LOPERS & ASSOCIATES

Phase Two Environmental Site Assessment

506 Kent Street
Ottawa, Ontario

Prepared for:
11034936 Canada Inc.

September 29, 2025

LOP25-038B

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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) update of the vacant property with Civic address No. 506 Kent Street, Ottawa, Ontario ("Phase Two Property", "Property" or "Site").

The Phase Two Property has been vacant for several years and was historically developed and occupied for residential use. There was a heating and plumbing contractor listed at the Property from 1969 until 2000. It is Lopers' understanding that BRIGIL intends to dedicate the Phase Two Property to the City of Ottawa for potential future Parkland use. As redevelopment of the Phase Two Property may involve a change in land use to a more stringent use, a record of site condition (RSC) will be filed with the Ministry of Environment, Conservation and Parks (MECP) for the Phase Two Property.

This Phase Two ESA is being completed as part of due diligence requirements associated with Property redevelopment and to support the submission of an RSC. Additionally, this Phase Two ESA was prepared to provide preliminary excess soil characterization for off-Site soil management during remediation.

Lopers has previously completed a Phase One Environmental Site Assessment (Phase One ESA) (Reference No. LOP25-038A, dated May 21, 2025) for BRIGIL at the Property. The presence of historical residential (and commercial) buildings at the Phase One Property was indicated from at least 1891 to 2002. These structures were demolished prior to 2005; historical demolition and backfilling practices may have included backfilling foundations with demolition debris and other fill materials of unknown environmental quality. Former building foundation footprints are suspected to have remnant demolition debris and/or other poor environmental quality fill material within their historic footprints. 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, the only APEC for the Phase One Property.

The Contaminants of Potential Concern ("CPCs") associated with the historical fill materials are petroleum hydrocarbons (PHCs), benzene, toluene, ethylbenzene, xylenes (BTEXs), polycyclic aromatic hydrocarbons (PAHs), metals & inorganics.

Based on the date of original development of the Site buildings, it was suspected that historical heating oil storage tanks may have been present at the Phase Two Property, although no documentation was found to that effect in records reviewed for the Phase One ESA. The expected fill locations would have been in similar locations to the expected historical fuel storage (if historically present) locations.

The Phase One ESA recommended that a Phase Two ESA be conducted to assess the soil and groundwater quality in the vicinity of the identified APEC.

The scope of work for the Phase Two ESA included drilling ten (10) boreholes at the Phase Two Property. Three of the boreholes were instrumented with groundwater monitoring wells with screens installed in the overburden.

Twenty-two (22) soil samples, including two duplicate samples, were submitted for laboratory analysis for a combination of PHCs, BTEXs, VOCs, PAHs, metals and inorganics. One sample was also submitted for toxicity characteristic leaching procedure (TCLP) for leachate and waste characterization purposes.

Groundwater sampling of the 3 new monitoring wells at the Phase Two Property was completed. Five groundwater samples, including a duplicate sample and trip blank, were submitted for laboratory analysis for a combination of PHCs, BTEXs, PAHs, metals and inorganics; the trip blank was analyzed for VOCs.

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

The following soil samples had exceedance concentrations reported compared to their respective Site Condition Standards, as noted in Table 1a, Table 1b and 1c below:

Table 1a: Soil Exceedances – Petroleum Hydrocarbons

	Exceeding Parameter:		F3 PHCs (C16-C34)
Sample Location	MECP Table 3 Site Condition Standards		300 ug/g
	Sample ID	Sample Depth	Reported Concentration (ug/g)
BH2-25	BH2-25-SS4	2.3 – 2.9 m BGS	320
	DUP-1-03/18	Duplicate Sample of BH2-25-SS4	390

m BGS – metres Below Ground Surface

Table 1b: Soil Exceedances – Metals & Inorganics

Exceeding Parameter:			Antimony	Cobalt	Lead	Mercury	Vanadium	Conductivity	Sodium Adsorption Ratio
Sample Location	MECP Table 3 Site Condition Standards		7.5 ug/g	22 ug/g	120 ug/g	0.27 ug/g	86 ug/g	0.7 ug/g	5 ug/g
	Sample ID	Sample Depth	Reported Concentration (ug/g)						
BH1-25	BH1-25-SS2	0.8 - 1.4 m BGS	-	-	-	-	-	0.74	6.3
BH2-25	BH2-25-SS4	2.3 - 2.9 m BGS	31	-	1,700	-	-	-	-
	DUP-1-03/18 (Duplicate of BH2-25-SS4)		29	-	1,100	-	-	-	-
	BH2-25-SS5	3.1 - 3.7 m BGS	-	26	-	-	110	1.2	-
BH3-25	BH3-25-SS3	1.5 - 2.1 m BGS	-	-	180	-	-	2.4	-
BH4-25	BH4-25-SS3	1.5 - 2.1 m BGS	-	-	250	0.36	-	1.3	6.3
BH5-25	BH5-25-SS3	1.5 - 2.1 m BGS	-	-	410	0.33	-	-	-
	BH5-25-SS4	2.3 - 2.9 m BGS	-	-	250	-	-	-	-
BH6-25	BH6-25-SS3	1.5 - 2.1 m BGS	-	-	-	-	-	-	7.5
	BH6-25-SS5	3.1 - 3.7 m BGS	-	-	-	-	-	-	5.4
BH7-25	BH7-25-SS2	0.8 - 1.4 m BGS	8.6	-	370	-	-	1.1	15
	BH7-25-SS4	2.3 - 2.9 m BGS	-	-	-	-	-	-	6.5
BH8-25	BH8-25-SS2	0.8 - 1.4 m BGS	-	-	270	0.41	-	2.6	17
	DUP-2-03/19 (Duplicate of BH8-24-SS2)		-	-	280	0.35	-	2.4	17
	BH8-25-SS4	2.3 - 2.9 m BGS	-	-	-	-	-	1.3	6.3
BH9-25	BH9-25-SS2	0.8 - 1.4 m BGS	-	-	450	0.51	-	2.4	20
	BH9-25-SS3	1.5 - 2.1 m BGS	-	-	-	-	-	1.4	24
MW-1	MW-1 SS-2	0.8 - 1.5 m BGS	-	-	190	0.39	-	-	-

The soil samples collected from the Site were in locations that would have been in close proximity and/or subject to road/surface de-icing activities with the application of salts applied to ground surfaces for the safety of vehicular or pedestrian traffic under conditions of snow or ice or both and is suspected to exceed the Site Condition Standard solely as a result of these activities. Based on this application and the exemption set forth in Section 49.1 of O.Reg. 153/04, the applicable site condition standard is deemed not to be exceeded for the purpose of Part XV.1 of the Act.

Table 1c: Soil Exceedances – Polycyclic Aromatic Hydrocarbons

Exceeding Parameter:			Anthracene	Benzo(a) anthracene	Benzo(a)pyrene	Benzo(b/j) fluoranthene	Benzo(k) fluoranthene	Dibenzo(a,h) anthracene	Fluoranthene	Indeno(1,2,3-cd) pyrene
Sample Location	MECP Table 3 Site Condition Standards		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
	Sample ID	Sample Depth	Reported Concentration (ug/g)							
BH2-25	BH2-25-SS4	2.3 - 2.9 m BGS	-	-	0.34	-	-	-	0.71	-
	DUP-1-03/18 (Duplicate of BH2-25-SS4)		-	0.83	0.77	0.98	-	-	1.5	0.48
BH3-25	BH3-25-SS3	1.5 - 2.1 m BGS	-	0.55	0.56	-	-	-	1.4	0.39
BH4-25	BH4-25-SS3	1.5 - 2.1 m BGS	0.88	2.2	2	2.3	0.86	0.25	4.8	0.99
BH5-25	BH5-25-SS3	1.5 - 2.1 m BGS	-	-	0.36	-	-	-	-	-
BH7-25	BH7-25-SS2	0.8 - 1.4 m BGS	-	0.7	0.71	0.85	-	-	1.2	0.48
MW-1	MW-1 SS-2	0.8 - 1.5 m BGS								

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

All of the groundwater samples collected as part of this 2025 Lopers Phase Two ESA and previously in the 2018 Pinchin Phase II ESA were in compliance with the Site Condition Standards. Only one of the Pinchin monitoring wells from 2018 were observed at the Property, but it was not serviceable for groundwater sampling.

The Phase Two Property (soil) is not in compliance with the site condition standards as of the certification date of March 25, 2025.

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. It has been interpreted that the submission of a record of site condition will be required since there will be a change of land use of the Phase Two Property to a more sensitive use.

2. Introduction

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 property with civic address No. 506 Kent Street, Ottawa, Ontario ("Phase Two Property", "Property" or "Site"). The location of the Phase Two Property within the City of Ottawa is presented on Figure 1: Key Plan.

i. Site Description

The Phase Two Property is legally described as Lot 9 (West Kent Street Lots) Registered Plan 30, in the City of Ottawa and has a property identification number (P.I.N.) of 04122-0228 as obtained from a Legal Survey completed by Farley, Smith & Denis Surveying Ltd. (FSD), on September 8, 2004. The boundaries of the Phase Two Property are presented on Figure 2: Site Plan.

Based on approximate dimensions obtained from the City of Ottawa's GIS mapping software, the Phase Two Property has an approximate area of 610.67 m^2 (0.06 Hectares) and a zoning designation of R4UD[479], which signifies Residential zoning with a height restriction of 4 storeys. The Phase Two Property is located on the west side of Kent Street, immediately north of the Arlington Avenue intersection.

ii. Property Ownership

The Phase Two Property is currently owned by 12712610 Canada Inc., a subsidiary company of BRIGIL. This Phase Two ESA was commissioned by Mr. Anthony Johnston, Project Manager - Land Development and Architecture 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.

Current and Proposed Future Use

The Phase Two Property has been vacant for several years and was historically developed and occupied for residential use. There was a heating and plumbing contractor listed at the Property from 1969 until 2000. It is Lopers' understanding that BRIGIL intends to dedicate the Phase Two Property to the City of Ottawa for potential future Parkland use.

As redevelopment of the Phase Two Property may involve a change in land use to a more stringent use, a record of site condition (RSC) will be filed with the Ministry of Environment, Conservation and Parks (MECP) for the Phase Two Property.

iii. Applicable Site Condition Standard

Through Ontario Regulation 153/04 (O.Reg. 153/04), the Ministry of Environment, Conservation and Parks (MECP) prescribes the applicable site condition standards for properties based on the intended land use. The proposed future use of the Phase Two Property is parkland, which is included in the MECP's residential/parkland/institutional land use category.

The Phase Two Property and all other properties within 250 m of the property boundaries are supplied by the municipal drinking 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 over the full depth of overburden was considered for this Phase Two ESA. The full depth generic site condition standards were selected for comparison for the Phase Two Property [O.Reg. 153/04, sections 36, 37, 38, 39 and 40].

The Phase Two Property is not situated within or adjacent to an area of natural significance and does not include any land within 30 m of an area of natural significance. The pH of the soil was analyzed as part of this Phase Two ESA and was found to range from 7.26 to 7.75. As such, the Phase Two Property is not considered to be an environmentally sensitive area [O.Reg. 153/04, section 41].

A layer of silty sand and gravel (fill) was encountered from near ground surface to depths ranging from 2.3 to 3 m below ground surface (BGS) in all 10 boreholes. This soil type would be classified as coarse grained soil with an average thickness of approximately 2.5 m. Silty clay and silty sand were encountered immediately below the shallow silty sand and gravel; grain size analysis was completed for 3 soil samples; 2 of the 3 analyzed the silty clay and silty sand are classified as a fine grained soil, as reported through grain size analysis. The entire overburden soil profile of the Phase Two Property is not known; however, a substantial layer of silty clay is known to exist locally. For the purposes of this Phase Two ESA, the soil conditions are considered to be coarse grained, which are representative of the depth of investigation for the APECs and provide a more conservative comparison to the MECP site condition standards than the fine-grained values [O.Reg. 153/04, section 42]. Further investigation and laboratory analysis would be required to apply the fine grained soil conditions.

Review of the drilling program and borehole/monitoring well logs completed as part of this Phase Two ESA and previous investigations was completed. It was determined that over 2/3 of the Property has greater than 2 m of overburden soil. The Property is therefore not considered a shallow soil property [O.Reg. 153/04, section 43.1].

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

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

3. Background Information

i. Physical Setting

The *Phase One Study Area* referred to in this section and the next section includes the Phase Two Property itself and properties with their boundaries within 250 m of the Phase Two Property limits.

No water bodies or areas of natural and scientific interest (ANSIs) were identified on the Phase Two Property or the Phase One Study Area.

The local topography in the Phase One Study Area generally slopes downward to the south. The Phase Two Property is generally at grade with the neighbouring properties and Right-of-Ways. Off-site there is a local depression to the southeast, where Kent Street crosses Highway 417 via an underpass. The nearest surface water body identified is Patterson Creek, located approximately 630 m southeast of the Phase Two Property. The Rideau Canal (man made and concrete-lined thus not interacting with groundwater) is present approximately 850 m east of the Property. The Ottawa River is located approximately 1.8 km north of the Phase Two Property.

Surface water flow is dominated by infiltration with some localized drainage directed towards catch basins in adjacent municipal rights-of-way to the south and east of the Property, which drain into the municipal stormwater sewer system.

No drinking water wells are located at the Phase Two Property. No potable water wells are suspected to be present in the vicinity of the Property given that the surrounding properties are serviced by the City of Ottawa's municipal potable water supply network. The Phase Two Property and Phase One 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 (listed in reverse chronological order)

BRIGIL provided the following four reports for review as part of this Phase One ESA:

1. "Phase One Environmental Site Assessment, 506 Kent Street, Ottawa, Ontario", dated May 21, 2025, completed by Lopers & Associates for BRIGIL. ("2025 Lopers Phase One ESA")
2. "Phase II Environmental Site Assessment, 506 Kent Street, Ottawa, Ontario", dated September 7, 2018, completed by 2018 Pinchin Ltd., for 2217822 Ontario Inc. o/a Jones Bros. ("Pinchin Phase II ESA")
3. "Phase One Environmental Site Assessment, 506 Kent Street, Ottawa, Ontario", dated August 10, 2018, completed by 2018 Pinchin Ltd., for 2217822 Ontario Inc. o/a Jones Bros. ("Pinchin Phase I ESA")

2025 Lopers Phase One ESA

A Phase One ESA report was prepared for the Property in May of 2025 by Lopers & Associates. The Phase One ESA identified one potentially contaminating activity (PCA) at the Phase One Property:

> *"The presence of historical residential buildings at the Phase One Property was indicated from at least 1891 to 2002. These structures were demolished prior to 2005; historical demolition and backfilling practices may have included backfilling foundations with demolition debris and other fill materials of unknown environmental quality. Former building foundation footprints are suspected to have remnant demolition debris and/or other poor environmental quality fill material within their historic footprints. 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, the only APEC for the Phase One Property."*

Fifty properties with PCAs in the Phase One Study Area were identified as part of this Phase One ESA. Neighbouring property PCAs consist of a historic railway, industrial activities, reported fuel spills, various historical automotive garages, gas stations and dry cleaners. The 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 were not considered to represent APECs for the Phase One Property.

A Phase Two Environmental Site Assessment was recommended for the Property.

2018 Phase II Environmental Site Assessment by Pinchin (2018 Pinchin Phase II ESA)

The 2018 Pinchin Phase II ESA was completed as recommended to assess the APECs identified during the 2018 Pinchin Phase I ESA, namely, the soil quality in the vicinity of the historical historic fill placement as well as investigation of groundwater quality. The 2018 Pinchin Phase II ESA involved drilling 4 boreholes, all of which were instrumented with groundwater monitoring wells.

A total of 4 soil samples from the Property were submitted for laboratory analysis for a combination of PHCs, volatile organic compounds ("VOCs") including benzene, toluene,

ethylbenzene and xylenes ("BTEXs"), polycyclic aromatic hydrocarbons ("PAHs") and/or metals. There were exceedances of the Site Condition Standards for lead, mercury and various PAHs in one of the analyzed soil samples from the 2018 Pinchin Phase II ESA. Pinchin stated that the impacted soil is representative of the shallow fill material encountered across the Site and can be addressed during redevelopment by excavation or implementing a risk management plan.

- The presence of fill material, which has been identified to be impacted with metals and PAHs, 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.

Four groundwater samples were submitted for a combination of Metals, PHCs, VOCs (including BTEXs) and PAHs. These groundwater samples were in compliance with the Site Condition Standards.

Lopers comment: The absence of groundwater impacts negates the assumed requirement for groundwater remediation which was included in the Paterson Group's 2016 Remedial Cost Estimate.

2018 Phase I Environmental Site Assessment by Pinchin (2018 Pinchin Phase I ESA)

The 2018 Pinchin Phase I ESA identified that the Property was originally developed for residential purposes since at least 1948. Pinchin identified the presence of a Plumbing & Heating contractor at the Property from 1969 to 2000. The Property was vacant land at the time of the 2018 Pinchin Phase I ESA and it was observed to have been vacant since at least 2004.

Pinchin identified the presence of a commercial bus station at 265 Catherine Street, approximately 20 m south of the Phase One ESA, from 1974 until at least 2011; a fuel underground storage tank ("UST") nest was reported to be associated with operations at this property. The reported presence of UST(s) at the 265 Catherine Street property represents PCA #10, however, based on the separation distance from the Phase One Property and the inferred down-gradient orientation of the PCA with respect to the Property, it has not been interpreted to contribute to an APEC for the Site.

Pinchin was provided with an April 22, 2016 "Remedial Cost Estimate", completed by Paterson Group Inc. ("Paterson"). The Paterson Remedial Cost Estimate assumed the presence of approximately 1,400 m^3 of soil which was contaminated with metals and 100,000 L of groundwater contaminated with petroleum hydrocarbons ("PHCs") that required remediation prior to redevelopment of the Property. Pinchin inferred that this contamination originated from the previously identified poor environmental quality fill material (PCA #1) which was a result of the placement of demolition debris at the Site during demolition of the former Site building.

Lopers comment: The Paterson 2016 Remedial Cost Estimate precedes the formal acquisition of environmental information on the Property via the Pinchin Phase I and II ESAs in 2018.

4. Scope of Investigation

i. Overview of Site Investigation

This Phase Two ESA was designed to meet the general requirements of O.Reg. 153/04 as amended, with details of scope presented in Lopers' letter entitled:

- "Proposal for Phase One and Phase Two Environmental Site Assessments, Environmental Remediation Supervision and Confirmatory Sampling & Record of Site Condition Submission, Proposed Residential Re-development, 506 Kent Street, Ottawa, ON", dated February 17, 2025, reference No. PRO-038-25-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. There were no active underground utility services identified at the Property during review of the Ontario 1-Call public locates. Copies of the underground locates are provided in Appendix B.

A total of 10 boreholes (BH1-25 through BH10-25) were drilled at the Phase Two Property on March 18 and 19, 2025. The boreholes were drilled using a steel track 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 three groundwater monitoring wells (BH6-25, BH7-25 and BH8-25) were installed on the northwest, south-central and east portions of the Phase Two Property. The boreholes which were instrumented with groundwater monitoring wells were drilled to the localized depths of 4.57 m BGS and were screened with the intent to straddle the shallow groundwater table. When possible, these groundwater monitoring wells were developed on the day of drilling by removing at least three well volumes or by purging the wells dry three times.

Four boreholes that were completed with groundwater monitoring wells were installed by Pinchin in 2018. These boreholes/monitoring wells were distributed across the Site and representative soil and groundwater samples were collected at the time of the 2018 Pinchin Phase II ESA. Only one of the Pinchin monitoring wells from 2018 (MW-2) were observed at the Property, but it was not serviceable for groundwater sampling.

The locations of the boreholes/monitoring wells drilled/installed as part of this Phase Two ESA as well as previously drilled monitoring wells at the Phase Two Property are presented on Figure

2: Site Plan. The rationale for the placement of the boreholes/monitoring wells is provided below:

BH1-25, BH2-25 and BH3-25 were drilled on the east portion of the Phase Two Property. These boreholes were placed in locations to assess fill quality at the Site (APEC #1) in the location of the historic residential building. A historic monitoring well (MW-2) installed by Pinchin in 2018, was present in the vicinity of BH1-25. A historic monitoring well (MW-3) was drilled and installed by Pinchin in 2018, in the vicinity of BH3-25; this monitoring well could not be located at the time of the 2025 Phase Two ESA and is assumed to have been destroyed or buried.

BH6-25 was drilled on the northwest portion of the Phase Two Property. This borehole was placed in a location to assess fill quality at the Site (APEC #1) in the location of a historical outbuilding/private garage. This borehole was instrumented with a groundwater monitoring well, with its screen installed within soil which was observed to be wet during the drilling/soil sample collection.

BH7-25, BH8-25 and BH9-25 were drilled on the central portion of the Phase Two Property. These boreholes were placed in locations to assess fill quality at the Site (APEC #1) in the locations to the west of the historic residential building. These borehole locations would also have been suitable for an assessment of historical heating oil storage/filling, assuming that the former Site building was possibly historically heated using furnace oil. BH7-25 and BH8-25 were instrumented with groundwater monitoring wells, with their screens installed within soil which was observed to be wet during the drilling/soil sample collection.

BH4-25, BH5-25 and BH10-25 were drilled in the east portion of the Phase Two Property. These boreholes were placed in locations to assess fill quality and provide general coverage of the Site (APEC #1). Historic monitoring wells, MW-4 and MW-1, were drilled and installed by Pinchin in 2018, in the vicinity of BH4-25 and BH10-25, respectively; these monitoring wells could not be located at the time of the 2025 Phase Two ESA and are assumed to have been destroyed or buried.

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 (BH6-25, BH7-25 and BH8-25) was completed at the Phase Two Property on March 25, 2025. The groundwater level was measured in the Pinchin monitoring well MW-2, however, the well protector had been damaged, and the top cap was broken; this monitoring well was not sampled as groundwater was likely impacted from surficial influence and thus would not be representative of actual Site conditions.

Static groundwater levels were measured 6 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. Groundwater samples were selected for laboratory analysis of select CPCs based on APECs and CPCs identified in the Phase One ESA.

An elevation survey was completed of the boreholes/monitoring wells drilled at the Phase Two Property by Lopers on March 25, 2025. The boreholes/monitoring wells were surveyed relative to the top of spindle of the fire hydrant southeast of the Site, northwest of the Kent Street and Arlington Avenue intersection. The geodetic elevation of the top of spindle of this fire hydrant was provided on the 2004 FSD Legal Survey as 69.433 m above sea level (m ASL). Ground surface elevations were surveyed between 68.6 m ASL to 68.8 m ASL across the entire Phase Two Property (i.e. generally flat Site topography).

ii. Media Investigation

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

Soil quality at the Phase Two Property was investigated through the collection of soil samples at varying depths in 10 boreholes facilitated by drilling using a track mounted CME drill rig with stainless-steel split spoon sampling.

Groundwater quality at the Phase Two Property was investigated through the installation of three monitoring wells. The monitoring wells were installed to the localized depths of approximately 4.57 m BGS and were screened to straddle the shallow groundwater table. The monitoring wells of interest at the Phase Two Property have their monitoring well screens installed within weathered overburden and are expected to straddle the shallow groundwater aquifer. The 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 sediment sampling was completed as part of the Phase Two ESA.

iii. Phase One Conceptual Site Model

The Phase One Property, which has the same location orientation and property boundaries as the Phase Two Property, is located at Civic No. 506 Kent Street, Ottawa, Ontario and has an approximate area of 610.67 m^2 (0.06 Hectares).

Phase One Property has been developed or occupied for residential use since 1891 until at least 1969. A commercial record of a heating and plumbing contractor was identified at the Property from 1969 to 2000. Between 2002 and 2005 the residential (and/or commercial) building on the east portion of the Property was demolished and the foundation backfilled. Based on the most recent use of the Phase One Property the O.Reg. 153/04 property use classification was interpreted to be Commercial Use.

The Phase One Property is currently vacant, gravel surfaced and has been observed to be used for temporary parking by the adjacent restaurant and residential neighbours. 12712610 Canada

Inc. purchased the Property in 2024, and it is understood that the Property will be dedicated to the City of Ottawa for potential future Parkland use. The Phase One Property is immediately surrounded by a municipal Right-of-Way (Kent Street) and residential dwellings to the east; a municipal Right-of-Way (Arlington Avenue), followed by vacant commercial land to the south, commercial (restaurant) followed by residential properties to the north and residential properties to the west.

The Phase One Study Area includes the Phase One Property and extends to properties with 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.

No water bodies or areas of natural significance are located at the Phase One Property or in the Phase One Study Area. No drinking water wells are located at the Phase One Property, and the Phase One Study Area is serviced by the City of Ottawa's municipal potable water distribution network.

The local topography in the Phase One Study Area generally slopes downward to the south. The Phase One Property is generally flat and at grade with the neighbouring properties and Right-of-Ways. Off-site there is a local depression to the southeast, where Kent Street crosses Highway 417 via an underpass. The nearest surface water body identified is Patterson Creek, located approximately 630 m southeast of the Phase One Property. The Rideau Canal (man made and concrete-lined thus not interacting with groundwater) is present approximately 850 m east of the Property. The Ottawa River is located approximately 1.8 km north of the Phase Two Property.

Based on the historical research, the general stratigraphy of the Phase One Property and Phase One Study Area consists of sand and gravel fill, underlain by silty clay, followed by silty sand and gravel (till). The overburden soil is underlain by interbedded limestone and/or shale bedrock, which was reported at approximately 8 to 12 m below ground surface. Groundwater is expected at a depth of approximately 2 to 5 m BGS and flows in a predominantly northeast direction.

The presence of historical residential buildings at the Phase One Property was observed from at least 1891 to 1956. These structures were demolished prior to 2005; historical demolition and backfilling practices may have included backfilling foundations with demolition debris and other fill materials of unknown environmental quality. Former building foundation footprints are suspected to have remnant demolition materials and/or other poor environmental quality fill material within their historic footprints. The suspected presence of poor-quality fill material at the Property represents PCA #1 and is associated with O.Reg. 153/04 PCA: Importation of Fill Material of Unknown Quality. This represents APEC #1 for the Phase One Property.

The Contaminants of Potential Concern ("CPCs") associated with the historical fill materials are PHCs, BTEXs, PAHs, metals & inorganics.

Fifty properties with PCAs in the Phase One Study Area were identified as part of this Phase One ESA. Neighbouring property PCAs consist of a historic railway, industrial activities, various historical automotive garages, gas stations and dry cleaners. The 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.

The Phase One Property is presently vacant and has been disconnected from utilities, as such, no water, sewer or natural gas connections were observed. Historic underground utility corridors do have the potential to affect contaminant distribution and transport.

iv. Deviations from Sampling and Analysis Plan

Volatile Organic Compounds ("VOCs") were not initially identified as a CPC, however, following observation of elevated volatile vapour concentrations in screening soil samples from BH6-25, VOCs were included as a CPC for sampling and analysis in select soil samples from this borehole location.

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

v. Impediments

There were no impediments encountered as part of this Phase Two ESA.

5. Investigation Method

i. General

The investigation method for this Phase Two ESA involved an assessment of the soil and 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 10 boreholes distributed across the Site. The boreholes were drilled using a track mounted CME 55 drill rig operated by George Downing Estate Drilling. Soil samples were collected 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 three 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 as part of the Phase Two Property. An elevation survey was completed of the boreholes/monitoring wells drilled at the Phase Two Property by Lopers. The boreholes/monitoring wells were surveyed relative to the top of spindle of a fire hydrant with a known geodetic elevation.

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

ii. Drilling

The Phase Two ESA drilling field program was completed on March 18 and 19, 2025 under the direction of Mr. Luke Lopers, P.Eng. Ten 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 track mounted CME 55 drill, equipped with hollow stem augers and stainless-steel split spoons.

Samples were collected using stainless-steel split spoons from the near surface to the full depth of drilling. Split spoon samples, collected in 0.6 m segments, were recovered 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, were washed using soap and water and a scrub brush between samples to minimize the potential for cross-contamination among samples. The field technician used sterile nitrile gloves, which were changed prior to the handling of each soil sample to further reduce the potential of cross-contamination. The flights of the hollow stem augers were cleaned manually following each borehole.

iii. Soil Sampling

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

Soil samples were initially collected in Ziploc bags for initial screening as part of sample selection. Soil samples selected for laboratory analysis were collected in dedicated clear glass jars and vials prepared and provided by the analytical laboratory. Soil samples collected for BTEXs/VOCs and the F1 range of PHCs analysis were collected using a dedicated graduated syringe provided by the laboratory and placed directly into a glass vial with a known quantity of

methanol preservative. Analytes and associated preservatives were specified on each jar/vial by the laboratory. Each jar/vial sample set was provided with a unique sample identifier, project number and date of sampling in the field.

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

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

- Silty Sand & Gravel (Fill);
- Silty Sand; and,
- Silty Clay.

Detailed geological and physical descriptions of these stratigraphic units are provided in Section 6.i Geology of this report.

iv. Field Screening Measurements

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

Additional field screening of the soil samples was completed using an RKI Instruments Model Eagle-2 combustible gas detector ("RKI Eagle"). The RKI Eagles used for soil sample screening as part of this Phase Two ESA were obtained from Maxim Environmental and Safety Inc. and calibrated by Maxim on March 12, 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 (i.e. fill material at shallow depths or PHC impacts near the groundwater table interface).
4. Select sample of underlying (inferred 'clean') soil the maximum depth where contamination was suspected in overlying soils.

v. Groundwater: Monitoring Well Installation

Installation of monitoring wells in BH6-25, BH7-25 and BH8-25 were completed by George Downing Estate Drilling. The wells were installed using slotted PVC No. 10 monitoring well screens, which were 51 mm in diameter; these screens were installed at depths that straddled the shallow groundwater table in each of the aforementioned boreholes. 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 1 m above the surface grade with a PVC riser, 51 mm in diameter. A threaded PVC end cap was installed at the base of the screen to prevent sediment infiltration, while a J-Plug was installed at the top of the riser.

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 steel stickup protective casings, which were backfilled with sand to stabilize the casings. The monitoring wells were completed with above grade installations with protective steel stickup boxes.

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 March 18 and 19, 2025 by purging the wells dry at least three times. The wells were left to stabilize for up to 14 days prior to groundwater sampling.

vi. Groundwater: Field Measurement of Water Quality Parameters

Measurements of the groundwater quality field parameters were completed to determine stabilization of these parameters prior to sampling. These measurements were completed using a Horiba U-52 groundwater quality measurement device ("Horiba") or YSI Pro Plus Quatro groundwater quality measurement device ("YSI"). The Horiba/YSI 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 March 19, 2025. The Horiba/YSI is capable of measuring temperature, pH, conductivity, turbidity, dissolved oxygen and oxidation reduction potential. Additional equipment and calibration information for the Horiba/YSI are provided on the certificate of calibration included in Appendix D.

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

vii. Groundwater: Sampling

Lopers completed a groundwater sampling event of the 3 newly installed groundwater monitoring wells (BH6-25, BH7-25, BH8-25) on March 25, 2025. All of these monitoring wells

have their screens set in the overburden and were installed with their screens straddling the first aquifer.

The groundwater level was measured in the previously existing MW-2, however, the well protector had been damaged, and the top cap was broken; this monitoring well was not sampled as groundwater was likely impacted from surficial influence and may not be representative of actual Site conditions.

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, BTEXs, 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.

viii. Sediment: Sampling

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

ix. Analytical Testing

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

x. Residue Management Procedures

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.

xi. Elevation Surveying

An elevation survey was completed of the boreholes/monitoring wells drilled at the Phase Two Property by Lopers on March 25, 2025. The boreholes/monitoring wells were surveyed relative to the top of spindle of the fire hydrant southeast of the Site, northwest of the Kent Street and Arlington Avenue intersection. The geodetic elevation of top of spindle of this fire hydrant was provided on the 2004 FSD Legal Survey as 69.433 m above sea level (m ASL).

xii. Quality Assurance and Quality Control Measures

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

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

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

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

A trip blank water sample was submitted for VOC laboratory analysis from the groundwater sampling event completed on March 25, 2025. No detectable VOC concentrations were reported in the trip blank water samples.

Two duplicate soil samples DUP-1-03/18 (BH2-25-SS4) and DUP-2-03/19 (BH8-25-SS2) were prepared in the field by taking two soil samples from the same interval on the split-spoon and were submitted to the laboratory as blind field duplicate samples (of their respective samples). These samples were analyzed for PHCs, 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-1-03/25 was submitted to the laboratory as a blind field duplicate sample of BH8-25-GW1. These samples were analyzed for PHCs, 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.

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

6. Review and Evaluation

i. Geology

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

Silty Sand & Gravel (Fill)

A layer of silty sand and gravel with some clay fill material, ranging from approximately 1.7 to 3.1 m in thickness, was encountered at ground surface in all of the boreholes. This material was generally loose to compact and was found to be moist, becoming wet at approximately 2.4 m BGS.

Evidence of deleterious fill was observed in all of the boreholes drilled as part of this Phase Two ESA. Physical observations of soil mixed with debris, brick, asphalt, slag (spent coal and metal), wood and other refuse were observed at a range of depths in all 10 of the boreholes. There was no staining observed in this layer, however, a 'chemical odour' was observed in soil samples collected from BH6-25, in the northwest portion of the Site.

Silty Sand

A layer of silty sand material, with trace to some gravel and clay, was present below the Silty Sand & Gravel (Fill) in 7 (BH4-25 through BH10-25) of the 10 boreholes drilled as part of this

Phase Two ESA. This silty sand was encountered at thicknesses ranging from approximately 0.7 to 2.1 m in thickness. This layer was described to be found in moist to wet moisture conditions.

No odours, staining or evidence of deleterious fill were observed in this layer.

Silty Clay

A layer of silty clay was encountered at depths ranging from approximately 3.1 to 4.0 m below the silty sand & gravel (Fill) layer in BH1-25, BH2-25 and BH3-25 and below the silty sand layer in BH6-25 though BH10-25. This material was identified to consist of silty clay, was firm becoming soft with depth and was generally grey in colour. This layer was encountered in wet moisture conditions.

No odours, staining or evidence of deleterious fill were observed in this layer.

Aquifer

The shallow (unconfined) aquifer is the aquifer of interest based on the nature of APECs and PCAs identified for the Phase Two Property. Based on observations and measured groundwater monitoring data collected as part of this investigation, the aquifer is present in the silty sand geological unit and extends into the silty clay unit beneath.

Based on moisture contents observed in the soil samples collected as part of this Phase Two ESA, it is expected that seasonal and annual variability affect the groundwater table elevation in the shallow aquifer.

ii. Groundwater Elevations and Flow Direction

Based on the nature of the primary CPCs identified for groundwater at the Phase Two Property (including light non-aqueous phase liquids (LNAPLs) possibly present in historical fuel storage tanks, the screened intervals for the groundwater monitoring wells were installed to straddle the shallow groundwater table within the overburden.

An elevation survey was completed of the boreholes/monitoring wells drilled at the Phase Two Property by Lopers on March 25, 2025. The boreholes/monitoring wells were surveyed relative to the top of spindle of the fire hydrant southeast of the Site, northwest of the Kent Street and Arlington Avenue intersection. The geodetic elevation of top of spindle of this fire hydrant was provided on the 2004 FSD Legal Survey as 69.433 m above sea level (m ASL).

A shallow groundwater aquifer was present within the overburden at the Phase Two Property. Given that the groundwater table was found in the silty sand geological unit in all monitoring wells at the Phase Two Property, it is inferred that the same shallow aquifer exists across these units and can be used for a determination of localized groundwater flow direction and hydraulic gradient. Monitoring well construction details are presented in Table 2 below.

Table 2: Monitoring Well Construction Details

Monitoring Well	Ground Surface Elevation (m AMSL)	Top of Piezometer Elevation (m AMSL)	Screen Elevation (m AMSL)	Sand Pack Elevation (m AMSL)	Bentonite Seal (m AMSL)
BH6-25	68.72	69.68	64.14 – 67.19	64.14 – 67.49	67.49 – 68.42
BH7-25	68.66	69.59	64.09 – 67.14	64.09 – 67.44	67.44 – 68.36
BH8-25	68.71	69.71	64.15 – 67.20	64.15 – 67.50	67.50 – 68.41
MW-2**	68.76	68.68	64.19 – 67.24	64.19 – 67.54	67.54 – 68.70

m AMSL – metres Above Mean Sea Level
** – Installed by Pinchin in 2018

On March 25, 2025, following a period of 6 days for stabilization after drilling and developing the monitoring wells, the groundwater levels were measured and are presented in Table 3 below. The groundwater table was measured at depths ranging between 2.26 to 2.48 m BGS on March 25, 2025.

Table 3: Groundwater Table Elevations Measured on March 25, 2025

Monitoring Well	Ground Surface Elevation (m AMSL)	Top of Piezometer Elevation (m AMSL)	Depth to Groundwater (m below TOP)	Groundwater Table Elevation (m AMSL)	Depth to Groundwater (m BGS)
BH6-25	68.72	69.68	3.22	66.46	2.26
BH7-25	68.66	69.59	3.41	66.18	2.48
BH8-25	68.71	69.71	3.27	66.44	2.27
MW-2**	68.76	68.68	2.22	66.46	2.31

m AMSL – metres Above Mean Sea Level
m BGS – metres below Ground Surface
** – Installed by Pinchin in 2018

Based on the measured groundwater table elevations in the monitoring wells BH6-25, BH7-25, BH8-25 and MW-2 measured on March 25, 2025, the local groundwater flow direction at the Phase Two Property was towards the southeast as shown on Figure 3: Groundwater Flow Interpretation.

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 BH6-25, BH7-25, BH8-25 and MW-2 were used for a determination of groundwater flow direction. These groundwater monitoring wells were the primary monitoring wells used for assessment of the APECs identified in the Phase One ESA. Based on the measured groundwater table elevations in these monitoring wells, the local

groundwater flow direction at the Phase Two Property is towards the south-southeast. 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.

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 historic 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 2.26 to 2.48 m BGS, it is possible that migration of contaminants (if present) through underground utility service trenches (generally approximately 2 to 3 m BGS) could have occurred.

iii. Groundwater: Hydraulic Gradients

The horizontal hydraulic gradient was determined by plotting groundwater contours interpreted from groundwater elevations presented in Table 3 and then by dividing the difference in hydraulic head by the lateral separation distance in the groundwater contours. Based on the measured groundwater elevations on March 25, 2025, from BH6-25, BH7-25, BH8-25 and MW-2, the horizontal hydraulic gradient at the Phase Two Property is approximately 0.023 m/m.

iv. Coarse Grained Soil Texture

A layer of silty sand and gravel (fill) was encountered from near ground surface to depths ranging from 2.3 to 3 m below ground surface (BGS) in all 10 boreholes. This soil type would be classified as coarse grained soil with an average thickness of approximately 2.5 m. Silty clay and silty sand were encountered immediately below the shallow silty sand and gravel; grain size analysis was completed for 3 soil samples; 2 of the 3 analyzed the silty clay and silty sand are classified as a fine grained soil, as reported through grain size analysis. The entire overburden soil profile over the Phase Two Property is not known; however, a substantial layer of silty clay is known to exist locally. For the purposes of this Phase Two ESA, the soil conditions are considered to be coarse grained, which are representative of the depth of investigation for the APECs and provide a more conservative comparison to the MECP site condition standards than the fine-grained values. Further investigation and laboratory analysis would be required to apply the fine grained soil conditions.

v. Soil Field Screening

Initial field screening of the soil samples consisted of visual and olfactory observations made at the time of sample collection during the drilling program. Additional field screening of the soil samples was completed using an RKI Eagle gas detector. Combustible soil vapour screening concentrations in the soil samples from 9 of the 10 boreholes were found to range from 0 to 25 ppm, which is low and generally not considered indicative of significant PHC or VOC contamination. The combustible soil vapour screening concentrations in the soil samples from BH6-25 were measured up to 120 ppm; some of these soil samples were also observed to have a 'chemical odour'.

vi. Soil Quality

Location and Depth of Soil Samples

The following soil samples, which were collected from the boreholes drilled as part of this Phase Two ESA and the 2018 Pinchin Phase II ESA, were submitted for laboratory analysis.

Table 4: Soil Samples Selected for Laboratory Analysis

Sample Location	Sample ID	Sample Depth (m BGS)	Analytical Parameters
2025 Lopers Phase Two ESA			
BH1-25	BH1-25-SS2	0.8 - 1.4 m BGS	PHCs, BTEXs, PAHs, Metals & Inorganics
BH2-25	BH2-25-SS4	2.3 - 2.9 m BGS	PHCs, BTEXs, PAHs, Metals & Inorganics
	DUP-1-03/18 (Duplicate of BH2-25-SS4)		PHCs, BTEXs, PAHs, Metals & Inorganics
	BH2-25-SS5	3.1 - 3.7 m BGS	PAHs, Metals & Inorganics, Grain Size
BH3-25	BH3-25-SS3	1.5 - 2.1 m BGS	PHCs, BTEXs, PAHs, Metals & Inorganics
BH4-25	BH4-25-SS3	1.5 - 2.1 m BGS	PHCs, BTEXs, PAHs, Metals & Inorganics
	BH4-25-SS4	2.3 - 2.9 m BGS	PHCs, BTEXs, PAHs, Metals & Inorganics, Grain Size
BH5-25	BH5-25-SS3	1.5 - 2.1 m BGS	PHCs, BTEXs, PAHs, Metals & Inorganics
	BH5-25-SS4	2.3 - 2.9 m BGS	PHCs, BTEXs, PAHs, Metals & Inorganics
BH6-25	BH6-25-AU1	0.0 - 0.6 m BGS	PHCs, VOCs, PAHs, Metals & Inorganics
	BH6-25-SS3	1.5 - 2.1 m BGS	PAHs, Metals & Inorganics
	BH6-25-SS5	3.1 - 3.7 m BGS	PHCs, VOCs, PAHs, Metals & Inorganics
	BH6-25-SS6	3.8 - 4.4 m BGS	VOCs, Grain Size
BH7-25	BH7-25-SS2	0.8 - 1.4 m BGS	PHCs, BTEXs, PAHs, Metals & Inorganics
	BH7-25-SS4	2.3 - 2.9 m BGS	PHCs, BTEXs, PAHs, Metals & Inorganics
BH8-25	BH8-25-SS2	0.8 - 1.4 m BGS	PHCs, BTEXs, PAHs, Metals & Inorganics, Methyl Mercury
	DUP-2-03/19 (Duplicate of BH8-24-SS2)		PHCs, BTEXs, PAHs, Metals & Inorganics
	BH8-25-SS4	2.3 - 2.9 m BGS	PHCs, BTEXs, PAHs, Metals & Inorganics
BH9-25	BH9-25-SS2	0.8 - 1.4 m BGS	PHCs, BTEXs, PAHs, Metals & Inorganics, Methyl Mercury

Sample Location	Sample ID	Sample Depth (m BGS)	Analytical Parameters
	BH9-25-SS3	1.5 - 2.1 m BGS	PHCs, BTEXs, PAHs, Metals & Inorganics
BH10-25	BH10-25-SS2	0.8 - 1.4 m BGS	Methyl Mercury
	BH10-25-SS4	2.3 - 2.9 m BGS	PHCs, BTEXs, PAHs, Metals & Inorganics
2018 Pinchin Phase II ESA			
MW-1	MW-1 SS-2	0.8 - 1.5 m BGS	PAHs, Metals, pH
MW-2	MW-2 SS-3	1.5 – 2.3 m BGS	Grain Size, pH
	MW-2 SS-4	2.3 – 3.1 m BGS	PHCs, VOCs, PAHs, Metals
MW-3	MW-3 SS-7	4.6 – 5.3 m BGS	PHCs, VOCs, PAHs
MW-4	MW-4 SS-6	3.8 – 4.6 m BGS	PHCs, VOCs, PAHs

Comparison of Soil Analytical Results to Applicable Site Condition Standards

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

The aforementioned soil samples (collected by Lopers in 2025) selected for laboratory analysis were submitted to BV Labs under chain of custody on the day of drilling. The laboratory certificates of analysis (BV Labs Report #s R8509615 and R8518707) are provided in Appendix E.

The following soil samples had exceedance concentrations reported compared to their respective Site Condition Standards, as noted in Table 5a, Table 5b and Table 5c:

Table 5a: Soil Exceedances – Petroleum Hydrocarbons

		Exceeding Parameter:	F3 PHCs (C16-C34)
Sample Location	MECP Table 3 Site Condition Standards		300 ug/g
	Sample ID	Sample Depth	Reported Concentration (ug/g)
BH2-25	BH2-25-SS4	2.3 – 2.9 m BGS	320
	DUP-1-03/18	Duplicate Sample of BH2-25-SS4	390

Table 5b: Soil Exceedances – Metals & Inorganics

Exceeding Parameter:			Antimony	Cobalt	Lead	Mercury	Vanadium	Conductivity	Sodium Adsorption Ratio
Sample Location	MECP Table 3 Site Condition Standards		7.5 ug/g	22 ug/g	120 ug/g	0.27 ug/g	86 ug/g	0.7 ug/g	5 ug/g
	Sample ID	Sample Depth	Reported Concentration (ug/g)						
BH1-25	BH1-25-SS2	0.8 - 1.4 m BGS	-	-	-	-	-	0.74	6.3
BH2-25	BH2-25-SS4	2.3 - 2.9 m BGS	31	-	1,700	-	-	-	-
	DUP-1-03/18 (Duplicate of BH2-25-SS4)		29	-	1,100	-	-	-	-
	BH2-25-SS5	3.1 - 3.7 m BGS	-	26	-	-	110	1.2	-
BH3-25	BH3-25-SS3	1.5 - 2.1 m BGS	-	-	180	-	-	2.4	-
BH4-25	BH4-25-SS3	1.5 - 2.1 m BGS	-	-	250	0.36	-	1.3	6.3
BH5-25	BH5-25-SS3	1.5 - 2.1 m BGS	-	-	410	0.33	-	-	-
	BH5-25-SS4	2.3 - 2.9 m BGS	-	-	250	-	-	-	-
BH6-25	BH6-25-SS3	1.5 - 2.1 m BGS	-	-	-	-	-	-	7.5
	BH6-25-SS5	3.1 - 3.7 m BGS	-	-	-	-	-	-	5.4
BH7-25	BH7-25-SS2	0.8 - 1.4 m BGS	8.6	-	370	-	-	1.1	15
	BH7-25-SS4	2.3 - 2.9 m BGS	-	-	-	-	-	-	6.5
BH8-25	BH8-25-SS2	0.8 - 1.4 m BGS	-	-	270	0.41	-	2.6	17
	DUP-2-03/19 (Duplicate of BH8-24-SS2)		-	-	280	0.35	-	2.4	17
	BH8-25-SS4	2.3 - 2.9 m BGS	-	-	-	-	-	1.3	6.3
BH9-25	BH9-25-SS2	0.8 - 1.4 m BGS	-	-	450	0.51	-	2.4	20
	BH9-25-SS3	1.5 - 2.1 m BGS	-	-	-	-	-	1.4	24
MW-1	MW-1 SS-2	0.8 - 1.5 m BGS	-	-	190	0.39	-	-	-

The soil samples collected from the Site were in locations that would have been in close proximity and/or subject to road/surface de-icing activities with the application of salts applied to ground surfaces for the safety of vehicular or pedestrian traffic under conditions of snow or ice or both and is suspected to exceed the Site Condition Standard solely as a result of these activities. Based on this application and the exemption set forth in Section 49.1 of O.Reg.

153/04, the applicable site condition standard is deemed not to be exceeded for the purpose of Part XV.1 of the Act.

Table 5c: Soil Exceedances – Polycyclic Aromatic Hydrocarbons

Exceeding Parameter:			Anthracene	Benzo(a) anthracene	Benzo(a)pyrene	Benzo(b/j) fluoranthene	Benzo(k) fluoranthene	Dibenzo(a,h) anthracene	Fluoranthene	Indeno(1,2,3-cd) pyrene
Sample Location	MECP Table 3 Site Condition Standards		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
	Sample ID	Sample Depth	Reported Concentration (ug/g)							
BH2-25	BH2-25-SS4	2.3 - 2.9 m BGS	-	-	0.34	-	-	-	0.71	-
	DUP-1-03/18 (Duplicate of BH2-25-SS4)		-	0.83	0.77	0.98	-	-	1.5	0.48
BH3-25	BH3-25-SS3	1.5 - 2.1 m BGS	-	0.55	0.56	-	-	-	1.4	0.39
BH4-25	BH4-25-SS3	1.5 - 2.1 m BGS	0.88	2.2	2	2.3	0.86	0.25	4.8	0.99
BH5-25	BH5-25-SS3	1.5 - 2.1 m BGS	-	-	0.36	-	-	-	-	-
BH7-25	BH7-25-SS2	0.8 - 1.4 m BGS	-	0.7	0.71	0.85	-	-	1.2	0.48
MW-1	MW-1 SS-2	0.8 - 1.5 m BGS								

All of 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 from soil samples analyzed as part of this Phase Two ESA and comparison to the applicable Site Condition Standards are presented in Table 9: Soil Analytical Results following the text of this report. Summaries of the soil analytical results from the 2018 Pinchin Phase II ESA are provided in the Summary Tables from the Pinchin 2018 Phase II ESA Report, which are attached for reference. Spatial depiction of the soil exceedances at the Phase Two Property are depicted in Figures 4a through 4c.

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

A waste characterization sample was prepared for laboratory analysis of toxicity characteristic leaching procedure (TCLP) analysis for ignitability, leachate metals & inorganics, leachate VOCs and leachate semi-volatiles (PAHs). This sample was comprised of a composite of worst-case samples, as determined by field screening parameters and analytical soil results.

The aforementioned composite soil sample selected for TCLP laboratory analysis was submitted to ALS under chain of custody on March 18, 2025. The laboratory certificate of analysis (BV Labs Report # R8509615) is provided in Appendix E.

This composite 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 TCLP analytical results

and field screening, if excess soil generated from redevelopment of the Site cannot be reused as acceptable fill at an appropriate receiving site, it can be treated as solid non-hazardous waste.

Contaminants of Concern

There was evidence of non-native fill material observed down to a depth of 3.1 m BGS, during the subsurface drilling and sampling, completed as part of the present Phase Two ESA and the 2018 Pinchin Phase II ESA. The presence of imported 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 Contaminants of Potential Concern ("CPCs") associated with the historical fill materials are PHCs, BTEXs, polycyclic aromatic hydrocarbons (PAHs), metals & inorganics. Volatile Organic Compounds were included as a CPC for select soil samples from BH6-25 following observation of a 'chemical odour' and elevated soil vapour screening results from soil sampling in this location.

Based on the date of original development of the Site buildings, it was suspected that historical heating oil storage tanks may have been present at the Phase Two Property, although no documentation was found to that effect in records reviewed for the Phase One ESA. If historically present, the expected fill locations would have been in similar locations to the borehole BH7-25, BH8-25 and BH9-25. The CPCs associated with fuel storage are PHCs and BTEXs, which had already been included for assessment for APEC #1.

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 may be soil that serves as a source of contaminant mass contributing to groundwater at the Phase Two Property. Soil contamination, namely PHCs were encountered at the east-central portion of the Phase Two Property (within APEC #1 in an area of historic foundation backfilling). There are detectable concentrations of PHCs in this area of the Phase Two Property and it is suspected that soil serving as a source of contaminant mass is contributing to groundwater quality.

Light or Dense Non-Aqueous Phase Liquids

The analytical soil results indicate the potential presence of light non-aqueous phase liquids (LNAPLs) at the Phase Two Property, given that PHCs were detected in the fill samples at various locations across the Site; the concentration of the F3 Range of PHCs was found to marginally exceed the Site Condition Standards (320 ug/g & 390 ug/g reported vs. SCS of 300 ug/g). It should be noted that the concentrations of PHCs in the soil are not themselves indicative of the suspected presence of LNAPL free product at the Phase Two Property.

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

vii. Groundwater Quality

Locations and Sample Depth Interval of Groundwater Samples

The groundwater samples were collected using a peristaltic pump with tubing positioned to draw water from between the top of the water table and approximate (vertical) center of the water column at each monitoring well, at low flow rates. The groundwater sample locations, screen depths and parameters analyzed are presented in Table 6 below.

Table 6: Groundwater Samples Selected for Laboratory Analysis

Sample Location	Groundwater Table Elevation (m AMSL)	Screen Elevation (m AMSL)	Analytical Parameters
BH6-25	68.72	64.14 – 67.19	PHCs, BTEXs, PAHs, Metals & Inorganics
BH7-25	68.66	64.09 – 67.14	PHCs, BTEXs, PAHs, Metals & Inorganics
BH8-25	68.71	64.15 – 67.20	PHCs, BTEXs, PAHs, Metals & Inorganics
MW-2**	68.76	64.19 – 67.24	No sample collected in 2025 – damaged monitoring well.

m AMSL – metres Above Mean Sea Level

Field Filtering

Samples for PHCs, BTEXs, PAHs and general chemistry were unfiltered; only the water samples for metals analysis was field filtered using a dedicated 0.45 µm Waterra filter for each sample.

Comparison of Groundwater Analytical Results to Applicable Site Conditions Standards

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

The groundwater samples selected for laboratory analysis were submitted to BV Labs under chain of custody on March 25, 2025. The laboratory certificates of analysis (BV Labs Report # R8512581) are provided in Appendix E.

All groundwater samples collected as part of this 2025 Lopers Phase Two ESA and 2018 Pinchin Phase II ESA were in compliance with the Site Condition Standards.

A full summary of the groundwater analytical results and comparison to the applicable Site Condition Standards are presented in Table 10: Groundwater Analytical Results following the text of this report. Summaries of the groundwater analytical results from the 2018 Pinchin Phase II ESA are provided in the Summary Tables from the Pinchin 2018 Phase II ESA Report, which are attached for reference.

Contaminants of Concern

There was evidence of non-native fill material observed down to a depth of 3.1 m BGS, during the subsurface drilling and sampling, completed as part of the 2018 Pinchin Phase II ESA. The presence of imported 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 Contaminants of Potential Concern ("CPCs") associated with the historical fill materials are PHCs, BTEXs, polycyclic aromatic hydrocarbons (PAHs), metals & inorganics. Volatile Organic Compounds were included as a CPC for select soil samples from BH6-25 following observation of a 'chemical odour' and elevated soil vapour screening results from soil sampling in this location; there were no significant detectable VOC concentrations in the soil samples from BH6-25 and VOCs were not included as a CPC for the groundwater samples.

Based on the date of original development of the Site buildings, it was suspected that historical heating oil storage tanks may have been present at the Phase Two Property, although no documentation was found to that effect in records reviewed for the Phase One ESA. If historically present, the expected fill locations would have been in similar locations to the borehole BH7-25, BH8-25 and BH9-25, two of which had groundwater monitoring wells installed. The CPCs associated with fuel storage are PHCs and BTEXs, which had already been included for assessment for APEC #1.

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

Contaminants Related to Chemical and Biological Transformations

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

Soil Serving as a Source of Contaminant Mass Contributing to Groundwater

Based on the analytical results, concentrations of PHCs were detected in soil samples collected within the fill material from across the Site. The detectable PHCs were in compliance with the Site Condition Standards with the exception of the F3 fraction of PHCs in BH2-25-SS4. There were detectable concentrations of PHCs in the groundwater sample BH8-24-GW1 collected from the monitoring well installed at BH8-25, near the centre of the Property. It is suspected that soil serving as a source of contaminant mass is contributing to groundwater quality; although it should be noted that the groundwater analytical results from samples collected as part of this Phase Two ESA were in compliance with the site condition standards.

Light or Dense Non-Aqueous Phase Liquids

The analytical groundwater results indicate the potential presence of light non-aqueous phase liquids (LNAPLs) at the Phase Two Property, given PHCs were identified in various soil samples collected from across the Site and at low concentrations in the groundwater sample from BH8-25. It should be noted that the presence of measurable levels of LNAPL 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 to Property.

viii. Sediment Quality

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

ix. Quality Assurance and Quality Control Results

Duplicate Samples

The soil samples DUP-1-03/18 (BH2-25-SS4) and DUP-2-03/19 (BH8-25-SS2) were submitted to the laboratory as blind field duplicate samples (of their respective samples). The relative percent difference (RPD) for individual parameters soil duplicate results to original sample results were generally less than 50%, which meets the required ratio. Higher RPDs were observed in the duplicate sample from BH2-25-SS4 with respect to certain PAH and metals parameters. However, it should be noted that a high degree of heterogeneity was observed in the fill material and that there were exceedances of the Site Condition Standards for the aforementioned parameters in both the original and duplicate samples. The variability of these sample results does not affect the validity of the conclusions with respect to these results. These samples were analyzed for PHCs, 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-1-03/25 was submitted to the laboratory as a blind field duplicate sample of BH8-25-GW1. The RPD of groundwater duplicate results to original sample results for metals was generally 0 to 34%, which meets the required ratio. Given that no exceedances of the site condition standards were detected for any analyzed parameters in both samples, the variability of these sample results does not affect the validity of the conclusions with respect to these results. These samples were analyzed for PHCs, 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

Trip blank water samples for VOCs accompanied the site assessor during the groundwater sampling and were submitted for laboratory analysis following the groundwater sampling event completed on March 25, 2025. No detectable VOC concentrations were reported in the trip blank water sample.

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, demonstrates that the analytical data can be relied on for decision making, and the overall objectives of the investigation and the assessment were met.

x. Phase Two Conceptual Site Model

There was evidence of non-native fill material observed down to a depth of 3.1 m BGS, during the subsurface drilling and sampling completed as part of this Phase Two ESA. The presence of imported 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 Contaminants of Potential Concern ("CPCs") associated with the historical fill materials are PHCs, BTEXs, polycyclic aromatic hydrocarbons (PAHs), metals & inorganics. Volatile Organic Compounds were included as a CPC for selected soil samples from BH6-25 following observation of a 'chemical odour' and elevated soil vapour screening results from soil sampling in this location; there were no significant detectable VOC concentrations in the soil samples from BH6-25 and VOCs were not included as a CPC for the groundwater samples.

Based on the date of original development of the Site buildings, it was suspected that historical heating oil storage tanks may have been present at the Phase Two Property, although no documentation was found to that effect in records reviewed for the Phase One ESA. If historically present, the expected fill locations would have been in similar locations to the borehole BH7-25, BH8-25 and BH9-25. The CPCs associated with fuel storage are PHCs and BTEXs, which had already been included for assessment for APEC #1.

The historic 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 2.26 to 2.48 m BGS, it is possible that migration of contaminants (if present) through underground utility service trenches (generally approximately 2 to 3 m BGS) could have occurred.

The overburden stratigraphy of the Phase Two Property was observed in three geological units, including silty sand and gravel (fill) layer, Silty Sand layer, and Silty Clay layer present across the Property.

The overburden soil is underlain by interbedded limestone and/or shale bedrock, which was reported at depths of approximately 8 to 12 m below ground surface in the general area of the Property. Practical refusal to drilling was interpreted through a dynamic cone penetration test ("DCPT") during the Phase Two ESA drilling program, which encountered practical refusal at 11.92 m BGS.

The groundwater table was measured at depths ranging between 2.26 to 2.48 m BGS on March 25, 2025. The shallow groundwater aquifer was present in the silty sand geological unit and extends into the silty clay unit beneath. Given that the groundwater table was found in the silty sand and/or silty clay in each of the monitoring wells at the Phase Two Property, it is inferred that the same shallow aquifer exists across these units and can be used for a determination of groundwater flow direction and hydraulic gradient. The horizontal hydraulic gradient at the Phase Two Property was calculated to be approximately 0.023 m/m with a localized groundwater flow direction towards the south-southeast.

The Phase Two Property has been vacant for several years and was historically developed and occupied for residential use. There was a heating and plumbing contractor listed at the Property from 1969 until 2000. It is Lopers' understanding that BRIGIL intends to dedicate the Phase Two Property to the City of Ottawa for potential future Parkland use.

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.

The Phase Two Property is not situated within or adjacent to an area of natural significance and does not include any land within 30 m of an area of natural significance. The pH of the soil was analyzed as part of this Phase Two ESA and was found to range from 7.26 to 7.75. As such, the Phase Two Property is not considered to be an environmentally sensitive area.

A layer of silty sand and gravel (fill) was encountered from near ground surface to depths ranging from 2.3 to 3 m below ground surface (BGS) in all 10 boreholes. This soil type would be classified as coarse grained soil with an average thickness of approximately 2.5 m. Silty clay and silty sand were encountered immediately below the shallow silty sand and gravel; grain size analysis was completed for 3 soil samples; 2 of the 3 analyzed the silty clay and silty sand are classified as a fine grained soil, as reported through grain size analysis. The entire overburden soil profile of the Phase Two Property is not known; however, a substantial layer of silty clay is known to exist locally. For the purposes of this Phase Two ESA, the soil conditions are considered to be coarse grained, which are representative of the depth of investigation for the APECs and provide a more conservative comparison to the MECP site condition standards than the fine-grained values. Further investigation and laboratory analysis would be required to apply the fine grained soil conditions.

Review of the drilling program and borehole/monitoring well logs completed as part of this Phase Two ESA and previous investigations was completed. It was determined that over 2/3 of the Property has greater than 2 m of overburden soil. The Property is not considered a shallow soil property.

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.

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

The following soil samples had exceedance concentrations reported compared to their respective Site Condition Standards, as noted in Table 7a, Table 7b and Table 7c below:

Table 7a: Soil Exceedances – Petroleum Hydrocarbons

		Exceeding Parameter:	**F3 PHCs (C16-C34)**
Sample Location	**MECP Table 3 Site Condition Standards**		300 ug/g
	Sample ID	**Sample Depth**	**Reported Concentration (ug/g)**
BH2-25	BH2-25-SS4	2.3 – 2.9 m BGS	320
	DUP-1-03/18	Duplicate Sample of BH2-25-SS4	390

Table 7b: Soil Exceedances - Metals

		Exceeding Parameter:	**Antimony**	**Cobalt**	**Lead**	**Mercury**	**Vanadium**	**Conductivity**	**Sodium Adsorption Ratio**
Sample Location	**MECP Table 3 Site Condition Standards**		7.5 ug/g	22 ug/g	120 ug/g	0.27 ug/g	86 ug/g	0.7 ug/g	5 ug/g
	Sample ID	**Sample Depth**	**Reported Concentration (ug/g)**						
BH1-25	BH1-25-SS2	0.8 - 1.4 m BGS	-	-	-	-	-	0.74	6.3
BH2-25	BH2-25-SS4	2.3 - 2.9 m BGS	31	-	1,700	-	-	-	-
	DUP-1-03/18 (Duplicate of BH2-25-SS4)		29	-	1,100	-	-	-	-
	BH2-25-SS5	3.1 - 3.7 m BGS	-	26	-	-	110	1.2	-
BH3-25	BH3-25-SS3	1.5 - 2.1 m BGS	-	-	180	-	-	2.4	-
BH4-25	BH4-25-SS3	1.5 - 2.1 m BGS	-	-	250	0.36	-	1.3	6.3
BH5-25	BH5-25-SS3	1.5 - 2.1 m BGS	-	-	410	0.33	-	-	-
	BH5-25-SS4	2.3 - 2.9 m BGS	-	-	250	-	-	-	-
BH6-25	BH6-25-SS3	1.5 - 2.1 m BGS	-	-	-	-	-	-	7.5
	BH6-25-SS5	3.1 - 3.7 m BGS	-	-	-	-	-	-	5.4
BH7-25	BH7-25-SS2	0.8 - 1.4 m BGS	8.6	-	370	-	-	1.1	15
	BH7-25-SS4	2.3 - 2.9 m BGS	-	-	-	-	-	-	6.5
BH8-25	BH8-25-SS2	0.8 - 1.4 m BGS	-	-	270	0.41	-	2.6	17
	DUP-2-03/19 (Duplicate of BH8-24-SS2)		-	-	280	0.35	-	2.4	17
	BH8-25-SS4	2.3 - 2.9 m BGS	-	-	-	-	-	1.3	6.3
BH9-25	BH9-25-SS2	0.8 - 1.4 m BGS	-	-	450	0.51	-	2.4	20
	BH9-25-SS3	1.5 - 2.1 m BGS	-	-	-	-	-	1.4	24
MW-1	MW-1 SS-2	0.8 - 1.5 m BGS	-	-	190	0.39	-	-	-

The soil samples collected from the Site would have been in locations that would have been in close proximity and/or subject to road/surface de-icing activities with the application of salts applied to ground surfaces for the safety of vehicular or pedestrian traffic under conditions of snow or ice or both and is suspected to exceed the Site Condition Standard solely as a result of these activities. Based on this application and the exemption set forth in Section 49.1 of O.Reg. 153/04, the applicable site condition standard is deemed not to be exceeded for the purpose of Part XV.1 of the Act.

Table 7c: Soil Exceedances – Polycyclic Aromatic Hydrocarbons

Exceeding Parameter:			Anthracene	Benzo(a) anthracene	Benzo(a)pyrene	Benzo(b/j) fluoranthene	Benzo(k) fluoranthene	Dibenzo(a,h) anthracene	Fluoranthene	Indeno(1,2,3-cd) pyrene
Sample Location	MECP Table 3 Site Condition Standards		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
	Sample ID	Sample Depth	Reported Concentration (ug/g)							
BH2-25	BH2-25-SS4	2.3 - 2.9 m BGS	-	-	0.34	-	-	-	0.71	-
	DUP-1-03/18 (Duplicate of BH2-25-SS4)		-	0.83	0.77	0.98	-	-	1.5	0.48
BH3-25	BH3-25-SS3	1.5 - 2.1 m BGS	-	0.55	0.56	-	-	-	1.4	0.39
BH4-25	BH4-25-SS3	1.5 - 2.1 m BGS	0.88	2.2	2	2.3	0.86	0.25	4.8	0.99
BH5-25	BH5-25-SS3	1.5 - 2.1 m BGS	-	-	0.36	-	-	-	-	-
BH7-25	BH7-25-SS2	0.8 - 1.4 m BGS	-	0.7	0.71	0.85	-	-	1.2	0.48
MW-1	MW-1 SS-2	0.8 - 1.5 m BGS								

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 2025 Lopers Phase Two ESA and 2018 Pinchin Phase II ESA were in compliance with the Site Condition Standards.

The Phase Two Property (soil) is not in compliance with the site condition standards as of the certification date of March 25, 2025.

7. Conclusions

The following soil samples had exceedance concentrations reported compared to their respective Site Condition Standards, as noted in Table 8a, Table 8b and Table 8c as follows:

Table 8a: Soil Exceedances – Petroleum Hydrocarbons

		Exceeding Parameter:	F3 PHCs (C16-C34)
Sample Location	MECP Table 3 Site Condition Standards		300 ug/g
	Sample ID	Sample Depth	Reported Concentration (ug/g)
BH2-25	BH2-25-SS4	2.3 – 2.9 m BGS	320
	DUP-1-03/18	Duplicate Sample of BH2-25-SS4	390

Table 8b: Soil Exceedances – Metals

		Exceeding Parameter:	Antimony	Cobalt	Lead	Mercury	Vanadium	Conductivity	Sodium Adsorption Ratio
Sample Location	MECP Table 3 Site Condition Standards		7.5 ug/g	22 ug/g	120 ug/g	0.27 ug/g	86 ug/g	0.7 ug/g	5 ug/g
	Sample ID	Sample Depth	Reported Concentration (ug/g)						
BH1-25	BH1-25-SS2	0.8 - 1.4 m BGS	-	-	-	-	-	0.74	6.3
BH2-25	BH2-25-SS4	2.3 - 2.9 m BGS	31	-	1,700	-	-	-	-
	DUP-1-03/18 (Duplicate of BH2-25-SS4)		29	-	1,100	-	-	-	-
	BH2-25-SS5	3.1 - 3.7 m BGS	-	26	-	-	110	1.2	-
BH3-25	BH3-25-SS3	1.5 - 2.1 m BGS	-	-	180	-	-	2.4	-
BH4-25	BH4-25-SS3	1.5 - 2.1 m BGS	-	-	250	0.36	-	1.3	6.3
BH5-25	BH5-25-SS3	1.5 - 2.1 m BGS	-	-	410	0.33	-	-	-
	BH5-25-SS4	2.3 - 2.9 m BGS	-	-	250	-	-	-	-
BH6-25	BH6-25-SS3	1.5 - 2.1 m BGS	-	-	-	-	-	-	7.5
	BH6-25-SS5	3.1 - 3.7 m BGS	-	-	-	-	-	-	5.4
BH7-25	BH7-25-SS2	0.8 - 1.4 m BGS	8.6	-	370	-	-	1.1	15
	BH7-25-SS4	2.3 - 2.9 m BGS	-	-	-	-	-	-	6.5
BH8-25	BH8-25-SS2	0.8 - 1.4 m BGS	-	-	270	0.41	-	2.6	17
	DUP-2-03/19 (Duplicate of BH8-24-SS2)		-	-	280	0.35	-	2.4	17
	BH8-25-SS4	2.3 - 2.9 m BGS	-	-	-	-	-	1.3	6.3
BH9-25	BH9-25-SS2	0.8 - 1.4 m BGS	-	-	450	0.51	-	2.4	20
	BH9-25-SS3	1.5 - 2.1 m BGS	-	-	-	-	-	1.4	24
MW-1	MW-1 SS-2	0.8 - 1.5 m BGS	-	-	190	0.39	-	-	-

The soil samples collected from the Site were from locations that likely would have been in close proximity and/or subject to road/surface de-icing activities with the application of salts applied to ground surfaces for the safety of vehicular or pedestrian traffic under conditions of snow or ice or both and is suspected to exceed the Site Condition Standard solely as a result of these activities. Based on this application and the exemption set forth in Section 49.1 of O.Reg. 153/04, the applicable site condition standard is deemed not to be exceeded for the purpose of Part XV.1 of the Act.

Table 8c: Soil Exceedances – Polycyclic Aromatic Hydrocarbons

Exceeding Parameter:			Anthracene	Benzo(a) anthracene	Benzo(a)pyrene	Benzo(b/j) fluoranthene	Benzo(k) fluoranthene	Dibenzo(a,h) anthracene	Fluoranthene	Indeno(1,2,3-cd) pyrene
Sample Location	MECP Table 3 Site Condition Standards		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
	Sample ID	Sample Depth	Reported Concentration (ug/g)							
BH2-25	BH2-25-SS4	2.3 - 2.9 m BGS	-	-	0.34	-	-	-	0.71	-
	DUP-1-03/18 (Duplicate of BH2-25-SS4)		-	0.83	0.77	0.98	-	-	1.5	0.48
BH3-25	BH3-25-SS3	1.5 - 2.1 m BGS	-	0.55	0.56	-	-	-	1.4	0.39
BH4-25	BH4-25-SS3	1.5 - 2.1 m BGS	0.88	2.2	2	2.3	0.86	0.25	4.8	0.99
BH5-25	BH5-25-SS3	1.5 - 2.1 m BGS	-	-	0.36	-	-	-	-	-
BH7-25	BH7-25-SS2	0.8 - 1.4 m BGS	-	0.7	0.71	0.85	-	-	1.2	0.48
MW-1	MW-1 SS-2	0.8 - 1.5 m BGS								

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 2025 Lopers Phase Two ESA and 2018 Pinchin Phase II ESA were in compliance with the Site Condition Standards.

The Phase Two Property (soil) is not in compliance with the site condition standards as of the certification date of March 25, 2025.

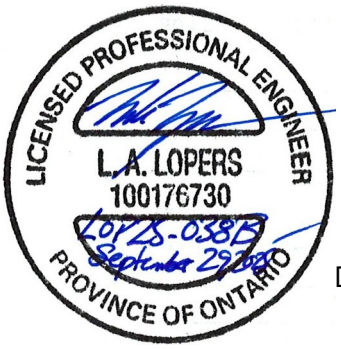
An environmental remediation program, including the bulk removal and off-site disposal of soil in excess of the site condition standards, is recommended for the Phase Two Property. It has been interpreted that the submission of a record of site condition (RSC) will be required since there will be a change of land use of the Phase Two Property to a more sensitive use.

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 Mr. Don Plenderleith, P.Eng. Mr. Plenderleith is a Professional Engineer registered in Ontario since 1994 and has authored and/or reviewed hundreds of Phase One and Two ESAs in Ontario and the rest of Canada. The qualifications of the assessor/Qualified Person and reviewer are included in Appendix F.

Sincerely,



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

8. Limitations

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

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

This Phase Two ESA has been prepared for the sole use of BRIGIL 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 BRIGIL

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

Survey Plan, Farley, Smith & Denis Surveying Ltd. (FSD), dated September 8, 2004.

City of Ottawa, geoOttawa mapping website, Visited March through September, 2025. http://maps.ottawa.ca/geoottawa/

Google Earth, Visited March through September, 2025.

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

"Phase One Environmental Site Assessment, 506 Kent Street, Ottawa, Ontario", dated May 21, 2025, completed by Lopers & Associates for BRIGIL. ("2025 Lopers Phase One Environmental Site Assessment")

"Phase I Environmental Site Assessment, 506 Kent Street, Ottawa, Ontario", dated August 10, 2018, completed by 2018 Pinchin Ltd., for 2217822 Ontario Inc. o/a Jones Bros.

"Phase II Environmental Site Assessment, 506 Kent Street, Ottawa, Ontario", dated September 7, 2018, completed by 2018 Pinchin Ltd., for 2217822 Ontario Inc. o/a Jones Bros.

BV Labs Certificate of Analysis – Report # R8509615 – Soil Sample Submission March 18, 2025

BV Labs Certificate of Analysis – Report # R8518707 - Soil Sample Submission March 19, 2025

BV Labs Certificate of Analysis – # R8512581 - Groundwater Sample Submission March 25, 2025

10. Appendices

Appendix A – Sampling and Analysis Plan

Appendix B – Underground Utility Locates

Appendix C – Borehole Logs

Appendix D – Certificates of Equipment Calibration

Appendix E – Laboratory Certificates of Analysis

Appendix F – Qualifications of Assessors

Figures

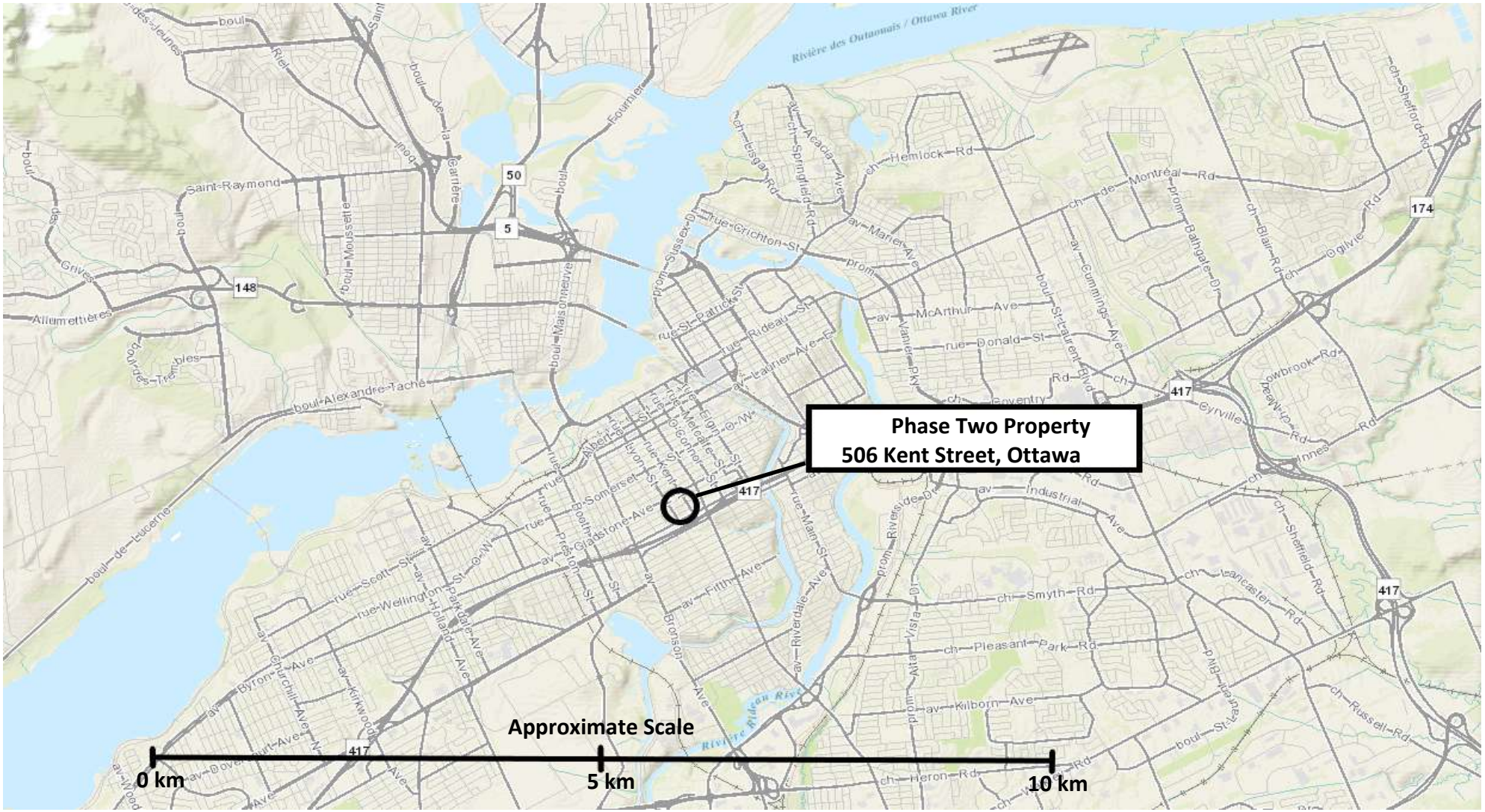


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Figure 1: Key Plan
Phase Two Environmental Site Assessment
506 Kent Street, Ottawa, Ontario
11034936 Canada Inc.

Project Reference No:	LOP25-038B
Drawing No.:	LOP25-038B-1
Date:	August 29, 2025
Author:	L. Lopers
Source:	geoOttawa, Base Mapping

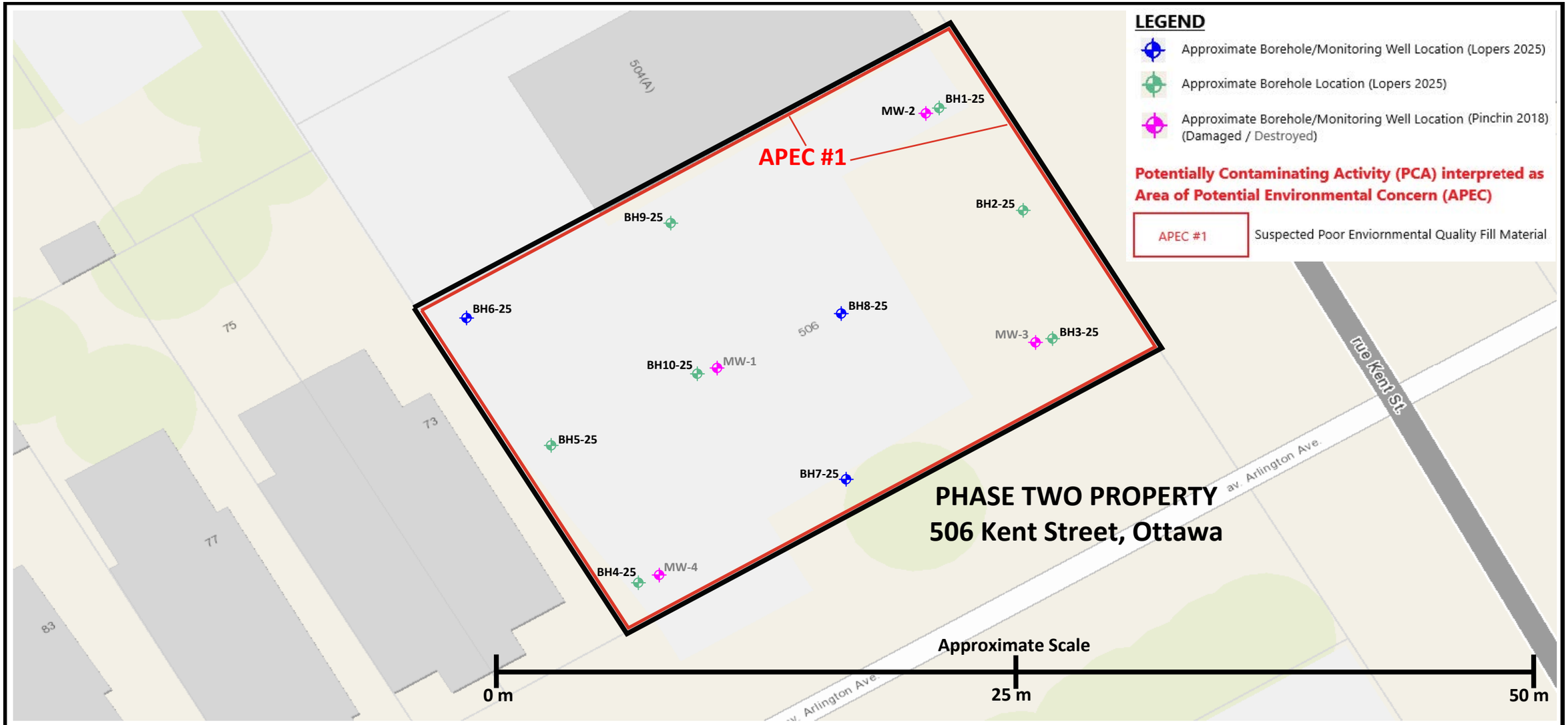

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Figure 2: Site Plan
Phase Two Environmental Site Assessment
506 Kent Street, Ottawa, Ontario
11034936 Canada Inc.

Project Reference No:	LOP25-038B
Drawing No.:	LOP25-038B-2
Date:	August 30, 2025
Author:	L. Lopers
Source:	geoOttawa

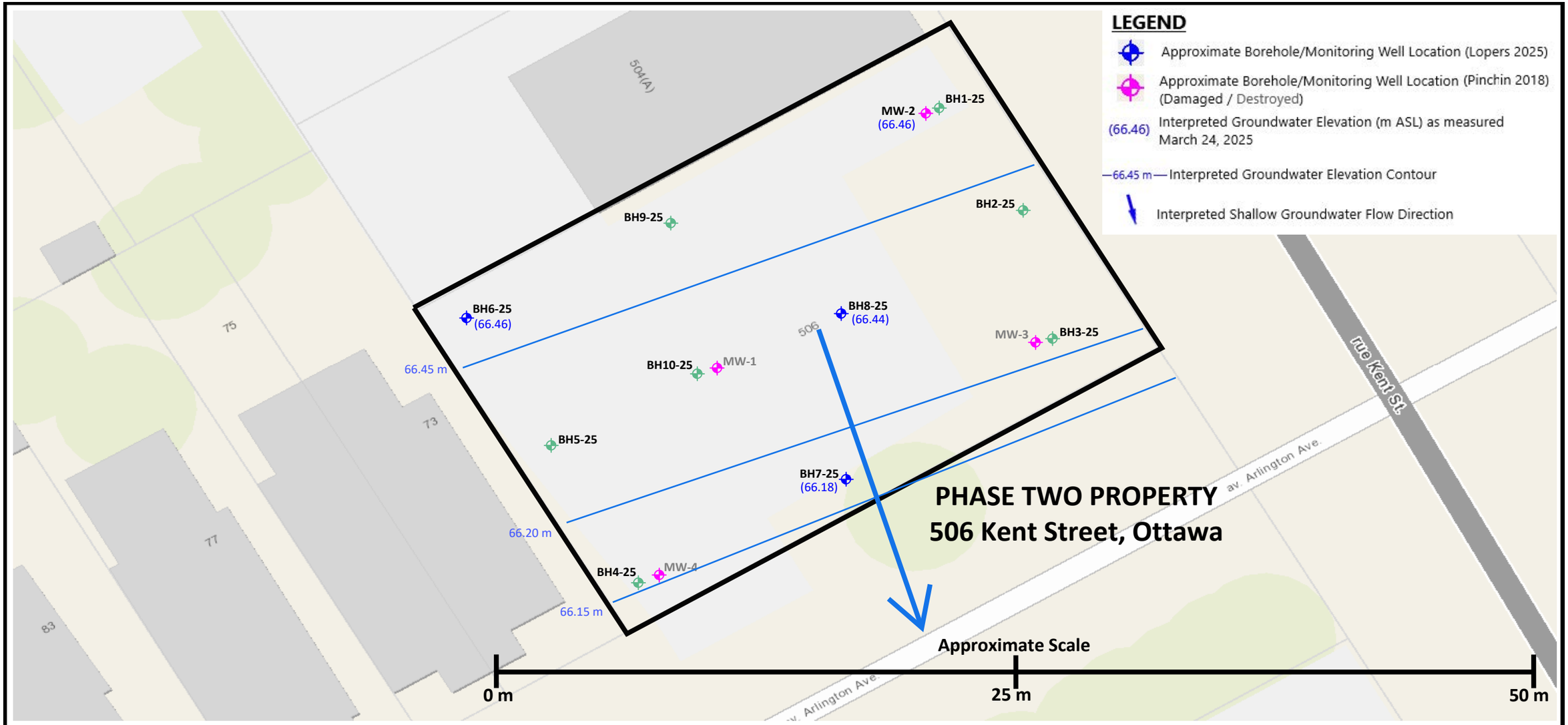

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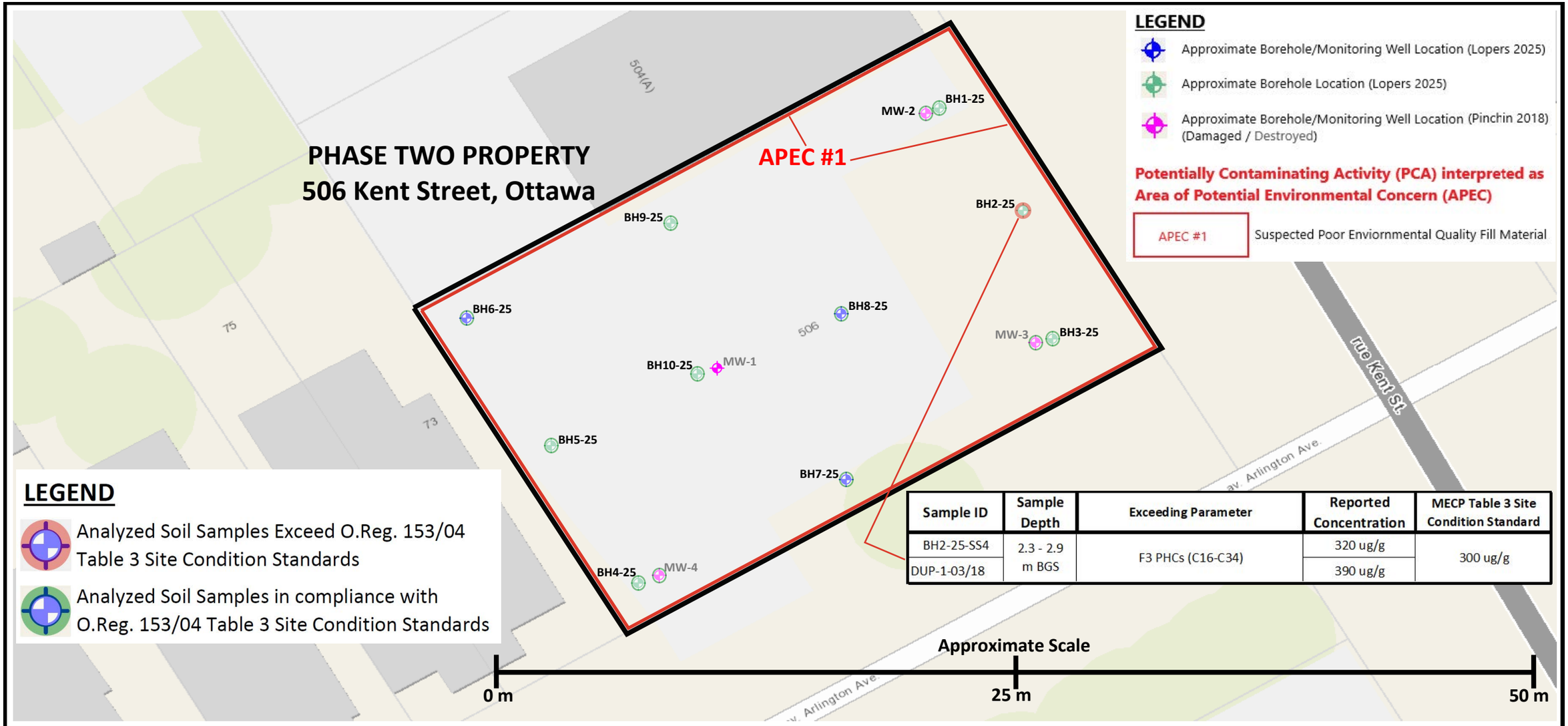
Figure 3: Groundwater Flow Interpretation
Phase Two Environmental Site Assessment
506 Kent Street, Ottawa, Ontario
11034936 Canada Inc.

Project Reference No:	LOP25-038B
Drawing No.:	LOP25-038B-3
Date:	September 29, 2025
Author:	L. Lopers
Source:	geoOttawa



Sample ID	Sample Depth	Exceeding Parameter	Reported Concentration	MECP Table 3 Site Condition Standard
BH2-25-SS4	2.3 - 2.9 m BGS	F3 PHCs (C16-C34)	320 ug/g	300 ug/g
DUP-1-03/18			390 ug/g	

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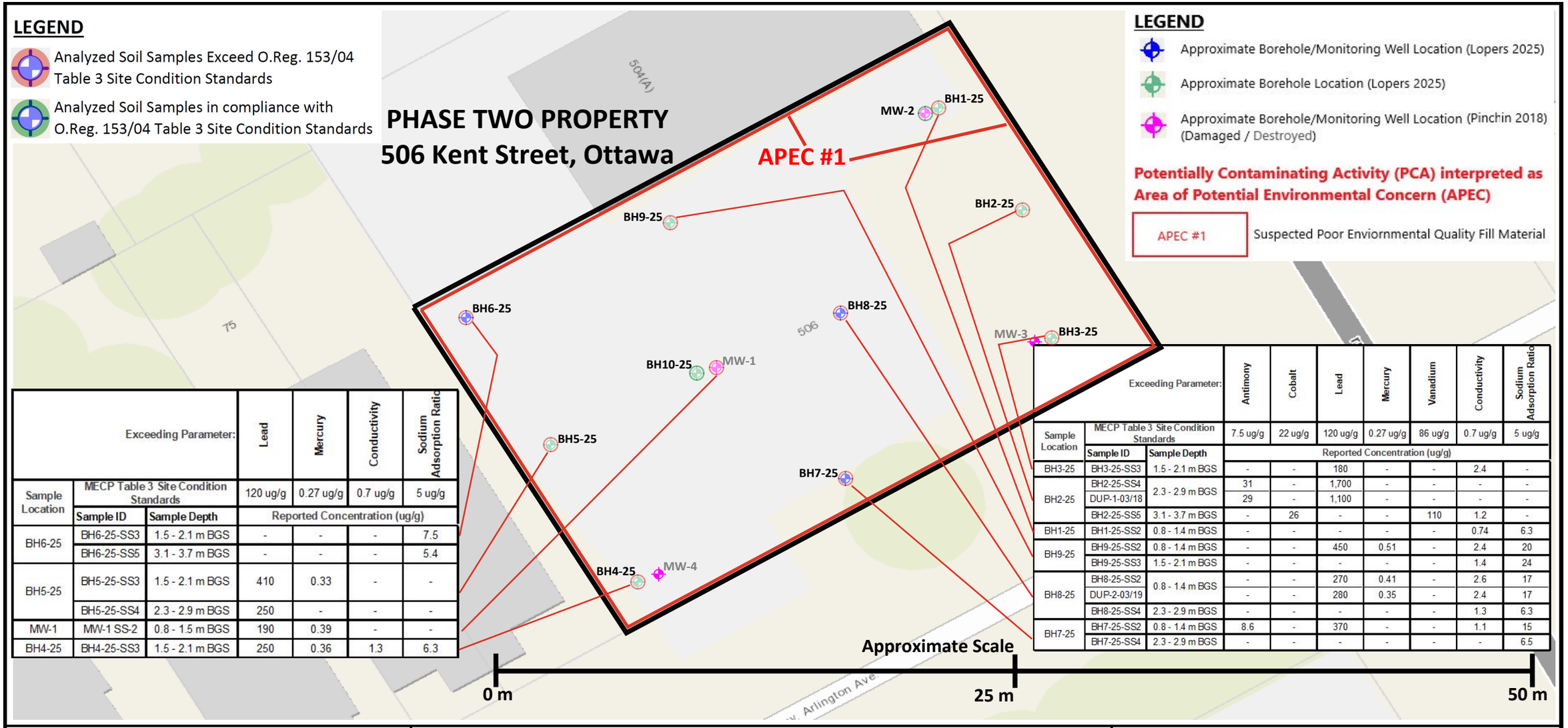
Figure 4a: Petroleum Hydrocarbon Soil Exceedances
Phase Two Environmental Site Assessment
506 Kent Street, Ottawa, Ontario
11034936 Canada Inc.

Project Reference No:	LOP25-038B
Drawing No.:	LOP25-038B-4a
Date:	September 29, 2025
Author:	L. Lopers
Source:	geoOttawa



Sample Location	Sample ID	Sample Depth	Exceeding Parameter: Lead	Mercury	Conductivity	Sodium Adsorption Ratio
	MECP Table 3 Site Condition Standards		120 ug/g	0.27 ug/g	0.7 ug/g	5 ug/g
			Reported Concentration (ug/g)			
BH6-25	BH6-25-SS3	1.5 - 2.1 m BGS	-	-	-	7.5
	BH6-25-SS5	3.1 - 3.7 m BGS	-	-	-	5.4
BH5-25	BH5-25-SS3	1.5 - 2.1 m BGS	410	0.33	-	-
	BH5-25-SS4	2.3 - 2.9 m BGS	250	-	-	-
MW-1	MW-1 SS-2	0.8 - 1.5 m BGS	190	0.39	-	-
BH4-25	BH4-25-SS3	1.5 - 2.1 m BGS	250	0.36	1.3	6.3

Sample Location	Sample ID	Sample Depth	Exceeding Parameter: Antimony	Cobalt	Lead	Mercury	Vanadium	Conductivity	Sodium Adsorption Ratio
	MECP Table 3 Site Condition Standards		7.5 ug/g	22 ug/g	120 ug/g	0.27 ug/g	86 ug/g	0.7 ug/g	5 ug/g
			Reported Concentration (ug/g)						
BH3-25	BH3-25-SS3	1.5 - 2.1 m BGS	-	-	180	-	-	2.4	-
BH2-25	BH2-25-SS4	2.3 - 2.9 m BGS	31	-	1,700	-	-	-	-
	DUP-1-03/18		29	-	1,100	-	-	-	-
	BH2-25-SS5	3.1 - 3.7 m BGS	-	26	-	-	110	1.2	-
BH1-25	BH1-25-SS2	0.8 - 1.4 m BGS	-	-	-	-	-	0.74	6.3
BH9-25	BH9-25-SS2	0.8 - 1.4 m BGS	-	-	450	0.51	-	2.4	20
	BH9-25-SS3	1.5 - 2.1 m BGS	-	-	-	-	-	1.4	24
BH8-25	BH8-25-SS2	0.8 - 1.4 m BGS	-	-	270	0.41	-	2.6	17
	DUP-2-03/19		-	-	280	0.35	-	2.4	17
	BH8-25-SS4	2.3 - 2.9 m BGS	-	-	-	-	-	1.3	6.3
BH7-25	BH7-25-SS2	0.8 - 1.4 m BGS	8.6	-	370	-	-	1.1	15
	BH7-25-SS4	2.3 - 2.9 m BGS	-	-	-	-	-	-	6.5

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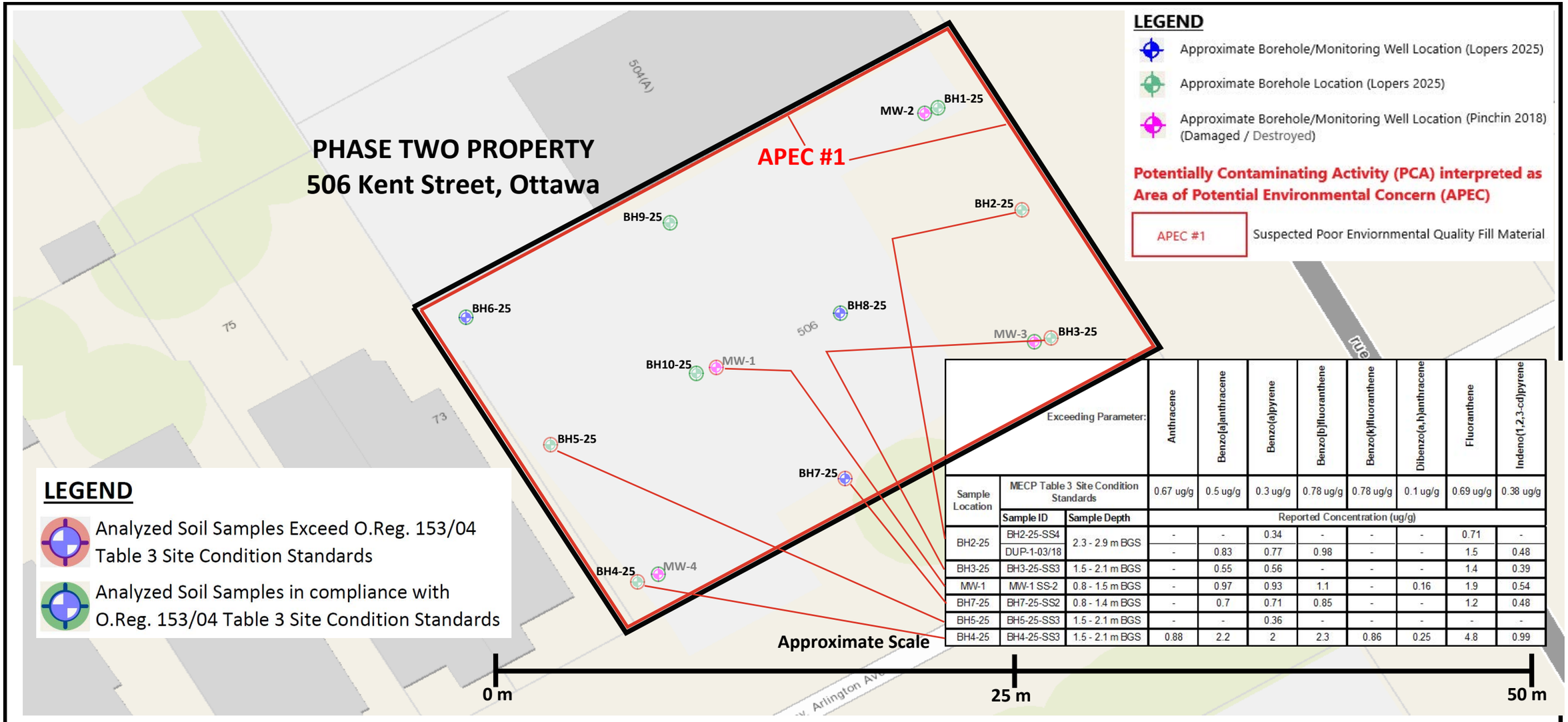
Figure 4b: Metals & Inorganics Soil Exceedances
Phase Two Environmental Site Assessment
506 Kent Street, Ottawa, Ontario
11034936 Canada Inc.

Project Reference No:	LOP25-038B
Drawing No.:	LOP25-038B-4b
Date:	September 29, 2025
Author:	L. Lopers
Source:	geoOttawa



Exceeding Parameter:			Anthracene	Benzo[a]anthracene	Benzo(e)pyrene	Benzo[b]fluoranthene	Benzo(k)fluoranthene	Dibenzo(a,h)anthracene	Fluoranthene	Indeno(1,2,3-cd)pyrene
Sample Location	MECP Table 3 Site Condition Standards		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
	Sample ID	Sample Depth	Reported Concentration (ug/g)							
BH2-25	BH2-25-SS4	2.3 - 2.9 m BGS	-	-	0.34	-	-	-	0.71	-
	DUP-1-03/18		-	0.83	0.77	0.98	-	-	1.5	0.48
BH3-25	BH3-25-SS3	1.5 - 2.1 m BGS	-	0.55	0.56	-	-	-	1.4	0.39
MW-1	MW-1 SS-2	0.8 - 1.5 m BGS	-	0.97	0.93	1.1	-	0.16	1.9	0.54
BH7-25	BH7-25-SS2	0.8 - 1.4 m BGS	-	0.7	0.71	0.85	-	-	1.2	0.48
BH5-25	BH5-25-SS3	1.5 - 2.1 m BGS	-	-	0.36	-	-	-	-	-
BH4-25	BH4-25-SS3	1.5 - 2.1 m BGS	0.88	2.2	2	2.3	0.86	0.25	4.8	0.99

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Figure 4c: Polycyclic Aromatic Hydrocarbons Soil Exceedances
Phase Two Environmental Site Assessment
506 Kent Street, Ottawa, Ontario
11034936 Canada Inc.

Project Reference No:	LOP25-038B
Drawing No.:	LOP25-038B-4c
Date:	September 29, 2025
Author:	L. Lopers
Source:	geoOttawa

Tables

Table 9: Soil Analytical Results

506 Kent Street, Ottawa, Ontario

Parameter	Units	Method Detection Limit (MDL)	O.Reg. 153/04 Table 3: Residential Property Use Standards, Coarse Grained Soil	Sample ID: BH1-25-SS2	BH2-25-SS4	DUP-1-03/18	BH2-25-SS5	BH3-25-SS3	BH4-25-SS3	BH4-25-SS4
				Sample Depth: 0.8 - 1.4 m BGS	2.3 - 2.9 m BGS	Duplicate of BH2-25-SS4	3.1 - 3.7 m BGS	1.5 - 2.1 m BGS	1.5 - 2.1 m BGS	2.3 - 2.9 m BGS
				Sample Date: March 18, 2025	March 18, 2025	March 18, 2025	March 18, 2025	March 18, 2025	March 18, 2025	March 18, 2025
				Laboratory Sample ID: APBQ54	APBQ55	APBQ68	APBQ56	APBQ57	APBQ58	APBQ59
Petroluem Hydrocarbons (PHCs)										
F1 PHCs (C6-C10)	ug/g	5	55	<10	<10	<10	-	<10	<10	<10
F2 PHCs (C10-C16)	ug/g	10	98	11	11	11	-	10	14	<7.0
F3 PHCs (C16-C34)	ug/g	50	300	110	320	390	-	85	210	<50
F4 PHCs (C34-C50)	ug/g	50	2800	220	730	1100	-	68	100	<50
F4G PHCs (gravimetric)	ug/g	50	2800	1000	2100	-	-	-	-	-
Volatile Organic Compounds (VOCs) including Benzene, Toluene, Ethylbenzene and Xylenes (BTEXs)										
Acetone	ug/g	0.50	16	-	-	-	-	-	-	-
Benzene	ug/g	0.0050	0.21	<0.020	<0.020	<0.020	-	<0.020	<0.020	<0.020
Bromodichloromethane	ug/g	0.050	13	-	-	-	-	-	-	-
Bromoform	ug/g	0.050	0.27	-	-	-	-	-	-	-
Bromomethane	ug/g	0.050	0.05	-	-	-	-	-	-	-
Carbon Tetrachloride	ug/g	0.050	0.05	-	-	-	-	-	-	-
Chlorobenzene	ug/g	0.050	2.4	-	-	-	-	-	-	-
Chloroform	ug/g	0.050	0.05	-	-	-	-	-	-	-
Dibromochloromethane	ug/g	0.050	9.4	-	-	-	-	-	-	-
1,2-Dichlorobenzene	ug/g	0.050	3.4	-	-	-	-	-	-	-
1,3-Dichlorobenzene	ug/g	0.050	4.8	-	-	-	-	-	-	-
1,4-Dichlorobenzene	ug/g	0.050	0.083	-	-	-	-	-	-	-
1,1-Dichloroethane	ug/g	0.050	3.5	-	-	-	-	-	-	-
1,2-Dichloroethane	ug/g	0.050	0.05	-	-	-	-	-	-	-
1,1-Dichloroethylene	ug/g	0.050	0.05	-	-	-	-	-	-	-
Cis-1,2-Dichloroethylene	ug/g	0.050	3.4	-	-	-	-	-	-	-
Trans-1,2-Dichloroethylene	ug/g	0.050	0.084	-	-	-	-	-	-	-
1,2-Dichloropropane	ug/g	0.050	0.05	-	-	-	-	-	-	-
Cis-1,3-Dichloropropylene	ug/g	0.050	NV	-	-	-	-	-	-	-
Trans-1,3-Dichloropropylene	ug/g	0.045	NV	-	-	-	-	-	-	-
Ethylbenzene	ug/g	0.050	2	<0.020	<0.020	<0.020	-	<0.020	<0.020	<0.020
Ethylene Dibromide	ug/g	0.075	0.05	-	-	-	-	-	-	-
Methyl Ethyl Ketone	ug/g	0.050	16	-	-	-	-	-	-	-
Methylene Chloride	ug/g	0.050	0.1	-	-	-	-	-	-	-
Methyl Isobutyl Ketone	ug/g	0.015	1.7	-	-	-	-	-	-	-
Methyl-t-Butyl Ether	ug/g	0.050	0.75	-	-	-	-	-	-	-
Styrene	ug/g	0.50	0.7	-	-	-	-	-	-	-
1,1,1,2-Tetrachloroethane	ug/g	0.50	0.058	-	-	-	-	-	-	-
1,1,2,2-Tetrachloroethane	ug/g	0.040	0.05	-	-	-	-	-	-	-
Toluene	ug/g	0.050	2.3	<0.020	0.023	<0.020	-	0.022	0.16	<0.020
Tetrachloroethylene	ug/g	0.050	0.28	-	-	-	-	-	-	-
1,1,1-Trichloroethane	ug/g	0.050	0.38	-	-	-	-	-	-	-
1,1,2-Trichloroethane	ug/g	0.050	0.05	-	-	-	-	-	-	-
Trichloroethylene	ug/g	0.050	0.061	-	-	-	-	-	-	-
Vinyl Chloride	ug/g	0.050	0.02	-	-	-	-	-	-	-
m-Xylene & p-Xylene	ug/g	0.050	NV	<0.040	<0.040	<0.040	-	<0.040	<0.040	<0.040
o-Xylene	ug/g	0.010	NV	<0.020	<0.020	<0.020	-	<0.020	<0.020	<0.020
Total Xylenes	ug/g	0.050	3.1	<0.020	<0.020	<0.020	-	<0.020	<0.020	<0.020
Dichlorodifluoromethane	ug/g	0.020	16	-	-	-	-	-	-	-
Dioxane, 1,4-	ug/g	0.030	1.8	-	-	-	-	-	-	-
Hexane(n)	ug/g		2.8				-			
Trichlorofluoromethane	ug/g	0.030	4	-	-	-	-	-	-	-
1,3-Dichloropropene (cis + trans)	ug/g	0.050	0.05	-	-	-	-	-	-	-
Polycyclic Aromatic Hydrocarbons										
Acenaphthene	ug/g	0.050	7.9	<0.050	<0.050	<0.050	<0.010	0.043	0.35	<0.0050
Acenaphthylene	ug/g	0.050	0.15	<0.050	<0.050	<0.050	<0.010	0.088	0.15	<0.0050
Anthracene	ug/g	0.050	0.67	<0.050	0.06	0.12	<0.010	0.19	0.88	<0.0050
Benzo[a]anthracene	ug/g	0.050	0.5	0.055	0.36	0.83	<0.010	0.55	2.2	<0.0050
Benzo[a]pyrene	ug/g	0.050	0.3	0.061	0.34	0.77	<0.010	0.56	2	<0.0050
Benzo[b]fluoranthene	ug/g	0.050	0.78	0.082	0.44	0.98	<0.010	0.67	2.3	<0.0050
Benzo[g,h,i]perylene	ug/g	0.050	6.6	0.053	0.24	0.46	<0.010	0.34	0.98	<0.0050
Benzo[k]fluoranthene	ug/g	0.050	0.78	<0.050	0.15	0.34	<0.010	0.25	0.86	<0.0050
Chrysene	ug/g	0.050	7	0.054	0.31	0.67	<0.010	0.48	1.9	<0.0050
Dibenzo[a,h]anthracene	ug/g	0.050	0.1	<0.050	<0.050	0.1	<0.010	0.094	0.25	<0.0050
Fluoranthene	ug/g	0.050	0.69	0.14	0.71	1.5	<0.010	1.4	4.8	0.0097
Fluorene	ug/g	0.050	62	<0.050	<0.050	<0.050	<0.010	0.072	0.32	<0.0050
Indeno[1,2,3-cd]pyrene	ug/g	0.050	0.38	<0.050	0.23	0.48	<0.010	0.39	0.99	<0.0050
1-Methylnaphthalene	ug/g	0.050	0.99	<0.050	<0.050	<0.050	<0.010	0.028	0.18	<0.0050
2-Methylnaphthalene	ug/g	0.030	0.99	<0.050	<0.050	<0.050	<0.010	0.031	0.22	<0.0050
Naphthalene	ug/g	0.010	0.6	<0.050	<0.050	<0.050	<0.010	0.046	0.61	<0.0050
Phenanthrene	ug/g	0.050	6.2	0.065	0.26	0.5	<0.010	1	4	0.0076
Pyrene	ug/g	0.050	78	0.11	0.6	1.2	<0.010	1	3.8	0.0077
Methylnaphthalene (1&2)	ug/g	0.030	0.99	<0.071	<0.071	<0.071	<0.014	0.06	0.4	<0.0071
Metals										
Antimony	ug/g	1.0	7.5	0.56	31	29	<0.20	1.3	3.2	<0.20
Arsenic	ug/g	1.0	18	4.3	3.4	4	1.2	5.1	8.3	<1.0
Barium	ug/g	1.0	390	200	240	240	280	360	140	45
Beryllium	ug/g	0.5	4	0.48	0.28	0.33	0.77	0.53	0.35	0.21
Boron, available	ug/g	0.1	120	0.29	0.45	0.49	0.44	0.4	0.47	0.21
Boron	ug/g	5.0	1.5	7.1	<5.0	5.5	8.9	8.5	<5.0	<5.0
Cadmium	ug/g	0.5	1.2	0.34	0.17	0.21	0.1	0.49	0.42	<0.10
Chromium	ug/g	1.0	160	24	26	28	140	26	25	23
Chromium (VI)	ug/g	0.2	8	<0.18	<0.18	<0.18	<0.36	<0.18	<0.18	0.22
Cobalt	ug/g	1.0	22	8.6	8.1	8.5	26	8.3	6.5	4.3
Copper	ug/g	1.0	140	27	25	24	58	33	38	7.2
Lead	ug/g	1.0	120	75	1700	1100	10	180	250	5.6
Mercury	ug/g	0.005	0.27	0.12	0.098	0.14	<0.050	0.27	0.36	<0.050
Methyl Mercury	ng/g	0.050	8.4	-	-	-	-	-	-	-
Molybdenum	ug/g	1.0	6.9	1.9	2.1	2.3	0.73	1.3	0.97	<0.50
Nickel	ug/g	1.0	100	21	20	20	79	20	16	11
Selenium	ug/g	1.0	2.4	<0.50	<0.50	<0.50	<0.50	<0.50	0.73	<0.50
Silver	ug/g	0.2	20	0.2	<0.20	<0.20	<0.20	0.47	0.22	<0.20
Thallium	ug/g	0.5	1	0.25	0.32	0.28	0.37	0.28	0.13	0.076
Uranium	ug/g	1.0	23	0.87	0.82	0.84	1.2	0.79	0.64	0.53
Vanadium	ug/g	1.0	86	28	32	32	110	28	28	20
Zinc	ug/g	5.0	340	120	120	130	130	260	180	50
General Inorganics										
SAR	N/A	0.01	5	6.3	3.4	4	2.3	3.7	6.3	2
Conductivity	mS/cm	0.02	0.7	0.74	0.47	0.54	1.2	2.4	1.3	0.66
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	7.72	7.59	7.57	7.64	7.57	7.55	7.26
Grain Size										
Percent Passing (i.e. smaller than)	mm	0.075	50%	-	-	-	100	-	-	47

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

506 Kent Street, Ottawa, Ontario

Parameter	Units	Method Detection Limit (MDL)	O.Reg. 153/04 Table 3: Residential Property Use Standards, Coarse Grained Soil	Sample ID: BH5-25-SS3	BH5-25-SS4	BH6-25-AU1	BH6-25-SS3	BH6-25-SS5	BH6-25-SS6	BH7-25-SS2	BH7-25-SS4
				Sample Depth: 1.5 - 2.1 m BGS	2.3 - 2.9 m BGS	0.0 - 0.6 m BGS	1.5 - 2.1 m BGS	3.1 - 3.7 m BGS	3.8 - 4.4 m BGS	0.8 - 1.4 m BGS	2.3 - 2.9 m BGS
				Sample Date: March 18, 2025	March 18, 2025	March 18, 2025	March 18, 2025	March 18, 2025	March 18, 2025	March 18, 2025	March 18, 2025
				Laboratory Sample ID: APBQ60	APBQ61	APBQ62	APBQ63	APBQ64	APBQ65	APBQ66	APBQ67
Petroluem Hydrocarbons (PHCs)											
F1 PHCs (C6-C10)	ug/g	5	55	<10	<10	<10	-	<10	<10	<10	<10
F2 PHCs (C10-C16)	ug/g	10	98	13	<7.0	16	-	<7.0	<7.0	14	<7.0
F3 PHCs (C16-C34)	ug/g	50	300	150	<50	64	-	<50	<50	160	<50
F4 PHCs (C34-C50)	ug/g	50	2800	95	<50	<50	-	<50	<50	56	<50
F4G PHCs (gravimetric)	ug/g	50	2800	-	-	-	-	-	-	-	-
Volatile Organic Compounds (VOCs) including Benzene, Toluene, Ethylbenzene and Xylenes (BTEXs)											
Acetone	ug/g	0.50	16	-	-	<0.49	-	<0.49	<0.49	-	-
Benzene	ug/g	0.0050	0.21	<0.020	<0.020	<0.0060	-	<0.0060	<0.0060	<0.020	<0.020
Bromodichloromethane	ug/g	0.050	13	-	-	<0.040	-	<0.040	<0.040	-	-
Bromoform	ug/g	0.050	0.27	-	-	<0.040	-	<0.040	<0.040	-	-
Bromomethane	ug/g	0.050	0.05	-	-	<0.040	-	<0.040	<0.040	-	-
Carbon Tetrachloride	ug/g	0.050	0.05	-	-	<0.040	-	<0.040	<0.040	-	-
Chlorobenzene	ug/g	0.050	2.4	-	-	<0.040	-	<0.040	<0.040	-	-
Chloroform	ug/g	0.050	0.05	-	-	<0.040	-	<0.040	<0.040	-	-
Dibromochloromethane	ug/g	0.050	9.4	-	-	<0.040	-	<0.040	<0.040	-	-
1,2-Dichlorobenzene	ug/g	0.050	3.4	-	-	<0.040	-	<0.040	<0.040	-	-
1,3-Dichlorobenzene	ug/g	0.050	4.8	-	-	<0.040	-	<0.040	<0.040	-	-
1,4-Dichlorobenzene	ug/g	0.050	0.083	-	-	<0.040	-	<0.040	<0.040	-	-
1,1-Dichloroethane	ug/g	0.050	3.5	-	-	<0.040	-	<0.040	<0.040	-	-
1,2-Dichloroethane	ug/g	0.050	0.05	-	-	<0.049	-	<0.049	<0.049	-	-
1,1-Dichloroethylene	ug/g	0.050	0.05	-	-	<0.040	-	<0.040	<0.040	-	-
Cis-1,2-Dichloroethylene	ug/g	0.050	3.4	-	-	<0.040	-	<0.040	<0.040	-	-
Trans-1,2-Dichloroethylene	ug/g	0.050	0.084	-	-	<0.040	-	<0.040	<0.040	-	-
1,2-Dichloropropane	ug/g	0.050	0.05	-	-	<0.040	-	<0.040	<0.040	-	-
Cis-1,3-Dichloropropylene	ug/g	0.050	NV	-	-	<0.030	-	<0.030	<0.030	-	-
Trans-1,3-Dichloropropylene	ug/g	0.045	NV	-	-	<0.040	-	<0.040	<0.040	-	-
Ethylbenzene	ug/g	0.050	2	<0.020	<0.020	<0.010	-	<0.010	<0.010	<0.020	<0.020
Ethylene Dibromide	ug/g	0.075	0.05	-	-	<0.040	-	<0.040	<0.040	-	-
Methyl Ethyl Ketone	ug/g	0.050	16	-	-	<0.40	-	<0.40	<0.40	-	-
Methylene Chloride	ug/g	0.050	0.1	-	-	<0.049	-	<0.049	<0.049	-	-
Methyl Isobutyl Ketone	ug/g	0.015	1.7	-	-	<0.40	-	<0.40	<0.40	-	-
Methyl-t-Butyl Ether	ug/g	0.050	0.75	-	-	<0.040	-	<0.040	<0.040	-	-
Styrene	ug/g	0.50	0.7	-	-	<0.040	-	<0.040	<0.040	-	-
1,1,1,2-Tetrachloroethane	ug/g	0.50	0.058	-	-	<0.040	-	<0.040	<0.040	-	-
1,1,2,2-Tetrachloroethane	ug/g	0.040	0.05	-	-	<0.040	-	<0.040	<0.040	-	-
Toluene	ug/g	0.050	2.3	<0.020	<0.020	<0.020	-	<0.020	<0.020	<0.020	<0.020
Tetrachloroethylene	ug/g	0.050	0.28	-	-	<0.040	-	<0.040	<0.040	-	-
1,1,1-Trichloroethane	ug/g	0.050	0.38	-	-	<0.040	-	<0.040	<0.040	-	-
1,1,2-Trichloroethane	ug/g	0.050	0.05	-	-	<0.040	-	<0.040	<0.040	-	-
Trichloroethylene	ug/g	0.050	0.061	-	-	<0.010	-	<0.010	<0.010	-	-
Vinyl Chloride	ug/g	0.050	0.02	-	-	<0.019	-	<0.019	<0.019	-	-
m-Xylene & p-Xylene	ug/g	0.050	NV	<0.040	<0.040	<0.020	-	<0.020	<0.020	<0.040	<0.040
o-Xylene	ug/g	0.010	NV	<0.020	<0.020	<0.020	-	<0.020	<0.020	<0.020	<0.020
Total Xylenes	ug/g	0.050	3.1	<0.020	<0.020	<0.020	-	<0.020	<0.020	<0.020	<0.020
Dichlorodifluoromethane	ug/g	0.020	16	-	-	<0.040	-	<0.040	<0.040	-	-
Dioxane, 1,4-	ug/g	0.030	1.8	-	-	-	-	-	-	-	-
Hexane(n)	ug/g		2.8			0.065	-	<0.040	<0.040		
Trichlorofluoromethane	ug/g	0.030	4	-	-	<0.040	-	<0.040	<0.040	-	-
1,3-Dichloropropene (cis + trans)	ug/g	0.050	0.05	-	-	<0.050	-	<0.050	<0.050	-	-
Polycyclic Aromatic Hydrocarbons											
Acenaphthene	ug/g	0.050	7.9	0.023	<0.0050	<0.0050	0.025	<0.0050	-	0.049	<0.0050
Acenaphthylene	ug/g	0.050	0.15	0.038	<0.0050	0.014	0.0085	<0.0050	-	0.061	<0.0050
Anthracene	ug/g	0.050	0.67	0.11	<0.0050	0.028	0.1	<0.0050	-	0.17	<0.0050
Benzo[a]anthracene	ug/g	0.050	0.5	0.39	<0.0050	0.085	0.19	<0.0050	-	**0.7**	<0.0050
Benzo[a]pyrene	ug/g	0.050	0.3	**0.36**	<0.0050	0.074	0.15	<0.0050	-	**0.71**	<0.0050
Benzo[b]fluoranthene	ug/g	0.050	0.78	0.41	<0.0050	0.088	0.18	<0.0050	-	**0.85**	<0.0050
Benzo[g,h,i]perylene	ug/g	0.050	6.6	0.2	<0.0050	0.043	0.077	<0.0050	-	0.44	<0.0050
Benzo[k]fluoranthene	ug/g	0.050	0.78	0.15	<0.0050	0.032	0.067	<0.0050	-	0.3	<0.0050
Chrysene	ug/g	0.050	7	0.3	<0.0050	0.065	0.14	<0.0050	-	0.56	<0.0050
Dibenzo[a,h]anthracene	ug/g	0.050	0.1	0.065	<0.0050	0.011	0.022	<0.0050	-	0.12	<0.0050
Fluoranthene	ug/g	0.050	0.69	0.63	0.0087	0.16	0.43	<0.0050	-	**1.2**	0.0061
Fluorene	ug/g	0.050	62	0.024	<0.0050	0.0067	0.031	<0.0050	-	0.045	<0.0050
Indeno[1,2,3-cd]pyrene	ug/g	0.050	0.38	0.23	<0.0050	0.047	0.084	<0.0050	-	**0.48**	<0.0050
1-Methylnaphthalene	ug/g	0.050	0.99	0.0093	<0.0050	<0.0050	0.0056	<0.0050	-	0.012	<0.0050
2-Methylnaphthalene	ug/g	0.030	0.99	0.011	<0.0050	<0.0050	0.0074	<0.0050	-	0.013	<0.0050
Naphthalene	ug/g	0.010	0.6	0.016	<0.0050	<0.0050	0.016	<0.0050	-	0.019	<0.0050
Phenanthrene	ug/g	0.050	6.2	0.3	<0.0050	0.075	0.34	<0.0050	-	0.58	<0.0050
Pyrene	ug/g	0.050	78	0.53	0.0082	0.13	0.33	<0.0050	-	1.1	0.0053
Methylnaphthalene (1&2)	ug/g	0.030	0.99	0.02	<0.0071	<0.0071	0.013	<0.0071	-	0.024	<0.0071
Metals											
Antimony	ug/g	1.0	7.5	2.7	3.3	0.66	0.84	<0.20	-	**8.6**	<0.20
Arsenic	ug/g	1.0	18	3.6	2	2.6	1.7	<1.0	-	7.6	<1.0
Barium	ug/g	1.0	390	180	150	120	54	24	-	190	29
Beryllium	ug/g	0.5	4	0.26	0.25	0.25	0.22	<0.20	-	0.33	<0.20
Boron, available	ug/g	0.1	120	0.39	0.39	0.39	0.4	0.12	-	0.36	0.13
Boron	ug/g	5.0	1.5	<5.0	<5.0	10	<5.0	<5.0	-	<5.0	<5.0
Cadmium	ug/g	0.5	1.2	0.41	0.44	0.15	<0.10	<0.10	-	0.24	<0.10
Chromium	ug/g	1.0	160	19	20	13	16	13	-	19	16
Chromium (VI)	ug/g	0.2	8	<0.18	<0.18	<0.18	<0.18	<0.18	-	<0.18	<0.18
Cobalt	ug/g	1.0	22	5	4.3	3.7	4.7	3.8	-	5.8	4.2
Copper	ug/g	1.0	140	49	21	17	10	7.1	-	140	14
Lead	ug/g	1.0	120	**410**	**250**	70	66	2.1	-	**370**	4.2
Mercury	ug/g	0.005	0.27	**0.33**	0.17	0.061	0.15	<0.050	-	0.1	<0.050
Methyl Mercury	ng/g	0.050	8.4	-	-	-	-	-	-	-	-
Molybdenum	ug/g	1.0	6.9	0.57	<0.50	0.98	<0.50	<0.50	-	1.1	<0.50
Nickel	ug/g	1.0	100	11	11	11	10	8.5	-	12	10
Selenium	ug/g	1.0	2.4	0.61	0.51	<0.50	<0.50	<0.50	-	1.2	<0.50
Silver	ug/g	0.2	20	<0.20	<0.20	<0.20	<0.20	<0.20	-	1	<0.20
Thallium	ug/g	0.5	1	0.13	0.11	0.12	0.078	<0.050	-	0.15	0.06
Uranium	ug/g	1.0	23	0.47	0.58	0.6	0.37	1.3	-	0.49	0.46
Vanadium	ug/g	1.0	86	21	19	11	20	16	-	24	19
Zinc	ug/g	5.0	340	240	320	89	57	17	-	140	22
General Inorganics											
SAR	N/A	0.01	5	1.9	3.4	2.3	**7.5**	**5.4**	-	**15**	**6.5**
Conductivity	mS/cm	0.02	0.7	0.35	0.46	0.26	0.46	0.29	-	**1.1**	0.49
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	7.58	7.5	7.75	7.71	7.53	-	7.64	7.71
Grain Size											
Percent Passing (i.e. smaller than)	mm	0.075	50%	-	-	-	-	-	90	-	-

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

506 Kent Street, Ottawa, Ontario

Parameter	Units	Method Detection Limit (MDL)	O.Reg. 153/04 Table 3: Residential Property Use Standards, Coarse Grained Soil	Sample ID: BH8-25-SS2	DUP-2-03/19	BH8-25-SS4	BH9-25-SS2	BH9-25-SS3	BH10-25-SS2	BH10-25-SS4
				Sample Depth: 0.8 - 1.4 m BGS	Duplicate of BH8-24-SS2	2.3 - 2.9 m BGS	0.8 - 1.4 m BGS	1.5 - 2.1 m BGS	0.8 - 1.4 m BGS	2.3 - 2.9 m BGS
				Sample Date: March 19, 2025	March 19, 2025	March 19, 2025	March 19, 2025	March 19, 2025	March 19, 2025	March 19, 2025
				Laborartory Sample ID: APBQ70	APBQ76	APBQ71	APBQ72	APBQ73	APBQ74	APBQ75
Petroluem Hydrocarbons (PHCs)										
F1 PHCs (C6-C10)	ug/g	5	55	<10	<10	<10	<10	<10	-	<10
F2 PHCs (C10-C16)	ug/g	10	98	14	14	<7.0	11	<7.0	-	<7.0
F3 PHCs (C16-C34)	ug/g	50	300	150	250	<50	200	<50	-	<50
F4 PHCs (C34-C50)	ug/g	50	2800	76	310	<50	88	<50	-	<50
F4G PHCs (gravimetric)	ug/g	50	2800	-	-	-	-		-	
Volatile Organic Compounds (VOCs) including Benzene, Toluene, Ethylbenzene and Xylenes (BTEXs)										
Acetone	ug/g	0.50	16	-	-	-	-	-	-	-
Benzene	ug/g	0.0050	0.21	<0.020	<0.020	<0.020	<0.020	<0.020	-	<0.020
Bromodichloromethane	ug/g	0.050	13	-	-	-	-	-	-	-
Bromoform	ug/g	0.050	0.27	-	-	-	-	-	-	-
Bromomethane	ug/g	0.050	0.05	-	-	-	-	-	-	-
Carbon Tetrachloride	ug/g	0.050	0.05	-	-	-	-	-	-	-
Chlorobenzene	ug/g	0.050	2.4	-	-	-	-	-	-	-
Chloroform	ug/g	0.050	0.05	-	-	-	-	-	-	-
Dibromochloromethane	ug/g	0.050	9.4	-	-	-	-	-	-	-
1,2-Dichlorobenzene	ug/g	0.050	3.4	-	-	-	-	-	-	-
1,3-Dichlorobenzene	ug/g	0.050	4.8	-	-	-	-	-	-	-
1,4-Dichlorobenzene	ug/g	0.050	0.083	-	-	-	-	-	-	-
1,1-Dichloroethane	ug/g	0.050	3.5	-	-	-	-	-	-	-
1,2-Dichloroethane	ug/g	0.050	0.05	-	-	-	-	-	-	-
1,1-Dichloroethylene	ug/g	0.050	0.05	-	-	-	-	-	-	-
Cis-1,2-Dichloroethylene	ug/g	0.050	3.4	-	-	-	-	-	-	-
Trans-1,2-Dichloroethylene	ug/g	0.050	0.084	-	-	-	-	-	-	-
1,2-Dichloropropane	ug/g	0.050	0.05	-	-	-	-	-	-	-
Cis-1,3-Dichloropropylene	ug/g	0.050	NV	-	-	-	-	-	-	-
Trans-1,3-Dichloropropylene	ug/g	0.045	NV	-	-	-	-	-	-	-
Ethylbenzene	ug/g	0.050	2	<0.020	<0.020	<0.020	<0.020	<0.020	-	<0.020
Ethylene Dibromide	ug/g	0.075	0.05	-	-	-	-	-	-	-
Methyl Ethyl Ketone	ug/g	0.050	16	-	-	-	-	-	-	-
Methylene Chloride	ug/g	0.050	0.1	-	-	-	-	-	-	-
Methyl Isobutyl Ketone	ug/g	0.015	1.7	-	-	-	-	-	-	-
Methyl-t-Butyl Ether	ug/g	0.050	0.75	-	-	-	-	-	-	-
Styrene	ug/g	0.50	0.7	-	-	-	-	-	-	-
1,1,1,2-Tetrachloroethane	ug/g	0.50	0.058	-	-	-	-	-	-	-
1,1,2,2-Tetrachloroethane	ug/g	0.040	0.05	-	-	-	-	-	-	-
Toluene	ug/g	0.050	2.3	0.024	0.023	<0.020	<0.020	<0.020	-	<0.020
Tetrachloroethylene	ug/g	0.050	0.28	-	-	-	-	-	-	-
1,1,1-Trichloroethane	ug/g	0.050	0.38	-	-	-	-	-	-	-
1,1,2-Trichloroethane	ug/g	0.050	0.05	-	-	-	-	-	-	-
Trichloroethylene	ug/g	0.050	0.061	-	-	-	-	-	-	-
Vinyl Chloride	ug/g	0.050	0.02	-	-	-	-	-	-	-
m-Xylene & p-Xylene	ug/g	0.050	NV	0.061	0.047	<0.040	<0.040	<0.040	-	<0.040
o-Xylene	ug/g	0.010	NV	0.079	0.025	<0.020	<0.020	<0.020	-	<0.020
Total Xylenes	ug/g	0.050	3.1	0.14	0.072	<0.020	<0.020	<0.020	-	<0.020
Dichlorodifluoromethane	ug/g	0.020	16	-	-	-	-	-	-	-
Dioxane, 1,4-	ug/g	0.030	1.8	-	-	-	-	-	-	-
Hexane(n)	ug/g		2.8						-	
Trichlorofluoromethane	ug/g	0.030	4	-	-	-	-	-	-	-
1,3-Dichloropropene (cis + trans)	ug/g	0.050	0.05	-	-	-	-	-	-	-
Polycyclic Aromatic Hydrocarbons										
Acenaphthene	ug/g	0.050	7.9	0.66	0.9	<0.0050	0.12	<0.0050	-	<0.0050
Acenaphthylene	ug/g	0.050	0.15	0.17	0.21	<0.0050	0.74	<0.0050	-	<0.0050
Anthracene	ug/g	0.050	0.67	1.6	2.3	<0.0050	1.3	<0.0050	-	<0.0050
Benzo[a]anthracene	ug/g	0.050	0.5	2.6	3.2	0.0055	6.3	<0.0050	-	<0.0050
Benzo[a]pyrene	ug/g	0.050	0.3	2.4	2.8	0.0054	6.5	<0.0050	-	<0.0050
Benzo[b]fluoranthene	ug/g	0.050	0.78	2.5	2.9	0.006	7.3	<0.0050	-	<0.0050
Benzo[g,h,i]perylene	ug/g	0.050	6.6	1.2	1.3	<0.0050	3.8	<0.0050	-	<0.0050
Benzo[k]fluoranthene	ug/g	0.050	0.78	0.88	0.99	<0.0050	2.5	<0.0050	-	<0.0050
Chrysene	ug/g	0.050	7	2	2.5	<0.0050	6	<0.0050	-	<0.0050
Dibenzo[a,h]anthracene	ug/g	0.050	0.1	0.28	0.37	<0.0050	0.8	<0.0050	-	<0.0050
Fluoranthene	ug/g	0.050	0.69	5.7	7.2	0.01	13	<0.0050	-	<0.0050
Fluorene	ug/g	0.050	62	0.74	0.93	<0.0050	0.15	<0.0050	-	<0.0050
Indeno[1,2,3-cd]pyrene	ug/g	0.050	0.38	1.3	1.6	<0.0050	4.3	<0.0050	-	<0.0050
1-Methylnaphthalene	ug/g	0.050	0.99	0.18	0.24	<0.0050	<0.050	<0.0050	-	<0.0050
2-Methylnaphthalene	ug/g	0.030	0.99	0.28	0.38	<0.0050	<0.050	<0.0050	-	<0.0050
Naphthalene	ug/g	0.010	0.6	0.71	0.88	<0.0050	<0.050	<0.0050	-	<0.0050
Phenanthrene	ug/g	0.050	6.2	5.1	7	0.0053	5.2	<0.0050	-	<0.0050
Pyrene	ug/g	0.050	78	4.4	5.5	0.0088	11	<0.0050	-	<0.0050
Methylnaphthalene (1&2)	ug/g	0.030	0.99	0.46	0.62	<0.0071	<0.071	<0.0071	-	<0.0071
Metals										
Antimony	ug/g	1.0	7.5	4	4	<0.20	2.5	<0.20	-	<0.20
Arsenic	ug/g	1.0	18	2.8	2.7	<1.0	6.1	<1.0	-	<1.0
Barium	ug/g	1.0	390	140	130	28	220	37	-	23
Beryllium	ug/g	0.5	4	0.28	0.25	<0.20	0.33	0.22	-	<0.20
Boron, available	ug/g	0.1	120	0.42	0.4	0.23	0.49	0.15	-	0.13
Boron	ug/g	5.0	1.5	<5.0	<5.0	<5.0	<5.0	<5.0	-	<5.0
Cadmium	ug/g	0.5	1.2	0.98	0.88	<0.10	0.75	<0.10	-	<0.10
Chromium	ug/g	1.0	160	20	18	15	23	19	-	16
Chromium (VI)	ug/g	0.2	8	<0.18	<0.18	<0.18	<0.18	<0.18	-	<0.18
Cobalt	ug/g	1.0	22	6	5.5	3.5	6.6	4.2	-	3.8
Copper	ug/g	1.0	140	23	21	7.6	78	6.9	-	6.9
Lead	ug/g	1.0	120	**270**	**280**	11	**450**	2.8	-	2
Mercury	ug/g	0.005	0.27	**0.41**	**0.35**	<0.050	**0.51**	<0.050	-	<0.050
Methyl Mercury	ng/g	0.050	8.4	<0.050	-	-	<0.050	-	0.052	-
Molybdenum	ug/g	1.0	6.9	0.77	0.65	<0.50	1.3	<0.50	-	<0.50
Nickel	ug/g	1.0	100	15	14	8.3	16	11	-	8.9
Selenium	ug/g	1.0	2.4	<0.50	<0.50	<0.50	1.1	<0.50	-	<0.50
Silver	ug/g	0.2	20	0.25	<0.20	<0.20	0.3	<0.20	-	<0.20
Thallium	ug/g	0.5	1	0.13	0.12	0.054	0.16	0.071	-	<0.050
Uranium	ug/g	1.0	23	0.63	0.58	0.47	0.63	0.32	-	1
Vanadium	ug/g	1.0	86	23	22	21	26	17	-	16
Zinc	ug/g	5.0	340	380	310	27	420	21	-	20
General Inorganics										
SAR	N/A	0.01	5	**17**	**17**	**6.3**	**20**	**24**	-	2.9
Conductivity	mS/cm	0.02	0.7	**2.6**	**2.4**	**1.3**	**2.4**	**1.4**	-	0.59
Cyanide, free	ug/g	0.03	0.051	<0.01	<0.01	<0.01	<0.01	<0.01	-	<0.01
pH	pH Units	0.05	5-11	7.56	7.64	7.66	7.67	7.62	-	7.45
Grain Size										
Percent Passing (i.e. smaller than)	mm	0.075	50%	-	-	-	-	-	-	-

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 10: Groundwater Analytical Results

506 Kent Street, Ottawa, Ontario

Parameter	Units	Method Detection Limit (MDL)	O.Reg. 153/04 Table 3: Residential Property Use Standards, Coarse Grained Soil	Sample ID: **BH6-25-GW1**	**BH7-25-GW1**	**BH8-25-GW1**	**DUP-1-03/25**
				Well Screen Depth: 1.5 - 4.6 m BGS	1.5 - 4.6 m BGS	1.5 - 4.6 m BGS	Duplicate of BH8-25-GW1
				Sample Date: March 5, 2025	March 5, 2025	March 5, 2025	March 5, 2025
				Laborartory Sample ID: APHM31	APHM32	APHM33	APHM34
Petroluem Hydrocarbons (PHCs)							
F1 PHCs (C6-C10)	µg/L	25	750	<25	<25	<25	<25
F2 PHCs (C10-C16)	µg/L	100	150	<90	<90	130	140
F3 PHCs (C16-C34)	µg/L	250	500	<200	<200	<200	<200
F4 PHCs (C34-C50)	µg/L	250	500	<200	<200	<200	<200
F4G PHCs (gravimetric)	µg/L	250	500	-	-	-	-
Volatile Organic Compounds (VOCs) including Benzene, Toluene, Ethylbenzene and Xylenes (BTEXs)							
Benzene	µg/L	0.2	44	<0.20	<0.20	<0.20	<0.20
Ethylbenzene	µg/L	0.2	2300	<0.20	<0.20	<0.20	<0.20
Toluene	µg/L	0.2	18000	0.72	<0.20	0.33	0.32
m-Xylene & p-Xylene	µg/L	0.2	NV	<0.40	<0.40	<0.40	<0.40
o-Xylene	µg/L	0.2	NV	<0.20	<0.20	<0.20	<0.20
Total Xylenes	µg/L	0.2	4200	<0.40	<0.40	<0.40	<0.40
Polycyclic Aromatic Hydrocarbons							
Acenaphthene	µg/L	0.05	600	<0.050	<0.050	0.37	0.34
Acenaphthylene	µg/L	0.05	1.8	<0.050	<0.050	<0.050	<0.050
Anthracene	µg/L	0.05	2.4	<0.050	<0.050	<0.050	<0.050
Benz(a)anthracene	µg/L	0.05	4.7	<0.050	<0.050	<0.050	<0.050
Benzo(a)pyrene	µg/L	0.009	0.81	0.046	<0.0090	<0.0090	<0.0090
Benzo(b+j)fluoranthene	µg/L	0.05	0.75	0.057	<0.050	<0.050	<0.050
Benzo(g,h,i)perylene	µg/L	0.05	0.2	<0.050	<0.050	<0.050	<0.050
Benzo(k)fluoranthene	µg/L	0.05	0.4	<0.050	<0.050	<0.050	<0.050
Chrysene	µg/L	0.05	1	<0.050	<0.050	<0.050	<0.050
Dibenz(a,h)anthracene	µg/L	0.05	0.52	<0.050	<0.050	<0.050	<0.050
Fluoranthene	µg/L	0.05	130	0.13	<0.050	0.09	0.09
Fluorene	µg/L	0.05	400	<0.050	<0.050	<0.060	<0.050
Indeno(1,2,3-c,d)pyrene	µg/L	0.05	0.2	<0.050	<0.050	<0.050	<0.050
Methylnaphthalene, 1+2-	µg/L	0.05	1800	<0.050	<0.050	<0.050	<0.050
Methylnaphthalene, 1-	µg/L	0.05	1800	<0.050	<0.050	<0.050	<0.050
Methylnaphthalene, 2-	µg/L	0.071	1800	<0.071	<0.071	<0.071	<0.071
Naphthalene	µg/L	0.05	1400	0.056	<0.050	<0.050	<0.050
Phenanthrene	µg/L	0.03	580	0.073	0.089	0.16	0.16
Pyrene	µg/L	0.05	68	0.12	<0.050	0.067	0.068
Metals							
Antimony	µg/L	0.5	20000	2.2	1.3	<0.50	<0.50
Arsenic	µg/L	1.0	1900	1.5	<1.0	<1.0	<1.0
Barium	µg/L	2.0	29000	210	120	170	170
Beryllium	µg/L	0.4	67	<0.40	<0.40	<0.40	<0.40
Boron	µg/L	10	45000	100	95	91	91
Cadmium	µg/L	0.1	2.7	0.15	<0.090	<0.090	<0.090
Chromium	µg/L	5	810	<5.0	<5.0	<5.0	<5.0
Chromium, hexavalent [Cr VI]	µg/L	0.5	140	<0.50	<0.50	<0.50	<0.50
Cobalt	µg/L	0.5	66	0.77	<0.50	0.84	0.88
Copper	µg/L	0.9	87	6.8	1.2	<0.90	<0.90
Lead	µg/L	0.5	25	6.2	<0.50	<0.50	<0.50
Mercury	µg/L	0.1	0.29	<0.10	<0.10	<0.10	<0.10
Molybdenum	µg/L	0.5	9200	8.3	1.6	4.7	4.4
Nickel	µg/L	1	490	2.6	1.6	1.8	2.2
Selenium	µg/L	2.0	63	2.3	<2.0	<2.0	<2.0
Silver	µg/L	0.1	1.5	<0.090	<0.090	<0.090	<0.090
Sodium	µg/L	100.0	2.30E+06	300000	210000	390000	400000
Thallium	µg/L	0.05	510	<0.050	<0.050	<0.050	<0.050
Uranium	µg/L	0.1	420	15	4.2	3.2	3.2
Vanadium	µg/L	0.5	250	3.7	<0.50	0.82	0.58
Zinc	µg/L	5.0	1100	13	<5.0	<5.0	<5.0
General Inorganics							
Chloride	µg/L	5	2300	290	310	450	430
Cyanide, free	µg/L	1	66	<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

TABLE 5
PETROLEUM HYDROCARBON AND BTEX ANALYSIS FOR SOIL
2217822 Ontario Inc. o/a Jones Bro
506 Kent Street, Ottawa, Ontario

Parameter	*MECP Table 3 Standards**	*Sample Designation*		
		Sample Collection Date (dd/mm/yyyy)		
		Sample Depth (mbgs)		
		MW-2 SS-4	*MW-3 SS-7*	*MW-4 SS-6*
		23/08/2018	*23/08/2018*	*23/08/2018*
		2.3 - 3.1	*4.6 - 5.3*	*3.8 - 4.6*
Benzene	0.21	-	-	-
Toluene	2.3	-	-	-
Ethylbenzene	2	-	-	-
Xylenes (Total)	3.1	-	-	-
Petroleum Hydrocarbons F1 (C_6 - C_{10})	55	<10	<10	<10
Petroleum Hydrocarbons F2 (>C_{10} - C_{16})	98	<10	<10	<10
Petroleum Hydrocarbons F3 (>C_{16} - C_{34})	300	<50	<50	<50
Petroleum Hydrocarbons F4 (>C_{34} - C_{50})	2800	<50	<50	<50

Notes:

MECP Table 3 Standards* — Soil, Ground Water and Sediment Standards for Use Under Part XV.1 of the Environmental Protection Act, April 15, 2011, Table 3 Standards, Coarse-Textured Soils, Non-Potable Groundwater Condition, for Residential/Parkland/Institutional Property Use.

BOLD	Exceeds Site Condition Standard
BOLD	Reportable Detection Limit Exceeds Site Condition Standard
Units	All Units in µg/g
mbgs	Metres Below Ground Surface
BTEX	Benzene, Toluene, Ethylbenzene and Xylenes

Pinchin File: 227187.001

TABLE 6

VOLATILE ORGANIC COMPOUND ANALYSIS FOR SOIL

2217822 Ontario Inc. o/a Jones Bro

506 Kent Street, Ottawa, Ontario

Parameter	*MECP Table 3 Standards**	*Sample Designation*		
		Sample Collection Date (dd/mm/yyyy)		
		Sample Depth (mbgs)		
		MW-2 SS-4	*MW-3 SS-7*	*MW-4 SS-6*
		23/08/2018	*23/08/2018*	*23/08/2018*
		2.3 - 3.1	*4.6 - 5.3*	*3.8 - 4.6*
Acetone	16	<0.50	<0.50	<0.50
Benzene	0.21	<0.020	<0.020	<0.020
Bromodichloromethane	13	<0.050	<0.050	<0.050
Bromoform	0.27	<0.050	<0.050	<0.050
Bromomethane	0.05	<0.050	<0.050	<0.050
Carbon Tetrachloride	0.05	<0.050	<0.050	<0.050
Chlorobenzene	2.4	<0.050	<0.050	<0.050
Chloroform	0.05	<0.050	<0.050	<0.050
Dibromochloromethane	9.4	<0.050	<0.050	<0.050
1,2-Dichlorobenzene	3.4	<0.050	<0.050	<0.050
1,3-Dichlorobenzene	4.8	<0.050	<0.050	<0.050
1,4-Dichlorobenzene	0.083	<0.050	<0.050	<0.050
1,1-Dichloroethane	3.5	<0.050	<0.050	<0.050
1,2-Dichloroethane	0.05	<0.050	<0.050	<0.050
1,1-Dichloroethylene	0.05	<0.050	<0.050	<0.050
Cis-1,2-Dichloroethylene	3.4	<0.050	<0.050	<0.050
Trans-1,2-Dichloroethylene	0.084	<0.050	<0.050	<0.050
1,2-Dichloropropane	0.05	<0.050	<0.050	<0.050
Cis-1,3-Dichloropropylene	NV	<0.030	<0.030	<0.030
Trans-1,3-Dichloropropylene	NV	<0.040	<0.040	<0.040
Ethylbenzene	2	<0.020	<0.020	<0.020
Ethylene Dibromide	0.05	<0.050	<0.050	<0.050
Methyl Ethyl Ketone	16	<0.50	<0.50	<0.50
Methylene Chloride	0.1	<0.050	<0.050	<0.050
Methyl Isobutyl Ketone	1.7	<0.50	<0.50	<0.50
Methyl-t-Butyl Ether	0.75	<0.050	<0.050	<0.050
Styrene	0.7	<0.050	<0.050	<0.050
1,1,1,2-Tetrachloroethane	0.058	<0.050	<0.050	<0.050
1,1,2,2-Tetrachloroethane	0.05	<0.050	<0.050	<0.050
Toluene	2.3	<0.020	<0.020	<0.020
Tetrachloroethylene	0.28	<0.050	<0.050	<0.050
1,1,1-Trichloroethane	0.38	<0.050	<0.050	<0.050
1,1,2-Trichloroethane	0.05	<0.050	<0.050	<0.050
Trichloroethylene	0.061	<0.050	<0.050	<0.050
Vinyl Chloride	0.02	<0.020	<0.020	<0.020
m-Xylene & p-Xylene	NV	<0.020	<0.020	<0.020
o-Xylene	NV	<0.020	<0.020	<0.020
Total Xylenes	3.1	<0.020	<0.020	<0.020
Dichlorodifluoromethane	16	<0.050	<0.050	<0.050
Dioxane, 1,4-	1.8	-	-	-
Hexane(n)	2.8	<0.050	<0.050	<0.050
Trichlorofluoromethane	4	<0.050	<0.050	<0.050
1,3-Dichloropropene (cis + trans)	0.05	<0.050	<0.050	<0.050

Notes:

MECP Table 3 Standards* — Soil, Ground Water and Sediment Standards for Use Under Part XV.1 of the Environmental Protection Act, April 15, 2011, Table 3 Standards, Coarse-Textured Soils, Non-Potable Groundwater Condition, for Residential/Parkland/Institutional Property Use.

BOLD — Exceeds Site Condition Standard

BOLD — Reportable Detection Limit Exceeds Site Condition Standard

Units — All Units in µg/g

mbgs — Metres Below Ground Surface

Pinchin File: 227187.001

TABLE 7
POLYCYCLIC AROMATIC HYDROCARBON ANALYSIS FOR SOIL
2217822 Ontario Inc. o/a Jones Bro
506 Kent Street, Ottawa, Ontario

Parameter	*MECP Table 3 Standards**	*Sample Designation*			
		Sample Collection Date (dd/mm/yyyy)			
		Sample Depth (mbgs)			
		MW-1 SS-2	*MW-2 SS-4*	*MW-3 SS-7*	*MW-4 SS-6*
		23/08/2018	*23/08/2018*	*23/08/2018*	*23/08/2018*
		0.8 - 1.5	*2.3 - 3.1*	*4.6 - 5.3*	*3.8 - 4.6*
Acenaphthene	7.9	0.047	<0.0050	<0.0050	<0.0050
Acenaphthylene	0.15	0.067	<0.0050	<0.0050	<0.0050
Anthracene	0.67	0.14	<0.0050	<0.0050	<0.0050
Benzo(a)anthracene	0.5	**0.97**	<0.0050	<0.0050	<0.0050
Benzo(a)pyrene	0.3	**0.93**	0.0058	<0.0050	<0.0050
Benzo(b)fluoranthene	0.78	**1.1**	0.0053	<0.0050	<0.0050
Benzo(ghi)perylene	6.6	0.47	<0.0050	0.0053	<0.0050
Benzo(k)fluoranthene	0.78	0.39	<0.0050	<0.0050	<0.0050
Chrysene	7	0.68	<0.0050	<0.0050	<0.0050
Dibenzo(a,h)anthracene	0.1	**0.16**	<0.0050	<0.0050	<0.0050
Fluoranthene	0.69	**1.9**	<0.0050	<0.0050	<0.0050
Fluorene	62	0.044	<0.0050	<0.0050	<0.0050
Indeno(1,2,3-cd)pyrene	0.38	**0.54**	<0.0050	<0.0050	<0.0050
Methylnaphthalene 2-(1-)	0.99	0.011	<0.0050	<0.0050	<0.0050
Naphthalene	0.6	0.019	<0.0050	<0.0050	<0.0050
Phenanthrene	6.2	0.47	<0.0050	<0.0050	<0.0050
Pyrene	78	1.7	<0.0050	<0.0050	<0.0050

Notes:

MECP Table 3 Standards* — Soil, Ground Water and Sediment Standards for Use Under Part XV.1 of the Environmental Protection Act, April 15, 2011, Table 3 Standards, Coarse-Textured Soils, Non-Potable Groundwater Condition, for Residential/Parkland/Institutional Property Use.

BOLD — Exceeds Site Condition Standard

BOLD — Reportable Detection Limit Exceeds Site Condition Standard

Units — All Units in µg/g

mbgs — Metres Below Ground Surface

Pinchin File: 227187.001

TABLE 8
METALS ANALYSIS FOR SOIL
2217822 Ontario Inc. o/a Jones Bro
506 Kent Street, Ottawa, Ontario

Parameter	*MECP Table 3 Standards**	*Sample Designation*	
		Sample Collection Date (dd/mm/yyyy)	
		Sample Depth (mbgs)	
		MW-1 SS-2	*MW-2 SS-4*
		23/08/2018	*23/08/2018*
		0.8 - 1.5	*2.3 - 3.1*
Antimony	7.5	3	<0.20
Arsenic	18	6	1.2
Barium	390	160	180
Beryllium	4	0.34	0.55
Boron (Total)	120	5.2	9.6
Cadmium	1.2	0.61	0.15
Chromium (Total)	160	21	74
Cobalt	22	6.4	16
Copper	140	26	47
Lead	120	**190**	7
Mercury	0.27	**0.39**	<0.050
Molybdenum	6.9	1.1	0.81
Nickel	100	14	44
Selenium	2.4	0.86	2.3
Silver	20	0.43	<0.20
Thallium	1	0.13	0.26
Uranium	23	0.48	2.5
Vanadium	86	24	85
Zinc	340	260	81

Notes:

MECP Table 3 Standards*	Soil, Ground Water and Sediment Standards for Use Under Part XV.1 of the Environmental Protection Act, April 15, 2011, Table 3 Standards, Coarse-Textured Soils, Non-Potable Groundwater Condition, for Residential/Parkland/Institutional Property Use.
BOLD	Exceeds Site Condition Standard
BOLD	Reportable Detection Limit Exceeds Site Condition Standard
Units	All Units in µg/g
mbgs	Metres Below Ground Surface
NA	Not Applicable

Pinchin File: 227187.001

TABLE 9
PETROLEUM HYDROCARBON AND BTEX ANALYSIS FOR GROUNDWATER
2217822 Ontario Inc. o/a Jones Bro
506 Kent Street, Ottawa, Ontario

Parameter	*MECP Table 3 Standards**	*Sample Designation*		
		Sample Collection Date (dd/mm/yyyy)		
		MW-2	*MW-3*	*MW-4*
		27/08/2018	*27/08/2018*	*27/08/2018*
Benzene	44	-	-	-
Toluene	18000	-	-	-
Ethylbenzene	2300	-	-	-
Xylenes (Total)	4200	-	-	-
Petroleum Hydrocarbons F1 (C_6 - C_{10})	750	<25	<25	<25
Petroleum Hydrocarbons F2 (>C_{10} - C_{16})	150	<100	<100	<100
Petroleum Hydrocarbons F3 (>C_{16} - C_{34})	500	<200	<200	<200
Petroleum Hydrocarbons F4 (>C_{34} - C_{50})	500	<200	<200	<200

Notes:

MECP Table 3 Standards*	Soil, Ground Water and Sediment Standards for Use Under Part XV.1 of the Environmental Protection Act, April 15, 2011, Table 3 Standards, Coarse-Textured Soils, Non-Potable Groundwater Condition, for All Types of Property Use.
BOLD	Exceeds Site Condition Standard
BOLD	Reportable Detection Limit Exceeds Site Condition Standard
Units	All Units in µg/L
BTEX	Benzene, Toluene, Ethylbenzene and Xylenes

Pinchin File: 227187.001

TABLE 10

VOLATILE ORGANIC COMPOUND ANALYSIS FOR GROUNDWATER

2217822 Ontario Inc. o/a Jones Bro

506 Kent Street, Ottawa, Ontario

Parameter	*MECP Table 3 Standards**	*Sample Designation*		
		Sample Collection Date (dd/mm/yyyy)		
		MW-2	*MW-3*	*MW-4*
		27/08/2018	*27/08/2018*	*27/08/2018*
Acetone	130000	<10	<10	<10
Benzene	44	<0.20	<0.20	<0.20
Bromodichloromethane	85000	<0.50	<0.50	<0.50
Bromoform	380	<1.0	<1.0	<1.0
Bromomethane	5.6	<0.50	<0.50	<0.50
Carbon Tetrachloride	0.79	<0.20	<0.20	<0.20
Chlorobenzene	630	<0.20	<0.20	<0.20
Chloroform	2.4	<0.20	<0.20	<0.20
Dibromochloromethane	82000	<0.50	<0.50	<0.50
1,2-Dichlorobenzene	4600	<0.50	<0.50	<0.50
1,3-Dichlorobenzene	9600	<0.50	<0.50	<0.50
1,4-Dichlorobenzene	8	<0.50	<0.50	<0.50
1,1-Dichloroethane	320	<0.20	<0.20	<0.20
1,2-Dichloroethane	1.6	<0.50	<0.50	<0.50
1,1-Dichloroethylene	1.6	<0.20	<0.20	<0.20
Cis-1,2-Dichloroethylene	1.6	<0.50	<0.50	<0.50
Trans-1,2-Dichloroethylene	1.6	<0.50	<0.50	<0.50
1,2-Dichloropropane	16	<0.20	<0.20	<0.20
Cis-1,3-Dichloropropylene	NV	<0.30	<0.30	<0.30
Trans-1,3-Dichloropropylene	NV	<0.40	<0.40	<0.40
Ethylbenzene	2300	<0.20	<0.20	<0.20
Ethylene Dibromide	0.25	<0.20	<0.20	<0.20
Methyl Ethyl Ketone	470000	<10	<10	<10
Methylene Chloride	610	<2.0	<2.0	<2.0
Methyl Isobutyl Ketone	140000	<5.0	<5.0	<5.0
Methyl-t-Butyl Ether	190	<0.50	<0.50	<0.50
Styrene	1300	<0.50	<0.50	<0.50
1,1,1,2-Tetrachloroethane	3.3	<0.50	<0.50	<0.50
1,1,2,2-Tetrachloroethane	3.2	<0.50	<0.50	<0.50
Toluene	18000	<0.20	<0.20	<0.20
Tetrachloroethylene	1.6	<0.20	<0.20	<0.20
1,1,1-Trichloroethane	640	<0.20	<0.20	<0.20
1,1,2-Trichloroethane	4.7	<0.50	<0.50	<0.50
Trichloroethylene	1.6	<0.20	<0.20	<0.20
Vinyl Chloride	0.5	<0.20	<0.20	<0.20
m-Xylene & p-Xylene	NV	<0.20	<0.20	<0.20
o-Xylene	NV	<0.20	<0.20	<0.20
Total Xylenes	4200	<0.20	<0.20	<0.20
Dichlorodifluoromethane	4400	<1.0	<1.0	<1.0
Dioxane, 1,4-	1900000	-	-	-
Hexane(n)	51	<1.0	<1.0	<1.0
Trichlorofluoromethane	2500	<0.50	<0.50	<0.50
1,3-Dichloropropene (cis + trans)	5.2	<0.50	<0.50	<0.50

Notes:

MECP Table 3 Standards* — Soil, Ground Water and Sediment Standards for Use Under Part XV.1 of the Environmental Protection Act, April 15, 2011, Table 3 Standards, Coarse-Textured Soils, Non-Potable Groundwater Condition, for All Types of Property Use.

BOLD — Exceeds Site Condition Standard

BOLD — Reportable Detection Limit Exceeds Site Condition Standard

Units — All Units in µg/L

Pinchin File: 227187.001

TABLE 11
POLYCYCLIC AROMATIC HYDROCARBON ANALYSIS FOR GROUNDWATER
2217822 Ontario Inc. o/a Jones Bro
506 Kent Street, Ottawa, Ontario

Parameter	*MECP Table 3 Standards**	*Sample Designation*			
		Sample Collection Date (dd/mm/yyyy)			
		MW-1	*MW-2*	*MW-3*	*MW-4*
		27/08/2018	*27/08/2018*	*27/08/2018*	*27/08/2018*
Acenaphthene	600	<0.050	<0.050	<0.050	<0.050
Acenaphthylene	1.8	<0.050	0.071	<0.050	<0.050
Anthracene	2.4	<0.050	<0.050	<0.050	<0.050
Benzo(a)anthracene	4.7	<0.050	<0.050	<0.050	<0.050
Benzo(a)pyrene	0.81	0.02	0.013	<0.010	0.016
Benzo(b)fluoranthene	0.75	<0.050	<0.050	<0.050	<0.050
Benzo(ghi)perylene	0.2	<0.050	<0.050	<0.050	<0.050
Benzo(k)fluoranthene	0.4	<0.050	<0.050	<0.050	<0.050
Chrysene	1	<0.050	<0.050	<0.050	<0.050
Dibenzo(a,h)anthracene	0.52	<0.050	<0.050	<0.050	<0.050
Fluoranthene	130	0.057	<0.050	<0.050	0.075
Fluorene	400	<0.050	<0.050	<0.050	<0.050
Indeno(1,2,3-cd)pyrene	0.2	<0.050	<0.050	<0.050	<0.050
Methylnaphthalene 2-(1-)	1800	<0.050	<0.050	<0.050	<0.050
Naphthalene	1400	<0.050	<0.050	<0.050	<0.050
Phenanthrene	580	0.048	<0.030	<0.030	0.084
Pyrene	68	<0.050	<0.050	<0.050	<0.050

Notes:

MECP Table 3 Standards* — Soil, Ground Water and Sediment Standards for Use Under Part XV.1 of the Environmental Protection Act, April 15, 2011, Table 3 Standards, Coarse-Textured Soils, Non-Potable Groundwater Condition, for All Types of Property Use.

BOLD — Exceeds Site Condition Standard

BOLD — Reportable Detection Limit Exceeds Site Condition Standard

Units — All Units in µg/L

Pinchin File: 227187.001

TABLE 12
METALS ANALYSIS FOR GROUNDWATER
2217822 Ontario Inc. o/a Jones Bro
506 Kent Street, Ottawa, Ontario

Parameter	*MECP Table 3 Standards**	*Sample Designation*	
		Sample Collection Date (dd/mm/yyyy)	
		MW-1	*MW-4*
		27/08/2018	*27/08/2018*
Antimony	20000	<0.50	1.7
Arsenic	1900	<1.0	1.5
Barium	29000	150	120
Beryllium	67	<0.50	<0.50
Boron	45000	120	140
Cadmium	2.7	<0.10	<0.10
Chromium	810	<5.0	<5.0
Chromium VI	140	-	-
Cobalt	66	2.6	1.1
Copper	87	2.7	1.9
Lead	25	<0.50	0.55
Mercury	0.29	-	-
Molybdenum	9200	3.7	14
Nickel	490	4.3	3.6
Sodium	2300000	220000	220000
Selenium	63	<2.0	<2.0
Silver	1.5	<0.10	<0.10
Thallium	510	<0.050	<0.050
Vanadium	250	0.54	1.5
Zinc	1100	6.8	5.4
Uranium	420	5	3.1

Notes:

MECP Table 3 Standards* — Soil, Ground Water and Sediment Standards for Use Under Part XV.1 of the Environmental Protection Act, April 15, 2011, Table 3 Standards, Coarse-Textured Soils, Non-Potable Groundwater Condition, for All Types of Property Use.

BOLD — Exceeds Site Condition Standard

BOLD — Reportable Detection Limit Exceeds Site Condition Standard

Units — All Units in µg/L

Pinchin File: 227187.001

Appendix A

Sampling and Analysis Plan

LOPERS & ASSOCIATES

Sampling and Analysis Plan

506 Kent Street
Ottawa, Ontario

Prepared for:
13008916 Canada Inc.

3/7/2025

Table of Contents

1. Background

Lopers & Associates (Lopers) was retained by 13008916 Canada Inc. (Brigil) to complete a Phase Two Environmental Site Assessment (Phase Two ESA) of the commercial property with Civic address No. 506 Kent Street, Ottawa, Ontario ("Phase Two Property", "Property" or "Site").

Lopers has previously completed a Phase One Environmental Site Assessment (Phase One ESA) (Reference No. LOP25-038A, dated May 2025) for Brigil at the Property. The Phase One ESA identified the presence of three potentially contaminating activities (PCAs) at the Property which were interpreted to represent an areas of potential environmental concern (APECs).

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)	Entire horizontal limits of the Phase One Property to an unknown depth	PHCs/BTEXs, PAHs, Metals & Inorganics

Previous environmental reports were provided, which document the presence of contaminant concentrations that exceed the Site Condition Standards at the Phase One Property; the contaminants are associated with the aforementioned APEC #1.

Based on the identification of APECs at the Phase One Property and the requirement for documentation associated with an RSC, 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 10 boreholes at the Phase Two Property. Three of the boreholes were instrumented with groundwater monitoring wells with screens installed in the overburden. 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. As it is understood that the Site is developed with a commercial place and that no privately owned underground services or infrastructure drawings are available, therefore private locates will also be completed in the proposed drilling locations.

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

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

4. Planning Site Investigation - Specific Requirements

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

i. Media for Investigation

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

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

ii. Locations and Depths for Sampling

A total of 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 were 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 through #3 as part of the previously prepared Phase One ESA.

5.4 Equipment Calibration

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

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

5.5 Data Quality Objectives

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

(a) the decision-making is not affected; and

(b) the overall objectives of the investigation are met.

6. Standard Operating Procedures

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

6.1 Borehole Drilling

The drilling field program will be completed under full time supervision of Lopers & Associates personnel. The drilling subcontractor retained for the Phase Two ESA is 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 present surface influence.

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

6.5 Elevation Survey

An elevation survey of all boreholes and monitoring wells will be conducted following the completion of the drilling program. The boreholes/monitoring wells will be surveyed relative to the top of spindle of the fire hydrant southeast of the Site, northwest of the Kent Street and Arlington Avenue intersection. The geodetic elevation of top of spindle of this fire hydrant was provided on the 2004 FSD Legal Survey as 69.433 m above sea level (m ASL). The ground surface elevation of all boreholes should be surveyed. 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

Underground Utility Locates

From: solutions@on1call.com
To: Luke Lopers
Subject: Request 2025102065
Date: March 3, 2025 1:55:52 PM

LOCATE REQUEST CONFIRMATION

REQUEST #:	REQUEST PRIORITY:	REQUEST TYPE:	WORK TO BEGIN DATE:
2025102065	**STANDARD**	**REGULAR**	**03/10/2025**
Update of Request #	**Project #:**	**Call Date: 03/03/2025 01:52:22 PM**	**Transmit Date: 03/03/2025 01:54:30 PM**

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

DIG INFORMATION		
Region/County: OTTAWA **Community:** **City:** OTTAWA **Address:** 506, KENT ST **Intersecting Street 1:** FLORA ST **Intersecting Street 2:** ARLINGTON AVE	**Work Done for:** PROPERTY OWNER **Reason for Work:** ENVIRONMENTAL **Dig Method:** Machine Dig **Depth:** More than 15 Feet	**Pre-Marked:** Area Not Pre-Marked **Property Type:** Private Property **Site Meeting:** No **Work End Date:**

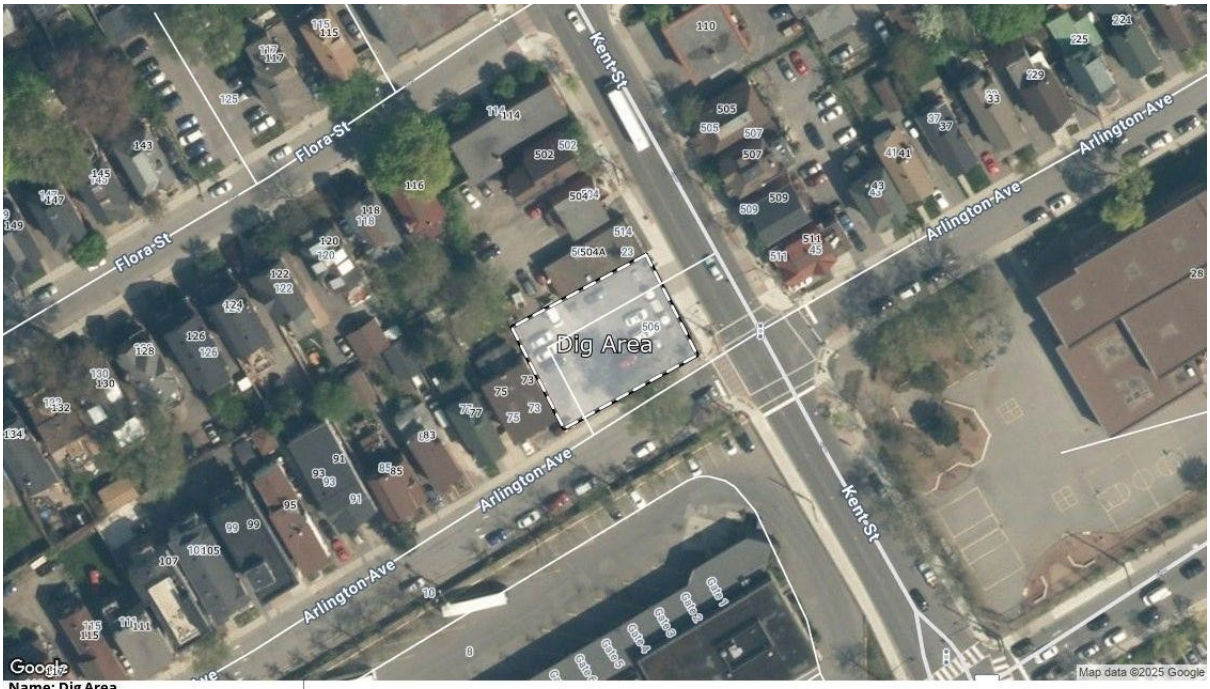
ADDITIONAL INFORMATION	QUALIFYING INFORMATION
ENVIRONMENTAL DRILLING TO DELINEATE FILL	

THICKNESS AND QUALITY, BOREHOLE LOCATIONS SUBJECT TO CHANGE DEPENDING ON FINDINGS. PLEASE LOCATE ENTIRE PROPERTY.	

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
CITY OF OTTAWA WATER/SEWER (OTWAWS01)	OTWAWS01	Notification sent
CITY OF OTTAWA TRAFFIC SIGNALS (OTWATS01)	OTWATS01	Notification sent
BLACK AND MC DONALD FOR CITY OF OTTAWA STREET LIGHTS (OTWASL01)	OTWASL01	Notification sent
BELL CANADA (BCOE01)	BCOE01	Notification sent

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



Name: Dig Area

Area: 667.13sq. m

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.

3. All drawings dictate which members are notified.

Promark telecon
Location of underground infrastructures

Primary Locate Sheet

OTTLocateFollowup@Promark-Telecon.ca
Phone 613-723-9888 Toll Free: 1-800-371-8866

Request #2025102065

NORMAL

Utilities Located :	Revised Excavation Date	Excavation Date	Status
☐ Bell ☐ Telus ☐ Hydro One ☐ 360 ☐ Gas ☐ Elexicon ☐ Hydro Ottawa ☐ Zayo ☐ BHT ☐ Rogers ☐ Videotron	mm/dd/yyyy	2025-03-10 5:00:00 PM mm/dd/yyyy	STANDARD Homeowner ☐ Contractor ☐ Project ☐

Requested by:	Company:	Phone:	Fax/email:
LUKE LOPERS	LOPERS & ASSOCIATES	(613)-327-9073 ext.	LUKE@LOPERS.CA

Appt Date:	Received Date:	Locate Address:	
mm/dd/yyyy	2025-03-03 1:54:00 PM mm/dd/yyyy	506, KENT ST FLORA ST	ARLINGTON AVE

Type of work:	City:
ENVIRONMENTAL	OTTAWA

Caller's Remarks:
PROPERTY TYPE: PRIVATE PROPERTY
SITE MEETING: NO
ENVIRONMENTAL DRILLING TO DELINEATE FILL THICKNESS AND QUALITY, BOREHOLE LOCATIONS SUBJECT TO CHANGE DEPENDING ON FINDINGS. PLEASE LOCATE ENTIRE PROPERTY.
MAP REF.: 613 567-K2P, 45.40958051 , -75.69456116, HYDRO OTTAWA (HOT1) HOT1 NOTIFICATION SENT, PROMARK FOR ENBRIDGE GAS (ENOE01) ENOE01 NOTIFICATION SENT, CITY OF OTTAWA WATER/SEWER (OTWAWS01) OTWAWS01 NOTIFICATION SENT, CITY OF OTTAWA TRAFFIC SIGNALS (OTWATS01)

Bell Mark | Clear	Gas Mark | Clear	Hydro Ottawa Mark | Clear	Street Lighting Mark | Clear	Elexicon Mark | Clear	Hydro One Mark | Clear	Rogers Mark | Clear	360 Mark | Clear	Videotron Mark | Clear

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

Records Reference: ☐ GMobile ☐ LAC Multiviewer ☐ FRA # ☐ GO360

Field Notes, As-Laids, Service Sketches:

Locator Remarks:

☐ Third Party Notification _____

Apply Sticker Here if Required

Excavator shall notify & receive a clearance from utility prior to excavation for the following: **Telecon** ☐ **High Priority Cable** ☐ **Central Office Vicinity**

GAS MATERIAL TYPE: ☐ **Steel (ST)** ☐ **Plastic (PE)** ☐ **Copper (CP)**

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

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

Caution: Bell and 360 locates are valid for the life of the excavation. Hydro One - Hydro Ottawa - Enbridge Gas - Elexicon Energy locates are valid for 60 days. Telus is valid for 90 days. Rogers locates are valid for 90 days unless an extension approval is provided by Rogers. Unless otherwise indicated, all other utility locates are VOID after 30 days. For utility specific details, see attached document(s).

Caution: Any changes to location or nature of work will require a new locate. The excavator must not work outside the located area without obtaining a new locate. Privately owned services within the located area have not been marked - check with service / property owner. For all locate requests including remarks, contact Ontario One Call at **1-800-400-2255** or online at **www.on1call.com**

Locator Name: LACHAPELLE BRANDEN	Start Time:	☐ Mark & Fax ☐ Left on Site ☐ Emailed
ID # : EMP002100	End Time :	Print:
Date	Total Hours:	Signature:

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

Promark telecon

Location of underground infrastructures

Primary Locate Sheet

OTTLocateFollowup@Promark-Telecon.ca

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

Request #2025102065

NORMAL

Utilities Located :

- [ ] Bell
- [x] Gas
- [ ] BHT
- [ ] Telus
- [ ] Elexicon
- [ ] Rogers
- [ ] Hydro One
- [x] Hydro Ottawa
- [ ] Videotron
- [ ] 360
- [ ] Zayo

Revised Excavation Date: N/A (mm/dd/yyyy)

Excavation Date: 3/10/2025 5:00:00 PM (mm/dd/yyyy)

Status: STANDARD

- [ ] Homeowner
- [x] Contractor
- [ ] Project

Requested by: LUKE LOPERS

Company: LOPERS & ASSOCIATES

Phone: (613)-327-9073 ext.

Fax/email: LUKE@LOPERS.CA

Appt Date: N/A (mm/dd/yyyy)

Received Date: 3/3/2025 1:54:00 PM (mm/dd/yyyy)

Locate Address: 506, KENT ST

FLORA ST ARLINGTON AVE

Type of work: ENVIRONMENTAL

City: OTTAWA

Caller's Remarks:
PROPERTY TYPE: PRIVATE PROPERTY
SITE MEETING: NO
ENVIRONMENTAL DRILLING TO DELINEATE FILL THICKNESS AND QUALITY, BOREHOLE LOCATIONS SUBJECT TO CHANGE DEPENDING ON FINDINGS. PLEASE LOCATE ENTIRE PROPERTY.

MAP REF.: 613 567-K2P, 45.40958051, -75.69456116, HYDRO OTTAWA (HOT1) HOT1 NOTIFICATION SENT, PROMARK FOR ENBRIDGE GAS (ENOE01) ENOE01 NOTIFICATION SENT, CITY OF OTTAWA WATER/SEWER (OTWAWS01) OTWAWS01 NOTIFICATION SENT, CITY OF OTTAWA TRAFFIC SIGNALS (OTWATS01) OTWATS01 NOTIFICATION SENT, BLACK AND MC DONALD FOR CITY OF OTTAWA STREET LIGHTS (OTWASL01) OTWASL01 NOTIFICATION SENT, BELL CANADA

Bell	Gas	Hydro Ottawa	BIRCH HILL T	ZAYO	Hydro One	TELUS	360	Videotron
Mark | Clear	Mark | Clear	Mark | Clear	Mark | Clear	Mark | Clear	Mark | Clear	Mark | Clear	Mark | Clear	Mark | Clear
	1	1						

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

Records Reference: [x] GMobile [x] LAC Multiviewer [x] FRA # PMTOTT01832 [ ] GO360

Field Notes, As-Laids, Service Sketches: 6N0052-2,6-0279-74

Locator Remarks:

[ ] Third Party Notification

N/A

Apply Sticker Here if Required

Excavator shall notify & receive a clearance from utility prior to excavation for the following: Telecon [ ] High Priority Cable [ ] Central Office Vicinity

GAS MATERIAL TYPE: [ ] Steel (ST) [x] Plastic (PE) [ ] Copper (CP)

Method of Field Marking: [x] Paint [ ] CHALK; [x] Flags [ ] Offset Flags [ ] Other

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

Caution: Bell and 360 locates are valid for the life of the excavation. Hydro One – Hydro Ottawa – Enbridge Gas – Elexicon Energy locates are valid for 60 days. Telus is valid for 90 days. Rogers locates are valid for 90 days unless an extension approval is provided by Rogers. Unless otherwise indicated, all other utility locates are VOID after 30 days. For utility specific details, see attached document(s).

Caution: Any changes to location or nature of work will require a new locate. The excavator must not work outside the located area without obtaining a new locate. Privately owned services within the located area have not been marked – check with service / property owner. For all locate requests including remarks, contact Ontario One Call at **1-800-400-2255** or online at **www.on1call.com**

Locator Name: LACHAPELLE BRANDEN

ID #: EMP002100

Date: 3/4/2025

Start Time: 11:00

End Time: 12:00

Total Hours: 1h

[ ] Mark & Fax [ ] Left on Site [x] Emailed

Print: N/A

Signature: N/A

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

Promark telecon
Location of underground infrastructures

Auxiliary Locate Sheet

OTTLocateFollowup@Promark-Telecon.ca
Phone: 613-723-9888 Toll Free: 1-800-371-8866

Utilities Located :
☐ Bell ☐ BHT ☐ Telus ☐ Hydro One ☐ Videotron
● Gas ☐ 360 ☐ Rogers ☐ Elexicon ☐ Hydro Ottawa ☐ Zayo

Date Located: mm/dd/yyyy 3/4/2025

Request # 2025102065

Number of Services marked: (Specify building/house numbers) (1)- 504-A KENT ST

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

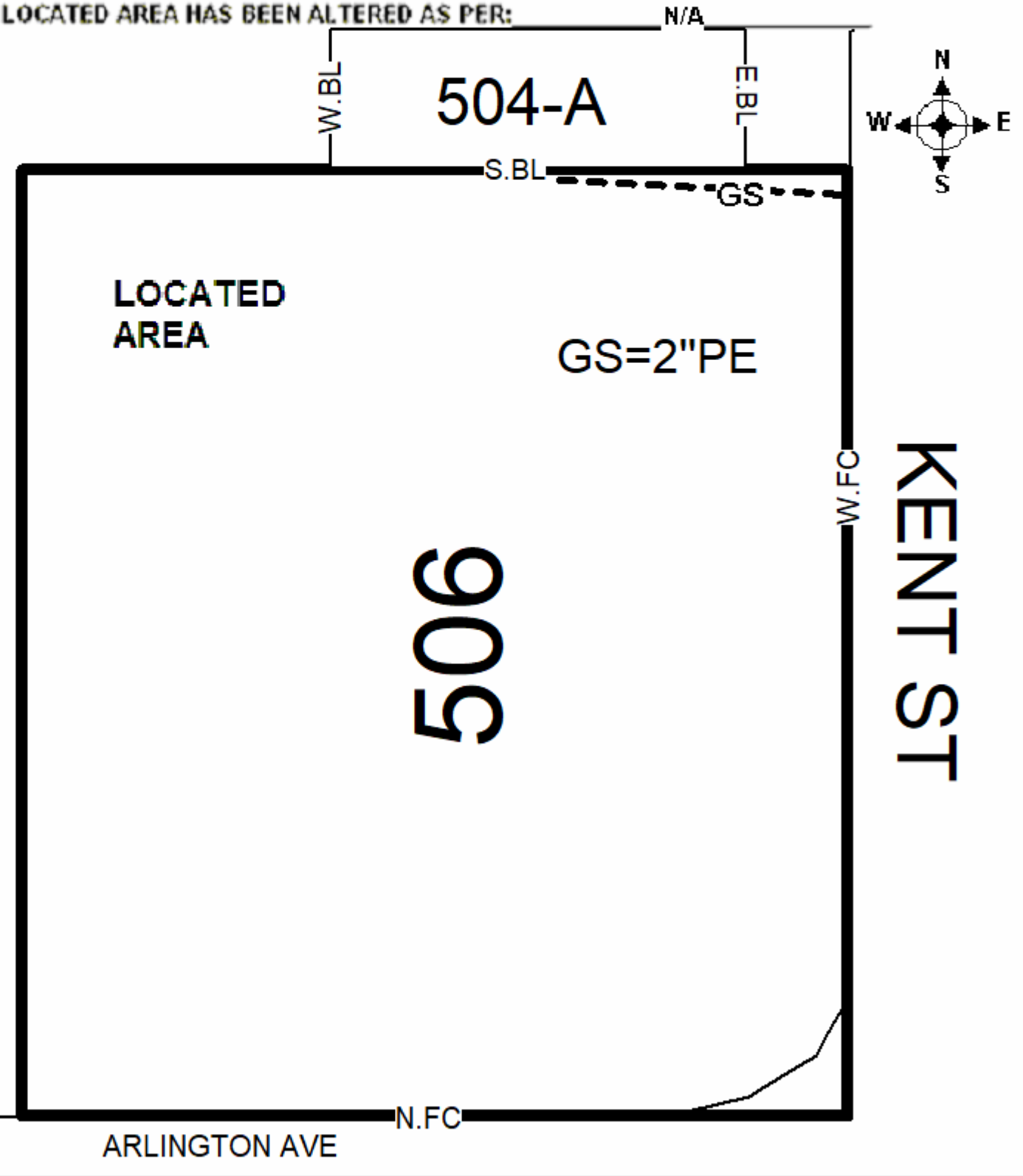
FROM: S.BL OF 504-A KENT ST
FROM: 2.0M E OF E.BL OF 73 ARLINGTON AVE
TO: N.FC OF ARLINGTON AVE
TO: W.FC OF KENT ST

Legend

Building Line	-- BL --
Fence Line	-- FL --
Face of Curb	-- FC --
Asphalt Edge	-- AE --
Sidewalk	SW
Driveway	-- DW --
Manhole	M/H
Pedestal	⊠
Buried CableTV	-- 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

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: N/A



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.

Promark telecon
Location of underground infrastructures

Auxiliary Locate Sheet

OTTLocateFollowup@Promark-Telecon.ca
Phone: 613-723-9888 Toll Free: 1-800-371-8866

Utilities Located:	Date Located: mm/dd/yyyy	Request #
[●] Hydro Ottawa	3/4/2025	2025102085

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

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

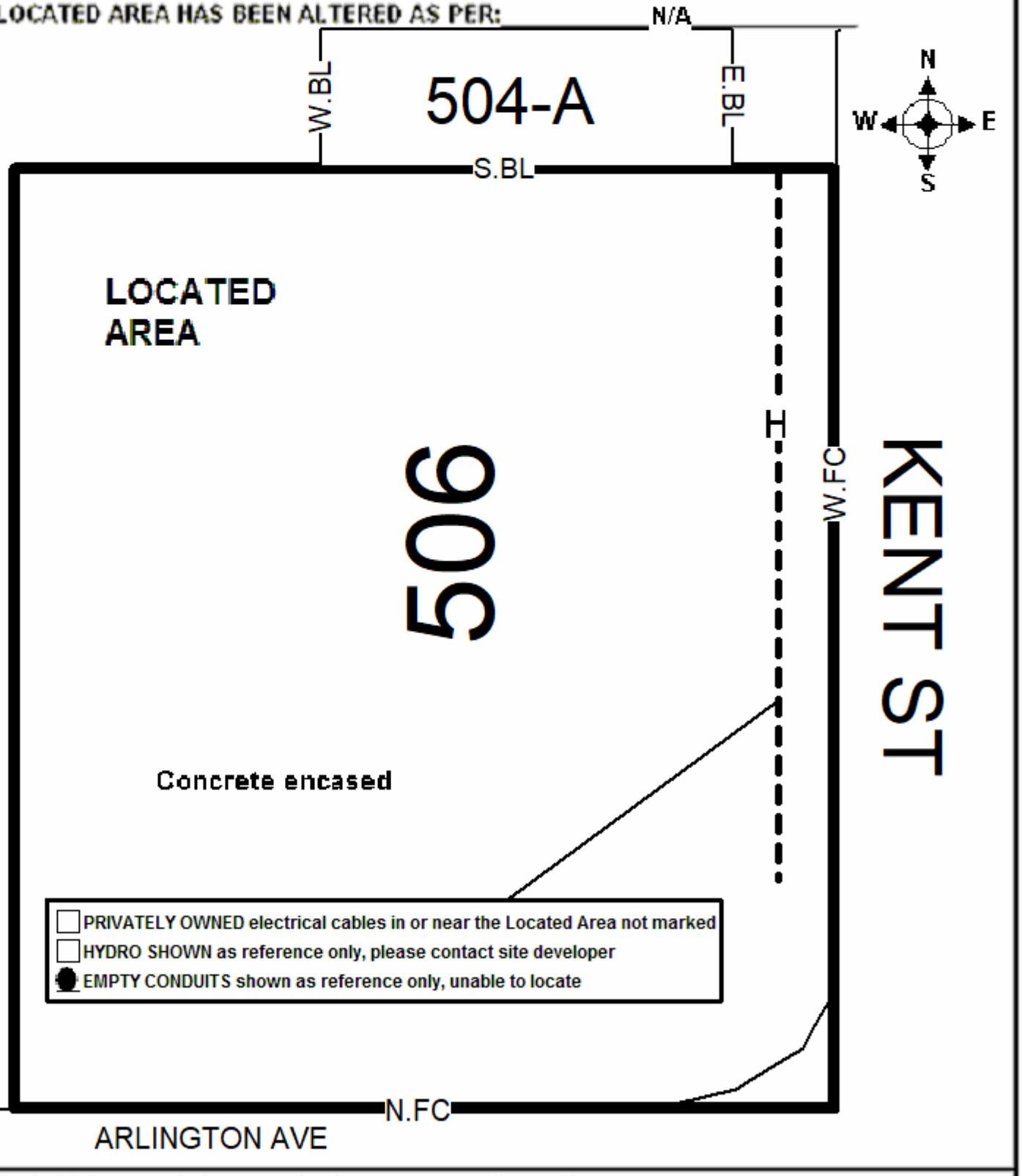
FROM: S.BL OF 504-A KENT ST	TO: N.FC OF ARLINGTON AVE
FROM: 2.0M E OF E.BL OF 73 ARLINGTON AVE	TO: W.FC OF KENT ST

Legend

Building Line	-- BL --
Fence Line	-- FL --
Face of Curb	-- FC --
Asphalt Edge	-- AE --
Sidewalk	SW
Driveway	-- DW --
Manhole	M/H
Pedestal	⊠
Buried CableTV	-- 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	O
Railway	
End Cap	
Traffic Manhole	Ⓣ
Street Light Cable	-- SL --
Street Light	✱
North	N.
East	E.
West	W.
South	S.

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: N/A



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.

Enbridge Excavator Checklist

ENBRIDGE
Life Takes Energy

Prior to site arrival

- [ ] Ensure you have received all locate sheets (total of package is found on page 1).
- [ ] If required, print additional copies of locate package for crews at various locations on site.
- [ ] If required, ensure all clearances have been received, printed and included in locate package.

Upon site arrival

- [ ] Review the sketch and the located area limits. Do you have what was requested? If not, do not excavate outside what was issued until the locate service provider has been contacted and the locate corrected.
- [ ] Review the markings on site. Is the entire plant identified on the locate form marked in the field? If not, contact the locate service provider.
- [ ] Ensure a plan is in place to protect and preserve the original yellow paint markings. White paint can be used to preserve and maintain the markings but should be placed beside or at the top or bottom of the original markings, ensuring not to replace the yellow paint.

Prior to excavation

- [ ] Ensure appropriate safeguards to expose all marked gas lines will be used. Hand dig or hydro excavation method must be used within 1 m (3.3 ft) (or as directed by Enbridge Gas Inc.) of any marked lines.
- [ ] If hydro-excavation will be used, ensure equipment is operated per Enbridge requirements.
- [ ] If support of gas lines or trench protection will be required through the course of excavation, ensuring approved methods and materials are readily available.

During Excavation

- [ ] Ensure no mechanical equipment is used within 1 m (3.3 ft) (or as directed by Enbridge Gas Inc.) of locate marks.
- [ ] Once gas lines are fully exposed (top, sides, bottom) ensure no mechanical equipment is used within 0.3 m (1 ft) (or greater if directed by Enbridge) of exposed pipe.
- [ ] Ensure all locate marks are verified. Expose per locate mark. Do not assume a gas line found away from the mark is what the locator was actually marking; you may have found an abandoned line or a missed line.
- [ ] Ensure all exposed gas identified in your excavation match the description on the auxiliary sheet of your locate (i.e., size and material). Any discrepancies should be reported to the locate service provider.

Additional information for Excavators can be found in the
Enbridge Third-Party Requirements in the Vicinity of Natural Gas Facilities Standard

enbridgegas.com/~/media/Extranet-Pages/Safety/Before-you-dig/Third-Party-Requirements-in-the-Vicinity-of-Natural-Gas-Facilities

April 06th, 2022

To all Excavators :

Bell locates are valid for the life of the excavation project and will not automatically be relocated every 90days.

Please note the following for the above apply:

A) Construction within the located area begins within 90 days of the "locate completed date" on the original ticket.

B) The construction company named on the locate remains active on the site.

Bell expects excavators will protect and preserve the paint marks put down on the original locate ticket. If markings are removed due to weather or excavation work, the excavator is expected to recreate the markings based on the tie-in measurements provided on the original locate ticket.

If an excavator would like their, markings freshened up, they can contact **Promark** (Bell Canada Locate Service Provider in this area) directly to arrange for them to place a fresh markings on the ground. **However, this will be at the excavator's expense.**

Promark can be reached at:

Toronto – 905-474-1114 toll free – 1-888-883-6273

Ottawa – 613-723-9888 toll free – 1-800-371-8866

The locate will be considered officially expired one day after the final day of construction.

Best regards

From: agt_comm@irth.com
To: Luke Lopers
Subject: Ticket 2025102065 - Response to Dig Request
Date: March 3, 2025 7:27:52 PM

Bell Plant - OE01 CONDITIONAL CLEARANCE

CONDITIONAL CLEARANCE # 2025102065

ONE CALL TICKET #: 2025102065

Issued By: Bell Plant - OE01

For Station Code: BCOE01

Location: 506 KENT ST

Work Type: ENVIRONMENTAL

Date Issued: 03/03/2025 01:55:42 PM

Primary Contact: LUKE LOPERS

Email Address: Luke@Lopers.ca

Fax:

CONDITION(S)

NOT DIGGING WITHIN 4 FEET OF THE REAR PROPERTY LINE

This Clearance provided from Bell authorizes you to begin your excavation based on the conditions listed in the above box

As there may be other buried utilities in your dig area, you are advised to contact all buried utility owners for your work area and obtain the necessary locates/clearances.

Please pay special attention to who/what this Clearance is for. Please review the document carefully and compare it to your locate request to ensure you understand what you are being cleared for. We are not responsible for any damages that result from misunderstanding what utility you are cleared for on this paperwork.

If you have any questions or concerns regarding your conditional clearance or to report a damage,

please call the Bell Screening Centre at **866-480-5901.**

Ontario One Call TF

City of Ottawa
Street Light Locate

Black&McDonald

NOTICE OF INTENT TO EXCAVATE

Header Code: STANDARD

Request Type: NORMAL

Ticket No: 2025102065

Original Call Date: 3/3/2025 1:54:00 PM

Work To Begin Date: 03/10/2025

Company: LOPERS & ASSOCIATES

Contact Name: LUKE LOPERS

Pager:

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

Cell: (613)-327-9073 ext.

Fax:

Alternate Contact: LUKE LOPERS

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

Place: OTTAWA

Street: 506, KENT ST

Nearest Intersecting Street: FLORA ST

Second Intersecting Street: ARLINGTON AVE

Subdivision:

Additional Dig Information: Depth in M. 0

MAP REF.: 613 567 PRIVATE PROPERTY SITE MEETING: NO ENVIRONMENTAL DRILLING TO DELINEATE FILL THICKNESS AND QUALITY, BOREHOLE LOCATIONS SUBJECT TO CHANGE DEPENDING ON FINDINGS. PLEASE LOCATE ENTIRE PROPERTY.

WO/ JOB #:

Type Of Work: ENVIRONMENTAL

Remarks:

HYDRO OTTAWA (HOT1), HOT1, NOTIFICATION SENT, PROMARK FOR ENBRIDGE GAS (ENOE01), ENOE01, NOTIFICATION SENT, CITY OF OTTAWA WATER/SEWER (OTWAWS01), OTWAWS01, NOTIFICATION SENT, CITY OF OTTAWA TRAFFIC SIGNALS (OTWATS01), OTWATS01, NOTIFICATION SENT, BLACK AND MC DONALD FOR CITY OF OTTAWA STREET LIGHTS (OTWASL01), OTWASL01, NOTIFICATION SENT, BELL CANADA (BCOE01), BCOE01, NOTIFICATION SENT

MIKE LESPERANCE

64A

Ontario 1 Call	2025102065	City of Ottawa Street Light Locate	Black&McDonald

- SL - Streetlight
- OH - Overhead Fed
- H - Hydro Lines
- BL - Building Line
- FL - Fence Line
- CL - Face of Curb Line
- AE - Asphalt Edge
- PL - Property Line
- SW - Sidewalk
- MH - Manhole
- ↔ Measurements
- - - - Reference Line
- Catch Basin
- Hydro Pole
- Sign Posts
- Power Source
- EB99
- Decorative Light
- Streetlight
- FH Fire Hydrant
- Pedestal
- Disconnect

LOCATOR SKETCH

Clear

O-H Service

City of Ottawa Street Lights are Overhead Fed

ANY MEASUREMENTS FROM A CURB EDGE ARE FROM OUTSIDE CURB EDGE UNLESS STATED OTHERWISE

Notes/Comments:

Locate is valid for 90 days. If sketch is different from markings, location or nature of work changes, a new locate must be requested. Hand dig within 1m (3.28ft) on either side of markings. Depth of buried plant varies.

Cette fiche n'est pas **valide 90 jours** de calendrier apres le reperage. Si les marques ne concordent pas avec celles sur le croquis, un nouveau reperage est requis. Tout changement a l'emplacement ou a la nature du travail necessite un nouveau reperage. Creuser a la main un metre (3.28 pieds) du repere. La profondeur des installationvarie d'un endroit a l'autre

Date Located	03/04/2025		
Located by	Mike L.		
Page	2	of	2

From: Sigouin, Francois
To: Luke Lopers
Subject: 2025102065
Date: March 3, 2025 2:01:43 PM
Attachments: image001.png

2025102065

This Ontario One Ticket is **Clear of Underground City of Ottawa / Ville d'Ottawa Traffic Lights Infrastucture 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 localisations sont valables 90 jours

Frank Sigouin
City of Ottawa
Traffic U/G Utilities Investigator
Cell: (613)229-0580
Email: francois.sigouin@ottawa.ca
Mon-Fri 7h00 to 15h30

'

'

From: esd-locate@ottawa.ca
To: Luke Lopers
Cc: esd-locate@ottawa.ca
Subject: Re: Ontario1Call 2025102065 - 506 KENT ST
Date: March 3, 2025 2:15:54 PM
Attachments: 2025LocatesDisclaimer.pdf

If the excavation is not in the road you may proceed.
Si les excavations ne se passent pas dans la rue, vous pouvez continuer.

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 ninety (90) days. | S'il-vous-plaît notez: les localisations de la ville d'Ottawa sont valables pendant quatre-vingt-dix (90) jours.

'

'

Appendix C

Borehole Logs

BH1-25

LOPERS & ASSOCIATES

Lopers & Associates
30 Lansfield Way
Ottawa, Ontario K2G3V8

CLIENT 11034936 Canada Inc.
PROJECT NAME Phase Two Environmental Site Assessment
PROJECT NUMBER LOP25-038B
PROJECT LOCATION 506 Kent Street, Ottawa, ON
DATE STARTED 25-3-18 **COMPLETED** 25-3-18
GROUND ELEVATION 68.77 m **HOLE SIZE** 20 cm
DRILLING CONTRACTOR Downing
GROUND WATER LEVELS:
DRILLING METHOD Track Mounted CME 55
AFTER DRILLING ---
LOGGED BY L. Lopers **CHECKED BY** D. Plenderleith
NOTES 69.433 m ASL - Top of Spindle of Fire Hydrant SE of Property

DEPTH (m)	SAMPLE TYPE NUMBER	BLOW COUNTS (N VALUE)	ENVIRONMENTAL DATA	GRAPHIC LOG	MATERIAL DESCRIPTION	WELL DIAGRAM
	SS 1	14-12-8-8 (20)	Vapor = 5		Silty Sand and Gravel (Fill). Brown to grey, compact to loose, moist wet at approximately 2.4 m BGS.	
1	SS 2	5-6-6-5 (12)	Vapor = 0		Possible asphalt pieces or cinders from approximately 0.8 to 1.4 m BGS	
2	SS 3	3-2-3-2 (5)	Vapor = 0			
	SS 4	4-4-7-3 (11)	Vapor = 15			
3					3.05 65.72	
	SS 5	1-0-1-0 (1)	Vapor = 20		Silty Clay. Grey, soft, wet.	
					3.66 65.11	

Bottom of hole at 3.66 m.

BH2-25

LOPERS & ASSOCIATES

Lopers & Associates
30 Lansfield Way
Ottawa, Ontario K2G3V8

CLIENT 11034936 Canada Inc.
PROJECT NAME Phase Two Environmental Site Assessment
PROJECT NUMBER LOP25-038B
PROJECT LOCATION 506 Kent Street, Ottawa, ON
DATE STARTED 25-3-18 **COMPLETED** 25-3-18
GROUND ELEVATION 68.735 m **HOLE SIZE** 20 cm
DRILLING CONTRACTOR Downing
GROUND WATER LEVELS:
DRILLING METHOD Track Mounted CME 55
AFTER DRILLING ---
LOGGED BY L. Lopers **CHECKED BY** D. Plenderleith
NOTES 69.433 m ASL - Top of Spindle of Fire Hydrant SE of Property

DEPTH (m)	SAMPLE TYPE NUMBER	BLOW COUNTS (N VALUE)	ENVIRONMENTAL DATA	GRAPHIC LOG	MATERIAL DESCRIPTION	WELL DIAGRAM
	SS 1		Vapor = 5		Silty Sand and Gravel (Fill). Brown to grey, compact to loose, moist wet at approximately 2.4 m BGS.	
1	SS 2	4-3-2-4 (5)	Vapor = 5		Possible asphalt pieces or cinders and wood from approximately 0.8 to 3 m BGS	
2	SS 3	5-3-3-4 (6)	Vapor = 15			
	SS 4	6-9-50/0.08	Vapor = 15			
3					3.05 65.69	
	SS 5	1-1-2-2 (3)	Vapor = 5		Silty Clay. Grey, soft, moist.	
					3.66 65.08	

Bottom of hole at 3.66 m.

BH3-25

LOPERS & ASSOCIATES

Lopers & Associates
30 Lansfield Way
Ottawa, Ontario K2G3V8

CLIENT 11034936 Canada Inc.
PROJECT NAME Phase Two Environmental Site Assessment
PROJECT NUMBER LOP25-038B
PROJECT LOCATION 506 Kent Street, Ottawa, ON
DATE STARTED 25-3-18 **COMPLETED** 25-3-18
GROUND ELEVATION 68.741 m **HOLE SIZE** 20 cm
DRILLING CONTRACTOR Downing
GROUND WATER LEVELS:
DRILLING METHOD Track Mounted CME 55
AFTER DRILLING ---
LOGGED BY L. Lopers **CHECKED BY** D. Plenderleith
NOTES 69.433 m ASL - Top of Spindle of Fire Hydrant SE of Property

DEPTH (m)	SAMPLE TYPE NUMBER	BLOW COUNTS (N VALUE)	ENVIRONMENTAL DATA	GRAPHIC LOG	MATERIAL DESCRIPTION	WELL DIAGRAM
	SS 1		Vapor = 20		Silty Sand and Gravel (Fill). Brown to grey, compact to loose, moist wet at approximately 2.4 m BGS.	
1	SS 2	6-6-5-8 (11)	Vapor = 20		Brick and asphalt pieces from approximately 0.8 to 2.1 m BGS	
	SS 3	3-5-4-4 (9)	Vapor = 5			
2	SS 4	3-3-13-9/- 0.07	Vapor = 5			
3					3.05 65.69	
	SS 5	0-1-0-1 (1)	Vapor = 5		Silty Clay. Grey, soft, moist to wet.	
					3.66 65.08	

Bottom of hole at 3.66 m.

BH4-25

LOPERS & ASSOCIATES

Lopers & Associates
30 Lansfield Way
Ottawa, Ontario K2G3V8

CLIENT 11034936 Canada Inc.
PROJECT NAME Phase Two Environmental Site Assessment
PROJECT NUMBER LOP25-038B
PROJECT LOCATION 506 Kent Street, Ottawa, ON
DATE STARTED 25-3-18 **COMPLETED** 25-3-18
GROUND ELEVATION 68.629 m **HOLE SIZE** 20 cm
DRILLING CONTRACTOR Downing
GROUND WATER LEVELS:
DRILLING METHOD Track Mounted CME 55
AFTER DRILLING ---
LOGGED BY L. Lopers **CHECKED BY** D. Plenderleith
NOTES 69.433 m ASL - Top of Spindle of Fire Hydrant SE of Property

DEPTH (m)	SAMPLE TYPE NUMBER	BLOW COUNTS (N VALUE)	ENVIRONMENTAL DATA	GRAPHIC LOG	MATERIAL DESCRIPTION	WELL DIAGRAM
	SS 1		Vapor = 10		Silty Sand and Gravel (Fill). Brown to grey, compact to loose, moist.	
1	SS 2	10-6-3-3 (9)	Vapor = 0		Brick and asphalt pieces from approximately 0.8 to 2.1 m BGS	
	SS 3	2-2-2-1 (4)	Vapor = 10			
2					2.26 66.37	
	SS 4	2-1-3-1/-0.07	Vapor = 5		Silty Sand with some Gravel. Brown to Grey, loose, moist to wet at approximate 2.8 m BGS.	
3						
	SS 5	1-5-8-4 (13)	Vapor = 0		3.66 64.97	

Bottom of hole at 3.66 m.

BH5-25

LOPERS & ASSOCIATES

Lopers & Associates
30 Lansfield Way
Ottawa, Ontario K2G3V8

CLIENT 11034936 Canada Inc.
PROJECT NAME Phase Two Environmental Site Assessment
PROJECT NUMBER LOP25-038B
PROJECT LOCATION 506 Kent Street, Ottawa, ON
DATE STARTED 25-3-18 **COMPLETED** 25-3-18
GROUND ELEVATION 68.679 m **HOLE SIZE** 20 cm
DRILLING CONTRACTOR Downing
GROUND WATER LEVELS:
DRILLING METHOD Track Mounted CME 55
AFTER DRILLING ---
LOGGED BY L. Lopers **CHECKED BY** D. Plenderleith
NOTES 69.433 m ASL - Top of Spindle of Fire Hydrant SE of Property

DEPTH (m)	SAMPLE TYPE NUMBER	BLOW COUNTS (N VALUE)	ENVIRONMENTAL DATA	GRAPHIC LOG	MATERIAL DESCRIPTION	WELL DIAGRAM
	SS 1		Vapor = 15		Silty Sand and Gravel (Fill). Brown to grey, compact to loose, moist.	
1	SS 2	5-5-3-2 (8)	Vapor = 0		Slag (spent coal, cinders and metals), brick and asphalt pieces from approximately 0.8 to 2.1 m BGS	
2	SS 3	1-2-2-1 (4)	Vapor = 0		2.29 66.39	
	SS 4	0-0-0-0 (0)	Vapor = 15		Silty Sand with some Gravel and Clay. Brown to Grey, loose, moist to wet at approximate 2.8 m BGS.	
3	SS 5	1-2-3-2 (5)	Vapor = 15		3.66 65.02	
					Bottom of hole at 3.66 m.	

BH6-25

LOPERS & ASSOCIATES

Lopers & Associates
30 Lansfield Way
Ottawa, Ontario K2G3V8

CLIENT 11034936 Canada Inc.
PROJECT NAME Phase Two Environmental Site Assessment
PROJECT NUMBER LOP25-038B
PROJECT LOCATION 506 Kent Street, Ottawa, ON
DATE STARTED 25-3-18 **COMPLETED** 25-3-18
GROUND ELEVATION 68.716 m **HOLE SIZE** 20 cm
DRILLING CONTRACTOR Downing
GROUND WATER LEVELS:
DRILLING METHOD Track Mounted CME 55
AFTER DRILLING 2.26 m / Elev 66.46 m
LOGGED BY L. Lopers **CHECKED BY** D. Plenderleith
NOTES 69.433 m ASL - Top of Spindle of Fire Hydrant SE of Property

DEPTH (m)	SAMPLE TYPE NUMBER	BLOW COUNTS (N VALUE)	ENVIRONMENTAL DATA	MATERIAL DESCRIPTION
	SS 1		Vapor = 25	Silty Sand and Gravel (Fill). Brown to grey, compact to loose, moist.
1	SS 2	3-3-1-2 (4)	Vapor = 0	Slag (spent coal, cinders and metals), brick and asphalt pieces from approximately 0.8 to 2.6 m BGS
	SS 3	1-2-2-2 (4)	Vapor = 5	
2	SS 4	1-1-2-6 (3)	Vapor = 0	Groundwater Level measured at ~ 2.26 m BGS on March 24, 2025
				2.59 / 66.13 Silty Sand with some Gravel and Clay. Brown to Grey, loose, moist to wet at approximate 2.9 m BGS.
3	SS 5	4-5-7-5 (12)	Vapor = 120	
				3.96 / 64.76 Silty Clay. Grey, soft, wet.
4	SS 6	0-0-0-0 (0)	Vapor = 5	
				4.57 / 64.15 Bottom of hole at 4.57 m.

WELL DIAGRAM
Casing Top Elev: 69.68 (m)
Casing Type: Stickup

BH7-25

LOPERS & ASSOCIATES

Lopers & Associates
30 Lansfield Way
Ottawa, Ontario K2G3V8

CLIENT 11034936 Canada Inc.
PROJECT NAME Phase Two Environmental Site Assessment
PROJECT NUMBER LOP25-038B
PROJECT LOCATION 506 Kent Street, Ottawa, ON
DATE STARTED 25-3-18 **COMPLETED** 25-3-18
GROUND ELEVATION 68.659 m **HOLE SIZE** 20 cm
DRILLING CONTRACTOR Downing
GROUND WATER LEVELS:
DRILLING METHOD Track Mounted CME 55
AFTER DRILLING 2.48 m / Elev 66.18 m
LOGGED BY L. Lopers **CHECKED BY** D. Plenderleith
NOTES 69.433 m ASL - Top of Spindle of Fire Hydrant SE of Property

DEPTH (m)	SAMPLE TYPE NUMBER	BLOW COUNTS (N VALUE)	ENVIRONMENTAL DATA	GRAPHIC LOG	MATERIAL DESCRIPTION	WELL DIAGRAM
	SS 1		Vapor = 25		Silty Sand and Gravel (Fill). Brown to grey, compact to loose, moist.	Casing Top Elev: 69.59 (m) Casing Type: Stickup
1	SS 2	5-6-4-3 (10)	Vapor = 5			
	SS 3	1-2-5-9 (7)	Vapor = 1		Slag (spent coal, cinders and metals), brick and asphalt pieces from approximately 1.1 to 1.9 m BGS	
2					1.98 / 66.68	
	SS 4	3-4-5-6 (9)	Vapor = 10		Silty Sand with some Gravel and Clay. Brown to Grey, loose, moist to wet at approximate 2.3 m BGS. Groundwater Level measured at ~ 2.48 m BGS on March 24, 2025	
3					3.05 / 65.61	
	SS 5	0-0-0-0 (0)	Vapor = 15		Silty Clay. Grey, soft, wet.	
4	SS 6	0-0-0-0 (0)	Vapor = 20		4.57 / 64.09	

Bottom of hole at 4.57 m.

BH8-25

LOPERS & ASSOCIATES

Lopers & Associates
30 Lansfield Way
Ottawa, Ontario K2G3V8

CLIENT 11034936 Canada Inc.
PROJECT NAME Phase Two Environmental Site Assessment
PROJECT NUMBER LOP25-038B
PROJECT LOCATION 506 Kent Street, Ottawa, ON
DATE STARTED 25-3-19 **COMPLETED** 25-3-19
GROUND ELEVATION 68.713 m **HOLE SIZE** 20 cm
DRILLING CONTRACTOR Downing
GROUND WATER LEVELS:
DRILLING METHOD Track Mounted CME 55
AFTER DRILLING 2.27 m / Elev 66.44 m
LOGGED BY L. Lopers **CHECKED BY** D. Plenderleith
NOTES 69.433 m ASL - Top of Spindle of Fire Hydrant SE of Property

DEPTH (m)	SAMPLE TYPE NUMBER	BLOW COUNTS (N VALUE)	ENVIRONMENTAL DATA	GRAPHIC LOG	MATERIAL DESCRIPTION	WELL DIAGRAM
	SS 1		Vapor = 10		Silty Sand and Gravel (Fill). Brown to grey, compact to loose, moist.	Casing Top Elev: 69.71 (m) Casing Type: Stickup
1	SS 2	9-12-7-6 (19)	Vapor = 15		Slag (spent coal, cinders and metals), brick and asphalt pieces from approximately 0.8 to 1.9 m BGS	
2	SS 3	4-3-4-6 (7)	Vapor = 5			
					2.29 / 66.42	
	SS 4	4-8-13-13 (21)	Vapor = 5		Silty Sand with some Gravel and Clay. Brown to Grey, loose, wet at approximate 2.3 m BGS. Groundwater Level measured at ~ 2.27 m BGS on March 24, 2025	
3					3.05 / 65.66	
	SS 5	0-0-1-1 (1)	Vapor = 0		Silty Clay. Grey, soft, wet.	
4	SS 6	0-0-0-0 (0)	Vapor = 5			
					4.57 / 64.14	

Bottom of hole at 4.57 m.

BH9-25

LOPERS & ASSOCIATES

Lopers & Associates
30 Lansfield Way
Ottawa, Ontario K2G3V8

CLIENT 11034936 Canada Inc.
PROJECT NAME Phase Two Environmental Site Assessment
PROJECT NUMBER LOP25-038B
PROJECT LOCATION 506 Kent Street, Ottawa, ON
DATE STARTED 25-3-19 **COMPLETED** 25-3-19
GROUND ELEVATION 68.753 m **HOLE SIZE** 20 cm
DRILLING CONTRACTOR Downing
GROUND WATER LEVELS:
DRILLING METHOD Track Mounted CME 55
AFTER DRILLING ---
LOGGED BY L. Lopers **CHECKED BY** D. Plenderleith
NOTES 69.433 m ASL - Top of Spindle of Fire Hydrant SE of Property

DEPTH (m)	SAMPLE TYPE NUMBER	BLOW COUNTS (N VALUE)	ENVIRONMENTAL DATA	GRAPHIC LOG	MATERIAL DESCRIPTION	WELL DIAGRAM
	SS 1		Vapor = 15		Silty Sand and Gravel (Fill). Brown to grey, compact to loose, moist.	
1	SS 2	4-3-2-2 (5)	Vapor = 10		Slag (spent coal, cinders and metals), brick and asphalt pieces from approximately 0.8 to 1.6 m BGS	
					1.68 67.07	
	SS 3	1-1-6-8 (7)	Vapor = 10		Silty Sand with some Gravel and Clay. Brown to Grey, loose, moist to wet at approximate 2.3 m BGS.	
2						
	SS 4	3-4-8-25 (12)	Vapor = 0			
3						
	SS 5	8-3-2-1 (5)	Vapor = 5			
					3.81 64.94	
4	SS 6	1-0-1-0 (1)	Vapor = 5		Silty Clay. Grey, soft, wet.	
					4.42 64.33	
					Bottom of hole at 4.42 m.	

BH10-25

LOPERS & ASSOCIATES

Lopers & Associates
30 Lansfield Way
Ottawa, Ontario K2G3V8

CLIENT 11034936 Canada Inc.
PROJECT NAME Phase Two Environmental Site Assessment
PROJECT NUMBER LOP25-038B
PROJECT LOCATION 506 Kent Street, Ottawa, ON
DATE STARTED 25-3-19 **COMPLETED** 25-3-19
GROUND ELEVATION 68.697 m **HOLE SIZE** 20 cm
DRILLING CONTRACTOR Downing
GROUND WATER LEVELS:
DRILLING METHOD Track Mounted CME 55
AFTER DRILLING ---
LOGGED BY L. Lopers **CHECKED BY** D. Plenderleith
NOTES 69.433 m ASL - Top of Spindle of Fire Hydrant SE of Property

DEPTH (m)	SAMPLE TYPE NUMBER	BLOW COUNTS (N VALUE)	ENVIRONMENTAL DATA	GRAPHIC LOG	MATERIAL DESCRIPTION	WELL DIAGRAM
	SS 1		Vapor = 10		Silty Sand and Gravel (Fill). Brown to grey, compact to loose, moist.	
1	SS 2	9-5-4-4 (9)	Vapor = 5		Slag (spent coal, cinders and metals), brick and asphalt pieces from approximately 0.8 to 1.9 m BGS	
	SS 3	5-5-3-2 (8)	Vapor = 10		1.98 66.72	
2					Silty Sand with some Gravel and Clay. Brown to Grey, loose, moist to wet at approximate 3 m BGS.	
	SS 4	5-7-8-7 (15)	Vapor = 5			
3						
	SS 5	1-6-1-1 (7)	Vapor = 5		3.50 65.20	
					Silty Clay. Grey, soft, wet.	
					3.66 65.04	

Bottom of hole at 3.66 m.

Appendix D

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:* **E2B801** *Calibration Date:* **March 12, 2025**

SENSOR	CALIBRATION GAS STANDARD	CALIBRATION GAS CONCENTRATION	READING PRIOR TO ADJUSTMENT	INSTRUMENT SPAN SETTINGS	ALARM LEVEL SETTING
VOC	Isobutylene LOT# 24-1618 EXP: 03/28	100 PPM	109 PPM	100 PPM	400 & 1000 PPM
Combustible	Methane LOT# 23-1447 EXP: 12/25	50% LEL	<500 PPM	"ME" MODE	
Combustible	Hexane LOT# 24-2409 EXP: 09/28	1650 PPM	1600 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
www.maximenvironmental.com

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

Ottawa Office:
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:* **T1URJE4V** *Calibration Date:* **March 19, 2025**

2-POINT pH	CONDUCTIVITY	TURBIDITY	DISSOLVED OXYGEN	OXIDIZATION-REDUCTION POTENTIAL	TEMPERATURE
4.00 pH, 7.00 pH	4.49mS/cm ZERO CHECKED	0 & 100 NTU	8.86 mg/L @ 21.3 DegC SODIUM SULFITE ZERO	240mV	Traceable Thermometer s/n 250032696
AutoCal 4.00 pH Solution LOT # 4GI0133	AutoCal Solution LOT # 4GI0133	AutoCal Solution LOT# 4GI0133	Oakton Zero Solution LOT# 805004	Hanna ORP LOT # 0326	
Expiry Date: September 1, 2025	Expiry Date: September 1, 2025	Expiry Date: September 1, 2025	Expiry Date: June 1, 2026	Expiry Date: June 1, 2029	
pH 7.00 LOT # 4GF0046	@25 DegC	Turb. 100 NTU LOT # A4152			
Expiry Date: June 1, 2026		Expiry Date: June 1, 2026			

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: Jason Ashe

Maxim **Environmental and Safety Inc.**

sales@maximenvironmental.com
www.maximenvironmental.com

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

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

Appendix E

Laboratory Certificates of Analysis

Your Project #: LOP25-038B
Site Location: 506 KENT
Your C.O.C. #: 1037833-01-01

Attention: Luke Lopers

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

Report Date: 2025/03/26
Report #: R8509615
Version: 1 - Final

CERTIFICATE OF ANALYSIS

BUREAU VERITAS JOB #: C530032
Received: 2025/03/19, 10:40

Sample Matrix: Soil
Samples Received: 16

Analyses	Quantity	Date Extracted	Date Analyzed	Laboratory Method	Analytical Method
Methylnaphthalene Sum (1)	14	N/A	2025/03/25	CAM SOP-00301	EPA 8270D m
Semivolatile Organic Compounds (TCLP) (1)	1	2025/03/24	2025/03/25	CAM SOP-00301	EPA 8270E m
Hot Water Extractable Boron (1)	3	2025/03/24	2025/03/24	CAM SOP-00408	R153 Ana. Prot. 2011
Hot Water Extractable Boron (1)	1	2025/03/25	2025/03/25	CAM SOP-00408	R153 Ana. Prot. 2011
Hot Water Extractable Boron (1)	10	2025/03/25	2025/03/26	CAM SOP-00408	R153 Ana. Prot. 2011
1,3-Dichloropropene Sum (1)	3	N/A	2025/03/23		EPA 8260C m
Free (WAD) Cyanide (1)	14	2025/03/24	2025/03/24	CAM SOP-00457	OMOE E3015 m
Cyanide (WAD) in Leachates (1)	1	N/A	2025/03/21	CAM SOP-00457	OMOE 3015 m
Conductivity (1)	3	2025/03/24	2025/03/24	CAM SOP-00414	OMOE E3530 v1 m
Conductivity (1)	11	2025/03/25	2025/03/25	CAM SOP-00414	OMOE E3530 v1 m
Hexavalent Chromium in Soil by IC (1, 2)	14	2025/03/24	2025/03/24	CAM SOP-00436	EPA 3060A/7199 m
Petroleum Hydro. CCME F1 & BTEX in Soil (1, 3)	10	N/A	2025/03/24	CAM SOP-00315	CCME PHC-CWS m
Petroleum Hydrocarbons F2-F4 in Soil (1, 4)	13	2025/03/24	2025/03/24	CAM SOP-00316	CCME CWS m
F4G (CCME Hydrocarbons Gravimetric) (1)	2	2025/03/26	2025/03/26	CAM SOP-00316	CCME PHC-CWS m
Fluoride by ISE in Leachates (1)	1	2025/03/21	2025/03/21	CAM SOP-00449	SM 24 4500-F- C m
Acid Extractable Metals by ICPMS (1)	3	2025/03/24	2025/03/24	CAM SOP-00447	EPA 6020B m
Acid Extractable Metals by ICPMS (1)	11	2025/03/25	2025/03/25	CAM SOP-00447	EPA 6020B m
Total Metals in TCLP Leachate by ICPMS (1)	1	2025/03/21	2025/03/21	CAM SOP-00447	EPA 6020B m
Ignitability of a Sample (1)	1	2025/03/24	2025/03/24	CAM SOP-00432	EPA 1030 Rev. 1 m
Moisture (1)	15	N/A	2025/03/21	CAM SOP-00445	Carter 2nd ed 70.2 m
Nitrate& Nitrite as Nitrogen in Leachate (1)	1	N/A	2025/03/24	CAM SOP-00440	SM 24 4500-NO3I/NO2B
PAH Compounds in Soil by GC/MS (SIM) (1)	13	2025/03/24	2025/03/24	CAM SOP-00318	EPA 8270E
PAH Compounds in Soil by GC/MS (SIM) (1)	1	2025/03/24	2025/03/25	CAM SOP-00318	EPA 8270E
pH CaCl2 EXTRACT (1)	14	2025/03/24	2025/03/24	CAM SOP-00413	EPA 9045 D m
Sieve, 75um (1)	3	N/A	2025/03/25	CAM SOP-00467	ASTM D1140 -17 m
Sodium Adsorption Ratio (SAR) (1)	4	N/A	2025/03/25	CAM SOP-00102	EPA 6010C
Sodium Adsorption Ratio (SAR) (1)	10	N/A	2025/03/26	CAM SOP-00102	EPA 6010C
TCLP - % Solids (1)	1	2025/03/20	2025/03/21	CAM SOP-00401	EPA 1311 Update I m
TCLP - Extraction Fluid (1)	1	N/A	2025/03/21	CAM SOP-00401	EPA 1311 Update I m
TCLP - Initial and final pH (1)	1	N/A	2025/03/21	CAM SOP-00401	EPA 1311 Update I m
Volatile Organic Compounds and F1 PHCs (1)	3	N/A	2025/03/21	CAM SOP-00230	EPA 8260C m

Your Project #: LOP25-038B
Site Location: 506 KENT
Your C.O.C. #: 1037833-01-01

Attention: Luke Lopers

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

Report Date: 2025/03/26
Report #: R8509615
Version: 1 - Final

CERTIFICATE OF ANALYSIS

BUREAU VERITAS JOB #: C530032
Received: 2025/03/19, 10:40

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.

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.

Your Project #: LOP25-038B
Site Location: 506 KENT
Your C.O.C. #: 1037833-01-01

Attention: Luke Lopers

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

Report Date: 2025/03/26
Report #: R8509615
Version: 1 - Final

CERTIFICATE OF ANALYSIS

BUREAU VERITAS JOB #: C530032
Received: 2025/03/19, 10:40

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 Job #: C530032
Report Date: 2025/03/26

Lopers & Associates
Client Project #: LOP25-038B
Site Location: 506 KENT
Sampler Initials: LL

RESULTS OF ANALYSES OF SOIL

Bureau Veritas ID		APBQ54		APBQ55			APBQ56		
Sampling Date		2025/03/18 09:15		2025/03/18 10:10			2025/03/18 10:15		
COC Number		1037833-01-01		1037833-01-01			1037833-01-01		
	UNITS	BH1-25-SS2	QC Batch	BH2-25-SS4	RDL	QC Batch	BH2-25-SS5	RDL	QC Batch
Calculated Parameters									
Sodium Adsorption Ratio	N/A	6.3	9894512	3.4		9894512	2.3		9894512
Inorganics									
Conductivity	mS/cm	0.74	9897369	0.47	0.002	9897369	1.2	0.002	9897369
Moisture	%	10	9895378	20	1.0	9895378	41	1.0	9895378
Available (CaCl2) pH	pH	7.72	9896334	7.59		9896334	7.64		9896334
WAD Cyanide (Free)	ug/g	ND	9896348	ND	0.01	9896350	ND	0.01	9896348
Miscellaneous Parameters									
Grain Size	%						FINE	N/A	9897066
Sieve - #200 (<0.075mm)	%						100	1	9897066
Sieve - #200 (>0.075mm)	%						ND	1	9897066

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

Bureau Veritas ID		APBQ57		APBQ58			APBQ59		
Sampling Date		2025/03/18 10:40		2025/03/18 11:05			2025/03/18 11:10		
COC Number		1037833-01-01		1037833-01-01			1037833-01-01		
	UNITS	BH3-25-SS3	QC Batch	BH4-25-SS3	RDL	QC Batch	BH4-25-SS4	RDL	QC Batch
Calculated Parameters									
Sodium Adsorption Ratio	N/A	3.7	9894512	6.3		9894512	2.0		9894512
Inorganics									
Conductivity	mS/cm	2.4	9897369	1.3	0.002	9896448	0.66	0.002	9896448
Moisture	%	15	9895378	19	1.0	9895378	26	1.0	9895378
Available (CaCl2) pH	pH	7.57	9896334	7.55		9896334	7.26		9896334
WAD Cyanide (Free)	ug/g	ND	9896348	ND	0.01	9896350	ND	0.01	9896348
Miscellaneous Parameters									
Grain Size	%						COARSE	N/A	9897066
Sieve - #200 (<0.075mm)	%						47	1	9897066
Sieve - #200 (>0.075mm)	%						53	1	9897066

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

Bureau Veritas Job #: C530032
Report Date: 2025/03/26

Lopers & Associates
Client Project #: LOP25-038B
Site Location: 506 KENT
Sampler Initials: LL

RESULTS OF ANALYSES OF SOIL

Bureau Veritas ID		APBQ60		APBQ61		APBQ62	APBQ63		
Sampling Date		2025/03/18 11:35		2025/03/18 11:40		2025/03/18 11:55	2025/03/18 12:10		
COC Number		1037833-01-01		1037833-01-01		1037833-01-01	1037833-01-01		
	UNITS	BH5-25-SS3	QC Batch	BH5-25-SS4	QC Batch	BH6-25-AU1	BH6-25-SS3	RDL	QC Batch
Calculated Parameters									
Sodium Adsorption Ratio	N/A	1.9	9894512	3.4	9894512	2.3	7.5		9894512
Inorganics									
Conductivity	mS/cm	0.35	9897369	0.46	9897098	0.26	0.46	0.002	9897369
Moisture	%	14	9895378	24	9895378	12	23	1.0	9895378
Available (CaCl2) pH	pH	7.58	9896334	7.50	9896334	7.75	7.71		9896334
WAD Cyanide (Free)	ug/g	ND	9896348	ND	9896348	ND	ND	0.01	9896348

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		APBQ64			APBQ65			APBQ66		
Sampling Date		2025/03/18 12:20			2025/03/18 12:25			2025/03/18 13:40		
COC Number		1037833-01-01			1037833-01-01			1037833-01-01		
	UNITS	BH6-25-SS5	RDL	QC Batch	BH6-25-SS6	RDL	QC Batch	BH7-25-SS2	RDL	QC Batch
Calculated Parameters										
Sodium Adsorption Ratio	N/A	5.4		9894512				15		9894512
Inorganics										
Conductivity	mS/cm	0.29	0.002	9897369				1.1	0.002	9897369
Moisture	%	19	1.0	9895378	33	1.0	9895378	12	1.0	9895378
Available (CaCl2) pH	pH	7.53		9896334				7.64		9896334
WAD Cyanide (Free)	ug/g	ND	0.01	9896348				ND	0.01	9896350
Miscellaneous Parameters										
Grain Size	%				FINE	N/A	9897066			
Sieve - #200 (<0.075mm)	%				90	1	9897066			
Sieve - #200 (>0.075mm)	%				10	1	9897066			

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

Bureau Veritas Job #: C530032
Report Date: 2025/03/26

Lopers & Associates
Client Project #: LOP25-038B
Site Location: 506 KENT
Sampler Initials: LL

RESULTS OF ANALYSES OF SOIL

Bureau Veritas ID		APBQ67		APBQ68			APBQ69		
Sampling Date		2025/03/18 13:50		2025/03/18			2025/03/18		
COC Number		1037833-01-01		1037833-01-01			1037833-01-01		
	UNITS	**BH7-25-SS4**	**QC Batch**	**DUP-1-03/18**	**RDL**	**QC Batch**	**TCLP 5-3/7-2**	**RDL**	**QC Batch**
Calculated Parameters									
Sodium Adsorption Ratio	N/A	6.5	9894512	4.0		9894512			
Inorganics									
Conductivity	mS/cm	0.49	9896448	0.54	0.002	9897369			
Final pH	pH						5.75		9895510
Leachable Fluoride (F-)	mg/L						0.20	0.10	9895613
Initial pH	pH						9.22		9895510
Moisture	%	21	9895378	16	1.0	9895378			
Available (CaCl2) pH	pH	7.71	9896334	7.57		9896334			
TCLP - % Solids	%						100	0.2	9894679
TCLP Extraction Fluid	N/A						FLUID I		9895509
WAD Cyanide (Free)	ug/g	ND	9896348	ND	0.01	9896348			
Leachable WAD Cyanide (Free)	mg/L						ND	0.010	9895615
Leachable Nitrite (N)	mg/L						ND	0.10	9895626
Leachable Nitrate (N)	mg/L						ND	1.0	9895626
Leachable Nitrate + Nitrite (N)	mg/L						ND	1.0	9895626

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

ELEMENTS BY ATOMIC SPECTROSCOPY (SOIL)

Bureau Veritas ID		APBQ54	APBQ55		APBQ56		
Sampling Date		2025/03/18 09:15	2025/03/18 10:10		2025/03/18 10:15		
COC Number		1037833-01-01	1037833-01-01		1037833-01-01		
	UNITS	BH1-25-SS2	BH2-25-SS4	RDL	BH2-25-SS5	RDL	QC Batch
Inorganics							
Chromium (VI)	ug/g	ND	ND	0.18	ND	0.36	9896274
Metals							
Hot Water Ext. Boron (B)	ug/g	0.29	0.45	0.050	0.44	0.050	9897353
Acid Extractable Antimony (Sb)	ug/g	0.56	31	0.20	ND	0.20	9897311
Acid Extractable Arsenic (As)	ug/g	4.3	3.4	1.0	1.2	1.0	9897311
Acid Extractable Barium (Ba)	ug/g	200	240	0.50	280	0.50	9897311
Acid Extractable Beryllium (Be)	ug/g	0.48	0.28	0.20	0.77	0.20	9897311
Acid Extractable Boron (B)	ug/g	7.1	ND	5.0	8.9	5.0	9897311
Acid Extractable Cadmium (Cd)	ug/g	0.34	0.17	0.10	0.10	0.10	9897311
Acid Extractable Chromium (Cr)	ug/g	24	26	1.0	140	1.0	9897311
Acid Extractable Cobalt (Co)	ug/g	8.6	8.1	0.10	26	0.10	9897311
Acid Extractable Copper (Cu)	ug/g	27	25	0.50	58	0.50	9897311
Acid Extractable Lead (Pb)	ug/g	75	1700	1.0	10	1.0	9897311
Acid Extractable Molybdenum (Mo)	ug/g	1.9	2.1	0.50	0.73	0.50	9897311
Acid Extractable Nickel (Ni)	ug/g	21	20	0.50	79	0.50	9897311
Acid Extractable Selenium (Se)	ug/g	ND	ND	0.50	ND	0.50	9897311
Acid Extractable Silver (Ag)	ug/g	0.20	ND	0.20	ND	0.20	9897311
Acid Extractable Thallium (Tl)	ug/g	0.25	0.32	0.050	0.37	0.050	9897311
Acid Extractable Uranium (U)	ug/g	0.87	0.82	0.050	1.2	0.050	9897311
Acid Extractable Vanadium (V)	ug/g	28	32	5.0	110	5.0	9897311
Acid Extractable Zinc (Zn)	ug/g	120	120	5.0	130	5.0	9897311
Acid Extractable Mercury (Hg)	ug/g	0.12	0.098	0.050	ND	0.050	9897311

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

ELEMENTS BY ATOMIC SPECTROSCOPY (SOIL)

Bureau Veritas ID		APBQ57		APBQ58	APBQ59		APBQ60		
Sampling Date		2025/03/18 10:40		2025/03/18 11:05	2025/03/18 11:10		2025/03/18 11:35		
COC Number		1037833-01-01		1037833-01-01	1037833-01-01		1037833-01-01		
	UNITS	BH3-25-SS3	QC Batch	BH4-25-SS3	BH4-25-SS4	QC Batch	BH5-25-SS3	RDL	QC Batch
Inorganics									
Chromium (VI)	ug/g	ND	9896268	ND	0.22	9896274	ND	0.18	9896268
Metals									
Hot Water Ext. Boron (B)	ug/g	0.40	9897353	0.47	0.21	9896529	0.39	0.050	9897353
Acid Extractable Antimony (Sb)	ug/g	1.3	9897311	3.2	ND	9896495	2.7	0.20	9897311
Acid Extractable Arsenic (As)	ug/g	5.1	9897311	8.3	ND	9896495	3.6	1.0	9897311
Acid Extractable Barium (Ba)	ug/g	360	9897311	140	45	9896495	180	0.50	9897311
Acid Extractable Beryllium (Be)	ug/g	0.53	9897311	0.35	0.21	9896495	0.26	0.20	9897311
Acid Extractable Boron (B)	ug/g	8.5	9897311	ND	ND	9896495	ND	5.0	9897311
Acid Extractable Cadmium (Cd)	ug/g	0.49	9897311	0.42	ND	9896495	0.41	0.10	9897311
Acid Extractable Chromium (Cr)	ug/g	26	9897311	25	23	9896495	19	1.0	9897311
Acid Extractable Cobalt (Co)	ug/g	8.3	9897311	6.5	4.3	9896495	5.0	0.10	9897311
Acid Extractable Copper (Cu)	ug/g	33	9897311	38	7.2	9896495	49	0.50	9897311
Acid Extractable Lead (Pb)	ug/g	180	9897311	250	5.6	9896495	410	1.0	9897311
Acid Extractable Molybdenum (Mo)	ug/g	1.3	9897311	0.97	ND	9896495	0.57	0.50	9897311
Acid Extractable Nickel (Ni)	ug/g	20	9897311	16	11	9896495	11	0.50	9897311
Acid Extractable Selenium (Se)	ug/g	ND	9897311	0.73	ND	9896495	0.61	0.50	9897311
Acid Extractable Silver (Ag)	ug/g	0.47	9897311	0.22	ND	9896495	ND	0.20	9897311
Acid Extractable Thallium (Tl)	ug/g	0.28	9897311	0.13	0.076	9896495	0.13	0.050	9897311
Acid Extractable Uranium (U)	ug/g	0.79	9897311	0.64	0.53	9896495	0.47	0.050	9897311
Acid Extractable Vanadium (V)	ug/g	28	9897311	28	20	9896495	21	5.0	9897311
Acid Extractable Zinc (Zn)	ug/g	260	9897311	180	50	9896495	240	5.0	9897311
Acid Extractable Mercury (Hg)	ug/g	0.27	9897311	0.36	ND	9896495	0.33	0.050	9897311

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

ELEMENTS BY ATOMIC SPECTROSCOPY (SOIL)

Bureau Veritas ID		APBQ61		APBQ62	APBQ63	APBQ64		
Sampling Date		2025/03/18 11:40		2025/03/18 11:55	2025/03/18 12:10	2025/03/18 12:20		
COC Number		1037833-01-01		1037833-01-01	1037833-01-01	1037833-01-01		
	UNITS	BH5-25-SS4	QC Batch	BH6-25-AU1	BH6-25-SS3	BH6-25-SS5	RDL	QC Batch
Inorganics								
Chromium (VI)	ug/g	ND	9896274	ND	ND	ND	0.18	9896268
Metals								
Hot Water Ext. Boron (B)	ug/g	0.39	9897295	0.39	0.40	0.12	0.050	9897353
Acid Extractable Antimony (Sb)	ug/g	3.3	9897311	0.66	0.84	ND	0.20	9897311
Acid Extractable Arsenic (As)	ug/g	2.0	9897311	2.6	1.7	ND	1.0	9897311
Acid Extractable Barium (Ba)	ug/g	150	9897311	120	54	24	0.50	9897311
Acid Extractable Beryllium (Be)	ug/g	0.25	9897311	0.25	0.22	ND	0.20	9897311
Acid Extractable Boron (B)	ug/g	ND	9897311	10	ND	ND	5.0	9897311
Acid Extractable Cadmium (Cd)	ug/g	0.44	9897311	0.15	ND	ND	0.10	9897311
Acid Extractable Chromium (Cr)	ug/g	20	9897311	13	16	13	1.0	9897311
Acid Extractable Cobalt (Co)	ug/g	4.3	9897311	3.7	4.7	3.8	0.10	9897311
Acid Extractable Copper (Cu)	ug/g	21	9897311	17	10	7.1	0.50	9897311
Acid Extractable Lead (Pb)	ug/g	250	9897311	70	66	2.1	1.0	9897311
Acid Extractable Molybdenum (Mo)	ug/g	ND	9897311	0.98	ND	ND	0.50	9897311
Acid Extractable Nickel (Ni)	ug/g	11	9897311	11	10	8.5	0.50	9897311
Acid Extractable Selenium (Se)	ug/g	0.51	9897311	ND	ND	ND	0.50	9897311
Acid Extractable Silver (Ag)	ug/g	ND	9897311	ND	ND	ND	0.20	9897311
Acid Extractable Thallium (Tl)	ug/g	0.11	9897311	0.12	0.078	ND	0.050	9897311
Acid Extractable Uranium (U)	ug/g	0.58	9897311	0.60	0.37	1.3	0.050	9897311
Acid Extractable Vanadium (V)	ug/g	19	9897311	11	20	16	5.0	9897311
Acid Extractable Zinc (Zn)	ug/g	320	9897311	89	57	17	5.0	9897311
Acid Extractable Mercury (Hg)	ug/g	0.17	9897311	0.061	0.15	ND	0.050	9897311

RDL = Reportable Detection Limit
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ELEMENTS BY ATOMIC SPECTROSCOPY (SOIL)

Bureau Veritas ID		APBQ66		APBQ67		APBQ68		
Sampling Date		2025/03/18 13:40		2025/03/18 13:50		2025/03/18		
COC Number		1037833-01-01		1037833-01-01		1037833-01-01		
	UNITS	BH7-25-SS2	QC Batch	BH7-25-SS4	QC Batch	DUP-1-03/18	RDL	QC Batch
Inorganics								
Chromium (VI)	ug/g	ND	9896274	ND	9896274	ND	0.18	9896274
Metals								
Hot Water Ext. Boron (B)	ug/g	0.36	9897353	0.13	9896529	0.49	0.050	9897353
Acid Extractable Antimony (Sb)	ug/g	8.6	9897311	ND	9896495	29	0.20	9897311
Acid Extractable Arsenic (As)	ug/g	7.6	9897311	ND	9896495	4.0	1.0	9897311
Acid Extractable Barium (Ba)	ug/g	190	9897311	29	9896495	240	0.50	9897311
Acid Extractable Beryllium (Be)	ug/g	0.33	9897311	ND	9896495	0.33	0.20	9897311
Acid Extractable Boron (B)	ug/g	ND	9897311	ND	9896495	5.5	5.0	9897311
Acid Extractable Cadmium (Cd)	ug/g	0.24	9897311	ND	9896495	0.21	0.10	9897311
Acid Extractable Chromium (Cr)	ug/g	19	9897311	16	9896495	28	1.0	9897311
Acid Extractable Cobalt (Co)	ug/g	5.8	9897311	4.2	9896495	8.5	0.10	9897311
Acid Extractable Copper (Cu)	ug/g	140	9897311	14	9896495	24	0.50	9897311
Acid Extractable Lead (Pb)	ug/g	370	9897311	4.2	9896495	1100	1.0	9897311
Acid Extractable Molybdenum (Mo)	ug/g	1.1	9897311	ND	9896495	2.3	0.50	9897311
Acid Extractable Nickel (Ni)	ug/g	12	9897311	10	9896495	20	0.50	9897311
Acid Extractable Selenium (Se)	ug/g	1.2	9897311	ND	9896495	ND	0.50	9897311
Acid Extractable Silver (Ag)	ug/g	1.0	9897311	ND	9896495	ND	0.20	9897311
Acid Extractable Thallium (Tl)	ug/g	0.15	9897311	0.060	9896495	0.28	0.050	9897311
Acid Extractable Uranium (U)	ug/g	0.49	9897311	0.46	9896495	0.84	0.050	9897311
Acid Extractable Vanadium (V)	ug/g	24	9897311	19	9896495	32	5.0	9897311
Acid Extractable Zinc (Zn)	ug/g	140	9897311	22	9896495	130	5.0	9897311
Acid Extractable Mercury (Hg)	ug/g	0.10	9897311	ND	9896495	0.14	0.050	9897311

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

ELEMENTS BY ATOMIC SPECTROSCOPY (SOIL)

Bureau Veritas ID		APBQ69		
Sampling Date		2025/03/18		
COC Number		1037833-01-01		
	UNITS	TCLP 5-3/7-2	RDL	QC Batch
Metals				
Leachable Arsenic (As)	mg/L	ND	0.2	9895731
Leachable Barium (Ba)	mg/L	0.8	0.2	9895731
Leachable Boron (B)	mg/L	ND	0.1	9895731
Leachable Cadmium (Cd)	mg/L	ND	0.05	9895731
Leachable Chromium (Cr)	mg/L	ND	0.1	9895731
Leachable Lead (Pb)	mg/L	0.2	0.1	9895731
Leachable Mercury (Hg)	mg/L	ND	0.001	9895731
Leachable Selenium (Se)	mg/L	ND	0.1	9895731
Leachable Silver (Ag)	mg/L	ND	0.01	9895731
Leachable Uranium (U)	mg/L	ND	0.01	9895731

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

SEMI-VOLATILE ORGANICS BY GC-MS (SOIL)

Bureau Veritas ID		APBQ54	APBQ55		APBQ56		APBQ57		
Sampling Date		2025/03/18 09:15	2025/03/18 10:10		2025/03/18 10:15		2025/03/18 10:40		
COC Number		1037833-01-01	1037833-01-01		1037833-01-01		1037833-01-01		
	UNITS	BH1-25-SS2	BH2-25-SS4	RDL	BH2-25-SS5	RDL	BH3-25-SS3	RDL	QC Batch
Calculated Parameters									
Methylnaphthalene, 2-(1-)	ug/g	ND	ND	0.071	ND	0.014	0.060	0.0071	9894511
Polyaromatic Hydrocarbons									
Acenaphthene	ug/g	ND	ND	0.050	ND	0.010	0.043	0.0050	9896277
Acenaphthylene	ug/g	ND	ND	0.050	ND	0.010	0.088	0.0050	9896277
Anthracene	ug/g	ND	0.060	0.050	ND	0.010	0.19	0.0050	9896277
Benzo(a)anthracene	ug/g	0.055	0.36	0.050	ND	0.010	0.55	0.0050	9896277
Benzo(a)pyrene	ug/g	0.061	0.34	0.050	ND	0.010	0.56	0.0050	9896277
Benzo(b/j)fluoranthene	ug/g	0.082	0.44	0.050	ND	0.010	0.67	0.0050	9896277
Benzo(g,h,i)perylene	ug/g	0.053	0.24	0.050	ND	0.010	0.34	0.0050	9896277
Benzo(k)fluoranthene	ug/g	ND	0.15	0.050	ND	0.010	0.25	0.0050	9896277
Chrysene	ug/g	0.054	0.31	0.050	ND	0.010	0.48	0.0050	9896277
Dibenzo(a,h)anthracene	ug/g	ND	ND	0.050	ND	0.010	0.094	0.0050	9896277
Fluoranthene	ug/g	0.14	0.71	0.050	ND	0.010	1.4	0.0050	9896277
Fluorene	ug/g	ND	ND	0.050	ND	0.010	0.072	0.0050	9896277
Indeno(1,2,3-cd)pyrene	ug/g	ND	0.23	0.050	ND	0.010	0.39	0.0050	9896277
1-Methylnaphthalene	ug/g	ND	ND	0.050	ND	0.010	0.028	0.0050	9896277
2-Methylnaphthalene	ug/g	ND	ND	0.050	ND	0.010	0.031	0.0050	9896277
Naphthalene	ug/g	ND	ND	0.050	ND	0.010	0.046	0.0050	9896277
Phenanthrene	ug/g	0.065	0.26	0.050	ND	0.010	1.0	0.0050	9896277
Pyrene	ug/g	0.11	0.60	0.050	ND	0.010	1.0	0.0050	9896277
Surrogate Recovery (%)									
D10-Anthracene	%	99	113		96		100		9896277
D14-Terphenyl (FS)	%	88	86		90		99		9896277
D8-Acenaphthylene	%	93	91		86		97		9896277

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

SEMI-VOLATILE ORGANICS BY GC-MS (SOIL)

Bureau Veritas ID		APBQ58		APBQ59	APBQ60	APBQ61		
Sampling Date		2025/03/18 11:05		2025/03/18 11:10	2025/03/18 11:35	2025/03/18 11:40		
COC Number		1037833-01-01		1037833-01-01	1037833-01-01	1037833-01-01		
	UNITS	BH4-25-SS3	RDL	BH4-25-SS4	BH5-25-SS3	BH5-25-SS4	RDL	QC Batch
Calculated Parameters								
Methylnaphthalene, 2-(1-)	ug/g	0.40	0.071	ND	0.020	ND	0.0071	9894511
Polyaromatic Hydrocarbons								
Acenaphthene	ug/g	0.35	0.050	ND	0.023	ND	0.0050	9896277
Acenaphthylene	ug/g	0.15	0.050	ND	0.038	ND	0.0050	9896277
Anthracene	ug/g	0.88	0.050	ND	0.11	ND	0.0050	9896277
Benzo(a)anthracene	ug/g	2.2	0.050	ND	0.39	ND	0.0050	9896277
Benzo(a)pyrene	ug/g	2.0	0.050	ND	0.36	ND	0.0050	9896277
Benzo(b/j)fluoranthene	ug/g	2.3	0.050	ND	0.41	ND	0.0050	9896277
Benzo(g,h,i)perylene	ug/g	0.98	0.050	ND	0.20	ND	0.0050	9896277
Benzo(k)fluoranthene	ug/g	0.86	0.050	ND	0.15	ND	0.0050	9896277
Chrysene	ug/g	1.9	0.050	ND	0.30	ND	0.0050	9896277
Dibenzo(a,h)anthracene	ug/g	0.25	0.050	ND	0.065	ND	0.0050	9896277
Fluoranthene	ug/g	4.8	0.050	0.0097	0.63	0.0087	0.0050	9896277
Fluorene	ug/g	0.32	0.050	ND	0.024	ND	0.0050	9896277
Indeno(1,2,3-cd)pyrene	ug/g	0.99	0.050	ND	0.23	ND	0.0050	9896277
1-Methylnaphthalene	ug/g	0.18	0.050	ND	0.0093	ND	0.0050	9896277
2-Methylnaphthalene	ug/g	0.22	0.050	ND	0.011	ND	0.0050	9896277
Naphthalene	ug/g	0.61	0.050	ND	0.016	ND	0.0050	9896277
Phenanthrene	ug/g	4.0	0.050	0.0076	0.30	ND	0.0050	9896277
Pyrene	ug/g	3.8	0.050	0.0077	0.53	0.0082	0.0050	9896277
Surrogate Recovery (%)								
D10-Anthracene	%	102		98	95	98		9896277
D14-Terphenyl (FS)	%	85		92	93	93		9896277
D8-Acenaphthylene	%	80		92	96	91		9896277

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

SEMI-VOLATILE ORGANICS BY GC-MS (SOIL)

Bureau Veritas ID		APBQ62	APBQ63	APBQ64	APBQ66	APBQ67		
Sampling Date		2025/03/18 11:55	2025/03/18 12:10	2025/03/18 12:20	2025/03/18 13:40	2025/03/18 13:50		
COC Number		1037833-01-01	1037833-01-01	1037833-01-01	1037833-01-01	1037833-01-01		
	UNITS	BH6-25-AU1	BH6-25-SS3	BH6-25-SS5	BH7-25-SS2	BH7-25-SS4	RDL	QC Batch
Calculated Parameters								
Methylnaphthalene, 2-(1-)	ug/g	ND	0.013	ND	0.024	ND	0.0071	9894511
Polyaromatic Hydrocarbons								
Acenaphthene	ug/g	ND	0.025	ND	0.049	ND	0.0050	9896277
Acenaphthylene	ug/g	0.014	0.0085	ND	0.061	ND	0.0050	9896277
Anthracene	ug/g	0.028	0.10	ND	0.17	ND	0.0050	9896277
Benzo(a)anthracene	ug/g	0.085	0.19	ND	0.70	ND	0.0050	9896277
Benzo(a)pyrene	ug/g	0.074	0.15	ND	0.71	ND	0.0050	9896277
Benzo(b/j)fluoranthene	ug/g	0.088	0.18	ND	0.85	ND	0.0050	9896277
Benzo(g,h,i)perylene	ug/g	0.043	0.077	ND	0.44	ND	0.0050	9896277
Benzo(k)fluoranthene	ug/g	0.032	0.067	ND	0.30	ND	0.0050	9896277
Chrysene	ug/g	0.065	0.14	ND	0.56	ND	0.0050	9896277
Dibenzo(a,h)anthracene	ug/g	0.011	0.022	ND	0.12	ND	0.0050	9896277
Fluoranthene	ug/g	0.16	0.43	ND	1.2	0.0061	0.0050	9896277
Fluorene	ug/g	0.0067	0.031	ND	0.045	ND	0.0050	9896277
Indeno(1,2,3-cd)pyrene	ug/g	0.047	0.084	ND	0.48	ND	0.0050	9896277
1-Methylnaphthalene	ug/g	ND	0.0056	ND	0.012	ND	0.0050	9896277
2-Methylnaphthalene	ug/g	ND	0.0074	ND	0.013	ND	0.0050	9896277
Naphthalene	ug/g	ND	0.016	ND	0.019	ND	0.0050	9896277
Phenanthrene	ug/g	0.075	0.34	ND	0.58	ND	0.0050	9896277
Pyrene	ug/g	0.13	0.33	ND	1.1	0.0053	0.0050	9896277
Surrogate Recovery (%)								
D10-Anthracene	%	80	85	101	95	99		9896277
D14-Terphenyl (FS)	%	73	86	93	94	92		9896277
D8-Acenaphthylene	%	77	88	93	97	91		9896277

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

SEMI-VOLATILE ORGANICS BY GC-MS (SOIL)

Bureau Veritas ID		APBQ68			APBQ69		
Sampling Date		2025/03/18			2025/03/18		
COC Number		1037833-01-01			1037833-01-01		
	UNITS	DUP-1-03/18	RDL	QC Batch	TCLP 5-3/7-2	RDL	QC Batch
Semivolatile Organics							
Leachable Benzo(a)pyrene	ug/L				ND	0.10	9896281
Leachable m/p-Cresol	ug/L				ND	2.5	9896281
Leachable o-Cresol	ug/L				ND	2.5	9896281
Leachable Cresol Total	ug/L				ND	2.5	9896281
Leachable 2,4-Dichlorophenol	ug/L				ND	2.5	9896281
Leachable 2,4-Dinitrotoluene	ug/L				ND	10	9896281
Leachable Hexachlorobenzene	ug/L				ND	10	9896281
Leachable Hexachlorobutadiene	ug/L				ND	10	9896281
Leachable Hexachloroethane	ug/L				ND	10	9896281
Leachable Nitrobenzene	ug/L				ND	10	9896281
Leachable Pentachlorophenol	ug/L				ND	2.5	9896281
Leachable Pyridine	ug/L				ND	10	9896281
Leachable 2,3,4,6-Tetrachlorophenol	ug/L				ND	2.5	9896281
Leachable 2,4,5-Trichlorophenol	ug/L				ND	0.50	9896281
Leachable 2,4,6-Trichlorophenol	ug/L				ND	2.5	9896281
Calculated Parameters							
Methylnaphthalene, 2-(1-)	ug/g	ND	0.071	9894511			
Polyaromatic Hydrocarbons							
Acenaphthene	ug/g	ND	0.050	9896277			
Acenaphthylene	ug/g	ND	0.050	9896277			
Anthracene	ug/g	0.12	0.050	9896277			
Benzo(a)anthracene	ug/g	0.83	0.050	9896277			
Benzo(a)pyrene	ug/g	0.77	0.050	9896277			
Benzo(b/j)fluoranthene	ug/g	0.98	0.050	9896277			
Benzo(g,h,i)perylene	ug/g	0.46	0.050	9896277			
Benzo(k)fluoranthene	ug/g	0.34	0.050	9896277			
Chrysene	ug/g	0.67	0.050	9896277			
Dibenzo(a,h)anthracene	ug/g	0.10	0.050	9896277			
Fluoranthene	ug/g	1.5	0.050	9896277			
Fluorene	ug/g	ND	0.050	9896277			

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

SEMI-VOLATILE ORGANICS BY GC-MS (SOIL)

Bureau Veritas ID		APBQ68			APBQ69		
Sampling Date		2025/03/18			2025/03/18		
COC Number		1037833-01-01			1037833-01-01		
	UNITS	DUP-1-03/18	RDL	QC Batch	TCLP 5-3/7-2	RDL	QC Batch
Indeno(1,2,3-cd)pyrene	ug/g	0.48	0.050	9896277			
1-Methylnaphthalene	ug/g	ND	0.050	9896277			
2-Methylnaphthalene	ug/g	ND	0.050	9896277			
Naphthalene	ug/g	ND	0.050	9896277			
Phenanthrene	ug/g	0.50	0.050	9896277			
Pyrene	ug/g	1.2	0.050	9896277			
Surrogate Recovery (%)							
Leachable 2,4,6-Tribromophenol	%				52		9896281
Leachable 2-Fluorobiphenyl	%				45		9896281
Leachable 2-Fluorophenol	%				41		9896281
Leachable D14-Terphenyl (FS)	%				88		9896281
Leachable D5-Nitrobenzene	%				52		9896281
Leachable D5-Phenol	%				22		9896281
D10-Anthracene	%	97		9896277			
D14-Terphenyl (FS)	%	92		9896277			
D8-Acenaphthylene	%	93		9896277			

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

VOLATILE ORGANICS BY GC/MS (SOIL)

Bureau Veritas ID		APBQ62	APBQ64	APBQ65		
Sampling Date		2025/03/18 11:55	2025/03/18 12:20	2025/03/18 12:25		
COC Number		1037833-01-01	1037833-01-01	1037833-01-01		
	UNITS	BH6-25-AU1	BH6-25-SS5	BH6-25-SS6	RDL	QC Batch
Calculated Parameters						
1,3-Dichloropropene (cis+trans)	ug/g	ND	ND	ND	0.050	9894410
Volatile Organics						
Acetone (2-Propanone)	ug/g	ND	ND	ND	0.49	9895305
Benzene	ug/g	ND	ND	ND	0.0060	9895305
Bromodichloromethane	ug/g	ND	ND	ND	0.040	9895305
Bromoform	ug/g	ND	ND	ND	0.040	9895305
Bromomethane	ug/g	ND	ND	ND	0.040	9895305
Carbon Tetrachloride	ug/g	ND	ND	ND	0.040	9895305
Chlorobenzene	ug/g	ND	ND	ND	0.040	9895305
Chloroform	ug/g	ND	ND	ND	0.040	9895305
Dibromochloromethane	ug/g	ND	ND	ND	0.040	9895305
1,2-Dichlorobenzene	ug/g	ND	ND	ND	0.040	9895305
1,3-Dichlorobenzene	ug/g	ND	ND	ND	0.040	9895305
1,4-Dichlorobenzene	ug/g	ND	ND	ND	0.040	9895305
Dichlorodifluoromethane (FREON 12)	ug/g	ND	ND	ND	0.040	9895305
1,1-Dichloroethane	ug/g	ND	ND	ND	0.040	9895305
1,2-Dichloroethane	ug/g	ND	ND	ND	0.049	9895305
1,1-Dichloroethylene	ug/g	ND	ND	ND	0.040	9895305
cis-1,2-Dichloroethylene	ug/g	ND	ND	ND	0.040	9895305
trans-1,2-Dichloroethylene	ug/g	ND	ND	ND	0.040	9895305
1,2-Dichloropropane	ug/g	ND	ND	ND	0.040	9895305
cis-1,3-Dichloropropene	ug/g	ND	ND	ND	0.030	9895305
trans-1,3-Dichloropropene	ug/g	ND	ND	ND	0.040	9895305
Ethylbenzene	ug/g	ND	ND	ND	0.010	9895305
Ethylene Dibromide	ug/g	ND	ND	ND	0.040	9895305
Hexane	ug/g	0.065	ND	ND	0.040	9895305
Methylene Chloride(Dichloromethane)	ug/g	ND	ND	ND	0.049	9895305
Methyl Ethyl Ketone (2-Butanone)	ug/g	ND	ND	ND	0.40	9895305
Methyl Isobutyl Ketone	ug/g	ND	ND	ND	0.40	9895305
Methyl t-butyl ether (MTBE)	ug/g	ND	ND	ND	0.040	9895305

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

VOLATILE ORGANICS BY GC/MS (SOIL)

Bureau Veritas ID		APBQ62	APBQ64	APBQ65		
Sampling Date		2025/03/18 11:55	2025/03/18 12:20	2025/03/18 12:25		
COC Number		1037833-01-01	1037833-01-01	1037833-01-01		
	UNITS	BH6-25-AU1	BH6-25-SS5	BH6-25-SS6	RDL	QC Batch
Styrene	ug/g	ND	ND	ND	0.040	9895305
1,1,1,2-Tetrachloroethane	ug/g	ND	ND	ND	0.040	9895305
1,1,2,2-Tetrachloroethane	ug/g	ND	ND	ND	0.040	9895305
Tetrachloroethylene	ug/g	ND	ND	ND	0.040	9895305
Toluene	ug/g	ND	ND	ND	0.020	9895305
1,1,1-Trichloroethane	ug/g	ND	ND	ND	0.040	9895305
1,1,2-Trichloroethane	ug/g	ND	ND	ND	0.040	9895305
Trichloroethylene	ug/g	ND	ND	ND	0.010	9895305
Trichlorofluoromethane (FREON 11)	ug/g	ND	ND	ND	0.040	9895305
Vinyl Chloride	ug/g	ND	ND	ND	0.019	9895305
p+m-Xylene	ug/g	ND	ND	ND	0.020	9895305
o-Xylene	ug/g	ND	ND	ND	0.020	9895305
Total Xylenes	ug/g	ND	ND	ND	0.020	9895305
F1 (C6-C10)	ug/g	ND	ND	ND	10	9895305
F1 (C6-C10) - BTEX	ug/g	ND	ND	ND	10	9895305
Surrogate Recovery (%)						
4-Bromofluorobenzene	%	101	100	100		9895305
D10-o-Xylene	%	106	93	88		9895305
D4-1,2-Dichloroethane	%	96	94	98		9895305
D8-Toluene	%	91	91	91		9895305

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		APBQ54	APBQ55			APBQ57	APBQ58		
Sampling Date		2025/03/18 09:15	2025/03/18 10:10			2025/03/18 10:40	2025/03/18 11:05		
COC Number		1037833-01-01	1037833-01-01			1037833-01-01	1037833-01-01		
	UNITS	BH1-25-SS2	BH2-25-SS4	RDL	QC Batch	BH3-25-SS3	BH4-25-SS3	RDL	QC Batch
BTEX & F1 Hydrocarbons									
Benzene	ug/g	ND	ND	0.020	9896272	ND	ND	0.020	9896272
Toluene	ug/g	ND	0.023	0.020	9896272	0.022	0.16	0.020	9896272
Ethylbenzene	ug/g	ND	ND	0.020	9896272	ND	ND	0.020	9896272
o-Xylene	ug/g	ND	ND	0.020	9896272	ND	ND	0.020	9896272
p+m-Xylene	ug/g	ND	ND	0.040	9896272	ND	ND	0.040	9896272
Total Xylenes	ug/g	ND	ND	0.040	9896272	ND	ND	0.040	9896272
F1 (C6-C10)	ug/g	ND	ND	10	9896272	ND	ND	10	9896272
F1 (C6-C10) - BTEX	ug/g	ND	ND	10	9896272	ND	ND	10	9896272
F2-F4 Hydrocarbons									
F4G-sg (Grav. Heavy Hydrocarbons)	ug/g	1000	2100	100	9898044				
F2 (C10-C16 Hydrocarbons)	ug/g	11	11	7.0	9896192	10	14	7.0	9896192
F3 (C16-C34 Hydrocarbons)	ug/g	110	320	50	9896192	85	210	50	9896192
F4 (C34-C50 Hydrocarbons)	ug/g	220	730	50	9896192	68	100	50	9896192
Reached Baseline at C50	ug/g	No	No		9896192	Yes	Yes		9896192
Surrogate Recovery (%)									
1,4-Difluorobenzene	%	105	106		9896272	105	106		9896272
4-Bromofluorobenzene	%	99	100		9896272	100	99		9896272
D10-o-Xylene	%	92	102		9896272	93	97		9896272
D4-1,2-Dichloroethane	%	101	101		9896272	100	102		9896272
o-Terphenyl	%	94	96		9896192	97	100		9896192

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		APBQ59	APBQ60	APBQ61			APBQ62		
Sampling Date		2025/03/18 11:10	2025/03/18 11:35	2025/03/18 11:40			2025/03/18 11:55		
COC Number		1037833-01-01	1037833-01-01	1037833-01-01			1037833-01-01		
	UNITS	BH4-25-SS4	BH5-25-SS3	BH5-25-SS4	RDL	QC Batch	BH6-25-AU1	RDL	QC Batch
BTEX & F1 Hydrocarbons									
Benzene	ug/g	ND	ND	ND	0.020	9896272			
Toluene	ug/g	ND	ND	ND	0.020	9896272			
Ethylbenzene	ug/g	ND	ND	ND	0.020	9896272			
o-Xylene	ug/g	ND	ND	ND	0.020	9896272			
p+m-Xylene	ug/g	ND	ND	ND	0.040	9896272			
Total Xylenes	ug/g	ND	ND	ND	0.040	9896272			
F1 (C6-C10)	ug/g	ND	ND	ND	10	9896272			
F1 (C6-C10) - BTEX	ug/g	ND	ND	ND	10	9896272			
F2-F4 Hydrocarbons									
F2 (C10-C16 Hydrocarbons)	ug/g	ND	13	ND	7.0	9896192	16	7.0	9896192
F3 (C16-C34 Hydrocarbons)	ug/g	ND	150	ND	50	9896192	64	50	9896192
F4 (C34-C50 Hydrocarbons)	ug/g	ND	95	ND	50	9896192	ND	50	9896192
Reached Baseline at C50	ug/g	Yes	Yes	Yes		9896192	Yes		9896192
Surrogate Recovery (%)									
1,4-Difluorobenzene	%	107	106	106		9896272			
4-Bromofluorobenzene	%	98	99	98		9896272			
D10-o-Xylene	%	91	93	89		9896272			
D4-1,2-Dichloroethane	%	100	101	102		9896272			
o-Terphenyl	%	100	98	99		9896192	100		9896192

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		APBQ64	APBQ65			APBQ66	APBQ67		
Sampling Date		2025/03/18 12:20	2025/03/18 12:25			2025/03/18 13:40	2025/03/18 13:50		
COC Number		1037833-01-01	1037833-01-01			1037833-01-01	1037833-01-01		
	UNITS	BH6-25-SS5	BH6-25-SS6	RDL	QC Batch	BH7-25-SS2	BH7-25-SS4	RDL	QC Batch
BTEX & F1 Hydrocarbons									
Benzene	ug/g					ND	ND	0.020	9896272
Toluene	ug/g					ND	ND	0.020	9896272
Ethylbenzene	ug/g					ND	ND	0.020	9896272
o-Xylene	ug/g					ND	ND	0.020	9896272
p+m-Xylene	ug/g					ND	ND	0.040	9896272
Total Xylenes	ug/g					ND	ND	0.040	9896272
F1 (C6-C10)	ug/g					ND	ND	10	9896272
F1 (C6-C10) - BTEX	ug/g					ND	ND	10	9896272
F2-F4 Hydrocarbons									
F2 (C10-C16 Hydrocarbons)	ug/g	ND	ND	7.0	9896192	14	ND	7.0	9896192
F3 (C16-C34 Hydrocarbons)	ug/g	ND	ND	50	9896192	160	ND	50	9896192
F4 (C34-C50 Hydrocarbons)	ug/g	ND	ND	50	9896192	56	ND	50	9896192
Reached Baseline at C50	ug/g	Yes	Yes		9896192	Yes	Yes		9896192
Surrogate Recovery (%)									
1,4-Difluorobenzene	%					108	106		9896272
4-Bromofluorobenzene	%					98	99		9896272
D10-o-Xylene	%					87	94		9896272
D4-1,2-Dichloroethane	%					102	103		9896272
o-Terphenyl	%	100	99		9896192	100	99		9896192

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		APBQ68		
Sampling Date		2025/03/18		
COC Number		1037833-01-01		
	UNITS	DUP-1-03/18	RDL	QC Batch
BTEX & F1 Hydrocarbons				
Benzene	ug/g	ND	0.020	9896272
Toluene	ug/g	ND	0.020	9896272
Ethylbenzene	ug/g	ND	0.020	9896272
o-Xylene	ug/g	ND	0.020	9896272
p+m-Xylene	ug/g	ND	0.040	9896272
Total Xylenes	ug/g	ND	0.040	9896272
F1 (C6-C10)	ug/g	ND	10	9896272
F1 (C6-C10) - BTEX	ug/g	ND	10	9896272
F2-F4 Hydrocarbons				
F2 (C10-C16 Hydrocarbons)	ug/g	11	7.0	9896192
F3 (C16-C34 Hydrocarbons)	ug/g	390	50	9896192
F4 (C34-C50 Hydrocarbons)	ug/g	1100	50	9896192
Reached Baseline at C50	ug/g	No		9896192
Surrogate Recovery (%)				
1,4-Difluorobenzene	%	107		9896272
4-Bromofluorobenzene	%	98		9896272
D10-o-Xylene	%	87		9896272
D4-1,2-Dichloroethane	%	100		9896272
o-Terphenyl	%	91		9896192

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

MISCELLANEOUS (SOIL)

Bureau Veritas ID		APBQ69	
Sampling Date		2025/03/18	
COC Number		1037833-01-01	
	UNITS	**TCLP 5-3/7-2**	**QC Batch**
Inorganics			
Ignitability	N/A	NF/NI	9896831
QC Batch = Quality Control Batch			

GENERAL COMMENTS

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

Sample APBQ54 [BH1-25-SS2] : 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 APBQ55 [BH2-25-SS4] : 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 APBQ56 [BH2-25-SS5] : Hexavalent Chromium: Detection Limits were raised due to high moisture content.

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

Sample APBQ57 [BH3-25-SS3] : 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 APBQ58 [BH4-25-SS3] : 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 APBQ67 [BH7-25-SS4] : 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 APBQ68 [DUP-1-03/18] : 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 APBQ69 [TCLP 5-3/7-2] : NF/NI = Non Flammable and Non Ignitable

Results relate only to the items tested.

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

QUALITY ASSURANCE REPORT

QA/QC Batch	Init	QC Type	Parameter	Date Analyzed	Value	Recovery	UNITS	QC Limits
9895305	DW5	Matrix Spike	4-Bromofluorobenzene	2025/03/21		102	%	60 - 140
			D10-o-Xylene	2025/03/21		121	%	60 - 130
			D4-1,2-Dichloroethane	2025/03/21		91	%	60 - 140
			D8-Toluene	2025/03/21		103	%	60 - 140
			Acetone (2-Propanone)	2025/03/21		86	%	60 - 140
			Benzene	2025/03/21		97	%	60 - 140
			Bromodichloromethane	2025/03/21		95	%	60 - 140
			Bromoform	2025/03/21		103	%	60 - 140
			Bromomethane	2025/03/21		103	%	60 - 140
			Carbon Tetrachloride	2025/03/21		105	%	60 - 140
			Chlorobenzene	2025/03/21		96	%	60 - 140
			Chloroform	2025/03/21		98	%	60 - 140
			Dibromochloromethane	2025/03/21		99	%	60 - 140
			1,2-Dichlorobenzene	2025/03/21		104	%	60 - 140
			1,3-Dichlorobenzene	2025/03/21		104	%	60 - 140
			1,4-Dichlorobenzene	2025/03/21		104	%	60 - 140
			Dichlorodifluoromethane (FREON 12)	2025/03/21		102	%	60 - 140
			1,1-Dichloroethane	2025/03/21		94	%	60 - 140
			1,2-Dichloroethane	2025/03/21		94	%	60 - 140
			1,1-Dichloroethylene	2025/03/21		94	%	60 - 140
			cis-1,2-Dichloroethylene	2025/03/21		106	%	60 - 140
			trans-1,2-Dichloroethylene	2025/03/21		108	%	60 - 140
			1,2-Dichloropropane	2025/03/21		99	%	60 - 140
			cis-1,3-Dichloropropene	2025/03/21		89	%	60 - 140
			trans-1,3-Dichloropropene	2025/03/21		93	%	60 - 140
			Ethylbenzene	2025/03/21		98	%	60 - 140
			Ethylene Dibromide	2025/03/21		95	%	60 - 140
			Hexane	2025/03/21		109	%	60 - 140
			Methylene Chloride(Dichloromethane)	2025/03/21		98	%	60 - 140
			Methyl Ethyl Ketone (2-Butanone)	2025/03/21		88	%	60 - 140
			Methyl Isobutyl Ketone	2025/03/21		88	%	60 - 140
			Methyl t-butyl ether (MTBE)	2025/03/21		95	%	60 - 140
			Styrene	2025/03/21		103	%	60 - 140
			1,1,1,2-Tetrachloroethane	2025/03/21		111	%	60 - 140
			1,1,2,2-Tetrachloroethane	2025/03/21		92	%	60 - 140
			Tetrachloroethylene	2025/03/21		101	%	60 - 140
			Toluene	2025/03/21		99	%	60 - 140
			1,1,1-Trichloroethane	2025/03/21		96	%	60 - 140
			1,1,2-Trichloroethane	2025/03/21		89	%	60 - 140
			Trichloroethylene	2025/03/21		105	%	60 - 140
			Trichlorofluoromethane (FREON 11)	2025/03/21		100	%	60 - 140
			Vinyl Chloride	2025/03/21		107	%	60 - 140
			p+m-Xylene	2025/03/21		98	%	60 - 140
			o-Xylene	2025/03/21		107	%	60 - 140
			F1 (C6-C10)	2025/03/21		97	%	60 - 140
9895305	DW5	Spiked Blank	4-Bromofluorobenzene	2025/03/21		106	%	60 - 140
			D10-o-Xylene	2025/03/21		96	%	60 - 130
			D4-1,2-Dichloroethane	2025/03/21		91	%	60 - 140
			D8-Toluene	2025/03/21		102	%	60 - 140
			Acetone (2-Propanone)	2025/03/21		93	%	60 - 140
			Benzene	2025/03/21		98	%	60 - 130
			Bromodichloromethane	2025/03/21		95	%	60 - 130
			Bromoform	2025/03/21		109	%	60 - 130

QUALITY ASSURANCE REPORT(CONT'D)

QA/QC Batch	Init	QC Type	Parameter	Date Analyzed	Value	Recovery	UNITS	QC Limits
			Bromomethane	2025/03/21		109	%	60 - 140
			Carbon Tetrachloride	2025/03/21		105	%	60 - 130
			Chlorobenzene	2025/03/21		96	%	60 - 130
			Chloroform	2025/03/21		98	%	60 - 130
			Dibromochloromethane	2025/03/21		103	%	60 - 130
			1,2-Dichlorobenzene	2025/03/21		104	%	60 - 130
			1,3-Dichlorobenzene	2025/03/21		104	%	60 - 130
			1,4-Dichlorobenzene	2025/03/21		104	%	60 - 130
			Dichlorodifluoromethane (FREON 12)	2025/03/21		106	%	60 - 140
			1,1-Dichloroethane	2025/03/21		105	%	60 - 130
			1,2-Dichloroethane	2025/03/21		95	%	60 - 130
			1,1-Dichloroethylene	2025/03/21		97	%	60 - 130
			cis-1,2-Dichloroethylene	2025/03/21		114	%	60 - 130
			trans-1,2-Dichloroethylene	2025/03/21		117	%	60 - 130
			1,2-Dichloropropane	2025/03/21		100	%	60 - 130
			cis-1,3-Dichloropropene	2025/03/21		92	%	60 - 130
			trans-1,3-Dichloropropene	2025/03/21		98	%	60 - 130
			Ethylbenzene	2025/03/21		95	%	60 - 130
			Ethylene Dibromide	2025/03/21		100	%	60 - 130
			Hexane	2025/03/21		120	%	60 - 130
			Methylene Chloride(Dichloromethane)	2025/03/21		103	%	60 - 130
			Methyl Ethyl Ketone (2-Butanone)	2025/03/21		103	%	60 - 140
			Methyl Isobutyl Ketone	2025/03/21		89	%	60 - 130
			Methyl t-butyl ether (MTBE)	2025/03/21		107	%	60 - 130
			Styrene	2025/03/21		107	%	60 - 130
			1,1,1,2-Tetrachloroethane	2025/03/21		110	%	60 - 130
			1,1,2,2-Tetrachloroethane	2025/03/21		100	%	60 - 130
			Tetrachloroethylene	2025/03/21		104	%	60 - 130
			Toluene	2025/03/21		99	%	60 - 130
			1,1,1-Trichloroethane	2025/03/21		96	%	60 - 130
			1,1,2-Trichloroethane	2025/03/21		91	%	60 - 130
			Trichloroethylene	2025/03/21		106	%	60 - 130
			Trichlorofluoromethane (FREON 11)	2025/03/21		103	%	60 - 130
			Vinyl Chloride	2025/03/21		111	%	60 - 130
			p+m-Xylene	2025/03/21		95	%	60 - 130
			o-Xylene	2025/03/21		110	%	60 - 130
			F1 (C6-C10)	2025/03/21		94	%	80 - 120
9895305	DW5	Method Blank	4-Bromofluorobenzene	2025/03/21		100	%	60 - 140
			D10-o-Xylene	2025/03/21		87	%	60 - 130
			D4-1,2-Dichloroethane	2025/03/21		91	%	60 - 140
			D8-Toluene	2025/03/21		96	%	60 - 140
			Acetone (2-Propanone)	2025/03/21	ND, RDL=0.49		ug/g	
			Benzene	2025/03/21	ND, RDL=0.0060		ug/g	
			Bromodichloromethane	2025/03/21	ND, RDL=0.040		ug/g	
			Bromoform	2025/03/21	ND, RDL=0.040		ug/g	
			Bromomethane	2025/03/21	ND, RDL=0.040		ug/g	
			Carbon Tetrachloride	2025/03/21	ND, RDL=0.040		ug/g	

QUALITY ASSURANCE REPORT(CONT'D)

QA/QC Batch	Init	QC Type	Parameter	Date Analyzed	Value	Recovery	UNITS	QC Limits
			Chlorobenzene	2025/03/21	ND, RDL=0.040		ug/g	
			Chloroform	2025/03/21	ND, RDL=0.040		ug/g	
			Dibromochloromethane	2025/03/21	ND, RDL=0.040		ug/g	
			1,2-Dichlorobenzene	2025/03/21	ND, RDL=0.040		ug/g	
			1,3-Dichlorobenzene	2025/03/21	ND, RDL=0.040		ug/g	
			1,4-Dichlorobenzene	2025/03/21	ND, RDL=0.040		ug/g	
			Dichlorodifluoromethane (FREON 12)	2025/03/21	ND, RDL=0.040		ug/g	
			1,1-Dichloroethane	2025/03/21	ND, RDL=0.040		ug/g	
			1,2-Dichloroethane	2025/03/21	ND, RDL=0.049		ug/g	
			1,1-Dichloroethylene	2025/03/21	ND, RDL=0.040		ug/g	
			cis-1,2-Dichloroethylene	2025/03/21	ND, RDL=0.040		ug/g	
			trans-1,2-Dichloroethylene	2025/03/21	ND, RDL=0.040		ug/g	
			1,2-Dichloropropane	2025/03/21	ND, RDL=0.040		ug/g	
			cis-1,3-Dichloropropene	2025/03/21	ND, RDL=0.030		ug/g	
			trans-1,3-Dichloropropene	2025/03/21	ND, RDL=0.040		ug/g	
			Ethylbenzene	2025/03/21	ND, RDL=0.010		ug/g	
			Ethylene Dibromide	2025/03/21	ND, RDL=0.040		ug/g	
			Hexane	2025/03/21	ND, RDL=0.040		ug/g	
			Methylene Chloride(Dichloromethane)	2025/03/21	ND, RDL=0.049		ug/g	
			Methyl Ethyl Ketone (2-Butanone)	2025/03/21	ND, RDL=0.40		ug/g	
			Methyl Isobutyl Ketone	2025/03/21	ND, RDL=0.40		ug/g	
			Methyl t-butyl ether (MTBE)	2025/03/21	ND, RDL=0.040		ug/g	
			Styrene	2025/03/21	ND, RDL=0.040		ug/g	
			1,1,1,2-Tetrachloroethane	2025/03/21	ND, RDL=0.040		ug/g	
			1,1,2,2-Tetrachloroethane	2025/03/21	ND, RDL=0.040		ug/g	
			Tetrachloroethylene	2025/03/21	ND, RDL=0.040		ug/g	
			Toluene	2025/03/21	ND, RDL=0.020		ug/g	

QUALITY ASSURANCE REPORT(CONT'D)

QA/QC Batch	Init	QC Type	Parameter	Date Analyzed	Value	Recovery	UNITS	QC Limits
			1,1,1-Trichloroethane	2025/03/21	ND, RDL=0.040		ug/g	
			1,1,2-Trichloroethane	2025/03/21	ND, RDL=0.040		ug/g	
			Trichloroethylene	2025/03/21	ND, RDL=0.010		ug/g	
			Trichlorofluoromethane (FREON 11)	2025/03/21	ND, RDL=0.040		ug/g	
			Vinyl Chloride	2025/03/21	ND, RDL=0.019		ug/g	
			p+m-Xylene	2025/03/21	ND, RDL=0.020		ug/g	
			o-Xylene	2025/03/21	ND, RDL=0.020		ug/g	
			Total Xylenes	2025/03/21	ND, RDL=0.020		ug/g	
			F1 (C6-C10)	2025/03/21	ND, RDL=10		ug/g	
			F1 (C6-C10) - BTEX	2025/03/21	ND, RDL=10		ug/g	
9895305	DW5	RPD	Acetone (2-Propanone)	2025/03/21	NC		%	50
			Benzene	2025/03/21	NC		%	50
			Bromodichloromethane	2025/03/21	NC		%	50
			Bromoform	2025/03/21	NC		%	50
			Bromomethane	2025/03/21	NC		%	50
			Carbon Tetrachloride	2025/03/21	NC		%	50
			Chlorobenzene	2025/03/21	NC		%	50
			Chloroform	2025/03/21	NC		%	50
			Dibromochloromethane	2025/03/21	NC		%	50
			1,2-Dichlorobenzene	2025/03/21	NC		%	50
			1,3-Dichlorobenzene	2025/03/21	NC		%	50
			1,4-Dichlorobenzene	2025/03/21	NC		%	50
			Dichlorodifluoromethane (FREON 12)	2025/03/21	NC		%	50
			1,1-Dichloroethane	2025/03/21	NC		%	50
			1,2-Dichloroethane	2025/03/21	NC		%	50
			1,1-Dichloroethylene	2025/03/21	NC		%	50
			cis-1,2-Dichloroethylene	2025/03/21	NC		%	50
			trans-1,2-Dichloroethylene	2025/03/21	NC		%	50
			1,2-Dichloropropane	2025/03/21	NC		%	50
			cis-1,3-Dichloropropene	2025/03/21	NC		%	50
			trans-1,3-Dichloropropene	2025/03/21	NC		%	50
			Ethylbenzene	2025/03/21	NC		%	50
			Ethylene Dibromide	2025/03/21	NC		%	50
			Hexane	2025/03/21	NC		%	50
			Methylene Chloride(Dichloromethane)	2025/03/21	NC		%	50
			Methyl Ethyl Ketone (2-Butanone)	2025/03/21	NC		%	50
			Methyl Isobutyl Ketone	2025/03/21	NC		%	50
			Methyl t-butyl ether (MTBE)	2025/03/21	NC		%	50
			Styrene	2025/03/21	NC		%	50
			1,1,1,2-Tetrachloroethane	2025/03/21	NC		%	50
			1,1,2,2-Tetrachloroethane	2025/03/21	NC		%	50
			Tetrachloroethylene	2025/03/21	NC		%	50
			Toluene	2025/03/21	NC		%	50

QUALITY ASSURANCE REPORT(CONT'D)

QA/QC Batch	Init	QC Type	Parameter	Date Analyzed	Value	Recovery	UNITS	QC Limits
			1,1,1-Trichloroethane	2025/03/21	NC		%	50
			1,1,2-Trichloroethane	2025/03/21	NC		%	50
			Trichloroethylene	2025/03/21	NC		%	50
			Trichlorofluoromethane (FREON 11)	2025/03/21	NC		%	50
			Vinyl Chloride	2025/03/21	NC		%	50
			p+m-Xylene	2025/03/21	NC		%	50
			o-Xylene	2025/03/21	NC		%	50
			Total Xylenes	2025/03/21	NC		%	50
			F1 (C6-C10)	2025/03/21	NC		%	30
			F1 (C6-C10) - BTEX	2025/03/21	NC		%	30
9895378	SIA	RPD [APBQ67-02]	Moisture	2025/03/21	3.7		%	20
9895613	NGI	Matrix Spike	Leachable Fluoride (F-)	2025/03/21		98	%	80 - 120
9895613	NGI	Leachate Blank	Leachable Fluoride (F-)	2025/03/21	ND, RDL=0.10		mg/L	
9895613	NGI	Spiked Blank	Leachable Fluoride (F-)	2025/03/21		107	%	80 - 120
9895613	NGI	Method Blank	Leachable Fluoride (F-)	2025/03/21	ND, RDL=0.10		mg/L	
9895613	NGI	RPD	Leachable Fluoride (F-)	2025/03/21	0.50		%	25
9895615	GYA	Matrix Spike	Leachable WAD Cyanide (Free)	2025/03/21		89	%	80 - 120
9895615	GYA	Leachate Blank	Leachable WAD Cyanide (Free)	2025/03/21	ND, RDL=0.010		mg/L	
9895615	GYA	Spiked Blank	Leachable WAD Cyanide (Free)	2025/03/21		98	%	80 - 120
9895615	GYA	Method Blank	Leachable WAD Cyanide (Free)	2025/03/21	ND, RDL=0.0020		mg/L	
9895615	GYA	RPD	Leachable WAD Cyanide (Free)	2025/03/21	NC		%	20
9895626	C_N	Matrix Spike	Leachable Nitrite (N)	2025/03/24		106	%	80 - 120
			Leachable Nitrate (N)	2025/03/24		94	%	80 - 120
			Leachable Nitrate + Nitrite (N)	2025/03/24		96	%	80 - 120
9895626	C_N	Leachate Blank	Leachable Nitrite (N)	2025/03/24	ND, RDL=0.10		mg/L	
			Leachable Nitrate (N)	2025/03/24	ND, RDL=1.0		mg/L	
			Leachable Nitrate + Nitrite (N)	2025/03/24	ND, RDL=1.0		mg/L	
9895626	C_N	Spiked Blank	Leachable Nitrite (N)	2025/03/24		104	%	80 - 120
			Leachable Nitrate (N)	2025/03/24		97	%	80 - 120
			Leachable Nitrate + Nitrite (N)	2025/03/24		98	%	80 - 120
9895626	C_N	Method Blank	Leachable Nitrite (N)	2025/03/24	ND, RDL=0.10		mg/L	
			Leachable Nitrate (N)	2025/03/24	ND, RDL=1.0		mg/L	
			Leachable Nitrate + Nitrite (N)	2025/03/24	ND, RDL=1.0		mg/L	
9895626	C_N	RPD	Leachable Nitrite (N)	2025/03/24	NC		%	20
			Leachable Nitrate (N)	2025/03/24	NC		%	20
			Leachable Nitrate + Nitrite (N)	2025/03/24	NC		%	20
9895731	TLG	Matrix Spike	Leachable Arsenic (As)	2025/03/21		100	%	80 - 120
			Leachable Barium (Ba)	2025/03/21		NC	%	80 - 120
			Leachable Boron (B)	2025/03/21		97	%	80 - 120
			Leachable Cadmium (Cd)	2025/03/21		99	%	80 - 120
			Leachable Chromium (Cr)	2025/03/21		98	%	80 - 120
			Leachable Lead (Pb)	2025/03/21		96	%	80 - 120
			Leachable Mercury (Hg)	2025/03/21		94	%	80 - 120

QUALITY ASSURANCE REPORT(CONT'D)

QA/QC Batch	Init	QC Type	Parameter	Date Analyzed	Value	Recovery	UNITS	QC Limits
			Leachable Selenium (Se)	2025/03/21		101	%	80 - 120
			Leachable Silver (Ag)	2025/03/21		96	%	80 - 120
			Leachable Uranium (U)	2025/03/21		99	%	80 - 120
9895731	TLG	Leachate Blank	Leachable Arsenic (As)	2025/03/21	ND, RDL=0.2		mg/L	
			Leachable Barium (Ba)	2025/03/21	ND, RDL=0.2		mg/L	
			Leachable Boron (B)	2025/03/21	ND, RDL=0.1		mg/L	
			Leachable Cadmium (Cd)	2025/03/21	ND, RDL=0.05		mg/L	
			Leachable Chromium (Cr)	2025/03/21	ND, RDL=0.1		mg/L	
			Leachable Lead (Pb)	2025/03/21	ND, RDL=0.1		mg/L	
			Leachable Mercury (Hg)	2025/03/21	ND, RDL=0.001		mg/L	
			Leachable Selenium (Se)	2025/03/21	ND, RDL=0.1		mg/L	
			Leachable Silver (Ag)	2025/03/21	ND, RDL=0.01		mg/L	
			Leachable Uranium (U)	2025/03/21	ND, RDL=0.01		mg/L	
9895731	TLG	RPD	Leachable Arsenic (As)	2025/03/21	NC		%	35
			Leachable Barium (Ba)	2025/03/21	NC		%	35
			Leachable Boron (B)	2025/03/21	NC		%	35
			Leachable Cadmium (Cd)	2025/03/21	NC		%	35
			Leachable Chromium (Cr)	2025/03/21	NC		%	35
			Leachable Lead (Pb)	2025/03/21	NC		%	35
			Leachable Mercury (Hg)	2025/03/21	NC		%	35
			Leachable Selenium (Se)	2025/03/21	NC		%	35
			Leachable Silver (Ag)	2025/03/21	NC		%	35
			Leachable Uranium (U)	2025/03/21	NC		%	35
			Leachable Arsenic (As)	2025/03/21	NC		%	35
			Leachable Barium (Ba)	2025/03/21	0.94		%	35
			Leachable Boron (B)	2025/03/21	NC		%	35
			Leachable Cadmium (Cd)	2025/03/21	NC		%	35
			Leachable Chromium (Cr)	2025/03/21	NC		%	35
			Leachable Lead (Pb)	2025/03/21	NC		%	35
			Leachable Mercury (Hg)	2025/03/21	NC		%	35
			Leachable Selenium (Se)	2025/03/21	NC		%	35
			Leachable Silver (Ag)	2025/03/21	NC		%	35
			Leachable Uranium (U)	2025/03/21	NC		%	35
9895731	TLG	Spiked Blank	Leachable Arsenic (As)	2025/03/21		98	%	80 - 120
			Leachable Barium (Ba)	2025/03/21		96	%	80 - 120
			Leachable Boron (B)	2025/03/21		96	%	80 - 120
			Leachable Cadmium (Cd)	2025/03/21		97	%	80 - 120
			Leachable Chromium (Cr)	2025/03/21		97	%	80 - 120
			Leachable Lead (Pb)	2025/03/21		97	%	80 - 120
			Leachable Mercury (Hg)	2025/03/21		96	%	80 - 120
			Leachable Selenium (Se)	2025/03/21		99	%	80 - 120
			Leachable Silver (Ag)	2025/03/21		96	%	80 - 120
			Leachable Uranium (U)	2025/03/21		99	%	80 - 120

QUALITY ASSURANCE REPORT(CONT'D)

QA/QC Batch	Init	QC Type	Parameter	Date Analyzed	Value	Recovery	UNITS	QC Limits
9895731	TLG	Method Blank	Leachable Arsenic (As)	2025/03/21	ND, RDL=0.2		mg/L	
			Leachable Barium (Ba)	2025/03/21	ND, RDL=0.2		mg/L	
			Leachable Boron (B)	2025/03/21	ND, RDL=0.1		mg/L	
			Leachable Cadmium (Cd)	2025/03/21	ND, RDL=0.05		mg/L	
			Leachable Chromium (Cr)	2025/03/21	ND, RDL=0.1		mg/L	
			Leachable Lead (Pb)	2025/03/21	ND, RDL=0.1		mg/L	
			Leachable Mercury (Hg)	2025/03/21	ND, RDL=0.001		mg/L	
			Leachable Selenium (Se)	2025/03/21	ND, RDL=0.1		mg/L	
			Leachable Silver (Ag)	2025/03/21	ND, RDL=0.01		mg/L	
			Leachable Uranium (U)	2025/03/21	ND, RDL=0.01		mg/L	
9896192	KLI	Matrix Spike [APBQ55-02]	o-Terphenyl	2025/03/24		104	%	60 - 140
			F2 (C10-C16 Hydrocarbons)	2025/03/24		105	%	60 - 140
			F3 (C16-C34 Hydrocarbons)	2025/03/24		105	%	60 - 140
			F4 (C34-C50 Hydrocarbons)	2025/03/24		70	%	60 - 140
9896192	KLI	Spiked Blank	o-Terphenyl	2025/03/24		93	%	60 - 140
			F2 (C10-C16 Hydrocarbons)	2025/03/24		93	%	80 - 120
			F3 (C16-C34 Hydrocarbons)	2025/03/24		97	%	80 - 120
			F4 (C34-C50 Hydrocarbons)	2025/03/24		91	%	80 - 120
9896192	KLI	Method Blank	o-Terphenyl	2025/03/24		94	%	60 - 140
			F2 (C10-C16 Hydrocarbons)	2025/03/24	ND, RDL=7.0		ug/g	
			F3 (C16-C34 Hydrocarbons)	2025/03/24	ND, RDL=50		ug/g	
			F4 (C34-C50 Hydrocarbons)	2025/03/24	ND, RDL=50		ug/g	
9896192	KLI	RPD [APBQ55-02]	F2 (C10-C16 Hydrocarbons)	2025/03/24	10		%	30
			F3 (C16-C34 Hydrocarbons)	2025/03/24	26		%	30
			F4 (C34-C50 Hydrocarbons)	2025/03/24	18		%	30
9896268	SB5	Matrix Spike	Chromium (VI)	2025/03/24		86	%	70 - 130
9896268	SB5	Spiked Blank	Chromium (VI)	2025/03/24		93	%	80 - 120
9896268	SB5	Method Blank	Chromium (VI)	2025/03/24	ND, RDL=0.18		ug/g	
9896268	SB5	RPD	Chromium (VI)	2025/03/24	3.3		%	35
9896272	LRA	Matrix Spike	1,4-Difluorobenzene	2025/03/24		106	%	60 - 140
			4-Bromofluorobenzene	2025/03/24		99	%	60 - 140
			D10-o-Xylene	2025/03/24		99	%	60 - 140
			D4-1,2-Dichloroethane	2025/03/24		101	%	60 - 140
			Benzene	2025/03/24		92	%	50 - 140
			Toluene	2025/03/24		90	%	50 - 140
			Ethylbenzene	2025/03/24		95	%	50 - 140
			o-Xylene	2025/03/24		93	%	50 - 140
			p+m-Xylene	2025/03/24		90	%	50 - 140
			F1 (C6-C10)	2025/03/24		100	%	60 - 140

QUALITY ASSURANCE REPORT(CONT'D)

QA/QC Batch	Init	QC Type	Parameter	Date Analyzed	Value	Recovery	UNITS	QC Limits
9896272	LRA	Spiked Blank	1,4-Difluorobenzene	2025/03/24		97	%	60 - 140
			4-Bromofluorobenzene	2025/03/24		101	%	60 - 140
			D10-o-Xylene	2025/03/24		102	%	60 - 140
			D4-1,2-Dichloroethane	2025/03/24		88	%	60 - 140
			Benzene	2025/03/24		88	%	50 - 140
			Toluene	2025/03/24		84	%	50 - 140
			Ethylbenzene	2025/03/24		93	%	50 - 140
			o-Xylene	2025/03/24		92	%	50 - 140
			p+m-Xylene	2025/03/24		89	%	50 - 140
			F1 (C6-C10)	2025/03/24		96	%	80 - 120
9896272	LRA	Method Blank	1,4-Difluorobenzene	2025/03/24		95	%	60 - 140
			4-Bromofluorobenzene	2025/03/24		100	%	60 - 140
			D10-o-Xylene	2025/03/24		90	%	60 - 140
			D4-1,2-Dichloroethane	2025/03/24		93	%	60 - 140
			Benzene	2025/03/24	ND, RDL=0.020		ug/g	
			Toluene	2025/03/24	ND, RDL=0.020		ug/g	
			Ethylbenzene	2025/03/24	ND, RDL=0.020		ug/g	
			o-Xylene	2025/03/24	ND, RDL=0.020		ug/g	
			p+m-Xylene	2025/03/24	ND, RDL=0.040		ug/g	
			Total Xylenes	2025/03/24	ND, RDL=0.040		ug/g	
			F1 (C6-C10)	2025/03/24	ND, RDL=10		ug/g	
			F1 (C6-C10) - BTEX	2025/03/24	ND, RDL=10		ug/g	
9896272	LRA	RPD	Benzene	2025/03/24	NC		%	50
			Toluene	2025/03/24	NC		%	50
			Ethylbenzene	2025/03/24	NC		%	50
			o-Xylene	2025/03/24	NC		%	50
			p+m-Xylene	2025/03/24	NC		%	50
			Total Xylenes	2025/03/24	NC		%	50
			F1 (C6-C10)	2025/03/24	NC		%	30
			F1 (C6-C10) - BTEX	2025/03/24	NC		%	30
9896274	RSU	Matrix Spike	Chromium (VI)	2025/03/24		57 (1)	%	70 - 130
9896274	RSU	Spiked Blank	Chromium (VI)	2025/03/24		92	%	80 - 120
9896274	RSU	Method Blank	Chromium (VI)	2025/03/24	ND, RDL=0.18		ug/g	
9896274	RSU	RPD	Chromium (VI)	2025/03/24	NC		%	35
9896277	RAJ	Matrix Spike	D10-Anthracene	2025/03/24		94	%	50 - 130
			D14-Terphenyl (FS)	2025/03/24		90	%	50 - 130
			D8-Acenaphthylene	2025/03/24		88	%	50 - 130
			Acenaphthene	2025/03/24		98	%	50 - 130
			Acenaphthylene	2025/03/24		94	%	50 - 130
			Anthracene	2025/03/24		109	%	50 - 130
			Benzo(a)anthracene	2025/03/24		117	%	50 - 130
			Benzo(a)pyrene	2025/03/24		107	%	50 - 130
			Benzo(b/j)fluoranthene	2025/03/24		100	%	50 - 130
			Benzo(g,h,i)perylene	2025/03/24		104	%	50 - 130

QUALITY ASSURANCE REPORT(CONT'D)

QA/QC Batch	Init	QC Type	Parameter	Date Analyzed	Value	Recovery	UNITS	QC Limits
			Benzo(k)fluoranthene	2025/03/24		101	%	50 - 130
			Chrysene	2025/03/24		103	%	50 - 130
			Dibenzo(a,h)anthracene	2025/03/24		104	%	50 - 130
			Fluoranthene	2025/03/24		111	%	50 - 130
			Fluorene	2025/03/24		99	%	50 - 130
			Indeno(1,2,3-cd)pyrene	2025/03/24		111	%	50 - 130
			1-Methylnaphthalene	2025/03/24		92	%	50 - 130
			2-Methylnaphthalene	2025/03/24		93	%	50 - 130
			Naphthalene	2025/03/24		83	%	50 - 130
			Phenanthrene	2025/03/24		94	%	50 - 130
			Pyrene	2025/03/24		107	%	50 - 130
9896277	RAJ	Spiked Blank	D10-Anthracene	2025/03/24		98	%	50 - 130
			D14-Terphenyl (FS)	2025/03/24		92	%	50 - 130
			D8-Acenaphthylene	2025/03/24		92	%	50 - 130
			Acenaphthene	2025/03/24		102	%	50 - 130
			Acenaphthylene	2025/03/24		99	%	50 - 130
			Anthracene	2025/03/24		112	%	50 - 130
			Benzo(a)anthracene	2025/03/24		115	%	50 - 130
			Benzo(a)pyrene	2025/03/24		110	%	50 - 130
			Benzo(b/j)fluoranthene	2025/03/24		107	%	50 - 130
			Benzo(g,h,i)perylene	2025/03/24		107	%	50 - 130
			Benzo(k)fluoranthene	2025/03/24		105	%	50 - 130
			Chrysene	2025/03/24		109	%	50 - 130
			Dibenzo(a,h)anthracene	2025/03/24		96	%	50 - 130
			Fluoranthene	2025/03/24		115	%	50 - 130
			Fluorene	2025/03/24		102	%	50 - 130
			Indeno(1,2,3-cd)pyrene	2025/03/24		115	%	50 - 130
			1-Methylnaphthalene	2025/03/24		101	%	50 - 130
			2-Methylnaphthalene	2025/03/24		102	%	50 - 130
			Naphthalene	2025/03/24		97	%	50 - 130
			Phenanthrene	2025/03/24		99	%	50 - 130
			Pyrene	2025/03/24		111	%	50 - 130
9896277	RAJ	Method Blank	D10-Anthracene	2025/03/24		105	%	50 - 130
			D14-Terphenyl (FS)	2025/03/24		90	%	50 - 130
			D8-Acenaphthylene	2025/03/24		89	%	50 - 130
			Acenaphthene	2025/03/24	ND, RDL=0.0050		ug/g	
			Acenaphthylene	2025/03/24	ND, RDL=0.0050		ug/g	
			Anthracene	2025/03/24	ND, RDL=0.0050		ug/g	
			Benzo(a)anthracene	2025/03/24	ND, RDL=0.0050		ug/g	
			Benzo(a)pyrene	2025/03/24	ND, RDL=0.0050		ug/g	
			Benzo(b/j)fluoranthene	2025/03/24	ND, RDL=0.0050		ug/g	
			Benzo(g,h,i)perylene	2025/03/24	ND, RDL=0.0050		ug/g	
			Benzo(k)fluoranthene	2025/03/24	ND, RDL=0.0050		ug/g	
			Chrysene	2025/03/24	ND, RDL=0.0050		ug/g	

QUALITY ASSURANCE REPORT(CONT'D)

QA/QC Batch	Init	QC Type	Parameter	Date Analyzed	Value	Recovery	UNITS	QC Limits
			Dibenzo(a,h)anthracene	2025/03/24	ND, RDL=0.0050		ug/g	
			Fluoranthene	2025/03/24	ND, RDL=0.0050		ug/g	
			Fluorene	2025/03/24	ND, RDL=0.0050		ug/g	
			Indeno(1,2,3-cd)pyrene	2025/03/24	ND, RDL=0.0050		ug/g	
			1-Methylnaphthalene	2025/03/24	ND, RDL=0.0050		ug/g	
			2-Methylnaphthalene	2025/03/24	ND, RDL=0.0050		ug/g	
			Naphthalene	2025/03/24	ND, RDL=0.0050		ug/g	
			Phenanthrene	2025/03/24	ND, RDL=0.0050		ug/g	
			Pyrene	2025/03/24	ND, RDL=0.0050		ug/g	
9896277	RAJ	RPD	Acenaphthene	2025/03/24	NC		%	40
			Acenaphthylene	2025/03/24	NC		%	40
			Anthracene	2025/03/24	NC		%	40
			Benzo(a)anthracene	2025/03/24	NC		%	40
			Benzo(a)pyrene	2025/03/24	NC		%	40
			Benzo(b/j)fluoranthene	2025/03/24	NC		%	40
			Benzo(g,h,i)perylene	2025/03/24	20		%	40
			Benzo(k)fluoranthene	2025/03/24	NC		%	40
			Chrysene	2025/03/24	NC		%	40
			Dibenzo(a,h)anthracene	2025/03/24	NC		%	40
			Fluoranthene	2025/03/24	NC		%	40
			Fluorene	2025/03/24	NC		%	40
			Indeno(1,2,3-cd)pyrene	2025/03/24	2.9		%	40
			1-Methylnaphthalene	2025/03/24	NC		%	40
			2-Methylnaphthalene	2025/03/24	NC		%	40
			Naphthalene	2025/03/24	13		%	40
			Phenanthrene	2025/03/24	7.6		%	40
			Pyrene	2025/03/24	NC		%	40
9896281	WZ	Matrix Spike	Leachable 2,4,6-Tribromophenol	2025/03/24		68	%	10 - 130
			Leachable 2-Fluorobiphenyl	2025/03/24		42	%	30 - 130
			Leachable 2-Fluorophenol	2025/03/24		36	%	10 - 130
			Leachable D14-Terphenyl (FS)	2025/03/24		88	%	30 - 130
			Leachable D5-Nitrobenzene	2025/03/24		46	%	30 - 130
			Leachable D5-Phenol	2025/03/24		19	%	10 - 130
			Leachable Benzo(a)pyrene	2025/03/24		101	%	30 - 130
			Leachable m/p-Cresol	2025/03/24		33	%	10 - 130
			Leachable o-Cresol	2025/03/24		38	%	10 - 130
			Leachable Cresol Total	2025/03/24		35	%	10 - 130
			Leachable 2,4-Dichlorophenol	2025/03/24		43	%	10 - 130
			Leachable 2,4-Dinitrotoluene	2025/03/24		72	%	30 - 130
			Leachable Hexachlorobenzene	2025/03/24		73	%	30 - 130
			Leachable Hexachlorobutadiene	2025/03/24		38	%	30 - 130
			Leachable Hexachloroethane	2025/03/24		38	%	30 - 130
			Leachable Nitrobenzene	2025/03/24		50	%	30 - 130
			Leachable Pentachlorophenol	2025/03/24		96	%	30 - 130

QUALITY ASSURANCE REPORT(CONT'D)

QA/QC Batch	Init	QC Type	Parameter	Date Analyzed	Value	Recovery	UNITS	QC Limits
			Leachable Pyridine	2025/03/24		34	%	10 - 130
			Leachable 2,3,4,6-Tetrachlorophenol	2025/03/24		81	%	10 - 130
			Leachable 2,4,5-Trichlorophenol	2025/03/24		52	%	10 - 130
			Leachable 2,4,6-Trichlorophenol	2025/03/24		48	%	10 - 130
9896281	WZ	Spiked Blank	Leachable 2,4,6-Tribromophenol	2025/03/24		84	%	10 - 130
			Leachable 2-Fluorobiphenyl	2025/03/24		75	%	30 - 130
			Leachable 2-Fluorophenol	2025/03/24		68	%	10 - 130
			Leachable D14-Terphenyl (FS)	2025/03/24		93	%	30 - 130
			Leachable D5-Nitrobenzene	2025/03/24		81	%	30 - 130
			Leachable D5-Phenol	2025/03/24		37	%	10 - 130
			Leachable Benzo(a)pyrene	2025/03/24		109	%	30 - 130
			Leachable m/p-Cresol	2025/03/24		58	%	10 - 130
			Leachable o-Cresol	2025/03/24		67	%	10 - 130
			Leachable Cresol Total	2025/03/24		63	%	10 - 130
			Leachable 2,4-Dichlorophenol	2025/03/24		74	%	10 - 130
			Leachable 2,4-Dinitrotoluene	2025/03/24		88	%	30 - 130
			Leachable Hexachlorobenzene	2025/03/24		91	%	30 - 130
			Leachable Hexachlorobutadiene	2025/03/24		70	%	30 - 130
			Leachable Hexachloroethane	2025/03/24		71	%	30 - 130
			Leachable Nitrobenzene	2025/03/24		86	%	30 - 130
			Leachable Pentachlorophenol	2025/03/24		101	%	30 - 130
			Leachable Pyridine	2025/03/24		59	%	10 - 130
			Leachable 2,3,4,6-Tetrachlorophenol	2025/03/24		99	%	10 - 130
			Leachable 2,4,5-Trichlorophenol	2025/03/24		76	%	10 - 130
			Leachable 2,4,6-Trichlorophenol	2025/03/24		84	%	10 - 130
9896281	WZ	Method Blank	Leachable 2,4,6-Tribromophenol	2025/03/24		76	%	10 - 130
			Leachable 2-Fluorobiphenyl	2025/03/24		79	%	30 - 130
			Leachable 2-Fluorophenol	2025/03/24		64	%	10 - 130
			Leachable D14-Terphenyl (FS)	2025/03/24		93	%	30 - 130
			Leachable D5-Nitrobenzene	2025/03/24		86	%	30 - 130
			Leachable D5-Phenol	2025/03/24		38	%	10 - 130
			Leachable Benzo(a)pyrene	2025/03/24	ND, RDL=0.10		ug/L	
			Leachable m/p-Cresol	2025/03/24	ND, RDL=2.5		ug/L	
			Leachable o-Cresol	2025/03/24	ND, RDL=2.5		ug/L	
			Leachable Cresol Total	2025/03/24	ND, RDL=2.5		ug/L	
			Leachable 2,4-Dichlorophenol	2025/03/24	ND, RDL=2.5		ug/L	
			Leachable 2,4-Dinitrotoluene	2025/03/24	ND, RDL=10		ug/L	
			Leachable Hexachlorobenzene	2025/03/24	ND, RDL=10		ug/L	
			Leachable Hexachlorobutadiene	2025/03/24	ND, RDL=10		ug/L	
			Leachable Hexachloroethane	2025/03/24	ND, RDL=10		ug/L	
			Leachable Nitrobenzene	2025/03/24	ND, RDL=10		ug/L	
			Leachable Pentachlorophenol	2025/03/24	ND, RDL=2.5		ug/L	

QUALITY ASSURANCE REPORT(CONT'D)

QA/QC Batch	Init	QC Type	Parameter	Date Analyzed	Value	Recovery	UNITS	QC Limits
			Leachable Pyridine	2025/03/24	ND, RDL=10		ug/L	
			Leachable 2,3,4,6-Tetrachlorophenol	2025/03/24	ND, RDL=2.5		ug/L	
			Leachable 2,4,5-Trichlorophenol	2025/03/24	ND, RDL=0.50		ug/L	
			Leachable 2,4,6-Trichlorophenol	2025/03/24	ND, RDL=2.5		ug/L	
9896281	WZ	RPD	Leachable Benzo(a)pyrene	2025/03/24	NC		%	40
			Leachable m/p-Cresol	2025/03/24	NC		%	40
			Leachable o-Cresol	2025/03/24	NC		%	40
			Leachable Cresol Total	2025/03/24	NC		%	40
			Leachable 2,4-Dichlorophenol	2025/03/24	NC		%	40
			Leachable 2,4-Dinitrotoluene	2025/03/24	NC		%	40
			Leachable Hexachlorobenzene	2025/03/24	NC		%	40
			Leachable Hexachlorobutadiene	2025/03/24	NC		%	40
			Leachable Hexachloroethane	2025/03/24	NC		%	40
			Leachable Nitrobenzene	2025/03/24	NC		%	40
			Leachable Pentachlorophenol	2025/03/24	NC		%	40
			Leachable Pyridine	2025/03/24	NC		%	40
			Leachable 2,3,4,6-Tetrachlorophenol	2025/03/24	NC		%	40
			Leachable 2,4,5-Trichlorophenol	2025/03/24	NC		%	40
			Leachable 2,4,6-Trichlorophenol	2025/03/24	NC		%	40
9896334	GTK	Spiked Blank	Available (CaCl2) pH	2025/03/24		99	%	97 - 103
9896334	GTK	RPD [APBQ59-01]	Available (CaCl2) pH	2025/03/24	0.18		%	N/A
9896348	GYA	Matrix Spike	WAD Cyanide (Free)	2025/03/24		95	%	75 - 125
9896348	GYA	Spiked Blank	WAD Cyanide (Free)	2025/03/24		105	%	80 - 120
9896348	GYA	Method Blank	WAD Cyanide (Free)	2025/03/24	ND, RDL=0.01		ug/g	
9896348	GYA	RPD	WAD Cyanide (Free)	2025/03/24	NC		%	35
9896350	GYA	Matrix Spike	WAD Cyanide (Free)	2025/03/24		98	%	75 - 125
9896350	GYA	Spiked Blank	WAD Cyanide (Free)	2025/03/24		106	%	80 - 120
9896350	GYA	Method Blank	WAD Cyanide (Free)	2025/03/24	ND, RDL=0.01		ug/g	
9896350	GYA	RPD	WAD Cyanide (Free)	2025/03/24	NC		%	35
9896448	GTK	Spiked Blank	Conductivity	2025/03/24		101	%	90 - 110
9896448	GTK	Method Blank	Conductivity	2025/03/24	ND, RDL=0.002		mS/cm	
9896448	GTK	RPD	Conductivity	2025/03/24	1.8		%	10
9896495	DT1	Matrix Spike	Acid Extractable Antimony (Sb)	2025/03/24		118	%	75 - 125
			Acid Extractable Arsenic (As)	2025/03/24		108	%	75 - 125
			Acid Extractable Barium (Ba)	2025/03/24		NC	%	75 - 125
			Acid Extractable Beryllium (Be)	2025/03/24		107	%	75 - 125
			Acid Extractable Boron (B)	2025/03/24		102	%	75 - 125
			Acid Extractable Cadmium (Cd)	2025/03/24		106	%	75 - 125
			Acid Extractable Chromium (Cr)	2025/03/24		NC	%	75 - 125
			Acid Extractable Cobalt (Co)	2025/03/24		110	%	75 - 125
			Acid Extractable Copper (Cu)	2025/03/24		102	%	75 - 125
			Acid Extractable Lead (Pb)	2025/03/24		105	%	75 - 125
			Acid Extractable Molybdenum (Mo)	2025/03/24		104	%	75 - 125
			Acid Extractable Nickel (Ni)	2025/03/24		NC	%	75 - 125
			Acid Extractable Selenium (Se)	2025/03/24		106	%	75 - 125
			Acid Extractable Silver (Ag)	2025/03/24		101	%	75 - 125

QUALITY ASSURANCE REPORT(CONT'D)

QA/QC Batch	Init	QC Type	Parameter	Date Analyzed	Value	Recovery	UNITS	QC Limits
			Acid Extractable Thallium (Tl)	2025/03/24		107	%	75 - 125
			Acid Extractable Uranium (U)	2025/03/24		115	%	75 - 125
			Acid Extractable Vanadium (V)	2025/03/24		NC	%	75 - 125
			Acid Extractable Zinc (Zn)	2025/03/24		NC	%	75 - 125
			Acid Extractable Mercury (Hg)	2025/03/24		104	%	75 - 125
9896495	DT1	Spiked Blank	Acid Extractable Antimony (Sb)	2025/03/24		118	%	80 - 120
			Acid Extractable Arsenic (As)	2025/03/24		103	%	80 - 120
			Acid Extractable Barium (Ba)	2025/03/24		100	%	80 - 120
			Acid Extractable Beryllium (Be)	2025/03/24		98	%	80 - 120
			Acid Extractable Boron (B)	2025/03/24		96	%	80 - 120
			Acid Extractable Cadmium (Cd)	2025/03/24		102	%	80 - 120
			Acid Extractable Chromium (Cr)	2025/03/24		105	%	80 - 120
			Acid Extractable Cobalt (Co)	2025/03/24		106	%	80 - 120
			Acid Extractable Copper (Cu)	2025/03/24		100	%	80 - 120
			Acid Extractable Lead (Pb)	2025/03/24		103	%	80 - 120
			Acid Extractable Molybdenum (Mo)	2025/03/24		99	%	80 - 120
			Acid Extractable Nickel (Ni)	2025/03/24		106	%	80 - 120
			Acid Extractable Selenium (Se)	2025/03/24		102	%	80 - 120
			Acid Extractable Silver (Ag)	2025/03/24		98	%	80 - 120
			Acid Extractable Thallium (Tl)	2025/03/24		103	%	80 - 120
			Acid Extractable Uranium (U)	2025/03/24		110	%	80 - 120
			Acid Extractable Vanadium (V)	2025/03/24		104	%	80 - 120
			Acid Extractable Zinc (Zn)	2025/03/24		107	%	80 - 120
			Acid Extractable Mercury (Hg)	2025/03/24		104	%	80 - 120
9896495	DT1	Method Blank	Acid Extractable Antimony (Sb)	2025/03/24	ND, RDL=0.20		ug/g	
			Acid Extractable Arsenic (As)	2025/03/24	ND, RDL=1.0		ug/g	
			Acid Extractable Barium (Ba)	2025/03/24	ND, RDL=0.50		ug/g	
			Acid Extractable Beryllium (Be)	2025/03/24	ND, RDL=0.20		ug/g	
			Acid Extractable Boron (B)	2025/03/24	ND, RDL=5.0		ug/g	
			Acid Extractable Cadmium (Cd)	2025/03/24	ND, RDL=0.10		ug/g	
			Acid Extractable Chromium (Cr)	2025/03/24	ND, RDL=1.0		ug/g	
			Acid Extractable Cobalt (Co)	2025/03/24	ND, RDL=0.10		ug/g	
			Acid Extractable Copper (Cu)	2025/03/24	ND, RDL=0.50		ug/g	
			Acid Extractable Lead (Pb)	2025/03/24	ND, RDL=1.0		ug/g	
			Acid Extractable Molybdenum (Mo)	2025/03/24	ND, RDL=0.50		ug/g	
			Acid Extractable Nickel (Ni)	2025/03/24	ND, RDL=0.50		ug/g	
			Acid Extractable Selenium (Se)	2025/03/24	ND, RDL=0.50		ug/g	
			Acid Extractable Silver (Ag)	2025/03/24	ND, RDL=0.20		ug/g	
			Acid Extractable Thallium (Tl)	2025/03/24	ND, RDL=0.050		ug/g	

QUALITY ASSURANCE REPORT(CONT'D)

QA/QC Batch	Init	QC Type	Parameter	Date Analyzed	Value	Recovery	UNITS	QC Limits
			Acid Extractable Uranium (U)	2025/03/24	ND, RDL=0.050		ug/g	
			Acid Extractable Vanadium (V)	2025/03/24	ND, RDL=5.0		ug/g	
			Acid Extractable Zinc (Zn)	2025/03/24	ND, RDL=5.0		ug/g	
			Acid Extractable Mercury (Hg)	2025/03/24	ND, RDL=0.050		ug/g	
9896495	DT1	RPD	Acid Extractable Antimony (Sb)	2025/03/24	1.7		%	30
			Acid Extractable Arsenic (As)	2025/03/24	5.5		%	30
			Acid Extractable Barium (Ba)	2025/03/24	2.9		%	30
			Acid Extractable Beryllium (Be)	2025/03/24	1.9		%	30
			Acid Extractable Boron (B)	2025/03/24	NC		%	30
			Acid Extractable Cadmium (Cd)	2025/03/24	NC		%	30
			Acid Extractable Chromium (Cr)	2025/03/24	0.65		%	30
			Acid Extractable Cobalt (Co)	2025/03/24	1.3		%	30
			Acid Extractable Copper (Cu)	2025/03/24	0.32		%	30
			Acid Extractable Lead (Pb)	2025/03/24	0.69		%	30
			Acid Extractable Molybdenum (Mo)	2025/03/24	NC		%	30
			Acid Extractable Nickel (Ni)	2025/03/24	0.28		%	30
			Acid Extractable Selenium (Se)	2025/03/24	NC		%	30
			Acid Extractable Silver (Ag)	2025/03/24	NC		%	30
			Acid Extractable Thallium (Tl)	2025/03/24	6.9		%	30
			Acid Extractable Uranium (U)	2025/03/24	4.8		%	30
			Acid Extractable Vanadium (V)	2025/03/24	0.45		%	30
			Acid Extractable Zinc (Zn)	2025/03/24	5.0		%	30
			Acid Extractable Mercury (Hg)	2025/03/24	NC		%	30
9896529	GR1	Matrix Spike	Hot Water Ext. Boron (B)	2025/03/24		99	%	75 - 125
9896529	GR1	Spiked Blank	Hot Water Ext. Boron (B)	2025/03/24		102	%	75 - 125
9896529	GR1	Method Blank	Hot Water Ext. Boron (B)	2025/03/24	ND, RDL=0.050		ug/g	
9896529	GR1	RPD	Hot Water Ext. Boron (B)	2025/03/24	NC		%	40
9897066	SIA	QC Standard	Sieve - #200 (<0.075mm)	2025/03/25		56	%	53 - 58
			Sieve - #200 (>0.075mm)	2025/03/25		44	%	42 - 47
9897066	SIA	RPD	Sieve - #200 (<0.075mm)	2025/03/25	12		%	20
			Sieve - #200 (>0.075mm)	2025/03/25	2.4		%	20
9897098	GTK	Spiked Blank	Conductivity	2025/03/25		100	%	90 - 110
9897098	GTK	Method Blank	Conductivity	2025/03/25	ND, RDL=0.002		mS/cm	
9897098	GTK	RPD	Conductivity	2025/03/25	4.2		%	10
9897295	GR1	Matrix Spike [APBQ61-01]	Hot Water Ext. Boron (B)	2025/03/25		103	%	75 - 125
9897295	GR1	Spiked Blank	Hot Water Ext. Boron (B)	2025/03/25		102	%	75 - 125
9897295	GR1	Method Blank	Hot Water Ext. Boron (B)	2025/03/25	ND, RDL=0.050		ug/g	
9897295	GR1	RPD [APBQ61-01]	Hot Water Ext. Boron (B)	2025/03/25	8.9		%	40
9897311	VIV	Matrix Spike	Acid Extractable Antimony (Sb)	2025/03/25		87	%	75 - 125
			Acid Extractable Arsenic (As)	2025/03/25		103	%	75 - 125
			Acid Extractable Barium (Ba)	2025/03/25		NC	%	75 - 125
			Acid Extractable Beryllium (Be)	2025/03/25		99	%	75 - 125
			Acid Extractable Boron (B)	2025/03/25		89	%	75 - 125
			Acid Extractable Cadmium (Cd)	2025/03/25		100	%	75 - 125
			Acid Extractable Chromium (Cr)	2025/03/25		99	%	75 - 125

QUALITY ASSURANCE REPORT(CONT'D)

QA/QC Batch	Init	QC Type	Parameter	Date Analyzed	Value	Recovery	UNITS	QC Limits
			Acid Extractable Cobalt (Co)	2025/03/25		99	%	75 - 125
			Acid Extractable Copper (Cu)	2025/03/25		96	%	75 - 125
			Acid Extractable Lead (Pb)	2025/03/25		97	%	75 - 125
			Acid Extractable Molybdenum (Mo)	2025/03/25		95	%	75 - 125
			Acid Extractable Nickel (Ni)	2025/03/25		100	%	75 - 125
			Acid Extractable Selenium (Se)	2025/03/25		102	%	75 - 125
			Acid Extractable Silver (Ag)	2025/03/25		100	%	75 - 125
			Acid Extractable Thallium (Tl)	2025/03/25		98	%	75 - 125
			Acid Extractable Uranium (U)	2025/03/25		100	%	75 - 125
			Acid Extractable Vanadium (V)	2025/03/25		NC	%	75 - 125
			Acid Extractable Zinc (Zn)	2025/03/25		NC	%	75 - 125
			Acid Extractable Mercury (Hg)	2025/03/25		99	%	75 - 125
9897311	VIV	Spiked Blank	Acid Extractable Antimony (Sb)	2025/03/25		99	%	80 - 120
			Acid Extractable Arsenic (As)	2025/03/25		102	%	80 - 120
			Acid Extractable Barium (Ba)	2025/03/25		100	%	80 - 120
			Acid Extractable Beryllium (Be)	2025/03/25		97	%	80 - 120
			Acid Extractable Boron (B)	2025/03/25		100	%	80 - 120
			Acid Extractable Cadmium (Cd)	2025/03/25		97	%	80 - 120
			Acid Extractable Chromium (Cr)	2025/03/25		97	%	80 - 120
			Acid Extractable Cobalt (Co)	2025/03/25		99	%	80 - 120
			Acid Extractable Copper (Cu)	2025/03/25		96	%	80 - 120
			Acid Extractable Lead (Pb)	2025/03/25		96	%	80 - 120
			Acid Extractable Molybdenum (Mo)	2025/03/25		96	%	80 - 120
			Acid Extractable Nickel (Ni)	2025/03/25		99	%	80 - 120
			Acid Extractable Selenium (Se)	2025/03/25		103	%	80 - 120
			Acid Extractable Silver (Ag)	2025/03/25		99	%	80 - 120
			Acid Extractable Thallium (Tl)	2025/03/25		98	%	80 - 120
			Acid Extractable Uranium (U)	2025/03/25		99	%	80 - 120
			Acid Extractable Vanadium (V)	2025/03/25		97	%	80 - 120
			Acid Extractable Zinc (Zn)	2025/03/25		102	%	80 - 120
			Acid Extractable Mercury (Hg)	2025/03/25		102	%	80 - 120
9897311	VIV	Method Blank	Acid Extractable Antimony (Sb)	2025/03/25	ND, RDL=0.20		ug/g	
			Acid Extractable Arsenic (As)	2025/03/25	ND, RDL=1.0		ug/g	
			Acid Extractable Barium (Ba)	2025/03/25	ND, RDL=0.50		ug/g	
			Acid Extractable Beryllium (Be)	2025/03/25	ND, RDL=0.20		ug/g	
			Acid Extractable Boron (B)	2025/03/25	ND, RDL=5.0		ug/g	
			Acid Extractable Cadmium (Cd)	2025/03/25	ND, RDL=0.10		ug/g	
			Acid Extractable Chromium (Cr)	2025/03/25	ND, RDL=1.0		ug/g	
			Acid Extractable Cobalt (Co)	2025/03/25	ND, RDL=0.10		ug/g	
			Acid Extractable Copper (Cu)	2025/03/25	ND, RDL=0.50		ug/g	
			Acid Extractable Lead (Pb)	2025/03/25	ND, RDL=1.0		ug/g	
			Acid Extractable Molybdenum (Mo)	2025/03/25	ND, RDL=0.50		ug/g	

QUALITY ASSURANCE REPORT(CONT'D)

QA/QC Batch	Init	QC Type	Parameter	Date Analyzed	Value	Recovery	UNITS	QC Limits
			Acid Extractable Nickel (Ni)	2025/03/25	ND, RDL=0.50		ug/g	
			Acid Extractable Selenium (Se)	2025/03/25	ND, RDL=0.50		ug/g	
			Acid Extractable Silver (Ag)	2025/03/25	ND, RDL=0.20		ug/g	
			Acid Extractable Thallium (Tl)	2025/03/25	ND, RDL=0.050		ug/g	
			Acid Extractable Uranium (U)	2025/03/25	ND, RDL=0.050		ug/g	
			Acid Extractable Vanadium (V)	2025/03/25	ND, RDL=5.0		ug/g	
			Acid Extractable Zinc (Zn)	2025/03/25	ND, RDL=5.0		ug/g	
			Acid Extractable Mercury (Hg)	2025/03/25	ND, RDL=0.050		ug/g	
9897311	VIV	RPD	Acid Extractable Antimony (Sb)	2025/03/25	NC		%	30
			Acid Extractable Arsenic (As)	2025/03/25	0.92		%	30
			Acid Extractable Barium (Ba)	2025/03/25	2.3		%	30
			Acid Extractable Beryllium (Be)	2025/03/25	5.9		%	30
			Acid Extractable Boron (B)	2025/03/25	NC		%	30
			Acid Extractable Cadmium (Cd)	2025/03/25	8.1		%	30
			Acid Extractable Chromium (Cr)	2025/03/25	0.59		%	30
			Acid Extractable Cobalt (Co)	2025/03/25	0.17		%	30
			Acid Extractable Copper (Cu)	2025/03/25	2.2		%	30
			Acid Extractable Lead (Pb)	2025/03/25	0.74		%	30
			Acid Extractable Molybdenum (Mo)	2025/03/25	NC		%	30
			Acid Extractable Nickel (Ni)	2025/03/25	1.8		%	30
			Acid Extractable Selenium (Se)	2025/03/25	NC		%	30
			Acid Extractable Silver (Ag)	2025/03/25	NC		%	30
			Acid Extractable Thallium (Tl)	2025/03/25	3.5		%	30
			Acid Extractable Uranium (U)	2025/03/25	2.5		%	30
			Acid Extractable Vanadium (V)	2025/03/25	2.7		%	30
			Acid Extractable Zinc (Zn)	2025/03/25	0.89		%	30
9897353	JOH	Matrix Spike	Hot Water Ext. Boron (B)	2025/03/26		109	%	75 - 125
9897353	JOH	Spiked Blank	Hot Water Ext. Boron (B)	2025/03/26		101	%	75 - 125
9897353	JOH	Method Blank	Hot Water Ext. Boron (B)	2025/03/26	ND, RDL=0.050		ug/g	
9897353	JOH	RPD	Hot Water Ext. Boron (B)	2025/03/26	0.0085		%	40
9897369	GTK	Spiked Blank	Conductivity	2025/03/25		103	%	90 - 110
9897369	GTK	Method Blank	Conductivity	2025/03/25	ND, RDL=0.002		mS/cm	
9897369	GTK	RPD	Conductivity	2025/03/25	2.9		%	10
9898044	RDU	Matrix Spike	F4G-sg (Grav. Heavy Hydrocarbons)	2025/03/26		97	%	65 - 135
9898044	RDU	Spiked Blank	F4G-sg (Grav. Heavy Hydrocarbons)	2025/03/26		102	%	65 - 135
9898044	RDU	Method Blank	F4G-sg (Grav. Heavy Hydrocarbons)	2025/03/26	ND, RDL=100		ug/g	

QUALITY ASSURANCE REPORT(CONT'D)

QA/QC Batch	Init	QC Type	Parameter	Date Analyzed	Value	Recovery	UNITS	QC Limits
9898044	RDU	RPD	F4G-sg (Grav. Heavy Hydrocarbons)	2025/03/26	7.4		%	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.

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

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

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

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

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

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

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

(1) The matrix spike recovery was below the lower control limit. This may be due in part to the reducing environment of the sample. The sample was reanalyzed with the same results.

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

VALIDATION SIGNATURE PAGE

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

Cristina Carriere, Senior Scientific Specialist

Louise Harding, Scientific Specialist

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

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

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Bureau Veritas
6740 Campobello Road, Mississauga, Ontario Canada L5N 2L8 Tel:(905) 817-5700 Toll-free:800-563-6266 Fax:[illegible] 77 www.bvna.com

NONT-2025-03-4015 /:

Bottle Order #: 1037833

COC #: C#1037833-01-01

Project Manager: Katherine Szozda

INVOICE TO:		REPORT TO:		PROJECT INFORMATION:	
Company Name:	#39509 Lopers & Associates	Company Name:		Quotation #:	C51005
Attention:	Alisha Sullivan	Attention:	Luke Lopers	P.O. #:	
Address:	30 Lansfield Way Ottawa ON K2G 3V8	Address:		Project:	LOP25-0380
Tel:	(613) 327-9073 Fax:	Tel:	Fax:	Project Name:	506 Kent
Email:	Alisha.Sullivan@bureauveritas.com	Email:	Luke@lopers.ca	Site #:	
				Sampled By:	L.Lopers

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

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

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

Special Instructions

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

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

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

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

	Sample Barcode Label	Sample (Location) Identification	Date Sampled	Time Sampled	Matrix	Field Filtered (please circle): Metals / Hg / Cr VI	O.Reg 153 PHCs, BTEX/F1-F4	O.Reg 153 PAHs	O.Reg 153 Metals & Inorganics Pkg	Methyl Mercury in Sediment/Soil - Wet Wt	Sieve, 75um	O.Reg 558 TCLP Inorganics Package	O.Reg 558 TCLP Semi-Volatile Organics	Ignitability of a Sample	VOCs		# of Bottles	Comments
1		BH1-25-SS2	Mar 18/25	9:15AM	S		X	X	X									
2		BH2-25-SS4		10:10AM	S		X	X	X									
3		BH2-25-SS5		10:15AM	S			X	X		X							
4		BH3-25-SS3		10:40AM	S		X	X	X									
5		BH4-25-SS3		11:05AM	S		X	X	X									
6		BH4-25-SS4		11:10AM	S		X	X	X		X				[illegible]			
7		BH5-25-SS3		11:35AM	S		X	X	X									
8		BH5-25-SS4		11:40AM	S		X	X	X									
9		BH6-25-AU1		11:55AM	S		X	X	X						X			
10		BH6-25-SS3		12:10PM	S			X	X									

RELINQUISHED BY: (Signature/Print)	Date: (YY/MM/DD)	Time	RECEIVED BY: (Signature/Print)	Date: (YY/MM/DD)	Time	# jars used and not submitted
[signature]	25/03/18	9:27PM	Pedro da Silva [illegible]	2025/03/19	10:40	
Luke Lopers			Ashley Mikkelsen [illegible]	2025/03/20	07:22	

Laboratory Use Only

Time Sensitive	Temperature (°C) on Recei	Custody Seal	Yes	No
	7/7/10 (i-c-p)	Present		
		Intact	J	

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

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

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

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

White: Bureau Veritas Yellow: Client
4/4/4 4/6/7

Bureau Veritas Canada (2019) Inc.

Received in Ottawa

C530032
2025/03/19 10:40

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

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CHAIN OF CUSTODY RECORD

INVOICE TO:		REPORT TO:		PROJECT INFORMATION:		Laboratory Use Only:	
Company Name:	#39509 Lopers & Associates	Company Name:		Quotation #:	C51005	Bureau Veritas Job #:	Bottle Order #:
Attention:	Alisha Sullivan	Attention:	Luke Lopers	P.O. #:			1037833
Address:	30 Lansfield Way	Address:		Project:	LOP25-038B	COC #:	Project Manager:
	Ottawa ON K2G 3V8			Project Name:	506 Kent	C#1037833-02-01	Katherine Szozda
Tel:	(613) 327-9073 Fax:	Tel:	Fax:	Site #:			
Email:	Alisha.Sullivan@bureauveritas.com	Email:	Luke@lopers.ca	Sampled By:	L. Lopers		

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

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

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

Special Instructions

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

ANALYSIS REQUESTED (PLEASE BE SPECIFIC)

#	Sample Barcode Label	Sample (Location) Identification	Date Sampled	Time Sampled	Matrix	Field Filtered (please circle): Metals / Hg / Cr VI	O.Reg 153 PHCs, BTEX/F1-F4	O.Reg 153 PAHs	O.Reg 153 Metals & Inorganics Pkg	Methyl Mercury in Sediment/Soil - Wet Wt	Sieve, 75um	O.Reg 558 TCLP Inorganics Package	O.Reg 558 TCLP Semi-Volatile Organics	Ignitability of a Sample	VOCs		# of Bottles	Comments
1		BH6-25-SS5	March 03/18/25	12:20PM	S		X	X	X						X			
2		BH6-25-SS6	Mar 18/25	12:25 PM	S		X				X				X			
3		BH7-25-SS2		1:40 PM	S		X	X	X									
4		BH7-25-SS4		1:50 PM	S		X	X	X									
5		DUP-1-03/18		-	S		X	X	X									
6		TCLP 5-3/7-2		-	S							X	X	X				
7																		
8																		
9																		
10																		

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

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

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

RELINQUISHED BY: (Signature/Print)	Date: (YY/MM/DD)	Time	RECEIVED BY: (Signature/Print)	Date: (YY/MM/DD)	Time	# jars used and not submitted
Luke Lopers	25/03/18	9:27 PM	Pedro da Silva	2025/03/19	10:40	
			Ashita Sullivan	2025/03/20	07:22	

Laboratory Use Only				
Time Sensitive	Temperature (°C) on Receipt	Custody Seal	Yes	No
	7/7/10 (ice)	Present	✓	
		Intact	✓	

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

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

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

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

White: Bureau Veritas Yellow: Client

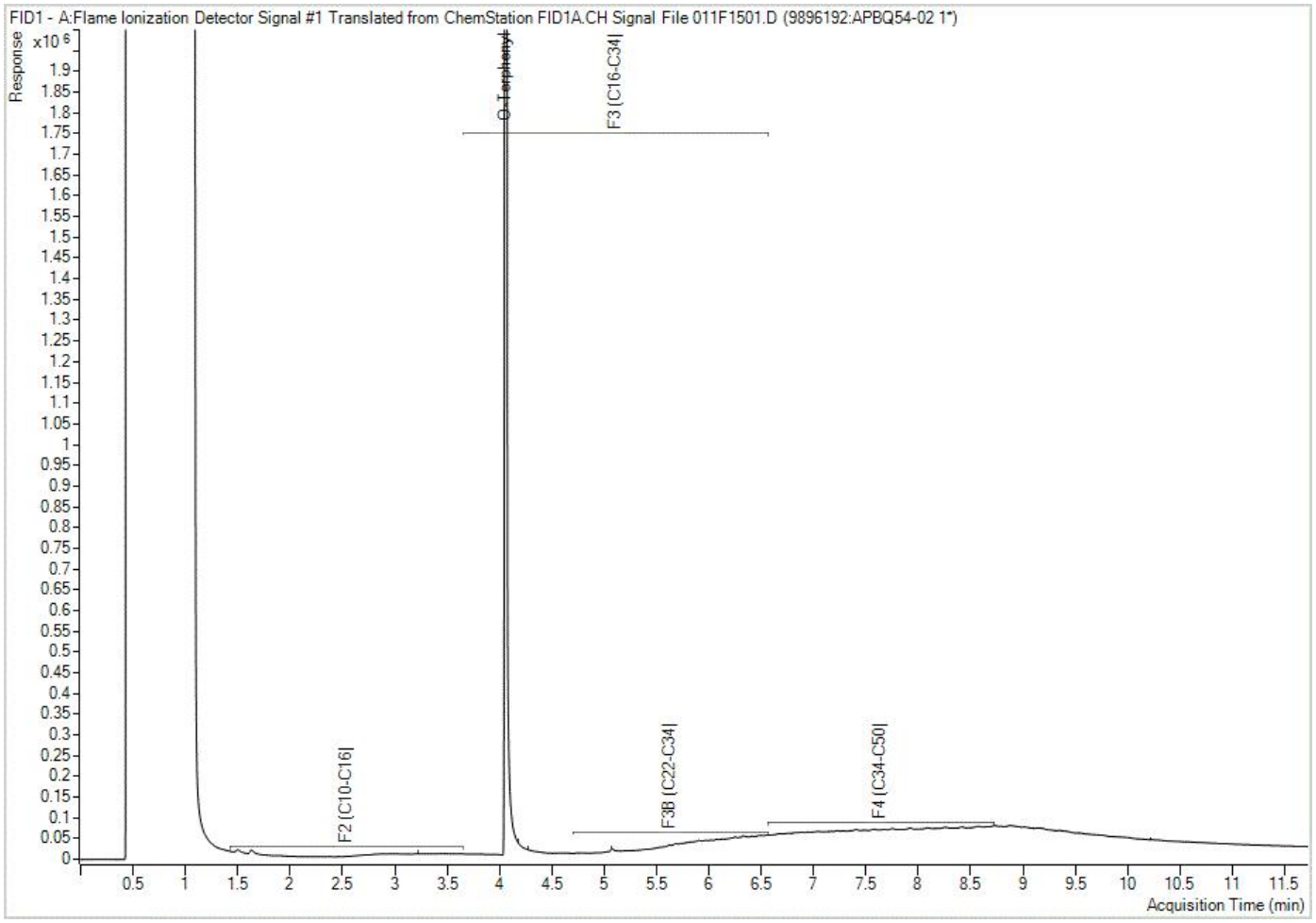
4/4/4 4/6/7

Received in Ottawa

Bureau Veritas Job #: C530032
Report Date: 2025/03/26
Bureau Veritas Sample: APBQ54

Lopers & Associates
Client Project #: LOP25-038B
Project name: 506 KENT
Client ID: BH1-25-SS2

Petroleum Hydrocarbons F2-F4 in Soil Chromatogram

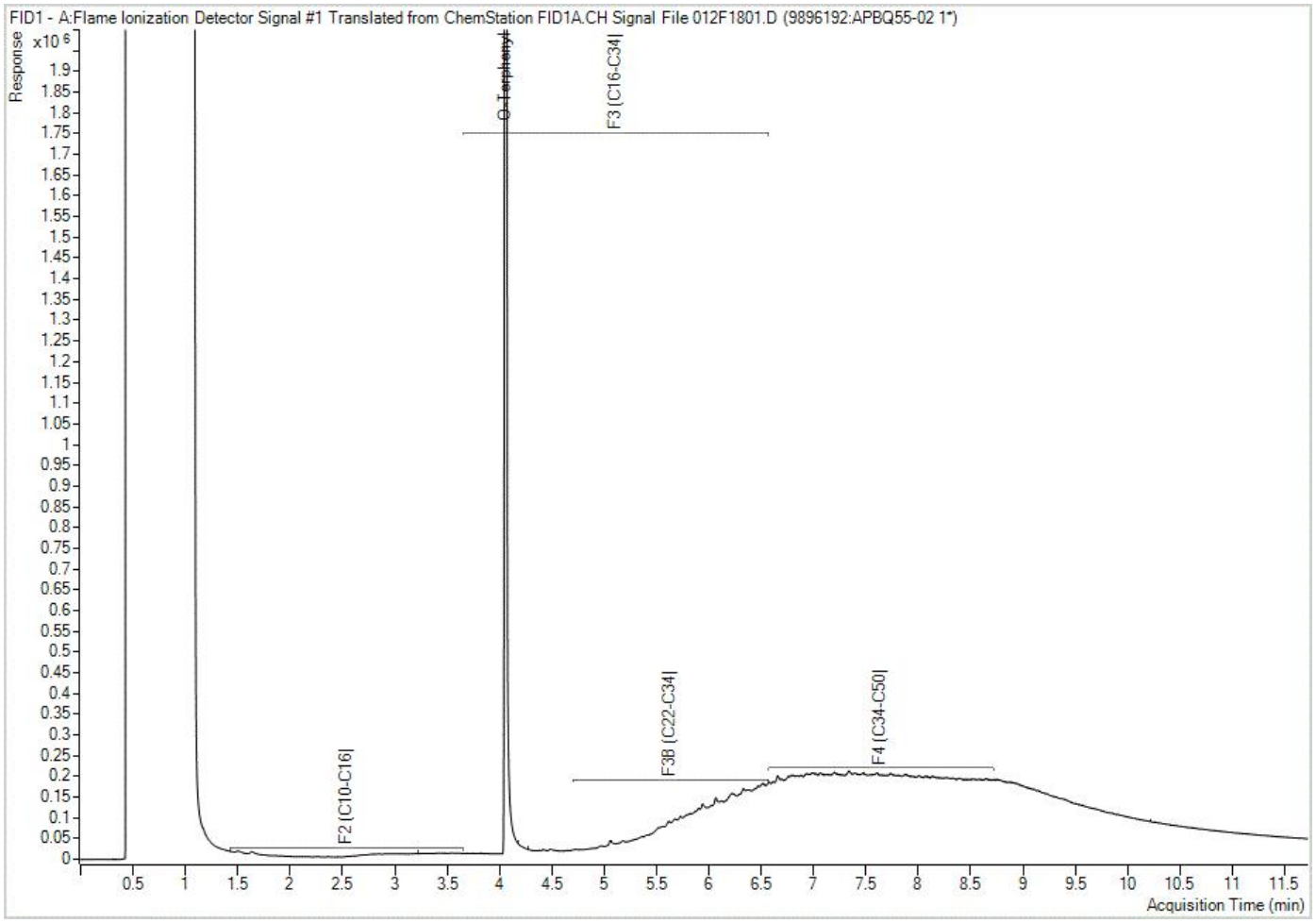


Note: This information is provided for reference purposes only. Should detailed chemist interpretation or fingerprinting be required, please contact the laboratory.

Bureau Veritas Job #: C530032
Report Date: 2025/03/26
Bureau Veritas Sample: APBQ55

Lopers & Associates
Client Project #: LOP25-038B
Project name: 506 KENT
Client ID: BH2-25-SS4

Petroleum Hydrocarbons F2-F4 in Soil Chromatogram

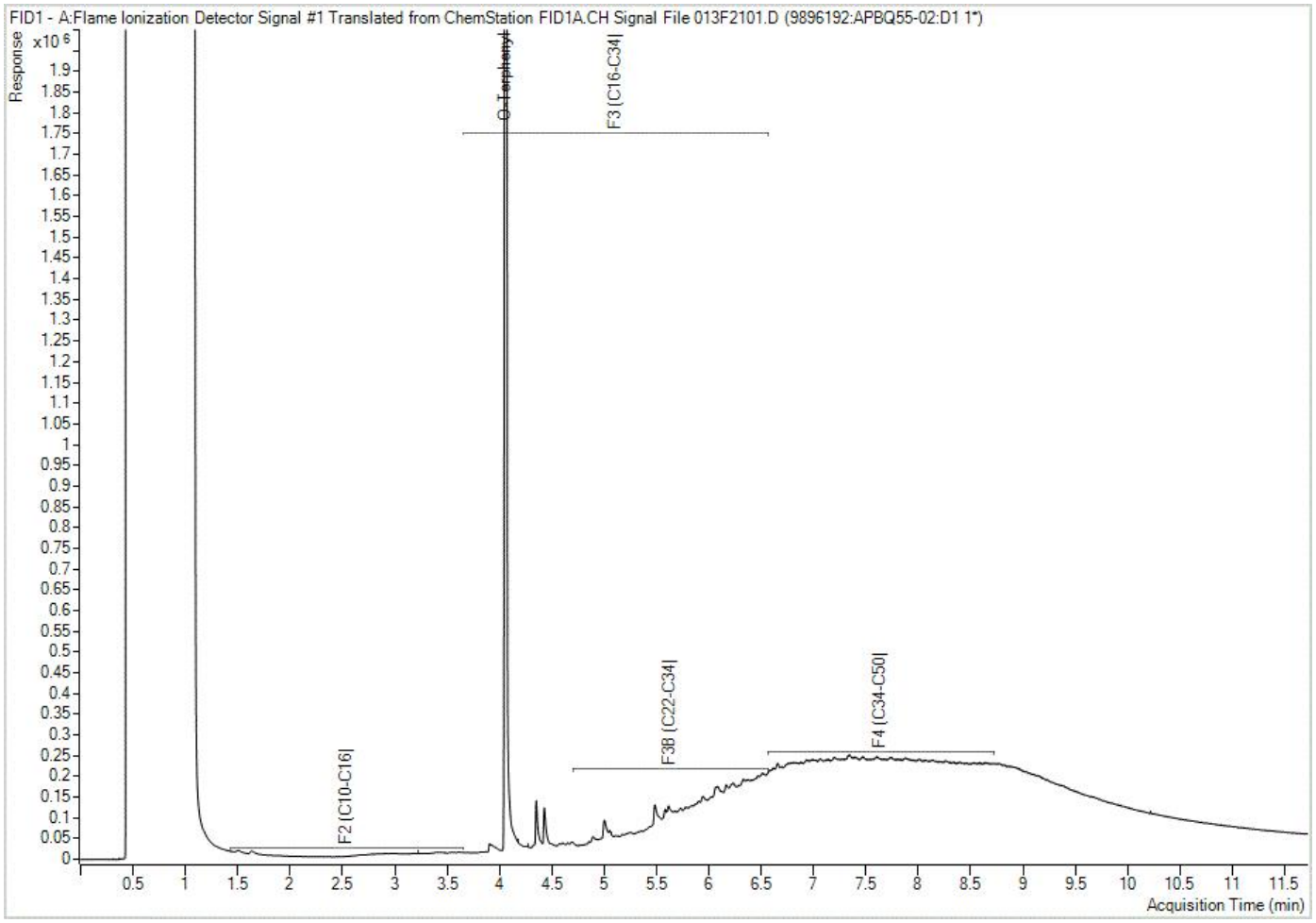


Note: This information is provided for reference purposes only. Should detailed chemist interpretation or fingerprinting be required, please contact the laboratory.

Bureau Veritas Job #: C530032
Report Date: 2025/03/26
Bureau Veritas Sample: APBQ55 Lab-Dup

Lopers & Associates
Client Project #: LOP25-038B
Project name: 506 KENT
Client ID: BH2-25-SS4

Petroleum Hydrocarbons F2-F4 in Soil Chromatogram

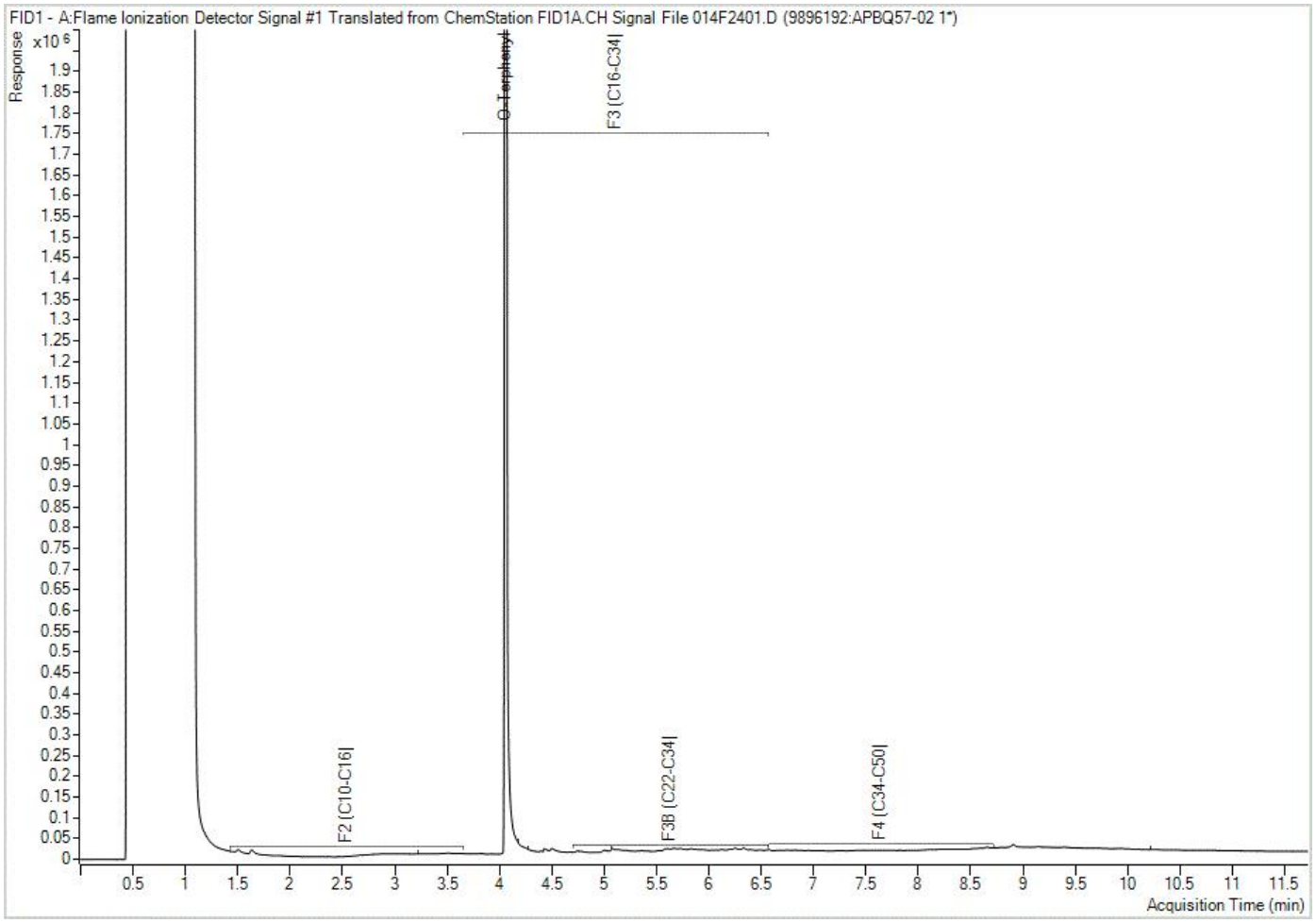


Note: This information is provided for reference purposes only. Should detailed chemist interpretation or fingerprinting be required, please contact the laboratory.

Bureau Veritas Job #: C530032
Report Date: 2025/03/26
Bureau Veritas Sample: APBQ57

Lopers & Associates
Client Project #: LOP25-038B
Project name: 506 KENT
Client ID: BH3-25-SS3

Petroleum Hydrocarbons F2-F4 in Soil Chromatogram

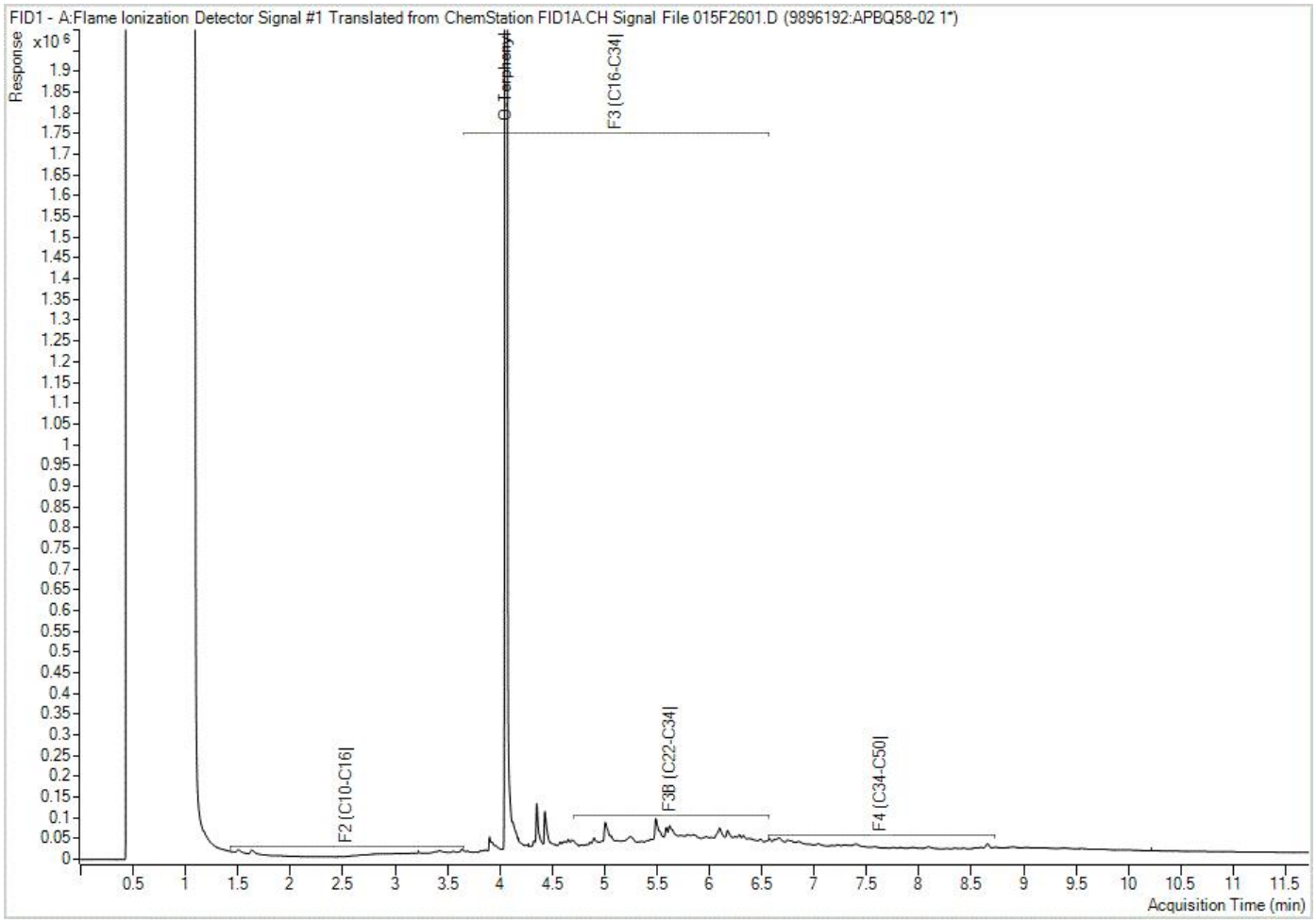


Note: This information is provided for reference purposes only. Should detailed chemist interpretation or fingerprinting be required, please contact the laboratory.

Bureau Veritas Job #: C530032
Report Date: 2025/03/26
Bureau Veritas Sample: APBQ58

Lopers & Associates
Client Project #: LOP25-038B
Project name: 506 KENT
Client ID: BH4-25-SS3

Petroleum Hydrocarbons F2-F4 in Soil Chromatogram

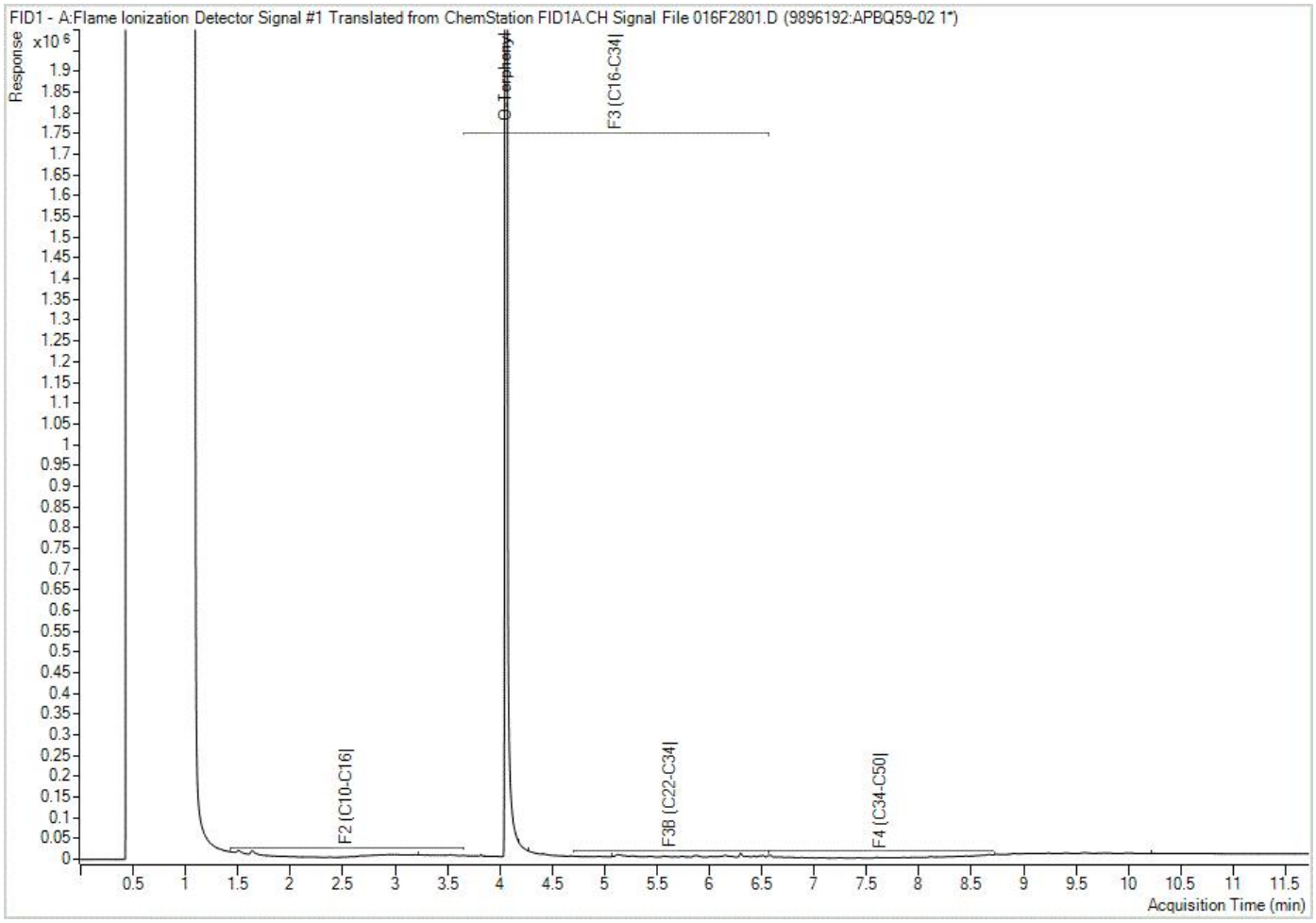


Note: This information is provided for reference purposes only. Should detailed chemist interpretation or fingerprinting be required, please contact the laboratory.

Bureau Veritas Job #: C530032
Report Date: 2025/03/26
Bureau Veritas Sample: APBQ59

Lopers & Associates
Client Project #: LOP25-038B
Project name: 506 KENT
Client ID: BH4-25-SS4

Petroleum Hydrocarbons F2-F4 in Soil Chromatogram

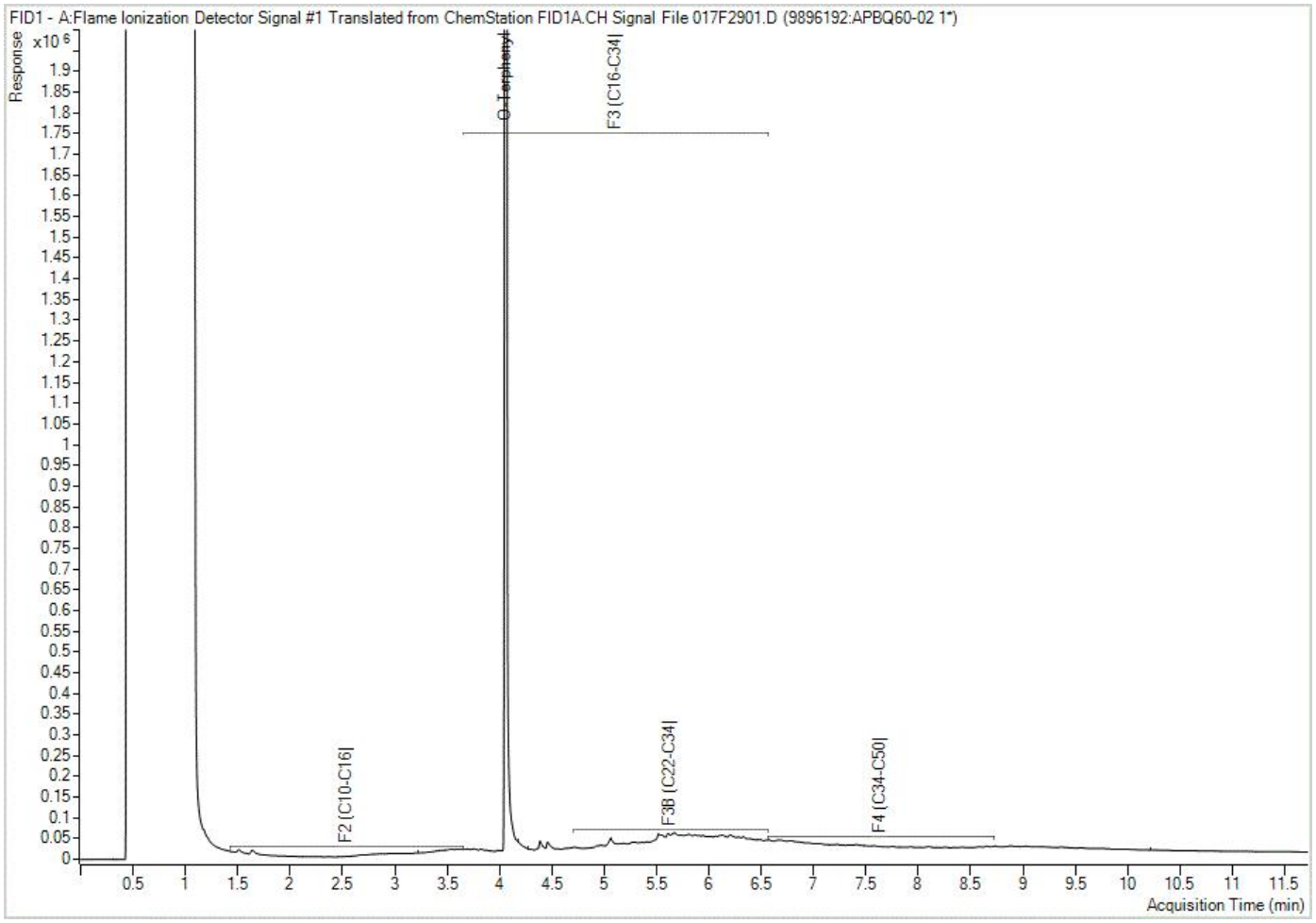


Note: This information is provided for reference purposes only. Should detailed chemist interpretation or fingerprinting be required, please contact the laboratory.

Bureau Veritas Job #: C530032
Report Date: 2025/03/26
Bureau Veritas Sample: APBQ60

Lopers & Associates
Client Project #: LOP25-038B
Project name: 506 KENT
Client ID: BH5-25-SS3

Petroleum Hydrocarbons F2-F4 in Soil Chromatogram

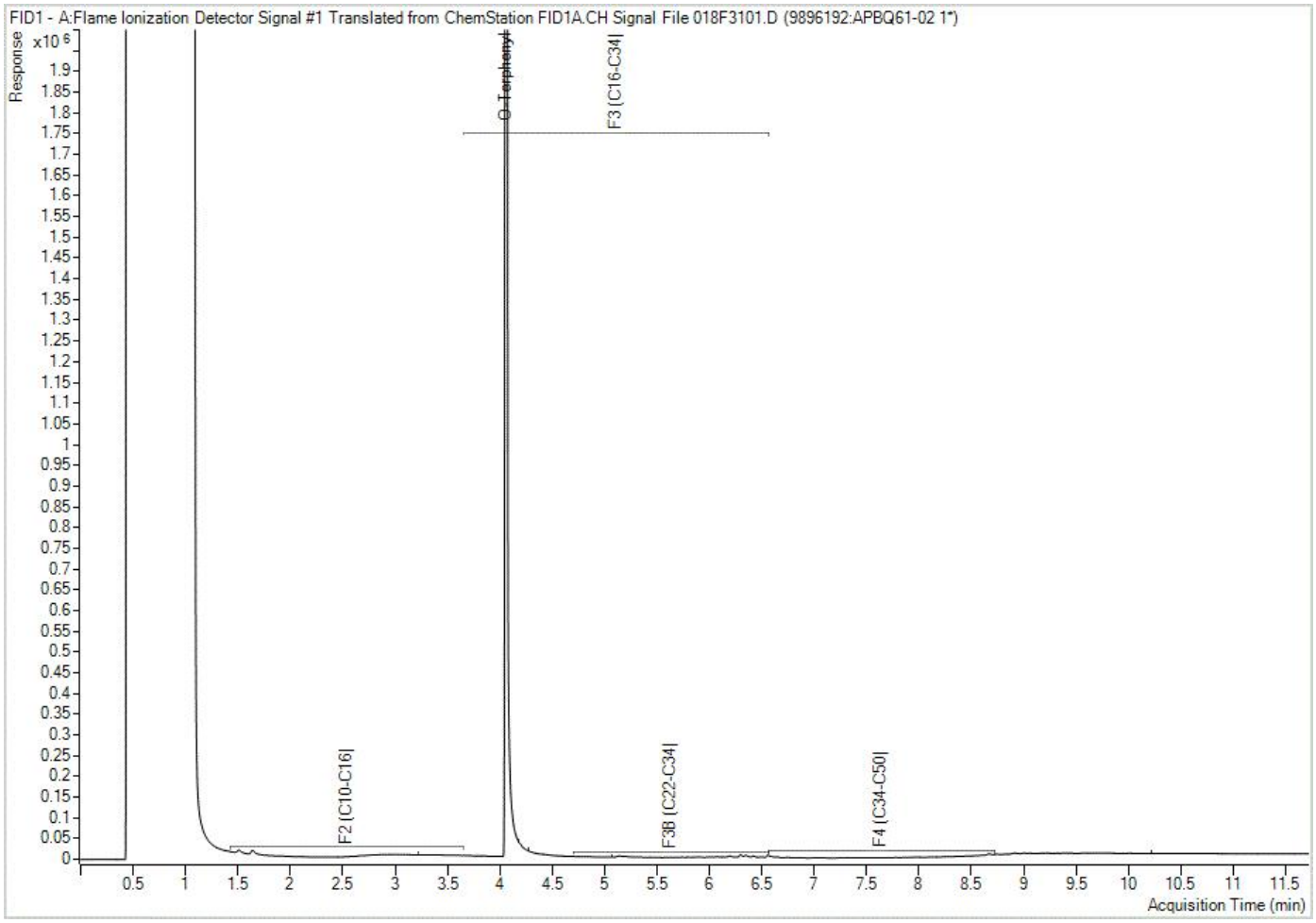


Note: This information is provided for reference purposes only. Should detailed chemist interpretation or fingerprinting be required, please contact the laboratory.

Bureau Veritas Job #: C530032
Report Date: 2025/03/26
Bureau Veritas Sample: APBQ61

Lopers & Associates
Client Project #: LOP25-038B
Project name: 506 KENT
Client ID: BH5-25-SS4

Petroleum Hydrocarbons F2-F4 in Soil Chromatogram

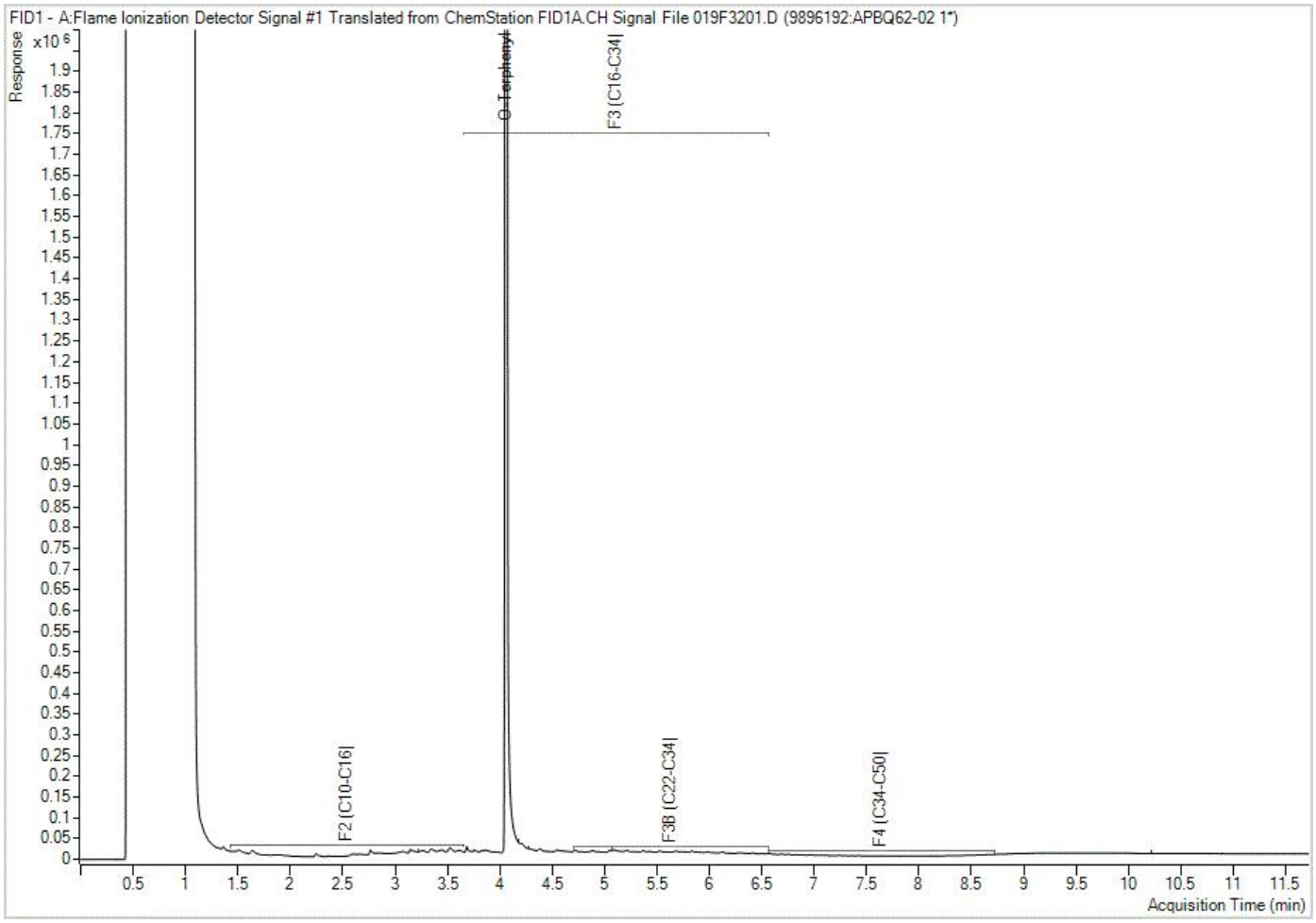


Note: This information is provided for reference purposes only. Should detailed chemist interpretation or fingerprinting be required, please contact the laboratory.

Bureau Veritas Job #: C530032
Report Date: 2025/03/26
Bureau Veritas Sample: APBQ62

Lopers & Associates
Client Project #: LOP25-038B
Project name: 506 KENT
Client ID: BH6-25-AU1

Petroleum Hydrocarbons F2-F4 in Soil Chromatogram

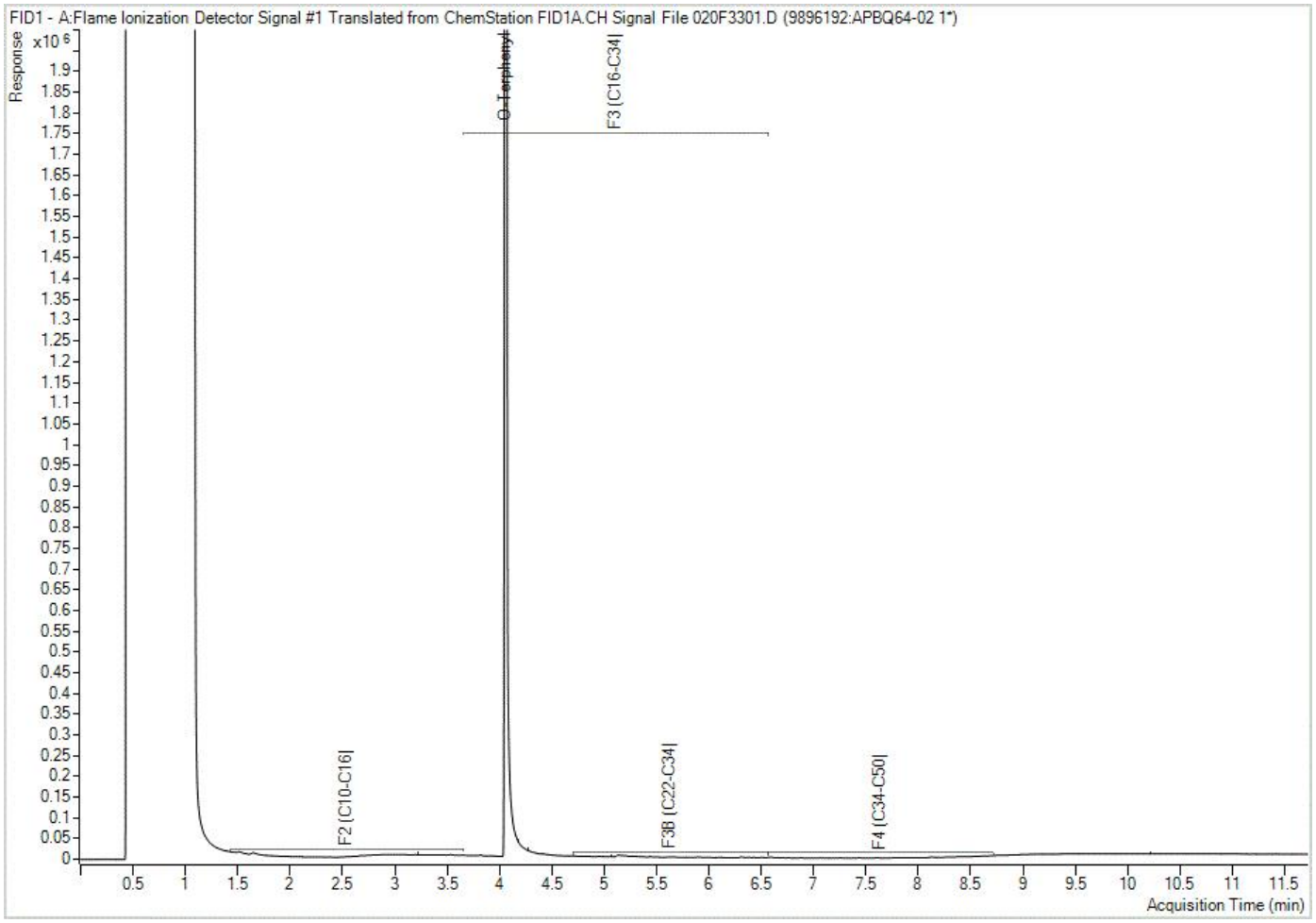


Note: This information is provided for reference purposes only. Should detailed chemist interpretation or fingerprinting be required, please contact the laboratory.

Bureau Veritas Job #: C530032
Report Date: 2025/03/26
Bureau Veritas Sample: APBQ64

Lopers & Associates
Client Project #: LOP25-038B
Project name: 506 KENT
Client ID: BH6-25-SS5

Petroleum Hydrocarbons F2-F4 in Soil Chromatogram

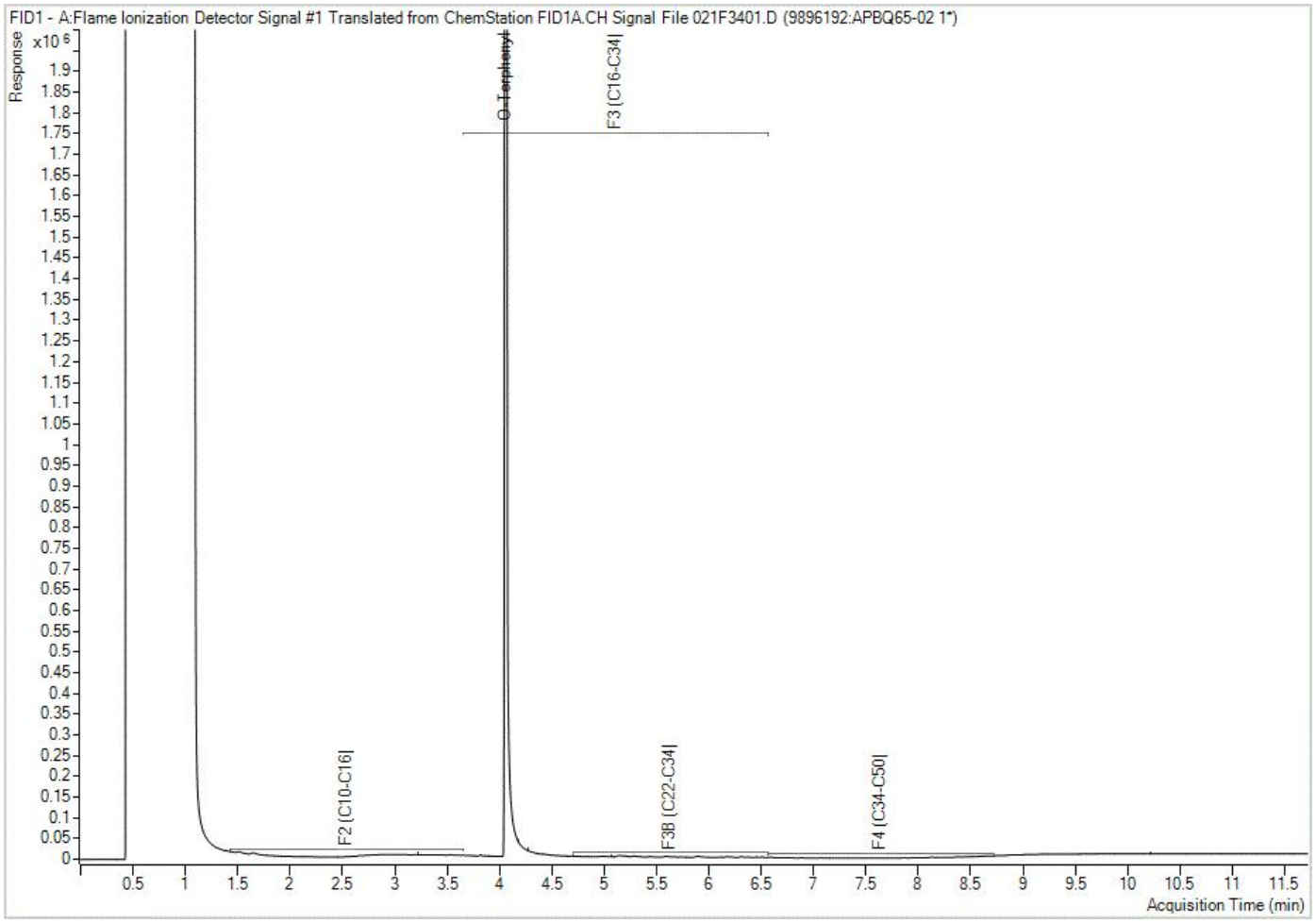


Note: This information is provided for reference purposes only. Should detailed chemist interpretation or fingerprinting be required, please contact the laboratory.

Bureau Veritas Job #: C530032
Report Date: 2025/03/26
Bureau Veritas Sample: APBQ65

Lopers & Associates
Client Project #: LOP25-038B
Project name: 506 KENT
Client ID: BH6-25-SS6

Petroleum Hydrocarbons F2-F4 in Soil Chromatogram

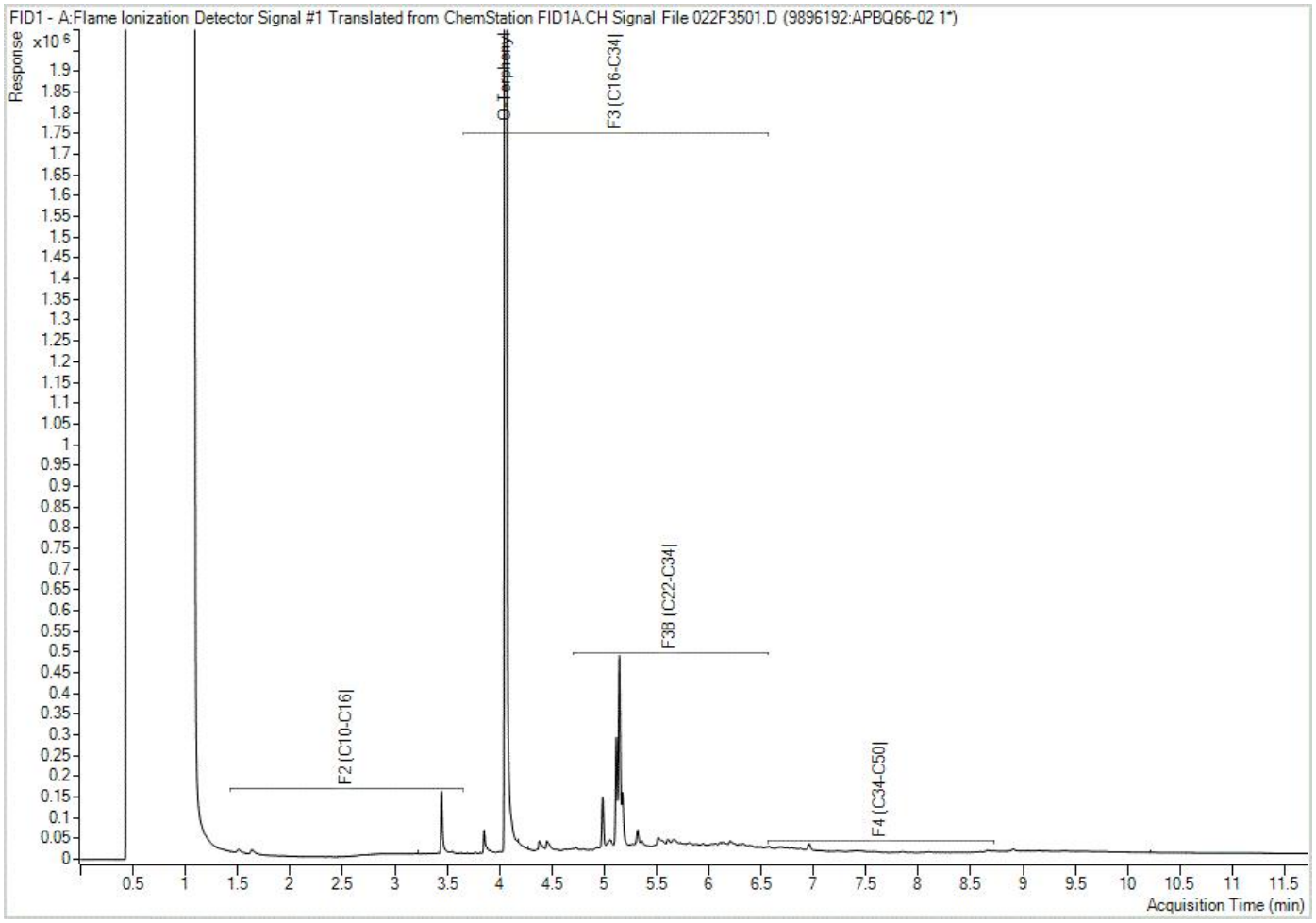


Note: This information is provided for reference purposes only. Should detailed chemist interpretation or fingerprinting be required, please contact the laboratory.

Bureau Veritas Job #: C530032
Report Date: 2025/03/26
Bureau Veritas Sample: APBQ66

Lopers & Associates
Client Project #: LOP25-038B
Project name: 506 KENT
Client ID: BH7-25-SS2

Petroleum Hydrocarbons F2-F4 in Soil Chromatogram

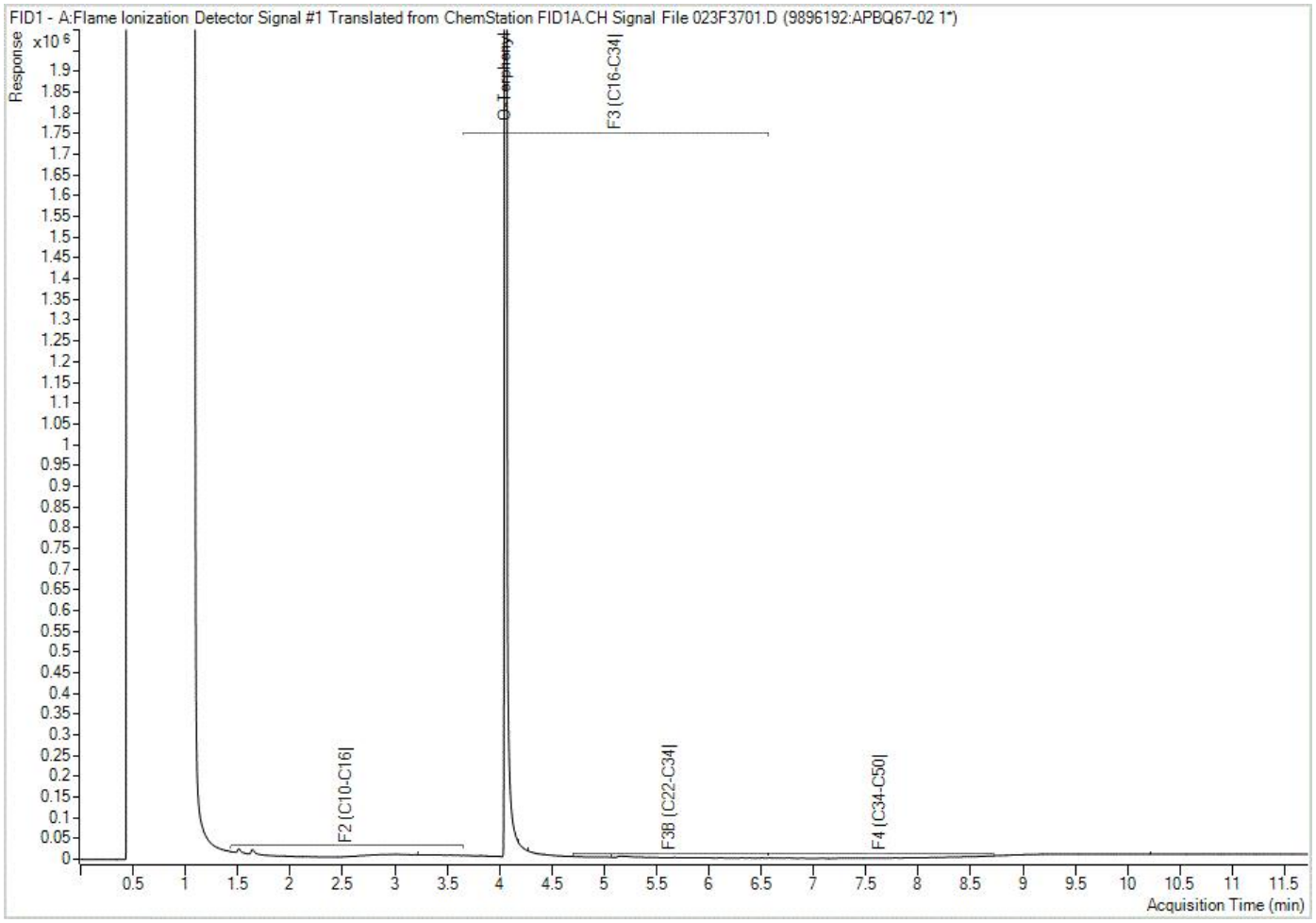


Note: This information is provided for reference purposes only. Should detailed chemist interpretation or fingerprinting be required, please contact the laboratory.

Bureau Veritas Job #: C530032
Report Date: 2025/03/26
Bureau Veritas Sample: APBQ67

Lopers & Associates
Client Project #: LOP25-038B
Project name: 506 KENT
Client ID: BH7-25-SS4

Petroleum Hydrocarbons F2-F4 in Soil Chromatogram

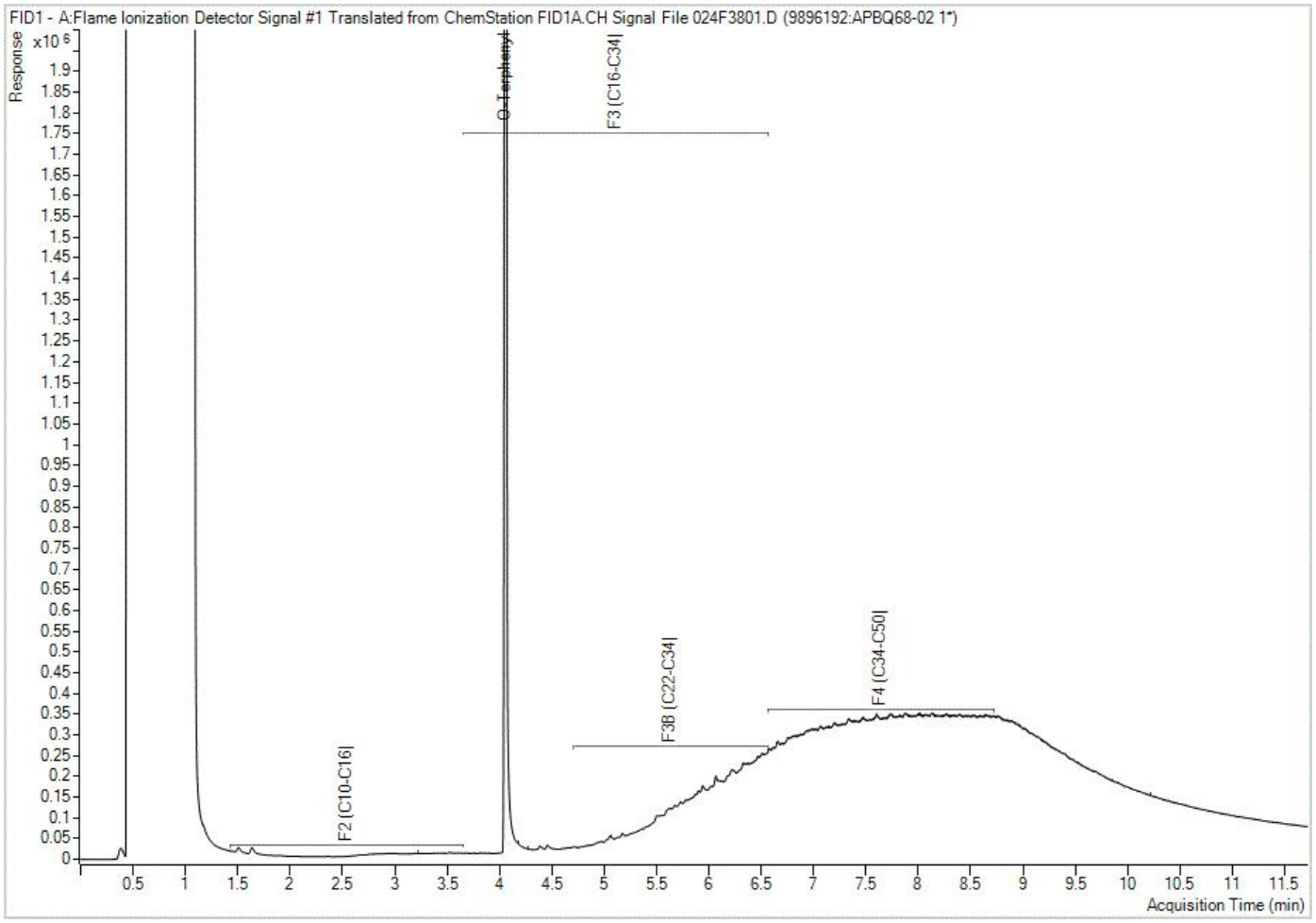


Note: This information is provided for reference purposes only. Should detailed chemist interpretation or fingerprinting be required, please contact the laboratory.

Bureau Veritas Job #: C530032
Report Date: 2025/03/26
Bureau Veritas Sample: APBQ68

Lopers & Associates
Client Project #: LOP25-038B
Project name: 506 KENT
Client ID: DUP-1-03/18

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 #: LOP25-038B
Site Location: 506 KENT
Your C.O.C. #: 1037833-03-01

Attention: Luke Lopers

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

Report Date: 2025/04/10
Report #: R8518707
Version: 2 - Final

CERTIFICATE OF ANALYSIS

BUREAU VERITAS JOB #: C530033
Received: 2025/03/19, 13:00

Sample Matrix: Soil
Samples Received: 7

Analyses	Quantity	Date Extracted	Date Analyzed	Laboratory Method	Analytical Method
Methylnaphthalene Sum (1)	6	N/A	2025/03/23	CAM SOP-00301	EPA 8270D m
Hot Water Extractable Boron (1)	6	2025/03/25	2025/03/25	CAM SOP-00408	R153 Ana. Prot. 2011
Free (WAD) Cyanide (1)	6	2025/03/24	2025/03/24	CAM SOP-00457	OMOE E3015 m
Conductivity (1)	6	2025/03/25	2025/03/25	CAM SOP-00414	OMOE E3530 v1 m
Hexavalent Chromium in Soil by IC (1, 3)	6	2025/03/24	2025/03/25	CAM SOP-00436	EPA 3060A/7199 m
Petroleum Hydro. CCME F1 & BTEX in Soil (1, 4)	6	N/A	2025/03/25	CAM SOP-00315	CCME PHC-CWS m
Petroleum Hydrocarbons F2-F4 in Soil (1, 5)	6	2025/03/24	2025/03/25	CAM SOP-00316	CCME CWS m
Acid Extractable Metals by ICPMS (1)	6	2025/03/25	2025/03/25	CAM SOP-00447	EPA 6020B m
Methyl Mercury in Soil - Dry Wt Calc (2)	1	2025/03/20	2025/04/10	BBY WI-00033	Auto Calc
Methyl Mercury in Soil - Dry Wt Calc (2)	2	2025/03/31	2025/04/10	BBY WI-00033	Auto Calc
Methyl Mercury in Sediment/Soil - Wet Wt (2)	3	2025/04/08	2025/04/09	BBY7SOP-00030	EPA 1630 m
Moisture (Subcontracted) (2, 6)	1	2025/03/25	2025/03/26	BBY8SOP-00017	BCMOE BCLM Dec2000 m
Moisture (Subcontracted) (2, 6)	2	2025/04/01	2025/04/02	BBY8SOP-00017	BCMOE BCLM Dec2000 m
Moisture (1)	6	N/A	2025/03/20	CAM SOP-00445	Carter 2nd ed 70.2 m
PAH Compounds in Soil by GC/MS (SIM) (1)	4	2025/03/22	2025/03/22	CAM SOP-00318	EPA 8270E
PAH Compounds in Soil by GC/MS (SIM) (1)	2	2025/03/22	2025/03/23	CAM SOP-00318	EPA 8270E
pH CaCl2 EXTRACT (1)	6	2025/03/24	2025/03/24	CAM SOP-00413	EPA 9045 D m
Sodium Adsorption Ratio (SAR) (1)	6	N/A	2025/03/25	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 #: LOP25-038B
Site Location: 506 KENT
Your C.O.C. #: 1037833-03-01

Attention: Luke Lopers

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

Report Date: 2025/04/10
Report #: R8518707
Version: 2 - Final

CERTIFICATE OF ANALYSIS

BUREAU VERITAS JOB #: C530033
Received: 2025/03/19, 13:00

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

Reference Method suffix "m" indicates test methods incorporate validated modifications from specific reference methods to improve performance.
* RPDs calculated using raw data. The rounding of final results may result in the apparent difference.
(1) This test was performed by Bureau Veritas Mississauga, 6740 Campobello Rd , Mississauga, ON, L5N 2L8
(2) This test was performed by Bureau Veritas Burnaby, 4606 Canada Way , Burnaby, BC, V5G 1K5
(3) Soils are reported on a dry weight basis unless otherwise specified.
(4) 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.
(5) 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.
(6) Offsite analysis requires that subcontracted moisture be reported.

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

Bureau Veritas Job #: C530033
Report Date: 2025/04/10

Lopers & Associates
Client Project #: LOP25-038B
Site Location: 506 KENT
Sampler Initials: LL

RESULTS OF ANALYSES OF SOIL

Bureau Veritas ID		APBQ70			APBQ71			APBQ72		
Sampling Date		2025/03/19 10:45			2025/03/19 10:55			2025/03/19 08:35		
COC Number		1037833-03-01			1037833-03-01			1037833-03-01		
	UNITS	BH8-25-SS2	RDL	QC Batch	BH8-25-SS4	RDL	QC Batch	BH9-25-SS2	RDL	QC Batch
Calculated Parameters										
Total (Dry Wt) Methyl Mercury	ng/g	ND	0.059	9908038				ND	0.060	9908038
Sodium Adsorption Ratio	N/A	17		9894512	6.3		9894512	20		9894512
Inorganics										
Conductivity	mS/cm	2.6	0.002	9897098	1.3	0.002	9897098	2.4	0.002	9897098
Moisture	%	18	1.0	9894833	19	1.0	9894833	20	1.0	9894833
Available (CaCl2) pH	pH	7.56		9896334	7.66		9896334	7.67		9896334
WAD Cyanide (Free)	ug/g	ND	0.01	9896350	ND	0.01	9896350	ND	0.01	9896350
Physical Testing										
Moisture-Subcontracted	%	15	0.30	9908039				17	0.30	9908039

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		APBQ73			APBQ74			APBQ75		
Sampling Date		2025/03/19 08:40			2025/03/19 09:20			2025/03/19 09:30		
COC Number		1037833-03-01			1037833-03-01			1037833-03-01		
	UNITS	BH9-25-SS3	RDL	QC Batch	BH10-25-SS2	RDL	QC Batch	BH10-25-SS4	RDL	QC Batch
Calculated Parameters										
Total (Dry Wt) Methyl Mercury	ng/g				0.064	0.061	9908036			
Sodium Adsorption Ratio	N/A	24		9894512				2.9		9894512
Inorganics										
Conductivity	mS/cm	1.4	0.002	9897098				0.59	0.002	9897098
Moisture	%	15	1.0	9894833				25	1.0	9894833
Available (CaCl2) pH	pH	7.62		9896334				7.45		9896334
WAD Cyanide (Free)	ug/g	ND	0.01	9896350				ND	0.01	9896350
Physical Testing										
Moisture-Subcontracted	%				18	0.30	9908037			

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

Lopers & Associates
Client Project #: LOP25-038B
Site Location: 506 KENT
Sampler Initials: LL

RESULTS OF ANALYSES OF SOIL

Bureau Veritas ID		APBQ76		
Sampling Date		2025/03/19		
COC Number		1037833-03-01		
	UNITS	**DUP-2-03/19**	**RDL**	**QC Batch**
Calculated Parameters				
Sodium Adsorption Ratio	N/A	17		9894512
Inorganics				
Conductivity	mS/cm	2.4	0.002	9897098
Moisture	%	13	1.0	9894833
Available (CaCl2) pH	pH	7.64		9896334
WAD Cyanide (Free)	ug/g	ND	0.01	9896350

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

MERCURY BY COLD VAPOUR AA (SOIL)

Bureau Veritas ID		APBQ70	APBQ72	APBQ74		
Sampling Date		2025/03/19 10:45	2025/03/19 08:35	2025/03/19 09:20		
COC Number		1037833-03-01	1037833-03-01	1037833-03-01		
	UNITS	BH8-25-SS2	BH9-25-SS2	BH10-25-SS2	RDL	QC Batch
Metals						
Total (Wet Wt) Methyl Mercury	ng/g	ND	ND	0.052	0.050	9908035

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

Bureau Veritas Job #: C530033
Report Date: 2025/04/10

Lopers & Associates
Client Project #: LOP25-038B
Site Location: 506 KENT
Sampler Initials: LL

ELEMENTS BY ATOMIC SPECTROSCOPY (SOIL)

Bureau Veritas ID		APBQ70	APBQ71	APBQ72	APBQ73	APBQ75		
Sampling Date		2025/03/19 10:45	2025/03/19 10:55	2025/03/19 08:35	2025/03/19 08:40	2025/03/19 09:30		
COC Number		1037833-03-01	1037833-03-01	1037833-03-01	1037833-03-01	1037833-03-01		
	UNITS	BH8-25-SS2	BH8-25-SS4	BH9-25-SS2	BH9-25-SS3	BH10-25-SS4	RDL	QC Batch
Inorganics								
Chromium (VI)	ug/g	ND	ND	ND	ND	ND	0.18	9896424
Metals								
Hot Water Ext. Boron (B)	ug/g	0.42	0.23	0.49	0.15	0.13	0.050	9897295
Acid Extractable Antimony (Sb)	ug/g	4.0	ND	2.5	ND	ND	0.20	9897503
Acid Extractable Arsenic (As)	ug/g	2.8	ND	6.1	ND	ND	1.0	9897503
Acid Extractable Barium (Ba)	ug/g	140	28	220	37	23	0.50	9897503
Acid Extractable Beryllium (Be)	ug/g	0.28	ND	0.33	0.22	ND	0.20	9897503
Acid Extractable Boron (B)	ug/g	ND	ND	ND	ND	ND	5.0	9897503
Acid Extractable Cadmium (Cd)	ug/g	0.98	ND	0.75	ND	ND	0.10	9897503
Acid Extractable Chromium (Cr)	ug/g	20	15	23	19	16	1.0	9897503
Acid Extractable Cobalt (Co)	ug/g	6.0	3.5	6.6	4.2	3.8	0.10	9897503
Acid Extractable Copper (Cu)	ug/g	23	7.6	78	6.9	6.9	0.50	9897503
Acid Extractable Lead (Pb)	ug/g	270	11	450	2.8	2.0	1.0	9897503
Acid Extractable Molybdenum (Mo)	ug/g	0.77	ND	1.3	ND	ND	0.50	9897503
Acid Extractable Nickel (Ni)	ug/g	15	8.3	16	11	8.9	0.50	9897503
Acid Extractable Selenium (Se)	ug/g	ND	ND	1.1	ND	ND	0.50	9897503
Acid Extractable Silver (Ag)	ug/g	0.25	ND	0.30	ND	ND	0.20	9897503
Acid Extractable Thallium (Tl)	ug/g	0.13	0.054	0.16	0.071	ND	0.050	9897503
Acid Extractable Uranium (U)	ug/g	0.63	0.47	0.63	0.32	1.0	0.050	9897503
Acid Extractable Vanadium (V)	ug/g	23	21	26	17	16	5.0	9897503
Acid Extractable Zinc (Zn)	ug/g	380	27	420	21	20	5.0	9897503
Acid Extractable Mercury (Hg)	ug/g	0.41	ND	0.51	ND	ND	0.050	9897503

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

ELEMENTS BY ATOMIC SPECTROSCOPY (SOIL)

Bureau Veritas ID		APBQ76		
Sampling Date		2025/03/19		
COC Number		1037833-03-01		
	UNITS	DUP-2-03/19	RDL	QC Batch
Inorganics				
Chromium (VI)	ug/g	ND	0.18	9896424
Metals				
Hot Water Ext. Boron (B)	ug/g	0.40	0.050	9897295
Acid Extractable Antimony (Sb)	ug/g	4.0	0.20	9897503
Acid Extractable Arsenic (As)	ug/g	2.7	1.0	9897503
Acid Extractable Barium (Ba)	ug/g	130	0.50	9897503
Acid Extractable Beryllium (Be)	ug/g	0.25	0.20	9897503
Acid Extractable Boron (B)	ug/g	ND	5.0	9897503
Acid Extractable Cadmium (Cd)	ug/g	0.88	0.10	9897503
Acid Extractable Chromium (Cr)	ug/g	18	1.0	9897503
Acid Extractable Cobalt (Co)	ug/g	5.5	0.10	9897503
Acid Extractable Copper (Cu)	ug/g	21	0.50	9897503
Acid Extractable Lead (Pb)	ug/g	280	1.0	9897503
Acid Extractable Molybdenum (Mo)	ug/g	0.65	0.50	9897503
Acid Extractable Nickel (Ni)	ug/g	14	0.50	9897503
Acid Extractable Selenium (Se)	ug/g	ND	0.50	9897503
Acid Extractable Silver (Ag)	ug/g	ND	0.20	9897503
Acid Extractable Thallium (Tl)	ug/g	0.12	0.050	9897503
Acid Extractable Uranium (U)	ug/g	0.58	0.050	9897503
Acid Extractable Vanadium (V)	ug/g	22	5.0	9897503
Acid Extractable Zinc (Zn)	ug/g	310	5.0	9897503
Acid Extractable Mercury (Hg)	ug/g	0.35	0.050	9897503

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 Job #: C530033
Report Date: 2025/04/10

Lopers & Associates
Client Project #: LOP25-038B
Site Location: 506 KENT
Sampler Initials: LL

SEMI-VOLATILE ORGANICS BY GC-MS (SOIL)

Bureau Veritas ID		APBQ70		APBQ71		APBQ72		APBQ73		
Sampling Date		2025/03/19 10:45		2025/03/19 10:55		2025/03/19 08:35		2025/03/19 08:40		
COC Number		1037833-03-01		1037833-03-01		1037833-03-01		1037833-03-01		
	UNITS	BH8-25-SS2	RDL	BH8-25-SS4	RDL	BH9-25-SS2	RDL	BH9-25-SS3	RDL	QC Batch
Calculated Parameters										
Methylnaphthalene, 2-(1-)	ug/g	0.46	0.071	ND	0.0071	ND	0.071	ND	0.0071	9894511
Polyaromatic Hydrocarbons										
Acenaphthene	ug/g	0.66	0.050	ND	0.0050	0.12	0.050	ND	0.0050	9895929
Acenaphthylene	ug/g	0.17	0.050	ND	0.0050	0.74	0.050	ND	0.0050	9895929
Anthracene	ug/g	1.6	0.050	ND	0.0050	1.3	0.050	ND	0.0050	9895929
Benzo(a)anthracene	ug/g	2.6	0.050	0.0055	0.0050	6.3	0.050	ND	0.0050	9895929
Benzo(a)pyrene	ug/g	2.4	0.050	0.0054	0.0050	6.5	0.050	ND	0.0050	9895929
Benzo(b/j)fluoranthene	ug/g	2.5	0.050	0.0060	0.0050	7.3	0.050	ND	0.0050	9895929
Benzo(g,h,i)perylene	ug/g	1.2	0.050	ND	0.0050	3.8	0.050	ND	0.0050	9895929
Benzo(k)fluoranthene	ug/g	0.88	0.050	ND	0.0050	2.5	0.050	ND	0.0050	9895929
Chrysene	ug/g	2.0	0.050	ND	0.0050	6.0	0.050	ND	0.0050	9895929
Dibenzo(a,h)anthracene	ug/g	0.28	0.050	ND	0.0050	0.80	0.050	ND	0.0050	9895929
Fluoranthene	ug/g	5.7	0.050	0.010	0.0050	13	0.050	ND	0.0050	9895929
Fluorene	ug/g	0.74	0.050	ND	0.0050	0.15	0.050	ND	0.0050	9895929
Indeno(1,2,3-cd)pyrene	ug/g	1.3	0.050	ND	0.0050	4.3	0.050	ND	0.0050	9895929
1-Methylnaphthalene	ug/g	0.18	0.050	ND	0.0050	ND	0.050	ND	0.0050	9895929
2-Methylnaphthalene	ug/g	0.28	0.050	ND	0.0050	ND	0.050	ND	0.0050	9895929
Naphthalene	ug/g	0.71	0.050	ND	0.0050	ND	0.050	ND	0.0050	9895929
Phenanthrene	ug/g	5.1	0.050	0.0053	0.0050	5.2	0.050	ND	0.0050	9895929
Pyrene	ug/g	4.4	0.050	0.0088	0.0050	11	0.050	ND	0.0050	9895929
Surrogate Recovery (%)										
D10-Anthracene	%	88		101		90		98		9895929
D14-Terphenyl (FS)	%	90		87		91		88		9895929
D8-Acenaphthylene	%	99		101		98		102		9895929

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

SEMI-VOLATILE ORGANICS BY GC-MS (SOIL)

Bureau Veritas ID		APBQ75		APBQ76		
Sampling Date		2025/03/19 09:30		2025/03/19		
COC Number		1037833-03-01		1037833-03-01		
	UNITS	BH10-25-SS4	RDL	DUP-2-03/19	RDL	QC Batch
Calculated Parameters						
Methylnaphthalene, 2-(1-)	ug/g	ND	0.0071	0.62	0.071	9894511
Polyaromatic Hydrocarbons						
Acenaphthene	ug/g	ND	0.0050	0.90	0.050	9895929
Acenaphthylene	ug/g	ND	0.0050	0.21	0.050	9895929
Anthracene	ug/g	ND	0.0050	2.3	0.050	9895929
Benzo(a)anthracene	ug/g	ND	0.0050	3.2	0.050	9895929
Benzo(a)pyrene	ug/g	ND	0.0050	2.8	0.050	9895929
Benzo(b/j)fluoranthene	ug/g	ND	0.0050	2.9	0.050	9895929
Benzo(g,h,i)perylene	ug/g	ND	0.0050	1.3	0.050	9895929
Benzo(k)fluoranthene	ug/g	ND	0.0050	0.99	0.050	9895929
Chrysene	ug/g	ND	0.0050	2.5	0.050	9895929
Dibenzo(a,h)anthracene	ug/g	ND	0.0050	0.37	0.050	9895929
Fluoranthene	ug/g	ND	0.0050	7.2	0.050	9895929
Fluorene	ug/g	ND	0.0050	0.93	0.050	9895929
Indeno(1,2,3-cd)pyrene	ug/g	ND	0.0050	1.6	0.050	9895929
1-Methylnaphthalene	ug/g	ND	0.0050	0.24	0.050	9895929
2-Methylnaphthalene	ug/g	ND	0.0050	0.38	0.050	9895929
Naphthalene	ug/g	ND	0.0050	0.88	0.050	9895929
Phenanthrene	ug/g	ND	0.0050	7.0	0.050	9895929
Pyrene	ug/g	ND	0.0050	5.5	0.050	9895929
Surrogate Recovery (%)						
D10-Anthracene	%	99		115		9895929
D14-Terphenyl (FS)	%	87		111		9895929
D8-Acenaphthylene	%	103		116		9895929

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		APBQ70	APBQ71	APBQ72	APBQ73	APBQ75		
Sampling Date		2025/03/19 10:45	2025/03/19 10:55	2025/03/19 08:35	2025/03/19 08:40	2025/03/19 09:30		
COC Number		1037833-03-01	1037833-03-01	1037833-03-01	1037833-03-01	1037833-03-01		
	UNITS	BH8-25-SS2	BH8-25-SS4	BH9-25-SS2	BH9-25-SS3	BH10-25-SS4	RDL	QC Batch
BTEX & F1 Hydrocarbons								
Benzene	ug/g	ND	ND	ND	ND	ND	0.020	9897136
Toluene	ug/g	0.024	ND	ND	ND	ND	0.020	9897136
Ethylbenzene	ug/g	ND	ND	ND	ND	ND	0.020	9897136
o-Xylene	ug/g	0.079	ND	ND	ND	ND	0.020	9897136
p+m-Xylene	ug/g	0.061	ND	ND	ND	ND	0.040	9897136
Total Xylenes	ug/g	0.14	ND	ND	ND	ND	0.040	9897136
F1 (C6-C10)	ug/g	ND	ND	ND	ND	ND	10	9897136
F1 (C6-C10) - BTEX	ug/g	ND	ND	ND	ND	ND	10	9897136
F2-F4 Hydrocarbons								
F2 (C10-C16 Hydrocarbons)	ug/g	14	ND	11	ND	ND	7.0	9896780
F3 (C16-C34 Hydrocarbons)	ug/g	150	ND	200	ND	ND	50	9896780
F4 (C34-C50 Hydrocarbons)	ug/g	76	ND	88	ND	ND	50	9896780
Reached Baseline at C50	ug/g	Yes	Yes	Yes	Yes	Yes		9896780
Surrogate Recovery (%)								
1,4-Difluorobenzene	%	113	112	109	111	111		9897136
4-Bromofluorobenzene	%	91	90	97	90	90		9897136
D10-o-Xylene	%	100	98	101	92	99		9897136
D4-1,2-Dichloroethane	%	106	108	108	108	110		9897136
o-Terphenyl	%	98	99	97	98	98		9896780

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		APBQ76		
Sampling Date		2025/03/19		
COC Number		1037833-03-01		
	UNITS	DUP-2-03/19	RDL	QC Batch
BTEX & F1 Hydrocarbons				
Benzene	ug/g	ND	0.020	9897136
Toluene	ug/g	0.023	0.020	9897136
Ethylbenzene	ug/g	ND	0.020	9897136
o-Xylene	ug/g	0.025	0.020	9897136
p+m-Xylene	ug/g	0.047	0.040	9897136
Total Xylenes	ug/g	0.072	0.040	9897136
F1 (C6-C10)	ug/g	ND	10	9897136
F1 (C6-C10) - BTEX	ug/g	ND	10	9897136
F2-F4 Hydrocarbons				
F2 (C10-C16 Hydrocarbons)	ug/g	14	7.0	9896780
F3 (C16-C34 Hydrocarbons)	ug/g	250	50	9896780
F4 (C34-C50 Hydrocarbons)	ug/g	310	50	9896780
Reached Baseline at C50	ug/g	No		9896780
Surrogate Recovery (%)				
1,4-Difluorobenzene	%	109		9897136
4-Bromofluorobenzene	%	92		9897136
D10-o-Xylene	%	95		9897136
D4-1,2-Dichloroethane	%	107		9897136
o-Terphenyl	%	99		9896780

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

GENERAL COMMENTS

Revised Report [2025/04/18]: Requested additonal analysis for methyl mercury added to samples BH8-25-SS2 and BH9-25-SS2 as per client.
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 APBQ70 [BH8-25-SS2] : PAH ANALYSIS: Due to the sample matrix, sample required dilution. Detection limit was adjusted accordingly.

Sample APBQ72 [BH9-25-SS2] : PAH ANALYSIS: Due to the sample matrix, sample required dilution. Detection limit was adjusted accordingly.

Sample APBQ76 [DUP-2-03/19] : PAH ANALYSIS: Due to the sample matrix, sample required dilution. Detection limit was adjusted accordingly.

Results relate only to the items tested.

Bureau Veritas Job #: C530033
Report Date: 2025/04/10

Lopers & Associates
Client Project #: LOP25-038B
Site Location: 506 KENT
Sampler Initials: LL

QUALITY ASSURANCE REPORT

QA/QC Batch	Init	QC Type	Parameter	Date Analyzed	Value	Recovery	UNITS	QC Limits
9894833	JTS	RPD	Moisture	2025/03/20	0		%	20
9895929	JYO	Matrix Spike	D10-Anthracene	2025/03/22		95	%	50 - 130
			D14-Terphenyl (FS)	2025/03/22		88	%	50 - 130
			D8-Acenaphthylene	2025/03/22		97	%	50 - 130
			Acenaphthene	2025/03/22		91	%	50 - 130
			Acenaphthylene	2025/03/22		95	%	50 - 130
			Anthracene	2025/03/22		101	%	50 - 130
			Benzo(a)anthracene	2025/03/22		100	%	50 - 130
			Benzo(a)pyrene	2025/03/22		95	%	50 - 130
			Benzo(b/j)fluoranthene	2025/03/22		90	%	50 - 130
			Benzo(g,h,i)perylene	2025/03/22		89	%	50 - 130
			Benzo(k)fluoranthene	2025/03/22		80	%	50 - 130
			Chrysene	2025/03/22		99	%	50 - 130
			Dibenzo(a,h)anthracene	2025/03/22		90	%	50 - 130
			Fluoranthene	2025/03/22		96	%	50 - 130
			Fluorene	2025/03/22		92	%	50 - 130
			Indeno(1,2,3-cd)pyrene	2025/03/22		97	%	50 - 130
			1-Methylnaphthalene	2025/03/22		85	%	50 - 130
			2-Methylnaphthalene	2025/03/22		91	%	50 - 130
			Naphthalene	2025/03/22		84	%	50 - 130
			Phenanthrene	2025/03/22		87	%	50 - 130
			Pyrene	2025/03/22		92	%	50 - 130
9895929	JYO	Spiked Blank	D10-Anthracene	2025/03/22		98	%	50 - 130
			D14-Terphenyl (FS)	2025/03/22		85	%	50 - 130
			D8-Acenaphthylene	2025/03/22		95	%	50 - 130
			Acenaphthene	2025/03/22		95	%	50 - 130
			Acenaphthylene	2025/03/22		96	%	50 - 130
			Anthracene	2025/03/22		104	%	50 - 130
			Benzo(a)anthracene	2025/03/22		99	%	50 - 130
			Benzo(a)pyrene	2025/03/22		101	%	50 - 130
			Benzo(b/j)fluoranthene	2025/03/22		100	%	50 - 130
			Benzo(g,h,i)perylene	2025/03/22		105	%	50 - 130
			Benzo(k)fluoranthene	2025/03/22		88	%	50 - 130
			Chrysene	2025/03/22		97	%	50 - 130
			Dibenzo(a,h)anthracene	2025/03/22		99	%	50 - 130
			Fluoranthene	2025/03/22		101	%	50 - 130
			Fluorene	2025/03/22		95	%	50 - 130
			Indeno(1,2,3-cd)pyrene	2025/03/22		109	%	50 - 130
			1-Methylnaphthalene	2025/03/22		89	%	50 - 130
			2-Methylnaphthalene	2025/03/22		94	%	50 - 130
			Naphthalene	2025/03/22		94	%	50 - 130
			Phenanthrene	2025/03/22		93	%	50 - 130
			Pyrene	2025/03/22		97	%	50 - 130
9895929	JYO	Method Blank	D10-Anthracene	2025/03/22		103	%	50 - 130
			D14-Terphenyl (FS)	2025/03/22		90	%	50 - 130
			D8-Acenaphthylene	2025/03/22		98	%	50 - 130
			Acenaphthene	2025/03/22	ND, RDL=0.0050		ug/g	
			Acenaphthylene	2025/03/22	ND, RDL=0.0050		ug/g	
			Anthracene	2025/03/22	ND, RDL=0.0050		ug/g	

QUALITY ASSURANCE REPORT(CONT'D)

QA/QC Batch	Init	QC Type	Parameter	Date Analyzed	Value	Recovery	UNITS	QC Limits
			Benzo(a)anthracene	2025/03/22	ND, RDL=0.0050		ug/g	
			Benzo(a)pyrene	2025/03/22	ND, RDL=0.0050		ug/g	
			Benzo(b/j)fluoranthene	2025/03/22	ND, RDL=0.0050		ug/g	
			Benzo(g,h,i)perylene	2025/03/22	ND, RDL=0.0050		ug/g	
			Benzo(k)fluoranthene	2025/03/22	ND, RDL=0.0050		ug/g	
			Chrysene	2025/03/22	ND, RDL=0.0050		ug/g	
			Dibenzo(a,h)anthracene	2025/03/22	ND, RDL=0.0050		ug/g	
			Fluoranthene	2025/03/22	ND, RDL=0.0050		ug/g	
			Fluorene	2025/03/22	ND, RDL=0.0050		ug/g	
			Indeno(1,2,3-cd)pyrene	2025/03/22	ND, RDL=0.0050		ug/g	
			1-Methylnaphthalene	2025/03/22	ND, RDL=0.0050		ug/g	
			2-Methylnaphthalene	2025/03/22	ND, RDL=0.0050		ug/g	
			Naphthalene	2025/03/22	ND, RDL=0.0050		ug/g	
			Phenanthrene	2025/03/22	ND, RDL=0.0050		ug/g	
			Pyrene	2025/03/22	ND, RDL=0.0050		ug/g	
9895929	JYO	RPD	Acenaphthene	2025/03/22	NC		%	40
			Acenaphthylene	2025/03/22	NC		%	40
			Anthracene	2025/03/22	NC		%	40
			Benzo(a)anthracene	2025/03/22	NC		%	40
			Benzo(a)pyrene	2025/03/22	NC		%	40
			Benzo(b/j)fluoranthene	2025/03/22	NC		%	40
			Benzo(g,h,i)perylene	2025/03/22	NC		%	40
			Benzo(k)fluoranthene	2025/03/22	NC		%	40
			Chrysene	2025/03/22	NC		%	40
			Dibenzo(a,h)anthracene	2025/03/22	NC		%	40
			Fluoranthene	2025/03/22	NC		%	40
			Fluorene	2025/03/22	NC		%	40
			Indeno(1,2,3-cd)pyrene	2025/03/22	NC		%	40
			1-Methylnaphthalene	2025/03/22	NC		%	40
			2-Methylnaphthalene	2025/03/22	NC		%	40
			Naphthalene	2025/03/22	NC		%	40
			Phenanthrene	2025/03/22	NC		%	40
			Pyrene	2025/03/22	NC		%	40
9896334	GTK	Spiked Blank	Available (CaCl2) pH	2025/03/24		99	%	97 - 103
9896334	GTK	RPD	Available (CaCl2) pH	2025/03/24	0.18		%	N/A
9896350	GYA	Matrix Spike	WAD Cyanide (Free)	2025/03/24		98	%	75 - 125
9896350	GYA	Spiked Blank	WAD Cyanide (Free)	2025/03/24		106	%	80 - 120
9896350	GYA	Method Blank	WAD Cyanide (Free)	2025/03/24	ND, RDL=0.01		ug/g	

QUALITY ASSURANCE REPORT(CONT'D)

QA/QC Batch	Init	QC Type	Parameter	Date Analyzed	Value	Recovery	UNITS	QC Limits
9896350	GYA	RPD	WAD Cyanide (Free)	2025/03/24	NC		%	35
9896424	SB5	Matrix Spike	Chromium (VI)	2025/03/24		94	%	70 - 130
9896424	SB5	Spiked Blank	Chromium (VI)	2025/03/24		97	%	80 - 120
9896424	SB5	Method Blank	Chromium (VI)	2025/03/24	ND, RDL=0.18		ug/g	
9896424	SB5	RPD	Chromium (VI)	2025/03/24	NC		%	35
9896780	DN0	Matrix Spike	o-Terphenyl	2025/03/25		99	%	60 - 140
			F2 (C10-C16 Hydrocarbons)	2025/03/25		94	%	60 - 140
			F3 (C16-C34 Hydrocarbons)	2025/03/25		100	%	60 - 140
			F4 (C34-C50 Hydrocarbons)	2025/03/25		95	%	60 - 140
9896780	DN0	Spiked Blank	o-Terphenyl	2025/03/25		99	%	60 - 140
			F2 (C10-C16 Hydrocarbons)	2025/03/25		95	%	80 - 120
			F3 (C16-C34 Hydrocarbons)	2025/03/25		99	%	80 - 120
			F4 (C34-C50 Hydrocarbons)	2025/03/25		94	%	80 - 120
9896780	DN0	Method Blank	o-Terphenyl	2025/03/24		101	%	60 - 140
			F2 (C10-C16 Hydrocarbons)	2025/03/24	ND, RDL=7.0		ug/g	
			F3 (C16-C34 Hydrocarbons)	2025/03/24	ND, RDL=50		ug/g	
			F4 (C34-C50 Hydrocarbons)	2025/03/24	ND, RDL=50		ug/g	
9896780	DN0	RPD	F2 (C10-C16 Hydrocarbons)	2025/03/25	NC		%	30
			F3 (C16-C34 Hydrocarbons)	2025/03/25	NC		%	30
			F4 (C34-C50 Hydrocarbons)	2025/03/25	NC		%	30
9897098	GTK	Spiked Blank	Conductivity	2025/03/25		100	%	90 - 110
9897098	GTK	Method Blank	Conductivity	2025/03/25	ND, RDL=0.002		mS/cm	
9897098	GTK	RPD [APBQ75-01]	Conductivity	2025/03/25	4.2		%	10
9897136	AAI	Matrix Spike	1,4-Difluorobenzene	2025/03/25		102	%	60 - 140
			4-Bromofluorobenzene	2025/03/25		98	%	60 - 140
			D10-o-Xylene	2025/03/25		96	%	60 - 140
			D4-1,2-Dichloroethane	2025/03/25		101	%	60 - 140
			Benzene	2025/03/25		84	%	50 - 140
			Toluene	2025/03/25		89	%	50 - 140
			Ethylbenzene	2025/03/25		135	%	50 - 140
			o-Xylene	2025/03/25		NC	%	50 - 140
			p+m-Xylene	2025/03/25		124	%	50 - 140
			F1 (C6-C10)	2025/03/25		NC	%	60 - 140
9897136	AAI	Spiked Blank	1,4-Difluorobenzene	2025/03/25		106	%	60 - 140
			4-Bromofluorobenzene	2025/03/25		97	%	60 - 140
			D10-o-Xylene	2025/03/25		99	%	60 - 140
			D4-1,2-Dichloroethane	2025/03/25		102	%	60 - 140
			Benzene	2025/03/25		94	%	50 - 140
			Toluene	2025/03/25		91	%	50 - 140
			Ethylbenzene	2025/03/25		103	%	50 - 140
			o-Xylene	2025/03/25		98	%	50 - 140
			p+m-Xylene	2025/03/25		95	%	50 - 140
			F1 (C6-C10)	2025/03/25		103	%	80 - 120
9897136	AAI	Method Blank	1,4-Difluorobenzene	2025/03/25		111	%	60 - 140
			4-Bromofluorobenzene	2025/03/25		89	%	60 - 140
			D10-o-Xylene	2025/03/25		97	%	60 - 140
			D4-1,2-Dichloroethane	2025/03/25		107	%	60 - 140

QUALITY ASSURANCE REPORT(CONT'D)

QA/QC Batch	Init	QC Type	Parameter	Date Analyzed	Value	Recovery	UNITS	QC Limits
			Benzene	2025/03/25	ND, RDL=0.020		ug/g	
			Toluene	2025/03/25	ND, RDL=0.020		ug/g	
			Ethylbenzene	2025/03/25	ND, RDL=0.020		ug/g	
			o-Xylene	2025/03/25	ND, RDL=0.020		ug/g	
			p+m-Xylene	2025/03/25	ND, RDL=0.040		ug/g	
			Total Xylenes	2025/03/25	ND, RDL=0.040		ug/g	
			F1 (C6-C10)	2025/03/25	ND, RDL=10		ug/g	
			F1 (C6-C10) - BTEX	2025/03/25	ND, RDL=10		ug/g	
9897136	AAI	RPD	Benzene	2025/03/25	6.1		%	50
			Toluene	2025/03/25	1.8		%	50
			Ethylbenzene	2025/03/25	2.9		%	50
			o-Xylene	2025/03/25	3.3		%	50
			p+m-Xylene	2025/03/25	4.1		%	50
			Total Xylenes	2025/03/25	3.8		%	50
			F1 (C6-C10)	2025/03/25	6.5		%	30
			F1 (C6-C10) - BTEX	2025/03/25	6.8		%	30
9897295	GR1	Matrix Spike	Hot Water Ext. Boron (B)	2025/03/25		103	%	75 - 125
9897295	GR1	Spiked Blank	Hot Water Ext. Boron (B)	2025/03/25		102	%	75 - 125
9897295	GR1	Method Blank	Hot Water Ext. Boron (B)	2025/03/25	ND, RDL=0.050		ug/g	
9897295	GR1	RPD	Hot Water Ext. Boron (B)	2025/03/25	8.9		%	40
9897503	VIV	Matrix Spike [APBQ72-01]	Acid Extractable Antimony (Sb)	2025/03/25		99	%	75 - 125
			Acid Extractable Arsenic (As)	2025/03/25		111	%	75 - 125
			Acid Extractable Barium (Ba)	2025/03/25		NC	%	75 - 125
			Acid Extractable Beryllium (Be)	2025/03/25		108	%	75 - 125
			Acid Extractable Boron (B)	2025/03/25		104	%	75 - 125
			Acid Extractable Cadmium (Cd)	2025/03/25		108	%	75 - 125
			Acid Extractable Chromium (Cr)	2025/03/25		110	%	75 - 125
			Acid Extractable Cobalt (Co)	2025/03/25		107	%	75 - 125
			Acid Extractable Copper (Cu)	2025/03/25		NC	%	75 - 125
			Acid Extractable Lead (Pb)	2025/03/25		NC	%	75 - 125
			Acid Extractable Molybdenum (Mo)	2025/03/25		105	%	75 - 125
			Acid Extractable Nickel (Ni)	2025/03/25		107	%	75 - 125
			Acid Extractable Selenium (Se)	2025/03/25		110	%	75 - 125
			Acid Extractable Silver (Ag)	2025/03/25		109	%	75 - 125
			Acid Extractable Thallium (Tl)	2025/03/25		105	%	75 - 125
			Acid Extractable Uranium (U)	2025/03/25		108	%	75 - 125
			Acid Extractable Vanadium (V)	2025/03/25		NC	%	75 - 125
			Acid Extractable Zinc (Zn)	2025/03/25		NC	%	75 - 125
			Acid Extractable Mercury (Hg)	2025/03/25		108	%	75 - 125
9897503	VIV	Spiked Blank	Acid Extractable Antimony (Sb)	2025/03/25		104	%	80 - 120
			Acid Extractable Arsenic (As)	2025/03/25		107	%	80 - 120
			Acid Extractable Barium (Ba)	2025/03/25		102	%	80 - 120
			Acid Extractable Beryllium (Be)	2025/03/25		103	%	80 - 120

QUALITY ASSURANCE REPORT(CONT'D)

QA/QC Batch	Init	QC Type	Parameter	Date Analyzed	Value	Recovery	UNITS	QC Limits
			Acid Extractable Boron (B)	2025/03/25		103	%	80 - 120
			Acid Extractable Cadmium (Cd)	2025/03/25		103	%	80 - 120
			Acid Extractable Chromium (Cr)	2025/03/25		101	%	80 - 120
			Acid Extractable Cobalt (Co)	2025/03/25		103	%	80 - 120
			Acid Extractable Copper (Cu)	2025/03/25		101	%	80 - 120
			Acid Extractable Lead (Pb)	2025/03/25		101	%	80 - 120
			Acid Extractable Molybdenum (Mo)	2025/03/25		99	%	80 - 120
			Acid Extractable Nickel (Ni)	2025/03/25		102	%	80 - 120
			Acid Extractable Selenium (Se)	2025/03/25		108	%	80 - 120
			Acid Extractable Silver (Ag)	2025/03/25		104	%	80 - 120
			Acid Extractable Thallium (Tl)	2025/03/25		104	%	80 - 120
			Acid Extractable Uranium (U)	2025/03/25		104	%	80 - 120
			Acid Extractable Vanadium (V)	2025/03/25		101	%	80 - 120
			Acid Extractable Zinc (Zn)	2025/03/25		105	%	80 - 120
			Acid Extractable Mercury (Hg)	2025/03/25		107	%	80 - 120
9897503	VIV	Method Blank	Acid Extractable Antimony (Sb)	2025/03/25	ND, RDL=0.20		ug/g	
			Acid Extractable Arsenic (As)	2025/03/25	ND, RDL=1.0		ug/g	
			Acid Extractable Barium (Ba)	2025/03/25	ND, RDL=0.50		ug/g	
			Acid Extractable Beryllium (Be)	2025/03/25	ND, RDL=0.20		ug/g	
			Acid Extractable Boron (B)	2025/03/25	ND, RDL=5.0		ug/g	
			Acid Extractable Cadmium (Cd)	2025/03/25	ND, RDL=0.10		ug/g	
			Acid Extractable Chromium (Cr)	2025/03/25	ND, RDL=1.0		ug/g	
			Acid Extractable Cobalt (Co)	2025/03/25	ND, RDL=0.10		ug/g	
			Acid Extractable Copper (Cu)	2025/03/25	ND, RDL=0.50		ug/g	
			Acid Extractable Lead (Pb)	2025/03/25	ND, RDL=1.0		ug/g	
			Acid Extractable Molybdenum (Mo)	2025/03/25	ND, RDL=0.50		ug/g	
			Acid Extractable Nickel (Ni)	2025/03/25	ND, RDL=0.50		ug/g	
			Acid Extractable Selenium (Se)	2025/03/25	ND, RDL=0.50		ug/g	
			Acid Extractable Silver (Ag)	2025/03/25	ND, RDL=0.20		ug/g	
			Acid Extractable Thallium (Tl)	2025/03/25	ND, RDL=0.050		ug/g	
			Acid Extractable Uranium (U)	2025/03/25	ND, RDL=0.050		ug/g	
			Acid Extractable Vanadium (V)	2025/03/25	ND, RDL=5.0		ug/g	
			Acid Extractable Zinc (Zn)	2025/03/25	ND, RDL=5.0		ug/g	
			Acid Extractable Mercury (Hg)	2025/03/25	ND, RDL=0.050		ug/g	
9897503	VIV	RPD [APBQ72-01]	Acid Extractable Antimony (Sb)	2025/03/25	11		%	30

QUALITY ASSURANCE REPORT(CONT'D)

QA/QC Batch	Init	QC Type	Parameter	Date Analyzed	Value	Recovery	UNITS	QC Limits
			Acid Extractable Arsenic (As)	2025/03/25	5.8		%	30
			Acid Extractable Barium (Ba)	2025/03/25	10		%	30
			Acid Extractable Beryllium (Be)	2025/03/25	1.9		%	30
			Acid Extractable Boron (B)	2025/03/25	NC		%	30
			Acid Extractable Cadmium (Cd)	2025/03/25	6.4		%	30
			Acid Extractable Chromium (Cr)	2025/03/25	5.2		%	30
			Acid Extractable Cobalt (Co)	2025/03/25	1.2		%	30
			Acid Extractable Copper (Cu)	2025/03/25	3.7		%	30
			Acid Extractable Lead (Pb)	2025/03/25	14		%	30
			Acid Extractable Molybdenum (Mo)	2025/03/25	0.12		%	30
			Acid Extractable Nickel (Ni)	2025/03/25	2.7		%	30
			Acid Extractable Selenium (Se)	2025/03/25	6.0		%	30
			Acid Extractable Silver (Ag)	2025/03/25	NC		%	30
			Acid Extractable Thallium (Tl)	2025/03/25	6.7		%	30
			Acid Extractable Uranium (U)	2025/03/25	2.1		%	30
			Acid Extractable Vanadium (V)	2025/03/25	5.4		%	30
			Acid Extractable Zinc (Zn)	2025/03/25	2.9		%	30
			Acid Extractable Mercury (Hg)	2025/03/25	8.8		%	30
9908035	éOT	Matrix Spike	Total (Wet Wt) Methyl Mercury	2025/04/09		72 (1)	%	80 - 120
9908035	éOT	QC Standard	Total (Wet Wt) Methyl Mercury	2025/04/09		98	%	N/A
9908035	éOT	Spiked Blank	Total (Wet Wt) Methyl Mercury	2025/04/09		97	%	80 - 120
9908035	éOT	Method Blank	Total (Wet Wt) Methyl Mercury	2025/04/09	ND, RDL=0.050		ng/g	
9908037	IPO	Method Blank	Moisture-Subcontracted	2025/03/26	ND, RDL=0.30		%	
9908037	IPO	RPD [APBQ74-01]	Moisture-Subcontracted	2025/03/26	0.55		%	20
9908039	IPO	Method Blank	Moisture-Subcontracted	2025/04/02	ND, RDL=0.30		%	

N/A = Not Applicable

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

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

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

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

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

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

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

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

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

VALIDATION SIGNATURE PAGE

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

Cristina Carriere

Cristina Carriere, Senior Scientific Specialist

David Huang, BBY Scientific Specialist

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

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

C530033
2025/03/19 13:00

Page of

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

CHAIN OF CUSTODY RECORD

INVOICE TO:		REPORT TO:		PROJECT INFORMATION:		Laboratory Use Only:	
Company Name:	#39509 Lopers & Associates	Company Name:		Quotation #:	C51005	Bureau Veritas Job #:	Bottle Order #:
Attention:	Alisha Sullivan	Attention:	Luke Lopers	P.O. #:			1037833
Address:	30 Lansfield Way	Address:		Project:	506 Kent S		
	Ottawa ON K2G 3V8			Project Name:	LOP25-038B	COC #:	Project Manager:
Tel:	(613) 327-9073 Fax:	Tel:	Fax:	Site #:		C#1037833-03-01	Katherine Szozda
Email:	Alisha.Sullivan@bureauveritas.com	Email:	Luke@lopers.ca	Sampled By:	L.Lopers		

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

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

Other Regulations
- ☐ CCME ☐ Sanitary Sewer Bylaw
- ☐ Reg 558. ☐ Storm Sewer Bylaw
- ☐ MISA Municipality ___
- ☐ PWQO ☐ Reg 406 Table ___
- ☐ Other ___

Special Instructions

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

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

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

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

	Sample Barcode Label	Sample (Location) Identification	Date Sampled	Time Sampled	Matrix	Field Filtered (please circle): Metals / Hg / Cr VI	O.Reg 153 PHCs, BTEX/F1-F4	O.Reg 153 PAHs	O.Reg 153 Metals & Inorganics Pkg	Methyl Mercury in Sediment/Soil - Wet Wt	Sieve, 75um	O.Reg 558 TCLP Inorganics Package	O.Reg 558 TCLP Semi-Volatile Organics	Igni ability of a Sample			# of Bottles	Comments
1		BH8-25-SS2	Mar 19/25	10:45AM	S		X	X	X								4	
2		BH8-25-SS4	Mar 19/25	10:55AM	S		X	X	X								4	
3		BH9-25-SS2	Mar 19/25	8:35AM	S		X	X	X								4	
4		BH9-25-SS3	Mar 19/25	8:40AM	S		X	X	X								4	
5		BH10-25-SS2	↓	9:20AM	S					X							1	
6		BH10-25-SS4		9:30AM	S		X	X	X								4	
7		DUP-2-03/19	↓	-	S		X	X	X								4	
8																		
9																		
10																		

NONT-2025-03-4016

Received in Ottawa

RELINQUISHED BY: (Signature/Print)	Date: (YY/MM/DD)	Time	RECEIVED BY: (Signature/Print)	Date: (YY/MM/DD)	Time	# jars used and not submitted
Luke Lopers	25/03/19		Samantha Santiago ASA	2025/03/19	1300	
			Alisha Sullivan	25/03/20	07:20	

Laboratory Use Only					
Time Sensitive	Temperature (°C) on Recei	14,16,15	Ice	Custody Seal Present	Yes
				Intact	No ✓

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

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

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

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

White: Bureau Veritas Yellow: Client

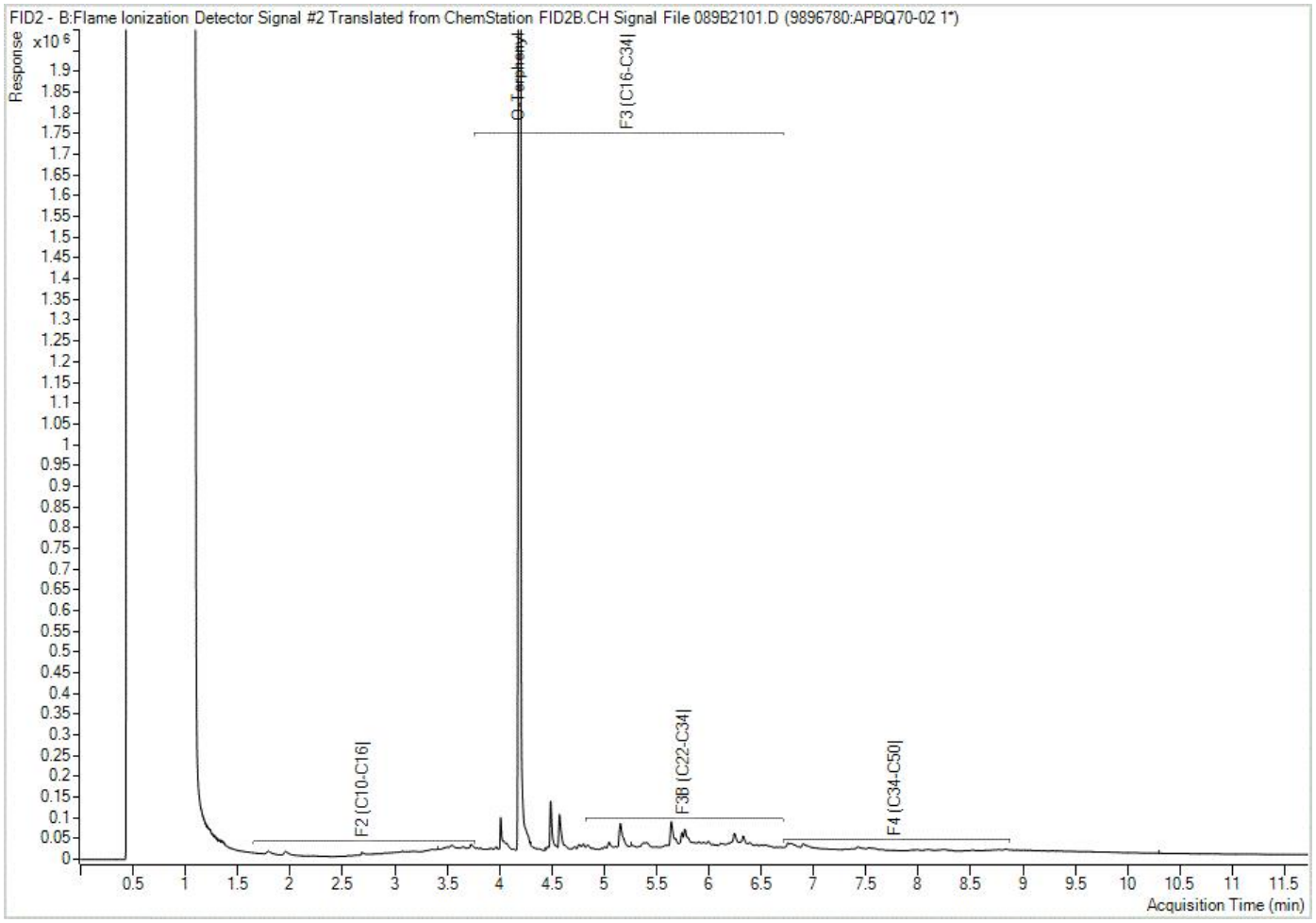
4/4/5

Bureau Veritas Canada (2019) Inc.

Bureau Veritas Job #: C530033
Report Date: 2025/04/10
Bureau Veritas Sample: APBQ70

Lopers & Associates
Client Project #: LOP25-038B
Project name: 506 KENT
Client ID: BH8-25-SS2

Petroleum Hydrocarbons F2-F4 in Soil Chromatogram

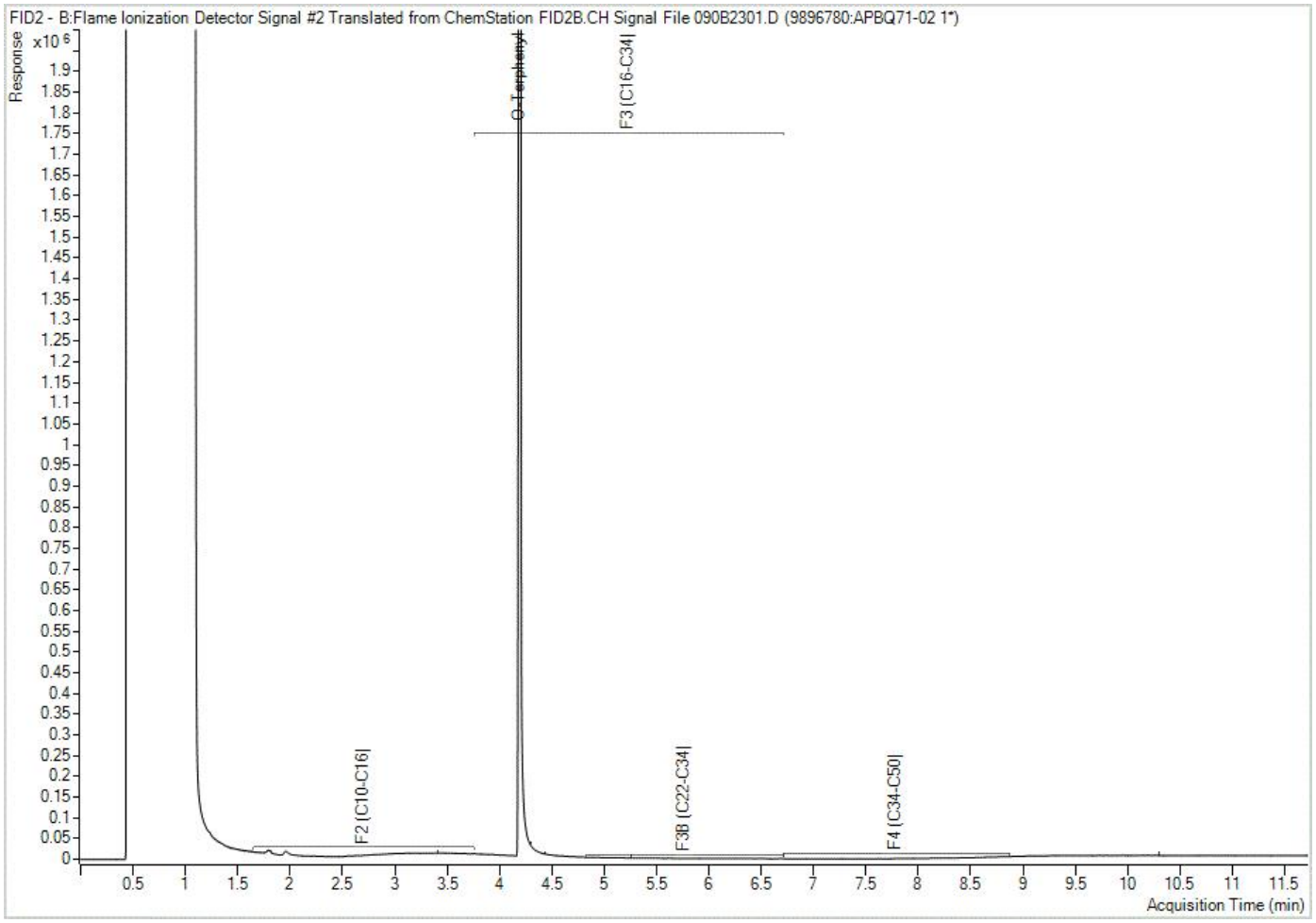


Note: This information is provided for reference purposes only. Should detailed chemist interpretation or fingerprinting be required, please contact the laboratory.

Bureau Veritas Job #: C530033
Report Date: 2025/04/10
Bureau Veritas Sample: APBQ71

Lopers & Associates
Client Project #: LOP25-038B
Project name: 506 KENT
Client ID: BH8-25-SS4

Petroleum Hydrocarbons F2-F4 in Soil Chromatogram

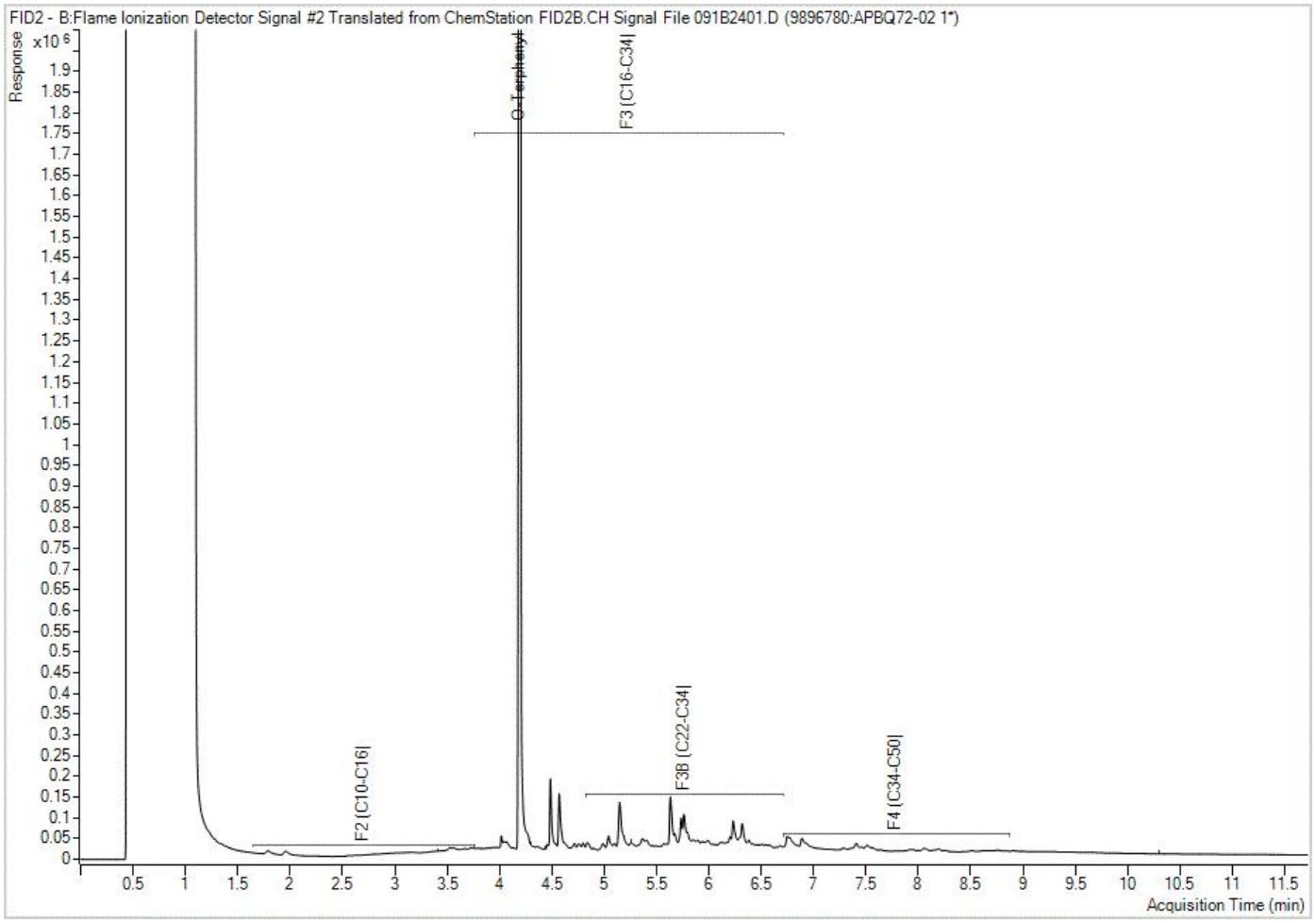


Note: This information is provided for reference purposes only. Should detailed chemist interpretation or fingerprinting be required, please contact the laboratory.

Bureau Veritas Job #: C530033
Report Date: 2025/04/10
Bureau Veritas Sample: APBQ72

Lopers & Associates
Client Project #: LOP25-038B
Project name: 506 KENT
Client ID: BH9-25-SS2

Petroleum Hydrocarbons F2-F4 in Soil Chromatogram

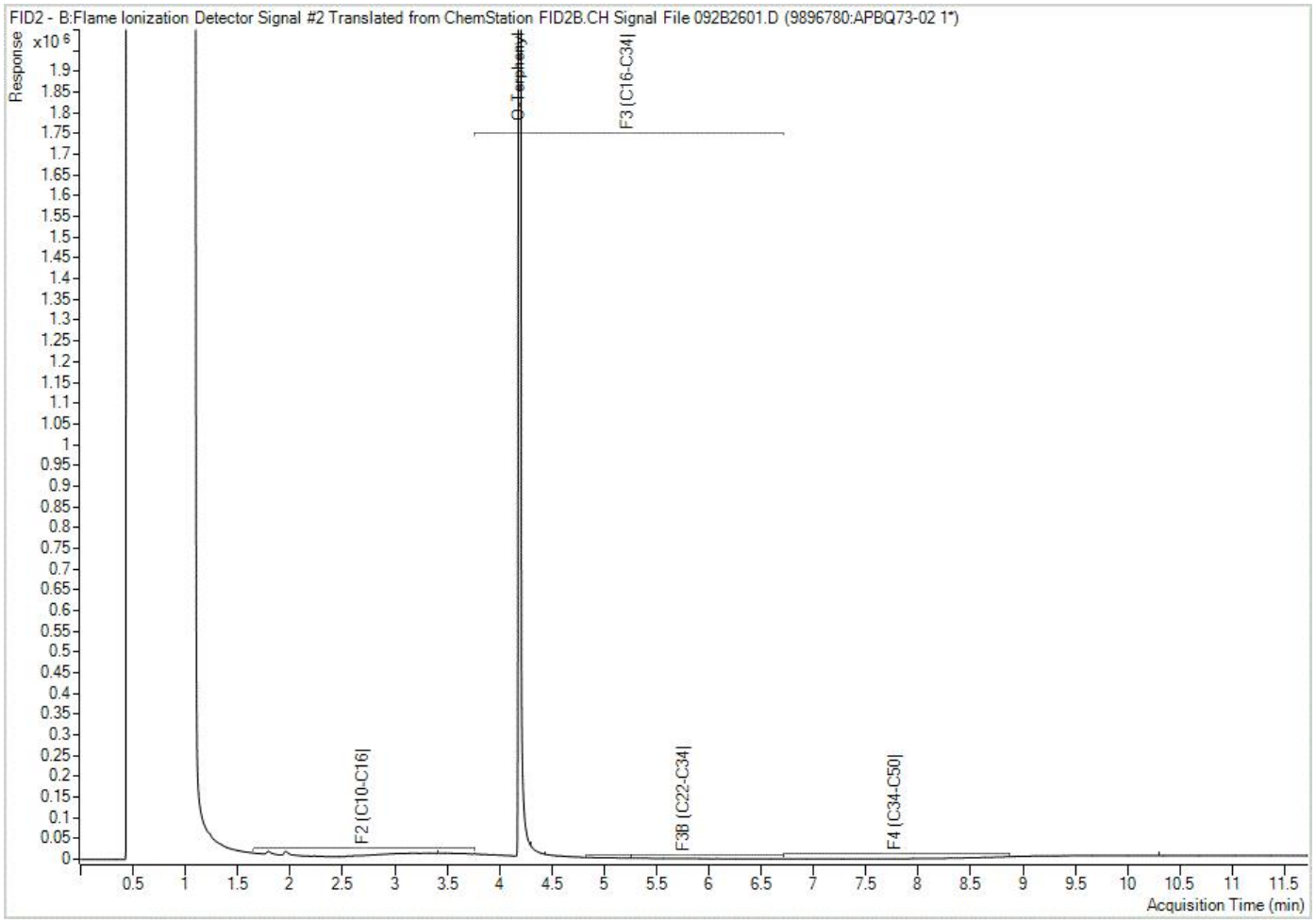


Note: This information is provided for reference purposes only. Should detailed chemist interpretation or fingerprinting be required, please contact the laboratory.

Bureau Veritas Job #: C530033
Report Date: 2025/04/10
Bureau Veritas Sample: APBQ73

Lopers & Associates
Client Project #: LOP25-038B
Project name: 506 KENT
Client ID: BH9-25-SS3

Petroleum Hydrocarbons F2-F4 in Soil Chromatogram

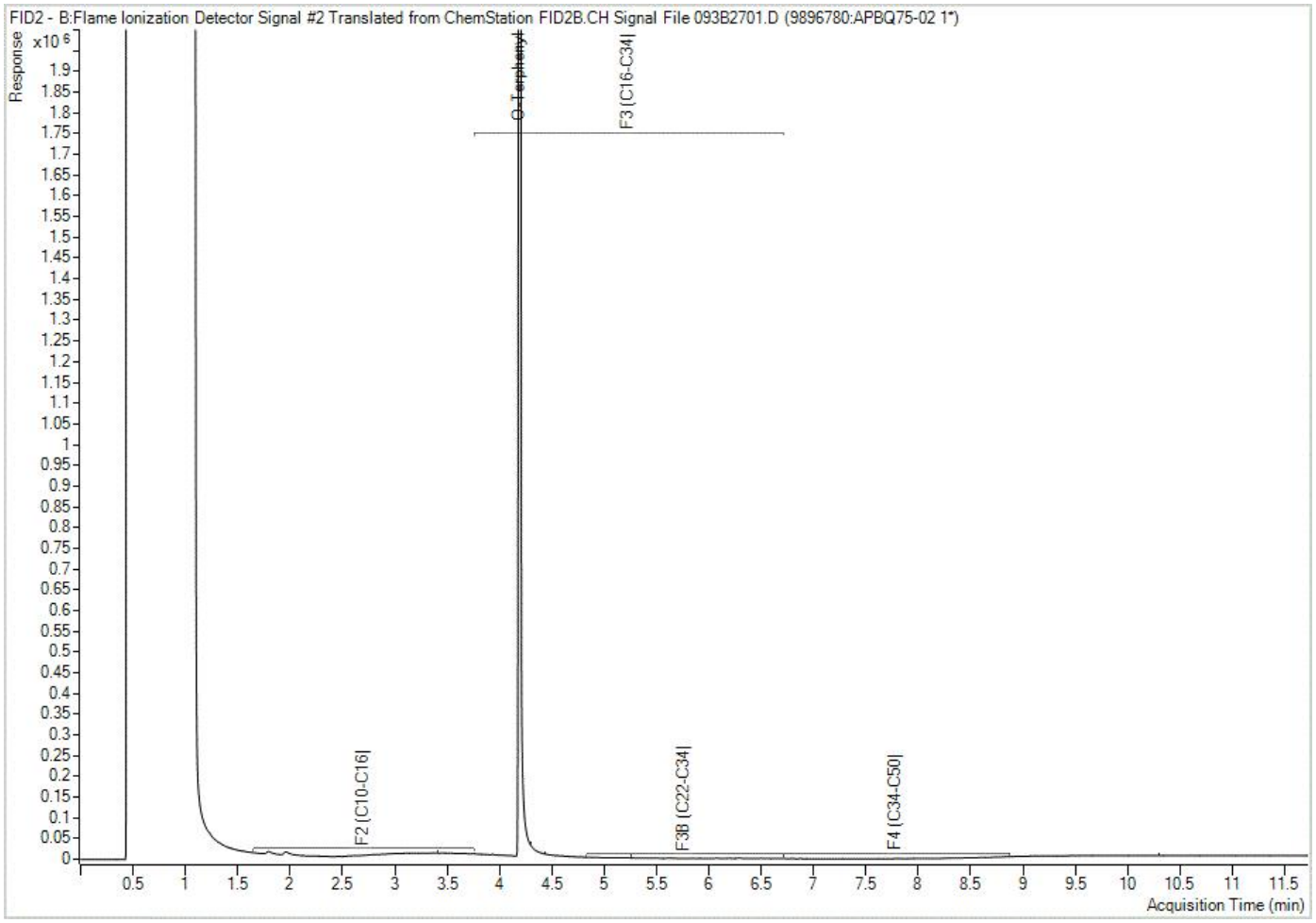


Note: This information is provided for reference purposes only. Should detailed chemist interpretation or fingerprinting be required, please contact the laboratory.

Bureau Veritas Job #: C530033
Report Date: 2025/04/10
Bureau Veritas Sample: APBQ75

Lopers & Associates
Client Project #: LOP25-038B
Project name: 506 KENT
Client ID: BH10-25-SS4

Petroleum Hydrocarbons F2-F4 in Soil Chromatogram

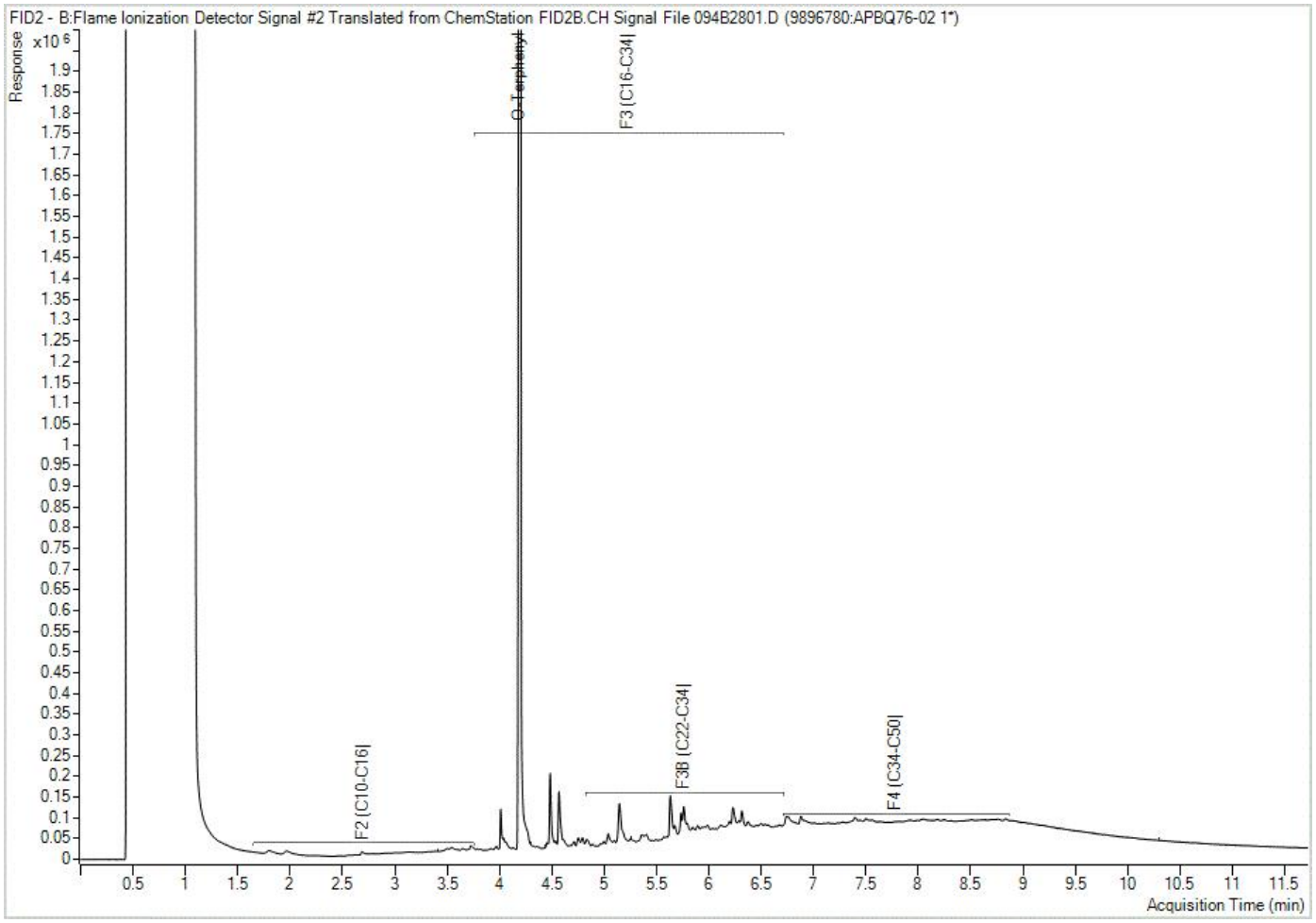


Note: This information is provided for reference purposes only. Should detailed chemist interpretation or fingerprinting be required, please contact the laboratory.

Bureau Veritas Job #: C530033
Report Date: 2025/04/10
Bureau Veritas Sample: APBQ76

Lopers & Associates
Client Project #: LOP25-038B
Project name: 506 KENT
Client ID: DUP-2-03/19

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 #: LOP25-038B
Your C.O.C. #: C#1038707-01-01

Attention: Luke Lopers

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

Report Date: 2025/04/01
Report #: R8512581
Version: 1 - Final

CERTIFICATE OF ANALYSIS

BUREAU VERITAS JOB #: C533253
Received: 2025/03/26, 09:52

Sample Matrix: Ground Water
Samples Received: 5

Analyses	Quantity	Date Extracted	Date Analyzed	Laboratory Method	Analytical Method
Methylnaphthalene Sum (1)	4	N/A	2025/03/30	CAM SOP-00301	EPA 8270D m
1,3-Dichloropropene Sum (1)	1	N/A	2025/03/29		EPA 8260C m
Chloride by Automated Colourimetry (1)	4	N/A	2025/03/31	CAM SOP-00463	SM 24 4500-Cl E m
Chromium (VI) in Water (1)	4	N/A	2025/03/28	CAM SOP-00436	EPA 7199 m
Free (WAD) Cyanide (1)	4	N/A	2025/03/28	CAM SOP-00457	OMOE E3015 m
Petroleum Hydro. CCME F1 & BTEX in Water (1)	4	N/A	2025/03/31	CAM SOP-00315	CCME PHC-CWS m
Petroleum Hydrocarbons F2-F4 in Water (1, 2)	4	2025/03/29	2025/03/29	CAM SOP-00316	CCME PHC-CWS m
Mercury (1)	4	2025/03/31	2025/03/31	CAM SOP-00453	EPA 7470A m
Dissolved Metals by ICPMS (1)	4	N/A	2025/03/28	CAM SOP-00447	EPA 6020B m
PAH Compounds in Water by GC/MS (SIM) (1)	4	2025/03/29	2025/03/29	CAM SOP-00318	EPA 8270E
Volatile Organic Compounds in Water (1)	1	N/A	2025/03/28	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.

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

Your Project #: LOP25-038B
Your C.O.C. #: C#1038707-01-01

Attention: Luke Lopers

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

Report Date: 2025/04/01
Report #: R8512581
Version: 1 - Final

CERTIFICATE OF ANALYSIS

BUREAU VERITAS JOB #: C533253

Received: 2025/03/26, 09:52

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

Bureau Veritas Job #: C533253
Report Date: 2025/04/01

Lopers & Associates
Client Project #: LOP25-038B
Sampler Initials: LL

RESULTS OF ANALYSES OF GROUND WATER

Bureau Veritas ID		APHM31	APHM32		APHM33	APHM34		
Sampling Date		2025/03/25 10:45	2025/03/25 10:00		2025/03/25 11:30	2025/03/25		
COC Number		C#1038707-01-01	C#1038707-01-01		C#1038707-01-01	C#1038707-01-01		
	UNITS	**BH6-25-GW1**	**BH7-25-GW1**	**RDL**	**BH8-25-GW1**	**DUP-1-03/25**	**RDL**	**QC Batch**
Inorganics								
WAD Cyanide (Free)	ug/L	ND	ND	1	ND	ND	1	9899963
Dissolved Chloride (Cl-)	mg/L	290	310	4.0	450	430	5.0	9900803

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

ELEMENTS BY ATOMIC SPECTROSCOPY (GROUND WATER)

Bureau Veritas ID		APHM31	APHM32	APHM33	APHM34		
Sampling Date		2025/03/25 10:45	2025/03/25 10:00	2025/03/25 11:30	2025/03/25		
COC Number		C#1038707-01-01	C#1038707-01-01	C#1038707-01-01	C#1038707-01-01		
	UNITS	BH6-25-GW1	BH7-25-GW1	BH8-25-GW1	DUP-1-03/25	RDL	QC Batch
Metals							
Chromium (VI)	ug/L	ND	ND	ND	ND	0.50	9900151
Mercury (Hg)	ug/L	ND	ND	ND	ND	0.10	9901333
Dissolved Antimony (Sb)	ug/L	2.2	1.3	ND	ND	0.50	9899996
Dissolved Arsenic (As)	ug/L	1.5	ND	ND	ND	1.0	9899996
Dissolved Barium (Ba)	ug/L	210	120	170	170	2.0	9899996
Dissolved Beryllium (Be)	ug/L	ND	ND	ND	ND	0.40	9899996
Dissolved Boron (B)	ug/L	100	95	91	91	10	9899996
Dissolved Cadmium (Cd)	ug/L	0.15	ND	ND	ND	0.090	9899996
Dissolved Chromium (Cr)	ug/L	ND	ND	ND	ND	5.0	9899996
Dissolved Cobalt (Co)	ug/L	0.77	ND	0.84	0.88	0.50	9899996
Dissolved Copper (Cu)	ug/L	6.8	1.2	ND	ND	0.90	9899996
Dissolved Lead (Pb)	ug/L	6.2	ND	ND	ND	0.50	9899996
Dissolved Molybdenum (Mo)	ug/L	8.3	1.6	4.7	4.4	0.50	9899996
Dissolved Nickel (Ni)	ug/L	2.6	1.6	1.8	2.2	1.0	9899996
Dissolved Selenium (Se)	ug/L	2.3	ND	ND	ND	2.0	9899996
Dissolved Silver (Ag)	ug/L	ND	ND	ND	ND	0.090	9899996
Dissolved Sodium (Na)	ug/L	300000	210000	390000	400000	100	9899996
Dissolved Thallium (Tl)	ug/L	ND	ND	ND	ND	0.050	9899996
Dissolved Uranium (U)	ug/L	15	4.2	3.2	3.2	0.10	9899996
Dissolved Vanadium (V)	ug/L	3.7	ND	0.82	0.58	0.50	9899996
Dissolved Zinc (Zn)	ug/L	13	ND	ND	ND	5.0	9899996

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

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

Bureau Veritas ID		APHM31	APHM32		APHM33		APHM34		
Sampling Date		2025/03/25 10:45	2025/03/25 10:00		2025/03/25 11:30		2025/03/25		
COC Number		C#1038707-01-01	C#1038707-01-01		C#1038707-01-01		C#1038707-01-01		
	UNITS	BH6-25-GW1	BH7-25-GW1	RDL	BH8-25-GW1	RDL	DUP-1-03/25	RDL	QC Batch
Calculated Parameters									
Methylnaphthalene, 2-(1-)	ug/L	ND	ND	0.071	ND	0.071	ND	0.071	9899221
Polyaromatic Hydrocarbons									
Acenaphthene	ug/L	ND	ND	0.050	0.37	0.050	0.34	0.050	9900748
Acenaphthylene	ug/L	ND	ND	0.050	ND	0.050	ND	0.050	9900748
Anthracene	ug/L	ND	ND	0.050	ND	0.050	ND	0.050	9900748
Benzo(a)anthracene	ug/L	ND	ND	0.050	ND	0.050	ND	0.050	9900748
Benzo(a)pyrene	ug/L	0.046	ND	0.0090	ND	0.0090	ND	0.0090	9900748
Benzo(b/j)fluoranthene	ug/L	0.057	ND	0.050	ND	0.050	ND	0.050	9900748
Benzo(g,h,i)perylene	ug/L	ND	ND	0.050	ND	0.050	ND	0.050	9900748
Benzo(k)fluoranthene	ug/L	ND	ND	0.050	ND	0.050	ND	0.050	9900748
Chrysene	ug/L	ND	ND	0.050	ND	0.050	ND	0.050	9900748
Dibenzo(a,h)anthracene	ug/L	ND	ND	0.050	ND	0.050	ND	0.050	9900748
Fluoranthene	ug/L	0.13	ND	0.050	0.090	0.050	0.090	0.050	9900748
Fluorene	ug/L	ND	ND	0.050	ND (1)	0.060	ND	0.050	9900748
Indeno(1,2,3-cd)pyrene	ug/L	ND	ND	0.050	ND	0.050	ND	0.050	9900748
1-Methylnaphthalene	ug/L	ND	ND	0.050	ND	0.050	ND	0.050	9900748
2-Methylnaphthalene	ug/L	ND	ND	0.050	ND	0.050	ND	0.050	9900748
Naphthalene	ug/L	0.056	ND	0.050	ND	0.050	ND	0.050	9900748
Phenanthrene	ug/L	0.073	0.089	0.030	0.16	0.030	0.16	0.030	9900748
Pyrene	ug/L	0.12	ND	0.050	0.067	0.050	0.068	0.050	9900748
Surrogate Recovery (%)									
D10-Anthracene	%	109	108		108		106		9900748
D14-Terphenyl (FS)	%	99	108		104		106		9900748
D8-Acenaphthylene	%	97	97		98		97		9900748

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.

VOLATILE ORGANICS BY GC/MS (GROUND WATER)

Bureau Veritas ID		APHM35		
Sampling Date		2025/03/25		
COC Number		C#1038707-01-01		
	UNITS	**TRIP BLANK**	**RDL**	**QC Batch**
Calculated Parameters				
1,3-Dichloropropene (cis+trans)	ug/L	ND	0.50	9899115
Volatile Organics				
Acetone (2-Propanone)	ug/L	ND	10	9899455
Benzene	ug/L	ND	0.20	9899455
Bromodichloromethane	ug/L	ND	0.50	9899455
Bromoform	ug/L	ND	1.0	9899455
Bromomethane	ug/L	ND	0.50	9899455
Carbon Tetrachloride	ug/L	ND	0.19	9899455
Chlorobenzene	ug/L	ND	0.20	9899455
Chloroform	ug/L	ND	0.20	9899455
Dibromochloromethane	ug/L	ND	0.50	9899455
1,2-Dichlorobenzene	ug/L	ND	0.40	9899455
1,3-Dichlorobenzene	ug/L	ND	0.40	9899455
1,4-Dichlorobenzene	ug/L	ND	0.40	9899455
Dichlorodifluoromethane (FREON 12)	ug/L	ND	1.0	9899455
1,1-Dichloroethane	ug/L	ND	0.20	9899455
1,2-Dichloroethane	ug/L	ND	0.49	9899455
1,1-Dichloroethylene	ug/L	ND	0.20	9899455
cis-1,2-Dichloroethylene	ug/L	ND	0.50	9899455
trans-1,2-Dichloroethylene	ug/L	ND	0.50	9899455
1,2-Dichloropropane	ug/L	ND	0.20	9899455
cis-1,3-Dichloropropene	ug/L	ND	0.30	9899455
trans-1,3-Dichloropropene	ug/L	ND	0.40	9899455
Ethylbenzene	ug/L	ND	0.20	9899455
Ethylene Dibromide	ug/L	ND	0.19	9899455
Hexane	ug/L	ND	1.0	9899455
Methylene Chloride(Dichloromethane)	ug/L	ND	2.0	9899455
Methyl Ethyl Ketone (2-Butanone)	ug/L	ND	10	9899455
Methyl Isobutyl Ketone	ug/L	ND	5.0	9899455
Methyl t-butyl ether (MTBE)	ug/L	ND	0.50	9899455
Styrene	ug/L	ND	0.40	9899455

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		APHM35		
Sampling Date		2025/03/25		
COC Number		C#1038707-01-01		
	UNITS	**TRIP BLANK**	**RDL**	**QC Batch**
1,1,1,2-Tetrachloroethane	ug/L	ND	0.50	9899455
1,1,2,2-Tetrachloroethane	ug/L	ND	0.40	9899455
Tetrachloroethylene	ug/L	ND	0.20	9899455
Toluene	ug/L	ND	0.20	9899455
1,1,1-Trichloroethane	ug/L	ND	0.20	9899455
1,1,2-Trichloroethane	ug/L	ND	0.40	9899455
Trichloroethylene	ug/L	ND	0.20	9899455
Trichlorofluoromethane (FREON 11)	ug/L	ND	0.50	9899455
Vinyl Chloride	ug/L	ND	0.20	9899455
p+m-Xylene	ug/L	ND	0.20	9899455
o-Xylene	ug/L	ND	0.20	9899455
Total Xylenes	ug/L	ND	0.20	9899455
Surrogate Recovery (%)				
4-Bromofluorobenzene	%	104		9899455
D4-1,2-Dichloroethane	%	115		9899455
D8-Toluene	%	93		9899455

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

PETROLEUM HYDROCARBONS (CCME)

Bureau Veritas ID		APHM31	APHM32	APHM33	APHM34		
Sampling Date		2025/03/25 10:45	2025/03/25 10:00	2025/03/25 11:30	2025/03/25		
COC Number		C#1038707-01-01	C#1038707-01-01	C#1038707-01-01	C#1038707-01-01		
	UNITS	BH6-25-GW1	BH7-25-GW1	BH8-25-GW1	DUP-1-03/25	RDL	QC Batch
BTEX & F1 Hydrocarbons							
Benzene	ug/L	ND	ND	ND	ND	0.20	9901485
Toluene	ug/L	0.72	ND	0.33	0.32	0.20	9901485
Ethylbenzene	ug/L	ND	ND	ND	ND	0.20	9901485
o-Xylene	ug/L	ND	ND	ND	ND	0.20	9901485
p+m-Xylene	ug/L	ND	ND	ND	ND	0.40	9901485
Total Xylenes	ug/L	ND	ND	ND	ND	0.40	9901485
F1 (C6-C10)	ug/L	ND	ND	ND	ND	25	9901485
F1 (C6-C10) - BTEX	ug/L	ND	ND	ND	ND	25	9901485
F2-F4 Hydrocarbons							
F2 (C10-C16 Hydrocarbons)	ug/L	ND	ND	130	140	90	9900750
F3 (C16-C34 Hydrocarbons)	ug/L	ND	ND	ND	ND	200	9900750
F4 (C34-C50 Hydrocarbons)	ug/L	ND	ND	ND	ND	200	9900750
Reached Baseline at C50	ug/L	Yes	Yes	Yes	Yes		9900750
Surrogate Recovery (%)							
1,4-Difluorobenzene	%	94	96	100	100		9901485
4-Bromofluorobenzene	%	97	94	96	99		9901485
D10-o-Xylene	%	99	111	102	78		9901485
D4-1,2-Dichloroethane	%	96	97	97	97		9901485
o-Terphenyl	%	106	106	104	104		9900750

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

Results relate only to the items tested.

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

QUALITY ASSURANCE REPORT

QA/QC Batch	Init	QC Type	Parameter	Date Analyzed	Value	Recovery	UNITS	QC Limits
9899455	KH2	Matrix Spike	4-Bromofluorobenzene	2025/03/28		105	%	70 - 130
			D4-1,2-Dichloroethane	2025/03/28		116	%	70 - 130
			D8-Toluene	2025/03/28		94	%	70 - 130
			Acetone (2-Propanone)	2025/03/28		102	%	60 - 140
			Benzene	2025/03/28		95	%	70 - 130
			Bromodichloromethane	2025/03/28		100	%	70 - 130
			Bromoform	2025/03/28		114	%	70 - 130
			Bromomethane	2025/03/28		98	%	60 - 140
			Carbon Tetrachloride	2025/03/28		112	%	70 - 130
			Chlorobenzene	2025/03/28		96	%	70 - 130
			Chloroform	2025/03/28		104	%	70 - 130
			Dibromochloromethane	2025/03/28		109	%	70 - 130
			1,2-Dichlorobenzene	2025/03/28		102	%	70 - 130
			1,3-Dichlorobenzene	2025/03/28		100	%	70 - 130
			1,4-Dichlorobenzene	2025/03/28		102	%	70 - 130
			Dichlorodifluoromethane (FREON 12)	2025/03/28		90	%	60 - 140
			1,1-Dichloroethane	2025/03/28		90	%	70 - 130
			1,2-Dichloroethane	2025/03/28		118	%	70 - 130
			1,1-Dichloroethylene	2025/03/28		93	%	70 - 130
			cis-1,2-Dichloroethylene	2025/03/28		102	%	70 - 130
			trans-1,2-Dichloroethylene	2025/03/28		93	%	70 - 130
			1,2-Dichloropropane	2025/03/28		89	%	70 - 130
			cis-1,3-Dichloropropene	2025/03/28		97	%	70 - 130
			trans-1,3-Dichloropropene	2025/03/28		112	%	70 - 130
			Ethylbenzene	2025/03/28		94	%	70 - 130
			Ethylene Dibromide	2025/03/28		103	%	70 - 130
			Hexane	2025/03/28		91	%	70 - 130
			Methylene Chloride(Dichloromethane)	2025/03/28		95	%	70 - 130
			Methyl Ethyl Ketone (2-Butanone)	2025/03/28		95	%	60 - 140
			Methyl Isobutyl Ketone	2025/03/28		88	%	70 - 130
			Methyl t-butyl ether (MTBE)	2025/03/28		98	%	70 - 130
			Styrene	2025/03/28		97	%	70 - 130
			1,1,1,2-Tetrachloroethane	2025/03/28		110	%	70 - 130
			1,1,2,2-Tetrachloroethane	2025/03/28		92	%	70 - 130
			Tetrachloroethylene	2025/03/28		99	%	70 - 130
			Toluene	2025/03/28		91	%	70 - 130
			1,1,1-Trichloroethane	2025/03/28		104	%	70 - 130
			1,1,2-Trichloroethane	2025/03/28		100	%	70 - 130
			Trichloroethylene	2025/03/28		103	%	70 - 130
			Trichlorofluoromethane (FREON 11)	2025/03/28		103	%	70 - 130
			Vinyl Chloride	2025/03/28		84	%	70 - 130
			p+m-Xylene	2025/03/28		96	%	70 - 130
			o-Xylene	2025/03/28		100	%	70 - 130
9899455	KH2	Spiked Blank	4-Bromofluorobenzene	2025/03/28		105	%	70 - 130
			D4-1,2-Dichloroethane	2025/03/28		107	%	70 - 130
			D8-Toluene	2025/03/28		96	%	70 - 130
			Acetone (2-Propanone)	2025/03/28		91	%	60 - 140
			Benzene	2025/03/28		96	%	70 - 130
			Bromodichloromethane	2025/03/28		98	%	70 - 130
			Bromoform	2025/03/28		107	%	70 - 130
			Bromomethane	2025/03/28		95	%	60 - 140
			Carbon Tetrachloride	2025/03/28		115	%	70 - 130
			Chlorobenzene	2025/03/28		97	%	70 - 130
			Chloroform	2025/03/28		103	%	70 - 130

QUALITY ASSURANCE REPORT(CONT'D)

QA/QC Batch	Init	QC Type	Parameter	Date Analyzed	Value	Recovery	UNITS	QC Limits
			Dibromochloromethane	2025/03/28		105	%	70 - 130
			1,2-Dichlorobenzene	2025/03/28		103	%	70 - 130
			1,3-Dichlorobenzene	2025/03/28		103	%	70 - 130
			1,4-Dichlorobenzene	2025/03/28		104	%	70 - 130
			Dichlorodifluoromethane (FREON 12)	2025/03/28		91	%	60 - 140
			1,1-Dichloroethane	2025/03/28		89	%	70 - 130
			1,2-Dichloroethane	2025/03/28		111	%	70 - 130
			1,1-Dichloroethylene	2025/03/28		94	%	70 - 130
			cis-1,2-Dichloroethylene	2025/03/28		101	%	70 - 130
			trans-1,2-Dichloroethylene	2025/03/28		94	%	70 - 130
			1,2-Dichloropropane	2025/03/28		87	%	70 - 130
			cis-1,3-Dichloropropene	2025/03/28		93	%	70 - 130
			trans-1,3-Dichloropropene	2025/03/28		103	%	70 - 130
			Ethylbenzene	2025/03/28		98	%	70 - 130
			Ethylene Dibromide	2025/03/28		97	%	70 - 130
			Hexane	2025/03/28		92	%	70 - 130
			Methylene Chloride(Dichloromethane)	2025/03/28		91	%	70 - 130
			Methyl Ethyl Ketone (2-Butanone)	2025/03/28		85	%	60 - 140
			Methyl Isobutyl Ketone	2025/03/28		81	%	70 - 130
			Methyl t-butyl ether (MTBE)	2025/03/28		99	%	70 - 130
			Styrene	2025/03/28		99	%	70 - 130
			1,1,1,2-Tetrachloroethane	2025/03/28		112	%	70 - 130
			1,1,2,2-Tetrachloroethane	2025/03/28		87	%	70 - 130
			Tetrachloroethylene	2025/03/28		103	%	70 - 130
			Toluene	2025/03/28		94	%	70 - 130
			1,1,1-Trichloroethane	2025/03/28		107	%	70 - 130
			1,1,2-Trichloroethane	2025/03/28		95	%	70 - 130
			Trichloroethylene	2025/03/28		106	%	70 - 130
			Trichlorofluoromethane (FREON 11)	2025/03/28		104	%	70 - 130
			Vinyl Chloride	2025/03/28		85	%	70 - 130
			p+m-Xylene	2025/03/28		100	%	70 - 130
			o-Xylene	2025/03/28		104	%	70 - 130
9899455	KH2	Method Blank	4-Bromofluorobenzene	2025/03/28		105	%	70 - 130
			D4-1,2-Dichloroethane	2025/03/28		108	%	70 - 130
			D8-Toluene	2025/03/28		95	%	70 - 130
			Acetone (2-Propanone)	2025/03/28	ND, RDL=10		ug/L	
			Benzene	2025/03/28	ND, RDL=0.20		ug/L	
			Bromodichloromethane	2025/03/28	ND, RDL=0.50		ug/L	
			Bromoform	2025/03/28	ND, RDL=1.0		ug/L	
			Bromomethane	2025/03/28	ND, RDL=0.50		ug/L	
			Carbon Tetrachloride	2025/03/28	ND, RDL=0.19		ug/L	
			Chlorobenzene	2025/03/28	ND, RDL=0.20		ug/L	
			Chloroform	2025/03/28	ND, RDL=0.20		ug/L	
			Dibromochloromethane	2025/03/28	ND, RDL=0.50		ug/L	

QUALITY ASSURANCE REPORT(CONT'D)

QA/QC Batch	Init	QC Type	Parameter	Date Analyzed	Value	Recovery	UNITS	QC Limits
			1,2-Dichlorobenzene	2025/03/28	ND, RDL=0.40		ug/L	
			1,3-Dichlorobenzene	2025/03/28	ND, RDL=0.40		ug/L	
			1,4-Dichlorobenzene	2025/03/28	ND, RDL=0.40		ug/L	
			Dichlorodifluoromethane (FREON 12)	2025/03/28	ND, RDL=1.0		ug/L	
			1,1-Dichloroethane	2025/03/28	ND, RDL=0.20		ug/L	
			1,2-Dichloroethane	2025/03/28	ND, RDL=0.49		ug/L	
			1,1-Dichloroethylene	2025/03/28	ND, RDL=0.20		ug/L	
			cis-1,2-Dichloroethylene	2025/03/28	ND, RDL=0.50		ug/L	
			trans-1,2-Dichloroethylene	2025/03/28	ND, RDL=0.50		ug/L	
			1,2-Dichloropropane	2025/03/28	ND, RDL=0.20		ug/L	
			cis-1,3-Dichloropropene	2025/03/28	ND, RDL=0.30		ug/L	
			trans-1,3-Dichloropropene	2025/03/28	ND, RDL=0.40		ug/L	
			Ethylbenzene	2025/03/28	ND, RDL=0.20		ug/L	
			Ethylene Dibromide	2025/03/28	ND, RDL=0.19		ug/L	
			Hexane	2025/03/28	ND, RDL=1.0		ug/L	
			Methylene Chloride(Dichloromethane)	2025/03/28	ND, RDL=2.0		ug/L	
			Methyl Ethyl Ketone (2-Butanone)	2025/03/28	ND, RDL=10		ug/L	
			Methyl Isobutyl Ketone	2025/03/28	ND, RDL=5.0		ug/L	
			Methyl t-butyl ether (MTBE)	2025/03/28	ND, RDL=0.50		ug/L	
			Styrene	2025/03/28	ND, RDL=0.40		ug/L	
			1,1,1,2-Tetrachloroethane	2025/03/28	ND, RDL=0.50		ug/L	
			1,1,2,2-Tetrachloroethane	2025/03/28	ND, RDL=0.40		ug/L	
			Tetrachloroethylene	2025/03/28	ND, RDL=0.20		ug/L	
			Toluene	2025/03/28	ND, RDL=0.20		ug/L	
			1,1,1-Trichloroethane	2025/03/28	ND, RDL=0.20		ug/L	
			1,1,2-Trichloroethane	2025/03/28	ND, RDL=0.40		ug/L	
			Trichloroethylene	2025/03/28	ND, RDL=0.20		ug/L	

QUALITY ASSURANCE REPORT(CONT'D)

QA/QC Batch	Init	QC Type	Parameter	Date Analyzed	Value	Recovery	UNITS	QC Limits
			Trichlorofluoromethane (FREON 11)	2025/03/28	ND, RDL=0.50		ug/L	
			Vinyl Chloride	2025/03/28	ND, RDL=0.20		ug/L	
			p+m-Xylene	2025/03/28	ND, RDL=0.20		ug/L	
			o-Xylene	2025/03/28	ND, RDL=0.20		ug/L	
			Total Xylenes	2025/03/28	ND, RDL=0.20		ug/L	
9899455	KH2	RPD	Acetone (2-Propanone)	2025/03/28	NC		%	30
			Benzene	2025/03/28	NC		%	30
			Bromodichloromethane	2025/03/28	NC		%	30
			Bromoform	2025/03/28	NC		%	30
			Bromomethane	2025/03/28	NC		%	30
			Carbon Tetrachloride	2025/03/28	NC		%	30
			Chlorobenzene	2025/03/28	NC		%	30
			Chloroform	2025/03/28	NC		%	30
			Dibromochloromethane	2025/03/28	NC		%	30
			1,2-Dichlorobenzene	2025/03/28	NC		%	30
			1,3-Dichlorobenzene	2025/03/28	NC		%	30
			1,4-Dichlorobenzene	2025/03/28	NC		%	30
			Dichlorodifluoromethane (FREON 12)	2025/03/28	NC		%	30
			1,1-Dichloroethane	2025/03/28	NC		%	30
			1,2-Dichloroethane	2025/03/28	NC		%	30
			1,1-Dichloroethylene	2025/03/28	NC		%	30
			cis-1,2-Dichloroethylene	2025/03/28	NC		%	30
			trans-1,2-Dichloroethylene	2025/03/28	NC		%	30
			1,2-Dichloropropane	2025/03/28	NC		%	30
			cis-1,3-Dichloropropene	2025/03/28	NC		%	30
			trans-1,3-Dichloropropene	2025/03/28	NC		%	30
			Ethylbenzene	2025/03/28	NC		%	30
			Ethylene Dibromide	2025/03/28	NC		%	30
			Hexane	2025/03/28	NC		%	30
			Methylene Chloride(Dichloromethane)	2025/03/28	NC		%	30
			Methyl Ethyl Ketone (2-Butanone)	2025/03/28	NC		%	30
			Methyl Isobutyl Ketone	2025/03/28	NC		%	30
			Methyl t-butyl ether (MTBE)	2025/03/28	NC		%	30
			Styrene	2025/03/28	NC		%	30
			1,1,1,2-Tetrachloroethane	2025/03/28	NC		%	30
			1,1,2,2-Tetrachloroethane	2025/03/28	NC		%	30
			Tetrachloroethylene	2025/03/28	NC		%	30
			Toluene	2025/03/28	NC		%	30
			1,1,1-Trichloroethane	2025/03/28	NC		%	30
			1,1,2-Trichloroethane	2025/03/28	NC		%	30
			Trichloroethylene	2025/03/28	NC		%	30
			Trichlorofluoromethane (FREON 11)	2025/03/28	NC		%	30
			Vinyl Chloride	2025/03/28	NC		%	30
			p+m-Xylene	2025/03/28	NC		%	30
			o-Xylene	2025/03/28	NC		%	30
			Total Xylenes	2025/03/28	NC		%	30
9899963	GYA	Matrix Spike [APHM31-05]	WAD Cyanide (Free)	2025/03/28		93	%	80 - 120
9899963	GYA	Spiked Blank	WAD Cyanide (Free)	2025/03/28		98	%	80 - 120

QUALITY ASSURANCE REPORT(CONT'D)

QA/QC Batch	Init	QC Type	Parameter	Date Analyzed	Value	Recovery	UNITS	QC Limits
9899963	GYA	Method Blank	WAD Cyanide (Free)	2025/03/28	ND,RDL=1		ug/L	
9899963	GYA	RPD [APHM31-05]	WAD Cyanide (Free)	2025/03/28	NC		%	20
9899996	AFZ	Matrix Spike	Dissolved Antimony (Sb)	2025/03/28		102	%	80 - 120
			Dissolved Arsenic (As)	2025/03/28		101	%	80 - 120
			Dissolved Barium (Ba)	2025/03/28		100	%	80 - 120
			Dissolved Beryllium (Be)	2025/03/28		100	%	80 - 120
			Dissolved Boron (B)	2025/03/28		94	%	80 - 120
			Dissolved Cadmium (Cd)	2025/03/28		99	%	80 - 120
			Dissolved Chromium (Cr)	2025/03/28		98	%	80 - 120
			Dissolved Cobalt (Co)	2025/03/28		96	%	80 - 120
			Dissolved Copper (Cu)	2025/03/28		98	%	80 - 120
			Dissolved Lead (Pb)	2025/03/28		98	%	80 - 120
			Dissolved Molybdenum (Mo)	2025/03/28		101	%	80 - 120
			Dissolved Nickel (Ni)	2025/03/28		96	%	80 - 120
			Dissolved Selenium (Se)	2025/03/28		100	%	80 - 120
			Dissolved Silver (Ag)	2025/03/28		95	%	80 - 120
			Dissolved Sodium (Na)	2025/03/28		NC	%	80 - 120
			Dissolved Thallium (Tl)	2025/03/28		101	%	80 - 120
			Dissolved Uranium (U)	2025/03/28		103	%	80 - 120
			Dissolved Vanadium (V)	2025/03/28		99	%	80 - 120
			Dissolved Zinc (Zn)	2025/03/28		96	%	80 - 120
9899996	AFZ	Spiked Blank	Dissolved Antimony (Sb)	2025/03/28		100	%	80 - 120
			Dissolved Arsenic (As)	2025/03/28		102	%	80 - 120
			Dissolved Barium (Ba)	2025/03/28		101	%	80 - 120
			Dissolved Beryllium (Be)	2025/03/28		98	%	80 - 120
			Dissolved Boron (B)	2025/03/28		94	%	80 - 120
			Dissolved Cadmium (Cd)	2025/03/28		100	%	80 - 120
			Dissolved Chromium (Cr)	2025/03/28		100	%	80 - 120
			Dissolved Cobalt (Co)	2025/03/28		98	%	80 - 120
			Dissolved Copper (Cu)	2025/03/28		99	%	80 - 120
			Dissolved Lead (Pb)	2025/03/28		100	%	80 - 120
			Dissolved Molybdenum (Mo)	2025/03/28		99	%	80 - 120
			Dissolved Nickel (Ni)	2025/03/28		97	%	80 - 120
			Dissolved Selenium (Se)	2025/03/28		100	%	80 - 120
			Dissolved Silver (Ag)	2025/03/28		97	%	80 - 120
			Dissolved Sodium (Na)	2025/03/28		98	%	80 - 120
			Dissolved Thallium (Tl)	2025/03/28		100	%	80 - 120
			Dissolved Uranium (U)	2025/03/28		103	%	80 - 120
			Dissolved Vanadium (V)	2025/03/28		100	%	80 - 120
			Dissolved Zinc (Zn)	2025/03/28		100	%	80 - 120
9899996	AFZ	Method Blank	Dissolved Antimony (Sb)	2025/03/28	ND, RDL=0.50		ug/L	
			Dissolved Arsenic (As)	2025/03/28	ND, RDL=1.0		ug/L	
			Dissolved Barium (Ba)	2025/03/28	ND, RDL=2.0		ug/L	
			Dissolved Beryllium (Be)	2025/03/28	ND, RDL=0.40		ug/L	
			Dissolved Boron (B)	2025/03/28	ND, RDL=10		ug/L	
			Dissolved Cadmium (Cd)	2025/03/28	ND, RDL=0.090		ug/L	
			Dissolved Chromium (Cr)	2025/03/28	ND, RDL=5.0		ug/L	

QUALITY ASSURANCE REPORT(CONT'D)

QA/QC Batch	Init	QC Type	Parameter	Date Analyzed	Value	Recovery	UNITS	QC Limits
			Dissolved Cobalt (Co)	2025/03/28	ND, RDL=0.50		ug/L	
			Dissolved Copper (Cu)	2025/03/28	ND, RDL=0.90		ug/L	
			Dissolved Lead (Pb)	2025/03/28	ND, RDL=0.50		ug/L	
			Dissolved Molybdenum (Mo)	2025/03/28	ND, RDL=0.50		ug/L	
			Dissolved Nickel (Ni)	2025/03/28	ND, RDL=1.0		ug/L	
			Dissolved Selenium (Se)	2025/03/28	ND, RDL=2.0		ug/L	
			Dissolved Silver (Ag)	2025/03/28	ND, RDL=0.090		ug/L	
			Dissolved Sodium (Na)	2025/03/28	ND, RDL=100		ug/L	
			Dissolved Thallium (Tl)	2025/03/28	ND, RDL=0.050		ug/L	
			Dissolved Uranium (U)	2025/03/28	ND, RDL=0.10		ug/L	
			Dissolved Vanadium (V)	2025/03/28	ND, RDL=0.50		ug/L	
			Dissolved Zinc (Zn)	2025/03/28	ND, RDL=5.0		ug/L	
9899996	AFZ	RPD	Dissolved Antimony (Sb)	2025/03/28	NC		%	20
			Dissolved Arsenic (As)	2025/03/28	NC		%	20
			Dissolved Barium (Ba)	2025/03/28	0.65		%	20
			Dissolved Beryllium (Be)	2025/03/28	NC		%	20
			Dissolved Boron (B)	2025/03/28	1.7		%	20
			Dissolved Cadmium (Cd)	2025/03/28	NC		%	20
			Dissolved Chromium (Cr)	2025/03/28	NC		%	20
			Dissolved Cobalt (Co)	2025/03/28	NC		%	20
			Dissolved Copper (Cu)	2025/03/28	10		%	20
			Dissolved Lead (Pb)	2025/03/28	NC		%	20
			Dissolved Molybdenum (Mo)	2025/03/28	2.4		%	20
			Dissolved Nickel (Ni)	2025/03/28	5.0		%	20
			Dissolved Selenium (Se)	2025/03/28	NC		%	20
			Dissolved Silver (Ag)	2025/03/28	NC		%	20
			Dissolved Sodium (Na)	2025/03/28	0.043		%	20
			Dissolved Thallium (Tl)	2025/03/28	NC		%	20
			Dissolved Uranium (U)	2025/03/28	6.5		%	20
			Dissolved Vanadium (V)	2025/03/28	NC		%	20
			Dissolved Zinc (Zn)	2025/03/28	NC		%	20
9900151	HK1	Matrix Spike	Chromium (VI)	2025/03/28		95	%	80 - 120
9900151	HK1	Spiked Blank	Chromium (VI)	2025/03/28		104	%	80 - 120
9900151	HK1	Method Blank	Chromium (VI)	2025/03/28	ND, RDL=0.50		ug/L	
9900151	HK1	RPD	Chromium (VI)	2025/03/28	NC		%	20
9900748	JYO	Matrix Spike [APHM31-06]	D10-Anthracene	2025/03/29		117	%	50 - 130
			D14-Terphenyl (FS)	2025/03/29		108	%	50 - 130
			D8-Acenaphthylene	2025/03/29		109	%	50 - 130
			Acenaphthene	2025/03/29		109	%	50 - 130
			Acenaphthylene	2025/03/29		112	%	50 - 130
			Anthracene	2025/03/29		112	%	50 - 130

QUALITY ASSURANCE REPORT(CONT'D)

QA/QC Batch	Init	QC Type	Parameter	Date Analyzed	Value	Recovery	UNITS	QC Limits
			Benzo(a)anthracene	2025/03/29		117	%	50 - 130
			Benzo(a)pyrene	2025/03/29		112	%	50 - 130
			Benzo(b/j)fluoranthene	2025/03/29		104	%	50 - 130
			Benzo(g,h,i)perylene	2025/03/29		109	%	50 - 130
			Benzo(k)fluoranthene	2025/03/29		113	%	50 - 130
			Chrysene	2025/03/29		110	%	50 - 130
			Dibenzo(a,h)anthracene	2025/03/29		117	%	50 - 130
			Fluoranthene	2025/03/29		110	%	50 - 130
			Fluorene	2025/03/29		112	%	50 - 130
			Indeno(1,2,3-cd)pyrene	2025/03/29		109	%	50 - 130
			1-Methylnaphthalene	2025/03/29		100	%	50 - 130
			2-Methylnaphthalene	2025/03/29		100	%	50 - 130
			Naphthalene	2025/03/29		99	%	50 - 130
			Phenanthrene	2025/03/29		109	%	50 - 130
			Pyrene	2025/03/29		111	%	50 - 130
9900748	JYO	Spiked Blank	D10-Anthracene	2025/03/29		112	%	50 - 130
			D14-Terphenyl (FS)	2025/03/29		115	%	50 - 130
			D8-Acenaphthylene	2025/03/29		102	%	50 - 130
			Acenaphthene	2025/03/29		100	%	50 - 130
			Acenaphthylene	2025/03/29		103	%	50 - 130
			Anthracene	2025/03/29		104	%	50 - 130
			Benzo(a)anthracene	2025/03/29		110	%	50 - 130
			Benzo(a)pyrene	2025/03/29		106	%	50 - 130
			Benzo(b/j)fluoranthene	2025/03/29		101	%	50 - 130
			Benzo(g,h,i)perylene	2025/03/29		105	%	50 - 130
			Benzo(k)fluoranthene	2025/03/29		108	%	50 - 130
			Chrysene	2025/03/29		105	%	50 - 130
			Dibenzo(a,h)anthracene	2025/03/29		111	%	50 - 130
			Fluoranthene	2025/03/29		102	%	50 - 130
			Fluorene	2025/03/29		102	%	50 - 130
			Indeno(1,2,3-cd)pyrene	2025/03/29		104	%	50 - 130
			1-Methylnaphthalene	2025/03/29		93	%	50 - 130
			2-Methylnaphthalene	2025/03/29		91	%	50 - 130
			Naphthalene	2025/03/29		91	%	50 - 130
			Phenanthrene	2025/03/29		102	%	50 - 130
			Pyrene	2025/03/29		103	%	50 - 130
9900748	JYO	Method Blank	D10-Anthracene	2025/03/29		110	%	50 - 130
			D14-Terphenyl (FS)	2025/03/29		113	%	50 - 130
			D8-Acenaphthylene	2025/03/29		99	%	50 - 130
			Acenaphthene	2025/03/29	ND, RDL=0.050		ug/L	
			Acenaphthylene	2025/03/29	ND, RDL=0.050		ug/L	
			Anthracene	2025/03/29	ND, RDL=0.050		ug/L	
			Benzo(a)anthracene	2025/03/29	ND, RDL=0.050		ug/L	
			Benzo(a)pyrene	2025/03/29	ND, RDL=0.0090		ug/L	
			Benzo(b/j)fluoranthene	2025/03/29	ND, RDL=0.050		ug/L	
			Benzo(g,h,i)perylene	2025/03/29	ND, RDL=0.050		ug/L	

QUALITY ASSURANCE REPORT(CONT'D)

QA/QC Batch	Init	QC Type	Parameter	Date Analyzed	Value	Recovery	UNITS	QC Limits
			Benzo(k)fluoranthene	2025/03/29	ND, RDL=0.050		ug/L	
			Chrysene	2025/03/29	ND, RDL=0.050		ug/L	
			Dibenzo(a,h)anthracene	2025/03/29	ND, RDL=0.050		ug/L	
			Fluoranthene	2025/03/29	ND, RDL=0.050		ug/L	
			Fluorene	2025/03/29	ND, RDL=0.050		ug/L	
			Indeno(1,2,3-cd)pyrene	2025/03/29	ND, RDL=0.050		ug/L	
			1-Methylnaphthalene	2025/03/29	ND, RDL=0.050		ug/L	
			2-Methylnaphthalene	2025/03/29	ND, RDL=0.050		ug/L	
			Naphthalene	2025/03/29	ND, RDL=0.050		ug/L	
			Phenanthrene	2025/03/29	ND, RDL=0.030		ug/L	
			Pyrene	2025/03/29	ND, RDL=0.050		ug/L	
9900748	JYO	RPD [APHM32-06]	Acenaphthene	2025/03/29	NC		%	30
			Acenaphthylene	2025/03/29	NC		%	30
			Anthracene	2025/03/29	NC		%	30
			Benzo(a)anthracene	2025/03/29	NC		%	30
			Benzo(a)pyrene	2025/03/29	NC		%	30
			Benzo(b/j)fluoranthene	2025/03/29	NC		%	30
			Benzo(g,h,i)perylene	2025/03/29	NC		%	30
			Benzo(k)fluoranthene	2025/03/29	NC		%	30
			Chrysene	2025/03/29	NC		%	30
			Dibenzo(a,h)anthracene	2025/03/29	NC		%	30
			Fluoranthene	2025/03/29	NC		%	30
			Fluorene	2025/03/29	NC		%	30
			Indeno(1,2,3-cd)pyrene	2025/03/29	NC		%	30
			1-Methylnaphthalene	2025/03/29	NC		%	30
			2-Methylnaphthalene	2025/03/29	NC		%	30
			Naphthalene	2025/03/29	NC		%	30
			Phenanthrene	2025/03/29	4.6		%	30
			Pyrene	2025/03/29	NC		%	30
9900750	AS2	Matrix Spike [APHM33-06]	o-Terphenyl	2025/03/29		108	%	60 - 140
			F2 (C10-C16 Hydrocarbons)	2025/03/29		107	%	60 - 140
			F3 (C16-C34 Hydrocarbons)	2025/03/29		113	%	60 - 140
			F4 (C34-C50 Hydrocarbons)	2025/03/29		106	%	60 - 140
9900750	AS2	Spiked Blank	o-Terphenyl	2025/03/29		110	%	60 - 140
			F2 (C10-C16 Hydrocarbons)	2025/03/29		109	%	60 - 140
			F3 (C16-C34 Hydrocarbons)	2025/03/29		117	%	60 - 140
			F4 (C34-C50 Hydrocarbons)	2025/03/29		108	%	60 - 140
9900750	AS2	Method Blank	o-Terphenyl	2025/03/29		110	%	60 - 140
			F2 (C10-C16 Hydrocarbons)	2025/03/29	ND, RDL=90		ug/L	
			F3 (C16-C34 Hydrocarbons)	2025/03/29	ND, RDL=200		ug/L	

QUALITY ASSURANCE REPORT(CONT'D)

QA/QC Batch	Init	QC Type	Parameter	Date Analyzed	Value	Recovery	UNITS	QC Limits
			F4 (C34-C50 Hydrocarbons)	2025/03/29	ND, RDL=200		ug/L	
9900750	AS2	RPD [APHM32-06]	F2 (C10-C16 Hydrocarbons)	2025/03/29	NC		%	30
			F3 (C16-C34 Hydrocarbons)	2025/03/29	NC		%	30
			F4 (C34-C50 Hydrocarbons)	2025/03/29	NC		%	30
9900803	MJ1	Matrix Spike	Dissolved Chloride (Cl-)	2025/03/31		NC	%	80 - 120
9900803	MJ1	Spiked Blank	Dissolved Chloride (Cl-)	2025/03/31		98	%	80 - 120
9900803	MJ1	Method Blank	Dissolved Chloride (Cl-)	2025/03/31	ND, RDL=1.0		mg/L	
9900803	MJ1	RPD	Dissolved Chloride (Cl-)	2025/03/31	1.1		%	20
9901333	MPJ	Matrix Spike	Mercury (Hg)	2025/03/31		91	%	75 - 125
9901333	MPJ	Spiked Blank	Mercury (Hg)	2025/03/31		96	%	80 - 120
9901333	MPJ	Method Blank	Mercury (Hg)	2025/03/31	ND, RDL=0.10		ug/L	
9901333	MPJ	RPD	Mercury (Hg)	2025/03/31	NC		%	20
9901485	GRU	Matrix Spike	1,4-Difluorobenzene	2025/03/31		103	%	70 - 130
			4-Bromofluorobenzene	2025/03/31		100	%	70 - 130
			D10-o-Xylene	2025/03/31		96	%	70 - 130
			D4-1,2-Dichloroethane	2025/03/31		104	%	70 - 130
			Benzene	2025/03/31		93	%	50 - 140
			Toluene	2025/03/31		90	%	50 - 140
			Ethylbenzene	2025/03/31		99	%	50 - 140
			o-Xylene	2025/03/31		96	%	50 - 140
			p+m-Xylene	2025/03/31		92	%	50 - 140
			F1 (C6-C10)	2025/03/31		96	%	60 - 140
9901485	GRU	Spiked Blank	1,4-Difluorobenzene	2025/03/31		94	%	70 - 130
			4-Bromofluorobenzene	2025/03/31		107	%	70 - 130
			D10-o-Xylene	2025/03/31		101	%	70 - 130
			D4-1,2-Dichloroethane	2025/03/31		100	%	70 - 130
			Benzene	2025/03/31		89	%	50 - 140
			Toluene	2025/03/31		88	%	50 - 140
			Ethylbenzene	2025/03/31		107	%	50 - 140
			o-Xylene	2025/03/31		103	%	50 - 140
			p+m-Xylene	2025/03/31		99	%	50 - 140
			F1 (C6-C10)	2025/03/31		99	%	60 - 140
9901485	GRU	Method Blank	1,4-Difluorobenzene	2025/03/31		96	%	70 - 130
			4-Bromofluorobenzene	2025/03/31		100	%	70 - 130
			D10-o-Xylene	2025/03/31		104	%	70 - 130
			D4-1,2-Dichloroethane	2025/03/31		98	%	70 - 130
			Benzene	2025/03/31	ND, RDL=0.20		ug/L	
			Toluene	2025/03/31	ND, RDL=0.20		ug/L	
			Ethylbenzene	2025/03/31	ND, RDL=0.20		ug/L	
			o-Xylene	2025/03/31	ND, RDL=0.20		ug/L	
			p+m-Xylene	2025/03/31	ND, RDL=0.40		ug/L	
			Total Xylenes	2025/03/31	ND, RDL=0.40		ug/L	
			F1 (C6-C10)	2025/03/31	ND, RDL=25		ug/L	

QUALITY ASSURANCE REPORT(CONT'D)

QA/QC Batch	Init	QC Type	Parameter	Date Analyzed	Value	Recovery	UNITS	QC Limits
			F1 (C6-C10) - BTEX	2025/03/31	ND, RDL=25		ug/L	
9901485	GRU	RPD	Benzene	2025/03/31	NC		%	30
			Toluene	2025/03/31	NC		%	30
			Ethylbenzene	2025/03/31	NC		%	30
			o-Xylene	2025/03/31	NC		%	30
			p+m-Xylene	2025/03/31	NC		%	30
			Total Xylenes	2025/03/31	NC		%	30
			F1 (C6-C10)	2025/03/31	NC		%	30
			F1 (C6-C10) - BTEX	2025/03/31	NC		%	30

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

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

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

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

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

NC (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).

VALIDATION SIGNATURE PAGE

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

Louise Harding, Scientific Specialist

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

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

C533253
2025/03/26 09:52

Affix Lab Label Here

Presence of Visible Particulate/Sediment

Maxxam Analytics
CAM FCD-01013/5

When there is >1cm of visible particulate/sediment, the amount will be recorded in the field below

		Bottle Types																													
		Inorganics						Organics											Hydrocarbons							Volatiles				Other
	Sample ID	All	CrVI	CN	General	Hg	Metals (Diss.)	Organic 1 of 2	Organic 2 of 2	PCB 1 of 2	PCB 2 of 2	Pest/ Herb 1 of 2	Pest/ Herb 2 of 2	SVOC/ ABN 1 of 2	SVOC/ ABN 2 of 2	PAH 1 of 2	PAH 2 of 2	Dioxin /Furan	F1 Vial 1	F1 Vial 2	F1 Vial 3	F1 Vial 4	F2-F4 1 of 2	F2-F4 2 of 2	F4G	VOC Vial 1	VOC Vial 2	VOC Vial 3	VOC Vial 4	
1	BH6-25-GW1	TS																													
2																															
3																															
4																															
5																															
6																															
7																															
8																															
9																															
10																															

Comments:

Legend:	
P	Suspended Particulate
TS	Trace Settled Sediment (just covers bottom of container or less)
S	Sediment greater than (>) Trace, but less than (<) 1 cm

Recorded By: (signature/print)

C533253
2025/03/26 09:52

Page of

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

NONT-2025-03-5724

Bottle Order #: 1038707

Project Manager: Katherine Szozda

C#1038707-01-01

INVOICE TO:		REPORT TO:		PROJECT INFORMATION:	
Company Name:	#39509 Lopers & Associates	Company Name:		Quotation #:	C51005
Attention:	Alisha Sullivan	Attention:	Luke Lopers	P.O. #:	
Address:	30 Lansfield Way Ottawa ON K2G 3V8	Address:		Project:	LOP25-038B
Tel:	(613) 327-9073 Fax:	Tel:	Fax:	Project Name:	
Email:	Alisha.Sullivan@bureauveritas.com	Email:	Luke@lopers.ca	Site #:	Sde Kan +
				Sampled By:	Lopers

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

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

Other Regulations
- ☐ CCME ☐ Sanitary Sewer Bylaw
- ☐ Reg 558. ☐ Storm Sewer Bylaw
- ☐ MISA Municipality ___
- ☐ PWQO ☐ Reg 406 Table ___
- ☐ Other ___

Special Instructions

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

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

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

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

	Sample Barcode Label	Sample (Location) Identification	Date Sampled	Time Sampled	Matrix	Field Filtered (please circle): Metals / Hg / Cr VI	ANALYSIS REQUESTED (PLEASE BE SPECIFIC): O.Reg 153 PHCs, BTEX/F1-F4	O.Reg 153 Metals & Inorganics Pkg (Wtr)	O.Reg 153 PAHs	VOCs	# of Bottles	Comments
1		BH6-25-GW1	March 25/25	10:45AM	GW	X	X	X	X			
2		BH7-25-GW1		10:00AM		X	X	X	X			
3		BH8-25-GW1		11:30AM		X	X	X	X			
4		DUP-1-03/25		-		X	X	X	X			
5		Trip Blank		-						X		
6												
7												
8												
9												
10												

RELINQUISHED BY: (Signature/Print)	Date: (YY/MM/DD)	Time	RECEIVED BY: (Signature/Print)	Date: (YY/MM/DD)	Time	# jars used and not submitted
	25/03/25	6:10PM	Rebeca da Silva	2025/03/26	09:52	
			Ashetin Sahotra	2025/03/27	06:43	

Laboratory Use Only

Time Sensitive	Temperature (°C) on Recei	Custody Seal	Yes	No
	0/0/0 (icepack)	Present	✓	
		Intact	✓	

White: Bureau Veritas Yellow: Client
2/1/4

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

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

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

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

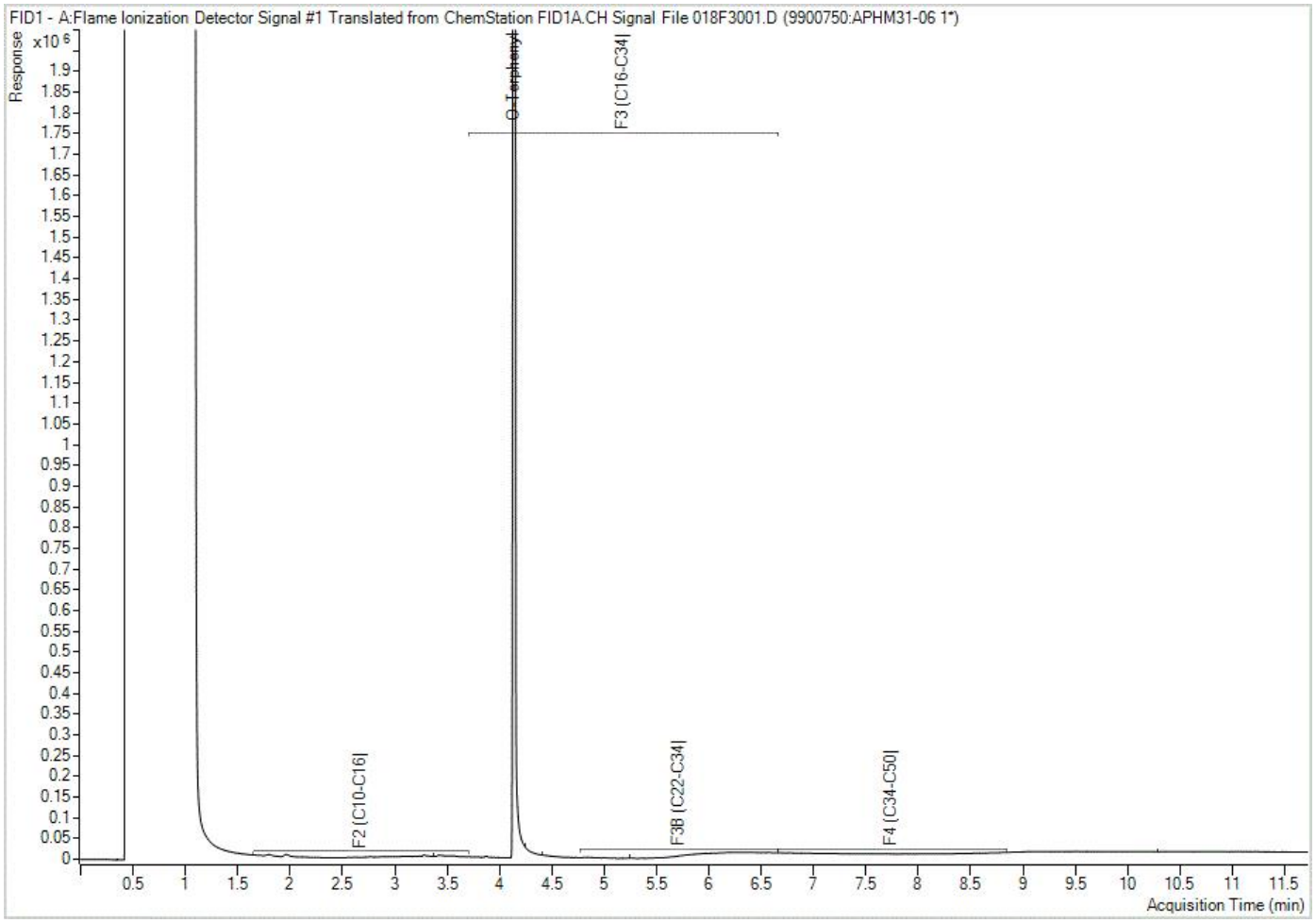
Bureau Veritas Canada (2019) Inc.

Received in Ottawa

Bureau Veritas Job #: C533253
Report Date: 2025/04/01
Bureau Veritas Sample: APHM31

Lopers & Associates
Client Project #: LOP25-038B
Client ID: BH6-25-GW1

Petroleum Hydrocarbons F2-F4 in Water Chromatogram

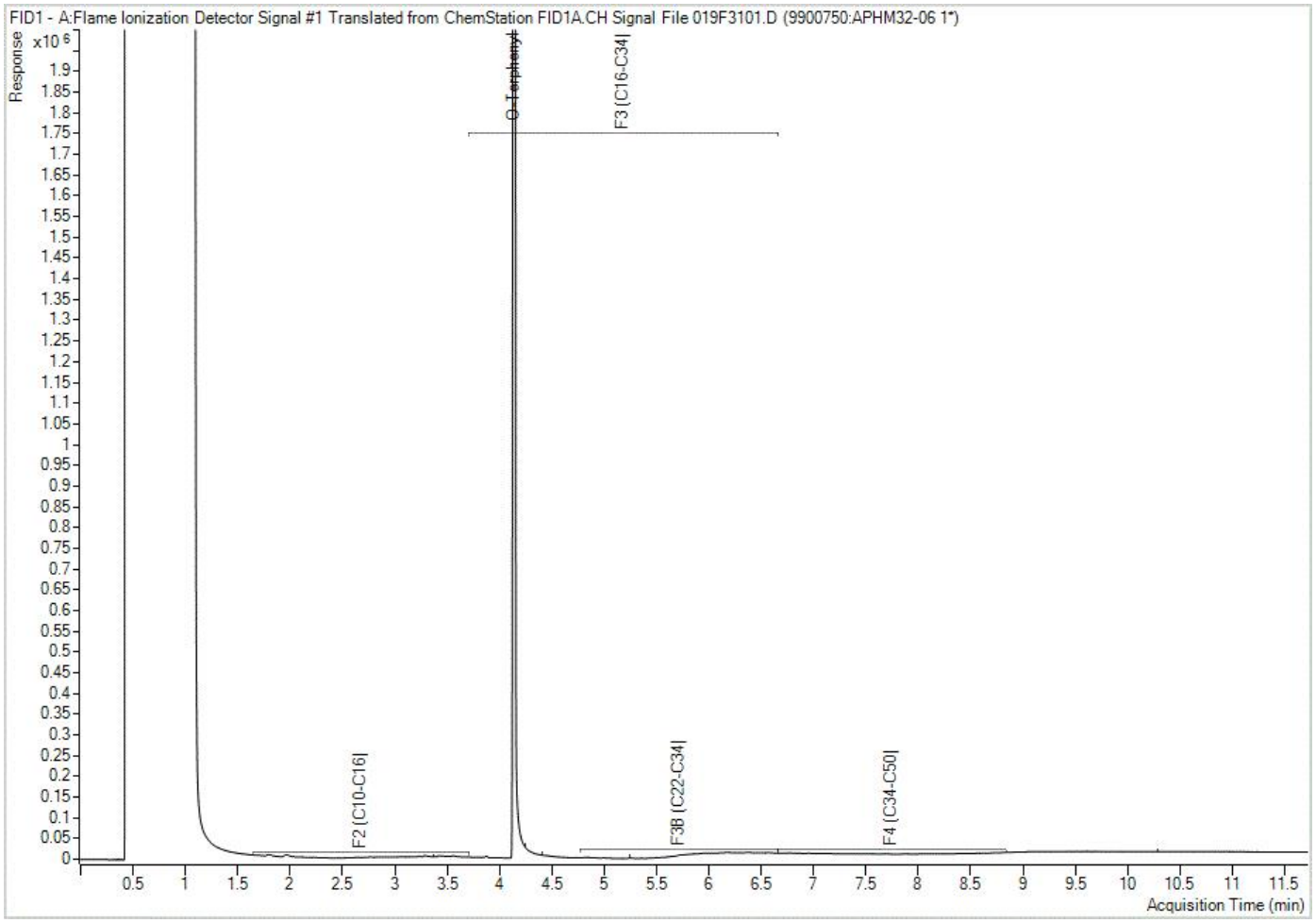


Note: This information is provided for reference purposes only. Should detailed chemist interpretation or fingerprinting be required, please contact the laboratory.

Bureau Veritas Job #: C533253
Report Date: 2025/04/01
Bureau Veritas Sample: APHM32

Lopers & Associates
Client Project #: LOP25-038B
Client ID: BH7-25-GW1

Petroleum Hydrocarbons F2-F4 in Water Chromatogram

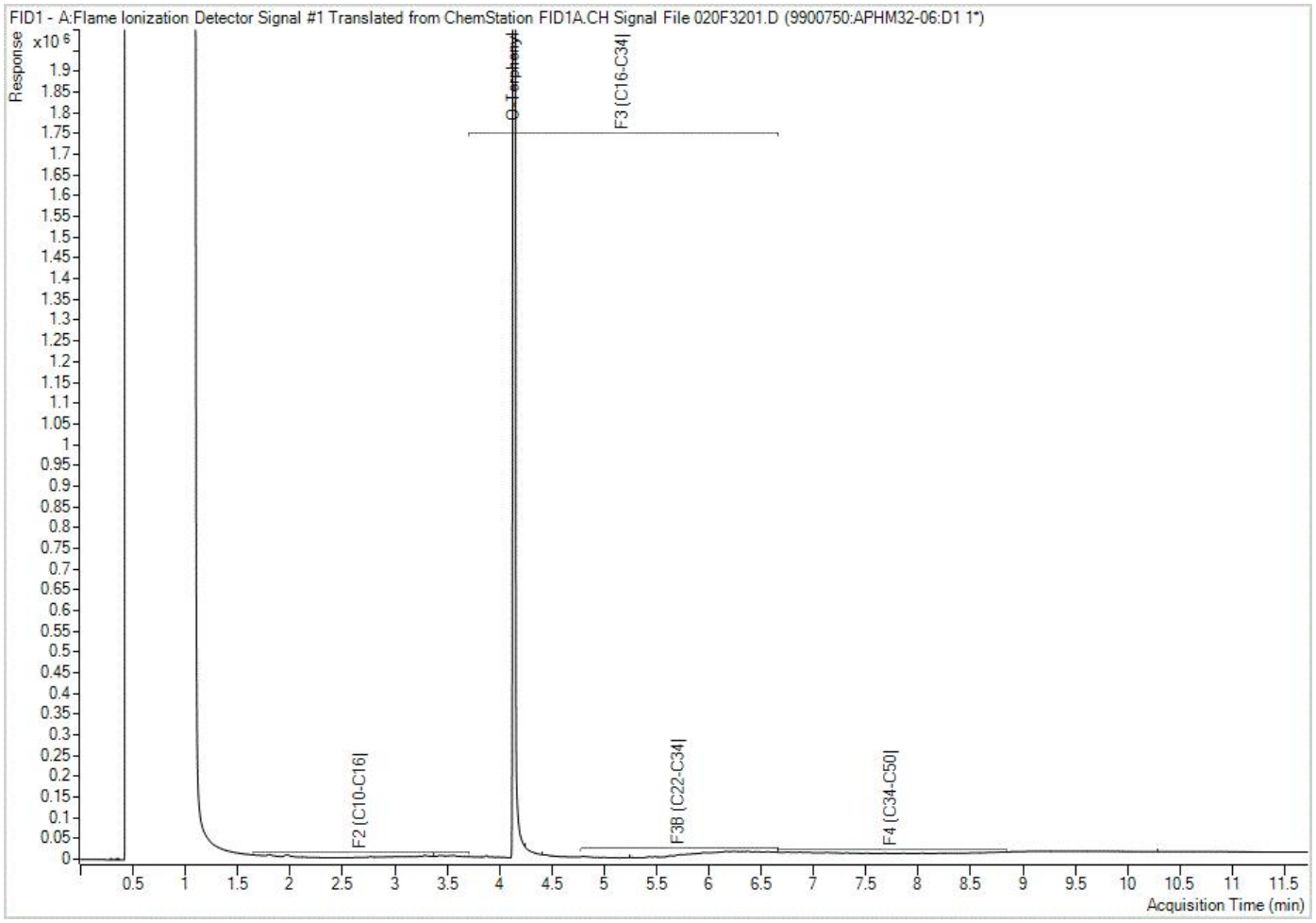


Note: This information is provided for reference purposes only. Should detailed chemist interpretation or fingerprinting be required, please contact the laboratory.

Bureau Veritas Job #: C533253
Report Date: 2025/04/01
Bureau Veritas Sample: APHM32 Lab-Dup

Lopers & Associates
Client Project #: LOP25-038B
Client ID: BH7-25-GW1

Petroleum Hydrocarbons F2-F4 in Water Chromatogram

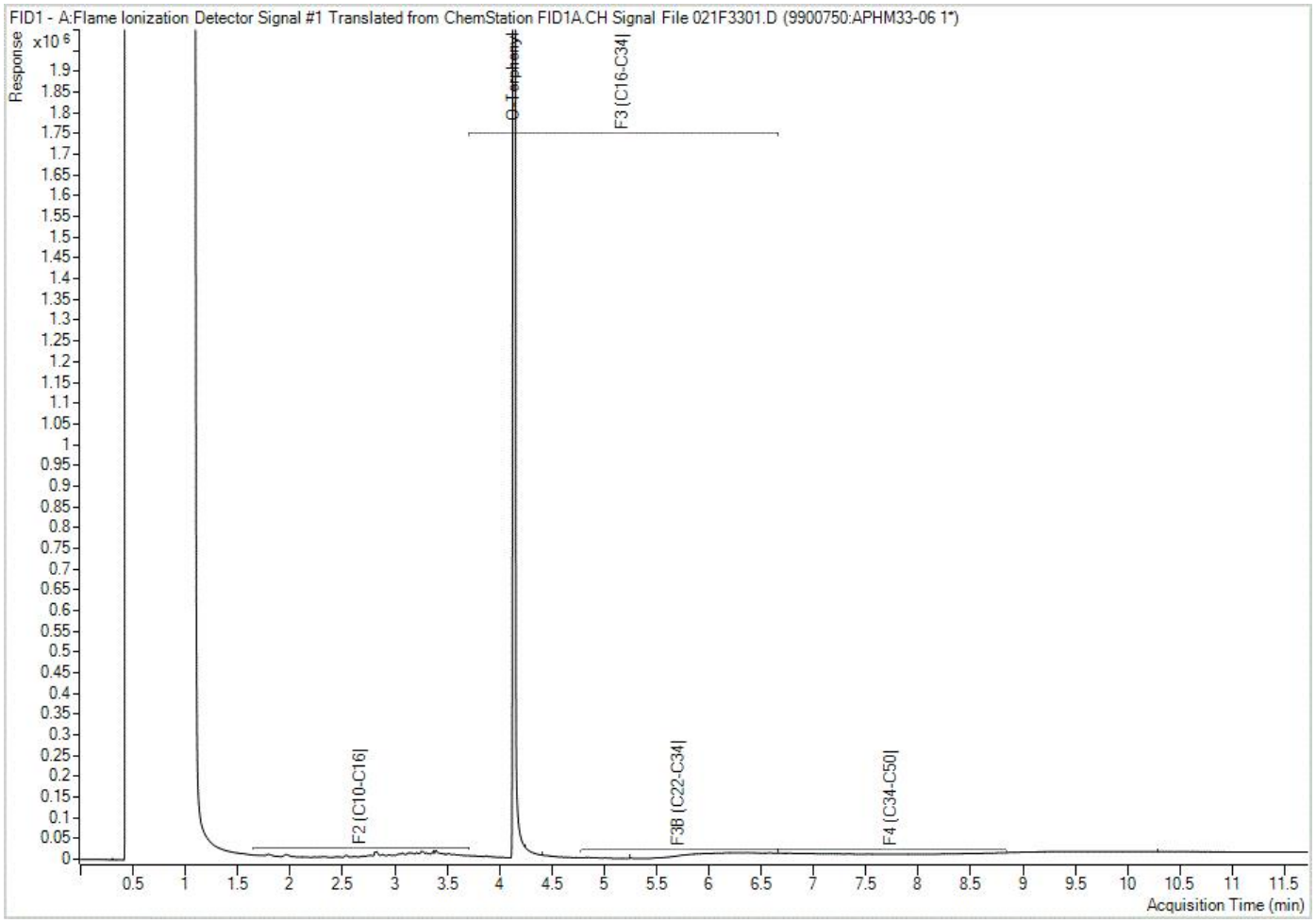


Note: This information is provided for reference purposes only. Should detailed chemist interpretation or fingerprinting be required, please contact the laboratory.

Bureau Veritas Job #: C533253
Report Date: 2025/04/01
Bureau Veritas Sample: APHM33

Lopers & Associates
Client Project #: LOP25-038B
Client ID: BH8-25-GW1

Petroleum Hydrocarbons F2-F4 in Water Chromatogram

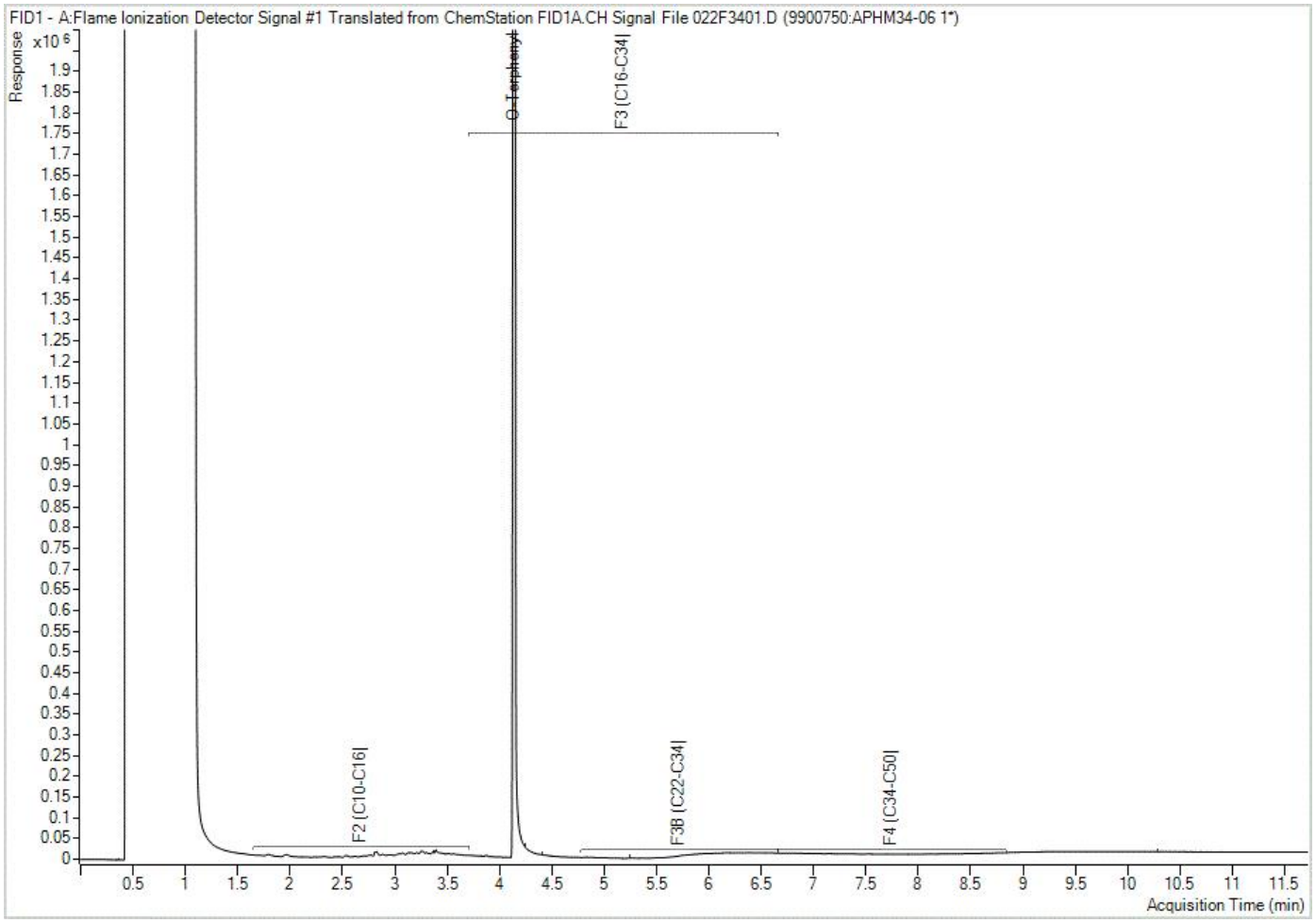


Note: This information is provided for reference purposes only. Should detailed chemist interpretation or fingerprinting be required, please contact the laboratory.

Bureau Veritas Job #: C533253
Report Date: 2025/04/01
Bureau Veritas Sample: APHM34

Lopers & Associates
Client Project #: LOP25-038B
Client ID: DUP-1-03/25

Petroleum Hydrocarbons F2-F4 in Water Chromatogram



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

Appendix F

Qualifications of Assessors

PROFILE

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

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

CONTACT

EMAIL:
Luke@Lopers.ca

LUKE LOPERS

Principal
LOPERS & ASSOCIATES

EDUCATION

University of Waterloo,
B.A.Sc., Honours Environmental Engineering
Management Science Option Designation - 2002 - 2008

PROFESSIONAL EXPERIENCE

Lopers & Associates, Principal, Project Manager, Senior Environmental Engineer
Ottawa, Ontario - 2020–Present
Responsible for the management, coordination, supervision, completion and delivery of Phase I/1 and II/2 Environmental Site Assessments, Environmental Remediation Programs, Environmental litigation support, Designated Substance Surveys, scope of work development, cost estimates and proposals

GHD Limited, Project Manager, Senior Environmental Engineer
Ottawa, Ontario - 2013–2020
Responsible for the management, senior technical review, coordination, supervision, completion and delivery of Phase I/1 and II/2 Environmental Site Assessments, Environmental Remediation Programs, Environmental litigation support, Designated Substance Surveys, scope of work development, cost estimates and proposals
Office Safety Captain and Joint Health and Safety Committee team leader

Paterson Group Inc., Project Manager, Environmental Engineer
Ottawa, Ontario - 2009–2013
Responsible for supervision, completion and review for Phase I/1 and II/2 Environmental Site Assessments, Environmental Remediation Programs, Designated Substance Surveys

NEXT Environmental Inc., Site Investigation Staff
Burnaby, British Columbia - 2008–2009
Responsible for fieldwork and reporting for Stage/Phase I and II Environmental Site Assessments, Environmental Remediation Programs

PROFESSIONAL DESIGNATIONS

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

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

SELECT LIST OF CLIENTS

Ottawa Community Housing Corporation
Brigil Construction
Willms & Shier Environmental Lawyers LLP

RECENT & RELEVANT PROJECT EXPERIENCE

Phase One Environmental Site Assessments

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

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

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

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

Phase Two Environmental Site Assessments

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

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

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

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

Environmental Remediation Programs (Lopers & Associates)

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

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

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

    - Lopers assisted the Client with regulatory approvals and in obtaining municipal brownfields redevelopment grant funding as part of Site remediation/redevelopment.
- Former lumberyard, Central Bus Terminal and Fuel Outlet, Catherine Street, Brigil Construction.
    - Project Experience dating back to 2010, with 2 unaffiliated property owners and with Mr. Lopers practicing Professional Engineering for 2 unaffiliated Engineering companies.
    - Environmental Remediation Plan prepared by Mr. Lopers Fuel terminal remediation February-April 2024. UST removal, bulk soil excavation, groundwater pump & treat & discharge to municipal storm sewer under SSA. Post-remediation groundwater monitoring in progress to support RSC application (2025)
    - Lopers is also assisting the Client with regulatory approvals and in obtaining municipal brownfields redevelopment grant funding as part of Site remediation/redevelopment.
- Former Retail Fuel Outlet and Automotive Service Garage, Ridgewood, Brigil Construction.
    - Environmental Remediation Plan prepared by Mr. Lopers Fuel remediation June-October 2024. Bulk soil excavation and off-Site disposal. Post-remediation groundwater monitoring in progress to support RSC application (2025)
    - Lopers is also assisting the Client with obtaining municipal brownfields redevelopment grant funding as part of Site remediation/redevelopment.
- Former Residential Developments with historic USTs, poor environmental quality fill materials and/or in vicinity to off-Site VOC groundwater plume, Gladstone Avenue & Rochester Street, Ottawa Community Housing Corporation.
    - Environmental Remediation Plan prepared by Mr. Lopers poor environmental quality fill remediation September-October 2024 (periodically on-goint). 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.
- HBMAs 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 (HBMAs) 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 l 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 l 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 l Outcome Consultants (PWGSC) l Governmental Facilities, Eureka, Nunavut l June 2022

- Environmental Project Manager, Field Assessor for UST removal, DSS, Abatement Review & Compliance Monitoring l BGIS (PWGSC) l CRA Taxation & Data Centre, 875 Heron Road, Ottawa, Ontario l 2017-2019

- Environmental Project Manager, Field Assessor for Project Specific DSSs l BGIS (PWGSC) l 20 to 30 buildings in Ottawa & Gatineau l 2016-2019

- Environmental Project Manager, Field Assessor for Environmental Compliance Audit l BGIS (PWGSC) l Tunney's Pasture (select facilities), Ottawa, Ontario l 2016

- Planning Coop Student for Executive Assistant to Director of Ministry of Transportation l St. Catharines, Ontario l 2003

Education

BEng Geological Engineering, École Polytechnique de Montreal, Montreal, Quebec, 1990

MSc Geophysics, University of British Columbia, Vancouver, British Columbia, 1983

BSc Geophysics, Honours, University of British Columbia, Vancouver, British Columbia, 1980

Certifications

Registered as PMP with Project Management Institute since 2012, requalified in 2018

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

Professional Affiliations

Licensed as P.Eng. with the Professional Engineers of Ontario (PEO) since 1994

Licensed as Ing. with l'Ordre des ingénieurs du Québec (OIQ), 1992

Licensed as P.Eng. with NAPEG (NWT and Nunavut), since 2009.

Licensed as P.Eng with Engineers Yukon since 2018

Federal Clearance Level

Secret ID # 95251065

DON PLENDERLEITH

Senior Environmental Engineer and Project Manager

PROFESSIONAL SUMMARY

Mr. Plenderleith has been an environmental engineer for 30 years. From 1990 to 2000 he worked at specialty firms in Montreal and Ottawa where he gained field and reporting experience in site assessment and remediation of retail fuel outlets and railway yards. In 1991 and 1992 he worked on a CIDA sponsored project to assess additional water resource potential in two provinces in Indonesia. He worked for Golder for 19 years on projects in Ottawa, the North and overseas.

His expertise covers all steps in contaminated site management: Phase I, II and III environmental site assessments (ESAs), risk assessments, remedial options evaluations, remedial action plans, tender plans and specifications, remediation project oversight, long-term monitoring and project closure. He has largely concentrated on federal sites since 2002 and was Golder's initial point of contact on the Environmental Standing Offer Agreement with PSPC in the National Capital over that time.

Don led Golder's national client service team for Federal government and was responsible to Golder's management for maintaining strong relations with the federal government. Locally, he provided project management and technical direction of a variety of environmental projects from the Ottawa office. Don mentored several junior professionals. His site portfolio included: military bases, Northern sites, navigational sites, correctional facilities, research labs, commercial buildings and Canadian embassies abroad. On several multi-year projects (Kingston Penitentiary and Connaught Ranges landfill) he directed all steps of site management from initial investigations, through to site closure.

Don is equally experienced at providing strategic and portfolio-level assistance to clients as well as site-specific level work. He has written contaminated sites management plans for several federal Departments. He helped to develop components of the FCSAP project manager's tool kit and has trained federal project managers in its use. He has provided program-level assistance to the FCSAP Secretariat for funding demand forecasting and long-term strategy and risk management. For nine years he led a multi-disciplinary team that performed contaminated site liability peer reviews for the Office of the Auditor General of Canada.

Don completed his engineering degree in French and is licensed to practice in Quebec. He frequently coordinates the French language component at bilingual meetings and workshops.

PROJECT EXPERIENCE – STANDING OFFER MANAGER

Public Services and Procurement Canada, National Capital Region, Environmental Engineering Standing Offer (2002-2019).

Don managed Golder's Environmental Standing Offer Agreement (SOA) with PSPC in the National Capital Region from 2002 to 2019. He was the first point of contact with PSPC for new call-ups. He formed project teams from the approved resources and reviewed the work plans under each call-up. He was responsible and accountable for Golder's overall project performance to PSPC.

PROJECT EXPERIENCE – SENIOR PROJECT MANAGER

Phase I, II, and III and Remediation at Pittsburgh Institution and Kingston Penitentiary for PSPC/CSC near Kingston, Ontario

Environmental Site Assessment, Remediation Planning and Implementation for the Pittsburgh Institution and Kingston Penitentiary, Kingston, Ontario from 2007 to 2015 - Don was the Senior Project Manager and project reviewer for the Phase I, II and III of contaminated sites on two similar projects at these federal penitentiaries. Don performed project management and provided technical direction during the full suite of services from site assessment through to remediation. Federal project management tools, and FCSAP technical tools (GOST) were used to assist with procedural compliance. Don assisted PSPC with the tender specification for both remediation projects and performed on-site supervision during the fast-track remediation work at Pittsburgh. Don also performed senior review of the draft and final reports.

Peer Review and Liability Review of US Steel Site in Hamilton Harbour for PSPC and Transport Canada (July-August 2016)

Don was the Senior Project Manager for a Peer Review of reports pertaining to the US Steel site on Hamilton Harbour that the Hamilton Port Authority (HPA) was considering purchasing. TC requested the peer review and liability review in its oversight role over the HPA. Don brought a senior expert in at steel industry at Golder onto the project team. With his input some important gaps in the previous site assessments, management plans and liability estimates were identified to TC.

Contaminated Site Reporting and Review for Department of National Defence Ottawa, Ontario, Canada

Don has managed several projects for DND's Director General Environment, related to the financial reporting of DND's contaminated sites. He managed the EcoNet validation project in 2006, in which the systems and procedures by which site cost and liability information are input to DND's Contaminated Site database, Econet. Several of DND's major projects being run out of headquarters were reviewed in that exercise. In 2008 he assisted DND by producing the 2008 update of their Contaminated Sites Management Plan (CSMP) for Treasury Board submission. Nine divisional CSMPs were reviewed, summarized and incorporated into the departmental CSMP.

PROGRAM LEVEL WORK – FEDERAL CONTAMINATED SITES

Project Management Tools for Contaminated Sites, Ottawa, Ontario, Canada

Mr. Plenderleith developed two of the FCSAP Project Management Tools: Status Reporting and Project Risk Management. He has provided training in the tools to federal project managers country-wide. He has delivered training sessions at RPIC National Contaminated Sites workshops on several occasions on the PM Tools, the Sustainable Development Tool (SDAT), and Guidance Tool for Selection of Technologies Tools (GOST).

Assistance to FCSAP for program-level Risk Management, PWGSC/ECCC Ottawa, Ontario

Don has led a team at Golder that provided assistance to the FCSAP Secretariat from 2013 to 2019 in the areas of cost projections for funding demand estimates. He devised a method of projecting the costs of unassessed sites based on closure costs of similar sites. This tool was used to estimate the funding demand for FCSAP Phase III and past Phase III. Don assisted the Secretariat with Long-Term Strategic planning for FSCAP post 2020 when the 15-year program is due to sunset.

Secondments to Federal Departments

Mr. Plenderleith has been seconded from Golder to the Department of Foreign Affairs and International Trade (now Global Affairs Canada "GAC") on three occasions to develop their Contaminated Sites Management Plans and to fill in while GAC was staffing their full-time environmental engineer position. Through these secondments he has developed a greater understanding of the role of federal custodians in managing their programs.

PROJECT EXPERIENCE – NORTHERN SITES

DEW Line Site Monitoring, Baffin Region, DND (2015-19)

Mr. Plenderleith was the project director of Golder's DEW Line Monitoring contract with DND from four years 2015 to 2019. He was responsible for overall program quality and liaison with the client and management of Inuit subcontractors. The project was multi-disciplinary, involving geotechnical and environmental components. Mr. Plenderleith has developed a very positive working relationship with the hamlet of Qikiqtarjuaq and the Inuit staff from that community, many of whom have returned to work with Golder every year. All Inuit Participation Targets were exceeded.

Tundra Mine Remediation Monitoring PSPC/INAC (2016-2018)

Don was the Senior project director for Golder's Remediation Monitoring of Tundra Mine (NWT) for PSPC and INAC. This project is multi-disciplinary involving surface water and groundwater environmental monitoring and aquatic monitoring for the final stages of the remediation of Tundra Mine. Don has reviewed the monthly and annual monitoring reports produced for the Water Licence. His earlier experience with the RAP for Tundra has been valuable on this project.

Remedial Options Review and Remedial Action Planning Former Water Tanker Base, Inuvik Airport, NWT 2010-12

From 2010 to 2012, Mr. Plenderleith was the technical director for the Phase III ESA detailed site assessment and remediation planning of the former Water Tanker Base at the Inuvik Airport in NWT. The work included determining the contaminants of concern, delineation of contaminated soil and seasonal groundwater areas, and assessing remedial options. The remedial action plan reviewed chemical oxidation and removal & disposal options within the constraints of northern work season, and the distance to a disposal facility. Descriptions, costs, advantages and limitations were provided for several options. GNWT performed the remediation with own forces.