L	
			Leachable (SPLP) Arsenic (As)	2025/12/23	ND,RDL=1		ug/L	
			Leachable (SPLP) Barium (Ba)	2025/12/23	ND,RDL=5		ug/L	
			Leachable (SPLP) Beryllium (Be)	2025/12/23	ND, RDL=0.5		ug/L	
			Leachable (SPLP) Boron (B)	2025/12/23	ND, RDL=10		ug/L	
			Leachable (SPLP) Cadmium (Cd)	2025/12/23	ND, RDL=0.1		ug/L	
			Leachable (SPLP) Chromium (Cr)	2025/12/23	ND,RDL=5		ug/L	
			Leachable (SPLP) Cobalt (Co)	2025/12/23	ND, RDL=0.5		ug/L	
			Leachable (SPLP) Copper (Cu)	2025/12/23	ND,RDL=1		ug/L	
			Leachable (SPLP) Lead (Pb)	2025/12/23	ND, RDL=0.5		ug/L	



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A078942	AFZ	Spiked Blank	Leachable (SPLP) Molybdenum (Mo)	2025/12/23	ND,RDL=1		ug/L			
			Leachable (SPLP) Nickel (Ni)	2025/12/23	ND,RDL=1		ug/L			
			Leachable (SPLP) Selenium (Se)	2025/12/23	ND,RDL=2		ug/L			
			Leachable (SPLP) Silver (Ag)	2025/12/23	ND, RDL=0.1		ug/L			
			Leachable (SPLP) Thallium (Tl)	2025/12/23	ND, RDL=0.05		ug/L			
			Leachable (SPLP) Uranium (U)	2025/12/23	ND, RDL=0.1		ug/L			
			Leachable (SPLP) Vanadium (V)	2025/12/23	ND,RDL=1		ug/L			
			Leachable (SPLP) Zinc (Zn)	2025/12/23	ND,RDL=5		ug/L			
			Leachable (SPLP) Antimony (Sb)	2025/12/23		102	%	80 - 120		
			Leachable (SPLP) Arsenic (As)	2025/12/23		99	%	80 - 120		
			Leachable (SPLP) Barium (Ba)	2025/12/23		98	%	80 - 120		
			Leachable (SPLP) Beryllium (Be)	2025/12/23		97	%	80 - 120		
			Leachable (SPLP) Boron (B)	2025/12/23		96	%	80 - 120		
			Leachable (SPLP) Cadmium (Cd)	2025/12/23		97	%	80 - 120		
			Leachable (SPLP) Chromium (Cr)	2025/12/23		99	%	80 - 120		
			Leachable (SPLP) Cobalt (Co)	2025/12/23		100	%	80 - 120		
			Leachable (SPLP) Copper (Cu)	2025/12/23		100	%	80 - 120		
			Leachable (SPLP) Lead (Pb)	2025/12/23		98	%	80 - 120		
			A078942	AFZ	Method Blank	Leachable (SPLP) Molybdenum (Mo)	2025/12/23	97	%	80 - 120
						Leachable (SPLP) Nickel (Ni)	2025/12/23	97	%	80 - 120
Leachable (SPLP) Selenium (Se)	2025/12/23	104				%	80 - 120			
Leachable (SPLP) Silver (Ag)	2025/12/23	92				%	80 - 120			
Leachable (SPLP) Thallium (Tl)	2025/12/23	97				%	80 - 120			
Leachable (SPLP) Uranium (U)	2025/12/23	98				%	80 - 120			
Leachable (SPLP) Vanadium (V)	2025/12/23	99				%	80 - 120			
Leachable (SPLP) Zinc (Zn)	2025/12/23	102				%	80 - 120			
Leachable (SPLP) Antimony (Sb)	2025/12/23	ND, RDL=0.5					ug/L			
Leachable (SPLP) Arsenic (As)	2025/12/23	ND,RDL=1					ug/L			
Leachable (SPLP) Barium (Ba)	2025/12/23	ND,RDL=5					ug/L			
Leachable (SPLP) Beryllium (Be)	2025/12/23	ND, RDL=0.5					ug/L			
Leachable (SPLP) Boron (B)	2025/12/23	ND, RDL=10					ug/L			
Leachable (SPLP) Cadmium (Cd)	2025/12/23	ND, RDL=0.1					ug/L			
Leachable (SPLP) Chromium (Cr)	2025/12/23	ND,RDL=5					ug/L			
Leachable (SPLP) Cobalt (Co)	2025/12/23	ND, RDL=0.5					ug/L			
Leachable (SPLP) Copper (Cu)	2025/12/23	ND,RDL=1					ug/L			
Leachable (SPLP) Lead (Pb)	2025/12/23	ND, RDL=0.5					ug/L			
Leachable (SPLP) Molybdenum (Mo)	2025/12/23	ND,RDL=1					ug/L			
Leachable (SPLP) Nickel (Ni)	2025/12/23	ND,RDL=1					ug/L			
Leachable (SPLP) Selenium (Se)	2025/12/23	ND,RDL=2		ug/L						
Leachable (SPLP) Silver (Ag)	2025/12/23	ND, RDL=0.1		ug/L						
Leachable (SPLP) Thallium (Tl)	2025/12/23	ND, RDL=0.05		ug/L						
Leachable (SPLP) Uranium (U)	2025/12/23	ND, RDL=0.1		ug/L						



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A078942	AFZ	RPD [AYLN32-01]	Leachable (SPLP) Vanadium (V)	2025/12/23	ND,RDL=1		ug/L	
			Leachable (SPLP) Zinc (Zn)	2025/12/23	ND,RDL=5		ug/L	
			Leachable (SPLP) Antimony (Sb)	2025/12/23	NC		%	35
			Leachable (SPLP) Arsenic (As)	2025/12/23	NC		%	35
			Leachable (SPLP) Barium (Ba)	2025/12/23	2.1		%	35
			Leachable (SPLP) Beryllium (Be)	2025/12/23	NC		%	35
			Leachable (SPLP) Boron (B)	2025/12/23	0.67		%	35
			Leachable (SPLP) Cadmium (Cd)	2025/12/23	NC		%	35
			Leachable (SPLP) Chromium (Cr)	2025/12/23	NC		%	35
			Leachable (SPLP) Cobalt (Co)	2025/12/23	NC		%	35
			Leachable (SPLP) Copper (Cu)	2025/12/23	NC		%	35
			Leachable (SPLP) Lead (Pb)	2025/12/23	NC		%	35
			Leachable (SPLP) Molybdenum (Mo)	2025/12/23	13		%	35
			Leachable (SPLP) Nickel (Ni)	2025/12/23	NC		%	35
			Leachable (SPLP) Selenium (Se)	2025/12/23	NC		%	35
			Leachable (SPLP) Silver (Ag)	2025/12/23	NC		%	35
			Leachable (SPLP) Thallium (Tl)	2025/12/23	NC		%	35
			Leachable (SPLP) Uranium (U)	2025/12/23	NC		%	35
			Leachable (SPLP) Vanadium (V)	2025/12/23	2.4		%	35
			Leachable (SPLP) Zinc (Zn)	2025/12/23	NC		%	35
A079179	NRA	Matrix Spike	Leachable (SPLP) 4-Bromofluorobenzene	2025/12/23		102	%	70 - 130
			Leachable (SPLP) D4-1,2-Dichloroethane	2025/12/23		105	%	70 - 130
			Leachable (SPLP) D8-Toluene	2025/12/23		98	%	70 - 130
			Leachable (SPLP) Bromomethane	2025/12/23		105	%	60 - 140
			Leachable (SPLP) Carbon Tetrachloride	2025/12/23		115	%	70 - 130
			Leachable (SPLP) Chloroform	2025/12/23		107	%	70 - 130
			Leachable (SPLP) 1,2-Dichlorobenzene	2025/12/23		101	%	70 - 130
			Leachable (SPLP) 1,4-Dichlorobenzene	2025/12/23		102	%	70 - 130
			Leachable (SPLP) 1,1-Dichloroethane	2025/12/23		101	%	70 - 130
			Leachable (SPLP) 1,2-Dichloroethane	2025/12/23		112	%	70 - 130
			Leachable (SPLP) 1,1-Dichloroethylene	2025/12/23		106	%	70 - 130
			Leachable (SPLP) cis-1,2-Dichloroethylene	2025/12/23		114	%	70 - 130
			Leachable (SPLP) trans-1,2-Dichloroethylene	2025/12/23		113	%	70 - 130
			Leachable (SPLP) 1,2-Dichloropropane	2025/12/23		106	%	70 - 130
			Leachable (SPLP) cis-1,3-Dichloropropene	2025/12/23		101	%	70 - 130
			Leachable (SPLP) trans-1,3-Dichloropropene	2025/12/23		108	%	70 - 130
			Leachable (SPLP) Ethylene Dibromide	2025/12/23		110	%	70 - 130
			Leachable (SPLP) 1,1,1,2-Tetrachloroethane	2025/12/23		115	%	70 - 130
			Leachable (SPLP) 1,1,2,2-Tetrachloroethane	2025/12/23		103	%	70 - 130
			Leachable (SPLP) Tetrachloroethylene	2025/12/23		103	%	70 - 130
Leachable (SPLP) 1,1,2-Trichloroethane	2025/12/23		106	%	70 - 130			
Leachable (SPLP) Trichloroethylene	2025/12/23		107	%	70 - 130			
A079179	NRA	Spiked Blank	Leachable (SPLP) 4-Bromofluorobenzene	2025/12/23		101	%	70 - 130
			Leachable (SPLP) D4-1,2-Dichloroethane	2025/12/23		102	%	70 - 130
			Leachable (SPLP) D8-Toluene	2025/12/23		98	%	70 - 130
			Leachable (SPLP) Bromomethane	2025/12/23		90	%	60 - 140
			Leachable (SPLP) Carbon Tetrachloride	2025/12/23		103	%	70 - 130
			Leachable (SPLP) Chloroform	2025/12/23		95	%	70 - 130
			Leachable (SPLP) 1,2-Dichlorobenzene	2025/12/23		89	%	70 - 130
			Leachable (SPLP) 1,4-Dichlorobenzene	2025/12/23		91	%	70 - 130
			Leachable (SPLP) 1,1-Dichloroethane	2025/12/23		91	%	70 - 130
			Leachable (SPLP) 1,2-Dichloroethane	2025/12/23		99	%	70 - 130
			Leachable (SPLP) 1,1-Dichloroethylene	2025/12/23		96	%	70 - 130
			Leachable (SPLP) cis-1,2-Dichloroethylene	2025/12/23		100	%	70 - 130



BUREAU  
VERITAS

Bureau Veritas Job #: C5F9047  
Report Date: 2025/12/24

Lopers & Associates  
Client Project #: LOP25-035B  
Sampler Initials: LL

### QUALITY ASSURANCE REPORT(CONT'D)

QA/QC Batch	Init	QC Type	Parameter	Date Analyzed	Value	Recovery	UNITS	QC Limits
			Leachable (SPLP) trans-1,2-Dichloroethylene	2025/12/23		100	%	70 - 130
			Leachable (SPLP) 1,2-Dichloropropane	2025/12/23		96	%	70 - 130
			Leachable (SPLP) cis-1,3-Dichloropropene	2025/12/23		92	%	70 - 130
			Leachable (SPLP) trans-1,3-Dichloropropene	2025/12/23		94	%	70 - 130
			Leachable (SPLP) Ethylene Dibromide	2025/12/23		94	%	70 - 130
			Leachable (SPLP) 1,1,1,2-Tetrachloroethane	2025/12/23		101	%	70 - 130
			Leachable (SPLP) 1,1,2,2-Tetrachloroethane	2025/12/23		89	%	70 - 130
			Leachable (SPLP) Tetrachloroethylene	2025/12/23		91	%	70 - 130
			Leachable (SPLP) 1,1,2-Trichloroethane	2025/12/23		93	%	70 - 130
			Leachable (SPLP) Trichloroethylene	2025/12/23		95	%	70 - 130
A079179	NRA	Method Blank	Leachable (SPLP) 4-Bromofluorobenzene	2025/12/23		103	%	70 - 130
			Leachable (SPLP) D4-1,2-Dichloroethane	2025/12/23		102	%	70 - 130
			Leachable (SPLP) D8-Toluene	2025/12/23		96	%	70 - 130
			Leachable (SPLP) Bromomethane	2025/12/23	ND, RDL=0.40		ug/L	
			Leachable (SPLP) Carbon Tetrachloride	2025/12/23	ND, RDL=0.19		ug/L	
			Leachable (SPLP) Chloroform	2025/12/23	ND, RDL=0.90		ug/L	
			Leachable (SPLP) 1,2-Dichlorobenzene	2025/12/23	ND, RDL=0.40		ug/L	
			Leachable (SPLP) 1,4-Dichlorobenzene	2025/12/23	ND, RDL=0.40		ug/L	
			Leachable (SPLP) 1,1-Dichloroethane	2025/12/23	ND, RDL=0.40		ug/L	
			Leachable (SPLP) 1,2-Dichloroethane	2025/12/23	ND, RDL=0.40		ug/L	
			Leachable (SPLP) 1,1-Dichloroethylene	2025/12/23	ND, RDL=0.40		ug/L	
			Leachable (SPLP) cis-1,2-Dichloroethylene	2025/12/23	ND, RDL=0.40		ug/L	
			Leachable (SPLP) trans-1,2-Dichloroethylene	2025/12/23	ND, RDL=0.40		ug/L	
			Leachable (SPLP) 1,2-Dichloropropane	2025/12/23	ND, RDL=0.40		ug/L	
			Leachable (SPLP) cis-1,3-Dichloropropene	2025/12/23	ND, RDL=0.30		ug/L	
			Leachable (SPLP) trans-1,3-Dichloropropene	2025/12/23	ND, RDL=0.30		ug/L	
			Leachable (SPLP) Ethylene Dibromide	2025/12/23	ND, RDL=0.19		ug/L	
			Leachable (SPLP) 1,1,1,2-Tetrachloroethane	2025/12/23	ND, RDL=0.40		ug/L	
			Leachable (SPLP) 1,1,2,2-Tetrachloroethane	2025/12/23	ND, RDL=0.40		ug/L	
			Leachable (SPLP) Tetrachloroethylene	2025/12/23	ND, RDL=0.40		ug/L	
			Leachable (SPLP) 1,1,2-Trichloroethane	2025/12/23	ND, RDL=0.40		ug/L	
			Leachable (SPLP) Trichloroethylene	2025/12/23	ND, RDL=0.40		ug/L	
A079179	NRA	RPD	Leachable (SPLP) Bromomethane	2025/12/23	NC		%	30
			Leachable (SPLP) Carbon Tetrachloride	2025/12/23	NC		%	30
			Leachable (SPLP) Chloroform	2025/12/23	NC		%	30
			Leachable (SPLP) 1,2-Dichlorobenzene	2025/12/23	NC		%	30



BUREAU  
VERITAS

Bureau Veritas Job #: C5F9047  
Report Date: 2025/12/24

Lopers & Associates  
Client Project #: LOP25-035B  
Sampler Initials: LL

### QUALITY ASSURANCE REPORT(CONT'D)

QA/QC Batch	Init	QC Type	Parameter	Date Analyzed	Value	Recovery	UNITS	QC Limits
			Leachable (SPLP) 1,4-Dichlorobenzene	2025/12/23	NC		%	30
			Leachable (SPLP) 1,1-Dichloroethane	2025/12/23	NC		%	30
			Leachable (SPLP) 1,2-Dichloroethane	2025/12/23	NC		%	30
			Leachable (SPLP) 1,1-Dichloroethylene	2025/12/23	NC		%	30
			Leachable (SPLP) cis-1,2-Dichloroethylene	2025/12/23	NC		%	30
			Leachable (SPLP) trans-1,2-Dichloroethylene	2025/12/23	NC		%	30
			Leachable (SPLP) 1,2-Dichloropropane	2025/12/23	NC		%	30
			Leachable (SPLP) cis-1,3-Dichloropropene	2025/12/23	NC		%	30
			Leachable (SPLP) trans-1,3-Dichloropropene	2025/12/23	NC		%	30
			Leachable (SPLP) Ethylene Dibromide	2025/12/23	NC		%	30
			Leachable (SPLP) 1,1,1,2-Tetrachloroethane	2025/12/23	NC		%	30
			Leachable (SPLP) 1,1,2,2-Tetrachloroethane	2025/12/23	NC		%	30
			Leachable (SPLP) Tetrachloroethylene	2025/12/23	NC		%	30
			Leachable (SPLP) 1,1,2-Trichloroethane	2025/12/23	NC		%	30
			Leachable (SPLP) Trichloroethylene	2025/12/23	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.

Leachate Blank: A blank matrix containing all reagents used in the leaching procedure. Used to determine any process contamination.

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

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

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

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

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

(1) 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 #: C5F9047

Report Date: 2025/12/24

Lopers & Associates

Client Project #: LOP25-035B

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 that reads 'Cristina Carriere'.

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Cristina Carriere, Senior Scientific Specialist

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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

COOLER OBSERVATIONS:		CUSTODY SEAL		YES	NO	□ Drinking Water			
1	OTT-2025-12-091	PRESENT		<input checked="" type="checkbox"/>		TEMP	4	4	4
		INTACT		<input checked="" type="checkbox"/>					
		ICE PRESENT		<input checked="" type="checkbox"/>					
2	OTT-2025-12-096	PRESENT		<input checked="" type="checkbox"/>		TEMP	2	5	4
		INTACT		<input checked="" type="checkbox"/>					
		ICE PRESENT		<input checked="" type="checkbox"/>					
3	094	PRESENT		<input checked="" type="checkbox"/>		TEMP	4	3	4
		INTACT		<input checked="" type="checkbox"/>					
		ICE PRESENT		<input checked="" type="checkbox"/>					
4	092	PRESENT		<input checked="" type="checkbox"/>		TEMP	-2	-1	1
		INTACT		<input checked="" type="checkbox"/>					
		ICE PRESENT		<input checked="" type="checkbox"/>					
5	093	PRESENT		<input checked="" type="checkbox"/>		TEMP	4	2	1
		INTACT		<input checked="" type="checkbox"/>					
		ICE PRESENT		<input checked="" type="checkbox"/>					
6	090	PRESENT		<input checked="" type="checkbox"/>		TEMP	-2	-1	1
		INTACT		<input checked="" type="checkbox"/>					
		ICE PRESENT		<input checked="" type="checkbox"/>					
7	095	PRESENT		<input checked="" type="checkbox"/>		TEMP	4	3	1
		INTACT		<input checked="" type="checkbox"/>					
		ICE PRESENT		<input checked="" type="checkbox"/>					
8	087 088	PRESENT		<input checked="" type="checkbox"/>		TEMP	2	2	-1
		INTACT		<input checked="" type="checkbox"/>					
		ICE PRESENT		<input checked="" type="checkbox"/>					
9	1	PRESENT		<input checked="" type="checkbox"/>		TEMP	-1	-1	-1
		INTACT		<input checked="" type="checkbox"/>					
		ICE PRESENT		<input checked="" type="checkbox"/>					
10	089	PRESENT		<input checked="" type="checkbox"/>		TEMP	-1	-2	-1
		INTACT		<input checked="" type="checkbox"/>					
		ICE PRESENT		<input checked="" type="checkbox"/>					

SHIPPED FROM BV SERVICE CENTER:		CUSTODY SEAL		YES	NO	□ Drinking Water			
OTTAWA		PRESENT				TEMP	1	2	3
RECEIVED AT: MISSISSAUGA		INTACT							
		ICE PRESENT							
11		PRESENT				TEMP	1	2	3
		INTACT							
		ICE PRESENT							
12		PRESENT				TEMP	1	2	3
		INTACT							
		ICE PRESENT							
13		PRESENT				TEMP	1	2	3
		INTACT							
		ICE PRESENT							
14		PRESENT				TEMP	1	2	3
		INTACT							
		ICE PRESENT							
15		PRESENT				TEMP	1	2	3
		INTACT							
		ICE PRESENT							
16		PRESENT				TEMP	1	2	3
		INTACT							
		ICE PRESENT							
17		PRESENT				TEMP	1	2	3
		INTACT							
		ICE PRESENT							
18		PRESENT				TEMP	1	2	3
		INTACT							
		ICE PRESENT							
19		PRESENT				TEMP	1	2	3
		INTACT							
		ICE PRESENT							
20		PRESENT				TEMP	1	2	3
		INTACT							
		ICE PRESENT							

RECEIVED BY (PRINT & SIGN)	DATE (YYYY/MM/DD)	TIME (HH:MM)
ANMOLPREET SINGH <i>AS</i>	2025/12/17	06:35

If Custody seal condition and presence of ice is the same for all, use these boxes:	CUSTODY SEAL	YES	NO
	PRESENT		
	INTACT		
	ICE PRESENT		



C5F9047  
2025/12/16 15:45

Bureau Veritas  
35 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

<b>Invoice To:</b> Company: #39509 Lopers & Associates Attention: Alisha Sullivan Address: 30 Lansfield Way Ottawa ON K2G 3V8 Tel: (613) 327-9073 Fax: Email: Alisha.Sullivan@bureauveritas.com		<b>Report To:</b> Company: Luke Lopers Attention: Luke Lopers Address: Tel: Fax: Email: Luke@lopers.ca		<b>PROJECT INFORMATION:</b> Quotation #: C43362 P.O. #: LOP25-035B Project Name: Site #: 131 Parkdale L. Lopers Sampled By:		<b>Laboratory Use Only:</b> Bureau Veritas Job #: 1072069 Bottle Order #:  COC #:  Project Manager: Katherine Szozda C#1072069-01-01	
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MOE REGULATED DRINKING WATER OR WATER INTENDED FOR HUMAN CONSUMPTION MUST BE SUBMITTED ON THE BUREAU VERITAS DRINKING WATER CHAIN OF CUSTODY

<b>Regulation 153 (2011)</b> <input type="checkbox"/> Table 1 <input type="checkbox"/> Ros/Park <input type="checkbox"/> Medium/Fine <input type="checkbox"/> Table 2 <input type="checkbox"/> Ind/Comm <input type="checkbox"/> Coarse <input type="checkbox"/> Table 3 <input type="checkbox"/> Agri/Other <input type="checkbox"/> For PSC <input type="checkbox"/> Table	<b>Other Regulations</b> <input type="checkbox"/> CCME <input type="checkbox"/> Sanitary Sewer Bylaw <input checked="" type="checkbox"/> Reg 558 <input type="checkbox"/> Storm Sewer Bylaw <input type="checkbox"/> MISA <input type="checkbox"/> Municipality <input type="checkbox"/> PWOC <input checked="" type="checkbox"/> Reg 406 Table 2.1-2.1.4.1 <input type="checkbox"/> Other	<b>Special Instructions</b>
--	---	-----------------------------

Field Filtered (please circle): Metals / Hg / Cr / V1	<input type="checkbox"/> O Reg 405 Excess Soil SPLP Metals	<input type="checkbox"/> O Reg 405 Excess Soil SPLP ABNs	<input type="checkbox"/> O Reg 405 Excess Soil SPLP VOCs	<input type="checkbox"/> O Reg 558 TCLP Inorganics Package	<input type="checkbox"/> O Reg 558 TCLP Semi-Volatile Organics	<input type="checkbox"/> O Reg 558 TCLP VOCs by HS	Ignitability of a Sample
--	--	--	--	--	--	--	--------------------------

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

**Regular (Standard) TAT:**  
(will be applied if Rush TAT is not specified):  
Standard TAT = 5-7 Working days for most tests.

Please note: Standard TAT for certain tests such as BOD and Dioxins/Furans are > 5 days - contact your Project Manager for details.

**Job Specific Rush TAT (if applies to entire submission)**  
Date Required: Time Required:

Rush Confirmation Number: (call lab for #)

Sample Barcode Label	Sample (Location) Identification	Date Sampled	Time Sampled	Matrix	Field Filtered (please circle): Metals / Hg / Cr / V1	<input type="checkbox"/> O Reg 405 Excess Soil SPLP Metals	<input type="checkbox"/> O Reg 405 Excess Soil SPLP ABNs	<input type="checkbox"/> O Reg 405 Excess Soil SPLP VOCs	<input type="checkbox"/> O Reg 558 TCLP Inorganics Package	<input type="checkbox"/> O Reg 558 TCLP Semi-Volatile Organics	<input type="checkbox"/> O Reg 558 TCLP VOCs by HS	Ignitability of a Sample	# of Bottles	Comments
1	BH8-25-Au1	Dec 12/25	1:15 PM	S		X	X	X						
2	BH11-25-Au1	Dec 12/25	1:25 PM	S					X	X	X	X		
3														
4														
6														
6														
7														
8														
9														
10														



OTT-2025-12-096

Relinquished By (Print): Luke Lopers	Date: 25/12/16	Time: 3:46 PM	RECEIVED BY: (Signature/Print) Roxo da Silva	Date: 2025/12/16	Time: 15:45	# jars used and not submitted	<b>Laboratory Use Only</b> Time Sensitive: <input type="checkbox"/> Temperature (°C) on Receipt: 2/0/3 (ice) Custody Seal Present: <input type="checkbox"/> Intact: <input checked="" type="checkbox"/> Yes: <input type="checkbox"/> No: <input checked="" type="checkbox"/>			
--------------------------------------	----------------	---------------	--	------------------	-------------	-------------------------------	--	--	--	--

\* 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-COFS.

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

White: Bureau Veritas Yellow: Client



Your Project #: LOPER25-035B  
 Site Location: 131 PARKDALE  
 Your C.O.C. #: C#1076969-01-01

**Attention: Luke Lopers**

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

**Report Date: 2025/12/30**  
 Report #: R8675838  
 Version: 1 - Final

**CERTIFICATE OF ANALYSIS**

**BUREAU VERITAS JOB #: C5F9964**

**Received: 2025/12/18, 10:03**

Sample Matrix: Ground Water  
 # Samples Received: 5

Analyses	Quantity	Date	Date	Laboratory Method	Analytical Method
		Extracted	Analyzed		
Methylnaphthalene Sum (1)	4	N/A	2025/12/24	CAM SOP-00301	EPA 8270D m
1,3-Dichloropropene Sum (1)	4	N/A	2025/12/23		EPA 8260C m
1,3-Dichloropropene Sum (1)	1	N/A	2025/12/27		EPA 8260C m
Chloride by Automated Colourimetry (1)	4	N/A	2025/12/29	CAM SOP-00463	SM 24 4500-Cl E m
Chromium (VI) in Water (1)	4	N/A	2025/12/22	CAM SOP-00436	EPA 7199 m
Free (WAD) Cyanide (1)	4	N/A	2025/12/23	CAM SOP-00457	OMOE E3015 m
Petroleum Hydrocarbons F2-F4 in Water (1, 2)	4	2025/12/23	2025/12/24	CAM SOP-00316	CCME PHC-CWS m
Mercury (1)	4	2025/12/23	2025/12/23	CAM SOP-00453	EPA 7470A m
Lab Filtered Metals by ICPMS (1)	4	2025/12/23	2025/12/29	CAM SOP-00447	EPA 6020B m
PAH Compounds in Water by GC/MS (SIM) (1)	4	2025/12/23	2025/12/24	CAM SOP-00318	EPA 8270E
Volatile Organic Compounds and F1 PHCs (1)	4	N/A	2025/12/22	CAM SOP-00230	EPA 8260D m
Volatile Organic Compounds in Water (1)	1	N/A	2025/12/24	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.



Your Project #: LOPER25-035B  
Site Location: 131 PARKDALE  
Your C.O.C. #: C#1076969-01-01

**Attention: Luke Lopers**

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

**Report Date: 2025/12/30**  
Report #: R8675838  
Version: 1 - Final

**CERTIFICATE OF ANALYSIS**

**BUREAU VERITAS JOB #: C5F9964**

**Received: 2025/12/18, 10:03**

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

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

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

**Encryption Key**

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

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**BUREAU  
VERITAS**

Bureau Veritas Job #: C5F9964  
Report Date: 2025/12/30

Lopers & Associates  
Client Project #: LOPER25-035B  
Site Location: 131 PARKDALE  
Sampler Initials: LP

**RESULTS OF ANALYSES OF GROUND WATER**

Bureau Veritas ID		AYNG96		AYNG97		AYNG98		AYNG99		
Sampling Date		2025/12/17 14:00		2025/12/17 14:50		2025/12/17 16:10		2025/12/17		
COC Number		C#1076969-01-01		C#1076969-01-01		C#1076969-01-01		C#1076969-01-01		
	UNITS	BH2 - 25 - GW1	RDL	BH3 - 25 - GW1	RDL	BH4 - 25 - GW1	QC Batch	DUP - 12/17	RDL	QC Batch

Inorganics										
WAD Cyanide (Free)	ug/L	ND	1	ND	1	ND	A078189	ND	1	A078189
Dissolved Chloride (Cl-)	mg/L	370	8.0	170	2.0	1100	A079387	1100	25	A079388

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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Bureau Veritas Job #: C5F9964  
Report Date: 2025/12/30

Lopers & Associates  
Client Project #: LOPER25-035B  
Site Location: 131 PARKDALE  
Sampler Initials: LP

**ELEMENTS BY ATOMIC SPECTROSCOPY (GROUND WATER)**

Bureau Veritas ID		AYNG96		AYNG97		AYNG98	AYNG99		
Sampling Date		2025/12/17 14:00		2025/12/17 14:50		2025/12/17 16:10	2025/12/17		
COC Number		C#1076969-01-01		C#1076969-01-01		C#1076969-01-01	C#1076969-01-01		
	UNITS	BH2 - 25 - GW1	QC Batch	BH3 - 25 - GW1	RDL	BH4 - 25 - GW1	DUP - 12/17	RDL	QC Batch
<b>Metals</b>									
Chromium (VI)	ug/L	ND	A078511	ND	0.50	ND	ND	0.50	A078511
Mercury (Hg)	ug/L	ND	A079222	ND	0.10	ND	ND	0.10	A079217
Dissolved Antimony (Sb)	ug/L	3.2	A079445	2.7	0.50	3.6	3.6	0.50	A079445
Dissolved Arsenic (As)	ug/L	2.0	A079445	1.9	1.0	4.8	4.7	1.0	A079445
Dissolved Barium (Ba)	ug/L	33	A079445	47	2.0	120	130	2.0	A079445
Dissolved Beryllium (Be)	ug/L	ND	A079445	ND	0.40	ND	ND	0.40	A079445
Dissolved Boron (B)	ug/L	340	A079445	2900	10	230	230	10	A079445
Dissolved Cadmium (Cd)	ug/L	ND	A079445	ND	0.090	ND	ND	0.090	A079445
Dissolved Chromium (Cr)	ug/L	ND	A079445	ND	5.0	ND	ND	5.0	A079445
Dissolved Cobalt (Co)	ug/L	0.70	A079445	ND	0.50	0.58	0.65	0.50	A079445
Dissolved Copper (Cu)	ug/L	3.5	A079445	2.7	0.90	3.0	4.9	0.90	A079445
Dissolved Lead (Pb)	ug/L	5.0	A079445	0.62	0.50	ND	2.1	0.50	A079445
Dissolved Molybdenum (Mo)	ug/L	48	A079445	55	0.50	81	79	0.50	A079445
Dissolved Nickel (Ni)	ug/L	1.3	A079445	2.0	1.0	2.2	2.6	1.0	A079445
Dissolved Selenium (Se)	ug/L	ND	A079445	2.9	2.0	ND	ND	2.0	A079445
Dissolved Silver (Ag)	ug/L	ND	A079445	ND	0.090	ND	ND	0.090	A079445
Dissolved Sodium (Na)	ug/L	330000	A079445	240000	100	870000	900000	500	A079445
Dissolved Thallium (Tl)	ug/L	ND	A079445	ND	0.050	0.066	0.064	0.050	A079445
Dissolved Uranium (U)	ug/L	2.3	A079445	1.7	0.10	13	13	0.10	A079445
Dissolved Vanadium (V)	ug/L	0.79	A079445	0.66	0.50	0.93	1.0	0.50	A079445
Dissolved Zinc (Zn)	ug/L	28	A079445	ND	5.0	ND	11	5.0	A079445
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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Bureau Veritas Job #: C5F9964  
Report Date: 2025/12/30

Lopers & Associates  
Client Project #: LOPER25-035B  
Site Location: 131 PARKDALE  
Sampler Initials: LP

### SEMI-VOLATILE ORGANICS BY GC-MS (GROUND WATER)

Bureau Veritas ID		AYNG96	AYNG97	AYNG98	AYNG99		
Sampling Date		2025/12/17 14:00	2025/12/17 14:50	2025/12/17 16:10	2025/12/17		
COC Number		C#1076969-01-01	C#1076969-01-01	C#1076969-01-01	C#1076969-01-01		
	UNITS	BH2 - 25 - GW1	BH3 - 25 - GW1	BH4 - 25 - GW1	DUP - 12/17	RDL	QC Batch
<b>Calculated Parameters</b>							
Methylnaphthalene, 2-(1-)	ug/L	ND	ND	ND	ND	0.071	A077448
<b>Polyaromatic Hydrocarbons</b>							
Acenaphthene	ug/L	ND	ND	ND	ND	0.050	A079436
Acenaphthylene	ug/L	ND	ND	ND	ND	0.050	A079436
Anthracene	ug/L	ND	ND	ND	ND	0.050	A079436
Benzo(a)anthracene	ug/L	ND	ND	ND	ND	0.050	A079436
Benzo(a)pyrene	ug/L	ND	ND	0.022	ND	0.0090	A079436
Benzo(b/j)fluoranthene	ug/L	ND	ND	ND	ND	0.050	A079436
Benzo(g,h,i)perylene	ug/L	ND	ND	ND	ND	0.050	A079436
Benzo(k)fluoranthene	ug/L	ND	ND	ND	ND	0.050	A079436
Chrysene	ug/L	ND	ND	ND	ND	0.050	A079436
Dibenzo(a,h)anthracene	ug/L	ND	ND	ND	ND	0.050	A079436
Fluoranthene	ug/L	ND	ND	ND	ND	0.050	A079436
Fluorene	ug/L	ND	ND	ND	ND	0.050	A079436
Indeno(1,2,3-cd)pyrene	ug/L	ND	ND	ND	ND	0.050	A079436
1-Methylnaphthalene	ug/L	ND	ND	ND	ND	0.050	A079436
2-Methylnaphthalene	ug/L	ND	ND	ND	ND	0.050	A079436
Naphthalene	ug/L	ND	ND	ND	ND	0.050	A079436
Phenanthrene	ug/L	0.033	0.037	0.035	ND	0.030	A079436
Pyrene	ug/L	ND	ND	ND	ND	0.050	A079436
<b>Surrogate Recovery (%)</b>							
D10-Anthracene	%	111	107	100	106		A079436
D14-Terphenyl (FS)	%	52	67	46 (1)	37 (1)		A079436
D8-Acenaphthylene	%	94	90	79	85		A079436
RDL = Reportable Detection Limit QC Batch = Quality Control Batch ND = Not Detected at a concentration equal or greater than the indicated Detection Limit. (1) Recovery or RPD for this parameter is outside control limits. The overall quality control for this analysis meets acceptability criteria.							



BUREAU  
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Bureau Veritas Job #: C5F9964  
Report Date: 2025/12/30

Lopers & Associates  
Client Project #: LOPER25-035B  
Site Location: 131 PARKDALE  
Sampler Initials: LP

### VOLATILE ORGANICS BY GC/MS (GROUND WATER)

Bureau Veritas ID		AYNG96		AYNG97		AYNG98	AYNG99		
Sampling Date		2025/12/17 14:00		2025/12/17 14:50		2025/12/17 16:10	2025/12/17		
COC Number		C#1076969-01-01		C#1076969-01-01		C#1076969-01-01	C#1076969-01-01		
	UNITS	BH2 - 25 - GW1	RDL	BH3 - 25 - GW1	RDL	BH4 - 25 - GW1	DUP - 12/17	RDL	QC Batch

Calculated Parameters									
1,3-Dichloropropene (cis+trans)	ug/L	ND	0.50	ND	0.50	ND	ND	0.50	A077035
Volatile Organics									
Acetone (2-Propanone)	ug/L	ND (1)	16	ND (1)	12	ND	ND	10	A078022
Benzene	ug/L	0.40	0.17	0.22	0.17	ND	ND	0.17	A078022
Bromodichloromethane	ug/L	1.3	0.50	0.56	0.50	ND	ND	0.50	A078022
Bromoform	ug/L	ND	1.0	ND	1.0	ND	ND	1.0	A078022
Bromomethane	ug/L	ND	0.50	ND	0.50	ND	ND	0.50	A078022
Carbon Tetrachloride	ug/L	ND	0.20	ND	0.20	ND	ND	0.20	A078022
Chlorobenzene	ug/L	ND	0.20	ND	0.20	ND	ND	0.20	A078022
Chloroform	ug/L	9.5	0.20	4.3	0.20	2.5	2.6	0.20	A078022
Dibromochloromethane	ug/L	ND	0.50	ND	0.50	ND	ND	0.50	A078022
1,2-Dichlorobenzene	ug/L	ND	0.50	ND	0.50	ND	ND	0.50	A078022
1,3-Dichlorobenzene	ug/L	ND	0.50	ND	0.50	ND	ND	0.50	A078022
1,4-Dichlorobenzene	ug/L	ND	0.50	ND	0.50	ND	ND	0.50	A078022
Dichlorodifluoromethane (FREON 12)	ug/L	ND	1.0	ND	1.0	ND	ND	1.0	A078022
1,1-Dichloroethane	ug/L	ND	0.20	ND	0.20	ND	ND	0.20	A078022
1,2-Dichloroethane	ug/L	ND	0.50	ND	0.50	ND	ND	0.50	A078022
1,1-Dichloroethylene	ug/L	ND	0.20	ND	0.20	ND	ND	0.20	A078022
cis-1,2-Dichloroethylene	ug/L	ND	0.50	ND	0.50	ND	ND	0.50	A078022
trans-1,2-Dichloroethylene	ug/L	ND	0.50	ND	0.50	ND	ND	0.50	A078022
1,2-Dichloropropane	ug/L	ND	0.20	ND	0.20	ND	ND	0.20	A078022
cis-1,3-Dichloropropene	ug/L	ND	0.30	ND	0.30	ND	ND	0.30	A078022
trans-1,3-Dichloropropene	ug/L	ND	0.40	ND	0.40	ND	ND	0.40	A078022
Ethylbenzene	ug/L	ND	0.20	ND	0.20	ND	ND	0.20	A078022
Ethylene Dibromide	ug/L	ND	0.20	ND	0.20	ND	ND	0.20	A078022
Hexane	ug/L	ND	1.0	ND	1.0	ND	ND	1.0	A078022
Methylene Chloride(Dichloromethane)	ug/L	ND	2.0	ND	2.0	ND	ND	2.0	A078022
Methyl Ethyl Ketone (2-Butanone)	ug/L	ND	10	ND	10	ND	ND	10	A078022

RDL = Reportable Detection Limit  
 QC Batch = Quality Control Batch  
 ND = Not Detected at a concentration equal or greater than the indicated Detection Limit.  
 (1) Detection limit was raised due to matrix interference.



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Bureau Veritas Job #: C5F9964  
Report Date: 2025/12/30

Lopers & Associates  
Client Project #: LOPER25-035B  
Site Location: 131 PARKDALE  
Sampler Initials: LP

### VOLATILE ORGANICS BY GC/MS (GROUND WATER)

Bureau Veritas ID		AYNG96		AYNG97		AYNG98		AYNG99	
Sampling Date		2025/12/17 14:00		2025/12/17 14:50		2025/12/17 16:10		2025/12/17	
COC Number		C#1076969-01-01		C#1076969-01-01		C#1076969-01-01		C#1076969-01-01	
	UNITS	BH2 - 25 - GW1	RDL	BH3 - 25 - GW1	RDL	BH4 - 25 - GW1	DUP - 12/17	RDL	QC Batch
Methyl Isobutyl Ketone	ug/L	ND	5.0	ND	5.0	ND	ND	5.0	A078022
Methyl t-butyl ether (MTBE)	ug/L	ND	0.50	ND	0.50	ND	ND	0.50	A078022
Styrene	ug/L	ND	0.50	ND	0.50	ND	ND	0.50	A078022
1,1,1,2-Tetrachloroethane	ug/L	ND	0.50	ND	0.50	ND	ND	0.50	A078022
1,1,2,2-Tetrachloroethane	ug/L	ND	0.50	ND	0.50	ND	ND	0.50	A078022
Tetrachloroethylene	ug/L	ND	0.20	ND	0.20	ND	ND	0.20	A078022
Toluene	ug/L	0.33	0.20	0.28	0.20	ND	ND	0.20	A078022
1,1,1-Trichloroethane	ug/L	ND	0.20	ND	0.20	ND	ND	0.20	A078022
1,1,2-Trichloroethane	ug/L	ND	0.50	ND	0.50	ND	ND	0.50	A078022
Trichloroethylene	ug/L	ND	0.20	ND	0.20	ND	ND	0.20	A078022
Trichlorofluoromethane (FREON 11)	ug/L	ND	0.50	ND	0.50	ND	ND	0.50	A078022
Vinyl Chloride	ug/L	ND	0.20	ND	0.20	ND	ND	0.20	A078022
p+m-Xylene	ug/L	ND	0.20	0.29	0.20	ND	ND	0.20	A078022
o-Xylene	ug/L	ND	0.20	ND	0.20	ND	ND	0.20	A078022
Total Xylenes	ug/L	ND	0.20	0.29	0.20	ND	ND	0.20	A078022
F1 (C6-C10)	ug/L	ND	25	ND	25	ND	ND	25	A078022
F1 (C6-C10) - BTEX	ug/L	ND	25	ND	25	ND	ND	25	A078022
<b>Surrogate Recovery (%)</b>									
4-Bromofluorobenzene	%	97		97		96	97		A078022
D4-1,2-Dichloroethane	%	107		106		107	107		A078022
D8-Toluene	%	95		93		93	93		A078022
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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Bureau Veritas Job #: C5F9964  
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Site Location: 131 PARKDALE  
Sampler Initials: LP

### VOLATILE ORGANICS BY GC/MS (GROUND WATER)

<b>Bureau Veritas ID</b>		AYNH00		
<b>Sampling Date</b>		2025/12/17		
<b>COC Number</b>		C#1076969-01-01		
	<b>UNITS</b>	<b>TBLK-VOC/F1BTEX-25-1022</b>	<b>RDL</b>	<b>QC Batch</b>
<b>Calculated Parameters</b>				
1,3-Dichloropropene (cis+trans)	ug/L	ND	0.50	A077035
<b>Volatile Organics</b>				
Acetone (2-Propanone)	ug/L	ND	10	A078055
Benzene	ug/L	ND	0.20	A078055
Bromodichloromethane	ug/L	ND	0.50	A078055
Bromoform	ug/L	ND	1.0	A078055
Bromomethane	ug/L	ND	0.50	A078055
Carbon Tetrachloride	ug/L	ND	0.19	A078055
Chlorobenzene	ug/L	ND	0.20	A078055
Chloroform	ug/L	ND	0.20	A078055
Dibromochloromethane	ug/L	ND	0.50	A078055
1,2-Dichlorobenzene	ug/L	ND	0.40	A078055
1,3-Dichlorobenzene	ug/L	ND	0.40	A078055
1,4-Dichlorobenzene	ug/L	ND	0.40	A078055
Dichlorodifluoromethane (FREON 12)	ug/L	ND	1.0	A078055
1,1-Dichloroethane	ug/L	ND	0.20	A078055
1,2-Dichloroethane	ug/L	ND	0.49	A078055
1,1-Dichloroethylene	ug/L	ND	0.20	A078055
cis-1,2-Dichloroethylene	ug/L	ND	0.50	A078055
trans-1,2-Dichloroethylene	ug/L	ND	0.50	A078055
1,2-Dichloropropane	ug/L	ND	0.20	A078055
cis-1,3-Dichloropropene	ug/L	ND	0.30	A078055
trans-1,3-Dichloropropene	ug/L	ND	0.40	A078055
Ethylbenzene	ug/L	ND	0.20	A078055
Ethylene Dibromide	ug/L	ND	0.19	A078055
Hexane	ug/L	ND	1.0	A078055
Methylene Chloride(Dichloromethane)	ug/L	ND	2.0	A078055
Methyl Ethyl Ketone (2-Butanone)	ug/L	ND	10	A078055
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 (GROUND WATER)**

Bureau Veritas ID		AYNH00		
Sampling Date		2025/12/17		
COC Number		C#1076969-01-01		
	UNITS	TBLK-VOC/F1BTEX-25-1022	RDL	QC Batch
Methyl Isobutyl Ketone	ug/L	ND	5.0	A078055
Methyl t-butyl ether (MTBE)	ug/L	ND	0.50	A078055
Styrene	ug/L	ND	0.40	A078055
1,1,1,2-Tetrachloroethane	ug/L	ND	0.50	A078055
1,1,2,2-Tetrachloroethane	ug/L	ND	0.40	A078055
Tetrachloroethylene	ug/L	ND	0.20	A078055
Toluene	ug/L	ND	0.20	A078055
1,1,1-Trichloroethane	ug/L	ND	0.20	A078055
1,1,2-Trichloroethane	ug/L	ND	0.40	A078055
Trichloroethylene	ug/L	ND	0.20	A078055
Trichlorofluoromethane (FREON 11)	ug/L	ND	0.50	A078055
Vinyl Chloride	ug/L	ND	0.20	A078055
p+m-Xylene	ug/L	ND	0.20	A078055
o-Xylene	ug/L	ND	0.20	A078055
Total Xylenes	ug/L	ND	0.20	A078055
<b>Surrogate Recovery (%)</b>				
4-Bromofluorobenzene	%	99		A078055
D4-1,2-Dichloroethane	%	95		A078055
D8-Toluene	%	99		A078055
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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Sampler Initials: LP

**PETROLEUM HYDROCARBONS (CCME)**

Bureau Veritas ID		AYNG96	AYNG97	AYNG98	AYNG99		
Sampling Date		2025/12/17 14:00	2025/12/17 14:50	2025/12/17 16:10	2025/12/17		
COC Number		C#1076969-01-01	C#1076969-01-01	C#1076969-01-01	C#1076969-01-01		
	UNITS	BH2 - 25 - GW1	BH3 - 25 - GW1	BH4 - 25 - GW1	DUP - 12/17	RDL	QC Batch
<b>F2-F4 Hydrocarbons</b>							
F2 (C10-C16 Hydrocarbons)	ug/L	ND	ND	ND	ND	90	A079440
F3 (C16-C34 Hydrocarbons)	ug/L	220	330	260	240	200	A079440
F4 (C34-C50 Hydrocarbons)	ug/L	ND	ND	ND	ND	200	A079440
Reached Baseline at C50	ug/L	Yes	Yes	Yes	Yes		A079440
<b>Surrogate Recovery (%)</b>							
o-Terphenyl	%	107	107	105	106		A079440
RDL = Reportable Detection Limit QC Batch = Quality Control Batch ND = Not Detected at a concentration equal or greater than the indicated Detection Limit.							



**BUREAU  
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### GENERAL COMMENTS

Results relate only to the items tested.



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Bureau Veritas Job #: C5F9964  
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### QUALITY ASSURANCE REPORT

QA/QC									
Batch	Init	QC Type	Parameter	Date Analyzed	Value	Recovery	UNITS	QC Limits	
A078022	XII	Matrix Spike	4-Bromofluorobenzene	2025/12/22		101	%	70 - 130	
			D4-1,2-Dichloroethane	2025/12/22		100	%	70 - 130	
			D8-Toluene	2025/12/22		103	%	70 - 130	
			Acetone (2-Propanone)	2025/12/22		109	%	60 - 140	
			Benzene	2025/12/22		109	%	70 - 130	
			Bromodichloromethane	2025/12/22		106	%	70 - 130	
			Bromoform	2025/12/22		107	%	70 - 130	
			Bromomethane	2025/12/22		105	%	60 - 140	
			Carbon Tetrachloride	2025/12/22		116	%	70 - 130	
			Chlorobenzene	2025/12/22		100	%	70 - 130	
			Chloroform	2025/12/22		108	%	70 - 130	
			Dibromochloromethane	2025/12/22		108	%	70 - 130	
			1,2-Dichlorobenzene	2025/12/22		108	%	70 - 130	
			1,3-Dichlorobenzene	2025/12/22		110	%	70 - 130	
			1,4-Dichlorobenzene	2025/12/22		112	%	70 - 130	
			Dichlorodifluoromethane (FREON 12)	2025/12/22		133	%	60 - 140	
			1,1-Dichloroethane	2025/12/22		106	%	70 - 130	
			1,2-Dichloroethane	2025/12/22		111	%	70 - 130	
			1,1-Dichloroethylene	2025/12/22		110	%	70 - 130	
			cis-1,2-Dichloroethylene	2025/12/22		113	%	70 - 130	
			trans-1,2-Dichloroethylene	2025/12/22		114	%	70 - 130	
			1,2-Dichloropropane	2025/12/22		109	%	70 - 130	
			cis-1,3-Dichloropropene	2025/12/22		102	%	70 - 130	
			trans-1,3-Dichloropropene	2025/12/22		116	%	70 - 130	
			Ethylbenzene	2025/12/22		104	%	70 - 130	
			Ethylene Dibromide	2025/12/22		107	%	70 - 130	
			Hexane	2025/12/22		123	%	70 - 130	
			Methylene Chloride(Dichloromethane)	2025/12/22		107	%	70 - 130	
			Methyl Ethyl Ketone (2-Butanone)	2025/12/22		96	%	60 - 140	
			Methyl Isobutyl Ketone	2025/12/22		106	%	70 - 130	
			Methyl t-butyl ether (MTBE)	2025/12/22		105	%	70 - 130	
			Styrene	2025/12/22		105	%	70 - 130	
			1,1,1,2-Tetrachloroethane	2025/12/22		115	%	70 - 130	
1,1,2,2-Tetrachloroethane	2025/12/22		103	%	70 - 130				
Tetrachloroethylene	2025/12/22		107	%	70 - 130				
Toluene	2025/12/22		106	%	70 - 130				
1,1,1-Trichloroethane	2025/12/22		106	%	70 - 130				
1,1,2-Trichloroethane	2025/12/22		112	%	70 - 130				
Trichloroethylene	2025/12/22		107	%	70 - 130				
Trichlorofluoromethane (FREON 11)	2025/12/22		106	%	70 - 130				
Vinyl Chloride	2025/12/22		109	%	70 - 130				
p+m-Xylene	2025/12/22		104	%	70 - 130				
o-Xylene	2025/12/22		112	%	70 - 130				
F1 (C6-C10)	2025/12/22		86	%	60 - 140				
A078022	XII	Spiked Blank	4-Bromofluorobenzene	2025/12/22		101	%	70 - 130	
			D4-1,2-Dichloroethane	2025/12/22		103	%	70 - 130	
			D8-Toluene	2025/12/22		102	%	70 - 130	
			Acetone (2-Propanone)	2025/12/22		103	%	60 - 140	
			Benzene	2025/12/22		95	%	70 - 130	
			Bromodichloromethane	2025/12/22		93	%	70 - 130	
			Bromoform	2025/12/22		93	%	70 - 130	
Bromomethane	2025/12/22		94	%	60 - 140				
Carbon Tetrachloride	2025/12/22		100	%	70 - 130				



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### QUALITY ASSURANCE REPORT(CONT'D)

QA/QC Batch	Init	QC Type	Parameter	Date Analyzed	Value	Recovery	UNITS	QC Limits
			Chlorobenzene	2025/12/22		86	%	70 - 130
			Chloroform	2025/12/22		94	%	70 - 130
			Dibromochloromethane	2025/12/22		94	%	70 - 130
			1,2-Dichlorobenzene	2025/12/22		95	%	70 - 130
			1,3-Dichlorobenzene	2025/12/22		96	%	70 - 130
			1,4-Dichlorobenzene	2025/12/22		97	%	70 - 130
			Dichlorodifluoromethane (FREON 12)	2025/12/22		121	%	60 - 140
			1,1-Dichloroethane	2025/12/22		93	%	70 - 130
			1,2-Dichloroethane	2025/12/22		100	%	70 - 130
			1,1-Dichloroethylene	2025/12/22		97	%	70 - 130
			cis-1,2-Dichloroethylene	2025/12/22		99	%	70 - 130
			trans-1,2-Dichloroethylene	2025/12/22		100	%	70 - 130
			1,2-Dichloropropane	2025/12/22		96	%	70 - 130
			cis-1,3-Dichloropropene	2025/12/22		91	%	70 - 130
			trans-1,3-Dichloropropene	2025/12/22		102	%	70 - 130
			Ethylbenzene	2025/12/22		90	%	70 - 130
			Ethylene Dibromide	2025/12/22		94	%	70 - 130
			Hexane	2025/12/22		109	%	70 - 130
			Methylene Chloride(Dichloromethane)	2025/12/22		95	%	70 - 130
			Methyl Ethyl Ketone (2-Butanone)	2025/12/22		90	%	60 - 140
			Methyl Isobutyl Ketone	2025/12/22		98	%	70 - 130
			Methyl t-butyl ether (MTBE)	2025/12/22		96	%	70 - 130
			Styrene	2025/12/22		92	%	70 - 130
			1,1,1,2-Tetrachloroethane	2025/12/22		99	%	70 - 130
			1,1,2,2-Tetrachloroethane	2025/12/22		89	%	70 - 130
			Tetrachloroethylene	2025/12/22		90	%	70 - 130
			Toluene	2025/12/22		91	%	70 - 130
			1,1,1-Trichloroethane	2025/12/22		92	%	70 - 130
			1,1,2-Trichloroethane	2025/12/22		98	%	70 - 130
			Trichloroethylene	2025/12/22		92	%	70 - 130
			Trichlorofluoromethane (FREON 11)	2025/12/22		92	%	70 - 130
			Vinyl Chloride	2025/12/22		99	%	70 - 130
			p+m-Xylene	2025/12/22		90	%	70 - 130
			o-Xylene	2025/12/22		97	%	70 - 130
			F1 (C6-C10)	2025/12/22		98	%	60 - 140
A078022	XJI	Method Blank	4-Bromofluorobenzene	2025/12/22		98	%	70 - 130
			D4-1,2-Dichloroethane	2025/12/22		104	%	70 - 130
			D8-Toluene	2025/12/22		94	%	70 - 130
			Acetone (2-Propanone)	2025/12/22	ND, RDL=10		ug/L	
			Benzene	2025/12/22	ND, RDL=0.17		ug/L	
			Bromodichloromethane	2025/12/22	ND, RDL=0.50		ug/L	
			Bromoform	2025/12/22	ND, RDL=1.0		ug/L	
			Bromomethane	2025/12/22	ND, RDL=0.50		ug/L	
			Carbon Tetrachloride	2025/12/22	ND, RDL=0.20		ug/L	
			Chlorobenzene	2025/12/22	ND, RDL=0.20		ug/L	



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QA/QC Batch	Init	QC Type	Parameter	Date Analyzed	Value	Recovery	UNITS	QC Limits
			Chloroform	2025/12/22	ND, RDL=0.20		ug/L	
			Dibromochloromethane	2025/12/22	ND, RDL=0.50		ug/L	
			1,2-Dichlorobenzene	2025/12/22	ND, RDL=0.50		ug/L	
			1,3-Dichlorobenzene	2025/12/22	ND, RDL=0.50		ug/L	
			1,4-Dichlorobenzene	2025/12/22	ND, RDL=0.50		ug/L	
			Dichlorodifluoromethane (FREON 12)	2025/12/22	ND, RDL=1.0		ug/L	
			1,1-Dichloroethane	2025/12/22	ND, RDL=0.20		ug/L	
			1,2-Dichloroethane	2025/12/22	ND, RDL=0.50		ug/L	
			1,1-Dichloroethylene	2025/12/22	ND, RDL=0.20		ug/L	
			cis-1,2-Dichloroethylene	2025/12/22	ND, RDL=0.50		ug/L	
			trans-1,2-Dichloroethylene	2025/12/22	ND, RDL=0.50		ug/L	
			1,2-Dichloropropane	2025/12/22	ND, RDL=0.20		ug/L	
			cis-1,3-Dichloropropene	2025/12/22	ND, RDL=0.30		ug/L	
			trans-1,3-Dichloropropene	2025/12/22	ND, RDL=0.40		ug/L	
			Ethylbenzene	2025/12/22	ND, RDL=0.20		ug/L	
			Ethylene Dibromide	2025/12/22	ND, RDL=0.20		ug/L	
			Hexane	2025/12/22	ND, RDL=1.0		ug/L	
			Methylene Chloride(Dichloromethane)	2025/12/22	ND, RDL=2.0		ug/L	
			Methyl Ethyl Ketone (2-Butanone)	2025/12/22	ND, RDL=10		ug/L	
			Methyl Isobutyl Ketone	2025/12/22	ND, RDL=5.0		ug/L	
			Methyl t-butyl ether (MTBE)	2025/12/22	ND, RDL=0.50		ug/L	
			Styrene	2025/12/22	ND, RDL=0.50		ug/L	
			1,1,1,2-Tetrachloroethane	2025/12/22	ND, RDL=0.50		ug/L	
			1,1,2,2-Tetrachloroethane	2025/12/22	ND, RDL=0.50		ug/L	
			Tetrachloroethylene	2025/12/22	ND, RDL=0.20		ug/L	
			Toluene	2025/12/22	ND, RDL=0.20		ug/L	
			1,1,1-Trichloroethane	2025/12/22	ND, RDL=0.20		ug/L	



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QA/QC Batch	Init	QC Type	Parameter	Date Analyzed	Value	Recovery	UNITS	QC Limits
			1,1,2-Trichloroethane	2025/12/22	ND, RDL=0.50		ug/L	
			Trichloroethylene	2025/12/22	ND, RDL=0.20		ug/L	
			Trichlorofluoromethane (FREON 11)	2025/12/22	ND, RDL=0.50		ug/L	
			Vinyl Chloride	2025/12/22	ND, RDL=0.20		ug/L	
			p+m-Xylene	2025/12/22	ND, RDL=0.20		ug/L	
			o-Xylene	2025/12/22	ND, RDL=0.20		ug/L	
			Total Xylenes	2025/12/22	ND, RDL=0.20		ug/L	
			F1 (C6-C10)	2025/12/22	ND, RDL=25		ug/L	
			F1 (C6-C10) - BTEX	2025/12/22	ND, RDL=25		ug/L	
A078022	XJI	RPD	Acetone (2-Propanone)	2025/12/22	NC		%	30
			Benzene	2025/12/22	NC		%	30
			Bromodichloromethane	2025/12/22	NC		%	30
			Bromoform	2025/12/22	NC		%	30
			Bromomethane	2025/12/22	NC		%	30
			Carbon Tetrachloride	2025/12/22	NC		%	30
			Chlorobenzene	2025/12/22	NC		%	30
			Chloroform	2025/12/22	NC		%	30
			Dibromochloromethane	2025/12/22	NC		%	30
			1,2-Dichlorobenzene	2025/12/22	NC		%	30
			1,3-Dichlorobenzene	2025/12/22	NC		%	30
			1,4-Dichlorobenzene	2025/12/22	NC		%	30
			Dichlorodifluoromethane (FREON 12)	2025/12/22	NC		%	30
			1,1-Dichloroethane	2025/12/22	NC		%	30
			1,2-Dichloroethane	2025/12/22	NC		%	30
			1,1-Dichloroethylene	2025/12/22	NC		%	30
			cis-1,2-Dichloroethylene	2025/12/22	NC		%	30
			trans-1,2-Dichloroethylene	2025/12/22	NC		%	30
			1,2-Dichloropropane	2025/12/22	NC		%	30
			cis-1,3-Dichloropropene	2025/12/22	NC		%	30
			trans-1,3-Dichloropropene	2025/12/22	NC		%	30
			Ethylbenzene	2025/12/22	NC		%	30
			Ethylene Dibromide	2025/12/22	NC		%	30
			Hexane	2025/12/22	NC		%	30
			Methylene Chloride(Dichloromethane)	2025/12/22	NC		%	30
			Methyl Ethyl Ketone (2-Butanone)	2025/12/22	NC		%	30
			Methyl Isobutyl Ketone	2025/12/22	NC		%	30
			Methyl t-butyl ether (MTBE)	2025/12/22	NC		%	30
			Styrene	2025/12/22	NC		%	30
			1,1,1,2-Tetrachloroethane	2025/12/22	NC		%	30
			1,1,2,2-Tetrachloroethane	2025/12/22	NC		%	30
			Tetrachloroethylene	2025/12/22	NC		%	30
			Toluene	2025/12/22	10		%	30
			1,1,1-Trichloroethane	2025/12/22	NC		%	30
			1,1,2-Trichloroethane	2025/12/22	NC		%	30



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QA/QC	Batch	Init	QC Type	Parameter	Date Analyzed	Value	Recovery	UNITS	QC Limits
				Trichloroethylene	2025/12/22	NC		%	30
				Trichlorofluoromethane (FREON 11)	2025/12/22	NC		%	30
				Vinyl Chloride	2025/12/22	NC		%	30
				p+m-Xylene	2025/12/22	9.9		%	30
				o-Xylene	2025/12/22	NC		%	30
				Total Xylenes	2025/12/22	9.9		%	30
				F1 (C6-C10)	2025/12/22	NC		%	30
				F1 (C6-C10) - BTEX	2025/12/22	NC		%	30
A078055	NGH		Matrix Spike	4-Bromofluorobenzene	2025/12/24		100	%	70 - 130
				D4-1,2-Dichloroethane	2025/12/24		103	%	70 - 130
				D8-Toluene	2025/12/24		102	%	70 - 130
				Acetone (2-Propanone)	2025/12/24		96	%	60 - 140
				Benzene	2025/12/24		96	%	70 - 130
				Bromodichloromethane	2025/12/24		98	%	70 - 130
				Bromoform	2025/12/24		108	%	70 - 130
				Bromomethane	2025/12/24		92	%	60 - 140
				Carbon Tetrachloride	2025/12/24		106	%	70 - 130
				Chlorobenzene	2025/12/24		96	%	70 - 130
				Chloroform	2025/12/24		98	%	70 - 130
				Dibromochloromethane	2025/12/24		108	%	70 - 130
				1,2-Dichlorobenzene	2025/12/24		101	%	70 - 130
				1,3-Dichlorobenzene	2025/12/24		101	%	70 - 130
				1,4-Dichlorobenzene	2025/12/24		107	%	70 - 130
				Dichlorodifluoromethane (FREON 12)	2025/12/24		110	%	60 - 140
				1,1-Dichloroethane	2025/12/24		92	%	70 - 130
				1,2-Dichloroethane	2025/12/24		101	%	70 - 130
				1,1-Dichloroethylene	2025/12/24		97	%	70 - 130
				cis-1,2-Dichloroethylene	2025/12/24		NC	%	70 - 130
				trans-1,2-Dichloroethylene	2025/12/24		105	%	70 - 130
				1,2-Dichloropropane	2025/12/24		96	%	70 - 130
				cis-1,3-Dichloropropene	2025/12/24		95	%	70 - 130
				trans-1,3-Dichloropropene	2025/12/24		106	%	70 - 130
				Ethylbenzene	2025/12/24		97	%	70 - 130
				Ethylene Dibromide	2025/12/24		103	%	70 - 130
				Hexane	2025/12/24		105	%	70 - 130
				Methylene Chloride(Dichloromethane)	2025/12/24		98	%	70 - 130
				Methyl Ethyl Ketone (2-Butanone)	2025/12/24		101	%	60 - 140
				Methyl Isobutyl Ketone	2025/12/24		98	%	70 - 130
				Methyl t-butyl ether (MTBE)	2025/12/24		94	%	70 - 130
				Styrene	2025/12/24		99	%	70 - 130
				1,1,1,2-Tetrachloroethane	2025/12/24		110	%	70 - 130
				1,1,2,2-Tetrachloroethane	2025/12/24		97	%	70 - 130
				Tetrachloroethylene	2025/12/24		99	%	70 - 130
				Toluene	2025/12/24		98	%	70 - 130
				1,1,1-Trichloroethane	2025/12/24		95	%	70 - 130
				1,1,2-Trichloroethane	2025/12/24		99	%	70 - 130
				Trichloroethylene	2025/12/24		NC	%	70 - 130
				Trichlorofluoromethane (FREON 11)	2025/12/24		95	%	70 - 130
				Vinyl Chloride	2025/12/24		96	%	70 - 130
				p+m-Xylene	2025/12/24		96	%	70 - 130
				o-Xylene	2025/12/24		102	%	70 - 130
A078055	NGH		Spiked Blank	4-Bromofluorobenzene	2025/12/24		102	%	70 - 130
				D4-1,2-Dichloroethane	2025/12/24		100	%	70 - 130



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				D8-Toluene	2025/12/24		100	%	70 - 130
				Acetone (2-Propanone)	2025/12/24		90	%	60 - 140
				Benzene	2025/12/24		92	%	70 - 130
				Bromodichloromethane	2025/12/24		93	%	70 - 130
				Bromoform	2025/12/24		97	%	70 - 130
				Bromomethane	2025/12/24		89	%	60 - 140
				Carbon Tetrachloride	2025/12/24		103	%	70 - 130
				Chlorobenzene	2025/12/24		88	%	70 - 130
				Chloroform	2025/12/24		94	%	70 - 130
				Dibromochloromethane	2025/12/24		98	%	70 - 130
				1,2-Dichlorobenzene	2025/12/24		91	%	70 - 130
				1,3-Dichlorobenzene	2025/12/24		96	%	70 - 130
				1,4-Dichlorobenzene	2025/12/24		92	%	70 - 130
				Dichlorodifluoromethane (FREON 12)	2025/12/24		108	%	60 - 140
				1,1-Dichloroethane	2025/12/24		88	%	70 - 130
				1,2-Dichloroethane	2025/12/24		95	%	70 - 130
				1,1-Dichloroethylene	2025/12/24		94	%	70 - 130
				cis-1,2-Dichloroethylene	2025/12/24		99	%	70 - 130
				trans-1,2-Dichloroethylene	2025/12/24		100	%	70 - 130
				1,2-Dichloropropane	2025/12/24		92	%	70 - 130
				cis-1,3-Dichloropropene	2025/12/24		86	%	70 - 130
				trans-1,3-Dichloropropene	2025/12/24		88	%	70 - 130
				Ethylbenzene	2025/12/24		92	%	70 - 130
				Ethylene Dibromide	2025/12/24		93	%	70 - 130
				Hexane	2025/12/24		102	%	70 - 130
				Methylene Chloride(Dichloromethane)	2025/12/24		93	%	70 - 130
				Methyl Ethyl Ketone (2-Butanone)	2025/12/24		96	%	60 - 140
				Methyl Isobutyl Ketone	2025/12/24		93	%	70 - 130
				Methyl t-butyl ether (MTBE)	2025/12/24		93	%	70 - 130
				Styrene	2025/12/24		92	%	70 - 130
				1,1,1,2-Tetrachloroethane	2025/12/24		101	%	70 - 130
				1,1,2,2-Tetrachloroethane	2025/12/24		87	%	70 - 130
				Tetrachloroethylene	2025/12/24		93	%	70 - 130
				Toluene	2025/12/24		91	%	70 - 130
				1,1,1-Trichloroethane	2025/12/24		94	%	70 - 130
				1,1,2-Trichloroethane	2025/12/24		91	%	70 - 130
				Trichloroethylene	2025/12/24		96	%	70 - 130
				Trichlorofluoromethane (FREON 11)	2025/12/24		93	%	70 - 130
				Vinyl Chloride	2025/12/24		92	%	70 - 130
				p+m-Xylene	2025/12/24		90	%	70 - 130
				o-Xylene	2025/12/24		96	%	70 - 130
A078055	NGH		Method Blank	4-Bromofluorobenzene	2025/12/24		102	%	70 - 130
				D4-1,2-Dichloroethane	2025/12/24		101	%	70 - 130
				D8-Toluene	2025/12/24		95	%	70 - 130
				Acetone (2-Propanone)	2025/12/24	ND, RDL=10		ug/L	
				Benzene	2025/12/24	ND, RDL=0.20		ug/L	
				Bromodichloromethane	2025/12/24	ND, RDL=0.50		ug/L	
				Bromoform	2025/12/24	ND, RDL=1.0		ug/L	



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			Bromomethane	2025/12/24	ND, RDL=0.50		ug/L	
			Carbon Tetrachloride	2025/12/24	ND, RDL=0.19		ug/L	
			Chlorobenzene	2025/12/24	ND, RDL=0.20		ug/L	
			Chloroform	2025/12/24	ND, RDL=0.20		ug/L	
			Dibromochloromethane	2025/12/24	ND, RDL=0.50		ug/L	
			1,2-Dichlorobenzene	2025/12/24	ND, RDL=0.40		ug/L	
			1,3-Dichlorobenzene	2025/12/24	ND, RDL=0.40		ug/L	
			1,4-Dichlorobenzene	2025/12/24	ND, RDL=0.40		ug/L	
			Dichlorodifluoromethane (FREON 12)	2025/12/24	ND, RDL=1.0		ug/L	
			1,1-Dichloroethane	2025/12/24	ND, RDL=0.20		ug/L	
			1,2-Dichloroethane	2025/12/24	ND, RDL=0.49		ug/L	
			1,1-Dichloroethylene	2025/12/24	ND, RDL=0.20		ug/L	
			cis-1,2-Dichloroethylene	2025/12/24	ND, RDL=0.50		ug/L	
			trans-1,2-Dichloroethylene	2025/12/24	ND, RDL=0.50		ug/L	
			1,2-Dichloropropane	2025/12/24	ND, RDL=0.20		ug/L	
			cis-1,3-Dichloropropene	2025/12/24	ND, RDL=0.30		ug/L	
			trans-1,3-Dichloropropene	2025/12/24	ND, RDL=0.40		ug/L	
			Ethylbenzene	2025/12/24	ND, RDL=0.20		ug/L	
			Ethylene Dibromide	2025/12/24	ND, RDL=0.19		ug/L	
			Hexane	2025/12/24	ND, RDL=1.0		ug/L	
			Methylene Chloride(Dichloromethane)	2025/12/24	ND, RDL=2.0		ug/L	
			Methyl Ethyl Ketone (2-Butanone)	2025/12/24	ND, RDL=10		ug/L	
			Methyl Isobutyl Ketone	2025/12/24	ND, RDL=5.0		ug/L	
			Methyl t-butyl ether (MTBE)	2025/12/24	ND, RDL=0.50		ug/L	
			Styrene	2025/12/24	ND, RDL=0.40		ug/L	
			1,1,1,2-Tetrachloroethane	2025/12/24	ND, RDL=0.50		ug/L	
			1,1,2,2-Tetrachloroethane	2025/12/24	ND, RDL=0.40		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
				Tetrachloroethylene	2025/12/24	ND, RDL=0.20		ug/L	
				Toluene	2025/12/24	ND, RDL=0.20		ug/L	
				1,1,1-Trichloroethane	2025/12/24	ND, RDL=0.20		ug/L	
				1,1,2-Trichloroethane	2025/12/24	ND, RDL=0.40		ug/L	
				Trichloroethylene	2025/12/24	ND, RDL=0.20		ug/L	
				Trichlorofluoromethane (FREON 11)	2025/12/24	ND, RDL=0.50		ug/L	
				Vinyl Chloride	2025/12/24	ND, RDL=0.20		ug/L	
				p+m-Xylene	2025/12/24	ND, RDL=0.20		ug/L	
				o-Xylene	2025/12/24	ND, RDL=0.20		ug/L	
				Total Xylenes	2025/12/24	ND, RDL=0.20		ug/L	
A078055		NGH	RPD	Acetone (2-Propanone)	2025/12/24	NC		%	30
				Benzene	2025/12/24	NC		%	30
				Bromodichloromethane	2025/12/24	NC		%	30
				Bromoform	2025/12/24	NC		%	30
				Bromomethane	2025/12/24	NC		%	30
				Carbon Tetrachloride	2025/12/24	NC		%	30
				Chlorobenzene	2025/12/24	NC		%	30
				Chloroform	2025/12/24	NC		%	30
				Dibromochloromethane	2025/12/24	NC		%	30
				1,2-Dichlorobenzene	2025/12/24	NC		%	30
				1,3-Dichlorobenzene	2025/12/24	NC		%	30
				1,4-Dichlorobenzene	2025/12/24	NC		%	30
				Dichlorodifluoromethane (FREON 12)	2025/12/24	NC		%	30
				1,1-Dichloroethane	2025/12/24	6.7		%	30
				1,2-Dichloroethane	2025/12/24	NC		%	30
				1,1-Dichloroethylene	2025/12/24	5.1		%	30
				cis-1,2-Dichloroethylene	2025/12/24	4.9		%	30
				trans-1,2-Dichloroethylene	2025/12/24	NC		%	30
				1,2-Dichloropropane	2025/12/24	NC		%	30
				cis-1,3-Dichloropropene	2025/12/24	NC		%	30
				trans-1,3-Dichloropropene	2025/12/24	NC		%	30
				Ethylbenzene	2025/12/24	6.3		%	30
				Ethylene Dibromide	2025/12/24	NC		%	30
				Hexane	2025/12/24	NC		%	30
				Methylene Chloride(Dichloromethane)	2025/12/24	NC		%	30
				Methyl Ethyl Ketone (2-Butanone)	2025/12/24	NC		%	30
				Methyl Isobutyl Ketone	2025/12/24	NC		%	30
				Methyl t-butyl ether (MTBE)	2025/12/24	NC		%	30
				Styrene	2025/12/24	5.4		%	30
				1,1,1,2-Tetrachloroethane	2025/12/24	NC		%	30
				1,1,2,2-Tetrachloroethane	2025/12/24	NC		%	30
				Tetrachloroethylene	2025/12/24	NC		%	30
				Toluene	2025/12/24	NC		%	30



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QA/QC Batch	Init	QC Type	Parameter	Date Analyzed	Value	Recovery	UNITS	QC Limits
			1,1,1-Trichloroethane	2025/12/24	5.9		%	30
			1,1,2-Trichloroethane	2025/12/24	NC		%	30
			Trichloroethylene	2025/12/24	5.6		%	30
			Trichlorofluoromethane (FREON 11)	2025/12/24	NC		%	30
			Vinyl Chloride	2025/12/24	4.4		%	30
			p+m-Xylene	2025/12/24	NC		%	30
			o-Xylene	2025/12/24	NC		%	30
			Total Xylenes	2025/12/24	NC		%	30
A078189	GYA	Matrix Spike	WAD Cyanide (Free)	2025/12/23		100	%	80 - 120
A078189	GYA	Spiked Blank	WAD Cyanide (Free)	2025/12/23		106	%	80 - 120
A078189	GYA	Method Blank	WAD Cyanide (Free)	2025/12/23	ND,RDL=1		ug/L	
A078189	GYA	RPD	WAD Cyanide (Free)	2025/12/23	0		%	20
A078511	RSU	Matrix Spike	Chromium (VI)	2025/12/22		94	%	80 - 120
A078511	RSU	Spiked Blank	Chromium (VI)	2025/12/22		99	%	80 - 120
A078511	RSU	Method Blank	Chromium (VI)	2025/12/22	ND, RDL=0.50		ug/L	
A078511	RSU	RPD	Chromium (VI)	2025/12/22	NC		%	20
A079217	MPJ	Matrix Spike	Mercury (Hg)	2025/12/23		94	%	75 - 125
A079217	MPJ	Spiked Blank	Mercury (Hg)	2025/12/23		95	%	80 - 120
A079217	MPJ	Method Blank	Mercury (Hg)	2025/12/23	ND, RDL=0.10		ug/L	
A079217	MPJ	RPD	Mercury (Hg)	2025/12/23	NC		%	20
A079222	MPJ	Matrix Spike	Mercury (Hg)	2025/12/23		92	%	75 - 125
A079222	MPJ	Spiked Blank	Mercury (Hg)	2025/12/23		95	%	80 - 120
A079222	MPJ	Method Blank	Mercury (Hg)	2025/12/23	ND, RDL=0.10		ug/L	
A079222	MPJ	RPD	Mercury (Hg)	2025/12/23	NC		%	20
A079387	MJ1	Matrix Spike	Dissolved Chloride (Cl-)	2025/12/29		NC	%	80 - 120
A079387	MJ1	Spiked Blank	Dissolved Chloride (Cl-)	2025/12/29		94	%	80 - 120
A079387	MJ1	Method Blank	Dissolved Chloride (Cl-)	2025/12/29	ND, RDL=1.0		mg/L	
A079387	MJ1	RPD	Dissolved Chloride (Cl-)	2025/12/29	0.46		%	20
A079388	MJ1	Matrix Spike	Dissolved Chloride (Cl-)	2025/12/29		NC	%	80 - 120
A079388	MJ1	Spiked Blank	Dissolved Chloride (Cl-)	2025/12/29		94	%	80 - 120
A079388	MJ1	Method Blank	Dissolved Chloride (Cl-)	2025/12/29	ND, RDL=1.0		mg/L	
A079388	MJ1	RPD	Dissolved Chloride (Cl-)	2025/12/29	0.13		%	20
A079436	RAJ	Matrix Spike	D10-Anthracene	2025/12/24		110	%	50 - 130
			D14-Terphenyl (FS)	2025/12/24		98	%	50 - 130
			D8-Acenaphthylene	2025/12/24		92	%	50 - 130
			Acenaphthene	2025/12/24		76	%	50 - 130
			Acenaphthylene	2025/12/24		74	%	50 - 130
			Anthracene	2025/12/24		106	%	50 - 130
			Benzo(a)anthracene	2025/12/24		88	%	50 - 130
			Benzo(a)pyrene	2025/12/24		97	%	50 - 130
			Benzo(b/j)fluoranthene	2025/12/24		104	%	50 - 130
			Benzo(g,h,i)perylene	2025/12/24		105	%	50 - 130
			Benzo(k)fluoranthene	2025/12/24		112	%	50 - 130
			Chrysene	2025/12/24		95	%	50 - 130
			Dibenzo(a,h)anthracene	2025/12/24		107	%	50 - 130
			Fluoranthene	2025/12/24		103	%	50 - 130
			Fluorene	2025/12/24		85	%	50 - 130
			Indeno(1,2,3-cd)pyrene	2025/12/24		107	%	50 - 130



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QA/QC	Batch	Init	QC Type	Parameter	Date Analyzed	Value	Recovery	UNITS	QC Limits
				1-Methylnaphthalene	2025/12/24		69	%	50 - 130
				2-Methylnaphthalene	2025/12/24		69	%	50 - 130
				Naphthalene	2025/12/24		66	%	50 - 130
				Phenanthrene	2025/12/24		103	%	50 - 130
				Pyrene	2025/12/24		104	%	50 - 130
A079436	RAJ		Spiked Blank	D10-Anthracene	2025/12/23		114	%	50 - 130
				D14-Terphenyl (FS)	2025/12/23		102	%	50 - 130
				D8-Acenaphthylene	2025/12/23		93	%	50 - 130
				Acenaphthene	2025/12/23		79	%	50 - 130
				Acenaphthylene	2025/12/23		75	%	50 - 130
				Anthracene	2025/12/23		107	%	50 - 130
				Benzo(a)anthracene	2025/12/23		90	%	50 - 130
				Benzo(a)pyrene	2025/12/23		100	%	50 - 130
				Benzo(b/j)fluoranthene	2025/12/23		107	%	50 - 130
				Benzo(g,h,i)perylene	2025/12/23		107	%	50 - 130
				Benzo(k)fluoranthene	2025/12/23		115	%	50 - 130
				Chrysene	2025/12/23		97	%	50 - 130
				Dibenzo(a,h)anthracene	2025/12/23		109	%	50 - 130
				Fluoranthene	2025/12/23		106	%	50 - 130
				Fluorene	2025/12/23		86	%	50 - 130
				Indeno(1,2,3-cd)pyrene	2025/12/23		110	%	50 - 130
				1-Methylnaphthalene	2025/12/23		72	%	50 - 130
				2-Methylnaphthalene	2025/12/23		72	%	50 - 130
				Naphthalene	2025/12/23		68	%	50 - 130
				Phenanthrene	2025/12/23		103	%	50 - 130
				Pyrene	2025/12/23		107	%	50 - 130
A079436	RAJ		Method Blank	D10-Anthracene	2025/12/23		114	%	50 - 130
				D14-Terphenyl (FS)	2025/12/23		101	%	50 - 130
				D8-Acenaphthylene	2025/12/23		93	%	50 - 130
				Acenaphthene	2025/12/23	ND, RDL=0.050		ug/L	
				Acenaphthylene	2025/12/23	ND, RDL=0.050		ug/L	
				Anthracene	2025/12/23	ND, RDL=0.050		ug/L	
				Benzo(a)anthracene	2025/12/23	ND, RDL=0.050		ug/L	
				Benzo(a)pyrene	2025/12/23	ND, RDL=0.0090		ug/L	
				Benzo(b/j)fluoranthene	2025/12/23	ND, RDL=0.050		ug/L	
				Benzo(g,h,i)perylene	2025/12/23	ND, RDL=0.050		ug/L	
				Benzo(k)fluoranthene	2025/12/23	ND, RDL=0.050		ug/L	
				Chrysene	2025/12/23	ND, RDL=0.050		ug/L	
				Dibenzo(a,h)anthracene	2025/12/23	ND, RDL=0.050		ug/L	
				Fluoranthene	2025/12/23	ND, RDL=0.050		ug/L	
				Fluorene	2025/12/23	ND, RDL=0.050		ug/L	



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QA/QC Batch	Init	QC Type	Parameter	Date Analyzed	Value	Recovery	UNITS	QC Limits
			Indeno(1,2,3-cd)pyrene	2025/12/23	ND, RDL=0.050		ug/L	
			1-Methylnaphthalene	2025/12/23	ND, RDL=0.050		ug/L	
			2-Methylnaphthalene	2025/12/23	ND, RDL=0.050		ug/L	
			Naphthalene	2025/12/23	ND, RDL=0.050		ug/L	
			Phenanthrene	2025/12/23	ND, RDL=0.030		ug/L	
			Pyrene	2025/12/23	ND, RDL=0.050		ug/L	
A079436	RAJ	RPD	Acenaphthene	2025/12/23	NC		%	30
			Acenaphthylene	2025/12/23	NC		%	30
			Anthracene	2025/12/23	NC		%	30
			Benzo(a)anthracene	2025/12/23	NC		%	30
			Benzo(a)pyrene	2025/12/23	NC		%	30
			Benzo(b/j)fluoranthene	2025/12/23	NC		%	30
			Benzo(g,h,i)perylene	2025/12/23	NC		%	30
			Benzo(k)fluoranthene	2025/12/23	NC		%	30
			Chrysene	2025/12/23	NC		%	30
			Dibenzo(a,h)anthracene	2025/12/23	NC		%	30
			Fluoranthene	2025/12/23	NC		%	30
			Fluorene	2025/12/23	NC		%	30
			Indeno(1,2,3-cd)pyrene	2025/12/23	NC		%	30
			1-Methylnaphthalene	2025/12/23	NC		%	30
			2-Methylnaphthalene	2025/12/23	NC		%	30
			Naphthalene	2025/12/23	NC		%	30
			Phenanthrene	2025/12/23	NC		%	30
			Pyrene	2025/12/23	NC		%	30
A079440	MSZ	Matrix Spike	o-Terphenyl	2025/12/23		103	%	60 - 140
			F2 (C10-C16 Hydrocarbons)	2025/12/23		96	%	60 - 140
			F3 (C16-C34 Hydrocarbons)	2025/12/23		99	%	60 - 140
			F4 (C34-C50 Hydrocarbons)	2025/12/23		87	%	60 - 140
A079440	MSZ	Spiked Blank	o-Terphenyl	2025/12/23		103	%	60 - 140
			F2 (C10-C16 Hydrocarbons)	2025/12/23		94	%	60 - 140
			F3 (C16-C34 Hydrocarbons)	2025/12/23		99	%	60 - 140
			F4 (C34-C50 Hydrocarbons)	2025/12/23		86	%	60 - 140
A079440	MSZ	Method Blank	o-Terphenyl	2025/12/23		100	%	60 - 140
			F2 (C10-C16 Hydrocarbons)	2025/12/23	ND, RDL=90		ug/L	
			F3 (C16-C34 Hydrocarbons)	2025/12/23	ND, RDL=200		ug/L	
			F4 (C34-C50 Hydrocarbons)	2025/12/23	ND, RDL=200		ug/L	
A079440	MSZ	RPD	F2 (C10-C16 Hydrocarbons)	2025/12/24	NC		%	30
			F3 (C16-C34 Hydrocarbons)	2025/12/24	19		%	30
			F4 (C34-C50 Hydrocarbons)	2025/12/24	NC		%	30
A079445	TLG	Matrix Spike	Dissolved Antimony (Sb)	2025/12/29		105	%	80 - 120
			Dissolved Arsenic (As)	2025/12/29		99	%	80 - 120
			Dissolved Barium (Ba)	2025/12/29		98	%	80 - 120
			Dissolved Beryllium (Be)	2025/12/29		97	%	80 - 120
			Dissolved Boron (B)	2025/12/29		94	%	80 - 120



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			Dissolved Cadmium (Cd)	2025/12/29		101	%	80 - 120
			Dissolved Chromium (Cr)	2025/12/29		93	%	80 - 120
			Dissolved Cobalt (Co)	2025/12/29		100	%	80 - 120
			Dissolved Copper (Cu)	2025/12/29		99	%	80 - 120
			Dissolved Lead (Pb)	2025/12/29		94	%	80 - 120
			Dissolved Molybdenum (Mo)	2025/12/29		96	%	80 - 120
			Dissolved Nickel (Ni)	2025/12/29		97	%	80 - 120
			Dissolved Selenium (Se)	2025/12/29		98	%	80 - 120
			Dissolved Silver (Ag)	2025/12/29		93	%	80 - 120
			Dissolved Sodium (Na)	2025/12/29		NC	%	80 - 120
			Dissolved Thallium (Tl)	2025/12/29		96	%	80 - 120
			Dissolved Uranium (U)	2025/12/29		100	%	80 - 120
			Dissolved Vanadium (V)	2025/12/29		95	%	80 - 120
			Dissolved Zinc (Zn)	2025/12/29		98	%	80 - 120
A079445	TLG	Spiked Blank	Dissolved Antimony (Sb)	2025/12/29		102	%	80 - 120
			Dissolved Arsenic (As)	2025/12/29		100	%	80 - 120
			Dissolved Barium (Ba)	2025/12/29		98	%	80 - 120
			Dissolved Beryllium (Be)	2025/12/29		98	%	80 - 120
			Dissolved Boron (B)	2025/12/29		95	%	80 - 120
			Dissolved Cadmium (Cd)	2025/12/29		100	%	80 - 120
			Dissolved Chromium (Cr)	2025/12/29		95	%	80 - 120
			Dissolved Cobalt (Co)	2025/12/29		102	%	80 - 120
			Dissolved Copper (Cu)	2025/12/29		102	%	80 - 120
			Dissolved Lead (Pb)	2025/12/29		95	%	80 - 120
			Dissolved Molybdenum (Mo)	2025/12/29		94	%	80 - 120
			Dissolved Nickel (Ni)	2025/12/29		99	%	80 - 120
			Dissolved Selenium (Se)	2025/12/29		100	%	80 - 120
			Dissolved Silver (Ag)	2025/12/29		93	%	80 - 120
			Dissolved Sodium (Na)	2025/12/29		97	%	80 - 120
			Dissolved Thallium (Tl)	2025/12/29		100	%	80 - 120
			Dissolved Uranium (U)	2025/12/29		99	%	80 - 120
			Dissolved Vanadium (V)	2025/12/29		95	%	80 - 120
			Dissolved Zinc (Zn)	2025/12/29		101	%	80 - 120
A079445	TLG	Method Blank	Dissolved Antimony (Sb)	2025/12/29	ND, RDL=0.50		ug/L	
			Dissolved Arsenic (As)	2025/12/29	ND, RDL=1.0		ug/L	
			Dissolved Barium (Ba)	2025/12/29	ND, RDL=2.0		ug/L	
			Dissolved Beryllium (Be)	2025/12/29	ND, RDL=0.40		ug/L	
			Dissolved Boron (B)	2025/12/29	ND, RDL=10		ug/L	
			Dissolved Cadmium (Cd)	2025/12/29	ND, RDL=0.090		ug/L	
			Dissolved Chromium (Cr)	2025/12/29	ND, RDL=5.0		ug/L	
			Dissolved Cobalt (Co)	2025/12/29	ND, RDL=0.50		ug/L	
			Dissolved Copper (Cu)	2025/12/29	ND, RDL=0.90		ug/L	
			Dissolved Lead (Pb)	2025/12/29	ND, RDL=0.50		ug/L	



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			Dissolved Molybdenum (Mo)	2025/12/29	ND, RDL=0.50		ug/L	
			Dissolved Nickel (Ni)	2025/12/29	ND, RDL=1.0		ug/L	
			Dissolved Selenium (Se)	2025/12/29	ND, RDL=2.0		ug/L	
			Dissolved Silver (Ag)	2025/12/29	ND, RDL=0.090		ug/L	
			Dissolved Sodium (Na)	2025/12/29	ND, RDL=100		ug/L	
			Dissolved Thallium (Tl)	2025/12/29	ND, RDL=0.050		ug/L	
			Dissolved Uranium (U)	2025/12/29	ND, RDL=0.10		ug/L	
			Dissolved Vanadium (V)	2025/12/29	ND, RDL=0.50		ug/L	
			Dissolved Zinc (Zn)	2025/12/29	ND, RDL=5.0		ug/L	
A079445	TLG	RPD	Dissolved Antimony (Sb)	2025/12/29	NC		%	20
			Dissolved Arsenic (As)	2025/12/29	2.7		%	20
			Dissolved Barium (Ba)	2025/12/29	0.29		%	20
			Dissolved Beryllium (Be)	2025/12/29	NC		%	20
			Dissolved Boron (B)	2025/12/29	4.2		%	20
			Dissolved Cadmium (Cd)	2025/12/29	NC		%	20
			Dissolved Chromium (Cr)	2025/12/29	NC		%	20
			Dissolved Cobalt (Co)	2025/12/29	NC		%	20
			Dissolved Copper (Cu)	2025/12/29	0.076		%	20
			Dissolved Lead (Pb)	2025/12/29	4.6		%	20
			Dissolved Molybdenum (Mo)	2025/12/29	1.2		%	20
			Dissolved Nickel (Ni)	2025/12/29	0.23		%	20
			Dissolved Selenium (Se)	2025/12/29	NC		%	20
			Dissolved Silver (Ag)	2025/12/29	NC		%	20
			Dissolved Sodium (Na)	2025/12/29	0.060		%	20
			Dissolved Thallium (Tl)	2025/12/29	NC		%	20
			Dissolved Uranium (U)	2025/12/29	2.5		%	20
			Dissolved Vanadium (V)	2025/12/29	NC		%	20
			Dissolved Zinc (Zn)	2025/12/29	NC		%	20

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

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

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

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

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

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

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



BUREAU  
VERITAS

Bureau Veritas Job #: C5F9964  
Report Date: 2025/12/30

Lopers & Associates  
Client Project #: LOPER25-035B  
Site Location: 131 PARKDALE  
Sampler Initials: LP

### VALIDATION SIGNATURE PAGE

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

A handwritten signature in black ink that reads "Cristina Carriere".

---

Cristina Carriere, Senior Scientific Specialist

---

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



### SERVICE CENTER COOLER TEMPERATURE RECORD

#### CHAIN-OF-CUSTODY RECORD

BV Receipt #		COOLER OBSERVATIONS:					
1	OTT-2025-12-10	CUSTODY SEAL	YES	NO	<input type="checkbox"/> Drinking Water		
		PRESENT	<input checked="" type="checkbox"/>		TEMP	NA	NA
		INTACT	<input checked="" type="checkbox"/>			NA	NA
		ICE PRESENT	<input checked="" type="checkbox"/>				
2	112	CUSTODY SEAL	YES	NO	<input type="checkbox"/> Drinking Water		
		PRESENT	<input checked="" type="checkbox"/>		TEMP	2	2
		INTACT	<input checked="" type="checkbox"/>			1	
		ICE PRESENT	<input checked="" type="checkbox"/>				
3	113	CUSTODY SEAL	YES	NO	<input type="checkbox"/> Drinking Water		
		PRESENT	<input checked="" type="checkbox"/>		TEMP	9	8
		INTACT	<input checked="" type="checkbox"/>				8
		ICE PRESENT	<input checked="" type="checkbox"/>				
4	111	CUSTODY SEAL	YES	NO	<input type="checkbox"/> Drinking Water		
		PRESENT	<input checked="" type="checkbox"/>		TEMP	0	0
		INTACT	<input checked="" type="checkbox"/>			1	
		ICE PRESENT	<input checked="" type="checkbox"/>				
5	118 119	CUSTODY SEAL	YES	NO	<input type="checkbox"/> Drinking Water		
		PRESENT	<input checked="" type="checkbox"/>		TEMP	2	1
		INTACT	<input checked="" type="checkbox"/>			2	
		ICE PRESENT	<input checked="" type="checkbox"/>				
6	116	CUSTODY SEAL	YES	NO	<input type="checkbox"/> Drinking Water		
		PRESENT	<input checked="" type="checkbox"/>		TEMP	-1	-1
		INTACT	<input checked="" type="checkbox"/>			0	
		ICE PRESENT	<input checked="" type="checkbox"/>				
7	120 to 125	CUSTODY SEAL	YES	NO	<input type="checkbox"/> Drinking Water		
		PRESENT	<input checked="" type="checkbox"/>		TEMP	2	3
		INTACT	<input checked="" type="checkbox"/>			1	
		ICE PRESENT	<input checked="" type="checkbox"/>				
8	114	CUSTODY SEAL	YES	NO	<input type="checkbox"/> Drinking Water		
		PRESENT	<input checked="" type="checkbox"/>		TEMP	0	0
		INTACT	<input checked="" type="checkbox"/>			1	
		ICE PRESENT	<input checked="" type="checkbox"/>				
9	115	CUSTODY SEAL	YES	NO	<input type="checkbox"/> Drinking Water		
		PRESENT	<input checked="" type="checkbox"/>		TEMP	2	1
		INTACT	<input checked="" type="checkbox"/>			2	
		ICE PRESENT	<input checked="" type="checkbox"/>				
10	117	CUSTODY SEAL	YES	NO	<input type="checkbox"/> Drinking Water		
		PRESENT	<input checked="" type="checkbox"/>		TEMP	1	2
		INTACT	<input checked="" type="checkbox"/>			1	
		ICE PRESENT	<input checked="" type="checkbox"/>				

BV Receipt #		SHIPPED FROM BV SERVICE CENTER:					
		OTTAWA					
BV Receipt #		RECEIVED AT:					
		MISSISSAUGA					
11	OTT-2025-12-12 6	CUSTODY SEAL	YES	NO	<input type="checkbox"/> Drinking Water		
		PRESENT	<input checked="" type="checkbox"/>		TEMP	2	2
		INTACT	<input checked="" type="checkbox"/>			2	
		ICE PRESENT	<input checked="" type="checkbox"/>				
12		CUSTODY SEAL	YES	NO	<input type="checkbox"/> Drinking Water		
		PRESENT	<input checked="" type="checkbox"/>		TEMP	2	1
		INTACT	<input checked="" type="checkbox"/>			2	
		ICE PRESENT	<input checked="" type="checkbox"/>				
13		CUSTODY SEAL	YES	NO	<input type="checkbox"/> Drinking Water		
		PRESENT	<input type="checkbox"/>		TEMP		
		INTACT	<input type="checkbox"/>				
		ICE PRESENT	<input type="checkbox"/>				
14		CUSTODY SEAL	YES	NO	<input type="checkbox"/> Drinking Water		
		PRESENT	<input type="checkbox"/>		TEMP		
		INTACT	<input type="checkbox"/>				
		ICE PRESENT	<input type="checkbox"/>				
15		CUSTODY SEAL	YES	NO	<input type="checkbox"/> Drinking Water		
		PRESENT	<input type="checkbox"/>		TEMP		
		INTACT	<input type="checkbox"/>				
		ICE PRESENT	<input type="checkbox"/>				
16		CUSTODY SEAL	YES	NO	<input type="checkbox"/> Drinking Water		
		PRESENT	<input type="checkbox"/>		TEMP		
		INTACT	<input type="checkbox"/>				
		ICE PRESENT	<input type="checkbox"/>				
17		CUSTODY SEAL	YES	NO	<input type="checkbox"/> Drinking Water		
		PRESENT	<input type="checkbox"/>		TEMP		
		INTACT	<input type="checkbox"/>				
		ICE PRESENT	<input type="checkbox"/>				
18		CUSTODY SEAL	YES	NO	<input type="checkbox"/> Drinking Water		
		PRESENT	<input type="checkbox"/>		TEMP		
		INTACT	<input type="checkbox"/>				
		ICE PRESENT	<input type="checkbox"/>				
19		CUSTODY SEAL	YES	NO	<input type="checkbox"/> Drinking Water		
		PRESENT	<input type="checkbox"/>		TEMP		
		INTACT	<input type="checkbox"/>				
		ICE PRESENT	<input type="checkbox"/>				
20		CUSTODY SEAL	YES	NO	<input type="checkbox"/> Drinking Water		
		PRESENT	<input type="checkbox"/>		TEMP		
		INTACT	<input type="checkbox"/>				
		ICE PRESENT	<input type="checkbox"/>				

RECEIVED BY (PRINT & SIGN)	DATE (YYYY/MM/DD)	TIME (HH:MM)
ANMOJPREET SINGH	2025/12/19	06:20

If Custody seal condition and presence of ice is the same for all, use these boxes:	CUSTODY SEAL	YES	NO
	PRESENT		
	INTACT		
	ICE PRESENT		



C5F9964  
2025/12/18 10:03

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

<b>Invoice To:</b> Company: #39509 Lopers & Associates Attention: Alisha Sullivan Address: 30 Lansfield Way Ottawa ON K2G 3V8 Tel: (613) 327-9073 Fax: Email: Alisha.Sullivan@bureauveritas.com		<b>Report To:</b> Company: Luke Lopers Attention: Luke Lopers Address: Tel: Fax: Email: Luke@lopers.ca		<b>PROJECT INFORMATION:</b> Quotation #: C43362 P.O. #: Project: LOP25-035B Project Name: B1 Reddale Site #: L.lopers Sampled By:		<b>Laboratory Use Only:</b> Bureau Veritas Job #:  1076969 COC #:  C#1076969-01-01 Project Manager: Katherine Szozda	
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MOE 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 153 (2011)			Other Regulations		Special Instructions		Field Filtered (please circle): Metals / Hg / Cr VI	O. Reg 153 Metals & Inorganics Pkg (WH)	O. Reg 153 VOCs by HS & F1-F4	O. Reg 153 PAHs	Regular (Standard) TAT: <input checked="" type="checkbox"/>	
<input type="checkbox"/> Table 1	<input checked="" type="checkbox"/> Res/Park	<input type="checkbox"/> Medium/Fine	<input type="checkbox"/> CCME	<input type="checkbox"/> Sanitary Sewer Bylaw							(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.	
<input type="checkbox"/> Table 2	<input type="checkbox"/> Ind/Comm	<input checked="" type="checkbox"/> Coarse	<input type="checkbox"/> Reg 558	<input type="checkbox"/> Storm Sewer Bylaw			Job Specific Rush TAT (if applies to entire submission)		Date Required: _____ Time Required: _____		<input type="checkbox"/>	
<input checked="" type="checkbox"/> Table 3	<input checked="" type="checkbox"/> Agri/Other	<input type="checkbox"/> For RSC	<input type="checkbox"/> MISA	Municipality _____			Date Required: _____ Time Required: _____		Rush Confirmation Number: _____		(call lab for #)	
<input type="checkbox"/> Table 4			<input type="checkbox"/> PWGO	Reg 406 Table _____								
<input type="checkbox"/> Table 5			<input type="checkbox"/> Other _____									
Include Criteria on Certificate of Analysis (Y/N)?												
Sample Barcode Label	Sample (Location) Identification	Date Sampled	Time Sampled	Matrix							# of Bottles	Comments
1	BH2-2S-GW1	Dec 17/25	2:00 PM	GW			X	X	X		9	Metals preservative rinsed out Bottles not field filtered
2	BH3-2S-GW1		2:50 PM	GW			X	X	X		9	
3	BH4-2S-GW1		4:10 PM	GW			X	X	X		9	
4	DUP-12/17		-	GW			X	X	X		9	
5												
6												
7												
8												
9												
10												

OTT-2025-12-114



Relinquished By (Print): <u>Luke Lopers</u>	Date: (YY/MM/DD): <u>23/12/17</u>	Time: <u>5:45 PM</u>	RECEIVED BY: (Signature/Print): <u>Leen Asad</u>	Date: (YY/MM/DD): <u>2025/12/18</u>	Time: <u>10:03</u>	# jars used and not submitted: _____	<b>Laboratory Use Only</b> (Ice Packs) Time Sensitive: _____ Temperature (°C) on Receipt: <u>3/3/4</u> Custody Seal: Present <input checked="" type="checkbox"/> Intact <input checked="" type="checkbox"/>		
---	-----------------------------------	----------------------	--	-------------------------------------	--------------------	--------------------------------------	--	--	--

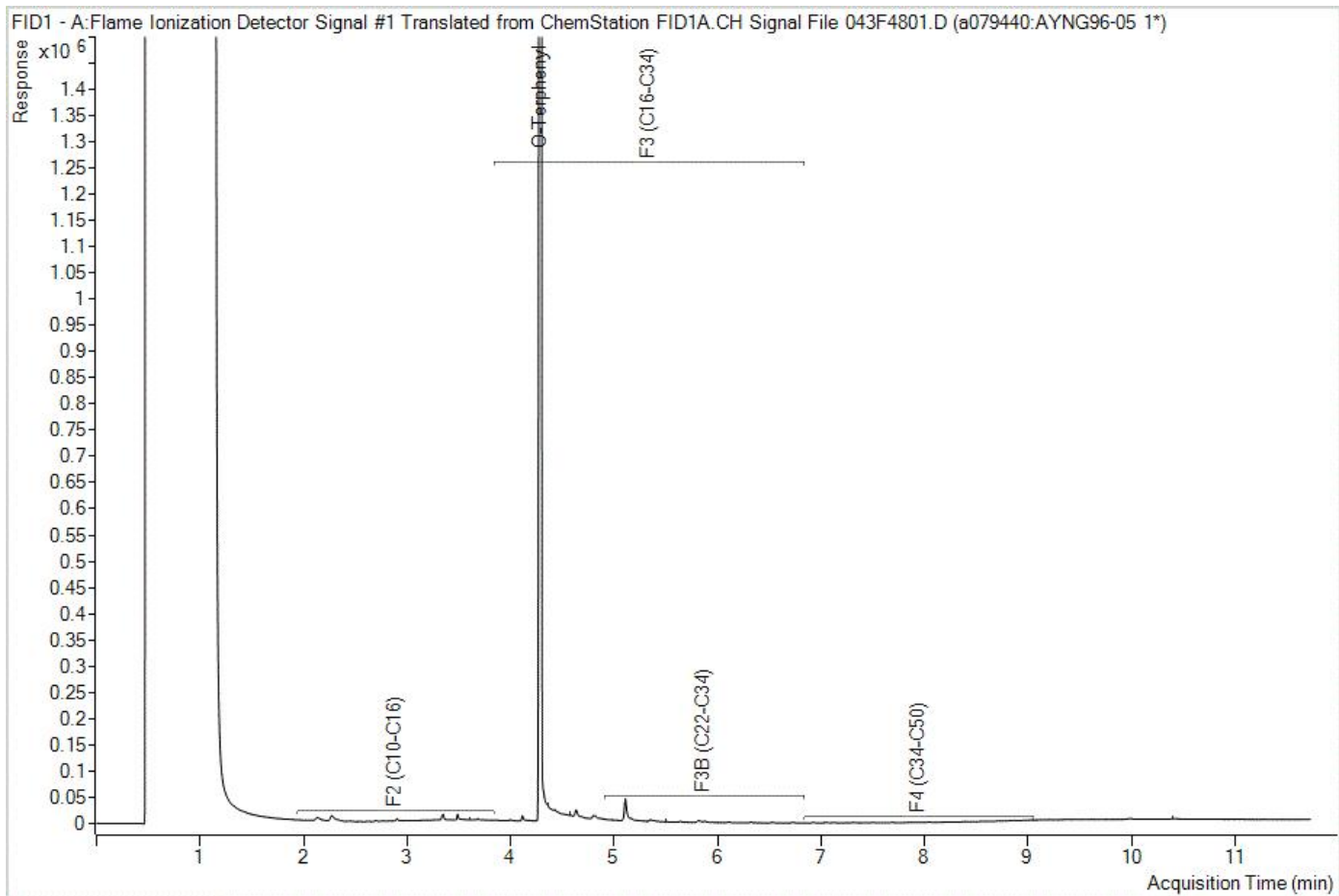
\* UNLESS OTHERWISE AGREED TO IN WRITING, WORK SUBMITTED ON THIS CHAIN OF CUSTODY IS SUBJECT TO BUREAU VERITAS'S STANDARD TERMS AND CONDITIONS. SIGNING OF THIS CHAIN OF CUSTODY DOCUMENT IS ACKNOWLEDGMENT AND ACCEPTANCE OF OUR TERMS WHICH ARE AVAILABLE FOR VIEWING AT WWW.BVNA.COM/ENVIRONMENTAL-LABORATORIES/RESOURCES/COC-TERMS-AND-CONDITIONS.

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

White: Bureau Veritas Yellow: Client

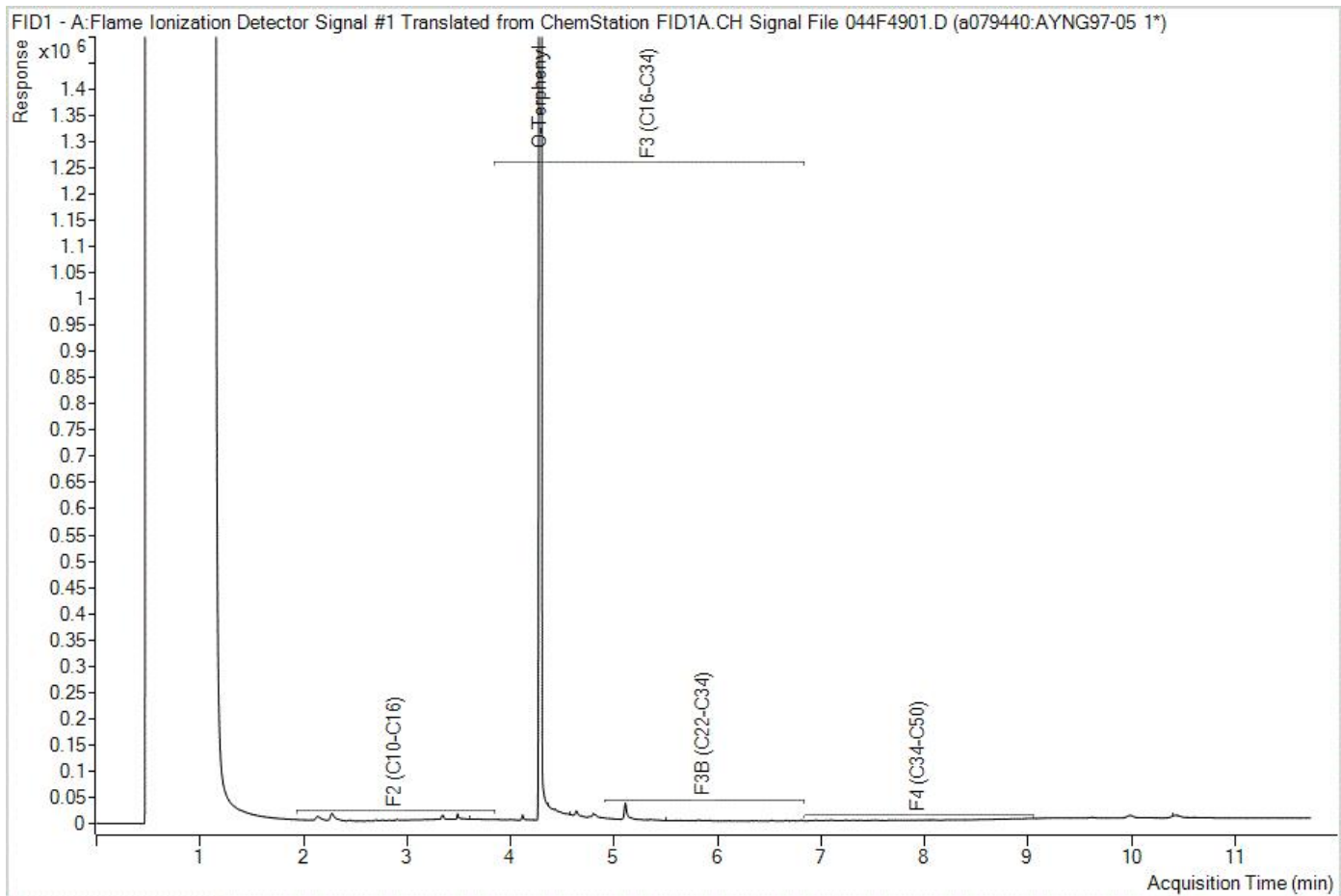
SAMPLES MUST BE KEPT COOL (< 10° C) FROM TIME OF SAMPLING UNTIL DELIVERY TO BUREAU VERITAS

Petroleum Hydrocarbons F2-F4 in Water Chromatogram



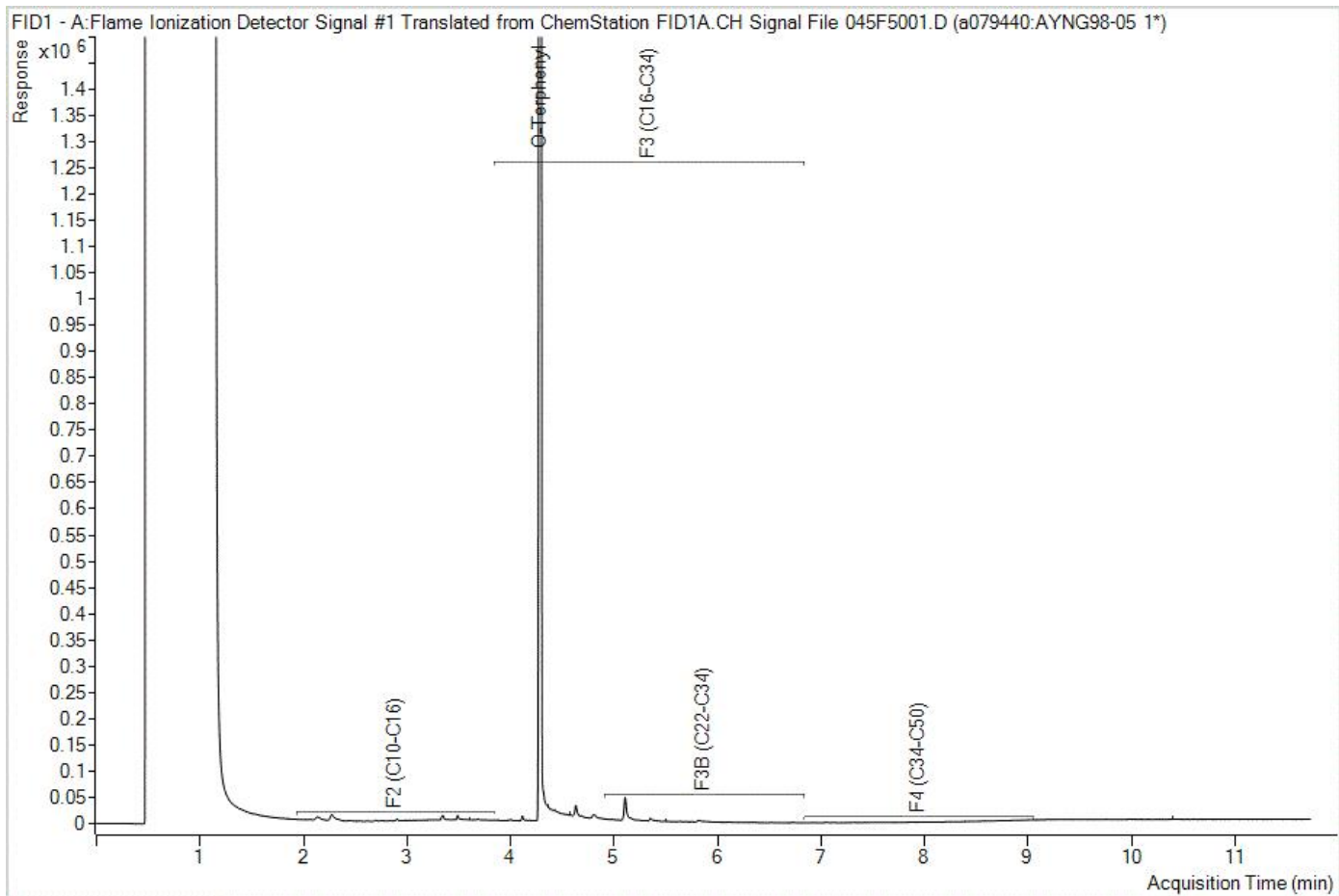
Note: This information is provided for reference purposes only. Should detailed chemist interpretation or fingerprinting be required, please contact the laboratory.

Petroleum Hydrocarbons F2-F4 in Water Chromatogram



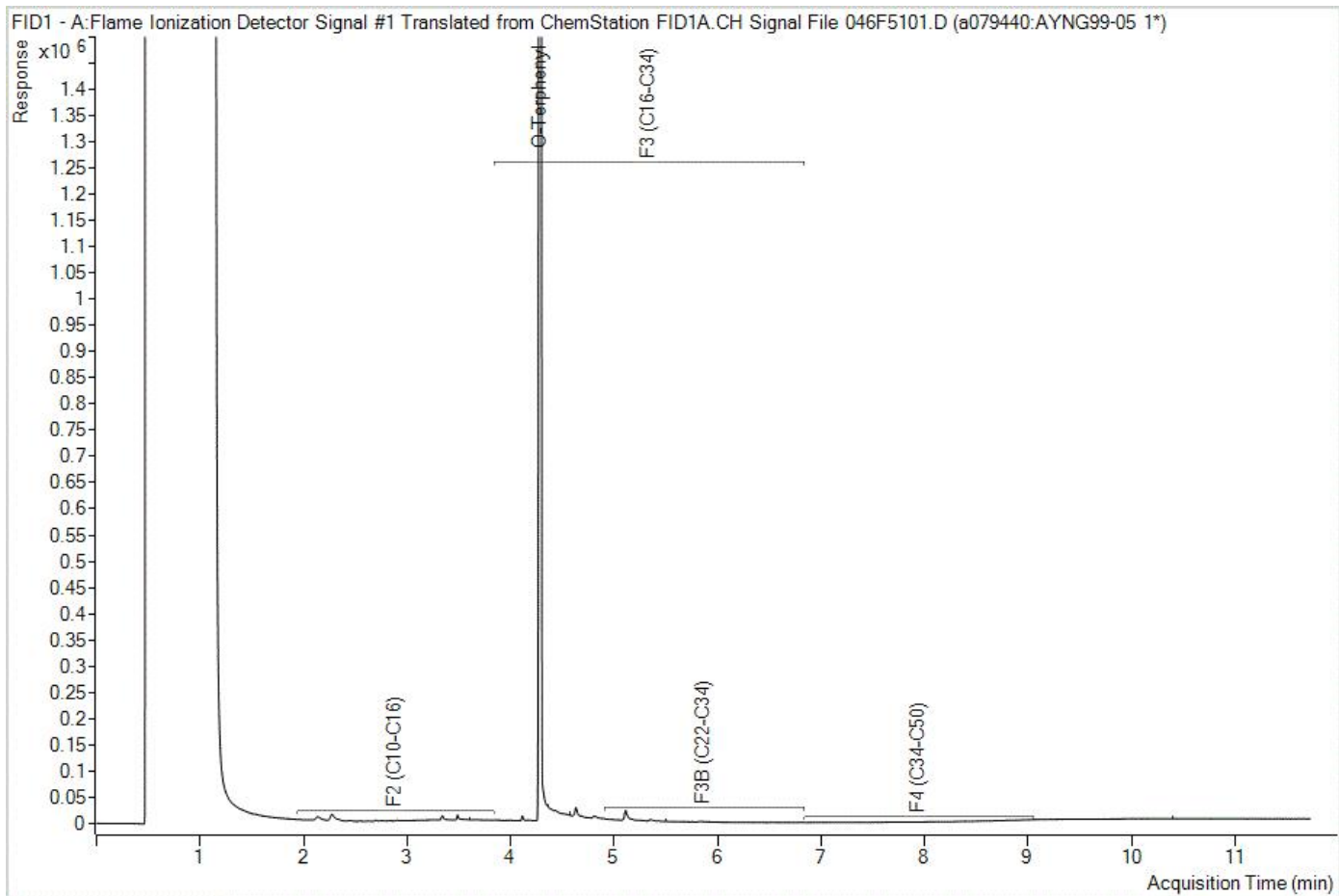
Note: This information is provided for reference purposes only. Should detailed chemist interpretation or fingerprinting be required, please contact the laboratory.

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

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# 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](mailto: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<sub>RA</sub>

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<sub>RA</sub>) 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

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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<sub>RA</sub>, 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<sub>RA</sub> 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

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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.

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## 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.